



MONMOUTH COUNTY, NEW JERSEY

DRAFT

MONMOUTH COUNTY MASTER PLAN

VOLUME I

PREPARED BY MONMOUTH COUNTY DIVISION OF PLANNING



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Joe Barris, PP, AICP, Assistant Director of Planning
JoAnn Denton, RMC, Secretary to the Board
Mark R. Aikins, Esq., Counsel to the Board

MASTER PLAN PROJECT TEAM

Edward Sampson, PP, AICP, Director of Planning
Joe Barris, PP, AICP, Assistant Director of Planning, Project Manager
Mary Ellen Scott, Assistant Planner, Assistant Project Manager
Brittany Ashman, AICP, LEED GA, Assistant Planner, Project Assistant, Graphics Coordinator
Ann-Marie Falkowski, GIS Specialist III, Map Layouts and Design
JoAnn Denton, Secretary to the Board, Correspondence and Logistics

Contributing Authors, Editors, & GIS Support: Brittany Ashman, Joe Barris, James Bonanno, Linda Brennen, Amanda Brockwell, Kyle Clonan, Steven daCosta, JoAnn Denton, Ann-Marie Falkowski, Victor Furmanec, Anthony Gamallo, Harriet Honigfeld, Laura Kirby, Meghan Leavey, Eric Pierson, Ed Sampson, Mary Ellen Scott, and Ann Waters

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Master Plan Kick-Off & Open House/Networking Event Attendees

Contributing Residents

Master Plan Working Groups Participants:

- Agriculture & Economic Development
- Arts, Historic, & Cultural Resources
- Community Development & Housing
- Community Resiliency
- Data Aggregation
- Environmental (MCEC)
- Farmland Preservation (MCADB)
- Transportation (MCTC)

Monmouth County Departments & Agencies:

- Brookdale Community College
- Buildings and Grounds
- Department of Human Services
- Department Public Information and Tourism
- Department Public Works and Engineering
- Division of Economic Development
- Health Department
- Library System
- Monmouth Arts
- Mosquito Control Division
- Office of Emergency Management
- Park System
- Prosecutor's Office
- Rutgers Cooperative Extension
- Sheriff's Office

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Monmouth County Boards, Councils, & Commissions:

- Monmouth County Agriculture Development Board (MCADB)
- Monmouth County Environmental Council (MCEC)
- Monmouth County Fair Housing Board
- Monmouth County Historical Commission
- Monmouth County Human Relations Commission
- Monmouth County Planning Board
- Monmouth County Transportation Council (MCTC)

Municipal Representatives:

- Elected Officials
- Appointed Municipal Master Plan Representatives
- Local Arts Council Representatives
- Local Environmental Council Representatives
- Local Historical Society Representatives

Community Stakeholders Organizations:

- Allentown Village Initiative
- American Littoral Society
- Clean Ocean Action
- Creative NJ
- Federal Emergency Management Agency (FEMA)
- Freehold Regional High School District
- Interfaith Neighbors
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- New Jersey Sea Grant
- NJ Department of Agriculture
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- NJ Economic Development Authority
- NJ Office of Planning Advocacy
- NJ TRANSIT
- North Jersey Transportation Planning Authority (NJTPA)
- NY/NJ Baykeeper
- Rutgers Cooperative Extension
- Social Communities Activities Network (SCAN)
- State Agriculture Development Committee (SADC)
- Sustainable Jersey (SJ)
- Together North Jersey (TNJ)
- U.S. Naval Weapons Station Earle (NWSE)



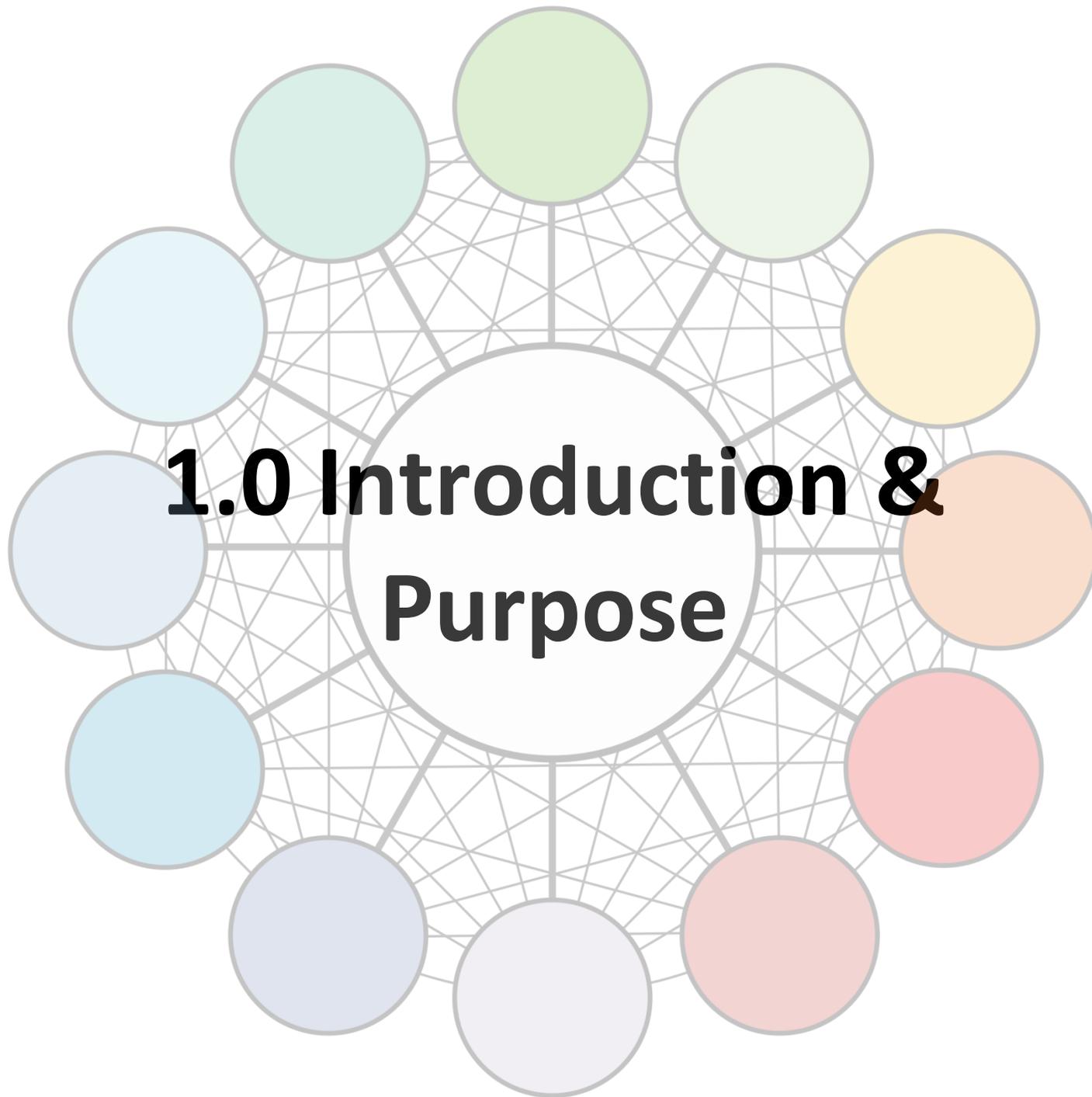
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1.0 Introduction & Purpose

1.1 Monmouth County Location and Setting

[Monmouth County](#) is the northern most county along the Jersey Shore and is part of the NY Metropolitan region. The county was established on March 7, 1683, and is one of the original counties of the province of East Jersey. On October 31, 1693, the county was partitioned into the townships of Freehold, Middletown, and Shrewsbury, all of which still exist in some form today. In 1714, the first county government was established in what was then Monmouth Court House, scene of the June 28, 1778 Battle of Monmouth, the last major battle in the northern theater of the American Revolution. Soon after, the first U.S. decennial census of 1790 recorded a county population of 16,918 people.

Today, Monmouth County has a population of 628,715 people and is the fifth most populous county in the State of NJ (U.S. Census Bureau, 2015). It also ranks among the top 50 highest-income counties in the U.S. with a cost of living index of 121.5 compared to the U.S. average of 100 (U.S. Census Bureau, 2011). Encompassing over 472 square miles of land and 193 square miles of water, the county is home to 53 municipalities, ranging in size from 0.1 square miles (Loch Arbour) to 62.1 square miles (Howell). Overall population density is approximately 1,330 people per square mile with town populations ranging from 190 (Loch Arbour) to 65,500 people (Middletown). Most of the population lives within five miles of either the Raritan Bay shoreline or Atlantic Ocean coastline. The County Seat is Freehold Borough, formerly Monmouth Courthouse, which is located in central Monmouth County near the convergence of U.S. Highway 9 and State Route 33. Monmouth County is only 40 miles south of New York City and 50 miles northeast of Philadelphia making it an ideal location for city bound commuters, as well as a close getaway for urbanites seeking refuge to the country or the world famous Jersey Shore. Figure 1.1: Regional Location Map displays an aerial view of Monmouth County's location. The county's

diverse community landscapes (refer to Section 2.7.4) and its many natural and cultural amenities make it a highly desirable place to live, work, play, and stay.

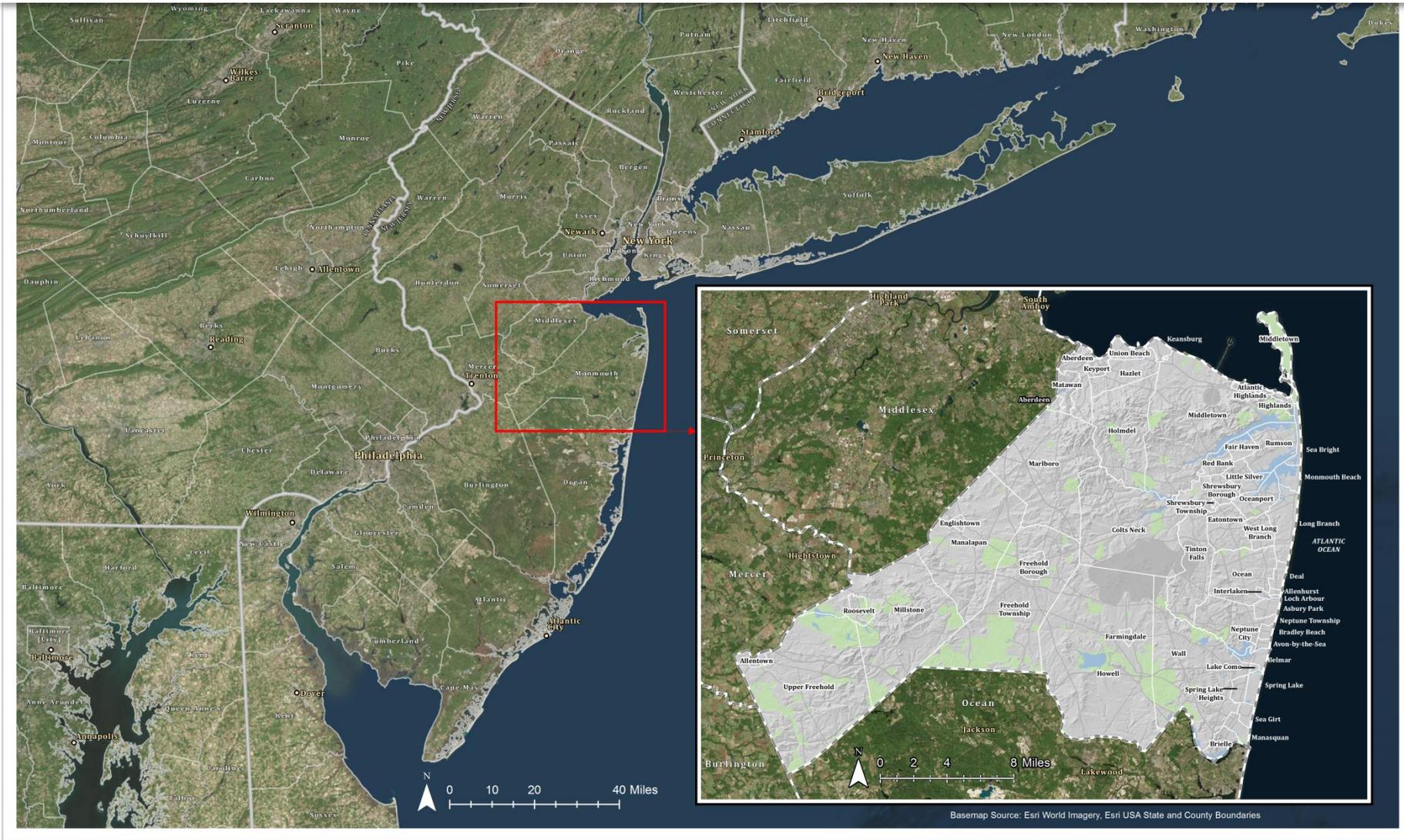
1.2 Demographics Trends and Existing Conditions

The [Monmouth County Division of Planning](#) creates, maintains, and updates a number of annual planning reports for use by the public that provide insight into existing conditions and trends in the county. First, the [Monmouth County Profile Report](#) serves as a comprehensive narrative of Monmouth County's demographics, housing, education, economics, and development data for a given year. The *Profile Report* assists the county with maintaining its AAA bond rating, which benefits municipalities, boards of education, utility authorities, and other local government entities seeking to finance large capital projects. [Monmouth County At-A-Glance](#) provides readers with an informative, graphically enhanced snapshot of the county and each of the 53 municipalities. This report publishes commonly requested demographic, housing, economic, employment, and land use data, in addition to a brief background summary and list of current planning and development issues for each municipality. The 2015 *At-A-Glance* featured an updated design with new datasets and text to reflect changes occurring in the county. The *Monmouth County Master Plan*, also referred to as the *Plan* or *Master Plan* throughout this document, recognizes *At-A-Glance* and the *Profile Report* as two of numerous consultative and supportive documents that should be referred to alongside the *Master Plan* during policy formation and program development (refer to Section 1.8 The Master Plan Structure).

Prior to delving into the *Master Plan*, readers are encouraged to peruse these two documents to gain a fundamental understand of the planning issues facing Monmouth County today. In addition, the *Master Plan Appendices* contain a number of documents important to the *Plan's* broader context including a brief exploration of the Dynamic Drivers that influence growth in the county followed by a highlight of national



Figure 1.1: Regional Location Map



and regional trends that are bound to influence these drivers as we move through the *Plan's* 10-year horizon.

1.3 The Master Plan Theme: Redevelopment, Revitalization, and Rediscovery

This document represents the third complete comprehensive *Master Plan* for Monmouth County, New Jersey since the inception of the Monmouth County Planning Board in 1954. It is the successor to the [Monmouth County Growth Management Guide \(1982\)](#) and prior to that report the [Monmouth County General Development Plan \(1969\)](#). This third *Master Plan* was initiated in response to a fundamental change in our approach to regional planning; from one that had emphasized growth management in an era of mass suburbanization to one that is more focused on the redevelopment, revitalization, and rediscovery of communities throughout the county. The new *Plan* recognizes that most of our municipalities have successfully planned for and have already established their desired physical form and character. As such, many of them now seek to maintain and/or enhance their distinct identities through more sustainable approaches in a time characterized by limited growth and constrained public finance.

1.4 Master Plan Vision Statement

As the era of mass suburbanization ends and population growth becomes more stable, Monmouth County transitions into a decade long strategy that supports investment in actions that help sustain our coveted high quality-of-life. The *Monmouth County Master Plan* is a vital coordinating tool used by municipalities, school boards, businesses, and other government agencies to help guide efforts and actions that contribute to a strong, stable, and sustainable prosperity for those that call this place home.

Attention to and investment in both our natural and built environments adds real value to our communities, providing for the county's overall long-term economic viability. Shore towns are being restored to their

former vitality with enhanced resiliency against future storm events. Older first and second expansion suburbs provide reinvestment opportunities for those seeking market affordable homes, a strong sense of community, and commuting convenience. Cultural resources, access to transit, and good jobs attract prosperous exurbanites to reside in more established and secluded enclaves while others opt for the vitality of *up and coming* hip towns being rediscovered along the [MoCo Arts Corridor](#). Further inland, towns continue to strike a balance between economic growth driven by the availability of land and infrastructure with environmental protection concerns. Open space, farmland preservation, and low-impact uses are expanded as ways to protect vital drinking water supplies and the county's agrarian economy in our more rural locales. Conversely, urban centers continue to follow through on their earlier redevelopment initiatives poised to realize their potential while small, historic towns look toward preservation as a means to revitalize and enhance their existing character.

As this new era of redevelopment, revitalization, and rediscovery takes hold, the next decade brings with it many unforeseen challenges. Although comprised of many independent towns and interdependent communities, the county and our stakeholders work together to address these challenges in achieving a common vision for our community; to keep Monmouth County...

"The Place You Want to Be"



1.5 Master Plan Goals, Principles, and Objectives (GPOs)

MASTER PLAN GOAL #1

PROMOTE A COMPREHENSIVE APPROACH TO PLANNING AND COORDINATE THESE EFFORTS AMONG ALL LEVELS OF GOVERNMENT AND WITH OUR COMMUNITY STAKEHOLDERS.

Goal Statement: The goal of comprehensive planning is to integrate county-level planning initiatives with plans at the federal, state, regional, and local levels to achieve effective coordination across jurisdictions and disciplines. This approach results in the most efficient use of public resources and provides for better results through beneficial organizational synergies.

Principle 1.1 Comprehensive Planning: Planning issues are to be addressed from interdisciplinary perspectives to identify and assess both the interdependent and collective impacts as well as new opportunities. This will minimize adverse impacts while maximizing benefits for all parties.

1.1 Objectives:

- A. As part of the *Monmouth County Master Plan*, create specialized documents and provide services that focus understanding on areas, issues, and ideas of interest and concern to help guide decision makers in shaping public policy.
- B. Provide value to the county by advising on long-term investment decisions, assisting in prioritizing operations, and coordinating interdepartmental activities.
- C. Provide value to residents, businesses, municipalities, and other stakeholder partners by offering information, support for planning activities, and opportunities to share planning related services.
- D. Support the goals and objectives of the *Monmouth County Strategic Plan*.

- E. Serve as a regional planning facilitator.

Principle 1.2 Coordination: Effective planning requires collaborating with stakeholders along with integration and coordination both internally (horizontally) and with other planning efforts and/or levels of government (vertically).

1.2 Objectives:

- A. Facilitate a continuous dialogue between the county, municipalities, and other stakeholders during the development of municipal and county master plans.
- B. Coordinate Division of Planning initiatives with other county departments and agencies.
- C. Provide Division of Planning support and technical assistance to other county departments and agencies that promote the goals of the *Monmouth County Master Plan* and the *Monmouth County Strategic Plan*.
- D. Coordinate county planning activities and plans with those of other counties as well as regional and state entities.
- E. Encourage inter-municipal coordination and cooperation in the review of plans, ordinances, programs, and projects that potentially have "greater than local" impacts to minimize adverse regional and local impacts while respecting home rule.
- F. Monitor state and federal plans, legislation, and proposed rules and regulations that could impact Monmouth County and the Goals, Principles, and Objectives of the *Monmouth County Master Plan*.
- G. Promote the sharing of information and data with planning partners.
- H. Identify planning related services that could be shared with municipalities to help lower public costs.
- I. Coordinate with municipalities on regional planning initiatives.
- J. Provide support and coordination for the committees and councils under the purview of the Monmouth County Planning Board and the Monmouth County Board of Chosen Freeholders.



Principle 1.3 Planning Approach: Comprehensive planning relies on the use of new and emerging technologies as well as traditional methods of input from stakeholders and citizens.

1.3 Objectives:

- A. Continue to emphasize the use of geographic information systems (GIS) for analysis and the visualization of data for planning studies.
- B. Use evolving technologies as tools for planning and the dissemination of information.
- C. Continue to develop partnerships with community stakeholders by offering planning knowledge and assisting in project implementation.
- D. Encourage citizen participation in planning exercises and studies through new approaches, such as social media and webinars, to reach a broader audience.
- E. Develop and/or use existing quantifiable metrics to measure the effectiveness of programming.

2.1 Objectives:

- A. Encourage county and municipal actions to identify, promote, and protect natural resources and significant natural features, unique areas, critical habitats, and the potential or known habitats of resident and migratory populations of rare, endangered, and threatened species, particularly those that have municipal, county, or statewide significance.
- B. Protect, conserve, and enhance the county’s significant, diverse, natural, and scenic resources utilizing sound ecological protection and restoration measures.
- C. Protect habitat and ecological diversity by encouraging the preservation of large, contiguous tracts of land.
- D. Encourage the sustainable use of public lands in concert with natural resource protection.
- E. Encourage the protection and conservation of all water sources, including the reuse of water, through responsible water resource management planning.
- F. Ensure high water quality through the implementation of Best Management Practices (BMPs).
- G. Promote the consideration of such overarching issues as sea level rise, saltwater intrusion, and development impacts on aquifer recharge and stormwater management in decision making related to water supply and wastewater.
- H. Promote public awareness of environmental issues through outreach and educational opportunities including the relationship between the protection and enhancement of natural resources and economic value to the community.
- I. Support the creation of municipal land use regulations and programs that protect environmentally sensitive areas based on constraints, building suitability, natural resource value, and environmental criteria.

Principle 2.2 Farmland Preservation: In addition to preserving our historic agricultural heritage, farmland preservation is a valuable

MASTER PLAN GOAL #2

PROMOTE THE PROTECTION AND CONSERVATION OF NATURAL AND CULTURAL RESOURCES TO HELP GUARANTEE OUR LONG-TERM SUSTAINABILITY.

Goal Statement: The goal of resource protection goes beyond the preservation of natural resources and systems to include cultural resources such as the arts, historic and architectural assets including buildings, sites, or streetscapes which give communities a sense of identity and value.

Principle 2.1 Natural Resources: Resources that are the naturally occurring, life-supporting environmental infrastructure that all species rely upon and the built environment is dependent upon to function and prosper.



program that permanently preserves land for food production, maintains the equine and nursery industries, preserves historic landscapes and vistas, retains a community’s rural character, and protects natural systems from further degradation caused by the non-agricultural built environment.

2.2 Objectives:

- A. Continue to support and encourage the strategic purchase of development rights on farmland for the purpose of maintaining working farms and agricultural lands using objective criteria to set priorities.
- B. Support the identification of new and the continuation of reliable dedicated sources for farmland preservation funding.
- C. Encourage and promote the use of generally accepted agricultural management practices (AMPs) that have been adopted by the SADC and generally accepted agricultural management practices that foster good stewardship of farming operations while protecting natural resources.
- D. Promote sound zoning and land use techniques that guide development and redevelopment into more compact locations while continuing to preserve viable farmland.
- E. Encourage the expansion of viable agricultural uses on preserved farmland to assure long-term agribusiness sustainability.

Principle 2.3 Arts, Historic and Cultural Community Identity: Our cultural assets and resources reflect our shared heritage. Preserving them helps retain community distinctiveness, instills community pride, supports sustained economic development, attracts reuse and reinvestment, and greatly contributes to our overall quality-of-life.

2.3 Objectives:

- A. Encourage and support local efforts to identify, preserve, and restore significant historic sites, buildings, structures, and cultural institutions.

- B. Reinforce Monmouth County’s rich arts, cultural, and historic identity by promoting venues, sites, and events that invite visitors, attract business, and entice residents to discover our vibrant, diverse, and distinct communities.
- C. Develop partnerships with cultural and educational institutions, nonprofits, businesses, tourism groups, and artists that support marketing, economic development, and preservation efforts.
- D. Increase awareness of the economic value arts, culture, and history have toward the support of community preservation, identity, and development/redevelopment efforts.
- E. Support education programs that incorporate Monmouth County history and expand opportunities for culturally-oriented programming.
- F. Support the preservation, protection, enhancement, and appreciation of places of community expression of diversity, customs, and traditions.

Principle 2.4 Investments in Priority Preservation Areas and Locations: Aligning state, county, and local preservation strategies improves efficiency and reduces cost in protecting our community’s significant natural resources and cultural assets.

2.4 Objectives:

- A. Focus most public land acquisition and farmland preservation efforts in county recognized priority preservation investment areas.
- B. Promote land use techniques such as noncontiguous clustering and lot-size averaging that support the retention of farmland and open space in rural communities.
- C. Support joint agricultural and recreational preservation efforts that provide for the complementary use of preserved properties, where feasible.
- D. Enhance communities through revitalization efforts while retaining and strengthening significant assets that contribute to their individual identity.



- E. Provide for necessary infrastructure improvements and support services resulting from the adverse impacts of regional development affecting preservation areas within the context of buffering and protecting our agricultural, cultural, and historic resources.
- F. Support policies and investments in preservation areas that provide for safe, healthy, sustainable, and resilient communities.

- C. Encourage the development of a multi-modal transportation and circulation network that promotes walkability and bicycling, links neighborhoods to one another, and connects residents to employment centers and regional facilities.
- D. Encourage a range of housing options including types, sizes, styles, and accommodations to meet the needs associated with various lifestyles, life-stages, abilities, and occupations of residents while supporting economic sustainability within the region.
- E. Encourage the redevelopment and revitalization of highway commercial corridors that incorporate multipurpose uses, higher design standards, are located outside Special Flood Hazard Areas (SFHA), and improve circulation both on and off-site.
- F. Support efforts that increase sustainable infrastructure capacity to accommodate population change, replace aging systems, and encourage investments that provide for safe, sound, resilient, and reliable utility service.
- G. Promote vibrancy, attractiveness, and a diverse array of uses, occupations, services, and amenities for downtowns and business districts.
- H. Endorse the use of enhanced landscapes, streetscapes, and design amenities that promote safe and secure neighborhoods as well as other attractive and appealing built environments that discourage aversion, crime, and blight.
- I. Encourage regional and local arts/cultural planning initiatives and support creative placemaking efforts that attract innovative ideas, community involvement, entrepreneurial talent, and new businesses to a community.
- J. Enhance and improve recreational opportunities.
- K. Encourage the use of green technology and design to reduce the impact of property improvements on natural systems.
- L. Promote the redevelopment or reuse of environmentally degraded places such as brownfields and grayfield sites into

MASTER PLAN GOAL #3:

PROMOTE BENEFICIAL DEVELOPMENT AND REDEVELOPMENT THAT CONTINUES TO SUPPORT MONMOUTH COUNTY AS A HIGHLY DESIRABLE PLACE TO LIVE, WORK, PLAY, AND STAY.

Goal Statement: The purpose of this goal is to assist municipalities in determining the best use of increasingly scarce undeveloped land resources and to help identify opportunities for the redevelopment of other areas in ways that will best meet the demands of the evolving marketplace and needs of the community. The purpose is also to assist those municipalities that desire to maintain and/or enhance their community’s current character as their highest local priority.

Principle 3.1 Vibrant and Sustainable Communities: Encourage the creation of vibrant communities through a variety of housing choices, energy and transportations options, recreational and cultural offerings, health and safety initiatives, and business opportunities that result in a more sustainable and higher quality-of-life for all residents.

3.1 Objectives:

- A. Promote polices that foster healthy, sustainable, and resilient communities.
- B. Facilitate community dialogue and engagement in the planning process.



safe, new uses and public amenities that promote healthy community design.

- M. Support the acquisition of natural open lands that protect environmentally sensitive resources, provide for habitat restoration, and mitigate the impacts of natural hazards.
- N. Support the sustainability of rural communities through farmland preservation and the advancement of viable local agricultural industries.

Principle 3.2 Preservation of Community Character: Protect and strengthen the established character of municipalities and their distinct qualities.

3.2 Objectives:

- A. Support retention, preservation, restoration, and improvement of our cultural, historic, and scenic resources that define a community's distinct character.
- B. Support measures to improve communities in need of revitalization or restoration.
- C. Promote in-fill development and the adaptive reuse of substandard, underutilized, or abandoned structures that complement or improve adjacent land uses and support or enhance neighborhood character resulting in healthier places to live, work, learn, and recreate.
- D. Promote the development and use of design standards that reinforce neighborhood character and improve the appearance and appeal of special improvement districts, commercial districts and corridors, and redevelopment areas.
- E. In rural areas, retain the existing community character through the use of design standards, land use strategies, design, landscaping, and land preservation.

Principle 3.3 Housing: Encourage a variety of new and rehabilitated housing that will enable populations to more readily cycle through different life-stages, giving residents an opportunity to age in place.

3.3 Objectives:

- A. Encourage municipalities to monitor the evolving housing market and consider the desirability of changing zoning to accommodate shifts in market demand.
- B. Encourage housing development in locations that provide access to various modes of travel that could reduce automobile dependency.
- C. Promote energy efficient construction and housing systems that reduce long-term costs and maintenance as well as design, technologies, and construction methods that have a lower impact on natural systems.
- D. Encourage public and private rehabilitation and reuse of substandard and vacant housing units in addition to the adaptive reuse of substandard, underutilized, or abandoned structures.

Principle 3.4 Economic Development and Redevelopment: The public will benefit socially and economically from the retention, attraction, and advancement of entrepreneurial and business enterprises that result in quality jobs and a stronger, more resilient tax base.

3.4 Objectives:

- A. Support ongoing county economic development initiatives and provide technical assistance when needed.
- B. Encourage development of a high quality, diversified tax base to provide superior economic resiliency when confronted with unanticipated changes in the overall economy.
- C. Help foster key partnerships between the county, businesses, faith-based organizations, nonprofits, educational institutions, community organizations, chambers of commerce, utility providers, and state and local governments.
- D. Promote sustainable coastal, rural, cultural, and historical-based tourism.
- E. Encourage public investments that enhance local and regional competitiveness in the marketplace.



- F. Promote the retention, improvement, maintenance, upgrading, and/or adaptive reuse of existing governmental and institutional facilities.
- G. Promote the use of environmental BMPs for utilities and infrastructure during redevelopment that contribute to healthier communities, support improved efficiency, and result in long-term cost reductions.
- H. Support the safe redevelopment of brownfields, where feasible.
- I. Encourage a variety of new and rehabilitated housing options to meet the needs of an evolving workforce in support of greater regional economic growth.

Principle 3.5 Agricultural Development: Agriculture is an irreplaceable economic asset to our local, regional, and state economies.

3.5 Objectives:

- A. Foster and develop plans, programs, and practices that reinforce local agriculture as a sustainable industry.
- B. Support the expansion of agribusiness opportunities in response to changes in the larger regional marketplace.
- C. Continue to promote and support agricultural retention and preservation efforts.
- D. Foster the advancement of the Right to Farm Act objectives through encouragement of local land use ordinances that support commercial farms and facilitate the integration of surrounding land uses, recognizing both the historic nature and continued importance of our local farms and the agricultural industry.
- E. Raise public awareness of the economic, environmental, social, and cultural value of protecting our agricultural resources.

Principle 3.6 Recovery and Community Resiliency: Promote planning, land use, and design strategies that increase the capacity to adapt physically and economically to long-term environmental changes, emergencies, and natural hazards.

3.6 Objectives:

- A. Participate with our stakeholders in developing long-term recovery, mitigation, and resiliency plans to better protect communities, people, businesses, infrastructure, services, and resources against the effects of natural and manmade disasters.
- B. Offer assistance to other county agencies for hazard mitigation planning and addressing the potential long-term economic, environmental, and health impacts that occur during disaster recovery.
- C. Continue to work with municipalities on the implementation of hazard mitigation policies and strategies.
- D. Assist municipalities to incorporate resiliency planning into their local master plans, ordinances, and practices.
- E. Provide support for outreach, awareness, and public education to coastal and riverine communities on flood hazards, mitigation strategies, and emergency preparedness. Encourage individuals, local businesses, and community organizations to develop their own disaster preparedness plans.
- F. Promote and support actions and efforts that increase natural resiliency.
- G. Provide technical assistance in all disaster recovery efforts.
- H. Identify natural resources such as stream corridors, frequently flooded properties, steep slopes, century forests, and coastal lowlands that contribute to community resiliency.

Principle 3.7 Investment in Priority Growth Areas and Growth-Impacted Locations: Aligning state, county, and local investment strategies improves efficiency, minimizes incompatible land use conflicts, and reduces costs associated with repairing, replacing, and expanding systemic infrastructure.

3.7 Objectives:

- A. Encourage public infrastructure investments in county recognized priority growth areas and locations that support



economic development and redevelopment; particularly locations in existing and planned service areas.

- B. Coordinate infrastructure and utility upgrades with economic development and redevelopment activities.
- C. Encourage the repair and replacement of aging infrastructure systems that eliminate deficiencies, enhance conservation and recreational opportunities, improve public safety, and increase efficiency and capacity as needed.
- D. Encourage the incorporation of new technologies and improved coordination among public service providers to ensure proper timing and sequencing of facility and service extensions and upgrades.
- E. Promote roadway and intersection improvements that provide for complete streets, enhance vehicular safety, address capacity issues, and reduce wait times.
- F. Focus most public transportation improvements, utility, and infrastructure investment in places where public safety issues are a concern.
- G. Work with our transit partners in providing more effective and efficient transportation services and options within the county as well as to and from regional destinations outside the county.
- H. Support investment in the preservation of cultural, historic, and scenic resources located in priority growth areas and locations.
- I. Support policies and investment in priority growth areas and locations that promote safe, healthy, sustainable, and resilient communities.
- J. Support investment in the acquisition of environmentally sensitive land and resources located in priority growth areas and locations.

1.6 10-Year Planning Horizon

The *Monmouth County Master Plan* is written within the context of a 10-year planning horizon and is limited in scope to planning issues that are meaningful to those that live, work, play, and stay in Monmouth

County. It draws on the cooperation of community stakeholders and governmental resources, seeking to inform and guide decision makers at all levels of influence in their planning and implementation activities.

1.7 One Plan, Multiple Versions

The *Master Plan* is intended to be presented in several distinct forms. The first version is this document; initially adopted by the Monmouth County Planning Board and published as the official *Monmouth County Master Plan (2016)*. Although fully implementable at the time of adoption, this text-based version of the *Plan* is a temporary bridge to the final product. The final form of the *Master Plan* will be visually and graphically rich interpretation of the *Plan*, intended for interactive, online viewing, which will eventually be adopted by the Monmouth County Planning Board to replace the text laden version.

Concurrent with development of the graphic version, the Division of Planning's GIS Section will begin working on developing an online mapping tool that will allow community stakeholders access to the mapping data presented in the *Plan*. From an online portal, users will be able to recreate *Master Plan* figures as well as create their own maps for defined geographic areas.

In an effort to make the *Master Plan* a truly living document, the Division of Planning will put in place procedures to periodically update the initial text version of the *Plan*. This will result in an unofficial but perpetual draft of the *Plan* housed online that the public can reference for up-to-date data and information.

1.8 The Master Plan Structure

FOUNDATION: This section of the *Master Plan*, 1.0 Introduction & Purpose, provides the reader with an overview of the *Plan's* foundation as well as the Planning Board's overall approach to preparation of the *Master Plan*. It presents the fundamental principles on which the *Plan* is



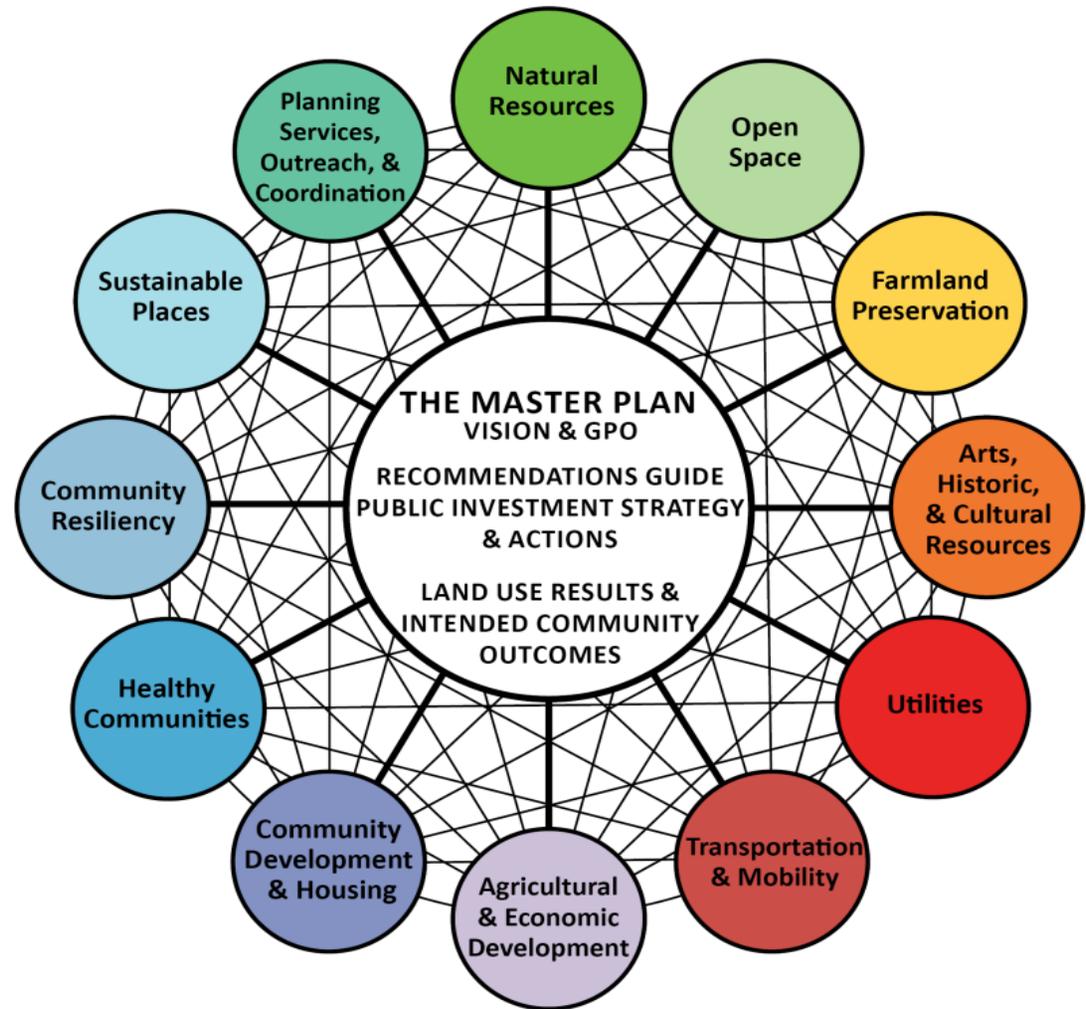
based including the community’s Vision Statement and the Goals, Principles, and Objectives (GPOs).

LAND USE: Figure 1.2: Monmouth County Master Plan Logo shows the relationship between the major components that comprise the *Master Plan* including Land Use, the first Element of the *Master Plan*, and the 12 Primary *Master Plan* Elements that surround the *Plan’s* core. 2.0 Land Use Element contains no formal Recommendations. Instead, each of the 12 Primary Elements provides Recommendations and Stakeholder Strategies intended to support actions and investments resulting in desirable land use and community outcomes as expressed in the GPOs. The Land Use Element provides a historic and contemporary overview of the influences on land use in the county as well as a framework for public investment that recognizes the importance of aligning planning outcomes with public policy and investment strategies.

12 PRIMARY ELEMENTS: The 12 Primary Elements are similarly presented throughout the *Plan*; each containing an introduction to the Element’s topic area, a review of existing conditions, a discussion about Emerging Issues and Long Range Challenges, highlights of stakeholder actions and efforts, as well as a section on resources and funding opportunities. Figures such as maps, images, tables, and charts, along with success stories reinforce themes and concepts throughout the *Plan*. Links to relevant documents and website have been imbedded in the online version for easy referral while the same links can be found as an addendum to each Element in the printed version. Recommendations as well as Stakeholder Strategies for each Element are intended to guide various community stakeholder efforts, actions, and investment

towards desirable land use outcomes as framed in the Land Use Element and conveyed through the GPOs as a means to attaining the *Master Plan’s* Vision. Both the Recommendations and Stakeholder

Figure 1.2: Monmouth County Master Plan Logo



Strategies were developed with input from the Monmouth County Planning Board, community stakeholders, and elected officials during topic oriented Working Group meetings and throughout the planning process.

The Primary Elements are organized into three focus categories based on their intent and purpose: 1) Preservation Focused Elements; 2) Economic Development Focused Elements; and 3) Whole Communities Focused Elements. The Preservation Focused Elements include Natural Resources (3.0), Open Space (4.0), Farmland Preservation (5.0), and Arts, Historic, & Cultural Resources (6.0). The Arts, Historic, & Cultural Resources Element (6.0) is a cross-over Element as it possesses attributes that are important to both preservation and economic development. Economic Development Focused Elements include Arts, Historic, & Cultural Resources (6.0), Utilities (7.0), Transportation & Mobility (8.0), Agricultural & Economic Development (9.0), and Community Development & Housing (10.0). Community Development & Housing (10.0) is also considered a crossover Element that straddles both economic development and whole community. The Whole Community Focused Elements takes the results sought through the Preservation and Economic Development Focus Elements and applies them to a broader context, one that seeks to achieve safer, stronger, more secure, healthier, and publically engaged communities. Whole Community Focused Elements include Community Development & Housing (10.0), Healthy Communities (11.0), Community Resiliency (12.0), Sustainable Places (13.0), and Planning Services, Outreach, and Coordination (14.0).

MASTER PLAN RECOMMENDATIONS: Recommendations are the official “actions steps” that the Monmouth County Planning Board and Division of Planning, as the lead agency, may pursue in order to achieve the purpose and intent ascribed by the *Master Plan’s* GPOs. They will guide the Division of Planning’s work program during the *Plan’s* 10-year lifecycle. As a major component of the *Master Plan*, all

Recommendations are reviewed and accepted by the Board of Chosen Freeholders and adopted by the Planning Board.

Each *Master Plan* Element has an associated *Recommendation Summaries Report* which has been compiled into a standalone compendium to the *Master Plan*. The report provides an in-depth discussion as to how each Recommendation correlates to the GPOs of the *Master Plan*. For brevity sake, an abridged summary sheet for each Recommendation is presented at the beginning of the corresponding Element. Recommendations are reiterated towards the end of each Element as an appropriate segue to Stakeholder Strategies.

STAKEHOLDER STRATEGIES: The Stakeholder Strategies found in each of the 12 Primary Elements are a list of suggestions, informal recommendations, and ideas for the county’s planning partners and other community stakeholders to consider when developing their own plans, programming, and outreach efforts. Unlike official *Master Plan* Recommendations, implementation of these prospective action items does not necessarily fall under the purview of the county as the lead agency; however they do support the overall GPOs of the *Master Plan*. As such, the Monmouth County Division of Planning will provide assistance to community stakeholders and municipal partners, whenever feasible, to assist in implementation of these activities and ideas. Stakeholder Strategies are provided for each Element, organized by their influence on the other Element’s topical areas. This approach reinforces the interconnectivity between the various Elements and provokes thought as to how a Stakeholder Strategy in one Element can influence or support multiple positive outcomes elsewhere in the *Master Plan*.



DOCUMENTS INCORPORATED BY REFERENCE: A unique attribute of the *Monmouth County Master Plan* is that it carries over some elements of the prior *Monmouth County Growth Management Guide (1982)* in addition to integrating several new documents that are officially incorporated into this *Master Plan* by reference. This compilation of standalone policy documents produced by the Division of Planning, other Monmouth County Departments, or closely related stakeholder agencies promotes and advances the GPOs. The documents identified in the Figure 1.3: Documents Incorporated into the Master Plan by Reference are recognized as components of one or more Elements and subject to the provisions established under N.J.S.A. 40:27-4.



CONSULTATIVE AND SUPPORTIVE DOCUMENTS: The *Master Plan* also cites numerous other documents of significance (e.g. maps, plans, reports, inventories, studies, etc.) that provide important information and resources that support specific *Master Plan* Elements. Although not recognized as official components of the adopted *Monmouth County Master Plan*, they complement one or more *Master Plan* Elements and should be consulted alongside the *Master Plan* during policy formation and program development. The list of documents incorporated by reference into the *Master Plan* is identified in Figure 1.4: Master Plan

Consultative and Supporting Documents. More information about the *Master Plan's* relationship to other plans and documents can be found in 14.0 Planning Services, Outreach, & Coordination Element.



APPENDICES: Element 15.0 contains a number of documents important to the *Master Plan's* broader context including:

- **APPENDIX A, *Monmouth County Planning Board Timeline:*** A comprehensive list of milestones, activities, accomplishments, and influences associated with Monmouth County Planning and the Monmouth County Planning Board from 1935 to the present.
- **APPENDIX B, *Three Dynamic Drivers:*** An insightful exploration about population dynamics in Monmouth County written by Former Planning Board Chair, Vince Domidion
- **APPENDIX C, *National and Regional Trends and Expectations:*** A summary of relevant national and county trends and expectations about population, housing, economy, social/cultural, and natural resources which could influence Monmouth County planning issues during the *Master Plan's* 10-year lifespan.
- **APPENDIX D, *Master Plan Recommendation Summaries:*** Expanding the *Master Plan* graphic Recommendation Summaries found at the beginning of each Element, this Appendix details each Recommendation's relationship to the *Master Plan* GPOs.
- **APPENDIX E, *Municipal Planning Documents Reference Sheet:*** A compilation of municipality specific website, master plan status, various master plan elements, committees/commissions, and natural resource inventory.
- **APPENDIX F, *Monmouth County CDBG Approved Municipal and Nonprofit Projects:*** A compilation of the Monmouth County CDBG approved municipal and nonprofit HUD grant award recipients for eligible projects from 2006 to 2015 with project name and grant amount.
- **APPENDIX G, *Hyperlink URLs:*** The URL address and page number of every hyperlink listed in the Master Plan to provide readers

advanced means of electronic accessibility and a condensed list of references by chapter.

1.9 Community Outreach and Public Participation

Work on the *Master Plan* update began in the summer of 2013. It was officially introduced as a project of the Monmouth County Division of Planning with a public kick-off event on October 22, 2013. At that time, the concept of developing a new *Master Plan* focused on six key themes: (1) consolidate prior planning efforts, (2) promote beneficial economic development, (3) preserve the quality of community life, (4) encourage efficient land use, (5) improve environmental quality, and (6) improve intergovernmental coordination. These six key themes have been sustained within the *Master Plan* through various drafts and prior iterations. The October 2013 kick-off event was the first of many public outreach and engagements efforts intended to increase public awareness of the value of planning, garner input from the public and feedback into the planning process, and establish community stakeholder relationships that lead to project support and eventual assistance with implementation. Throughout development of the *Plan's* Vision Statement, GPOs, as well as the Recommendations and Stakeholder Strategies, professional staff from the Division of Planning and members of the Monmouth County Planning Board lead numerous discussions with issues-based Working Groups. Outcomes from these Working Groups, comprised of community stakeholders, planning board members, elected officials, and other government representatives, lead to the creation of the 12 Primary Elements of the *Master Plan*.



The Monmouth County Division of Planning used a number of approaches to collect public comments and engage community stakeholders during the *Master Plan* planning process including:



A comprehensive overview of the master planning process is displayed through a graphic timeline in Figure 1.5: Master Plan Process Timeline.

1.10 Implementation

Monmouth County Master Plan Recommendations are intentionally structured as implementable “actions steps” that the Monmouth County Planning Board and the Division of Planning, as the lead agency, may choose to pursue at any time during the 10-year planning horizon in order to achieve the intent and purpose ascribed through the GPOs. Each year, with consent from the Planning Board, the Division of Planning will review each of the Recommendations and from that point develop and prioritize an annual work program. The creation of the annual work program requires timely updates to the *Master Plan* as a living document as envisioned in Section 1.7 and takes into account the status of ongoing public interest in planning outcomes. Devising the annual work program provides an opportune moment for Planning Division staff to reevaluate the progress made in achieving actions initiated during the prior year and amend approaches and strategies in

response to changing circumstances and feedback received from the public during implementation. Implementation is dependent upon a number of factors including availability of in-house professional planning staff to drive the annual work program, funding opportunities, as well as assistance and support provided by other county departments, municipal partners, and community stakeholders. Maintaining a sense of relevance, proprietorship, and stewardship amongst the various county agencies and community stakeholders is one of the greatest challenges and one of the most important aspects necessary toward achieving the three overarching goals of the *Monmouth County Master Plan*.

1.11 Summation

This new *Monmouth County Master Plan* builds upon an already successful planning heritage; one that has afforded today’s residents, businesses, and visitors to Monmouth County with an exceptional variety of experiences and an enhanced quality-of-life. Even in the daunting shadow of the Great Recession, recovery from Superstorm Sandy, and the closure of Fort Monmouth, this *Master Plan* envisions inventive planning that works on behalf of decision makers and community stakeholders toward a more resilient and sustainable future. This *Master Plan* is to be a dynamic, living document; a flexible tool intended for use by municipalities, school boards, and other local government agencies in the development and creation of their own plans and programs. As such, the information, data, and resources in this *Plan* are easily accessible, highly transferable, and purposely organized around 12 Primary Plan Elements, similar to those found in municipal master plans. It is a document derived from stakeholder collaboration and consensus, which provides a countywide public investment strategy built upon prior planning efforts that reinforce our overall community vision. The *Master Plan* acknowledges and supports other local and regional planning efforts and seeks consistency amongst these plans and agencies as a realistic means to advance common public interests and shared planning goals.



Figure 1.5: Master Plan Process Timeline

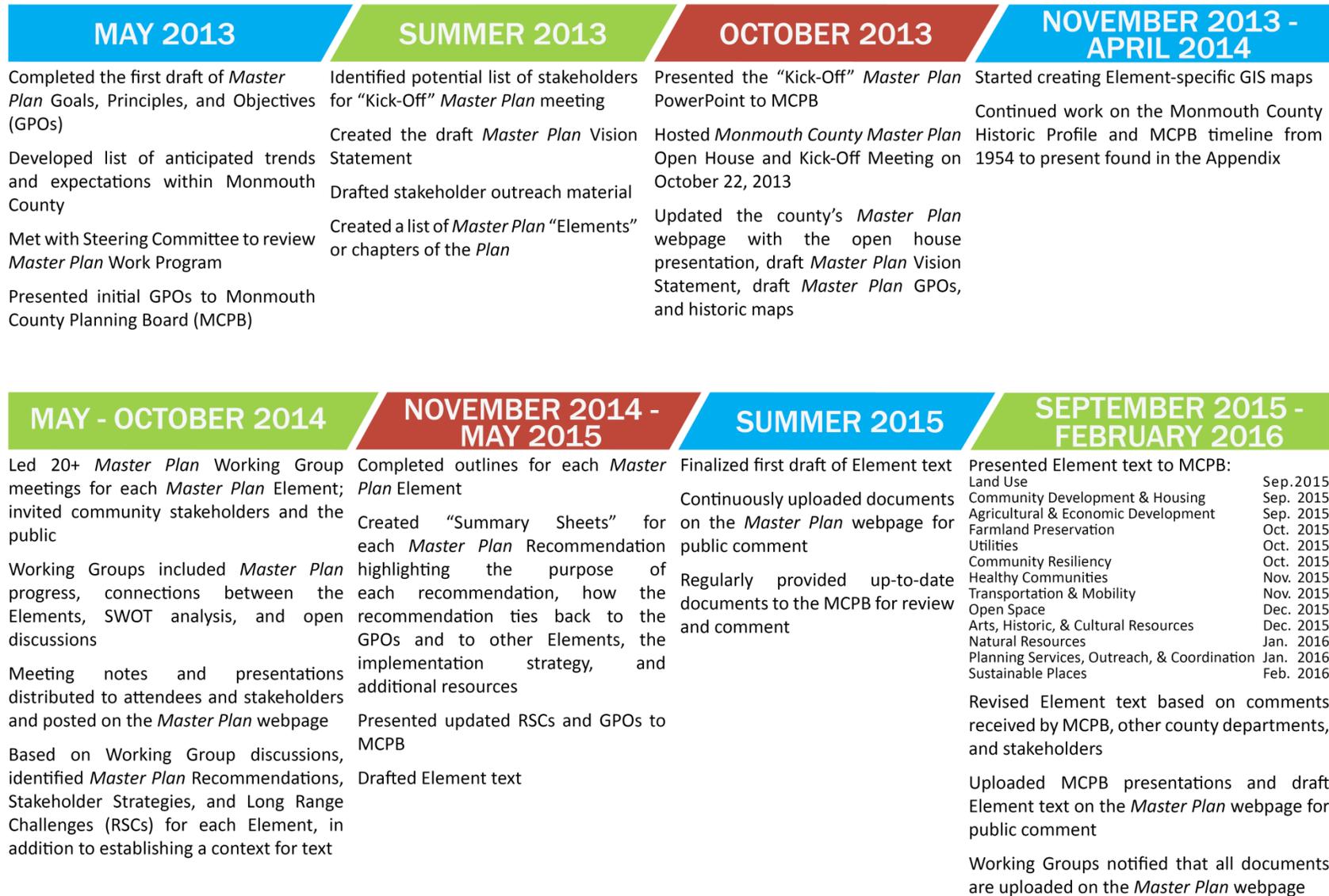
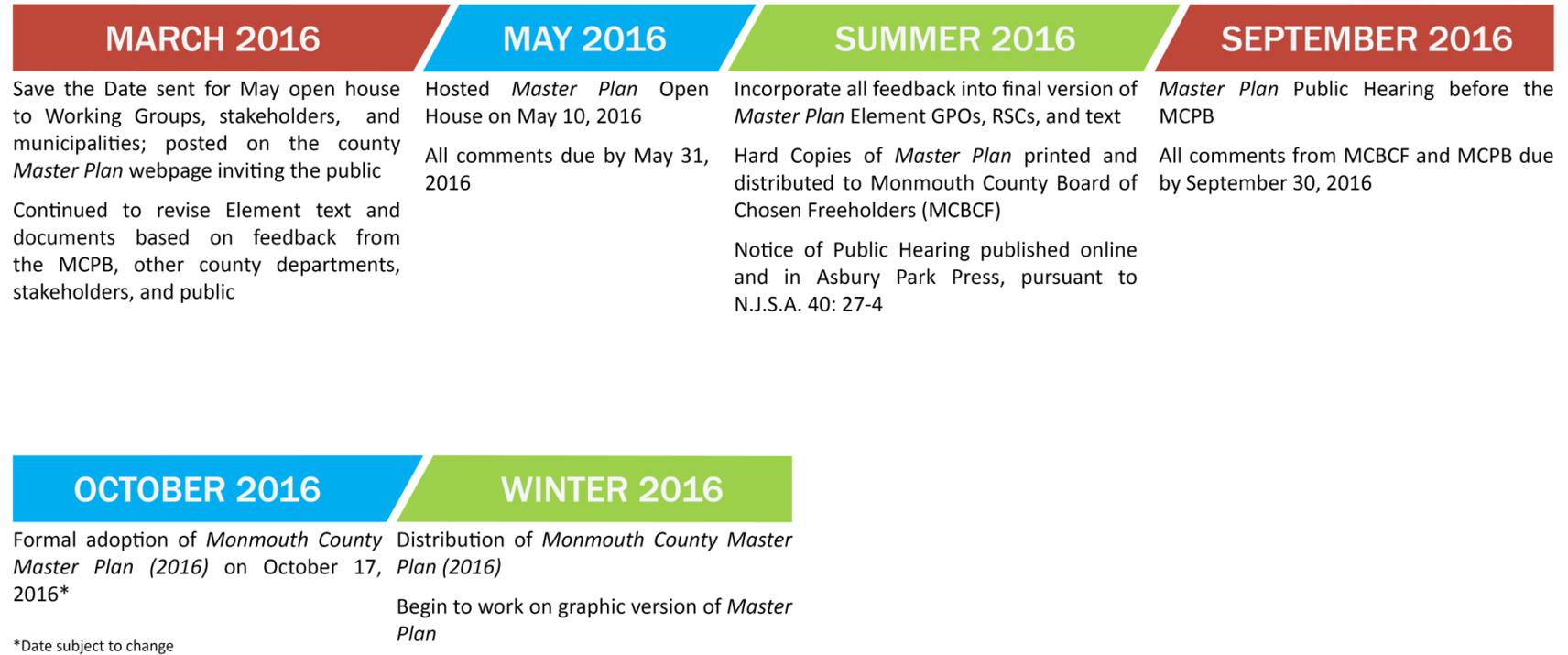
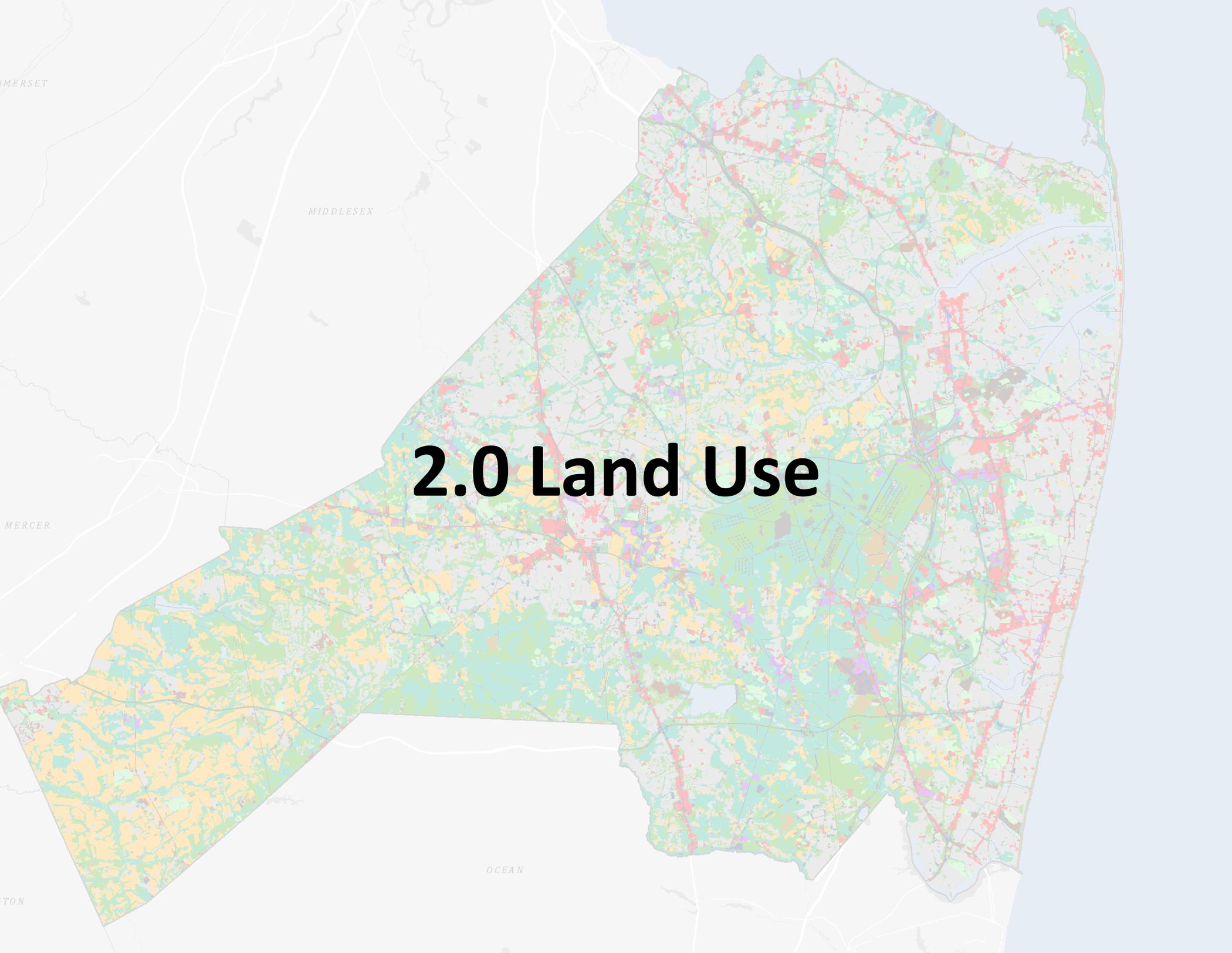


Figure 1.5: Master Plan Process Timeline (continued)





2.0 Land Use

2.0 Land Use

2.1 Introduction

Every Element of the *Master Plan* relates back to the way we decide to invest in our community's future. The decision in what type of investment to make can serve many purposes such as the investment in the preservation of land to retain an irreplaceable and valuable natural system, the reinvestment in existing buildings and infrastructure that support economic development efforts, or the investment in new capital projects that spur additional economic and social benefits. Land use results from a deliberative system of tangible and intangible policy choices, done collectively and individually, influenced by public, private, and nonprofit sector investments. This *Master Plan* places many of the complicated, interdependent relationships between the various *Plan* Elements into a contextual framework to assist decision makers in determining a preferred land use preservation and/or development strategy.

Municipalities retain much of the land use decision-making ability as prescribed by New Jersey's Municipal Land Use Law (MLUL). However, there are a number of other public policy and planning efforts that considerably influence land use outcomes. This *Master Plan* Element reviews the status of land use in Monmouth County as well as describes those initiatives that have a major influence on land use outcomes. Fortunately, Monmouth County has a clear and solid foundation in existing land use policy stemming from many detailed prior studies and regional plans.

The Land Use Element works in concert with other *Master Plan* Elements to:

- Determine the appropriate location for certain types of land use resulting in anticipated outcomes

- Evaluate the alignment of public policy and investment strategies resulting in preferred land use outcomes
- Identify where conflicts may occur between growth and preservation policy at various levels of government while acknowledging that these policies sometimes must work in tandem towards a beneficial outcome
- Make municipalities aware of land use policy alignments and potential conflicts so they may better determine an appropriate course of action and investment at the local level

2.2 Historic Land Use Influences

Land use today in Monmouth County is the culmination of centuries' worth of historic factors, each building upon and in relation to one other. Figure 2.1: Monmouth County Historic Timeline displays a graphic timeline starting from 9,500 B.C. continuing to *Monmouth County Master Plan* adoption in 2016. The first primary determinant in contemporary land use was the original Native American trails along ridgelines throughout the area. These trails continue to influence us today as they have been incorporated into the fundamental alignment of our local roadway network. Other early factors included soil conditions that were the primary determinant in the location of European settler farmsteads and forest clearing activities necessary for crop production.

The establishment of mills along stream corridors first facilitated Colonial agrarian commerce and then early American enterprise. Natural resource-based industries like iron ore and marl were influential in the area but short lived, ceding to other regional and national economic demands. Agrarian commerce, the primary land use from the Colonial Era well into the 20th century, led to the establishment of business centers and communities in what are today Freehold Borough, Farmingdale, Englishtown, and Allentown ([Figure 2.2: Historic Map of Monmouth, 18th Century](#)).



Figure 2.1: Monmouth County Historic Timeline

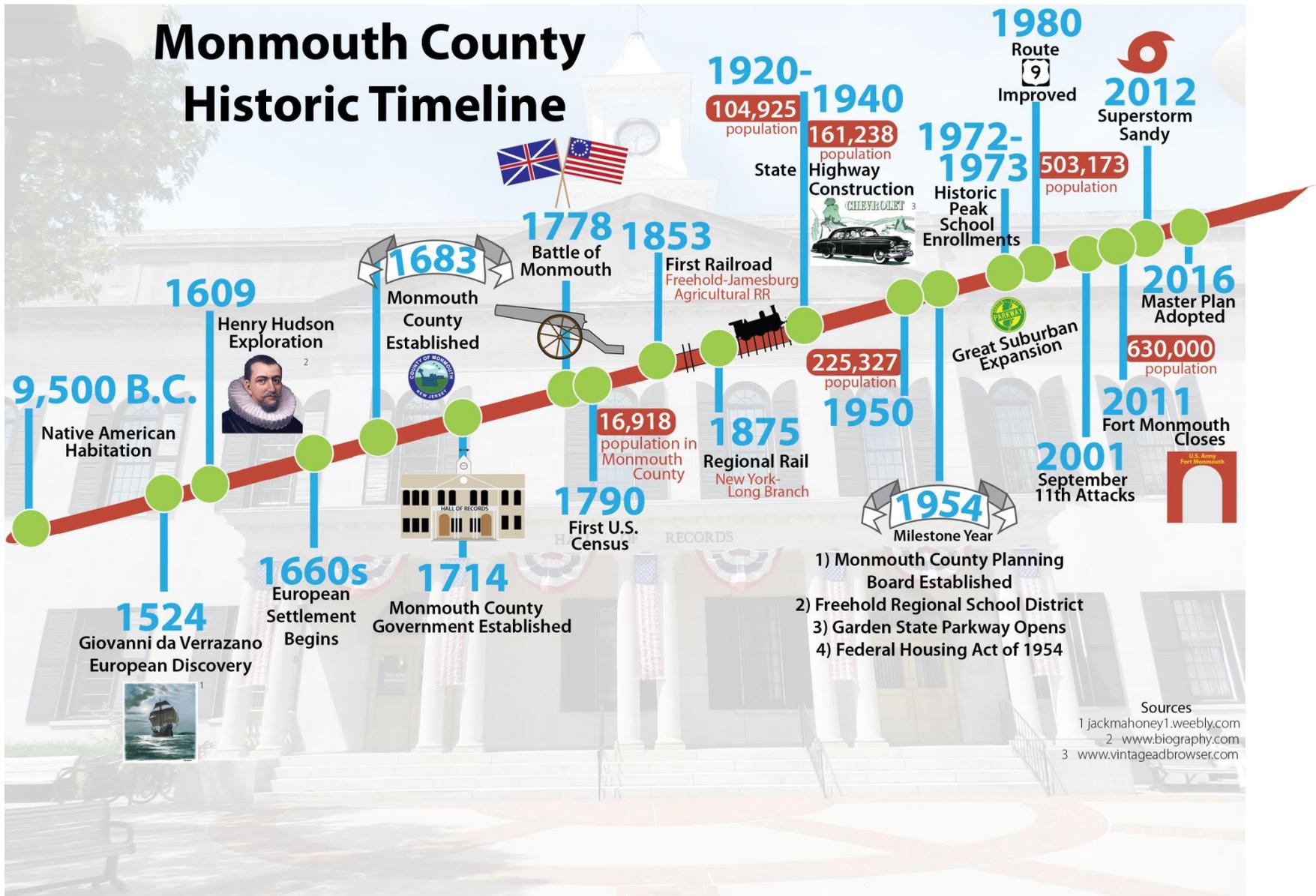
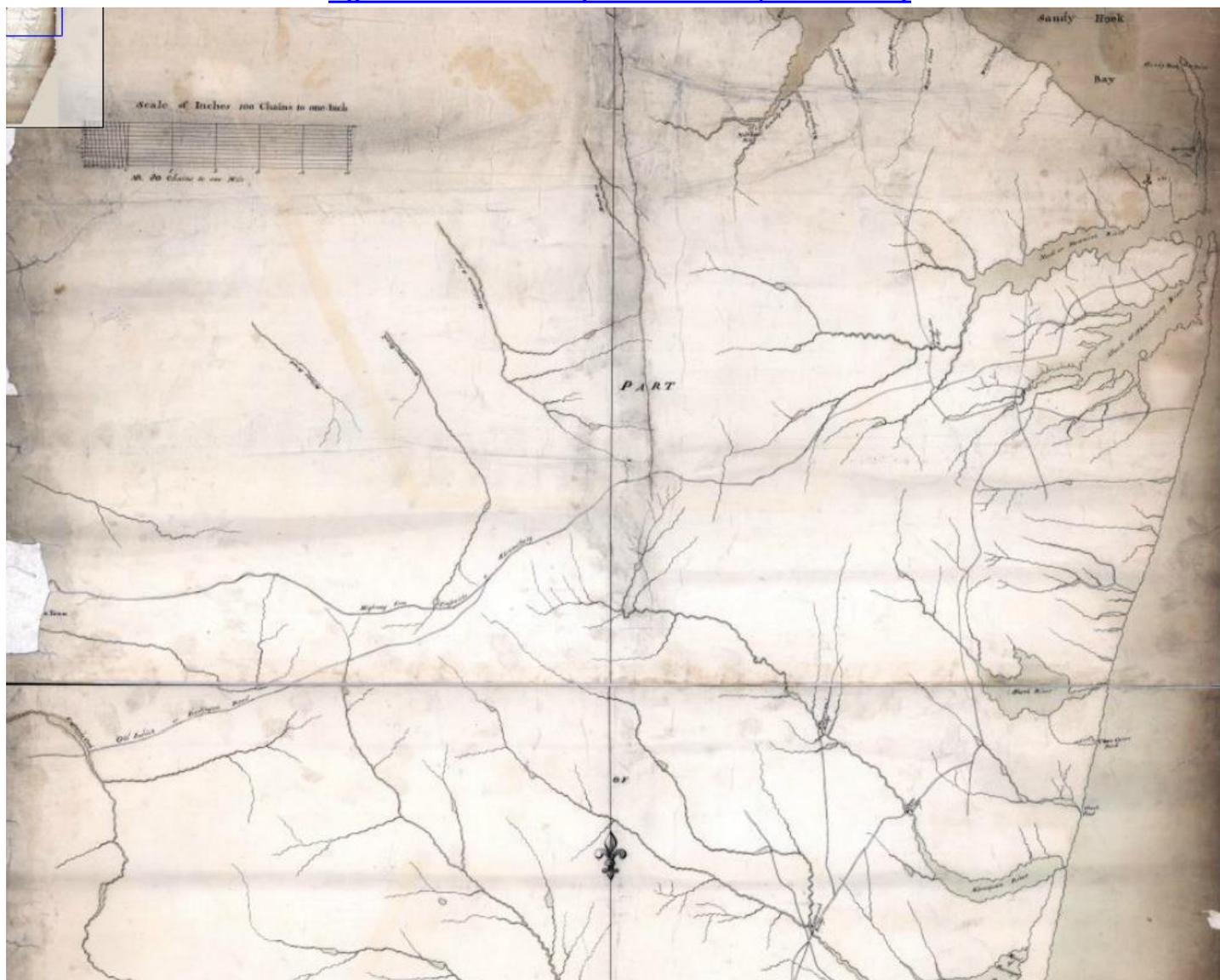


Figure 2.2: Historic Map of Monmouth, 18th Century



Construction of the first railroad in the county, the Freehold and Jamesburg Agricultural Railroad, in 1853 provided these centers access to more distant markets for locally produced goods. Prior to the completion of a railroad network, steamships were the predominant method of transport between coastal communities such as Highlands, Atlantic Highlands, Keansburg, Keyport, Red Bank, and Long Branch to New York City. Land speculation along the coast resulted in major railroad investment in the 1870s and 1880s that brought a new “tourism” economy to seaside locations, providing the foundation of our Victorian Era beach towns and resorts ([Figure 2.3: Driving Road Chart of Monmouth County, 1889](#)).

Beginning in the early 20th century, the automobile “fad” quickly morphed into to an automobile culture. With it came the creation of a state highway program intended to provide more convenient and reliable means of travel throughout the state such as State Route 4 (now State Route 35) and State Route 7 (now State Route 33). By the early to mid-20th century, roads began to play a more significant role than railroads in establishing land use patterns as more remote locations in the county became accessible for development and commuting became an ever more viable and enviable alternative to urban living ([Figure 2.4: Road Map of Monmouth County, 1929](#)). Commercial uses along highways such as Route 35 and Route 36 quickly responded to the needs and expectations of a seasonal tourist trade. With the advent of more convenient roadway access, many seasonal residents along the Bayshore began to winterize their vacation bungalows converting them into year-round residences.

A majority of the land in the county was developed after WWII, mostly for residential purposes interspersed with pockets of commercial development along coastal state highways. The opening of the Garden State Parkway (GSP) in the 1950s accelerated the post-war suburban housing boom and new opportunities along the Route 9 corridor in the

1960s lead to further investment in the predominate suburban land use patterns we experience today. Two development corridors evolved, one east of the Parkway with suburban infill occurring between GSP and older, established rail line coastal towns and the second along Route 9. Not until the beginning of the 21st century had the suburban development pattern ebbed; challenging us to consider alternative land use strategies as we move toward the horizon of the mid-21st century.

2.3 Historic Land Use Analysis

As stated in the first comprehensive land use study for Monmouth County, [Study of Land Use and Physical Characteristics \(1967\)](#), a land use survey is one of the most important basic elements in any comprehensive plan. This report was the precursor to the first county master plan, the [Monmouth County General Development Plan 1969-1985 \(1969\)](#). This comprehensive plan includes [Figure 2.5: Monmouth County General Development Plan Map, 1969](#). According to the 1967 land use study ([Figure 2.6: General Land Use Map, 1966](#)), only 31.9% of available land (97,416 acres) had been utilized (built) while 68.1% remained “non-urbanized” meaning either wooded, vacant, or being used for agricultural purposes. Of the remaining 207,800 acres of “non-urbanized” land, approximately 88,000 acres were considered at that time to have environmental constraints such as poor drainage or topographic limitations that limited further development. Essentially, 120,000 acres or almost 40% of all the land in the county was still considered to have “no impediments to urban development.”

Most of the developed land at this time was located in the eastern reaches of the county, with urbanized and suburbanized concentrations found along the coast and Raritan Bayshore. By the mid-1960s, single-family residential developments dominated the landscape with pockets of multi-family and commercial areas located in Red Bank, Long Branch, and Asbury Park.



Figure 2.3: Historic Map of Monmouth County, 1889

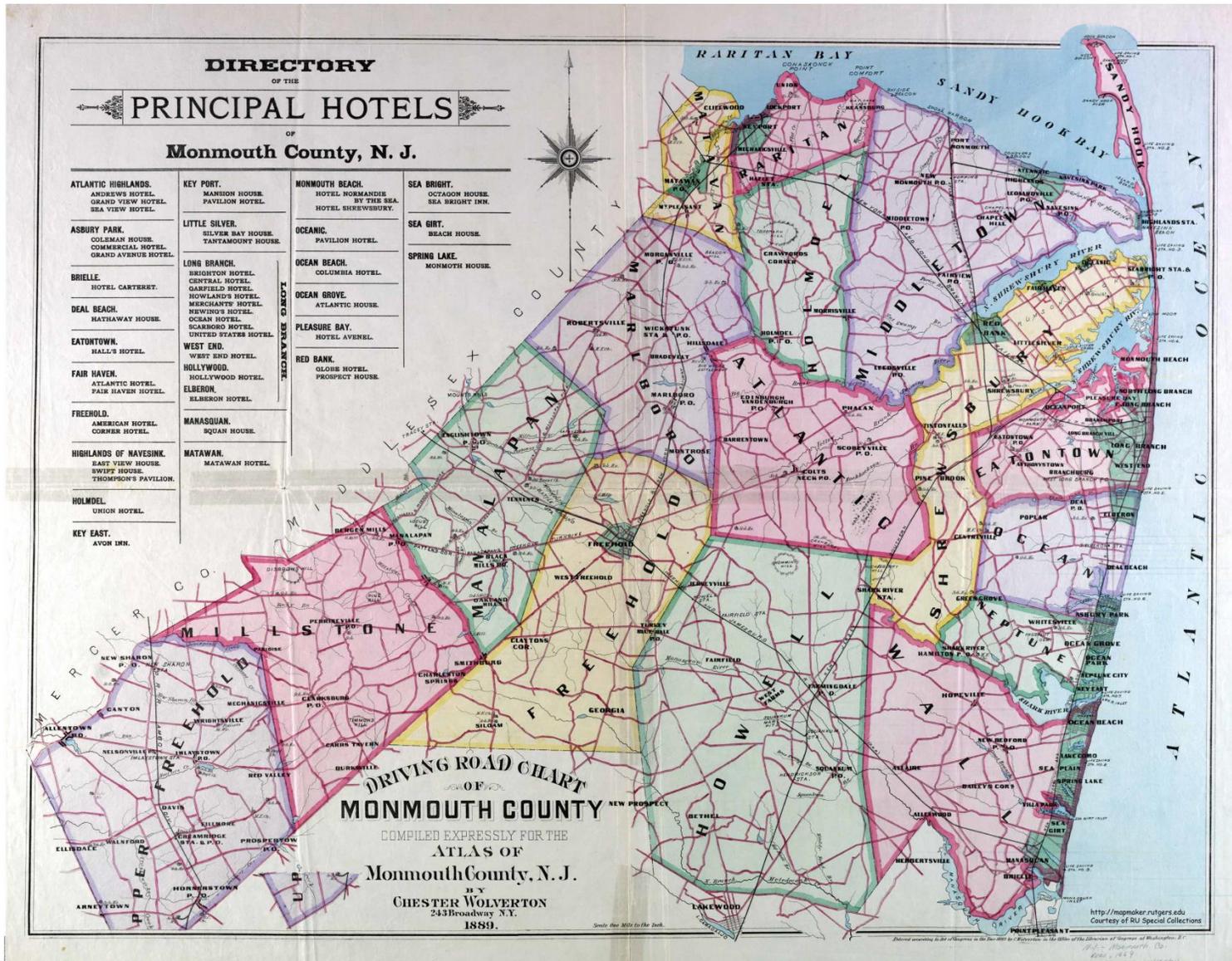


Figure 2.5: Monmouth County General Development Plan Map, 1969

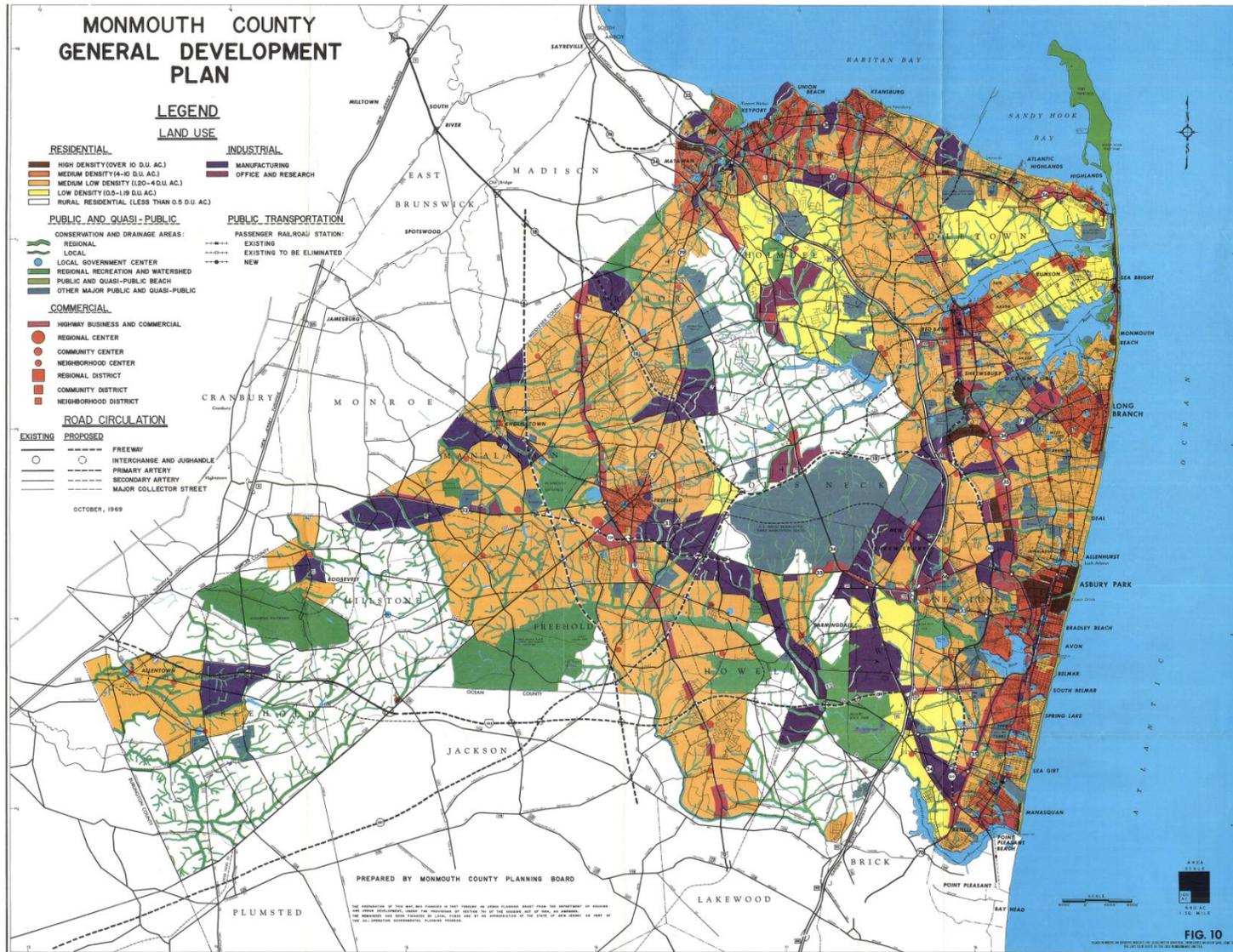
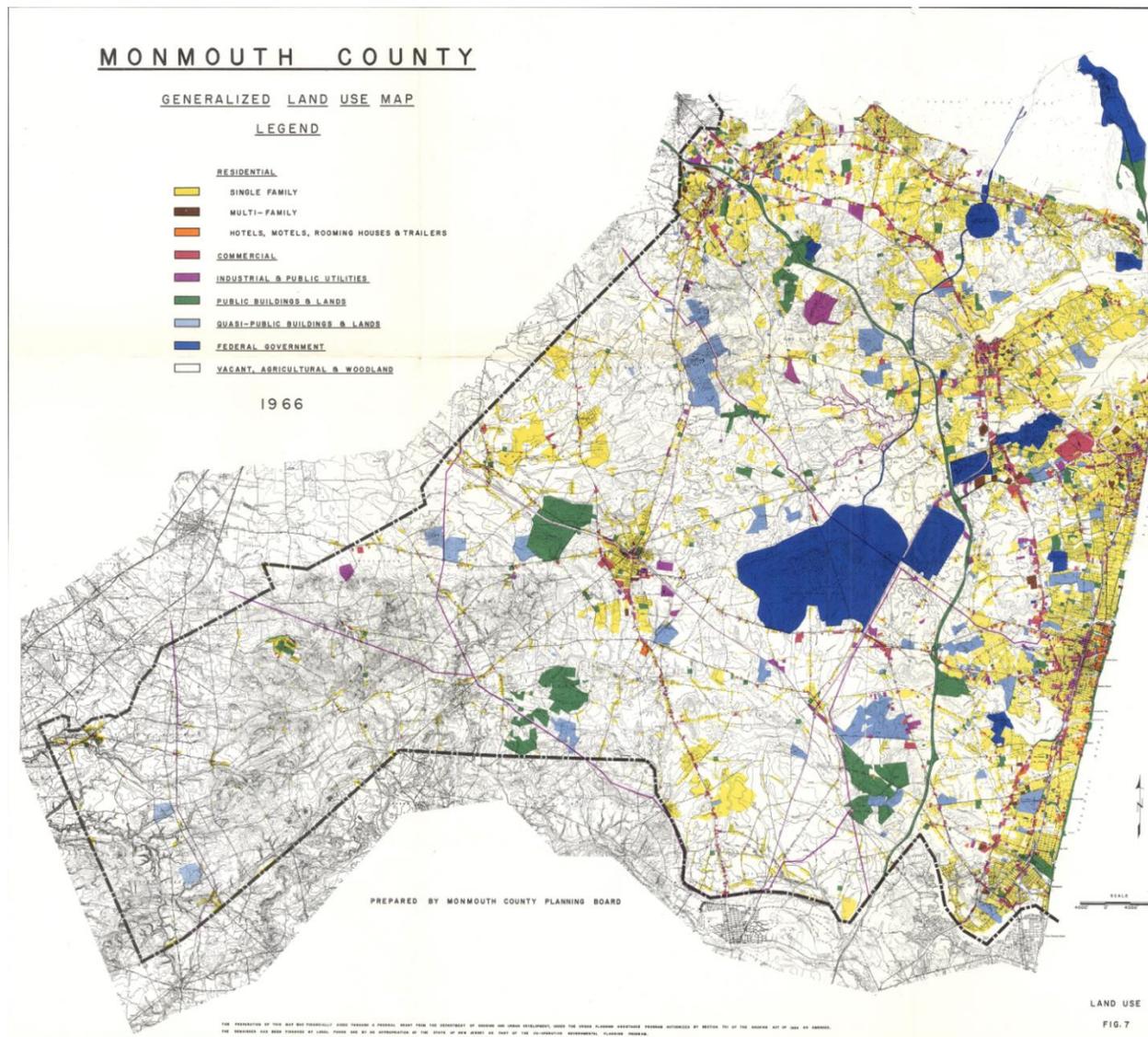


Figure 2.6: General Land Use Map, 1966



The 1967 land use study shows the beginning of development taking place along the Route 9 corridor, the largest concentration being in and around historic Freehold Borough with isolated residential developments shown in Freehold, Howell, Manalapan, and Marlboro Townships. There was virtually no new development west of Route 9, south of the Freehold and Jamesburg Agricultural Railroad, which ceased passenger service in 1960. The major land use concern at that time was how commercial development was being emphasized along major highway corridors, and how “strip developments” over time would result in lessening the carrying capacity of the highways, creating “commercial main streets with serious problems of traffic congestion and safety resulting.”

According to the [Monmouth County Growth Management Guide \(1982\)](#), developed land had grown from 97,416 acres, representing 31.9% of all land in the county in 1966, to 132,587 acres (43.5%) in 1974 and 156,549 acres (51.3%) of all land by 1980. Most of the high development activity during this time occurred in the western reaches of Monmouth County specifically in Howell, Marlboro, and Manalapan Townships proximate to Route 9. Concurrently, public open space acquisition began being emphasized as a way to protect environmental features, natural landscapes, and recreational lands necessary to accommodate a growing population. In 1965, only 5,568 acres, less than 2% of all county lands (excluding state lands) were preserved as public open space. By 1970, that number almost doubled to 10,816 acres (3.5%). A decade later, 22,852 acres were accounted for in public open space, representing 7.5% of all county land.

Suburban land use patterns along Route 9 and east of the GSP were well established by this time and began to be formalized into larger, regional land use approaches. The [Monmouth County Growth Management Guide Map, 1982 \(Figure 2.7\)](#), distinguished two general land use designations in the county, both with accompanying subcategories and specific policies, “Growth Areas” and “Limited Growth Areas.” The

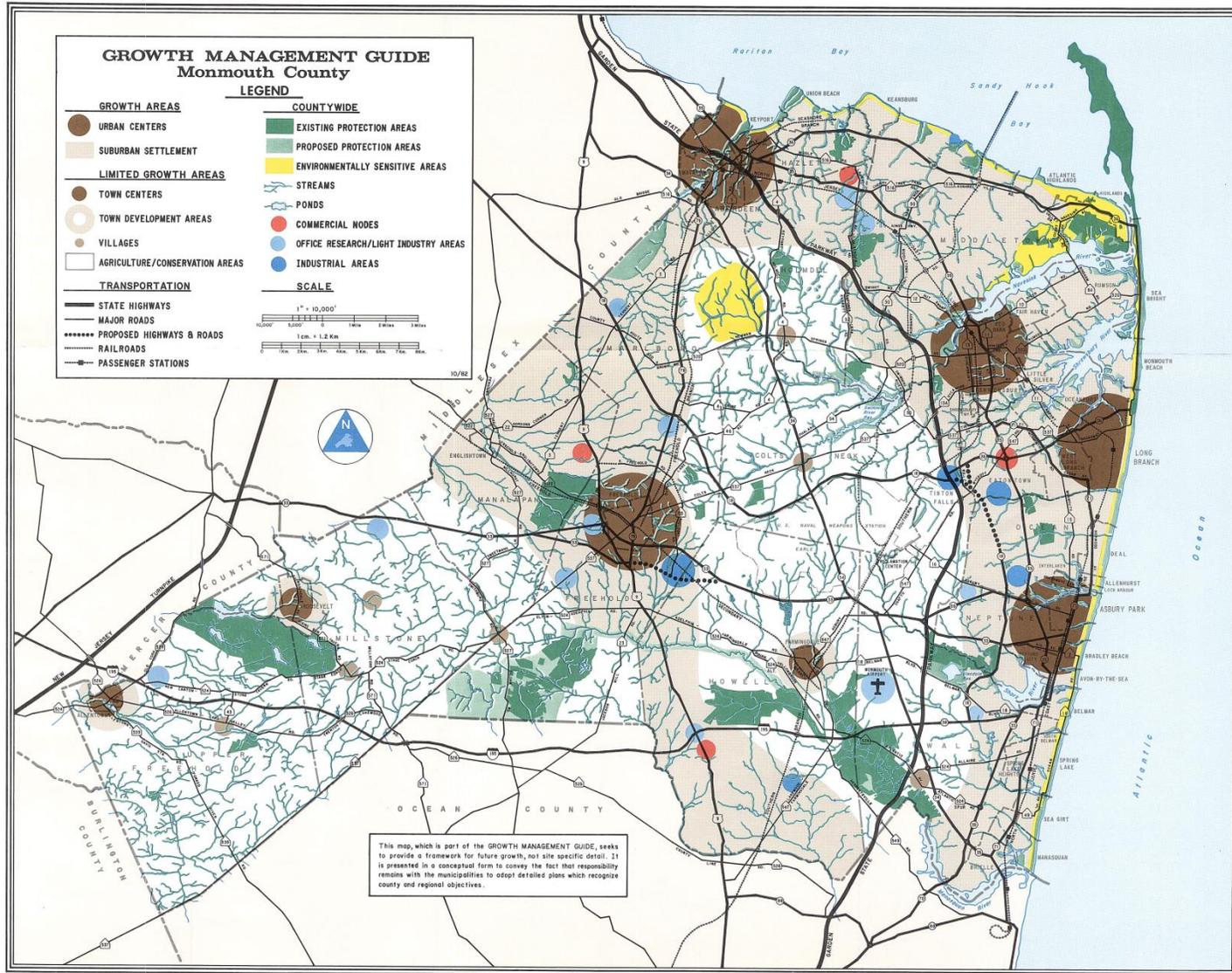
county’s “Growth Areas” represented two “Growth Corridors”, one along the coast and another along Route 9 that provided for “urban services” such as public water, public sewerage systems, transit, shopping facilities, fire and police protection, schools, employment opportunities, and road access. “Urban Centers” within “Growth Areas” were given a redevelopment and rehabilitation focus, encouraging manufacturing and wholesaling employment opportunities as well as the siting of new office facilities while suburban settlements were primarily supportive of lower density (maximum four units/net acre), single-family residential units with limited multi-family options.

The remainder of the county was located in one of two “Limited Growth Areas”. The “Central Limited Growth Area”, between the “Coastal and Central Growth Corridors”, included those areas tributary to the Swimming River Reservoir and the proposed Manasquan River Reservoir system including significant areas with prime agricultural soils. The “Western Limited Growth Area”, known today as the Panhandle, was so designated because of the presence of prime agricultural soils and a viable agricultural community. The 1982 *Monmouth County Growth Management Guide* discouraged investment in public facilities and sewer service in “Limited Growth Areas.” Rather, it supported policies such as land acquisition and cluster development options in order to retain agricultural soils and environmentally sensitive features. Town centers, town development areas, and agricultural conservation areas were also given their own policy objectives.

In general, this regional framework for land use policy remained in place for the next three decades, reinforced through county and local planning efforts as well as [The New Jersey State Development and Redevelopment Plan \(SDRP\)](#) including several *State Plan* updates through the Cross-Acceptance process. Suburban encroachment continued into undeveloped areas along the “Growth Area Corridors” while most open space acquisitions, farmland preservation, and lower density residential zoning efforts were focused in the



Figure 2.7: Monmouth County Growth Management Guide Map, 1982



Agricultural/Conservation sub locations within the “Limited Growth Area.” By 1997, it was estimated that the county’s supply of undeveloped land was as little as 51,000 acres, or 17% of the county land area (Monmouth County Open Space Plan Amendment, 1998). The [Monmouth County Open Space Plan](#) and [Monmouth County Farmland Preservation Plan](#) helped to advance land preservation efforts during this highly competitive time of suburban land consumption.

Prime developable land was becoming scarce in growth areas while development in the remaining rural areas curtailed due to lower density residential zoning, environmental constraints, and limited infrastructure. It was during this period that a more serious interest in redevelopment began to emerge. The 1990s saw the beginning of downtown and urban revitalization taking hold first in places like Red Bank, Freehold Borough, Ocean Grove (Neptune Township) and Atlantic Highlands. Efforts to redevelop Asbury Park and Long Branch gained traction with Smart Growth investment and initiatives from state agencies. By the beginning of the 21st century, older established suburban town were exploring their revitalization and redevelopment opportunities including Aberdeen, Matawan, Keyport, Keansburg, Neptune Township, and Neptune City. Suburban residential development in western Monmouth reached its zenith in the middle of the first decade while at the same time, a substantial number of new construction units in the county could also be attributed to redevelopment in urban locations. Large-scale sites such as Fort Monmouth (Eatontown, Oceanport, Tinton Falls), Bell Works formerly Alcatel-Lucent (Holmdel), Pier Village (Long Branch), and Fort Hancock (Sandy Hook) remain a relevant focus of redevelopment today second only to the enormous rebuilding effort still currently underway in the wake of Superstorm Sandy.

2.4 Current Land Use

Before further discussion, there needs to be a clarification between the terms “land use” and “land cover” as they are often mistakenly

interchanged with one another. Land cover is the physical composition of the landscape. Natural systems are typically identified by terms such as forested, fields, grasslands, wetlands (forested wetlands), water, barren, desert, beach, etc. The built environment is often given a general characterization such as “built” or “urban.” Categorizing all developed land as “urban” can be problematic as the term itself inherently implies an associative high intensity of use or impervious coverage that may not necessarily exist on the ground. This terminology may lead to the misrepresentation of data and misinterpretation of analytical results. Land use, on the other hand, is how people utilize land, often through manipulation of the natural environment. Uses are identified first in general terms such as urban, wetland, agriculture, forest, water, and barren. From there, more specific classifications are derived within each land use category such as residential, commercial, industrial, recreational, forestland, cropland, etc. Subcategorization goes even further to include density and intensity of land use.

2.4.1 New Jersey Department of Environmental Protection (NJDEP) Land Use/Land Cover (LU/LC)

According to the NJDEP, the initial geographic information system (GIS) LU/LC layer was based on aerial photography captured in the spring of 1986. Subsequent LU/LC data were extrapolated from photos taken in 1995, 2002, and 2007 with the most current in 2012. For each of these years data layers were produced through the visual interpretation of color infrared photography. Photo interpreters examine each image, and based on their knowledge of photo signatures, classify the image into various LU/LC categories. The classifications are converted into a LU/LC GIS digital file. All four LU/LC data sets contain important data used in a wide variety of environmental analyses (NJDEP website, 2014). Details on NJDEP’s LU/LC classification system can be found on the NJDEP GIS Bureau’s [NJ-GeoWeb](#).



Freshwater wetlands were first mapped under the New Jersey Freshwater Wetlands Mapping Program and incorporated into the LU/LC datasets. The wetlands delineations in these data are for screening purposes. The Land Use Regulatory Program (LURP) of the NJDEP determines the extent and final determination of wetlands on a case-by-case basis (NJDEP website, 2014).

A comparison of land use data between 1986 and 2012, shown in Figure 2.8, indicates that the largest change can be attributed to residential uses (+6.7%) which accounts for 32.5% of all land use in the county.

Residential growth during this period occurred mostly at the expense of Agriculture (-6.4%), which declined from 17.3% in 1986 to 10.09% in 2012. It is interesting to note that wetlands (20.8%) and Upland Vegetation (16.6%) remain the second and third largest land use categories in 2012. Data collection methods often change through time so there is not always an exact match between categories. This accounts for some of the data anomalies seen in the table.

The Land Use Map Series 1986, 1995/97, 2002, 2007 (Figure 2.9) and the Land Use Map, 2012 (Figure 2.10), offer a visual display of land use by category for each data year. Figure 2.11: Land Use Change Map: 1986-2012 provides a geographical representation of the physical change in land use as presented in Figure 2.8: Land Use Table, 1986-2012. This map confirms that most of the change in land use can be attributed to residential development that occurred in the western reaches of Monmouth County, particularly in the Panhandle and along the Route 9 corridor.

Although NJDEP LU/LC data provides provocative insight into the changing landscape through time, it cannot be used to discern which lands have been permanently preserved (parks, open space, conservation areas, and preserved farm lands) or which lands are no longer subject to either further development (deed restricted) or

further development intensity. According to the Monmouth County Park System and the Farmland Preservation Program, the amount of county preserved farmland and open space, exclusive of local, state, and federal lands, increased from approximately 5,400 acres in 1986 to approximately 32,500 acres in 2014.

LU/LC data is particularly useful in helping quantify change and impact to natural systems including the encroachment of incompatible, adjacent uses. Data from other sources such as zoning and parcel data must be used in combination with NJDEP LU/LC data in order to determine the future development potential of remaining land in the county. Details on NJDEP's LU/LC classification system can be found on the NJDEP GIS Bureau's [NJ-GeoWeb](#).

2.4.2 Parcel and Tax Data

Another way to view land use is through tax assessment data. Each parcel of land is assessed for tax purposes and assigned a real property tax code based on its use. Unlike LU/LC data, property data does not provide information on various environmental features nor does it differentiate between the various built and natural features on a particular site. It is, however, useful in identifying the location of existing uses as well as the location of remaining vacant parcels available for future development and the amount of tax revenue generated by a particular site or use on a property. It is also timelier than LU/LC because tax assessment information is updated annually and can show incremental year-to-year land use changes. Planners often use parcel and tax data to determine appropriate zoning, land use suitability as well as compatibility and potential conflicts with adjacent land uses.



Figure 2.8: Land Use Table, 1986-2012

Year	1986		1995/97		2002		2007		2012		Change 1986 - 2012	% Change 1986 - 2012
	Acres	Percent Change										
Residential	78,332.3	25.78	85,343.8	27.5	94,400.1	30.4	99,725.0	32.1	101,019.5	32.5	22,687.2	6.7
Commercial and Services	9,732.8	3.20	10,050.8	3.2	11,094.0	3.6	12,020.7	3.9	12,393.3	4.0	2,660.5	0.8
Military	2,570.2	0.85	1,825.7	0.6	2,179.0	0.7	2,073.7	0.7	1,931.6	0.6	-638.6	-0.2
Former Military	0.0	0.00	33.4	0.0	32.1	0.0	0.0	0.0	140.7	0.0	140.7	0.0
Transportation, Communication, and Utilities	4,759.3	1.57	4,379.4	1.4	6,811.5	2.2	7,636.2	2.5	7,796.7	2.5	3,037.4	0.9
Mixed Urban or Built-Up Land	0.0	0.00	32.8	0.0	43.5	0.0	56.2	0.0	55.5	0.0	55.5	0.0
Other Urban or Built-Up Land	6,297.2	2.07	10,151.8	3.3	8,086.1	2.6	9,196.1	3.0	8,777.3	2.8	2,480.1	0.8
Recreational Land	7,070.0	2.33	7,808.3	2.5	9,492.0	3.1	10,239.2	3.3	10,544.7	3.4	3,474.7	1.1
Agriculture	52,566.0	17.30	45,838.2	14.7	38,444.6	12.4	34,682.0	11.2	33,833.3	10.9	-18,732.7	-6.4
Upland Vegetation	57,443.0	18.91	56,833.6	18.3	53,980.2	17.4	51,710.1	16.6	51,660.3	16.6	-5,782.7	-2.3
Water *	3,528.2	1.16	11,278.2	3.6	11,067.9	3.6	11,937.0	3.8	11,901.1	3.8	8,372.9	2.7
Wetlands **	73,359.9	24.14	70,039.0	22.5	66,355.4	21.3	64,992.5	20.9	64,582.8	20.8	-8,777.2	-3.4
Barren	4,528.1	1.49	4,497.4	1.4	6,076.4	2.0	3,878.3	1.2	3,464.5	1.1	-1,063.6	-0.4
Total	303,835.5	100.00	310,840.6	100.0	310,840.6	100.0	310,840.6	100.0	310,840.6	100.0		

Notes: *The Shrewsbury, Navesink, and Shark Rivers were not mapped in 1986.
 ** Any category with a Class I designation as Wetlands is included in this category.



Figure 2.9: Land Use Map Series, 1986, 1995/97, 2002, 2007

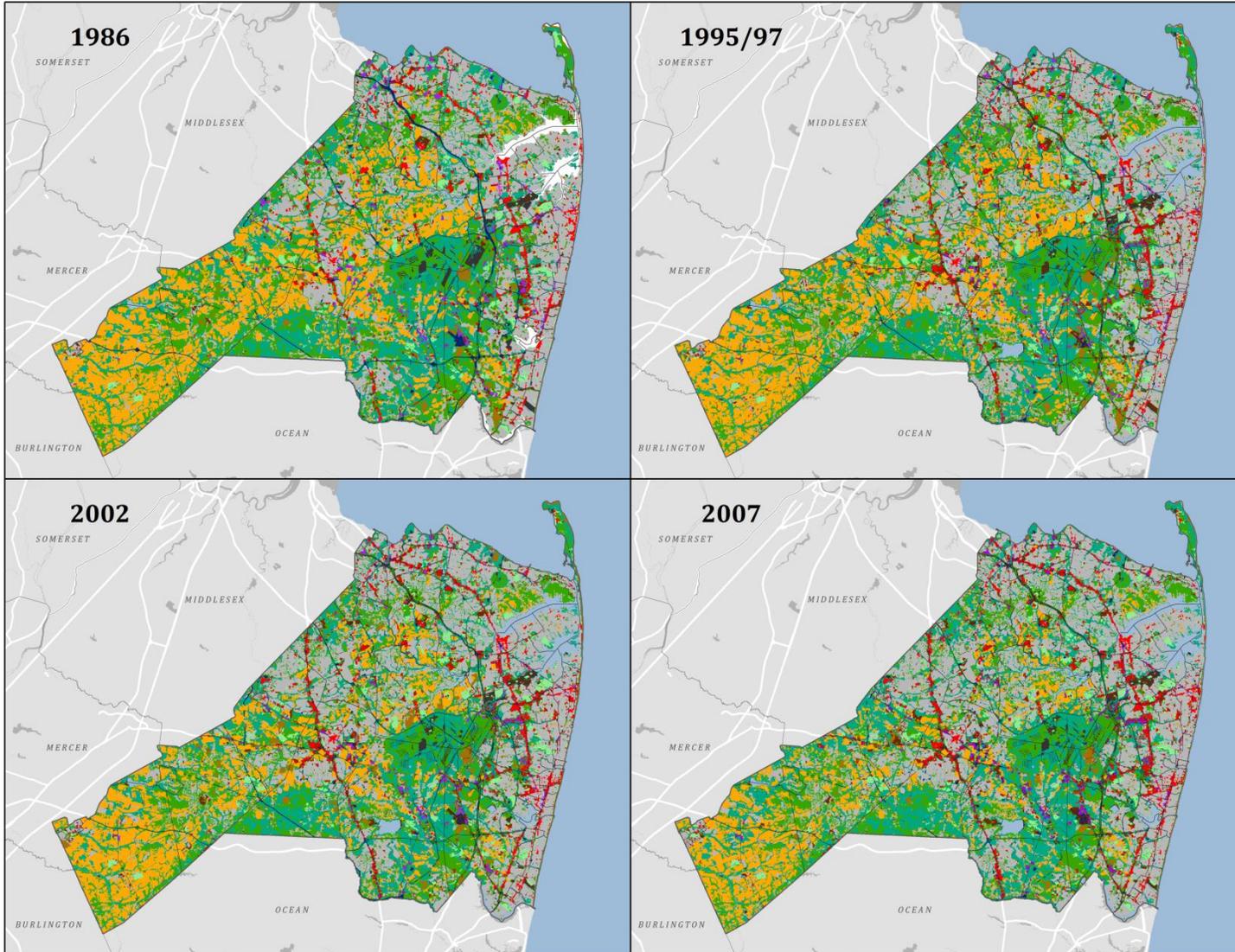


Figure 2.10: Land Use Map, 2012

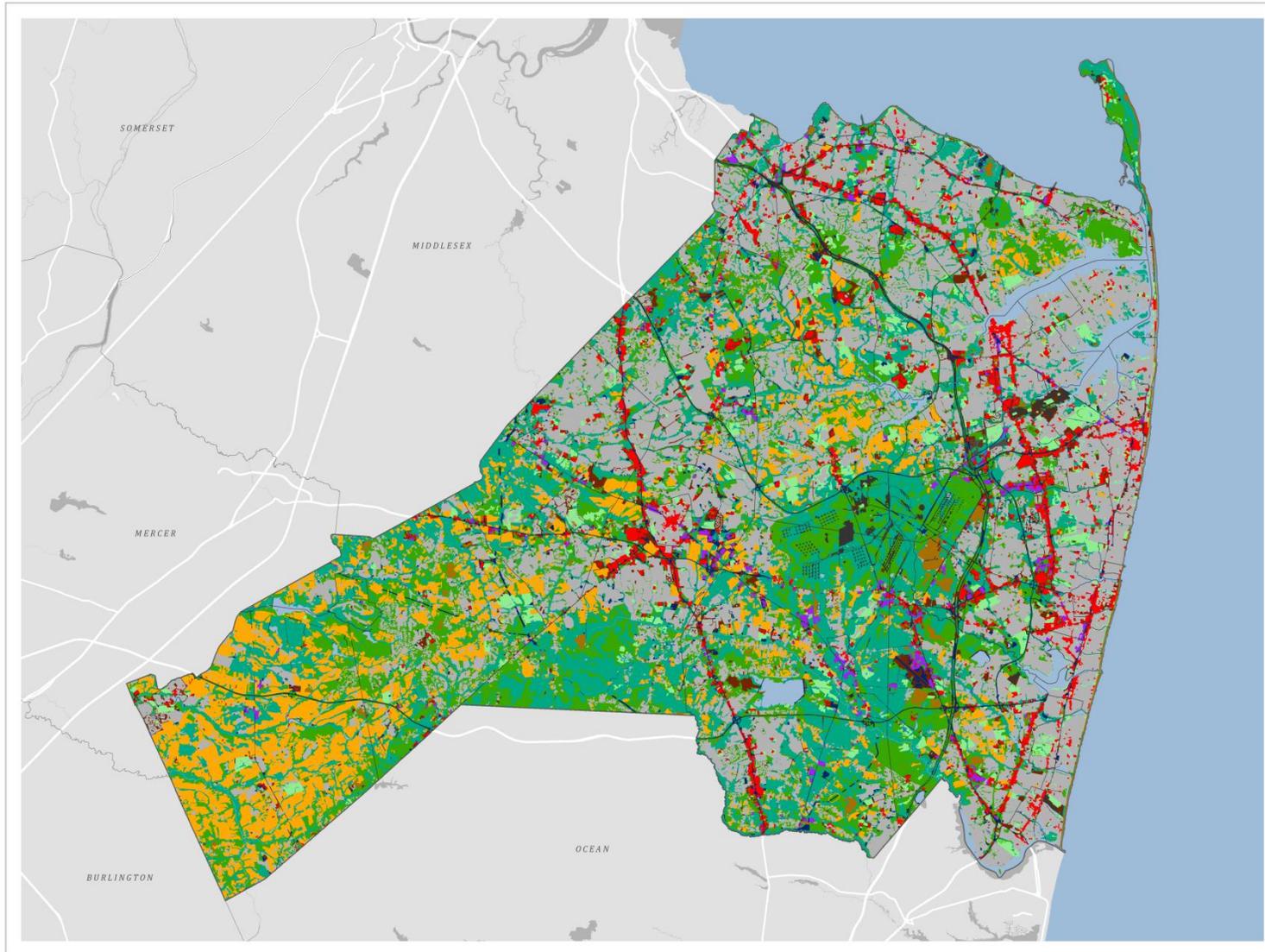
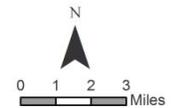


FIGURE 2.10
Land Use Map, 2012
Monmouth County
Master Plan
 May 2016

- Residential
- Commercial/Services
- Military
- Former Military
- Industrial
- Transportation, Communication, Utilities; Airport Facilities
- Mixed Urban or Built-Up Land
- Other Urban or Built-Up Land
- Recreational Land
- Agriculture
- Forest
- Water
- Wetlands
- Barren Land

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, and the New Jersey Office of GIS. Land Use classifications were derived from the NJDEP 2012 Land Use/Land Cover Dataset.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



Figure 2.11: Land Use Change Map, 1986-2012

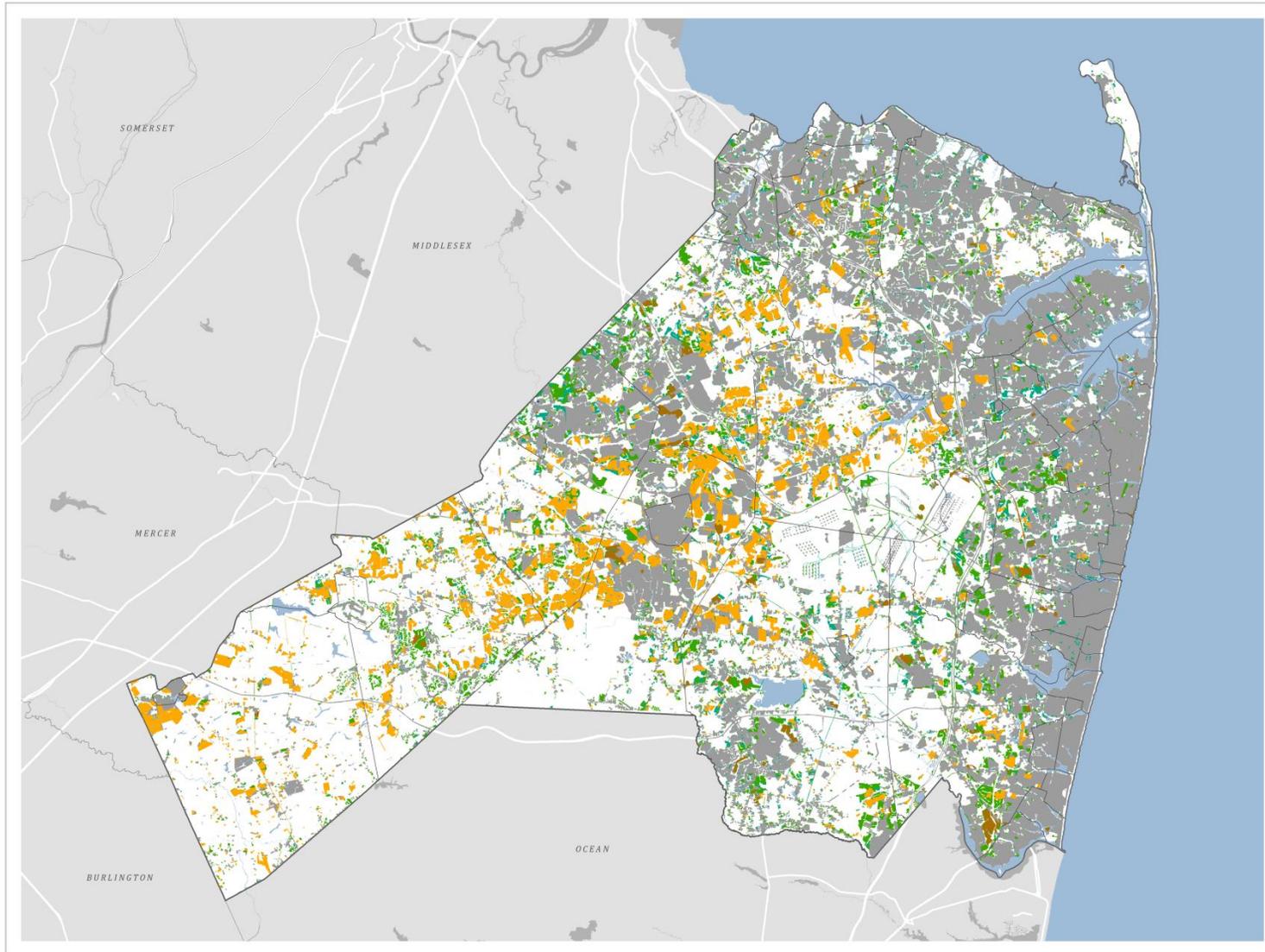
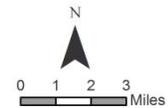


FIGURE 2.11
Land Use Change Map
(1986-2012)

**Monmouth County
Master Plan**
May 2016

- Urban
- Urban, Formerly Agriculture
- Urban, Formerly Barren
- Urban, Formerly Forest
- Urban, Formerly Water
- Urban, Formerly Wetlands

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, and the New Jersey Office of GIS. Land Use urban comparisons were derived using the NJDEP 1986 & 2012 Land Use/Land Cover Dataset.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



Unlike municipal zoning categories that are often unique at the local level, parcel and tax data is categorized the same throughout the state allowing for easy and straightforward interpretation at either the local or regional level. Figure 2.12: Land Use by Tax Classification Table, 2015, shows total acreage by land use type as identified by the tax parcel map while Figure 2.13: Land Use by Tax Classification Map, 2015, illustrates the current land use by tax classification for all real property in Monmouth County.

acres of farmland remaining in Monmouth County, approximately 14,800 acres have been permanently preserved or almost 28.3% of remaining farmland. This number does not account for farmland held in ownership by the Monmouth County Park System that is considered parkland for classification purposes.

2.5 Build-out Analysis

In August 2012, the Monmouth County Division of Planning completed a countywide build-out analysis using a model builder application provided by the NJDEP as part of the *Wastewater Management Plan (WMP) for Monmouth County*. This GIS-based model was designed to determine residential and commercial build-out for small communities at the municipal level. Upon exploration of the model, it became apparent that some of the data was outdated, the directions were incomplete, and accurate quality control measures would be necessary to achieve accurate results. Division of Planning staff refined the model by enhancing inputs and data as well as the model’s methodology resulting in findings that are more accurate.

According to the [Monmouth County White Paper on NJDEP’s WQP Build-out Model \(2012\)](#), countywide results show a residential development potential of up to 12,600 new units on remaining, undeveloped land based on zoning at that time. Towns with the largest remaining residential development potential include Howell, Marlboro, Upper Freehold, Middletown, and Freehold Township that account for approximately 59.3% of future residential development. Non-residential development was also calculated. Manalapan, Wall, Millstone, Tinton Falls, and Howell account for approximately 53.8% of the remaining 1,774 non-residential acres. Detailed results can be found in the study’s white paper.

Figure 2.12: Land Use by Tax Classification Table, 2015

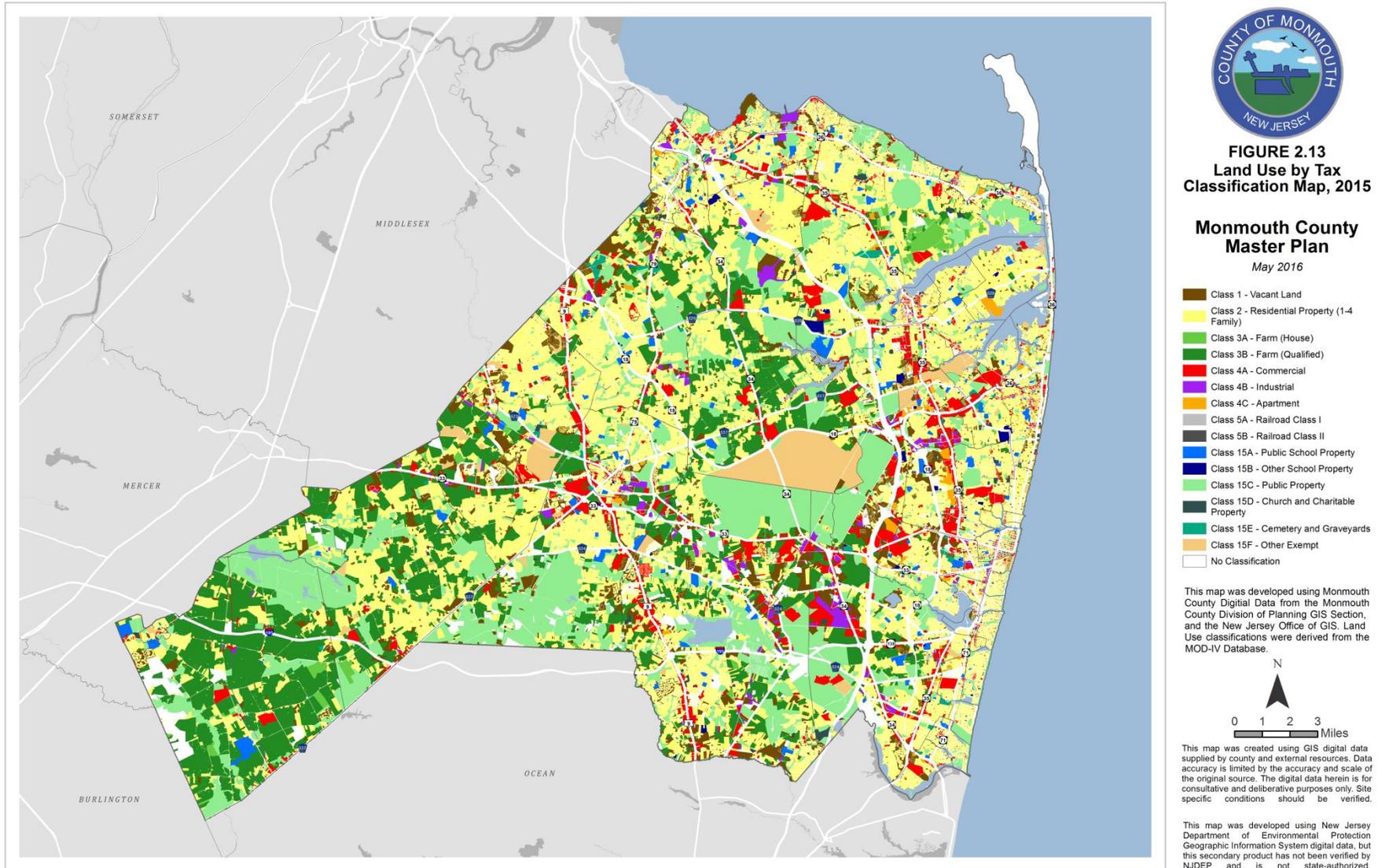
Property Class	Description	Area (acres)	%
1	Vacant Land	20,020	7.21%
2	Residential Property (1-4 Family)	96,057	34.58%
3A	Farm (House)	3,421	1.23%
3B	Farm (Qualified)	48,529	17.47%
4A	Commercial	17,068	6.14%
4B	Industrial	2,958	1.06%
4C	Apartment	1,762	0.63%
5A	Railroad Class I	292	0.11%
5B	Railroad Class II	10	0.00%
15A	Public School Property	4,131	1.49%
15B	Other School Property	684	0.25%
15C	Public Property	57,917	20.85%
15D	Church and Charitable Property	1,797	0.65%
15E	Cemetery and Graveyards	1,177	0.42%
15F	Other Exempt	9,624	3.46%
N/A	No Classification	12,319	4.44%
Total		277,766	100%

According to tax records, in 2015, the largest land use category in Monmouth County remains “Residential” at 35.22% followed by “Public Property” at 20.85% and “Farm” at 18.70%. Of the estimated 52,300

NOTE: Results from the NJDEP wastewater estimator model should not be considered absolute but allotted to a flexible range of possible outcomes which are dependent upon numerous variables such as



Figure 2.13: Land Use by Tax Classification Map, 2015



source, type, and accuracy of data utilized, pace of development, municipal zoning changes, and implementation of redevelopment proposals, as well as other inestimable factors. One of the major limiting factors of the NJDEP model is the exclusion of redevelopment areas in the analysis. This is important because most of the future development in the eastern portions of the county will result from redevelopment, especially in more urban areas and as anticipated from Fort Monmouth.

2.6 Land Use Influences

A complex network of laws, rules, court rulings, regulations, policy decisions, financial structures, and market forces all influence land use development patterns that affect regional growth and preservation efforts. There are numerous policy guiding documents and programs that municipalities must contend with on a daily basis when dealing with land use policy decisions and implementation issues.

2.6.1 State and Federal Policy Influences

New Jersey State Development and Redevelopment Plan (SDRP): The State Planning Act of 1985 (N.J.S.A. 52:18A-196 et seq.) created the New Jersey State Planning Commission and the Office of State Planning. The Act requires the commission to prepare and adopt a *State Development and Redevelopment Plan (SDRP)*. The most current adopted plan, [The New Jersey State Development and Redevelopment Plan \(2001\)](#), sets forth a vision for the future of our state along with strategies to achieve that vision. One of the major concerns raised by Monmouth County during Cross-Acceptance process was the classification of many of our coastal and Bayshore towns as Metropolitan Planning Areas (Planning Area 1), the same classification given to the state's largest and densest urban centers.

The 2001 SDRP's reliance on maps had been a point of both contention and distraction for many municipalities as state agencies attempted to use the State Plan Policy Map for regulatory means. Although the Cross-Acceptance process was a helpful exercise in aligning local,

county, and state plans and policies, there had been considerable consternation regarding the cost and length of the process as well as the unrealized benefit for communities engaged in Plan Endorsement. According to the [Proposed Final Draft - State Strategic Plan: New Jersey's State Development & Redevelopment Plan \(Draft Date 10/11/2011\)](#),

"There is no escaping that this process was mired in starts and stops and paralyzed by competing public interests related to, for example, environmental protection and affordable housing."

Since 2010, the [Office of Planning Advocacy \(OPA\)](#) has been working on developing a new *State Strategic Plan*, one that is more streamlined than previous versions. As stated by the OPA, the new plan will provide,

"...opportunities for responsible growth and redevelopment in New Jersey and create a strategic implementation plan that capitalizes on these opportunities by better coordination of capital improvement investments and regulatory regimes of state agencies. A sustainable framework requires that we balance environmental stewardship, economic growth and social equity." (Department of State, 2012)

On October 19, 2011, the [State Planning Commission](#) released a proposed final draft report entitled the [State Strategic Plan: New Jersey's State Development and Redevelopment Plan](#). As stated in the document itself,

"This State Strategic Plan is New Jersey's revised and readopted State Development and Redevelopment Plan, designed to meet the statutory charge of representing — a balance of development and conservation objectives best suited to meet the needs of the state."

The *State Strategic Plan (final draft)* has refocused its policy efforts by eliminating the predominance of the State Plan Map in planning efforts, instead relying on a set of goals and series of "Garden State Values" that



better articulated a smart-growth philosophy of development and preservation. The proposed plan establishes a set of criteria to determine areas for different types of growth and preservation, which could guide where various kinds of public investments would be made ([NJ Spotlight](#), 2013). The four primary goals with accompanying strategies to meet this mission include:

Goal 1: Targeted Economic Growth: Enhance opportunities for attraction and growth of industries of statewide and regional importance.

Goal 2: Effective Planning for Vibrant Regions: Guide and inform regional planning so that each region of the state can experience appropriate growth according to the desires and assets of that region.

Goal 3: Preservation and Enhancement of Critical State Resources: Ensure that strategies for growth include preservation of our state's critical natural, agricultural, scenic, recreation, and historic resources, recognizing the role they play in sustaining and improving the quality-of-life for New Jersey residents and attracting economic growth.

Goal 4: Tactical Alignment of Government: Enable effective resource allocation, coordination, cooperation, and communication among those who play a role in meeting the mission of this plan.

Council on Affordable Housing (COAH): This council was charged with adopting substantive rules for each six-year “housing cycle” which outlined how each municipality’s fair share housing obligation is calculated and the manner in which a municipality must address its obligations during that round. In an attempt to simplify the process for the Third Round “housing cycle” regulations, COAH turned to a growth share methodology. Subject to litigation, the New Jersey Supreme Court sustained parts of the regulations, declared some parts invalid, and remanded it back to the COAH for revisions. The State Appellate Division offered additional guidance along with its decision about many

of the assumptions used in the methodology as well as on rules governing set-asides for affordable housing, developer incentives and compensation, age-restricted housing, Regional Contribution Agreements (RCAs), and COAH’s systems of credits and bonuses.

On February 9, 2010, Governor Christie signed an Executive Order immediately suspending the operation of the Council on Affordable Housing and appointing a panel to study the issue of affordable housing. In March 2012, the State Appellate Court determined that the Governor had exceeded his authority when he abolished COAH and transferred affordable housing functions to the Department of Community Affairs. In September 2013, the State Supreme Court directed the state to promulgate third round rules by May 1, 2014.

In response to a lack of progress on the September 2013 directive, the New Jersey Supreme Court established a new timeframe for the Council on Affordable Housing to adopt new rules to implement the Mount Laurel Doctrine, setting November 17, 2014 as the date by which new rules must be in place. This order rejected the state’s request to have an open-ended period of time to adopt rules, while allowing the state more time to comply with the Supreme Court’s September 26, 2013 decision (Fair Share Housing Center, 2014).

Due to inaction by the state to remedy the situation by promulgating new third round rules, the Supreme Court handed down a decision on March 10, 2015 that conceded municipalities would no longer have to rely on COAH to comply with the Mount Laurel Doctrine. In essence, the Courts nullified the state’s administrative remedy to the Fair Housing Act of 1985 and replaced it with a court remedy for affordable housing compliance. The Supreme Court directed municipalities to appear in trial courts beginning on June 8, 2015 to show how they intended to provide their fair share of their region’s need for affordable housing.



Environmental Regulatory Considerations: Although there are many different types of regulatory constraints required by the [New Jersey Department of Environmental Protection \(NJDEP\)](#), the following are the most prevalent and have the greatest influence on site-specific land development considerations:

Freshwater Wetlands: Freshwater wetlands are vital components of our ecosystem and essential to the socioeconomic well-being of our community. Their existence protects drinking water by filtering pollutants, retaining runoff from heavy rains and snowmelt, and providing habitat for fish and wildlife. They are protected through numerous state regulations including the New Jersey Freshwater Wetlands Protection Act (N.J.S.A. 13:9B) which provides for their protection and mitigation of disturbances.

Riparian Zone and Flood Hazard Areas: Special Flood Hazard Areas (SFHAs) are regulated through the Flood Hazard Area (FHA) Control Act Rules (N.J.A.C. 7:13) which implement the New Jersey Flood Hazard Area Control Act (N.J.S.A. 58:16A-50 seq.). Structures developed within these areas are required to incorporate more stringent standards to better mitigate the impacts caused by flooding and severe storm events. The NJDEP also regulates stream corridors (riparian zones) to reduce the adverse effects on water quality caused by erosion associated with new development. The riparian zone is the land and vegetation within regulated water and extending either 50 feet, 150 feet, or 300 feet from the top of bank along both sides of the regulated water, depending on the environmental sensitivity of the water (NJDEP website, 2016).

Coastal Area Facilities Review Act (CAFRA): The CAFRA is the law that regulates certain types of residential, commercial, public, or industrial development activities within a defined area (refer to the Environmental Regulatory Features Map in 3.0 Natural Resources). Any development located on a beach or dune is subject to

regulations, as well as structures between the mean high water line and a point 150 feet landward. Within the CAFRA area, residential developments having 25 or more dwelling units or commercial developments having 50 or more parking spaces are subject to review.

Coastal Zone Management Rules (CZM Rules): CZM Rules at N.J.A.C. 7:7E define Special Areas of environmental interest, details requirements for development projects, and sets forth the compliance criteria for permit approval. Certain general permits require compliance with specific sections of the CZM Rule, for example “dunes,” “tidelands,” or “shellfish habitat.” Individual permit applications must address and demonstrate compliance with each applicable component of the CZM Rules for the specific site and regulated activity to be approved. (NJDEP website, 2014)

Other State Agency and Regional Entities

Land use in Monmouth County is also influenced by an array of additional state agencies and regional entities:

New Jersey Transit (NJ TRANSIT): NJ TRANSIT is New Jersey’s public transportation corporation providing bus and rail service to many communities in Monmouth County. In recent years, the agency has taken an active role in both sponsoring and partnering in Transit-Oriented Development (TOD) land use studies. NJ TRANSIT has been an active member in the North Jersey Transportation Planning Agency (NJTPA) and the NJTPA’s Together North Jersey (TNJ) Regional Plan Steering Committee. Through this U.S. Department of Housing and Urban Development (HUD) initiative, NJ TRANSIT sponsored a Local Demonstration Project in the county, [Connecting Community Corridors Study \(2014\)](#), a strategic plan for connectivity and mobility in portions of Asbury Park, Bradley Beach, and Neptune Township. System-wide ridership, capacity, and operational issues for both bus and rail



passengers can affect interest in development and redevelopment in locations dependent upon NJ TRANSIT services.

New Jersey Department of Transportation (NJDOT): This state department provides funding for capital improvements for roads, highways, and bridges. Maintaining and improving our existing roadway infrastructure network is an essential element in our regional economic competitiveness. Similar to NJ TRANSIT, NJDOT is also a member of the state's interagency Transit Village Task Force. Municipalities with Transit Village Designation receive additional technical assistance and funding benefits from state agencies.

North Jersey Transportation Planning Authority (NJTPA): NJTPA is the federally authorized Metropolitan Planning Organization (MPO) for the 13-county northern NJ region. Each year, the NJTPA oversees more than \$2 billion in transportation improvement projects and provides a forum for interagency cooperation and public input. It also sponsors and conducts studies, assists county planning agencies, and monitors compliance with national air quality goals. (NJTPA website, 2014)

On September 10, 2013, the NJTPA Board of Trustees approved [Plan 2040](#), the latest update to the NJTPA's Regional Transportation Plan (RTP) for northern New Jersey. [Plan 2040](#) carries forward key components of [Plan 2035](#), including a [Regional Capital Investment Strategy](#) and serves as a transportation investment guide for the region. (NJTPA website, 2016)

In 2011, HUD awarded the NJTPA \$5 million through the Sustainable Communities Regional Planning Grant Program to develop a Regional Plan for Sustainable Development (RPSD) for the 13-county region to improve economic competitiveness and address issues such as housing, jobs, schools, and transportation. In 2012, Monmouth County began participation as part of the [Together North Jersey](#) consortium on the development of a regional plan for North Jersey. As stated on their

website, "The plan will be both "place-based" and "issue-based" and will use sustainability, transit system connectivity, and Transit-Oriented Development (TOD) as the central framework for integrating plans, regulations, investments, and incentive programs at all levels of government to improve economic and environmental conditions, while promoting regional equity and resource efficiency. The outcome of plan implementation will be a more sustainable future for the region that invests in existing communities where housing, jobs, educational, cultural, and recreational opportunities are made more easily accessible" (NJTPA, 2014). The public review period for comment on *The Plan. 2015* took place from April 15, 2015 to May 15, 2015. After three years of extensive planning activities, [The Plan. 2015](#) was released in November 2015.

U.S. Department of Housing and Urban Development (HUD): This department's mission is "to create strong, sustainable, inclusive communities, and quality affordable homes for all" (HUD website, 2014). Their emphasis is on providing quality and affordable housing free from discrimination. HUD's influence affects nearly every aspect of housing in America. Some of the many HUD programs that influence land use include:

- Community Development Block Grants (CDBG)
- Oversees the Federal Housing Administration (insuring mortgages)
- Housing and rental assistance for the homeless and disabled
- Grants to state governments to implement plans to increase home ownership and affordable housing for low income residents (HOME Program)
- Tax incentives to locate businesses in, and hire works from, areas of high poverty
- Insure mortgage loans for low-income families and disaster victims
- Funding for public housing authorities
- Rental assistance to very low-income families (Section 8)



- Enforcement of the Fair Housing Act
- Funding to conduct planning studies
- Mortgaged backed securities
- Sustainable Communities Initiative (SCI)
- Promote policies that influence the location and development of affordable housing outcomes in local communities

On July 16, 2015, HUD released a final rule on Affirmatively Furthering Fair Housing. This follows a U.S. Supreme Court decision in June 2015 regarding disparate impacts of fair housing. The new rule is intended to equip communities that receive HUD funding with the data and tools that will help them to meet long-standing fair housing obligations in their use of HUD funds. HUD will provide publicly open data for grantees to use to assess the state of fair housing within their communities and to set locally-determined priorities and goals. The rule responds to recommendations of the Government Accountability Office and stakeholders for HUD to enhance its fair housing planning obligations by providing greater clarity and support to jurisdictions receiving HUD funding, and facilitating local decision-making on fair housing priorities and goals. (HUD, 2015)

2.6.2 Monmouth County Policy Influences

Monmouth County Comprehensive Economic Development Strategy (CEDS): In 2012, Monmouth County received a Planning Investment Grant from the U.S. Economic Development Agency (USEDA) to support the process of establishing a *CEDS*. Participants from the county's public, nonprofit, and private sectors provided information and input throughout the process to conduct and develop an industry analysis establishing a solid path for future economic development within the county.

Monmouth County Water Quality Management Planning: The state's Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., authorizes the

Governor to administer the Statewide Water Quality Management Planning rules and designates 12 areawide planning agencies for the purpose of developing, adopting, updating, and amending Areawide Water Quality Management Plans (AWQMPs). In 1997, the Monmouth County Board of Chosen Freeholders became the Designated Planning Agency for Monmouth County (Governor Whitman Executive Order 67). The Board of Chosen Freeholders delegated operational responsibilities to the Monmouth County Planning Board (MCPB), which in turn created the Amendment Review Committee (ARC) to process and review proposed changes to the Monmouth County AWQMP in order to increase the speed and efficiency with which amendments could be processed. There are several aspects to areawide water quality management planning. The focus in Monmouth County has primarily been wastewater and stormwater management planning.

Monmouth County submitted a draft *Wastewater Management Plan (WMP) for Monmouth County* to the NJDEP in 2003, 2006, and lastly in 2011 for their review and approval based on existing and future sewer service areas (SSAs) as well as discussions with municipalities, sewerage authorities, and other stakeholders. As part of this inclusive planning process all existing utility authority and town wastewater plans in the county were reviewed and incorporated into the *WMP*. Changes to the state legislation allowed for the [Monmouth County Future Wastewater Service Area \(FWSA\) Map Viewer](#), which includes programmed and planned sewer service areas throughout the county, to be adopted by the NJDEP on April 1, 2013. Meanwhile, work on a new draft *WMP* for the county is proceeding slowly while the wastewater community awaits adoption of the proposed rule changes.

Planned and programmed sewer service areas remain the most influential determinants in the location and intensity of growth and development. Since the 1982 *Monmouth County Growth Management Guide*, the county, along with the state and municipal partners, have strived to align growth and preservations policies and strategies with



programmed sewer service. These efforts include working within the context of the goals and objectives of the *State Development and Redevelopment Plan (SDRP)* as well as facilitating ongoing dialogue between the state and municipal partners and stakeholders during *SDRP* updates (Cross-Acceptance). The county's four regional plans (2004-2011) also contributed to better alignment between municipal land uses, local zoning, State Planning Areas, and Monmouth County's *WMP* maps.

Monmouth County Farmland Preservation Plan: The [Monmouth County Farmland Preservation Plan](#) last updated in 2008 guides the county's efforts in preserving its remaining farmland and maintaining a viable agricultural industry. The plan sets preservation goals in 1, 5, and 10-year increments and identifies Agricultural Development Areas (ADAs) that will be the focus of preservation efforts. Programmed sewer service locations should be limited in ADAs so as not to encourage higher impact development in targeted farmland preservation locations.

Monmouth County Open Space Plan: The [Monmouth County Open Space Plan \(2006\)](#), developed by the Monmouth County Park System and adopted by the MCPB (Resolution #06-38), is an element of the *Monmouth County Growth Management Guide (1982)*. The *Monmouth County Open Space Plan* provides a framework for preservation and acquisition of public open space to serve the needs of the county residents now and in the future. The current plan identifies seven different categories of parks including Regional Parks, Recreation Areas, Special Use Areas, Golf Courses, Greenways, Open Lands, and Unclassified Areas. Work on an update is set to begin in 2016.

Monmouth County Scenic Roadway Plan: The MCPB adopted [The Monmouth County Scenic Roadway Plan \(2001\)](#) on September 17, 2001 as an element of the *Monmouth County Growth Management Guide*. The purpose of the plan was to identify those county roadways, or

sections of county roadways, that possess a high degree of visual quality. Driving, biking, or walking along these roadways is a pleasurable and enjoyable experience. The county uses the plan when assessing the need for enhanced landscaping along a scenic roadway during the development review process. Towns are encouraged to strengthen their own design guidelines and land use regulations in an effort to retain the aesthetic appeal experienced along these roadway corridors.

Monmouth County Road Plan: The original *Monmouth County Road Plan* was adopted on June 17, 1996 as an element of the *Monmouth County Growth Management Guide*. The most recent [Monmouth County Road Plan \(2012\)](#) was adopted by the MCPB on October 12, 2012. It includes a map and a listing of all the roads under county jurisdiction. The plan includes information such as the County Route number, road name, length, and right-of-way width. Desired typical sections for county roads in urban, suburban, and rural settings are also part of the plan.

Monmouth County Regional Planning Studies: Since 2004, with funding provided by the Office of Smart Growth, the Monmouth County Division of Planning conducted four regional land use studies including:

- [Route 9/Western Monmouth Development Plan \(2004\)](#)
- [Bayshore Region Strategic Plan \(2006\)](#)
- [Coastal Monmouth Plan \(2010\)](#)
- [Panhandle Region Plan \(2011\)](#)

These studies provide a regional context for land use decisions focusing on specific issues unique to each study area. Each plan was developed through extensive outreach with municipalities and state agencies. The plans have been instrumental in assisting municipalities identify local planning issues of regional significance and providing an implementation framework for each study through a Planning Implementation Agenda (PIA). The PIA is a summary table that presents alternatives for each identified need in the plan and recommends a



pallet of alternative strategies to achieve objective outcomes. All four regional plans are considered *Consultative and Supportive Documents* to this *Master Plan* as identified in the Planning Services, Outreach, & Coordination Element (14.0).

2.6.3 Municipal Master Plans and the Municipal Land Use Law (MLUL)

“Home Rule” is the power granted either by the U.S. Constitution or Legislature or both to municipal governments to organize themselves to carry out a range of governmental activities under their own authority, and to preserve health, safety, and general welfare (New Jersey League of Municipalities, 2015). In NJ, a strong approach to “Home Rule” is established in both the State Constitution Article IV, Section VII (11) and the Home Rule Act of 1917 N.J.S.A. 40:42 et seq. Key to those powers prescribed is that each municipality has control over its own master plans and land use regulations including the ability to plan and zone.

As stated on the official Colts Neck municipal website, “The Municipal Land Use Law (MLUL) is the legislative foundation of Planning Boards and Zoning Boards of Adjustment in the State of New Jersey. It defines the powers and responsibilities of boards and is essential to their functions and decisions” (Colts Neck, 2012). Within the MLUL, a master plan is the overall policy document that provides guidance on the physical, economic, and social development of the municipality. The municipal zoning ordinance relates “to the nature and extent of the uses of land and of buildings and structures thereon” and “shall be drawn with reasonable consideration to the character of each district and its peculiar suitability for particular uses and to encourage the most appropriate use of land” (New Jersey Municipal Land Use Law, 2008).

According to the New Jersey MLUL, a master plan must contain, “a statement of objectives, principles, and assumptions, policies and standards upon which proposals for development of the municipality are based” and a land use element. A municipality may also include numerous optional elements in their master plan. By law, the master

plan is to be reexamined once every ten years from the previous reexamination. The reexamination report requirement’s purpose is to identify any issues that require revision or adjustment for the master plan and development regulations to meet municipal needs, this includes not only revisiting the current master plan and ordinance codes, but also suggesting the addition of new plan elements that respond to changes to the municipality’s goals and objectives.

2.6.4 Other Considerations

Utilities and Infrastructure: Both the location and design capacity of utilities and infrastructure such as natural gas, electricity, public water, and sanitary sewers facilitate the siting and potential intensity of land use development. Municipalities provide appropriate service locations for these types of provisions through their master plans and often coordinate closely with local or regional utility authorities that are often responsible for providing necessary and reliable utility service. Locations without access to sewer service should look to develop within the confines of the natural carrying capacity of land.

As our society becomes more dependent upon the internet for communication, entertainment, and commerce, there is growing discussion about broadband being viewed as a utility. Those communities with faster connection speeds and Wi-Fi availability gain a competitive advantage in the commercial marketplace. A growing number of public-private partnerships have been created throughout the county to foster broadband investment in local areas. These types of partnerships have begun to realize how fundamentally important accessibility of broadband is for emerging economies to succeed.

Property Tax Structure and Fiscal Impacts: Each year school districts, municipal governing bodies, and county governing bodies notify the Monmouth County Tax Board of their budgetary requirements through submission of adopted budgets. The various levies are totaled to



represent the “amount to be raised by taxation” for each taxing jurisdiction (NJ League of Municipalities website, 2014).

The tax levy is divided by the total assessed value of all taxable property within the municipality—or the tax base—to determine the general tax rate. The general tax rate is then applied to the assessed value of each individual parcel of property to determine the property owner’s tax liability. Local budgets, assessed value, and the availability of other revenues, then, are the prime determinants of each taxpayer’s burden. The rate is annually adjusted to account for these factors. Because of this, one will see their property tax referred to as a “residual tax” (NJ League of Municipalities website, 2014).

Because of their primary reliance on property taxes to fund local budgetary requirements, municipalities in NJ often find themselves in what is commonly referred to as the “ratable chase” whereby a town seeks to attract development it perceives as paying more in property taxes (revenue) than it requires in municipal services (costs). Development tends to incur costs associated with accommodating increased traffic (road maintenance and repair), policing, emergency services, utilities/infrastructure, social programs, and schools. Of course, various types of development have varying degrees of impact and costs on municipal services. Although NJ case law prohibits zoning based purely on a fiscal basis to stabilize the tax rate by excluding certain types of development, it is important for policy and decision makers to understand the financial impact development has on the municipal budget while planning for a community.

Overall, the total 2015 assessed value of Monmouth County municipalities was just over \$100 billion. The total tax levied against that value was just over \$2 billion. This equates to a unified theoretical tax rate of \$2.07 per hundred dollars of assessed value. While each of our fifty-three towns has gone about developing in a distinct individual

way, a look at the General Tax Rate in each shows that most are quite close to \$2.00 or somewhat below it.

There are seven classes and subclasses and each comes with its own set of benefits and costs. The information provided herein is a summary at the county-level. More details may be found in the [Monmouth County Board of Taxation Abstract of Ratables \(2015\)](#).

Property Class 1: Vacant Land
11,361 parcels
\$1,599,466,850 assessed value

Vacant land is typically held in private ownership as an investment property. The development potential is due to numerous colluding factors including location, market demands, zoning, and environmental constraints just to name a few. Vacant (undeveloped) land still generates tax revenue for a community, albeit less than a similarly improved (developed) tax assessed property.

Vacant land acquired either for public open space or reserved through easements may generate an incidental positive in terms of property tax revenue. Studies have shown that residences near preserved open space such as parks or conservation areas are often worth more than comparable properties farther removed. This proximal benefit increases assessed property value and has tax revenue implications in a community.

Property Class 2: Residential
209,632 parcels
\$89,295,912,975 assessed value

Residential use is the predominant land use in Monmouth County. Along with farm houses, it accounts for 84% of the county’s assessed



value. It is both a significant source of revenue and a generator of cost associated with impacts on school districts.

As the population changes, the market is reshaping itself. Since the 2000's, traditional single-family detached, market rate housing has given way to age-restricted housing developments. This type of housing now represents 53% of all the new residential development in the county.

Just as the demand for age-restricted senior housing is on the rise, so is the demand for upscale multi-family units and smaller single-family homes that meet the evolving demands of downsizing empty nesters and younger singles and couples.

With one and two person households now the majority and fewer than one third of households with children, there is a shift in preference to those places with access to amenities and transportation options making the continued development of transit villages a trend likely to continue.

Property Class 3A: Farm House
1,528 parcels
\$907,985,900 assessed value

Twenty-two of fifty-three towns have farm houses in them. This is one of the smallest classes of land use in the county, however, it is also one that is relatively high in value. This value is likely derived from the combination of factors such as proximity- often surrounded by Class 3B Farmland-relative scarcity, and location in relatively affluent communities. The value of Class 3A properties must be understood in the context of the related Class 3B properties from which they receive indirect added value.

Property Class 3B: Farm Qualified
2,760 parcels
\$28,926,625 assessed value

These are parcels of land that are farm assessed and have no farm house on them. Twenty-five of fifty-three towns have farm qualified land with two-thirds of 3B parcels concentrated in four municipalities; Upper Freehold, Millstone, Howell, and Colts Neck Townships.

Farmland has been shown to cost less in government services than the tax revenues it generates. Farmland preservation is different from open space acquisition in that preserved farms, unless purchased outright, stay in private ownership and remain on the tax rolls. With a growing movement toward locally grown foods and the increasing scarcity of undeveloped prime agricultural land, the value of surviving farm parcels should increase.

Property Class 4A: Commercial
9,182 parcels
\$12,159,534,800 assessed value

Commercial uses are often seen as desirable because they generate taxable value without adding to the educational costs that accompanies residential uses. This can be true, especially initially, but it can become less so if the property experiences a high vacancy rate. In such cases tax appeals can erode value and with age competing newer properties can create a downward spiral of value of a commercial use that is seen as outdated or is rendered less convenient by changes in traffic volumes, development patterns, or competing locations. Commercial uses are, nonetheless, a vital part of community development providing a location for essential local commerce and jobs for local residents.



Property Class 4B: Industrial
 513 parcels
 \$1,108,813,300 assessed value

Industrial uses span a wide range and their value has to be measured against their impact on neighboring uses. They often come with specialized requirements such as access to transportation infrastructure, waste disposal systems, or water supply. Heavier industries that involve manufacturing or the processing of raw materials may require access to rail lines and come with special permitting requirements. They can also come with the need for substantial buffering to help ameliorate negative impact on neighboring uses, particularly residential neighborhoods.

The alternative of lighter industrial uses involving product assembly, research, or warehousing may have lesser impacts or permitting requirements. With the exception of resource based industries such as sand and gravel mining, Monmouth County has attracted more light industries and continues to have opportunities for further development and redevelopment with Fort Monmouth being a specific example of opportunity. The greatest number of industrial properties is found in Wall Township with 90.

Property Class 4C: Apartments
 942 parcels
 \$1,852,308,000 assessed value

Apartments and related multi-family developments are a growing use in the redeveloping urban centers of the county. While typically smaller than single-family homes, apartments can be amenity rich with high-end appliances, materials, and fixtures that impart substantial value. Apartments may also be found in public ownership or included in state

mandated affordable housing programs that can limit market value and tax revenues.

2.7 Framework for Public Investment

Monmouth County’s diversity is reflected in the variety of both its built and natural landscapes. [The New Jersey State Development and Redevelopment Plan \(2001\)](#) attempted to map and define these landscapes as “Planning Areas.” Each Planning Area had specific Policy Objectives that were intended to guide the application of the Statewide Policies. The Policy Objectives were to ensure that the Planning Areas guided development in appropriate locations where infrastructure already existing and into Centers away from protected natural Environs (*The New Jersey State Development and Redevelopment Plan, 2001*).

2.7.1 Public Investment Strategy

The *Monmouth County Master Plan (2016)* recognizes the importance of aligning planning with policy investment strategies that broadly support and reinforce the economic, cultural, physical, and natural landscapes that define our communities. Although the framework strategy is similar to the intent and approach presented in the [Draft Final State Strategic Plan \(2012\)](#) and supported by Together North Jersey’s regional plan, [The Plan. 2015](#), the criteria and definitions used by Monmouth County are modified slightly to reflect the issues, concerns, values, and priorities specific to Monmouth County.

The Monmouth County Public Investment Strategy is a composite approach based on a number of previous planning efforts including:

- [Monmouth County Growth Management Guide \(1982\)](#)
- [Monmouth County Growth Management Guide \(1995\)](#)
- [The New Jersey State Development Redevelopment Plan \(2001\)](#)
- Monmouth County’s Regional Planning Studies (2004-2011) including:
 - [Route 9/Western Monmouth Development Plan \(2004\)](#)



- [Bayshore Region Strategic Plan \(2006\)](#)
- [Coastal Monmouth Plan \(2010\)](#)
- [Panhandle Region Plan \(2011\)](#)
- 2003-2009 State Cross-Acceptance process
- [Monmouth County Open Space Plan \(2006\)](#)
- [Monmouth County Farmland Preservation Plan \(2008\)](#)
- [Monmouth County Road Plan \(2012\)](#)
- [Monmouth County Future Wastewater Service Area Map \(2013\)](#)
- Together North Jersey's regional plan: [The Plan. 2015](#)

Decades of consistent and reiterated planning efforts have resulted in a near perfect alignment of land use goals and objectives between municipalities, Monmouth County, and the state when it comes to public investment strategy. It is the county's intent is to continue coordination through open dialogue with local governing bodies and regional planning agencies to reduce any remaining inconsistencies.

2.7.2 Public Investment Areas

The draft *State Strategic Plan: New Jersey's State Development & Redevelopment Plan (2012)* recognizes four public investment areas including:

- Priority Growth Investment Area
- Alternate Growth Investment Area
- Limited Growth Investment Area
- Priority Investment Preservation Area

Similar to and supportive of the *State Strategic Plan's* approach to developing a public investment framework, the *Monmouth County Master Plan (2016)* recognizes the following five-public investment areas, which includes two-overlay categories within the Priority Growth Investment Area (PGIA).

(I) Priority Growth Investment Area (PGIA): Areas with either existing or planned infrastructure that lend to development and redevelopment opportunities.

Public investments related to the efficient development and redevelopment of previously developed sites and optimization of existing settlement patterns should be encouraged but to a lesser extent than a Priority Growth - Reinvestment Area/Site (PG-RAS). PGIAs are considered the locations for meeting most of the county's future population and employment growth, however, the PGIA also includes many established communities seeking to maintain their existing development pattern and character.

PGIA Criteria

Land located within a current or future sewer service area as identified on the [Monmouth County Wastewater Management Plan Map \(2013\)](#).

Supports county landscapes such as:

- Urban and Regional Centers
- Shore Towns and Coastal Places
- Inland Towns and Villages
- Suburban Areas
- Historic Sites, Places, and Districts

(II) Priority Growth - Reinvestment Area/Site Overlay (PG-RAS): Areas or sites located within the PGIA where more intense or significant development, redevelopment, revitalization, and hazard mitigation investments are highly encouraged.

Public investment should encourage the productive reuse of historic, vacant, abandoned, contaminated, and underutilized sites/structures. Revitalization is an important component in urban areas, existing neighborhoods, and commercial corridors. Redevelopment near certain transit stations and access to cultural and recreational amenities should



be encouraged as well as multi-modal improvements to the existing transportation network and infrastructure. These areas are intended to accommodate much of the county’s future population and employment growth in the PGIA. Although located in a PGIA, the term “growth” as to accommodate additional population should not be implied for reinvestments made with the intent and/or purpose toward recreational enhancements, community revitalization, hazard mitigation, or historic repurposing and preservation.

PG-RAS Criteria

Located in a PGIA and includes:

- Fort Monmouth Economic Revitalization Authority property identified for development and/or redevelopment within the [Fort Monmouth Reuse and Redevelopment Plan \(2008\)](#) as amended and supplemented
- Other “Areas in Need of Redevelopment” or Redevelopment Sites
- “Areas in Need of Revitalization”
- Transit Stations (proper)
- Locally supported Transit-Oriented Development (TOD) initiatives
- NJDOT Certified Transit Centers
- Land owned by the New Jersey Sports and Exposition Authority
- Places where public investment supports the *Monmouth County CEDS*
- Specialized use locations (e.g. hospitals, medical campuses, colleges, and office/industrial parks)
- Any site or place in a Priority Growth Investment Area (PGIA) that has the characteristics and investment needs of a Priority Preservation Investment Area/Site (PPIAS) including, but not limited to:
 - Historic sites and structures
 - Urban lands identified for acquisition or land identified for preservation through an open space master plan or recreation plan

Supports county landscapes within PGIA such as:

- Commercial Business Districts
- Arts, Cultural, and Entertainment (ACE) Hubs
- Commercial Corridors
- Historic Sites, Places, and Districts

(III) Priority Growth - Water Supply Watershed Areas Overlay (PG-WSWA): Locations within a Priority Growth Investment Area that contain a natural resource value pertaining to water quality and supply.

Further study would be needed to expand the definition to include aquifer recharge areas in PGIA. Because of the natural resource value, towns should support best management practices and strategies (e.g. zoning, land use techniques, and green engineering) that maximize preservation of the natural resource function. (Refer to 12.0 Sustainable Places Element)

PG-WSWA Criteria

Areas located in a PGIA that contribute to or impact the natural resource function as it relates to the public water supply.

Supports the same county landscapes identified for the PGIA.

(IV) Limited Growth Investment Area (LGIA): Areas located outside of existing or programmed sewer service areas intended for low-density residential uses, compatible rural patterns, and supportive commercial uses.

Large-scale growth should be discouraged in these locations with an emphasis on the conservation and preservation of rural and environmentally sensitive lands.



LGIA Criteria

Areas not located in either a programmed or planned sewer service area and includes:

- Developed Lands
- Areas that do not meet the criteria for a Priority Preservation Investment Area/Site (PPIAS)

Supports county landscapes such as:

- Historic Sites, Places, and Districts
- Rural and Natural Environs
- Open Space
- Vistas and Viewsheds
- Scenic Byways/Scenic Roadways

(V) Priority Preservation Investment Area/Site (PPIAS): An area or site where an investment in land preservation, agricultural development and retention, historic preservation, environmental protection and stewardship is preferred and encouraged.

Support the use of land conservation methods, techniques, and best management practices.

PPIAS Criteria

Areas not located in either a programmed or planned sewer service area and include:

- Agricultural Development Areas (ADAs)
- Environmentally sensitive lands such as Category 1 streams, threatened, and endangered species habitats.
- Permanently preserved and deed restricted land including farmland and parkland
- Land identified for preservation through an open space master plan and/or outdoor/recreation plan

- Land identified for preservation through a farmland preservation plan and/or approved Planning Incentive Grant application
- Historic districts
- Historic sites and structures
- Any site or location in a Priority Preservation Investment Area (PPIAS) or Limited Growth Investment Area (LGIA) that is significantly impacted by regional growth and has public needs similar to that of projects and programs found in a Priority Growth Investment Area (PGIA) including, but not limited to:
 - Capital improvement such as regionally impacted roadway intersections, roadway and highway improvements, bridge repair/replacements
 - County, state, and federal lands intended to accommodate regional active recreation needs
 - Scenic Byways/Scenic Roadways

Supports county landscapes such as:

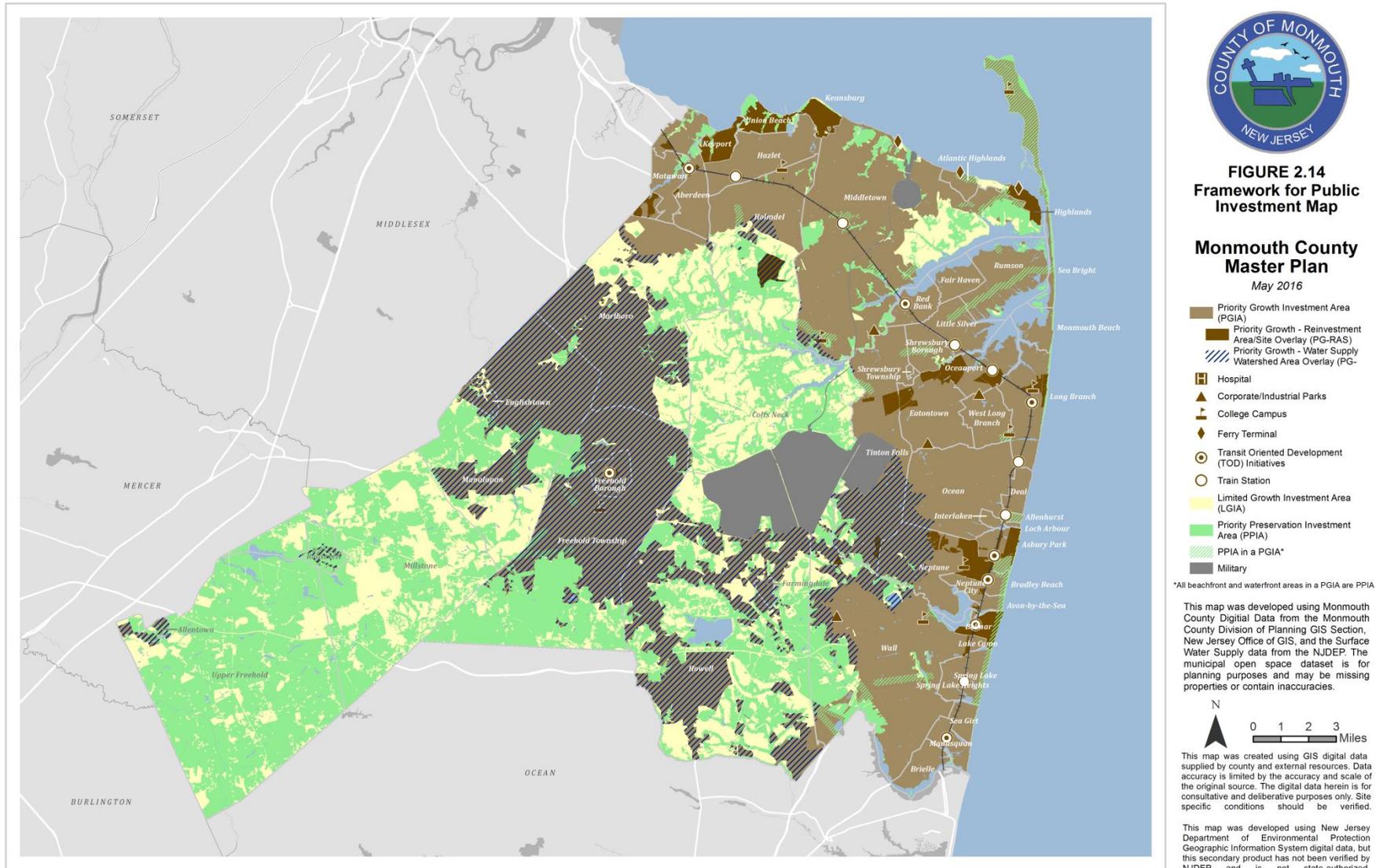
- Historic Sites, Places, and Districts
- Rural and Natural Environs
- Open Space including county, state, and federal current parklands and those intended for conservation
- Vistas and Viewsheds
- Scenic Byways/Scenic Roadways
- Beach and Waterfront

2.7.3 Framework for Public Investment Map

Figure 2.14: Framework for Public Investment Map, 2016, provides an overall graphic representation of various investment areas based on Public Investment Area criteria and Community Landscapes as described in Section 2.7.2 Public Investment Areas.



Figure 2.14: Framework for Public Investment Map, 2016



2.7.4 Community Landscapes

Community landscapes provide a general description of the physical characteristics of places people may experience as they travel through the county. Landscapes are intended to be used as a planning tool to assist residents, stakeholders, and decisions makers in visualizing existing conditions and desired planning outcomes. A community can be comprised of multiple landscapes. For instance, the City of Asbury Park can be considered an Urban Center, Coastal Town, ACE (Arts Culture, and Entertainment) Hub that contains a Town Center (downtown), Commercial Corridor (Route 71 / Main Street), and Waterfront.

- **Urban and Regional Centers:** These are highly developed neighborhoods and communities with public services, walkable as well as multi-modal transportation options, and a range of housing stock including higher density residential uses such as apartments and high rises. They are often regarded as the historic and cultural centers of the county and provide for residents and visitors a mixed-use of services and activities. They either contain a diversified employment base and a central business district (CBD) or downtown comprised of a mix of retail and professional services. Included in this category are four municipalities: Asbury Park, Freehold Borough, Long Branch, and Red Bank.
- **Shore Towns and Coastal Places:** Commonly referred to as “the shore”, these communities are either entire towns or sections of a municipality that are highly susceptible to the effects of coastal storms due to their proximity to the ocean, bay, or estuary. Many places can be physically described as historic summer vacation towns or “pre-war” suburbs that often have a higher residential density, commercial core, are often walkable and/or offer multiple transit options. Public investment should focus on retrofitting existing infrastructure and improving the efficiency of existing systems, improving resiliency for coastal storm events, and mitigating impacts from sea level rise. Some limited TOD opportunities exist although rehabilitating existing housing stock, revitalizing existing commercial core areas, and maintaining a

heightened sense of community character is often more desirous. These places are often tourist destinations and experience a large population influx during summer months. Many host local festivals, fairs, arts and cultural events throughout the year (see ACE Hubs).

- **Interior Towns and Villages:** Interior towns and villages include Allentown, Englishtown, Freehold Borough, Farmingdale, Matawan, and Roosevelt. These non-coastal, “pre-war” communities often contain a historic central business core surrounded by well-established residential neighborhoods developed during various eras. Only Roosevelt Borough bucks this description with its own unique history as the Depression Era “Jersey Homestead.” Public investment should focus on retrofitting existing infrastructure and improving efficiency of existing systems, improving resiliency against increasingly severe storm events, rehabilitating existing housing stock, and revitalizing existing commercial core areas. Historic preservation efforts should seek to protect community character through the implementation of design elements that respect “place distinction” while allowing for a variety of compatible contemporary uses to spur private reinvestment.
- **Historic Sites, Places, and Districts:** Many historic locations throughout the county are defined by a historic site, building, estate, crossroad, or a concentration of such components as identified in the Monmouth County Historic Sites Inventory, placement on the National or State Registers of Historic Places, and/or identified in a local master plan. Examples of historic nodes and places include Holmdel Village (Holmdel), Navesink (Middletown), and Allenwood (Wall). Historic districts are those listed on the State or Federal Register of Historic Places and/or identified local master plans.
- **Beach and Waterfront:** Public investment in waterfront locations (coastal and estuarine) include coastal flood hazard mitigation projects, improvements in resiliency for waterfront commercial properties, enhanced building requirements in Special Flood Hazard Areas, and more resilient utility and infrastructure upgrades.



- **Commercial Business Districts (CBDs):** These places are often considered the center or “heart” of the community. They provide a variety of mixed-uses including residential, retail, and professional services all within a defined district within a larger community. A CBD can be found at a variety of scales from a cluster of commercial buildings to a fully built downtown. For the purpose of this *Plan*, CBDs include downtowns, town centers, village centers, main streets, and larger scale commercial nodes not found along a commercial corridor (see Commercial Corridor description). Diversification of uses, reinforcing community character, and the renovation and repurposing of abandoned or historic structures in these locations is strongly encouraged.
- **ACE (Arts, Culture, and Entertainment) Hubs:** The *Coastal Monmouth Plan (2010)* introduced the concept of ACEs. An ACE is a special designation given to a host community with a high concentration of arts and cultural activities which serves as a destination for both locals and visitors alike. They are often lively locations with an active nightlife attributed in some part to proximate cultural attractions. The five ACEs identified in the *Coastal Monmouth Plan* included Asbury Park, Belmar, Long Branch, Manasquan, and Red Bank. This *Master Plan* recognizes these five communities and adds the Boroughs of Atlantic Highlands, Freehold, and Keyport to the list of ACEs. Matawan and Allentown Boroughs are viewed as emerging ACEs as they are in the process of broadening their cultural offerings.
- **Suburban Areas:** Considered the automobile dependent “post-war” communities, these places are defined by the distinct separation of residential from non-residential uses and limited connectivity between uses. Public investment should provide for the limited expansion of infrastructure, maintain, and improve existing infrastructure, encourage the use of greener engineering alternatives and sustainable actions, improve or maintain existing levels of public service, and diversify housing options. Communities in these locations are host to many of the county’s historic sites, places, and districts.
- **Commercial Corridors:** Commercial corridors accommodate commercial needs on a larger/regional scale providing for a mix of retail, wholesale, and professional services intended primarily for the motoring public. Investment should focus on highway revitalization and design enhancements, better onsite circulation, improved connectivity between adjacent properties and uses, traffic congestion mitigation, multi-modal enhancements, and improved vehicular and pedestrian safety.
- **Rural and Natural Environs:** Public infrastructure such as sewer and water are practically nonexistent as these areas are planned for lower residential density and lower intensity commercial development that is compatible with the natural carrying capacity of the environment. Innovative land use techniques that protect and conserve natural resources, open space, and farmland are strongly encouraged as a means to protect such resources. Public investment in the acquisition of open space for conservation purposes and farmland preservation in conjunction with the use of Best Management Practices (BMPs) and long-term agricultural sustainable methods is a policy priority. Many historic farmsteads, places, and districts can be found in these locations throughout Monmouth County.
- **Open Space:** These are regional (county, state, and federal) open space facilities for the intended use and purpose of conservation, active recreation, or wildlife management.
- **Vistas and Viewsheds:** The visual perspective experienced from a particular vantage point that conveys exceptional or distinct beauty, interest, or frames the historic context of a place to the observer.
- **Scenic Byways/Scenic Roadways:** A designation given to a roadway that demonstrates one or more outstanding intrinsic quality including archaeological, cultural, historical, natural, recreational, and/or scenic. Existing state scenic byways in Monmouth County



include the Upper Freehold Historic Farmland Byway (Allentown and Upper Freehold). Additional county-based scenic byways are recommended in 6.0 Arts, Historic, and Cultural Resources. Existing scenic roadways are identified in [The Monmouth County Scenic Roadway Plan \(2001\)](#).

2.7.5 Community Landscapes Map

Figure 2.15: Community Landscape Map provides an overall graphic representation of community landscapes. The *Monmouth County Master Plan (2016)* Goals, Principles, and Objectives (GPOs) support recommendations for the continuation and strengthening of the various types of landscapes found throughout the county. Any community undergoing a planning study should conduct a visualization exercise that uses landscapes to identify appropriate goals, principals, and objectives for their community.



Figure 2.15: Community Landscape Map, 2016

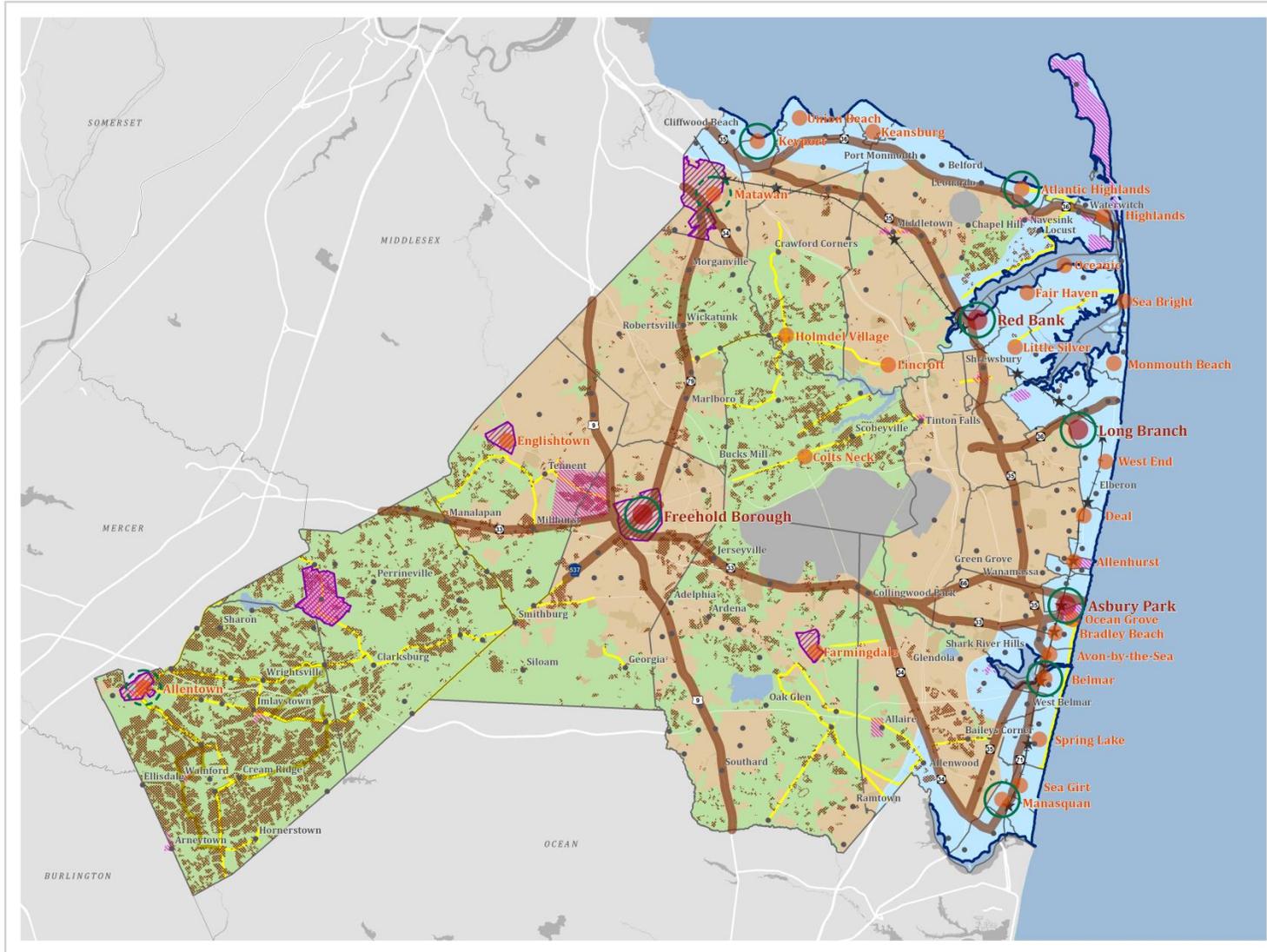


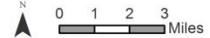
FIGURE 2.15
Community
Landscape Map

Monmouth County
Master Plan

May 2016

- Urban and Regional Center
- Commercial Business District
- Historic Village/Place
- Historic Shore Towns & Coastal Places
- Historic Town
- New Jersey and/or National Historic District
- Beach and Waterfront
- Arts, Culture, and Entertainment (ACE) Hub
- Emerging ACE Hub
- Suburban Area
- Commercial Corridor
- Rural & Natural Environ
- Agricultural Land
- Open Space
- Scenic Byway
- Scenic Roadway
- Train Station
- Military

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, and New Jersey Office of Planning GIS. Municipal open space was mapped using parcels and the NJDEP Green Acres Recreation and Open Space Inventory (ROSI) list. The municipal open space dataset is for planning purposes and may be missing properties or contain inaccuracies.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified. This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



The background image shows a dense, green forest or field of vegetation under a heavy, grey, overcast sky. The scene is misty or foggy, with the background elements appearing soft and less distinct. The overall color palette is muted greens and greys.

3.0 Natural Resources

3.0 NATURAL RESOURCES

MASTER PLAN RECOMMENDATION 3.1

3.1: Maintain and update inventories of the county’s natural features and systems and promote the protection of natural resources in conjunction with the Monmouth County Park System (MCPS).

Purpose

The Division of Planning will provide professional and technical assistance with the implementation of the Monmouth County Environmental Council’s (MCEC) update of the *Natural Features Study for Monmouth County (1975)* which will soon be replaced with the *Monmouth County Natural Resources Inventory*. This document will assist the MCPS in identifying, acquiring, and preserving significant natural and historic resources throughout the county, particularly as they related to improved community resiliency and sustainability.

Monmouth County Departments & Organizations Involvement

Division of Planning	Assist the MCEC and MCPS in the identification of significant natural and cultural resources; update the countywide <i>Natural Features Study for Monmouth County</i> .
Planning Board (MCPB)	Recognize the <i>Monmouth County Natural Resources Inventory</i> as a consultative and supporting document to the <i>Monmouth County Master Plan</i> .
MCEC	Review natural and historic feature research and documents prepared by Division of Planning staff; provide input on the upcoming <i>Monmouth County Natural Resources Inventory</i> .
MCPS	Identify, acquire, and preserve significant natural and historic resources; provide support, information, and review of the upcoming <i>Monmouth County Natural Resources Inventory</i> .

Other Project Stakeholder Involvement

Municipalities	Provide input, review, and comment on the upcoming <i>Monmouth County Natural Resources Inventory</i> .
Nonprofits	Provide input, review, and comment on the upcoming <i>Monmouth County Natural Resources Inventory</i> .



Huber Woods, Middletown

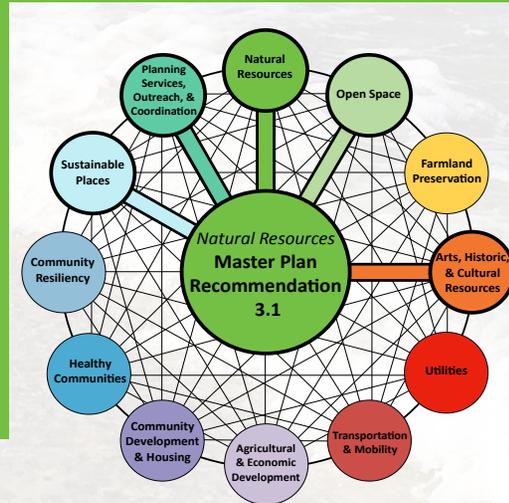
Source: Brittany Ashman

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 3.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning	●													
Coordination		●												
Planning Approach			●											
Environmental Resources				●										
Farmland Preservation					●									
Arts, Culture, & Historic						●								
Preservation Investments														
Vibrant & Sustainable Communities								●						
Community Preservation									●					
Housing										●				
Economic Development											●			
Agricultural Development												●		
Recovery & Resiliency													●	
Growth Investments														●

Implementation Strategy

- Coordinate the data collection with the MCPS, MCEC, and municipal environmental commissions.
- Seek input from preservation partners and municipalities.
- Complete research and development of the *Monmouth County Natural Resources Inventory* and begin the process of approval by the MCEC.
- Reach out to all stakeholders for review and comment.
- Provide support to the county, nonprofits, and municipalities as they move forward with preservation efforts that support plan implementation.



Strongest Associated Master Plan Elements

3.0 NATURAL RESOURCES

MASTER PLAN RECOMMENDATION 3.2



Huber Woods, Middletown

Source: Brittany Ashman

3.2: Participate in initiatives that identify, target, and protect important resources, critical habitats, species of concern, and Areas of Significant Environmental Quality (ASEQ).

Purpose

The Monmouth County Environmental Council's (MCEC) mission directs the identification of ASEQ. The *Natural Features Study for Monmouth County (1975)* initially identified these areas and in 1978, the *Monmouth County Unique Areas Study* refined the list and summarized their importance. Over the years, the MCEC added more Unique Areas to the list, primarily through recommendation from municipalities and the Monmouth County Park System (MCPS), renaming the list to ASEQ (2007).

Monmouth County Departments & Organizations Involvement

Division of Planning	Work with stakeholders to provide support to the MCEC to update the ASEQ, as amended over time.
MCEC	Review the ASEQ and the updated <i>Monmouth County Unique Areas Study</i> prepared by the staff, providing input and recommendations; adopt the final products.
MCPS	Provide support, information, and review of the <i>Monmouth County Unique Areas Study</i> update.

Other Project Stakeholder Involvement

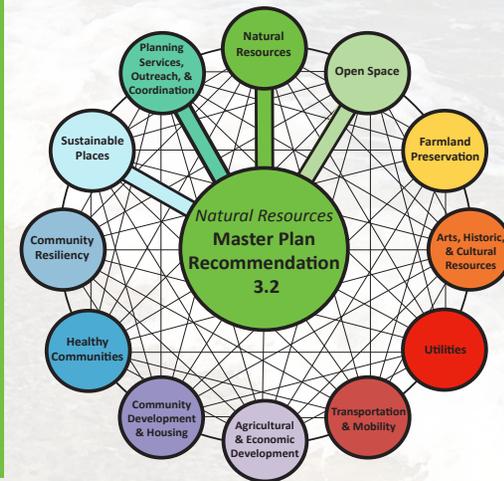
Municipalities	Recommend new ASEQs to the Division of Planning.
Nonprofits	Recommend new ASEQs to the Division of Planning.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 3.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●													
B. Coordination		●												
C. Planning Approach			●											
D. Environmental Resources				●										
E. Farmland Preservation				●										
F. Arts, Culture, & Historic				●										
G. Preservation Investments														
H. Vibrant & Sustainable Communities								●						
I. Community Preservation									●					
J. Housing										●				
K. Economic Development											●			
L. Agricultural Development												●		
M. Recovery & Resiliency													●	
N. Growth Investments														●

Implementation Strategy

- Refine list of the ASEQ based on feedback from the MCPS, preservation partners, municipalities, and the MCEC.
- Seek review from other county agencies that might have concerns.
- Complete the research and development of the *Monmouth County Unique Areas Study* update.
- Reach out to all stakeholders for review and comment.
- Begin the formal process of approval by the MCEC.
- Provide support to county departments, nonprofits, and all levels of government as they move forward with preservation efforts that support plan implementation.



Strongest Associated Master Plan Elements

3.0 NATURAL RESOURCES

MASTER PLAN RECOMMENDATION 3.3



Huber Woods, Middletown

Source: Brittany Ashman

3.3: Encourage and support new and continuing partnerships for resource protection.

Purpose

Partnerships with the federal and state government, other counties, municipalities, as well as private and nonprofit stakeholders promote regional watershed protection and other regionally-based natural resource protection initiatives. The partnerships share a common vision, engage in collaborative planning efforts, leverage funding, and implement cooperative strategies.

Monmouth County Departments & Organizations Involvement

Division of Planning	Participate as the project lead or partner in natural resource related partnership efforts; support other county departments.
Various County Agencies	Participate as project lead or partner; offer direction, services, or support to lead agency.

Other Project Stakeholder Involvement

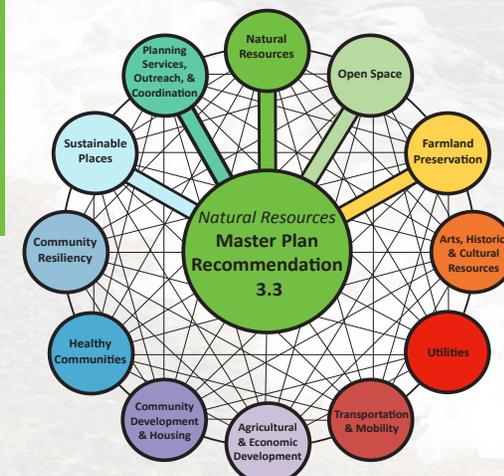
Municipalities and Other Counties	Serve as project partners; provide input, support, and feedback; assist in implementing local projects.
State of NJ and Federal Government Agencies	Serve as project partners; allocate funding when available; provide plan or project review for permits.
Academic Institutions and Utility Authorities	Serve as project lead or partners; provide data, support, and implementation and academic assistance.
Nonprofits	Participate as project partners; support partnership efforts through preservation, volunteerism, or outreach assistance, as appropriate.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 3.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														
A.														
B.														
C.														
D.														
E.														
F.														
G.														
H.														
I.														
J.														
K.														
L.														
M.														
N.														

Implementation Strategy

- Identify appropriate partnerships and represent the Division of Planning where directed.
- Monitor partnership activities, participate in and help facilitate meetings, review documents, share data, and provide feedback.
- Assist in project implementation when possible.



Strongest Associated Master Plan Elements

3.0 NATURAL RESOURCES

MASTER PLAN RECOMMENDATION 3.4

3.4: Continue to educate the public on the county’s valuable natural resources, environmental impact assessment procedures, and other important environmental issues.

Purpose
 The Monmouth County Environmental Council’s (MCEC) mission includes environmental education and outreach. Monmouth County Park System (MCPS) programming is also geared towards environmental education efforts and the Monmouth County Health Department (MCHD) educates the public on environmental health related issues. All three agencies host informational workshops and produce educational outreach materials on a variety of natural resource and environmental issues for municipalities, schools, community groups, and the general public. The Division of Planning annually hosts an AmeriCorps NJ Watershed Ambassador, administrated by NJ Department of Environmental Protection (NJDEP), with the primary goal of watershed and water quality education and outreach.

Monmouth County Departments & Organizations Involvement

Division of Planning	Coordinate, support, and assist the MCEC, MCPS, and MCHD in environmental education and outreach efforts; prepare or assist in the preparation of environmental education related brochures and other documents; provide outreach to municipalities through roundtable events on topical environmental issues; provide educational programs to schools and community groups through the AmeriCorps NJ Watershed Ambassador Program.
MCEC	Hold roundtable events; recommend topics for educational programs and brochures; assist staff in the preparation; review or implement programs and documents.
MCPS	Continue to provide educational programs and documents on a wide variety of environmental and natural resource topics.
MCHD	Continue to provide educational programs and documents on a wide variety of environmental health related topics.
Brookdale Community College (BCC)	Potential partner for educational outreach; include county workshops in their publications and website; promote to student community.

Other Project Stakeholder Involvement

Municipalities	Suggest topics of interest; participate in outreach programs; provide venues for events.
Academic Institutions and Community Groups	Participate in educational programs; offer support through speakers, data, and venues.
Resident and Local Businesses	Participate in educational programs.



Huber Woods, Middletown

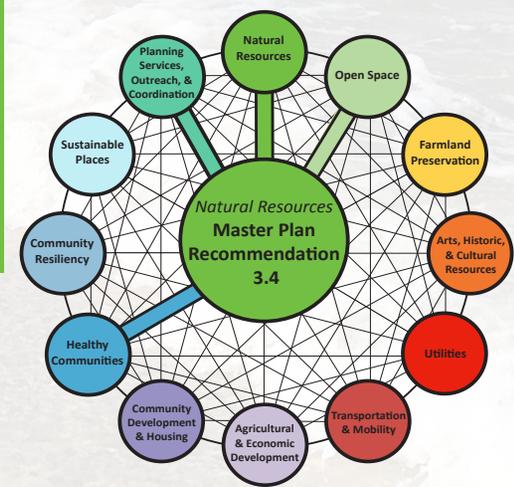
Source: Brittany Ashman

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 3.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination		●												
Planning Approach			●											
Environmental Resources				●										
Farmland Preservation					●									
Arts, Culture, & Historic						●								
Preservation Investments														
Vibrant & Sustainable Communities								●						
Community Preservation									●					
Housing										●				
Economic Development											●			
Agricultural Development												●		
Recovery & Resiliency													●	
Growth Investments														●

Implementation Strategy

- Coordinate educational program offerings with the MCEC, MCPS, MCHD, academic institutions, and other stakeholder groups.
- Update current brochures and prepare new educational materials, taking advantage of evolving technologies.
- Seek grant funding to facilitate production of educational materials and programming.



Strongest Associated Master Plan Elements

3.0 NATURAL RESOURCES

MASTER PLAN RECOMMENDATION 3.5



Huber Woods, Middletown

Source: Brittany Ashman

3.5: Assist municipalities with floodplain management and planning initiatives that improve community resiliency and/or advance their standing in the National Flood Insurance Program (NFIP) Community Rating System (CRS) program.

Purpose

The NFIP administers the CRS program and scores towns on their effectiveness in dealing with the mitigation of flood hazard events. Earning CRS points lowers flood insurance premiums for homeowners and businesses located in Special Flood Hazard Areas (SFHAs) in participating towns. CRS points are awarded to towns that leverage their natural resources to increase community resiliency through activities such as preserving natural open spaces and installing natural shoreline protections.

Monmouth County Departments & Organizations Involvement

Division of Planning	Encourage municipalities to participate in the Monmouth County CRS Users Group to advance knowledge and understanding of the NFIP CRS program; provide technical, geographic information system (GIS) mapping (e.g. open space mapping), and professional assistance to municipalities, in accordance with county guidelines.
Office of Emergency Management (OEM)	Encourage municipalities to participate in the Monmouth County CRS Users Group; continue to disseminate information and updates from the Federal Emergency Management Agency (FEMA), NFIP, and CRS program to Monmouth County municipalities and stakeholders; provide technical and professional assistance to municipalities, in accordance with county guidelines.

Other Project Stakeholder Involvement

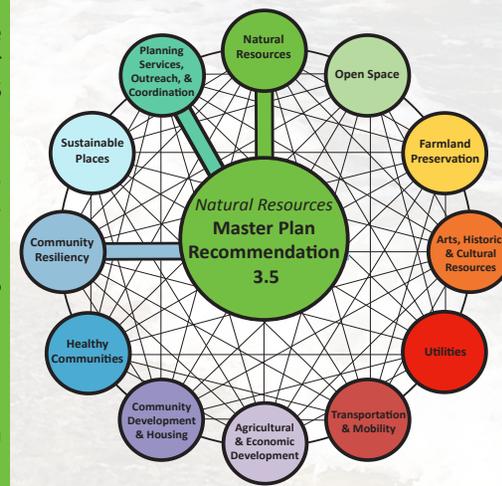
Municipalities	Voluntarily participate in the Monmouth County CRS Users Group meetings and events to share information, ideas, and concepts that will assist other partners in gaining CRS points, receive assistance from the county, in accordance with county guidelines.
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Master Plan Goals, Principles, & Objectives (GPOs) Relating to 3.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination	●	●	●								●			
C. Planning Approach	●		●										●	
D. Environmental Resources		●	●										●	
E. Farmland Preservation	●	●	●		●	●	●				●	●	●	
F. Arts, Culture, & Historic														
G. Preservation Investments														
H. Vibrant & Sustainable Communities								●	●	●				
I. Community Preservation								●	●	●				
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Encourage municipal participation in NFIP's CRS program.
- Through the Monmouth County CRS Assistance Program, provide professional and technical assistance for towns seeking participation or advancement in NFIP's CRS program.
- Leverage efficiencies of scale that result in cost effective, shared services by providing towns with baseline data, information, and mapping support.
- Assist municipalities in lowering costs for NFIP policyholders (residents and business owners) in SFHAs.
- Promote mitigation preparedness and activities in SFHAs.
- Assist towns in the preparation of their floodplain management plans and ordinances.
- Provide peer support and access to professional assistance from county, state, and federal agencies through the Monmouth County CRS Users Group.



Strongest Associated Master Plan Elements

3.0 Natural Resources

3.1 Introduction

The location of Monmouth County provides for an array of unique natural resources, critical habitats, and species of concern. This county essentially provides a microcosm of the state in that it has natural and developed beaches; offers river, bay, and ocean boating and fishing opportunities; encompasses large and small lakes, rivers, and reservoirs; and includes highlands, lowlands, forests, farms and developed areas. The variety and quantity of preserved natural land ensures that the county will continue to provide some level of land use diversity for many years to come. It is important, to continue to preserve natural lands for what they provide to the sustainability of the county: drinking water, food, pollution control, and opportunities for recreation, just to name a few.

The Goals, Principles, and Objectives (GPOs) related to the Natural Resources Element focus on identifying and protecting the county’s natural resources along with educating the public, enhancing partnerships, supporting preservation efforts and assisting with resource managing projects, such as floodplain management initiatives. *Master Plan Goal #2* states: “promote the protection and conservation of natural and cultural resources to help guarantee our long-term sustainability.” Principle 2.1 specifies the value of natural resources as life-supporting infrastructure imperative to the built environment. As development in the county continues, important natural resources must be preserved in order to maintain a sustainable balance and retain the high quality-of-life to which Monmouth County residents have become accustomed.

3.2 Existing Conditions

3.2.1 Physical Geography and Natural Features

Monmouth County is comprised of 472 square miles located in eastern

central NJ and is the state’s sixth largest county. There are 27 miles of coastline along the Atlantic Ocean and 26 miles of shoreline along Raritan Bay. The county features four major coastal rivers: Manasquan, Shark, Navesink, and Shrewsbury. Figure 3.1: Physical Geography Map shows the physical geography of the county in terms of both the natural and built environment.

Elevations in the county range from sea level at the coast to 391 feet above sea level at Crawford’s Hill in Holmdel. There is a prominent, crescent shaped ridge known as the Mount Pleasant Hills spanning from the Highlands in the northeast to Freehold in the county’s center. This ridge essentially follows the divide between the Inner and Outer Coastal Plain Physiographic Provinces. Together they form the Atlantic Coastal Plain Physiographic Province. Other than the relatively less prominent Hominy Hills, which stretch from Colts Neck toward Eatontown, the rest of the county is largely comprised of lowlands.

The county features a wide variety of soils, with 43 agronomic soil series and 114 different types or subtypes recognized by the Soil Conservation



Manasquan River
Source: Linda J. Brennan



Figure 3.1: Physical Geography Map



FIGURE 3.1
Physical Geography Map

**Monmouth County
Master Plan**

May 2016

- Agriculture
- Built-Up Lands
- Barren
- Forest
- Water
- Wetlands
- Recreational Lands

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, and the New Jersey Office of GIS. Land Use classifications were derived from the NJDEP 2012 Land Use/Land Cover Dataset.

Additional sources: USDA Bureau of Chemistry and Soils "Soil Survey of The Freehold Area, New Jersey" (1927), and USGS topographic quadrangle maps.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



Service (SCS). Soil types are important because their mineral or organic matter is an essential determinant in plant growth and agriculture. Their hydraulic conductivity, the ability to hold and drain water, is also an important factor in building and development as well as agricultural. Soil types give rise to different ecological habitats as well as different suitability for land uses. The degree of land slope affects the drainage, runoff, and erosion potential of soil. Ninety percent of the land in Monmouth County features a less than 10% slope, while 75% of Monmouth County has a less than 5% slope. Areas of less than 2% slope are considered “poorly drained”.

As seen in Figure 3.2: Generalized Soils Map of Monmouth County, 1983, the county’s 43 agronomic soil series can be grouped into 12 generalized map unit categories, as delineated by the U.S. Department of Agriculture Soil Conservation Service.

Klej-Keyport-Urban Land: This map unit comprises approximately 8% of the county’s soils and is found primarily on depressions, low divides, and side slopes throughout Keansburg, Hazlet, Aberdeen, Matawan, Marlboro, and Manalapan. Soils of this area are nearly level to moderately steep and well to somewhat poorly drained. Surface soils are generally loamy sand or sandy loam, with minor soils featuring varying amounts of silt or sand. Approximately 15% of this unit contains urban land, consisting of areas covered by industrial, commercial, or residential development.

Evesboro-Klej: These soils are found in the central coastal area, from Ocean Township to Neptune Township and Neptune City to Belmar. A separate tract encompasses the Manasquan River in Farmingdale. This category makes up about 9% of the county and is primarily Evesboro soils, with smaller amounts of Klej and other soils in minor amounts. These soils are nearly level to steep, excessively drained to moderately well drained, and found on divides and side slopes. The surface layer of this unit is primarily

sand, with some areas of sandy loam.

Freehold-Urban Land-Collington: This unit comprises 22% of the county from Upper Freehold through Freehold Borough, and into Holmdel, Lincroft, and Middletown. The soils are nearly level to moderately steep and well drained. They are found on divides and side slopes. The surface layer is primarily loamy sand, sandy loam, loam, and small amounts of sandy clay loam. This unit provides much of the county’s farmland and is used for common field crops, hay, sod, vegetables, and horse farms. The unit also includes a significant amount of developed urban land.

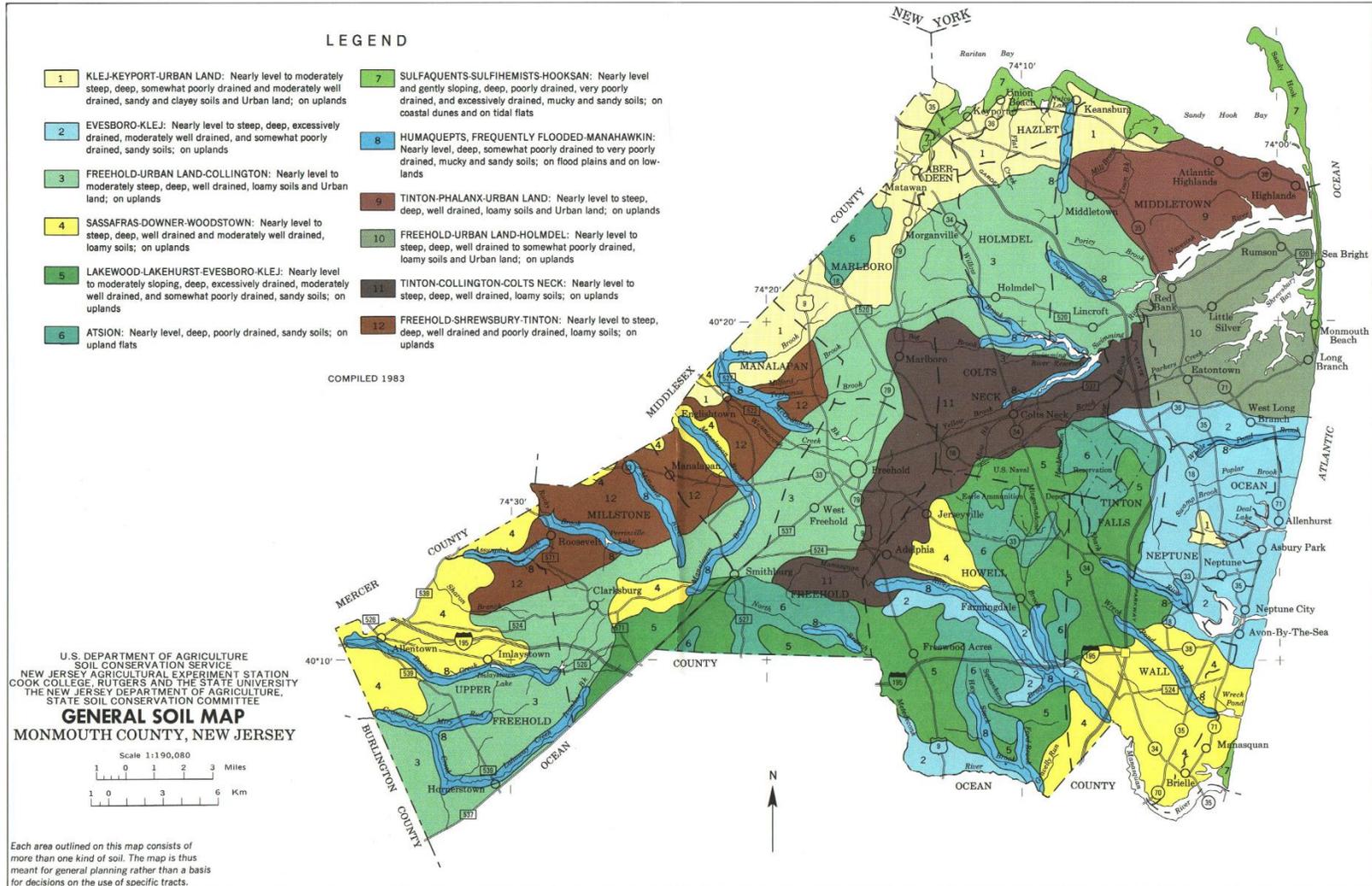
Sassafras-Downer-Woodstown: This map unit makes up 11% of the county and is located throughout Wall and parts of Howell, Allentown, and Imlaystown (Upper Freehold). This nearly level to steep area features well drained to moderately well drained land found on divides, side slopes, depressions, swales, and low divides. The surface soil features different mixtures of loam including sand, gravel, and clay. Most of this area is used for common field crops, vegetables, and horse farms. Some areas are considered urban.

Lakewood-Lakehurst-Evesboro: This unit is nearly level to moderately sloping, excessively drained to somewhat poorly drained land found mainly in Tinton Falls, Howell, Wall, and the southern areas of Upper Freehold and Freehold Township which border Ocean County. It encompasses 11% of Monmouth County and is found on divides, side slopes, and low depressions. Most soils within this category are sands or loamy sands. This map unit is generally wooded and poorly suited for farming.

Atsion: These soils make up 7% of the county and are found in depressions and on broad flats in Farmingdale, Howell, and southern Freehold Township. Most areas are nearly level and poorly drained. The surface soil is sand with a subsoil of loamy sand



Figure 3.2: Generalized Soils Map of Monmouth County, 1983



and sand. Most areas are wooded. Properly managed areas can be suitable for specialty crops such as blueberries and cranberries.

Sulfaquents-Sulfihemists-Hooksan: This unit makes up 2% of the county and can be found in tidal flats, marshes, coastal dunes, and beaches from Sandy Hook to Monmouth Beach and in areas of Keansburg, Union Beach, and Manasquan. Surface soils are typically sands that can be poorly drained to excessively drained. These areas mostly provide habitat for wildlife or are used for recreation. Some areas within this category have been developed as marinas or for private docks. Beach related development often includes public recreational facilities.

Humaquepts, Frequently Flooded-Manahawkin: This map unit surrounds rivers and streams throughout Monmouth County and is generally associated with freshwater wetlands. It comprises 5% of the county area and is generally wooded; unsuitable for most uses due to a seasonal high water table and frequent flooding. The land is somewhat to very poorly drained; primarily mucky and sandy soils found on floodplains, broad flats, and lowlands.

Tinton-Phalanx-Urban Land: This map unit comprises 4% of the county in areas of Middletown, Atlantic Highlands, and Highlands. Soils are well drained loamy sands found on divides and side slopes. Most areas within this category are woodland or developed land. Some areas are fairly suited for farming.

Freehold-Urban Land-Holmdel: These soils are found in Rumson, Little Silver, Red Bank, Eatontown, and Long Branch. These are nearly level to steep, well drained to somewhat poorly drained soils found on divides, side slopes, and depressions. Most surface soil is sandy loam or loamy sand. The map unit comprises 6% of the county, and where not developed, provides land suitable for common field crops, hay, sod, and vegetables.

Tinton-Collington-Colts Neck: This map unit contains 9% of Monmouth County land across Freehold Township, Marlboro, Colts Neck, and Tinton Falls. Soil is nearly level to steep and well drained. It is often found on divides and side slopes. Surface soils are loamy sand and sandy loam. Most areas are used for common field crops, nursery stock, and horse farms, while some are wooded.

Freehold-Shrewsbury-Tinton: This map unit comprises 6% of the county and features land spanning the western border of Monmouth County from Upper Freehold north through Freehold Township and Manalapan. The land is nearly level to steep, well drained to poorly drained, and found on areas of divides, broad flats, and side slopes. Surface soil is loamy sand, sandy loam, sandy clay loam, and loam. This land area is suited for common field crops, orchards, and nursery stock. Other areas provide pastureland or are wooded.

Monmouth County holds approximately 59 square miles of surface water all of which are important for drinking, stormwater collection, farming, and recreation according to the [Natural and Cultural Features of Monmouth County \(2010\)](#) report. Surface water designated for drinking is stored in the county's four reservoirs: Swimming River, Glendola, Manasquan, and the Brick Reservoir, which is partially in Monmouth County and partially in Ocean County. Numerous small lakes and ponds are found throughout the county, both natural and manmade.

The Monmouth County Health Department (MCHD) monitors water quality throughout the county. The MCHD participates in the New Jersey Department of Environmental Protection (NJDEP) Cooperative Coastal Monitoring Program. The MCHD also samples select unguarded bay and river beaches on a weekly basis during the beach bathing season. The MCHD issues beach advisories and closures as necessary based upon their monitoring results. The majority of Monmouth County Beach



Advisories and/or closures are caused by stormwater runoff. The quality of Monmouth County's surface waters can experience rapid degradation in the hours following a large storm event.

The county has three major drainage basins: the Atlantic Coastal, the Raritan, and the Delaware. These are delineated on Figure 3.3: Watersheds of Monmouth County Map. Drainage basins can be further divided into watersheds, which are all of the land that drains to one water body such as a river, lake, stream or bay. These land areas are separated by divides of high ground, where each side drains to a different body of water and the watersheds are generally named for the drainage endpoint.

The United States Geologic Survey (USGS) divides all land by Hydrologic Units. Each Hydrologic Unit is further subdivided into smaller and smaller units and classified by the 14 digit Hydrologic Unit Codes (HUCs). There are 21 major regions in the U.S. The first two numbers in the HUC reference the region. All of NJ is within the second region and therefore all HUCs within the state begin with '02'. NJ is further divided into two subregions which provide the third and fourth digit of all HUCs within the state: '03' for Lower Hudson and '04' for Delaware. Monmouth County has drainage units in both subregions. Additional digits are added to the codes as the units are further subdivided. NJDEP primarily uses the HUC 11 divisions. New Jersey's HUC 11s range in size from 3 to 349 square miles, with an average size of 60 square miles. Figure 3.3: delineates the HUC 11 watersheds within Monmouth County. NJDEP aggregates the HUC 11s in the state into 21 Watershed Management Areas (WMA). Monmouth County has land within six of these WMAs. Figure 3.3: Watersheds of Monmouth County Map provides the WMA boundaries.

Quality, quantity, and drainage patterns of water in a watershed are affected by human land use and development. Impervious surfaces, such as paved roads and buildings, can interrupt the natural flow of

stormwater into streams or groundwater percolation and aquifer recharge. Among other side effects, storms can wash street residue into surface waters or cause flooding.

Plans can be generated to improve water resources through effective management of land use/land cover activities. Best watershed management practices, such as the re-vegetation of a bulkheaded lake or retrofitting storm drains to remove sediments from stormwater, can be key components of a watershed management program.

This discussion of physiography, soils, and water resources is just a small summary of the significant natural resources found in Monmouth County. Inventories of the local natural and cultural resources have been prepared over the years by the county and most municipalities. Those inventories provide a much more in-depth analysis of the resources, their value, protection efforts, and stewardship needs.

3.2.2 Advisory Committees

Monmouth County Environmental Council (MCEC): The Monmouth County Board of Chosen Freeholders formed the MCEC by resolution in 1972. The mission of the MCEC is to advise the Monmouth County Planning Board on matters relating to conservation and the environment. Among its duties, the council is charged with inventorying and evaluating the physical and natural features of the county; establishing priorities for preservation; reviewing proposed environmental legislation; educating the public on related issues; and furthering the environmental preservation, protection, and interests of the county. Over the years, the MCEC has received a number of grants to fund specific projects such as the construction of a rain garden at Brookdale Community College. MCEC members also act as liaisons to local municipal environmental commissions and regional groups related to watershed, environmental, sustainability, and natural resource initiatives. The Division of Planning provides staff support to the MCEC.



Figure 3.3: Watersheds of Monmouth County Map, 2016

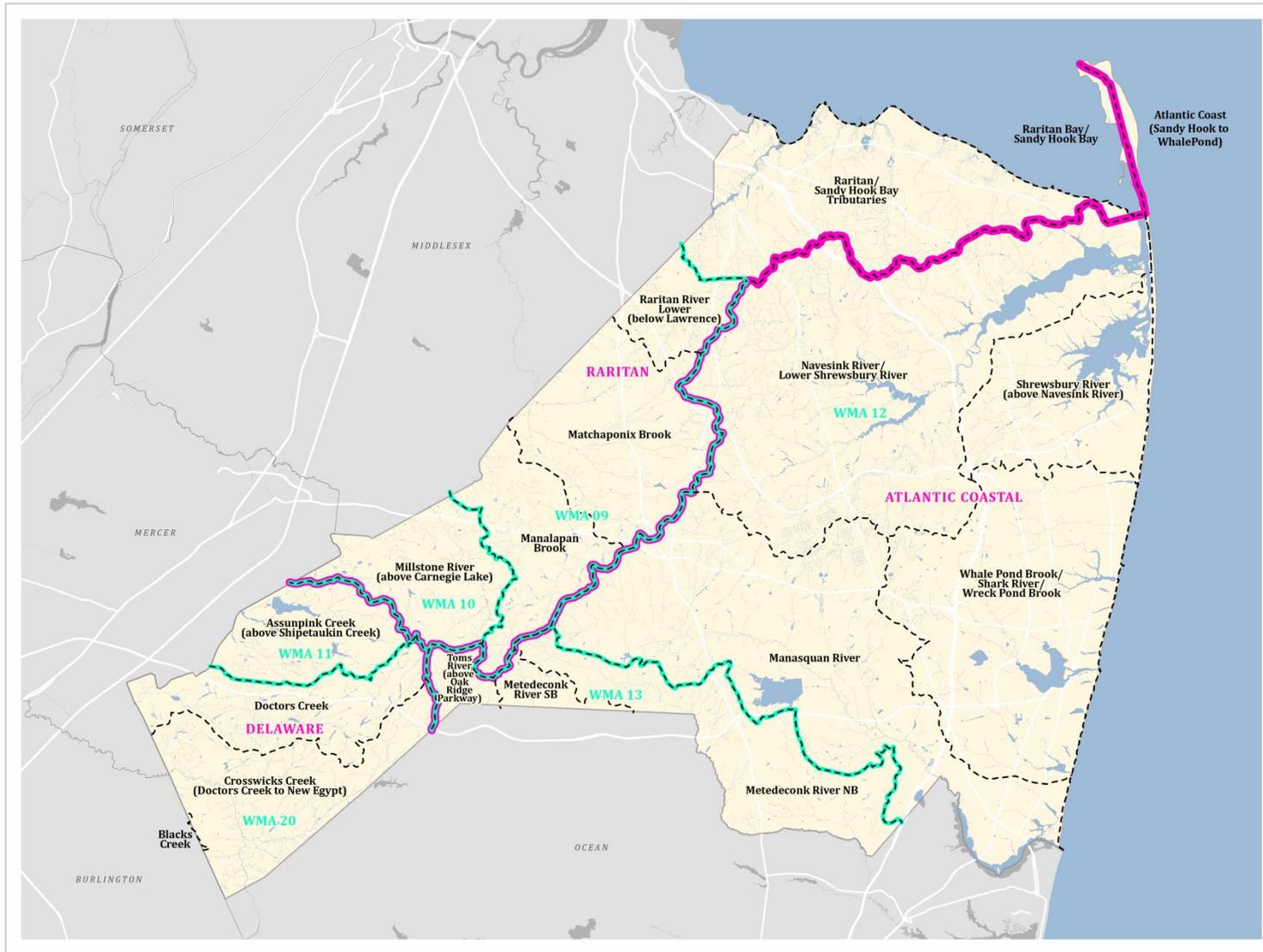
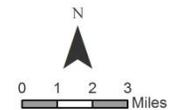


FIGURE 3.3
Watersheds of
Monmouth County
Master Plan

May 2016

- Major Drainage Basin
- Watershed Management Area
- - - HUC11 Watershed

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, New Jersey Office of GIS, and the NJDEP.



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Municipal Environmental Commissions: In 1968, the NJ State Legislature passed N.J.S.A. 40:56A authorizing municipalities to create by ordinance a municipal conservation commission “...for the protection, development or use of natural resources, including water resources, located within its territorial limits.” In 1972, the legislature amended that law, changing the name to environmental commissions while expanding their responsibilities to include pollution prevention and solid waste management. The 1972 amendment also allowed the establishment of joint commissions consisting of two or more municipalities. Subsequent amendments in 1975 and 1989 further refined membership and duties of these commissions. In Monmouth County, 35 municipalities have commissions formed under N.J.S.A. 40:56A. A number of other municipalities have formed similar groups with somewhat different responsibilities, calling them such things as an environmental advisory committee. Still other municipalities have joined additional duties, such as those that might typically be associated with shade tree commissions. The vast majority of municipalities in Monmouth County have some form of environmental advisory body. Figure 3.4: Municipal Environmental Groups provides the name of groups charged with monitoring municipal environmental matters, and when known, the year they were formed.

[NJ Department of Agriculture - State Soil Conservation Committee \(SSCC\)](#): The SSCC, established by statute in 1937, administers the state natural resource conservation program. SSCC membership includes the Secretary of Agriculture, the Commissioner of the NJDEP, the Director of Rutgers Cooperative Extension, the Dean of Cook College, an appointee of the Governor, and six local soil conservation district supervisors. Under the NJ Natural Resources Program, there are 15 local soil conservation districts.

[Freehold Soil Conservation District](#): The local conservation district responsible for Monmouth County is the Freehold Soil Conservation District. The first of its kind in NJ, this district was incorporated in June

1938. Middlesex County is also under its jurisdiction. The district’s mission is to “promote sound soil and water conservation practices on the land in order to protect our topsoil and water resources.” Any land disturbance projects greater than 5,000 square feet on commercial, subdivided residential, mining, storage, landfill, or utility sites are required to submit a soil erosion control plan to the district for review and approval under the NJ Soil Erosion and Sediment Control Act.

State Agencies: The NJDEP has multiple divisions tasked with protecting New Jersey’s, and therefore Monmouth County’s, natural resources. These sections include the Division of Parks and Forestry, the Division of Fish and Wildlife, the Office of Coastal and Land Use Planning, the Division of Water Quality, and the Division of Water Supply and Geoscience. These divisions oversee natural resource management on state owned land and also regulates the usage of natural resources by private landowners.

The NJDEP offers many programs to aid landowners, such as the [NJ Forest Stewardship Program](#), [NJ Farmland Assessment Program](#), and [Environmental Quality Incentives Program](#).

Federal Agencies: Under the direction of the U.S. Department of Agriculture (USDA), the [Natural Resources Conservation Service](#), formerly the Soil Conservation Service, provides technical assistance on natural resource use and conservation matters to private landowners, farmers, local conservation districts, government agencies, tribes, and other groups interested in conserving natural resources. They also offer a number of [financial assistance programs](#) such as Agricultural Management Assistance, Conservation Stewardship, and Environmental Quality Incentives. The U.S. Forest Service, also under the USDA, manages and protects the national forests and grasslands. Their mission is “to sustain the health, diversity, and productivity of the nation’s forests and grasslands to meet the needs of present and future generations.” The U.S. Forest Service also works with the NJDEP Forest



Figure 3.4: Municipal Environmental Groups

Municipality	Name	Year Formed
Aberdeen	Environmental & Shade Tree Advisory Board	1973
Allenhurst	none (1)	
Allentown	Environmental Commission	1975
Asbury Park	Environmental/Shade Tree Commission	2000
Atlantic Highlands	Environmental Commission	1998
Avon-by-the-Sea	Environmental Commission	1992
Belmar	Environmental Commission	
Bradley Beach	Environmental Commission	
Brielle	Environmental Commission	1972
Colts Neck	Environmental Commission	1973
Deal	none (1)	
Eatontown	Environmental Commission	1974
Englishtown	none (1)	
Fair Haven	Environmental Commission	1970 (2)
Farmingdale	Environmental Advisory Committee (1)	
Freehold Borough	none (1)	
Freehold Township	Environmental Commission	1971
Hazlet	Environmental Commission	1982
Highlands	Environmental Advisory Committee	
Holmdel	Environmental Commission	1973
Howell	Environmental Commission	
Interlaken	Borough Council serves the function (1)	
Keansburg	none (1)	
Keyport	Environmental Commission	
Lake Como	Environmental Commission	
Little Silver	Environmental Commission	1972 (2)
Loch Arbour	none (1)	
Long Branch	Environmental Commission	1972
Manalapan	Environmental Commission	1993
Manasquan	Environmental Commission	1972

Sources: Municipal ordinances and websites unless otherwise noted as follows:
 (1) MCEC records or
 (2) Association of New Jersey Environmental Commissions website



Municipality	Name	Year Formed
Marlboro	Environmental Commission	
Matawan	Environmental Commission	1971
Middletown	Environmental Commission	1969 (2)
Millstone	Environmental Commission	1971
Monmouth Beach	Environmental Commission	1972
Neptune City	Environmental Committee	
Neptune Township	Environmental/Shade Commission	
Ocean	Environmental Commission	1971 (2)
Oceanport	Environmental Commission	
Red Bank	Environmental Commission	1971 (2)
Roosevelt	Environmental Commission	
Rumson	Environmental Commission	1969
Sea Bright	Environmental Partnership Committee	1972 (2)
Sea Girt	Environmental Commission	
Shrewsbury Borough	Environmental Commission	1970 (2)
Shrewsbury Township	none (1)	
Spring Lake	Environmental Commission	1991
Spring Lake Heights	Environmental Commission	2003
Tinton Falls	Environmental Commission	1989
Union Beach	none (1)	
Upper Freehold	Environmental Advisory Committee	2004
Wall	Environmental Advisory Committee	1978
West Long Branch	Environmental Commission	1983

Sources: Municipal ordinances and websites unless otherwise noted as follows:
 (1) MCEC records or
 (2) Association of New Jersey Environmental Commissions website



Service on many projects sustaining healthy woodlands throughout the state.

3.2.3 Supportive Reports and Guiding Documents

Monmouth County Division of Planning

The Division of Planning assists the MCEC and the Monmouth County Planning Board (MCPB) in the preparation of numerous studies, reports, white papers, and brochures.

Natural Features Study for Monmouth County (1975) and Associated Background or Focused Documents: The MCEC was formed by the Board of Chosen Freeholders with an acknowledgement of the importance and sensitivity of county's natural resources along with the need to protect them. One of the original priorities given to the MCEC was to inventory the natural features of Monmouth County. Its response was to immediately begin preparation of an Environmental Quality Index (published in 1973) and Development Suitability Map (1974). These components paved way for the *Natural Features Study for Monmouth County (1975)*. The first part of the *Natural Features Study* was a complete inventory of natural features and resources, intended to provide a sound environmental basis for future planning. Chapters include geography (physical location, topography, drainage patterns, and climate), geology (general geology, stratigraphy, soils, slope, and acid soil), water resources (watersheds and streamflow, ponds and lakes, reservoirs, and groundwater), ecology (vegetation, wetlands, and unique areas), and development suitability (floodplains, watershed areas, aquifer recharge, wetlands, poorly drained soils, steep slopes, agricultural lands, coastal beaches, suitability by planning area, and recommendations). Composite maps showing levels of development suitability were provided in the 1975 printing. Due to the study's popularity, it was reprinted in November 1976 and again in January 1988. The third and final printing in 1988 removed the then outdated Development Suitability Chapter and

referred readers instead to the [Monmouth County Growth Management Guide \(1982\)](#). The 1988 printing also referred readers to the *Monmouth County Open Space Guide (1983)*, [Bayshore Waterfront Access Plan \(1987\)](#), [Land Use in the Swimming and Manasquan Reservoir Watersheds \(1985\)](#), *Growth Management Techniques (1987)*, an updated *Monmouth County Environmental Quality Index (1980)*, Monmouth County Historic Sites Inventory (1986), and the *Monmouth County Historic Preservation Guide (1987)*. In the final printing, changes were also made to the "Unique Areas" section of the ecology chapter pertinent to the adoption of the *Monmouth County Unique Areas Study (1978)*.

Following the adoption of the *Monmouth County Master Plan (2016)*, the MCEC and Division of Planning staff will complete an update to the countywide *Natural Features Study*, which is tentatively titled the *Monmouth County Natural Resources Inventory*. Once approved by the MCEC and accepted by the MCPB, this new document will be considered a supportive and consultative document to the *Master Plan* and posted on the county website.

Regional Ecological Resource Inventories: Three regional Ecological Resource Inventories were prepared as regional updates to the earlier countywide *Natural Features Study (1975)*, the *South Coast Environmental Planning Region Ecological Resource Inventory (1996)*, *North Coast Environmental Planning Region Ecological Resource Inventory (1999)*, and *Mid-Coast Environmental Planning Region Ecological Resource Inventory (2000)*. With the preparation of each of these documents the regional lists of unique areas and historic resources, as well as the existing land use chapters, saw the most significant revisions.

Monmouth County Unique Areas Study (1978) and Areas of Significant Environmental Quality (ASEQ): The *Monmouth County Unique Areas Study* fulfilled the MCEC's initial goal of producing a



study of exceptional sites of environmental or ecological significance in the county. It was intended to generate an awareness of and respect for the environmentally aesthetic areas and important natural resources. The 1978 study was expanded from a chapter in the *Natural Features Study (1975)* and, after careful analysis, modified the list of sites. The flora, fauna, and a simple ecosystem analysis consisting of community type, successional stage, soil type, characteristics, and other pertinent facts (historical or archeological significance) of each unique area was documented in the 1978 study. The areas are categorized as bogs, marshes, and swamps; waterways; coastal wetlands; lakes, ponds, and reservoirs; meadows, parks, and forests; and archeological and geological areas. As the purpose of the *Unique Areas Study* was to identify, survey, and report on the county’s unique areas to encourage preservation, it has proven to be successful. Over the years, a number of these sites have been permanently preserved.

While the literal definition of unique is *one of a kind*, even the earliest county reports, while being selective, included more than one waterway, wetland, and forest. Therefore, in 2007 the Unique Areas were renamed Areas of Significant Environmental Quality (ASEQ), although the study was not formally updated to reflect the new name. The MCEC continues to work with municipalities and the Monmouth County Park

System (MCPS) to nominate additional worthy sites. Division of Planning staff, in conjunction with MCEC, continues the identification, nomination, and evaluation of ASEQs. Development of a new updated ASEQ study is being coordinated with the update to the *Natural Features Study*.

Eco-Tips Brochures: In an effort to educate the public on the important local natural features and environmental issues, the MCEC published a series of [Eco-Tips Brochures](#). Topics include: Coastal Dunes; Lawns & Gardens; Managing Plant Invaders; Problem Geese; Stream Corridor Protection; Tree Preservation; What is a Watershed?; Energy for the Future; Building a Rain Garden; and Stormwater Management.

Monmouth County Park System (MCPS)

The MCPS is a longstanding and indispensable partner of the Division of Planning. The MCPS produces many documents, a number of which are discussed in the 4.0 Open Space Element of this *Master Plan*. Several MCPS publications are focused on the county’s natural features in general or on the flora and fauna of specific sites.



Seals resting on Skeleton Hill Island in Sandy Hook Bay

Source Linda J. Brennen



From Unique Area to County Park: Perrineville Lake

The *Natural Features Study for Monmouth County (1975)*, prepared by the Monmouth County Environmental Council (MCEC), selected 43 Unique Areas, most of which were also identified as part of a 1973 Monmouth County Park System (MCPS) natural lands survey. These sites were recognized by both groups as having unique natural value. The MCEC’s *Monmouth County Unique Areas Study (1978)* further refined the list and provided more detailed descriptions and classifications for each site. The stated intent was to “generate awareness of and respect for (these areas)” and encourage efforts toward “preserving our forests, waters, wetlands and wildlife from needless destruction.”

Perrineville Lake, located in Millstone, was cited on the original 1975 list for its scenic qualities. The lake, associated wetlands, and surrounding hills were recognized in the 1978 study as providing abundant opportunities for food and cover for smaller mammals, amphibians, reptiles, waterfowl, and songbirds. The *Monmouth County Park, Recreation, and Open Space Plan (1991)* identified an area of roughly 500 acres surrounding Perrineville Lake as a recommended acquisition site for a regional park. The varied landscape was considered suitable for possible active recreation, preservation and a future linkage to an existing recreational site in Roosevelt Borough.

In 1999, the MCPS was afforded the opportunity to acquire the first two parcels totaling just over 90 acres, including the 16-acre lake. Within ten years, Perrineville Lake Park grew to over 900 acres. Today the park encompasses 1,236 acres and is now the third largest park in the MCPS system. The nearly five miles of multi-use trails wander the interior of the park and connect to both New Jersey’s Assunpink Wildlife Management Area and the Borough of Roosevelt. Fishing, boating, walking, birding, and picnicking are among the favorite pastimes of roughly 12,000 annual visitors to this scenic mix of fields, woods, and wetlands.

Perrineville Lake Park is just one example of permanent preservation that has resulted from the early MCPS and MCEC work to identify the County’s valuable natural resource



Perrineville Lake

Source: Linda J. Brennen



Natural Resources Management:

The MCPS has developed a series of [objectives and strategies](#) for natural resources management including public utilization and appreciation, forest health, field management, and invasive species management. They have also completed various studies and prepared a number of educational documents including: [Select Forest Communities of Monmouth County Parks](#), [Protecting the Open Space Landscapes of Monmouth County](#), [Field Management in Monmouth County Parks](#), [Visual Report on the Impacts of White Tailed Deer on Monmouth County Park Lands](#), and [Tips for Planting a Rain Garden](#).

Nature Series: The MCPS has produced a series of [brochures](#) on the birds, snakes, turtles, amphibians, mammals, marine mammals, fish, seashells, insects, trees, and invasive species found in Monmouth County.

Park Brochures: MCPS has brochures prepared for each of their park sites. These brochures typically provide a map and summary of the facilities and sometimes they include a discussion of the natural environment. They are available at the parks and on the [MCPS website](#) accessible from the individual page provided for each park property.

Monmouth County Health Department (MCHD)

The MCHD is another significant partner to the Division of Planning.



ASEQ Estuarine Pond (Border between Neptune and Wall Townships)

Source: Linda J. Brennen

MCHD works “to empower county residents to achieve optimum health by providing public health services.” MCHD administers an array of natural resource related projects, especially through its [Environmental Health Program](#). In addition to providing comprehensive [Annual Reports](#), the MCHD generates [memos, presentations, and reports](#) on the county’s air quality, algae, coastal waters, geographic information system (GIS) reports, hazmat, historical information, household hazardous waste, and watershed and water quality management. MCHD is an active member in NJDEP’s [Cooperative Coastal Monitoring Program \(CCMP\)](#), which monitors recreational beach water

quality. CCMP provides information regarding [current beach status](#), water quality sample results, reports of beach advisories, and beach closings. MCHD also prepared a study entitled [Natural and Cultural Features of Monmouth County \(2013\)](#) as background reading for environmental health investigations.

New Jersey Department of Environmental Protection (NJDEP)

An imperative asset to the state and county’s natural resource protection efforts is the NJ Division of Fish and Wildlife’s Endangered and Nongame Species Program’s [Landscape Project](#). In 1994, the program developed a landscape level approach to the protection of species that are endangered, threatened, or of special concern. The Landscape Project overlays land use/land cover (LU/LC) data with documented species location data in GIS. The goal of the Landscape Project is “to protect New Jersey’s biological diversity by maintaining and enhancing imperiled wildlife populations within healthy, functioning



ecosystems.” Dividing the state into landscape regions based on plant and animal communities, this project identifies and maps imperiled species. GIS maps contain data on species location, LU/LC, and life history for endangered, threatened, and special concern wildlife species throughout the state. The Landscape Project is updated periodically to reflect changes in LU/LC, additional species, and species status changes. The county regularly uses these maps, along with local decision makers, municipal planners, state agencies, and the general public. The NJDEP’s Division of Fish and Wildlife generated the [2005 State Wildlife Action Plan](#) which is currently being updated and maintains [lists of New Jersey’s Endangered and Threatened Species](#). Staff of the Endangered and Nongame Species Program has developed a variety of [documents](#) related to studies they have performed.

Municipal Natural Resource Inventories

Many municipalities in Monmouth County have been proactive with natural resource protection and identification. Through the creation and maintenance of an Ecological or Natural Resource Inventory, municipalities gain a comprehensive catalog of resources in their community along with providing a foundation for land use and conservation planning decisions. These inventories offer a vital educational resource to residents and public officials. Often compiled by municipal environmental commissions, these reports typically consist of an introduction and municipal profile followed by chapters on climate, geology, geography/topography, soils, hydrology, vegetation, critical areas, existing land use, open space, habitats, contaminated sites, air quality, and historic resources. Figure 3.5: Municipal Natural Resource Inventories lists the names and dates of the known municipal resource inventories. Links to available online inventories is also provided.

3.3 Emerging Issues and Long Range Challenges

3.3.1 Water Conservation: Meeting the summer outdoor water need is a significant challenge in our area. Water purveyors are looking at enhancing reservoir capacity by decreasing sedimentation. Other options may possibly include the addition of tariffs; limiting outdoor use to odd/even days; and applying tiered water rates

3.3.2 Energy: The use of natural resources for energy is not, in and of itself, an emerging issue. However, under the category of nonrenewable resource extraction and transport, several newer technologies have come to the forefront in the past decade which could impact our area in the years to come. Some of the more recent newsworthy issues include the hydraulic fracturing (“hydro-fracking” or “fracking”) method of natural gas extraction, transport of liquid natural gas, and the proposal of new rights-of-way for pipelines and electricity. Energy conservation efforts also continue to result in emerging technologies which could reduce the per capita consumption of nonrenewable energy related resources.

3.3.3 Natural Resource Protection and Sustainability: It is vitally important that the use of valuable natural resources does not outpace the ability to replace those resources or that in order to use a certain resource, other resources are not damaged. Employing sound stewardship methods and implementing conservation measures are necessary to ensure that sufficient resources will be available for the generations that follow.

3.3.4 Public-Private Partnerships: As project funding dwindles, the need for additional and more innovative partnerships increases. These partnerships might be for research, preservation, or stewardship. More governmental agencies are reaching out to academia, corporations, nonprofits, and volunteer groups in order to share resources and stretch dollars.



Figure 3.5: Municipal Natural Resource Inventories

Municipality	Resource Inventory	Date
Aberdeen	Natural Resource Inventory	2002
Allentown	Natural Resource Inventory	2002
Atlantic Highlands	Our Town's Environment	2000
Belmar	Belmar: A Natural & Historic Treasure	2008
Brielle	Natural Resource Inventory	1978
Colts Neck	Natural Resource Inventory	1983
Fair Haven	Environmental Resource Inventory	1991
Highlands	Phase I Natural Resource Inventory	1992
Howell	Environmental Resource Inventory	2008
Keyport	Natural Resource Inventory	2007
Lake Como	Natural Resources Inventory: Borough of South Belmar	1995
Little Silver	Environmental Resource Inventory	2008
Long Branch	Environmental Resource Inventory	2011
Manalapan	Natural Resource Inventory	1976
	Natural Resource Inventory Addendum and Supplement	1992
	Natural Resource Inventory, Phase 2	1993
Manasquan	Natural Resource Inventory	1992
	Natural Resource Inventory, Phase II, Volume II	1993
Marlboro	Green Buildings & Environmental Sustainability Plan Element	2013
Millstone	Natural Resource Inventory - Phase I	1991
	Natural Resource Inventory Update Phase II	1993
Neptune Township	Environmental Resource Inventory	2003
Oceanport	Environmental Resource Inventory	undated
Red Bank	Environmental Resource Inventory, Final Report Phase I	1994
	Environmental Resource Inventory, Phase Two	1995
Roosevelt	Natural Resources Inventory: Phase I	1991
	Natural Resources Inventory: Phases II and III	1993
Shrewsbury Borough	Environmental Resource Inventory	2011
West Long Branch	Natural Resources Inventory	1995

Sources: Municipal websites, direct communication, and Rutgers University Community Repository



3.3.5 Long Range Challenges

- Various NJ State plans, rules, and regulations that are aimed at protecting natural resources have become outdated and are in need of review and updating in order to remain effective in a changing world.
- Funding for protection and conservation projects remains limited (e.g. grants and low-interest loans).
- The increasing number of invasive species in NJ threatens our natural and agricultural heritage.
- Development continues to encroach on the county's environmentally sensitive and critical lands, devaluing the integrity of existing natural systems, and removing the last vestiges of natural lands.
- Disaster preparedness planning needs to incorporate natural resource protection and planning for potential environmental changes, such as sea level rise.
- University research for natural resource management funding is in short supply.
- Sea level rise continues to impact coastal resources. Beaches and wetlands are drowning; the saline influence in coastal waterways is shifting; and maritime forests and coastal vegetation are at risk.

It is important that these challenges be monitored and that efforts be made, where possible, to work with partners and stakeholders to protect and maintain the county's natural resources.

3.4 Natural Resources Stakeholder Actions and Efforts

3.4.1 Monmouth County Actions and Efforts

In addition to the current efforts to update the countywide *Natural Features Study* and report on Areas of Significant Environmental Quality (ASEQ), the MCEC hosts annual environmental roundtable events to bring to the forefront issues of concern to Monmouth County. One of the earliest roundtables, held in 1992, introduced the concept of regional planning on a watershed basis. Recent programs have focused on such natural resource related topics as building rain gardens for stormwater capture, energy initiatives, and community gardening.

The MCPS preserves important natural resources through land acquisition and strives to maintain or enhance the biodiversity of land holdings in areas that are not specifically focused on active recreation. Most holdings have undergone an analysis of flora and fauna along with habitat suitability and diversity that are considered in planning for future park facilities, trails, and habitat maintenance, preservation, or enhancement. The MCPS has also dedicated resources to environmental education including the development of Environmental Centers at the Manasquan Reservoir and Huber Woods. They offer a great variety of nature oriented programming including: [Environmental Education Programs for Groups](#), [Scout Troop Activities](#), [Nature Adventures Patch Collectors](#), [Outdoor Adventures Program](#), and a ten park Scavenger Hunt called [Rockin' the Trails](#). Preserved lands, whether held by the MCPS, state, or Federal Government, is depicted on Figure 3.6: Environmental Regulatory Features Map, 2016.



Figure 3.6: Environmental Regulatory Features Map, 2016

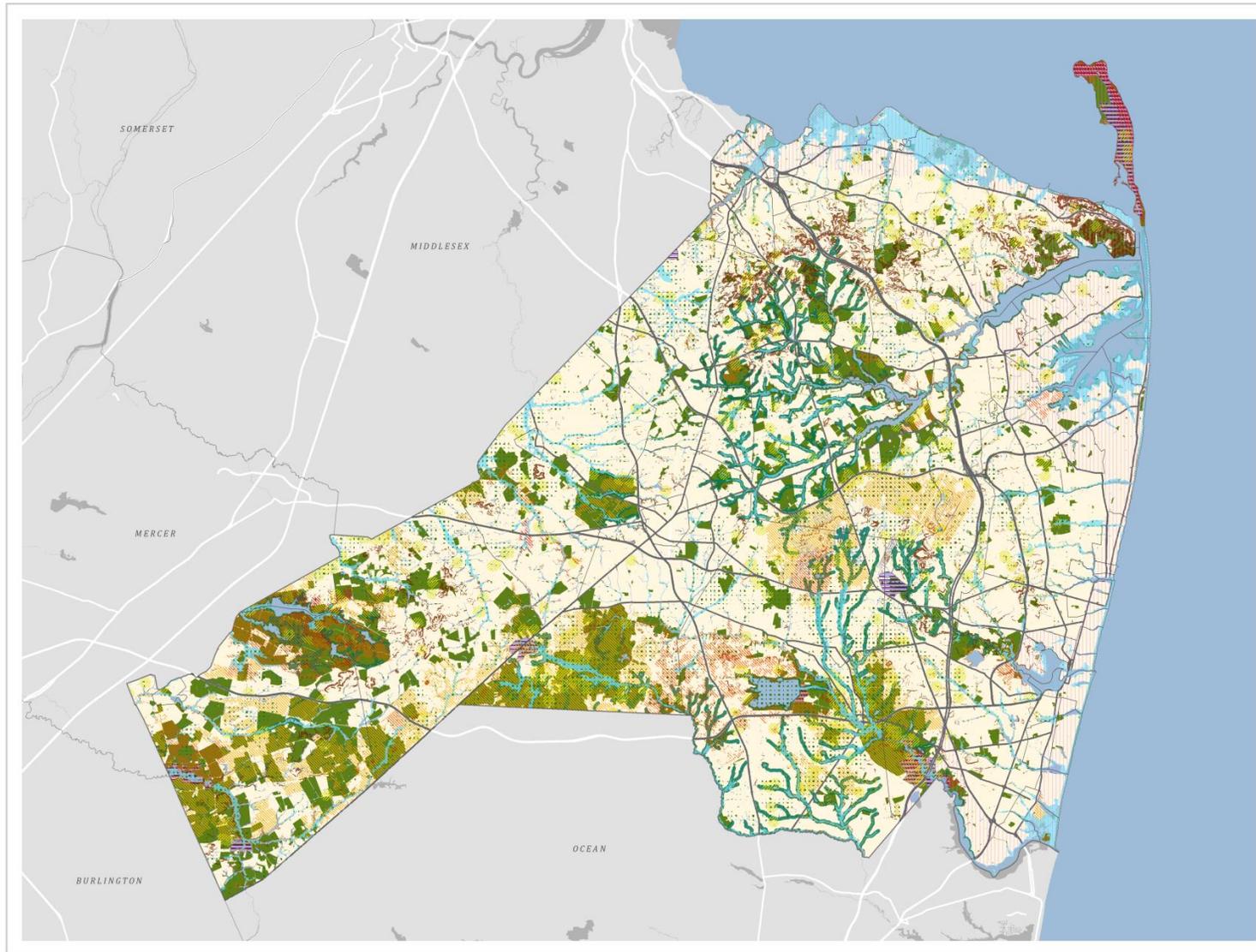


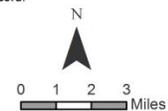
FIGURE 3.6
Environmental Regulatory
Features Map

**Monmouth County
Master Plan**

May 2016

- NJDEP Wetlands
- Coastal Areas Facilities Review Act (CAFRA) Boundary
- Vernal & Potential Vernal Habitat
- State Threatened Species Habitat
- State Endangered Species Habitat
- Federal Listed Species Habitat
- NJDEP Natural Heritage Sites
- Category 1 Stream Buffer (300')
- Preserved Land
- Flood Insurance Risk Zones**
- 0.2% Annual Chance
- 1% Annual Chance

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, New Jersey Office of GIS, Monmouth Conservation Foundation, FEMA, and the National Park Service. The municipal open space dataset is for planning purposes and may be missing properties or contain inaccuracies. The County GIS parcel data layer is intended for informational purposes only and is not intended to replace any legal record.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



3.4.2 State Efforts

Federal actions are, at times, passed to the individual states for enforcement and implementation. States also have the ability to develop additional policies, laws, and regulations for use within their jurisdictions. Figure 3.7: Significant State Environmental Laws lists several significant NJ environmental acts, rules, and regulations in place.

NJ also preserves land for resource protection. The [NJDEP](#) has been tasked since 1970 with the management of natural resources within the state. This is done through a number of methods including direct land preservation, issuing permits for resource use, and enforcement of environmental laws and regulations. NJDEP also promotes resource protection through grants and environmental education.

Some regulations apply to specific geographic areas, such as the Coastal Area Facilities Review Act (CAFRA) delineated CAFRA zone, wherein certain development activities require a permit. To protect the water quality of water bodies of significant importance, the NJDEP delineates Stream Buffers on Category 1 Waters. These buffers are vegetated areas adjacent to significant waterways (Category 1 Streams), which provide habitat, water quality, and flood protection to individual waterways. Any development or other disturbance in the buffer must be approved by through a NJDEP Division of Land Use Permit.

NJDEP’s [Endangered and Nongame Species Program](#) designates state-level Threatened and Endangered Species in order to preserve the biological diversity of NJ. Habitats of these species are critical to their survival and these habitats are mapped by the [NJDEP](#). [Natural Heritage Sites](#) are other areas of significant natural or biological diversity and mapped throughout the NJDEP’s Landscape Project. Freshwater and coastal wetlands have also been mapped statewide by the NJDEP and are protected due to their high value as water retention basins, water filtration, coastal buffers, ecological habitat, and other ecosystem services.

Figure 3.7: Significant State Environmental Laws

Citation	NJ Environmental Acts, Rules, and Regulations
N.J.A.C. 7:1H	County Environmental Health Act
N.J.A.C. 7:5A	Natural Areas and the Natural System
N.J.A.C. 7:7	Coastal Permit Program Rules
N.J.A.C. 7:7A / N.J.S.A. 13:9B	Freshwater Wetlands Protection Act and Rules
N.J.A.C. 7:7E	Coastal Zone Management Rules
N.J.A.C. 7:8	Stormwater Management Rules
N.J.A.C. 7:10	Safe Drinking Water Act
N.J.A.C. 7:13 / N.J.S.A. 58:16A	Flood Hazard Area Control Act and Rules
N.J.A.C. 7:15	Water Quality Management Planning Act
N.J.A.C. 7:27	Air Pollution Control Act
N.J.S.A. 12:3	Tidelands Act
N.J.S.A. 12:5-3	Waterfront Development Act
N.J.S.A. 13:19	Coastal Area Facility Review Act
N.J.S.A. 13:9A	Wetlands Act of 1970
N.J.S.A. 58:10A	Water Pollution Control Act

[Vernal pools](#) are confined wetland areas which do not feature breeding fish populations. Vernal pools are inundated with water at least two months of the year and either dry out completely or to a very shallow water level at other points of the year. Certain amphibian species, known as “obligate vernal pool breeders”, depend upon vernal pools for



survival. Vernal pools, wetlands, Natural Heritage Areas, and Endangered Species habitat are given special management considerations during land use and other permit review processes, during which the NJDEP Division of Land Use Regulation may require any development application to be altered or denied in order to protect these significant areas. Figure 3.6: Environmental Regulatory Features Map illustrates a graphic representation of these regulatory features and protected areas. The Environmental Regulatory Features Map also depicts preserved lands in Monmouth County including parcels held by the MCPS, NJDEP state parks, municipal land preserves, preserved farmland, and conservation easements.

3.4.3 Federal Actions

The Doctrine of Public Trust is defined as the historic principle that government holds resources in trust for public use. The development of environmental laws, rules, and regulations is an extension of the Public Trust Doctrine. The U.S. Congress has enacted numerous environmental laws and policies aimed at natural resource protection. Figure 3.8: Significant Federal Environmental Acts lists a few of the key federal acts that shape the current environmental laws and regulations.

To further resource protection efforts at the federal level, a number of governmental departments were created to oversee environmental and natural resource management. Over time, additional agencies were formed. Some of the key federal agencies involved in natural resource protection include: [United States Coast Guard](#) (1790), [Department of the Interior](#) (1849), [Department of Agriculture](#) (1862), [National Park Service](#) (1916), [Natural Resources Conservation Service](#) (1935), [Environmental Protection Agency](#) (1970), [Nuclear Regulatory Commission](#) (1975), and [Department of Energy](#) (1977). The Federal Government preserves large tracts of land, provides money for local resource protection, and controls the use or extraction of natural resources on federal lands through leases. The Federal Emergency Management Agency (FEMA) responds to natural disasters and oversees

Figure 3.8: Significant Federal Environmental Acts

Citation	Federal Environmental Act
16 U.S.C. §1431 et seq. and 33 U.S.C. §1401 et seq.	Marine Protection, Research, and Sanctuaries Act
16 U.S.C. §1531 et seq.	Endangered Species Act
16 U.S.C. §1451 et seq.	Coastal Zone Management Act
33 U.S.C. §1251 et seq.	Clean Water Act
33 U.S.C. §2601 et seq.	Shore Protection Act
33 U.S.C. §401 et seq.	Rivers and Harbors Act
42 U.S.C. §4321 et seq.	National Environmental Policy Act
42 U.S.C. §13201 et seq.	Energy Policy Act
42 U.S.C. §6901 et seq.	Resource Conservation and Recovery Act
42 U.S.C. §7401 et seq.	Clean Air Act
42 U.S.C. §9601 et seq.	Comprehensive Environmental Response, Compensation, and Liability Act (<i>Superfund</i>)

the National Flood Insurance Program. This program manages floodplain development, sets flood insurance regulations for property owners, and creates Flood Insurance Risk Maps (FIRM). Depending upon their mortgage, property owners within the mapped floodplain may be required to purchase flood insurance through the National Flood Insurance Program. Monmouth County’s 0.2% and 1.0% annual Flood Risk Zones (the 500-year and 100-year floodplains, respectively) are delineated in Figure 3.6: Environmental Regulatory Features Map.



3.4.4 Partnership Efforts

Monmouth County has participated in numerous partnership efforts to positively influence the preservation of natural resources in Monmouth County or to improve the quality of those resources. Past regional partnerships led to the designation of [Federal No Discharge Zones](#) in Monmouth County waters. Today the Manasquan, Shark, Navesink, and Shrewsbury Rivers hold that designation to prevent boats from discharging their waste. The county continues to monitor or be involved in multi-municipality or multi-county partnership efforts aimed at resource protection, management, or preservation.

Wreck Pond Brook Watershed Regional Stormwater Management

Plan: Wreck Pond is a coastal lake in southern Monmouth County. The Wreck Pond Brook Watershed includes land within Spring Lake, Spring Lake Heights, Sea Girt, and Wall Township. High bacteria counts, following even small rainfall events, led to the closing of area beaches. Sedimentation contributed to eutrophication of ponds within the watershed and caused flooding. The Wreck Pond Brook Watershed Regional Stormwater Management Plan Committee was formed and grants from the NJDEP were secured to analyze the issues and begin to implement solutions. A number of studies have been prepared related to this effort including the [Wreck Pond Brook Watershed Regional Stormwater Management Plan \(2008\)](#), [Watershed - Based Implementation Plan \(2011\)](#), [Wreck Pond Brook Watershed Restoration Plan for Impaired Waters \(2015\)](#), and [Final Environmental Assessment: Restoring Wreck Pond Inlet \(2015\)](#).

U.S. Naval Weapons Station (NWS) Earle: NWS Earle was commissioned in 1943 as a U.S. Navy Base comprised of four sections. Mainside is the largest section consisting of 11,851 acres. It is located across parts of Colts Neck, Howell, Wall, and Tinton Falls. The 17-mile long federal Normandy Road/Rail Corridor connects Mainside to the 705-acre Waterfront Area, located in Middletown. The fourth section of Earle is the Pier Complex, which juts 2.2 miles offshore and is typically

considered the division between Raritan Bay and the Sandy Hook Bay. Earle is the largest weapons station on the east coast and with its many wooded acres, the setting has been noted as one of the most serene and beautiful Naval installations in the country. NWS Earle has a history of working with the state, county, and surrounding municipalities in efforts to enhance the local environment. Examples include assisting with the replacement of old mosquito ditches in the Pier Complex area that alleviated flooding in an adjacent neighborhood and providing a secure test location of the NY/NJ Baykeeper's oyster reef habitat restoration project. The U.S. Department of Defense (DOD) Office of Economic Adjustment promotes cooperative planning efforts between military installations and the surrounding communities. The DOD offers a grant program for the preparation of Joint Land Use Studies (JLUS) to assist the military and surrounding communities to identify compatible land use issues and seek ways to work together to reduce conflicts. Monmouth County has applied for a JLUS grant in coordination with NWS Earle.

Gateway National Recreation Area: The Sandy Hook Unit of Gateway National Park is currently working with stakeholders, including representation by the Board of Chosen Freeholders, to develop a vision for balanced redevelopment of the Fort Hancock area. The initiative is called [Fort Hancock 21st Century](#). Much of Sandy Hook has been left in a natural state with dunes and coastal wetlands. The National Park Service (NPS) and several other groups housed at Sandy Hook offer a number of nature based and environmental education programs onsite. The NPS posts a [calendar of events](#) on their website.

New York-New Jersey Harbor and Estuary Program: The Hudson River, Raritan River, the Arthur Kill, and numerous smaller rivers converge to form the New York-New Jersey Harbor Estuary. The Harbor and Estuary Program (HEP) was established in 1987 to protect this Estuary of National Significance. HEP is a partnership of federal, state, and local governments; scientists; civic and environmental advocates; the fishing



community; business and labor leaders; and educators. The partnership produced a comprehensive *Conservation and Management Plan* in 1996 and the *2011 Action Plan*, which is being updated in 2016. During May 2016, the MCEC hosted a HEP Action Plan update forum in Atlantic Highlands as one of the council's regular community roundtables on environmental issues.

Sustainable Raritan River Initiative: Numerous Monmouth County watersheds drain to the Raritan River or the Raritan Bay. The Sustainable Raritan River Initiative is a joint program between Rutgers University's Edward J. Bloustein School of Planning and Public Policy and the School of Environmental and Biological Science. The initiative in turn partners with the Sustainable Raritan River Collaborative, a network of over 130 organizations, governmental entities, and businesses in the Raritan region. All of these stakeholders work together in balancing the economic, social, and environmental objectives while pursuing the common goal of restoring the Raritan River, its tributaries, and its estuary. The five primary areas of concern for this initiative are:

1. Site remediation, rehabilitation, and reuse of abandoned and underutilized properties
2. Public access to and recreational use of the river
3. Stewardship, habitat restoration, and protection
4. Improved water quality and management of water quantity including stormwater
5. Balanced redevelopment for both economic growth and environmental quality

Their steering committee and staff members host topical workshops and an annual conference, provide technical assistance, assist with anchor projects, and manage communication and outreach, including monthly e-newsletters.

Barnegat Bay Partnership: The southernmost Atlantic Coastal watersheds of Monmouth County drain to the Barnegat Bay via the

Toms River and the Metedeconk River watersheds. The Manasquan River Watershed is also hydrologically connected through the Intercostal Waterway that has its northern terminus on the southern bank of the Manasquan River.

The Barnegat Bay National Estuary Program (BBNEP) was founded in 1997 in an effort to protect the natural, cultural, and economic resources of the Bay. The *BBNEP Comprehensive Conservation and Management Plan* was approved by the partnership in 2002. The *Strategic Plan* was developed in 2008 to identify key issues, priorities, and tasks. In 2010, the group was renamed the Barnegat Bay Partnership (BBP). Updates to the *BBP Strategic Plan* have been completed in 2012 and 2016.

Metedeconk River Watershed Partnership: The Metedeconk Watershed encompasses about 90 square miles of southern Monmouth and northern Ocean Counties. The four Monmouth County municipalities within the watershed are Freehold Township, Howell, Millstone, and Wall. The river is potable water supply for parts of municipalities in both counties. The water supply facilities are operated by the Brick Township Municipal Utilities Authority (BTMUA). In January 2010, the BTMUA formed a bi-county/multi-municipality steering committee for the development of the *Metedeconk River Watershed Protection and Restoration Plan*, which was completed in May 2013. The steering committee continues to meet as needed to facilitate plan implementation.

3.5 Additional Resources and Funding Opportunities

Federal

- [Centers for Disease Control and Prevention \(CDC\)](#)
 - [Division of Community Health: Environmental Change](#)
 - [National Center for Environmental Health](#)
- [National Oceanic and Atmospheric Administration \(NOAA\)](#)
 - [NOAA Fisheries](#)



- [U.S. Department of Agriculture](#)
 - [Natural Resources Conservation Service](#)
 - [U.S. Forest Service](#)
 - [U.S. Department of the Interior](#)
 - [Bureau of Land Management](#)
 - [National Park Service \(NPS\)](#)
 - [U.S. Geological Survey](#)
 - [U.S. Fish and Wildlife Service](#)
 - [Endangered Species Program](#)
 - [National Wildlife Refuge System](#)
 - [U.S. Department of Transportation Federal Highway Administration](#)
 - [Recreational Trails Program](#)
 - [U.S. Environmental Protection Agency \(EPA\)](#)
 - [Clean Water Rule](#)
 - [Climate Change](#)
 - [Community Action for a Renewed Environment \(CARE\) Resource Guide](#)
 - [EJSCREEN: Environmental Justice Screening and Mapping Tool](#)
 - [Land and Cleanup](#)
 - [National Aquatic Resource Surveys](#)
 - [Resource Conservation](#)
 - [WaterSense](#)
 - [Water Infrastructure and Resiliency Finance Center](#)
 - [State and Local Climate and Energy Program Resources](#)
 - [Waste Information Resources](#)
- State**
- [New Jersey Department of Environmental Protection\(NJDEP\)](#)
 - [Bureau of GIS--Landscape Project Data](#)
 - [Data Miner](#)
 - [DEP Bulletin](#)
 - [DEP Online Business Portal](#)
 - [Division of Fish and Wildlife's Endangered and Nongame Species Program](#)
 - [Electronic Compendium of Selected Environmental Standards](#)
 - [The Official Guide for NJ Fishing, Hunting and Wildlife App](#)
 - [Environmental Research Library](#)
 - [Grant and Loan Programs](#)
 - [NJ-GeoWeb](#)
 - [Office of Natural Resource Restoration](#)
 - [Public Records \(OPRA\)](#)
 - [The State Environmental Education Directory \(SEEDs\)](#)
 - [State of New Jersey Department of Agriculture](#)
 - [Conservation Districts in NJ](#)
 - [Conservation Education](#)
 - [Natural Resources Conservation](#)
 - [NJDEP Construction Stormwater Permit Phase II](#)
 - [NJ Erosion Control Standards](#)
 - [Policies and Rules](#)
 - [Soil and Water Conservation](#)
 - [Technical Resources](#) (Soil Erosion Control Technical Bulletins, New Product Approvals, USDA Natural Resources Conservation Service, Chapter 251, GIS)
- County and Local**
- [Monmouth County Division of Planning Environmental and Sustainability Section](#)
 - [Monmouth County Eco Brochures](#)
 - [Monmouth County Division of Shade Tree](#)
 - [Monmouth County Environmental Council](#)
 - [Monmouth County Green Table](#)
 - [Monmouth County Health Department Environmental Health Program](#)
 - [Monmouth County Mosquito Control Commission](#)
 - [Monmouth County Park System](#)
 - [Monmouth County Wastewater Management Plan Map Viewer](#)
- Nonprofits, Research Centers, and Other Stakeholders**
- [Alliance for a Living Ocean](#)
 - [Alliance for NJ Environmental Education](#)
 - [American Littoral Society](#)



- [Association of NJ Environmental Commissions \(ANJEC\)](#)
- [Clean Ocean Action](#)
- [Clean Water Fund of New Jersey](#)
- [Clearwater of NJ](#) (formerly Monmouth County Friends of Clearwater)
- Conserve Wildlife Foundation: [New Jersey Endangered and Threatened Species Field Guide](#)
- [Earth Share New Jersey](#)
- [Ecological Society of America](#)
- [Garden State Earth Institute](#)
- [INFORM, Inc.](#)
- [Manasquan River Watershed Association](#)
- [Monmouth Conservation Foundation](#)
- Municipal Environmental Commissions (see Figure 3.4)
- Municipal Ecological Resource Inventories or Natural Resource Inventories (see Figure 3.5)
- [Native Plant Society of New Jersey](#)
- [Nature Conservancy](#)
 - [A Guide for Incorporating Ecosystem Service Valuation into Coastal Restoration Projects](#)
- [Natural Resources Defense Council](#)
 - [Link to Environmental Groups](#)
- [NatureServe](#)
- [Navesink Maritime Heritage Association](#)
- [New Jersey Audubon Society](#)
- [New Jersey Conservation Foundation](#)
- [New Jersey State Mosquito Control Commission](#)
- [New Jersey Recreation and Park Association](#)
- [New Jersey School of Conservation](#)
- [New Jersey Chapter Sierra Club](#)
- [New Jersey Work Environment Council](#)
- [NJ Coast Anglers Association](#)
- [NJ Environmental Federation](#)
- [NJ Water Environment Association](#)
- [NJ Water Resources Institute](#)

- [Sustainable Jersey](#)
- [The Land Conservancy of NJ](#)
- [Wetlands Institute](#)

3.6 Master Plan Recommendations and Stakeholder Strategies

Meetings and conversations with the MCEC, various county departments, and *Master Plan* Environmental Working Group stakeholders resulted in the development of five *Master Plan* Recommendations and numerous Stakeholder Strategies related to natural resources.

Master Plan Recommendations

Recommendation 3.1: Maintain and update inventories of the county's natural features and systems and promote the protection of natural resources in conjunction with the Monmouth County Park System (MCPS). The mission of the Monmouth County Environmental Council (MCEC) calls for inventories of the county's natural and cultural features. The MCPS mission also directs the MCEC to identify significant natural and historic resources in the county, preserving them when feasible through acquisition and stewardship. The Division of Planning staff is directed to support both the MCEC and the MCPS in these joint efforts, particularly as they relate to improved resiliency and sustainability for the county. The Division of Planning staff is currently working to update the *Natural Features Study (1975)*. Once approved by the MCEC and accepted by the MCPB, this new document will be considered a supportive and consultative document to the *Master Plan* and posted on the county website.

Recommendation 3.2: Participate in initiatives that identify, target, and protect important resources, critical habitats, species of concern, and Areas of Significant Environmental Quality (ASEQ). The Monmouth County Environmental Council (MCEC) mission directs the identification of ASEQs. Division of Planning staff from the Environmental and Sustainability Section will continue to provide support to the MCEC to



update both the *Natural Features Study (1975)* and the *Monmouth County Unique Areas Study (1978)* with the development of two new documents and continue to coordinate these efforts with the Monmouth County Park System (MCPS) and interested municipalities.

Recommendation 3.3: Encourage and support new and continuing partnerships for resource protection The Division of Planning staff is directed to continue supporting partnerships between the public and private sectors, nonprofit organizations, and community stakeholders that promote regionally-based watershed and natural resource protection initiatives when those partnerships share a common vision to engage in collaborative planning efforts, leverage funding, and implement cooperative strategies.

Recommendation 3.4: Continue to educate the public on the county's valuable natural resources, environmental impact assessment procedures, and other important environmental issues. The Monmouth County Environmental Council (MCEC) mission includes environmental education and outreach initiatives. The Monmouth County Park System (MCPS) and the Monmouth County Health Department (MCHD) also engage in environmental education. All three hold workshops and produce documents related to natural resource and environmental issues. The Division of Planning annually hosts a New Jersey Department of Environmental Protection (NJDEP) Watershed Ambassador with the primary goal of watershed and water quality education and outreach. Division of Planning staff is directed to continue to support these efforts and to work with other stakeholder groups to encourage additional outreach efforts on environmental and sustainability initiatives.

Recommendation 3.5: Assist municipalities with floodplain management and planning initiatives that improve community resiliency and/or advance their standing in the National Flood Insurance Program (NFIP) Community Rating System (CRS) program.

Division of Planning staff is directed to continue supporting municipal efforts related to the CRS program that will lower flood insurance premiums for homeowners and businesses located in Special Flood Hazard Areas (SFHAs) of participating towns.

Stakeholder Strategies

General

- Encourage the use of buffers to protect environmentally critical lands from encroaching land uses.
- Support efforts to acquire grant funding to further environmentally proactive projects that benefit Monmouth County.
- Support efforts to preserve, restore, and enhance wetlands and stream corridors or mitigate the impacts when disturbance is the only option.
- Encourage the creation, protection, and conservation of coastal and freshwater wetlands, habitats, and functions that provide for pollution control, flood control, hazard mitigation, groundwater recharge, and other environmental, social, and economic benefits.
- Support legislation that furthers the protection of vital natural resources from contamination, degradation, or depletion.
- Encourage coordination between all levels of government for regional natural resource planning, protection, and management.
- Promote the preservation of upland forests, which provide benefits for stormwater retention, water quality preservation, and the increase of groundwater recharge, particularly in critical aquifers.
- Work with Monmouth County Department of Public Works and Engineering and Monmouth County Shade Tree Commission to create, promote, and provide examples for sustainable, healthy, and safe community forests throughout Monmouth County, and to influence proper tree care and stewardship in New Jersey.

Open Space

- Support efforts at all governmental levels to create greenways, linear parks, trails, and buffered stream corridors that provide



wildlife passages, critical habitats, and opportunities for public interaction with the natural environment without detriment to our natural systems.

- Promote the preservation of both upland and wetland forests, particularly century forests.
- Promote the safe eradication of invasive species and the mitigation of their negative impacts.
- Promote the preservation of a variety of habitats to support species diversity.
- Provide for limited access to publicly owned environmentally sensitive lands in ways that will not adversely affect resource quality.
- Encourage the provision of public recreational lands that also serve to preserve and protect natural resources.
- Support the MCPS’ extensive recreational programs and special events.
- Support land stewardship and restoration efforts of the MCPS and similar agencies.

Farmland Preservation

- Promote the use of sound agricultural Best Management Practices (BMPs) that protect sensitive land.
- Encourage farming practices and the use of BMPs that conserve natural resources such as soil and water.
- Preserve the county’s remaining critical agricultural lands for farming.
- Encourage a whole-systems approach to the design and management of sustainable agrarian ecosystems.

Arts, Historic, & Cultural Resources

- Encourage public art that celebrates the natural world and brings awareness of the importance of our limited and valuable natural treasures.
- Support efforts that combine to preserve historic locales or

structures and valuable natural resources.

- Encourage the preservation of natural habitats and ecosystems as examples of the living natural history of Monmouth County.

Utilities

- Encourage the integration of water resource planning into land use planning.
- Where feasible incorporate the preservation of natural systems, such as wetlands and stormwater management, into development and redevelopment projects.
- Promote the preservation and improvement of water supply resources through the implementation of BMPs that ensure a high quality of water and the conservation of all water resources.
- Support the use of renewable energy resources that work in concert with natural systems without degrading or diminishing natural resources.
- Promote green infrastructure initiatives to better manage stormwater runoff while preserving or improving natural systems.

Transportation & Mobility

- Promote air quality improvement through improved transit and transportation systems that relieve congestion.
- Encourage more pedestrian, bicycle, and equestrian trails that serve to reduce vehicle miles traveled while improving air quality.
- Encourage walkable communities, accessibility to transit, and the use of alternative-fueled vehicles in efforts that strive to preserve natural resources and reduce our dependence on nonrenewable energy resources.

Agricultural & Economic Development

- Acknowledge the economic value of protecting and enhancing our natural resources.
- Encourage ecotourism and agri-tourism opportunities throughout the county in ways that promote and protect important natural resources.



Community Development & Housing

- Encourage towns to develop ordinances that have a *de minimus* effect on natural systems, including those that promote adaptive reuse, redevelopment, clustering, and density transfers that accommodate growth while providing additional resource protection measures.
- Promote municipal land use policies that protect sensitive environmental and natural resources.
- Encourage policies that support reforestation and the planting of shade trees, as well as ecological restoration and management in disturbed areas.
- Encourage municipalities to adopt green building standards to create more energy efficient buildings and reduce impacts on natural resources.

Healthy Communities

- Provide technical assistance to municipal partners in developing environmental impact assessment procedures and reports.
- Encourage daylighting of piped streams in an effort to reduce runoff pollution, mitigate flooding, and improve livability in the built environment.
- Support multi-jurisdictional cooperation in the management and restoration of coastal lakes and ponds, the beaches affected by their discharge, their watersheds, and associated wetlands.
- Promote initiatives that provide community benefits while encouraging time spent in nature, such as developing and maintaining nature trails, establishing community gardens, and creating dog parks.
- Acknowledge the links between healthy ecosystems and human health, including air quality and water quality and quality-of-life within a community.

Community Resiliency

- Assist in the protection of community resources through the

permanent preservation of shorelines, floodplains, wetlands, and buffer areas, especially in Special Flood Hazard Areas that are susceptible to the effects of sea level rise. This can be achieved through either the acquisition of land or conservation easements.

- Promote shoreline stabilization and protection through the creation and maintenance of native dune vegetation.
- Promote the restoration and maintenance of maritime forests and coastal wetlands.
- Encourage hazard mitigation planning in locations prone to wildfires.
- Sustainable Places
- Encourage the use of BMPs that protect and conserve our natural resources, such as waste management, sustainable design, and Green Infrastructure.
- Promote the use of living shorelines and wetland restoration measures that protect stream corridors and reduce erosion.
- Consider natural, non-structural techniques, low-impact design methods, and BMPs for resource protection and restoration, particularly in the management of stormwater runoff from developed areas.
- Encourage creative land use planning and design to accommodate future growth while enhancing sustainability.
- Use native tree species for landscaping and treescaping projects that are most suitable for the environment and intended use.

Sustainable Places

- Encourage the use of BMPs that protect and conserve our natural resources, such as waste management, sustainable design, and Green Infrastructure.
- Promote the use of living shorelines and wetland restoration measures that protect stream corridors and reduce erosion.
- Consider natural, non-structural techniques, low-impact design methods, and BMPs for resource protection and restoration, particularly in the management of stormwater runoff from



developed areas.

- Encourage creative land use planning and design to accommodate future growth while enhancing sustainability.
- Use native tree species for landscaping and treescaping projects that are most suitable for the environment and intended use.

Planning Services, Outreach, & Coordination

- Continue to provide resource conservation and environmental educational resources to schools and community organizations, as requested.
- Encourage local and regional educational institutions to incorporate environmental education throughout all aspects of their curriculum.
- Support municipal involvement in the Sustainable Jersey certification program (including Municipal Green Teams) and similar initiatives that promote a local awareness of environmental issues, conservation, and the need for resource protection.
- Use our environment and natural systems as outdoor classrooms and laboratories for student lessons and public education.



A rural landscape featuring a wooden fence in the foreground, a grassy field, a red barn, and a forested hill in the background. The scene is framed by trees, with a large tree on the right side. The text "4.0 Open Space" is overlaid in the center.

4.0 Open Space

4.0 OPEN SPACE

MASTER PLAN RECOMMENDATION 4.1



Monmouth Battlefield State Park, Manalapan

Source: Joe Barris

4.1: Assist the Monmouth County Park System (MCPS) in its preparation of updates to the *Monmouth County Open Space Plan (2006)* and other similar or related studies, and incorporate the *Monmouth County Open Space Plan* by reference as a component of the *Monmouth County Master Plan*.

Purpose

The MCPS is responsible for preparing several plans related to parks, recreation, and open space, including the *Monmouth County Open Space Plan*. The Division of Planning staff will provide support to the MCPS in the preparation and adoption of this and other related MCPS plans.

Monmouth County Departments & Organizations Involvement

Division of Planning	Assist MCPS staff in the development and implementation of the <i>Monmouth County Open Space Plan</i> updates.
Planning Board (MCPB)	Incorporate the <i>Monmouth County Open Space Plan</i> by reference as a component of the <i>Monmouth County Master Plan</i> .
MCPS	Develop and implement the <i>Monmouth County Open Space Plan</i> .

Other Project Stakeholder Involvement

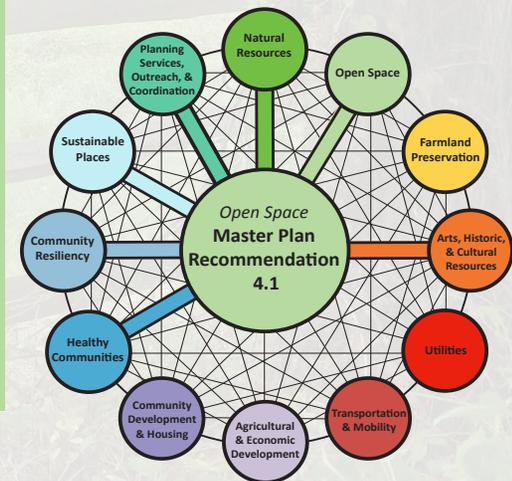
Municipalities	Provide input on the <i>Monmouth County Open Space Plan</i> updates; provide data and information from their own recreation and open space master plan elements.
Monmouth Conservation Foundation (MCF)	Provide input on the <i>Monmouth County Open Space Plan</i> update; move forward with plan implementation.
Other Nonprofits	Provide input on the <i>Monmouth County Open Space Plan</i> and coordinate their mission as it relates to preservation efforts within Monmouth County; meet regularly with preservation partners at the county to coordinate joint projects.
Residents and Local Businesses	Provide input on the <i>Monmouth County Open Space Plan</i> update.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 4.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning	●	●		●		●		●	●					
Coordination	●	●		●				●						
Planning Approach			●	●										●
Environmental Resources				●										
Farmland Preservation					●									
Arts, Culture, & Historic						●								
Preservation Investments														
Vibrant & Sustainable Communities								●	●					
Community Preservation										●				
Housing											●			
Economic Development												●		
Agricultural Development													●	
Recovery & Resiliency														●
Growth Investments														●

Implementation Strategy

- Assist the MCPS in development of the *Monmouth County Open Space Plan*.
- Incorporate the *Monmouth County Open Space Plan* by reference as a component of the *Monmouth County Master Plan*.
- Continue to monitor open space planning efforts after *Monmouth County Master Plan* adoption and update records annually.
- Provide support to the county, nonprofits, and municipalities as they move forward with plan implementation.



Strongest Associated Master Plan Elements

4.0 OPEN SPACE

MASTER PLAN RECOMMENDATION 4.2

4.2: Work with all levels of government and nonprofit organizations to promote the preservation of sensitive environmental systems and significant natural features through acquisition, deed restrictions, conservation easements, redevelopment projects, zoning, and other innovative land use techniques.

Purpose

As an integral part of their mission, the Monmouth County Environmental Council (MCEC), as charged by the Monmouth County Board of Chosen Freeholders (MCBCF), promotes the preservation of our important natural features. This can best be accomplished through the identification of those resources and open space preservation at various levels of government.

Monmouth County Departments & Organizations Involvement

Division of Planning	Work closely with the MCPS, municipalities, local nonprofits, and other government agencies to identify and preserve important natural resources as public open space; offer support to the agencies and organizations that make open space preservation in Monmouth County a significant goal of their mission.
MCPS	Continue to acquire and maintain natural lands and green corridors; continue to offer programming related to nature education, species diversity, habitat protection, and stewardship.
MCEC	Promote preservation of important natural features through continued identification of Areas of Significant Environmental Quality (ASEQ) and the provision of related educational programs.

Other Project Stakeholder Involvement

Municipalities	Preserve open space and develop recreational lands that serve local needs.
Nonprofits	Work within the county to preserve open space, possibly as a partner to the county or municipalities in acquisition projects.



Monmouth Battlefield State Park, Manalapan

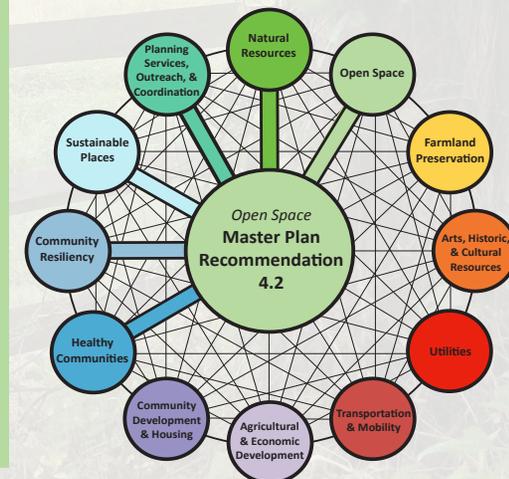
Source: Joe Barris

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 4.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic														
G. Preservation Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Provide assistance, as needed, to the MCPS staff in the identification of potential acquisitions.
- Support county, nonprofits, and municipalities in their efforts to preserve open space and develop recreational lands.
- Work with the Monmouth County Steering Committee, MCEC, and MCPS to continue offering educational opportunities, access to emerging technologies and tools, and assistance with recreational planning and zoning.
- Provide assistance to municipal representatives and residents with public access issues related to the protection of our important natural resources.



Strongest Associated Master Plan Elements

4.0 OPEN SPACE

MASTER PLAN RECOMMENDATION 4.3



Monmouth Battlefield State Park, Manalapan

Source: Joe Barris

4.3: Provide technical and professional assistance to our municipal partners in support of their local open space acquisition efforts and recreational facility improvements.

Purpose

Expand access to park amenities, cultural, historic, and recreational programming, environmental education offerings, natural lands, and open space facilities within Monmouth County that improve community health, sustainability, and resiliency for residents and visitors.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide an appropriate level of support to municipalities as they plan for recreational improvements and open space acquisition; assist the Monmouth County Park System (MCPS) in its recreational and open space planning efforts, as requested.
MCPS	Continue to implement the <i>Monmouth County Open Space Plan (2006)</i> through acquisitions, programming, and the provision and stewardship of facilities; on behalf of the Monmouth County Board of Chosen Freeholders (MCBCF), continue to annually administer the competitive Monmouth County Municipal Open Space Grant Program, as funded by allocations from the Monmouth County Open Space Trust Fund.

Other Project Stakeholder Involvement

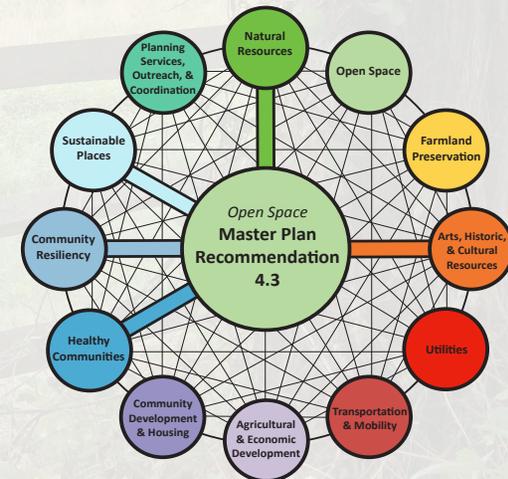
Municipalities	Continue efforts to provide safe recreational facilities and beneficial recreational programming in accordance with state standards and guidelines.
Nonprofits	Work with municipalities to preserve open space, provide grant funding where available, and assist with outreach efforts.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 4.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination		●												
Planning Approach			●											
Environmental Resources				●										
Farmland Preservation														
Arts, Culture, & Historic						●								
Preservation Investments														
Vibrant & Sustainable Communities								●						
Community Preservation									●					
Housing										●				
Economic Development											●			
Agricultural Development												●		
Recovery & Resiliency													●	
Growth Investments														●

Implementation Strategy

- Assist the MCPS in implementation of the *Monmouth County Open Space Plan*.
- Continue to monitor recreational planning in municipal master plans, grant applications, and Recreation and Open Space Inventory (ROSI) preparation and updates to the New Jersey Department of Environmental Protection (NJDEP).
- Support the MCPS and municipalities as they acquire and develop recreational lands and upgrade or redevelop existing recreational facilities.
- Encourage the use of traditional and nontraditional funding sources for recreational acquisition, planning, and development including state and federal grants, corporate endowments, and private trusts.



Strongest Associated Master Plan Elements

4.0 Open Space

4.1 Introduction

Monmouth County is nationally recognized for its excellence in park system operations and services by the National Commission for Accreditation of Parks and Recreation Agencies and sanctioned by the American Academy for Parks and Recreation Association. The county's open spaces, whether publically or privately owned, are deeply treasured and greatly used. These areas enhance the quality-of-life and aesthetics throughout the county, while preserving environmental systems and habitat, and providing recreational outlets for residents. The quality and quantity of preserved open space in Monmouth County has long attracted residents and tourists. The Open Space Element of the *Master Plan* summarizes existing open space plans and stakeholder partnerships while highlighting the importance of maintaining and expanding open space efforts. *Master Plan* Goal #2 promotes "the protection and conservation of natural and cultural resources to help guarantee our long-term sustainability," directly relates to this Element. Furthermore, this Element is also linked to *Master Plan* Goal #3 which sees to "promote beneficial development and redevelopment that continues to support Monmouth County as a highly desirable place to live, work, play, and stay." It is imperative that large contiguous open spaces be protected and that they remain unspoiled as development and redevelopment occurs. Appropriate recreation and open space investments should be promoted in all areas of the county.

4.2 Existing Conditions

4.2.1 Primary Open Space and Recreation Lands Inventory

Open space comprises an array of different uses and types. Recreational open spaces can consist of formal facilities (playgrounds and sports fields) and informal facilities (hiking and walking trails, canoe launches, and observation platforms). Preservation areas are generally

protected permanently for agricultural activities, habitat maintenance, historic or ecological significance. These may include areas for hiking and nature interpretation. Conservation of open space may be for historic, cultural, or environmental reasons and can be done at the local, regional, statewide, or national level. Figure 4.1: Monmouth County Open Space and Parkland Map delineates existing municipal, county, state, and federal recreation and open space lands.

While the Federal Government maintains a number of parks and wildlife management areas in NJ, the Sandy Hook Unit of [Gateway National Recreation Area](#) is the only national park facility found within Monmouth County. Located in Middletown Township, Sandy Hook offers beautiful beaches, surf fishing, camping, hiking, biking, boating, and more within a cultural, educational, and historic setting. Fort Hancock and the Sandy Hook Proving Ground are National Historic Landmarks where visitors can see Spanish-American War and World War I era barracks, tour World War II era gun batteries, and learn about



Sandy Hook Lighthouse

Source: Linda J. Brennan



Figure 4.1: Monmouth County Open Space and Parkland Map, 2016

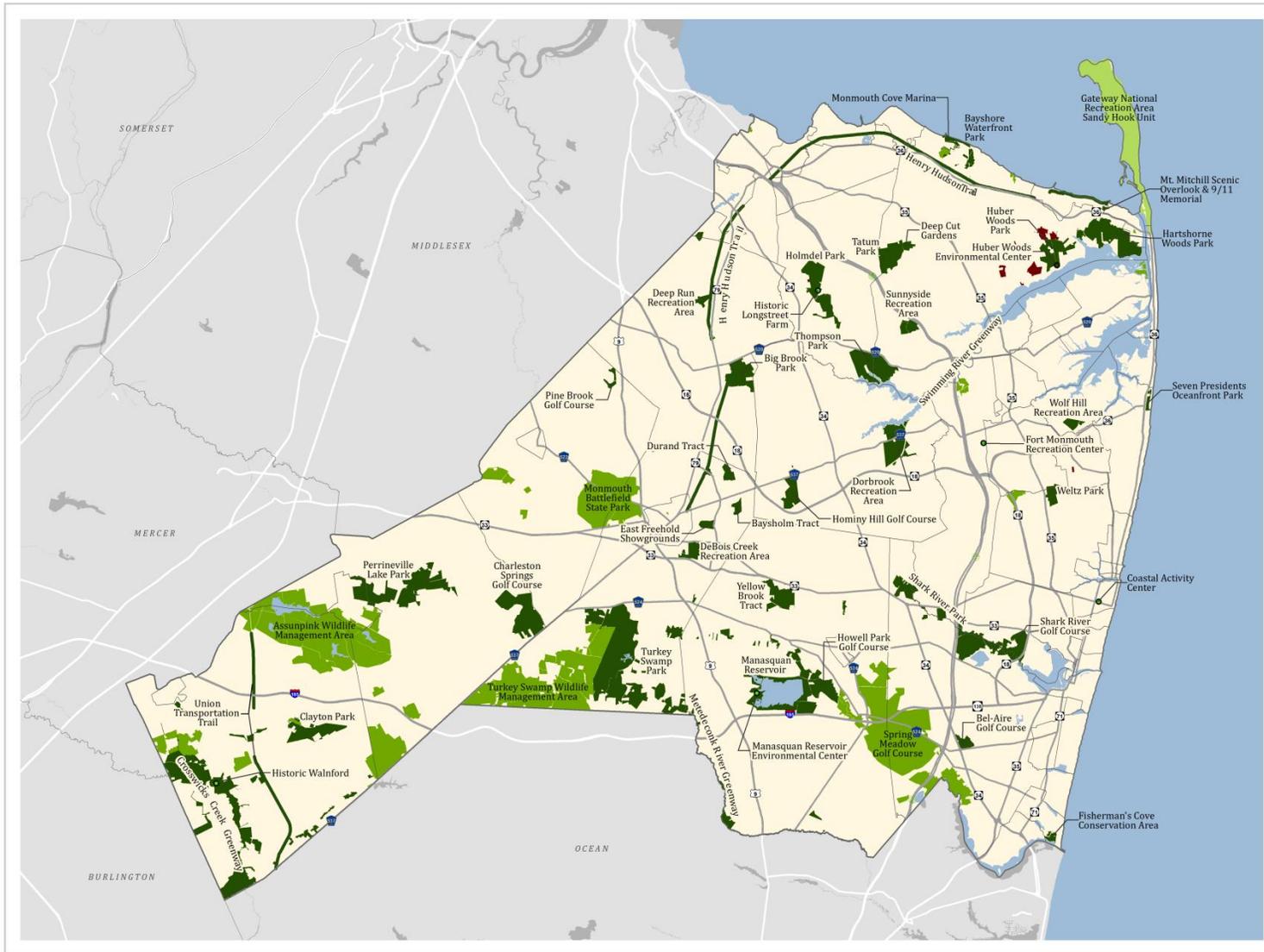


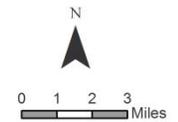
FIGURE 4.1
Monmouth County Open Space and Parkland Map

Monmouth County Master Plan

May 2016

- Federal Park
- State Park
- County Park
- Monmouth Conservation Foundation Easement

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, New Jersey Office of GIS, Monmouth Conservation Foundation, and the National Park Service.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.





Battle of Monmouth Reenactment

Source: Linda J. Brennen

Cold War era missile silos. The Sandy Hook Lighthouse, the oldest working lighthouse in the country and a National Historic Landmark, is located within the park. Visitors can tour the Keeper’s quarters and climb to the top of the lighthouse for an amazing view of the New York Skyline and the Navesink Highlands of Monmouth County.

There are four [state recreational facilities](#) within Monmouth County. The Leonardo State Marina, located on Raritan Bay in Middletown, provides 176 berths. Monmouth Battlefield State Park has permanently preserved over 1,800 acres surrounding the site of one of the largest and decisive battles of the American Revolution. Facilities include a visitor’s center, restored 18th century farmhouse, and miles of trails available for hiking, biking, and horseback riding. Interpretive programs are offered year-round and a battle reenactment is held each year in late June to commemorate the June 28, 1778 Battle of Monmouth. Allaire State Park encompasses over 3,200 acres in Wall and Howell Townships. Recreational opportunities include canoeing, fishing, camping, hunting; trails for hiking, biking, and horseback riding; open fields, playgrounds, picnic areas, and shelter buildings. There are

visitor’s and nature interpretive centers onsite as well as the Museum of New Jersey Transportation and the Pine Creek Railroad. The park is best known for the Historic Allaire Village, an early 18th century iron production industrial village with interpretative programming offered by docents in period dress. Adjacent to Allaire State Park is Spring Meadow Golf Course, a premier 18-hole public course that also features a driving range and restaurant.

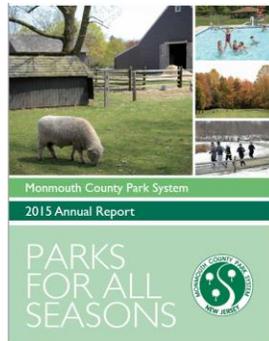
The NJDEP’s Division of Fish and Wildlife’s Bureau of Land Management administers the [New Jersey Wildlife Management Area System](#). These areas intend to preserve the diversity of wildlife and fish habitats throughout the state. They provide recreational opportunities while preserving open space, protecting habitats for an array of species, and safeguarding the area’s water supplies. There are six Wildlife Management Areas found entirely or partially within Monmouth County. Figure 4.2: NJDEP Management Areas in Monmouth County provides their general location and size in acres as of March 2016.

Figure 4.2: NJDEP Wildlife Management Areas in Monmouth County as of March 2016

Name of Tract	Municipality (County)	Total Acreage
Assunpink	Millstone, Roosevelt and Upper Freehold	6,373.44
Imlaystown Lake	Upper Freehold	30.00
Manasquan River	Wall and Brick (Ocean County)	744.33
Navesink River	Rumson	66.93
Pleasant Run	Upper Freehold, Hamilton (Mercer County), and North Hanover (Burlington County)	500.00
Turkey Swamp	Freehold Township	3,972.62



The Monmouth County Park System (MCPS) maintains regional parks, recreation areas, special use areas, conservation lands, open lands, greenways, and golf courses. Recreational areas are primarily outdoor recreation facilities. Special use areas are designated for specific purposes whether cultural, historic, or horticultural. Conservation areas are permanently protected because of the recognized ecological, natural, and/or cultural values. Greenways are natural or manmade linkages between areas, such as former railroad rights-of-way. Open lands comprise agriculture or outdoor recreation lands such as hiking or fishing. The MCPS website provides up-to-date information on all its [parks](#), [golf courses](#), [campgrounds](#), and [activities](#).



The MCPS' [2015 Annual Report Parks for All Seasons](#) offered the following statistics:

- There are presently over 16,557 total acres in MCPS, 382 acres of which were acquired during 2015. Turkey Swamp Park is the largest County Park totaling 2,263 acres.
- The MCPS maintains 137 miles of trails consisting of paved, easy, moderate, and challenging difficulty levels.
- During 2015, 6,379 MCPS programs were offered which were attended by 96,594 people.
- Overall the MCPS estimated that 2015 saw over 6.7 million park visits.

- The Holmdel Park facility was the most visited with over 1.2 million visits.

Figure 4.3: MCPS Facilities provides the names, locations, acreage, and a summary of amenities as of November 2015. The MCPS uses a series of factors in determining their goals, both in terms of the quantity of acreage and the types and quality of the land to be preserved or put into active recreation. The [Monmouth County Open Space Plan \(2006\)](#), last updated in 2006, details factors considered in their planning process and outlines future plans for acquisition and development.



Source: MCPS



Figure 4.3: MCPS Facilities

Name	Location	Acres	Facility Summary
Baysholm Tract	Freehold Township	71	Preserved in natural state
Bayshore Waterfront Park	Middletown	228	Bayfront beach, fishing, boating, and nature programs
Big Brook Park	Marlboro	415	Preserved open space and trails with limited facilities
Clayton Park	Upper Freehold	440	Preservation, fishing, and extensive trail system
Crosswicks Creek Park	Upper Freehold	2193	Preserved open space and farmland, canoeing, and extensive trails with limited facilities
DeBois Creek Recreation Area	Freehold Township	165	Preserved in natural state
Deep Cut Gardens	Middletown	54	Horticultural Center, greenhouses, Home Composting Demonstration Site, and extensive gardens
Deep Run Recreation Area	Marlboro	71	Preserved in natural state
Dorbrook Recreation Area	Colts Neck	535	Barrier free playground, sprayground, swimming pools, court sports, athletic fields, and paved trails
Durand Tract	Freehold Township	94	Preserved in natural state
East Freehold Showgrounds	Freehold Township	81	Showgrounds for horse shows, dog shows, and special events including the annual Monmouth County Fair
Fisherman's Cove Conservation Area	Manasquan	55	Riverfront beach, dog beach, and fishing
Fort Monmouth Recreation Area	Tinton Falls	10	Gymnasium, pools, game room, and program rooms
Freneau Woods Park	Aberdeen	155	Preserved in natural state
Hartshorne Woods Park	Middletown	794	Preservation, historic resources, fishing, and extensive trail system
Holmdel Park	Holmdel	575	Arboretum, fishing, court sports, ice skating, sledding, and trails
Huber Woods Park	Middletown	375	Preserved open space, visitors center, historic resources, and trails
Manasquan Reservoir Recreation Area	Howell	1204	Visitor's Center, Environmental Center, fishing, boating, ice skating, and trails



Name	Location	Acres	Facility Summary
Manasquan River Greenway	Howell and Freehold Townships	443	Preserved open space with riverfront access for canoeing and fishing
Metedeconk River Greenway	Howell and Freehold Townships	423	Preserved open space with riverfront access for canoeing and fishing
Monmouth Cove Marina	Middletown	10	154 boat slips, floating docks, storage, and fuel
Mount Mitchell Scenic Overlook	Atlantic Highlands	12	Scenic viewpoints, 9/11 Memorial and 1980 Hostage Memorial
Perrineville Lake Park	Millstone and Roosevelt	1159	Fishing, boating, and trails
Seven Presidents Oceanfront Park	Long Branch	38	Oceanfront beach, activity center, skateplex, sand volleyball courts, and fishing
Shark River Park	Neptune and Wall	988	Fishing, ice skating, group picnic facilities, fields, and trails
Sunnyside Equestrian Center	Middletown	135	Equestrian Center, preserved open space, and trails
Swimming River Park	Middletown	11	Boat ramp
Swimming River Greenway	Middletown	4	Preserved open space with riverfront access for fishing
Tatum Park	Middletown	366	Two activity centers, preserved open space and trails
Thompson Park	Middletown	667	Park Headquarters, Visitor's Center, Craft Center, athletic fields, court sports, group picnic areas, fishing, boating, off-leash dog park, and extensive trails
Turkey Swamp Park	Freehold Township	2263	Boat rentals, fishing, archery range, athletic fields, camping (family and group sites), group picnic area, and extensive trails
Weltz Park	Ocean	169	Preserved open space with limited facilities
Wolf Hill Recreation Area	Oceanport	92	18-hole disc golf course, athletic fields, and off-leash dog park
Yellow Brook Tract	Howell	369	Preserved in natural state
<u>Historic Sites</u>			
Name	Location	Acres	Facility Summary
Historic Longstreet Farm	Holmdel	9	Historic resources and living farm within Holmdel Park
Historic Walnford	Upper Freehold	36	Historic resources including a 19 th century gristmill



<u>Golf Courses</u>			
Name	Location	Acres	Facility Summary
Bel-Aire	Wall	114	27 holes in total: 18-hole executive par 60 course and 9-hole par 3 courses with Golf Center, and a separate 9-hole Foot Golf course
Charleston Springs	Millstone	781	36 holes in total: Two 18-hole par 72 courses with a Golf Center and short game area
Hominy Hill	Colts Neck	262	Award-winning course, Golf Center, and putting green
Howell Park	Howell	311	18-hole par 72 course and practice green
Pine Brook	Manalapan	61	18-hole par 61 course and Golf Center
Shark River	Neptune	176	18-hole par 71 course and Golf Center

<u>Trails</u>			
Name	Location	Miles	Facility Summary
Henry Hudson Trail	Various municipalities	24	Paved and gravel trails on former railroad right-of-way
Union Transportation Trail	Upper Freehold	8.6	Natural surface trail on a former railroad right-of-way

4.2.2 Advisory Committees

Monmouth County Board of Recreation Commissioners: This board is the policy making body responsible for the operation and maintenance of the MCPS. It was created by the Monmouth County Board of Chosen Freeholders by resolution in 1960 to supervise the development of the MCPS. Today this nine-member board is also responsible for park personnel; park rules and regulations; acquisition and development of parks; and recreational programming. It also serves as a coordinating agency between the state and local municipalities. The commission meets twice monthly.

Monmouth County Friends of the Parks: The MCPS also has the support of the Friends. Formed in 1991, this member-based 501(c)(3) registered charitable organization uses dues, donations, and proceeds from fundraisers to assist and support County Park System efforts to enhance

park properties and programs. Projects completed by the Friends during 2014 included the Timolat Farm Phase II Landscape Restoration at Huber Woods Park (\$38,050); Mt. Vesuvius Restoration at Deep Cut Gardens (\$19,500); the purchase of Disc Golf supplies for Wolf Hill Recreation Area (\$6,188); building repairs at Historic Longstreet Farm (\$3,060); and exhibit design for Battery Lewis at Hartshorne Woods Park (\$10,920). The Friends also assisted with the 2014 CAPRA accreditation; designation of Battery Lewis as a historic landmark; preparation of the Greener NJ Documentary; and the expansion of the Dorbrook Recreation Area’s public information system. Through the Recreation Assistance Program (RAP), the Friends provide scholarships for children from underserved communities within the county to participate in week-long summer camps or attend special programs.



4.2.3 Supportive Reports and Guiding Documents

Monmouth County Park System (MCPS)

Monmouth County Open Space Plan (2006): The Monmouth County Board of Chosen Freeholders founded the MCPS in 1960. During the following year in 1961, the Monmouth County Board of Recreation Commissioners was established as its governing body. In celebration of its 50th anniversary, the MCPS compiled a [detailed history](#) of MCPS achievements. The county's first *Open Space Plan* was adopted in 1972 and became the driving force of land acquisitions. An open space policy was adopted in 1983, titled the *Monmouth County Open Space Guide*. The most recent *Monmouth County Open Space Plan* was adopted in 2006. This 2006 plan includes an introduction (the system and plan purpose), the planning process, land preservation goals and policies (roles, responsibilities, and needs analysis), action plan (advocacy, stewardship, acquisition, and reexamination), list of proposed open space sites (additions to existing county parks, new county park sites, and greenways), appendices (Mission Statement of the Monmouth County Board of Recreation Commissioners, Park System Lands Classification System, Inventory of Existing County Open Space Holdings, Municipal Open Space Acreage and Needs, and Resolutions of Adoption), and a plan map. The MCPS began the process to update the 2006 plan during 2016. Under the guidance of the Monmouth County Board of Recreation Commissioners, MCPS serves as the open space, park, and recreation agency for the county.

Healthy Habitats- Habitat Restoration and Invasive Species Management Projects: MCPS stewards the environment through various healthy habitat projects and has Habitat Management Plans for all MCPS Properties. One example is the habitat enhancement and restoration project conducted at Hartshorne Woods Park, located in Middletown, to restore a World War II battery's condition, expand public access, and create grassy habitats for birds

traveling the Atlantic Flyway. Another example is an invasive vegetation management project performed at Thompson Park, also in Middletown, to expand open landscapes and bird habitats, restore the historic landscape, and improve facility accessibility. A long-term goal of this project is to make and maintain a mosaic of habitats including shrub lands, open woodlands, native grasses, and forested buffers. A similar project was conducted at Fisherman's Cove Conservation Area, located in Manasquan, to restore the native plant communities and remove invasive species. This report indicates "the primary function of a Conservation Area is the preservation and enhancement of valuable natural resources." Invasive species management and control is imperative to the viability of open spaces.

Recreation Services Plan: The MCPS developed the *Recreation Services Plan*, last updated and adopted in 2010. This plan establishes the agency philosophy and mission for recreation services, analyzes existing conditions including demographics, recreation trends, community interests, community opportunities, program staffing and organization, program offerings, recreation



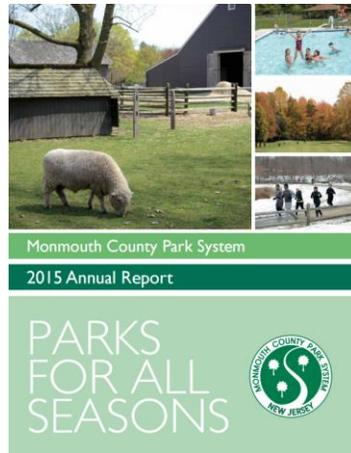
Wild Turkey

Source: Linda J. Brennen



facilities, and budget, and creates an action plan for achieving the plan goals and objectives.

Park Development and Maintenance Plan: The MCPS also produces the *Park Development and Maintenance Plan*, last updated and adopted in 2011. This plan provides background information and analyzes existing conditions including acreage and visitation, budget, staffing and organization, regulatory climate, public opinion, and park infrastructure: resources and improvements, establishes goals and objectives, identifies implementation strategies, and lists anticipated development projects.



Annual Report: The first MCPS Annual Report originated in 1967 and recorded more 2,000 county acres preserved. Subsequent years reported 3,569 preserved county park acres in 1976, 5,442 in the *1989 Annual Report*, 12,114 in the *2000 Annual Report*, and 16,557 in the most current version: [2015 Annual Report Parks for All Seasons](#). In addition to MCPS statistics, these reports provide a valuable resource to a comprehensive range of stakeholders detailing new initiatives, continued successes, future plans, and

current facilities. Successful open space planning is shared and conducted through various levels of government.

Deer Management: Being the third largest landowner in Monmouth County (after federal and state governments), the MCPS manages deer populations in county parklands through the deer management program. Annual reports are provided to the Monmouth County Board of Recreation Commissioners, the most recent being the [Deer Management Program Annual Report \(2016\)](#).

New Jersey Statewide Comprehensive Outdoor Recreation Plan (SCORP): The NJDEP’s Green Acres Program develops five-year plans known as the *SCORP*. The *SCORP* provides a framework and guidance to the state, local governments, and conservation organizations for their efforts toward the preservation of open space and the provision of public recreation. The most current [2013-2017 New Jersey Statewide Comprehensive Outdoor Recreation Plan](#) was adopted in September 2014. The plan provides data on the status of efforts to permanently preserve land for recreation, open space, and agriculture. The most recent SCORP notes that, as of January 2012, 19.5% of Monmouth County had been preserved, while 48.3% was developed, leaving an estimated 32.1% still available. By comparison, as a whole, the state of NJ was noted as having 30.2% preserved, 32.1% developed, and 37.7% available. During the previous five-year planning period (2007-2012), the Green Acres Program preserved an additional 1,402 acres through state land acquisition and assisted with the purchase of 846 acres by local governments and 128 acres by nonprofits in Monmouth County. The current planning period will see an increase in preservation of floodprone properties (Blue Acres Program) that were affected by Superstorm Sandy.



Battery Lewis Restoration

During World War II, Sandy Hook’s Fort Hancock was part of the Harbor Defenses of NY headquarters. Coordinating all of New York’s lower harbor defense, this strategic location generated ample military innovations in the area. Across the bay sitting on high elevation, Battery Lewis was constructed in 1943. Located on the Navesink Military Historic District, also known as the Fort Hancock Annex, the range of artillery at Battery Lewis reached offshore near Point Pleasant Beach to the east end of Long Beach, NY. By duration of time and neglect, Battery Lewis fell into disrepair. Planning for the Battery Lewis Restoration Project began in 2013. During 2014, The Friends of the Parks funded two projects: a nomination application for the [Navesink Military Reservation to the National Register of Historic Places](#) and an exhibit plan. In October 2015, the Navesink Military Historic District (all 224 acres of the former military base) was officially listed on the National Register of Historic Places. Battery Lewis is now part of Monmouth County Park System’s Hartshorne Woods, a major recreational destination in the county with over 250,000 visitors annually encompassing 787 acres.

Restoration will include interior repairs and improvements to the 600-foot long battery. Exhibit rooms will give visitors an overview of the military history and landscape including the Highlands unique geography, creation of Hartshorne Woods Park, and the Hartshorne Legacy. The Friends of the Parks are funding interpretive displays that will include historical photographs and veteran reminiscences. A World War II 16-inch Navy gun barrel from the Battleship New Jersey was donated by the U.S. Navy and will be on permanent display at Battery Lewis. The donated gun is almost identical to the 16-inch guns used in Battery Lewis during World War II. Once restoration is completed and the gun barrel will be installed on a newly constructed pedestal.

The Battery Lewis Restoration Project preserves, protects, and enhances our county’s historical legacy and will be a wonderful addition to a park already popular for its challenging trails and amazing views.

For more information see: [Battery Lewis and the Navesink Military Reservation at Hartshorne Woods Park – Monmouth County Park System Information Sheet on Restoration & Interpretation](#) and [Monmouth County Park System Hartshorne Woods Park](#)

4.2.4 Other Providers of Recreation and Open Spaces

Municipalities: Open space is an important component of maintaining a healthy community, defining community character, and raising the quality-of-life for local residents. While the county focuses mainly on providing regional facilities for open space and recreational activities, municipalities focus on their unique community and neighborhood recreational needs. Monmouth County municipalities recognize this imperative need and most have their own open space plans and initiatives. Municipal open space plans typically include an introduction, inventory of park and recreation facilities, cultural resources, needs analysis, resource assessment, an action plan, lists of areas proposed for future development or acquisition, and maps. Open space committees act as advisory agents to local planning boards and governing bodies on future acquisitions, sometimes in concert with municipal environmental committees. They work cooperatively with the county and state to preserve undeveloped tracts, recreational facilities, and educating residents on the benefits of open space preservation. Municipalities are also involved in the preservation of historic and agricultural properties, at times in partnership with county and state agencies. Municipal recreation committees are also known to work closely with municipal staff on local recreational programming.

State of New Jersey: To meet New Jersey’s increasing recreation and conservation needs, the [Green Acres Program](#) was established in 1961. The mission of the Green Acres Program is “to achieve, in partnership with others, a system of interconnected open spaces, whose protection will preserve and enhance New Jersey’s natural environment and its historic, scenic, and recreational resources for public use and enjoyment.” The Green Acres Program consists of five program areas. The [State Land Acquisition Program](#) manages the [Blue](#)



[Acres Floodplain Acquisitions](#), [In Lieu of Tax Payment Program](#), and [Limited Practical Use \(LPU\) Pinelands Acquisition Program](#). The [Local Governments and Nonprofit Assistance Program](#) oversees the [Coastal Blue Acres Program](#) and [Tax Exemption Program](#). The [Bureau of Legal Services and Stewardship - Keeping It Green](#) oversees the land after acquired or developed. This bureau manages the resourceful [Recreation and Open Space Inventory \(ROSI\)](#) which is a master list of all municipal Green Acres-encumbered properties. This bureau also oversees encumbered lands to ensure they are compliant with the [Green Acres Rules](#). The [Bureau of Planning & Information Management](#) offers technical assistance for municipal, county, nonprofit, or state recreation development efforts and open space acquisition. This bureau also gives staff support to the Governor's Council on New Jersey Outdoors along with open space and recreation planning guidance. The fifth program is the [Office of Natural Resource Restoration](#), was created in the early 1990s to restore environmental impacts caused by multiple oil spills and discharges. This program is designated with administering and protecting New Jersey's natural resources. The NJDEP also administers the [Green Acres Survey Section](#) to assist those preparing and contracting for the offered special surveys. Special surveys areas include [state land acquisitions](#), [local governments](#) and [nonprofit organizations](#), [Blue Acres Program](#), and [standard scope of work](#). The NJDEP's Division of Parks and Forestry [New Jersey Trails Program](#) provides financial assistance to develop and maintain trails and trail facilities, funded by the Federal Highway Administration's Recreational Trails Program. Since the program's inception, the Green Acres Program has preserved hundreds of thousands of acres of land and plays a vital role in withstanding our county's high quality-of-life.

U.S. Federal Government: In 1872, Yellowstone was designated the first national park and became a substantial advancement in modern land protection. The Federal Government continued to

designate various other national parks over the years, and with passing the Forest Reserve Act of 1891, authorized the designation of forest reserves. The [National Park Service](#), created in 1916 as an agency of the U.S. Department of the Interior, manages our country's national parks. The U.S. Department of the Interior manages the [Bureau of Land Management](#), [Bureau of Reclamation](#) and [United States Fish and Wildlife Service](#). Various other public lands are managed by the [National Oceanic and Atmospheric Administration](#) and the [U.S. Army Corps of Engineers](#). The majority of federally managed public lands are used for recreational activities. The U.S. Department of Agriculture manages the [United States Forest Service](#) comprised of the National Forest System, State and Private Forestry, Business Operations, and Research Development. The mission of the U.S. Forest Service is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." The Federal Government acknowledges the recreational, environmental, and cultural significance of open space and places.

[Monmouth Conservation Foundation \(MCF\):](#) While several land trusts work throughout NJ, MCF focuses specifically on Monmouth County and has worked closely with the MCPS since its inception in 1977. MCF assists in the permanent preservation of county parkland and holds several conservation easements. In its nearly 40 years, it has helped preserve more than 22,500 acres of open space and farmland. MCF is dedicated to forming crucial partnerships to ensure a permanent legacy of open space and habitat in our county.

Figure 4.4: Monmouth County Composite Open Space Map displays all the preserved lands in Monmouth County including federal parks, state parks, eight-year preserved farms (discussed more in 5.0 Farmland Preservation), municipal open space (from NJDEP's Green Acres Recreation Open Space Inventory), MCF easements, and Colts Neck's preserved land via lot size averaging. Colts Neck implemented this



Figure 4.4: Monmouth County Composite Open Space Map

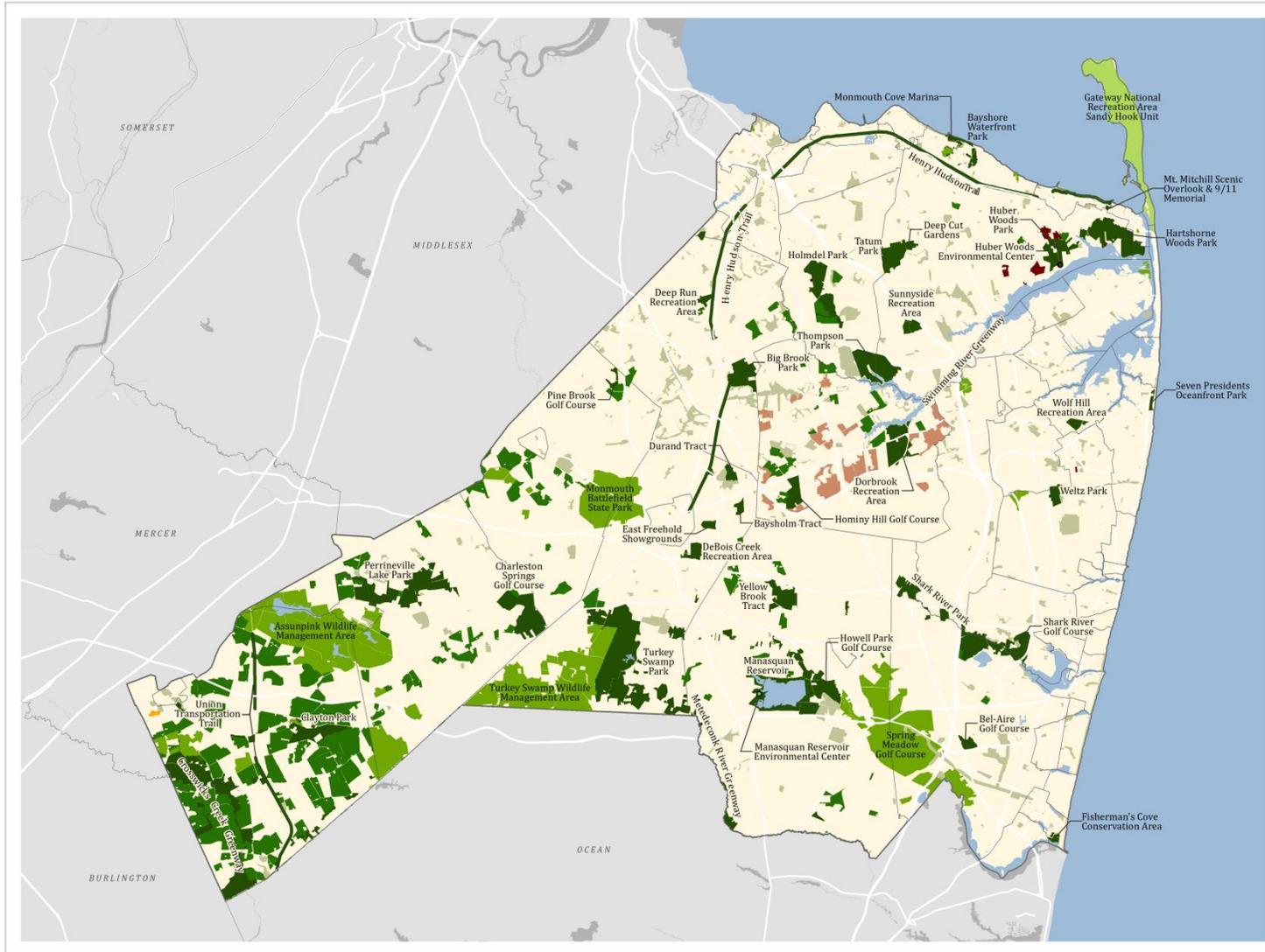
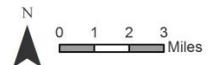


FIGURE 4.4
Monmouth County
Composite Open
Space Map
Monmouth County
Master Plan

May 2016
 Data current through 12/31/2015

- Federal Park
- State Park
- Preserved Farm
- County Park
- Municipal Open Space
- Eight-Year Program Farm
- Monmouth Conservation Foundation Easement
- Preserved via Lot Size Averaging (Colts Neck Township only)

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, New Jersey Office of GIS, Monmouth Conservation Foundation, NJDEP, SADC, and the National Park Service. Municipal open space was mapped using parcels and the NJDEP Green Acres Recreation and Open Space Inventory (ROSI) list. The municipal open space dataset is for planning purposes and may be missing properties or contain inaccuracies.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



unique design approach to preserve major tracts of land for agricultural uses and/or open space. Lot size averaging allows for flexibility and variety by averaging the size of individual lots within a development to vary from the zoned maximum density. The approach requires the average size of lots in a subdivision to be equal or greater than a specified minimum rather than each individual lot. This can be useful when working with irregular shaped lots, critical areas, infill development, and greenfields.

4.2.5 State Park Friends Organizations

Friends of Monmouth Battlefield, Inc.: Formed in 1990, the Friends of Monmouth Battlefield is a not-for-profit organization. Their mission calls for the group to be “dedicated to protecting, preserving and interpreting the military and social history of the Monmouth Campaign of 1778 and the cultural landscapes of both the battlefield and associated sites within a broader geographic area beyond the Park.” The group is licensed as an Officially Recognized Friends Organization (ORFO) by the state, which authorizes the group to act in partnership with the state for the protection, preservation, and interpretation of the battlefield. To this end, the Friends assist with programming, tours, and outreach; apply for grants; seek and provide donations; and staff the gift shop in the Park Visitors Center.

Historic Village at Allaire: [Allaire Village, Inc.](#) is a nonprofit educational and historic preservation partnership organization. Its stated mission is to “assist and advise the State of New Jersey in certain phases of the development, restoration, preservation, interpretation, and operation of the Historic Howell Works within Allaire State Park.” Their goals are to promote the historical, aesthetic, and cultural significance of the Historic Howell Works; provide exhibits, demonstrations, cultural programs, tours, interpretive programs, educational materials, and publications; maintain a historical library; encourage and participate in the

acquisition, restoration, preservation, research and display of artifacts; and assist in fund raising and purchasing items to benefit their mission, the village and the park.

4.3 Emerging Issues and Long Range Challenges

4.3.1 Changing Trends in Recreational Use: Over the years, changing trends in recreational needs have led to the expansion of ball fields, the provision of more unique amenities as fitness trails, and most recently, the addition of disc golf facilities. Park programming has evolved over the years in response to these new demands. The MCPS evaluates its programming and facility attendance and responds to changes to meet the new demands. Expanding trails and greenways; the development of a ‘foot-golf’ course at Bel-Aire; adding cabins to the camping facility at Turkey Swamp; creating additional off-lease dog park facilities; and adding free-swim time at county pools are just a few county responses to recreational demands put in place over the past few years. The MCPS has begun updating the *Monmouth County Open Space Plan (2006)* and it is likely that new trends will identified and addressed during this process.

Trends external to the MCPS are also relevant to the delivery of recreation services to its constituents. The following current preference trends, generated from literature review, direct experience, and professional networking, have been identified by the MCPS as worthy of consideration when planning for recreation services.

Individual Activities: The *2010 National Survey on Recreation and the Environment* identified birding as the fastest growing activity in the long term. The six most popular individual activities were identified as walking; family gathering; viewing natural scenery; visiting a nature center, nature trail or zoo; picnicking; and sightseeing. These preferences probably owe some of their popularity to their minimal required investments in cost, physical exertion, and equipment or skill development.



Outdoor Activities: The [2015 Outdoor Recreation Participation Topline Report](#) found that nearly half of all Americans participate in outdoor activities. Extreme weather and unusually cold winters in 2013 were likely reasons that there was a small drop in the outdoor recreation participation rate during the reporting period. Previous reports noted sizeable participation increases in many nature-based activities, peaking in 2012. The top five most popular outdoor activities for youth and young adults (ages 6 to 24) were running, jogging, and trail running; bicycling; camping; fishing; and hiking, in order. The same five activities were most popular among adults aged 25 and older, however the order was slightly different, with fishing at the number two spot, followed by bicycling, hiking, and then camping. For youth ages 6 to 12, fun is by far the most common motivation for participating in outdoor activities. Other motivators include discovery, exploration, new experiences, and exercise. Interest in playgrounds with natural elements is growing. Since 2009, parents have been embracing the concept of play value and are seeking facilities and activities that challenge their children. Participation in adventure racing and triathlons increased significantly between 2011 and 2014. Water sports, such as stand-up paddling, wind-surfing, kayak fishing, white water kayaking and tour kayaking have also increased substantially, as did BMX biking. During 2014 winter sports, such as snowboarding, downhill skiing and cross-country skiing saw notable increases, possibly as a result of the colder winter.

Sports: Sports are expected to remain a popular way to stay in shape. Trends toward structured play for children, however, may have peaked. Some parents are reducing long-term team/program commitments for their children in favor of activities that involve the entire family.

Programming: Demand for a variety of programmed and organized recreational activities is growing to supplement a family's ability to

recreate together. Fitness inspired by dance styles and dance as a form of fitness is also growing in popularity.

The Benefits of Parks: A 2010 National Recreation and Park Association report entitled [The Benefits of Physical Activity Provided by Park and Recreation Services: The Scientific Evidence](#) determined that the availability of park and recreation facilities, and the distance between these facilities and one's home, directly relates to the physical activity levels of community residents. The study also noted a direct relationship between increased investment in parks and recreation and a decrease in the costs of health care and cited numerous health organizations that now consider parks to be an integral part of the nation's healthcare system. Additional discussion of the value of parks is included in 11.0 Healthy Communities.

Privatization of Parks: In July 2015, Governor Chris Christie signed a bill that would allow the NJ Sports and Exposition Authority to review and possibly finance private development at Liberty State Park. The privatization of public parks is a growing trend as governments at every level look for new ways to reduce long-term maintenance costs and monetize fixed assets. Redevelopment at Fort Hancock is an example of a private-public investment strategy where the National Park Service is the master plan developer and property manager. Investors that pay for the rehabilitation of historic buildings will be granted long-term leases for a variety of permitted mixed commercial and residential uses. The privatization of parks is a controversial Emerging Issue that requires greater review and discussion to determine its long-term impact on lands held in public trust.

4.3.2 Innovative Conservation Practices and Emerging Technologies:

Local conservation techniques comprise voluntary programs, deed restrictions, conservation easements, and land trusts. Voluntary



programs are when private landowners agree to willingly participate in stewardship agreements to preserve their land. Municipalities use deed restrictions, covenants, or easements to restrict portions of property proposed to be developed for amenities such as open space. Conservation easements are between a third party such as land trust or public agency and the property owner allow the owner to retain certain rights to the land. This is different from a fee simple acquisition, where one purchases the land outright. Conservation easements impose restrictions on the use of the land, while not taking full ownership. Several nonprofit land trust organizations are dedicated to managing and conserving tracts of land. These organizations generally accept conservation easements or donations of land from private owners. Sometimes life rights are granted to the former owners, allowing them to stay on the property after ownership is transferred. Land trusts usually work with government agencies and landowners to protect open spaces and at times pass the land or easements they acquire to those government agencies for permanent preservation.

New stewardship efforts are being put into place within greenways, conservation areas, and preserved open space to maintain or increase species diversity. Within the MCPS holdings, extensive species lists are developed for each site, and plans are established for the stewardship and maintenance of the land to provide the optimum desired results.

Computer and mobile phone applications or 'apps' are being developed to enhance the park experience. The New Jersey State Parks partnered with [Pocket Ranger](#) to develop free, outdoor guides that include GPS features, a compass, park and trail maps, news and calendar functions, photos, facility contact information, and more. The MCPS also has an interactive [Trail Map](#), [MCPS Trails Elevation Profile](#), and [Forest Communities of the MCPS](#) available for use on computers and mobile devices.

4.3.3 Long Range Challenges

The [2013-2017 New Jersey Statewide Comprehensive Outdoor Recreation Plan \(SCORP\)](#) identified five issues relative to meeting the current and projected future public open space and recreation demand in New Jersey:

- *Land Preservation:* Although it has been proven that open space preservation increases the value of surrounding properties, generates revenue, and reduces the cost of public services, these facts are not widely understood or believed. It remains necessary to continue to educate the public about the positive impacts of acquiring open space and recreational facilities.
- *Recreation:* Recreational opportunities improve the quality-of-life and health of a community. The types of facilities needed changes over time with such variables as the age of the resident population, recreational programming, and current trends in fitness. Technology also plays a part, as can be seen in the recent move to develop more mobile phone applications related to recreation and the local park experience. Park improvements should embrace new trends where appropriate.
- *State Resource Areas:* Among the state resource issues raised in the *2013-2017 New Jersey SCORP*, the most relevant topic area for Monmouth County is the impact Superstorm Sandy had on the coastal zone. Facility recovery should continue in a resilient way and Blue Acres Program funding should be sought to increase open space acquisitions in areas where repeated flood damage occurs as a way to move homes and businesses out of harm's way. Another relevant topic area is Historic Resources. The relationship between historic preservation, open space, recreation, and tourism creates opportunities that should continue to be evaluated and given high priority.
- *Greenways and Trails:* Preserving stream and wildlife corridors not only offers opportunities for trail development, but also ensures



that habitat for certain species can be maintained in balance with community development.

- *Stewardship*: Maintaining or improving resources, once preserved, is an important element of conservation. The spread of invasive species from disturbed or unkempt land negatively impacts preserved land, requiring a significant expenditure of time and funds. Eradication of invasive species helps save and promote growth of native species.

Within the context of Monmouth County as a suburban and somewhat densely developed community, the issues identified in the 2013-2017 New Jersey SCORP are applicable. In fact, many of these same issues were raised as challenges during the Master Plan Working Group meetings for open space/recreation and natural resources. The number one issue raised in the Environmental Working Groups related to the desire to increase the quantity of open space within the county. However, qualitative issues are also imperative. These issues include supporting healthy cultural and natural environments throughout the county’s open space, strengthening the tie between people and open spaces, and promoting resident involvement. Lastly, the need to optimize the sustainable use of county resources was also identified.

4.4 Open Space Stakeholder Actions and Efforts

4.4.1 Monmouth County Efforts

As previously discussed, the Monmouth County Park System (MCPS) is the primary county agency charged with open space planning and preservation and the provision of facilities and programs for regional recreation.

The MCPS also administers the competitive [Municipal Open Space Grant Program](#) to assist Monmouth County municipalities in land acquisition and recreational development. The Board of Chosen Freeholders annually allocates this funding from a portion of the Monmouth County Open Space Trust Fund. Since the 2003 inception of this program, 171

grants have awarded more than \$26 million to 47 municipalities. The 2015 round provided a total of \$1,863,000 to 12 municipalities, with an average award of approximately \$169,000. Figure 4.4: 2015 Open Space Grant Awards details the awards for 2015.

The Monmouth County [Farmland Preservation Program](#) coordinates agricultural land preservation efforts in the county and assists municipal initiatives. County projects proceed through a series of stages beginning with initial landowner expressions of interest, to evaluation, and where feasible, the purchase of agricultural easements. Later stages include annual monitoring and stewardship of the preserved farms. Greater detail about the Farmland Preservation Program is provided in 5.0 Farmland Preservation Element.

Figure 4.4: 2015 Open Space Grant Awards

Municipality	Project	Award
Aberdeen	Veterans' Memorial Park Improvements: Phase I	\$250,000
Holmdel	Cross Farms Park Improvements	\$137,000
Keyport	Main Street Park Development	\$204,000
Little Silver	Improvement to Borough Fields	\$121,000
Manalapan	Holiday Lake Park Pavilion	\$13,000
Manasquan	Mallard Park Improvements: Phase 2	\$39,000
Middletown	Croydon Hall Synthetic Turf Field	\$201,000
Millstone	Clarksburg MEC-CRC Historic Preservation Project: Phase 1	\$250,000
Neptune	Loffredo Field Improvements	\$250,000
Red Bank	Mohawk Pond and East Side Park Improvements	\$223,000
Rumson	Piping Rock Park Improvements: Phase II	\$137,000
Wall	Municipal Complex Basketball Court	\$175,000



The [Monmouth County Greentable](#) Steering Committee consists of representatives from the Monmouth County Park System, Monmouth County Farmland Preservation Program, Monmouth County Environmental Council, NY/NJ Baykeeper, and Monmouth Conservation Foundation. They plan and host periodic meetings that strive to bring together residents, groups, and government officials working to preserve, improve, and manage open space and farmland. These meetings offer opportunities to form partnerships or share experiences and information.

4.4.2 Partnership Efforts

[Hancock 21st Century Federal Advisory Committee](#): The U.S. Department of the Interior formed this committee 2012 and is comprised of members from a variety of backgrounds including environmentalists, local government, real estate, hospitality, education, and nature sciences. They meet to plan for the future of Fort Hancock and Sandy Hook Proving Ground National Historic Landmark. All meetings are open to the public with a time set aside for public comments. Their operating procedures help Sandy Hook develop plans consistent with the [Gateway National Recreation Area's General Management Plan and Environmental Impact Statement \(2014\)](#). The committee promotes the leasing of the Fort's historic buildings for adaptive reuse to help it become a viable, vibrant community once again. The National Park Service is currently requesting proposals to lease multiple of these historic buildings. The Gateway National Recreation Area includes more than 26,000 acres of marshes, wildlife sanctuaries, recreational athletic fields, sandy beaches, camping and picnic areas, and historic structures. It is a vital part of Monmouth County's preserved open space and is one of the country's most visited national parks.

[New York-New Jersey Harbor Estuary Program](#): Established in 1987, the NY-NJ Harbor Estuary Program focuses on protecting and restoring healthy communities, improving safe access to waterways, managing

sediment, public education, and fostering community stewardship. The NY-NJ Harbor Estuary Program's main focus is the tidal waters of the Hudson-Raritan Estuary from Piermont Marsh in New York State to an imaginary line connecting Sandy Hook, New Jersey, and Rockaway Point New York at the mouth of the harbor. The program is comprised of federal, state, and local government leaders, civic and environmental advocates, the fishing community, scientists, business and labor leaders, and educators. The incredible natural diversity in one of the most populated metropolitan areas in the country and the world is protected through this program. The program consists of committees, working groups, and staff who release planning documents, publications, and create awareness. Their website also offers an interactive habitat site map.

[Fort Monmouth Economic Revitalization Authority \(FMERA\)](#): Since the closure of Fort Monmouth, the U.S. Army has been transferring portions of the property to FMERA. FMERA's mission is "to create an atmosphere in which employers will employ and investors will invest, to maximize the jobs created and the value of the property." Fort Monmouth covers over 1,100 acres of land surrounded by Eatontown, Tinton Falls, and Oceanport. As noted on FMERA's [website](#), the *Fort Monmouth Reuse and Development Plan (2008)* envisions the location "will be home to theaters, restaurants and shops; an 18 hole golf course; a bowling alley; a fitness center; 210-acres of ball fields and active recreation uses; walking, jogging and biking paths; and over 200 acres of parkland preserves and passive open space." Once redeveloped the former Fort property should substantially increase open space opportunities and facilities for county residents and visitors.

In 2013, the MCPS opened the [Fort Monmouth Recreation Center](#), located in Tinton Falls. The building, facilities, and surrounding property was acquired from FMERA. Maintenance, ADA accessibility enhancements, and infrastructure improvements were completed in May 2015 and the 21,000 square foot building now provides the Park





Municipal ball field absorbing floodwaters during Hurricane Irene in 2011

Source: Linda J. Brennen

System's first ever indoor recreation facility. Indoor amenities include classrooms/activity rooms, multipurpose rooms, gymnasium, and a game room. Outdoor facilities include a pool complex with two pools and a service building with restrooms, a gazebo, and picnic area. Programs available onsite include arts and crafts, sports, exercise classes, and special events. The Fort Monmouth Recreation Center was a 2015 Monmouth County Planning Merit Award recipient.

Metedeconk Watershed Stakeholders: The Metedeconk River and its tributaries flow through Freehold Township, Howell, Millstone, and Wall Townships in Monmouth County and Brick, Lakewood, and Jackson Townships in Ocean County. The stakeholders include NJDEP, county and municipal representatives, Jacques Cousteau National Estuarine Research Reserve (JCNERR), Rutgers University, the Trust for Public

Land, U.S .Fish and Wildlife Service, and Brick Township Municipal Utilities Authority. The Metedeconk River is a vital regional source of drinking water supply in addition to providing a substantial amount of freshwater discharge to the Barnegat Bay estuary. Stakeholders assisted in the preparation of the [Metedeconk River Watershed Protection and Restoration Plan \(2013\)](#). The plan consists of an introduction, watershed characterization, watershed conditions, identification of management strategies, an implementation program, and references. The plan promotes the protection of natural shoreline buffers and open space and supports open space planning and preservation. It is noted in the report that the land use pattern of the watershed is roughly half open space and half developed area. The MCPS has preserved a 929-acre greenway along the Metedeconk River to protect and buffer floodplains from adjacent development. Similar preservation efforts are also ongoing in the Ocean County portion of the watershed.

4.4.3 Other Stakeholder Efforts

State of New Jersey: As discussed in Section 4.2 Existing Conditions, NJDEP’s Green and Blue Acres Program provide several opportunities to facilitate the conservation and redevelopment of land for recreational and open space uses. In 2011, New Jersey Keep it Green released the *A Legacy of Green: Celebrating 50 Years of the Green Acres Program* report. The report consists of accomplishments and partnerships, green acres in action, and ‘pressing needs, uncertain future.’ The economic, environmental, and health benefits of open space are detailed. NJDEP’s Green Acres website lists three Green Acres success stories found in Monmouth County. Gunning Island in Rumson was preserved through a joint acquisition effort by the Trust for Public Land and Rumson Borough using Green Acres funding, MCPS Grant funding, and a Federal National and Oceanic Atmosphere Administration Coastal and Estuarine Land Preservation grant. The island of 19 acres was protected as a wildlife preserve accessible to kayakers, canoeists, and birders. The second noted success story is the Ralph Pier Replacement in Keyport Borough. A new pier was built replacing a structurally unsound 30+ year old pier



to provide public access to the bay and multiple recreation purposes. The third success story is Firefighter's Park Development in Union Beach Borough, where Green Acres funding provided new recreational facilities such as a gazebo, play area, new path, and landscaping with native plants. NJDEP's Green Acres Program has become a national model for open space preservation.

The Blue Acres Program is committed to reducing the impact of devastating storms on people and moving them out harms way, with more than 400 buyouts now completed. The program was recently recognized by [FEMA for Mitigation Best Practices](#) for its Benefit-Cost Analysis (BCA) approach. The U.S. Department of Housing and Urban Development also recognized the program with its "Exemplary Practice" rating for creating a team to negotiate mortgage forgiveness on behalf of homeowners owing more than their property's worth.

Municipal: While regional partnerships among stakeholders play a substantial role in open space preservation, so do the individual efforts of municipalities. Municipal open spaces meet the day-to-day community and neighborhood recreational needs of local residents. Municipalities preserve and manage local greenways and smaller recreational parcels. Most Monmouth County municipalities have environmental commissions and/or open space committees, which are the forefront in protecting, funding, and maintaining local open spaces. As the county manages the consistent growing development, municipalities need to incorporate open space planning into municipal comprehensive planning. Several municipalities have Recreation and Open Space Plans that provide guidance regarding the location, acquisition, development, and improvement of recreation and open space areas along with a current inventory of such areas (e.g. Millstone and Highlands).

Nonprofits: Open space acquisition is most often a joint collaboration from several different entities. Municipalities often work with the state

and the county (through the Monmouth County Open Space Program or MCPS) in addition to several nonprofits. [Monmouth County Conservation Foundation](#) and the [Trust for Public Lands](#) are two predominant nonprofits for open space preservation in Monmouth County. Organizations like this hold title or easements to land dedicated as open space and assist public agencies in negotiating and financing land acquisition. Some groups like scout organizations and the YMCA also own land and operate recreational facilities. Nonprofits provide input into the MCPS's *Monmouth County Open Space Plan* and coordinate their mission as it relates to preservation efforts within Monmouth County. Nonprofits also meet regularly with preservation partners in the county to coordinate projects.

As the *Monmouth County Open Space Plan (2006)* states, "the responsibility for the open space system, like other forms of infrastructure, is shared by public agencies at all levels of government, nonprofit agencies and groups, and private citizens, and corporate entities." The Division of Planning staff works closely with MCPS, the state, municipalities, nonprofits, and other government agencies to identify and preserve important natural resources as public open spaces.

4.5 Additional Resources and Funding Opportunities

Federal

- National Oceanic and Atmospheric Administration
 - [Coastal and Estuarine Land Conservation Program](#)
- [U.S. Department of Agriculture](#)
 - [Forest Service Open Space Conservation](#)
 - [Forest Legacy Program](#)
 - [Forest Stewardship Program](#)
 - [Growth and Open Space Conservation Webinar Series](#)
 - [Urban and Community Forestry Tools and Resources](#)
- U.S. Department of the Interior



- National Park Service [Land and Water Conservation Fund](#)
- [Rivers, Trails, and Conservation Assistance Program](#)
- U.S. Department of Transportation Federal Highway Administration
 - [Recreational Trails Program](#)
- U.S. Environmental Protection Agency
 - [Clean Water State Revolving Fund](#)

State

- [Garden State Preservation Fund](#)
- [New Jersey Department of Environmental Protection \(NJDEP\)](#)
 - [Blue Acres Program](#)
 - [Environmental Infrastructure Financing Program](#)
 - [Garden State Historic Preservation Trust Fund](#)
 - [Green Acres Program](#)
 - [Natural Lands Trust](#)
 - [New Jersey Trails Program](#)
 - [Parks and Open Space Education](#)
 - [Search NJ Open Space Database \(ROSI\)](#)
 - [Smart Growth](#)

County and Local

- [Monmouth County Park System](#)
 - [Municipal Open Space Grant Program](#): discussed in 4.4 Open Space Stakeholder Actions and Efforts
- [Special People United to Ride](#)
- [Monmouth County Division of Planning Environmental and Sustainability Section](#)
- [Monmouth County Environmental Council](#)

Nonprofits, Research Centers, and Other Stakeholders

- [American Trails](#)
- ANJEC's [A Handbook for Public Financing of Open Space in New Jersey](#)
- [Community Preservation Coalition](#)
- [D&R Greenway Land Trust](#)

- [Garden State Greenways](#)
- [The Land Conservancy of NJ](#)
- [Land and Water Conservation Fund \(LWCF\)](#)
- [Land Trust Alliance](#)
- [Monmouth Conservation Foundation \(MCF\)](#)
- [National Recreation and Park Association](#)
- [Nature Conservancy of NJ](#)
- [Natural Resources Defense Council](#)
 - [Link to Environmental Groups](#)
- [New Jersey Conservation Foundation](#)
- [New Jersey Environmental Infrastructure Trust](#)
- [New Jersey Farmland Preservation Program](#)
- [NJ Baykeeper](#)
- [NJ Future- Land Preservation](#)
- [NJ Keep it Green](#)
- [Rails to Trails Conservancy](#)
- [Society for Conservation GIS](#)
- [The Fund for New Jersey](#)
- [The Schumann Fund for New Jersey](#)
- [The Trust for Public Land](#)
- [The Watershed Institute Open Space Resources](#)

4.6 Master Plan Recommendations and Stakeholder Strategies

Three *Master Plan* Recommendations and numerous Stakeholder Strategies regarding Open Space emerged from meetings and conversations with the Monmouth County Board of Chosen Freeholders and Working Group stakeholders.

Master Plan Recommendations

Recommendation 4.1: Assist the Monmouth County Park System (MCPS) in its preparation of updates to the *Monmouth County Open Space Plan (2006)* and other similar or related studies, and incorporate the *Monmouth County Open Space Plan* by reference as a component



of the Monmouth County Master Plan. Through the *Monmouth County Open Space Plan*, the MCPS envisions continued acquisition of regionally significant lands that can provide additional recreational opportunities and preservation of habitat and open spaces; add to existing facilities; and preserve and enhance the quality-of-life for Monmouth County residents and visitors. Division of Planning staff will continue assisting the MCPS with their preservation efforts, data gathering, and preparation of studies and reports related to open space and natural resource planning. The Division of Planning will incorporate the *Monmouth County Open Space Plan* by reference as a component of the *Monmouth County Master Plan*.

Recommendation 4.2: Work with all levels of government and nonprofit organizations to promote the preservation of sensitive environmental systems and significant natural features through acquisition, deed restrictions, conservation easements, redevelopment projects, zoning, and other innovative land use techniques. The Monmouth County Planning Board (MCPB) and the Monmouth County Environmental Council (MCEC) have long supported the open space planning and preservation efforts of various government agencies through identification of areas of environmental significance worthy of preservation; the presentation of outreach programs that highlight environmental issues; and the support of grant applications. Division of Planning staff has served on partnerships and technical advisory committees that led to the development or institution of policies, rules, or grant funding for habitat and watershed management, open space acquisition, and conservation initiatives. Staff is encouraged to continue and expand these efforts.

Recommendation 4.3: Provide technical and professional assistance to our municipal partners in support of their local open space acquisition efforts and recreational facility improvements. Working with Monmouth County municipalities, the Monmouth County Park System (MCPS), the Monmouth County Environmental Council (MCEC), and

other stakeholders, Division of Planning staff continues to identify Areas of Significant Environmental Quality (ASEQ) that could lead to new open space preservation efforts. Staff has assisted municipal partners in their acquisition and recreational development efforts by providing letters of support for grant applications and in assistance through regional watershed partnership efforts that identify potential acquisition targets or funding mechanisms. The Sustainable Jersey Monmouth County Hub is one way that technical support is provided to municipal partners, as Hub events and programs bring new ideas, offer opportunities for shared experiences, and introduces new sources of funding and support that can ultimately lead to increases in open space preservation. The Division of Planning staff is encouraged to continue these efforts.

Stakeholder Strategies

General

- Maximize the benefits of public recreational investments that improve resident's quality-of-life and increase physical activity benefits.
- Encourage private property owners to preserve sensitive environments through conservation easements.
- Support the acquisition and preservation of critical or otherwise important wildlife habitats and species.
- Promote access to water resources and beaches in ways that are aligned with sound Best Management Practices (BMP) measures.
- Encourage partnerships that promote open space preservation.
- Enhance and improve existing recreational facilities and sites, particularly aged facilities in urban areas.
- Promote the use of Community Development Block Grant (CDBG) Program, Green Acres, Blue Acres, and other sources of funding to acquire open space and to develop, enhance, or redevelop recreational facilities and sites.
- Continue to partner with municipalities, private partners, nonprofits, other county departments, and state agencies to preserve complementary open space networks.



Natural Resources

- Support the acquisition of parks, recreation, and open space lands and conservation easements, particularly those that provide the additional benefit of valuable resource protection.
- Support the efforts of municipalities, regional agencies, and county departments to preserve sensitive environments, scenic corridors, and viewsheds through purchase, deed restrictions, conservation easements, and zoning.
- Encourage the use of public lands in concert with natural resource protection.
- Preserve open spaces to increase opportunities for water quality improvements and groundwater recharge.
- Support the provision of adequate resources for the stewardship and management of publicly owned open spaces.

Farmland Preservation

- Continue to partner with municipalities, other county departments, private partners, nonprofits, and state agencies to preserve agricultural lands and complementary open space.
- Encourage BMPs, such as those for soil erosion and invasive species control, which mutually benefit open space and agricultural viability.

Arts, Historic, & Cultural Resources

- Encourage the appropriate use of public lands for the promotion of art and culture through installations, exhibitions, fairs, and festivals.
- Promote the preservation of historic and cultural resources through open space acquisitions.
- Support the preservation of historic structures through adaptive reuse for suitable recreational or community purposes.
- Promote art, cultural, and historic programming as well as events organized by the county and community stakeholders.
- Incorporate surrounding natural environs in historic site preservation efforts.

Utilities

- Support efforts to retain, protect, and maintain stream corridors and wetlands for flood control and recreation in ways that do not pose negative ecological impacts.
- Continue to support compatible use of renewable energy resources at park and recreation facilities.
- Support necessary infrastructure investments for park and recreational facilities.

Transportation & Mobility

- Encourage connective pedestrian, bicycle, and equestrian routes along suitable roadways between parks, open spaces, and regional facilities and the communities that they serve.
- Continue to preserve and enhance former railroad rights-of-way as public trails.
- Ensure sufficient public road rights-of-way are reserved along properties acquired for open space and recreational purposes.
- Promote Transit-Oriented Development (TOD) to reduce suburban sprawl and increase opportunities for open space preservation.

Agricultural & Economic Development

- Acknowledge and expand awareness of the economic benefits derived from open space preservation such as tourism, increased property value, and recreation.
- Support partnerships that create balanced agricultural and open space preservation opportunities.
- Promote the local agricultural industry through the provision of agricultural and equine demonstrations and farmer’s markets in public open spaces.
- Examine the possibility of using of agricultural lands held by the county for vocational training and entrepreneurial incubator opportunities for new farmers.



Community Development & Housing

- Encourage the provision of buffers, conservation areas for environmentally sensitive lands, usable open space, and recreational facilities within new developments and redevelopment plans.
- Support municipal, county, and State efforts to expand open space and recreational holdings in accordance with the *New Jersey Statewide Comprehensive Outdoor Recreation Plan* guidelines.
- Promote the acquisition of open space and development of recreational facilities with close proximity to residential areas.
- Encourage a desirable balance of farmland, open space, and developed land.
- Increase open space and recreational opportunity efforts for underserved populations, particularly in “Communities of Concern” as identified by Together North Jersey (TNJ).

Healthy Communities

- Acknowledge the benefits of open space and recreation to the overall physical and mental well-being of individuals and the community.
- Support the provision, expansion, and refurbishment of recreational facilities in all communities that create safe, attractive, and diverse leisure opportunities.
- Increase accessibility to a variety of open space and recreational facilities for people of all ages and abilities to encourage physical activity and fitness.
- Support open space preservation and the development of recreational and community facilities within walking distance of residential areas and mixed-use developments.

Community Resiliency

- Support public and private preservation efforts to purchase floodprone properties, both coastal and riverine, from willing sellers

to break the cycle of damage and rebuilding in areas repeatedly affected by flooding; impacted by storm surge; or in harm’s way from potential sea level rise.

- Support preservation of vegetated uplands as open space for flood control and stormwater management which relieves flooding in lower elevation areas, especially along the coast.
- Continue to acquire buffer lands to protect residential properties in fire hazard areas.
- Provide education on the importance of protecting natural open space in hazard prone areas.

Sustainable Places

- Promote the use of sound sustainable BMPs throughout preserved land and open space.
- Support efforts to buffer coastal properties from the effects of flooding and severe storm events through open space preservation.
- Encourage long-term sustainability in the design of new recreational facilities.

Planning Services, Outreach, & Coordination

- Continue to provide scholastic and recreational educational opportunities in nature, science, technology, art, culture, health, and physical fitness through a variety of classes, interpretation, and programs that are available to all.
- Use open space facilities and public land as a hub for educational workshops, community activities, and outreach.



The background image is a faded, low-contrast photograph of a rural landscape. It shows a wide, flat field in the foreground, possibly a farm or agricultural area. In the middle ground, there is a line of trees, including some tall, thin deciduous trees and some denser evergreens. To the left, a person is visible in the distance, standing in the field. The overall scene is bright and somewhat washed out, with a soft, hazy quality. The text '5.0 Farmland Preservation' is overlaid in the center of the image in a bold, black, sans-serif font.

5.0 Farmland Preservation

5.0 FARMLAND PRESERVATION

MASTER PLAN RECOMMENDATION 5.1



Sinha Farm, Millstone

Source: Harriet Honigfeld

5.1: Maintain and update, as needed, the *Monmouth County Farmland Preservation Plan (2008)* as a component of the *Monmouth County Master Plan*.

Purpose

Guide Monmouth County's efforts in preserving farmland and maintaining a viable agricultural industry in compliance with the NJ State regulations regarding county comprehensive farmland preservation plans (N.J.A.C. 2:76-17 and N.J.S.A. 4:1C-43.1).

Monmouth County Departments & Organizations Involvement

Division of Planning	Prepare the <i>Monmouth County Farmland Preservation Plan</i> and annual updates; assist municipalities with the preparation of their farmland preservation plans to ensure coordination with the <i>Monmouth County Master Plan</i> .
Planning Board (MCPB)	Incorporate the <i>Monmouth County Farmland Preservation Plan</i> by reference as a component of the <i>Monmouth County Master Plan</i> .
Park System (MCPS)	Confer on annual submission of Open Space Addendum to the <i>Monmouth County Farmland Preservation Plan</i> ; partner on projects of mutual interest, particularly along identified greenways; meet regularly to discuss joint acquisition projects.
Agriculture Development Board (MCADB)	Provide input and feedback.
Division of Economic Development	Provide support and guidance for implementation of Chapter 6 of the <i>Monmouth County Farmland Preservation Plan</i> and related initiatives.

Other Project Stakeholder Involvement

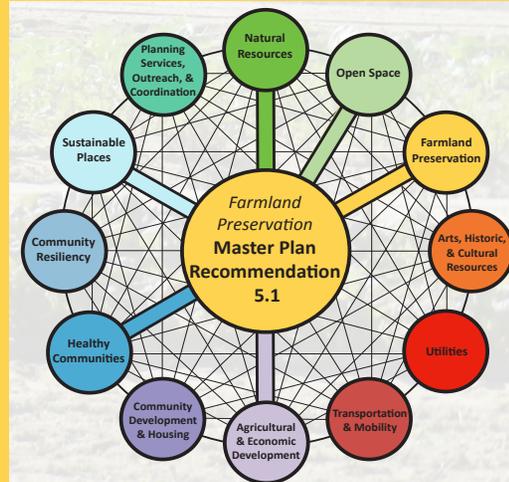
State Agriculture Development Committee (SADC)	Establish framework of county comprehensive farmland preservation plans and develop schedule for updates through their statutes, rules, and policies; provide tools, data, and resources.
Municipalities	Provide feedback; coordinate municipal farmland preservation plans with the <i>Monmouth County Master Plan</i> and <i>Monmouth County Preservation Plan</i> .
Farmland Owners	Provide input into the <i>Monmouth County Farmland Preservation Plan</i> and annual updates.
Nonprofits	Provide input into the <i>Monmouth County Farmland Preservation Plan</i> and annual updates.
Agricultural Agencies	Provide insight into past, current, and future agricultural trends and practices; administer programs detailed in Chapter 7 of the <i>Monmouth County Farmland Preservation Plan</i> .

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 5.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning	●	●	●		●		●	●	●		●	●		
Coordination	●	●	●		●		●			●	●	●		
Planning Approach	●	●	●	●	●		●			●	●	●		
Environmental Resources					●		●				●	●		
Farmland Preservation					●		●				●	●		
Arts, Culture, & Historic							●				●	●		
Preservation Investments							●				●	●		
Vibrant & Sustainable Communities								●	●		●	●		
Community Preservation								●	●		●	●		
Housing									●	●	●	●		
Economic Development											●	●		
Agricultural Development											●	●		
Recovery & Resiliency													●	●
Growth Investments														●

Implementation Strategy

- Prepare annual plan updates per state regulations, circulating drafts to preservation partners each September.
- Revise target farms list and project areas as needed.
- Update geographic information system (GIS) layers as they relate to the *Monmouth County Farmland Preservation Plan*.
- Have all stakeholders use the *Monmouth County Farmland Preservation Plan* as a guide and resource for relevant projects and planning initiatives.
- Provide information and findings from annual plan updates for use in the proposed *Agricultural Sustainability Plan* for Monmouth County (discussed further in Element 9.0 Agricultural & Economic Development).



Strongest Associated Master Plan Elements

5.0 FARMLAND PRESERVATION

MASTER PLAN RECOMMENDATION 5.2



Sinha Farm, Millstone

Source: Harriet Honigfeld

5.2: Manage and coordinate the purchase of agricultural easements, as guided by the *Monmouth County Farmland Preservation Plan (2008)*.

Purpose

Coordinate the purchase of agriculture development easements in accordance with the eligibility requirements outlined in the *Monmouth County Farmland Preservation Plan* to ensure that an adequate land base is available for current and future agricultural operations.

Monmouth County Departments & Organizations Involvement

Division of Planning	Manage easement acquisition projects from inquiry stage to application to post-closing; conduct outreach to local farmers and municipalities.
Ag. Dev. Board (MCADB)	Approve acquisition projects.
Finance Department	Administer funding; oversee accounts payable and receivable.
Board of Chosen Freeholders	Adopt resolutions approving projects; sign grant agreements.
Department of Public Works and Engineering	Review surveys; conduct surveys as schedule allows; provide feedback on necessary right-of-way and bridge accommodations.
Park System (MCPS)	Partner on joint acquisition projects.
Purchasing Division	Coordinate and process Request for Proposals (RFPs), requisitions, payment vouchers, and contracts with vendors.
County Counsel	Provide legal counsel.

Other Project Stakeholder Involvement

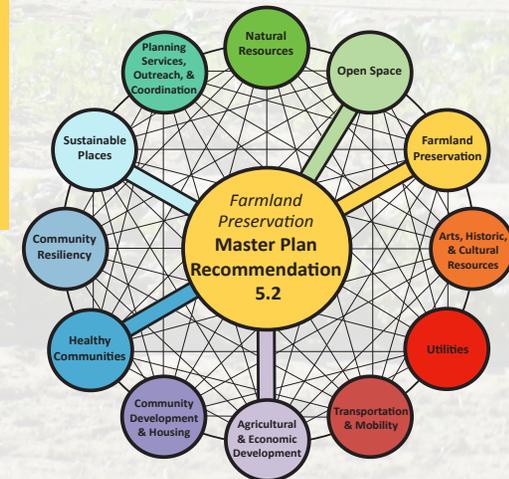
State Agriculture Development Committee (SADC)	Provide grants and funding for projects; process applications; co-sign deeds of easement; approve projects.
Municipalities	Provide funds for projects; apply for grants; conduct outreach to potential applicants.
Nonprofits	Apply for preservation funds through the Grants to Nonprofits program; partner on easement acquisition projects.
U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS)	Provide funds for eligible projects; co-sign certain deeds of easement.
U.S. Department of Defense	Potential partner on easement acquisition projects.
Landowners	Apply to programs; preserve farms.
Vendors	Appraisers, surveyors, title companies, and other vendors provide real estate services.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 5.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic														
G. Preservation Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Continue to work with partners to process applications and coordinate real estate transactions.
- Continue to work with partners to conduct outreach to targeted farm owners.
- Seek alternate funding strategies, techniques, and new partnerships.



Strongest Associated Master Plan Elements

5.0 FARMLAND PRESERVATION

MASTER PLAN RECOMMENDATION 5.3



Sinha Farm, Millstone

Source: Harriet Honigfeld

5.3: Continue to provide professional and technical assistance to the Monmouth County Agriculture Development Board (MCADB), municipal partners, and other agricultural community stakeholders.

Purpose

The Division of Planning provides technical and administrative support to the MCADB. The MCADB is mandated to promote and coordinate agricultural preservation activities in the county. Therefore, the Division of Planning provides assistance to all interested municipal partners, nonprofit organizations, and any other community groups, as requested in furtherance of MCADB's mission.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide technical assistance to other Division of Planning staff as it relates to farmland interests; prepare documents and resources for the benefit of the decisions and topics before MCADB review.
MCADB	Review and provide input on various policies, programs, and legislation that could impact farming in Monmouth County.
Rutgers Cooperative Extension (RCE)	Serve as an advisor to the MCADB for technical support and industry standards in a range of agricultural areas.

Other Project Stakeholder Involvement

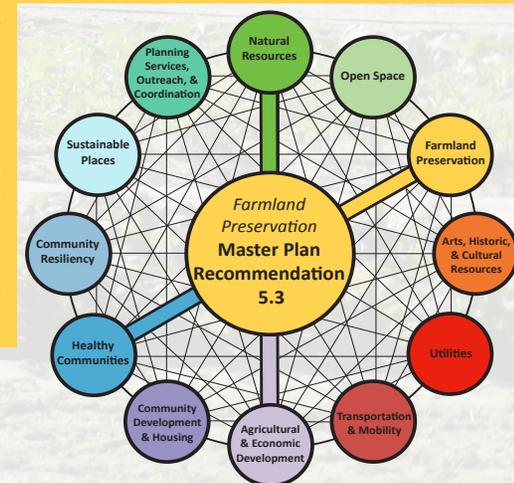
Municipalities	Provide feedback on potential projects and coordinate regarding agricultural disputes through the Right to Farm Act or mediation.
Farmland Owners	Contact staff regarding interest in preservation, right-to-farm matters, agricultural mediation, and other agricultural related matters.
Nonprofits	Coordinate with the Division of Planning on projects of shared interest.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 5.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning				Environmental Resources	Farmland Preservation	Arts, Culture, & Historic	Preservation Investments	Vibrant & Sustainable Communities	Community Preservation	Housing	Economic Development	Agricultural Development	Recovery & Resiliency	Growth Investments
A.	●	●	●	●	●	●	●	●		●	●	●	●	
B.	●	●			●		●	●				●		
C.	●				●							●		
D.		●			●							●	●	
E.	●						●					●		
F.		●		●								●		
G.		●										●		
H.												●		
I.		●										●		
J.		●										●		
K.												●		
L.												●		
M.												●		
N.								●						

Implementation Strategy

- Continue to support the mission of the MCADB by providing administrative and technical support to the board.
- Continue to provide technical assistance to participating Municipal Planning Incentive Grant (PIG) Program municipalities on plan development, annual plan updates, and plan implementation.
- Continue to provide technical assistance to nonprofit organizations interested in preserving farmland.



Strongest Associated Master Plan Elements

5.0 FARMLAND PRESERVATION

MASTER PLAN RECOMMENDATION 5.4

5.4: Continue annual monitoring of preserved farms to ensure deed compliance and respond to post-closing requests.

Purpose

The deed of easement obligates the easement holder to conduct an annual site visit to verify compliance with the terms of the deed of easement. The deed of easement also requires the county and the state to approve certain changes to the structures and use of the land within the easement area. Therefore, the Division of Planning handles post-closing requests to approve particular changes within a farm's restricted areas and works to resolve deed violations.

Monmouth County Departments & Organizations Involvement

Division of Planning	Staff to monitor easements; meet with landowners and farmers; process post-closing requests; address easement violations; conduct outreach.
Agriculture Development Board (MCADB)	Vote on post-closing requests; advise on easement violations and deed interpretations.

Other Project Stakeholder Involvement

State Agriculture Development Committee (SADC)	As coholders of easements, vote on post-closing requests; review monitoring paperwork; promulgate rules related to new legislation.
Landowners and Farmers	Comply with deeds of easement; ask questions; submit paperwork and applications as necessary.
New Jersey Department of Agriculture	Houses the SADC; provide sources for farmers on subjects such as animal health, plants, and marketing; oversees animal waste management rule compliance.
Rutgers New Jersey Agricultural Experiment Station (NJAES)	Offer extension services and soil testing; process water withdrawal paperwork.
U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS)	Coholders of a number of our deeds of easements; prepare soil and water conservation plans; advise farmers on soil and water protection methods; connect farmers to grant programs.
New Jersey Farm Bureau	Serve as a resource for farmers and landowners.



Sinha Farm, Millstone

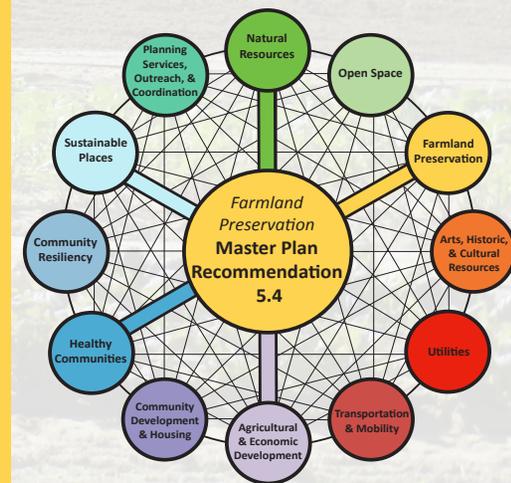
Source: Harriet Honigfeld

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 5.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination		●		●				●				●		
C. Planning Approach						●				●		●		
D. Environmental Resources				●				●						
E. Farmland Preservation					●									
F. Arts, Culture, & Historic						●								
G. Preservation Investments														
H. Vibrant & Sustainable Communities								●						
I. Community Preservation									●					
J. Housing										●				
K. Economic Development											●			
L. Agricultural Development												●		
M. Recovery & Resiliency													●	
N. Growth Investments														●

Implementation Strategy

- Conduct annual visits to preserved farms to ensure compliance with the terms of the deed of easement.
- Submit monitoring reports to SADC and interested parties.
- The MCADB and SADC with assistance of Division of Planning staff and Monmouth County Counsel resolve deed violations and process post-closing requests
- Keep landowners apprised of latest regulations and information.
- Process post-closing requests including house replacements, agricultural labor housing, divisions of premises, and energy generation facilities, as prescribed by the deeds of easement.
- Connect farmers and landowners to resources so they can better steward their lands and manage their operations.



Strongest Associated Master Plan Elements

5.0 FARMLAND PRESERVATION

MASTER PLAN RECOMMENDATION 5.5



Sinha Farm, Millstone

Source: Harriet Honigfeld

5.5: Continue to hear right-to-farm complaints, review requests for Site-Specific Agricultural Management Practice (SSAMP) recommendations, and provide program resources to support the Right to Farm Act.

Purpose

The Right to Farm Act (N.J.A.C. 4:1C-10.4) mandates that County Agriculture Development Boards (CADBs) hear requests relative to compliance with generally accepted practices on commercial farms, prepare SSAMP recommendations, and resolve right-to-farm complaints. Protection under the Right to Farm Act also helps promote generally accepted agricultural management practices (AMPs) in farming and land stewardship.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide technical assistance to guide the Monmouth County Agriculture Development Board (MCADB) and other stakeholders through the right-to-farm process.
Other County Departments	Provide technical assistance to help the MCADB to resolve right-to-farm issues.
MCADB	Board members hear complaints and SSAMPs for right-to-farm issues that arise in the county.
Rutgers Cooperative Extension (RCE)	A RCE representative serves in an advisory capacity to the MCADB as a nonvoting member of the board; serves as a vital role in providing agricultural expertise in right to farm site visits and hearings.

Other Project Stakeholder Involvement

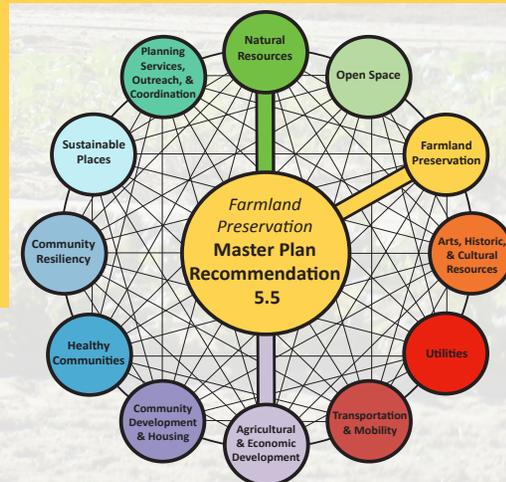
State Agriculture Development Committee (SADC)	Coordinates the right-to-farm program in partnership with CADBs, and if appealed go to the SADC. SADC also provides support to MCADB staff; drafts and approves SSAMP requests in addition to drafting and updating right-to-farm regulations.
Municipalities	Recipient of notifications when a complaint or SSAMP is filed; participation in the research and hearing process.
USDA - Natural Resource Conservation Service (NRCS)	Provide technical assistance to the MCADB and farmers that are involved in right to farm matters when applicable to generally accepted AMPs.
Commercial Farms	If an operation meets the definition of a commercial farm as defined by the Right to Farm Act, it is eligible to seek protection for generally accepted agricultural activities.
Neighboring Landowners	If a neighboring landowner or member of the community takes issue with an agricultural activity on a commercial farm, they may seek relief through the Right to Farm Act; recipient of notification of public hearings.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 5.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Process SSAMP applications and right-to-farm complaints.
- Conduct outreach to farmers, municipalities, attorneys, etc. to promote AMPs, increase understanding of relevant statutes, and encourage good relationships with neighbors.
- Promote the SADC's Agricultural Mediation Program to help resolve Right to Farm-related issues



Strongest Associated Master Plan Elements

5.0 FARMLAND PRESERVATION

MASTER PLAN RECOMMENDATION 5.6



Sinha Farm, Millstone

Source: Harriet Honigfeld

5.6: Proceed with planning efforts to understand, evaluate, and support our agricultural industry in a regional context to improve long-term agricultural sustainability.

Purpose

Through the successes of the Farmland Preservation Program, the county now has a permanent land base available for farming. Support of the agriculture business industry is a natural next step that will protect the county's investment in preserved lands and ensure the viability of unpreserved lands, making them less likely to succumb to development pressures. The Division of Planning will support planning efforts that promote the agriculture industry as a whole. This includes such efforts as the preparation of the *Agricultural Sustainability Plan (ASP)* for Monmouth County (as detailed in *Master Plan Recommendation 9.1*), providing and recommending resources to farmers through the expertise of Division of Planning staff, and supporting agriculture industry efforts through the Division of Economic Development.

Monmouth County Departments & Organizations Involvement

Division of Planning	Research planning techniques to promote the agriculture industry; research and write grants to fund agricultural industry viability issues; develop an <i>ASP</i> for Monmouth County.
Agriculture Development Board (MCADB)	Provide guidance and feedback regarding industry needs and sustainability planning issues.
Division of Economic Development	Pursue grants to conduct industry research and offer agriculture business development training and resources.

Other Project Stakeholder Involvement

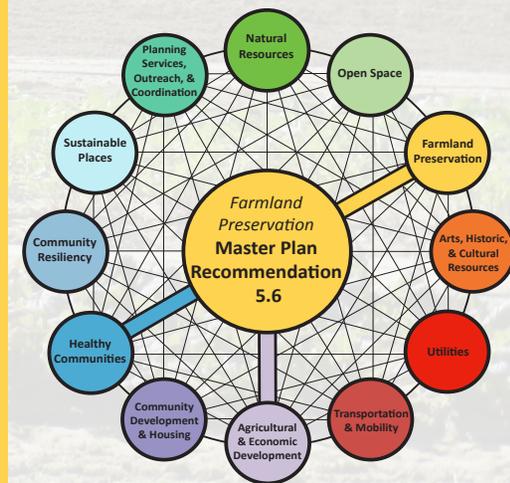
Agriculture Business Owners and Operators	Provide feedback and guidance to offer a better understanding of their needs and challenges.
Municipalities	Coordinate and encourage planning practices and decisions that support the agricultural industry.
Agriculture Agencies and Interest Groups	Provide industry feedback.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 5.6

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Begin working towards the development of the *ASP* for Monmouth County, as identified in the *Agricultural & Economic Development Master Plan Element Recommendation 9.1*.
- Continue to coordinate with municipalities, agriculture interest groups, and other applicable stakeholders to facilitate rural planning initiatives in accordance with the *Monmouth County Farmland Preservation Plan* and any applicable municipal farmland preservation plans.
- Promote the NJ Land Link: Online Listings and State Agriculture Development Committee (SADC) land linking initiatives.
- Seek ways to support the agricultural industry that would include, but not be limited to: seeking grants, connecting producers with resources, and establishing stronger partnerships with agriculture industry stakeholders and business groups to ensure resources are reaching our Monmouth County farmers.



Strongest Association to Master Plan Elements

5.0 Farmland Preservation

5.1 Introduction

After New Jersey passed the Farmland Preservation Bond Act in 1981 that authorized counties to create county agriculture development boards, the Monmouth County Board of Chosen Freeholders acted quickly to create the Monmouth County Agriculture Development Board (MCADB). Soon after in 1987, the MCADB preserved its first farm, the 63-acre Meade farm (now Reid Sod Farm) on Howell Road in Howell. Since that time, the county has consistently supported the preservation of agricultural land through the acquisition of development easements on eligible farmland. The success of the Farmland Preservation Program is reliant upon collaborative project partnerships among the municipality, county, state, and other allies. As our county land base continues to creep towards complete build-out, we are continually reminded of the importance of farmland preservation in ensuring that current and future generations benefit from the aesthetic, health, economic, and environmental benefits that access to fertile agricultural lands brings to the community.

5.2 Existing Conditions

5.2.1 Monmouth County Agriculture Development Board (MCADB):

The MCADB is the appointed arm of the county's Farmland Preservation Program and reports directly to the Monmouth County Board of Chosen Freeholders. The MCADB governs agricultural preservation activities in the county, issues decisions in Right to Farm cases, and makes determinations about deed of easement compliance. The MCADB consists of nine voting members, one nonvoting advisory member, and two alternates. Three members and one alternate are first nominated by the Monmouth County Board of Agriculture (see 9.4.2 Partnership Efforts) and appointed by the Freeholders. At least one of the members is a farmer with extensive experience in Monmouth County. Four members and one alternate are selected by the Board of Chosen

Freeholders in consultation with staff, existing MCADB members, and the Board of Agriculture. The MCADB's enabling resolutions give examples of suitable members such as a rural community leader, a realtor, a lender, a representative with environmental interests, a farmer, and a marketing expert. An eighth member of the MCADB represents the Freehold Soil Conservation District. A ninth member represents the Monmouth County Planning Board. The county's most senior Agricultural Agent serves as a nonvoting advisor.

The Division of Planning provides support to the MCADB and handles the day-to-day administration of the programs overseen by the MCADB. For instance, staff serves as the custodian of all MCADB records and documents, prepares monthly meeting agendas, and drafts meeting minutes and resolutions. Staff manage easement acquisition projects, monitors the county's many easements, prepares planning documents and updates, and assembles the maps and documents needed for the board to hear Right to Farm cases and make decisions on preservation projects, stewardship matters, and policy considerations.

The impressive, professional work that the MCADB conducts on a regular basis recently made national news when former "Daily Show" host, entertainer Jon Stewart, and his wife submitted an application to the Board proposing to establish an agricultural education and visitor's center on the 45-acre historic Hockhockson Farm in Colts Neck. The new operation will continue the existing vegetable production activities on the property, offer lectures and classes, and integrate a number of rescue animals into the farm system. During the May 2016 MCADB meeting, the Board unanimously approved the aspects of the proposal that fell under its purview. Shortly thereafter, on May 9, 2015, Jon Stewart described his interactions with the MCADB on a special live taping of [The Axe Files](#) hosted by David Axelrod:

My wife...."she is starting a sanctuary for farm animals. So we had to go before a local Monmouth County Agriculture Board.



The epitome of real America civic engagement, civic society. The work that these individuals...they were all farmers. The board is ten farmers. The work that they put into preserving and keeping the farm life and what they do, their way of life going, was inspiring. If you want to talk about inspiration, we can put it right on them. The questions they raised with us were thought provoking. They helped shape this project in a way that improved it massively, and they dealt with a tremendous amount of paper work that made no sense to anyone. And they did it with humor and a certain resignation, but they did it."

5.2.2 Supportive Reports and Guiding Documents

Monmouth County Farmland Preservation Plan: In 2008, the Monmouth County Planning Board adopted the [Monmouth County Farmland Preservation Plan \(2008\)](#) as an element of the *Monmouth County Growth Management Guide (1982)*. It replaced the previous plan element from 2000. State administrative code N.J.A.C. 2:76-17.4 dictates the content of county comprehensive farmland preservation plans, a requirement for counties seeking funding through the state's [County Planning Incentive Grant \(PIG\) Program](#). The most recent *Monmouth County Farmland Preservation Plan* includes eight chapters and several appendices covering topics such as the county's agricultural land base, industry trends, land use planning, past and future preservation program activities including acreage goals and project areas, economic development, natural resource conservation, and agricultural industry sustainability and retention. Per the regulations, the plan contains a map of the county's Agriculture Development Areas (ADAs), a funding plan, and criteria for preservation. It also includes a list of farms targeted for preservation by the county.

County Planning Incentive Grant (PIG) Program: Every December, Division of Planning staff submits to the [State Agriculture Development](#)

[Committee \(SADC\)](#) an annual PIG Program application along with forms for each preservation project area. The submission follows notification to municipal and other interested parties and a 90-day comment period. The update presents an opportunity to edit the target farms list and associated geographic information system (GIS) data and maps. During the course of the year, properties may have been preserved, developed, determined to be ineligible, or missed from the original list. The update is also a chance to add new project areas, as the county did with the addition of the Wall Township Project Area in 2010. For the past few years, the submissions have included an Open Space Addendum to the target farms list that highlights parcels of joint interest to the Monmouth County Park System and Farmland Preservation Program. These properties often lie along stream corridors featured in the [Monmouth County Open Space Plan \(2006\)](#), further discussed in the 4.0 Open Space Element.

Municipal Farmland Preservation Plans: Seven municipalities in the county have adopted their own comprehensive farmland preservation plans as elements of their master plans. Colts Neck, Holmdel, Howell, Manalapan, Marlboro, Millstone, and Upper Freehold prepared their plans in compliance with state guidelines and are thus eligible for funding through the [Municipal Planning Incentive Grant Program](#). The content of these documents mirrors that of the *Monmouth County Farmland Preservation Plan* but reflects more localized data and knowledge.

Panhandle Region Plan: Adopted in 2011, this regional planning study covers the western reaches of Monmouth County including Upper Freehold, Millstone, Allentown, and Roosevelt. One of the plan's three primary goals is to "promote farmland retention and support for the agricultural industry, and retain the areas rural and historic landscape and character." The document includes a chapter on agriculture that discusses overarching stakeholder concerns, the equine industry, agri-tourism, soils, Monmouth County and municipal farmland preservation



efforts, zoning strategies, agribusiness, the Upper Freehold Historic Scenic Byway, and emergency animal response.

5.2.3 Preserved Farmland

Acres Preserved: As stated in the enabling resolution for the county’s Farmland Preservation Program, the continuing loss of farms and high-yield farmland is of great concern to Monmouth County. Therefore, starting in the 1980s Monmouth County has made a substantial investment in securing an agricultural land base for current and future generations of farmers. As of December 2015, there were 14,890 acres of preserved farmland in Monmouth County and 204 agricultural easements. This represents 38% of the remaining 38,961 acres of Monmouth County farmland reported by the 2012 Census of Agriculture and 37% of the 40,000 farmland-assessed acres in the county. Much of this preservation activity transpired after the preparation of the

Monmouth County Farmland Preservation Plan (2008). Since June 2007, the county and its partners increased the number of acres restricted by agricultural easements in Monmouth County from 10,602 to 14,890 acres, a 40% increase. Figure 5.1: Preserved Farms in Monmouth County Map, 2015, shows the location of existing preserved farmland in Monmouth County as of December 31, 2015.

Figure 5.2: Monmouth County Preserved Farmland as of 12/31/2015 shows farmland preservation activity by municipality from June 2007 to December 2015. Upper Freehold continues to lead the county in preserved agricultural land with a tally just shy of 10,000 acres. The municipality has seen significant activity in the last eight and a half years with 2,372 acres of preserved farmland added to the rolls. These new easements include 608 acres of the former Princeton Nurseries lands and 303 acres of Baier Lustgarten Farms and Nurseries land. These protected farms not only lie in the heart of a regional farmland belt but also enhance Monmouth County Park System’s open space efforts



Monmouth County and Upper Freehold Township preserved the organic Harvest Hill Farm in 2008 using an Installment Purchase Agreement

Source: Harriet Honigfeld

Figure 5.2: Monmouth County Preserved Farmland as of 12/31/15

Municipality	December 2015 Acreage	June 2007 Acreage	Increase
Colts Neck	893	813	80
Freehold Township	226	35	191
Holmdel	328	190	138
Howell	637	393	244
Manalapan	1,242	731	511
Marlboro	237	167	70
Middletown	101	0	101
Millstone	1,196	648	548
Roosevelt	257	257	0
Upper Freehold	9,718	7,346	2,372
Wall	55	22	33
Totals	14,890	10,602	4,288



Figure 5.1: Preserved Farms in Monmouth County Map, 2015

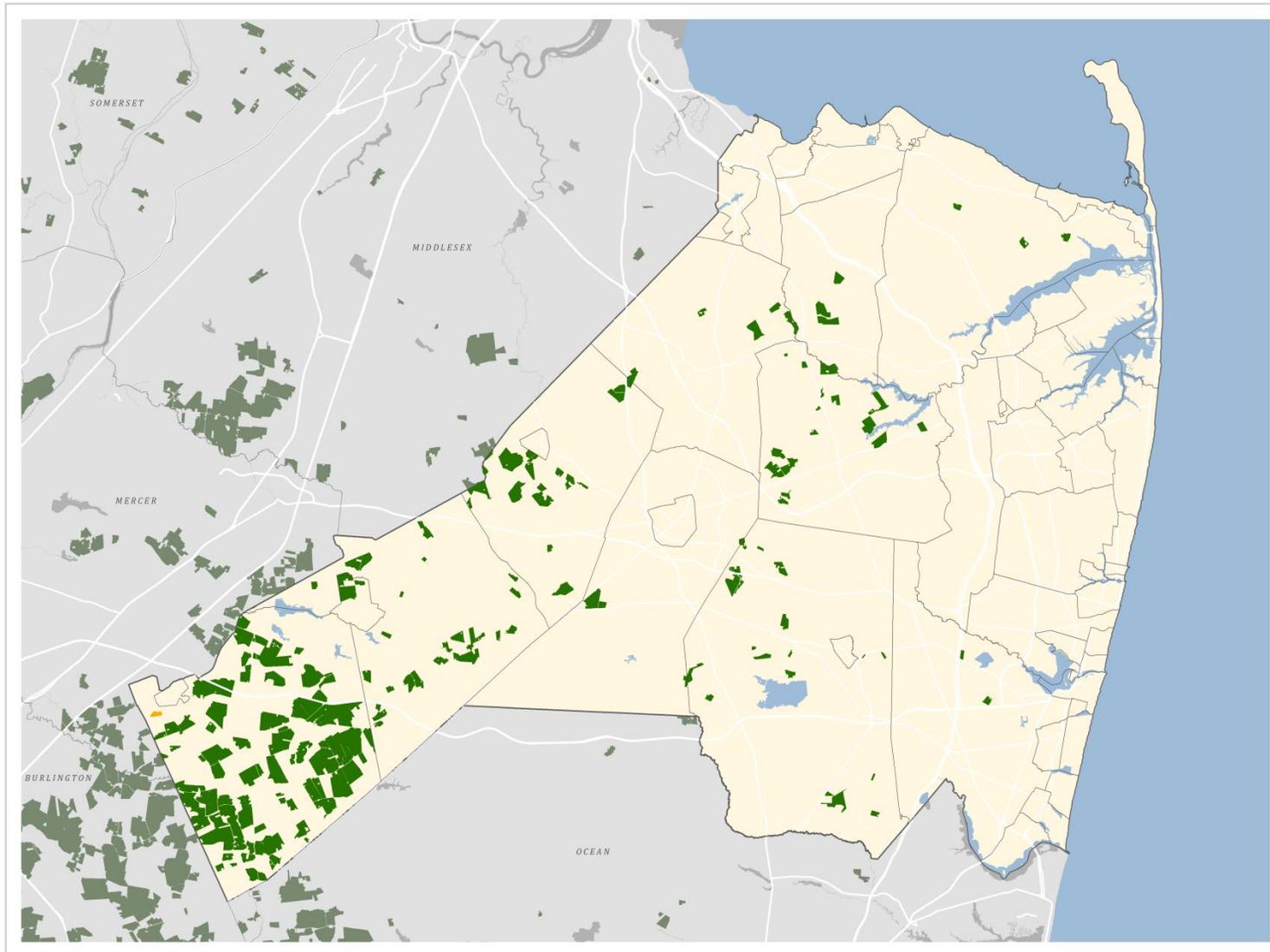


FIGURE 5.1
Preserved Farms in
Monmouth County Map
2015

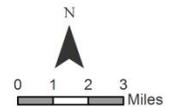
Monmouth County
Master Plan

May 2016

Data current through 12/31/2015

-  Preserved Farm
-  Eight-Year Program Farm
-  Preserved Farms in Other Counties

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, New Jersey Office of GIS, and the SADC. The County GIS parcel data layer is intended as informational purposes only and is not intended to replace any legal record.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



Flemer Entities/Princeton Nurseries

In its heyday, Princeton Nurseries was one of the largest and most prestigious commercial nurseries in the country. However, the nursery's announcement in 2007 that it would be closing threatened to leave a crucial hole in a band of farmland and open space that spans across four counties. Much of this land surrounded Crosswicks Creek, of which a seven-mile stretch runs through Monmouth County. Knowing the operation's shut down was imminent, state, county, local, and nonprofit officials began negotiations with representatives from the Flemer family to preserve the farm. Of the 2,400 or so acres affiliated with the operation, 1,900 acres had no existing deed restrictions.

After many years of work, the project partners came to the closing table in August 2012. The parties signed and recorded 93 different deeds, something of a record. The owners received payment of \$27.8 million, a discounted price, for a mix of outright land sales that allowed for the expansion of parks and establishment of wildlife management areas as well as the sale of agricultural easements to restrict future development and guarantee that the associated parcels would remain in farm use. The majority of the newly preserved land is situated in Upper Freehold, but some also lies in Hamilton Township (Mercer County) and North Hanover Township and Chesterfield (Burlington County).

In Monmouth County itself, the deal enabled the purchase of eight agricultural easements on 627 acres of highly productive soils, additions to Crosswicks Creek Park, the creation of the 512-acre Pleasant Run Wildlife Management Area, and delineation of the Countryside Trail along historic carriage roads.

The project relied on the cooperation of a myriad of agencies and organizations. Two state agencies, the SADC and NJ Department of Environmental Protection (NJDEP) Green Acres Program led the way with support from departments such as the Attorney General's office. Three counties were intimately involved in the project: Monmouth, Mercer, and Burlington. In Monmouth County's case, staff from multiple departments and boards coordinated efforts; participants including the MCADB, the Division of Planning, the Monmouth County Park System, the Board of Chosen Freeholders, Administration, Finance, and Engineering. Upper Freehold was among the municipalities that contributed funds and support. Two nonprofits, the Monmouth Conservation Foundation and D&R Greenway Land Trust, helped facilitate the deal. Finally, the landowners and their attorneys invested a tremendous amount of time and effort into preserving the land holdings.

Today, the Pleasant Run Wildlife Management Area is open for public access. Crosswicks Creek Park in Upper Freehold now extends over 1,500 acres and is a popular spot for hiking, canoeing and fishing. The preserved farm parcels that once made up Princeton Nurseries have recently transferred to new owners with plans for their own nursery operations as well as wineries and other ventures. All of this was made possible by the project partners who had the vision, expertise, and financial resources to save Monmouth County's largest farm.



including Crosswicks Creek and Lahaway Creek greenways. During this same period, other municipalities have also made notable strides in protecting farms from development. Monmouth County now has 511 more acres of agricultural easements in Manalapan for a total of 1,242, and 548 more acres in Millstone for a total of 1,196. The county saw three easements secured in Middletown in the last decade. Also, Wall and its partners acquired the first easement in the municipality to receive state Farmland Preservation Program funding.

Easement acquisition through the Farmland Preservation Program involves many steps, some of which go beyond a typical real estate transaction. Aside from making an offer, executing a contract, surveying a property, obtaining a title commitment, securing funding and closing, projects involve a substantial volume of paperwork and agency review. The process adheres to statutory requirements of the various grant programs, funding sources and government entities. Additional steps include parcel evaluation, application preparation and submission, Green Light Approval (the name given to the SADC's preliminary acceptance of a project), appraisals, appraisal certification, final approval from all project partners, deed preparation, and funds release resolutions. Not surprisingly, it can take a year or two to bring a project to closing. The state required that Monmouth County set 1, 5, and 10-year goals for the acquisition of easements in its comprehensive farmland preservation plan. In the *Monmouth County Farmland Preservation Plan (2008)*, the five-year cumulative acquisition goal was set at 15,765 acres. The ten-year goal was set at 18,840 acres. Given funding limitations and the declining pool of eligible preservation candidates, these targets have proven to be a stretch. In our last few annual updates of the plan, we lowered to goals to 3,000 more acres within the five-year period after publication of the plan and 6,000 additional acres within the ten-year period after publication. As Monmouth County has averaged more than 500 acres per year of agricultural easement acquisitions since 1987, we are close to hitting these projections.

Acquisition Costs: Since the inception of the Farmland Preservation Program, almost a quarter of a billion dollars has been spent on permanently deed restricting farms in Monmouth County. The 77 easements purchased after June 2007 cost over \$109 million (see: [List of Cost Per Farm as of 12/31/2015](#)). The state provided 58% of these funds, the county 23%, and the municipalities 18%. Monmouth Conservation Foundation and the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) contributed funds as well. The state money emanated from the Garden State Preservation Trust via its allocations to the SADC. County money derived from the Monmouth County's Open Space and Farmland Preservation Trust Fund and the county's capital budget. Most municipal funds came from local open space and farmland preservation trust funds.



Gladiolas are grown on the Cicalese Farm in Colts Neck

Source: Harriet Honigfeld



Monmouth County’s average easement price from July 2007 to December 2015 was \$30,949 as compared to \$20,686 over the life of the program. Over the same time period, the median easement price per acre was \$27,811 as compared to \$16,600 over the life of program. Easement considerations in the late 2000s were higher than in recent years for several reasons. Some of the values reflected appraisals prepared prior to the recession. Appraisals in communities such as Upper Freehold benefited from a grandfathering provision that allowed values to be calculated based on 2004 zoning. Furthermore, a number of purchases since 2007 occurred in locations with particularly high land values.

Grant Programs: Several grant programs have supported preservation activity in the years since July 2007. Monmouth County and its partners preserved 1,000 acres or more through the County Easement Purchase Program, the Direct Easement Purchase Program, and the Municipal Planning Incentive Grant Program. Figure 5.3: Easement Acreage Totals Per Grant Program shows the various grant programs and their use in

farmland preservation as of December 2015. The Monmouth County Easement Purchase Program, once the mainstay of the state Farmland Preservation Program, has since been phased out. Monmouth County preserved 645 acres through the Monmouth County Planning Incentive Grant Program, the successor to the County Easement Purchase Program. Three new Grants to Nonprofits Program easements span 105 acres. The MCADB also preserved one farm without SADC participation, Harvest Hill Farm in Upper Freehold, using an Installment Purchase Agreement (IPA). With the IPA, the county paid a portion of the total consideration in cash to the seller at closing, invested a pre-determined amount of money in bonds, and makes installment payments twice a year to the landowner. A more detailed description of the various types of preservation programs and options including grants, purchase types, transfers/exchanges, and the eight-year program can be found in the [Monmouth County Farmland Preservation Plan \(2008\)](#).

5.2.4 Farmland Preservation Criteria

All farmland helps to contribute to the overall agricultural community in the region; even small or marginal lands can be productive agricultural operations with the some creativity and ingenuity. However, limited public funds demand that lands be prioritized using eligibility and ranking criteria. The primary goal of the state and county is to preserve the most agriculturally productive farmland.

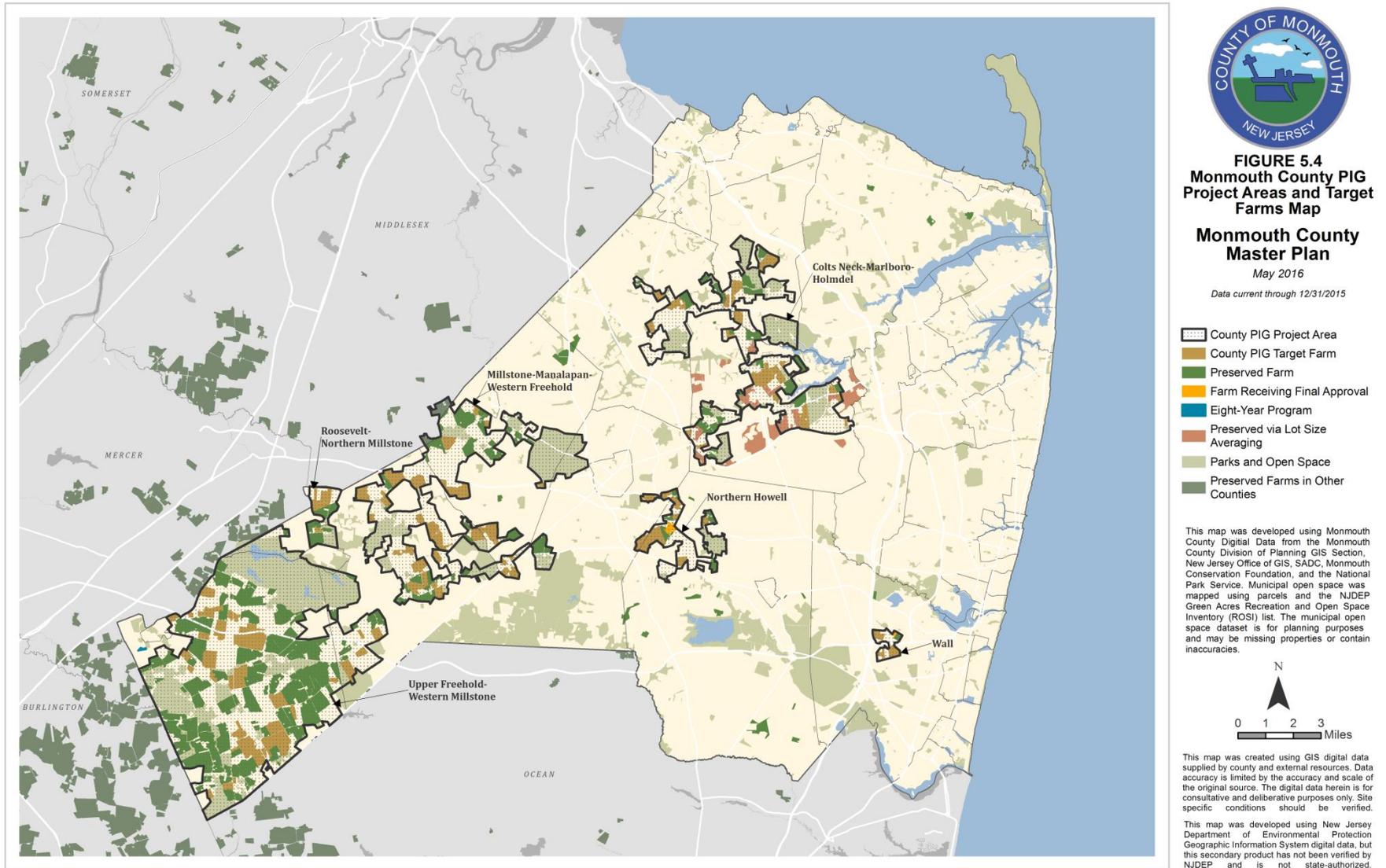
Therefore, some of the main criteria used to determine the suitability of a farm for preservation are: soil types, parcel size, potential for development, and amount of wetlands. In addition, the county strives to preserve contiguous parcels of farmland to create dense groupings of land in active agricultural production. As a result, applications benefit from proximity to other preserved farmland. Figure 5.4: Monmouth County PIG Project Areas and Target Farms Map, shows target farms that have been identified as potential candidates for preservation based on these criterion.

Figure 5.3: Easement Acreage Totals Per Grant Program

Grant Program	June 2007 Acres	Dec 2015 Acres
County Easement Purchase Program	7,527	8,507
County Planning Incentive Grant Program	0	645
Municipal Planning Incentive Grant Program	1,465	2,829
Direct Easement Program	1,218	2,378
Fee Simple Program	249	249
Interagency Transfer	110	110
Preserved by Municipality	10	10
Preserved by Monmouth County	23	23
Grants to Nonprofits Program	0	105
Preserved by MCADB	0	36
Permanently Preserved Acreage	10,602	14,892



Figure 5.4: Monmouth County PIG Project Areas and Target Farms Map



The Monmouth County Farmland Preservation Program utilizes the eligibility criteria established by the SADC as a baseline for evaluating potential candidates. A detailed explanation of the SADC's [eligibility criteria](#) can be found on the agency's website. Additionally, each SADC funding program has slightly different eligibility criteria. More information about the program's specific requirements can be found on pages 54 to 55 of the [Monmouth County Farmland Preservation Plan \(2008\)](#).

Monmouth County recognizes that farms that do not qualify for the various farmland preservation grant programs are still an important part of the overall agricultural economy. Accordingly, all farms and related businesses will benefit from the county's new Grown in Monmouth initiative that is detailed in Element 9.0 Agricultural & Economic Development. This effort will assess the potential for new and innovative agricultural businesses and markets, establish a countywide branding and marketing strategy, and provide business development support services.

5.3 Emerging Issues and Long Range Challenges

5.3.1 Agricultural Development Areas (ADAs) Review: Despite the progress made to date in preserving the county's agricultural land base, there are close to 25,000 acres of farmland assessed lands that are unrestricted and open to the possibility of development. Monmouth County will continue to use a variety of tools to set priorities and protect these valuable lands. To meet statutory guidelines, the county has designated ADAs that serve as the focal point for farmland preservation efforts. ADAs encompass productive lands, do not conflict with municipal zoning ordinances, and remain free of commercial and suburban development. Monmouth County's last major revision of its ADAs took place in 2006. As land use patterns continue to shift and development fractures blocks of continuous farmland, the MCADB and SADC may need to revisit the boundaries of the county's ADAs.

5.3.2 Limited Sources of Funding: The availability of funds may further influence the pace of preservation. Passage of a 2014 voter referendum was expected to lead to a stable source of funding for farmland preservation and open space preservation in the state. The intention was for a percentage of New Jersey's Corporate Business Tax revenue to be set aside for the State Agriculture Development Committee (SADC) and NJ Department of Environmental Protection (NJDEP) Green Acres Program. This would guarantee an annual allotment of funds for these programs although at lower levels than in the past decade. Unfortunately, an implementation bill has yet to be adopted, and the Governor's budget for fiscal year 2016 ended up allocating only a portion of the expected funding.

5.3.3 Implementation of Innovative Land Use Preservation Techniques: Given funding limitations, communities are exploring alternatives to agricultural easement acquisition for protecting important lands. One newly strengthened tool is noncontiguous clustering whereby one parcel is preserved while its development rights are transferred to a different, noncontiguous parcel that is developed at a higher density than otherwise permitted. As described on the [NJ Future website](#), "In 2013 the state legislature passed an update to the cluster development provisions in New Jersey's Municipal Land Use Law, giving municipalities greater authority to include contiguous and noncontiguous clustering and lot-size averaging in their land use regulations. Municipalities now have the option of directing development through their existing zoning ordinances, or of offering landowners and developers additional benefits via these updated clustering opportunities."

5.3.4 Extent of Post Preservation Activities: The county's involvement with a preserved farm does not end at closing. The deed of easement requires the holder (i.e. the county, state, or nonprofit) to monitor each farm on an annual basis. At this time, county staff monitors 180 different easements and completes inspection forms it submits electronically to the SADC. The purpose of the visits is twofold: to



ensure compliance with the terms of the deed and to conduct outreach to landowners and farmers. The visits allow MCADB staff to obtain updated ownership and contact information, share news, answer questions, and direct landowners and farmers to helpful resources. The inspections also enable staff to identify problems on the farm and work with owners to resolve them. Because staff maintains strong relationships with landowners, usually a problem can be resolved through verbal and written communication. Occasionally, a formal MCADB determination or legal action is necessary.

Staff also communicates with landowners and their representatives throughout the year, fielding calls and emails related to a host of topics including potential property sales, proposed new buildings, leases municipal requirements, drainage issues, evolving business operations, farmland assessment, and legal and accounting concerns. Staff refers these inquiries to other colleagues and professionals when appropriate. For example, the USDA-NRCS, Rutgers Cooperative Extension (RCE), the New Jersey Farm Bureau, the New Jersey Department of Agriculture, and municipal zoning officials often provide assistance.

The deeds of easement and state legislation dictate that the MCADB take formal action on certain matters related to preserved farms. Each year the board considers requests for agriculture labor housing units, residential house replacements, and divisions of premises. Staff processes the requests then places them on an MCADB meeting agenda. The MCADB then approves or rejects the request by adopting a resolution. Subsequently, the SADC must take action. Rooftop and ground-mounted solar energy generation facilities approvals are a new type of review. As a result of legislative action, applications for solar facilities on preserved farms, even within exception areas, must be approved by the SADC. The MCADB, however, provides input to the state.

In an effort to be proactive, the MCADB invites landowners and

potential buyers of preserved farms to request a formal deed interpretation by the board at a regular public meeting. Recent requests have focused on a potential paintball operation, a veterinary practice that services the region's racehorses, a distillery, a brewery, and a greenhouse operation. [The board determined that the paintball proposal conflicted with the deed of easement but that the other requests were compatible.]

Through the annual inspections and inquiries made by interested parties, the county may discover a deed violation. Some of the more common deed compliance issues relate to trash and debris accumulation, new commercial nonagricultural uses, and unauthorized divisions of premises. Staff has had success in getting landowners to clean up sites by connecting them with the county's Solid Waste Enforcement Team and [Recycling and Solid Waste Planning Division](#). Nonagricultural and recreation use violations have been handled in various ways. For example, a utility that rented preserved farmland for an off-site water main repair project had to remediate the site. A soccer organization that used sod fields for a tournament was told to find a different location for future events. A farmer receiving rent for billboards on his land was deemed to be grandfathered since the use was proven to be on farm at time of preservation. More than one landowner had to remove off-road vehicle ramps from active agriculture land. Others brought their farms into compliance by converting a tennis court and a pool house built outside designated exception areas into storage structures tied to agricultural production.

Transfer of ownership of portions of a lot or lots bound by an agricultural easement, known as divisions of premises, are possible with MCADB and SADC approval. However, the division must meet a two-pronged test: the split must be for an agriculture purpose, and the resultant parcels must be agriculturally viable. Applicants do not always pass both tests and title transfers of portions of a farm through executions of estates, foreclosures, and tax liens are not always easy to



rectify. The MCADB has compelled landowners to re-record vesting deeds to consolidate ownership, municipalities to halt tax lien sales, and contract purchasers to expand their plans and buy all lots bound by an easement.

5.3.5 Increased Reliance on Right to Farm: The intent of the Right to Farm Act (RTFA) is to protect responsible commercial farms from nuisance complaints and unreasonably restrictive municipal ordinances that hinder the ability to continue agricultural production. The protections of the RTFA are particularly important in Monmouth County where the remaining farms are operating in close proximity to different and often conflicting land uses. For example, imagine a residential housing subdivision is built next to a farm and the neighbors begin to complain about the sound of the tractor or the smell of manure. In such a situation, the farmer or neighbor could request that the MCADB hear the matter and make a determination. The farmer must be operating according to generally accepted agricultural management practices in order for the activity to be protected by the RTFA. Depending on which party contacts the county first, the farmer or the neighbor, the case will proceed under conflict resolution or [Site-Specific Agricultural Management Practice \(SSAMP\)](#) guidelines. Chapter 8 of the *Monmouth County Farmland Preservation Plan (2008)* provides more detailed information about the RTFA.

Since the adoption of the *Monmouth County Farmland Preservation Plan* in April of 2008, New Jersey adopted new rules for Right to Farm, [N.J.A.C. 2:76-2.3 to 2.8](#), which became effective on April 7, 2014.

The rule adoption changed some of the procedures for how the RTFA is promulgated at the county-and state-level. In addition, the SADC made changes to the rules in response to recent right-to-farm case law. The first main change is a public notice requirement for SSAMP applications. The applicant is now required to send notice to all property owners and other stakeholders within 200 feet of the commercial farm. The SADC

implemented this requirement in response to *Curzi v. Raub*, NJ Superior Ct., App. Div. (2010), to ensure that neighboring property owners are aware of SSAMP requests to be considered before County Agriculture Development Boards (CADBs). The courts have made it clear that the board is responsible for balancing the interests of the farmer and the aggrieved party, so that all parties have ample opportunity to express their concerns to the board and thereby be considered as part of the final decision. The second main change to the procedures relates to the content of the resolutions passed by the MCADB. The procedures now require that the resolutions be detailed, including findings of fact and conclusions of law in addition to referencing any supporting documents that were used to make the board's decision. This requirement was added to ensure that a clear record of the decision is created in the event an appeal is filed.

As the regulations have become more complex, so have the cases that come before the board. The amount of time it takes staff and board to review and prepare for cases has increased significantly as the Right to Farm procedures have required that all complaints or SSAMPs follow an increasingly formal process. The procedural changes have also translated to a more costly process for both the county and the farmer. Legal representation has become more common for all parties involved and administrative costs, such as public noticing and stenography for hearings, are now necessary or required by law.

5.3.6 Focus on Long-Term Agricultural Sustainability: Due to changes in both the equine and nursery industries, tremendous opportunity for emerging sectors has arisen, but the Quarterly Census of Employment and Wages data from 2001-2012 reveal a 30% decline in agricultural related employment in the county. Additionally, more than 13% of the preserved farms in Monmouth County are listed for sale, oftentimes as a result of an equine farm closure. Monmouth County's farms are in transition, leading to job losses and uncertainty about the future of our regional agricultural industry. The changing agricultural landscape is



being fueled by several trends: an aging population of farmers, a depressed nursery industry (which is tied to the vagaries of the real estate market and the disposable income of local residents), and a depressed horse racing industry adversely affected by more lucrative purses and conditions in nearby states prompting a migration of business.

5.3.7 Need for Economic Development: Chapter 4 of the *Monmouth County Farmland Preservation Plan (2008)* focused on economic development topics pertinent to agriculture. Subjects range from marketing, public relations, and education to industry-specific issues. The 9.0 Agricultural & Economic Development Element delves further into agricultural economic development matters.

5.3.8 Limiting Impacts on Natural Resources: Since the adoption of the *Monmouth County Farmland Preservation Plan (2008)*, new rules have taken effect related to animal waste management and solar and wind energy generation facilities. These laws and regulations pertain to both preserved and unpreserved farms in the state. Specifically, the New Jersey Department of Agriculture adopted regulations in March 2009 that require owners of more than a certain number of livestock to prepare and implement manure management plans for their operations. The goal is to reduce nonpoint source pollution that may originate from livestock farms.

Public Law 2009, c. 213, signed in January 2010, identifies allowable limits and criteria for farms wishing to install solar, wind, or biomass energy generation systems. The law impacted preserved farms as well as non-preserved farms that are seeking to maintain farmland assessment status or obtain Right to Farm protection. The SADC, in turn, established application procedures for preserved farms erecting rooftop solar panels and ground-mounted solar arrays, and adopted an agricultural management practice (AMP) for any commercial farm seeking to construct, install, operate, or maintain solar energy



Preservation of the former Princeton Nurseries lands was a top priority for the region in the last decade due to their geographic and economic importance

Source: Harriet Honigfeld

generation facilities, structures and equipment. The SADC also drafted rules for wind energy facilities on preserved farms that have yet to be adopted.

The 2014 Farm Bill brought about some changes to the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) grant programs. The Farm and Ranch Lands Protection Program (FRPP) was replaced by the Agricultural Conservation Easement Program (ACEP). The Wildlife Habitat Incentives Program (WHIP) was folded into the Environmental Quality Incentives Program (EQIP). The EQIP helps agricultural producers maintain and improve their existing conservation systems and adopt additional strategies to address priority resource concerns.



For many years New Jersey's agricultural easements have included a requirement that preserved farms obtain a soil and water conservation plan. The Freehold Township office of the USDA-NRCS typically prepares the plans for Monmouth County in consultation with the landowner and farmer. A Soil Conservationist visits the property to evaluate soil, water, air, plant, and animal resources and proposes alternatives to address the resource conditions. There is a significant backlog of those waiting for soil conservation plans in Monmouth County, and the NRCS has partnered with the Department of Agriculture to ease this bottleneck. It is expected that a portion of future state farmland preservation funding will be set aside for cost share grants to preserved farm owners looking to install and implement projects detailed in their plans.

5.3.9 Long Range Challenges Identified by the Working Group: The Long Range Challenges identified during development of the *Master Plan* by community stakeholders during Working Group workshops are:

- **High Land Values:** The current market value of land and buildings in Monmouth County is \$1,021,640 per farm, which works out to \$21,581 per acre. The median cost per acre of an easement preserved in Monmouth County since 1987 is \$16,600. Monmouth is not the most expensive county in the state, but relative to other parts of the country land costs are very high. Accordingly, preservation funds do not stretch as far as elsewhere. High land values also create barriers to entry for young and new farmers, fuel pressure for landowners to sell to developers, and complicate estate planning since heirs may owe substantial taxes.
- **Dedicated Funding Source:** The state's share of farmland preservation funding has come from intermittent bonds supported by voter referenda over the years. Because of the unpredictability in the quantity and timing of funding, the preservation community pushed for a dedicated source of funding. In November 2014, New Jersey voters approved Public Question No. 2 that proposed dedicating a percentage of the Corporate Business Tax revenue to

replenish the Garden State Preservation Trust. As noted in 5.3.2 Limited Sources of Funding, implementation of the Public Question No. 2 has not been finalized as of this writing and uncertainties remain.

- **Increasing Number of Land Use Conflicts:** The MCADB has heard numerous agricultural disputes in previous years. The demand for Right to Farm protection in Monmouth County continues to be steady, underscoring the importance of the Right to Farm Act (RTFA) in our county. Two of the most intensely disputed cases to come before the MCADB have occurred in the previous three years. Both of these cases came to the board as SSAMP applications and were disputes between a commercial farm and a municipality. The RTFA provides for the option of preempting municipal regulations in situations where the board determines that the regulations are unreasonable towards the farmer and that an agriculturally based reason is present. In both cases, the board determined that the issue warranted preemption of municipal regulations to protect the commercial farmer's ability to continue or expand agricultural production and marketing of their agricultural product.

Recent Right to Farm cases have required numerous lengthy hearings to resolve. The board believes it to be in the best interest of all parties to make every effort to resolve the issue informally before proceeding to a hearing. The [New Jersey Agriculture Mediation Program](#) offers a way to accomplish this through the aid of a trained mediator whose services are provided free to participants. Mediation has been used successfully in the past by the county, but the importance of mediating an issue before bringing it to a hearing has become increasingly important to the board. Monmouth County staff and the board strongly encourage entities involved in agricultural disputes to participate in mediation as a first step. Ideally, disputes will be resolved through mediation. However, even if a matter is not able to be resolved completely



through mediation, some progress can be made before proceeding to a formal hearing that can save time and money for all stakeholders.

- *Protecting Farms that Do Not Meet Eligibility Criteria:* There are many farms of economic, environmental, and cultural importance that do not meet the criteria for preservation through one of the SADC's grant programs. Sometimes a community will pursue and craft its own easement, using language from the Farmland Preservation Program deed of easement as a model. For example, the Borough of Shrewsbury placed a conservation and public access easement on the 12-acre Bonanno farm, an equine operation of local importance. Municipalities should also look to land use techniques to further preservation goals. Some of these tools are already incorporated into local ordinances and some may need to be implemented. Colts Neck, for instance, has preserved large sections of a number of farms using its lot-size averaging zoning provisions. The noncontiguous cluster tool described in Section 5.3.3 Implementation of Innovative Land Use Preservation Techniques is another land use technique used for preserving agricultural lands.
- *Fostering Market Opportunities and Emerging Sectors:* To combat the decline being witnessed in the regional agricultural sector and to support long-term agricultural sustainability of our remaining farms, the Monmouth County Board of Chosen Freeholders successfully applied for a U.S. Department of Agriculture (USDA) grant. The county received funding to compile a working document for Monmouth County's Grown in Monmouth initiative. Key aspects of this initiative include mapping available agricultural products in rural sections of the county, analyzing the food supply chain to identify strategies that will overcome impediments, identifying potential new business opportunities, and creating a marketing plan to develop an awareness of and preference for buying products grown and made locally. See *Master Plan* Recommendation 9.1.
- *Agricultural Adaptability to More Extreme Weather Events:* With Superstorm Sandy and Hurricane Irene still fresh in the minds of Monmouth County residents, farmers are contemplating how to adapt to extreme weather events as well as the potential shift in overall weather patterns. To cope with potential floods, farmers in the Midwest are experimenting with the idea of planting of strips of native plants in strategic locations to prevent soil erosion and slow stormwater runoff. Similarly, they are purchasing equipment with tracks instead of wheels to enable mobility in muddy and wet conditions. On the other hand, periods of drought may lead more farmers to invest in irrigation systems and methods to recapture stormwater and gray water. A potential shift in temperature ranges and frost free dates would impact plant hardiness. Diversifying crops and erecting season-extending growing structures are two means of addressing this issue. ([Iowa's Corn Farmers Learn To Adapt To Weather Extremes, NPR, 2014](#))
- *Agricultural Labor and Associated Housing:* Many farms need to hire full-time and seasonal employees to care for livestock and produce and harvest crops. A shortage in the supply of agricultural laborers is of concern to many farm owners. In addition, high housing and rental costs in Monmouth County, and the need for a round-the-clock presence on certain operations, necessitate housing options for farm laborers directly on site. Most farming communities allow for the construction of agricultural labor units on farms and the deeds of easement allow for agricultural labor housing with permission. Unfortunately, the Council on Affordable Housing (COAH) does not give municipalities' credit for low-to moderate-income housing for agricultural labor housing units. The state should credit affordable labor housing on farms as a means of satisfying affordable housing obligations in rural communities.



5.4 Farmland Preservation Stakeholder Action and Efforts

5.4.1 Monmouth County Farmland Preservation Program

MCADB staff, housed in the Division of Planning, manages all phases of easement acquisition projects from the inquiry stage to application preparation and submission to post-closing administration and monitoring. Staff communicates regularly with local farmers, municipalities, and other agencies through the preservation process and life of the easement. The MCADB and the Board of Chosen Freeholders adopt resolutions approving county participation and financial contributions. The MCADB and staff monitor easements, vote on post-closing requests, and address easement violations. The MCADB hears complaints and SSAMP requests for Right to Farm issues that arise in the county.

In addition, the Division of Planning prepares the *Monmouth County Farmland Preservation Plan* and annual updates. The Division of Planning also assists municipalities with the preparation of their relevant master plan elements to ensure consistency among the documents. The Monmouth County Park System confers on the annual submission of the Open Space Addendum to the target farms list, and partners with the Division of Planning on projects of mutual interest, particularly along identified greenways.

5.4.2 Partnership Efforts

The [State Agriculture Development Committee \(SADC\)](#) is the primary funding partner in the county's easement purchase projects. As co-signators of the deeds, the SADC also votes on post-closing requests, reviews monitoring paperwork, and promulgates rules related to new legislation. The state coordinates the Right to Farm Program in conjunction with the counties, and handles appeals of County Agriculture Development Board (CADB) decisions. The committee provides support to the counties and updates Right to Farm regulations. The SADC, through its regulations, also establishes the content of the

county comprehensive farmland preservation plans and provides data and resources.

The [Monmouth County Farmland Preservation Program](#) and the [Monmouth County Park System \(MCPS\)](#) have a long history of working in tandem to assemble greenways and preserve contiguous farms. The *Monmouth County Open Space Plan (2006)* identifies a number of greenways that are a priority for county preservation. These greenways happen to lie within some of the more rural areas of Monmouth County and encompass waterways such as Crosswicks Creek, Doctors Creek, Lahaway Creek, and the Manasquan River. Accordingly, the waterways and their stream corridors often run adjacent to, and through, farms targeted for preservation. When a parcel is of interest to both programs, the MCPS and Farmland Preservation Program work out the proposed division lines upfront, and negotiate with the landowners accordingly. If the project moves to closing, the tilled land is encumbered with an agricultural easement and the stream corridor is purchased outright by the MCPS. The partners may also make arrangements to enable access for MCPS maintenance vehicles and personnel or allow access to a water source for the farm's irrigation needs.

Municipalities provide feedback on the county's planning documents and coordinate their municipal farmland plans with the *Monmouth County Master Plan*. They also draft their own farmland preservation elements for their local master plans, administer their own Municipal Planning Incentive Grants from the state, conduct outreach with landowners, and provide financial contributions for easement acquisitions.

Nonprofits acquire easements through the state's [Grants to Nonprofits Program](#) or in partnership with the county, municipalities and state. They often conduct outreach to landowners and assist with obtaining appraisals, surveys and other documents needed to bring a project to



closing. The [Monmouth Conservation Foundation](#) is a frequent county partner. They hold three agricultural easements in Monmouth County and have played a key role in a number of deals in Middletown, Wall, Upper Freehold, and Howell. The county has also worked with the [Fund for Roosevelt](#), [New Jersey Conservation Foundation](#), and [D&R Greenway Land Trust](#) on several projects.

Agricultural Agencies provide insight into past, current and future agricultural trends and practices. These agencies include the [USDA-Natural Resources Conservation Service](#), [Rutgers Cooperative Extension \(RCE\)](#), and [Freehold Soil Conservation District](#). Their services are critical to support farmers in their production, business and land stewardship efforts. They administer programs detailed in Chapter 7 of the *Monmouth County Farmland Preservation Plan (2008)*.

5.5 Additional Resources and Funding Opportunities

Federal

The Federal Government is another occasional source of funds. Monmouth County has preserved a dozen or so farms through the USDA's former Farm and Ranch Lands Protection Program. That program has been superseded by the [Agricultural Conservation Easement Program](#).

State

As previously discussed in Section 5.2.3 Preserved Farmland, Monmouth County relies heavily on grant funding from the SADC to cover the costs of agricultural easement acquisition projects. A typical cost share split for an easement is 60% state, 24% county, and 16% municipal money. There are a variety of [grant programs](#) administered by the SADC, each with its own criteria and funding limitations, that are used for farmland preservation.

For parcels of significant environmental or public value that may not meet eligibility requirements for farmland preservation, staff will refer

inquiries to other agencies and funding partners that focus on land conservation such as the [NJDEP Green Acres Program](#).

County and Local

Monmouth County has a dedicated open space and farmland preservation tax that generates over \$16 million per year. \$1.1 million of this annual tax revenue is set aside for farmland preservation. These funds have been used in conjunction with capital budget allocations to purchase easements. The county set aside over \$8 million per year from the capital budget in 2007, 2008, and 2009 for farmland preservation projects. No new capital budget appropriations were needed from 2010 to 2015. Monmouth County periodically bonds to generate money for land acquisitions. The Monmouth County Park System (MCPS) uses this option more frequently than the Farmland Program but it may be an option for the future. Most municipal funds used for the purchase of agricultural easements come from local open space and farmland preservation trust funds.

The MCPS has acquired several of its own agricultural and conservation easements on lands abutting county parks with a right of first refusal so that it may purchase the land outright once the owner is ready to sell and transition out of farming.

Nonprofits, Research Centers, and Other Stakeholders

To bring a number of projects to fruition, nonprofit partners such as [Monmouth Conservation Foundation](#) have contributed financially while providing other outreach and support services. In other scenarios, a land trust may line up a conservation-minded buyer to purchase the fee simple rights to a farm at the same time it is preserved or soon after. This may be advantageous in instances in which the original owners are no longer able or interested in retaining the property themselves.

5.6 Master Plan Recommendations and Stakeholder Strategies

Six Recommendations and numerous Stakeholder Strategies emerged from meetings and conversations with stakeholders as well as the SADC



or Board of Chosen Freeholder directives.

Master Plan Recommendations

Recommendation 5.1: Maintain and update, as needed, the *Monmouth County Farmland Preservation Plan (2008)* as a component of the *Monmouth County Master Plan*. The *Monmouth County Farmland Preservation Plan* guides Monmouth County's efforts in preserving farmland and maintaining a viable agricultural industry. It details the county's agricultural preservation efforts to date, targets land remaining for preservation, and lays the groundwork for efforts to retain and enhance the local agricultural economy.

Recommendation 5.2: Manage and coordinate the purchase of agricultural easements, as guided by the *Monmouth County Farmland Preservation Plan*. The county would accomplish this Recommendation in accordance with the eligibility requirements outlined in the *Farmland Preservation Plan* and state regulations to ensure that an adequate land base is available for current and future agricultural operations. The Division of Planning works with numerous internal county departments and a host of outside agencies to preserve farms.

Recommendation 5.3: Continue to provide professional and technical assistance to the Monmouth County Agriculture Development Board (MCADB), municipal partners, and other agricultural community stakeholders. The Division of Planning provides technical and administrative support to the MCADB. The state and Board of Chosen Freeholders has authorized the MCADB to promote and coordinate agricultural preservation activities in the county. Therefore, to further the MCADB's mission, staff assists all interested municipal partners, nonprofit organizations, and other community groups that seek help.

Recommendation 5.4: Continue annual monitoring of preserved farms to ensure deed compliance and respond to post-closing requests. The deed of easement obligates the easement holder to perform an annual

site visit to verify compliance with the terms of the document. The deed also requires the county and the state to approve certain changes to the structures and the use of the land within the easement area. These changes may center on house replacements, agricultural labor housing, divisions of premises, and green energy facilities. Staff of the Division of Planning handles such post-closing requests to approve particular changes within a farm's restricted areas and works to resolve deed violations.

Recommendation 5.5: Continue to hear right-to-farm complaints, review requests for Site-Specific Agricultural Management Practice (SSAMP) recommendations, and provide program resources to support the Right to Farm Act. The intent of the Right to Farm Act is to help agriculture exist in areas with a variety of land uses in close proximity to each other and to ensure that commercial farms seeking protection under the act use generally accepted agricultural management practices in their operations. The Right to Farm Act mandates that county agriculture development boards evaluate requests to determine if a farm's land management and stewardship practices meet or exceed the standards of the agricultural community. The MCADB is also authorized to resolve disputes between a farm and its neighbors or municipality. In addition, the MCADB has the ability to grant relief from municipal ordinances that may constrain an agricultural operation.

Recommendation 5.6: Proceed with planning efforts to understand, evaluate, and support our agricultural industry in a regional context to improve long-term agricultural sustainability. Through the success of the Farmland Preservation Program, the county now has a permanent land base available for farming. Support of the agricultural economy is a natural next step to uphold the county's investment in preserved lands and ensure the viability of unreserved lands. The Division of Planning will embark on the preparation of the *Agricultural Sustainability Plan (ASP)* for Monmouth County, providing and



recommending resources and strategies to farmers and complementing the work of the Division of Economic Development.

Stakeholder Strategies

General

- Encourage creative land use planning and design to accommodate future growth while avoiding conflicts with existing agricultural uses.
- Identify lands currently ineligible for preservation through state and local programs and explore new options to encourage agricultural retention of these lands.
- Direct the public to appropriate resources concerning the Farmland Assessment Act.
- Support reliable, dedicated sources of farmland preservation funding.
- Seek to preserve the highest quality farmland for the best value.
- Support the land-grant mission of Rutgers Cooperative Extension (RCE) that integrates campus programs with research conducted at experiment stations.
- Continue to partner with municipalities, private partners, nonprofits, other county departments, and state agencies to preserve agricultural lands.

Natural Resources

- Encourage the preservation of environmentally sensitive lands through the use of conservation easements or other preservation methods, as appropriate.
- Promote the use of Best Management Practices (BMPs) that foster stewardship of farming operations and natural resource protection.
- Incorporate monetary evaluations of natural capital to assist decision-making and justify expenditures for environmental services.

Open Space

- Encourage coordinated management of invasive species, soils, and

water resources in ways that are mutually beneficial to open space stewardship and agricultural viability.

- Encourage projects that preserve both farm sites and historic structures.
- Through the preservation of contiguous farms, maintain scenic viewsheds and agrarian landscapes.
- Promote the continued production of ethnic specialty crops and multicultural marketplaces in response to evolving markets.
- Support the 4-H Youth Development and Mentoring Programs and National Future Farmers of America Organization in our rural communities to encourage the retention of our local agrarian culture.

Utilities

- Provide for necessary infrastructure improvements and support services in preservation areas under regional development pressure while buffering and protecting existing agricultural, natural, and significant resources.
- Promote the use of sustainable energy resources on farms that are consistent with NJ State Agriculture Development Committee initiatives like agricultural management practices, site-specific agricultural management practices, or the most suitable BMPs available (e.g. solar, wind, geothermal generation for farm use, composting, and growing bio-energy crops).
- Consider irrigation needs and future access issues when preserving land in agricultural areas.
- Maintain drainage and drainage ways that flow to and from farms, taking into consideration downstream impacts.

Transportation & Mobility

- Ensure sufficient public road rights-of-way are reserved along properties acquired for farmland preservation and left unencumbered.
- Ensure that adequate vehicular access to farms is maintained when adjacent land is developed.



- Apply appropriate design guidelines for vehicular access that support existing and/or proposed agricultural uses on a site.
- Create better mobility between farms located in western Monmouth County and the more densely populated areas along the coast (connecting producers with consumers).

Agricultural & Economic Development

- Recognize farms as independent businesses.
- Recognize farmers as entrepreneurs and independent business owners.
- Encourage farm leasing options as a tool for economic viability and to assist new farm entrepreneurs.
- Promote the development of new market opportunities for locally grown agricultural products.
- Support further development of the agri-tourism industry and other emerging sectors of the agricultural economy.
- Promote nursery and equine industries recognizing the ancillary economic benefits derived by other sectors of the economy.
- Evaluate the concept of using preserved land in long-term leasing to a cooperative of new or beginning growers for high-value, perennial crops such as grapes, blueberries, and tree nuts.

Community Development & Housing

- Promote preservational land use techniques, such as noncontiguous clustering and lot-size averaging that provide for development in rural communities in conjunction with preservation of farmland and open spaces.
- Create awareness of the need for suitable agricultural labor housing and encourage municipalities to provide the appropriate zoning mechanisms.

Healthy Communities

- Promote the establishment of food hubs, which increases access to healthy and affordable local foods, eliminating food deserts.
- Support policies and the implementation of local land use

mechanisms for community food system planning in which food production, processing, distribution, and consumption are integrated to enhance the environmental, economic, social, and nutritional health of the community.

- Encourage the National Farm to School Network programs that provide educational opportunities emphasizing locally grown food, farming, school gardens, and nutrition.

Community Resiliency

- Serve as a resource for farmers that need assistance with rebuilding and cleanup after an extreme weather event or other emergencies.
- Encourage farm owners to establish emergency plans for their properties in order to protect crops, livestock, residences, and other agricultural buildings and infrastructure from natural disasters and other hazards.

Sustainable Places

- Support efforts to diversify and strengthen the long-term sustainability of the farming industry and develop strategies to encourage a broad range of agricultural operations including food production, equine, nurseries, aquaculture, and fisheries.
- Increase awareness about the significance of Agricultural Development Areas in locations where agriculture is the prevalent land use.
- Encourage the use of contiguous and noncontiguous clustering and density transfers.
- Educate non-farm residents on the importance of farming as an industry and assist with proper mitigation of conflicts between farm and non-farm uses.

Planning Services, Outreach, & Coordination

- Utilize the county’s facilities as a venue to promote preservation, outreach, and awareness education.
- Encourage the continuation of farm markets as a community outreach effort for the farming community.



- Promote community, municipal, and school gardens in partnership with RCE of Monmouth County.
- Encourage ag-related classes in the county’s vocational schools and at Brookdale Community College to ensure that the upcoming generation of local farmers has suitable educational opportunities.
- Promote participation in annual agriculture stakeholders input meetings.





6.0 Arts, Historic, & Cultural Resources

6.0 ARTS, HISTORIC, & CULTURAL RESOURCES

MASTER PLAN RECOMMENDATION 6.1



Film One Fest, Atlantic Highlands

Source: Monmouth Arts

6.1: Work with municipal, transit, and state agency partners to develop a county-based scenic byway system that provides interconnectivity of our arts, cultural, and historic assets through the use of a multi-modal transportation network.

Purpose

Provide a county-based network of physically interconnected historic, cultural, and arts assets modeled similarly to state and federal scenic byway programs that showcases our rich, various, and abundant cultural and historic resources, which supports tourism and increases the public's interest about Monmouth County.

Monmouth County Departments & Organizations Involvement

Division of Planning	Develop a county-based scenic byway program; identify byway assets and potential byway locations; conduct outreach with partner agencies; facilitate meetings; coordinate documentation efforts; provide mapping and develop byway narratives.
Park System (MCPS)	Provide knowledge about historic resources; assist with outreach efforts; help identify connections to and between MCPS resources; provide documentation material for byway narratives and ecotourism programming.
Library System	House reference and marketing materials; disseminate and distribute byway maps and narratives to local libraries.
Department of Public Works and Engineering	Assist in identifying byway locations; fabricate, install, and maintain byway signs.
Department of Public Information and Tourism	Graphically design byway logos; host online resources developed by the Division of Planning; disseminate marketing material and information; assist in the development of marketing materials.
Historical Commission	Identify byway assets; assist with outreach efforts; document historic and cultural resources.
Division of Economic Development	Promote agribusiness tie-ins with scenic byway program; work with local businesses in byway messaging.
Monmouth Arts	Support marketing and branding of arts and cultural attractions along designated byway routes; support online resources.

Other Project Stakeholder Involvement

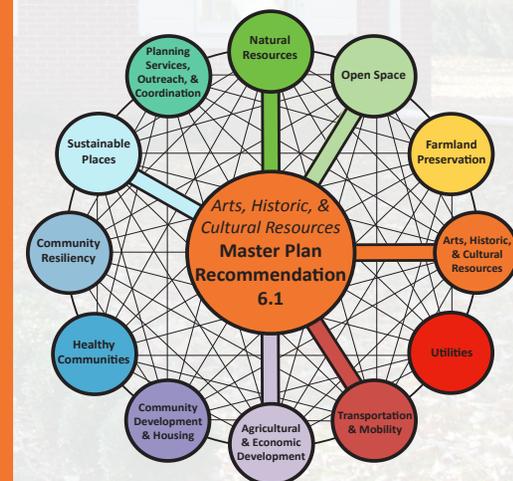
Municipalities	Assist in identifying local byway assets and location; coordinate byway with local businesses and tourism efforts; provide assistance for sign installation and maintenance on local roads; offer byway marketing assistance.
NJ Department of Transportation (NJDOT)	Assist in identifying sign locations and installation along state roadways if necessary.
NJ TRANSIT	Use train stations as possible destinations or points of interest along the byway; provide a transit link and regional marketing efforts for MoCo attractions and events.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 6.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination		●												
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic						●								
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- The Division of Planning is to work with other county departments and organizations to outline the extent of a byway program and determine viable byway routes.
- Coordinate project buy-in from other county departments and project stakeholders to support byway implementation such as finalizing byway routes, designing byway logos, developing a scenic byway plan, and fabricating, installing, and maintaining the signs.
- Develop individual byway committees comprised of representatives from county departments, host communities, and stakeholders to help oversee long-term stewardship of the program.
- Assist with the creation of maps and marketing materials for hard copy and online publication.



Strongest Associated Master Plan Elements

6.0 ARTS, HISTORIC, & CULTURAL RESOURCES

MASTER PLAN RECOMMENDATION 6.2



Film One Fest, Atlantic Highlands

Source: Monmouth Arts

6.2: Develop a geographic information system (GIS)-based, online mapping resource for the Monmouth County Park System's (MCPS) existing Monmouth County Historic Sites Inventory (HSI).

Purpose

Monmouth County's HSI contains valuable information that is not currently accessible to the public for mapping purposes. Georeferencing the historic sites for use with online mapping programs will assist with the development of scenic byways (*Master Plan* Recommendation 6.1). HSI mapping can be used to assist municipalities in the development of their local master plans as well as be used by the public to better understand the breadth and scope of countywide historic offerings.

Monmouth County Departments & Organizations Involvement

Division of Planning	The GIS Section will develop an online map interface for public use that will incorporate information from the HSI.
MCPS	Maintain geodatabases of historic sites; provide knowledge of historic resources; provide documentation materials; assist in developing an information dissemination protocol.
Historical Commission	Assist in the development of the HSI update; maintain historic reference materials.

Other Project Stakeholder Involvement

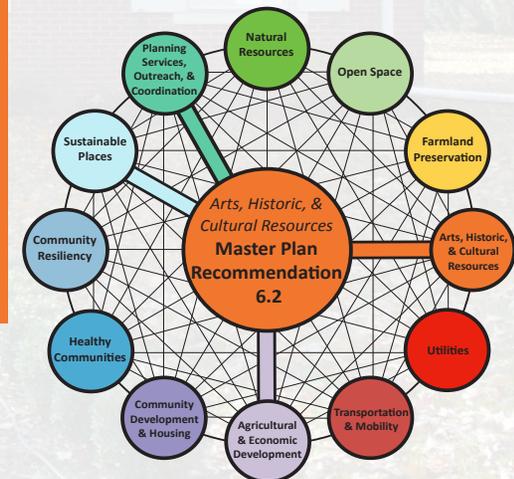
Municipalities	Assist in identifying local historic sites assets and location.
New Jersey Historic Preservation Office (NJ HPO)	Verify status of national and state historic sites, structures, and landmarks throughout Monmouth County.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 6.2

PRINCIPLES	GOAL 1			GOAL 2			GOAL 3							
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- The Division of Planning's GIS Section to develop an interactive online mapping program for public use.
- The Division of Planning is to work directly with the MCPS in developing accurate geodatabases of historic sites for use as part of the online mapping program.
- The MCPS and the Division of Planning should determine appropriate dissemination protocols as many historic sites are privately held.



Strongest Associated Master Plan Elements

6.0 ARTS, HISTORIC, & CULTURAL RESOURCES

MASTER PLAN RECOMMENDATION 6.3

6.3: Continue to provide technical and professional support as a member of the MoCo (Monmouth County) Partnership and expand the concept of the MoCo Arts Corridor to areas of western Monmouth County.

Purpose

The Division of Planning will continue to provide technical and professional support of the MoCo Partnership's mission. The MoCo Partnership includes government agencies, civic groups, artists, businesses, educational institutions, tourism, and transportation organizations with a mission to make the county a cultural destination of choice. Building off the success of the MoCo Arts Corridor in eastern Monmouth, the Division will continue to increase awareness of the cultural and historic offerings in western Monmouth County for both visitors and residents alike. This effort is closely related to *Master Plan* Recommendation 6.1 and should be expanded beyond the arts to include historic sites and agri-tourism opportunities that reflect the rural heritage of western Monmouth.

Monmouth County Departments & Organizations Involvement

Division of Planning	Continue to assist Monmouth Arts with grant applications, public outreach, and awareness; encourage municipal participation in MoCo; provide technical assistance as needed.
Monmouth Arts	Fiscal agent for MoCo; maintain MoCo website and marketing presence in the Arts Corridor; apply for grants; coordinate grant efforts; facilitate partnership meetings; encourage new membership in MoCo.
Division of Economic Development	Foster business engagement in MoCo activities; encourage MoCo artists to participate in Made in Monmouth events; participate in meetings and promote MoCo initiatives.
Park System (MCPS)	Incorporate MoCo efforts into parks planning and programs; encourage more art installations in the parks.
Library System	Venues for arts and cultural programming; promote MoCo programming; provide web links to cultural and art events around the county.
Department of Public Information and Tourism	As the county's official arts organization, help promote Monmouth Arts accomplishments; provide press releases on major MoCo events; assist in the branding and marketing of the MoCo Arts Corridor.

Other Project Stakeholder Involvement

Municipalities	Incorporate cultural planning and creative placemaking into master and redevelopment plans; participate in MoCo events; host and/or facilitate arts and cultural programs in the arts corridor.
NJ TRANSIT	Market the MoCo Arts Corridor to transit users; improve awareness of MoCo efforts throughout NJ; improve service and accommodations on the North Jersey Coast Line; include the arts into station renovation and/or redevelopment plans; improve wayfinding from transit stations to cultural institutions.
NJ Dep. of Transportation (NJDOT)	Assist with wayfinding measures; potential funder.
Artists	Actively engage members in the MoCo Partnership; assist with marketing and branding campaigns; encourage other artist participation in MoCo events.
Jersey Shore Convention and Visitors Bureau	Promote and market MoCo as a regional arts destination as well as the MoCo partners within the arts corridor.



Film One Fest, Atlantic Highlands

Source: Monmouth Arts

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 6.3

PRINCIPLES	GOAL 1			GOAL 2			GOAL 3							
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Continue to provide professional and technical assistance to Monmouth Arts and the MoCo Partnership, particularly in the expansion of MoCo into western Monmouth County.
- Engage municipalities more in discussions about cultural planning and creative placemaking.
- Encourage towns to participate as partners in MoCo and incorporate the MoCo concept into their master plan and policy documents.



Strongest Associated Master Plan Elements

6.0 ARTS, HISTORIC, & CULTURAL RESOURCES MASTER PLAN RECOMMENDATION 6.4



Film One Fest, Atlantic Highlands

Source: Monmouth Arts

6.4: Incorporate the Monmouth Arts’ cultural arts plan *Imagine, Envision, Create* (2012) as a component of the *Monmouth County Master Plan*.

Purpose

Imagine, Envision, Create integrates input and research from a broad range of artists, arts organization, creative industries, planning, tourism, education, and economic development. Monmouth Arts updates the plan every five years, providing strategies to help sustain and enhance an important quality-of-life factor for Monmouth County residents. The Monmouth County Division of Planning is a partner in this effort.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide Monmouth Arts assistance with updating and implementing the <i>Imagine, Envision, Create</i> ; provide technical assistance to municipalities in the development of <i>Imagine, Envision, Create</i> .
Planning Board (MCPB)	Partner; provides professional assistance in the development of this plan; incorporate <i>Imagine, Envision, Create</i> as a component of the <i>Master Plan</i> .
Monmouth Arts	Lead agency on the cultural arts plan update, which occurs every five years; assist local arts councils and municipalities in the development of cultural arts plans.
Division of Economic Development	Provide Monmouth Arts assistance with implementing and updating the <i>Imagine, Envision, Create</i> .

Other Project Stakeholder Involvement

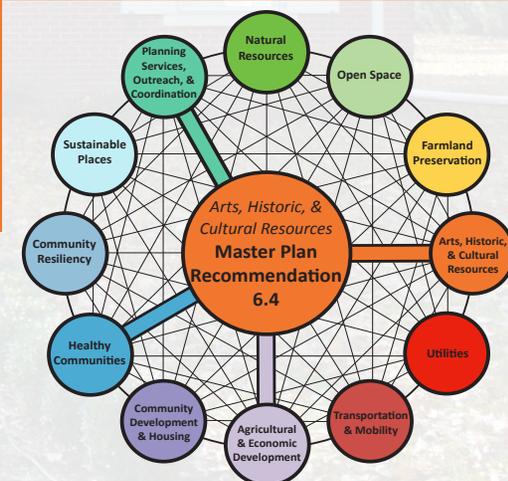
Municipalities	Incorporate appropriate recommendations found in <i>Imagine, Envision, Create</i> into local master plan and redevelopment plans.
Artists	Actively involve and engage artists with the creation of <i>Imagine, Envision, Create</i> .

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 6.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Provide Monmouth Arts assistance with updating and implementing the *Imagine, Envision, Create*; provide technical assistance to municipalities in the development of *Imagine, Envision, Create*.
- Incorporate the Monmouth Arts’ cultural arts plan *Imagine, Envision, Create* as a component of the *Monmouth County Master Plan*.



**Strongest Associated
Master Plan Elements**

6.0 ARTS, HISTORIC, & CULTURAL RESOURCES

MASTER PLAN RECOMMENDATION 6.5



Film One Fest, Atlantic Highlands

Source: Monmouth Arts

6.5: Respond to requests from our municipal partners for professional and technical assistance in creating cultural asset inventories and in the development of cultural and creative placemaking plans.

Purpose

Provide assistance to municipalities seeking to create cultural plans and advancement in the Sustainable Jersey (SJ) certification program with their Arts and Creative Culture Actions.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide professional and technical assistance to communities in the SJ certification program; participate on local creative teams; facilitate SJ Monmouth County Hub Steering Committee meetings and forums for the Monmouth County Hub for Municipal Green Teams meetings.
Monmouth Arts	Assist municipalities with their SJ Arts and Creative Culture Actions; participate on local creative teams.
Library System	County libraries should be recognized as cultural and creative assets in the development of municipal creative assets inventories.
Park System (MCPS)	Some county parks may also qualify as cultural and creative assets depending upon available programming.

Other Project Stakeholder Involvement

SJ	Facilitate SJ certification program.
Municipalities	Voluntarily participate in the SJ certification program; form creative teams; lead agency in the implementation of SJ action items.
Local SJ Creative Team	Local teams comprised of artists, arts organizations, creative industry personnel, economic development professionals, elected/appointed officials, realtors, major institutions (e.g. education, health, recreation, and financial), benefactors/philanthropists, and citizen volunteers.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 6.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic Preservation Investments														
G. Vibrant & Sustainable Communities														
H. Community Preservation														
I. Housing														
J. Economic Development														
K. Agricultural Development														
L. Recovery & Resiliency														
M. Growth Investments														
N.														

Implementation Strategy

- Facilitate SJ Monmouth County Hub Steering Committee meetings and forums for the Monmouth County Hub for Municipal Green Teams.
- Encourage participating SJ towns to participate in Arts and Creative Culture Actions.
- Request SJ participating municipalities to invite county representatives to participate as a member of their local creative team.
- As members of a local creative team, the county is able to provide technical and professional assistance for Arts and Creative Culture Actions.



Strongest Associated Master Plan Elements

6.0 Arts, Historic, & Cultural Resources

6.1 Introduction



Allen House circa 1710

Source: The Monmouth County Historical Association

The arts, historic, and cultural resources Monmouth County is founded upon predate the arrival of Giovanni da Verrazzano in 1524, the first European to explore and map the coast of New Jersey. Prior to Dutch settlements which followed Henry Hudson’s exploration of the Raritan Bay and Hudson River Valley in 1609, the land which is now known as Monmouth County was originally inhabited by the Lenni Lenape people who traveled with the seasons, establishing spring and summer residence, taking advantage of fertile soils and abundant fishing in and around coastal areas. Although many artifacts of their presence have been found and preserved, the nomadic nature of these Algonquin

people left little in the way of permanent reminders other than the trails they used which became the framework for some of our county roadways still in use today.

Monouth County’s built environment and accompanying alterations made to the natural landscape spans more than three and a half centuries. Much like the natural environment, the arts, historic, and cultural resources created since the arrival of the first European settlers are indigenous to Monmouth County. Since their arrival, Monmouth County has evolved through an array of historical events, most notably the Battle of Monmouth, which took place in and around what is today Manalapan, Freehold Township, and Freehold Borough; the battle which many historians agree was a major turning point of the American Revolution.

The establishment of mills along stream corridors that first facilitated Colonial agrarian commerce fostered early American innovation and enterprise. Natural resource based industries such as iron ore and marl were influential in the area but short lived, ceding quickly to other regional and national economic demands.



19th century gristmill at Wainford

Source: MCPS

Agriculture remained the predominant land use throughout most of the county, particularly in Western Monmouth well into the 20th century. During this time, towns such as of Freehold Borough, Farmingdale, Englishtown, and Allentown developed by fostering local commerce and agribusiness operations ([Figure 2.2: Historic Map of Monmouth, 18th Century](#)).



In the mid-to-late 1800s, the expansion of railroads across the county encouraged more intensive types of development. Seaside resort towns began attracting a large number of visitors thanks to First Lady Mary Todd Lincoln who vacationed here and remarked of its beauty. Coined the country's "Summer Capital" in 1869 by President Grant, our county's beaches have long attracted preeminent, well-known visitors. Long Branch beaches and surrounding areas prevailed as a premier presidential vacation destination during this time. Seven Presidents Oceanfront Park in Long Branch, managed by the Monmouth County Park System, is named after the seven U.S. presidents who all vacationed in the area: Ulysses S. Grant, Rutherford B. Hayes, James A. Garfield, Chester A. Arthur, Benjamin Harrison, William McKinley, and Woodrow Wilson. Since that time, the Jersey Shore has flourished as a tourist destination with beautiful beaches enjoyed by people of all backgrounds and economic means.

Our arts, historic, and cultural assets define and differentiate us from other locales, providing our residents with an irreplaceable component to an enhanced quality-of-life. These features are often a source of pride that reflect our cumulative history and encapsulate the accomplishments of all those who helped build our community. Efforts taken to perpetuate our agricultural heritage, protect our Jersey Shore lifestyle, and preserve our historic legacy are valued by those who live here. Many find solace in them as an enduring connection to one another through a common past. Others see these

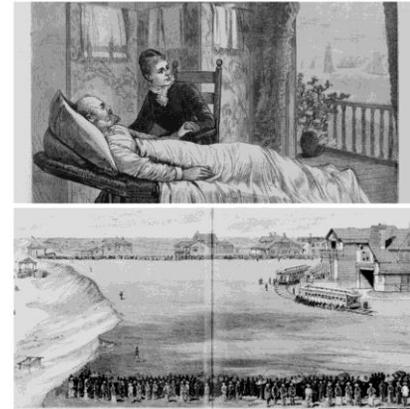


Gallery Reception

Source: Monmouth Arts

President Garfield Tea House

After being shot in Washington D.C. during the summer of 1881, President Garfield was expeditiously transported to an oceanfront cottage in Elberon (Long Branch) where he spent his final days. Local residents almost overnight constructed a rail spur leading directly to the front door of the cottage.



Source: Library of Congress

After his death, the tracks were torn up and some of the wooden ties were saved by actor, Oliver Byron, whom constructed the Garfield Tea House. The Garfield Tea House is now located at the Church of the Presidents which is undergoing an extensive restoration.



Source: Mary Ellen Scott



features as contemporary, part of our cultural fabric, and an expression of the places we all occupy or call home. New residents to Monmouth County are often drawn here because of the variety and abundance of cultural amenities and experiences available to them within a relatively small geographic area. Investors have been showcasing the inclusion of arts and cultural components into many of their development and redevelopment proposals as a major “selling point” in their marketing campaigns. Examples of this can be found on the webpages of the [Bell Works Site](#), touting “a cultural nucleus” in Holmdel as well as the [West Side Lofts](#) where one can “Live the Vibe” in Red Bank. Efforts towards the continued viability of these resources by incorporating them into design and development are being recognized all over the country as a cornerstone of long-term social sustainability and economic prosperity.

6.2 Existing Conditions

Arts, historic, and cultural (AHC) resources are not easily defined as they represent different things to many different people. They can be the physical representation of a stylistic, artistic, and architectural period or an abstract artistic expression, historic reenactments, or a cultural festival. No matter what form they take, they all reveal the story about people of a particular place in a particular moment of time. They represent the great continuum in which each successive generation has an opportunity to leave their physical presence and spiritual essence imbedded in the community they inhabited.

6.2.1 National and New Jersey Registers of Historic Places

Historical resources in Monmouth County vary from sites and villages to national and state parks to theaters and concert halls. To be listed on the NJ and/or National Registers historic properties and districts must meet criteria for significance in American history, archaeology, architecture, engineering, or culture, and possess integrity of location, design, setting, materials, workmanship, feeling, and association (NJ HPO, 2015). The New Jersey Department of Environmental Protection (NJDEP) houses the state’s Historic Preservation Office (HPO) which

maintains the NJ Register of Historic Places including those in Monmouth County. The U.S. Department of the Interior’s National Park Service (NPS) maintains the official list of the Nation’s historic places worthy of preservation, the National Register of Historic Places. Sites on both Registers are offered a degree of review and protection from public encroachments in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NJ HPO, 2015). NJ HPO regularly updates a list of [New Jersey and National Registers of Historic Places for Monmouth County](#). The aforementioned list also details the National Register’s historic districts found in Monmouth County.

Historic districts are a grouping of buildings, sites, structures, or properties that have been designated by one or more government entities as being historically, architecturally, or culturally significant. Districts can vary in size from the cluster of a few structures to hundreds of buildings. Both the National and State Registers include districts as well as individual sites within a district. Monmouth County’s historic districts are not only important because they represent some of the earliest colonial settlements on the eastern seaboard, but they also represent places of congregation and convergence that reflect changing architecture, development patterns, civic and military, technology, and “cultural norms” that define the first 300 years of development in this country. Historic districts enhance neighborhood or community-based historic preservation. Historic districts listed on the National and State Registers in Monmouth County are detailed in Figure 6.1.

6.2.2 Monmouth County Historic Sites Inventory (HSI)

In response to the devastating and irreplaceable loss of historic buildings, structures, and properties to development, the Monmouth County Park System (MCPS) created the *Monmouth County Historic Sites Inventory*. First published in 1984, the report highlights the findings of the complete inventory including site-specific data, photographs, and maps of an unpublished archive that is maintained by the MCPS. This



Figure 6.1: Monmouth County National and State Registers Historic Districts as of 4/26/2016

<u>Name on the Register</u>	<u>Host Municipality</u>	<u>Date Listed on Register</u>
Allenhurst Residential Historic District	Allenhurst	NR: 6/18/2010 SR: 2/18/2010
Allentown Historic District	Allentown	NR: 6/14/1982 SR: 10/29/1981
Asbury Park Commercial Historic District (Turn of the Century Commercial Historic District)	Asbury Park	NR: 9/30/2014 SR: 7/10/2014
Arneytown Historic District	Upper Freehold	NR: 12/12/1977 SR: 12/26/1974
Camp Evans Historic District (Marconi Belmar Stations, U.S. Army Signal Corps Radar Laboratory)	Wall	NHL: 10/16/2012 NR: 3/28/2002 SR: 3/20/2000
Camp Evans Historic District (Boundary Increase and Decrease)	Wall	NHL: 10/16/2012 NR: 8/21/2012 SR: 11/17/2011
Deserted Village of Allaire Historic District	Wall	NR: 1/11/1974 SR: 9/11/1970
Fort Hancock and Sandy Hook Proving Ground Historic District	Middletown	NHL: 12/17/1982 NR: 4/24/1980
Fort Monmouth Historic District	Oceanport	NR: 3/12/2014 SR: 6/24/2013
Imlaystown Historic District	Upper Freehold	NR: 1/3/1985 SR: 11/13/1984
Jersey Homesteads Historic District	Roosevelt	NR: 12/5/1983 SR: 10/14/1983
Middletown Village Historic District	Middletown	NR: 5/3/ 1974 SR: 12/20/1973
Monmouth Battlefield Historic District*	Manalapan and Freehold Townships	NHL: 1/20/1961 NR: 10/15/1966 SR: 5/27/1971
Navesink Historic District	Middletown	NR: 9/5/1975 SR: 10/21/1974
Navesink Military Reservation Historic District (in Hartshorne Woods Park)	Middletown	NR: 10/13/2015 SR: 8/28/2015
Ocean Grove Camp Meeting Association District	Neptune Township	NR: 4/12/1976 SR: 12/16/1975
Shrewsbury Historic District	Shrewsbury Borough	NR: 7/17/1978 SR: 5/7/1976
Tinton Falls Historic District	Tinton Falls	NR: 11/10/1977 SR: 7/2/1976
Walnford Historic District*	Upper Freehold	NR: 6/29/1976 SR: 5/8/1975
Water Witch Historic District	Middletown	NR: 3/12/2004 SR: 12/24/2003
*indicates Monmouth County Park System (MCPS)		
NHL: National Historic Landmark NR: National Register of Historic Places SR: New Jersey Register of Historic Places		



list represents the first comprehensive survey undertaken to identify the county's architectural and historic resources and was a necessary step in determining "...buildings and structures which are significant to and/or representative of the county's historic, culture, and architecture" (*Monmouth County Historic Sites Inventory, 1984*). Although the inventory does not include landscapes, vistas, and archaeological sites due to concerns over exploitation, it does provide brief narratives on historic development trends by region and a historic development overview of the county. The HSI was and remains a very important step in evaluating site eligibility for potential State and National Register recognition. The HSI has been updated through the years and represents a very valuable asset in the planning of projects and historical reference. This ongoing [Monmouth County HSI](#) was last updated on April 30, 2014. Digitizing this inventory into an easily a searchable geographic information system (GIS) format for public consumption online is the basis of *Master Plan* Recommendation 6.2.

6.2.3 Military Installations and U.S. Lifesaving Legacy

Being situated as a strategic defense to NYC in concurrence with American Revolutionary War history, Monmouth County is rich in military history. These military installations have helped create communities and provide beneficial economic impacts to our county.

MILITARY HERITAGE: Located at the southern entrance to the NY Harbor, the Sandy Hook peninsula provided extensive navigational and defensive value. Early in the Revolutionary War, the peninsula became contentious site of many fortifications. [Fort Hancock](#), commissioned by the U.S. Army in 1895, defended the New York Harbor until it was decommissioned in 1974 and was the most heavily armed fort on the Atlantic Coast. Reaching its peak population with more than 7,000 soldiers during World War II, Fort Hancock was a small army town. Fort Hancock now serves the public as part of the [Sandy Hook Unit Gateway National Recreation Area](#), discussed more in 4.0 Open Space Element. The State and National Registers designated the entire Sandy Hook

peninsula as the 'Fort Hancock and Sandy Hook Proving Ground Historic District', which includes the [Spermaceti Cove Life-Saving Station](#) (1894). The U.S. National Park Service (NPS) is currently issuing Request for Proposals (RFPs) for leasing historic Army buildings located on Sandy Hook for adaptive reuse.

[Fort Monmouth](#), also discussed in the 4.0 Open Space Element, was established permanently in 1925 and slated for closure by the Base Realignment and Closure (BRAC) Commission in 2005. The Federal Government's BRAC process manages realignment and closure of military installations following the Cold War. Fort Monmouth was a small military "town" that included a post office, gas station, health center, and other amenities. Since shutting down several years ago local and federal officials have been working to redevelop this expansive site spanning three municipalities (Eatontown, Oceanport, and Tinton Falls). Fort Monmouth provided the Armed Forces operational and development services for worldwide communication, surveillance, and reconnaissance for almost a century. During its decommission, the U.S. Army and NJ HPO identified properties eligible to be listed on the National Register in a Programmatic Agreement. Fort Monmouth is now managed by the Fort Monmouth Economic Revitalization Authority (FMERA), which advances the [Fort Monmouth Reuse and Redevelopment Plan \(2008\)](#).

FMERA's professional planning consultant produced the [Historic Preservation District Guidelines for Fort Monmouth's Historic Resources in the Boroughs of Eatontown and Oceanport \(2015\)](#). This document includes an introduction explaining the purpose of such guidelines, the history of Fort Monmouth and its historic resources, a list and maps of contributing buildings, and design guidelines for preservation categorized by land use and residential neighborhoods. The consultant received a New Jersey Planning Officers Award for its historic preservation work at the Fort. The Fort Monmouth Historic District was placed on the National Register in 2014. A Historic Preservation



Advisory Committee serves as the exclusive historic preservation commission for land use matters and approvals in the Fort Monmouth area.

Located near the Atlantic Coast in Wall Township, [Camp Evans](#) served a variety of military and civilian functions during the 20th century. It was the site of the 1914 Marconi Belmar Atlantic Wireless station, a transatlantic radio receiver. Acquired by the U.S. Army Signal Corps in 1941, the Camp Evans Signal Laboratory functioned as an electronic development, testing, and production facility during World War II. BRAC designated Camp Evans for closure in 1993. A nonprofit organization, Information Age Science History Museum and Learning Center (InfoAge), housed in some of the historic district buildings, currently works to preserve Camp Evans for future generations. The Institute for Exploratory Research also began at InfoAge. The Camp Evans Historic District consisting of the Marconi Belmar Station and U.S. Army Signal Corps Radar Laboratory is on the NJ and National Registers of Historic Places with boundaries extended during 2011-2012.



The [Sea Girt National Guard Training Center](#), operated by the National Guard, consists of a 9-acre beachfront parcel. Here visitors can also find the [National Guard Militia Main Museum of New Jersey](#) which displays original and reproduction uniforms, weapons, photographs, artifacts and art



Twin Lights Lighthouse in Highlands NJ
Source: Division of Planning

from the period of Dutch, Swedish and British colonization through the War for Independence, Civil War, and World Wars I and II to the present day.

Many of the communities found throughout our county have descended from our rich military history. Following the BRAC establishment and subsequent closure rounds, many communities throughout our county have had to adapt and evolve. These closures are federally mandated and communities are encouraged to preserve and adaptively reuse elements to protect our county’s historical military background. Expansive former military installations offer a wide variety of opportunities.

LIGHTHOUSES: Sea Girt is also home to one of the three remaining Monmouth County lighthouses, the others are the Sandy Hook Light and the Twin Lights Lighthouse in the Highlands.

Constructed in 1896, the [Sea Girt Lighthouse](#) was the last live-in lighthouse constructed on the Atlantic Coast. Its location was of determined by necessity as it filled in the last remaining unlit gap midway between the Twin Lights Lighthouse and Barnegat Lighthouse in Ocean County. In 1921, the lighthouse became the first land based radio beacon navigation system which allowed ships to navigate safely into New York Harbor during reduced visibility and inclement weather. After many decades of use, the lighthouse was restored by the Sea Girt Lighthouse Citizen’s Committee which now has rights to manage the facility through the mid-21st century.



The [Sandy Hook Light](#) was designed and built in 1764 and is the nation's oldest working lighthouse. Sandy Hook Light is located on the grounds of **Fort Hancock** that also houses Battery Potter, the nation's first disappearing gun battery powered by a steam hydraulic lift system. Fort Hancock was commissioned to protect New York Harbor from sea invasion in 1895. After the U.S. Coast Guard transferred ownership the National Park Service (NPS) in 1995, the lighthouse and keeper's house were restored in 2000. The Sandy Hook Light serves as a main attraction in the NPS Gateway National Recreation Area and is a National Historic Landmark.

Sitting almost 200 feet above sea level on one of the highest points of the Atlantic Coastline, the Navesink Highlands Light Station or the [Twin Lights Lighthouse](#) is a valuable and educational historic resource. The site is home to the first lighthouse fitted with Fresnel lens in 1841. The current two, nonidentical medieval-style towers were constructed in 1862. The property is managed by the Twin Lights Historical Society and owned by NJDEP. The Twin Lights Museum features informative exhibits and a gift shop. NYC skyline views here are also breathtaking. Twin Lights is a designated National Historic Landmark.

LIFESAVING LEGACY: As important as lighthouses and military installations, our county has a rich historical legacy of shipwrecks subsequently leading to lifeguarding. Lighthouses were built to let ship captains know their proximity to the shore and warn them of danger. Lifeguarding began in response to shipwrecks along the coast but later developed into beach guarding. Ironically enough, the Federal Government entered the lifesaving business in 1848 when a New Jersey businessman, William A. Newell, successfully lobbied for a \$10,000 appropriation from Congress which established the Life-Saving Service, a series of stations along the Atlantic Coast (known as the Newell Act). Eventually the Life-Saving Services was combined with a branch of the Revenue Service to create the U.S. Coast Guard. William A. Newell saw several shipwrecks as boy where ships which ran aground on the beach

in heavy seas and were unable to safely evacuate their passengers. This experience inspired him to invent the Breeches Buoy, a means of rescuing passengers from stranded ships by firing a line to which was attached a harness. Later the device was improved by securing a metal car to the line. Newell, often referred to as the father of the U.S. Coast Guard, also served as the Governor of New Jersey (1857-1860) and of the Washington Territory (1880-1884). He resided in the Gov. William A. Newell House on Main Street in the Allentown Historic District which is also located along the Upper Freehold Historic Farmland Scenic Byway. (Upper Freehold Historic Farmland Byway Nomination Packet to NJDOT, 2006)

Early federal life-saving stations are identified as lifesaving boathouses while later stations are categorized as integral stations, station complexes, and houses of refuge. Crews operated stations, located near port cities and shipping lanes, with the ability to perform open beach launchings. They included integral living quarters and boat storage space along with flagpole, lookout tower, sheds, and a water collection system. Stations constructed prior to the establishment of the U.S. Life-Saving Station, USLSS stations, and pre-1950 U.S. Coast Guard lifeboat stations are eligible for listing in the National Register of Historic Places. [Preservation NJ](#) notes "in 1900 New Jersey contained 42 lifesaving stations situated three and a half miles apart between Sandy Hook and Cape May." Today the U.S. Coast Guard carries on the traditions of the U.S. Life-Saving Service, however, technological innovations (helicopters, motor lifeboats, etc.) have transformed initiatives and capacity. ([United States Coast Guard](#))



Historic maps of New Jersey's shorelines and Life-Saving Stations indicate [Life-Saving Station No. 1 in Sandy Hook](#), [Life-Saving Station No. 2 in Spermaceti Cove](#), [Life-Saving Station No. 3 in Seabright](#), [Life-Saving Station No. 4 in Monmouth Beach](#), [Life-Saving Station No. 5 in Long Branch](#), [Life-Saving Station No. 6 in Deal](#), [Life-Saving Station No. 7 in Shark River](#), [Life-Saving Station No. 8 in Wreck Pond](#), and [Life-Saving Station No. 9 in Squan](#) (Manasquan). Princeton University Library maintains the [New Jersey Coast: First Atlas \(1878\)](#) which includes historic lithograph maps of the coast.

Prominent architect Paul J. Pelz designed a "passé High Victorian Gothic meets Queen Anne" high-style station in Deal, New Jersey in 1885. This design is considered "the pinnacle of ornateness in Life-Saving Service Architecture." (Pinyerd, D., [The Preservation of Pre-World War II Coast Guard Architecture in Oregon](#))

This discussion of our county's rich lifesaving history merits a mention of the imperativeness to protect, preserve, and rehabilitate remaining infrastructure for future generations. A few years ago, Superstorm Sandy destroyed an 1897 Boat House part of U.S. Life-Saving Station No. 5 in Long Branch. On the other hand, an excellent example of historic preservation is former Life-Saving Station No. 4 built in 1895. After the state planned to demolish this structure in 1999, the Monmouth Beach Historical Society and residents successfully transformed and renovated it into the Monmouth Beach Cultural Center providing information on the U.S. Coast Guard, life-saving stations, shipwrecks, and local community history.



Life-Saving Station No. 6 in Deal

Source: U.S. Coast Guard Headquarters

Frequent shipwrecks during the early 1900s typically stemmed from storms, sand bars, and shallow waters. The high prevalence of life-saving stations in Monmouth County is relevant to the county's history of shipwrecks as well. Estimates of shipwrecks off the NJ coast range from 2,500 to 7,200. New Jersey Historical Divers Association established the [New Jersey Shipwreck History Museum](#) in InfoAge at Camp Evans.

The museum provides hands-on exhibits and artifacts of our state's shipwrecks. A few notable shipwrecks are:

- The **Amity** sunk off of Squan Beach (Manasquan) in 1824 due to foggy conditions and the remains are buried about 330 yards offshore. In the early 1990s, divers began to find artifacts and rallied together to identify what was known as the 'Manasquan Wreck'.
- The **New Era**, a German immigrant clipper ship, ran aground during a November 1854 storm in Deal. Some 220 passengers died and the wreck is noted as one of the biggest maritime disasters to date.
- Five miles east of Belmar lies **Ella Warley**, a side-wheel steamboat with a substantial valuable cargo, sunk in 1863 after colliding with **S.S. North Star**, a U.S. transport. Artifacts such as coins have been found at the site.
- The freighter **Arundo** sunk when torpedoed by a U-136 German submarine in 1942. The Arundo lies off the coast Belmar. It is said to be a fascinating place to dive because it's large size and variety of wreckage including thousands of glass beer bottles. The freighter



supposedly held 5,000 cases of beer.

- The **Chauncy Jerome Jr Shipwreck Site** is located offshore of the Monmouth County Park System's Seven Presidents Oceanfront Park. Added to the National and State Registers of Historic Places in 1996, the packet ship of the Blue Ball Line ran aground in 1854.
- In September of 1934, the **Morro Castle** caught fire on the way to NY off the coast of Asbury Park. This ship was towed off and scrapped.

The Museum of New Jersey Maritime History keeps an updated [Shipwreck Data Base](#) with valuable information such as newspapers archives and ship logs. This database provides scuba wreck divers a comprehensive guide along with latitude and longitude points of potential dives. The Jersey Shore has been noted a 'proving ground' for wreck divers.

6.2.4 Municipal Resources

New Jersey's Municipal Land Use Law (MLUL) provides the opportunity for towns to identify, evaluate, designate, and regulate historic resources through the [New Jersey Statutes Annotated Historic Preservation Related Sections](#). Municipalities often inventory their historic sites or designate historic districts through their master plans. A historic site is defined by the MLUL as "any real property, manmade structure, natural object or configuration or any portion or group of the foregoing of historical, archeological, cultural, scenic or architectural significance." The MLUL defines a historic district as "one or more historic sites and intervening or surrounding property significantly affecting or affected by the quality and character of the historic site or sites." The MLUL provides for a historic preservation plan element that indicates the location and significance of historic sites and historic districts, identifies the standards used to assess worthiness for historic sites or district identification, and analyzes the impacts of each component and element of the master plan on the historic sites and districts.

Ecotourism of Ship Wreck Diving

In addition to historical legacy, these shipwrecks provide a unique example of **ecotourism of shipwrecks**. Destination diving to the county's shipwrecks encourages the protection and preservation of valuable habitats. It also emphasizes the appreciation for local cultures and biodiversity while providing learning opportunities for travelers and communities. Scuba divers have the upmost concern about protecting our seas and the unique habitats within them. Shipwrecks are a tourist attraction to scuba divers thus promoting economic activity.

One of the U.S. Department of Commerce's Marine Sanctuaries Conservation Series studied the socioeconomic impacts of two submerged vessels in the Florida Keys, the U.S.S. Spiegel Grove and the U.S.S. Vandenberg. In short, it was found submerged shipwrecks increase local dive charter which expands profits to local businesses and the local job sector. Increased recreational expenditures typically lead to growth and development of the economy and local tourism.

[*\(Office of National Marine Sanctuaries
Science Review of Artificial Reefs, 2012\)*](#)



Colts Neck Historical Preservation Committee

Rich in Revolutionary War history, the Colts Neck Historical Preservation Committee meets monthly to:

- a. "Prepare and maintain a survey of historic structures and sites within the Township from 1875 and earlier.
- b. Carry out advisory, educational and informational functions as will promote historic preservation in the Township.
- c. Preserve the heritage of the Township by preserving resources within the Township which reflect elements of its cultural, social, economic and architectural history.
- d. Promote appreciation of historic structures and sites for the education, pleasure and welfare of the local population.
- e. Encourage the appropriate maintenance and preservation of historic structures and sites.
- f. Promote the conservation of historic structures and sites and to invite voluntary compliance for said conservation.
- g. Monitor and recommend to the Township Committee the submission of any grants related to historic preservation.
- h. Monitor and recommend to the Township Committee the inclusion of any structures or sites within the state or federal historical register.
- i. Recognize structures and sites from 1875 and earlier with appropriate plaques.
- j. Collect and maintain an oral and pictorial history of the Township."

In April of 2015, the committee took over stewardship of the Historic Montrose School constructed in 1812. The Montrose School was the township's last one-room schoolhouse. Suffering from funding challenges, weather events, and duration of time the committee recommended, with the Township's approval, various repairs and upgrades. Upgrades have included a new durable fence, a pine tree donation, and new slate roof donation. The committee recently hosted a successful 'Country Christmas Open House' event at the Montrose School in December 2015. The free event included a repertoire of ballads and folk, a visit from Santa, tree lighting, and shopping. Through this event, the community experienced the historic significance of such resources in addition to supporting the local history for future generations.

The committee maintains a list of approximately 100 historic areas within Colts Neck including homes, schools, commercial buildings, battle sites, and cemeteries. They have developed fundraisers, including house tours and holiday events, to create awareness and generate income for preservation efforts.

Also located in Colts Neck Township, and mentioned in the 9.0 Agricultural & Economic Development Element, is America's oldest native commercial distillery and one of the country's oldest family businesses. Laird & Company, a family distillery founded in Colts Neck, holds federal distillery license Number One from 1780. Historical records show George Washington wrote the Laird family requesting the Applejack recipe and later noted in his journal about his production of such cider spirits. The art of producing Applejack has been passed down through Laird family generations for almost 300 years and some 12 generations. Today, Laird & Company is America's sole remaining applejack producer and a top apple brandy producer.



Towns can then develop, adopt, and implement land use ordinances and/or design guidelines to protect these resources without the need for placement on the State or National Registers. Towns are encouraged to use the Monmouth County HSI as a starting point to produce their own local inventory. Municipalities are also encouraged to establish Historic Preservation Committees whose responsibilities consist of protecting and preserving the township’s historic resources and creating awareness and support for historic preservation and restoration.

An inventory of municipal master plans and other associated documents related to arts, historic, or cultural resources can be found in Appendix E: Municipal Planning Documents Reference Sheet.

Although the MLUL does not include a cultural plan or creative placemaking plan as an optional element, it does allow for “appendices or separate reports containing the technical foundation for a master plan and its constituent elements.” Therefore, towns are encouraged to use this authority delegated to them under MLUL to develop culturally-based planning documents that strengthen policies between the arts and other master plan goals regarding community health, historic preservation, economic



development, and redevelopment.

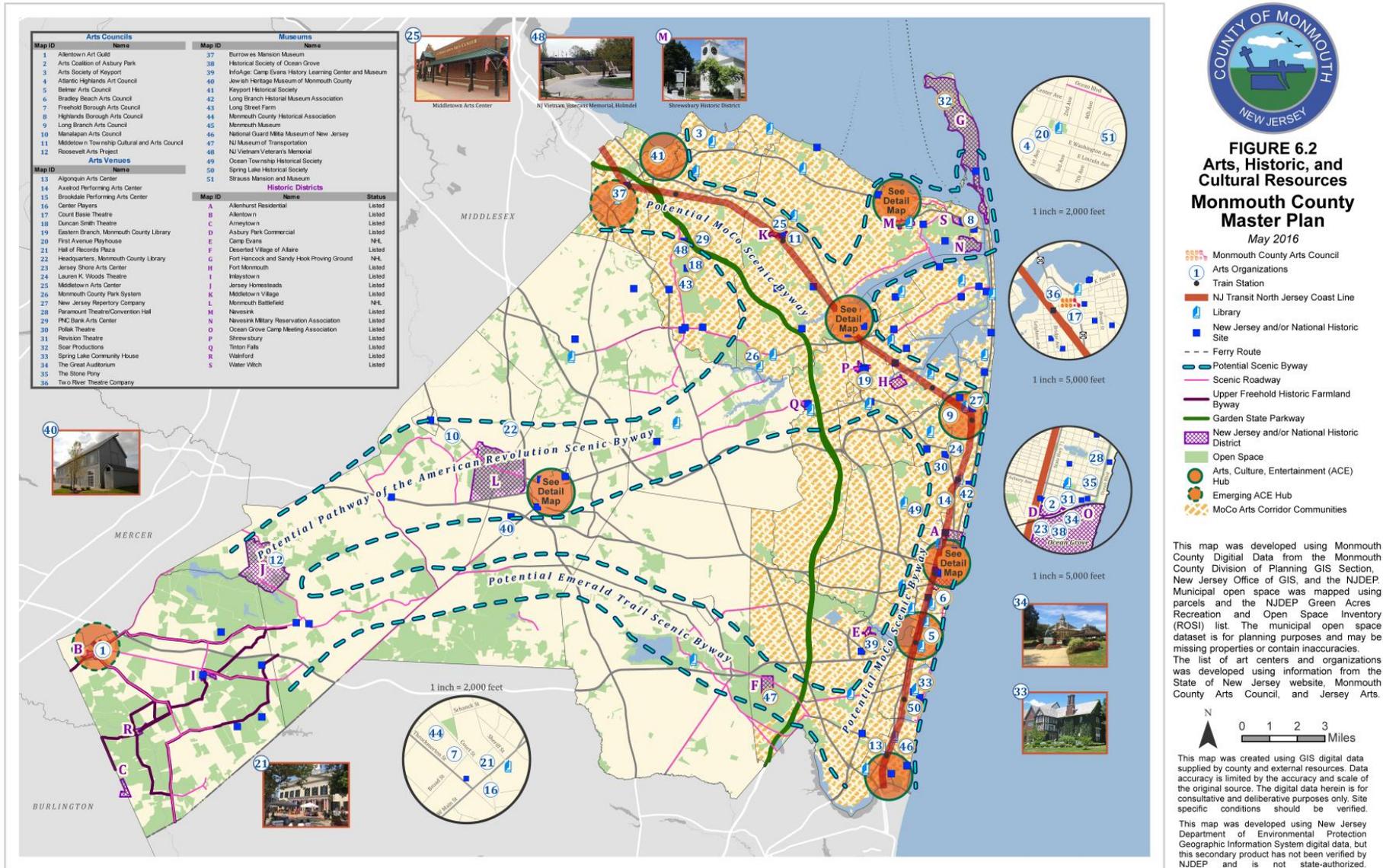
6.2.5 Arts, Historic, and Cultural (AHC) Resources Map

The AHC Resources Map shown in Figure 6.2 presents a composite of the county’s major cultural infrastructure including arts councils, venues, and museums. It is meant to be used as a tool to help visualize the location and connectivity between the prominent cultural amenities throughout the county. The AHC Resources Map is the first map to clearly define the communities located in the MoCo Arts Corridor. The original concept of an arts corridor was proposed in the *Coastal Monmouth Plan (2010)* as a means to collectively brand the region between Red Bank and Manasquan proximate to the NJ TRANSIT North Jersey Coast Line as a cultural destination. Because there are a large number of individual historic sites, only National and State Register historic districts are displayed on the map. A more inclusive map would have been impossible to read for the purpose of this report. *Master Plan* Recommendation 6.2 calls for the development of an interactive, GIS-based, online mapping resource for the Monmouth County Park System’s existing Monmouth County Historic Sites Inventory. This will include all the National and State Registered historic sites and districts as well as locally designated sites and districts.

Through adoption of this *Master Plan*, the AHC Resources Map provides important cultural directives for Monmouth County. For instance, the AHC Resources Map,



Figure 6.2: Arts, Historic, and Cultural Resources Map, 2016



expands upon the number of Arts, Cultural, and Entertainment (ACE) Hubs or nodes recognized in the *Coastal Monmouth Plan (2010)* from five (Red Bank, Long Branch, Asbury Park, Belmar, and Manasquan) to eight including Keyport, Freehold Borough and Atlantic Highlands. It also recognizes Allentown and Matawan as emerging ACE Hubs. ACE Hubs are defined as places containing a robust mix of arts, cultural, and entertainment activities. They are considered local and regional destinations for such activities and viewed as an important component in providing for a more resilient and sustainable, year-round local economy, particularly in highly seasonal markets.

Thanks to the efforts of Monmouth Arts, formerly known as the Monmouth County Arts Council, the Monmouth County Division of Planning and other partner organizations, the **MoCo Arts Corridor** has expanded to include 41 towns, from Matawan to Manasquan, with 1,200 plus artists and 75 art groups. This effort has drawn statewide attention and accolades for bringing Monmouth County to the forefront of creative placemaking at the regional level. At the United Nations in 2014, during a panel on the Role of Art and Education in the Reduction of Conflict and the Building of Communities the MoCo Arts Corridor was featured as “a great example of a regional collaboration” and “a beacon for creative placemaking planning, intervention, and sustainable development.”

It is an important distinction in the *Master Plan* that Freehold Borough is the first and only ACE Hub community recognized outside of the MoCo Arts Corridor. This community has achieved success in recent years by cultivating the arts through a series of collaborative partnerships between the Freehold Borough Arts Council (FBAC), the Freehold Center Partnership Special Improvement District, Freehold Borough and Monmouth County governments, and artists, along with arts and faith-based organizations. Building off this success, *Master Plan* Recommendation 6.3 seeks to bring the success of the MoCo Arts Corridor into the western reaches of Monmouth County. Freehold

Borough is viewed as a promising model community to assist with this proposal and can be a gateway to help expand this Corridor concept to the remaining 12 municipalities of western Monmouth County.

Aligned to *Master Plan* Recommendation 6.1, Figure 6.2: Arts, Historic, and Cultural Resources Map displays the potential locations for three new county-based scenic byways that provide additional interconnectivity of our arts, historic, and cultural assets. Based on the NJ State Scenic Byway model, each of the byway themes are taken from the intrinsic qualities found along each route. Proposed routes include a Revolutionary War theme byway, connecting the Upper Freehold Historic Farmland Byway to Monmouth Battlefield/Freehold Borough to Sandy Hook following British and American troop movements. Second, a proposed “emerald” byway, a name evoking our expansive greenways and open spaces, is proposed along a southern route linking major parks and their cultural attractions, including the Assunpink Wildlife Management Area, Turkey Swamp Park, Manasquan Reservoir, Allaire State Park, and Fisherman’s Cove. A third byway would reinforce the communities, destinations, and Jersey Shore cultural attractions found along the MoCo Arts Corridor. All three byways would connect and converge, leading travelers and visitors to discover some of the best historic, scenic, natural, and cultural resources the county has to offer. These byways could be tied into a year-round marketing and tourism campaign.

Monmouth County continues to draw visitors and audiences from throughout the state and country to live music events. Musical performances are often associated with the larger theatres throughout the county such as the Algonquin (Manasquan), Great Auditorium (Ocean Grove), Count Basie Theater (Red Bank) and Two River Theater (Red Bank). PNC Bank Arts Center in Holmdel is the county’s largest venue with a capacity of approximately 17,500 people attracting world class top performers. PNC is ranked in the top five most successful amphitheatres in the country and top two major outdoor arenas in the



NY Metropolitan Area ([PNC Bank Arts Center](#)). However, much of the local music scene cannot be fairly depicted on an AHC Resources map because it is happening almost everywhere, all the time throughout the county. During warmer weather months, there is a vibrant outdoor music scene where our beaches, parks, and downtowns are often the backdrop for outside performances. Many restaurants, bars, and pubs showcase local bands all year long, many with devout followers and regional name recognition. Asbury Park’s beachside resurgence can be attributed in part to their live music scene with famous venues including the Stony Pony (globally referred to as Bruce Springsteen’s home roots), the Saint, Wonder Bar, and House of Independents. [NJ Spotlight](#), an online newsletter, recently named four venues in the Monmouth County among the top ten places in the state to see Indie Bands. According to the editors of [Consequences of Sound](#), another online music publication, The Stone Pony and Count Basie Theater are listed prominently in the top “100 Greatest American Music Venues.” Built in 1894, the Great Auditorium in Ocean Grove, an architectural treasure holding about 6,250 people, is the largest enclosed auditorium in NJ. The 1908 pipe organ found in the auditorium is considered one of the largest and finest concert organs in the world ([NJ.com](#)).

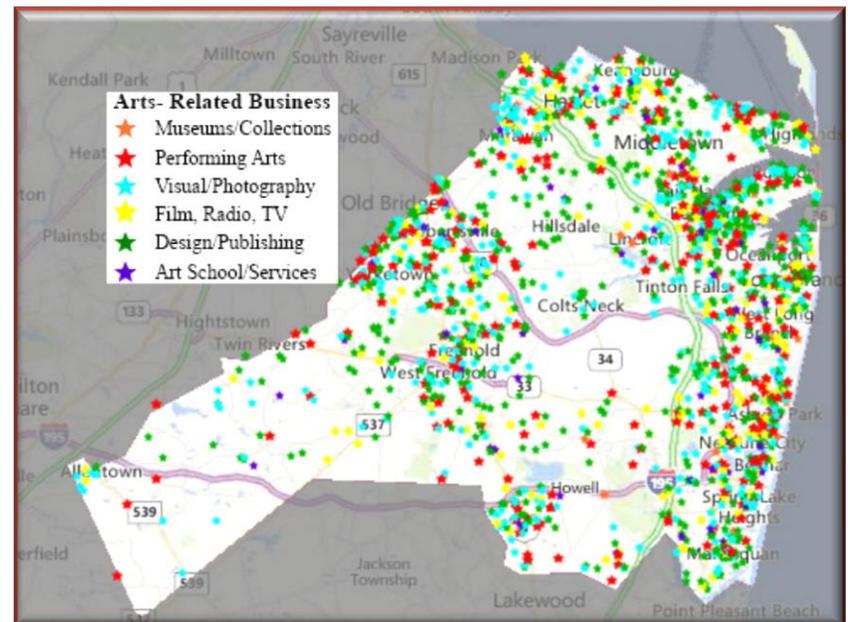
6.2.6 Creative Industries in Monmouth County

Figure 6.3: Arts-Related Businesses of Monmouth County, 2015, displays the type and location of arts-related businesses in the county as identified by Americans for the Arts in their [The Creative Industries in Monmouth County, NJ \(2015\)](#) report.

According to Americans for the Arts, creative industries are composed of arts businesses that range from nonprofit museums, symphonies, and theaters to for-profit film, architecture, and design companies. Creative industries account for 4.4% of the total number of businesses located in Monmouth County and 1.8% of the people they employ. Figure 6.3 plots the creative industries, with each star representing a unique arts business establishment. (Americans for the Arts, 2015)

Taking a lead from the Americans for the Arts report, the Monmouth County Division of Planning conducted its own research and study to gain additional insight into the county’s creative economy. The resulting white paper, entitled [Measuring Monmouth County’s Creative Economy \(2015\)](#), redefined the classification for creative businesses/ industries based on a variety of economic data sources. This county report reveals that creative industries employ over 7,300 workers in approximately 1,450 establishments in Monmouth County. The county is home to 100 arts and cultural nonprofit organizations accounting for \$18 million in annual revenue. Analysis shows that performing arts are by far the largest revenue generating nonprofit organizations. The report provides useful insight into the changing nature of creative industries and

Figure 6.3: Arts-Related Businesses of Monmouth County, 2015



Source: Americans for the Arts



provides an initial economic baseline for future year comparison.

6.3 Emerging Issues and Long Range Challenges

6.3.1 Adaptive Reuse of Historic Buildings: There was a time not so very long ago when historic buildings were thought to be too costly to fix and bring up to modern code. Demolition, from a short-term economic perspective, was often seen as an expedient way to resolve this real estate development issue. The public's increasing interest in preserving community character along with a growing market demand for walkable communities has made way for the concept and inclusion of adaptive reuse as a feasible development approach on sites as small as a single home to as large as an abandoned steel mill complex. Adaptive reuse is the repurposing of a site or building for a reason other than in which it was originally intended. Many historic structures that can be reused are located in some of the most sought after commercial business districts or traditional neighborhoods. Although some sites may not be salvageable due to neglect, decay, and contamination, those that can be have an opportunity to be reconstructed using more efficient and sustainable materials making them more economical and accessible (see Section 6.3.4 Accessibility to Resources) while preserving their historic integrity. Adaptive reuse is seen as an effective planning approach to reduce the impacts of urban sprawl as it does not require public investment in expanding infrastructure further into undeveloped areas. It is also seen as a means to rectify onsite environmental hazards, diminish blight, improve community health/safety, increase surrounding property values, and spur private investment elsewhere in the community. The use of adaptive reuse as a revitalization tool should be encouraged wherever it is economically feasible to do so.

6.3.2 Creative Placemaking: Creative placemaking is a fairly new approach in planning that leverages the use of arts, indigenous culture, artists, and creative people to attract interest and investment into a place with the intent of generating more equitable economic, social, and cultural outcomes throughout the entire community. Successful



Using an open gazebo on E. Main Street in downtown Freehold during off-peak hours, the Freehold Borough Arts Council (FBAC) sponsors a free Sunday Night Jazz and Blues Concert Series as part of their local creative placemaking efforts.

Source: FBAC

creative placemaking results from collaboration among diverse public and private constituents and stakeholders all of whom represent and have interest in the creative community.

In an era where walkable communities and place distinction are at a premium, more and more places are relying on arts, culture, and entertainment as the key to attracting interest in community redevelopment proposals. Through creative placemaking, communities hope to differentiate themselves from other places in appealing to a smart, creative, and entrepreneurial class of people who will not only live and work there, but contribute their positive energy and spirit to bring about inclusive change in the greater community around them.



The Asbury Hotel- Adaptive Reuse of Asbury Park's Former Salvation Army

During the course of 2015, the longstanding vacant and rundown Salvation Army retirement home in Asbury Park undertook extensive rehabilitation to become the city's pioneer hotel in over 50 years. A huge indicator of the city's resurgence, a preeminent real-estate company and partners are redeveloping the site into a five star 110-guest room hotel. Blocks away from the beach, the new hotel anticipates becoming a social hub of the city. The Asbury Hotel will be a classic beach hotel with modern amenities that plays off the city's Victorian-era real estate and rock-n-roll musical heritage. Stonehill & Taylor Architects and Planners, a firm famous for the adaptive projects such as the NoMad Hotel and Manhattan's Ace Hotel, drew the architectural designs.

Highlights of this exciting endeavor, The Asbury Hotel, include:

- Guests are greeted on the main floor by the '**The Counter**' which serves as a check-in station with grab-and-go food options available. Also in the lobby is **Soundbooth** a causal bar where guests and locals can play games and listen to live music.
- On the 6th floor is a rooftop garden, **The Baronet**, which transforms from a game area during the day to a nighttime carless 20-foot 'drive-in' projection theater featuring movies and live performances.
- Open to public on Sundays and featuring local DJs, **The Pool** is comprised of a large pool deck with ample seating. Next to the pool area, a **Beergarden** provides a relaxed meeting place for locals and guests serving craft and local beers, signature drinks, and street food.
- On the hotel's roof a 4,000 square foot lounge, **Salvation**, with ocean and city views will include beds and lounges while hosting local DJs and celebrity artists.
- **Asbury Hall & Lawn** will serve as the hotel's indoor/outdoor 4,800 square foot event and meeting center, which can be divided into smaller rooms to accommodate gatherings of all sizes.

The hotel's location at 210 5th Avenue is in walkable proximity to Convention Hall, the boardwalk, and beaches. The Asbury Hotel has the potential to be a substantial tourism economic driver for the city. The hotel opened Memorial Day weekend of 2016.

The developer also owns the property behind the hotel, the iconic Asbury Park Bowling Lanes which opened in 1962. Recently closed for preservation and enhancement, this vintage bowling alley/music and art venue will connect to the Hotel and is also a prime example for the adaptive reuse of historic buildings. Both of these properties are integral components of Asbury's historic legacy, which are now being preserved for future generations.



According to the Center for Creative Placemaking, communities that engage in creative placemaking seek to:

- *Leverage the creative possibilities in a place*
- *Capitalize on distinctiveness*
- *Empower artists and visionaries to help reach community potential.*
- *Create opportunities for people of all income levels and backgrounds to come together and to thrive*
- *Contribute to a mix of uses and pedestrian activity*
- *Attract businesses*
- *Improve social welfare*
- *Foster economic progress and entrepreneurship in the public interest*
- *Connect at the intersection of art and technology*

To assist towns with these efforts, *Master Plan* Recommendation 6.5 offers planning assistance to our municipal partners in creating cultural asset inventories and in the development of their cultural and creative placemaking plans that will incorporate the arts into local policy documents.

6.3.3 Public Art and Redevelopment: Arts, historic, and cultural resources are often tourism drivers attracting visitors from destinations both near and far. A few initiatives supporting this integration are strengthening related infrastructure and accessibility (see MoCo Arts Corridor), supporting public-private partnerships in the sector, fostering creative business aid disaster recovery efforts, creating cultural enterprise zones or communities, reclaiming industrial space for the arts, developing unique branding, marketing cultural events, and promoting unique destinations. Artists, firms, and cultural facilities located in close proximity to economic development activity often lend themselves to generating ample beneficial economic multipliers, especially in downtown redevelopment scenarios.

To further the presence and integration of public art in a community, municipalities may opt to establish ordinances that require a portion of

a developer's capital construction costs be dedicated for the creation and display of public art. During 2015, Morristown NJ became one of the first municipalities in the state to launch a [One Percent for Arts](#) program, ensuring the rich culture of their community sustains during redevelopment. This program designates 1% of capital costs up to \$100,000 for new redevelopment projects to the installation and maintenance of exterior public art on/or adjacent to the property being developed. This type of program fosters healthy, vibrant downtowns and is a model for cultivating climates rich in culture and arts. The One Percent for Art program was established by Morristown in partnership with Morris Arts. This approach should be considered by towns seeking to strengthen their arts presences in the MoCo Arts Corridor and throughout the county.

New Jersey established the Arts Inclusion Program, the state's percent for art program, in 1978. This program allocates up to 1.5% of state financed construction project budgets to artwork. Since its passage, the program has commissioned and installed hundreds of pieces of artwork in state agencies, state universities, NJ TRANSIT stations, and elsewhere. Such a program requires builders to dedicate a percentage of total building costs towards art resources in the community. The money is often dedicated to innovative applications of public art like a mural or arts and culture-based public programs. The [New Jersey State Council on the Arts](#) acts as a consultant in the art selection process.

6.3.4 Accessibility to Resources: Physical, economic, and cultural barriers that prohibit people from readily accessing, participating in, and enjoying the arts is a structural and financial challenge facing almost all arts organizations. The New Jersey Theatre Alliance has taken the lead in overcoming these challenges through the Cultural Access Network Project. Co-sponsored with the New Jersey Council on the Arts, the project provides services and programs to theaters and cultural organizations geared toward making their facilities, programs, and performances accessible to seniors and people with disabilities.



Overcoming physical obstacles is just one category of accessibility limitations. Although Monmouth County is considerably affluent, there remain a number of places in our community where access to the arts is much less predicated on proximity and much more on the cost of participation. Those who do not have the financial means to engage in artistic and cultural pursuits are often left at a long-term disadvantage creatively, socially, and scholastically from their more affluent peers. Many in the Monmouth County arts community recognize this inequity and have taken action to remove economic barriers as part of their programming. Collaboration between various entities including local and state government, art councils, historical committees, and private institutes to develop an 'Annual Free Admission Day' is encouraged. Finally, it is important to consider the social isolation caused by barriers to cultural inclusivity within the broader context of accessibility. The arts and artists themselves are often seen as barometers of change within society. As the county population grows older and more diverse, the arts will adapt and find ways to reach and reflect the audience it serves. As that occurs, it's important to identify and assist emerging and underserved populations within the community at large, including those identified in Section 6.3.5 Arts and Community Health.

6.3.5 Arts and Community Health: There is a growing body of evidence that supports the engagement of creative arts as a public health resource. [ArtPride New Jersey Foundation](#) (refer to Section 6.5.2 Arts and Cultural Resource Assistance) is a not-for-profit advocacy organization that has taken a lead role in this movement. Through its Alliance for Arts & Health New Jersey initiative, artists and arts professionals are connected with health and wellness service providers. The Alliance has identified ten key focus areas for arts and health in NJ: 1. Mental health, including substance abuse and prevention; 2. Geriatrics and creative aging; 3. Medical training, including nursing and medical staff; 4. Oncology; 5. Special needs populations (disabilities, autism, Parkinson's); 6. Obesity; 7. Youth services; 8. Pediatrics; 9. Caregivers; and 10. Military ([ArtPride](#), 2015). Developing stronger

partnerships between cultural organizations and health providers is a vital step in creating sustainable arts and health programming in Monmouth County. Funding, to a great extent, will come directly from the health providers themselves and from their associated partnerships outside of the arts.



Concrete road barrier used to restrict traffic to flood damaged areas along the beach converted into a public art, giving locals a positive message of hope in the aftermath of Superstorm Sandy. Belmar, NJ 2013

Source: Monmouth Arts

6.3.6 Arts Responder: Acknowledging Monmouth Arts as the county's primary "Arts Responder" helping connect the arts community to information, resources, and emergency funding in the aftermath of a disaster is just one of numerous Stakeholder Strategies identified in this Element under Community Resiliency (refer to Section 6.6 Master Plan Recommendations and Stakeholder Strategies). This particular Stakeholder Strategy recognizes the remarkable role undertaken by Monmouth Arts in the aftermath of Superstorm Sandy. Being a shore community, many of the county's most precious arts, historic, and cultural resources are located in vulnerable areas to future storm and flooding events. Arts, historical, and cultural resources are irreplaceable. Arts Responders are a vital way communities can protect and preserve such resources before, during, and after a storm. During Sandy recovery, Monmouth Arts worked with the Federal Emergency

Management Agency (FEMA) on behalf of cultural organizations. [American for the Arts](#) showcases online that during Superstorm Sandy:

“Two River Theater and Count Basie Theatre became recharging stations for people and electronics. Middletown Arts Center created a new program for students until the student’s schools were reopened. Monmouth Art’s efforts became ArtHelps, which included an Indie gogo campaign to support community arts projects in the hardest hit towns. Monmouth Arts also joined the Monmouth County Long-Term Recovery Group to ensure the arts were represented in ongoing recovery efforts.”

Presently, Monmouth Arts maintains a list of emergency preparedness resources online including first steps to recovery, government assistance options, legal help, and information for small businesses, self-employed, artists, arts organizations, schools, and teachers. As the threat from rising tides and severe weather continues to intensify, the role of Monmouth Arts as the Arts Responder in maintaining and protecting these assets from the effects of natural disasters becomes an increasingly important component to our overall community resiliency strategy. The nation has lost many historic and cultural resources due to natural disasters. The Romer Shoal Light Station (1898) off the coast of Sandy Hook and Keansburg Amusement Park (one of the NJ’s oldest amusement parks) sustained major damage and inundation during Sandy. The Romer Shoal Light Station is listed on the National and State Registers. This need is discussed further in the 12.0 Community Resiliency Element, Sections 12.3.2 Best Management Practices in Resiliency and 12.3.5 Keeping Community Character and Historic Fabric.

Following the appropriation of Public Law 113-2 Disaster Relief Appropriations, which streamlined Sandy disaster assistance, the National Park Service (NPS) funded the Hurricane Sandy Disaster Relief Assistance Grants for Historic Properties. This funding generated the [Action Plan Narrative for the Preservation, Stabilization, Rehabilitation, and Repair of Historic Properties \(2013\)](#) and [Implementation Addendum](#)

[\(July 2014\)](#).

6.3.7 Cultural Heritage Commissions: Collaboration and cohesion in this Element is an essential key facet for long-term success. While many municipalities throughout our county have established Historical Advisory or Historic Preservation Commissions, the emerging concept of a Cultural Heritage Commission is encouraged. This commission would combine the protection, preservation, and enhancement of historic resources and the arts.

Duties of a new Cultural Heritage Commission would include:

- Protecting the archeology, architecture, historic, and heritage tourism of their municipality
- Increase public awareness of the historic, cultural, architectural, and archeological preservation value
- Maintain, update, and enforce Historic Design Guidelines
- Work to identify historic locations while keeping an up-to-date inventory
- Review proposed projects to identify potential impacts
- Other various activities

Such a committee would be the county’s primary leader and catalyst for the promotion of public interest in the arts in addition to the preservation of heritage and culture. Focus would be on preserving the places and stories of the county’s rich cultural heritage and communities. The commission would work with municipal, county, regional, and federal agencies, individuals, organizations, community groups, and other various stakeholders. While often overlooked, our cultural heritage is found throughout the county’s museums, libraries, archives, historical societies, municipal offices, and historic sites, properties, and districts. The commission would oversee the designation and protection of local landmarks while incorporating new and emerging arts into the historical integrity.



Rich in heritage and positioned in a vulnerable location, the commission would also be in a position to expand the role of Monmouth Arts as Arts Responder (see Section 6.3.6 Arts Responder) into a comprehensive Arts, Historic, and Cultural Responder.

6.3.8 Value of a Public Arts Inventory

Public art ranges in size, form, and scale- it is simply art in public spaces. This art is free and should be accessible to everyone in the community. Often times, it relates directly to a community’s audience, cultural, history, landscape, or environmental conditions. Public art instills a

**Public Art, History, & Culture
COUNT BASIE BRONZE BUST**

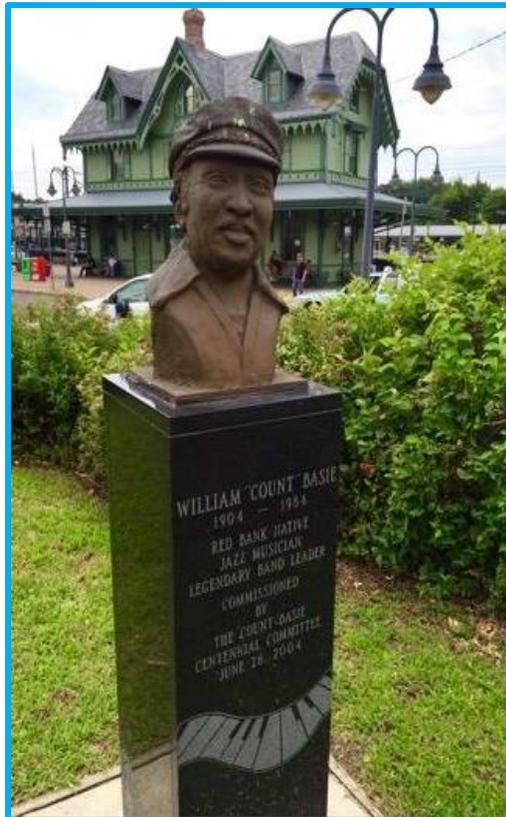
Piece By: Brian Hanlon

Created In: 2004

Located In: Red Bank, NJ along the MoCo Corridor

Funded By: Dr. Eugene Cheslock and Raymond Brennan

The bronze bust was commissioned in 2004 to commemorate the Count’s 100th birthday. Dr. Cheslock and Raymond Brennan felt that Count Basie, known as the Kid from Red Bank, put the borough on the map. The official unveiling ceremony dedicating the bust included remarks from Red Bank resident Phyllis Rudlow as she recalled her memories of her great- cousin, jazz legend William Count Basie. A sister• bust is at the Count Basie Theater, also sculpted by Hanlon.



sense of well-being and understanding of the culture while enhancing the visual and aesthetic quality of a community. [Belmar Arts Council](#) recognizes this value through its annual ArtWalk, a free family friendly event showcasing the talent of dozens of artists and participating businesses in the community. The value of this recognition is growing and an inventory of these public art installations provides tourists and residents a huge resource. The identification of such locations by local arts councils provides the county an opportunity to maintain and manage a Public Arts Story Map. The Public Arts Story Map will combine images, maps, and narrative text on the artist and piece of art.

Many residents may be unaware of significant public art installations throughout the county, and this inventory brings an opportunity to educate, create awareness, and provide recognition to such. For instance, the Asbury Park Public Library has two historically significant stained-glass windows; one is a memorial to Ulysses S. Grant and the other is crafted by Tiffany Company. *Master Plan* Recommendations 6.2 and 6.5 seeks to build upon work already begun at the county and local level in the development of AHC resource inventories so that the public may become more aware of these community assets.

6.3.9 Long Range Challenges: Long Range Challenges facing AHC resources as identified through Working Group discussions and exercises are:

- *Public awareness* about how important arts, cultural, and historic resources are to the county’s long-term economic and social viability is lacking.
- There is a *need to develop a regional wayfinding strategy* for cultural institutions, historic sites and districts, creative downtowns, and performing arts venues.
- *Overcoming the “disconnect”* of the county’s military history and historic sites with the overall story of Monmouth County.
- *Lack of awareness* (perception issue among many residents) in the



quantity, quality, diversity, and availability of the arts in Monmouth County.

6.4 Arts, Historic, and Cultural Stakeholder Actions and Efforts

Monmouth County is very fortunate to have a large number of highly respected public, private, and nonprofit advocates dedicated to the retention, expansion, and promotion of AHC resources at the county-level.

6.4.1 Monmouth County Efforts

Monmouth County Division of Planning

Regional Planning Studies: Between 2004 and 2011, the Monmouth County Division of Planning conducted a series of four regional studies including the [Route 9/Western Monmouth Development Plan \(2004\)](#), [Coastal Monmouth Plan \(2010\)](#), [Bayshore Region Strategic Plan \(2006\)](#), and [Panhandle Region Plan \(2011\)](#). Each of these reports touched upon some aspect of historic and cultural resource protection. The *Bayshore Region Strategic Plan* was the first plan to incorporate a discussion about the need for artist live/work space in the context of economic development issues and strategies. Significant efforts to engage artists and cultural organization during development of the *Coastal Monmouth Plan* resulted in the plan recommending a regional arts corridor to collectively branding the art venues and cultural attractions along the North Jersey Coast Line from Red Bank to Manasquan. This recommendation later inspired the creation of the MoCo Arts Corridor Partnership.

Creative Economy White Paper: Refer to Section 6.2.6 Creative Industries in Monmouth County, [Measuring Monmouth County's Creative Economy- A Data Insight Report of the Economic Contributions of Creative Industries in Monmouth County, NJ \(2015\)](#).

Upper Freehold Historic Farmland Byway: Designated as a New Jersey Scenic Byway by the New Jersey Department of Transportation (NJDOT)

Commissioner on November 29, 2006, the Upper Freehold Historic Farmland Byway follows a 31.5-mile route through Upper Freehold Township and Allentown Borough showcasing the distinct historic, scenic, recreational, and cultural assets of each of the communities. Although this project was a joint partnership between local, county, and state officials, the Monmouth County Division of Planning took the leadership role in preparation of the Byway Nomination Packet for submission to NJDOT and coordination of the Corridor Management Plan (CMP) process. While the Byway Nomination Packet is a little known resource about the local history along the byway, the [Upper Freehold Historic Farmland Byway Corridor Management Plan \(2010\)](#) was the essential first step in providing for the long-term stewardship of



The Old Mill along the Upper Freehold Historic Farmland Byway evokes charming, country culture and colonial heritage in Allentown, NJ

Source: Division of Planning



the intrinsic qualities that comprise the byway. *Master Plan* Recommendation 6.1 supports development of additional county-based scenic byways that would provide interconnectivity of our arts, cultural, and historic assets through the use of a multi-modal transportation network. Figure 6.2: Arts, Historic, and Cultural Resources Map in Section 6.2.4 Municipal Resources shows the general location where these future byways are being proposed. The county will advance this program through the creation of a Scenic Byway Story Map. This Scenic Byway Story Map will include a map of the byway, images, and narrative on the historical significance.

Monmouth County Park System (MCPS): Beyond publishing and maintaining the [Monmouth County Historic Sites Inventory](#) (see Section 6.2 Existing Conditions) and [Monmouth County Historic Preservation Planning Guide \(1989\)](#) (see Section 6.5 Technical Resources and Funding Opportunities), the MCPS is the largest holder of historic buildings and structures in Monmouth County (MCPS, 2016). This incredible responsibility is in the hands of the many passionate and dedicated employees of the MCPS who plan for, restore, maintain, and interpret these facilities. The MCPS also provides engaging year-round programming that includes all facets of arts, history, and culture. Since 1975, the MCPS hosts the annual Monmouth County Fair, a multi-day celebration of the county's agricultural heritage held at the East Freehold Showgrounds. The [Monmouth County Friends of the Parks](#) is a member-based 501(c)(3) registered charitable organization that uses dues, donations, and proceeds from fundraisers to assist and support MCPS efforts to enhance park properties and programs. The Division of Planning will continue to work with the MCPS and arts stakeholder to increase the presence and strengthen the interaction of between arts, nature, and recreation in our county parks. In 2015, the MCPS launched an annual Creative Arts and Music Festival held at their Thompson Park Creative Arts Center (which houses ceramic and pottery studios and serves as an artistic outlet for residents). The annual festival features artist's work for sale along with live music and art activities.

Two preeminent historic sites managed by the MCPS include Historic Walnford, an 18th century mill village and homestead part of the 1,400+ acre Crosswicks Creek Park in Upper Freehold and Longstreet Farm, a 1890's living farm museum, set on nine acres in Holmdel Park. Walnford or Waln's Mill was a colonial village founded in 1734. When purchased in 1772 by Richard Waln (1737-1809), it consisted of a farm, several houses, two orchards, a sawmill, a gristmill for grinding grain, a fulling mill for wool cloth, a blacksmith shop and a cooper's (barrel maker's) shop. The following year the mansion was constructed. It was said to be the largest house in Monmouth County at the time (Meirs, 2006). The site now showcases over 200 years of social, technological, and environmental history through the Waln family (MCPS, 2015). Longstreet Farm is a historic living farm representing rural Monmouth County in the 1890s. Situated on nine acres, interpreters dress in costume and employ tools, instruments, and machinery found on a working farm at that time. Throughout the year the farm hosts free demonstrations (e.g. blacksmith making) where interpreters in period dress perform daily and seasonal agricultural and domestic activities.

The [Navesink Military Reservation](#) spanning 245-acres in Hartshorne Woods Park received National Register designation as the Navesink Military Reservation Historic District on October 13, 2015. The reservation overlooking Sandy Hook Bay and the NY Harbor on "a natural fortress" was established in 1942. Battery Lewis, Battery 219, two housing cantonments for troops, and facilities for controlling the firing of the guns encompasses the reservation. The reservation played valuable roles during World War II and the Cold War. In 1974, the facility was closed and transferred to Monmouth County.

Monmouth County Historical Commission: Established by the Board of Chosen Freeholders in August of 1988, the commission is dedicated to the preservation of the county's rich historic heritage. The nine appointed commissioners work closely with the Freeholder Liaison, County Historian, and the Executive Director, in addition to Monmouth



County Division of Planning staff, as advocates for the preservation of historic properties, sites, and projects. Primary activities include the administration of a [Historic Preservation Grant Program](#) to assist nonprofit organizations and municipalities in maintaining historic structures; a [Historic Preservation Awards Program](#) to recognize successful rehabilitation projects; and a Fifth-Grade Essay Contest to encourage students to write about a historical site or an individual family member, who inspired their interest in history. The commission also coordinates a self-guided tour of over 40 historic sites throughout the county on the first weekend in May, known as [Weekend in Old Monmouth](#). Sites on the tour may vary year-to-year, keeping the event intriguing for those who have already participated. All these activities are supported by funds appropriated by the Monmouth County Board of Chosen Freeholders.

Monmouth Arts: Monmouth Arts, the county’s official arts agency, is a nonprofit organization whose mission is to enrich the community by inspiring and fostering arts. Their vision is a vibrant arts community that enhances the quality-of-life in Monmouth County. Since 1971, Monmouth Arts, formerly the Monmouth County Arts Council, has provided essential services and assistance to the arts and cultural community throughout the county. Today, Monmouth Arts does this through arts education, collaborations, special events, grants, and supportive marketing. Programing is made possible through funding provided from the Monmouth County Board of Chosen Freeholders through the County Historical Commission, the New Jersey State Council on the Arts, and private contributions. Following Superstorm Sandy in late 2012, Monmouth Arts responded with Arts Helps, a program devised to provide relief, resources, and assistance to artists and cultural organizations dealing with storm recovery issues, mentioned previously in Section 6.3.5 Arts Responder. Monmouth Arts also sends out informative monthly e-newsletters detailing arts news, special events, member spotlight, art education news, and other information.

Cultural Arts Plan: With assistance from the Monmouth County Division of Planning, Monmouth Arts updated its county-wide cultural arts plan [Imagine, Envision, Create \(2012\)](#). This plan builds upon the previous plan, *A Blueprint for the Arts*, and integrates input and research from a broad range of artists, arts organization, creative industries, planning, tourism, education and economic development (Monmouth Arts website, 2016). Developed with assistance from the Monmouth County Planning Board, The Monmouth Arts Cultural Plan, The plan identifies five primary goals for Monmouth Arts including (1) Building a Strong Cultural Arts and Image for Monmouth County, (2) Foster Community Arts Development, (3) Facilitate Increased Arts Education Opportunities, (4) Increase Funding and Resources for the Arts, and (5) Continue to Develop the Capacity of the Monmouth Arts. The plan offers insight into the arts community found throughout Monmouth County and evaluates arts opportunities through economic development, tourism, and education. *Imagine, Envision, Create* recommends a list of implementation strategies and tasks necessary to achieve the five primary goals of the plan. *Master Plan* Recommendation 6.4 seeks to



The MoCo Arts Partnership supports a diverse array of artists and arts along the MoCo Arts Corridor

Source: Monmouth Arts



formally recognize Monmouth Arts' *Imagine, Envision, Create* as a component of the AHC Element of the *Monmouth County Master Plan*.

MoCo Arts Partnership/Corridor: Cohesively marketing and branding the many municipalities that comprise coastal Monmouth as an art, cultural, and entertainment destination was first recommended in the *Coastal Monmouth Plan (2010)*. The *Coastal Monmouth Plan* calls for a unified marketing theme to strengthen the year-round shore economy in the coastal areas through cooperative promotional efforts. The ACE Hubs of Asbury Park, Atlantic Highlands, Belmar, Freehold, Keyport, Long Branch, Manasquan, and Red Bank are anchor communities located along NJ TRANSIT's North Jersey Coastline, and already attract a large amount of seasonal business activity. Monmouth Arts along with support from the Monmouth County Government, NJ TRANSIT, artists, local businesses, educational institutions, and numerous tourism and cultural organizations developed a comprehensive marketing plan for the coastal area. The MoCo (Monmouth County) Partnership has created the MoCo Arts Corridor as the signature brand for coastal Monmouth. Spanning from Matawan to Manasquan, this corridor encompasses 41 towns proximate to NJ TRANSIT's North Jersey Coast Line and the Garden State Parkway.

Monmouth County Public Library System: Our library system is considered by many to be one of the finest library systems in the nation. With Library Headquarters in Manalapan, an Eastern Branch in Shrewsbury Borough, 11 municipal branches, and 14 municipally affiliated members located throughout the county, the Library System provides year-round cultural programming in all locations. As stated in the library's mission statement, their aim is to help patrons meet their educational, recreational, and cultural needs through extensive collections, professional services, information resources, and innovative programming. The system also provides almost limitless opportunities for patrons to pursue a lifelong quest of understanding and knowledge through reading, learning, and interactive engagement.

To celebrate National Archives month, every October the [Monmouth County Archives](#) and Library celebrate Archives Week and host 'Archives and History Day.'

Monmouth County Health Department (MCHD): The MCHD produced the informative [Natural and Cultural Features of Monmouth County \(2010\)](#) to provide environmental health investigations with background reading about our county.

Brookdale Community College (BCC): BCC's Lincroft Campus is home to two of the region's cultural centers including the Monmouth Museum and the Center for Holocaust, Human Rights, and Genocide Education. Established in 1963 and given a permanent home at Brookdale in 1974, the [Monmouth Museum](#) is a private, nonprofit organization that views itself as a "Museum of Ideas" dedicated to presenting changing art, history, and science exhibitions to educate and entertain while providing for creative expression and life-long learning to the diverse community it serves (Monmouth Museum website, 2005). Each year the museum is host to the Monmouth Teen Arts Festival. Produced by Monmouth Arts, this festival is a multi-day celebration of young artists from around the county showcasing their ability and talent as well as providing them access to workshops, performances, and critiques from professional artists. The [Center for Holocaust, Human Rights and Genocide Education](#) was founded at Brookdale in 1979 as the Center for Holocaust Studies. The center's mission is to educate people about the historical issues of the Holocaust and genocide, eliminate racism and all forms of prejudice that are destructive to society, and develop programming focused on critical human rights issues (Center for Holocaust, Human Rights and Genocide Education website, 2015). This nonprofit, volunteer organization houses an extensive library of books and media materials as well as a permanent archive of memorabilia, artifacts, and documents from local holocaust survivors. It also offers specialized programming that advances education and understanding about issues surrounding genocide.



Monmouth County Department of Public Information and Tourism:

This department is the county's go-to information clearinghouse for those seeking to visit or explore Monmouth County. In 2014, tourism spending accounted for \$2.208 billion ([Monmouth County 2015 Profile](#)). The [Department of Tourism](#) manages a website that is continually updated with visitor resources including lodging, attractions, and upcoming events. It also oversees the production of an annual Monmouth County Travel Guide and maintains a storefront Visitor's Center on Main Street in Freehold Borough. They also works closely with business associations and visitors centers throughout the county to promote broader awareness about the best shopping, dining, recreation facilities, and cultural destinations Monmouth County has to offer.

6.4.2 New Jersey State Agencies and Efforts**New Jersey Department of Environmental Protection (NJDEP)**

New Jersey State Historic Preservation Office (NJ HPO): The NJ HPO is committed to "the preservation and appreciation of our collective past." As stated on the NJ HPO website, its mission is to assist the residents of New Jersey in identifying, preserving, protecting, and sustaining our historic and archaeological resources through the implementation of the state's historic preservation program. That program includes an annual workshop, co-sponsoring history and preservation related activities, as well as resource publications and professional training opportunities. The NJ HPO is responsible for the management and maintenance of the State Register of Historic Places. It also offers [Historic Preservation Certified Local Government \(CLG\) Grants](#) for eligible historic preservation activities.

Division of Parks and Forestry: This division is responsible for the preservation, maintenance, and interpretation of historic resources at two state parks in the county, Monmouth Battlefield State Park (Manalapan and Freehold Townships) and the 3,205-acre Allaire State Park (Wall and Howell Townships). Monmouth County's

colonial and revolutionary pride is strongly tied to the events that took place in and around the Battle of Monmouth in late June 1778. This 1,818-acre state park commemorates one of the largest battles of the Revolutionary War and the last major battle before focus shifted to the southern campaign. A welcoming visitor's center and restored 19th century landscape encourage visitors to wander the farm fields and hallowed grounds in the footsteps of the Continental Army. Allaire Village, part of the overall Allaire State Park and Manasquan River Greenway, is a living history museum that recreates life in an 19th century iron ore town. Once referred to by locals as the deserted village, the historic interpretation of the restored Howell Works is geared towards understanding early American business entrepreneurship. The state receives assistance in the management of these facilities from the Friends of Monmouth Battlefield and the Allaire Village, Inc. Both these organizations are 501(c)(3) not-for-profit organizations devoted to preserving, protecting, and historically interpreting these sites.

New Jersey State Planning Commission, Office of Planning Advocacy:

Adopted by the State Planning Commission in 2001, Goal #7 of [The New Jersey State Development and Redevelopment Plan \(SDRP\)](#) speaks directly to the preservation and enhancement of historic, cultural, scenic, open space, and recreational assets. The SDRP recommends 15 separate policies to achieve this goal, all of which strongly support the overarching goals of the *Monmouth County Master Plan*. SDRP policy recommendations for historic, cultural, and scenic resources are identified in Figure 6.4: State Plan Policy Recommendations for Historic, Cultural, and Scenic Resources.

New Jersey State Council on the Arts: Housed in the Department of State, the State Arts Council offers an array of programs, services, and funding opportunities supported by a direct appropriation from the State of New Jersey through a dedicated Hotel/Motel State Occupancy Fee and grants from the National Endowment for the Arts. Created in



Figure 6.4: State Plan Policy Recommendations for Historic, Cultural, and Scenic Resources

Policy 1: Identification and Inclusion	Coordinate the identification of historic areas, historic sites, landscapes, archeological sites, and scenic corridors for inclusion in state and national registers and in county and municipal planning documents.
Policy 2: Municipal Plans	Include historic surveys and scenic corridors in local master plans.
Policy 3: Preservation Guidelines	Ensure uniformity in guidelines used by all levels of government for the preservation and rehabilitation of historic buildings.
Policy 4: Historic Resources and Development Regulations	Protect the character of historic sites, landscapes, structures, and areas through comprehensive planning, flexible application of zoning ordinances, construction codes, and other development regulations.
Policy 5: Archaeological Resources Investigate, Protect, and Document Archaeological Resources	Investigate, protect, and document archaeological resources identified prior to disturbance of a site. Encourage voluntary, expedited documentation of archaeological finds that might not otherwise be investigated, especially in private construction sites.
Policy 6: Historic Resources and Infrastructure	Locate and design public and private capital improvements to protect historic resources and their settings from the immediate and cumulative effects of construction and maintenance of these improvements.
Policy 7: Historic Structure Re-use and Affordable Housing	Promote adaptive reuse of historic structures to provide affordable housing, where appropriate, in ways that respect architectural and historic integrity.
Policy 8: “Main Street” Programs	Promote “Main Street” and other programs to aid in protecting historic sites and structures during revitalization of traditional downtown areas.
Policy 9: Identification and Delineation Downtown Areas	Participate in the coordination of state, regional, and local government identification and delineation of scenic and historic corridors throughout New Jersey, and take the necessary steps to protect them.
Policy 10: Greenways, Scenic and Historic Corridors	Establish within a regional greenway system publicly accessible portions of scenic and historic corridors to provide passive and active recreational and cultural opportunities.
Policy 11: Development Patterns and Design to Support Scenic and Historic Values	Manage development and redevelopment to maintain, complement and enhance scenic and historic values within identified and delineated scenic and historic corridors.
Policy 12: Protection and Preservation of Scenic and Historic Corridors	Protect scenic and historic corridors by appropriate means and preserve them by using easement purchase, density transfers, fee simple purchase and other innovative and effective mechanisms.
Policy 13: Museums	Support museums, libraries, interpretive centers, archives and other public buildings as repositories of past culture and showcases for contemporary culture, and locate them in Centers, where appropriate, as interconnected components of community-based learning networks.
Policy 14: Civic Design and Public Art	Encourage high-quality design of all public buildings and landscapes, and promote the use of art in all public buildings and spaces.
Policy 15: Economic Development	Use historic preservation as a tool to promote economic development.



1966, the 17 member council is missioned to, "...improve the quality-of-life in this state, its people and communities by helping the arts flourish." The council annually supports thousands of public arts events reaching an audience in excess of 18 million and helps stimulate over \$1.5 billion in NJ economic activity. The council works with partner organizations, all of which is governed by strategic plans made in the broader context of [Arts Plan New Jersey](#). (State Council for the Arts, 2015)

[New Jersey Historical Commission \(NJHC\)](#): The NJHC is a state agency dedicated to the advancement of public knowledge and preservation of NJ history. Established by law in 1967, its work is founded on the fundamental belief that an understanding of our shared heritage is essential to sustaining a cohesive and robust democracy. The NJHC receives its funding primarily by legislative appropriation. It fulfills its mission through various initiatives including media projects, publications, and materials for teachers, as well as an active grant and awards program. The goal of the grant program is to engage diverse audiences and practitioners in the active exploration, enjoyment, interpretation, understanding, and preservation of NJ history. (Department of State website, 2015)

[New Jersey Historic Trust/Heritage Tourism Task Force](#): Created by state law in 1967, the mission of the trust is to advance historic preservation through advocacy, policy development, heritage tourism support, and financial resources towards the sustainable stewardship of historic properties (refer to Section 6.5 Technical Resources and Funding Opportunities). In 2006, the state legislature established a New Jersey Heritage Tourism Task Force. This task force, with collaboration from the Historic Trust and other state partners, developed [A Heritage Tourism Plan for New Jersey Master Plan \(2010\)](#). Their plan identifies six themes that will be used in historic site interpretation, historical marker program, heritage education curriculum, and tourism promotion. These six themes are:

- **New Jersey in Conflict** including the role of Monmouth Battlefield in the Revolutionary War
- **New Jersey at Work** showcasing industry and innovation
- **New Jersey Land and Sea** exposing our agricultural and seafaring heritage
- **New Jersey at Play** looking at our parks and resorts as attractive destinations
- **Many Faces of New Jersey** as our diversity represents the world
- **New Jersey by Design** acknowledging our distinct efforts in design, planning, and architecture

The trust provides strategic direction for the promotion of our state's heritage tourism.

[National Guard Militia Museum of New Jersey \(NGMMNJ\)](#): Unassuming in its quiet location as part of the National Guard Training Center in Sea Girt, the NGMMNJ collects, preserves, and displays artifacts, documents, and memorabilia that have historical significance to the Army National Guard, the Air National Guard, and the Naval Militia of NJ. The mission of the NGMMNJ is to preserve and explain the military heritage of NJ and enhance public understanding of how armed conflicts and military institutions have shaped our state and national experience. The Main Museum presents the role of the NJ Militia and National Guard within the context of the state's larger history, using original and reproduction uniforms, weapons, photographs, artifacts, and art from the period of Dutch, Swedish, and British colonization through the War for Independence, Civil War, and World Wars I and II to the present day. General admission to the museum is free and open to the public seven days a week except for holidays. (State of NJ, Dept. of Military Affairs website, 2015)

6.4.3 Partnership Efforts

[The Monmouth County Historical Association](#): The association is a private organization that receives annual operational support from the



Board of Chosen Freeholders. Five historic sites are owned and have been restored by the Association, including the Covenhoven House (Freehold Borough), Holmes-Hendrickson House (Holmdel), Allen House (Shrewsbury), Marlpit Hall (Middletown), and Taylor-Butler House (Middletown).

Monmouth University: The Monmouth University’s [Center for the Arts](#) is one of five Centers of Distinction housed at the University that work to promote awareness of specific issues of local and global interest. The Center for the Arts compliments the school’s academic offerings by hosting a variety of events including concerts, shows, theatrical productions, lectures, and exhibits for the pleasure of the university community as well as patronage by the public at large.

Local Arts Councils: Local arts councils are generally volunteer committees dedicated to inspiring and championing the arts at the neighborhood or municipal level. They may take the form as an extension of local government, such as a subcommittee within the recreation department, or they may be a separate private nonprofit organization that seeks programming support from membership fees, fundraising drives, and commercial sponsorships. Due to a high level of interest in arts and culture, Monmouth County is fortunate to have a number of flourishing arts councils that are eligible for pass-through grants from the county’s art agency, Monmouth Arts. Figure 6.5: Monmouth County Art Councils and Contact Information identifies art councils found in Monmouth County and how to access information regarding them.

ArtPride New Jersey Foundation: ArtPride is a not-for-profit foundation that offers a broad array of tremendously valuable programming in support of their motto to “education, innovate, advocate” for the arts in New Jersey. Programming includes Discover Jersey Arts (DJA) (intended to increase awareness and audience participation in arts and cultural events), Art Matters (highlighting towns that are using the arts to rebrand themselves), New Jersey Emerging Arts Leaders (providing professional development, leadership skills, and networking opportunities for art professionals), and the Alliance for Arts and Health (connecting arts and art professionals with healthcare providers).

United States National Park Service (NPS): The NPS is responsible for the stewardship of the Gateway National Recreation area of NY and NJ, which includes Sandy Hook and the former Fort Hancock. Fort Hancock is a National Historic Landmark District which includes the Sandy Hook Lighthouse (1764), the oldest working lighthouse in the U.S. (NPS website, 2015). Although an American military presence has been at the site since the War of 1812, the fort’s official commission began in 1895

Figure 6.5: Monmouth County Art Councils and Contact Information

Art Councils	Contact Information
Allentown Art Guild	www.allentownatguild.blogspot.com
Arts Coalition of Asbury Park (ArtsCAP)	Twitter
Arts Society of Keyport	Facebook
Atlantic Highland Arts Council	www.aharts.org
Belmar Arts Council	www.belmararts.org
Bradley Beach Arts Council	www.artsatthebeach.net
Freehold Borough Arts Council	www.freeholdboroarts.org
Highlands Borough Arts Council	www.highlandsartscouncil.weebly.com
Long Branch Arts Council	Facebook
Manalapan Arts Council	http://mtnj.org/committees/manalapan_arts_council_mac/
Middletown Arts Center	www.middletownarts.org
Roosevelt Arts Project	www.rooseveltartsproject.org



as part of NY Harbor’s defense, and was not decommissioned until almost a century later in 1974. Today, the public can tour some of the batteries and buildings. Through public-private partnerships, the NPS is in the process of redeveloping portions of the property through long-term leases and reinvestment incentives into a mixed-use facility including residential, commercial, and educational uses.



The National Park Service is a co-sponsor the Zero Waste Fest (September 2016) funded in part through a “Imagine Your Parks” grant from the National Endowment for the Arts

Source: Monmouth Arts

Crossroads of the American Revolution National Heritage Area (NHA): Established by Congress in 2006, this NHA encompasses 2,155 square miles in NJ, including 212 municipalities in 14 counties including western and central portions of Monmouth. NHAs are designated places recognized for their unique contribution to the nation’s history. The NPS

functions as a partner and advisor but the NHAs are generally run by local (not-for-profit) organizations and partnerships interested in promoting and preserving unique resources. A management plan developed for the NHA seeks to strengthen the region’s revolutionary-era identity and provide visitors and residents with a raised awareness of our common American heritage.

6.5 Additional Resources and Funding Opportunities

Many technical and financial resources are available to support the work of historic and cultural organizations in Monmouth County. The resources presented in this Element are by no means a complete list, but rather a comprehensive selection of those that would most likely benefit local and regional stakeholders. Although for the purpose of this *Master Plan* they are organized as either historic or art/cultural resource assistance, in practical application a number of these resources are interchangeable and may be useful to historic as well as cultural and arts organizations. Therefore, it is important for stakeholders to examine each one carefully to determine their potential applicability for an intended use, purpose, or outcome.

6.5.1 Historic Resource Assistance

Federal

- [Heritage Emergency National Task Force](#)
- [National Park Service \(NPS\)](#)
 - [National Register of Historic Places \(NRHS\)](#)
 - [Technical Preservation Services \(TPS\)](#)

State

- New Jersey Department of Environmental Protection (NJDEP)
 - [Division of Parks and Forestry, Office of Historic Sites \(OHS\)](#)
 - [NJ Historic Preservation Office \(NJ HPO\)](#)
- [New Jersey Historic Trust](#)
 - [Corporate Business Tax \(CBT\) Historic Preservation Fund](#)



- [Historic Preservation Revolving Loan Fund](#)
- [1772 Foundation](#)
- [Discover NJ History License Plate Fund for Heritage Tourism](#)
- [Revolving Loan Fund](#)
- [Emergency Grant and Loan Fund](#)
- New Jersey Cultural Trust (refer to Section 6.5.2 Arts and Cultural Resource Assistance)
- [New Jersey Historic Commission \(NJHC\)](#)
- [Main Street New Jersey](#)

County

- Monmouth County Park System (MCPS)
 - [Monmouth County Historic Sites Inventory](#)
 - [Monmouth County Historic Preservation Guide](#)
 - [Park System History Book: The First Fifty Years](#)
- [Monmouth County Historical Commission](#)
- [Monmouth County Library](#)

Nonprofits, Research Centers, and Other Stakeholders

- [Alliance for Response](#)
- [The American Institute for Conservation of Historic and Artistic Works \(AIC\)](#)
- [Central Monmouth County Related History](#)
- [Hurricane Sandy Cultural Resource Inventory by County](#)
- [Monmouth County Historical Association](#)
- [Preservation New Jersey](#)
- [Rutgers University Historical Maps:](#)
- [U.S. Life-Saving Service Heritage Association](#)

6.5.2 Arts and Cultural Resource Assistance

Federal

- [Federal Emergency Management Agency \(FEMA\)](#)
- [National Endowment for the Arts \(NEA\)](#)

State

- [New Jersey State Council on the Arts](#)
- [New Jersey Department of Transportation \(NJDOT\) Scenic Byway Program](#)
- [New Jersey Cultural Trust](#)

County

- [Monmouth Arts](#)
- [Monmouth County Division of Planning, Office of Community Development](#)

Nonprofits, Research Centers, and Other Stakeholders

- [ArtPride Foundation](#)
- [Center for Creative Placemaking](#)
- [Creative New Jersey](#)
- [The Geraldine R. Dodge Foundation](#)
- [The National Consortium for Creative Placemaking:](#)
- [New Jersey Arts Education Partnership](#)
- [New Jersey Cultural Alliance for Response \(NJCAR\)](#)
- [New Jersey Theater Alliance](#)
- [Smart Growth America](#)
- [Sustainable Jersey \(SJ\)](#)

6.6 Master Plan Recommendations and Stakeholder Strategies

Based on Working Group discussion and stakeholder meetings, five Recommendations and numerous Stakeholder Strategies were developed to advance Goals, Principles, and Objectives of this *Master Plan*.

Master Plan Recommendations

Recommendation 6.1: Work with municipal, transit, and state agency partners to develop a county-based scenic byway system that provides interconnectivity of our arts, cultural, and historic assets through the use of a multi-modal transportation network. Although envisioned



primarily along county roadways, this effort requires cooperation from a number of county agencies along with possible assistance from municipalities and the New Jersey Department of Transportation (NJDOT) to create a seamless byway system along the existing roadway network. The byway will provide residents and visitors an exciting opportunity to explore the county and learn more about important community cultural assets that contribute greatly to our cherished quality-of-life and sense of community pride. They can also be used as a platform to enhance marketing campaigns that promote tourism, particularly for multiple venues, sites, and attractions along a particular route. Incorporating agri-tourism into MoCo “west” communities will support viable agricultural uses on preserved farmland.

Recommendation 6.2: Develop a geographic information system (GIS)-based, online mapping resource for the Monmouth County Park System’s (MCPS) existing Monmouth County Historic Sites Inventory (HSI). Monmouth County’s HSI contains valuable information that is not currently accessible to the public for mapping purposes. Georeferencing the historic sites for use with online mapping programs will assist with the development of scenic byways (*Master Plan Recommendation 6.1*). HSI mapping can also be used by municipalities in the development of their local master plans or historic preservation ordinances as well as by the public to recognize and understand historic offerings in their community and county-wide. The Division of Planning GIS Section will work to update the information in the inventory and develop an appropriate online delivery interface for public use.

Recommendation 6.3: Continue to provide technical and professional support as a member of the MoCo (Monmouth County) Partnership and expand the concept of the MoCo Arts Corridor to areas of western Monmouth County. The Division of Planning will continue to provide technical and professional support of the MoCo Partnership’s mission. The MoCo Partnership includes government agencies, civic groups, artists, businesses, educational institutions, tourism, and transportation

organizations with a mission to make Monmouth County a cultural destination of choice. The MoCo Partnership has proven to be a valuable marketing initiative, providing a cohesive message about the cultural offerings in the county. Building off the success of the MoCo Arts Corridor in eastern Monmouth, we will continue to increase awareness of the cultural and historic offerings in western Monmouth County for both visitors and residents alike. This effort is closely related to *Master Plan Recommendation 6.1* and should be expanded beyond the arts to include historic sites and agri-tourism opportunities that reflect the rural heritage of western Monmouth.

Recommendation 6.4: Incorporate the Monmouth Arts’ cultural arts plan *Imagine, Envision, Create (2012)* as a component of the *Monmouth County Master Plan*. *Imagine, Envision, Create* integrates input and research from a broad range of artists, arts organizations, creative industries, planning, tourism, education, and economic development. Monmouth Arts updates the plan every five years, providing strategies to help sustain and enhance an important quality-of-life factor for many Monmouth County residents. The Monmouth County Division of Planning worked closely with Monmouth Arts on developing this plan to incorporate the arts into local land use, economic development, marketing, and community education/outreach.

Recommendation 6.5: Respond to requests from our municipal partners for professional and technical assistance in creating cultural asset inventories and in the development of cultural and creative placemaking plans. Incorporating arts and cultural plans into local master plans and policy documents raises public awareness about their important role in community identity and value. The partnerships developed and the information gathered by assisting municipalities with their cultural planning will strengthen support for regional creative placemaking efforts such as the MoCo Partnership. The *Monmouth County Master Plan* seeks to preserve, protect, and enhance places of



diversity, customs, and traditions. This effort supports local officials in their efforts to identify, preserve, and restore significant historic sites, buildings, structures, and cultural institutions.

Stakeholder Strategies

General

- Building upon “Weekend in Old Monmouth” example, work with municipal, county, and state entities to implement an ‘Annual Free Admission Day’ to various cultural sites and/or museums throughout the county.
- Propose incorporating “Weekend in Old Monmouth” tour sites into the proposed Monmouth County Scenic Byway/Roadway program.
- Provide technical and professional grant application assistance to our art and history partners in securing grant funds to develop mobile applications and web technology to communicate to the public on the county’s arts, cultural, and historic resources.
- Review master plans and land use ordinances to encourage the conversion of underutilized commercial structures into mixed-use or residential uses, where appropriate.
- Repurpose underutilized, abandoned, and vacant buildings for the purpose of commercial creative enterprises that result in qualitative growth.

Utilities

- Encourage utility companies to work with artists to use infrastructure as a new medium for public art projects.
- Incorporate renewable resources, energy efficiency initiatives, emerging technology, and green design into creative placemaking strategies.
- Foster sponsorship opportunities between utility companies and local cultural projects and programming.
- Integrate context sensitive design solutions when refurbishing, updating, or replacing utilities, infrastructure, and/or streetscapes.

Planning Services, Outreach, & Coordination

- Incorporate flexible creative spaces for performances, events, exhibits, and public art displays, both indoor and outdoor, when remodeling or designing new facilities.
- Work with art partners such as ArtPride, Monmouth Arts, and New Jersey State Council for the Arts on securing grant opportunities for local art education initiatives.
- Use local historic and cultural resources to augment classroom teaching for student instruction.

Transportation & Mobility

- Work with NJ TRANSIT and ferry service providers on improving wayfinding from transit stations, ferry terminals, and bus stops to local cultural attractions.
- Support towns in their attempts to connect downtowns, historic sites/districts, and cultural attractions by improving amenities for cyclists and pedestrians.
- Reinforce arts destinations by incorporating the arts into transportation facilities and improvements such as bike racks and bus shelters.
- Assist towns in creating “themed” cultural routes and tours through their community.
- Continue working with NJ TRANSIT and the MoCo Arts Partnership on the North Jersey Coast Line Public Arts Project.

Agricultural & Economic Development

- Adopt a One Percent for the Arts ordinance, such as the one implemented in Morristown NJ, that dedicates a portion of redevelopment construction costs towards the creation and inclusion of public art on the development site.
- Encourage the use of farmers markets as a complimentary space for the sale of art, artisan goods, and value-added culinary products.
- Incorporate public art and displays into community gardens.
- Support the local food economy by recognizing and fostering the



relationships between the culinary arts and local agricultural producers.

- Promote Monmouth County as a destination of choice for arts, heritage, and agri-tourism and encourage efforts to strengthen the link and association between these efforts.
- Utilize “Americans for the Arts” resources for placemaking in rural communities.

Community Development & Housing

- Affirmatively market low-and moderate-income housing to income qualified artists.
- Incorporate art live/work space into redevelopment and affordable housing plans to help retain the presence of artists in the community.
- Incorporate cultural-based planning into redevelopment and historic restoration projects.
- Encourage local arts organizations to partner with municipalities in identifying and applying for eligible Community Development Block Grant Program (CDBG) projects that include art and artists.
- Encourage applicants to apply for Monmouth County’s Façade Improvement Program to improve historic structures in CDBG eligible locations.

Community Resiliency

- Encourage those entrusted with the stewardship of important community cultural and historic artifacts and archives to develop specialized hazard mitigation and disaster response plans to protect their collections from irreparable damage.
- Create awareness that Monmouth Arts is recognized as the county’s primary Arts Responder to help connect the arts community to information, resources, and emergency funding in the aftermath of a disaster.
- Support art-based community recovery programs that provide a creative outlet for individuals and communities coping with the

stress, grief, and emotional strain resulting from disaster.

- Art organizations collaboratively develop contingency programming for conflict resolution and conflict avoidance for implementation in the wake of disaster.
- Identify and implement appropriate hazard mitigation protection strategies that protect historic resources without diminishing the historical integrity of the building or structure.

Sustainable Places

- Our arts, cultural, and historic resources differentiate us from other counties and attracts creative professionals, new residents, visitors, and employers seeking to invest in our community; therefore, efforts towards their continued viability are a cornerstone of long-term sustainability.
- When municipalities implement stricter hazard mitigation construction codes, they should integrate design guidelines that support existing neighborhood character and culture, enhance the attractiveness of the surrounding community, and improve building aesthetics to better ensure the retention of long-term property values.
- Encourage the development of arts councils and historic commissions as they are the community trust and vanguards for our cultural principles and resources.
- Incorporate historic structures in the design of new redevelopment projects as a means of anchoring the historic sense of a community.
- Encourage residents and businesses to work with local artists in discovering ways to creatively camouflage visual blight resulting from the elevation of buildings and structures to meet the Federal Emergency Management Agency (FEMA) standards.
- Start to foster a Capital to Coast arts network that builds creative synergy between the Asbury Park and Trenton art scenes through shared events and destination swap experiences.



Healthy Communities

- Seek culturally inclusive community-based arts programming and projects that build stronger intercommunity relationships, particularly those that bridge socioeconomic and demographic divides.
- With a growing aging population, it will become increasingly important to keep the elderly involved in arts and history programming that reduces their isolation from the larger community and contributes towards their continued sense of value.
- Encourage local councils to partner with community centers, nursing homes, police departments, and businesses to identify arts programming that supports a healthy environment.
- Use visual and performing arts as a component of public safety strategies including community outreach, youth engagement, and crime deterrence.

Natural Resources

- Many artists derive inspiration from the natural environment, therefore it is important to preserve and protect our indigenous, natural sources of artistic inspiration.
- The natural landscapes and natural resources in and around a historic site should be preserved in conjunction with the sites to maintain the entire location within an appropriate historic context and setting.
- Encourage the infusion of arts, cultural, and historic resources into the county’s natural environment.

Open Space

- Preserving natural landscapes from the incremental deleterious effects caused by the built environment retains our heritage landscapes for the enjoyment of current and future generations.
- Support Monmouth County Park System (MCPS) efforts to promote and protect our cultural heritage through property acquisition.
- Utilize historic facilities to host historic “period” art and cultural

exhibits and events that reflect our local heritage.

- Find opportunities to integrate ecotourism with historic-based tourism.

Farmland Preservation

- Vestiges of our rural heritage landscape are preserved in perpetuity as a testament to our agricultural legacy.
- Retain the county’s rural and equestrian culture for future generations through the retention of equestrian farms and bridle path networks.
- Showcase the county’s agricultural history through educational programming on the evolution of industrial design, farm tools, and equipment.



An aerial photograph of a utility plant. At the top, there are two large, white, circular tanks. Below them are several other circular tanks, some with mechanical structures in the center. A large, rectangular building with a grid-like roof structure is prominent in the center. To the left, there is a large, dark, rectangular structure. In the bottom left corner, there is a baseball field with a yellow infield. The entire facility is surrounded by greenery and a road network.

7.0 Utilities

7.0 UTILITIES

MASTER PLAN RECOMMENDATION 7.1

7.1: Plan for areawide water quality management, including implementation of the *Wastewater Management Plan (WMP)* for Monmouth County as part of the *Monmouth County Water Quality Management (WQM) Plan*, to serve the needs of residents and businesses in a way that supports economic development, particularly in Priority Growth Investment Areas (PGIAs), and conserves environmental resources that protect water quality and quantity.

Purpose

Under NJ Executive Order 67, the Monmouth County Board of Chosen Freeholders (MCBCF) was designated as the Water Quality Management Planning Agency for the county. The MCBCF delegates responsibility to the Monmouth County Planning Board (MCPB), which consequently formed an Amendment Review Committee (ARC) to provide technical review and recommendations. This recommendation allows the Division of Planning to continue water quality management planning efforts related to all potential impacts to water quality including nonpoint source pollution, protection of our water supplies, wastewater management, and stormwater control.

Monmouth County Departments & Organizations Involvement

Division of Planning	Develop and implement the <i>WMP for Monmouth County</i> as part of the <i>Monmouth County WQM Plan</i> ; prepare and implement the <i>Monmouth County WQM Plan</i> ; continue to process amendments and revisions to the <i>Monmouth County WQM Plan</i> through the ARC; review municipal master plan utility elements for consistency with county plans; assist municipalities and other county departments with wastewater planning efforts and their preparation of applications for amendments to county plans; work with other counties where sewer service crosses county boundaries; conduct outreach to the public regarding wastewater management planning issues and initiatives.
MCPB	Recognize the <i>Monmouth County WQM Plan</i> and the <i>WMP for Monmouth County</i> as consultative and supportive documents of the <i>Monmouth County Master Plan</i> .
Park System (MCPS)	Confer with MCPB on wastewater management planning efforts for parks and recreation areas.
Health Department	Assist with the coordination of wastewater management planning issues that could potentially affect public health.
Division of Economic Development	Promote development and new infrastructure investments in PGIAs that support economic development and expansion in the county, in accordance with recommendations found in the <i>Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)</i> .

Other Project Stakeholder Involvement

NJ Department Environmental Protection (NJDEP)	Coordinate review of amendments to the <i>Monmouth County WQM Plan</i> and the <i>WMP for Monmouth County</i> .
Municipalities	Create municipal master plan utility elements; prepare or review applications for amendments, revisions, and modifications to <i>WMP for Monmouth County</i> .
Utility Authorities	Coordinate <i>wastewater management plans</i> and the review of amendments, revisions, or modifications with the Division of Planning for service or franchise areas within the county.
Other Counties	Coordinate with MCPB on projects that overlap jurisdictions or are located along the county borders.



Swimming River Water Treatment Plant, Colts Neck

Source: Brittany Ashman

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 7.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●													
B. Coordination		●		●										●
C. Planning Approach			●											●
D. Environmental Resources	●	●		●								●		●
E. Farmland Preservation	●	●		●										●
F. Arts, Culture, & Historic				●			●	●						●
G. Preservation Investments				●										●
H. Vibrant & Sustainable Communities				●				●						●
I. Community Preservation				●										●
J. Housing				●										●
K. Economic Development				●										●
L. Agricultural Development				●										●
M. Recovery & Resiliency				●										●
N. Growth Investments				●										●

Implementation Strategy

- Monitor proposed changes to NJDEP Statewide WQM Planning rules.
- Revisions necessary to the *Monmouth County WQM Plan*, as a result of rule revision, should be addressed and submitted to the NJDEP for approval.
- Proposed amendments to the *WMP for Monmouth County* will be reviewed and processed according to adopted procedures, and with coordination of State review.
- Monitor the *New Jersey Statewide Water Supply Plan (1996)* for changes and the potential impacts of those changes on Monmouth County.
- Continue to monitor the water quality aspects of stormwater management planning.



Strongest Associated Master Plan Elements

7.0 UTILITIES

MASTER PLAN RECOMMENDATION 7.2

7.2: Encourage adoption of municipal and regional stormwater management plans that support sound stormwater management initiatives and green Best Management Practices (BMPs).

Purpose

On February 11, 2004, the Monmouth County Board of Chosen Freeholders (MCBCF) designated the Monmouth County Planning Board (MCPB) as the county review agency for stormwater plans and ordinances, which consequently created the Stormwater Technical Advisory Committee (STAC) comprised of Monmouth County Departments, representatives of related outside agencies, and the building community. The purpose of the STAC is to review and comment on municipal plans and ordinances and to make recommendations to the MCPB. Recommendation 7.2 allows the Division of Planning staff to continue stormwater management planning efforts and to act as staff to the STAC.

Monmouth County Departments & Organizations Involvement

Division of Planning	Continue to work with municipalities, county departments, other related agencies, and the New Jersey Department of Environmental Protection (NJDEP) to monitor and encourage green BMPs and stormwater management planning; review proposed revisions to municipal stormwater management plans and ordinances for consistency with county plans; assist the Department of Public Works and Engineering on their watershed and stormwater related initiatives, as requested.
Department of Public Works and Engineering	Provides staff membership to the STAC.
Health Department	
Mosquito Control Division	
Environmental Council (MCEC)	The MCEC is represented on the STAC and assists in related education and outreach efforts.

Other Project Stakeholder Involvement

NJDEP	Establish BMPs for stormwater management; continue to work with the county on approval of municipal and regional stormwater management plans.
Freehold Soil Conservation District	Serve on the STAC; continue to work with Division of Planning on regional projects and outreach and education efforts, as needed.
Other Counties	Work in partnership on regional watershed/stormwater projects that overlap jurisdiction or that cross county borders.
New Jersey Shore Builders Association	Serves as a member of the STAC.



Swimming River Water Treatment Plant, Colts Neck

Source: Brittany Ashman

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 7.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														
A.														
B.														
C.														
D.														
E.														
F.														
G.														
H.														
I.														
J.														
K.														
L.														
M.														
N.														

Implementation Strategy

- The Division of Planning will monitor proposed changes to the Stormwater Management Rules of the New Jersey Administrative Code (N.J.A.C.) 7:8.
- Proposed revisions or amendments to municipal stormwater management plans or ordinances will be processed according to adopted procedures and brought to the STAC for review and comment.



Strongest Associated Master Plan Elements

7.0 UTILITIES

MASTER PLAN RECOMMENDATION 7.3



7.3: Review the New Jersey Statewide Water Supply Plan (1996) for accuracy, monitor water supply issues, and provide recommendations to address discrepancies.

Purpose

The New Jersey Department of Environmental Protection (NJDEP) prepared an update to the *New Jersey Statewide Water Supply Plan*, but has not published the draft for review and comment. The Division of Planning will continue to monitor water supply management planning efforts at the state-level and work with regional partners on initiatives that would benefit the residents and businesses in Monmouth County. Since several economic, environmental, and social changes have occurred since the adoption of the current plan in 1996, it is appropriate to undertake a full review of the *New Jersey Water Supply Plan*.

Monmouth County Departments & Organizations Involvement

Division of Planning	Within the context of the <i>Monmouth County Water Quality Management (WQM) Plan</i> ; continue to monitor state water supply plans, efforts, and initiatives for potential impacts to the county; consider the development of a water supply plan for Monmouth County as a component of the <i>Monmouth County WQM</i> ; review municipal master plan utility elements for consistency with county plans; monitor the water supply plans of local purveyors and review for consistency with the county plans; coordinate projects that overlap jurisdictions or are located along county borders.
Health Department (MCHD)	Assist with the coordination of water supply issues that could potentially affect public health.
Department of Public Works and Engineering	Assist with the coordination of water supply planning.

Other Project Stakeholder Involvement

NJDEP	Prepare the <i>New Jersey Statewide Water Supply Plan</i> update.
Municipalities	Work with the county and state agencies on any water supply plan for the county.
Water Purveyors	Work with the county and state agencies on any water supply plan for the county.
Local Health Departments	Work with the MCHD in assisting local health departments on water supply issues that could potentially affect public health.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 7.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning	●													
Coordination		●												
Planning Approach														
Environmental Resources				●										●
Farmland Preservation					●									
Arts, Culture, & Historic						●								
Preservation Investments														
Vibrant & Sustainable Communities								●						
Community Preservation									●					
Housing										●				
Economic Development											●			
Agricultural Development												●		
Recovery & Resiliency													●	
Growth Investments														●

Implementation Strategy

- Monitor the *New Jersey Statewide Water Supply Plan* for changes and the potential impacts of those changes on Monmouth County.
- Advise the Monmouth County Planning Board (MCPB) on issues concerning water supply planning that could potentially impact Monmouth County.



Strongest Associated Master Plan Elements

7.0 UTILITIES

MASTER PLAN RECOMMENDATION 7.4



Swimming River Water Treatment Plant, Colts Neck

Source: Brittany Ashman

7.4: Work with other county departments and agencies to create and implement a comprehensive energy plan that promotes a culture of responsible energy use that optimizes efficiency, hardens infrastructure, and reduces both energy use and costs.

Purpose

The Monmouth County Board of Chosen Freeholders (MCBCF) recognizes counties can play an important role in reducing emissions and improving efficiency through policy areas such as transportation, land use, economic development, and outreach, as well as by making operational changes to county facilities. In 2013, the MCBCF designated a Monmouth County Energy Committee to develop 1, 5, and 10-Year Plan Project Lists to implement energy reduction measures at county facilities. The Division of Planning was tasked with helping coordinate these plans. Recommendation 7.4 allows the Division of Planning staff to continue to work with the Monmouth County Energy Committee to implement energy-related tasks of the *Monmouth County Strategic Plan (2009)*.

Monmouth County Departments & Organizations Involvement

Division of Planning	Continue to work with other county departments on the Monmouth County Energy Committee and the staff advisory group; spearhead efforts to secure and manage additional grants to fund needed county energy projects; work with the County Energy Committee to identify 1, 5, and 10-Year Energy Plan Project Lists; assist the Department of Public Works and Engineering and Park System, as requested, with energy related initiatives and grants.
Department of Public Works and Engineering	Provide staff to the Monmouth County Energy Committee and the staff advisory group.
Purchasing Division	Provide staff membership to the Monmouth County Energy Committee.
Park System (MCPS)	Provide staff membership to the Monmouth County Energy Committee and the staff advisory group.

Other Project Stakeholder Involvement

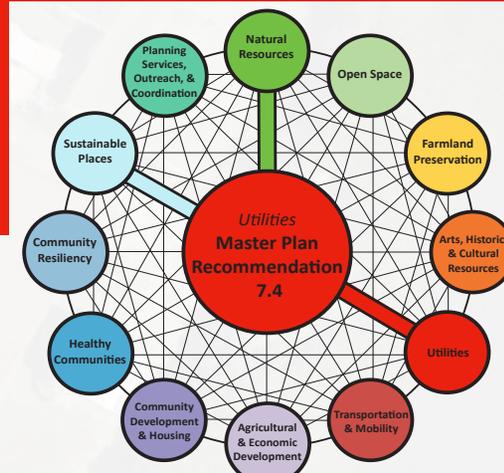
New Jersey's Clean Energy Program	Provide clean energy grants and assist with implementation.
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Master Plan Goals, Principles, & Objectives (GPOs) Relating to 7.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Consider implementing feasible recommendations from the reports prepared under the 2014 Local Government Energy Audit Program (LGEA) and consider applying for future funding cycles.
- Continue to work with the Monmouth County Energy Committee to update the 1, 5, and 10-Year Energy Plan Project Lists and other initiatives, as directed.



Strongest Association to Master Plan Elements

7.0 Utilities

7.1 Introduction

Public utilities are business enterprises, public-service corporations, or quasi-governmental authorities that provide a government regulated essential community service. These services may include regional sewage collection, treatment and discharge; the collection, storage, treatment and distribution of potable water on a regional scale; provision of telecommunications and/or paid television service; and the development, transmission and distribution of energy resources, such as electricity and natural gas.

The [New Jersey Board of Public Utilities \(BPU\)](#) is the state agency with authority to oversee that utility service is provided in a way that is safe and adequate; and that these services are available at reasonable, non-discriminatory rates to all members of the public. The BPU is also charged with developing and regulating a competitive, economically cost effective energy policy that promotes responsible growth and clean renewable energy sources while maintaining a high quality-of-life in NJ. Some counties hold a level of jurisdiction over certain utilities.

Monmouth County is charged with preparing specialized regional documents related to the planning and management of water and water quality, specifically water supply, stormwater control, and wastewater management. *Master Plan* Objective 1.2C promotes achieving the goals of the [Monmouth County Strategic Plan \(2009\)](#), which calls for environmentally safe measures and practices in all aspects of county operations and policies, explicitly with actions geared toward energy management. The county has chosen to work cooperatively with state agencies, municipalities and other stakeholders to reduce greenhouse gas emissions, increase energy efficiency, and explore the use of alternative sources of energy at county facilities. These examples show how the Division of Planning's regional utility

planning and management tasks are consistent with *Master Plan* Goals, Principles, and Objectives.

Natural gas, electric power, cable/broadband, and telephone/internet are the other major utilities available in the county. Telephone, cellular phone, internet, and television service, including both cable and satellite, are available from a wide range of providers, due in part to Monmouth County's location within the New York Metropolitan area. Although the county does not have an active role with these utilities, they are important to the economic growth of the region and should be monitored to ensure that sufficient service is provided to the appropriate areas without negatively impacting the environmentally sensitive areas within the county.

7.2 Existing Conditions

7.2.1 Advisory Committees

[Amendment Review Committee \(ARC\)](#): The New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq. authorizes the state to delegate to certain agencies the ability to develop, adopt, update, and amend Areawide Water Quality Management Plans. The Monmouth County Board of Chosen Freeholders is a Designated Planning Agency, and through the passage of Resolution #96-143, they delegated wastewater management planning responsibilities to the Monmouth County Planning Board. In turn, the Planning Board passed Resolution #97-11 creating the ARC to review and recommend action on potential amendments. Over the years, roughly 60 amendment proposals have come to the county for review. Some were returned without prejudice, some were withdrawn, some were modified to become consistent, and several were rolled into the *Wastewater Management Plan (WMP) for Monmouth County (2012 DRAFT)*. Approximately 25% were adopted as separate amendments by the New Jersey Department of Environmental Protection (NJDEP). Monthly meetings of the ARC are scheduled each year, but the committee only meets as needed. During 2015, the committee met seven times.



Stormwater Technical Advisory Committee: In 2004, the county Stormwater Review Process was established through [N.J.A.C. 7:8-4.4](#) requiring counties to approve, conditionally approve, or disapprove municipal stormwater management plans and ordinances. This rule essentially requires each county to serve as a regional facilitator for stormwater management planning. On February 11, 2004, the Monmouth County Board of Chosen Freeholders designated the Monmouth County Planning Board as the county review agency for Municipal Stormwater Management Plans. The Planning Board in turn passed Resolution #04-08 created the Stormwater Technical Advisory Committee for the purpose of reviewing municipal stormwater management plans and ordinances and making recommendations for action. This committee no longer meets regularly, but is appointed each year in case a municipality chooses to amend their plan or ordinance.

County Energy Committee: Under the direction of the Board of Chosen Freeholders, county staff has been working for several years to reduce energy use, costs, and emissions. A Monmouth County Energy Committee was formed in 2013 to further work begun by previous energy stakeholder groups and green teams. This committee is chaired by a Freeholder and comprised primarily of Monmouth County Department Heads. It meets as needed to review potential grant applications and products; energy-related plans, policies, and alternatives; and the county's 1, 5, and 10-Year Energy Plan Project Lists.

7.2.2 Supportive Reports and Guiding Documents

Monmouth County Water Quality Management (WQM): In addition to preparation of a [Statewide Water Quality Management Plan](#), which was adopted in 1985, the state designated 12 Areawide Water Quality Management Planning Areas, each with their own Areawide Water Quality Management Plan (AWQMP). The *Water Quality Management Plan for Monmouth County* was prepared by the NJDEP and adopted on September 4, 1980. These regional plans are used by the NJDEP and

designated planning agencies to determine appropriate water quality management planning activities. Components of the *1980 Water Quality Management Plan for Monmouth County*, as prescribed by the Federal Clean Water Act, include water quality and environmental analyses; point and nonpoint source pollution control plans; discussions of area population, economy and land use; and an implementation plan that considers legal, institutional, and financial issues. As a Designated Planning Agency, Monmouth County will be responsible for the preparation of a new *WQM Plan* for Monmouth County. The first step is the preparation and adoption of a *Wastewater Management Plan (WMP) for Monmouth County*, under the NJDEP Statewide Water Quality Management Planning rules: [N.J.A.C. 7:15](#).

Division of Planning staff undertook several years of planning and negotiation with the sewer service providers and municipalities, and submitted a first draft *WMP for Monmouth County* to the NJDEP in 2003. Subsequent drafts were submitted under the 1994 rules in February 2004 and December 2006. In July 2008, the NJDEP revised their rules, but notified Monmouth County that because they were in process, the plan could be submitted using a mix of the requirements that were in place at the time of the first submission and the requirements of the newly adopted rules. Therefore, additional negotiations with the utility authorities, municipalities, and the NJDEP were required. A revised draft was submitted in September 2009 and a public meeting was held in August 2010. Following review of comments received at the 2010 meeting, another draft was prepared in April 2010 and a formal public hearing was held on June 6, 2011. A final submission was made to the NJDEP in March 2012 incorporating modifications that resulted from the public comment period. In August 2012, the county was notified that the State Attorney General's Office determined the *WMP for Monmouth County* could not be adopted as submitted, due to 2008 rule changes that could not be grandfathered as NJDEP staff previously thought. The major stumbling block was the rule requirement that all municipalities adopt certain NJDEP model



ordinances, which several Monmouth County municipalities considered unacceptable.

On January 17, 2012, P.L. 2011, c203 was signed into law allowing the bifurcation of Future Wastewater Service Area (FWSA) maps from WMPs to be adopted and amended separately. Monmouth County chose to pursue that option and the [Monmouth County Future Wastewater Service Area \(FWSA\) Map](#) was adopted by the NJDEP on April 11, 2013. When P.L. 2011, c203 was set to expire, the legislature passed bills that resulted in P.L. 2013, c188. This law continued to allow for the adoption of site-specific amendments, modifying the thresholds to activities that have a planned wastewater flow of less than 50,000 gallons per day, or that propose a new or expanded sewer service area less than 100 acres in size. Once amendments are adopted by the NJDEP, the Monmouth County FWSA Map is revised and posted on the [Monmouth County Wastewater Management Plan Map Viewer](#).

The NJDEP announced in 2013 that they were again planning to make significant revisions to the water quality planning rules, as the AWQMP rules were set to expire in May 2015. County staff recommended that the *WMP for Monmouth County* application be left open while awaiting publication of the draft rule changes, however, on February 2, 2015, the NJDEP chose to officially deactivate the county's open amendment application for the *WMP*, meaning that an entirely new plan submission would be necessary. The NJDEP continued to plan sweeping changes and published a rule proposal on October 19, 2015. At this time Monmouth County is awaiting the adoption of the new rule before proceeding with the preparation of a new document. The Monmouth County FWSA Map is, however, still valid and after the new NJDEP rule is adopted, amendments to the map will once again be able to be entertained.

Stormwater Management Plans: [NJDEP's Municipal Stormwater Regulation Program](#) was developed under the U.S. Environmental

Protection Agency's Phase II stormwater regulations, as mandated by the federal Clean Water Act. The NJDEP established four categories of New Jersey Pollutant Discharge Elimination System (NJPDES) general stormwater permits: Tier A municipalities, Tier B municipalities, Public Complex, and Highway Agency permits. Tier B municipalities tend to be rural and less populated municipalities. In Monmouth County, only Interlaken, Roosevelt, and Upper Freehold are Tier B communities. The other 50 municipalities are classified as Tier A.

All NJ municipalities were required to adopt municipal stormwater management plans and ordinances. The plans are mandated to include structural and nonstructural management strategies that meet the goals of [N.J.A.C. 7:8](#) and to comply with the requirements detailed in subsection 4 of that rule. These plans address stormwater related water quality, water quantity, and groundwater recharge issues. The plans discuss the chosen design and performance standards; preventative and corrective maintenance measures; evaluation of future land use impacts; and recommend compliance measures. Counties were given plan review authority by the NJDEP. By June of 2011 all 53 Monmouth County municipalities had adopted municipal stormwater management plans and ordinances approved by the county. Municipalities are required to file annual reports with the NJDEP and to reexamine the municipal stormwater management plan at each reexamination of their master plan, in accordance with [N.J.S.A. 40:55D-89](#). If revisions were found to be necessary, the municipality is required to submit the proposed plan and ordinance amendments to the county review agency for approval.

NJAC 7:8 also provides for regional stormwater management planning processes, including the development of a regional planning committee; designation of a Lead Planning Agency; the required elements of a Regional Stormwater Management Plan; and the development of a strategy for implementation. Although regional stormwater management planning committees have been formed, plans have been



drafted and projects have been implemented, Monmouth County has not, at this time, been forwarded any Regional Stormwater Management Plans to review and formally adopt as part of the *WQM Plan* under the requirements of both NJAC 7:8-3.9 and NJAC 7:15. Despite this, the NJDEP has provided some implementation funding.

New Jersey Statewide Water Supply Plan: The [Statewide Water Supply Management Act \(P.L. 1981, c.262\)](#) mandated the planning for and management of water resources to ensure adequate current and future water supply needs. The rules at [N.J.A.C. 7:19](#) govern the management of water supply, diversions, use permits, droughts, and water emergencies. There is no specific role for counties in the water supply permitting process, however an Areawide Water Quality Management Plan is expected to address water supply issues so at some future time the county will be expected to analyze regional water supply issues. The current [New Jersey Statewide Water Supply Plan](#) was adopted by the NJDEP in 1996. A draft plan update was prepared by NJDEP staff, but never released.

Energy Planning: Energy planning at the state-level was accomplished through the adoption of the [New Jersey Energy Master Plan \(2011\)](#), which encourages the expanded use of clean renewable energy technologies, such as solar and wind electric power generation; expanded use of natural gas in place of less clean burning fuels; and reduced energy consumption. During the summer of 2015, NJDEP collected public comments on the 2011 plan. The [New Jersey Energy Master Plan Update](#) was released in December 2015. The update documents the changes that have been implemented since 2011 including the implementation of many clean energy initiatives across the state. It also discusses the significant impacts that Superstorm Sandy had on the energy distribution system and added a new section in the plan aimed at protecting critical infrastructure; improving emergency preparedness and response; and creating long-term financing for

Jersey Central Power & Light Infrastructure Investment Campaign

Jersey Central Power & Light (JCP&L), a subsidiary of FirstEnergy Company, serves over a million NJ residents. Over the past few years, JCP&L has re-emphasized its commitment to safe, reliable power through an infrastructure investment campaign. This campaign intends to enhance and maintain a strong electrical system to help meet future load growth. Completed initiatives include:

- Built a new 10.2 mile 35.4 kV transmission line in Howell
- Expanded the Eaton Crest Substation in Eatontown
- Began construction of a new 16 mile 230 kV transmission line between the Larrabee Substation in Howell and the Oceanview Substation in Neptune, via the Atlantic Substation in Colts Neck, with planned upgrades to the substations.
- Upgraded the Atlantic Substation 34.5kv terminal in Colts Neck
- Built a new 1.8 mile 34.5kV line in Eatontown Borough

Additionally JCP&L upgraded nearly 100 distribution circuits to enhance reliability by adding or replacing poles, installing fusing, replacing or adding lightning arrestors, replacing crossarms, and installing animal guards. Aforementioned projects intend to increase transmission reliability and capacity in addition to providing redundancy and operational flexibility. Their hard work has paid off with the company posting its best service reliability numbers in 13 years during 2015, including an 18% reduction in the number of customer outages compared to 2014.

In 2015, the New Jersey Conference of Mayors recognized JCP&L as the "Business Leadership of the Year Honoree" for their continuing efforts to establish strong working relationships with local officials and community leaders.



resiliency improvements. The plan also discusses the importance of micro-grid technologies and distributed energy resources for the future.

Monmouth County has been pursuing similar energy saving efforts, primarily through the county Energy Committee. The 1, 5, and 10-Year Energy Plan Project Lists help focus energy related county facility projects. Monmouth County has been very successful in receiving grants for energy related projects that over the past several years have funded such projects as the installation of solar roof and canopy units; energy audits of multiple county facilities; installation of energy saving devices in numerous county buildings; and the replacement of several chillers, boilers, and other HVAC equipment.

7.3 Emerging Issues and Long Range Challenges

7.3.1 Coordinating Investments for Infrastructure: The 2.0 Land Use Element outlines Public Investment Areas. Infrastructure investments for such utilities as public sewer and water should be prioritized for the Priority Growth Investment Areas (PGIA) and Priority Reinvestment Sites or Areas (PRA). See the Framework for Public Investment discussion in the Land Use Element for PGIA and PRA criteria.

7.3.2 Infrastructure Deficit: System capacity, aging infrastructure, and resiliency planning are the challenges facing our local wastewater utilities. Older systems often suffer from infiltration of groundwater through cracked or broken infrastructure. Some treatment plants or collection systems are near capacity. Hurricane Irene (2011) and Superstorm Sandy (2012) caused significant damage to several wastewater facilities where pump stations and operating systems were in low-lying areas that were flooded during one or both storms (see subsequent discussion on Wastewater Utility Restoration and Resiliency Improvements). The upcoming *DRAFT Wastewater Management Plan (WMP) for Monmouth County* will discuss some of these issues in more detail as they apply to specific treatment facilities.

7.3.3 Stormwater Management Limitations

Local Control: In NJ, stormwater runoff from impervious surfaces is generally handled on a site-specific basis or as part of roadway networks. In other parts of the country, Stormwater Utilities have been formed to ensure a stable source of funding for management and treatment of stormwater. While NJ has enacted legislation relative to stormwater management, and stormwater utilities have been considered several times, the necessary legislation is not yet in place that would enable the development of a stormwater utility in this state. Unless that changes, municipalities will continue to hold a level of responsibility through their management plans and ordinances.

Continuous Maintenance Demands: Hurricane Irene and Superstorm Sandy hit Monmouth County with some of the worst flooding imaginable. Streams and lakes overflowed their banks, numerous roads were closed due to flooding, and storm drainage systems were overwhelmed. Homes, businesses, and infrastructure suffered significant damage in some areas. Managing stormwater during extreme storm events has become both an Emerging Issue and a Long Range Challenge. Maintenance of existing stormwater systems; dredging of local lakes and ponds that become silted from sediment transport; and the implementation of both new and old best management practices are extremely important for the improvement of the natural and piped systems ability to manage stormwater.

7.3.4 Water Quality Vulnerability: In December 2004, the NJDEP completed source water assessments for all public water supplies to determine each system's potential vulnerability to contamination from such possible threats as radon, pathogens, nutrients, volatile organic compounds, pesticides, inorganics, radionuclides, and disinfection byproduct precursors. The results varied by water supply system and are available on the [NJDEP website](#), searchable by municipality. It must



be noted that the level of susceptibility to contamination does not indicate the presence of contamination, only the potential threat.

7.3.5 Water Quantity Deficits: The NJDEP regularly analyzes the quantity of available water for each public water supply and publishes the deficit/surplus on their [website](#). As of January 2016, eight public water supply systems in Monmouth County were showing deficits. Deficits may be due to available water supply limits, water demand, or limitations in the system or treatment capacity.

The most recent (2010) county compiled data is available from the [U.S. Geological Survey \(USGS\)](#). Monmouth County ranked 12th in total water use by NJ County. Citing a 2010 served population of 630,380, USGS estimated that Monmouth County used 28.54 million gallons per day (mgd) from groundwater sources and 51.35 mgd from surface water sources for a total water usage of 79.89 mgd. When calculated per person, Monmouth County was ranked 7th lowest in water use. Figure 7.1: 2010 Water Use by Category in Millions of Gallons Per Day breaks

**Figure 7.1: 2010 Water Use by Category
in Millions of Gallons Per Day**

Category	Monmouth County	New Jersey
Public Supply	68.21	1,080.10
Domestic	5.72	98.34
Industrial	1.83	83.27
Irrigation	3.87	137.64
Livestock	0.09	0.98
Mining	0.17	8.64
Thermo-electric Power	0.00	513.29
Totals	79.89	1,922.25

Source: <http://nj.usgs.gov/infodata/wateruse.html>

down the categories of water use for Monmouth County and NJ.

7.3.6 Growing Number of Energy Strategies: Proposals for wind farms, offshore liquid natural gas (LNG) facilities, and hydraulic fracturing of rock to extract natural gas in adjacent states fill the news. Decommissioning aging nuclear power plants is a reality to be dealt with. Natural gas, oil, and electric transmission deficiencies, proposed routes and interconnections tend to be controversial, while most people do recognize the need for adequate and resilient systems. Emerging energy technologies include a return to small, localized power generation (e.g. small wind and fuel cells); expanding electric storage capacity in the grid, batteries or through other means; improving smart grid technology; and expanding solar energy production through the development of new materials (e.g. solar roofing and solar roadways). Monmouth County should continue to monitor evolving energy technologies, sources, and proposals to determine their impacts on existing systems and identify opportunities they may present for both county government and the private sector. Changes in this field are rapid and can be both beneficial and destabilizing.

7.3.7 Evolving Technologies: One Long Range Challenge for the communications industry stems from the rapidly evolving technologies in this field. Through the [Monmouth County Comprehensive Economic Development Strategy \(CEDS\) \(2014\)](#), the Division of Economic Development is planning to reach out to area providers to discuss the challenges facing the communications industry and the plans of local service providers for future expansion or upgrades. The county should monitor the evolving communications/broadband technologies to make sure that Monmouth County is up-to-date in this vital and rapidly changing area and at the same time supports the continuation of service to all segments of the population. The availability of robust broadband capacity is essential to attracting and supporting the kind of high tech businesses that can provide high paying jobs in Monmouth County.



7.3.8 Long Range Challenges: Some of the Long Range Challenges identified by Working Groups that will impact the county beyond the lifecycle of this *Master Plan* are:

- *Water Quality Management Plan:* Completion of a comprehensive *WQM Plan* for Monmouth County will continue to be delayed until the NJDEP makes necessary changes to the existing water quality management rules. The Division of Planning continues to seek adoption of a *Wastewater Management Plan (WMP) for Monmouth County*.
- *Cost Prohibitive Upgrades:* Older infrastructure inhibits the resiliency and long-term sustainability of some of the county's utilities, but the cost to upgrade, replace, and/or bury aboveground utilities is prohibitive.
- *Lacking a State Water Supply Plan Update:* During the 1980s, a study of groundwater availability and usage in certain aquifers led the NJDEP to designate Critical Water Supply Management Areas. Much of Monmouth County was in Critical Water Supply Management Area #1, which stretched from the eastern shore to the vicinity of County Route 527 in Freehold and Manalapan Townships. Saltwater intrusion into the aquifers was a very real threat. The opening of the Manasquan Reservoir in 1990 significantly reduced groundwater withdrawals from the affected aquifers and over the past 15 years groundwater levels have been recovering with the shift to greater surface water withdrawals. However, until an updated New Jersey Water Supply Master Plan is released, it will be difficult to know if there is a sufficient supply of potable water for current and planned future uses and if these sources will remain safe.

7.4 Utilities Stakeholder Actions and Efforts

7.4.1 Monmouth County Efforts

Wastewater Management Plan (WMP): Work on a new draft *WMP for Monmouth County* is proceeding slowly while the wastewater

community awaits adoption of the proposed rule changes. Meanwhile staff is actively working with the municipalities and sewerage authorities to ensure the adopted Monmouth County FWSA Map accurately reflects existing sewer service areas and approved NJPDES permits. Water quality education and monitoring continues at the county-level through the efforts of the Monmouth County Health Department and at the Division of Planning, primarily through the NJDEP Watershed Ambassador Program.

Regional Facilitator: Over the years, Monmouth County has been involved in a number of regional watershed or stormwater management planning efforts as a lead agency or partner. Regional partnerships have been formed for, among other areas, Parkers Creek, Deal Lake, and the Metedeconk River watersheds. Monmouth County has acted as the Lead Planning Agency for projects in the Many Mind Creek and Wreck Pond watersheds. Working regionally provides many environmental and economic benefits for stormwater management.

Clean Energy Improvements: Through the State Clean Energy Program, Monmouth County received two rounds of energy audit grant funding that paid for review and recommendations of the energy systems in over 30 county buildings, including several park facilities, the Monmouth County Courthouse, and the Monmouth County Correctional Facility. Numerous improvements have been made ranging from installing more efficient lighting to replacing HVAC systems and installing rooftop and ground mounted solar energy systems. In November 2013, the Monmouth County Energy Committee developed a list of short, medium, and long-term project targets to continue moving forward with their energy savings goals.

7.4.2 Utility Partners

There are numerous utility providers operating throughout the county. Figure 7.2: Utilities by Municipality lists the major local providers by municipality for sewer, water, electric, gas, and cable. During this



Figure 7.2: Utilities by Municipality

Municipality	Major Utility Providers, Where Service is Available				
	Sewer (1)	Water (2)	Electric	Natural Gas	Cable
Aberdeen	BRSA	NJAW, Aberdeen, and Matawan	JCP&L	NJNG	Cablevision
Allenhurst	TOSA	NJAW	JCP&L	NJNG	Comcast
Allentown	Allentown	Municipal Water Dept.	PSE&G	PSE&G	Cablevision
Asbury Park	APWQC	NJAW	JCP&L	NJNG	Cablevision
Atlantic Highlands	TOMSA via AHH	Municipal Water Dept.	JCP&L	NJNG	Comcast
Avon-by-the-Sea	TNSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Belmar	SMRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Bradley Beach	TNSA	NJAW	JCP&L	NJNG	Cablevision
Brielle	SMRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Colts Neck	n/a	Earle, Freehold Township, and SBWC	JCP&L	NJNG	Cablevision
Deal	TOSA	NJAW	JCP&L	NJNG	Comcast
Eatontown	TRWRA	Fort Monmouth and NJAW	JCP&L	NJNG	Comcast
Englishtown	WMUA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Fair Haven	TRWRA	NJAW	JCP&L	NJNG	Comcast
Farmingdale	MRRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Freehold Borough	MRRSA	Municipal Water Dept.	JCP&L	NJNG	Comcast
Freehold Township	MRRSA and WMUA	UW and Municipal Water Dept.	JCP&L	NJNG	Cablevision
Hazlet	BRSA	Shorelands	JCP&L	NJNG	Comcast
Highlands	TOMSA via AHH	NJAW	JCP&L	NJNG	Comcast
Holmdel	BRSA	Shorelands and NJAW	JCP&L	NJNG	Comcast
Howell	MRRSA	NJAW-SR and Parkway	JCP&L	NJNG	Cablevision
Interlaken	TOSA	NJAW	JCP&L	NJNG	Cablevision
Keansburg	BRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Keyport	BRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Lake Como	SMRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Little Silver	TRWRA	NJAW	JCP&L	NJNG	Comcast
Loch Arbour	TOSA	NJAW	JCP&L	NJNG	Comcast
Long Branch	LBSA	NJAW	JCP&L	NJNG	Comcast
Manalapan	WMUA	UW and Gordons Corner	JCP&L	NJNG	Cablevision
Manasquan	SMRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision



Municipality	Sewer (1)	Water (2)	Electric	Natural Gas	Cable
Marlboro	BRSA and WMUA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Matawan	BRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Middletown	TOMSA and FH	Gateway and NJAW	JCP&L	NJNG	Comcast
Millstone	n/a	n/a	JCP&L	PSE&G	Cablevision
Monmouth Beach	TRWRA	NJAW	JCP&L	NJNG	Comcast
Neptune Township	TNSA	NJAW	JCP&L	NJNG	Cablevision
Neptune City	TNSA	NJAW	JCP&L	NJNG	Cablevision
Ocean	TOSA	NJAW	JCP&L	NJNG	Cablevision
Oceanport	TRWRA	NJAW	JCP&L	NJNG	Comcast
Red Bank	TRWRA	NJAW and Municipal Water Dept.	JCP&L	NJNG	Comcast
Roosevelt	Roosevelt	Municipal Water Dept.	JCP&L	PSE&G	Comcast
Rumson	TRWRA	NJAW	JCP&L	NJNG	Comcast
Sea Bright	TRWRA	NJAW	JCP&L	NJNG	Comcast
Sea Girt	SMRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Shrewsbury Borough	TRWRA	NJAW	JCP&L	NJNG	Comcast
Shrewsbury Township	TRWRA	NJAW	JCP&L	NJNG	Comcast
Spring Lake	SMRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Spring Lake Heights	SMRSA	Municipal Water Dept.	JCP&L	NJNG	Cablevision
Tinton Falls	TNSA and TRWRA	NJAW	JCP&L	NJNG	Comcast
Union Beach	BRSA	NJAW	JCP&L	NJNG	Cablevision
Upper Freehold	Allentown	Aqua NJ	JCP&L and PSE&G	PSE&G	Cablevision
Wall	SMRSA and MRRSA	NJWSA and Municipal Water Dept.	JCP&L	NJNG	Cablevision
West Long Branch	TRWRA	NJAW	JCP&L	NJNG	Comcast

Notes: (1) Not all municipalities are entirely within sewer service areas. The listing of a sewer service provider only indicates that some part of the municipality is served. Small individual treatment systems were not listed. (2) Listing a water purveyor does not indicate that the entire municipality has access to a public water supply system. Only water systems that serve populations over 500 are listed, unless the entire municipal population is less.

Data sources: Monmouth County Future Wastewater Service Area Map adopted April 11, 2013; NJDEP Data Miner; NJDEP Source Water Assessment Program; New Jersey Natural Gas, Company; Jersey Central Power and Light Company; Public Service Electric and Gas Company; and Cable NJ- New Jersey Cable Telecommunications Association.

Provider Abbreviations: 1) Sewer: Allentown - Allentown Borough Sewerage Treatment Plant, APWQC - Asbury Park Water Quality Control Facility, AHH - Atlantic Highlands-Highlands Regional Sewerage Authority, BRSA - Bayshore Regional Sewerage Authority, FH - Fort Hancock Wastewater Treatment Plant, Earle - NWS Earle Treatment Facility, LBSA - Long Branch Sewerage Authority, MRRSA - Manasquan River Regional Sewerage Authority, Roosevelt - Roosevelt Borough Sewerage Treatment Plant, SMRSA - South Monmouth Regional Sewerage Authority, TOMSA - Township of Middletown Sewerage Authority, TNSA - Township of Neptune Sewerage Authority, TOSA - Township of Ocean Sewerage Authority, TRWRA - Two Rivers Water Reclamation Authority, and WMUA - Western Mouth Utilities Authority. 2) Water: Aqua - Aqua NJ - Hamilton Square; Earle - NWS Earle; Gateway - Gateway National Recreation Area Water; Gordons Corner - Gordons Corner Water Company; NJAW - New Jersey American Water Company; NJWSA - New Jersey Water Supply Authority; Parkway - Parkway Water Company; Shorelands - Shorelands Water Company; SBWC - S.B. Water Company; and UW - United Water. 3) Electric and Gas: JCP&L - Jersey Central Power and Light Company; NJNG - New Jersey Natural Gas Company; and PSE&G - Public Service Electric and Gas. 4) Cable: Cablevision - Cablevision Systems Corporation and Comcast - Comcast Cable Communications



Master Plan planning process, staff from the Environment and Sustainability Section of the Division of Planning invited stakeholders interested in utility planning, including representatives of various utility providers, to offer their valuable input on goals, objectives, trends, and strategies for sound utility planning and management. The impact of recent significant storm events on utility service within the county was heavily discussed during these meetings, as was the need for greater storm resiliency and funding for improvement projects.

After Hurricane Irene and Superstorm Sandy, the BPU requested that all utilities harden their infrastructure system against future storm events, enhancing service, reliability and resiliency throughout the various networks and systems. During 2014 Jersey Central Power & Light (JCP&L), a First Energy Corporation, made over 160 infrastructure improvements at a cost of approximately \$250 million. As a result the company announced a 17% reduction in the year's average outage duration when compared to 2013. Projects in Monmouth County included a \$15 million substation expansion project benefiting the Red Bank-Tinton Falls area; \$1.2 million substation improvements in Manalapan; tree-trimming throughout the service area; and installation of new equipment that automatically transfers customers to adjacent circuits in the event of an outage.

Since 2008, New Jersey Natural Gas (NJNG) has spent more than \$800 million on system upgrades, much of which occurred after Sandy. NJNG now has the least leaks per mile of any gas service provider in the state. More safety improvements and system enhancements are being planned in Monmouth County including a second feed to the Sea Bright-Monmouth Beach peninsula. The Southern Reliability Link (SRL) will provide a second feed into the NJNG system for customers in Monmouth, Ocean, and Burlington County. The lessons learned from Superstorm Sandy point to the need for an additional feed to protect customer service should the primary feed from the Texas Eastern line be disabled or shut down. After NJNG agreed to modify the originally



Solar Carport Canopy adjacent to the Monmouth County Agricultural Building in Freehold constructed during 2011

Source: Ann Waters

proposed SRL route, the Monmouth County Board of Chosen Freeholders adopted Resolution #2015-0112 strongly supporting the SRL pipeline project, “as it will directly benefit our residents, businesses, municipalities, county and state with natural gas service, which has become exponentially more important in the wake of Superstorm Sandy.” Improvements and service expansions are not limited to energy service conveyors and providers. Upgrades are currently being proposed by Gordon’s Corner Water Company and the Marlboro Township Harbor Road Water Treatment Facility, among others.

Raising structures in flood zones can impact utility service connections. The New Jersey Department of Community Affairs (NJDCA) has issued the [Elevation of Single Family Homes Notice and Guidance Document](#) to address the issue of proximity to high voltage powerlines. The NJDCA has also issued [Guidance on Electrical Meter Placement in a Designated Flood Zone](#) to advise builders, architects, and property owners of



requirements related to placing elevated electrical meters. Property owners should also contact their service provided to determine if further modifications are required.

Wastewater Utility Restoration and Resiliency Improvements

Bayshore Regional Sewerage Authority (BRSA), located in Union Beach serves approximately 83,000 people living in Aberdeen, Hazlet, Holmdel, Keansburg, Keyport, Matawan, Union Beach and Marlboro. When Superstorm Sandy hit in 2012, the entire 24-acre treatment plant was inundated with three feet of bay water. Critical facilities were damaged, rendering the plant inoperable. A state of emergency was declared and the necessary immediate repairs were performed to allow the facility to function safely. However, long-term repairs and resiliency improvements were still needed. Financing in the amount of \$28 million from the New Jersey Environmental Infrastructure Trust was secured in the form of a low-interest, short-term bridge loan provided in advance of anticipated federal disaster aid. This allowed BRSA to begin their much needed restoration and resiliency project in May 2015. The project has three phases: 1) restoration of key facilities, such as the primary incinerator and pump stations, 2) flood-proofing existing structures, and 3) mitigation measures, such as raising equipment above flood hazard elevations. Work is scheduled to be completed by September 2016.



Aerial view of BRSA Facility

Source: BRSA

Another victim of Sandy, the Southern Monmouth Regional Sewerage Authority (SMRSA), with a treatment facility in Wall, serves Belmar, Brielle, Lake Como, Manasquan, Sea Girt, Spring Lake, Spring Lake Heights and part of Wall. In 2006, the authority recognized the threat that hurricanes and nor’easters posed to coastal facilities. Looking for a safe and resilient alternative for the typical pump station with subsurface components, Authority Officials decided to test a mobile trailer pump station to replace their aging Sea Girt facility. The trailer housed the most sensitive equipment and could be moved out of harm’s way if a storm threatened the area. Secondary, sacrificial electrical and control systems were put in place that would remain onsite to power a portable generator and temporary transfer switch. After the storm passed, the trailer could be moved back and reconnected, reducing downtime and returning the facility to normal operation within hours.

After Superstorm Sandy passed, SMRSA evaluated their facilities and determined that several of their pump stations experienced significant damage. The Sea Girt pump station, however, functioned as planned and was fully operational shortly after the storm passed. Today, with the help of FEMA Public Assistance Grants, SMRSA is making improvements to their facilities including the installation of a mobile trailer at the Pitney pump station.



7.5 Additional Resources and Funding Opportunities

The 7.0 Utilities Element Recommendation Summaries provide a list of resources for utility related information on a local, regional, state, and federal level. There are a number of state and federal programs available for funding infrastructure improvements, but funding levels and the focus of projects to be funded changes periodically.

Federal

- [U.S. Energy Information Administration \(EIA\)](#)
- U.S. Environmental Protection Agency (USEPA)
 - [Clean Energy Incentive Program](#)
 - [Energy and the Environment](#)
 - [Climate and Energy Resources for State, Local, and Tribal Governments](#)
 - [National Pollutant Discharge Elimination System \(NPDES\)](#)

State

- New Jersey Department of Environmental Protection (NJDEP)
 - [The New Jersey Environmental Infrastructure Financing Program](#)
 - [Air Quality, Energy and Sustainability](#)
 - [Division of Water Supply and Geoscience](#)
 - [Drinking Water State Revolving Fund](#)
 - [Division of Stormwater Management](#)
 - [Division of Water Quality](#)
 - [Clean Water New Jersey](#)
 - [Water Pollution Management Element](#)
 - [New Jersey Pollution Discharge Elimination System \(NJPDES\)](#)
 - [Water Quality Management Planning](#)
- [Green Infrastructure in New Jersey](#)
- [New Jersey's Clean Energy Program \(NJCEP\)](#)
- [State of New Jersey Board of Public Utilities](#)

County and Local

- [Monmouth County Improvement Authority](#)
 - **Nonprofits, Research Centers, and Other Stakeholders**
- New Jersey Future
 - [Stormwater Utilities A Funding Solution for New Jersey's Stormwater Problems \(2014\)](#)
- Rutgers New Jersey Agricultural Experiment Station
 - [Green Infrastructure Guidance Manual for New Jersey](#)
 - [Green Infrastructure for Sustainable Communities](#)
 - [Rain Garden Manual of New Jersey](#)
- [State and Local Energy Efficiency Action \(SEE Action\) Network](#)
- [University of New Hampshire Stormwater Center](#)
- [Energy Research Council](#)
- [Rutgers Energy Institute](#)

7.6 Master Plan Recommendations and Stakeholder Strategies

Four *Master Plan* recommendations and numerous Stakeholder Strategies emerged from meetings and conversations with Board of Chosen Freeholders and Working Group stakeholders:

Master Plan Recommendations

Recommendation 7.1: Plan for areawide water quality management, including implementation of the *Wastewater Management Plan (WMP)* for Monmouth County as part of the *Monmouth County Water Quality Management (WQM) Plan*, to serve the needs of residents and businesses in a way that supports economic development, particularly in Priority Growth Investment Areas (PGIAs), and conserves environmental resources that protect water quality and quantity. The process developed in the 1990s should continue with the Monmouth County Planning Board (MCPB) and its Amendment Review Committee (ARC) handling the day-to-day technical review of amendments, maintenance of the Monmouth County Future Wastewater Service Area (FWSA) Map; and, once the



New Jersey Department of Environmental Protection's (NJDEP) wastewater management rules are adopted, drafting a new *WMP for Monmouth County* in consultation with the municipalities, utility authorities, and applicable state and regional entities. This recommendation further allows the Division of Planning to continue water quality management planning efforts related to all potential impacts to water quality including nonpoint source pollution, protection of our water supplies, wastewater management, and stormwater control.

Recommendation 7.2: Encourage adoption of municipal and regional stormwater management plans that support sound stormwater management initiatives and green Best Management Practices (BMPs). Division of Planning staff is encouraged to continue stormwater management planning and outreach efforts and to act as staff to the Stormwater Technical Advisory Committee. Should municipalities prepare amendments to their adopted stormwater management plans and ordinances, county review of those modifications would be required. Regional stormwater management plans require coordination with the county and should be reviewed for adoption as part of an *Areawide Water Quality Management Plan*.

Recommendation 7.3: Review the *New Jersey Statewide Water Supply Plan (1996)* for accuracy, monitor water supply issues, and provide recommendations to address discrepancies. Water supply planning for Monmouth County falls within the purview of areawide water quality management planning. The New Jersey Department of Environmental Protection (NJDEP) has been working on a new statewide water supply plan for several years but has not published a draft for review and comment. As a result of the many land use, economic, and technological changes that have occurred since adoption of the *State Water Supply Master Plan*, it may be necessary to the Areawide Water Quality Management Planning process to conduct a review of the 1996 plan against more current data, rather

than to wait for a new state plan to be adopted. The Division of Planning should also continue to monitor water supply management planning efforts at the state-level and work with regional partners on initiatives that would benefit county residents and businesses.

Recommendation 7.4: Work with other county departments and agencies to create and implement a comprehensive energy plan that promotes a culture of responsible energy use that optimizes efficiency, hardens infrastructure, and reduces both energy use and costs. Counties can play an important role in reducing greenhouse gas emissions through policy areas such as transportation, land use, economic development, and outreach, as well as by making operational changes to county facilities. Division of Planning staff should continue to support and participate in the Monmouth County Energy Committee initiatives including the preparation and updating of 1, 5, and 10-Year Energy Plan Project Lists; developing plans for implementation of energy reduction measures at county facilities; and coordinating with other county departments on grant application preparation and implementation to support the energy related and cost saving goals of the *Monmouth County Strategic Plan (2009)*. Furthermore, the Division of Planning should encourage the use of green technologies and designs through educational programs and outreach to the municipalities.

Stakeholder Strategies

General

- Monitor evolving technologies and sources to determine their impacts on existing systems and identify opportunities they may present for both county government and the private sector.
- Encourage land use planning decisions that are compatible with existing utility capacity and services.
- Encourage rehabilitation of existing utility system infrastructure with environmentally sound innovative technologies, improvements, and upgrades that will increase efficiency and



improve service.

- Encourage coordination between all levels of government to strengthen regional stormwater management.
- Support the use of alternative, renewable energy resources such as geothermal, solar, hydro, tidal, and wind power.
- Encourage the development of micro-grid technologies and distributed energy resources
- Promote New Jersey Government Energy Aggregation (NJGEA), which gives municipalities the ability to aggregate their energy usage and receive the lowest possible price of energy for their residents.
- Encourage municipal stormwater planning strategies to reduce surface water pollution

Natural Resources

- Protect watershed water quantity and quality through the use of innovative technologies for water conservation and wastewater treatment.
- Encourage land use planning techniques that advance the protection of headwaters, wellhead protection zones, groundwater recharge areas, and other locations that have an impact on downstream and downgradient water quality or supply.
- Discourage inter-basin transfers of water.

Open Space

- Ensure necessary utility infrastructure investments support diverse active recreational facilities to meet the needs of county residents and visitors.

Farmland Preservation

- Support agricultural use of alternative and sustainable energy sources to power farm residences, buildings, and irrigation pumps.
- Ensure the county’s agricultural industry has access to sound reliable utility systems required to advance green BMPs.

Arts, Historic, & Cultural Resources

- Support necessary infrastructure investments that encourage the preservation and development of a community’s art, cultural, and historic resources.
- Integrate utility infrastructure improvements in historic districts in ways that preserve and even enhance the district’s character.

Transportation & Mobility

- Promote the reduction of transportation related fossil fuel dependence and greenhouse gas emissions.
- Support the extension of the NJ TRANSIT North Coast Line’s electric trains south of the Long Branch Train Station and/or the expanded use of dual-mode locomotives.
- Promote the installation of electric charging stations for electric vehicles, where feasible.
- Promote installation of fueling stations and other accommodations for all alternative fuel vehicles.

Agricultural & Economic Development

- Support the expansion of communication systems, such as broadband internet access, into underserved, rural areas to facilitate economic development.
- Encourage the local development of new green energy industries while sustaining existing businesses that support energy conservation and related green technologies.

Community Development & Housing

- Promote residential discharge to groundwater systems, where feasible.
- Prioritize Community Development Block Grant (CDBG) projects based on energy efficiency, the use of BMPs, and their location proximate to existing utilities and infrastructure.



Healthy Communities

- Encourage municipalities to consider energy-related issues when developing or revising their zoning and land use policies.
- Ensure the provision of adequate levels of utility service to maintain safe and vibrant communities.

Community Resiliency

- Encourage improvements to existing utility infrastructure that are necessary to advance post hazard mitigation and overall resiliency.
- Support utility improvements recommended in the Monmouth County Office of Emergency Management’s *Multi-Jurisdictional Natural Hazard Mitigation Plan (2015)*.
- When replacing utility infrastructure located in Special Flood Hazard Areas (SFHAs) and floodprone locations prone to flood events, consider the use of technologies and/or construction methods that will better withstand future storm events, such as raising utilities above the Base Flood Elevation (BFE).
- Promote the installation of underground wires to reduce damage to utility services during storm-related events, where feasible.
- Encourage utility companies to invest in more storm and weather resilient energy distribution systems that lessen service disruption and decrease down time.

Sustainable Places

- Support environmentally sound upgrades to old, insufficient, or inefficient utility systems that improve future service within a sustainable level of capacity.
- Encourage distributed energy generation solutions that improve system efficiency, reliability, and resiliency.
- Encourage stormwater infiltration for groundwater recharge, where feasible.

Planning Services, Outreach, & Coordination

- Encourage water resource conservation through education, emerging technologies, and reuse of recaptured wastewater.
- Share energy saving lessons learned at the county-level with our municipalities, school districts, businesses, and residents.



NO
Skateboarding
Rollerskating
or
Rollerblading

Middletown

8.0 Transportation & Mobility

8.0 TRANSPORTATION & MOBILITY MASTER PLAN RECOMMENDATION 8.1

8.1: Maintain and update, as needed, *The Monmouth County Scenic Roadway Plan (2001)* and the *Monmouth County Road Plan (2012)* as adopted by reference as components of the Transportation & Mobility Element of the *Monmouth County Master Plan*.

Purpose

To establish and sustain the *Monmouth County Scenic Roadway Plan* and the *Monmouth County Road Plan* as the standards by which planning will be conducted, as it pertains to Monmouth County's road network.

Monmouth County Departments & Organizations Involvement

Division of Planning	Identify opportunities to update or improve upon these plans; evaluate effectiveness of <i>The Monmouth County Scenic Roadway Plan</i> ; develop new or enhanced scenic byway criteria for "built" locations, especially in downtowns and historic districts; coordinate improvement efforts and/or incorporate them into other projects.
Planning Board (MCPB)	Recognize <i>The Monmouth County Scenic Roadway Plan</i> and the <i>Monmouth County Road Plan</i> as adopted by reference as components of the Transportation & Mobility Element of the <i>Monmouth County Master Plan</i> .
Park System (MCPS)	Provide knowledge of environmental resources as well as park user behaviors that could be tied into <i>The Monmouth County Scenic Roadway Plan</i> .
Department of Public Works and Engineering	Manages county roads and is instrumental in the development and maintenance of these plans; review landscape measures and context sensitive appropriate design for scenic byway locations.
Transportation Council (MCTC)	Assist in identifying potential changes to the plans.

Other Project Stakeholder Involvement

Municipalities	Assist in identifying potential changes and help identify potential stakeholders in their community.
New Jersey Department of Transportation (NJDOT)	Assist in implementing any recommended potential changes.
North Jersey Transportation Planning Authority (NJTPA)	Assist in financing any recommended potential changes.



Main Street Bus Station, Bradley Beach

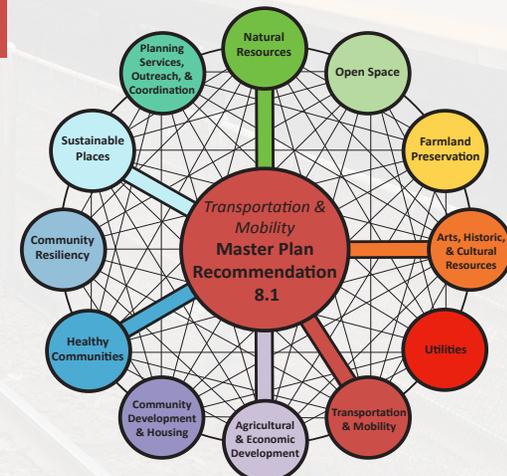
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●													
B. Coordination	●	●												
C. Planning Approach			●											
D. Environmental Resources				●										
E. Farmland Preservation					●									
F. Arts, Culture, & Historic						●								
G. Preservation Investments							●							
H. Vibrant & Sustainable Communities								●						
I. Community Preservation									●					
J. Housing										●				
K. Economic Development											●			
L. Agricultural Development												●		
M. Recovery & Resiliency													●	
N. Growth Investments														●

Implementation Strategy

- The Division of Planning will coordinate plan updates with other county departments.



**Strongest Associated
Master Plan Elements**

8.0 TRANSPORTATION & MOBILITY

MASTER PLAN RECOMMENDATION 8.2

8.2: Continue to develop and implement regional corridor studies through New Jersey Transportation Planning Authority's (NJTPA) Subregional Studies Program (SSP) and work with other county departments and agencies in identifying viable SSP and pilot projects with NJ TRANSIT and NJTPA that further the Goals, Principles, and Objectives (GPOs) of the *Monmouth County Master Plan*, the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)*, and the county's capital improvement needs.

Purpose

To best utilize federal resources, sourced through NJTPA, to support new planning initiatives that advance the GPOs of the *Monmouth County Master Plan*.

Monmouth County Departments & Organizations Involvement

Division of Planning	Work with other county departments in identifying potential SSP projects; coordinate the Technical Advisory Committee (TAC); act as lead county agency in project management of SSP programming.
Department of Public Works and Engineering	Assist the Division of Planning in identifying viable SSP projects (all SSP projects require participation from this department) from concept through completion, as the ultimate goal for all SSP projects is "implementation;" serve as a standing member of Monmouth County's TAC.
Division of Economic Development	Assist the Division of Planning in identifying viable SSP projects that support recommendations in the <i>CEDS</i> ; participate on the Monmouth County TAC.
Transportation Council (MCTC)	Assist with project concept development.

Other Project Stakeholder Involvement

Municipalities	Input will be sought as part of all TACs.
New Jersey Department of Transportation (NJDOT)	
NJ TRANSIT	
Meadowlink Transit Management Association (TMA)	
NJTPA	



Main Street Bus Station, Bradley Beach

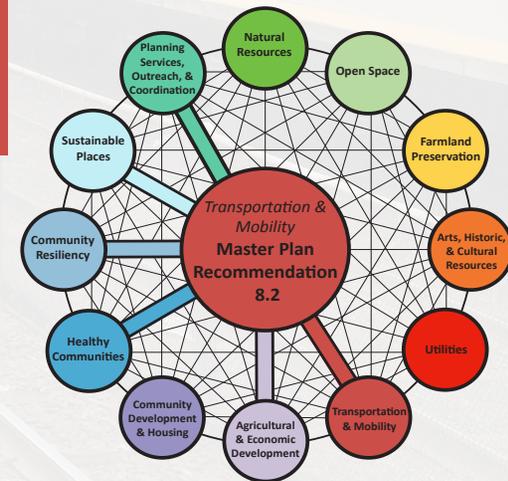
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination		●												
C. Planning Approach		●	●											
D. Environmental Resources	●	●												
E. Farmland Preservation	●													
F. Arts, Culture, & Historic														
G. Preservation Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Coordinate with the Department of Public Works and Engineering, and any other appropriate department prior to applying for SSP funding.
- Submit applications and conduct all administration related to the SSP program.



Strongest Associated Master Plan Elements

8.0 TRANSPORTATION & MOBILITY

MASTER PLAN RECOMMENDATION 8.3

8.3: Finalize, disseminate, and maintain the Monmouth County Transit Map and create a *Monmouth County Multi-Modal Transportation Guide*.

Purpose

To empower travelers in Monmouth County with knowledge necessary to effectively and efficiently use the existing transportation network.

Monmouth County Departments & Organizations Involvement

Division of Planning	Act as project lead on developing these initiatives; gather all relevant transportation data for incorporation into the Monmouth County Transit Map and <i>Monmouth County Multi-Modal Transportation Guide</i> ; create document layout and format for hard copy and web publication.
Department of Public Information and Tourism	Assist with integration into the county's website and provide graphical input.
Division of Economic Development	Assist in identifying regional trip generators.
Transportation Council (MCTC)	Provide input on the project's design and aesthetics; ensure clarity of provided information.

Other Project Stakeholder Involvement

NJ TRANSIT	Provide bus and train information for Monmouth County Transit Map and <i>Monmouth County Multi-Modal Transportation Guide</i> .
SeaStreak	
NY Waterway	Provide ferry data.



Main Street Bus Station, Bradley Beach

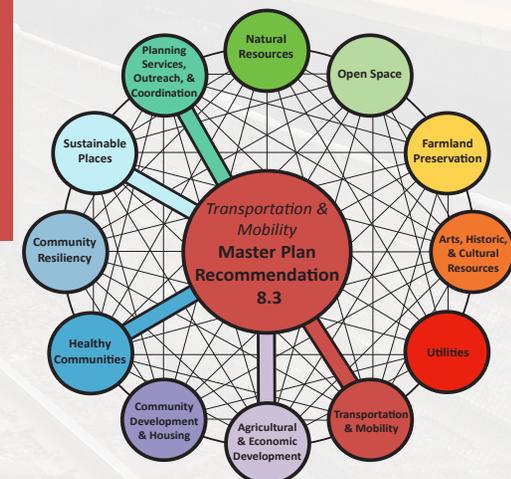
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic														
G. Preservation Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Assemble required data and develop the Monmouth County Transit Map and *Monmouth County Multi-Modal Transportation Guide* in geographic information system (GIS) form.
- Work with the Department of Public Information and Tourism in approval and publication on the Monmouth County website.



Strongest Associated Master Plan Elements

8.0 TRANSPORTATION & MOBILITY MASTER PLAN RECOMMENDATION 8.4

8.4: Work on implementing recommendations found in the *Monmouth County Bus Rapid Transit Opportunities Study (2015)* to improve bus service along critical corridors in Monmouth County, and eventually expand upon these efforts toward the development of a complete Bus Rapid Transit (BRT) approach.



Main Street Bus Station, Bradley Beach

Source: Steve daCosta

Purpose

Continue the efforts initiated in the *Monmouth County Bus Rapid Transit Opportunities Study* which include moving the county towards incorporating BRT concepts into the transportation network, improving bus service along critical corridors in the county, and expanding upon these efforts towards the development of a complete BRT approach.

Monmouth County Departments & Organizations Involvement

Division of Planning	Project leader in identifying BRT implementation opportunities.
Department of Public Information and Tourism	Assist with the dissemination of BRT related information to the public.
Department of Public Works and Engineering	Assist in the consideration of any new facilities to be designed and constructed for the development as part of the BRT network.

Other Project Stakeholder Involvement

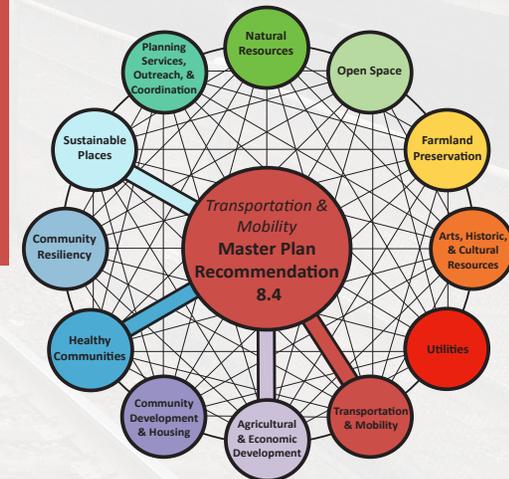
NJ TRANSIT	BRT improvements would be made to the existing NJ TRANSIT bus network in the county; buy-in and participation is necessary in all aspects relating to the implementation.
North Jersey Transportation Planning Authority (NJTPA)	NJTPA may be able to help secure funding for future BRT improvements and/or further studies.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1 Comprehensive Planning	1.2 Coordination	1.3 Planning Approach	2.1 Environmental Resources	2.2 Farmland Preservation	2.3 Arts, Culture, & Historic	2.4 Preservation Investments	3.1 Vibrant & Sustainable Communities	3.2 Community Preservation	3.3 Housing	3.4 Economic Development	3.5 Agricultural Development	3.6 Recovery & Resiliency	3.7 Growth Investments
A.	●	●	●					●			●			●
B.	●	●	●											●
C.	●	●						●						●
D.	●													●
E.											●			●
F.														●
G.														●
H.		●												●
I.		●												●
J.														●
K.														●
L.														●
M.														●
N.														●

Implementation Strategy

- Implement the *Monmouth County Bus Rapid Transit Opportunities Study*.
- Prioritize recommendations based on cost and implementation feasibility.
- Research potential funding sources for use in implementing recommendations.



Strongest Associated Master Plan Elements

8.0 TRANSPORTATION & MOBILITY MASTER PLAN RECOMMENDATION 8.5

8.5: Proceed with efforts to develop a Travel Demand Model (TDM) to assist the county and the New Jersey Transportation Planning Authority (NJTPA) in coordinating regional and subregional transportation planning studies and projects.

Purpose

Create a TDM that will become a part of all county-related transportation planning processes, allowing for informed visualization and the prioritization of projects.

The TDM will:

- Provide data on changes in traffic patterns as a result of capital projects;
- Model impacts of proposed development and redevelopment projects on the existing transportation network;
- Confirm findings established in developer traffic studies;
- Help evaluate impacts of proposed land use modifications;
- Identify and help prioritize capital improvement projects;
- Provide useful ongoing input into *Monmouth County Master Plan*;
- Allow for different modes of travel as well as considerations for seasonal travel demand.

Monmouth County Departments & Organizations Involvement

Division of Planning	Project lead for administration and execution of Subregional Studies Program (SSP) grant; coordinate efforts between all the stakeholders involved in the program.
Department of Public Works and Engineering	Primary project partner; provide technical assistance; gather information and data; conduct necessary traffic counts to gather data needed for project development.

Other Project Stakeholder Involvement

North Jersey Transportation Planning Authority (NJTPA)	Primary project partner; administers the SSP grant; provide expertise on TDM technology; ensure consistency with NJTPA Regional TDM.
NJ TRANSIT	Provide ridership data and other assistance as needed.
Ocean County	Project partner; provide assistance and expertise from their experience on TDM development; Monmouth County TDM will be consistent with Ocean County TDM to form a regional model that can be referenced up into NJTPA model.



Main Street Bus Station, Bradley Beach

Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●													
B. Coordination		●												
C. Planning Approach			●											
D. Environmental Resources				●										
E. Farmland Preservation					●									
F. Arts, Culture, & Historic Preservation						●								
G. Preservation Investments							●							
H. Vibrant & Sustainable Communities								●						
I. Community Preservation									●					
J. Housing										●				
K. Economic Development											●			
L. Agricultural Development												●		
M. Recovery & Resiliency													●	
N. Growth Investments														●

Implementation Strategy

- Develop a Request for Proposal (RFP) and select consultant through SSP process.
- Form Technical Advisory Committee (TAC) to guide process from inception.
- TAC will be comprised of appropriate stakeholders (e.g. NJ TRANSIT, NJDOT, and Meadowlink TMA).
- Consultant will assist on data collection, model development, model calibration, and training.



**Strongest Associated
Master Plan Elements**

8.0 TRANSPORTATION & MOBILITY MASTER PLAN RECOMMENDATION 8.6

8.6: Review and amend the Monmouth County Transportation Council's (MCTC) purpose and mission to align its programming with the Goals, Principles, and Objectives (GPOs) of the *Monmouth County Master Plan*.

Purpose

To maximize the MCTC's potential as a valuable component of Monmouth County's transportation planning process. The MCTC's stated purpose is to act as an advisory board to the Monmouth County Planning Board (MCPB) and its mission will be carried out with the *Monmouth County Master Plan* serving as its work program.

Monmouth County Departments & Organizations Involvement

Division of Planning	Project lead; acts as staff advisor to the MCTC (e.g. preparing agendas, generating minutes, and arranging for presentations and guest speakers).
Department of Public Works and Engineering	Send representative to attend all MCTC meetings; provides engineering updates.
MCTC	Regularly review both the <i>Master Plan</i> and the council's current influence on the county to ensure they are aligned.

Other Project Stakeholder Involvement

Municipalities	MCTC members maintain a list of liaisons in each of the county's 53 municipalities. These liaisons relay relevant transportation related issues to the MCPB through the MCTC.
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Main Street Bus Station, Bradley Beach

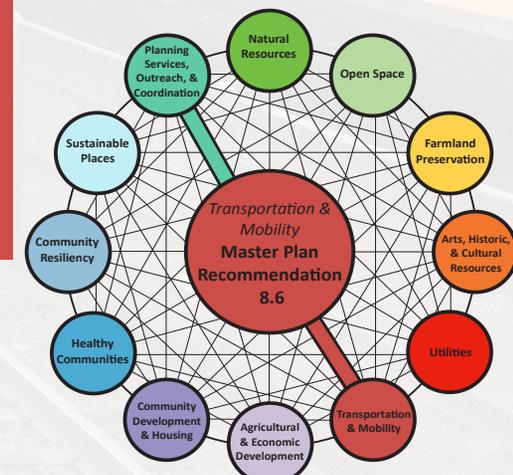
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.6

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination		●												
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Maintain and address MCTC's role as advisor to the MCPB.
- When necessary, incorporate new members who have a passion for transportation and community service and indoctrinate them with the principles set forth in the MCTC bylaws.
- Review and amend the MCTC bylaws as needed.



Strongest Association to Master Plan Elements

8.0 TRANSPORTATION & MOBILITY MASTER PLAN RECOMMENDATION 8.7

8.7: Provide an online “one stop transportation resource shop” for all transit information in the county including a geographic information system (GIS)-based, online mapping resource for the existing Monmouth County Bicycle Map, transit infrastructure and routes, and recreational resources.

Purpose

To provide a tool by which Monmouth County travelers will be empowered to make the best and most informed choices possible regarding trip times and transportation mode of choice.

Monmouth County Departments & Organizations Involvement

Division of Planning	Project lead; integrate all transportation routes and schedules; research similar efforts done elsewhere to gather best practices; GIS Section will serve as primary project partner in designing maps and webpage.
Park System (MCPS)	Provide information on multi-use trails, paths, and park connectors throughout Monmouth County.
Department of Public Works and Engineering	Share information on existing conditions when applicable.
Division of Economic Development	Determine which county resources should be featured on the online platform.
Transportation Council (MCTC)	Assist with project aesthetics and clarity of information; once resource is created, encourage its use through municipal liaisons and public outreach.

Other Project Stakeholder Involvement

NJ TRANSIT	Provide up-to-date route and schedule information on all NJ TRANSIT facilities in the county.
Academy Bus	Provide up-to-date route and schedule information on all Academy facilities in the county.
Seastreak	Provide up-to-date route and schedule information on all Seastreak facilities in the county.
NY Waterway	Provide up-to-date route and schedule information on all NY Waterway facilities in the county.



Main Street Bus Station, Bradley Beach

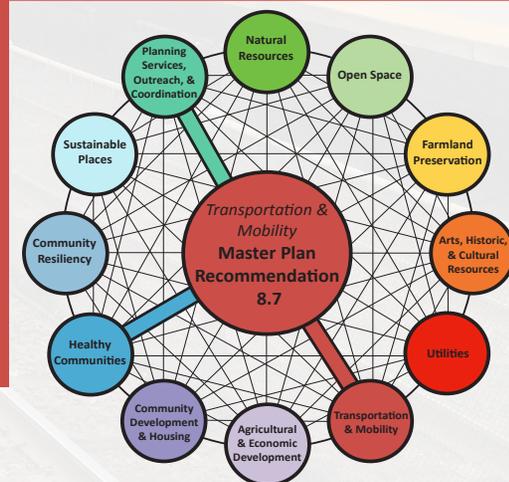
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.7

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- The Division of Planning Transportation Section will coordinate with the GIS Section to determine the best design options for this platform.
- The Division of Planning Transportation Section will coordinate with the MCPS and the Division of Economic Development on which resources to feature.
- The Division of Planning Transportation Section will coordinate with relevant stakeholders (e.g. NJ TRANSIT, and Academy) to gather up-to-date schedule and route information for incorporation into tool developed with the GIS Section.



Strongest Associated Master Plan Elements

8.0 TRANSPORTATION & MOBILITY MASTER PLAN RECOMMENDATION 8.8



Main Street Bus Station, Bradley Beach

Source: Steve daCosta

8.8: Coordinate planning activities with the Monmouth County Department of Public Works and Engineering to help identify and prioritize transportation-related projects and assist with developing and implementing the county’s capital improvement program.

Purpose

To coordinate projects in similar areas or with similar goals as well as to ensure transportation related projects within Monmouth County are completed accurately and in a timely manner.

Monmouth County Departments & Organizations Involvement

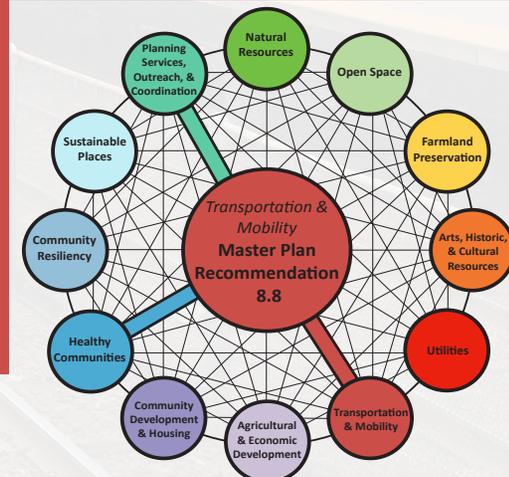
Division of Planning	Assist the Department of Public Works and Engineering in identifying and prioritizing transportation related projects; GIS Section provides support to the Department of Public Works and Engineering in map creation.
Department of Public Works and Engineering	Lead agency in all capital improvement and county facility improvement projects.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 8.8

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic Preservation														
G. Preservation Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Provide professional and technical assistance to the Department of Public Works and Engineering, upon request.
- Prepare and research information for the Department of Public Works and Engineering, upon request.
- Consider future goals of the Department of Public Works and Engineering to be included in the *Monmouth County Master Plan*.
- Prioritize and attempt to coordinate related projects.



Strongest Associated Master Plan Elements

8.0 Transportation & Mobility

8.1 Introduction

A transportation network can be defined as a framework of routes between locations. In Monmouth County this framework exists in two iterations: existing permanent facilities and scheduled services. The permanent facilities in place include roadways, railways, waterways, multi-use trails, and pedestrian facilities of varying sizes, scopes, and levels of service. The scheduled services are comprised of bus, rail, and ferry lines. Serving 630,000 residents over a land area of 472 square miles, Monmouth County's transportation network is crucially important to the well-being of users and functionality of the region.

8.2 Existing Conditions

8.2.1 Guiding Documents, Reports, and Studies

Monmouth County Road Plan: The *Monmouth County Road Plan* informs the public of the location, design, and right-of-way widths of the county road system. It is a long range plan that provides the framework for coordinating our regional road system with the growth and development of the county. The county road system is a network of existing and potential county roads that act as a continuous regional thoroughfare for carrying traffic to and from major traffic generators such as shopping centers, hospitals, employment centers, and transportation centers in a quick, safe, and efficient manner. The most recent [Monmouth County Road Plan](#) was adopted on October 15, 2012.

Monmouth County Scenic Roadway Plan: [The Monmouth County Scenic Roadway Plan](#) was adopted in 2001 with the purpose of retaining scenic qualities and features possessed by many county roads. *The Monmouth County Scenic Roadway Plan* has three main goals:

- To identify those county roads, or sections of county roads, that possess such a high degree of visual quality that driving, biking, or walking along those roads is a pleasurable experience;

- To establish a set of alternative design guidelines for scenic county roads for use by Monmouth County in its development review process and capital improvement program;
- To present other means of preserving scenic roads that may be implemented by the county, by municipalities, and by other agencies and organizations.

Monmouth County Bus Rapid Transit Opportunities Study: The [Monmouth County Bus Rapid Transit Opportunities Study \(2015\)](#) addresses the feasibility of implementing strategies and features consistent with Bus Rapid Transit (BRT) systems in order to improve bus service in Monmouth County. The study was developed by Monmouth County in partnership with Together North Jersey (TNJ) and the North Jersey Transportation Planning Authority (NJTPA). While further development of this concept may lead eventually to the development of a full-fledged BRT route (or multiple routes) within the county, the main intent is to develop approaches to improve existing service within the county.

The *Monmouth County Bus Rapid Transit Opportunities Study* provides an overview of the applicable BRT features and strategies that could potentially be implemented as means of enhancing existing bus transit service. While a full-fledged BRT system may not be immediately realistic or feasible in Monmouth County, many of the features and strategies commonly associated with BRT systems could enhance the existing transit system. Additionally, the study examines existing and potential future transit nodes to identify those suitable for further development. The process of developing these nodes in the future would include cost-benefit calculations and estimates of projected ridership increases. If potential features and strategies show positive economic and ridership value, then they could be implemented using a phased approach combining BRT features at transit node locations with BRT features and strategies on bus transit operations. Together, as

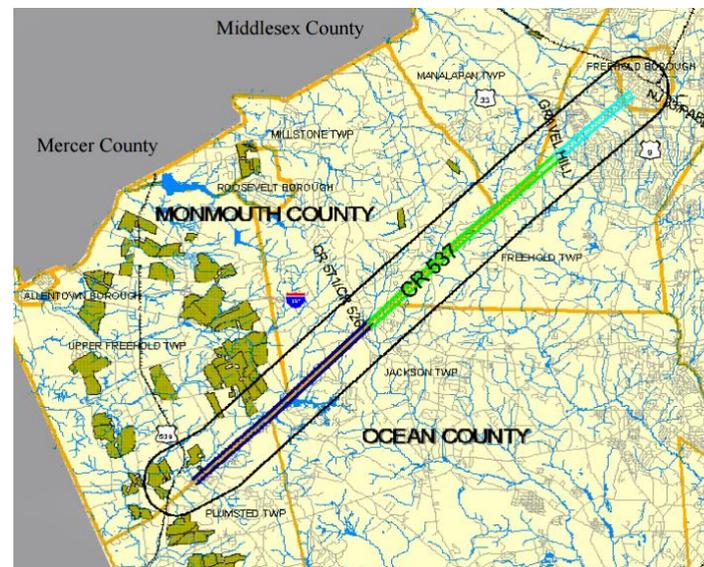


improvements progress, the overall bus system could start to resemble a modern BRT system.

Western Monmouth County Route 537 Corridor Study: Completed in January 2004, the goal of the [Western Monmouth County Route 537 Corridor Study](#) was to establish an action plan that will help address the changing balance between land use development and transportation needs within the County Route (CR) 537 corridor. This was accomplished through several objectives which are defined as follows:

- Coordination with officials and community stakeholders from local municipalities located within the CR 537 corridor to identify transportation concerns and issues and to establish a clear vision of anticipated land use development needs and treatments envisioned by these communities.
- Development of an inventory of county and municipal transportation facilities and resources within the CR 537 corridor and assessment of the performance of these facilities using transportation industry standards.
- Projection of future travel demands based upon projected land use build-out conditions and/or growth factor projections in the corridor using industry-standard analytical processes.
- Projection of travel demands to the existing transportation facilities within the CR 537 corridor and determination of the demands that future land use development will place upon access and mobility.
- Identification of a range of possible growth management strategies and/or appropriate scale transportation solutions to address the projected level of travel demand during the time horizons considered, and selection of those most appropriate for further consideration.
- Review of recommended strategies with community officials, stakeholders, and Technical Advisory Committee (TAC) representatives, and selection of appropriate alternatives.

- Development of concept drawings and mapping defining recommended strategies and/or roadway improvements for the CR 537 corridor.
- Identification of funding sources and mechanisms to be used to implement the recommended improvements.



Western Monmouth County Route 537 Corridor Study Project Limits

Monmouth County Bicycle Map: Developed in 2003 and updated in 2010, the [Monmouth County Bicycle Map](#) serves to inform Monmouth County residents of existing conditions on county roads from a bicyclist's perspective. The Monmouth County Bicycle Map identifies road conditions, trail locations, bicycle facilities, and important destinations for all bicycle riders. It also contains information regarding safety tips, NJ bicycle laws, information on bicycling for both health and transportation, and location for bicycle shops and clubs. The Monmouth County Bicycle Map was developed in close association with bicycle shops and ridership organizations.



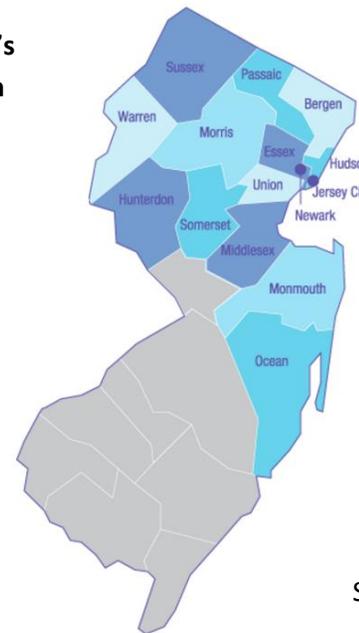
Monmouth County Coastal Evacuation Routes Study: The [Monmouth County Coastal Evacuation Routes Study \(2009\)](#) was conducted to evaluate how the current coastal evacuation routes system could be improved and possibly expanded to help move people away from flood zones. This work involved the following:

- Identifying a set of routes and roadways whose purpose is to bring people from a hazardous (flood) zone to a safe area
- Examining physical and operational problem areas and spots that could be targeted for improvements
- Proposing near term, intermediate, and long range solutions

Regional Plan for Sustainable Development (RPSD): In 2011, the U.S. Department of Housing and Urban Development (HUD) awarded TNJ a Sustainable Communities Regional Planning Grant. The funding was dedicated to develop a RPSD for the NJTPA 13-county region including Monmouth County, implement Local Demonstration Projects (LDP), and provide technical assistance and education opportunities. The RPSD is both “issue-based” and “place-based” seeking to harmonize existing plans while fostering an integrated regional vision for transportation infrastructure, utilities, green infrastructure, housing, employment, education, and other investments. After three years of development, TNJ produced [The Plan. 2015](#), discussed more in Section 8.4.2 Partnership Efforts

The LDPs are a substantial component of the RPSD planning process. A LDP conducted in Monmouth County is the [Connecting Community Corridors Study](#) for Asbury Park, Neptune Township, and Bradley Beach. This project aims to provide implementable short-term projects to achieve a greater sustainability for the neighboring municipalities by investing in existing corridor infrastructure. The majority of this study’s focus is along Memorial Drive (CR 40A) and Main Street (State Route 71) where amenities such as housing, jobs, educational, cultural, and recreational opportunities currently exist. The project Vision Themes

TNJ and NJTPA’s Service Region



Source: NJTPA

include Arts and Cultural Branding and Themes; Transit-Orientated Infill and Adaptive Reuse; Enhanced Shuttle Services; Traffic Calming and Pedestrian/Bike Improvements; Business Improvement and Main Street Program, and Urban Agriculture and Sustainable Infrastructure. Other concepts include creating a Gateway to Springwood, Cookman, and Ocean Grove and Reconnecting Bradley Beach and Bradley Park in Neptune Township.

Regional Transportation Plan (RTP) for Northern New Jersey-Plan 2040: *Plan 2040 (2013)* is the latest update to NJTPA’s RTP which is updated every four years. It is intended as an investment guide for future transportation development through the year 2040. *Plan 2040* as well as all succeeding updates to NJTPA’s RTP will be utilized by Monmouth County to ensure that all future transportation investments



are not only in the best interest of the county but in that of the entire northern NJ transportation network.

Gateway Project: Due to advanced age and flooding caused by Superstorm Sandy, the existing Hudson Rail Tunnels connecting Northern New Jersey to New York City are in dire need of rehabilitation. Both tunnels need to be shut down for an estimated year to repair the reinforced steel, concrete, and electrical infrastructure corroded by salt water. However, 200,000 daily commuters rely on these tunnels for access to employment in NYC and the closure of even one tunnel will reduce rail traffic by 75% during peak hours resulting in significant delays in rail commuting times. Tens of thousands of transit riders would be forced to find alternate means of transportation to their places of employment which would place further strain on bus transit and the already overburdened highways.

The Gateway Project plans to build two new rail tunnels which when opened will be used to accommodate rail traffic while the older tunnels are repaired. Later, the new tunnels would add to the maximum capacity of rail transportation traveling to and from NYC under the Hudson River. The project also calls for the replacement of Portal Bridge, a rail bridge spanning Hackensack River that is in desperate need of repairs, an expansion to New York Penn Station to accommodate the increase in rail traffic, and new rail lines connecting existing Northern New Jersey Train Stations to the new Gateway Rail Tunnels. Funding for this project will be provided for by the Federal Government which will pay half, and the States of New York and New Jersey which will split the remaining half. The environmental impact study and designs are currently underway. Construction is projected to begin in 2019.

8.2.2 Transportation Network

Monmouth County Roadway Network

Garden State Parkway (GSP): Spanning the entire state from north to south, the GSP is at its widest (12 lanes) in Monmouth County. Running 26 miles from Aberdeen to Wall, the GSP has helped to define the growth of Monmouth County since its construction in 1954. In Monmouth County, there are nine exits off the GSP and tolls are collected at one barrier and six ramps, as detailed in Figure 8.1: Garden State Parkway in Monmouth County.



For additional information, visit the [New Jersey Turnpike Authority](http://www.njta.com).

U.S. (Federal) and State Roads: U.S. Routes and NJ State Highway Routes comprise a critical portion of Monmouth County's road network. Figure 8.2: U.S. and State Roads in Monmouth County detail both U.S. Routes and some NJ State Highways in Monmouth County. For more information, see [Monmouth County's 2015 Straight Line Diagrams](#) as issued by the New Jersey Department of Transportation (NJDOT).

County Roads: The county road system is a network of existing and potential county roads that act as a continuous regional thoroughfare for carrying traffic to and from major traffic generators such as shopping centers, hospitals, employment centers, and transportation centers in a quick and efficient manner. In most cases the system provides a link between municipal collector roads and state and/or federal roads. The existing county road system is comprised of Principal County Roads and Minor County Roads. Principal County Roads are existing county roads that serve a regional function. Minor County Roads are those which do not serve a regional function. The county road system is also comprised



Figure 8.1: Garden State Parkway in Monmouth County

Exit	Mile Marker	Location	Toll	Notes
117A	118.79	Aberdeen – Hazlet	\$.50	SB exit and entrance
117	118.50	Hazlet	\$.50	SB exit NB entrance
N/A	117	Holmdel	N/A	Crossover ramps between express and local lanes
116	115.85		None	Exit for PNC Bank Arts Center
114	113.88	Holmdel – Middletown	\$.50	SB exit NB entrance
109	110.14	Middletown	\$.50	SB exit NB entrance
105	106.12	Tinton Falls	\$1.50	SB exit NB entrance Express Lane Access North end of commercial vehicle access
N/A	104.20		N/A	South end of local/express lanes split
N/A	103.96		\$1.50 (NB Only)	Asbury Park Toll Plaza
102	103.15		None	SB exit NB entrance
100	101.24		None	No direct access from Rte. 33 westbound to Parkway SB or from Parkway SB to Rte. 66 east bound
98	98.23	Wall	\$.50	SB exit NB entrance
SB: Southbound			NB: Northbound	



Figure 8.2: U.S. and State Roads in Monmouth County

Route	Length in Monmouth County	Description
U.S. 9	14 Miles	Northern end: CR 520 in Marlboro Southern end: I-195 in Howell
Interstate 195	26 Miles	Eastern end: Garden State Parkway in Wall Western end: CR 524 in Allentown
NJ 18	23 Miles	Northern end: CR 520 in Marlboro Southern end: NJ 138 in Wall
NJ 33	21 Miles	Eastern end: NJ 71 in Neptune Western end: CR 527A in Millstone
NJ 34	22.5 Miles	Northern end: NJ 79 in Matawan Southern end: NJ 35 in Wall
NJ 35	29 Miles	Northern end: CR 516 in Keyport Southern end: Ashley Avenue in Brielle
NJ 36	24.4 Miles (Entire route is in Monmouth County)	Northern end: Garden State Parkway/NJ 35 in Keyport Southern end: Garden State Parkway in Eatontown
NJ 71	16.78 Miles (Entire route is in Monmouth County)	Northern end: NJ 35/CR 537 in Eatontown Southern end: NJ 35 in Brielle
NJ 79	12.13 Miles (Entire route is in Monmouth County)	Northern end: NJ 34 in Matawan Southern end: U.S. Route 9 in Freehold Township

of Potential County Roads which include Municipal Roads (existing municipal roads that now serve a regional function and be considered in the future as county roads) and New Construction (new roads that will serve a regional function).

For more information on the county road system, see the *Monmouth County Road Plan (2012)* [Text](#) or [Map](#).



Monmouth County Transit Network

North Jersey Coast Line (NJCL): The NJCL is operated by NJ TRANSIT, and has been in existence in Monmouth County since the late 1800s. The entire line runs from New York Penn Station at its northern terminus to Bay Head at its southern terminus. There are 14 stops on the NJCL in Monmouth County, from Aberdeen-Matawan in the north to Manasquan in the south. These 14 stops see a total of approximately 10,000 boardings on the average weekday, with Aberdeen-Matawan being the busiest (2,500 daily boardings). Commuter trips to NY Penn Station vary in length of time from 60 minutes from Aberdeen-Matawan to 120 minutes from Manasquan.



The NJCL is electrified as far south as Long Branch, with trips to points south requiring a switchover to a diesel train at the Long Branch Station. However, in 2015 NJ TRANSIT secured funding for dual-mode locomotives that make a one-seat ride possible throughout the length of the entire NJCL. Figure 8.3: NJCL Excerpt of the NJ Transit Rail displays the train stops found in Monmouth County as of spring 2016.

NJ TRANSIT Rail Car



Source: Monmouth County Division of Planning Image Library

Figure 8.3: NJCL Excerpt of the NJ TRANSIT Rail



Source: NJ TRANSIT



NJ TRANSIT Bus Network: NJ TRANSIT operates an extensive bus transit network in Monmouth County, displayed in Figure 8.4: NJ Transit Bus Service in Monmouth County. It is comprised of 21 routes that provide both commuter and intra-county service; 13 of these routes can be characterized as long distance routes that connect Monmouth County to regional destinations. The majority of the commuter routes use the Garden State Parkway and U.S. Route 9 as the major north-south corridors through Monmouth County. The eight local service routes typically serve municipalities that are removed from the GSP and U.S. Route 9, and connect the county using east-west roadways.

The Route 139 service to New York City is the most heavily used, with almost 9,000 riders daily. Buses bound for Newark and Hudson County, including the 63, 64, and 67 Routes, each approach 1,500 daily boardings. The local (intra-county) routes each have fewer than 1,000 daily boardings, with many of the routes averaging far fewer riders.

Bradley Beach Bus Station on Main Street



Source: Steve daCosta

Figure 8.4: NJ TRANSIT Bus Service in Monmouth County

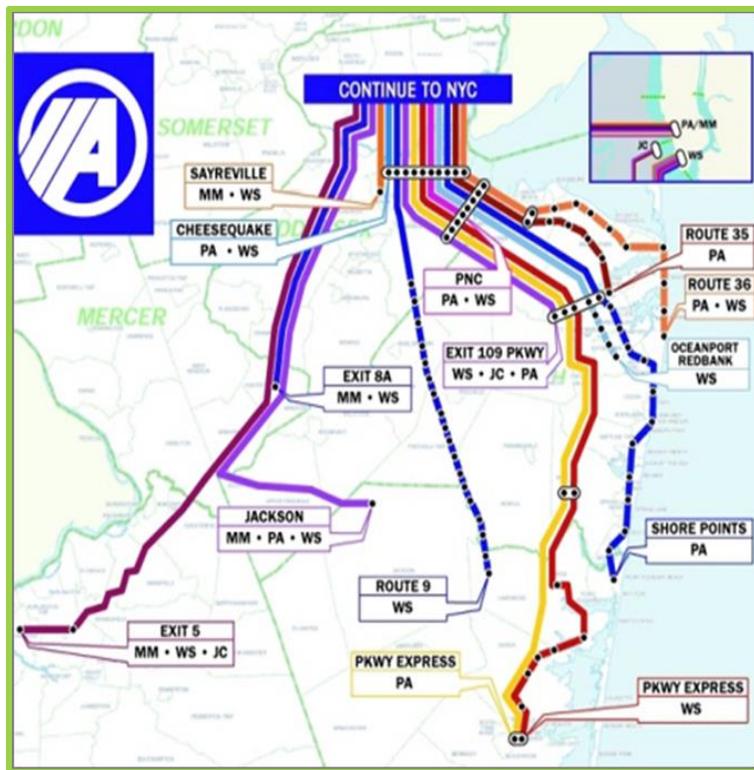
Category	Route	Description
Routes to/from Hudson County and Newark	63	Lakewood - Jersey City – Weehawken
	64	
	67	Toms River - Lakewood – Newark
Routes to/from New York City	133	Old Bridge - Aberdeen - New York
	131	Sayreville - New York
	135	Freehold - Matawan - New York
	137	Toms River - Lakewood - New York
	130	Lakewood - Old Bridge - New York
	132	
	136	
139		
Routes to/from Philadelphia	317	Asbury Park - Fort Dix – Philadelphia
Local Bus Service – Monmouth/Middlesex Inter-county	817	Perth Amboy - Campbell's Junction
Local Bus Service – Monmouth County	830	Asbury Park - Point Pleasant Beach
	831	Red Bank - Monmouth Mall - Long Branch
	832	Red Bank - Monmouth Mall - Asbury Park
	833	Red Bank - Freehold Raceway Mall
	834	Red Bank – Highlands
	835	Red Bank - Sea Bright
	836	Asbury Park - Freehold Raceway Mall - CentraState
	837	Long Branch - Asbury Park - Seaview Square

For additional information: [NJ TRANSIT Bus Schedules](#)



Academy Bus: Throughout Monmouth County, Academy Bus operates additional private carrier commuter bus service as shown in Figure 8.5: Academy Bus Service in Monmouth County as of 2015. This private operator operates long distance commuter buses between Monmouth County and NYC. The service is offered daily from numerous towns within Monmouth County including Asbury Park, Oceanport, and Atlantic Highlands. The bus service schedules, along with the land use of the county and demographic data, suggest that most patrons of private bus service are making long-distance trips to and from NYC.

Figure 8.5: Academy Bus Service in Monmouth



Source: [Academy Bus](#)

Demand-Responsive Services Monmouth County Division of Transportation, Special Citizen Area Transportation (SCAT): Monmouth County Division of Transportation provides a variety of demand responsive transportation services including the Shared Ride, medical, dialysis, and veterans. Service is provided through a combination of contractors and Monmouth County Division of Transportation staff drivers and vehicles.

Active Transportation Network

Monmouth County Bicycle Map: See Section 8.2.1 Guiding Documents, Reports, and Studies.

Trails of the Monmouth County Park System (MCPS): Monmouth County features over 130 miles of trails within the MCPS. These trails offer both a recreational outlet and a viable transportation alternative for all users. Most trails in the MCPS are open to walkers, runners, bicyclists, and equestrians and allow for recreational activity while creating a major county thoroughfare. Trails provide a safe connection between residential areas, parks, and commercial locations that are not accessible by fast moving motor vehicles. The [Henry Hudson Trail](#) connects municipalities along the Bayshore area from Keyport to Atlantic Highlands as well as a portion of central Monmouth from Freehold Borough to Marlboro. The Henry Hudson Trail is part of the National Rails-to-Trails Network that transforms unused rail corridors into vibrant community recreational trails. The [Union Transportation Trail](#) connects Upper Freehold to neighboring Ocean County. Because of the presence of various transportation uses, it is important to obey rules of protocol for yielding right-of-way when pedestrians, cyclists, and equestrians meet on the trail: cyclists yield to all other trail users and pedestrians yield to horses. The MCPS also offers an online interactive [ArcGIS Trail Map](#) and [MCPS Trails Elevation Profile](#).



Other Transportation Facilities and Services

Monmouth County Executive Airport: Founded in 1938, Monmouth County Executive Airport is a privately owned, public use airport located in Wall. Visit the [Federal Aviation Administration](#) for more information.

Ferry Services: Ferry services are provided by two companies on Monmouth County's Bayshore. [NY Waterway](#) departs from Belford for points in Manhattan and Jersey City. [Seastreak](#) departs from two locations (Highlands and Atlantic Highlands) for points in Manhattan.

Livery and Ridesourcing Services: Monmouth County is served by numerous private taxi services. Additionally, Monmouth County is served by the ridesourcing services [Uber](#) and [Lyft](#). These emerging companies utilize smartphones, global positioning systems (GPS), and social networks to provide rides in a timely manner.

Freight: In 2007 NJTPA published a [Monmouth County Freight Profile](#) outlining the county's freight infrastructure and traffic. Monmouth County's freight rail infrastructure, spanning north from Howell to Red Bank and east from Englishtown to Freehold Borough, was responsible for 0.5% of freight tonnage shipped to, from, or through Monmouth County in 2007. While the remaining 99.5% of freight tonnage transported to, from, or through Monmouth County in 2007 was done by trucks making use of Monmouth County's road network. The low amount of freight being transported by rail is due to low amount of industrial land use along the rail line. 68.5% of all truck freight tonnage was found to be traveling to or from Monmouth County while the remaining 31.5% was passing through. Routes 18, 34, and 195 experienced the highest volumes of truck volume with routes 9, 33, 35, and 537 not far behind. Monmouth County clearly has a heavy freight presence and in the future will seek to attract industrial businesses to locate along the existing freight rail line in the hopes of decreasing truck volume which damages roads. Another complication of rail freight in the county is a broken connection in the rail line between Freehold Borough

and Farmingdale where rail has been removed and left abandoned. In the future it may be beneficial to restore this missing freight connection.

Figure 8.6: Monmouth County Transportation and Mobility Map, 2016, is an illustration of the entire transportation network currently available in Monmouth County. North and south travel are well managed by the road network, bus routes, and rail line notably along the eastern portion of the county where development is denser. What the county lacks is adequate east and west bound public transportation. Looking to the future, Monmouth County seeks to invest in additional transportation options to further increase the mobility of Monmouth County residents and visitors throughout the county.

8.3 Emerging Issues and Long Range Challenges

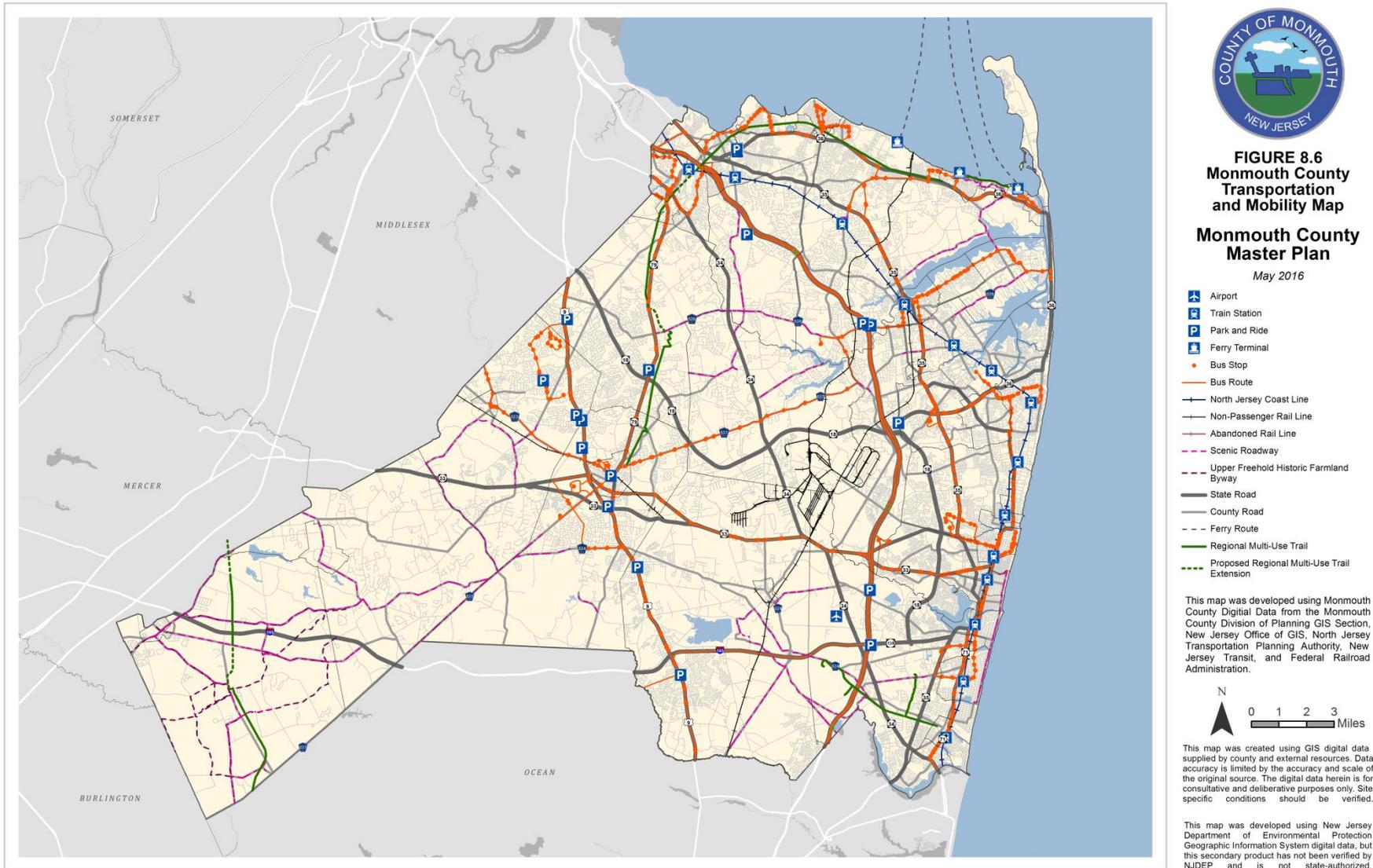
8.3.1 Innovative Transportation Practices and Technology

Demand Management Strategies: Demand management helps to ensure that the existing transportation network is operating at or near peak efficiency. As Monmouth County enters an era of redevelopment, the county will aim to maximize the capabilities of the current infrastructure using a variety of state of the art techniques.

Congestion Pricing: Congestion pricing is the process of requiring vehicles to pay a toll to enter an area. Enforcement of tolls or fees is determined on a case by case basis and can take place at all times, only during peak travel hours, or during any other portion of a day thought to strategically relieve congestion. Requiring a fee to enter is intended to reduce demand in an area while supplying revenue from those driving a vehicle into the area after the pricing is put in place. The Federal Highway Administration has found that congestion pricing tends to result in a 2% to 10% reduction in vehicle miles traveled and a 2% to 6% reduction in harmful emissions within a congestion priced area. The results vary as they are dependent on the extremity of the fee; the larger the fee the greater the incentive to refrain from driving into the area.



Figure 8.6: Monmouth County Transportation and Mobility Map



Parking Management: An abundance of parking is an invitation to drivers to feel free to use their vehicles. Conversely, a shortage of parking encourages users to walk, bike, use public transit, or carpool. Areas can be zoned specifically to determine how many parking spaces will be made available to users, and these parking regulations can be tailored to the needs of the area in question.

In addition to managing the number of spaces, parking fees also encourage the use of alternative modes of transportation. A fee structure can be used in lieu of or in conjunction with parking management, and provides the added benefit of a reliable revenue stream for the local government. A newer strategy for parking pricing is performance-managed parking. Performance-managed parking employs smart phones and other technologies to supply updated information on parking space availability and pricing.

Automatic License Plate Readers: Image processing technology uses cameras to read license plates. License Plate Readers (LPRs) often utilize infrared cameras for clarity at darker times of the day and are capable of reading license plates of vehicles moving at high speeds. Currently LPRs are mostly used by law enforcement to aid in the apprehension of criminals and stolen vehicles, however; they can be utilized to aid with information gathering, toll processing, restricting vehicle access, and parking management. Every vehicle license plate is unique and identifies the vehicle and driver which allows for a unique account to be attached to each license plate. Currently Florida, Massachusetts, and Pennsylvania have adapted their highways to use this technology to administer tolls. Eliminating bottle necks caused by toll booths and automatically charging passing drivers allows for a constant flow of traffic. In addition, Hoboken, NJ has recently installed a system where visitors can pay for parking by entering their license play number into a municipal meter. In this case, LPRs have taken the place of physical tickets and space numbers that can become lost, damaged, or faded to a point of illegibility. LPRs can also be used for gathering traffic

information or restricting vehicle access to parking garages and other area. For example, London is currently using this technology to enforce its congestion pricing.

Smartphone / Online Technology: Numerous smartphone apps currently exist that grant the user access to up to the minute information on transit availability, traffic conditions, routing options, and parking meter payment. Educated users then are able to choose the most efficient routes and modes, which serves to optimize their usage of the transportation network and reduce congestion for other users as well. Current examples of transportation related smartphone apps relevant to Monmouth County include:



(Google Maps)



Ride Sharing/Car Pooling: Turo Peer-To-Peer Car Rental Application

Peer-To-Peer car sharing/renting is a service that has emerged in recent years. Companies such as Turo allow vehicle owners to register their personal vehicle on a mobile phone application to be rented by Turo users living or visiting the area. Vehicle owners post pictures of their vehicle and set a price and mileage limit of their choosing. The application offers daily, weekly, and monthly rentals. Currently 2,500 cities in the U.S. have vehicles registered and 311 airports currently have Turo vehicles available for rent. The vehicles range from average low-end cars, vans, and trucks to high-end sports cars, jeeps, and SUVs. Vehicles being registered to rent on Turo must have fewer than 100,000 miles on them and have a fair market value less than \$75,000. This ensures that the vehicle has a low chance of breaking down while in use by a renter, and that Turo provided insurance can cover any damages to the vehicle. Turo provides \$1 million in liability insurance to vehicle owners as well as the full cash value of their vehicle in the case of an accident while the vehicle is in the hands of a renter. The vehicle renters also choose their own levels of coverage similar to that of a traditional rental car agency. Turo screens all potential renters as well as vehicles. Turo rejects one in five potential users for reasons such as: numerous speeding tickets, one very severe speeding ticket, one charge of driving under the influence, or one charge of vehicular manslaughter.

Potential renters can select what vehicle they would like to rent in their area and contact the vehicle owner via an application text messaging service. The vehicle owner can then screen the potential renter's driving records in all fifty states as well as reviews posted from previous transactions. This allows the vehicle owner to decide if they feel comfortable renting their vehicle to this specific customer. The vehicle owner also has the option of delivering the vehicle to the renter in which they can charge a delivery fee of up to \$50. Vehicle owners can also make their vehicles available at airports by adding the fee of parking to the rental fee.

Since Turo relies on participant owned vehicles, the costs of running the company are significantly lower than a traditional car rental agency such as Zipcar. Zipcar must pay to: acquire vehicles, stock the vehicles with the appropriate technology, purchase parking spaces for the vehicles, and pay for maintenance of the vehicles. With fewer capital expenditures, Turo is able to offer rental prices that are on average 35% lower than traditional rental car agencies.

Members renting their personal vehicle have the option of simply handing over the keys to a renter or linking their vehicles OnStar to the mobile application. This allows the vehicle owner to lock the vehicles key's inside the vehicle and permit a renter to use their mobile phone to locate, and unlock the vehicle upon their arrival. The usual OnStar services are also active through the application such as crash detection, and the ability to report the vehicle stolen and disable the vehicle. If the vehicle does not have OnStar but the owner would like this service, Turo will install a \$500 dollar black box into the vehicle for the cost at a \$100 to the vehicle owner.

The potential renter pays the vehicle owner the decided upon price of rental through the Turo application itself. Turo takes a portion of this payment to cover the costs of insurance and operating costs. The renter returns the vehicle to either the owner or an agreed upon location when the rental period has ended. The company claims that in 2014 the average active vehicle owner on the Turo application earned \$3,480 renting their vehicle through Turo.

More Information: <https://turo.com/how-turo-works>



Automated Cars: Automated vehicles, or autonomous vehicles, are self-driving vehicles that use lasers to allow the vehicle to process its surroundings multiple times per second. In the future, it is anticipated that this technology will result in fewer accidents and generally safer personal vehicle transportation as outlined by a July 2013 article, [The Revolutionary Development of Self-Driving Vehicles and Implications for the Transportation Engineering Profession](#), in the Institute of Transportation Engineers monthly Journal. This technology is in its infancy and how it will be incorporated into the existing transportation infrastructure is still be determined by lawmakers. In 2013, the National Highway Traffic Safety Administration issued a [Preliminary Statement of Policy Concerning Automated Vehicles](#) which delineates some proposed policy recommendations for the use of automated vehicles:

- Drivers will have to take a separate test and spend a number of hours operating a driverless vehicle to be able to receive a license or special certification on their current driver's license to be able to operate an autonomous vehicle.
- Require businesses to test all vehicles for a certain number of hours or miles without incident before carrying occupants. Businesses must also provide data on how each vehicle performs compared to the average vehicle as well as a plan for how they are going to further reduce safety risks and what fail-safes they intend to implement.
- Require occupant to sit in driver's seat ready to take over at all times, meaning no distractions allowed.
- States are encouraged to require testing in all types of weather conditions and scenarios that the state feels the vehicle may be subject to at any time while in use. This is to make sure the vehicle can handle an average year in this climate or type of environment.
- States are recommended to require that manufacturers report all instances of vehicles getting into crashes as well as when any fail safe such as a driver being prompted to take control, occurs.

- Driverless vehicles should be able to detect and record any malfunctions with technologies or degrading materials and be able to alert the driver as well as record the information so that the cause of the problem can be determined.
- The process of having a driver take over control of the vehicle must be seamless, safe, and easy.
- The installation of driverless technologies cannot interfere with any federal safety systems already in place.

Alternate Fuel Vehicles/Recharge Stations:

Biodiesel is a renewable fuel that can be manufactured from vegetable oils, animal fats, or recycled cooking grease for use in diesel vehicles. It is often mixed with normal diesel fuel and can be used in any diesel engine without any modifications. This type of fuel does emit carbon gas into the atmosphere. However, burning this fuel is considered a neutralizing effect because the plants and oils used to manufacture this fuel absorb carbon from the atmosphere; thus when the fuel is burned it is releasing carbon that was already in the atmosphere back into it.

Ethanol is already widely used in gasoline as a filler to make the gasoline cheaper and a little cleaner. This fuel is made from renewable sources such as corn and other plant materials such as biomass. Similar to biodiesel, ethanol is most often blended in with gasoline rather than used as a full alternative to gasoline. It is however available in high blends such as E85 which is 85% ethanol and 15% gasoline. This fuel is common and is used in "Flex Fuel" vehicles. There is a significant number of these vehicles on the road; they are vehicles that have the option of using regular gasoline or this high octane gasoline. Even though these vehicles are common, the owners and operators of these vehicles often do not know that they have a cleaner fuel option than gasoline. Flex fuel is readily available throughout the country. It is not available in every gas



station, but E10 a blend of 10% ethanol is made available by the majority of fuel providers.

Electricity is used in three types of electric vehicles: 1) hybrid vehicles use gasoline to produce electricity then run solely on electricity; 2) hybrid plug-in vehicles are hybrid vehicles that can be plugged in for added fuel conservation; and 3) plug-in vehicles are vehicles that run solely on electricity. Full electric vehicles have zero harmful emissions, and run on charged batteries. The charging time for these batteries varies between charging stations. An average 120V electrical outlet can take between 10 and 20 hours to charge a vehicle’s battery from empty. A 240V outlet will charge a vehicle battery much quicker however; few homes have 240V outlets that are accessible to vehicles.

More powerful charging stations, such as DC Fast Charger stations, are sparsely available along major thoroughways. The fastest charging option, known as Supercharger, is made available by Tesla and can charge 170 miles of battery life to a vehicle in 30 minutes. This is an example of what future vehicle chargers may accomplish, but for now the only vehicle able to use Supercharge stations is the Tesla Model S. Vehicle batteries are expensive and last between 12 and 15 years in a normal temperate climate. They have shorter life spans ranging from 8 to 12 years in extreme cold and heat climates. The cars themselves are expensive but have far lower fueling costs than traditional gasoline vehicles. Charging stations for electric vehicles are becoming widely available but the majority of vehicle charging is reported to be done at the

vehicle owner’s residence with the use of a 120V outlet.

Hydrogen fuel is a clean burning fuel that is manufactured using domestic products such as coal, solar energy, natural gas, wind, and biomass. Small amounts of carbon are released in the manufacturing of hydrogen fuel, but when consumed the fuel emits only hot air and water vapor. Hydrogen fueled vehicles are two to three times more efficient than traditional gasoline vehicles. Hydrogen is stored on the vehicle as a compressed gas that can be refilled in less than ten minutes, and is used to power fuel cells within the vehicle. With a driving range of around 300 miles, hydrogen vehicles are on par with gasoline powered vehicles.

While these vehicles are being used by some public transportation and commercial entities, they have not been made available to the public because of design issues in smaller vehicles. To be stored, hydrogen fuel requires high pressures and a low temperature. To store enough hydrogen on a vehicle to allow it to travel around 300 miles to meet consumer needs the vehicle would require a fuel tank far larger than the tanks currently used for gasoline. This is because hydrogen fuel gives off less energy per volume than gasoline. Fuel cells are also currently expensive and would not be competitive in today’s market. Currently California is leading the country in hydrogen fueling stations and is determined to add many more. The rest of the country however is far behind on providing such refueling stations, making them very rare.

Natural gas can be compressed (CNG) and used for fuel in either its gaseous or liquefied forms. The U.S. has an abundant supply of natural gas available



Electric Vehicle Parking Station at Monmouth University
Source: Steve daCosta



domestically making it much less expensive than crude oil. While both forms of natural gas are able to fuel vehicles, they each are better for different travel purposes. The gaseous state is more efficient for short range driving, while for longer trips liquefied natural gas is a better choice. Natural gas already has a significant amount of distribution infrastructure in place in the U.S., and burns cleaner than gasoline and diesel. Natural gas fuels are recorded by the U.S. Department of Energy to produce 6 to 11% less carbon emissions. Currently the fuel is being manufactured and used in three different types of vehicles. “Dedicated” vehicles run solely on natural gas as fuel. “Bi-fuel” vehicles have two separate systems allowing it run on either natural gas or gasoline. Finally “Dual-fuel” vehicles run on natural gas but are ignited using diesel fuel. Liquid natural gas is a more expensive option and used more often in heavy duty vehicles because it allows for more concentrated energy per volume. Vehicles powered by natural gas have lower energy output and thus cannot travel as far, but are still a good option for small passenger vehicles. There are a few hundred fueling stations nationwide that offer gaseous natural gas fuel. Presently, there are two CNG refueling stations in Monmouth County that are open to the public. One is located in Freehold Township the intersection of Route 33 and Halls Mill Road and the other is located in the Middletown Township Public Works yard. More CNG stations are planned including one at Fort Monmouth and one in nearby Lakewood in Ocean County.

Propane fuel is similar to natural gas fuels. Propane is also a readily available resource in the U.S. and is already used in different types of vehicles and machines throughout the world. Similarly to natural gas fuels the vehicles that use propane fuel are either dedicated bi-fuel, or dual-fuel. Propane fuel offers a similar performance to gasoline but performs better than gasoline in cold weather. This is due to its natural gaseous state which burns with a higher octane than fuel but with a lower carbon emission and oil contamination. Also due to this higher octane and lower oil contamination, propane

engines last significantly longer than gasoline engines and need less maintenance. Fueling stations for propane fuel are readily available to the public throughout the country but the number of stations varies by state. NJ has 20 of these filling stations. This fuel is more commonly used in fleets of trucks or buses.

Intelligent Transportation Systems Application for Traffic Signals:

Traffic signals can be outfitted with communication systems, traffic responsive adaptive controls, real-time data collections and analysis, and maintenance management systems to enable them to operate at a greater level of efficiency. Allowing signals to communicate with each other and continually adapt to current traffic conditions can optimize the flow of vehicles through intersections and corridors resulting in faster travel times, lower fuel consumption, and reduced vehicle emissions and congestion. Currently optimal traffic signal timings are generated and applied to traffic signals for their specific intersections busiest time of day resulting in efficient operations during a typical period of peak traffic volumes but not off peak periods. In addition if a traffic collision is to occur in an intersection, an adjustment of signal timing may be needed to help congested vehicle traffic through the intersection. The introduction of intelligent transportation system applications for traffic signals will give traffic signals the ability to adjust signal timing in cases of emergency as well as on-peak and off-peak travel conditions to keep traffic moving efficiently.



Adaptive Traffic Control Systems: Evaluation of an Adaptive Traffic Signal System: Route 291 in Lee's Summit Missouri

The Missouri Department of Transportation (MoDOT) installed its adaptive traffic signal system called InSync in March 2009. Twelve intersections along the MO 291 corridor spanning from I-470 to U.S. 50 in Lee's Summit were outfitted with these innovative traffic signals in an attempt to relieve congestion along the corridor. The original signals were timed to optimize the flow of northbound vehicles which adversely slowed southbound vehicle trips. The addition of the InSync System was intended to lessen travel times in both directions. MoDOT commissioned Midwest Research Institute (MRI) to evaluate traffic conditions along the corridor before and after the installation of the InSync System. In 2010, MRI released an organizational results research report titled [*Evaluation of an Adaptive Traffic Signal System: Route 291 in Lee's Summit, Missouri*](#) which detailed travel time run through the corridor, delay experienced at each intersection and in the corridor over all, vehicular emissions, fuel consumption, number of times stopped, and traffic volume data.

The intention of collecting traffic volume data was to ensure changes in data before and after the installation of the InSync System were not due to fluctuations in corridor use. In addition, the traffic volume data collected was compared with traffic volume data collected by the InSync System to evaluate the accuracy of the system's data collection. This process was repeated to test turning movement counts at one intersection with Chipman Road. At the end of the evaluation in 2010 MRI reported that the InSync System:

- Reduced travel times through the corridor by up to 39%
- Allowed vehicles traveling southbound during the morning off-peak and afternoon-peak periods to travel the length of the corridor in 140 fewer seconds (about 2.5 minutes)
- Had no statistically significant effect on travel times for northbound vehicles during the AM-peak and AM off-peak periods, most likely because the previous timing plan prioritized northbound travel
- Reduced average number of vehicle stops, vehicular emissions, and fuel consumption for every period that experienced reduced travel times.
- Reduced fuel consumption up to 21.4% per vehicle per trip
- Reduced harmful vehicular emissions (HC, CO, and NOx) up to 50%
- Increased vehicle speeds by up to 15.5 mph

The recorded traffic volume before and after the installation of the InSync system did not show a significant increase or decrease between study periods. The difference between traffic volumes was never recorded to have increased or decreased by greater than 4%. Meaning changes found by the implementation of the InSync system cannot be a result of traffic volume fluctuation. Data collected at the Chipman Road intersection for vehicle turning movements was found to be accurate when compared to manual counts however, traffic volume counts collected by The InSync System along the length of the corridor ranging from 5% to 53% higher than manual counts. These results led MRI to conclude that the adaptive traffic control system was effective in reducing fuel consumption, emissions, stops and delays, and travel time along the MO 291 corridor.



8.3.2 Monmouth County Issues

Transit-Oriented Development: Reconnect America, a national nonprofit whose task is to integrate transportation and community development, defines [Transit-Oriented Development \(TOD\)](#) as a type of community development that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation. Many opportunities for TOD exist in Monmouth County, with fourteen rail stations on the North Jersey Coast Line and numerous bus stops along key corridors. A notable example is the effort currently being undertaken in the Borough of Freehold, where [NJTPA](#) is currently undertaking a Transit Village Initiative with the following goals:

- Adoption of TOD Zoning District
- Identify sites for TOD development
- Improvements to pedestrian and bicycle facilities

Complete Streets: In July 2010, Monmouth County became the first county in NJ to enact a countywide Complete Streets Policy with the passage of [Resolution #10-592](#). In the policy, Complete Streets are defined as a means to provide safe access for all users by designing and operating a comprehensive, integrated, and connected multi-modal network of transportation operations. The Monmouth County Complete Streets Policy was adopted with the following goals and objectives: improvements shall also consider connections for Safe Routes to Schools, Safe Routes to Transit, Transit Villages, trail crossings, and areas or population groups with limited transportation options. By adopting a Complete Streets Policy Monmouth County also recognizes the benefits of providing bicycle connections.

Some believe there is a conflict to sharing roads between bicycles and motor vehicles; however both are capable of maintaining only a single direction of motion at a time where as pedestrians direction of motion can change at any time. Therefore, it is safer to have these two vehicles sharing a roadway despite the differences in their speeds. The conflict

between bicycles and motor vehicles is only perceived to be present because many roads were not purposely designed to accommodate both forms of transportation. The passage of [Resolution #2015-0352](#) encourages the development of off road/shared-use paths and sets guidelines for bicycle lanes on roadways. Bicycle lanes provide a safe, separated space for bicycle traffic to avoid interfering with vehicle traffic and giving both vehicles the ability to travel at their own speed.



Dedicated bike lanes in Avon make for easy means of travel

Source: Mary Ellen Scott

Safe Mobility for Aging, Veteran, and Disabled Populations: As a large portion of our county ages and special needs populations continue to rise, it is imperative to provide them with means of accessibility and mobility. Additionally, the more than 33,000 veterans living in Monmouth County are often struggling financially, on fixed incomes, or are homeless. These populations often face mobility challenges such as



medical service accessibility and decentralized transportation services lacking consistency. Currently SCAT and Paratransit provide transportation services to the majority of the county's disabled and senior populations. Moving forward, community mobility programs are being encouraged to enhance and sustain transportation services that could provide additional transport to job centers, mass transit connections, social interactions, and healthcare visits. Ideally newly developed senior, veteran, and special needs housing would be developed in walkable close proximity to health care and other services.

Expanding Types of Transit Options: Expanding transit options provides benefits to all aspects of Monmouth County's economy and society. Aging populations and low-income residents often do not have the means for a personal vehicle. Thus a range of transportation choices including barrier-free pedestrian and bicycle facilities with transit service accessibility are being encouraged and expanded throughout the county.

Regional Bikeway Network: Because of its regional perspective, the county has the ability to facilitate development of a regional bikeway network based primarily on local planning initiatives. Many municipalities have planned for and have implemented bikeways and shared roadways at the local-level. By compiling municipal plans and identifying the location of programmed facilities, the county can assist towns with identifying appropriate locations for bikeway expansion and links that would accommodate intra-municipal bikeway travel. This information can then be added to Figure 8.6: Monmouth County Transportation and Mobility Map, as part of the county's comprehensive transportation network.

Federal, State, and Local Funding Constraints: The 2007 Great Recession greatly affected funding for transit and forced transit agencies to lower expenditures (e.g. cutting services, layoffs, and downsizing) and/or raise fares. Additionally during economic downturns ridership often increases because public transit is less expensive than

personal automobile expenses (i.e. insurance and gas). While ridership continues to increase, transit agencies once reliant on federal, state, or local funding are forced to enact other measures. Aiding Monmouth County's partners in supplying transit funding is imperative. Currently Monmouth County is assisting NJ TRANSIT fund late night and weekend bus service on specific routes with the use of a JARC grant.

Promoting Environmentally Sustainable Transport: Downtown areas and Transit Villages provide residents a means of walkability to eat, shop, and work. However, most of suburban and rural Monmouth County does not provide this luxury. This results in greater usage of personal vehicles. It is imperative to note the environmental degradation of personal automobile use (e.g. vehicle emissions). Other means of transportation including sustainable and eco-friendly modes of transportation such as biking, green vehicles, and car sharing technologies, need to be encouraged and made more accessible in order to decrease personal automobile dependence.

8.3.3 Long Range Challenges: As populations fluctuate and the ideals and preferences of the society change, new inventive transportation solutions will be needed. The foreseeable future holds a number of challenges that effect Monmouth County's ability to plan for its changing transportation needs. These include:

- Many of our road and bridge improvements are dependent upon the NJ Transportation Trust Fund, which has no foreseeable mechanism for the sustainable replenishment of transportation funding.
- Our ability to develop new and innovative projects will be limited due to declining state revenue sources, particularly affecting those projects and programs that require long-term financial support for successful outcomes.
- New York Penn Station and the Port Authority Bus Terminal of NY and NJ are currently operating at or above capacity; increasing any NJ TRANSIT bus or rail commuter service to either of these locations



is virtually impossible until these facilities are upgraded and their current capacity expanded.

- There appears to be a widespread cultural transition occurring, one that is moving towards walkability and transit accessibility and away from sole dependence on personal vehicles for mobility.
- As funding becomes scarcer, the competition for funds from NJTPA and other revenue sources will become more pronounced.
- The replacement of aging infrastructure is becoming a higher priority even as funds decrease. Replacing aging infrastructure without significantly disrupting the transportation network is an additional challenge.
- Although north-south travel in NJ is readily accommodated, east-west movement needs to be enhanced. Travelling east from western areas, like Philadelphia and Trenton, to Monmouth County can be fairly inefficient and provides limited transit options. Connectivity needs to be encouraged between these destinations and additional transportation methods to alleviate traffic concerns on 1-195 should be analyzed.
- While capital projects and infrastructure investments are planned to accommodate future increases in population, these initiatives also need to incorporate natural disaster mitigation measures. Being a water abundant area, it is necessary our roads, bridges, and transportation infrastructure be developed and rehabilitated with this in mind. Traffic lights need to have generators for power failures. All Monmouth County Office of Emergency Management (OEM) evacuation routes need to be maintained and enhanced to provide safety to our residents during emergencies.

8.4 Transportation & Mobility Stakeholder Actions and Efforts

8.4.1 Monmouth County Efforts

Monmouth County Transportation Council (MCTC): The primary purpose of the MCTC is to serve as an advisory body to the Monmouth County Planning Board (MCPB). To fulfill this mandate, the council performs the following functions:

- Advises the MCPB on all aspects of transportation planning related to the county and region
- Forms subcommittees as needed to advise the MCPB of specific transportation issues
- Provides a forum for the public, municipalities, local and regional organizations and other interested individuals to discuss transportation issues affecting the county
- Assists the MCPB in identifying problems and issues and to educate the general public on regional transportation issues
- Serves as a resource to the MCPB in implementing transportation projects.
- Carries out other tasks as deemed necessary by the MCPB and the council
- Coordinates with neighboring counties on issues of concern to the council

Subregional Transportation Planning Program (STP): The STP exists as part of the North Jersey Transportation Planning Authority's (NJTPA) Unified Planning Work Program (UPWP), which outlines the transportation planning activities of NJTPA and its member subregions. The STP is an annual grant that funds the day to day tasks performed by the Transportation Section of the Monmouth County Division of Planning. Participation in the STP is mandatory for all subregions that wish to be eligible for federal transportation funds; the amount funded to each subregion is based on population. For FY2015 Monmouth County was allocated \$191,487.50 under the STP. Transportation Section staff is responsible for developing budgets, quarterly and year-end reporting, invoicing, and any other administrative work related to the STP.

Subregional Studies Program (SSP): Also part of the UPWP, the SSP is a two year grant designed to fund a specific study that is consistent with NJTPA's Regional Transportation Plan (RTP) and Together North Jersey's (TNJ) Regional Plan for Sustainable Development (RPSD). An SSP-funded



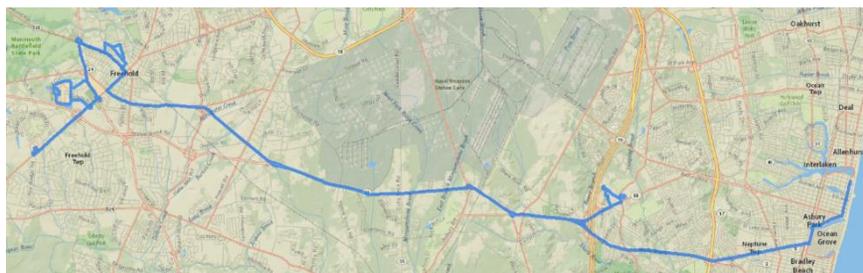
study may be conducted in house using exclusively Division of Planning staff, can be used to hire a consultant to conduct the study, or a combination thereof. The SSP is a competitive program with an application process that includes the submission of thumbnail sketches, proposals, and proposal presentations to an SSP Selection Committee.

Previous studies conducted by Monmouth County using SSP funds include:

- [Monmouth County Transportation Audit and Sustainable Transportation Plan \(June 2011\)](#)
- [Monmouth County Coastal Evacuation Routes Study \(June 2009\)](#)
- [Monmouth County State Route 79 Corridor Study \(July 2007\)](#)

Jobs Access Reverse Commute (JARC) Program: This grant program is administered by the Federal Transit Administration (FTA) with the intent of “addressing the unique transportation challenges faced by welfare recipients and low-income persons seeking to obtain and maintain employment.”

Since 2000, Monmouth County has partnered with NJ TRANSIT to use JARC to fund extended evening and weekend service on the [Route 836 Bus](#). The Route 836 Bus operates between CentraState Medical Center in Freehold Township via Freehold Borough, Howell, Tinton Falls, Neptune Township, and Asbury Park terminating at the James J. Howard Transportation Center.



Route 836 / JARC Service

The JARC funding provides for:

1. Continued operation of enhanced NJ TRANSIT Route 836 Local Bus service to:
 - Enable access to employment opportunities requiring second shift and off-peak hours
 - Provide expanded service to shopping, medical, recreational, and skills training / education destinations
2. An improved route alignment to:
 - Serve several additional major employers including two major county medical centers presently without conventional transit access
 - Connect with frequent NJ TRANSIT and private carrier regional and local bus route service on the U.S. Route 9 business corridor, thereby increasing access to employment in the corridor
 - Serve new and emerging commercial and residential areas of the county, including senior and assisted living centers

Extended service hours permit transit dependent residents to accept competitive employment where they would otherwise not be able to access jobs. The service enhancements also provide access to shopping, medical, recreational, and social service destinations for these populations.

Major employment opportunities along the route include:

- Freehold Raceway Mall and “Big Box” stores
- Monmouth County Correctional Institute
- Monmouth County and State Superior Courts
- Monmouth County Government
- Freehold Borough retail, service, and restaurants
- Asbury Park retail, service, and restaurants
- CentraState Medical Center
- Jersey Shore University Medical Center



- Neptune Walmart, Home Depot, and other “Big Box” stores
- Jersey Shore Premium Outlets
- Smaller commercial and industrial firms along the Route 836 Bus travel

The number of annual passenger trips on the [Route 836 Bus](#) is close to 80,000. It has been an extremely successful service and is among the highest performing JARC funded services in New Jersey.

8.4.2 Partnership Efforts

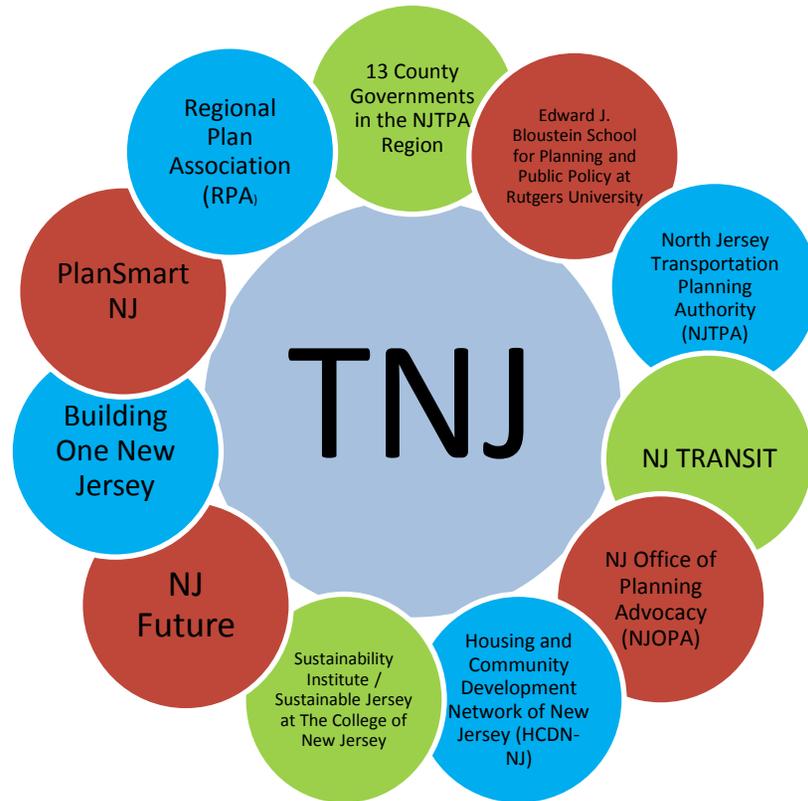
[New Jersey Department of Transportation \(NJDOT\)](#): This department is the authorized body that oversees transportation asset management at the state-level. NJDOT achieves this goal primarily through the development and implementation of programs such as the [Statewide Transportation Improvement Program](#) and the [Transportation Capital Program](#). Under the umbrella of these comprehensive programs, NJDOT funds county-level and local-level planning efforts such as Safe Routes to School and the Recreational Trails Program.

[Together North Jersey \(TNJ\)](#): TNJ is a collaboration of stakeholders in the NJ planning community created with the goal of creating a comprehensive and balanced plan that invests in the region’s existing communities to make housing, jobs, education, cultural, and recreational opportunities more accessible while reducing automobile dependency. TNJ is funded by a \$5 million Sustainable Communities Regional Planning Grant awarded by the U.S. Department of Housing and Urban Development (HUD).

TNJ has used funds from this grant to:

- Develop a Regional Plan for Sustainable Development (RPSD), or [The Plan. 2015](#), for the 13-county planning region
- Manage the Local Demonstration Project (LDP) Program
- Provide technical assistance and offer education and training opportunities that build the capacity of jurisdictions, organizations and the public to advance sustainability projects and initiatives

TNJ is comprised of the following members:



[NJ TRANSIT](#): NJ TRANSIT operates the North Jersey Coast Line and a comprehensive network of bus lines in Monmouth County (see 8.2 Existing Conditions). In addition, NJ TRANSIT administers the Jobs Access Reverse Commute (JARC) grant program. JARC allows for the Route 836 Bus, which runs between the Asbury Park Transportation Center in Asbury Park and CentraState Medical Center in Freehold, to run extended service hours in the evenings and on weekends. This invaluable service provides a low-cost transit option for those county residents working later or weekend shifts. Since its inception in 2000,



this particular JARC service has provided over one million trips (over 80,000 trips annually).

NJ TRANSIT is also studying parking management at Park and Ride lots along U.S. Route 9. From findings of this study, NJ TRANSIT and its consultants will update the existing review of Park and Ride policies,



Park and Ride lot near Garden State Parkway Entrance 105 in Tinton Falls- Eatontown
Source: Mary Ellen Scott

including major Park and Ride lots along the U.S. Route 9 corridor in Marlboro, Manalapan, Freehold Township, Freehold Borough, and Howell. Parking space counts will be updated to reflect current 2015 numbers. This study will provide an overview of parking technologies that may be used on individual lots or throughout the corridor. These technologies may include, but are not limited to, sensor technology,

variable message signs, and communications apps to provide real-time parking availability information.

North Jersey Transportation Planning Authority (NJTPA): NJTPA is the federally authorized metropolitan planning organization covering the 13 county northern NJ region, including Monmouth County. NJTPA oversees over \$2 billion in transportation projects, sponsors and conducts studies, assists county planning agencies, and monitors compliance with national air quality goals. The Subregional Transportation Planning (STP) Program and Subregional Studies Program (SSP) grants currently utilized by Monmouth County are administered by NJTPA, discussed previously in Section 8.4.1 Monmouth County Efforts.



MoCo Arts Corridor: The *Coastal Monmouth Plan (2010)* calls for a unified marketing theme to strengthen the year-round shore economy making coastal Monmouth a destination of choice through cooperative promotional efforts. NJ TRANSIT is a strategic partner in this Monmouth Arts effort and has provided in-kind marketing assistance to increase awareness of the arts and cultural offerings along the corridor as well as encourage the use of mass transit to and from host communities. The ACE (Arts, Cultural, Entertainment) Hubs (refer to 6.0 Arts, Historic, and Cultural Resources) of Keyport, Red Bank, Long Branch, Asbury Park, Belmar, and Manasquan are anchor communities located proximate to NJ TRANSIT’s North Jersey Coastline and already attract a large amount of seasonal business activity. The MoCo (Monmouth County) Partnership, a subcommittee of Monmouth Arts, is charged with expanding the MoCo Arts Corridor as the signature brand for Monmouth County. Monmouth Arts along with support from the Monmouth County government, NJ TRANSIT, artists, local businesses, educational institutions, and numerous tourism and cultural



organizations have developed and are implementing a comprehensive marketing plan for the arts corridor.

Brookdale Community College (BCC): As of 2014, BCC had a total enrollment of 14,144 students spread out over its six locations; its main campus in Lincroft, the full campus in Freehold Township, and among four learning centers in Neptune Township, Hazlet, Long Branch, and Wall (which is home to the NJ Coastal Communiversity). As the college adapts to the needs of a changing student body, one that is more diverse, increasingly part-time, and transit dependent; transportation accessibility is becoming an issue of increasing prominence.

In 2015, BCC established a Transportation Committee comprised of NJ TRANSIT, Monmouth County Division of Planning, Brookdale Community College administration, faculty, students, and other local stakeholders tasked with helping identify solutions to the college's transportation challenges.

Strategies considered include:

- Adjusting NJ TRANSIT bus routes to include Brookdale facilities when possible.
- Utilizing Meadowlink's shuttle and ride-sharing services to fill in those gaps where transit service does not exist.
- Launch a campaign to better educate the Brookdale community on how to best use the existing transportation network by marketing existing services, technology, and innovative new services such a

Based on findings from the Rutgers University's Bloustein School of Planning and Public Policy's *Bayshore Transit Study (2015)*, BCC and Monmouth County requested NJ TRANSIT reevaluate its current level of bus service in and around Brookdale locations to determine if existing service could be further enhanced. After careful consideration, NJ TRANSIT announced service changes including consolidation of the Route 833/853 buses to begin operation as an hourly, single seat ride

between Freehold Raceway Mall and Sea Bright. This route provides hourly stops at the Lincroft Campus during the week between the hours of 7:45 AM and 7:00PM. The new Route 833/853 consolidated route also operates on Saturdays, but with less frequency. The Route 817 bus was modified to provide direct service for the first time to the Hazlet Learning Center. Trips to and from the center occur in either direction and arrive on campus four times a day at three hour intervals with connections to Campbell's Junction (Middletown) and Middlesex County.

Although NJ TRANSIT's enhanced bus service is a welcomed improvement, other challenges facing BCC remain including the need to extend transit service to the Lincroft Campus to accommodate evening classes and providing transit options between the various campuses and learning centers so transit dependent students may complete their degree at one of the two main campuses. The Division of Planning will continue to provide technical and professional assistance to BCC's Transportation Committee.

Meadowlink Transportation Management Association (TMA): Meadowlink TMA for Monmouth County and operates locally under the name [EZride](#). Working as a nonprofit, Meadowlink is tasked with working with employers and governments to help with last mile service, shuttle programs, vanpools, ride-sharing, and otherwise filling in the gaps in the transportation network. Meadowlink's stated mission is to:

"Implement innovative transportation programs and services that enhance the quality of life, regional mobility, and economic opportunity for both people and businesses, while reducing traffic congestion and improving air quality." (EZride website, 2016)

8.5 Additional Resources and Funding Opportunities

Federal

- [Smart Growth America: National Complete Street Coalition](#)
- [State and Community Highway Safety Grant Program](#)



- [Section 402: State and Community Highway Safety Grant Program](#)
 - [U.S. Department of Transportation \(DOT\)](#)
 - [Federal Highway Administration \(FHA\)](#)
 - [Congestion Mitigation and Air Quality Improvement Program \(CMAQ\)](#)
 - [Core Highway Topics Resources](#)
 - [Office of Infrastructure](#)
 - [Office of Innovative Program Delivery](#)
 - [Office of Operations: 21st Century Operations Using 21st Century Technologies](#)
 - [Office of Safety](#)
 - [National Highway Institute](#)
 - [New Jersey Division](#)
 - [Planning, Environment, and Realty](#)
 - [Recreational Trails Program](#)
 - [Surface Transportation Block Grant Program \(STBG\)](#)
 - [Transportation Alternatives Program \(TAP\) Guidance](#)
(funded by FHA and administered by NJDOT and NJTPA)
 - [Federal Railroad Administration](#)
 - [Federal Transit Administration \(FTA\)](#)
 - [Grant Programs](#)
 - [Funding and Finance Resources](#)
 - [Maritime Administration](#)
 - [National Highway Traffic Safety Administration](#)
 - [Transit-Orientated Development Technical Assistance Initiative](#)
 - [Transportation Infrastructure Finance and Investment Act \(TIFIA\) Program](#)
 - [The Transportation Research Board \(TRB\)](#)
 - [The Transit Cooperative Research Program \(TCRP\)](#)
 - [The second Strategic Highway Research Program \(SHRP 2\)](#)
- State**
- New Jersey Department of Environmental Protection (NJDEP)
 - [Recreational Trails Program Grants](#)
- [NJ's Electric Vehicle Workplace Charging Grant](#)
 - New Jersey Department of Transportation (NJDOT)
 - [Clean Up NJ!](#)
 - [Adopt-A-Highway](#)
 - [Context Sensitive Design](#)
 - [Local Aid and Economic Development](#)
 - [New Jersey FIT: Future in Transportation](#)
 - [New Jersey's Long Range Transportation Plan \(2008\)](#)
 - [NJcommuter.com](#)
 - [Research Useful Links](#)
 - [Safe Routes to School](#) *(administered by NJDOT and NJTPA, funded by FHA)*
 - [FHA's Guidance for the Safe Routes to School Program](#)
 - [New Jersey Safe Routes to School \(SRTS\) Resource Center](#)
 - [New Jersey Safe Routes to School Program Strategic Plan Update \(2012\)](#)
 - [Find Your Safe Routes to School Regional Coordinator](#)
 - [Scenic Byways in New Jersey](#)
 - [Transit Village Initiative](#)
 - [Transportation Organizations](#)
 - [New Jersey Bicycle and Pedestrian Resource Center \(BPRC\)](#)
(supported by NJDOT through funds from the FHA)
 - [North Jersey Transportation Planning Authority \(NJTPA\)](#)
 - [Transportation Improvement Program \(TIP\)](#)
 - [Subregional Support Program](#)
- County and Local**
- [EZ Ride \(Meadowlink Commuter Service\)](#)
 - [Monmouth County Shuttles](#)
 - [Green Communities Grant](#)
 - [SCAT](#)
- Nonprofits, Research Centers, and Other Stakeholders**
- [AASHTO](#)
 - [Alan M. Voorhees Transportation Center](#)



- [National Transit Institute](#)
- [New Jersey Travel Independence Program](#)
- [GASCAP \(Greenhouse Gas Assessment Spreadsheet for Capital Projects\)](#)
- [Transportation Security, Resiliency, and Emergency Evacuation](#)
- [American Public Transportation Association](#)
- [Bicycle Hub of Marlboro](#)
 - [Monmouth Heritage Trail/ The Henry Hudson Trail](#)
- [Reconnecting America](#)
 - [Center for Transit-Orientated Development](#)
 - [Transportation for America](#)
- [Congress for the New Urbanism](#)
- [Healthiest Practice Open Streets](#)
- [New Jersey Turnpike Authority](#)
- [NJTOD \(partnership between Rutgers University and NJ TRANSIT\)](#)
- [Sierra Club Livable Communities](#)
- [Sustainable Jersey](#)
- [The Port Authority of New York & New Jersey](#)

8.6 Master Plan Recommendations and Stakeholder Strategies

Master Plan Recommendations

Recommendation 8.1: Maintain and update, as needed, *The Monmouth County Scenic Roadway Plan (2001)* and the *Monmouth County Road Plan (2012)* as adopted by reference as components of the Transportation & Mobility Element of the *Monmouth County Master Plan*. The *Monmouth County Roadway Plan* supports efforts that increase sustainable infrastructure capacity to accommodate population change, replace aging systems, and encourage investments that provide for safe, sound, resilient, and reliable utility service. Implementation of *The Monmouth County Scenic Roadway Plan* helps communities maintain their existing character by reducing the visual impact development has on the surrounding area. Together these plans will help prioritize investment, support planning activities, and foster a

better understanding of the issues that impact different areas of the county.

Recommendation 8.2: Continue to develop and implement regional corridor studies through New Jersey Transportation Planning Authority's (NJTPA) Subregional Studies Program (SSP) and work with other county departments and agencies in identifying viable SSP and pilot projects with NJ TRANSIT and NJTPA that further the Goals, Principles, and Objectives (GPOs) of the *Monmouth County Master Plan*, the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)*, and the county's capital improvement needs. The county can best utilize federal resources, sourced through NJTPA, to support new planning initiatives and advance the GPOs of the *Master Plan* by continuing to develop and implement new regional corridor studies that promote transportation infrastructure improvements and multi-modal transportation. The incorporation of evolving technologies, public outreach, and stakeholder feedback are heavily encouraged and sometimes required within the SSP framework and form the bedrock of studies engineered under this effort. The SSP also requires collaboration from stakeholders across various professional disciplines which can be achieved by providing Division of Planning support and technical assistance to other county departments and agencies that promote the GPOs of the *Monmouth County Master Plan* and the *Monmouth County Strategic Plan*.

Recommendation 8.3: Finalize, disseminate, and maintain the *Monmouth County Transit Map* and create a *Monmouth County Multi-Modal Transportation Guide*. The existing Monmouth County Transit Map coupled with the creation of a *Monmouth County Multi-Modal Transportation Guide* will facilitate the increased use of multi-modal transportation alternatives throughout the county; leading to healthier lifestyles and improved access to county businesses, employment locations, cultural landmarks, and tourist destinations.

Recommendation 8.4: Work on implementing recommendations found in the *Monmouth County Bus Rapid Transit Opportunities Study*



(2015) to improve bus service along critical corridors in Monmouth County, and eventually expand upon these efforts toward the development of a complete Bus Rapid Transit (BRT) approach. The primary objective of *Monmouth County Bus Rapid Transit Opportunities Study* is to facilitate a greater ease and efficiency of travel for users of the transportation network, the benefits of which would be wide ranging in creating more vibrant and sustainable communities. Continuing the efforts initiated in the *Monmouth County Bus Rapid Transit Opportunities Study* include moving the county towards incorporating BRT concepts into the transportation network, improving bus service along critical corridors in Monmouth County and the eventual expansion upon these efforts towards the development of a complete BRT approach along major Monmouth County corridors.

Recommendation 8.5: Proceed with efforts to develop a Travel Demand Model (TDM) to assist the county and the New Jersey Transportation Planning Authority (NJTPA) in coordinating regional and subregional transportation planning studies and projects. The creation of a TDM will provide another tool for use by the county to analyze behavior and to assist in the prioritization of projects. A Monmouth County specific TDM will become part of all county-related transportation planning processes thanks to its capability to: predict changes in traffic patterns as a result of capital projects, model impacts of proposed development and redevelopment projects, confirm findings established in developer traffic studies, and evaluate impacts by proposed land use modifications.

Recommendation 8.6: Review and amend the Monmouth County Transportation Council's (MCTC) purpose and mission to align its programming with the Goals, Principles, and Objectives (GPOs) of the Monmouth County Master Plan. The MCTC acts as a conduit between the community and the Monmouth County Planning Board (MCPB). It is a resource that can be better leveraged in aligning the needs of community stakeholders with county planning efforts. The MCTC's stated purpose of acting as an advisory board to the MCPB will be

reemphasized, and its mission will be carried out with the *Monmouth County Master Plan* serving as its work program.

Recommendation 8.7: Provide an online "one stop transportation resource shop" for all transit information in the county including a geographic information system (GIS)-based, online mapping resource for the existing Monmouth County Bicycle Map, transit infrastructure and routes, and recreational resources. An online transportation resource hub will serve the crucial role of informing county residents, visitors, and travelers of their multi-modal, countywide transportation options thus empowering them to make the best and most informed choices possible regarding trip times and mode choice.

Recommendation 8.8: Coordinate planning activities with the Monmouth County Department of Public Works and Engineering to help identify and prioritize transportation-related projects and assist with developing and implementing the county's capital improvement program. Contribute professional and technical assistance to Public Works and Engineering by providing assistance to the evaluation of capital improvement priorities and/or incorporating Public Works and Engineering's programming into the *Monmouth County Master Plan*.

Stakeholder Strategies

General

- Strengthen Monmouth County's role within North Jersey Transportation Planning Authority (NJTPA) in an effort to increase its support for county capital improvement projects, transportation enhancement studies and potential pilot projects, and broaden Monmouth County's ability to work collaboratively with other counties with similar transportation interests and needs.
- Continue partnering with NJ TRANSIT on identifying ways to improve the efficiency, comfort, safety, and effectiveness of bus and rail service throughout Monmouth County including the pursuit of a one seat ride along the entire length of the North Jersey Coast Line.
- Evaluate and advance alternative proposals that provide additional transit capacity for Monmouth County rail and bus riders to and



from destinations in North Jersey and NYC as a replacement to the Access to the Region's Core project.

- Continue to develop multi-modality into the county's transportation network and plans by providing for amenities that accommodate alternative transportation modes in new development plans whenever possible.
- Infuse emerging technologies such as mobile webpages, applications, ridesharing programs, and global positioning software (GPS), as newly integrated components of the existing transportation system; helping to enhance the user's experience.
- Implement the county's Complete Streets Policy with respect for adjacent land uses and context sensitivity.

Agricultural & Economic Development

- Foster public/private partnerships in order to generate transit funding opportunities to support new projects in a tightening fiscal environment.
- Assist in the identification of new transit routes that may provide better levels of service and/or ridership between population centers and employment centers or high demand destinations.
- Improve linkages between transportation modes to encourage economic development spurred by a more seamless movement of people, goods, and services throughout the region.
- Reduce east/west roadway traffic caused by north/south intersections; thus improving the connectivity and mobility between western Monmouth agricultural producers and residents with consumers and tourism-dependent businesses in eastern Monmouth.
- Support towns in their attempts to connect downtowns, historic sites/districts, and cultural attractions by improving amenities and wayfinding strategies for cyclists and pedestrian.
- Improve road efficiency through innovative smart technologies that enhance the safe and efficient movement of goods and services throughout the County.

- Review roadway design standards in rural areas to determine their appropriateness with agricultural operations such as farm equipment, freight, and trucks.

Community Development & Housing

- Prioritize Community Development Block Grant (CDBG) projects that support the implementation of Smart Growth America's Complete Streets Policy initiatives.
- Encourage the accommodation of low car ownership communities and facilities such as group homes, assisted living, affordable housing, and college housing in Transit-Oriented Developments (TODs).
- Focus on encouraging mixed-use TOD that not only allows residents to age in place but also provides people in various life-stages with convenient access to work, recreation, culture, and commercial services.
- Identify accessible human service facilities as many people dependent on these services do not have access to private automobile ownership.

Community Resiliency

- Continue to implement the recommendations identified in the *Monmouth County Coastal Evacuation Routes Study (2009)* and the [Multi-Jurisdictional Natural Hazard Mitigation Plan](#) for Monmouth County (2015) regarding resilient roadway and transit enhancements.
- Evacuation routes are the primary link between getting people out of harm's way during the threat of a severe storm or emergency event and getting first responders, emergency personnel, goods, and services where needed after an event has occurred.
 - Coordinate county improvements along emergency evacuation routes with other local and state agencies.
 - Give priority to the maintenance and upkeep of drainage facilities, signs, and roadways along coastal evacuation routes.



- Consider enhanced storm resilient designs that better absorbs storm surge and controls stormwater runoff for roadways, pedestrian, and transit facilities located in Special Flood Hazard Areas (SFHAs) and other vulnerable areas.
- Work with local and state government as well as regional transportation agencies in identifying areas in our transportation network susceptible to the effects of future sea level rise.
- Provide a means for real-time emergency information through electronic messaging, social media, and crowdsourcing applications.
- Reduce of east/west roadway traffic caused by north/south intersections to provide for efficient mobility of people, goods, and supplies during and after emergency events.
- Plan for and accommodate various modes of transportation (car, train, bus, ferry, bicycle, pedestrian, etc.) as this allows for reliable backup and redundancy in the transportation network in the case of a system disruption.

Sustainable Places

- Encourage low-impact development in the design of parking lots and right-of-ways (ROWs).
- Encourage the use of native, adaptive, drought-resistance landscaping and onsite groundwater recharge that lessen the need for detention, retention, and irrigation; mitigating the negative effects on the hydrological cycle caused by impervious surface coverage.
- Build support for and raise awareness of the alternative commute programs and strategies, such as New Jersey Smart Workplaces (NJSW), a program of New Jersey's Transportation Management Associations (TMAs), which recognizes employers that promote alternative commute programs at their work sites, reducing traffic congestions and improving the air quality throughout the region (aligned to Sustainable Jersey action item).
- Identify opportunities to support a "Green Fleet" of equipment and vehicles that are cleaner, lower impact, and use more efficient fuel sources (biodiesel, natural gas, propane, and electric), when

appropriate which doesn't negatively impact fleet requirements (aligns to Sustainable Jersey Actions).

- Research possible funding opportunities through public and private partnerships to sustain the Shore Shuttle and similar arrival/destination operations, connecting rail and bus to the tourist attractions, including the boardwalks, downtown districts, and cultural/arts venues and events.
- Support incentives, such as tax breaks, for facilities that support alternative fuel vehicles.
- In addition to bicycling and walking, identify transportation options that reduce congestion, such as off-peak commuting for transit and automobiles, telecommuting, and car sharing in order to lower the number of vehicle miles traveled.
- Support development and businesses that incentivize residents and/or employees to live close to where they work.

Healthy Communities

- Reduce pedestrian and cyclist conflicts with motorized roadway traffic thus improving the safe movement of all those who travel through a community by applying the U.S. Department of Transportation Federal Highway Administration's 4E approach to traffic safety:
 - Engineering: improve signage, textured and lit crosswalks, line-of-sight, pavement markings, bump outs, and other traffic calming measures in heavy pedestrian based neighborhoods and downtowns.
 - Enforcement: speed enforcement, visible patrols, and public safety enforcement of pedestrian activities.
 - Education: increase community outreach, sponsor safety awareness events, educate residents, commuters and recreational users, and provide English as a Second Language (ESL) outreach.
 - Empowerment: engage citizens in the safety process, develop neighborhood signage; work with local officials and police to enforce laws and reduce safety violations.



- Encourage and assist towns in the creation of their own bicycle/pedestrian plans that:
 - Establish a Bicycle and Pedestrian Advisory Committee to assist in improving bicycle and pedestrian representation throughout the municipal planning process.
 - Provide amenities that promote active mobility options such as cycling and walking as alternatives to motorized means of travel (e.g. bike paths, routes, trails, vehicle storage, parking, signage, etc.).
 - Accommodate bike lanes, bikeways, trails, and walkways with connections and links between neighboring communities to encourage the development of a regional bikeway network at the local level.
 - Seek ways to integrate exclusively recreation trails with connections to built environment destinations such as downtowns, community activity centers, transit hubs/facilities to create a comprehensive pedestrian/bicycle circulation network throughout a community.
 - Reduce the number of vehicle miles traveled resulting in improved air quality.
 - Encourage a healthier lifestyle for residents of all ages by facilitating safe travel by cycling and walking throughout the community.
 - Provide the necessary amenities to sustain a bicycle/pedestrian friendly community such as including bicycle parking as a requirement in the municipal zoning ordinance and providing those amenities in public parks, buildings, and facilities.

Natural Resources

- Transportation improvements resulting in the reduction in the number of vehicle miles traveled reduce particulate matter and chemical emissions that contribute to air pollution.
- Stormwater runoff from roadways affects the water quality of adjacent streams in the form of chemical and thermal pollution. Engineered solutions that rely on natural drainage for water

conveyance and discharge such as bioswales, rain gardens, and bio filtration landscaped basins can be used to help mitigate some of the nonpoint source impact on streams and water bodies.

- Utilize tree planting along streets to decrease sunlight exposure, therefore lowering the surface temperature of roadways.

Open Space

- Ensure that the county retains the necessary road ROW as identified in the *Monmouth County Road Plan* for all open space acquisitions projects taking place along a county roadway.
- Explore the potential of using utility and other public ROW to connect parks and accommodate new recreation trails.
- Public information materials such as brochures and online web content that provide directions to Monmouth County Park System (MCPS) facilities by car should also include mass transit accessibility directions.
- Support efforts by the MCPS to expand the County's regional trail network and help improve connections to local, state, and federal parks, trails, and bicycle systems.

Farmland Preservation

- Ensure that the county retains the necessary road ROW as identified in the *Monmouth County Road Plan* for all farmland acquisitions projects taking place along a county roadway.

Arts, Historic, & Cultural Resources

- Work with NJ TRANSIT and ferry service providers on improving wayfinding from transit stations, ferry terminals, and bus stops to local cultural attractions.
- Assist towns in creating "themed" cultural routes and tours through their community.
- Continue working with NJ TRANSIT and the MoCo Arts Partnership on the North Jersey Coast Line Public Arts Project.
- Integrate context sensitive design approaches for roadway, transit, bicycle, and pedestrian facilities that compliment, enhance, and preserve existing neighborhood character.



- Infuse public art into transportation improvement projects and use public art to create gateways into neighborhoods and communities.
- Support the establishment of a multi-modal MoCo Scenic Byway that showcases the arts, history, and cultural attractions along the MoCo Arts Corridor.
- Promote west/east movement connectivity movements through art initiatives such as a MoCo Arts Corridor linkage with Artworks Trenton.

Utilities

- For alternative fuel vehicles:
 - Municipalities should work with the private sector in providing alternative fueling stations for large-scale commercial development proposals such as shopping centers, office buildings, big box retail, hotels, and national chain restaurants.
 - Accommodate changes to municipal ordinances that allow recharge/refueling stations for alternative fuel vehicles as a conditional use.
 - Encouraging municipalities to include priority parking locations for alternative fuel vehicles in their municipal codes as a non-cost public incentive for these types of vehicles.
 - Encourage the county to incorporate alternative fuel stations into facility plans, such as those for electric plug-in vehicles.
 - Work with NJ TRANSIT on providing these types of facilities at their stations.
- Utilize parking lot space for solar panels installations.
- During roadway improvement projects, replace conventional drainage gates with ones that are bicycle safe.
- Utilize utility ROWs to reduce traffic on main roads.

Planning Service, Outreach, & Coordination

- Work with NJTPA and a local municipality on establishing a pilot Street Smart NJ Pedestrian Safety campaign. This public/private venture is in partnership with the Federal Highway Administration, New Jersey Department of Transportation, the New Jersey Division

of Highway Safety, and local law enforcement to educate drivers, pedestrians, and cyclists on travel safety laws.

- Public outreach on pedestrian/cyclist safety should be done in the prevalent languages and within the cultural context of the community seeking to reduce dangerous traffic conflicts.





9.0 Agricultural & Economic Development

9.0 AGRICULTURAL & ECONOMIC DEVELOPMENT MASTER PLAN RECOMMENDATION 9.1

9.1: Continue to support the viability of the local agricultural industry through the development and implementation of an *Agricultural Sustainability Plan (ASP)* for Monmouth County.



Purpose

The *ASP* will analyze current agricultural conditions in the county and make recommendations that support the continuation of agriculture as a long-term economically productive industry in Monmouth County.

Monmouth County Departments & Organizations Involvement

Division of Planning	Project lead; offers in-house expertise; form steering committee; conduct outreach; facilitate working groups; draft <i>ASP</i> ; develop examples of model ordinances.
Planning Board (MCPB)	Approve the <i>ASP</i> for Monmouth County as an adopted component of the Agricultural & Economic Development Element of the <i>Monmouth County Master Plan</i> .
Division of Economic Development	Primary project partner; work with Division of Planning in coordinating efforts; key member of the steering committee; Grown in Monmouth program coordinators; engage businesses and local economic development committees in the planning process; promote local agriculture industry; assist in locating new agribusiness resources; liaison for local business networking.
Agriculture Development Board (MCADB)	Provide input on plan development; participate in the steering committee.
Rutgers Cooperative Extension (RCE)	Participate on the steering committee; help identify other stakeholders; assist with outreach; provide expertise in local and statewide agricultural issues and access to research; assist in identifying Best Management Practices (BMPs); provide access to commercial growers and industry leaders.

Other Project Stakeholder Involvement

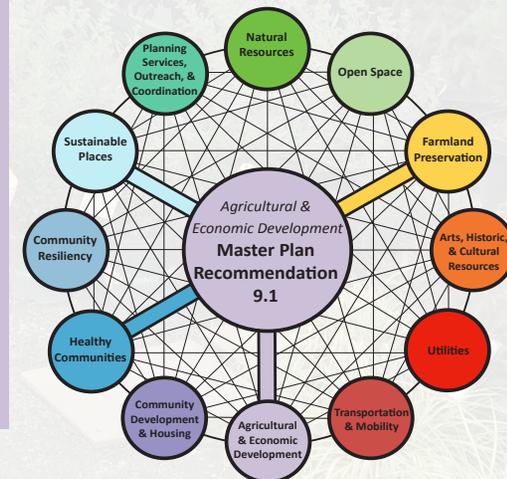
Municipalities	Participate on the steering committee; provide examples of BMPs in their communities; assist with outreach to businesses and farming community.
NJ Department of Agriculture, SADC	Participate on the steering committee; provide data, resources, and expertise.
United States Department of Agriculture (USDA)	Participation on steering committee by local staff; provide information on technical and financial resources for farmers.
Farmers	Participate on the steering committee; assist in identifying existing strengths and challenges.
Ag. Related Businesses	Participate on the steering committee; assist in identifying business needs.
Ag. Dependent Businesses	Participate on the steering committee; identify ways to strengthen association between local consumers and agricultural products in the county.
Nonprofits	Participate on steering committee; share experience in agricultural economic development and food systems.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 9.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●	●	●	●	●	●	●	●				●		
B. Coordination	●	●			●	●	●	●				●	●	●
C. Planning Approach		●		●	●							●		
D. Environmental Resources				●	●							●		
E. Farmland Preservation	●				●		●		●			●	●	
F. Arts, Culture, & Historic				●								●		
G. Preservation Investments														
H. Vibrant & Sustainable Communities								●						
I. Community Preservation									●					
J. Housing										●				
K. Economic Development												●		
L. Agricultural Development													●	
M. Recovery & Resiliency														●
N. Growth Investments														●

Implementation Strategy

- Form an Agricultural Sustainability Steering Committee from our stakeholders to help guide the planning process.
- Develop a plan outline and work program.
- Convene working groups, conduct analysis and research, and generate case studies.
- Prepare draft plan for consensus and final adoption by the MCPB as an adopted component of the Agricultural & Economic Development Element of the *Monmouth County Master Plan*.
- Assist with the development of model ordinances.



**Strongest Association to
Master Plan Elements**

9.0 AGRICULTURAL & ECONOMIC DEVELOPMENT MASTER PLAN RECOMMENDATION 9.2



Delicious Orchards, Colts Neck

Source: Brittany Ashman

9.2: Incorporate the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)* as a component of the Agricultural & Economic Development Element of the *Monmouth County Master Plan*; recognizing the *CEDS* as the county's economic development plan.

Purpose

With funding from the U.S. Economic Development Agency (USEDA), the Monmouth County Office of Economic Development completed a *CEDS* report which provides the county with an investment strategy that supports our long-term economic development goals. Upon approval by USED A, the county will be eligible to pursue grants for the implementation of recommendations in the report.

Monmouth County Departments & Organizations Involvement

Division of Planning	Assist the Division of Economic Development with implementing recommendations outlined in the <i>CEDS</i> and generating annual <i>CEDS</i> updates.
Planning Board (MCPB)	Incorporate <i>CEDS</i> as a component of the Agricultural & Economic Development Element of the <i>Monmouth County Master Plan</i> .
Division of Economic Development	Provide annual <i>CEDS</i> report updates to the USED A; implement <i>CEDS</i> recommendations as funding becomes available.

Other Project Stakeholder Involvement:

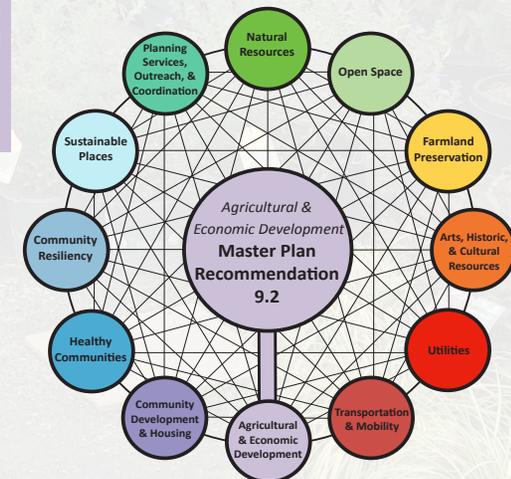
USED A	Review required annual <i>CEDS</i> report updates.
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Master Plan Goals, Principles, & Objectives (GPOs) Relating to 9.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Assist the Division of Economic Development in the implementation of *CEDS* recommendations and generating annual *CEDS* updates.
- Provide updates to the MCPB relating to the *CEDS*.



Strongest Associated Master Plan Elements

9.0 AGRICULTURAL & ECONOMIC DEVELOPMENT

MASTER PLAN RECOMMENDATION 9.3



Delicious Orchards, Colts Neck

Source: Brittany Ashman

9.3: Provide professional and technical support for the efforts performed by the Monmouth County Division of Economic Development that promote the long-term economic and agricultural viability of the county such as assisting with the implementation of the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)* and Grow Monmouth programs.

Purpose

As part of the annual work plan, the Division of Planning produces documents and participates in activities that support general economic development throughout the county. These projects dovetail with the more strategic efforts undertaken by the Division of Economic Development and should be used to advance *CEDS* and Grow Monmouth initiative.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide professional and technical assistance to the Division of Economic Development with grant applications and the implementation of <i>CEDS</i> recommendations if necessary; support advancement of Grown in Monmouth program; reserve Community Development Block Grant (CDBG) funding for Grow Monmouth Façade Improvement Program; provide demographic and economic information as necessary; conduct required environmental review for proposed projects.
Division of Economic Development	Administer Grow Monmouth programs including the Grow Monmouth Façade Improvement Program; convene and facilitate Grow Monmouth roundtables; pursue grants that support the <i>CEDS</i> and other strategic economic development investments in the county; manage U.S. Economic Development Administration (USEDA) associated grants.
Department of Public Works and Engineering	Provide professional and technical assistance and necessary data to the Division of Economic Development to assist with grant applications and the implementation of <i>CEDS</i> recommendations.
Brookdale Community College (BCC)	Provide school enrollment information upon request.
Department of Public Information and Tourism	Provide press releases for Grow Monmouth programs and upcoming Grow Monmouth roundtables.
Library System	Possibly host small business meetings and other events.

Other Project Stakeholder Involvement

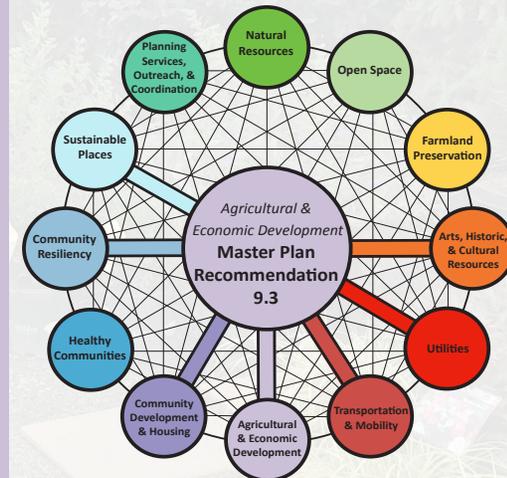
Municipalities	Host Grow Monmouth events; assist with outreach to local businesses; follow up with roundtable action items.
Monmouth University	Host annual Made in Monmouth Expo.
Local Businesses	Participate in Grow Monmouth events; business owners and managers participate in roundtable discussions; assist with implementing roundtable action items.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 9.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning	●							●						
Coordination		●							●					
Planning Approach			●											
Environmental Resources				●										
Farmland Preservation					●									
Arts, Culture, & Historic						●								
Preservation Investments														
Vibrant & Sustainable Communities								●						
Community Preservation									●					
Housing										●				
Economic Development											●			
Agricultural Development												●		
Recovery & Resiliency													●	
Growth Investments														●

Implementation Strategy

- Provide assistance with the implementation of the *CEDS* by the Division of Economic Development.
- Continue to provide support for Grow Monmouth programs by the Division of Economic Development.
- Assist the Division of Economic Development with implementation of U.S. Department of Agriculture (USDA) grants in support of Grown in Monmouth.
- The Monmouth County Office of Community Development, housed in the Division of Planning, will continue to set aside CDBG funds for the Grow Monmouth Façade Improvement Program.
- The Monmouth County Office of Community Development will include the Grow Monmouth Façade Improvement Program in their *Five-Year Consolidated Plan* and *Annual Action Plan*, as well as be responsible for U.S. Department of Housing and Urban Development (HUD) monitoring of the program.



Strongest Associated Master Plan Elements

9.0 AGRICULTURAL & ECONOMIC DEVELOPMENT

MASTER PLAN RECOMMENDATION 9.4

9.4: Develop model ordinances for municipalities that will help expand and develop agricultural businesses while decreasing the number of Right to Farm cases brought before the Monmouth County Agriculture Development Board (MCADB).

Purpose

Provide municipalities with viable options based on model land use ordinances to expand agribusiness opportunities throughout Monmouth County while providing adjacent non-agriculture property owners reasonable safeguards from nuisances associated with the expansion of onsite commercial activities.

Monmouth County Departments & Organizations Involvement

Division of Planning	Develop model ordinances as needed; conduct outreach; foster partnerships with farmers and property owners.
Division of Economic Development	Assist in identifying agribusiness development needs and barriers.
MCADB	Provide input on model ordinances.

Other Project Stakeholder Involvement

Municipalities	Review and provide input on model ordinances; implement model ordinances as necessary; support outreach efforts to farmers and property owners.
Agribusinesses and Farmers	Provide input on model ordinances.
Other Counties	Provide sample text and input for model ordinances.
NJ Department of Agriculture and State Agriculture Development Committee (SADC)	Provide feedback on promulgated model ordinances.
NJ Planning Officials	Provide feedback; assist with outreach.

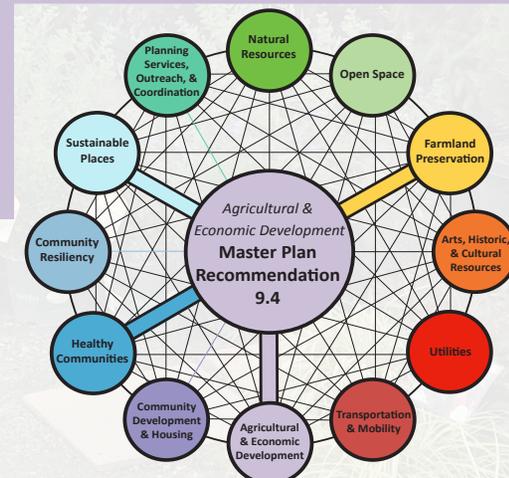


Master Plan Goals, Principles, & Objectives (GPOs) Relating to 9.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●							●						
B. Coordination														
C. Planning Approach														
D. Environmental Resources					●									
E. Farmland Preservation														
F. Arts, Culture, & Historic														
G. Preservation Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Work with the MCADB to develop a series of model ordinances for specific agricultural issues based on generally accepted agricultural management practices and examples from around the state and nation.
- Incorporate model ordinances into the *Agricultural Sustainability Plan (ASP)* for Monmouth County.



Strongest Associated Master Plan Elements

9.0 AGRICULTURAL & ECONOMIC DEVELOPMENT MASTER PLAN RECOMMENDATION 9.5



Delicious Orchards, Colts Neck

Source: Brittany Ashman

9.5: Through coordination between the Monmouth County Agriculture Development Board (MCADB) and the Development Review Section of the Division of Planning, draft and implement a required statement of acknowledgement for site plans and subdivision plats proposed in an Agricultural Development Area (ADA) to help raise awareness of potential neighboring agricultural activities and potentially reduce right-to-farm complaints.

Purpose

The Division of Planning will develop language to be placed on site plans and subdivision plats as a condition of final approval acknowledging that the property is located in an ADA. This advisory is intended to raise awareness for investors that the property may be subject to municipal Right to Farm Act protections due to its proximity with agricultural uses. This proposal should support the intent established by N.J.S.A. 4-1:C-48.

Monmouth County Departments & Organizations Involvement

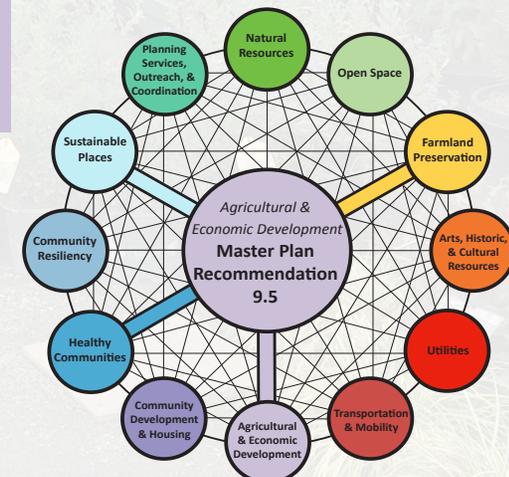
Division of Planning	Develop appropriate language for ADA notice; amend Monmouth County Development Regulations to include new language for developments in close proximity to an ADA.
MCADB	Assist the Division of Planning with the development of appropriate verbiage for regulations.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 9.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
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Implementation Strategy

- Develop verbiage with assistance from the MCADB.
- Amend Monmouth County Development Regulations to include new ADA requirements.



**Strongest Associated
Master Plan Elements**

9.0 Agricultural & Economic Development

9.1 Introduction

For many years, conversations about agricultural development and economic development seemed to be at odds with one another. The public investment policies geared towards each had been separate and fairly straightforward; agricultural development meant investing in preserving farms to provide for their perpetual use while economic development was viewed as investment in the expansion of infrastructure into underdeveloped, mostly agricultural locations, to accommodate residential and commercial growth. How could both types of development mutually coexist if advancement of one meant thwarting of the other?

The *Monmouth County Master Plan (2016)* acknowledges the importance of agriculture as a component of the overall economy, and recognizes that sustaining this industry requires specialized policies and investment strategies. The [Monmouth County Farmland Preservation Plan \(2008\)](#) began the discussion about agriculture in terms of economic development, agricultural industry sustainability, retention, and promotion. Agriculture should not be viewed as a competing interest against economic development because agriculture is part of our county's diverse economic portfolio. This position is supported through the county's Smart Growth efforts involving *The New Jersey State Development and Redevelopment Plan (SDRP) (2001)*, the Cross-Acceptance process, as well as the *Wastewater Management Plan (WMP) for Monmouth County*, which established appropriate locations for growth and for the preservation/conservation of natural resources such as prime agricultural soils.

At the same time, our approach to beneficial economic development

has shifted. Until recently, redevelopment was an economic development tool only viewed beneficially as a means to tackle the problem of urban decay and blight, not as an alternative to construction on greenfields. Today, redevelopment is being used to bring numerous underutilized properties into higher and better uses, increasing property value, and generating positive tax revenue results especially in our suburban communities, without the expense of having to expand infrastructure or deplete our remaining farms and open space. In the broader context, sustainable economic development for the entire county means having a goal-oriented investment and reinvestment strategy that promotes desirable land uses and value-added outcomes. The Land Use Element (2.0) reinforces the importance of agriculture and economic development through the framework for public investment and the concept of community landscapes.

9.2 Existing Conditions

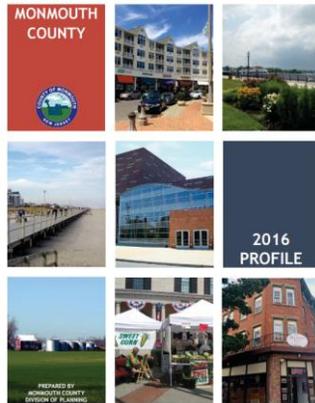
9.2.1 Economic Development Supportive Reports, Guiding Documents, and Existing Conditions

There are two main sources of economic development information and resources within Monmouth County: the annual *Monmouth County Profile Report* and the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)*.

Monmouth County Profile Report: This annual report produced by the Monmouth County Division of Planning provides a comprehensive demographic and economic snapshot of Monmouth County. Preparation involves collection and analysis of data from various sources (e.g. U.S. Census Bureau, NJ Department of Labor, U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis, etc.). This report seeks to showcase the county's latest demographic trends and economic initiatives involving both the public and private sectors. The report provides an insight into these economic-related topics in Monmouth County:



- Demographics
- Households
- Education and Income
- Ratable Distribution
- Housing
- Non-Residential Construction
- Facilities and Infrastructure
- Economic Outlook including Regional Business Outlook, Major Employers, Major Taxpayers, Redevelopment Initiatives, and County Initiatives



Comprehensive Economic Development Strategy (CEDS): In 2012, Monmouth County received a Planning Investment Grant from the U.S. Economic Development Agency (USEDA) to support the process of establishing a CEDS. Participants from the county’s public, nonprofit, and private sectors provided information and input throughout the process to develop a comprehensive industry analysis and help establish a solid path for future economic development within the county.

After an analysis of demographics, current market trends, the existing economic base, and an economic competitiveness assessment, the

Monmouth County CEDS (2014) report identified four focus industries as potential growth markets in both the near and long-term. Some excerpts related to this Element from the [Monmouth County Comprehensive Economic Development Strategy \(CEDS\) \(2014\)](#) are:

- **Health Care and Related Industries:** Health-related industries are a growing and important component of Monmouth County’s economy. Monmouth County is home to several top-rated hospitals and numerous medical service offices and clinics. The residential population of the county offers a strong pipeline for healthcare services, while the aging of the population and increase in assisted living facilities and age-restricted housing indicate more consumers of healthcare services in the future. Monmouth County provides desirable locations for doctors and other highly paid staff to live, but there is significant competition for employees on the lower end (e.g. technicians, certified nurse assistants, maintenance personnel, etc.) that mostly are commuting in from surrounding counties.
- **IT/Telecommunications:** An assessment of national and global IT markets indicates strong demand nationally and globally in data and network security, software and application development, and cloud based computing services. Monmouth County IT/ Telecommunications industry has a strong history of attracting venture capital. Between 2003 and 2009, the IT/ Telecommunications industries attracted more than \$400 million in venture capital, representing nearly 100% of all venture capital investments among all industries in the county. Venture capital investments were strongest from 2003 to 2005 and then declined considerably due to both national trends and the loss of major telecommunication players in the county.
- **Professional/Technical and Business/Finance:** Whereas there was some job loss overall in these two sectors combined (186 jobs lost from 2002 to 2012) the jobs were concentrated in a few subsectors



and were also impacted by losses at Fort Monmouth and within the telecommunications industry. Other subsectors experienced job growth and wages in all the subsectors are very high relative to the county as a whole. Proximity to major markets, including New York City, and high education levels make these sectors poised for future growth.

- **Tourism and Related Industries:** This includes industries and subsectors related to food service, cultural and performing arts, travel, retail, and other services. Together, these industries provide services to Monmouth County's residents, workforce, and visitors.

These four industries are not meant to be the only areas for the county to focus on but, based on current market trends in existing assets, they appear to offer the best opportunities for the county in both the short- and long-term (*Monmouth County CEDS, 2014*). Details on the four focus industries as well as recommendations for their expansion, specified strategies/action plans, and potential growth challenges are in the 2014 report.

With regard to competitiveness within the greater New Jersey Region, the *Monmouth County CEDS* identified the county's competitive advantages and liabilities. The key competitive assets include:

- County Management and Reputation
- Stable and Moderate Taxes
- Educational Assets
- Diverse Economy
- Cultural and Entertainment Offerings

Conversely, identified liabilities include:

- Concerns about Future Workforce Preparedness
- Lack of a Monmouth County "Brand Awareness"
- Perceived Difficulty in the Development Process (various levels of government)

- Congestion/Infrastructure

With a USEDA approved strategy now in place, the Monmouth County Division of Economic Development is in the process of identifying eligible projects for potential federal investment and funding. *Monmouth County Master Plan (2016)* Recommendation 9.3 supports the Division of Planning in providing assistance with the implementation of the *Monmouth County CEDS (2014)*.

The aforementioned tourism industry of Monmouth County plays an important role in economic matters. The miles of waterfront with fine dining, luxury shopping, and beautiful beaches attract visitors from all over the country. Retail trade is continuously attracted to the county due to the generally affluent population and continually expanding tourism industry (*Monmouth County 2016 Profile*). Other main destinations of tourism include boating and parasailing, Freehold Raceway Mall, Jersey Shore Outlets, Fun Time America, iPlay America, Kearsburg Amusement Park, and Monmouth Race Track.

The NJ Division of Travel and Tourism provides the annual *Economic Impact of Tourism* study and the *New Jersey Overnight Leisure Visitor Profile* study on their website. Tourism Economics, a global consultant firm that provides economic impact, forecasting, and market assessments, produced the most recent report, [The Economic Impact of Tourism in New Jersey \(2015\)](#). According to the report, Monmouth County generated \$2.4 billion in tourism sales in 2015, up 5.3% from 2014. Regarding tourism industry sales, the report explains that "With the memory and impact of Superstorm Sandy fading and another year of construction in the books, Monmouth and Ocean County were the fastest growing shore counties." Another travel and tourism consultant company, D.K. Shifflet and Associates LTD., produced the [2015 New Jersey Overnight Leisure Visitor Profile](#). This profile indicates that the top five activities for New Jersey visitors are beach/waterfront, culinary/dining experience, gambling (slots, cards, horses, etc.), visiting



friends and relatives, and shopping. It also reports record state high visitation and spending in 2015.

9.2.2 Agricultural Development Supportive Reports, Guiding Documents, and Existing Conditions

Although the *Monmouth County Profile Report* and *Monmouth County CEDS (2014)* touch on the agricultural economy and related topics, there are several other sources of data and guidance for this key Monmouth County industry.

Monmouth County Farmland Preservation Plan: The latest update to the [Monmouth County Farmland Preservation Plan \(2008\)](#) included a chapter focused on economic development topics pertinent to agriculture from marketing, public relations, and education to industry-specific issues. The Farmland Preservation Element (5.0) also provides an overview of existing farmland preservation conditions in the county.

Census of Agriculture: The U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) conducts the [Census of Agriculture](#) every five years. The census is required by law under the "Census of Agriculture Act of 1997," Public Law 105-113 (Title 7, U.S. Code, Section 2204g). The U.S. Census of Agriculture provides a detailed picture of the country's farms and ranches. It is the only source of uniform, comprehensive agricultural data for every state and county or county equivalent. Census of Agriculture data is routinely used by farm organizations, businesses, state departments of agriculture, elected representatives, and legislative bodies at all levels of government, public and private sector analysts, the news media, and colleges and universities. The data is frequently used to:

- Show the importance and value of agriculture at the county, state, and national levels
- Compare the income and costs of production
- Provide important data about the demographics and financial well-

being of producers

- Evaluate historical agricultural trends to formulate farm and rural policies and develop programs that help agricultural producers
- Create an extensive database of information on uncommon crops and livestock and the value of those commodities for assessing the need to develop policies and programs to support those commodities
- Provide geographic data on production so agribusinesses will locate near major production areas for efficiencies for both producers and agribusinesses
- Measure the usage of modern technologies such as conservation practices, organic production, renewable energy systems, internet access, and specialized marketing strategies
- Develop new and improved methods to increase agricultural production and profitability

The Census of Agriculture publishes county profiles that provide a concise overview of agricultural statistics for each county in the country. The [2012 Census of Agriculture: County Profile for Monmouth County](#) is the most up-to-date summary available.

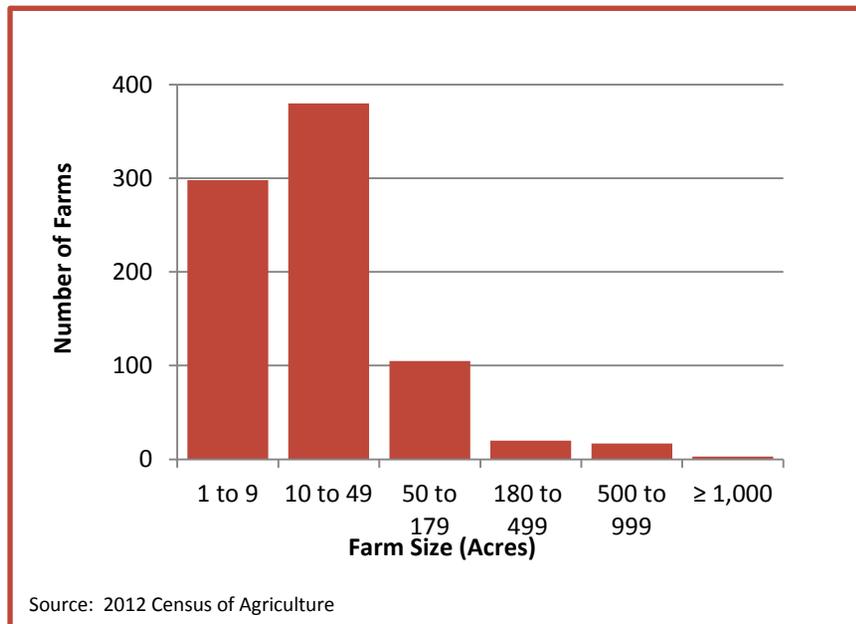
Farms: The [2012 Census of Agriculture: County Profile for Monmouth County](#) reports that Monmouth County has 823 farms whose land area totals 38,961 acres. These numbers are down from the 932 farms and 44,130 acres counted in the 2007 Census of Agriculture, representing a 12% decline in both categories. The rate of change in the number of farms is consistent with the state average; however, the acreage decline in New Jersey as a whole was only 3%. Monmouth County's land conversion occurred at a more rapid pace than other portions of the state during this time period. Monmouth County ranks fifth in New Jersey for the number of farms and eighth in total farmland. Monmouth's farms are concentrated in the western and central portions of county. Per Division of Taxation records, Upper Freehold,



Millstone, and Howell hold 60% of Monmouth County’s farmland.

Figure 9.1: Monmouth County Farms by Size illustrates the breakdown of farms by size category. In 2012, as well as 2007, the average size of a farm in Monmouth County was 47 acres. The median farm size in 2007 was 11 acres, meaning half the farms were larger than 11 acres, and half the farms were smaller. The median farm size increased slightly in 2012 to 12 acres. This implies that many of our remaining farms are small operations.

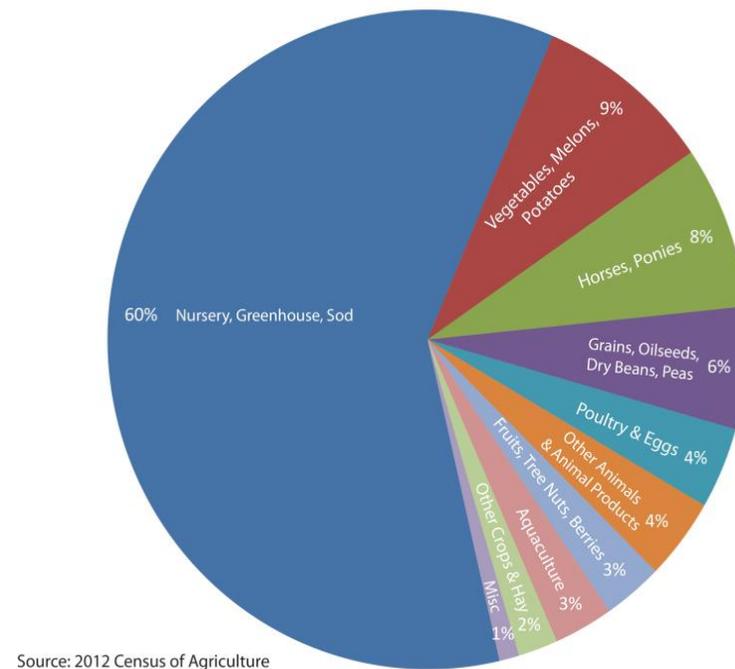
Figure 9.1: Monmouth County Farms by Size



Agricultural Products: Among other things, the Census of Agriculture surveys farms’ gross sales of agricultural products prior to taking deductions for taxes and expenses. The 2012 Census of Agriculture found that the market value of all agricultural products

sold by every Monmouth County farm surveyed was \$84,411,000. Crops made up 80% of the sales and livestock made up 20%. The overall sales value (not adjusted for inflation) decreased 20% since 2007. Most likely, the decline stemmed from a loss of land in farms and decline in high-value sectors such as nursery which mimicked the decline in housing during the recession. Like nursery products, sales of vegetables and melons decreased from 2007 to 2012. However, the value of horses sold increased during this time period, as did the value of grains. Figure 9.2: Percent Market Value of Agricultural Products Sold (2012) shows the percent of market value of agricultural products sold in Monmouth County.

Figure 9.2: Percent Market Value of Agricultural Products Sold



Percent Market Value: According to the 2012 Census of Agriculture, Monmouth County is the 2nd ranked county in the state, and 11th ranked county in the U.S., in terms of value of sales of nursery, greenhouse, and floriculture. This industry comprises 60%, or \$50,556,000, of the total value of goods sold in Monmouth County, and nursery stock crops are planted on a reported 4,111 acres in the county. This represents a yield of \$12,298 per acre.

Monmouth County boasts 354 equine farms with 4,950 horses and ponies. It is the first county in the state in terms of the number of horses and ponies as well as the value of sales of horses and ponies. Those sales were \$7,365,000 in 2012, ranking Monmouth as the 18th county nationwide, up from 35th in 1997. More than a third of the county’s 200+ preserved farms are equine operations. Even more are tied to the industry when one considers hay, straw, and grain operations. These numbers show how important the horse industry is to the long-term agricultural sustainability of Monmouth County.

The county supports other livestock besides horses. Monmouth has a notable number of goats and poultry. The 2012 Census of Agriculture withheld the quantity of layers from its published data set since one farm, Puglisi Egg Farm, is the primary contributor. However, *NJ Monthly* noted in a 2014 article that the farm produces 750,000 eggs a week. Monmouth is also the second ranked county in New Jersey for aquaculture. The local clamming industry is centered in Highlands. Additionally, the Port of Belford in Middletown contains one of the few remaining commercial fishing ports in New Jersey.

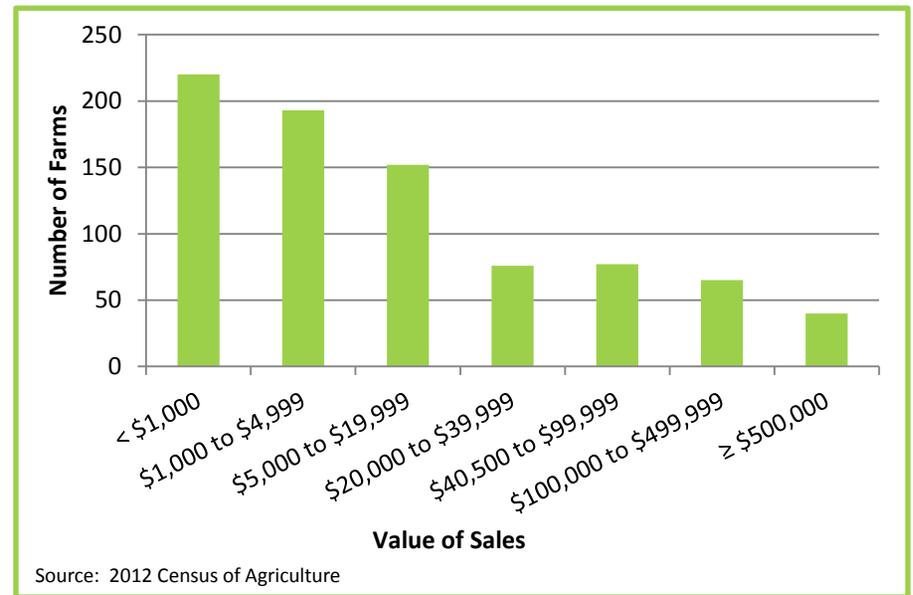
In the field and forage crop sector, soy, hay, and corn account for significant production acreage. Soy for beans is planted on 5,674 acres. Forage land for hay covers 4,828 acres. Corn for grain occupies 2,263 acres of Monmouth County farmland.

Annual Sales: Figure 9.3: Number of Monmouth County Farms by Value

of Sales sorts farms by their gross annual sales. According to the 2012 Census of Agriculture, 220 out of the 823 Monmouth County farms had less than \$1,000 in annual sales. Changes to the state’s farmland assessment rules will impact many of these farms which now need to exceed a \$1,000 threshold to maintain their preferential tax status. Another 111 farms reported sales between \$1,000 and \$2,499. That means that off the bat, 40% of county’s agricultural properties do not meet the income minimum to qualify as commercial farms under the Right to Farm Act.

The USDA has been paying particular attention to a group of farms it terms “Ag in the Middle” – smaller farms with \$100,000 to \$250,000 in annual sales. According to the 2012 Census of Agriculture, there are 42 such farms in Monmouth County. The owners in this category wrestle with where and how to sell their products. Their

Figure 9.3: Number of Monmouth County Farms by Value of Sales



operations are not large enough to sell to commodity markets but intense management demands make it hard to have other off-farm jobs. In addition, land in the region is very expensive, creating additional pressures for farmers. The market value of land and buildings per farm for Monmouth County is \$1,021,640, which works out to \$21,581 per acre. Monmouth is not the most expensive county in the state but land costs are very high relative to other parts of the country. This creates barriers to entry, fuels pressure to sell, and complicates estate planning.

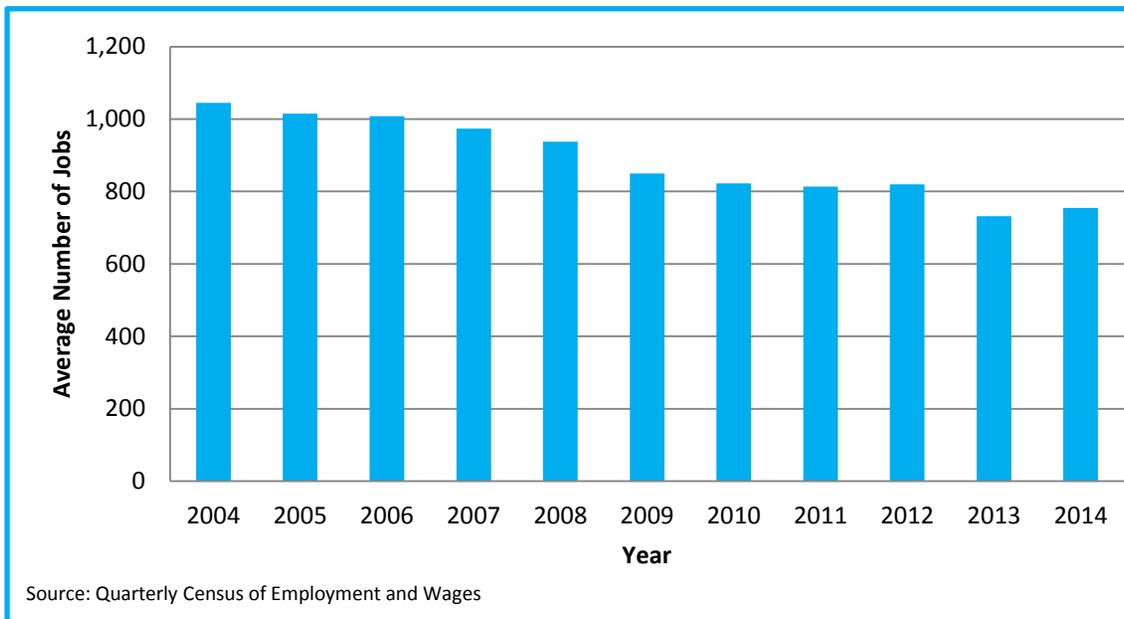
Primary Occupation: More than half of principal operators surveyed by the 2012 Census of Agriculture listed farming as their primary occupation (471). The other 352 operators are assumed to have other jobs that provide their main source of income. Many more males are

designated as their farm’s principal operator (649 males compared to 174 females). The 2007 numbers exhibit a similar ratio but the overall number of operators decreased from 2007 to 2012. The average age of a farm operator was 61 in 2012. This is an important factor in terms of future agricultural economic development. The average age of a farmer in 2007 was 58, showing that the cohort of farmers aged with the additional years without a substantial increase in young farmers. Thus, there is a strong need to nurture a younger generation of agricultural professionals.

Economic Impact - Jobs Data: Monmouth County’s farms are in transition, leading to job losses and uncertainty about the future of our regional agricultural industry. The changing agricultural landscape is being fueled by several trends: an aging and dying population of farmers, a depressed nursery industry (which is tied to the vagaries of the real estate market and the disposable income of local residents), and a depressed horse racing industry. More lucrative purses and conditions in nearby states have adversely impacted the equine industry and prompted a migration of business.

As Figure 9.4: Average Annual Number of Agriculture Jobs in Monmouth County illustrates, the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages data shows that the county has experienced a 30% decline in the total number of agricultural jobs, 820 in 2012 down from 1,172 in 2002. The biggest job losses were seen in the crop production industry (533 in 2012, down from 893 jobs in 2002), greenhouse and nursery production (657 jobs vs. 388 jobs), and vegetable and melon farming (136 jobs vs. 65 jobs). In addition, 13% of the county’s

Figure 9.4: Average Annual Number of Agriculture Jobs in Monmouth County



permanently preserved farm acres are up for sale. Many of the preserved farms for sale are nursery and equine farms that are closing down their large operations. This further underscores the decline of the once dominant agricultural industries in the area, spurring land sales as these operations shut down. However, the recent decline of select agricultural industries is an opportunity for emerging operations.

9.2.3 The Economic Engine of Agriculture

The Census of Agriculture focuses on producers but they are only part of the county’s larger agricultural economy and food system. There are many interconnected suppliers, service providers, distributors, processors, and sales venues that depend upon and support local farms. For example, suppliers furnish feed and seed, fuel, packaging and equipment. Service providers range from manure removers to well drillers to barn builders to roofers and solar installers. Processors mill lumber, butcher meat, and can vegetables. According to the NJ Department of Labor and Workforce Development, there were 100 Monmouth County businesses involved in agriculture in the 3rd quarter of 2014. On a wider stage, in 2015, Farm Credit East published the second edition of [Northeast Economic Engine: Agriculture, Forest Products, and Commercial Fishing \(2015\)](#). The report focused on the eight states including New Jersey. The authors used an IMPLAN (economic impact

assessment) software system to analyze 2012 data. They found that agriculture, fishing, and forestry generated an economic impact of \$103.4 billion and supported 483,375 jobs on and off the farm. As shown in Figure 9.5: Economic Impact of Agriculture on the Northeast’s Economy, the value of the products at the farm, forest and dock multiplied as they progressed to market and generated hundreds of thousands of additional jobs along the way. In New Jersey, this amounts to a \$12.8 billion impact on state economic output, and 56,598 jobs. This comes to \$226,156 in agricultural output per job.

9.3 Emerging Issues and Long Range Challenges

9.3.1. SWOT (Strengths/Weaknesses/Opportunities/Threats) Analysis:

The Agricultural & Economic Development Working Group held several meetings in 2014. During the meetings, attendees participated in a SWOT analysis of the agricultural economy in Monmouth County. A number of the issues discussed by the group have already been touched upon in Section 9.2 Existing Conditions but warrant further exploration. Highlights from the threats and weaknesses categories of the SWOT analysis include:

- Limited expansion opportunities due to surrounding development patterns
- High cost of entering the business for young farmers
- A need to recruit the next generation of interested and willing

Figure 9.5: Economic Impact of Agriculture on the Northeast’s Economy



Source: Farm Credit East “Northeast Economic Engine” 2015 Report



- farmers
- Declining equine industry
- Seasonal limitations
- Change in weather patterns affecting crops and growing season
- Water quality and supply
- Wildlife/deer/invasive species
- Government regulation: home rule, zoning restrictions, and food handling regulations

Some themes that emerged in the opportunities category include:

- More links between producers and consumers/distributors/institutions
- Increased training and education for those seeking to enter the industry
- Better estate and succession planning for farm families
- Preparation and planning for market changes
- Better planning for extreme weather events
- Expansion of agri-tourism
- Direct marketing opportunities
- Urban farming on underutilized sites and those slated for redevelopment
- Value-added crops
- Diversification of operations
- Expansion of year-round production and farm visitation
- Growing number of farm wineries and breweries
- Social media and technology
- Creative zoning

9.3.2 Industry Opportunities and Trends: There are some notable trends and economic development opportunities within established segments of the agricultural industry such as produce, aquaculture, and equine as well as emerging sectors such as wineries, breweries, agri-tourism, and urban agriculture. Within the produce sector, Community Supported Agriculture (CSA) programs, offerings aimed at

the ethnic market, and season extending technologies are important trends.

Community Supported Agriculture (CSA): CSAs are an increasingly popular concept. A CSA consists of a community of individuals or members who pledge support to a farm operation so that the farmland in essence becomes the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or "share-holders" of the farm pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. In return, they receive shares in the farm's bounty throughout the growing season, as well as satisfaction gained from reconnecting to the land and participating directly in food production. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests. ([Community Supported Agriculture, DeMuth, National Agricultural Library, USDA, 1993](#))

A few CSAs have come and gone in Monmouth County but the Mendies Farm in Roosevelt and Seven Arrows East in Rumson have active memberships. Each week or two, members receive a variety of freshly gathered crops. Aside from its winter CSA where members benefit from an output such as eggs and greenhouse-grown micro greens, Mendies offers a spring/ summer option. Honey Brook Organic Farm, the oldest organic CSA in New Jersey (based in Mercer and Burlington Counties), now delivers boxed shares to pick-up sites in Middletown.

Ethnic Produce: Ethnic produce, particularly greens and herbs that cater to Hispanic, Asian and Asian Indian palettes and recipes, reflect demographic changes in the nation and can be financially lucrative. According to the 2010 U.S. Census, Mexican, Puerto Rican, Chinese, and Asian populations grew significantly



Local Community Supported Agriculture (CSA) Farm

Mendies Farm LLC is a 30-acre preserved farm located in Roosevelt, New Jersey. The farm, owned by Lawrence and Heidi Mendies, has operated a CSA since 2011, giving members regular access to fresh produce that includes fruit, vegetables, herbs, and eggs. The farm's specialties include a wide array of microgreens. Advance signups and payments by members, who are limited in number, allow the landowners to buy seeds and supplies and make other capital expenditures throughout the year while guaranteeing those who participate in the program a share of the harvest.

The Mendies Farm aims for four seasons of farming and has two different CSA tracks. The winter season enables members to obtain produce every other week, whereas the Spring/Summer option allows for pickups once a week from approximately the first week of June until early November. Although the Spring/Summer CSA program is more popular, the winter program fills a void by providing fresh produce during the months in which it is difficult to obtain a locally grown supply. To do so, the farm relies on greenhouses.

Members are assigned set pickup days. Shares are typically organized into baskets and stored in a walk-in cooler. However, members can also harvest certain crops such as shelling peas directly from the field. Volunteers drawn from the CSA membership and the local community help with tasks such as weeding, mulching, and cultivating.

The landowner employs creative and innovative farming and engineering methods that promote a sustainable farming system. For example, the farm uses only organic pesticides and additives. Mr. Mendies has built a heated underground hosing system to keep the soil warmer in his greenhouses during the winter. He has plans for an outdoor wood-burning boiler and applies various compost and organic waste to enhance the soil.

As with any CSA, there are both rewards and risks to participation. There is no guaranteed volume or product selection from week-to-week or year-to-year. These factors depend on the weather and a number of other variables. However, the Mendies Farm CSA is becoming a key player in Western Monmouth County's food system, and the landowners' entrepreneurial spirit is steering the farm towards a successful future.

Website: [Mendies Farm](#)

See also: [Mendies Farm LLC Facebook page](#)



from 2000 to 2010 on the East Coast. These East Coast populations saw the following growth rates from 2000 to 2010: Puerto Rican, 32.5%; Mexican, 92%; Chinese, 40%; Asian Indians, 66%. To take advantage of these growing markets and the influence of immigrants on American cuisine in general, Rutgers University has been conducting research on which potential offerings grow best under local conditions.

Season-Extending Technology: A number of Monmouth County's farms are extending their growing seasons through innovative technologies as well as marketing strategies. Hoop houses allow the production of ornamental nursery stock as well as herbs, greens, and vegetables through overwintering and early seeding before the average frost-free date. Similarly, operations such as Holland Greenhouses are expanding into Monmouth County and building large, gutter-connected glass greenhouses for the production of herbs, vegetables, and flowers for the wholesale market. One long-established farm, Beyond Organic Growers (located at Reid Sod Farm in Howell), is delving into aeroponic technology within a greenhouse to grow organic herbs and vegetables throughout the year for local restaurants and markets.

Distribution Networks: New distribution networks are further linking producers to consumers. [Zone 7](#), based in Ringoes, NJ, picks up produce from small to mid-sized farms in NJ and eastern Pennsylvania and delivers fruit, berries, vegetables, mushrooms, eggs, honey, cheese, and grain to restaurants, grocers and institutions. The business focuses on organic farms and those that rely on sustainable farming practices. Zone 7 has been gradually expanding its pick-up area. It currently works with one Monmouth County producer, Jeff's Organic Produce, which owns and farms land in Upper Freehold. Buyers include Langosta Lounge in Asbury Park and Restaurant Nicholas in Red Bank.



Beyond Organic Growers is using aeroponic technology to grow herbs and vegetables

Source: Harriet Honigfeld

Aquaculture: As previously discussed, commercial fishing, aquaculture, and seafood processing have a historic foothold in Monmouth County. Within the state, Farm Credit East estimates that 3,185 people are employed in the industry. Some new ideas may further enhance this economic sector. In Connecticut, for example, the Thimble Island Oyster Company has been using the entire water column to grow kelp, oysters, mussels, and scallops. They call this system 3D or vertical farming. Elsewhere, Community Supported Fisheries (CSFs), a spin on the CSA concept, are gaining traction. A pilot program in Atlantic County operated for the last three years under the auspices of Rutgers Cooperative Extension of Ocean County. Their Agricultural Agent worked with a variety of fishing docks and shellfish farmers to diversify offerings. The CSF accommodates biweekly pickups. Clams are available year-round and fill in more seasonal offerings such as soft shell crab and thresher shark. The concept is expanding closer to Monmouth County, with a CSF in Old Bridge

at a culinary boutique called Heirloom Kitchens. The seafood industry may also be a focal point for economic development. Middletown Township considers its Port of Belford to be a candidate for redevelopment to attract additional users to an area anchored by a ferry terminal and commercial fishing hub. The municipality is working with a consultant who will explore the possibility of redevelopment of this waterfront area.

Equine Sector: The equine sector is a critical facet of the regional agricultural economy but has been under stress. Karyn Malinowski and Paul Gottlieb of Rutgers University recently published a report entitled, [2014 State of the New Jersey Horse Racing Industry: Post-Report of the Governor’s Advisory Commission on New Jersey Gaming, Sports, and Entertainment](#). The white paper analyzes racing opportunities, thoroughbred and standardbred breeding, preserved farms, and hay production. The indicators do not look good for New Jersey. There are reduced racing opportunities plus a significant number of preserved equine farms for sale, particularly in Monmouth County. Local equestrians race and train for appearances at Monmouth Park (thoroughbred) and Freehold Raceway (harness racing) as well as the Meadowlands (standardbred) and out of state. The Monmouth County Agriculture Development Board (MCADB) continues to preserve equine farms in the county (including one in 2014) and process new preservation applications for horse farms (including two submitted to the SADC in 2015). These would add to the scores of equine farms already preserved within the county. The Monmouth County Agricultural Agent and the county of Monmouth have been very involved in helping organize the Open Space Pace and Festival of Horses held each September at Freehold Raceway. The all-day festival features a parade of horses, educational exhibits, horse races, music, and entertainment designed to promote racing and attract new audiences. The event is recognized as a state agricultural fair and drew 4,500-5,000 attendees in 2014. The target

attendance for 2015 was 6,000.

Many people would like to see racinos in the Garden State. A racino combines a racetrack with a machine gaming facility. Most are limited to slot machines and electronic gaming only, although some have table games such as blackjack. The additional gambling options attract new customers to the complex who may never have attended a horse race. Higher attendance and additional revenue allow the tracks to offer higher purses and upgrade facilities. This raises the quality of racing, drawing more media attention and larger crowds.

There are some positive trends emerging in this sector, especially when pairing racing with agri-tourism. As noted in the *Monmouth County 2015 Profile*, during Monmouth Park’s 2014 meet (May 10th to September 28th), daily attendance averaged 9,926. That is a 3%



Monmouth County clams for sale at a community farmers’ market
Source: Harriet Honigfeld



increase from 2013. Average on-track handles indicated a jump of 5.6% to \$538,540. The grandstand side of the track received an upgrade with a Vegas-style sports bar just outside of the paddocks. Moreover, the track has attracted new audiences by sponsoring festivals and family fun days. Along these lines, there is hope that American Pharoah's Triple Crown win will boost public interest in racing. The 2015 Belmont Stakes race, seen by millions of television viewers, ended a 37-year drought in thrilling fashion.

Despite the weaknesses in the racing industry, there are signs that other areas of the equine sector are maintaining or expanding their footing. A number of farms in the county have transitioned from racehorses to show horses (hunters and jumpers and dressage) as well as therapeutic riding. In Upper Freehold, the Horse Park of New Jersey sponsors many horse shows including the Jersey Fresh International that features top competitors in dressage, cross country, and show jumping. Other events at the facility include barrel racing as well as exhibitions and fairs such as Freehold Fest. In an effort to challenge the industry trend, the *Monmouth County Master Plan (2016)* makes several Recommendations that support the viability of the overall local agricultural industry including the equine sector. This includes the development of an *Agricultural Sustainability Plan* (Recommendation 9.1) and assisting towns in the creation of ordinances that will help expand and develop their agricultural business opportunities (Recommendation 9.4)

Wine and Craft Breweries: Wineries and craft beer breweries are expanding their presence in New Jersey and the county. There were over 50 wineries in the state at end of 2015. Monmouth, itself, has good soils for grape production and lies in a world viticulture zone. The state's Alcohol Beverage Control division (ABC) has issued licenses in Monmouth County for wineries such as Cream Ridge Winery in Upper Freehold, 4JGs in Colts Neck, Peppadew

Fresh LLC in Marlboro, and Fox Hollow in Holmdel. Eventually, these wineries could be linked by a designated wine trail. Demand for New Jersey grapes is growing and currently exceeds the available supply.

Accordingly, Cream Ridge Winery is promoting the Grape Acres Project. The project would match landowners with potential growers and offer technical support and a guaranteed buyer for those who grow grapes on small plots of land. There is also a pilot program underway to allow special occasion events such as weddings on wineries located on preserved farms. This provides an alternate and complementary source of income for winery owners.

Aside from wineries, craft breweries are rapidly emerging throughout the state. Current Monmouth County craft breweries include Beach Haus Brewery (Belmar), Belford Brewing (Middletown), Carton Brewing (Atlantic Highlands), Dark City Brewing Company (Asbury Park), Jughandle Brewing Company (Tinton Falls), Kane Brewing Company (Ocean Township), Little Dog Brewing (Neptune City), and Screamin' Hill Brewery (Cream Ridge). Screamin' Hill Brewery is a recipient of the 2015 Monmouth County Planning Merit Awards and is the state's first 'farm to glass' brewery using hops, pumpkins, and other farm-grown products to make their beer. Carton Brewing began operation during 2011 in a 5,000 square foot warehouse. They recently received line of credit written by the New Jersey Economic Development Authority for relocation to a 10,000 square foot building. This move is imperative to keep up with their growing demand, Carton currently distributes to more than 250 bars, restaurants, and liquor stores in the tri-state area with over 300 stores on their waiting list. These breweries attract visitors from all over the state and align to a growing national trend of craft brewery popularity. A proposed bill would permit certain breweries to sell beer at farmers' markets within the constraints of ABC regulations. There is a lot of excitement surrounding new craft



microbreweries and a proposed whisky distillery in Asbury Park. Interestingly, Monmouth County actually started this trend with the Laird & Company of Colts Neck, America's oldest native commercial distillery with federal distillery license Number One from circa 1780.

Agri-Tourism: Tourism is a significant part of Monmouth County's economy. In 2014 tourism spending accounted for \$2.28 billion. Agricultural tourism, more commonly known as agri-tourism, is a growing component of these expenditures. According to Rutgers University Bulletin E333, [*The Economic Contributions of Agritourism in New Jersey \(2011\)*](#), during 2006 one out of five farms in the state offered agri-tourism, most frequently involving some form of on-farm direct to consumer marketing. Rutgers found that farms with \$250,000 or more in annual sales are more likely to host agri-tourism activities. The activities fall into five categories: direct to consumer sales, educational tourism, entertainment, accommodations, and outdoor recreation.

There is a foreseeable expansion in opportunities for agri-tourism, particularly as Halloween and fall events keep growing in popularity. Haunted hayrides, corn mazes, and harvest festivals are just some of the growing number of seasonal offerings attracting people to the more rural areas of the county. Along with this influx, there is growing concern about the traffic congestion on rural roadways associated with these types of events.

Urban Agriculture: Urban agriculture can increase a community's access to healthy food as well as employment, education, and community engagement opportunities. Urban agriculture can also repurpose former brownfields. In Asbury Park, Interfaith Neighbors is planning an urban farm as a complement to their Kula Café, a restaurant and job training program housed in the Springwood Center. The proposed Kula Urban Farm Project will include a year-

round greenhouse and outdoor raised beds. The farm will sell plants, vegetables, and leafy greens. It will allow local residents to volunteer in exchange for produce or revenue sharing and will incorporate an entrepreneurial garden (*Asbury Park Sun*, 2014). Elsewhere in the state, the Garden State Urban Farms project in Orange uses Small Plot Intensive (SPIN) farming methods to grow vegetables and herbs on a previously abandoned lot. The organization also operates a hydroponic greenhouse where at-risk youth and ex-offenders are trained to manage a sustainable business while producing high quality greens for the local community ([Garden State Urban Farms website](#)). In Newark, NJ, AeroFarms recently had a groundbreaking ceremony for a multi-story, hydroponic leafy green and herb production facility that plans to employ 78 people. Finally, Duke Farms in Hillsborough has established an Urban Agriculture Regional Training Center to teach individuals and organizations to plan, develop, and operate community food projects focused on such topics as composting, hoop houses, aquaponics, and micro-green production.

Community gardens and schoolyard gardens are other ways in which Monmouth County residents are growing and distributing fresh produce, improving health and wellness, and participating in the local food system. There are at least 34 community and schoolyard gardens in the county, a number of which bring together volunteers who tend plots for the purpose of food donation. Backyard farms are likewise increasing in popularity, not just for the production of vegetables, fruit, herbs, and greens but also for fresh eggs and honey. There is even a Colts Neck business called Oasis Backyard Farms that helps people set up their own organic vegetable gardens. Unfortunately, the desire to replace lawns with raised garden beds and house beehives and chicken coops, even on a small scale, can conflict with local ordinances and zoning. The Right to Farm Act is not designed to cover microfarms in urban and suburban neighborhoods. In some cases,



amendments to municipal ordinances may be required to better accommodate these trends.

9.3.3 Long Range Challenges: During workshop sessions, the Agricultural & Economic Development Working Group also identified several Long Range Challenges that they believe will require further consideration well beyond the *Master Plan's* 10-year lifecycle.

- *Soil and Land Retention:* The retention of soils through the continual use of generally accepted management practices and the retention of a critical mass of agriculturally productive land is necessary for the economic viability and sustainability of Monmouth County's agricultural industry.
- *Climate Challenges:* Anticipated changes in weather patterns and storm intensity will continue to affect farmland production, requiring farmers to adapt to new, more sustainable farming techniques and prepare for alternative business practices and crop production.
- *Historic Agricultural Preservation:* There are few grant opportunities and limited public assistance available for the restoration of historic barns and homes.
- *Funding Reform:* There is a need to modify the Garden State Preservation Trust (GSPT) funding allocations and rules to allow partnering with the State Historic Preservation Office (SHPO) when preserving farms and open space (or post preservation).
- *Public Awareness/Education on Agricultural Development Issues:* As farmers focus more on 'Direct to Consumer Marketing,' agri-tourism, and hospitality-related events and venues, there will need to be more public tolerance and understanding as to the challenges farmers face in maintaining a viable business in their community. More needs to be done in educating the public about agricultural food production, farm operations, nutrition, and their relationship to the local food economy. As farming operations diversify and

expand, municipal officials will need guidance in promulgating regulations that protect farmers in conducting these activities.

- *Decreasing Technical Support:* The decrease in the number of Rutgers Cooperative Extension Agricultural Agents means less support for farmers and poses an increased hurdle for new and young farmers that are the most in need of technical assistance provided by the agricultural agents.

9.4 Agricultural & Economic Development Stakeholder Actions and Efforts

9.4.1 Monmouth County Efforts

County agencies and departments oversee a number of projects and programs that support economic development and agricultural development.

Monmouth County Comprehensive Economic Development Strategy (CEDS): The *Monmouth County CEDS (2014)* was the first major step in viewing economic development countywide, taking into account all the various industry components that comprise the county's economy. The framework for public investment presented in Chapter 2 identifies "places where public investment supports the *Monmouth County CEDS*" as one of the criteria for the Priority Reinvestment Site or Area (PRSA). In Recommendation 9.2, the *Master Plan* calls for the *CEDS* to be incorporated as a component of the Agricultural & Economic Element of the *Monmouth County Master Plan*; recognizing the *CEDS* as the county's economic development plan.

Grow Monmouth: A long-term, community-wide suite of programs, the Grow Monmouth initiative is managed through the Monmouth County Division of Economic Development and serves to promote the economic health of Monmouth County. Outlined objectives include retaining and growing current county businesses, creating jobs, and attracting new businesses. Input is gathered from a variety of key



sectors including businesses, educational institutions, nonprofits, community organizations, and state and local governments.



Empowering Business. Creating Jobs.

Grow Monmouth offers resources to assist municipal economic development efforts such as:

- Municipally based outreach efforts and economic roundtables
- Economic opportunity mapping
- Identification of state and county business incentives
- Economic development and planning technical support

When called upon, the Division of Planning and Office of Community Development have been strong partners in supporting the administration of the Grow Monmouth by providing in-house professional and technical assistance. *Master Plan* Recommendation 9.3 recognizes the importance of continuing this relationship and recommends the Division of Planning continue to promote the long-term economic and agricultural viability of the county by assisting with the implementation of the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)* and Grow Monmouth initiative.

Note: The ^{GM} superscript indicates a Grow Monmouth program

- **Made in Monmouth ^{GM} (MIM) Expo:** As part of the Grow Monmouth initiative, this annual exhibition showcases consumer products entirely produced within the county borders. Beginning with the first event in 2012, MIM has been free for vendors and open to the public at no charge. The 2016 MIM event, its fifth exposition, featured over 220 participating vendors, attracting over 5,000 shoppers to its Monmouth University location in West Long Branch. This event also allows local businesses the opportunity to

network with one another and explore the possibility of establishing new business relationships. Many of the consumer goods presented at MIM are agriculturally-based, associated, or value-added products.

The success of the annual MIM Expo has led to several “mini” MIM events taking place throughout the year including one at the annual Monmouth County Fair. A 2015 “mini” MIM held at the Cream Ridge Winery in Upper Freehold complimented agri-tourism efforts in the Panhandle Region and promoted exploration along the Upper Freehold Historic Farmland Byway.

- **Grow Monmouth Façade Improvement Program ^{GM}:** Since 2013, this program has been using U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) funding to help improve the look of privately-held commercial structures within HUD designated eligibility areas. The Grow Monmouth Façade Improvement Program provides businesses the opportunity to apply for grants up to \$1,850 in order to upgrade exterior façade features such as new awnings, paint, doors, or signs. As of December 31, 2015, 52 projects have been completed, reinvesting over \$92,000.00 towards improving commercial facades in income eligible neighborhoods. The Division of Economic Development and Division of Planning (Office of Community Development) staff manage the program through the Grow Monmouth Committee. This committee evaluates the applications to determine eligibility and make grant awards to those proposed projects that meet program criteria.
- **Grown in Monmouth ^{GM}:** The Monmouth County Division of Economic Development, in conjunction with the Division of Planning and Rutgers Cooperative Extension, applied for a USDA Rural Business Enterprise Grant in October 2014 to obtain funding that will lay the groundwork for a marketing and



branding program referred to as Grown in Monmouth. The goal is to provide marketing assistance and business training to small and emerging agricultural producers located in rural areas of the county.

Grown in Monmouth aims to connect producers and buyers, expand small agricultural businesses, and contribute to job growth in the local area. In addition to managing MIM and mini MIM events, the Division of Economic Development also publishes an annual hyper-local Holiday Shopping Directory online.

Fort Monmouth Redevelopment: Monmouth County, represented by the Board of Chosen Freeholders, is a voting member on the [Fort Monmouth Economic Revitalization Authority \(FMERA\)](#) Board which oversees redevelopment of the 1,127-acre property. The site is being reimaged and recreated into a multi-use residential, retail, technology, and cultural destination in coastal Monmouth. Numerous private and public projects are moving forward as an improving economy has increased investor interest in the site. More information about ongoing redevelopment efforts can be found in the annual *Monmouth County Profile Report* and on the FMERA website.

MoCo Arts Corridor: Cohesively marketing and branding Monmouth County as an art, cultural, and entertainment destination was first recommended in the [Coastal Monmouth Plan \(2010\)](#). The *Coastal Monmouth Plan* calls for a unified marketing theme to strengthen the year-round shore economy in the coastal areas through cooperative promotional efforts. Monmouth County Arts Council (Monmouth Arts), with support from the Board of Chosen Freeholders, NJ TRANSIT, artists, local businesses, educational institutions, and numerous tourism and cultural organizations developed a comprehensive marketing plan for the coastal area. This **MoCo (Monmouth County) Partnership** has created the **MoCo Arts Corridor** as a new signature brand. Spanning from Matawan to Manasquan, this corridor

encompasses forty towns proximate to NJ TRANSIT's North Jersey Coast Line and the Garden State Parkway. The MoCo Arts Corridor is discussed further in 6.0 Arts, Cultural, and Historic Resources Element.

Monmouth County Agriculture Development Board (MCADB): The MCADB is appointed by and reports directly to the Board of Chosen Freeholders. The MCADB advises the Board of Chosen Freeholders, Division of Planning, and other county departments and agencies on all matters relating to or affecting agriculture retention and development and provides direct assistance to individual landowners and municipalities on the adoption and implementation of agriculture retention and development techniques and initiatives. The MCADB also governs agricultural preservation activities in the county, issues decisions in Right to Farm cases, and makes determinations about deed of easement compliance.

Farmland Preservation Program: Staff efforts related to agricultural development and sustainability center on farmland preservation, Right to Farm Program management, and planning. To guarantee a land base of high quality soils for generations to come, the county has been permanently preserving farms since 1987. 5.0 Farmland Preservation Element of this document delves into greater detail about the county's Farmland Preservation Program. The 5.0 Farmland Preservation Element also explains the county's role in implementing the Right to Farm Act, which lends support and guidance to farmers whose farming practices and operations may raise concerns with neighbors and municipalities. Furthermore, the county prepares and interprets local and regional plans and regulations that impact agriculture.

Agricultural Sustainability Plan: Recommendation 9.1 seeks to coordinate the county's agricultural initiatives such as the *Monmouth County Farmland Preservation Plan* and Grown in Monmouth program through one comprehensive guiding document called the *Agricultural Sustainability Plan (ASP)*. The aforementioned Grown in Monmouth



marketing strategy and plan is the first step in the development of a broader *ASP*.

Other Economic Development Supportive Programs: In March 2014, the Monmouth County Board of Chosen Freeholders and the Monmouth County Sheriff's Office announced the [Monmouth County Community Rating System \(CRS\) Assistance Program](#) to assist towns seeking to advance their CRS ranking in an effort to lower flood insurance premiums for residents and businesses in those communities. Towns that take action steps to increase their resiliency to future storm events are eligible for policyholder discounts. In general, the money saved by policyholders is typically spent and recirculated throughout the local community. More information on the Monmouth County CRS Assistance Program and the National Flood Insurance Premium's CRS program can be found in 12.0 Community Resiliency Element.

The Monmouth County Office of Community Development, housed in the Division of Planning, coordinates, implements, and monitors compliance for specific federal grant programs: the [Community Development Block Grant \(CDBG\)](#), [HOME Investment Partnership Program](#), [Emergency Solutions Grant](#), and [HEARTH homeless assistance grants](#). Working with participating communities and various nonprofit agencies, this section oversees a variety of activities that benefit low- and moderate-income households and provide reinvestment funds for U.S. Department of Housing and Urban Development (HUD) qualified communities. More information regarding the Monmouth County Office of Community Development is in 10.0 Community Development & Housing Element.

The 24-mile [Upper Freehold Historic Farmland Byway](#) in Monmouth County captures the unique agricultural, historical, environmental, and cultural traditions still visible in the area around Upper Freehold and Allentown. A visit to this byway offers visitors the opportunity to view history in the context of a working agricultural area (NJDOT

website, 2015). Scenic byways such as this one can be used to further develop agri-tourism and ecotourism by guiding travelers to many of the county's historic sites, agricultural businesses, scenic vistas, greenways, trails, and open spaces. 6.0 Arts, Historic, and Cultural Resources Element details proposals to expand the scenic byway network throughout Monmouth County.

Monmouth County's [Department of Public Information and Tourism](#) maintains a robust webpage along with an up to the minute calendar of events for those seeking to explore the many activities Monmouth County has to offer. They are also responsible for facilitating the development of the annual [Visit Monmouth Travel Guide](#).

More details on other county supportive programs such as the [Shared Services Program](#), the [Monmouth County Improvement Authority \(MCIA\)](#), and the [Monmouth County Real Property Assessment Demonstration Program](#) can be found in the annual *Monmouth County Profile Report*.

9.4.2 Partnership Efforts

The [NJ Department of Agriculture](#) "promotes, protects, and serves the Garden State's diverse agriculture and agribusiness industries." The Division of Marketing and Development oversees the successful statewide branding program, known as Jersey Fresh, for fruits and vegetables and its variants such as Jersey Grown for ornamental plants and Jersey Bred for horses. The division helps organize and support approximately 155 community farmers markets, bringing fresh produce to downtowns and connecting producers and consumers.

The [State Agriculture Development Committee \(SADC\)](#) is Monmouth County's main partner in its farmland preservation efforts. Aside from preservation, agricultural development is another integral part of the agency's mission. A recent endeavor was an upgrade of its farm link website to match farmers and landowners and facilitate leasing, farm



sales, apprenticeships, and estate planning. The new name for the service is [NJ Land Link](#).

The [New Jersey Farm Bureau](#) is a grassroots, membership-based organization that takes policy positions, tracks legislation, and disseminates information to farmers. For example, the organization has been conducting extensive outreach on New Jersey's new farmland assessment rules

[Monmouth County Board of Agriculture](#) is a local, non-governmental organization comprised primarily of farmers who meet monthly to discuss farming issues of local interest and filter agricultural policy positions to the State Board of Agriculture and New Jersey Farm Bureau.

The [New Jersey Agricultural Experiment Station \(NJAES\)](#) conducts research on new strains of crops such as strawberries and tomatoes and tests crops to identify variants most suited to local growing conditions. [Rutgers Cooperative Extension \(RCE\)](#) agents disseminate NJAES findings, counsel the agricultural community on local and statewide agricultural issues and best management practices, and provide training and consultation. RCE promotes healthy food choice programs and houses the New Jersey 4-H Youth Development Program and the Rutgers Master Gardener Program.

The [United States Department of Agriculture \(USDA\)](#) is a technical and financial resource for farmers. The Natural Resource Conservation Service administers a number of grant programs for farm improvements and the Farm Service Agency oversees loan, crop insurance, and disaster assistance programs.

[NOFA-NJ \(Northeast Organic Farm Association – New Jersey Chapter\)](#) has partnered with Duke Farms in Hillsborough, NJ on an agricultural business development project. The organization describes its Incubator

Farm as “a land leasing arrangement for beginning farmers who have farming experience and a business idea, but do not have access to land.” Participants have access to fenced and irrigated land, mentors, equipment, barn space, and business planning and marketing support.

Aside from its partnership with NOFA-NJ, [Duke Farms](#) has established the Urban Agriculture Regional Training Center in conjunction with Growing Power and CityFood Resources. It is sponsoring workshops to train groups and individuals who wish to foster their community food system. Workshop topics include composting and vermiculture, micro-green production, mushrooms, hoop house construction, and aquaponics.

[The FoodBank of Monmouth and Ocean Counties](#) manages its own garden through its volunteer garden program. Volunteers help the FoodBank's farmer with the preparing and tending the soil, planting, watering, weeding, and harvesting the yield from their half-acre onsite garden. While volunteers learn through experience about the seasonality of gardening, the herb and vegetable harvest is distributed to families in need in Monmouth and Ocean Counties.

Municipalities: Municipalities represent the county's most important stakeholders in the region's agricultural and economic development. Municipalities often handle the permits and approvals needed for new agricultural buildings and expanding operations. By taking a proactive approach and responding to trends in agriculture, municipalities may need to adopt and modify their ordinances and zoning codes. Through programs such as Grow Monmouth, Grown in Monmouth, and the Farmland Preservation Program, the county works closely with towns to foster agricultural enterprise, help towns stabilize and increase their commercial tax base, and promote a more business friendly atmosphere.



9.5 Additional Resources and Funding Opportunities

Federal

- [U.S. Department of Agriculture \(USDA\)](#)
 - [Economic Research Service](#)
 - [Land Use, Land Value, and Tenure](#)
- U.S. Economic Development Administration (USEDA)
 - [Funding Opportunities](#)
- U.S. Environmental Protection Agency (USEPA)
 - [Local Foods, Local Places](#)

State

- [Business Action Center \(BAC\)](#)
- [Division of Travel and Tourism](#)
 - [Grant Opportunities](#)
 - Cooperative Marketing Grant
 - Destination Marketing Organization Grant
- [New Jersey Department of Agriculture](#)
 - [Agricultural Education](#)
 - [Jersey Equine](#)
 - [Jersey Fresh](#)
 - [Jersey Fresh Farm to School](#)
 - [Jersey Grown](#)
 - [Jersey Seafood](#)
- [New Jersey Economic Development Authority \(NJEDA\)](#)
 - [Financing and Incentives](#)

County and Local

- [Monmouth County Tourism](#)
- [Monmouth County Workforce Investment Board](#)

Refer to Section 9.4.1 Monmouth County Efforts for discussion on Monmouth County's Grow Monmouth initiative.

Nonprofits, Research Centers, and Other Stakeholders

- [Agricultural Marketing Resource Center](#)

- [Choose New Jersey](#)
- [Eastern Monmouth Area Chamber of Commerce](#)
- [Greater Monmouth Chamber of Commerce](#)
- [Innovation New Jersey](#)
- [Jersey Shore Chamber of Commerce](#)
- [Market Maker: Linking Agricultural and Seafood Markets](#)
- [Monmouth County Chamber of Commerce](#)
- [Monmouth-Ocean Development Council](#)
- [Monmouth/Ocean Small Business Development Center at Brookdale Community College](#)
- [New Jersey Business & Industry Association \(NJBIA\)](#)
- [New Jersey Craft Beer](#)
- [NJ Association of Women Business Owners](#)
- [NJ Vegetable Growers Association](#)
- [NJ Wine Growers Association](#)
- [Northern Monmouth Chamber of Commerce](#)
- [Rutgers Food Innovation Center](#)
- [SCORE Chapter 36 Monmouth County, NJ](#)
- [U.S. Small Business Administration](#)

Refer to the Farmland Preservation Element (5.0) for more agricultural resources.

9.6 Master Plan Recommendations and Stakeholder Strategies

Five *Master Plan* Recommendations and numerous Stakeholder Strategies emerged from meetings and conversations with Working Groups and community stakeholders.

Master Plan Recommendations

Recommendation 9.1: Continue to support the viability of the local agricultural industry through the development and implementation of an *Agricultural Sustainability Plan (ASP)* for Monmouth County. A comprehensive *ASP* that coordinates farmland preservation, right-to-farm, agri-tourism, business expansion, and marketing is necessary for agricultural viability. The *ASP* requires participation from other county



departments, such as the Division of Economic Development, state agencies, municipalities, and stakeholders that have a vested interest in Monmouth County's agriculture industry. Although the county has made great strides in planning for and acquiring farmland, the ASP will support the continuation of the program by helping identify ways farmers can gain a competitive advantage in the marketplace to ensure their long-term commercial success.

Recommendation 9.2: Incorporate the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)* as a component of the Agriculture & Economic Development Element of the *Monmouth County Master Plan*; recognizing the CEDS as the county's economic development plan. Incorporating the *Monmouth County CEDS* by reference into the *Monmouth County Master Plan* aligns the Division of Planning efforts with those of the Division of Economic Development and provides the county with an investment strategy that supports overall long-term economic development goals. The *Master Plan* and *Monmouth County CEDS* seek to expand employment, improve business investment, add value to our tax base, and motivate more public and private investment in growth areas particularly in places designated for redevelopment such as Fort Monmouth and the Bell Works property in Holmdel.

Recommendation 9.3: Provide professional and technical support for the efforts performed by the Monmouth County Division of Economic Development that promote the long-term economic and agricultural viability of the county such as assisting with the implementation of the *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)* and Grow Monmouth programs. The Division of Planning produces documents and participates in activities that support general economic development in the county. These efforts include the annual *Monmouth County Profile Report*, annual *Monmouth County At-A-Glance*, the proposed *Monmouth County New Residential Survey Study*, participation in the annual bond calls, specialized demographic and

economic reports, market analysis, community development programming, and geographic information system (GIS) mapping and analysis. The Grow Monmouth initiative and the *Monmouth County CEDS* support a primary value of the *Monmouth County Strategic Plan (2009)* which is the promotion of the county's economic health. As such, the Division of Planning will continue to produce data, reports, studies, and analysis used by the county for agricultural and economic development purposes.

Recommendation 9.4: Develop model ordinances for municipalities that will help expand and develop agricultural businesses while decreasing the number of Right to Farm cases brought before the Monmouth County Agriculture Development Board (MCADB). The development and implementation of model ordinances and the promotion of generally accepted agricultural management practices (AMPs) reduces the number of right-to-farm conflicts in a community and diminishes environmental impacts from farming operations. With increased consumer interest for direct grower-consumer relationships, organic farming, exotic and unique foods, farm to table, and customized agri-tourism experiences, the remaining farms in the county have great potential to expand revenue. The Division of Planning can assist towns seeking ways to reduce conflicts between emerging agribusiness operations and existing land uses.

Recommendation 9.5: Through coordination between the Monmouth County Agriculture Development Board (MCADB) and the Development Review Section of the Division of Planning, draft and implement a required statement of acknowledgement for site plans and subdivision plats proposed in an Agricultural Development Area (ADA) to help raise awareness of potential neighboring agricultural activities and potentially reduce right-to-farm complaints. This type of advisory is intended to raise awareness for investors that a property is in an agricultural area and that neighboring parcels may be eligible for Right to Farm Act protections. Incorporating such language onto plats



provides another level of disclosure for those seeking to develop property in agricultural areas. It also validates local policies intended to help sustain the local agricultural economy.

Stakeholder Strategies

General

- Through the Division of Economic Development, and with assistance from the county’s agricultural program planners in the Division of Planning, explore the potential for creating a revolving loan program to provide farmers with small business loans and access to credit particularly for small loans.
- Support partnerships between the local government, nonprofits, educational facilities, and community stakeholders to create community gardens, as well as establish venues and events to sell locally made, value-added products (e.g. farm stands, farmers markets, and annual Made in Monmouth Expo).
- Encourage rural municipalities to consider adopting land use measures to accommodate agricultural workers’ housing since the New Jersey Right to Farm Act does not include protections for agricultural worker housing.
- Recommend to the State Agriculture Development Committee (SADC) to include agriculture labor housing as a protected activity under the Right to Farm Act.

Community Development & Housing

- Continue to allocate a portion of Monmouth County’s Community Development Block Grant (CDBG) annual funding to support economic development through the Grow Monmouth Façade Improvement Program.
- Support efforts to have the state recognize onsite affordable housing for agricultural workers as a means of addressing Council on Affordable Housing (COAH) obligations in rural locales.
- Assist in identifying CDBG eligible project opportunities in the county’s rural areas, particularly through the U.S. Department of

Housing and Urban Development’s (HUD) Rural Innovation Fund (RIF), which supports innovative housing and economic development in rural areas.

- Identify opportunities and assist with the creation of municipal ordinances that provide for the development of special needs facilities and institutions for the developmentally disabled located in agricultural areas and on farms that provide housing for residence and life skill development through agricultural education and experiences (e.g. [Camphill Association of North America](#)).

Community Resiliency

- As part of economic resiliency and recovery, support policies that provide for the diversification of our agricultural economy in response to marketplace transitions (e.g. value-added products, vineyards and wineries, and agri-tourism).
- Encourage farms and small businesses to develop plans for debris cleanup after severe weather events to ensure their timely reopening.
- Research program funding that provides small business training in resiliency methods and practices.
- Refer to [Additional Guidance on Building Requirements to Mitigate Agricultural Structures’ Damage in High- Risk Areas Is Needed](#) (GAO-14-583: Published: June 30, 2014. Publicly Released: July 29, 2014) for recommendations on how to better protect agricultural property in high-risk flood hazard areas
- Refer to [Homestead and Farm Resiliency Principles in Practice, NOFA 2013](#) (Ben Falk) as a success story in small farming and gardening methods for resiliency and sustainability.

Sustainable Places

- Encourage the repurposing of existing farm structures as the agricultural industry transitions (i.e. the repurposing of equine infrastructure for wine/distillery/brewery or other value-added products).
- Recycle and reuse debris from storm-related events to lessen the



need for new building materials.

- Support local food accessibility through Community Supported Agriculture (CSA) initiatives, community gardens, urban gardens and farms, rain gardens and school gardens.
- Support community composting efforts that will increase soil health, productivity and reduce landfill waste.
- Work with the Monmouth County Park System (MCPS), Monmouth County Agriculture Development Board (MCADB), Division of Economic Development, Rutgers Cooperative Extension (RCE), educational institutions, and SADC to promote the concept of incubator farms and programs that support agriculture career training, which help propagate the next generation of local farmers.
- Direct farmers to RCE, Northeast Organic Farm Association (NOFA), and other organizations that offer training in crop diversification techniques and introduce farmers to new crops and succession planting.

Healthy Communities

- Increase community access to healthy foods and food options that are grown locally through the support of local food movement initiatives such as CSAs, small farm operations, farmers markets and community gardens, thus working to eliminate the county's food deserts.
- Continue to support agricultural Best Management Practices (BMPs) that reduce the use of chemicals and fertilizers that can adversely impact groundwater and surface water quality.
- Provide educational opportunities to the public through farm tours and operational demonstrations, enhancing general awareness of the local community food systems.

Natural Resources & Open Space

- Retain soil on farms, a primary tenet of agricultural sustainability.
- Continue to support agricultural BMPs that reduce runoff and soil erosion that negatively affects streams and eventually downstream

communities and ecosystems in the watershed

- Conserve open space which in turn, increases the economic value of adjacent and nearby properties.
- Preserve marginal agricultural lands for their natural resource value through the implementation of conservation and preservational zoning techniques.
- Agricultural program planners in the Division of Planning continue to work closely with the MCPS in acquiring preserved farmland concurrent with open space acquisition efforts in locations containing agricultural assets.
- Emphasize that farmland provides areas of limited disturbance, which are necessary for effective groundwater recharging of aquifers and other drinking water sources.
- Improve groundwater recharge through the reestablishment of marshlands and natural upstream barriers to improve water quality, reduce runoff, and downstream flooding.
- Continue to endorse and encourage the use of best land management and stewardship practices as recommended by the Natural Resource Conservation Service (NRCS) and RCE.

Farmland Preservation

- Retain current (and often historic) land use via farmland preservation and maintain and enhance the local economy through agricultural job retention and creation.
- Purchase agricultural easements to supply landowners with capital to grow their farming operations, hire additional workers, and make physical improvements to their business.
- Preserve concentrations of farms to sustain interrelated support businesses (i.e. numerous horse farms are needed as clients for a successful feed store or veterinarian office).
- Sustain farms proximate to consumers and local markets to reduce transportation and production costs.
- Generate awareness and promote products grown on preserved farms.



Arts, Historic, & Cultural Resources

- Raise awareness of our agrarian heritage through living history farms, such as MCPS's Historic Longstreet Farm and preserve the history of farming through museums, museum exhibits, signage, and county agricultural fairs.
- Use the Grown in Monmouth initiative to connect local farmers and institutional users and to assist farmers in marketing their products to potential clients. Additionally, Grown in Monmouth destinations could be promoted by the use of informational signs on county roadways; for instance "Wineries" or "Pick Your Own" directional signs.
- Promote agriculturally compatible businesses in rural areas, such as bed and breakfasts, that make use of historic structures and attract tourists into the region.
- Raise awareness of our county's agricultural heritage through wayfinding techniques, such as including the history of the U.S. Route 9 corridor and poultry farming in Howell, as part of a Monmouth County Scenic Byway Program.
- Strengthen the link and association between the arts, cultural, and historic hubs and economic development opportunities.
- Participate on the Upper Freehold Historic Farmland Byway Committee to promote implementation of recommendations outlined in the [Upper Freehold Historic Farmland Byway Corridor Management Plan \(2010\)](#).

Utilities

- Support promulgated legislation and rules that further the ability of farms to enhance onsite energy production and storage thereby reducing costs and lessening the burden on the grid.
- Recapture rainwater via rain barrels, basins, greenhouse water recycling systems, rain gardens, etc., to lessen water utility service needs and to reduce resident's long-term utility cost.
- Encourage reuse of capped landfills and brownfields for sites of alternative energy, rather than greenfield sites.

- Encourage new development to locate near existing utilities and infrastructure while discouraging the programming of water and sewer utilities into rural locales.
- Support the use of tax and financial incentives for businesses that use renewable energy.

Planning Services, Outreach, & Coordination

- Encourage 4-H Youth Development and Mentoring Programs (4H) and National Future Farmers of America Organization (FFA) programming in schools and nonprofit organizations to provide local agriculture education in addition to business and life skills.
- Utilize Monmouth County facilities including those administered by the MCPS and Brookdale Community College to provide workforce training outreach.
- Encourage nonprofits, businesses, and local institutions to sponsor educational workshops, internships, and apprenticeships.
- Match vocational training/educational opportunities to current and emerging job markets.
- Encourage institutions to offer programs like those found at the FoodBank of Monmouth and Ocean Counties that use locally grown produce in their culinary courses and that operate their own gardens as a source of much needed fresh food for clients.

Transportation & Mobility

- Improve public transportation infrastructure and access to multi-modal transportation to lessen reliance on private vehicle use and reduce congestion, allowing for better movement of goods, employees, and customers.
- Improve the transportation connections between eastern and western Monmouth County, connecting the producers in western Monmouth with the consumers in eastern Monmouth.
- Improve transportation options in rural areas through means such as ridesharing, bicycle lanes and sharrows, vanpool options, and shuttles.
- Connect low car-ownership communities (e.g. group homes, senior



communities, assisted living facilities, and college campuses) to local markets and farmers stands/markets via ride sharing and shuttles.

- Review existing agricultural roadways' turning radius to accommodate farm vehicles and trucks.





10.0 Community Development & Housing

10.0 COMMUNITY DEVELOPMENT & HOUSING MASTER PLAN RECOMMENDATION 10.1

10.1: Form a Consolidated Plan Implementation Committee (CPIC) to help guide the Office of Community Development (CD) and HOME Consortium's Five-Year Strategy Submission for Housing and Community Development Programs (Five-Year Consolidated Plan) and Annual Action Plan: One Year Use of Funds (Annual Action Plan) in a manner consistent with achieving the Goals, Principles, and Objectives (GPOs) of the Monmouth County Master Plan.

Purpose

Currently there is no one "umbrella" committee to provide the Office of CD with assistance in overseeing the coordination of community development programs either internally or with the GPOs established in the *Master Plan*. It is recommended that an oversight committee be formed comprised of representatives from county departments and agencies, stakeholders from existing Office of CD committees, as well as other community development stakeholder groups to help guide the process.

Monmouth County Departments & Organizations Involvement

Division of Planning	The Director, Assistant Director, and Community Development Program Director participate as members of the CPIC.
Division of Economic Development	Participate as a member of the CPIC.
Fair Housing Board	Fair Housing Board Chair to participate as a member of the CPIC.

Other Project Stakeholder Involvement

Municipalities	Community Development Block Grant (CDBG) Committee Chair to participate as a member of the CPIC.
Non-Consortium Municipalities	Representatives from each of the three non-consortium communities (Asbury Park, Long Branch, Middletown) to participate as members on the CPIC.
Monmouth County Homeless Collaborative Service (HSC)	Homeless Services Collaborative (HSC) Chair to participate as a member of the CPIC.



Long Branch Housing Authority, Long Branch

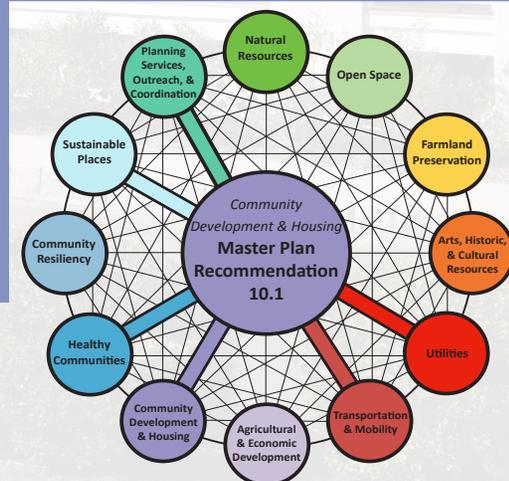
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 10.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Prepare an agenda of relevant topics for discussion and convene a meeting of potential stakeholder representatives.
- Collaborate with stakeholders to devise and approve a new committee structure.
- Include the approved committee into future U.S. Department of Housing and Urban Development (HUD) documents.



**Strongest Associated
Master Plan Elements**

10.0 COMMUNITY DEVELOPMENT & HOUSING MASTER PLAN RECOMMENDATION 10.2



Long Branch Housing Authority, Long Branch

Source: Steve daCosta

10.2: Incorporate the Goals, Principles, and Objectives (GPOs) of the *Monmouth County Master Plan* into the Office of Community Development's (CD) *Five-Year Strategy Submission for Housing and Community Development Programs (Five-Year Consolidated Plan)* to better align community development projects and programs with intended outcomes through the appropriation of funds from the Community Development Block Grant (CDBG) Program, HOME Investment Partnerships Program (HOME), and Emergency Solutions Grants Program (ESG).

Purpose

The Office of CD is responsible for allocating federal funds received from the U.S. Department of Housing and Urban Development (HUD) for three major programs: CDBG, HOME, and ESG. Committee representatives from each program meet annually to evaluate applications and to recommend the appropriate allocation of available funds. Until now there has been little coordination between project allocations and *Monmouth County Master Plan* GPOs. In order to achieve the desired outcomes established in the *Monmouth County Master Plan*, it is suggested that an oversight committee (Recommendation 10.1) evaluate current community development grant policies and formulate recommendations on ways to improve public investment strategies (community development program allocations) with public and private result oriented outcomes (*Master Plan* GPOs).

Monmouth County Departments & Organizations Involvement

Division of Planning	Facilitate meetings of the Consolidated Plan Implementation Committee (CPIC); prepare agenda items for discussion; recommend program changes to the CPIC for review and consideration; prepare the <i>Five-Year Consolidated Plan</i> .
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Other Project Stakeholder Involvement

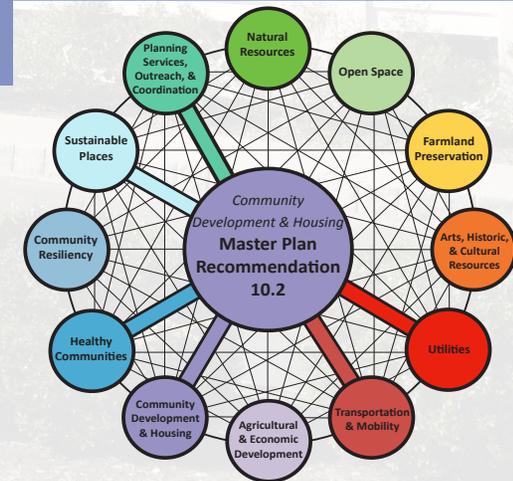
Consolidated Plan Implementation Committee (CPIC)	Assist Division of Planning and the Office of Community Development with preparing the <i>Five-Year Consolidated Plan</i> .
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Master Plan Goals, Principles, & Objectives (GPOs) Relating to 10.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- The CPIC to assist the Division of Planning with the preparation of the *Five-Year Consolidated Plan*.



**Strongest Associated
Master Plan Elements**

10.0 COMMUNITY DEVELOPMENT & HOUSING MASTER PLAN RECOMMENDATION 10.3



Long Branch Housing Authority, Long Branch

Source: Steve daCosta

10.3: Evaluate and recommend changes to the Office of Community Development’s (CD) existing standing committees’ structure to align current community development programming with the overall Division of Planning program.

Purpose

It has been some time since there has been a comprehensive review of the Office of CD’s committee structure to evaluate their effectiveness in program operations. In many instances, these committees are a requirement of HUD in support of public outreach. However, there may be an opportunity to reorganize committees so they provide better support for the Office of CD’s annual programming and play a more prominent role in the five-year consolidated planning process. The Consolidated Plan Implementation Committee (Recommendation 10.1) should lead the process of committee review and make suggestions on how to improve the current organizational structure so it better aligns with *Monmouth County Master Plan* Goals, Principles, and Objectives (GPOs).

Monmouth County Departments & Organizations Involvement

Division of Planning	Facilitate meetings of the Consolidated Plan Implementation Committee (CPIC); prepare agenda items for discussion; recommend program changes to the CPIC for review and consideration.
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Other Project Stakeholder Involvement

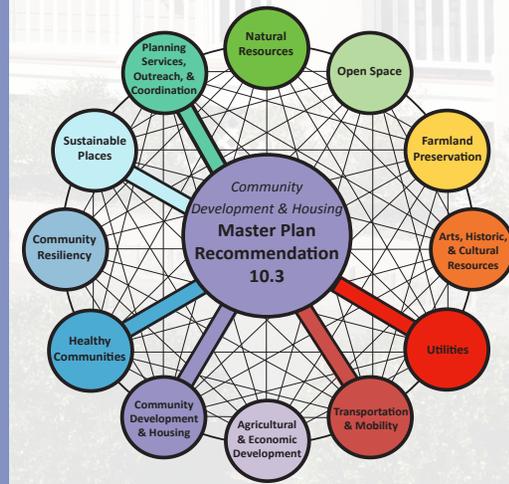
CPIC	Review and provide input on recommended committee structure changes as proposed by the Division of Planning, assist with the development of CPIC guiding documents.
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Master Plan Goals, Principles, & Objectives (GPOs) Relating to 10.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Facilitate meetings of the CPIC; prepare agenda items for discussion.
- Devise a CPIC subcommittee structure based on community development programming requirements.
- Determine which type of guiding documents (e.g. bylaws, purpose, mission statement, program guidelines) will be needed to manage the CPIC and associated subcommittees.
- Prepare guiding documents.
- Achieve required support from the Monmouth County Board of Chosen Freeholders (MCBCF) to implement committee structure changes.
- Approved recommendations to committee structures and incorporate them into the Office of CD planning documents such as the *Five-Year Strategy Submission for Housing and Community Development Programs (Five-Year Consolidated Plan)*.



Strongest Associated Master Plan Elements

10.0 COMMUNITY DEVELOPMENT & HOUSING MASTER PLAN RECOMMENDATION 10.4



Long Branch Housing Authority, Long Branch

Source: Steve daCosta

10.4: Work with other county departments and agencies in identifying potential county projects eligible for Community Development Block Grant (CDBG) funding.

Purpose

The CDBG Program allocates annual grants to larger cities and urban counties to develop viable communities by providing decent housing, suitable living environments, and opportunities to expand economic opportunities, principally for low- and moderate-income persons (HUD, 2014). The CDBG Program has been used primarily to fund eligible municipal projects however there may be instances where a county improvement project would be eligible for CDBG funding.

Monmouth County Departments & Organizations Involvement

Division of Planning	Facilitate meetings of the Monmouth County CDBG Committee; work with host communities in identifying eligible county projects; submit eligible projects to County Administration for further consideration; apply for CDBG funds if necessary.
County Administration	Approve the Division of Planning and Department of Public Works and Engineering to prepare and submit applications for CDBG eligible projects on behalf of Monmouth County.
Department of Public Works and Engineering	Work with the Division of Planning in identifying CDBG eligible projects.
Other County Departments	Work with other county departments and agencies in identifying CDBG eligible projects.

Other Project Stakeholder Involvement

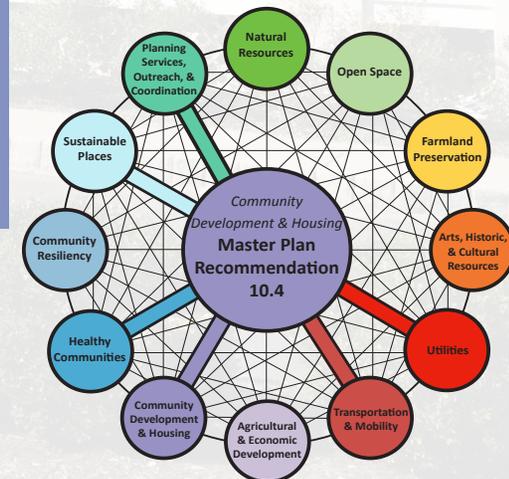
Municipalities	Work with host communities in identifying county projects eligible for CDBG funding in their community.
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Master Plan Goals, Principles, & Objectives (GPOs) Relating to 10.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination	●	●												
C. Planning Approach		●												
D. Environmental Resources	●													
E. Farmland Preservation														
F. Arts, Culture, & Historic							●							
G. Preservation Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														●

Implementation Strategy

- Form an internal committee comprised of county departments and agencies to identify potential CDBG eligible projects.
- Make recommendations to Monmouth County Administration on which projects to pursue for funding.
- Apply for CDBG funding for eligible projects.



Strongest Associated Master Plan Elements

10.0 COMMUNITY DEVELOPMENT & HOUSING MASTER PLAN RECOMMENDATION 10.5



Long Branch Housing Authority, Long Branch

Source: Steve daCosta

10.5: Initiate a new housing study for Monmouth County that examines existing market conditions and identifies recent housing development trends, including new construction and redevelopment of existing housing stock, that have evolved in response to new cultural and economic realities, housing affordability concerns, and shifting household demographics.

Purpose

Prior to Superstorm Sandy, the Division of Planning produced an annual *Monmouth County New Residential Development Survey* that provided readers and stakeholders insight into new residential development activities taking place in Monmouth County. The survey was placed on hiatus after Superstorm Sandy until such time that a more normalized housing market emerged after most storm reconstruction efforts were completed. Although a new residential survey would be part of this report, there is the need to provide a more comprehensive analysis that includes the existing housing stock analysis (which accounts for a majority of home sales in the county) and its influence on regional economic growth and development.

Monmouth County Departments & Organizations Involvement

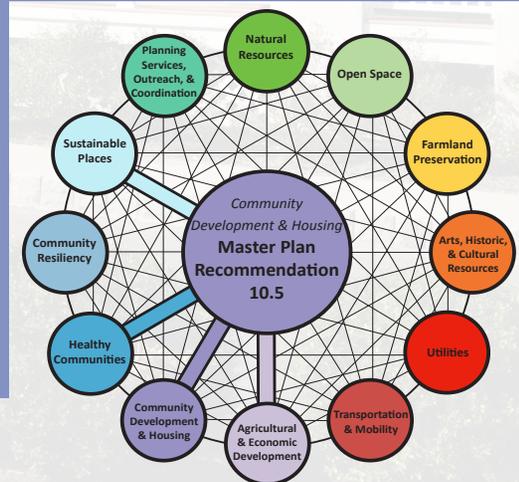
Division of Planning	Produce a new comprehensive housing study; consider providing either annual or biannual updates to the <i>Monmouth County New Residential Development Survey</i> ; conduct a comprehensive update of the study every five years.
Division of Economic Development	Assist with the data collection and provide input on the report.
Board of Taxation	Provide assistance on residential tax base information and data collection.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 10.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- The Office of Community Development (CD) is to establish a team of professional staff from the Division of Planning, Office of Economic Development, and the Board of Taxation to collaborate on the creation and development of this report.
- The Office of CD work program is to provide updates of the *Monmouth County New Residential Development Survey* section of the report.
- The Office of CD work program will provide for a comprehensive update of the *Monmouth County New Residential Development Survey* approximately every five years.



Strongest Associated Master Plan Elements

10.0 Community Development & Housing

10.1 Introduction

Community development can be described as the collective process whereby stakeholders in a given community participate in and advocate for both equitable and beneficial economic, social, and environmental outcomes, particularly for those that may be disadvantaged or powerless. As populations change in size, age, and diversity the effective provision of community services becomes an increasingly necessary component of protecting and preserving residents' quality-of-life. Community development initiatives within Monmouth County include: increasing economic and housing opportunities for low-and moderate-income residents, the expansion and improvement of public facilities and infrastructure, and increasing the development and accessibility of human services. The Monmouth County Office of Community Development (herein referred to as CD) coordinates, implements, and monitors participant compliance for three federal entitlement programs: the Community Development Block Grant (CDBG), HOME Investment Partnerships Program (HOME), and Emergency Solutions Grant (ESG). The overall goal of these federally funded initiatives is to effectively develop and maintain viable urban communities.

10.2 Existing Conditions

10.2.1 Community Development Committees

Through collaboration with various committees, CD staff develops partnerships amongst all levels of government, the private sector, and for-profit and nonprofit institutions. The use of committees provides a convenient means for the continuous exchange of ideas and information, helping link municipalities within a regional context. Participation by the Monmouth County Division of Planning staff allows for connections between Division of Planning objectives and the established U.S. Department of Housing and Urban Development (HUD)

principles, allowing for more efficient expenditures of allocated funds. This approach strongly supports *Monmouth County Master Plan (2016)* Goal #1 'Promote a comprehensive approach to planning and coordinate these efforts among all levels of government and with our community stakeholders.' Master Plan Recommendation 10.3 speaks directly to reevaluating the existing committees' structure, determining their current effectiveness, and to recommend changes to help streamline the committee process. In the interim, each committee should work on identifying how their particular program can promote outcomes that are better aligned with the Goals, Principles, and Objectives (GPOs) of the *Master Plan* as well as other Division of Planning activities.

Monmouth County Fair Housing Board: As an annual recipient of CDBG funding, Monmouth County is required by HUD to sufficiently address the fair housing certification that accompanies each *Annual Action Plan*. In 1988, the Board of Chosen Freeholders passed a resolution establishing the Monmouth County Fair Housing Board. This entity advises on matters pertaining to fair housing policy at both the state and federal levels. The obligations of the Fair Housing Board include: promoting housing and services for affordable and habitable housing to the residents of Monmouth County, promoting fair housing, fair lending, and prohibiting discrimination on the basis of race, color, religion, gender, national origin, ancestry, handicapped status, affectional or sexual orientation, and marital status in the sale, rental, or financing of residential dwellings. The Monmouth County Fair Housing Board consists of a minimum of 15 and a maximum of 21 members, each appointed by the Monmouth County Board of Chosen Freeholders (MCBCF).

Community Development Block Grant (CDBG) Committee: This committee is a public entity serving as a cooperative means of distributing federal grant allocations. Through an interlocal services agreement between Monmouth County and participating municipalities, the CDBG Committee functions as an advisor to the



MCBCF. This committee reviews and recommends municipal and nonprofit project applications, evaluates local community development needs, and develops priorities for the federally allocated CDBG funds. Each participating municipality appoints a representative (and one alternate) to officially represent the municipality in all community development committee related matters.

Citizen Participation Group (CPG): A subset of the CDBG Committee, the CPG advises the MCBCF on how best to serve the interests of low- and moderate-income residents throughout the county. With procedural requirements outlined within the *Monmouth County Citizen Participation Plan*, this group offers the public opportunities to become involved in the CDBG Program by presenting opportunities to comment and participate within the project allocation process.

Emergency Solutions Grant (ESG) Committee: The purpose of the ESG Committee is to evaluate applications submitted for ESG Program funding. The Monmouth County Office of CD partners with the Monmouth County Department of Human Services and other local stakeholders to review project applications, and advise the MCBCF as to the most efficient funding allocations. The ESG Program is designed to identify sheltered and unsheltered homeless persons as well as those at risk of homelessness, and provide the services necessary to help these persons quickly regain stability.

HOME Project Review Committee: This committee, an assemblage of staff from the Monmouth County Finance Department, Division of Planning, and the Office of CD, thoroughly reviews project applications. After each applicant presents its proposals, the committee carefully evaluates potential local and regional benefits, and recommends projects and specific grant allocations to the MCBCF. The Consolidated

Planning Process, as defined by HUD, provides a framework for community-wide dialogue to identify housing and community development priorities that both align and focus allocated funding from three federal formula block grant programs: CDBG Program, HOME Program, and ESG Program ([HUD Exchange](#)). The Monmouth County Office of CD creates annual budgets for more than \$7.5 million in federal grants, distributing funds for a variety of projects. Additionally staff fulfills mandatory federal reporting requirements consisting of tracking expenditures and quantifying specific project accomplishments.



New townhomes under construction near Cookman Avenue, Asbury Park

Source: Steve daCosta



This planning process is completed through a variety of plans and documents, outlining the allocation and commitment of funds that advance HUD's core goals.

10.2.2 Supportive Reports and Guiding Documents

Five-Year Consolidated Plan: On behalf of the MCBCF, the Office of CD applies for three federal grant programs through a single application process, the *Five-Year Strategy Submission for Housing and Community Development Programs* (known as the *Five-Year Consolidated Plan*). The *Five-Year Consolidated Plan* serves as Monmouth County's official housing policy and community development planning guide. HUD sets forth three identifiable goals when evaluating a jurisdiction's *Five-Year Consolidated Plan*:

- Increase the availability, affordability, and sustainability of decent housing;
- Providing suitable living environments; and
- Promotion of economic development.

When writing the *Five-Year Consolidated Plan*, grant recipients assess local market conditions, existing affordable housing supplies, and determine priority and future community development needs. This analysis allows jurisdictions to establish data-driven, place-based investment decisions for the ensuing five-year period. Through a collaborative process involving consortium participating municipalities, local nonprofit housing and service providers, affordable housing developers, housing authorities, health agencies, and other interested parties CD staff identifies the specific needs of the county's low- and moderate- income residents.

The *Monmouth County Master Plan* recommends (Recommendation 10.1) that for the *2020-2025 Five-Year Consolidated Plan*, the Office of CD launch an Implementation Committee to help oversee and guide the planning process in a manner that is consistent with the *Master Plan* Goals, Principles, and Objectives (GPOs). The current [2015-2019 Five-](#)

[Year Consolidated Plan](#) specifies goals the county aims to achieve over the (plan established) five-year period:

- Increase affordable rental housing and homeownership opportunities
- Fund owner-occupied housing rehabilitation
- Improving public facilities and municipal infrastructure
- Expand public services and economic development opportunities

The *2015-2019 Five-Year Consolidated Plan* presents a directed course of action the county and consortium of participating municipalities can undertake towards achieving these established objectives. Additionally, in an effort to track yearly goal progress this document delineates detailed performance measures

Annual Action Plan: The *Annual Action Plan* stands as a HUD-established monitoring requirement of the Consolidated Planning Process. The *Annual Action Plan* provides a concise summary of the actions, activities, and specific federal and non-federal funding resources that will be used each year to address the priority needs and specific goals identified within the Consolidated Plan. At the conclusion of each fiscal year, the Office of CD submits to HUD a *Consolidated Annual Performance and Evaluation Report (CAPER)*, outlining grant expenditures and a discussion of specific program accomplishments. *Master Plan* Recommendations 10.1 and 10.2 call for stronger alignments between the *Five-Year Consolidated Plan*, *Annual Action Plan*, and the community outcomes sought through the *Monmouth County Master Plan* GPOs. The most recent plans are [The County of Monmouth Annual Action Plan](#) submitted in March 2016 and the [Monmouth County CAPER](#) submitted in May 2016.

Citizen Participation Plan (CPP): Citizen engagement allows community members to become actively involved within the decision-making process. According to the Federal Housing and Community Development Act of 1974, federal grantees are legally required to



provide citizens reasonable opportunities to participate in CDBG activities from the beginning to the end. Monmouth County developed a detailed *CPP*, outlining how community members and other stakeholders can engage in planning, implementation, and evaluation of housing and community development programs. The most recent *CPP* was adopted by the MCBCF on March 13, 2014.

Limited English Proficiency/Language Assistance Plan (LEP/LAP): Title VI of the Civil Rights Act of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activities that receives federal financial assistance. LEP persons are defined as persons who do not speak English as their primary language and who have limited ability to read, write, speak, or understand the English Language. The Office of CD's *LEP/LAP* details specific methodology utilized by staff to encourage participation by non-English speaking persons.

Based on the (HUD required) four-factor analysis to determine limited English proficiency, it was determined Monmouth County will experience significant growth in the Spanish speaking population. In response to this emerging population trend, the Monmouth County *LEP/LAP* recommends that vital documents be translated into Spanish. The remaining LEP populations which exceed the HUD-established 1,000-person threshold, comprise approximately 2.1% of the total LEP population. The *LEP/LAP* recognizes the Monmouth County Office of CD Director as the LEP Coordinator, establishes language resource office protocols, staff training procedures, monitoring and updating to the LEP, and methods for filing complaints. The most recent *Limited English Proficiency/Language Assistance Plan* was last updated in January 2015.

Analysis of Impediments to Fair Housing Choice (AI): As part of the Consolidated Planning Process HUD requires CDBG grantees to submit a

plan outlining efforts to Affirmatively Furthering Fair Housing (AFFH) within local communities. In 2011, a working group was established including members of the Fair Housing Board, the Office of CD, and Division of Planning staff. This committee identified Monmouth County-specific barriers to fair housing choice. The final *2011 Analysis of Impediments to Fair Housing Choice* serves as a review of impediments for all protected classes, and as a foundation for the county's current and future fair housing planning initiatives.

The impediments determined to have significant impacts on low-and moderate-income residents' accessibility to fair housing choice within Monmouth County's *2011 AI* are:

1. Limitation of zoning and site selection for affordable housing developments
2. Environmental issues and constraints
3. High municipal property taxes and the cost of education
4. Gaps in transportation availability
5. Issues concerning public housing authorities
6. Expiring affordability controls in subsidized housing
7. Restrictive lending policies and practices
8. Limited resources and funding for programs that promote fair and affordable housing
9. Low educational achievement levels in select areas
10. Limitations on fair housing data collection methods
11. Lack of supportive housing for teens and young adults aging out of foster care
12. Lack of sufficient accessible housing for the disabled
13. Improvement in fair housing legislation at the state-level

Many of these problems are complex structural issues, with proposed solutions intended to be initiated over time. The Office of CD and the Fair Housing Board maintain and facilitate the actions discussed within the *2011 AI*. Not all proposed actions could be undertaken immediately



upon publication of the document, nor did they all fall under the jurisdictional oversight of the county.

In December 2015, HUD released the finalized AFFH rule, replacing the current AI (for which no format existed) with a standardized Assessment of Fair Housing form. This proposal dictates that CDBG participants will utilize a HUD-established Assessment Tool to evaluate fair housing choice, identify existing barriers to fair housing choice, and set and prioritize goals to overcome these barriers. This tool allows a jurisdiction’s fair housing analysis to be principally based on HUD-provided data, with additional input from other local and regional data sources. This AFFH will be submitted in advance of preparing the 2020-2025 Five-Year Consolidated Plan to ensure priorities, strategies and future activities cohesively incorporate this analysis.

The *Master Plan* calls for a new housing study to examine existing market conditions and identify recent residential development trends, including new construction as well as redevelopment of existing housing stock, that have evolved in response to new cultural and economic realities, housing affordability concerns, and shifting household demographics (Recommendation 10.5). This study will dovetail with the Office of CD’s efforts to identify ways to better evaluate local housing market conditions in Monmouth County, as well as influence other community partners in the removal of barriers to fair housing choice.

10.2.3 Housing Overview

Both population and housing units generally share an upward trend, with population growth serving as a major contributory factor to housing expansion.

However, the growth rates of Monmouth County’s population and housing units have fluctuated over the past fifty years as illustrated in Figure 10.1: Population: Housing Growth Rate Comparison 1950-2010. Between 1950 and 1970, the county’s population increased by approximately 43.2% each decade, outpacing the rate of housing expansion. During the same time period, the number of housing units in the county increased approximately 35.0% per decade. The 1970s and 1980s brought significant residential growth to the county with the number of housing units increasing by 20%, while population growth averaged 10% growth. Between 1990 and 2000, the county’s population grew 11.2% as compared to the number of housing units

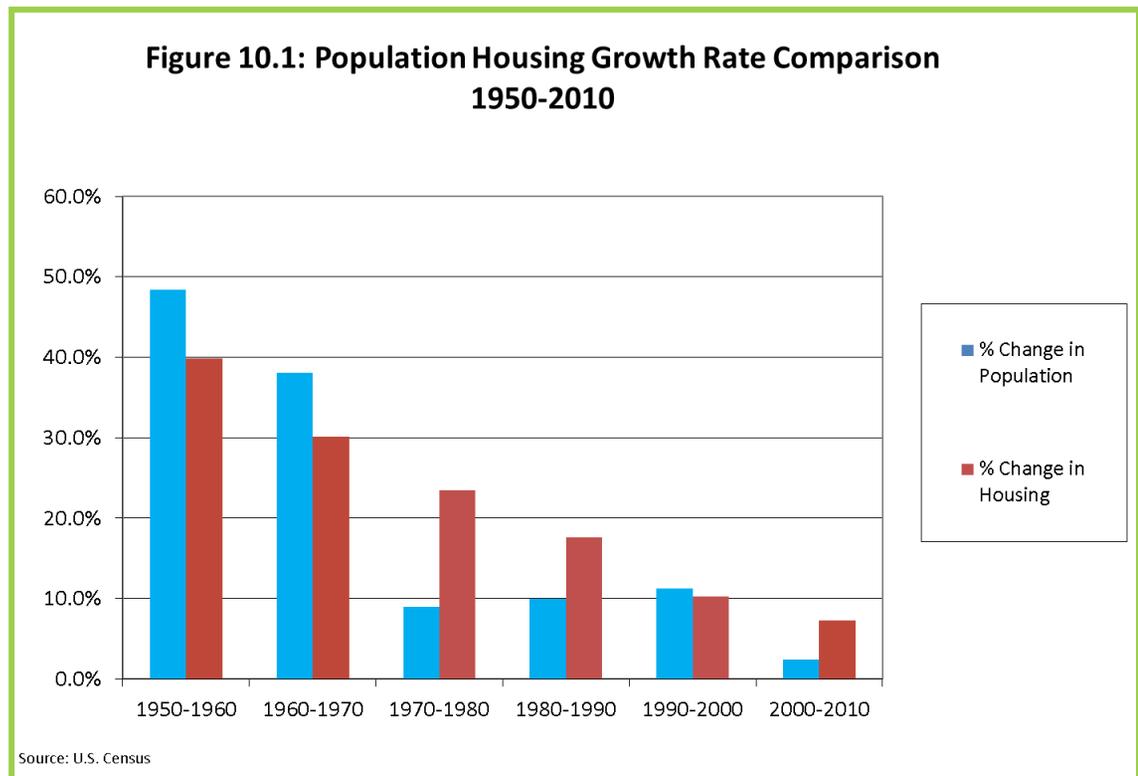


Figure 10.2: Monmouth County Residential Trends 1980-2014

Type of Unit	1980		1990		2000		2014	
	Total	% of Total						
1-unit Detached	122,220	67.6%	143,754	65.8%	161,048	67.0%	169,957	65.1%
1-unit Attached	5,213	2.9%	15,151	6.9%	19,766	8.2%	19,752	7.6%
2-4 units	17,811	9.8%	17,364	8.0%	19,031	7.9%	18,320	7.0%
5 to 9 units	6,354	3.5%	8,703	4.0%	9,520	3.9%	12,003	4.6%
10+ units	27,119	15.0%	27,019	12.4%	28,224	11.7%	37,324	14.3%
Mobile Home and Other	2,168	1.2%	6,417	2.9%	3,295	1.3%	3,398	1.3%
Total Housing Units	180,885	100.0%	218,408	100.0%	240,884	100.0%	260,754	100.0%

Source: U.S. Census, American Community Survey 2014

which increased 10.3%. The 2010 U.S. Census reported Monmouth County had 258,410 housing units, an increase of 7.3% from 2000. Over the same time period, the population only grew by 2.5%. Figure 10.2: Monmouth County Residential Trends 1980-2014 illustrates that between 1980 and 2014, 79,869 new units were added to Monmouth’s total housing inventory, a 44.2% increase. During the previous three decades, new residential development within the county had been predominately single-family housing. Since 1980, 62,276 or 78% of all new housing units were classified as single-family; 47,737 detached and 14,539 attached. In 1980, single-family attached (e.g. townhomes and duplexes) encompassed 2.9% of all housing units; in 2014 this category encompassed 7.6% of all housing units. During the same time period, multi-family units increased by 16,363 units, or 31.9%. A significant portion of this growth occurred in developments having ten or more units. Between 1980 and 2014, this development category increased by 10,205 units.

Of the 258,410 housing units counted during the 2010 U.S. Census, 233,983 (90.5%) were reported as occupied; 74.9% were owner

occupied and 25.2% were renter occupied. Comparatively, the 2000 U.S. Census reported Monmouth County as having 224,236 occupied units of which 74.6% were owner occupied and 25.4% were renter occupied. Between 1980 and 2010, the number of owner-occupied housing units increased by 47,272, while the number of renter-occupied housing units increased by 6,581 as seen in Figure 10.3: Housing Tenure of Monmouth County 1980-2010.

Figure 10.3: Housing Tenure of Monmouth County 1980 - 2010

Year	Occupied Housing units	Owner		Renter	
		Total	%	Total	%
1980	170,130	117,885	69.3%	52,245	30.7%
1990	197,570	143,533	72.6%	54,037	27.4%
2000	224,236	167,311	74.6%	56,925	25.4%
2010	233,983	175,157	74.9%	58,826	25.1%

Source: U.S. Census



While no countywide inventory of housing conditions has been recently completed, analysis of data collected for the American Community Surveys indicates that Monmouth County’s rental housing stock is significantly older than the owner-occupied stock: 40% of owner occupied housing was built after 1980, as compared to 27.0% of the renter-occupied housing. Correspondingly 27.5% of owner-occupied housing was built before 1960, as compared to 37.9% of rental occupied housing units.

Data gathered from the 2014 American Community Survey displayed in Figure 10.4: Value of Owner Occupied Housing Units 2014 illustrates that Monmouth County maintains a high-valued, owner-occupied market.

Housing cost burdens (paying more than 30% of income for housing) stands as the most common housing problem within Monmouth County. High rents, low vacancy rates, and a high owner-occupied housing market contribute to housing cost burdens experienced by those earning low-and moderate-income. According to the 2009-2013 American Community Survey data set, the number of Monmouth County owner-occupied units experiencing housing cost burdens, (68,842) is 54.2% higher than the number of renters (31,664) experiencing housing cost burdens.

To determine federal allocations for rental assistance programs, the established definition of Fair Market Rent is: the 40th percentile of gross rents for typical, non-substandard rental units occupied by recent movers in a local housing market. The National Low Income Housing Coalition’s [Out of Reach 2015](#) report states that NJ residents on average must earn \$25.17 an hour, or \$52,347 a year, in order to afford the Fair Market Rent of \$1,309 for a two-bedroom rental unit, without paying more than 30% of their income. In Monmouth County, renters must earn \$26.40 an hour, or \$54,920 a year to afford rent on a fair market two-bedroom apartment. There is no state where a federal minimum

Figure 10.4: Value of Owner Occupied Housing Units 2014

Housing Unit Value	Monmouth County
Less than \$50,000	3.4%
\$50,000 to \$99,999	1.4%
\$100,000 to \$149,999	3.4%
\$150,000 to \$199,999	4.1%
\$200,000 to \$299,999	17.53%
\$300,000 to \$499,999	39.0%
\$500,000 to \$999,999	26.7%
\$1,000,000 or more	4.4%
Median (dollars)	\$387,900
Percentage of Units Owner-Occupied	73.7%

Source: American Community Survey 2014

wage worker (earning \$7.25 an hour) working full-time can afford a one-bedroom apartment at the fair market rent; in Monmouth County minimum wage workers must work 102 hours to afford a one-bedroom apartment. Nationally, rents have risen for 23 straight quarters. In the 3rd quarter of 2014, reported rents were 15.2% higher than 2009. The high cost of construction materials and land acquisitions, along with high competition to secure financing are several reasons as to why few affordable housing units are built.

10.3 Emerging Issues and Long Range Challenges

10.3.1 Superstorm Sandy Recovery: The U.S. Department of Housing and Urban Development (HUD) provides flexible grants to help cities, counties, and states recover from presidentially declared disasters, especially within low-income areas. The [Community Development Block Grant Disaster Recovery Program \(CDBG-DR\)](#) funds a broad range of recovery activities, and can assist communities and neighborhoods that otherwise might not recover due to limited resources. In October 2012, Monmouth County witnessed historic flooding from Superstorm Sandy. According to the New Jersey Department of Community Affairs





Houses damaged during Superstorm Sandy

Source: Brittany Ashman

(DCA), approximately 5% of Monmouth County’s housing units experienced “severe” or “major damage.” Housing stock supplies were affected as homes were knocked off their foundations, left in states of disrepair, or deemed to be hazardous to public health or welfare. Governor Christie designated the DCA as the entity responsible for administering the distribution of CDBG-DR funds.

The [Monmouth County Home Repair and Advocacy Program](#) is designed to help seniors and individuals with disabilities whose primary homes were damaged from Superstorm Sandy. Approximately 7% of Monmouth County’s households are over 65 years of age, living alone, and 9% of households report a member having a disability (American Community Survey). Funded by an \$8.2 million, Social Services Block

Grant (funded by the U.S. Department of Health and Human Services) eligible households may receive up to \$5,000 for home repairs.

Superstorm Sandy caused the displacement of thousands of individuals from their homes, many who meet the HUD-established qualifications for low-and moderate-income. According to an August 2014 report by the New Jersey Apartment Association, 2.5% of Monmouth County’s rental units are currently vacant. Superstorm Sandy not only increased the cost of rental housing, but also eliminated thousands of units, leading to high occupancy of remaining units. To assist in the repopulating of rental units, the DCA provided short-term [Sandy Tenant-Based Rental Assistance](#) in the form of vouchers to assist eligible low-and moderate-income households with their rent in the nine counties most impacted by Superstorm Sandy. Funding provided up to 24 months of rental assistance to approximately 1,400 households.

The Fund for the Restoration of Multi-family Housing, financed by the congressional Sandy Aid package, utilizes tax-exempt bonds to pay for construction and financing costs associated with affordable housing projects. Sandy affected residents get priority for the first 90 days that funded apartments are open for leasing. As of July 2015, 744 units in Monmouth County had been approved; 445 classified for seniors and 299 for families. That New Jersey Housing and Mortgage Finance Agency (NJHMFA) has set aside \$50 million of the final allocation into the fund to be used exclusively for affordable housing family projects within Monmouth and Ocean Counties.

Superstorm Sandy has played a significant role in New Jersey’s ongoing foreclosure crisis. NJ is a judicial foreclosure state, with each foreclosure subject to supervision through the courts. This provides additional protections for homeowners while slowing down the speed at which a foreclosed home transfers back to the lender. Housing within the Bayshore Region of the county was significantly affected: approximately 48% of the homes in Keansburg and 79% of the homes in Union Beach



who received foreclosure notices in 2014 were affected by Sandy. In addition to homes incurring some level of damage, homes located in flood zones with dramatically altered neighborhoods were also shown to be at a high-risk of foreclosure. Current Federal Government statutes provide homeowners with a one-year grace period after Sandy, with the year's payments tacked on to the end of the loan.

10.3.2 Approaches to Affordable Housing: The county is not responsible for implementing affordable housing policy and can at times be disconnected from local municipal policies. Monmouth County utilizes federal grant allotments (CDBG and HOME) as tools and resources for preserving and expanding the supply of committed affordable housing. The county collaborates with businesses and nonprofit groups to encourage the production of affordable housing. Federal and state programs enable local efforts to further leverage private capital.

The **Housing Choice Voucher Program** is the Federal Government's major program for assisting very low-income families, the elderly, and the disabled. The choice and location of housing is placed within the hands of the individual family. A housing voucher holder is advised of the unit size for which it is eligible based on family size and composition. Vouchers are administered locally by the jurisdiction's housing authorities. Monmouth County has approximately 3,969 Housing Choice Vouchers in use (42 project-based, 688 tenant-based, 117 Veterans Affairs Supportive Housing, 612 family unification program, and 834 disabled).

The **New Jersey Housing Resource Center (NJHRC)**, administered by the [NJHMFA](#), provides an interactive online housing registry of available units and properties in NJ. Launched in 2005, this database provides a central location for NJ residents searching for affordable and accessible housing units.

Other federal and state financial resources for affordable housing include Low-Income Housing Tax Credits (LIHTC) and federal and state historic preservation tax credits. These tax incentive programs create unique opportunities by providing a source of funding for projects with restricted revenue streams. The **Low-Income Housing Tax Credits Program** provides a dollar for dollar reduction in federal tax liability, acting as a catalyst to attract private investment into the affordable housing market. In 2014, NJ was allocated approximately 20 million credits at a present value of approximately \$190 million. Additional tax credits can be generated with qualified tax-exempt bond financing. NJHMFA conducts annual file and physical inspections of 20% of the units in its portfolio. The Cranston-Gonzalez Act of 1990, which aims to "expand the supply of safe, sanitary, and affordable housing," anticipated historic preservation as a significant tool for meeting its goals. Historic buildings provide affordable housing to many American families. Affordable housing rehabilitation can contribute to the ongoing vitality of historic neighborhoods. Projects taking advantage of the Historic Rehabilitation Tax Credit must be reviewed by the National Park Service for adherence to standards.

10.3.3 Approaches to Preventing Homelessness: On average, 36,000 people a year in Monmouth County seek shelter or homeless prevention services. Monmouth County programs provide a wide array of services including prevention assistance, outreach, case management, emergency hotel placement, and transportation assistance. Typically, households must first seek assistance through the Monmouth County Division of Social Services to identify what, if any mainstream benefits they qualify for. Families may be eligible to receive **Temporary Assistance to Needy Families (TANF)**, a time limited federal program designed to provide temporary cash payments to families with minor children who have little or no income. In NJ, **Work First New Jersey (WFNJ)** is the state program created to help such families. Aside from certain categories of federally-exempt individuals, assistance benefits are limited to a lifetime maximum of 60 cumulative months.



Funds are considered a temporary cash subsidy to bridge the gap while individuals seek and obtain self-sufficiency through unsubsidized employment.

Eligible families and individuals in Monmouth County are funneled through a continuum of care including emergency shelters, to transitional housing, to permanent housing. Qualifying households may receive up to 12 months of Emergency Assistance funding which can be used to pay for stays in shelters, transitional housing, hotels/motels, or in apartments located within the community. Households ineligible for public assistance are referred back to community agencies. Current data indicates homeless prevention programs in Monmouth County operate independently of each other with very little successful progression through the system. At the same time, there have been high rates of regressive movements back into homelessness and stagnation in a state of homelessness as evidenced by the lateral movements to other shelters or transitional housing programs.

The primary source of information about homeless individuals and households living on the streets is the annual **Point-in-Time (PIT) Survey**, a one-day census count of the homeless population. As part of the Continuum of Care (CoC) application for homeless assistance grants, HUD requires jurisdictions to conduct a statistically reliable and unduplicated count of the homeless for one overnight period at the end of January. The 2014 survey utilized the New Jersey's Homeless Management Information System (HMIS) to assist in determining the count of homeless people sheltered on the night of the survey. The count of the unsheltered, and those sheltered by non-HMIS programs was conducted using a paper survey, personal interviews, and agency client records.

Over the past five years, the total number of homeless persons in Monmouth County has been fluctuating, with the highest reported count in 2013 at 918 persons. This significant jump was likely due in part

to the extensive damage caused by Superstorm Sandy. While there was a drop in the homeless count between 2013 and 2014, the five-year trend shows a slight rise in homelessness since 2010. In 2014, Monmouth County accounted for approximately 5% of New Jersey's statewide homeless population. According to the PIT Survey, two classifications experiencing growing numbers are veterans and at-risk youth.

With monetary resources shrinking, the solution to addressing local homelessness is using available resources in a more strategically targeted fashion, increasing both effectiveness and efficiency. The [*Monmouth County Strategic Plan to Prevent and End Homelessness \(2014\)*](#) was developed with the input and collaboration from a multitude of community agencies. Encompassing major points of concern, this plan outlines target strategies the Monmouth County community can pursue to effectively end homelessness. The planning timeline remains dynamic enabling the county to respond to the changing landscape of federal funding levels and program regulations. Established in 2014, the **Monmouth County Homeless System Collaborative** manages and oversees the homeless planning activities within the county, and serves as the governing/coordinating structure for the Monmouth County CoC funding. Comprised of key community stakeholders, the collaborative will remain a flexible board, capable of responding to the changing needs of the community.

The **New Jersey Homeless Management Information System (HMIS) Collaborative** was established in 2003 as a means by which to collect client-level data on the scope of homelessness within participating counties. Monmouth County is one of 19 counties included in the New Jersey CoC, which fosters a partnership between state agencies and local communities. The technology employed by HMIS facilitates coordination between both local and state efforts to reduce and end homelessness. The intent of the HMIS program is to understand the extent of homelessness, to better address the needs of all local



jurisdictions, and to allow governments to better assess the effectiveness and impact of housing and social service systems.

10.3.4 Addressing ‘Analysis of Impediments’ Findings: The Office of CD and the Monmouth County Fair Housing Board are tasked with facilitating the implementation of the proposed actions within the Analysis of Impediments (AI). In 2011, the AI Committee and the Fair Housing Board identified 13 specific impediments (discussed in Section 10.2.2 Supportive Reports and Guiding Documents) to Fair Housing Choice and recommended potential actions to lessen the impact of these impediments. Not all suggested actions fall under the jurisdictional oversight of the county. Some are recommended to be undertaken by various fair housing partners. The AI is a living document, serving as a basis and guide to actions the community is undertaking. As a requirement of the *Monmouth County Consolidated Annual Performance Report (CAPER)*, Monmouth County submits to HUD a summary of specific efforts undertaken towards mitigating the identified fair housing impediments. This annual report highlights the objective of addressing impediments, parties involved, recommended actions, and current actions to date.

10.3.5 CDBG Program Equity

The Community Development Block Grant (CDBG) Program was established by Title I of the Housing and Community Development Act of 1974 (Public Law 93-383). This program provides annual grants to entitlement communities to aid in providing decent housing and suitable living environments and by expanding economic opportunities primarily for low- and moderate- income persons. Monmouth County is the CDBG entitlement guarantee for 49 of the 53 towns in the county. (See Section 10.4.1 for details on the CDBG Program)

Monmouth County municipalities, municipal authorities, and nonprofit organizations compete equally for the total available CDBG funding. In recent years, grants to municipalities and municipal affiliate

organizations (i.e. housing authorities, sewer authorities, etc.) tended to rank higher on the Office of CD Committee’s list of recommended projects than grants to nonprofit organizations that provide many necessary and eligible public services. This is likely due to the committee’s composition comprised primarily of municipal representatives and increased competition for project funding, caused by decreases in CDBG funding from the Federal Government.

In 2015, the Division of Planning and Office of CD established a subcommittee to review the CDBG Program procedures and develop recommendations to improve equitable program outcomes. In 2016, the subcommittee presented their findings to the full Office of CD Committee for consideration, recommending a portion of the total anticipated amount of the CDBG annual allotment be set aside as a special fund for private nonprofit applicants. Based on the subcommittee’s recommendations the full Office of CD Committee agreed to a one-year pilot program for the FY2017 funding round that would set aside a minimum of 15% and a maximum allotment of 20% for private nonprofits organizations. This new approach will be reviewed again by the subcommittee once the FY2017 allocations are complete to determine its effectiveness in generating more equitable outcomes. Based on feedback from constituents and program results, the subcommittee will once again review the program to determine if the Office of CD Committee should consider further changes.

10.3.5 Long Range Challenges

- *Declining Funds / Increased Need:* Office of CD projects and programs must be constantly evaluated and if needed modified, should it be determined that there is a more efficient, cost effective and appropriate way to serve intended clients. This process is necessary since federal grant allocations have been gradually declining, with lawmakers apportioning less funding to both the CDBG and HOME Programs. With continued declines in federal grant allocations, the county has experienced increased competition



Figure 10.5: Monmouth County’s CDBG and HOME Funding Allocations 2003 - 2015

Year	CDBG		HOME	
	Federal Allocation*	% change	Federal Allocation	% change
2003	\$3,860,000	n/a	\$2,339,523	n/a
2004	\$3,780,000	-2.1%	\$2,326,454	-0.56%
2005	\$3,580,097	-5.3%	\$2,248,836	-3.34%
2006	\$3,099,740	-13.4%	\$2,119,702	-5.74%
2007	\$3,093,235	-0.2%	\$2,116,843	-0.13%
2008	\$2,985,778	-3.5%	\$2,040,154	-3.62%
2009	\$3,021,753	1.2%	\$2,267,662	11.15%
2010	\$3,267,920	8.1%	\$2,252,251	-0.68%
2011	\$2,728,592	-16.5%	\$1,988,102	-11.73%
2012	\$2,248,715	-17.6%	\$1,161,946	-41.56%
2013	\$2,367,235	5.3%	\$1,143,132	-1.62%
2014	\$2,303,330	-2.7%	\$1,183,212	3.51%
2015	\$2,200,956	-4.4%	\$1,046,488	-11.56%

*CDBG allocation excludes Howell allocation Source: HUD.gov

for limited funding opportunities. To allow for more efficiency in grant allocation a peak CDBG allocation of \$250,000 per project was implemented. However, with federal funds continuing to decline, individual CDBG grant allocations were decreased to \$200,000 in 2013. The 2009 round of CDBG applications brought a significant increase in the amount of unfunded projects, increasing from two unfunded projects in 2008 to seven in 2009. Between 2010 and 2015, 78 submitted applications did not receive funding.

Figure 10.5: Monmouth County’s CDBG and HOME Funding Allocations 2003-2015 illustrates year over year changes in Monmouth County’s CDBG and HOME funding allocations. In the preceding 12 years, combined funding from both programs has declined from \$6.2 million (2003) to less than \$3.3 million (2015); a reduction in funding of almost 50%.

- *Burdensome Monitoring Requirements:* Despite declining funds, the Office of CD strives to provide a high level of service to clients. HUD continues to apply new regulatory requirements towards grant recipients, in particular increasing the level of detailed real-time reporting. While the incorporation of reporting technology (i.e. [Integrated Disbursement and Information System](#)) is intended to simplify this process, the increased reporting requirements risk becoming its own impediment to providing timely and cost effective services to clients. Similarly, continuously changing HUD program guidelines are complicated and at times unclear. The Office of CD and Division of Planning staff must complete frequent training in order to adequately satisfy HUD’s evolving expectations.

- *Housing Affordability:* With not much developable land available, what residential development that is taking place is often occurring at lower densities. When supply declines, but demand continues to be high, prices will continue to increase. Data from the 2014 American Community Survey (Figure 10.4: Value of Owner Occupied Housing Units 2013) illustrates that Monmouth County maintains a high-valued, owner-occupied market. According to sales data gathered by the Monmouth County Association of realtors the average price of single-family home sold in 2015 was \$515,687; the median price of a condominium sold during the same time period was \$297,837. Since 2013 the average prices of sold single-family homes has increased 5.6%; the price of sold condominium units has increased 7.6%.

The [2014 United Way ALICE Report for New Jersey](#) stated that every county in New Jersey has more than 26% of households living below the asset limited income constrained, employed (ALICE) threshold. The ALICE threshold is defined as a realistic measure of income that



takes into account the current basic cost of necessities and geographic variation in New Jersey. The high cost of living is beyond what most jobs in the state can provide to working households. For a family of four in Monmouth County the established Household Survival budget for 2012 was \$63,902, the Household Stability budget was \$113,786. Analysis of employment data indicates that 53% of all jobs in NJ pay less than \$20/hour (\$40,000 per year if full-time).

Significant price variations between subsidized affordable housing and market rate housing prevents middle income households from moving up, resulting in fewer housing opportunities for middle income and also for low- and moderate-income households. First time home buyers or young people starting families have limited opportunities for homeownership within Monmouth County. Additional issues effecting housing affordability is new construction trends. Starting in the mid-2000s, age-restricted development has encompassed a significant portion of Monmouth County's new construction residential market. In 2014, the age-restricted development cohort comprised 38.5% of all new residential development within the county.

- *Accommodations for Those with Autism Spectrum Disorders (ASD):* A greatly underserved and growing population that has not received much attention when it comes to community development concerns and is poised to become a long-term human services and housing crisis are adults with ASD. Public Law 2007, Chapter 173 established the Adults with New Jersey Autism Task Force. Beginning in 2008, the Task Force, collected information, deliberated issues, and considered the needs of adults with ASD. During six sponsored public forums in 2009, persons with ASD and their families testified to future long-term issues. Many expressed concern about the lack of appropriate housing, employment, and available social and long-term care. Spaces in independent living

facilities often have extensive wait lists. According to the 2009 New Jersey Autism Task Force's [Addressing the Needs of Adults with Autism Spectrum Disorder](#) report, 89% of people with ASD reside with parents, siblings, or relatives. Comparatively only 20% of people with ASD reported wanting to reside with relatives, most wanting to transition to independent living. The current housing assignment system in New Jersey funnels all applicants into a single point of entry, creating a log-jam effect where few people are served in a single year. According to the report, the wait list for housing and services is in excess of 8,000 individuals, whereas state assigned agencies are only able to serve approximately 50-150 individuals a year. Applicants are told they should expect to wait for decades before their wait list number comes up. This challenge only becomes more difficult through time as more adults with ASD age and lose caretaking relatives.

- *Growing Incidence of ASD:* To further compound the ASD issue, another Long Range Challenge is the rising incidence of diagnosed Autism Spectrum Disorders. According to a 2016 report issued by the Centers for Disease Control and Prevention (CDC), 1 in every 68 children nationally is diagnosed with autism; in NJ that frequency climbs to 1 in 41. These statistics are based on CDC's continued evaluation of health and education records of 8-year old children. With a decade of surveillance data utilizing consistent methodology now available, this report presents a clear picture of nation and state autism diagnosis trends since 2000. ([Prevalence and Characteristics of Autism Spectrum Disorder among Children aged 8 years – Autism and Developmental Disabilities Monitoring Network, 2016](#))

Noted rate increases can be linked to changes in diagnosis and treatment, as well as greater awareness and record keeping. If the current prevalence rate remains stable, NJ can expect a continued growth in the number of identified persons with ASD in need of



some type of supportive services. Increased understanding of autism has vastly improved services for youths. The New Jersey Department of Education provides special education services through age 21. However, once individuals with autism turn 21, they and their families move from an entitlement system, to one in which access to services is often based on their ability to pay or to secure their own sources of funding. Most adults on the autism spectrum are eligible for funds through the New Jersey Division of Developmental Disabilities; however there is no guarantee that these funds will cover all needed services for individuals and their supportive families.

10.4 Community Development Stakeholder Actions and Efforts

10.4.1 Monmouth County Office of Community Development (CD) Programs

Federal, state, and local funding programs each carry unique and varying requirements. For over 30 years, the Monmouth County Office of CD has administered programs, funded through CDBG, HOME, and other local government subsidies, designed to improve the housing and economic situations of low-and moderate-income residents. For each federal grant program the Office of CD manages HUD mandated contracts, subcontracting with nonprofits, compliance monitoring, processing vouchers to the Monmouth County Finance Department, drawdowns in the Integrated Disbursement and Information System

(IDIS), annual reporting to HUD, and data input and quality issues in the Homeless Management Information System (HMIS).

Through analysis of American Community Survey data, HUD identifies annual median income limits to determine low-income target populations. According to HUD, persons having incomes at or below 80% of the area median income (AMI) of \$90,900 are determined to be “low-income,” and eligible to receive assistance. Figure 10.6: Monmouth-Ocean, NJ HUD Metro Area FY2016 Median Income Limits displays the most up-to-date HUD-established median income limits for the Monmouth-Ocean County metro area for corresponding household sizes.

Community Development Block Grant (CDBG) Program: The CDBG Program distributes federal grants on a formula basis to entitled cities and counties. Initiated in 1974, the CDBG Program stands as one of HUD’s longest continually running funding programs. HUD determines the amount of each grant by using a formula comprised of several measures: the extent of poverty, total population, housing unit overcrowding, age of housing, and population growth lag in relationship to other metropolitan areas. This annual grant allocation serves to assist in developing viable and stable urban communities by providing funding resources to address a diverse range of community development

Figure 10.6: Monmouth-Ocean, NJ HUD Metro Area FY2016 Median Income Limits

Median Income	FY16 Income Limit Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 person
\$90,900	Extremely Low (30%) Income Limits	\$19,100	\$21,800	\$24,550	\$27,250	\$29,450	\$32,580	\$36,730	\$40,890
	Very Low (50%) Income Limits	\$31,850	\$36,400	\$40,950	\$45,450	\$49,100	\$52,750	\$56,400	\$60,000
	Low (80%) Income Limits	\$46,300	\$52,900	\$59,500	\$66,100	\$71,400	\$76,700	\$82,000	\$87,300



projects. The national objectives of the CDBG Program are to: benefit low-and moderate-income persons, aid in the prevention and elimination of slums or blight, and meet an urgent community need. Monmouth County serves as a pass through and administrator for funding to participating communities (Source [HUD USER](#): a clearinghouse of information for housing research, data, and policy analysis published by HUD's office of Policy Development and Research).

The Monmouth County CDBG consortium includes 49 of the 53 county municipalities. Three municipalities (Asbury Park, Long Branch, and Middletown) are qualified (due to population and/or poverty thresholds) to receive grants directly from HUD. Howell meets the population threshold to receive CDBG funding directly from HUD; however through a municipal agreement, Howell designates 20% of its CDBG allocation to the county for grant administrative purposes.



The Buttered Biscuit in Bradley Beach received funding for upgrades from through the Growth Monmouth Façade Improvement Program

Source: Brittany Ashman

Monmouth County is classified as an urban county since the combined population within consortium participating municipalities, amounts to greater than 200,000 residents. Furthermore, the county's CDBG consortium municipalities meet the regulatory requirements to be classified as an Exception Criteria County, meaning less than ¼ of the populated Census Block Groups within the county's CDBG consortium municipalities contain 51% or more low-to-moderate income persons. Due to this classification, all area benefit projects (excluding ADA accessibility improvements) must be located in block groups whose low-and moderate-income population is above the HUD-established criteria of 36.76%.

The exact number of projects funded every year depends on the size, scope, feasibility, and quality of projects submitted. To apply, each potential project must submit an application to the Community Development Committee and the Monmouth County Board of Chosen Freeholders (MCBCF) for review. As part of the Consolidated Planning Process, applications that have been filed must comply with HUD's citizen participation requirements. The CDBG funding program umbrella includes: the Façade Improvement Program, Municipal and Nonprofit Projects, and Homeowner Housing Repair Programs including the Emergency Home Repair Program and the Housing Improvement Program (HIP).

Façade Improvement Program: In August 2013, the MCBCF announced the [Grow Monmouth Façade Improvement Program](#). Serving as a regional Economic Development initiative, this program awards CDBG funds to business owners to improve the exterior appearance of local commercial properties. Businesses located in eligible census block groups can apply to receive up to \$1,850 for façade upgrades including new awnings, fresh paint, new windows, new signage, etc. Building improvements help make streets a more interesting and appealing environment to conduct and attract business. To date, Monmouth County has approved 52 projects, reinvesting over \$90,000 in federal



funds into income-eligible neighborhoods.

Municipal and Nonprofit Projects: Annually, CDBG funds are awarded on a competitive basis providing (consortium) municipal and nonprofit participants an external source of funding for local projects. According to HUD-regulations, CDBG funds may be used for these activities:

1. Acquisition of property for a public purpose
2. Public facilities and improvements
3. Clearance activities
4. Public services
5. Payment for non-federal share required in connection with a federal grant-in-aid program
6. Removal of architectural barriers
7. Acquire, construct, reconstruct, rehabilitate, or install the distribution lines and facilities of privately owned utilities
8. Residential rehabilitation and preservation activities
9. Special economic development activities

Monmouth County Office of CD staff initially reviews all applications to ensure that the activity and budget line items are eligible and both national and county objectives are met. Examples of past funded projects include installation of curbs and sidewalks to improve pedestrian connections, street improvements in floodprone areas, American Disability Act (ADA) improvements to local government facilities, local park improvements, funding for nonprofit agencies construction projects, etc. CDBG funding helps to offset costs to local taxpayers and additionally allows local officials to emphasize specific priorities within their community. All proposed projects or activities must meet eligible activity guidelines as specified by HUD.

Figure 10.7: CDBG Public Infrastructure and Facility Improvements Map for 2006-2015 illustrates the municipalities that have received the largest concentrations of CDBG funding over the past ten years. Excluding Howell, who receives its own annual HUD allocation, the most

municipal project funding was designated to: Neptune Township, Keyport, Neptune City, Union Beach, Keansburg, Farmingdale, and Freehold Borough. Between 2006 and 2015, \$19,370,163 was allocated to 148 projects. See Appendix F: Monmouth County CDBG Approved Municipal and Nonprofit Projects for 2006-2015.

Master Plan Recommendation 10.4 seeks to collaborate with county agencies in identifying potential county projects that would be eligible for funding under this grant.

Housing Repair Programs: Poor physical conditions of housing units threaten to further reduce the county's affordable housing stock. Often times lower-income homeowners do not have the financial means necessary to make necessary property improvements that would counteract this decline. Monmouth County annually allocates CDBG funds towards owner-occupied residential repair programs in an effort to improve and preserve existing low-and moderate-income housing stock, while at the same time assisting local municipalities towards meeting their state determined fair housing need.

Single-family homeowners are assisted by two residential rehabilitation programs; the Emergency Home Repair Program and the Housing Improvement Program (HIP). The **Emergency Home Repair Program** provides low-income homeowners with funds to address emergency housing issues posing an immediate threat to the health and safety of the household; such as damaged roofs, inoperable furnaces, hazardous electric issues, etc. Additionally, this program provides funding to income-eligible Monmouth County homeowners towards handicap accessibility improvements within single-family structures. The Emergency Home Repair Program has a general grant assistance limit of \$3,000, with the exception of \$4,000 for roof replacement and \$4,500 for barrier free bathrooms. The *FY2015 Annual Plan* allocated \$325,000



Figure 10.7: CDBG Public Infrastructure and Facility Improvements Map 2006 - 2015

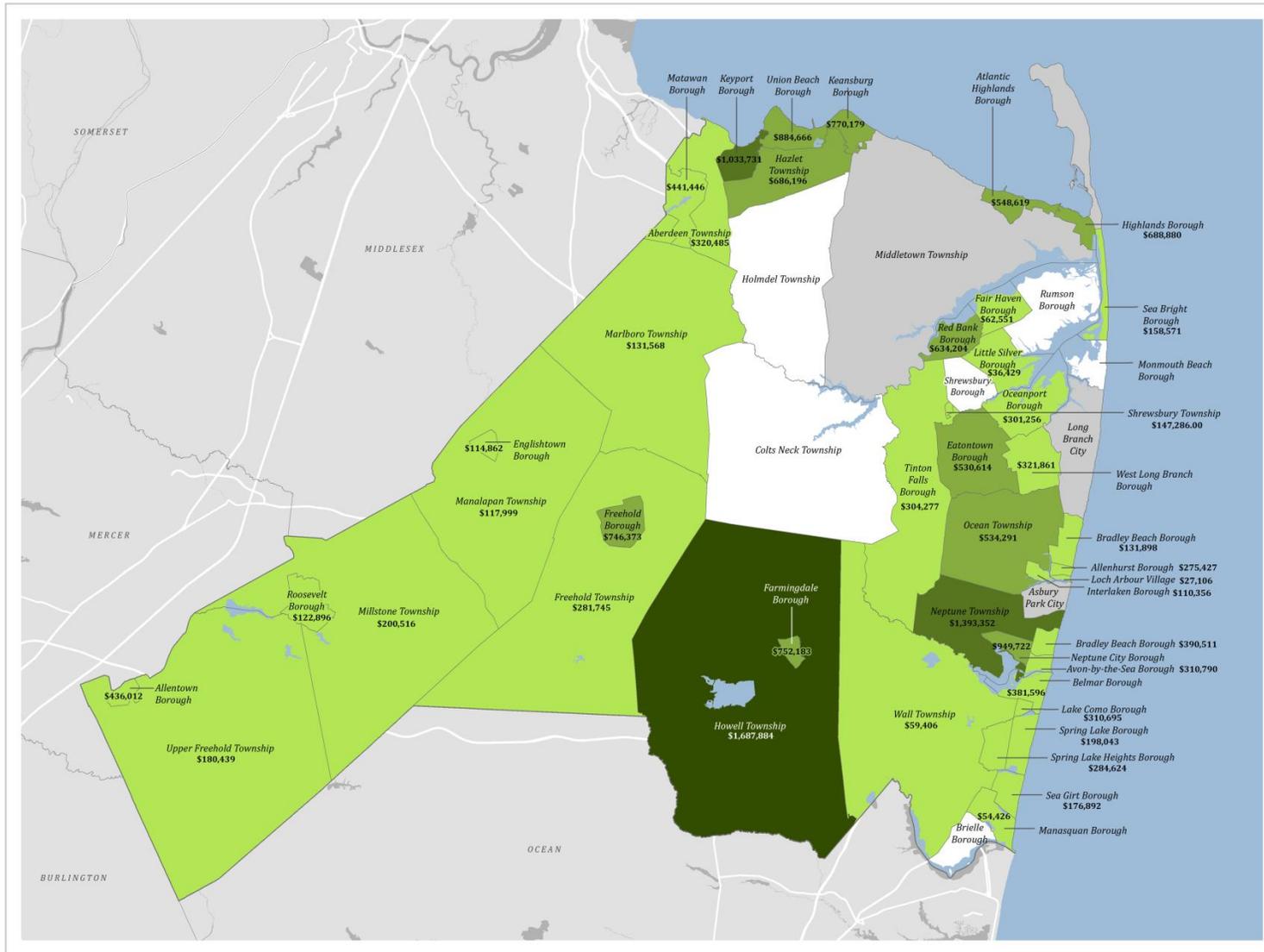


FIGURE 10.7
CDBG Public Infrastructure and Facility Improvements Map 2006-2015

Monmouth County Master Plan
May 2016

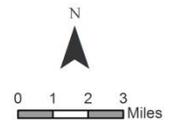
Does not participate in County Consortium

Total Amount of Grants by Municipality

- \$0.00
- ≤ \$500,000
- \$500,000.01 - \$1,000,000
- \$1,000,000.01 - \$1,500,000
- > \$1,500,000

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, and New Jersey Office of GIS.

Grant amount shown on map was rounded to the nearest whole dollar.



This map was created using GIS digital data supplied by county and external resources. Data accuracy is limited by the accuracy and scale of the original source. The digital data herein is for consultative and deliberative purposes only. Site specific conditions should be verified.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



toward this program with the plan estimating approximately 60 qualified homeowners receiving assistance.

The **Housing Improvement Program (HIP)** offers income-eligible homeowners up to \$20,000 through a 10-year, interest free, deferred loan. Rehabilitation is limited to single-family year-round, owner-occupied structures with no more than two dwelling units per structure. Additionally, program participants must reside within a municipality participating within the CDBG Urban County Consortium. HIP will perform the general rehabilitation necessary to bring the structure into compliance with the New Jersey State Rehabilitation Sub code. In order for a structure to be eligible for rehabilitation, it must have at least one health, safety, or code violation and/or one or more of the major systems in need of substantial repair or replacement. Eligible repairs covered by this program include lead based paint abatement, roof upgrades, heating, windows, electrical, plumbing, etc. Once a year, the Monmouth County CD Program publishes an advertisement in the Asbury Park Press and other local weekly newspapers, announcing acceptance of vouchers from resident interested in participating this program. Monmouth County Office of CD is responsible for establishing and maintaining individual files for each unit.

Housing repair projects are located throughout the county within consortium participating municipalities. However, as Figure 10.8: CDBG Program and Municipal Rehabilitation Projects Map depicts, between 2006 and 2015 Manalapan with 25, Manasquan with 24, and Belmar with 19 had the largest concentrations of housing units assisted.

In addition to the two CDBG funded housing rehabilitation programs, the county CD staff administers several municipally funded housing rehabilitation programs. To the extent funds allow, these programs serve to abate code violations and health and safety items. With an average repair cost ranging between \$10,000 and \$20,000, the Office of CD gets a fee per unit to offset staffing cost.

HOME Investment Partnerships Program (HOME): Established by Congress in 1990, HOME is a federal block grant program specifically designated to support affordable housing programs. With funds distributed on a formula basis, the purpose of the HOME Program is to expand the supply of decent, safe, sanitary, and affordable housing while at the same time strengthening the abilities of state and local government to provide housing to residents.

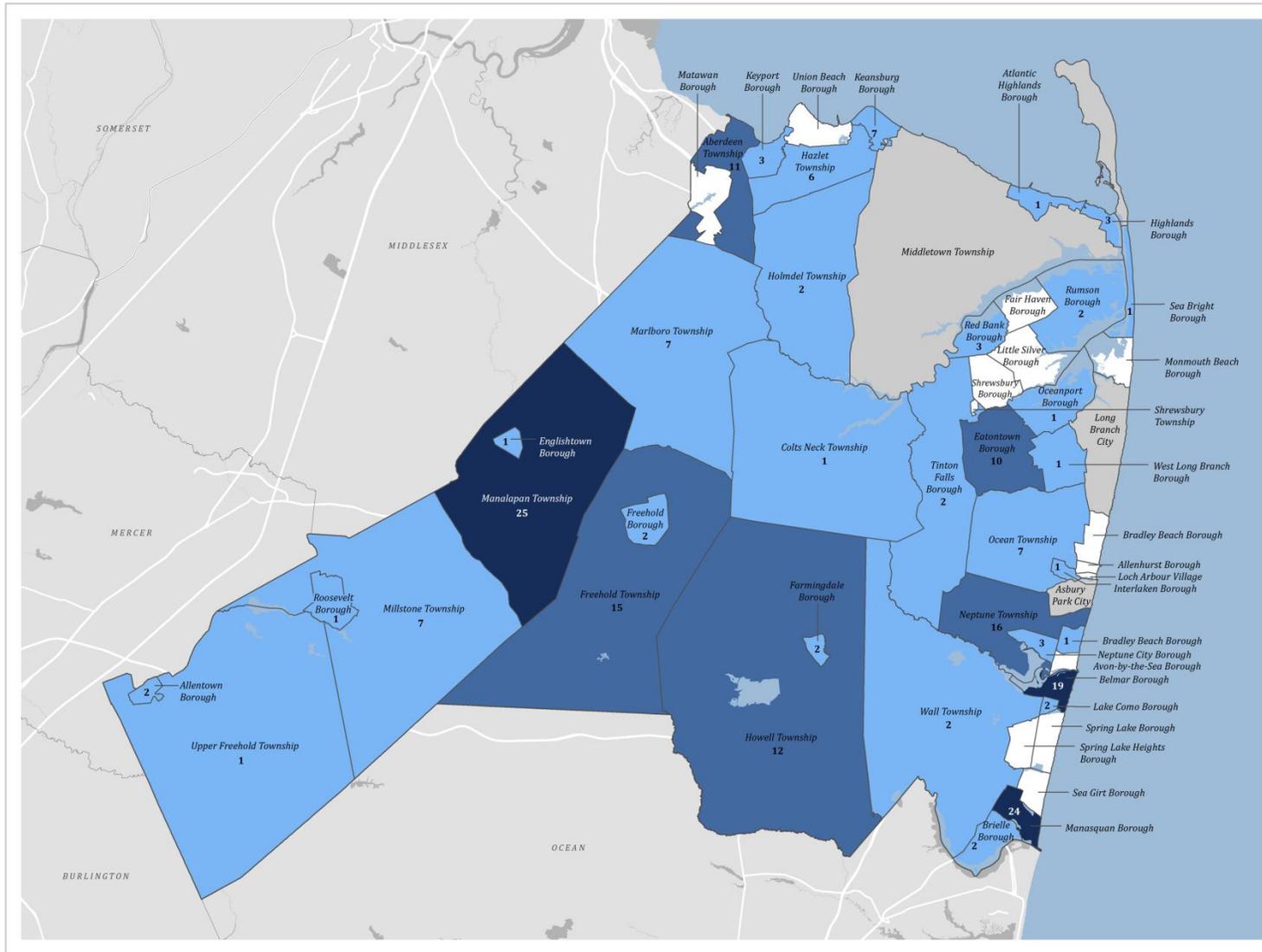
Eligible activities under this set of programs include new home construction or acquisition, rehabilitation, and conversion of existing structures. The flexibility of this grant program allows municipal governments to implement projects specifically tailored to their needs.



**Interfaith Neighbors
HOME Program single-family residence in Asbury Park**
Source: Mary Ellen Scott



Figure 10.8: CDBG Program Municipal Rehabilitation Projects Map



governments to implement projects specifically tailored to their needs. In terms of tenant-based rental assistance and new rental unit construction, 90% of allocated funding must go to assist families whose annual income falls at or below 60% of area median income. All HOME funds utilized for homeownership activities are required to go toward units that will be occupied by families that have incomes less than 80% of the area median income (24 C.F.R. 92.216(a), 92.217).

The HOME Program consortium consists of all 53 Monmouth County municipalities. Since each municipality does not meet HUD's established population and income standards on their own, a legally binding consortium was established. When all participating municipal populations are combined, the consortium meets both the population and income thresholds necessary for direct HOME funding from HUD. Asbury Park, Long Branch, and Middletown are additional partners in the Monmouth County HOME Consortium (though each receives its own CDBG funding). HOME requires participating jurisdictions to provide a grant match of twenty-five cents for every dollar in program funds allocated towards a specific project. Match funds can be in-kind or project-based. The HOME Investment Partnerships Program umbrella includes the First Time Homebuyers Program, Tenant- Based Rental Assistance, and Housing Production Projects.

First Time Homebuyers Program (FTHB): The high cost of residential real estate can present challenges to credit worthy first time homebuyers looking to enter the housing market. Monmouth County residents seeking to purchase their first home, but lacking the lump-sum necessary to secure a down payment and/or closing costs are eligible for the FTHB Program. Partnering with local lending institutions and nonprofit organizations, the county provides up to \$10,000 in the form of an interest-free deferred second mortgage. Qualified program applicants must be a first time homebuyer, have resided in Monmouth County for at least one year prior to application, and have an earned income that is no more than 80% of the county's (HUD-established)

median income limit. The first time buyer must reside in the home for five years following the assistance, or the loan must be re-paid in full. Purchased units may be single-family, condominium, townhome, manufactured home, or cooperative unit, provide that the residence is located within Monmouth County and does not exceed the maximum purchase price of \$337,000. Since 1994, the county has annually allocated HOME funds towards this program, providing a path for low- and moderate-income residents to sustainable home ownership. On average approximately 50 program participants per year have become new Monmouth County homebuyers. As illustrated in Figure 10.9: First Time Homebuyer Grantees Map for 2006-2015, Neptune Township has the highest concentration of participants with 75 housing units purchased through the First Time Homebuyer Program. Freehold Township, Holmdel, Tinton Falls, Manalapan, and Red Bank have each had over 29 FTHB participants.

Tenant-Based Rental Assistance (TBRA) Program: The need for affordable rental assistance is evidenced by the extensive waitlists for public housing units and Section 8 vouchers. Monmouth County's *Five-Year Consolidated Plan* highlighted increasing affordable rental housing supplies as a priority goal. On average, the wait list for family units within each county public housing authority is almost 1,500 households; the wait list for Section 8 vouchers exceeds 4,000 households. On average 90% of families on the list are classified as extremely low-income, earning less than or equal to 30% of the region's median income (Figure 10.6). Extremely low-income households not residing in public housing or using a rent subsidized voucher often experience considerable housing cost burdens.

In a concerted effort to assist the low-income renters of Monmouth County, a portion of the annual HOME grant is allocated to the TBRA program. This flexible program provides assistance to very low-income households with utility, security deposit, and rent costs for up to two years; allowing individual households the ability to afford housing costs



Figure 10.9: First Time Homebuyer Grantees Map 2006 – 2015

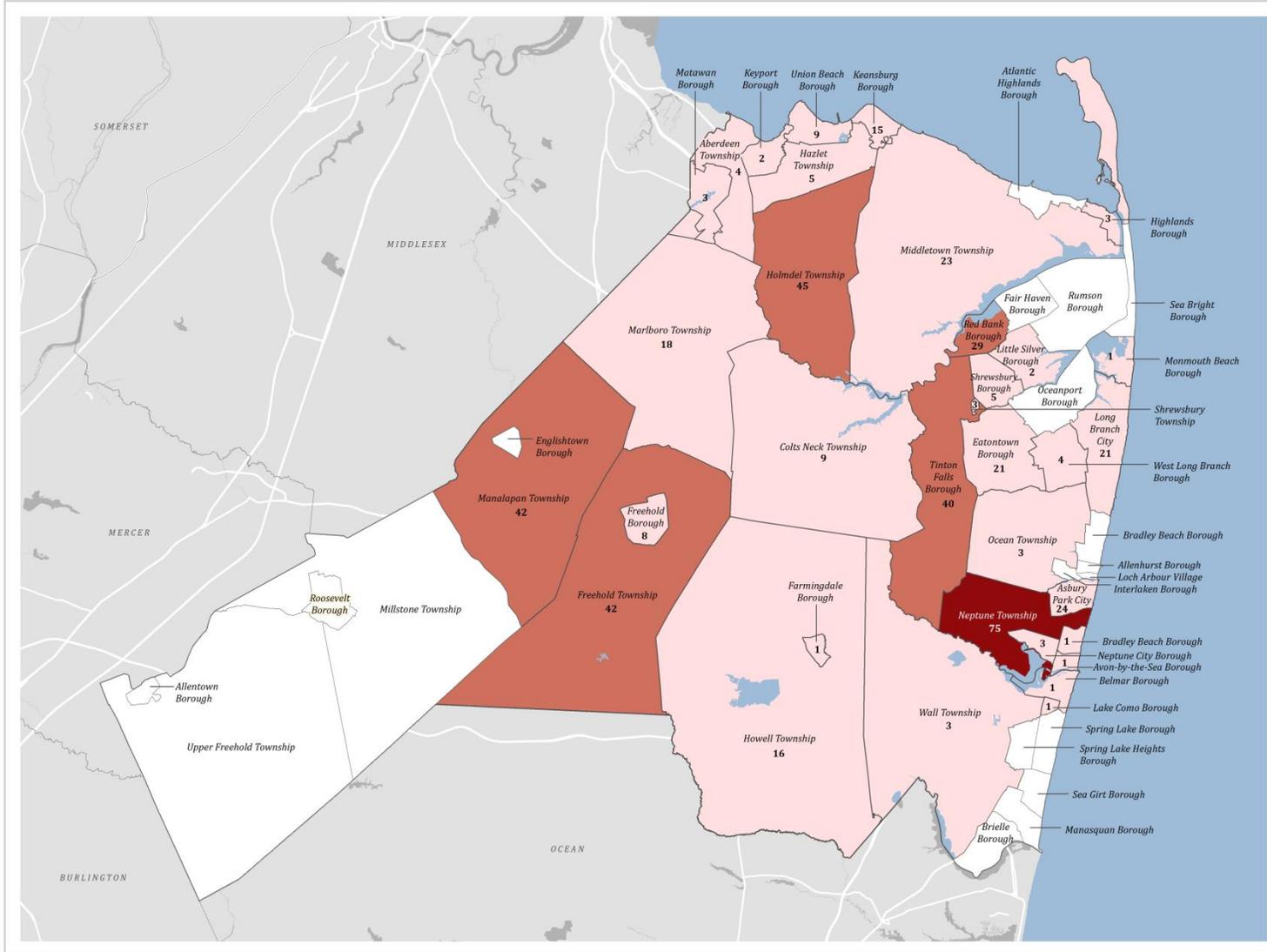
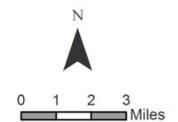


Figure 10.9
First Time Homebuyer
Program Grantees Map
2006-2015
Monmouth County
Master Plan
 May 2016

No of Grantees per Municipality

- 1 - 25
- 26 - 50
- 51 - 75

This map was developed using Monmouth County Digital Data from the Monmouth County Division of Planning GIS Section, and New Jersey Office of GIS.



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This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



of market-rate units. Rather than subsidizing specific rental units, the TBRA program provides assistance at the individual household level. Additionally, the voucher can move with the tenant meaning the household may take its assigned voucher and move to another rental property.

Monmouth County requires that the tenant lease an apartment whose rent does not exceed HUD’s established regional Fair Market Rent as illustrated in Figure 10.10.

**Figure 10.10: HUD FY2016 Fair Market Rents by Unit Bedrooms
Monmouth-Ocean Metro Area**

Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
\$904	\$1,124	\$1,417	\$1,928	\$2,245

Source: HUD.gov

The level of subsidy provided varies, based upon the income of the household, the particular rental unit selected, and the established Fair Market Rent Standard. On average, \$250,000 is annually allocated towards this program, providing assistance to 20-25 households.

Housing Production Projects: The limited availability of affordable units, slow income growth, and rising elderly and special needs populations, indicate a continued need for affordable housing unit production. Monmouth County annually solicits applications requesting financial assistance to aid in the construction and/or rehabilitation of affordable rental and home ownership units. HOME projects must conform to established program rules on income targeting, partnering with Community Housing Development Organizations (CHDOs), affordability requirements, site and neighborhood standards, and matching contribution requirements. Nonprofit and for-profit developers submit p

Committee in accordance with these criteria:

- Cohesion with goals and priorities outlined within the *Monmouth County Five-Year Consolidated Plan*
- Priority provided to projects resulting in new rental units and/or currently vacant units being made available
- Capacity and experience of the applicant in implementing comparable projects and ability to implement the project in a timely manner
- Effective use of other available assistance, resources, and financing
- The number of very low-income persons served

All projects assisted with HOME funds incur a match liability in an amount equal to no less than 25% of the total HOME funds granted to the project. In order to qualify, the match must be a permanent non-federal contribution to the project.

Once the application is approved, the county enters into a contract providing stop gap funding for the projects. As per HUD-regulations, CD staff assesses each developer’s experience, financial condition, and capacity to build and manage proposed projects. Additional analysis is carried out to evaluate the surrounding real estate markets and site suitability. A mortgage lien in the amount of assistance is attached to the property, ensuring it remains affordable to either the buyer or renter. Affordability periods vary according to the amount of assistance and/or type of unit developed, typically lasting between 10 to 20 years. CD staff continues to monitor the development throughout the entire affordability period.

Emergency Solutions Grant (ESG) Program: The ESG Program was established through the Stewart B. McKinney Act of 1987, and amended by the Homeless Emergency Assistance and Rapid Transition to Housing act of 2009 (HEARTH Act).The purpose of the ESG Program is to assist



individuals and families in quickly regaining stability in permanent housing after experiencing a housing crisis or homelessness. ESG funds are allocated towards the following program initiatives: street outreach, emergency shelter, homelessness prevention, rapid re-housing assistance, and HMIS data collection. Through consultation with the Monmouth County Homeless Collaborative (previously known as the Continuum of Care committee), the Office of CD acts as a pass-through, providing funding to nonprofits and county programs.

Previously funded projects have included: operating funds for nonprofit transitional housing facilities and county shelters, contracts with nonprofit agencies for provision of emergency rental assistance, contracts with nonprofit agencies for provision of medical aid and counseling services, and the Rapid Re-Housing program.

The **Rapid Re-Housing Program** provides short-term rental assistance, up to 12 months over a two year period, as well as additional supportive services. Clients are eligible to receive financial assistance in means of rental application fees, security deposits, 100% of rent for first six months of assistance, and 30% of rent for final six months of assistance. Households living on the street are placed into permanent housing, emergency shelter, or transitional housing programs and receive services designed to stabilize their permanent housing placement. Recently in an effort to establish service coordination, Homeless Collaborative members started working towards the establishment of uniform procedures for rapid re-housing programs for both the Monmouth County Division of Social Services, and nonprofit entities.

Monmouth County Fair Housing Office: After the 1988 creation of the Fair Housing Board, the Monmouth County Board of Chosen Freeholders established the position of Fair Housing Officer and situated this position within the Office of CD. The Monmouth County Fair Housing Office coordinates a countywide approach, ensuring the availability of fair housing opportunities for all residents. While the Fair

Housing Office serves all county residents, the following groups are targeted for assistance: minorities, handicapped, homeless, and senior citizens. Staff of the Monmouth County Fair Housing Office provides the public with general information and assistance on a wide range of housing problems. The Fair Housing Office performs intake and screens inquiries for discrimination complaints. Additional services include assistance and counseling on specific procedures for filing a housing complaint, help in finishing complaint forms, and review and verification of each complaint. When necessary, staff members refer clients to other agencies that are funded and staffed to handle a specific complaint that is outside the Fair Housing Office purview.

In a continuing effort to educate the public on fair housing policies the Fair Housing Officer conducts informational programming targeting the following: fair housing groups, concerned tenant/owner lease groups, homebuilders, realtors, lending institutions and municipalities. Each year the Board of Chosen Freeholders releases a proclamation commemorating April as National Fair Housing Month. Additionally, proclamations are awarded to individuals who assist residents and promote fair housing opportunities. One program that continues to play a pivotal role in the county's efforts to raise public awareness is the annual poster contest. Sponsored by the Monmouth County Fair Housing Board, in conjunction with the Monmouth County Board of Chosen Freeholders, the theme of the contest, "What Fair Housing Means to Me," is open to all county 6th grade students. The Fair Housing Officer visits participating schools, conducting interactive classroom presentations. Contest winners are honored at an annual luncheon, and winning posters are featured in the Monmouth County Fair Housing Calendar.

10.4.2 Public Housing Authorities

The mission of public housing authorities is to provide and maintain decent, safe, and affordable housing for low-income households, the elderly and the disabled, through housing vouchers and/or subsidized



unit. The U.S. Department of Housing and Urban Development administers federal aid to local housing authorities providing services to designated coverage areas throughout the county. Housing authorities are responsible for the management and operation of its local public housing program. Housing authority commissioners are appointed by the local government agency and are responsible for overseeing the expenditure of federal state and local dollars allocated for the purpose of housing low-income families, elderly, and disabled individuals. Commissioners are responsible for the fair administration of housing policies, attracting adequate resources, and balancing the demands of community groups.

In addition to lease compliance, and unit maintenance, housing authorities provide vital services and resources assisting residents towards becoming self-sufficient. Monmouth County has ten public housing authorities (as listed in Figure 10.11) encompassing approximately 27 properties, containing 1,983 units. On average, the wait time for family housing units within public housing authorities is five plus years. Wait lists for senior/disabled accessible units are often

shorter. However depending on resident turn-around; the wait can be several years for an available unit. For many public housing authorities, wait lists for housing assistance are closed. For Asbury Park, Neptune City, and Long Branch (authorities with the largest number of overall units) almost 50% of households on the wait list are families with children. On average 90% of families on the waiting list are classified as extremely low-income, earning less than or equal to 30% of the region’s average median income.

A significant portion of housing authorities in Monmouth County are small in size managing between 50 and 249 units. HUD approved *Five-Year* and *Annual Action Plans* establish each Housing Authorities policies, strategies, programs and operations for meeting the housing needs of persons within their designated target area. Recent plans indicate capital and safety improvements continue to be high priorities for Monmouth County Housing Authorities. As part of the new AFFH rule, Monmouth County will collaborate with public housing authorities, coordinating planning efforts and fostering participation from residents.

Figure 10.11 Housing Authorities in Monmouth County

Housing Authority	Street Address	City	State	Zip Code	Phone Number	Website
Asbury Park	1000 1/2 3rd Avenue	Asbury Park	NJ	07712	732-774-2660	http://lbhousing.org/apha/board.html
Belmar	710 8th Avenue #1	Belmar	NJ	07719	732-681-1795	http://www.belmarhousingauthority.com/
Freehold Borough	107 Throckmorton Street #1	Freehold	NJ	07728	732-462-2421	http://site.freehold.tenmast.com/
Highlands	Ptak Towers, 215 Shore Drive	Highlands	NJ	07732	732-872-2022	http://www.highlandshousingauthority.org/
Keansburg	1 Church Street	Keansburg	NJ	07734	732-787-6151	http://www.keansburgha.org/
Long Branch	2 Hope Lane	Long Branch	NJ	07740	732-222-3747	http://www.lbhousing.org/home1.html
Middletown	2 Oakdale Drive	Middletown	NJ	07748	732-671-2990	http://info.mhanj.net/
Monmouth County	3000 Kozloski Road	Freehold	NJ	07728	732-431-6000	https://co.monmouth.nj.us/page.aspx?ID=2692
Neptune City	2000 6th Avenue	Neptune City	NJ	07753	732-988-5397	http://www.neptunecityhousingauthority.org/
Red Bank	52 Evergreen Drive	Red Bank	NJ	07701	732-741-1808	http://redbankhousing.org/



Springwood Avenue Redevelopment Area

The first major redevelopment project completed within the Springwood Avenue Redevelopment Area, Springwood Center stands as the first commercial building to be constructed on the west side of Asbury Park since 1972. This formerly city-owned parcel was sold to nonprofit developer Interfaith Neighbors. Asbury Park and Interfaith Neighbors co-own the three-story building: Asbury Park owns the 2nd floor, Interfaith Neighbors owns the 3rd, and the two stakeholders co-own the ground floor.

The new 27,500 square foot mixed-use facility includes eight affordable rental units on the 3rd floor constructed using Monmouth County HOME Investment Partnerships Program funding. With rent established according to HUD guidelines, these units provide affordable housing opportunities to eight low-income households.

The 2nd floor of the Springwood Center provides a permanent home for the Asbury Park Senior Citizen group. For nearly ten years, Asbury Park had been without a senior citizen center, with seniors instead meeting in rented community rooms of local apartment buildings. Immediately after Superstorm Sandy, this center provided a valuable resource to the surrounding community with up to 700 people per day being fed at the center. The four retail spaces on the first floor house the Interfaith Neighbors Business Development Center and Business incubator, a substation of the Asbury Park Police Department, and the new Kula Café. This fully functioning café provides paid culinary and restaurant training, where local teenagers learn how to work in front-of-house and back-of-house positions. Each program lasts 16 weeks and employment is guaranteed upon successful completion. Adjacent to the café Interfaith Neighbors started a second economic initiative, the Kula Urban Farm to provide exposure to the urban agriculture movement and related industries. In addition to hospitality training students will now learn how to grow some of the food served to Kula Café patrons.



**Springwood Center in
Asbury Park**
Source: Mary Ellen Scott

10.4.3 Partnership Efforts

Analysis of Monmouth County’s non-homeless populations’ special needs and non-housing community development needs stands as a requirement of the Consolidated Planning Process. Persons with special needs include the elderly and frail elderly, persons with severe mental illness, the developmentally disabled, persons dealing with alcohol and /or drug addiction, persons with HIV/AIDS, and victims of domestic violence. The **Monmouth County Department of Human Services** was established by the Board of Chosen Freeholders in 1987. This department partners with the Office of CD to address the needs of citizens who are struggling with unexpected events and to enhance the overall quality-of-life of Monmouth County residents. The Department of Human Services consists of eight divisions including:



The Monmouth County Office of CD coordinated with the Department of Human Services and **Brookdale Community College** to undertake a comprehensive planning process focused on developing strategies to end chronic homelessness. Additionally, Monmouth County collaborates with the **New Jersey State Department of Community Affairs** to administer specific grant programs.

Community development, by its very definition, is a program based in partnership with other service providers, program recipients, and community organizers. Many of these established partnerships including those with municipalities, financial institutions, state and

county agencies, nonprofits, etc. have been discussed within the context of previously discussed CD programs.

10.5 Additional Resources and Funding Opportunities

Federal

- [U.S. Department of Agriculture Rural Development](#)
 - [Multi-Family Housing Direct Loans](#)
 - [Section 502 Direct Loan Program](#)
 - [Single Family Housing Repair Loans and Grants](#)
- [U.S. Department of Housing and Urban Development \(HUD\)](#)
 - [HUD in New Jersey](#)
 - [Housing Trust Fund](#)
 - [Rental Assistance](#)

State

- Department of Community Affairs
 - [Housing Assistance](#)
 - [State Rental Assistance Program](#)
- [Housing and Community Development Network of New Jersey](#)
- [New Jersey Housing Resource Center](#)
- [New Jersey Department of Human Services](#)
- [New Jersey Housing and Mortgage Finance Agency](#)
 - [Resources for the Homebuyer](#)
 - [Resources for Renters](#)
 - [Social Services Block Grant Rental Assistance Program](#)
- [NJ Helps Services](#)
- [New Jersey State Data Center](#)

County and Local

- [Monmouth County Association of Realtors](#)
- [Monmouth County Department of Human Services](#)
- [Monmouth County Division of Workforce Development](#)
- [Monmouth County Office of Emergency Management](#)
- [Social Communities Activities Network \(SCAN\)](#)



Refer to Section 10.4.1 Monmouth County Office of Community Development (CD) Programs

Nonprofits, Research Centers, and Other Stakeholders

- [180 Turning Lives Around](#)
- [A Future With Hope, Inc. - The United Methodist Church](#)
- [Affordable Housing Alliance](#)
- [American Red Cross](#)
- [Bayshore Resource Center](#)
- [Bayshore Family Success Center](#)
- [Bethal Christian Center](#)
- [Brethren Disaster Ministries](#)
- [Catholic Charities, Diocese of Trenton](#)
- [Coastal Habitat for Humanity](#)
- [Community Health Law Project](#)
- [Community Affairs and Resource Center of Monmouth County](#)
- [Family Promise of Monmouth County](#)
- [Habitat for Humanity, Northeast and Western Monmouth County](#)
- [Housing and Community Development Network of New Jersey](#)
- [Interfaith Neighbors](#)
- [Jersey Shore Gives Back](#)
- [Jersey Strong Foundation](#)
- [Keyport Ministerium](#)
- [Long Branch Concordance Family Success Center](#)
- [Lutheran Social Ministries](#)
- [Make Room](#)
- [Monmouth County Long-Term Recovery Group](#)
- [Monmouth ResourceNet](#)
- [Navicore Solutions](#)
- [National Low Income Housing Coalition](#)
 - [United for Homes](#)
- [NJ Future](#)

- [Creating Place to Age in New Jersey: Housing Affordability and Aging-Friendly Communities \(2015\)](#)
- [New Jersey Data Book](#) by Rutgers University
- [O.C.E.A.N. Inc.](#)
- Regional Plan Association
 - [Fragile Success](#)
- Technical Assistance Collaborate
 - [Priced Out Findings](#)
- Together North Jersey
 - [Housing Baseline Assessment Report \(2013\)](#)
- Urban Land Institute
 - [Housing Assistance Matters Initiative](#)

10.6 Master Plan Recommendations and Stakeholder Strategies

Five Recommendations and numerous Stakeholder Strategies emerged from workshops and meetings with stakeholders:

Master Plan Recommendations

Recommendation 10.1: Form a Consolidated Plan Implementation Committee (CPIC) to help guide the Office of Community Development (CD) and HOME Consortium's *Five-Year Strategy Submission for Housing and Community Development Programs (Five-Year Consolidated Plan)* and *Annual Action Plan: One Year Use of Funds (Annual Action Plan)* in a manner consistent with achieving the Goals, Principles, and Objectives (GPOs) of the *Monmouth County Master Plan*. The *Five-Year Consolidated Plan* serves as the (U.S. Department of Housing and Urban Development {HUD} recognized) official housing policy and community development planning guide for Monmouth County. Every five years, the county assesses affordable housing market conditions and community development needs to make strategic decisions about how to best invest allocated federal funds. This plan should not be viewed as a standalone "HUD" document. A continuous and collaborative process will help to establish a more unified vision of community development actions through the establishment of specific



goals and attainable objectives to accomplish those goals. Additionally, this proposed coordinated process will create opportunities for strategic planning to take place in a more comprehensive context and hopefully reduce duplication of efforts at various levels of government. Currently, there is a noted lack of acknowledgment for programs that already exist at local levels. Formation of a Five-Year Consolidated Plan Implementation Committee will help ensure goals and objectives outlined within the plan are achievable within the established time period, and will help coordinate reporting of program successes. This committee will bring a wider range of experience-based and subject matter knowledge to the planning process, helping to identify both interdependent and collective impacts as well as new opportunities.

Recommendation 10.2: Incorporate the Goals, Principles, and Objectives (GPOs) of the *Monmouth County Master Plan* into the Office of Community Development's (CD) *Five-Year Strategy Submission for Housing and Community Development Programs (Five-Year Consolidated Plan)* to better align community development projects and programs with intended outcomes through the appropriation of funds from the Community Development Block Grant (CDBG) Program, HOME Investment Partnerships Program (HOME), and Emergency Solutions Grants Program (ESG). Goals and objectives provide strategic direction by defining what the county hopes to achieve over the life of the plan. Correspondingly, goals and objectives establish a framework for tracking and reporting plan performance. Incorporating the GPOs of the *Monmouth County Master Plan* into the *Five-Year Consolidated Plan* will assist in both enhancing the conventional tools utilized for community development, while at the same time exploring the possibility of non-conventional tools that could further strengthen Office of CD programming. Additionally, the integrations of goals and objectives between the two plans can help advance the effectiveness of grant appropriations and the desired outcomes of the *Monmouth County Master Plan*.

Recommendation 10.3: Evaluate and recommend changes to the Office of Community Development's (CD) existing standing committees' structure to align current community development programming with the overall Division of Planning program. Coordinating the Office of CD structure with the Division of Planning programming will help to ensure the sustainability and viability of the *Monmouth County Master Plan*. The Community Development Block Grant (CDBG) Program has a wide range of eligible activities providing local governments flexibility to meet a community's needs. Changes to the standing committees' structure can encourage more variety in funded projects and the efficient allocation of funds. Recommended changes have included annual project themes, designated funds for nonprofits, and incorporation of master plan goals and principles into proposed projects.

Recommendation 10.4: Work with other county departments and agencies in identifying potential county projects eligible for Community Development Block Grant (CDBG) funding. The social service provision landscape within Monmouth County is diverse and complex. An array of public, private, and nonprofit organizations work both independently and collectively to address various needs. By establishing strong working relationships with other county departments and maximizing the utility of each county department and agency, there can be a more efficient and innovative allocation of limited funding resources. Collaborating with other county departments and agencies can ensure funding for eligible activities that provide the greatest local impact.

Recommendation 10.5: Initiate a new housing study for Monmouth County that examines existing market conditions and identifies recent housing development trends, including new construction and redevelopment of existing housing stock, that have evolved in response to new cultural and economic realities, housing affordability concerns, and shifting household demographics. Monmouth County



has a diverse housing stock including detached single-family homes, duplexes, townhomes mid-rise apartments, and a mixture of owner and renter occupied units. As previously discussed, over the past three decades, new residential development within the county has been predominately single-family housing. Currently, no countywide inventory of housing conditions and availability has been completed. There have been significant changes in demographic and economic conditions over the past several years. Evaluating current housing conditions that exist within the county can assist both in monitoring the success of community development activities and provide a framework to direct programming within areas that are evolving. The study would help the county address the housing needs of its residents and identify housing-related issues that may affect long-term planning goals. This study could evolve into a resource for many local housing market stakeholders towards determining market demand and responses to recent development trends. While supply-side strategies are important in opening up new market choices, they are only part of an overall housing strategy. A comprehensive housing study will not only provide value to the county but also residents, businesses, and municipalities.

Stakeholder Strategies

General

- Establish fair housing and affordable housing goals in Office of Community Development (CD) plans to address issues at the “place” level rather than the current, “one size fits all” approach (e.g. rental verse home ownership).
- Make better connections within CDBG Programs that can result in successful CD outcomes. For example, giving a HOME Program first time homebuyer priority assistance when purchasing a HOME Program funded affordable housing unit.
- As overall funding declines, realign CDBG and HOME Programs to increase the total number of clients served by switching more resources to the Emergency Home Repair Program.

Community Resiliency

- Prioritize CDBG funding of public infrastructure projects that promote resiliency to future storm events, such as the replacement or installation of storm drains.
- Incorporate a review of best practices for hazard resiliency including conformance to enhanced building code requirements as part of the environmental review for CD projects located in a Special Flood Hazard Area (SFHA).

Sustainable Places

- Prioritize HOME Program funding to projects that encourage a range of affordable housing types, sizes, sites, and accommodations for multiple lifestyles and life-stages that encourage Smart Growth America principles and support economic sustainability in the region.
- Prioritize HOME Program funding to support affordable housing proposals that have access to existing public infrastructure and are proximate to transit options, community and public services, recreation facilities, and necessary personal and professional services.
- Encourage projects designed for long-term energy efficiency and lower maintenance costs even though they may incur higher upfront costs.
- Encourage support for the redevelopment and revitalization of existing cities, suburbs, and towns that reduce the expansion of development into rural areas and those places without planned or programmed public infrastructure.
- The refurbishment and reuse of existing buildings, infill development, and redevelopment are the preferred development paradigm in the county.

Healthy Communities

- Prioritize CD funding for projects that incorporate walkability and handicapped accessibility into their proposals.



- Work with the Monmouth County Park System (MCPS) to encourage and assist towns in identifying CDBG eligible recreation/open space projects in their community.
- Continue to seek funding opportunities for projects that provide healthcare and wellness services to underserved neighborhoods and locations.
- Representatives from the Office of CD actively participate as members of Monmouth County's Continuum of Care Collaborative, providing support for the placement of vulnerable populations into permanent housing solutions.

Natural Resources & Open Space

- Prioritize the installation of handicapped accessible amenities toward and throughout public waterfront locations and conservation areas (where public access is permitted).
- Collaborate with the MCPS to encourage and assist towns in identifying CDBG eligible recreation/open space projects in their community.
- Assist towns with aligning a triple play of funding opportunities for eligible parks and recreation projects: NJDEP's Green Acres Program, Monmouth County Municipal Open Space Grant Program, and CDBG funds.
- Work with the MCPS in reviewing the requirements of their municipal open space grant process to consider more flexible matching fund requirements for projects located in CDBG eligible low-and moderate-income areas.

Farmland Preservation

- Discourage CDBG eligible projects on sites that are considered county targeted farmland acquisition/preservation properties except for those projects that bolster agricultural development and support the retention of agriculture in the community at large.

Arts, Historic, & Cultural Resources

- Prioritize CDBG funding for projects that: 1) preserve and enhance the historic integrity or character of a building and/or site and 2) integrate well with the character or planned development of the surrounding neighborhood.
- Incorporate local art and historic assets into the design of granted streetscape projects.

Utilities

- Prioritize CDBG eligible projects in places with existing access to public utilities and infrastructure rather than incurring the cost of extending public services to a site.
- Deference should be given to projects that incorporate renewable energy sources and/or efficient utilities and systems that save long-term projected operational and maintenance costs.

Planning Services, Outreach, & Coordination

- Monmouth County's higher education institutions can partner with affordable housing, community development, and other nonprofit stakeholder organizations to provide student opportunities to actively engage in CD projects through outreach, volunteerism, internships, and community awareness events.

Transportation & Mobility

- Explore ways to use CDBG funds to provide transit users with transportation safety, convenience, and comfort enhancements such as bus shelters, bicycle storage locations, and handicapped accessible transit stops and waiting areas.
- Encourage residential development proximate to multi-modal transportation options.
- Link walkable communities to transit service locations.
- Improve access and circulation in walkable communities through ADA improvements.



Agricultural & Economic Development

- Continue to allocate a portion of Monmouth County's CDBG annual funding to support economic development through the Monmouth County Façade Improvement Program.
- Support efforts to have the state recognize onsite affordable housing for agricultural workers as a means of addressing municipal affordable housing obligations in rural locales.
- The Office of CD should collaborate more closely with the Division of Economic Development to identify and evaluate CDBG funded programs that promote economic development that could be applied to the county.





11.0 Healthy Communities

11.0 HEALTHY COMMUNITIES

MASTER PLAN RECOMMENDATION 11.1

11.1: Work with local communities and stakeholders to promote agricultural sustainability through healthy food choice initiatives such as access to affordable, healthy foods and the creation of community gardens, urban agriculture programs, mobile food stands/food truck courts, and farmers markets.

Purpose

Addressing the nutritional needs of residents provides the foundation for a healthy community. The county can assist municipalities in assessing the availability of nutritious foods and help coordinate efforts with stakeholders, such as the FoodBank of Monmouth and Ocean Counties, to provide better access to and education about healthy food choices and local food production.

Monmouth County Departments & Organizations Involvement

Division of Planning	Assist municipalities and other stakeholders in identifying and promoting healthy food needs and other initiatives; include these initiatives in the <i>Agricultural Sustainability Plan (ASP)</i> for Monmouth County when drafted; coordinate agricultural sustainability efforts with the Division of Economic Development through the Grown in Monmouth initiative.
Division of Economic Development	Continue to coordinate the Grown in Monmouth initiative; engage businesses and local economic development committees in the planning process; promote the local agriculture industry; assist in locating new agribusiness resources; provide local business networking opportunities; assist in agricultural sustainability efforts that promote local farm-to-table initiatives.
Agricultural Development Board (MCADB)	Continue to assist local farmers with preservation; promote the local agriculture industry; resolve right-to-farm issues in ways that protect the establishment and retention of farm stands and markets thus protecting the farmer's ability to produce and locally market their crops and value-added products.
Brookdale Community College (BCC)	Consider BCC a resource for marketing workshops and local assistance.

Other Project Stakeholder Involvement

Rutgers Cooperative Extensive (RCE)	Assist with outreach; provide expertise in local and statewide agricultural issues; provide access to research, commercial growers, and industry leaders.
Ag. Related Businesses	Identify business needs and opportunities to meet the needs of the local community.
Ag. Dependent Businesses	Identify ways to strengthen the association between local consumers and agricultural products in Monmouth County.
Farmers	Continue to provide fresh healthy foods locally; assist in identifying local opportunities for distribution of products.
Municipalities	Assist with education and outreach to residents, businesses, and the farming community on healthy food initiatives available at the local level.
Schools	Partner with local farmers and markets for Farm to School initiatives and community garden programs.
Residents and Local Businesses	Respond to outreach/surveys conducted regarding healthy food options, areas of deficiencies, and opportunities to fulfill community needs.
FoodBank of Monmouth and Ocean Counties	Provides distribution of food to individuals in need from donations received by individuals and charity partners; hosts nutrition outreach and education; provides culinary training and occasionally gardening space for fresh produce.
Board of Agriculture	Assist with outreach and provide industry specific perspective and expertise.



Boardwalk, Long Branch

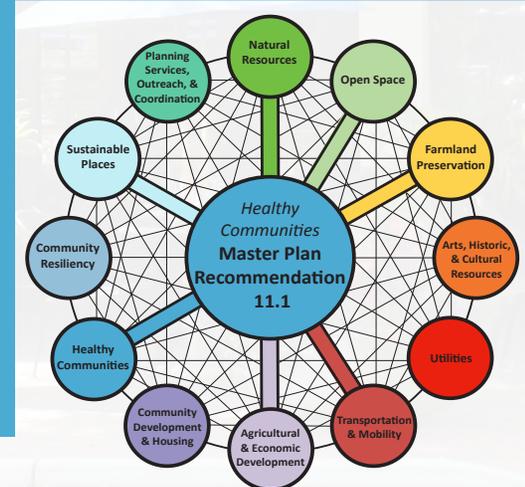
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 11.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
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Implementation Strategy

- Assist in the promotion of healthy food initiatives with other county departments and agencies, the State Agriculture Development Committee (SADC), and municipalities.
- Identify healthy food initiatives in the *Agricultural Sustainability Plan (ASP)* for Monmouth County.
- The Monmouth County Environmental Council (MCEC) will offer opportunities to promote healthy food programs as a topic for their annual roundtable events.
- Continue to assist with the Grown in Monmouth Initiative.



Strongest Associated Master Plan Elements

11.0 HEALTHY COMMUNITIES

MASTER PLAN RECOMMENDATION 11.2

11.2: Continue to protect human health by assisting with the identification and removal of environmental hazards from the community and raising awareness about public health issues.

Purpose

In order to assure the residents, businesses, and visitors of Monmouth County are provided with healthy communities to live, work, play, and stay, efforts must be focused on the education, identification, and eradication of public health threats.

Monmouth County Departments & Organizations Involvement

Division of Planning	Assist the Monmouth County Health Department (MCHD) in identifying environmental hazards; conduct environmental reviews of community development projects as required by the U.S. Department of Housing and Urban Development (HUD).
MCHD	Seek assistance when feasible from the Division of Planning on planning issues that could affect public health.
Reclamation Center Recycling and Solid Waste Planning	Provide support to municipalities for recycling and solid waste practices, including community cleanup efforts through the New Jersey Clean Communities program.
Mosquito Control	Use integrated pest management strategies to control mosquito population; respond to the public's requests to inspect properties where a mosquito problem is reported; post information and resources online about mosquito habitat, prevention, and vector born disease information.

Other Project Stakeholder Involvement

NJ Department of Environmental Protection (NJDEP)	Continued enforcement of environmental regulations; review of environmental permit applications; support for environmental remediation and redevelopment.
Municipalities	Provide resources and guidance for potential local environmental impacts to public health.



Boardwalk, Long Branch

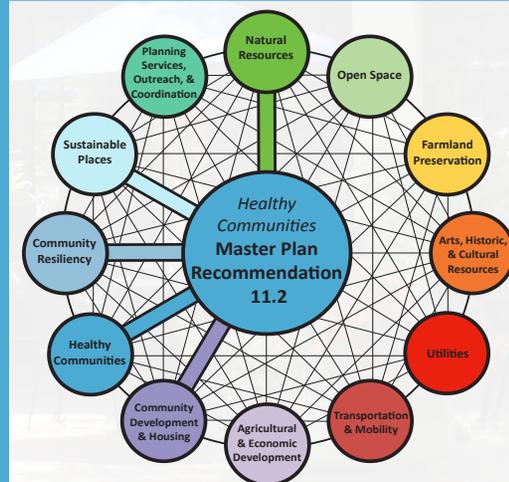
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 11.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Continue to provide support to the MCHD and other county departments and agencies on environmental and public health issues.
- Continue to provide environmental reviews for grant funding of potential projects.
- Monitor proposed changes to the NJDEP's Water Quality Management Planning Program.
- Monitor the *New Jersey Statewide Water Supply Plan (1996)* for updates and the potential impacts to Monmouth County.
- Monitor the water quality aspects of stormwater management planning.
- Continue to function as a designated planning agency for water quality and wastewater management planning.



Strongest Associated Master Plan Elements

11.0 HEALTHY COMMUNITIES MASTER PLAN RECOMMENDATION 11.3

11.3: Provide planning support and services to the Monmouth County Sheriff's Office and the Monmouth County Prosecutor's Office for public safety, law enforcement, crime prevention, and emergency response.

Purpose

One of the critical needs of a healthy community is safety and security. The mission of the Monmouth County Sheriff's Office and the Monmouth County Prosecutor's Office is to focus on creating and maintaining a safe and secure environment for the residents and businesses of Monmouth County. The Division of Planning will continue to provide services and resources, such as geographic information system (GIS) mapping and analysis, to the both offices to assist in furthering their mission.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide planning assistance to other county departments and agencies involved with emergency response, public safety, law enforcement, and crime prevention.
Sheriff's Office	Provide protection for the residents and businesses of Monmouth County; spearhead emergency management and planning efforts.
Prosecutor's Office	Coordinate with other law enforcement agencies within the county to provide prosecutorial needs.

Other Project Stakeholder Involvement

Municipalities	Assist with planning and implementation efforts related to emergency response and public safety.
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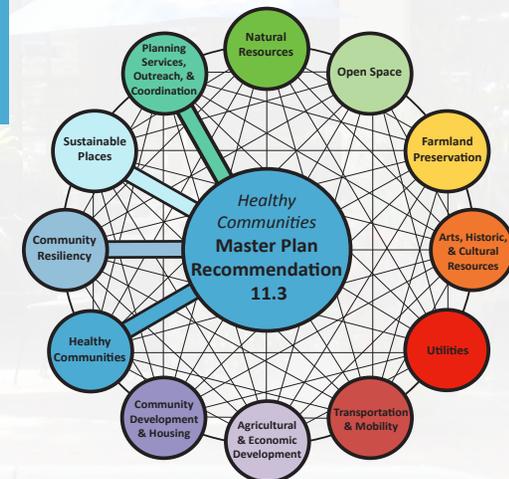
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 11.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
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Implementation Strategy

- Continue to provide input and assistance to the Monmouth County Sheriff's Office and the Monmouth County Prosecutor's Office in their crime prevention and public safety efforts.



**Strongest Associated
Master Plan Elements**

11.0 HEALTHY COMMUNITIES MASTER PLAN RECOMMENDATION 11.4

11.4: Incorporate the *Monmouth County Solid Waste Management Plan (2009)* as a component of the *Monmouth County Master Plan's* Healthy Communities Element.

Purpose

The Monmouth County Reclamation Center is tasked with updating the *Monmouth County Solid Waste Plan*. The Division of Planning staff will provide support to the Recycling and Solid Waste Planning staff in preparing the plan.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide data and planning assistance, as requested, in the implementation of the <i>Monmouth County Solid Waste Management Plan</i> ; provide outreach assistance with recycling programs; work with the New Jersey Clean Communities program on clean ups coordinated through the NJ Department Environmental Protection (NJDEP) AmeriCorps NJ Watershed Ambassador.
Planning Board (MCPB)	Incorporate the <i>Monmouth County Solid Waste Management Plan</i> as a component of the <i>Monmouth County Master Plan</i> .
Reclamation Center Recycling and Solid Waste Planning	Develop the <i>Monmouth County Solid Waste Management Plan</i> ; continue working with municipalities on recycling initiatives; continue to promote and assist with local clean ups through the New Jersey Clean Communities program.



Boardwalk, Long Branch

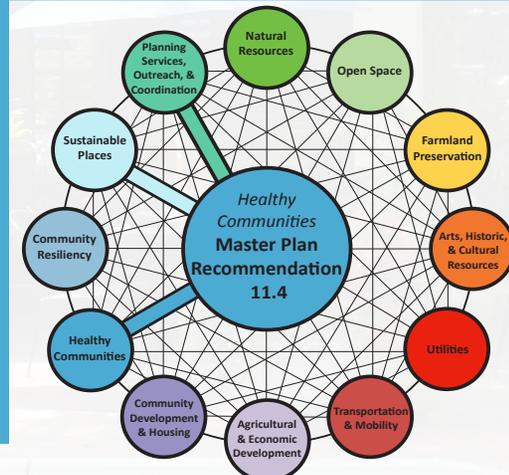
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 11.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination		●												
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities								●						
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Provide data and planning assistance, as requested, to Recycling and Solid Waste Planning.
- Incorporate the *Monmouth County Solid Waste Management Plan* as a component of the *Monmouth County Master Plan*.
- Monitor the *Monmouth County Solid Waste Management Plan* for updates and revisions, and the potential impacts of those changes on the county.
- The NJDEP AmeriCorps Ambassador will continue to work with the New Jersey Clean Communities/Program Coordinator Specialist to promote and schedule local clean ups.



**Strongest Associated
Master Plan Elements**

11.0 HEALTHY COMMUNITIES MASTER PLAN RECOMMENDATION 11.5

11.5: Incorporate by reference the *Monmouth County Community Health Improvement Plan (CHIP) (2012)* as a component of the Healthy Communities Element and include studies, reports, and findings from the Monmouth County Health Department (MCHD) and other local health departments as consultative and supportive documents to the *Master Plan*.

Purpose

The MCHD is comprised of trained professionals in all areas of public health whose mission is to provide support to the community in identifying and resolving public health issues. In addition to the services they provide, the MCHD conducts extensive outreach and education efforts along with providing documented research in many areas related to environmental health.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide support for healthy initiatives in Monmouth County; update the <i>Natural Features Study for Monmouth County (1975)</i> utilizing applicable data compiled by the MCHD; provide the MCHD with geographic information systems (GIS) assistance as needed.
Planning Board (MCPB)	Incorporate the <i>CHIP</i> as a component of the Healthy Communities Element; acknowledge reports and studies produced by the MCHD as consultative and supportive documents the <i>Monmouth County Master Plan</i> .
MCHD	Coordinate with the Division of Planning on planning issues that could potentially affect public health.

Other Project Stakeholder Involvement

Municipalities	Provide resources and guidance regarding potential local environmental impacts on public health.
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Boardwalk, Long Branch

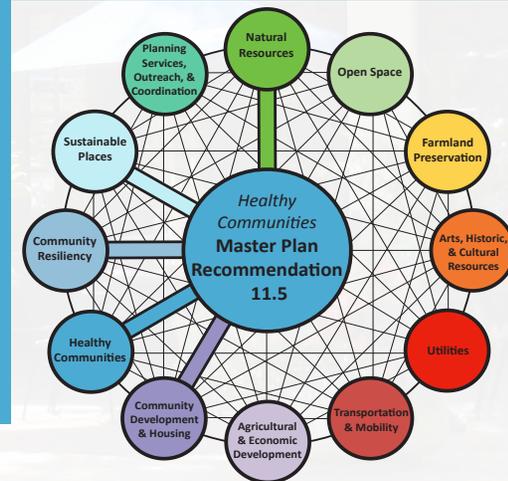
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 11.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic Preservation														
G. Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Incorporate by reference the *Monmouth County CHIP (2012)* as a component of the *Monmouth County Master Plan*.
- Adopt, by reference, reports, and studies produced by the MCHD as part of the Healthy Communities Element of the *Monmouth County Master Plan*.
- Continue to provide support and assistance to the MCHD in the implementation of county public health initiatives.
- Utilize MCHD data for updates to the *Natural Features Study for Monmouth County* and other applicable plans, reports, and studies.



**Strongest Associated
Master Plan Elements**

11.0 Healthy Communities

“...our greatest health challenges are complex, interconnected and closely associated with the social and environmental determinants of health, such as access to health care, education and jobs, community support, economic conditions, transportation, and public safety”

- Excerpt from the [Healthy Communities Policy](#), Long Beach California

11.1 Introduction

The Healthy Communities Element falls substantially within *Monmouth County Master Plan* Goal #3: Promote beneficial development and redevelopment that continues to support Monmouth County as a highly desirable place to live, work, play, and stay. *Master Plan* Goal #3 defines principles and objectives regarding the balance of development and redevelopment while conserving resources and maintaining/ enhancing community character. The principles consist of guidelines critical to creating and maintaining healthy communities, including, housing, economic development and redevelopment, recovery and community resiliency, and vibrant and sustainable communities.

When describing a healthy community, factors that extend beyond the physical and mental well-being of its members must be examined and addressed to ensure an environment that will provide the necessities for the utmost quality-of-life. A community that provides safety, employment opportunities, options for housing that will meet the needs and financial capabilities of all, access to health care and transportation options as well as a sustainable ecological environment is defined by the [World Health Organization \(WHO\)](#) as a healthy community.

Figure 11.1 displays the primary components of a healthy community:



Figure 11.1: Components of a Healthy Community

- **Public Health:** Protecting the health of people and the communities where they live, learn, work, and play ([American Public Health Association](#)).
- **Public Safety:** Protecting a community and providing a safe environment for all members of a community.
- **Mental, Physical, and Social Well-being:** Providing mental, physical, and social opportunities for interaction and enhancement within a community for the welfare of the population.
- **Environmental Impacts:** Minimizing negative impacts to natural resources, such as clean air and water.



- **Housing:** Providing safe and affordable housing options to meet the needs of the population at all life-stages.
- **Mobility and Access:** Integrating transportation options which give community members access to destinations essential for a healthy lifestyle.
- **Community Design:** Planning and providing a safe and healthy environment and lifestyle that meets the needs of a community.

11.2 Existing Conditions

11.2.1 Supportive Reports and Guiding Documents

Community Health Needs Assessment (CHNA): As part of the Patient Protection and Affordable Care Act of 2010, all nonprofit hospitals are required to prepare a CHNA at least once every three years as a condition of maintaining their tax-exempt status. The first round of CHNAs were due in 2012. These CHNAs contain an in-depth analysis of specific community needs along with an implementation strategy of how the hospital will meet the identified needs. CHNAs are intended to assist public health agencies, local officials, hospitals, policymakers, community leaders, and other stakeholders better understand their community's health needs. These assessments include identifying local public health needs along with an area's specific barriers and points of interests. Quantitative data (including prevention/ wellness measurements, demographics, obesity rates, mortality rates, uninsured residents, disease relevance, and incidents) and qualitative data (including survey content analysis) are both examined during CHNA development. The three major hospital systems in the county have completed CHNAs.

Meridian Health manages the **Jersey Shore University Medical Center** in Neptune City, **Riverview Medical Center** in Red Bank, and **Bayshore Community Hospital** in Holmdel along with two other hospitals in Ocean County. Meridian Health produced the [2015 Community Health Needs Assessment for Monmouth and Ocean Counties, New Jersey](#). This

2015 assessment was follow-up to similar studies conducted 2006 and 2011. Meridian's CHNAs intend to identify Monmouth and Ocean County residents' health status, behaviors, and needs along with providing valuable information to decision makers and guiding community health/wellness improvement efforts. The 2015 assessment includes an introduction (project overview, goals, and methodology along with a summary of findings), a community description of population characteristics and social determinants of health, the general health status, infectious disease, births, modifiable health risks including nutrition, physical activity, weight status, substance abuse and tobacco use, access to health services, healthcare information, advance care planning, palliative/hospice care, and local resources. The three identified overarching goals of this CHNA are:

1. To improve residents' health status, increase their life spans, and elevate their overall quality-of-life.
2. To reduce the health disparities among residents.
3. To increase accessibility to preventive services for all community residents.

CentraState Medical Center, located in Freehold Township, produced the [Community Health Needs Assessment and Implementation Plan FY2013](#). CentraState's service area is comprised of Western Monmouth County municipalities along with Jackson and Monroe Townships. Their CHNA contains a foreword, mission and vision, community served by the hospital, process and methods, identified health needs, significant health needs, implementation plans, and monitoring/evaluation. Significant health needs identified in their *CHNA FY2013* are heart disease, obesity, and access to primary care. Specific implementation plans to address these identified significant health needs are detailed in the CHNA as well.

Monmouth Medical Center in Long Branch, a member of Barnabas Health System, produced the [Monmouth Medical Center Community](#)



[Health Needs Assessment 2013](#). This CHNA includes an introduction, a methodology, an overview of Monmouth County, and a Monmouth County/Service Area Health Profile consisting of Health Outcomes and Health Factors along with an assets and gaps analysis. Health Factors analyzed include socioeconomic status, access to care, clinical care measures, health behaviors, physical environment, and behavioral health. This assessment identified the five top health issues as addressing the needs of the “frequent flyer” (patients who are willfully abusing access to emergency care), prevention and management of chronic diseases, physician prescribing patterns with regards to narcotics, pharmacy counseling for geriatric patients, and care transitions.

CHNAs offer hospitals inner capacity growth to better enhance community relationships and engagement. These assessments increase capacity to better serve residents and address their needs. The intention of these CHNAs is for hospitals to take a proactive approach in addressing community needs and creating healthy communities.

[County Health Rankings and Roadmaps- Building a Culture of Health, County by County](#): This program is a collaboration between the Robert Wood Johnson Foundation (RWJF) and the University of Wisconsin Population Health Institute. The goals of this program are to create awareness of the many factors influencing health, provide reliable local data to communities, engage local leaders from many sectors in creating sustainable communities, and empower community leaders working to improve health. The *County Health Rankings* measure policies and programs, vital health factors of the physical environment, social and economic factors, clinical care, and health behaviors, and health outcomes including length of life and quality-of-life. The [Monmouth County Overall Rank](#) provides a snapshot of how health is influenced where we live, learn, work, and play. The [Roadmaps to Health](#) provide strategies to move from education to action along with guidance and tools to understand the data.

Figure 11.2: Overall Rankings in Health Outcomes
Source: RWJF

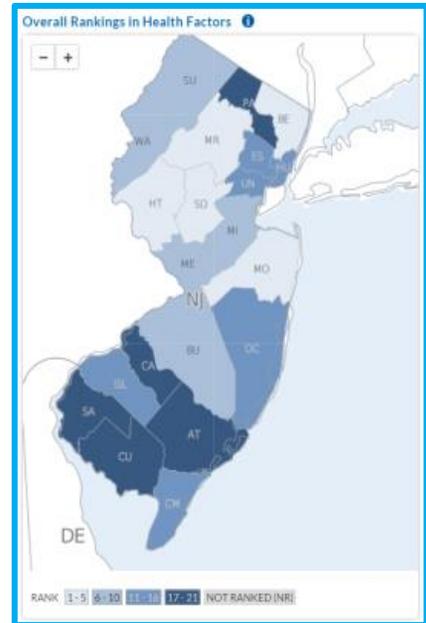
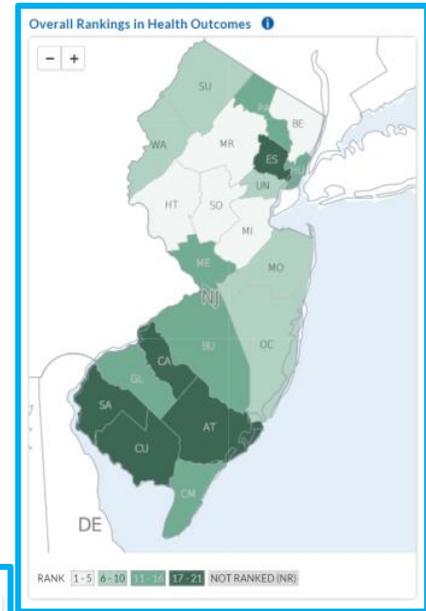


Figure 11.3: Overall Rankings in Health Factors
Source: RWJF



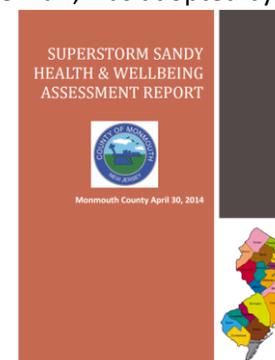
As seen in Figure 11.2: Overall Rankings in Health Outcomes, the 2015 report ranked [Monmouth County](#) 6th amongst all 21 New Jersey counties in Health Outcomes; a measure of the current health of the county-based on a combination of length of life (premature death) and quality-of-life (poor or fair health, poor physical health days, poor mental health days, and low birth weight).

Monmouth County also ranked 5th in an analysis of the Health Factors that influence a county's current and future health, including health behaviors (adult smoking, adult obesity, physical inactivity, teen births, access to exercise opportunities, etc.), clinical care (uninsured, diabetic monitoring, preventable hospital stays, etc.), social and economic factors (children in poverty, income inequality, unemployment, etc.), and the physical environment (air pollution, severe housing problems, long commute, etc.). This is displayed in Figure 11.3: Overall Rankings in Health Factors.

Monmouth County Community Health Improvement Plan (CHIP): In 2005, the Health Improvement Coalition of Monmouth County, a partnership of representatives from the Monmouth County and Freehold Departments of Health, Meridian and CentraState Healthcare Systems, community organizations, educational institutions and citizens, joined forces to improve the health and well-being of Monmouth County residents. Their mission was to develop a plan to meet the needs of the citizens by identifying and addressing the issues and challenges of a healthy lifestyle. The vision for the countywide health improvement plan was "to be a model community committed to empowering all residents to achieve optimum health." The first [CHIP](#) was developed in 2007 with the updated [Monmouth County, New Jersey Community Health Improvement Plan 2012-2016](#) released in 2011 following a review of the updated health statistics compiled as part of surveys and focus group responses. After a review of the assessment findings, the coalition prioritized the health needs of the county to determine which issues were the most severe as well as those that the

coalition would be able to address. In September of 2011, the coalition adopted the three key community health priorities, discussed in 11.2.2 Monmouth County Existing Conditions.

Monmouth County Solid Waste Management Plan: As required by legislation in 1977, Monmouth County adopted its first *Solid Waste Management Plan* in 1979. This plan identifies existing solid waste management practices and facilities to assist in determining future anticipated waste disposal needs and practices for the county. The most recent [Solid Waste Management Plan](#), including revisions and an update pursuant to the *NJ State Plan*, was adopted by the Freeholders in 2009.



Superstorm Sandy Health & Wellbeing Assessment: Superstorm Sandy, one of the most destructive storms to hit the Northeast coast, resulted in an unprecedented emergency response by many county agencies to assist in disaster relief for those impacted by the storm. In 2013, the Monmouth County Health Department received federal grant funding for the purposes of assessing and coordinating recovery activities that would address health, behavioral health, and social services needs associated with the aftermath of the storm. The 2014 assessment sought to identify the existing recovery efforts and needs of survivors to determine their future needs as part of a Long-Term Recovery Plan. Some of the recommendations from the assessment included working closely with healthcare providers to address post-Sandy related health



issues, creating a network of information in multiple formats and raising awareness to health and social needs available to Sandy survivors and first responders, as well as an understanding of potential health impacts associated with disasters.

11.2.2 Monmouth County Existing Conditions

Monmouth County CHIP: The 2012-2016 CHIP focuses on three major issues facing the county along with the goals and indicators that will assist in developing and implementing strategies to target each issue. The three key health issues are:

1. **Risk Factors for Heart Disease:** Considered the number one cause of death in the county, contributing risk factors identified with a non-healthy lifestyle impact approximately 81% of adults in Monmouth County.
2. **Obesity and Overweight for Children and Families:** Lifestyle also plays a key role in an individual's body weight and health. With a rise in obesity creating health related issues, over 62% of adults and almost 29% of children ranging in age from 6 to 17 are at risk of developing heart disease and diabetes as a result of their status as overweight or obese.
3. **Access to Comprehensive Health Care:** The lack of adequate health care and access to affordable health care has created an increase in the uninsured and underinsured in the county each year.

Food Access and Nutrition: One of the greatest challenges to maintaining a healthy community is meeting the nutritional needs of its population. Created by [Feeding America](#), a national network of food banks, the [Map the Meal Gap](#) research project was an opportunity to conduct a national search of the impact of hunger at the local level in order to identify the needs and strategies for communities to address hunger. The results of their research found approximately 10% of the population in Monmouth County is comprised of food insecure individuals, who lack adequate access to food sources at some point in

time; whereas the overall food insecurity rate in NJ is estimated to be 12.4%; approximately 1.1 million of the 8.9 million individuals that make up the state's population. Of Monmouth County's total population under the age of 18, 15.3% are children living in food insecure households. USDA describes food insecurity as not having enough food due to lack of access or unavailability of adequate nutrition choices to all members of a household to maintain a healthy lifestyle. In many instances, the choice must be made between putting healthy food on the table versus meeting the basic non-nutritional needs of a sustainable life that may include paying bills to assure a place to live. In Monmouth County, 4.3% of low-income individuals do not have access to a grocery store within close proximity to their home. ([2011 Food Insecurity & Food Cost In the U.S.](#)) ([2011 Child Food Insecurity & Food Cost in the U.S.](#))



Potable Water Quality/Quantity: One of the key components of a healthy community is the availability of a clean water supply to meet the needs of its residents. Providing potable drinking water for human and animal needs as well as the protection of water resources for aquatic life, agriculture, recreational, and other uses requires safeguarding surface and ground water from pollution generated from wastewater and stormwater discharges as well as other sources of nonpoint pollution. The protection of water recharge areas is also necessary to ensure the continual replenishment of ground water supply to our aquifers.

Protecting drinking water supplies and sources involves long-term planning and implementation of projects to limit the amount of development to control potential contamination near the source.



Maintaining water quality is more cost effective than the costs of cleanup of contamination afterwards (see Elements 3.0 Natural Resources and 7.0 Utilities).

As a major water purveyor for Monmouth County, New Jersey American Water (NJAW) provides an average of 43 million gallons per day to its customers, the Coastal North System provides groundwater from the Potomac-Raritan-Magothy Aquifer (PRM) and surface water from the Glendola Reservoir, Manasquan River Reservoir, Shark River, and Swimming River Reservoir to the Shrewsbury area. The Howell area of the system includes one surface water supply and 15 wells, the sources of which includes the Englishtown, Kirkwood-Cohansey, Mount Laurel-Wenonah, Potomac-Raritan-Magothy and Upper Potomac-Raritan-Magothy and Vincentown aquifers. NJAW also provides approximately 500,000 gallons of water per day to Union Beach customers from the PRM aquifer and Swimming River Reservoir. NJAW releases [Water Quality Reports](#) outlining the source and quality of the Coastal North System’s drinking water including a [Coastal North Basic Water Quality Summary](#) and [Coastal North Detailed Water Quality Report](#) in 2015.

Recreational Activity Opportunities: Most municipalities provide opportunities for physical activity, social gatherings, and health and wellness programming at municipally owned and maintained parks and recreation facilities. Information can be found on individual municipal websites or by contacting local Recreation departments. In addition to the municipal and county park offerings, the State of NJ provides additional outdoor recreation opportunities including two state parks (Allaire State Park and Historic Allaire Village and Monmouth Battlefield State Park), five wildlife management areas (Assunpink, Imlaystown Lake, Manasquan River, Pleasant Run, and Turkey Swamp) two of four state-owned golf courses (Cream Ridge and Spring Meadow) as well as a state marina in Leonardo (Middletown). The state also provides recreational opportunities while protecting open space and habitats through NJDEP’s Wildlife Management Areas. The six designated areas

in Monmouth County are Assunpink, Imlaystown Lake, Manasquan River, Navesink River, Pleasant Run, and Turkey Swamp.

Gateway National Recreation Area, which borders the Atlantic Ocean and Sandy Hook Bay, provides visitors with multiple year-round recreational opportunities including hiking, bathing, bird and seal watching, and the seven-mile long [Multi-Use Pathway \(MUP\)](#) used by cyclists, walkers, and joggers as well as the opportunity to visit the oldest lighthouse in the U.S. In addition, visitors may tour the historic Fort Hancock, commissioned by the U.S. Army in 1895 to protect the NY Harbor and decommissioned in 1975. Fort Hancock is now under the authority of the U.S. Coast Guard.



Peaceful sunset in Keansburg Borough

Source: Joe Barris



Monmouth County’s federal, state, and county open space parks and facilities are displayed in Figure 4.1: Open Space Map. Refer to Element 4.0 Open Space for more information on recreational activity opportunities in the county.

Lead Exposure: Children’s exposure to lead hazards continues to be a problem in a number of Monmouth County communities. The CDC has lowered the level of concern and the state of NJ has bills before the Assembly and Senate to do the same. Lead pipes in older dwellings may contribute to increased lead levels in children. The increased lead levels can have high societal costs. Special Education, criminal justice costs, and long-term social service needs are all associated with increased childhood lead levels. Removing lead based paint from dwellings is the best way to prevent childhood lead poisoning and ensure safe and healthy housing for future generations. The work must be done following lead safe work practices. When extensive work is being conducted, residents should be relocated and may only return once the work is completed.



During 2015, 9,885 children under the age of six, living in Monmouth County were screened for elevated lead levels. Of those screened 245 children had lead levels that exceed the CDC’s level of concern of 5 micrograms per deciliter of lead. This translates to 2.5% of the children screened had elevations. It is important for residents to be aware of the dangers of lead hazards and to ensure that all children are screened.

11.3 Emerging Issues and Long Range Challenges

A meeting of the Healthy Communities Working Group was held during 2014, with several follow-up staff to staff meetings between the Environmental and Sustainability staff and members of the Monmouth County Department of Health (MCHD). During the meetings, discussions

focused on some of the health-related issues facing Monmouth County. A number of the concerns discussed by the group have already been touched upon in Section 11.2 Existing Conditions but deserve further consideration for the purposes of improving and enhancing a community’s health and well-being. Also, through extensive research and discussion, additional emerging issues were identified by staff during the drafting of this *Master Plan* Element. Some of the notable concerns identified by the Working Group, MCHD, and Division of Planning staff include the following.



Monmouth County Junior Master Garden Grow Team Program through Master Gardeners of Monmouth County

Source: Mary Ellen Scott



11.3.1 Public Health

- The capacity of aging and/or underutilized educational facilities along with effectively assessing student needs.
- The need for improved communication and access between primary care physicians, hospital care and/or continued medical care.
- Physicians need to educate parents on the actual and perceived risks associated with childhood vaccinations.
- The spread of infectious diseases and traditional communicable disease.
- Address the problem of the rise of chronic illnesses.
- The [Monmouth County, New Jersey Community Health Improvement Plan 2012-2016](#) and previously identified hospital CHNAs detail high levels of child and adult obesity with goals to reduce the prevalence of obesity in children and families living in Monmouth County. Obesity has long-term health risks such as type 2 diabetes, stroke, heart disease, and several types of cancer.
- There are many health consequences of failing septic systems including groundwater contamination, bacteria, viruses, and parasites. Municipalities and homeowners need to be proactive in ensuring their system is properly maintained running during its design lifespan.
- Increase threat of vector-borne diseases stemming from climate change and emerging from other regions of the country compounded by the spread of international diseases attributed to global trade and travel.
- The NJ Governor's Council on Alcoholism and Drug Abuse released the [2014 Report Confronting New Jersey's New Drug Problem: A Strategic Action Plan to Address A Burgeoning Heroin/Opiate Epidemic Among Adolescents and Young Adults](#). The report indicates "heroin and other opiates has become the number one health care crisis confronting New Jersey" and "drug overdose deaths now surpass the number of deaths resulting from motor vehicles accidents, which has always been the leading cause of

accidental death in the U.S." The [CDC](#) reports across the nation some of the greatest increases in heroin use are among women, the privately insured, and people with higher incomes. Alarming local use and overdoses have enacted Monmouth County Officials to declare a 'heroin epidemic' in 2013 [\(NJ.com\)](#).

11.3.2 Public Safety

- Hazard mitigation planning needs to look more at localized issues such as temporary debris management, at-risk utilities (e.g. pump-stations, electric grid, etc.), temporary housing for out-of-state support teams (e.g. American Red Cross volunteers, utility workers, Federal Emergency Management Agency (FEMA) staff, etc.), and better use of transportation assets (e.g. evacuation routes, local airports, major highways, etc.).
- Active shooters planning, training, and integration among various entities can save lives. It is critical to have coordinated, inter-agency responses when such devastating events occur. Comprehensive planning for these events is vital and incorporates mitigation, preparedness, response, and recovery. These events are emotionally powerful and can have longstanding effects on a community. Psychological and emotional support along with mental health services need to be readily available.
- The New Jersey Department of Environmental Protection (NJDEP) recently released the [Disaster Debris Management Planning Tool Kit for New Jersey Municipalities \(2015\)](#). These new guidelines encourage municipalities to conduct pre-disaster planning and develop emergency debris management plans in coordination with the Monmouth County Office of Emergency Management (OEM) and Monmouth County Recycling and Solid Waste Planning Office. The guidelines state each municipality has to submit a designated Temporary Debris Management Area (TDMA).



11.3.3 Mental, Physical, and Social Well-being

- NJ has the highest rates in the nation with 1 in 41 or 2.5% of children identified with Autism Spectrum Disorder (ASD). New data released in 2016 depicts a 12% increase from two years ago. Communities need to plan for family services and adult accommodations for residents with special needs. High quality educational programs and treatment services for children with ASD are also encouraged (AutismNJ.org).
- Recognition of environmental justice conflicts so that when developing, implementing, and enforcing environmental policies, regulations, and laws all people and populations are provided the same level of protection from environmental health hazards.
- Residents are still living with the aftermath and recovery from Superstorm Sandy's devastation. For many, the physical loss, stress, and anxiety remain. This means it is important to continue mental health and wellness services for our residents through innovative programs, education, advocacy, and community partnerships.
- According to the CDC (Centers for Disease Control and Prevention), research shows that some people who are injured or ill recover faster when they are exposed to open, undeveloped land, also known as green space. Planning needs to consider accessibility to green spaces as an important cornerstone of healthy community design.

11.3.4 Environmental Impacts

- Sustainable wildlife management practices which promote native species and control nuisance/invasive species.
- Invasive species have the potential to alter our county's natural landscapes. The MCPS provides information regarding Protecting the [Open Space Landscapes of Monmouth County](#). The NJ Invasive Species Strike Team works to prevent the spread of these species

and provides valuable resources along with an interactive invasive species map.

- Protect water quantity and quality, both surface and groundwater.
- Municipalities should be proactive in planning for climate adaptation. Measures are discussed further in Element 12.0 Community Resiliency.
- Improving environmental health through proper containment and mitigation of contamination sources, especially on those sites associated with brownfield remediation and undergoing redevelopment.

11.3.5 Housing

- When lead contaminated homes receive remediation, families are often left with no place to live. Housing relocation options need to be established to ensure normality.
- There are no local, state, or federal regulations governing mold contamination in residential dwellings. The NJ Department of Health provides [Mold Guidelines for New Jersey Residents](#). However, education and outreach needs to be promoted to residents. Replacing existing, older, smaller, housing stock with larger, more resilient a types of housing, will price some longtime residents and subsequent generations who grew up at the shore out of their own neighborhood housing markets.
- There needs to be a mix of housing choices in any given community that will enable populations to more readily cycle through different life-stages, giving residents an opportunity to age in place.

11.3.6 Mobility and Access

- CentraState's [CHNA FY2013](#) states "many individuals in parts of the county, including minority populations in the Boro of Freehold in western Monmouth County, suffer with a lack of health insurance or have insurance that is accepted by too few providers (e.g. Medicaid)." Furthermore, the data indicates "that the number of



uninsured and underinsured has steadily increased each year.” Meridian Health’s [2015 CHNA](#) for Monmouth and Ocean Counties details difficulties accessing services, barriers to access, and lack of health insurance coverage. Findings of the report indicate 38.5% of adults report some type of difficulty or delay in obtaining healthcare services in the past year with woman, adults under the age of 65, lower-income residents, and Hispanics more often reporting difficulties. Barriers include prescription and doctor’s visit costs. The [Monmouth County, New Jersey Community Health Improvement Plan 2012-2016](#) also details accessibility barriers.

- Elevating houses will lead to emergency responder and elderly accessibility issues along with dangers during inclement weather.
- For aging and special needs populations, accessibility to vital resources should be enhanced.

11.3.7 Community Design

- Use design as a tool to promote more physical activity and walking; create safer public areas and spaces; improve access to healthy food options to improve eating habits and reducing obesity concerns; accommodate alternative methods of transportation and mobility; and protect/enhance the environment.
- Maximize social connectivity.
- Include a range of mobility options for an aging population.
- The CDC recognizes community design influences both physical and mental health and wellbeing. ([Healthy Community Design Video](#))

11.3.8 Long Range Challenges: During workshop sessions, the Healthy Communities Working Group also identified several Long Range Challenges that they believe will require further consideration well beyond this *Master Plan’s* 10-year lifecycle.

- Our communities continue to recover from Superstorm Sandy’s destruction. Impending related health issues to Superstorm Sandy

Implications of Smoking

Cigarette smoking overall among adults in the nation is down yet remains high among populations with low education, males, young adults, disabled, certain race/ethnicities, lesbians, gays, and bisexuals, and populations below the poverty level ([CDC](#)). Meridian Health’s *2015 CHNA* reports 15.1% of their service area currently smoke cigarettes. Prevention and cessation educational programs known to effectively reduce smoking, save lives, and save money for are recommended.

In 2016, Hawaii became the first state to raise the legal age to purchase tobacco products from 18 to 21. NJ legislation is currently proposing passing similar measures. While NJ allows municipalities to pass more stringent local laws regarding tobacco use, several municipalities have increased the age to 21 including Princeton, Highland Park, Sayreville, and Teaneck. [Campaign for Tobacco Free Kids](#) notes that raising the age to 21 would significantly reduce smoking ([NewsWorks](#)). Numerous municipalities in Monmouth County have passed ordinances regarding smoking on beaches and public recreation areas.

NJ also became the first state to ban e-cigarette use in bars and restaurants during 2010. The [2015 National Youth Tobacco Survey](#) released by the CDC reported from 2011 to 2015 a huge rise in the use of e-cigarettes among high school studies 1.5% to 16%. E-cigarette use is also increasing in adults. Although they are intended to help smokers end the use of cigarettes, future and long-term health implications of e-cigarettes are not known at this time.



include: potential increase in lead dust, mold, trip/fall/puncture injuries, the mental health of our residents, home elevation encumbering mobility (relocation and accessibility), and new government guidelines/mandates that may be cost prohibitive to continued home ownership.

- Understanding and awareness of what comprises a healthy community and how it fits into the broader context of sustainability.
- The growing drug epidemic threatens the safety and security of families and neighbors while undermining the community’s bonds, safety, desirability, resources, money, and talent. Monmouth County Prosecutor, Christopher Gramiccioni, recently stated in a press conference following his permanent appointment

announcement that “people will often talk to me about what is killing the most people in Monmouth County, and there is a misconception that it’s violent crime or vehicular accidents. Those are certainly terrible, but it pales in comparison to the heroin and opiate deaths,” adding the county has averaged about 80 heroin or opiate-related deaths over the last few years. He notes the pilot naloxone program is a rousing success in the county. NJ.com

- Crime and safety perceptions as they relate to a community’s private investments and property values.
- Integration of technology into healthy community approaches (data, movement, locations, access).

Local Brownfield Redevelopment

Three local examples of successful brownfields remediation projects in Monmouth County include the redevelopment of the former **Manasquan Borough Hall property** into residential townhouses and the cleanup and redevelopment of the former Keyport Public Works yard into the **Keyport Waterfront Park**.

The former **A&M Karagheusian Rug Mill** located in Freehold Borough, once considered one of the major employers in Monmouth County in the early 1900s, fell victim to abandonment and deterioration after a fire destroyed the building. Following the remediation of lead and asbestos contamination, common in structures built during that time period, the Rug Mill became home for low-income and senior citizens as a mixed-use project that included housing, office, and retail space. An example of adaptive reuse of a converted historic building.



**The Continental at Freehold:
An Affordable Rental Community**

Source: Mary Ellen Scott

In 2004, the Monmouth County Planning Board published [The Brownfields Redevelopment Handbook: A Step-by-Step Guide for Municipalities](#).



- Aging populations and the regional economy’s response to their changing service needs (beyond health and mental services).
- Local, accessible, and comprehensive health services remain out of reach for some residents.
- There needs to be an acknowledgement and strengthening of programs that address the association between housing conditions and accessibility to better housing and the physical and mental health of residents.
- Development remains vulnerable in floodprone areas.
- Protection of the water supply.
- A diminishing supply of developable land in Monmouth County has become the incentive to identify brownfield redevelopment opportunities that can provide the mechanism to revitalize a struggling local economy. A Brownfield is “any former or current commercial or industrial site, currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant” ([Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-1 et seq.](#)). For land that has become non-productive due to confirmed or perceived environmental contamination, redevelopment and reuse of such sites provides an opportunity to improve the quality of the environment, quality-of-life for its residents and subsequently increases economic incentives and revenue at the local level. The New Jersey Business Action Center's [Office for Planning Advocacy](#) provides [guidance and resources](#) for the redevelopment of brownfields into locations that will enhance the local economy as well as restore its environment.



The former site of the Lily Tulip plant, where Dixie cups were once made, was transformed into a shopping center, the Commons at Holmdel, and an active adult community, Cedar Village.

Source: Steven daCosta



11.4 Healthy Communities Stakeholder Actions and Efforts

11.4.1 Monmouth County Efforts

A number of county agencies and departments are involved in programming that supports healthy communities.

Monmouth County Health Department (MCHD): Comprised with a diverse background of health professionals, the staff of the MCHD provides information and guidance on health related topics to the residents of Monmouth County. The Health Department's speaker's bureau conducts training on public health and safety topics that may affect residents. Grant funding has enabled the staff to train hundreds of residents on how to maintain a healthy home following the aftermath of Superstorm Sandy. Community organizations are encouraged to contact the MD for public health and safety informational opportunities.



The MCHD provides assistance to other county departments and local health departments in all aspects of water quality monitoring to address water pollution issues. Since 1987, the MCHD in cooperation with NJDEP has conducted surface water monitoring as required under the County Environmental Health Act (CEHA), N.J.S.A. 26:3 AZ-21 et seq. Some of the objectives of the program are providing background water quality data, tracking data to identify trends over time with relation to land use, and providing support for watershed partnerships. Temperature, Enterococcus, E. coli, and pH, and salinity (of estuary sites) levels are sampled from ten monitored sites throughout the county on a rotating basis. The criteria for collecting and providing the data can be found in

the MCHD Environmental Laboratory's [Quality Assurance Project Plan for Ambient Stream Monitoring \(FY2014/2015\)](#).

The MCHD also monitors the county's coastal bathing beaches weekly for potential bacteria during the bathing season as part of the [Cooperative Coastal Monitoring Program \(CCMP\)](#), administered by NJDEP. The results of the weekly monitoring can be found on the MCHD Beach Sampling webpage. Current beach status, closures, water quality reports, and other important information is also available online.

In 2016, the MCHD launched our county's first public health e-newsletter. Residents can sign up for the free e-newsletter on the county webpage. E-newsletters will contain information on provided services and public health issues affecting residents. Included issues thus far have been topics like rabies clinics, hazardous waste collection, preparing for emergencies, illness prevention, and local health fairs.



Also contained within the MCHD is the [Monmouth County's Medical Reserve Corps](#) (see Public Safety, Emergency Management discussion).

Monmouth County Reclamation Center (MCRC): As required by legislation in 1977, Monmouth County adopted its first *Solid Waste Management Plan* in 1979. That plan identified existing solid waste management practices and facilities to assist in determining future anticipated waste disposal needs and practices for the county. Over the years the plan was revised and amended in response to state regulatory changes and requirements. In 2009, following an update to the *NJ State*

Solid Waste Plan, the [Monmouth County Solid Waste Management Plan](#) was amended and adopted by the Freeholders. The most recent plan provides an extensive review of existing waste disposal and recycling practices for increasing recycling rates through the implementation of new practices and programs.

Staff of the [Monmouth County Recycling and Solid Waste Planning](#) provides technical support and guidance to municipalities on solid waste management and recycling activities and conducts educational outreach and training for schools and the general public. With an emphasis on the need to recycle to reduce waste and enhance the environment, the [Recycling](#) staff provides training in backyard composting and recycling in the workplace. Staff also generated an annual Recycling Directory to provide all information and resources related to recycling in Monmouth County, [2016 Recycling Directory](#).

The Recycling and Solid Waste Planning staff works directly with volunteer organizations and municipalities as part of the [Monmouth County Clean Communities Program](#), sponsored by the Board of Chosen Freeholders and funded by an annual NJDEP grant through [New Jersey Clean Communities Council](#). This program focuses on litter abatement, enforcement, and education. All 53 municipalities receive a grant for these purposes based on the miles of roadways in their town and their population. This program works closely with the Monmouth County Sheriff’s Office Inmate Labor Program, an innovative, tax-saving resource enabling towns to complete labor-intensive projects. Any other entity, business, or volunteer that wishes to initiate or engage in a community service project is encouraged to reach out to this program.

In 2015, Keyport and Matawan were the first towns to receive funding for recycling programs as part of the new [Monmouth County Recycling Stimulus Initiative](#) grant program. The intent of the grant program is for municipalities to increase their rates of recycling and to expand the community’s awareness of recycling opportunities. Keyport received a

\$6,000 grant for recycling containers, a paper shredding event, and for the purchase of educational books on the subject of recycling to be donated to the Central School Library

Department of Human Services: Established by the Board of Chosen Freeholders in 1987, this department works to address the needs of citizens who are struggling with unexpected events and to enhance the overall quality-of-life of Monmouth County residents. The department of Human Services consists of eight divisions including:



Mosquito Control Division: Monmouth County has had an active mosquito control program since 1914. The mission of the Monmouth County Mosquito Control Division is to provide county residents and visitors with protection from arthropod-borne diseases, while maintaining an environmental comfort level that is suitable for the enjoyment of outdoor activities. In 1998, the Board of Chosen Freeholders designated Mosquito Control Advisory Board as the first Mosquito board in NJ to also provide services to educate residents about tick-borne diseases.

The Mosquito Control Division’s program follows an Integrated Pest Management (IPM) approach where a variety of strategies, methods, and products are used to keep mosquito populations low. Much of the division’s efforts involve source control which is the reduction or elimination of the standing water where mosquito larvae flourish.



Where possible, the division works with nature to control mosquitoes by introducing fish that eat mosquito larvae or cleaning a stream to improve water flow. The division responds to the public's requests to inspect properties where a mosquito problem is reported. Inspectors look for standing water sources that support mosquito larvae. If larvae are found, the inspector will treat the water and/or eliminate the breeding source if they are able to do so.

Public outreach and education is an important component of the mosquito control program as many mosquitoes emanate from standing water in small containers around the home. The division posts information and resources online about mosquito habitat, prevention, and vector-borne disease information. Presently, there is growing concern over the spread of the Zika virus throughout the U.S. Although Zika is the most recent public health threat to commandeer media attention, mosquitoes in NJ are more likely to carry other diseases such as West Nile virus, Eastern Equine Encephalitis, Malaria, and other maladies. The division monitors mosquitoes for these viruses as well as emerging diseases including Zika, Dengue, and Chickungunya virus. Ticks pose a similar threat in that they can carry Lyme disease, Rocky Mountain spotted fever, and a number of other life-threatening illnesses. The division offers tick-testing of female deer ticks for Lyme disease to county residents and conducts surveillance of tick habitats on public lands to access tick populations and infection rates.

Division of Planning, Office of Community Development: Providing opportunities for safe and affordable housing options to meet the needs of Monmouth County residents is one of many responsibilities of the [Monmouth County Community Development Program](#). With the assistance of federal funding, projects that target rehabilitation of existing vacant homes, construction of new affordable housing on vacant properties and improvements to infrastructure in areas of low-to moderate-income communities provide new opportunities for residents to reside in a healthier community. Coordinating the requirements of

federally funded programs involves the cooperation from a number of public and private entities from application to project completion. An environmental review of a potential project site must be conducted as a requirement to obtain federal funding to determine compliance with regulatory requirements. Performed by the Environmental and Sustainability Section within the Monmouth County Division of Planning, the environmental review process provides assurance that a project will provide a safe and healthy environment for those who will benefit from a new home, have use of a public facility, and gain from improvements to infrastructure. See Element 10.0 Community Development & Housing.

Public Works and Engineering, Complete Streets Policy: The overarching goal of Complete Streets is to create a community with safe access for all users of all methods of transportation regardless of age or ability to meet the needs associated with a livable and walkable community. Complete Streets is an important component of healthy Community Design. Some of the benefits of Complete Streets include: revitalization of downtowns, improving the health and safety benefits of the population through the encouragement of the use of alternative methods of transportation, and the reduction in environmental impacts and transportation costs associated with traditional transportation methods. [New Jersey Department of Transportation \(NJDOT\)](#) created and approved a Complete Streets Policy in 2009 for federal or state funded transportation projects. NJDOT provides assistance to municipalities that wish to adopt similar policies when seeking Local Aid funding. The Monmouth County Board of Chosen Freeholders adopted a [Complete Streets Policy](#) on July 22, 2010. In addition to Monmouth County, the following municipalities have adopted resolutions establishing and adopting a Complete Streets Policy:

- [Red Bank: 8/9/10](#)
- [Freehold Boro: 4/2/12](#)
- [Fair Haven: 7/12/12](#)



- Sea Bright: 11/18/13

Note: Also refer to Element 8.0 Transportation & Mobility regarding Monmouth County's Complete Streets Policy.

Division of Planning, Agricultural Sustainability Plan: *Master Plan* Recommendation 9.1 seeks to coordinate the county's agricultural initiatives such as the *Monmouth County Farmland Preservation Plan* and Grown in Monmouth initiative through one comprehensive guiding document called the *Agricultural Sustainability Plan (ASP)*. The aforementioned Grown in Monmouth marketing strategy is the first step in the development of a broader ASP.



Division of Economic Development, Grown in Monmouth Program:

The Division of Economic Development, in conjunction with the Division of Planning and Rutgers Cooperative Extension, applied for a USDA Rural Business Enterprise Grant in October 2014 to obtain funding that will lay the groundwork for a marketing and branding program to be known as Grown in Monmouth. The goal is to provide marketing assistance and business training to small and emerging agricultural producers located in rural areas of the county. Grown in Monmouth aims to connect producers and buyers, expand small agricultural businesses, and contribute to job growth in the local area. The county also sponsors an annual Made in Monmouth Expo each spring that features local producers of food and agricultural products among others crafts and goods. In addition, it publishes a hyper-local holiday shopping

guide on its website. (See Element 9.0 Agricultural & Economic Development)

Monmouth County Public Safety: There are two aspects that Monmouth County Public Safety focuses on: law enforcement and emergency preparedness.

Law Enforcement

Child Seat Safety Checkpoint: As part of a joint effort between the Monmouth County Sheriff's Office and the New Jersey Division of Highway Traffic Safety, a child safety seat program known as Safe C.A.R.G.O. "Children And Restraints GO together", provides voluntary child seat safety checkpoints for inspections of proper car seat installation and potential manufacturer recall. Schedules and locations for checkpoints can be found on the Sheriff's Office website.

Animal Welfare: The [Monmouth County Animal Response Team \(CART\)](#) works under direction of the Monmouth County OEM and Sheriff's Office to facilitate interagency local animal disaster preparedness and response development. The Sheriff's Office also works with municipal animal control offices, the [Associated Humane Societies](#), and the [Monmouth County Society for Prevention of Cruelty to Animals \(MSCPA\)](#) to prevent animal cruelty throughout the county. The MSCPA is a nonprofit organization dedicated to protecting and advocating for all animals in Monmouth County. The MSCPA is charged with enforcing the State of NJ Animal Cruelty Laws in Monmouth County.

The [NJ Department of Health's Office of Animal Welfare](#) establishes the statewide laws and rules addressing animal control, animal facility licensing and sanity rules, dog licensing, and the training of Animal Control Officers and Animal Cruelty Investigators. They work to ensure sanitary and humane conditions in pet shops shelters; educate on public health animal-related rules and regulations; promote solutions to animal control and welfare concerns; and promote the human care of



stray, unwanted, and homeless animals through animal control, impoundment, and sheltering throughout the state of New Jersey.

Other Outreach and Educational Programs: Additional opportunities to educate the public on both the role of law enforcement and the assistance of community members in crime prevention are offered as part of the [Citizen Police Academy](#) and the [Sheriff's Youth Week](#) programs. Instruction on the proper use of the 9-1-1 emergency system is offered through [A.C.E.S. \(Adults Calling Emergency Services\)](#) to both children and adults. The Sheriff's Office and representatives of the [Brain Injury Association of New Jersey \(BIANJ\)](#) visit schools throughout the county to teach the importance of [Bicycle Helmet Safety](#).

Special Projects Unit: The Monmouth County Prosecutor's Office Special Projects Unit, the community outreach segment of the Prosecutor's Office, provides training on crime prevention and public safety. Members of the Speakers Bureau will address topics related to bias and community relations; the criminal justice system; juvenile crime and safety (including Internet safety); gangs, drugs and violence; sexual assault; and child abuse to community organizations and schools.

Emergency Preparedness

Monmouth County Emergency Operations Plan, Office of Emergency Management (OEM): This 2013 plan was created and implemented by OEM providing guidance on countywide actions necessitated during an emergency. Protecting lives and property of a community involves the efforts of many emergency services including police, fire, medical and other governmental agencies and organizations. When major disasters or events requiring the deployment of a combined effort of services occur, the planned and coordinated response by all to address the impacts of the situation and the resulting recovery needs of those affected is the directive of emergency management. The coordination of emergency management during events warranting emergency

response throughout the county is the responsibility of the OEM within the Monmouth County Sheriff's Office.

Community Emergency Response Teams (CERT): Originally created by the Los Angeles Fire Department in 1985, a 1987 earthquake emphasized a need for civilians to be trained to respond and assist during times of major disasters. The Federal Emergency Management Agency (FEMA) identified the need for the assistance of trained civilians during times of crises and in 1993 made training available to communities throughout the country. The [Community Emergency Response Teams \(CERT\)](#) Program provides classroom training combined with simulated exercises to prepare individuals with basic disaster response knowledge and skills to provide immediate assistance in emergency situations before and as a supplement to the support of professional emergency response team members. In addition to the county's CERT Team within the OEM, Monmouth County has 11 active municipal CERT Teams as well as regional assistance from CERT Teams representing the NJ TRANSIT Police Department, the U.S. Air Force, the NJ Wing Civil Air Patrol stationed at McGuire AFB, and a team from Monmouth University that responds to campus emergency needs.

Multi-Jurisdictional Natural Hazard Mitigation Plan (OEM): Addressing the impacts of events proactively before their occurrence to reduce the negative effects upon a community is the act of mitigation. Planning in advance for the possible outcomes of disasters can result in a reduction of loss of lives and property and the long-term recovery efforts necessitated when disaster occurs. The resulting effort of advance hazard mitigation planning creates a more sustainable community. With funds provided by FEMA, the [Multi-Jurisdictional Natural Hazard Mitigation Plan for Monmouth County \(2015\)](#) was developed with the assistance of all 53 municipalities and input from other stakeholders. The first plan was approved by FEMA in 2009 with requirements for regular monitoring, evaluation, and updates every five years. The current plan was approved by FEMA in April 2015.



11.4.2 Partnership Efforts

Monmouth County Human Relations Commission (MCHRC): The MCHRC was formed in 1990 by a resolution of the Board of Chosen Freeholders. The commission works to promote understanding and tolerance among the many cultural groups in Monmouth County by enhancing human relations and addressing issues proactively. They work to end the causes of bias and discrimination that result in acts of violence, vandalism, and civil right violations. The MCHRC advocates for victims, creates school resources, conducts outreach, educates employees and employers, and works to improve police/community relations. They offer a hate/bias hotline for people to call and confidentially report incidents or complaints relating to age, race, religion, disability, sexual orientation, gender, national origin, or other factors. (Hotline telephone number: 732-303-7666)

Clean Communities Program: Maintaining a healthy and clean community by means of reducing debris and litter in public locations is the goal of the [New Jersey Clean Communities](#) program which was formed in 1986 following the passage of the Clean Communities Act. Funding provided by the act is distributed to municipalities and counties annually as state aid. Educational and cleanup programs that involve volunteer participation in environmental renewal provides an opportunity for community members to improve the health and aesthetics of their surroundings, while at the same time improving the environmental quality of the community. Administered by the New Jersey Clean Communities Council, in cooperation with the New Jersey Department of Environmental Protection and the New Jersey Department of Treasury, additional volunteer cleanup programs include New Jersey's [Adopt-A-Beach](#) and [Adopt-A-Highway](#) programs.

Medical Reserve Corps (MRC): Following the events of 9/11, the Federal Government created an organization of professionals and laypersons to respond in times of emergencies within their communities. MRC includes individuals with healthcare skills as well as

volunteers who are trained in emergency response to provide additional resources to existing emergency and public health teams within their municipalities. In the absence of emergency situations requiring their assistance, members of the MRC also provide education and outreach to communities to better prepare residents for potential crises. The State of NJ created the [New Jersey Medical Reserve Corps \(NJMRC\)](#) within the New Jersey Office of Emergency Management as part of the [New Jersey Citizen Corps](#) program. This program provides opportunities for all members of a community, within their capabilities and area of interest and expertise, to assist those in need during all types of emergency events.

The [Monmouth County's Medical Reserve Corps](#) includes volunteers trained to respond to emergencies and to present at educational events throughout the county. With the increase in unforeseen emergencies continuing to rise, the need for additional members to join the team also increases. Individuals interested in assisting their community in this capacity can apply through the Monmouth County Health Department.

Health Improvement Coalition of Monmouth County (HICMC): The HICMC is an ongoing coalition focusing on the implementation of the 2012-2016 Monmouth County Community Health Improvement Plan (CHIP). The coalition consists of county officials, local health department staff, healthcare providers, nonprofit organizations, and community representatives. Efforts have begun on the 2017-2021 CHIP.

New Jersey Department of Agriculture Programs

Jersey Fresh: As an educational marketing program for consumers of agricultural products, Jersey Fresh has created awareness to the importance of quality, variety, and availability of NJ grown produce. The New Jersey Department of Agriculture provides locally grown commodities to many different outlets including retail stores, restaurants, and schools, in order to reach those who desire the



freshest fruits and vegetables that provide the best quality, greatest amount of nutrients, and excellent flavor for a healthy and nutritious diet. Reduction in the time from harvest to consumption as well as promoting and supporting sustainable agriculture in the Garden State are the driving forces behind the program.

Division of Food and Nutrition: The division administers the National School Lunch Program, the School Breakfast Program, Special Milk Program, Afterschool Snack Program, Summer Food Service Program, [Child and Adult Day Care Food Program](#), Family Day Care Program, Commodity Food Distribution Program and [The Emergency Food Assistance Program \(TEFAP\)](#). Providing healthy and nutritious food to those in need is the work of these programs. Child and Adult Care Food Program provide nutritious meals and snacks to daycare centers and family daycare homes, homeless shelters, and after school programs to assure a well-balanced meal can be obtained by everyone in need. Food banks and pantries receive food donations from the Federal Government to be distributed as part of TEFAP.

Jersey Fresh Farm to School: Improving the health and performance of students through proper nutrition and awareness of the importance of consuming fresh and healthy products are some of the objectives of this initiative. Schools are able to obtain fresh agricultural products provided by local growers that will not only provide healthy meal options to students but will also support the local farming industry. The program also provides educational opportunities to apply farming knowledge to all areas of education through onsite school gardens.

FoodBank of Monmouth and Ocean Counties: In Monmouth County, the mission of the FoodBank of Monmouth and Ocean Counties is to

Jon Bon Jovi (JBJ) Soul Kitchen

With two current locations, in Red Bank and Toms River (Ocean County), JBJ Soul Kitchen offers an innovative way to address local food security barriers. Run by the Jon Bon Jovi Soul Foundation, the JBJ Soul Kitchen is a *pay it forward* community restaurant where guests can enjoy a farm-to-table, healthy meal. Guests can either pay for the meal or volunteer in the JBJ Soul Kitchen as their form of payment. One hour of volunteer time in the kitchen is equivalent to a dining certificate that feeds the volunteer and up to four family members. Volunteering in the kitchen also provides culinary training and skill building. Those that do pay for the dinner can also pay it forward to someone else's meal. Prices are not listed on the menu and the guest selects their donation. Opened in 2011, world renowned guest chefs visiting the JBJ Soul Kitchen have included Diane Hendericks, Todd English, Mario Batali, and Tom Colicchio. Meals include a three-course American cuisine often times harvested from their organic, onsite garden. The mission of the JBJ Soul Kitchen is to address issues of food insecurity while allowing diners the dignity of a meal without judgment.

The JBJ Soul Foundation furthered local philanthropy by collaborating with the FoodBank of Monmouth and Ocean Counties and the Peoples Pantry to create the B.E.A.T. (Bringing Everyone All Together) Center in Ocean County. This one stop shop serves as a FoodBank satellite location including a food distribution center, culinary training, at-risk after school children programs, and health care and free tax preparation.



alleviate hunger and build food security in Monmouth and Ocean Counties.



Community gardens, like the Oceanport Community Garden, offer residents an opportunity to grow fresh produce and herbs

Source: Mary Ellen Scott

Monmouth County Crime Prevention/Community Policing Association (MCCPOA): As the means to promote crime prevention awareness through outreach and education, the MCCPOA, a nonprofit organization comprised of civil and law enforcement representatives, was created to provide Monmouth County residents and community members with the skills and opportunities they would need to assure a safe environment for their communities. Law enforcement representatives include officers involved in programs such as D.A.R.E. and TRIAD targeted at educating age specific populations including schools and senior citizens. Educational programs are offered by the association to individuals and

community organizations to increase awareness and knowledge in areas such as home and business security, personal safety, risk management, and identification of potential scams. MCCPOA also provides community members with assistance to create Neighborhood Watch Programs as a means to take control of their communities through crime prevention.

Monmouth Arts: Enhancing a community’s quality-of-life through the arts is the foundation for the work of the Monmouth Arts. Through grants, education, special events, and other programs, community members have the opportunity to support and participate in cultural experiences that can unite and enrich a community through music, art, and theatre. (Refer to Element 6.0 Arts, Historic, & Cultural Resources)

The **Monmouth County Long-Term Recovery Group** continues to assist individuals and families by assessing and meeting their recovery needs with the goal of restoring and rebuilding communities through long-term planning and access to available resources.

11.5 Additional Resources and Funding Opportunities

Public Health

- [American Planning Association \(APA\)](#) and the [American Public Health Association](#) collaborated to develop [Plan4Health](#)
- [Centers for Disease Control and Prevention \(CDC\)](#)
 - [Community Health Improvement Navigator](#)
 - [Community Health Status Indicators \(CHSI 2015\)](#)
 - [Division of Community Health \(DCH\)](#)
 - [National Implementation and Dissemination for Chronic Disease Prevention](#)
 - [Partnerships to Improve Community Health](#)
 - [Racial and Ethnic Approaches to Community Health.](#)
 - [National Environmental Health Tracking Network](#)
 - [Planning and Health Resource Guide for Designing and Building Healthy Neighborhoods](#)



- [Feeding America:](#)
 - [Map the Meal Gap](#)
- [FoodBank of Monmouth and Ocean Counties](#)
- [National Recreation and Park Association \(NRPA\)](#)
- [New Jersey Hospitals Association \(NJHA\)](#)
 - [Keep NJ Healthy](#)
- [Robert Wood Johnson Foundation \(RWJF\)](#)
 - [A Culture of Health](#)
 - [New Jersey Health Initiatives](#)
 - [New Jersey Partnership for Healthy Kids](#)
- Rutgers New Jersey Agricultural Experiment Station (NJAES) [Cooperative Extension of Monmouth County \(RCE\)](#)
 - [Family and Community Health Science Department](#)
 - [Get Moving-Get Healthy New Jersey](#)
 - [New Jersey Supplemental Nutrition Assistance Program-Education \(SNAP-Ed\)](#) housed in the [Department of Nutritional Sciences](#) at Rutgers School of Environmental and Biological Sciences
- [Rutgers Against Hunger \(RAH\)](#)
- [State of New Jersey Department of Health](#)
 - [Federally Qualified Health Centers](#)
 - [New Jersey Environmental Public Health Tracking Program \(EPHT\)](#)
 - [ShapingNJ](#)
- [U.S. Department of Health and Human Services \(HHS\)](#)
- [YMCA](#)
 - [Healthier Communities Initiatives \(HCI\)](#)
 - [Making the Case to Stakeholders: Linking Policy and Environmental Strategies to Health Outcomes](#) guide

Public Safety

Refer to 11.4 Healthy Communities Stakeholder Actions and Efforts.

Mental, Physical, and Social Well-being

- [CPC Behavior Healthcare](#)
- [Guide to Mental Health Services in Monmouth County](#)
- [Mental Health Association of Monmouth County](#)
- [MHA – Mental Health Association of Monmouth County](#)

Environmental Impacts

- Department of State
 - [New Jersey Office for Planning Advocacy Redevelopment/Brownfield Program](#)
 - [Brownfields Redevelopment Task Force](#)
 - [Brownfields SiteMart: New Jersey’s Online Searchable Database for Brownfield Properties](#)
 - [Brownfields InterAgency Team](#)
- [New Jersey Department of Environmental Protection \(NJDEP\)](#)
 - [Source Water Assessment Program \(SWAP\)](#)
 - [Drinking Water Watch](#)
 - [Office of Brownfield Reuse \(OBR\)](#)
 - [Site Remediation Program \(SRP\)](#)
 - [Hazardous Discharge Site Remediation Fund \(HDSRF\)](#) a partnership with the [New Jersey Economic Development Authority \(EDA\)](#).
 - [Known Contaminated Sites Report](#)
 - [NJDEP’s Data Miner](#)
- [New Jersey Environmental Infrastructure Trust \(NJEIT\)](#)
- [New Jersey Water Savers](#)
- [Rutgers Master Gardener Program of Monmouth County](#)
- [U.S. Environmental Protection Agency \(USEPA\)](#)
 - [Brownfields Program](#)
 - [Compliance Assistance Centers](#)
 - [Environmental Health Resources for Community Members](#)
 - [Local Government Environmental Assistance Network \(LGEAN\)](#)
 - [International City/County Management Association \(ICMA\)](#)



Housing

See 10.0 Community Development & Housing Element for Additional Resources and Funding Opportunities related to Housing.

Mobility and Access

- [New Jersey Bicycle and Pedestrian Resource Center](#)
- [New Jersey Department of Transportation \(NJDOT\)](#):
 - [Complete Streets Policy](#)
 - [Making Complete Streets a Reality: A Guide to Policy Development](#)
 - [New Jersey's Guide to Creating a Complete Streets Implementation Plan](#)
 - [Meadowlink](#) (discussed further in 8.0 Transportation & Mobility Element) is the designated [SRTS Regional Coordinator](#) for Monmouth County.
 - [Safe Routes to School \(SRTS\)](#)
 - [New Jersey Safe Routes to School Resource Center](#)
 - [SRTS Infrastructure Grant Program](#)
- [Smart Growth America, National Complete Streets Coalition](#)
- [U.S. Department of Transportation](#)
 - [Transportation and Health Tool](#)

Community Design

- [Center for Disease Control \(CDC\) Healthy Places](#)
- [International City/County Management Association \(ICMA\)](#)
 - [Center for Sustainable Communities](#)
- [LEED Neighborhood Design \(LEED-ND\)](#)
- [New Jersey Redevelopment Authority \(NJRA\)](#)
 - [New Jersey Redevelopment Investment Fund \(RIF\)](#)
 - [New Jersey Urban Site Acquisition \(NJUSA\) Program](#)
- [Sustainable Jersey \(SJ\)](#)

11.6 Master Plan Recommendations and Stakeholder Strategies

Six *Master Plan* Recommendations and numerous Stakeholder Strategies were identified from Working Group meetings and additional input from stakeholders.

Master Plan Recommendations

Recommendation 11.1: Work with local communities and stakeholders to promote agricultural sustainability through healthy food choice initiatives such as access to affordable, healthy foods and the creation of community gardens, urban agriculture programs, mobile food stands/food truck courts, and farmers markets. Providing communities with better access to healthy food choices often requires partnerships and coordination with likeminded stakeholders working together, to assist communities with their assessment of healthy food availability and the identification of opportunities to provide for better food choices. Agricultural activity in the county provides a foundation for sustainable and healthy communities. Preserved farmland will continue to be a source for local food production that helps secure the sustainability of our local agricultural industry while at the same time ensures that locally grown, fresh quality food remains a viable option for consumers.

Recommendation 11.2: Continue to protect human health by assisting with the identification and removal of environmental hazards from the community and raising awareness about public health issues. Provide assistance to agencies in identifying environmental hazards that threaten public health along with the best methods in which to eradicate them. The use of all available sources of technology will better inform the public about environmental health issues.

Recommendation 11.3: Provide planning support and services to the Monmouth County Sheriff's Office and Monmouth County Prosecutor's Office for public safety, law enforcement, crime prevention, and emergency response. Planning for public safety and emergency response requires coordination among state, county, and



local agencies and departments. Promoting planning methods, such as flood mapping, with the use of all available and emerging technologies, will increase a community’s ability to adapt and overcome the impacts resulting from an emergency or disaster.

Recommendation 11.4: Incorporate the Monmouth County Solid Waste Management Plan (2009) as a component of the Monmouth County Master Plan’s Healthy Communities Element. By working together, county departments can provide a well-rounded planning and programming approach for a healthy county. As a result of collective efforts between county departments involved in promoting recycling and solid waste to municipal stakeholders, a greater awareness of the benefits of solid waste planning exists.

Recommendation 11.5: Incorporate by reference the Monmouth County Community Health Improvement Plan (CHIP) (2012) as a component of the Healthy Communities Element and include studies, reports, and findings from the Monmouth County Health Department (MCHD) and other local health departments as consultative and supportive documents to the Master Plan. The identification and elimination of public health hazards will result in healthier natural and built environments. To effectively plan and implement measures which affect the health and well-being of the county, coordination and collaboration with community stakeholders at all levels must occur. The utilization of reference documents, including documented research reports and studies, compiled by the MCHD in numerous areas of environmental health, becomes important when addressing public health issues. In response to potential health implications caused by natural or manmade disasters, preparation and training are important components of a community’s recovery.

Stakeholder Strategies

General

- Evaluate potential public health impacts associated with land use decision-making to enable improvements that will result in healthier communities.
- Plan for ‘complete communities’ that encourage safe and vibrant street-level activity by minimizing incongruous streetscapes through the implementation of complete street policies, the use of infill and redevelopment for vacant and underutilized properties, and the application of creative placemaking.
- Continue brownfield and closed landfill identification to assist in determining which sites could potentially be redeveloped, adaptively reused, or provide the site of a new useful purpose that is economically viable and protective of human health and the environment.
- Encourage municipalities, schools, hospitals, and other entities to develop active shooter protocols and training similar to that being done at the county.

Arts, Historic, & Cultural Resources

- Encourage the use of design guidelines for new development that emphasize compatibility in size, style, and scale with historic structures and their environs while promoting healthy community lifestyles.
- With an aging population, it becomes increasingly important to offer arts and history programming for the elderly that reduces their isolation from the larger community and contributes towards their continued sense of self-worth.
- Promote the use of arts in youth-at-risk programming (e.g. City of Philadelphia Mural Arts Program) and youth engagement (e.g. Howell Police Athletic League Theater Company).



- Use arts programming as one of the methods called upon to help us manage conflict resolution, mental health crisis, and community healing in the wake of a community tragedy or disaster.

Utilities

- Support the use of alternative, renewable energy resources such as geothermal, solar, hydro, tidal, and wind power to reduce the reliance on nonrenewable resources and pollution emissions from fossil fuels.
- Encourage distributed energy generation solutions to improve system efficiency, reliability, and resiliency.
- Encourage water resource conservation while protecting water quality through education, advanced technology, and reuse of captured wastewater.
- Maintain safe and efficient storm and sanitary sewers for safe communities.
- Support infrastructure investments necessary for the continuation of safe, vibrant, and vital communities.

Transportation & Mobility

- Support mobility and accessibility policies that accommodate multi-modal transportation options that:
 - lead to a healthier lifestyle;
 - improve access to recreation facilities, natural/open spaces, job opportunities, and quality/affordable health services;
 - improve pedestrian safety and circulation by means of “complete streets” design guidelines and National Center for Safe Routes to Schools programs; and
 - build, redesign, and better utilize sidewalks, bicycle lanes and networks, and multi-use trails (including equine) to increase mobility within a community and the larger region.
- Encourage municipalities developing mobility plans to consider resident accessibility to health services from community-based treatment clinics to regional trauma centers.

- Prioritize policies that decrease automobile dependency as the prominent mode of transportation.
- Encourage transportation improvements that reduce existing obstacles (e.g. traffic), expedite the local food transportation, and increase pedestrian safety.
- Encourage safe access to all community destinations.
- Work with state, county, and municipal agencies to reduce the distraction and aesthetic nuisance of sign clutter along roadways, particular in historic districts and along scenic roadways.

Agricultural & Economic Development

- Encourage year-round local food production and processing of value-added products to increase food security and economic opportunities for farmers.
- Encourage, promote, and conduct outreach for Monmouth County’s Grown in Monmouth initiative.
- Promote the establishment of local food distribution hubs, farmers markets, and other opportunities to increase fresh food accessibility.
- Foster partnerships with FoodCorps and other similar groups that promote healthy food in schools through nutritional education, hands-on gardening, cooking opportunities, and farm to school programs.
- Create mentorship or apprenticeship programs between local businesses and students, specifically in low-income areas where educational resources are scarce.
- Promote private investment in the community that leads to a wider range of job opportunities for local residents.

Community Development & Housing

- Prioritize Community Development Block Grant (CDBG) Program projects that reinforce safe and healthy communities.



- Recognize the need for various types of housing options for all residents, including those with special needs and vulnerable populations (i.e. group homes and senior housing).
- Encourage the adaptive reuse of substandard, underutilized, or abandoned structures for temporary and permanent housing, where appropriate.
- Recognize the direct relationship between healthy communities, housing design standards, and the physical and mental health of residents.
- Promote the use of U.S. Department of Housing and Urban Development (HUD), Centers for Disease Control and Prevention (CDC), and U.S. Environmental Protection Agency (USEPA) Healthy Housing guidelines for housing development and redevelopment projects.
- Ensure all communities use adequate lighting for safety and security purposes.
- Promote adequate trash and recycling receptacles for clean communities.
- Foster programs that intend to improve the economic conditions of lower-income neighborhoods in an effort to improve resident’s physical and mental health.
- Incorporating the principles of Healthy Homes into our communities can help abate many housing issues.

Planning Services, Outreach, & Coordination

- Provide for a range of recreational needs and community facilities for a diverse, aging, and multigenerational population.
- Encourage opportunities for physical activity, social interaction, and a sense of community within neighborhoods.
- Encourage collaboration amongst civic organizations and businesses in offering constructive, positive, and supportive projects and programs that engage citizens of all ages, interests, and abilities to reinforce community stewardship and civic values.

- Work with students, educators, and mental health professionals in devising effective anti-bullying campaigns that create safe havens in schools-free from physical and emotional pressures that threaten productive learning environments.
- Encourage collaboration between health departments and student health screenings in lower-income school districts to help identify health concerns and treatment options.
- Support law enforcement’s public engagement programs that seek to improve community relations as a means of crime prevention and reduction.
- Engage in proactive crime deterrence strategies such as educating and involving the community in crime prevention strategies, collaborating with law enforcement in public safety awareness campaigns, and offering youth-at-risk and youth mentoring programs as a means of improving quality-of-life.

Community Resiliency

- Encourage the provision for temporary emergency housing and heating/cooling shelters in underutilized facilities, such as schools, libraries, or houses of worship when not being used for their primary purposes.
- Identify potential post-disaster physical and mental health issues associated with survivors and caregivers to ascertain necessary and available resources when planning disaster recovery efforts.
- Locate all development out of Special Flood Hazard Areas (SFHAs) or strongly encourage the purchase of flood insurance if located in a SFHA, lowering the potential for loss of life and/or property.

Sustainable Places

- Support municipalities that are considering sustainable ordinances that would allow such things as xeriscaping, front yard vegetable gardens, etc.
- Use community design that fosters safe and secure places.



- Strengthen and support the integration of locally grown products into non-agricultural communities including places that have limited accessibility to fresh, healthy produce.
- Promote resident resiliency training by providing access to resources in multiple formats and languages represented within the community.

Natural Resources

- Engage organizations to advance public education on environmental issues such as water conservation and nonpoint source pollution.
- Encourage multi-jurisdictional cooperation in the management and restoration of coastal lakes, waterways, and beaches affected by regional stormwater discharge.
- Support legislation that further protects vital water resources from contamination, deterioration, or depletion, particularly potable water supplies, coastal water resources, and Category One waters (C1 waters).
- Promote the preservation and improvement of water resources through the implementation of Best Management Practices (BMPs) to ensure a high quality of water and the conservation of all water resources.

Open Space

- Encourage pedestrian and bicycle accessibility to recreation facilities, open space, and natural lands, as a means to improve the mental and physical health of residents.
- Use publically preserved land for environmental educational purposes.
- Support urban recreational opportunities, acquisitions, partnerships, and programs.
- Support public acquisition of open space and conservation easements and the development of recreational facilities, particularly through partnerships, grant programs, and innovative funding mechanisms.

Farmland Preservation

- Preserve agricultural land and open spaces for groundwater recharge.
- Promote the development of new market opportunities for locally grown agricultural products.
- Preserve farmland to retain our bucolic and historic landscapes.





12.0 Community Resiliency

12.0 COMMUNITY RESILIENCY

MASTER PLAN RECOMMENDATION 12.1



Bradley Beach Maritime Forest

Source: Mary Ellen Scott

12.1: Incorporate the approved *Multi-Jurisdictional Natural Hazard Mitigation Plan (HMP)* for Monmouth County (2015) update into the *Monmouth County Master Plan* by reference; recognizing that the *HMP* is the broadest approach to implementing community resiliency activities at both the local- and county-level.

Purpose

The *HMP* evaluates community susceptibility to natural hazards and the extent to which these events will occur. It identifies municipal vulnerability to the effects of natural hazards and the goals, objectives, and actions required to minimize risk and the potential for future losses. Hazard mitigation is the only phase of emergency management that is specifically dedicated to breaking the cycle of damage, reconstruction, and repeated damage while creating more well prepared and resilient communities in Monmouth County.

Monmouth County Departments & Organizations Involvement

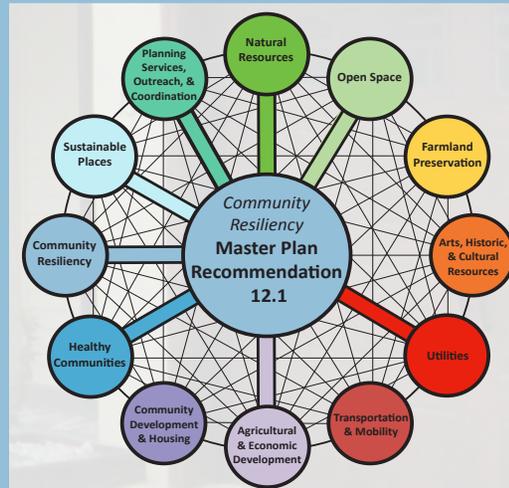
Division of Planning	Assist the Office of Emergency Management (OEM) in reviewing municipal master plans for consistency with the <i>HMP</i> ; provide <i>HMP</i> information and updates to the public, local officials, the Monmouth County CRS Users Group, and the Monmouth County Planning Board (MCPB); provide municipalities with model ordinances and support for resilient development; assist OEM in any implementation activities.
MCPB	Incorporate the approved <i>HMP</i> into the <i>Master Plan</i> by reference.
OEM	Assist municipalities with education regarding hazard mitigation and the implementation of mitigation activities at both the county and local level.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 12.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●													
B. Coordination		●												
C. Planning Approach			●											
D. Environmental Resources				●										
E. Farmland Preservation					●									
F. Arts, Culture, & Historic						●								
G. Preservation Investments							●							
H. Vibrant & Sustainable Communities								●						
I. Community Preservation									●					
J. Housing										●				
K. Economic Development											●			
L. Agricultural Development												●		
M. Recovery & Resiliency													●	
N. Growth Investments														●

Implementation Strategy

- Incorporate the approved *HMP* update into the *Master Plan* by reference.
- Ensure consistency between municipal master plans/ordinances and the *HMP*.
- Continue to be an active member on the *HMP* Steering Committee; provide *HMP* updates at public meetings; highlight the value of hazard mitigation planning at Monmouth County CRS Users Group and MCPB meetings.
- Provide municipalities with model ordinances and mitigation strategies for more resilient development.
- Lend letters of support to municipalities seeking funding (e.g. federal, state, and nonprofits) that promote the *Master Plan's* Goals, Principles, and Objectives (GPOs) for resilient development.
- Upon request, provide assistance to OEM in any *HMP* implementation activities.



Strongest Associated Master Plan Elements

12.0 COMMUNITY RESILIENCY

MASTER PLAN RECOMMENDATION 12.2

12.2: In partnership with the Monmouth County Office of Emergency Management (OEM), continue to encourage and advance municipal participation in the National Flood Insurance Program's (NFIP) Community Ratings System (CRS) program.

Purpose

The Monmouth County OEM and Division of Planning are working together to encourage municipal participation in the program through the creation of the Monmouth County CRS Users Group. The Users Group meet quarterly meetings and serve as a peer learning forum for municipalities to gain knowledge about the program and exchange strategies for program advancement.

Monmouth County Departments & Organizations Involvement

Division of Planning	Continue to facilitate CRS Users Group meetings; provide municipalities information on joining CRS via email and county website; serve on municipal Program for Public Information (PPI) committees; take courses to better understand the CRS program; become accredited in floodplain management; create geographic information system (GIS) maps for program advancement; provide municipal master plan assistance.
OEM	Continue to disseminate information and updates from the Federal Emergency Management Agency (FEMA), NFIP, and CRS program to the Users Group; facilitate CRS Users Group meetings; provide municipalities information on joining CRS; serve on municipal PPI committees; take courses to better understand the CRS program; become accredited in floodplain management.
Division of Economic Development	Conduct outreach projects and presentations on Grow Monmouth's Business Analyst Tool (a GIS-based tool identifying zoning, highways, sewer service areas, floodplains, and environmental constraints for each municipality to help with placement of businesses).
Department of Public Works and Engineering	Provide assistance with remediation projects, drainage maintenance, facilities inventory, and flood inventories.
Library System	Distribute FEMA floodplain management documents, reports, and brochures.
Counsel	Review CRS legal documents and policies, when needed.
Department of Public Information and Tourism	Publish brochures and press releases; update county website on CRS information.

Other Project Stakeholder Involvement

Municipalities	Management of local CRS program; municipalities are responsible for continuing to implement their credited activities in order to keep, maintain, and improve upon their CRS classifications.
FEMA	Attend CRS Users Group meetings to answer questions from participating municipalities.
Insurance Services Office, Inc. (ISO)	Responsible for reviewing community requests for CRS classification; verify implementation of activities credited by the CRS program.
NJ Department of Environmental Protection (NJDEP)	Clearinghouse for flood maps.
Jacques Cousteau National Estuarine Research Reserve (JC.NERR)	Continue to present information and tools useful to the advancing CRS participation, as it becomes available.



Bradley Beach Maritime Forest

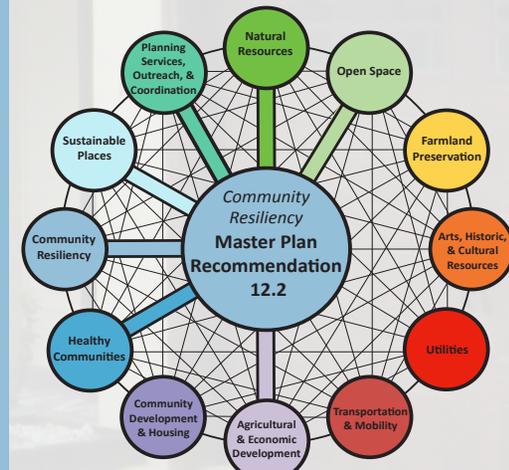
Source: Mary Ellen Scott

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 12.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Continue to facilitate and host the quarterly CRS Users Group meetings.
- Provide GIS mapping services for Monmouth County municipalities in order to gain program entry or advancement.
- Provide municipalities and resiliency stakeholders information on the CRS program.
- Continue to attend and notify municipalities of CRS webinars and program updates to further their knowledge of the CRS program and community resiliency measures.
- Continue to attend floodplain management courses for Division of Planning staff to become accredited as an Association of State Floodplain Managers Certified Floodplain Manager (CFM).
- Continue to maintain county website with up-to-date CRS information.



Strongest Associated Master Plan Elements

12.0 COMMUNITY RESILIENCY

MASTER PLAN RECOMMENDATION 12.3



Bradley Beach Maritime Forest

Source: Mary Ellen Scott

12.3: Partner with jurisdictions outside of the county to expand participation in the Monmouth County Community Rating System (CRS) Users Group, eventually resulting in a more influential regional forum.

Purpose

Build upon the existing Monmouth County CRS Users Group as the foundation for an expanded regional forum for CRS communities

Monmouth County Departments & Organizations Involvement

Division of Planning	Participate in meetings between other jurisdictions, county departments, and municipalities; attend regional workshops and conferences to learn the most up-to-date resiliency resources and tools available; provide links to regional resiliency resources via Monmouth County's CRS webpage.
Office of Emergency Management (OEM)	Participate in meetings between other jurisdictions and county departments and municipalities; operate as a regional facilitator.

Other Project Stakeholder Involvement

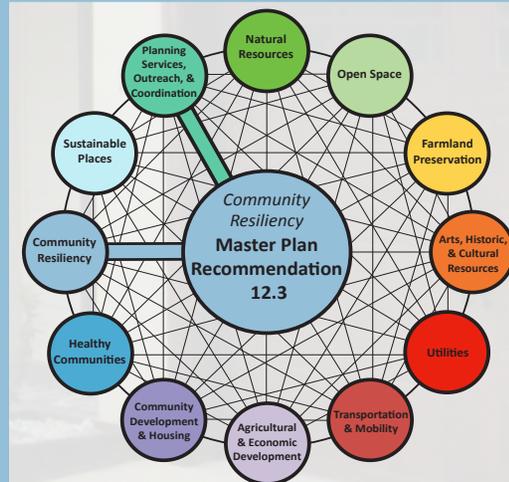
Federal Emergency Management Agency (FEMA)'s National Flood Insurance Program (NFIP)	Participate in regional meetings to provide additional information and answer questions from jurisdictions.
Surrounding Counties	Participate with Monmouth County to host, facilitate, and/or share CRS knowledge at the regional meetings.
Nearby Municipalities	Local officials are encouraged to attend the regional meetings, bringing with them their experience, knowledge, and questions about the CRS program.
NJ Department of Environmental Protection (NJDEP)	Participate in regional meetings to provide additional information and answer questions from jurisdictions.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 12.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Initiate a meeting with nearby municipalities and counties to discuss how to integrate the Monmouth County CRS Users Group meetings into regional meetings.
- Communicate with nearby jurisdictions on the scheduling of regional meetings.
- Invite resiliency partners to attend meetings to provide information and tools to gain CRS entry or advancement.
- Facilitate regional meetings, as necessary.
- Attend regional workshops, conferences, and panel discussions on community resiliency and the CRS program to maintain the most up-to-date information and resources for county municipalities.



Strongest Associated Master Plan Elements

12.0 COMMUNITY RESILIENCY

MASTER PLAN RECOMMENDATION 12.4

12.4: Support the Monmouth County Office of Emergency Management (OEM) in providing a network of shared emergency response services across the county.

Purpose

Monmouth County OEM proposes to enter into an Intra-County Mutual Aid and Assistance Agreement (MAAs) with participating county municipalities to provide additional aid and assistance in protecting persons or property against loss, damage, or destruction caused by fire, civil unrest, hazardous material, major criminal or emergency events, and natural or manmade disasters. The network of shared emergency response services allows for a quicker recovery, therefore enabling a community to adapt physically and economically to long-term environmental changes, emergencies, and natural hazards.

Monmouth County Departments & Organizations Involvement

Division of Planning	Assist OEM with implementation of the network of shared services and help with program outreach.
OEM	Lead agency in implementing the MAAs and network of shared emergency response services.
Shared Services	Execute agreements with municipalities.
Prosecutor's Office, Sheriff's Office, and Chiefs of Police Association	Request assistance from the Division of Planning or OEM in implementing their Special Needs Registry, a service open to all citizens with disabilities who reside, attend school, or are employed in Monmouth County created to assist residents with special needs in the event of an emergency.

Other Project Stakeholder Involvement

Municipalities	Enter agreements with the county; communicate their emergency response needs.
Monmouth-Ocean County Building Officials Association (MOCBOA)	Potential to perform a Needs Assessment for communities in the wake of a disaster to better connect communities with needed resources, under the terms of an agreement with OEM.



Bradley Beach Maritime Forest

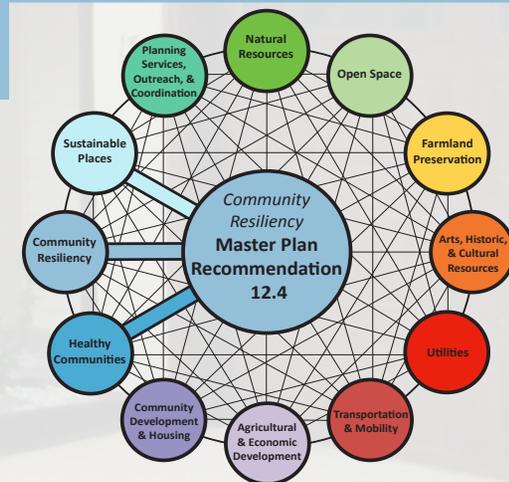
Source: Mary Ellen Scott

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 12.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														
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K.														
L.														
M.														
N.														

Implementation Strategy

- Make Division of Planning staff available to OEM and other county departments in implementing a network of shared services for county residents.



Strongest Associated Master Plan Elements

12.0 COMMUNITY RESILIENCY MASTER PLAN RECOMMENDATION 12.5



Bradley Beach Maritime Forest

Source: Mary Ellen Scott

12.5: Maintain a collection of Flood Insurance Rate Maps (FIRMs) and historic flood information for use in countywide resiliency and municipal CRS program advancement.

Purpose

The FIRMs, historic flood information, and flood studies promote countywide resiliency by informing municipalities of past flood events and current FEMA standards, which should influence decisions on where to locate future development to reduce loss of life and property. Municipalities that maintain their map collection and historic flood information can further their placement in National Flood Insurance Program's (NFIP) Community Rating System (CRS) program, as points are awarded specifically to FIRM and historical/repetitive flood information availability and maintenance. The Division of Planning will retain records on file to assist municipalities in acquiring regional flood mapping information, however a municipality must request a FIRM through NJ Department of Environmental Protection (NJDEP).

Monmouth County Departments & Organizations Involvement

Division of Planning	Ensure up-to-date FIRMs, maintain historic FIRM information and flood studies; coordinate with FEMA for historic map information.
Office of Emergency Management (OEM)	Facilitate outreach to our municipalities regarding proposed and new FIRMs.

Other Project Stakeholder Involvement

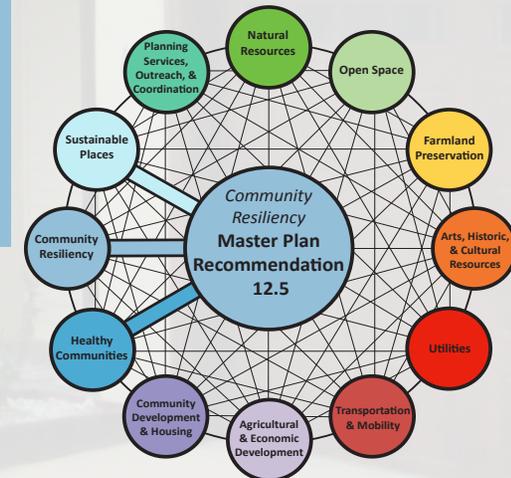
Federal Emergency Management Agency (FEMA)	Provide updates when new FIRMs are available.
NJDEP	Work with municipalities on securing flood information.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 12.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Maintain files on most recent FIRMs.
- Remain in communication with OEM and FEMA on any changes or adoptions to the FIRMs.
- Continue researching and archiving historic flood maps within the county.
- Archive county flood studies.



Strongest Associated Master Plan Elements

12.0 Community Resiliency

12.1 Introduction

The word *resiliency* describes the ability to recover from a disruptive event. These events can include natural disasters, fluctuations in the economy, or social tensions. The term resilience was introduced to the English language in the early 17th century, meaning to rebound or recoil. Originally used to describe durable timber, resilience is now used by policymakers, planners, practitioners, and academics to describe adopting new strategies to meet the ever-changing environment (Torrens Resilience Institute, 2014). The [Rockefeller Foundation](#) defines building resilience as “making people, communities, and systems better prepared to withstand catastrophic events—both natural and manmade—an able to bounce back more quickly and emerge stronger from these shocks and stresses.” The recent “changing” events that have affected Monmouth County include its vulnerability to more intense coastal storms, such as Hurricane Irene (2011) and Superstorm Sandy (2012), and annual nor’easters, and the 2008 Great Recession with its effect on jobs, housing and land values. The “word cloud”, shown in Figure 12.1: Resiliency Word Cloud, is a combination of synonyms and phrases that represent the word resilience as it relates to Monmouth County.

Monmouth County has approximately 27 miles of beached coastline along the Atlantic Ocean and a 22-mile shoreline along Raritan Bay. A majority of the county’s 630,000 inhabitants lives within five miles of the coast and is extremely vulnerable to coastal storms. The Monmouth County Division of Planning first addressed resiliency in the [Coastal Monmouth Plan \(2010\)](#). As recommended in the plan, the “state, county, and municipalities need to plan for a flexible response to sea level rise and potential impacts to not just developed areas but also to natural resources.” Some of the plan’s recommendations include minimizing new development in beach, dune, and coastal wetlands,



Source: Brittany Ashman, Monmouth County Division of Planning

Figure 12.1: Resiliency Word Cloud

creating retreat zone to minimize the need for future structural responses, creating buffers to protect sensitive habitats from sea level rise, and creation of a “Sea Level Rise Response Subcommittee” with government and nongovernment (e.g. scientists and environmental businesses) stakeholders.

Subsequent to the adoption of the *Coastal Monmouth Plan*, two major Atlantic storms have brought the topic of resiliency to the forefront of planning efforts throughout Monmouth County. Hurricane Irene, August 28, 2011, was a significant storm event that brought mostly high winds and major inland flooding. Although Irene resulted in over \$1 billion in damage to New Jersey, it pales in comparison to the damage caused by Superstorm Sandy which devastated Monmouth County. Sandy hit Monmouth County on October 29, 2012 and was the second-largest Atlantic tropical cyclone on record, setting historic recorded water levels at Sandy Hook, NJ and in the New York Harbor ([livescience](#)). In NJ



alone, Sandy destroyed or damaged 37,000 primary residences, left 8.7 million cubic yards of debris behind and left 2.7 million people without power (USA Today, 2013). In Monmouth County, power outages lasted 10-days on average. As development continues in floodprone areas, communities should be asking themselves how they can better prepare for future coastal storm events to ensure a quicker recovery process than experienced after Sandy.

The *Monmouth County Master Plan* Goals, Principles, and Objectives (GPOs) encourage planning and mitigation measures that protect and strengthen our municipalities against the increasing threat posed by severe storm events. For example, *Master Plan* Principle 3.6 promotes developing the capacity to adapt physically and economically to long-term environmental changes, emergencies, and natural hazards. According to FEMA, mitigation is the **only phase of emergency management specifically dedicated to breaking the cycle of damage, reconstruction, and repeated damage**. FEMA found that “a dollar spent from the federal treasury on FEMA mitigation grants potentially saves about \$3.65” on recovery efforts (FEMA, 2015). Further, since Sandy hit NJ, several grants and programs became available for communities to implement mitigation and resiliency practices (see 12.5 Additional Resources and Funding Opportunities), making mitigation cheaper and easier to implement which will result in less taxpayer money being spent on recovery efforts.

The Monmouth County Office of Emergency Management (OEM) manages hazard mitigation planning for the county through its [Multi-Jurisdictional Natural Hazard Mitigation Plan \(HMP\) for Monmouth County \(2015\)](#) which describes the county’s vulnerability to various natural hazards and provides actions and projects for reducing key risks. The *Monmouth County Master Plan* recommends a continued planning partnership with OEM and the adoption of the *HMP* update as an Element of Community Resiliency, recognizing that the *HMP* is the broadest approach to community resiliency at both the local and county

level (*Master Plan* Recommendation 12.1). Figure 12.2: Hazard Mitigation Planning includes the steps of hazard mitigation planning.

Figure 12.2: Hazard Mitigation Planning



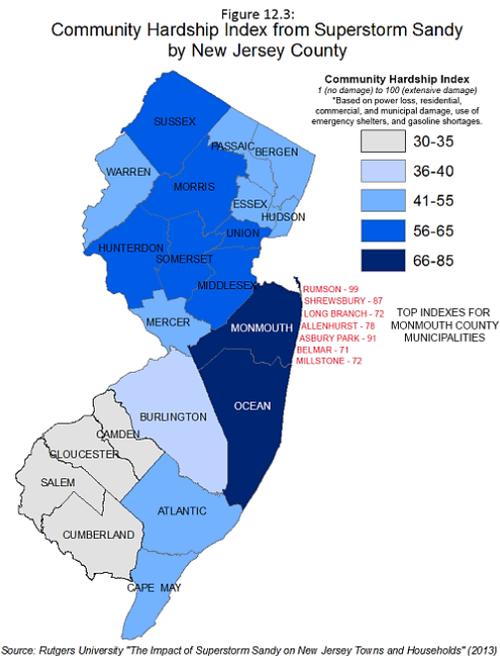
Since New Jersey is a “Home Rule” state, municipalities rather than the county have control over land use and are given the legal responsibility to create and enforce zoning ordinances, development regulations, plans, studies, and reports that encourage hazard mitigation and resiliency. Monmouth County’s role in encouraging resiliency is to provide assistance, access to resources, and/or a regional forum to discuss resiliency tools and resources for its municipalities. Resiliency planning brings together all levels of government and integrates master plans, hazard mitigation plans, subdivision and stormwater regulations, zoning, and budgets to provide a comprehensive regional approach to resiliency. Through the *Master Plan*, the Division of Planning aims to be a proactive partner to communities seeking to increase their resiliency.

12.2 Existing Conditions

According to *The Impact of Superstorm Sandy on New Jersey Towns and Households* (Rutgers University, 2013), NJ communities incurred a total cost of damage exceeding \$37 billion from Superstorm Sandy. One reason for this high cost of storm damage is the state’s population density. The 2010 U.S. Census reveals that NJ is the densest state in America at 1,195.5 people per square mile of land area, putting a lot of people and property at risk to future coastal storms. A [Rutgers’ Community Hardship Index](#) (Figure 12.3: Community Hardship Index from Superstorm Sandy) revealed that Monmouth and Ocean Counties suffered the most overall damage in NJ. The index was based on the



number of power outages, residential damage, residents in shelters, and gasoline shortages and ranged from a 1 (no damage) to a 100 (most extensive damage). Monmouth County scored the highest index in NJ at 84, followed by Ocean County with the score of 73. Within Monmouth County, Rumson had the third highest Index in the state and first highest in Monmouth County with an Index of 99, based on Rutgers criteria.



As a result from Sandy, the [New Jersey Department of Community Affairs \(DCA\)](#) found 5% of Monmouth County households had “severe” or “major” damage, a total of 11,467 housing units. Monmouth County was also the second highest county in the state for severe or major housing damage, representing 20% of all severe or major housing damage in NJ. Most of the housing units that experienced severe or

major damage in the county were located in Keansburg, Highlands, Union Beach, and Sea Bright (DCA, 2013). In terms of the dollar amount, four Monmouth County municipalities made the list of top ten municipalities in NJ to receive FEMA Public Assistance: Atlantic Highlands (\$17,220,000), Union Beach (\$5,940,000), Keansburg (\$5,740,000), and Belmar (\$5,320,000). Monmouth County also had the longest average power outage in the state at ten days (Rutgers University, 2013).

The New Jersey Department of Community Affairs (DCA) developed the [New Jersey Recovery Dashboard](#) to report on their progress of building of a more resilient NJ to residents. The dashboard provides current information on homeowner assistance programs, rental housing and renter programs, economic development, infrastructure programs, government entity support, supportive services, planning and administration, and Rebuild by Design initiative. This comprehensive website tracks recovery efforts and allows for county specific analysis.

The NJ Resiliency Network, a program of Sustainable Jersey, produced the [Post-Sandy Municipal Needs Assessment for Long-Term Recovery and Resiliency Planning](#) in March of 2015. The three major challenges facing NJ municipalities are facing:

1. The need to improve the rigor and quality of municipal risk and vulnerability assessments
2. The need to expand and deepen local flood hazard risk reduction and resilience efforts
3. The need to harden critical public infrastructure, particularly energy systems, to withstand shocks and stresses.

Key findings also indicate most at risk municipalities have not adequately addressed their vulnerability and they prioritize funding needs for resilience of critical infrastructure as opposed to flood protection measures. It was also found municipalities are not looking at long-term resilient strategies but more so on needed improvements to



energy supply. The report provides informative data on our municipalities and outlines next steps to meeting municipal resilience needs.

12.2.1 Implementation of Best Management Practices (BMPs)

The term BMPs relates to practices, or combination of practices, that aim to preserve the environment, reduce pollution, and enhance quality-of-life for residents. BMPs in Resiliency are practices and strategies specific to helping protect communities from storm events and speeding up the recovery process. Since NJ follows “Home Rule” policy, the Division of Planning encourages its municipalities to use BMPs in their master plans and development regulations to implement community resiliency at the local level.

Stormwater Management: A majority of Monmouth County’s coastal communities have high densities in floodprone areas. High density equates to more impervious surfaces (roofs, streets, parking lots), resulting in more stormwater runoff. Runoff occurs when stormwater does not naturally infiltrate back into the ground through soils, roots, and plants. By not doing so it collects debris, household chemicals, fertilizers, and/or other waste contaminants as it drains through a collection system before getting discharged into nearby bodies of water. During Sandy, Monmouth County municipalities experienced heavy stormwater runoff from excessive rain, storm surges, and nearby flooding of rivers, streams, and lakes, sometimes all three at once. Standing floodwater remained in neighborhoods for days. To improve infiltration of stormwater, towns can implement stormwater management practices that aim to collect stormwater runoff onsite or create natural ways to get runoff back into the ground before it can cause erosion, flooding, and damage to habitats, property, and infrastructure. With changes in the amount, timing, and intensity of rain events, in combination with increasing land development patterns, the need for better managed stormwater runoff needs to be addressed.

Borough of Spring Lake Model Ordinance

The Borough of Spring Lake in Monmouth County adopted an ordinance that requires an underground recharge system for residential developments. This ordinance requires the grading and drainage of lots to secure proper drainage and to prevent the collection of stormwater while minimizing the destruction of existing vegetation and the alteration of the existing topographic features of properties. Recharging onsite helps prevent saltwater intrusion and groundwater-related land subsidence.

Spring Lake Borough Ord. No. 14-2003

Roof leaders and sump pump drains shall not be permitted to spill at or through the curb of any street in the Borough. Roof leaders and sump pump drains for all new structures or additions with a building footprint of 750 square feet or greater shall be piped directly to dry wells or seepage pits to be installed on the lot. The dry wells or seepage pits shall meet this criterion: **[Added 12-16-2003 by Ord. No. 14-2003]**

- (1) Each dry well or seepage pit shall provide a minimum of 75 cubic feet of storage volume exclusive of the perimeter stone. A minimum of one cubic foot of storage volume exclusive of the perimeter stone shall be provided for each 12 square feet of roof area tributary to the dry well.
- (2) The dry wells shall be a minimum of two feet above the groundwater table and have a minimum of one foot of cover. They shall be located a minimum of 10 feet from any structure or property line and shall not be located under an impervious surface.
- (3) The dry well shall be placed on, and be surrounded on the sides by, a six-inch layer of stone wrapped with a geotextile material to prevent migration of the backfill material into the stone.
- (4) Overflows to the yard surface shall be provided at each leader pipe in case of back up of the dry well.



The benefit of a green infrastructure approach to resiliency is it can be implemented at any location by any level of government or individual. Property owners have the option to capture stormwater through rain gardens, vegetated rooftops, and/or rain barrels. Municipalities have stormwater management options of “soft vegetation edges” around coastal lakes to help infiltrate lake overflow during storm events, create bioretention facilities and rain gardens alongside roadways, permeable pavers as roads and parking lots, and/or hyper-absorbent street design to help clean and manage stormwater (Sasaki/Rutgers/Arup Proposal, Rebuild by Design, 2014).

The U.S. Environmental Protection Agency (EPA) has several tools in their Climate Action Plan Toolkit that helps plan for stormwater management. EPA’s [Stormwater Management Model](#) allows “engineers and planners to evaluate the performance of water infrastructure while considering future climate change projections...to determine the benefits of resiliency decisions to reduce local economic burden and protect communities” (EPA, 2015). Secondly, the EPA has a [Stormwater Calculator](#) that can be used by homeowners and developers to estimate the amount of rainwater and frequency of runoff on a specific site. The calculator helps local officials and property owners be better informed as to how runoff may vary based on historical weather and potential future climates so that when strong storms hit, communities will be prepared for what areas are at risk for flooding and how to manage those high-risk areas.

For more information on Stormwater Management, see 13.0 Sustainable Places Element.

Natural Resiliency and Living Shorelines: Among the most effective management practices of resiliency is using nature to defend against coastal storms. Natural resiliency, also known as Living Shorelines, uses natural (e.g. plants, sand, and rocks) and manmade structural materials to provide shoreline protection, maintain valuable habitat, and protect



Living Shoreline and Maritime Forest in Bradley Beach
Source: Mary Ellen Scott



Sand Dunes and native dune grass protect communities from storms, such as in Sea Girt
Source: Brittany Ashman



Bradley Beach Maritime Forest

In 2013, a partnership of local nonprofits, universities, and private sector engineers took an empty parking lot in Bradley Beach’s northeast corner that lies between the beach and a coastal lake and converted it back into its vegetative state: a maritime forest. The forest is the third line of defense against large coastal storms for the Bradley Beach community; the primary dunes are first and then the secondary dunes. The forest is designed to infiltrate water and protect the coastal lake and community from storm surge. The forest reduces risk, protects against flooding and storm damage, addresses stormwater problems, and improves biodiversity and local water quality. The maritime forest was the recipient of the Monmouth County Planning Board’s 2014 Planning Merit Award.



Before Imagery

Source: Good Maps



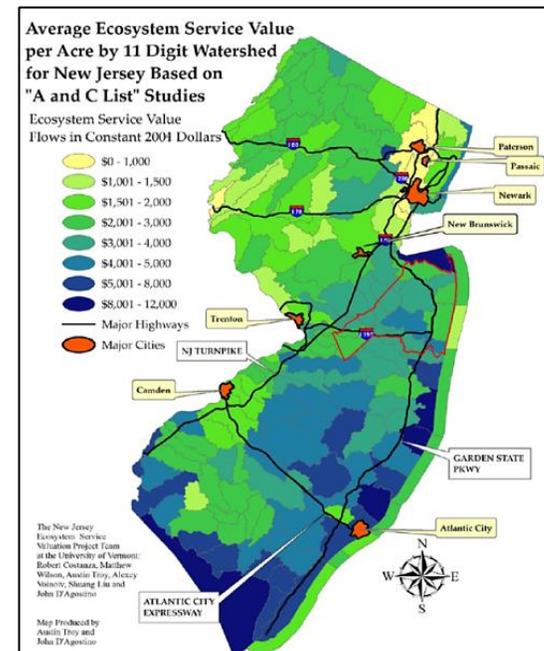
Parcel Design

Source: AECOM

the built environment against storms. Examples include maritime forests, tidal wetlands, salt marshes, submerged aquatic vegetation, dune systems, and estuarine reefs to dissipate wave energy (see Oyster Restoration example in Section 12.4.2 State and Federal Partnership Efforts, U.S. Navy and Department of Defense).

Figure 12.4: Average Ecosystem Service Value per Acre displays the ecosystem service value flows in 2004-dollar amount for NJ. Monmouth County is highlighted in red; the Figure reveals the Bayshore (north Monmouth County along the Raritan Bay) has the richest ecosystem service value in the county at \$8,001 to \$12,000. Subsequently, the Bayshore experienced the most storm damage during Superstorm Sandy. Therefore, the Bayshore has an opportunity to invest in its rich ecosystem to encourage natural resiliency. For more information on Living Shorelines, visit [NOAA’s Restoration Center](http://NOAA's Restoration Center).

Figure 12.4: Average Ecosystem Service Value per Acre



Resilient Construction: Our state is unique in that it requires all structures in the Special Flood Hazard Areas (SFHAs), or the land area covered by floodwaters of the base flood, to be one foot above the Base Flood Elevation (BFE). Municipalities may be stricter with their codes if they so choose. This additional requirement is called “freeboard” and represents an additional factor of safety above a flood level. The positive impact of stricter building codes is that they improve a town’s Community Rating System (CRS) classification (meaning cheaper flood insurance premiums) and lower flood damage risk. Other requirements such as raising utilities and generators above the BFE help structures maintain power during strong storm events.



Elevated Commercial Space in Sea Bright
Source: Mary Ellen Scott



Elevated Houses in Sea Bright
Source: Brittany Ashman

An Emerging Issue related to stricter building codes is that property owners attempting to elevate their homes and/or businesses above the BFE, sometimes find that compliance means proposing a structure that will exceed the maximum building height allowed by municipal zoning. Therefore property owners must seek a zoning variance, making it harder and more expensive to comply with the BFE. If municipalities face this issue, the adoption of a new ordinance allowing structures to elevate above the maximum building height when attempting to comply with the NFIP and/or the state law would make it easier for property owners to elevate above the BFE.

Another resilient reconstruction strategy for municipalities is to adopt a Design Flood Elevation (DFE), or the elevation adopted in zoning or building codes that is equal to or greater than the BFE. Building to a DFE can minimize damage to buildings when flood levels exceed the BFE, reduce flood insurance premiums, and prolong building life. Towns should consider incorporating DFE into their building and zoning codes as a preventative measure in places that will become prone to the effects of sea level rise.

Dry and Wet Floodproofing: When elevating a structure is not an option, floodproofing can be a resilient option. The difference between [wet](#) and [dry](#) floodproofing of a structure is that dry floodproofing is designed to keep water out whereas wet floodproofing is designed to allow water to flow in and out of the structure. According to FEMA, a dry floodproofed structure is made watertight below the level that needs flood protection to prevent floodwater from entering. Advantages of dry floodproofing are it is less costly than other retrofitting methods, does not require additional land that may be needed for levees and floodwalls, and may be fundable under FEMA mitigation grant programs. It is important to note that dry floodproofing cannot be used to bring a substantially damaged or substantially improved residential structure into compliance with the community's floodplain management code or law. Dry floodproofing requires advance warning to install, does not minimize the potential damage from high velocity flood flow and wave action, and is not aesthetically pleasing although such measures are temporary. Examples of dry floodproofing solutions include flood planks, aqua fences, watertight doors, drop down barrier doors, and bottom hinged barriers. According to FEMA, wet floodproofing includes permanent or contingent measures applied to a structure that prevents flooding damage while allowing floodwaters to enter the structure or area. Generally, this includes properly anchoring the structure, using flood resistant materials below the BFE, protection of mechanical and utility equipment, and use of openings or breakaway walls (FEMA, 2015).

Land Use Planning Techniques: A common land use technique in planning for natural disasters is to use an overlay zone to identify vulnerable areas such as flood hazard zones, hillsides, aquifers, coastal zones, and historic or scenic districts. Some towns have even posted signs or used smartphone apps to display when someone is in a hazard area. This is similar to NFIP's CRS High Water Mark (HMW) Initiative that uses signs on public and private buildings to show the high water mark from flood events. According to the National Disaster Preparedness Training Center, proactive shoreline regulations is another land use technique that works to preserve the shore and public access, facilitate the relocation of roads and other infrastructure away from the shore, help wetlands migrate inland, and facilitate the inland migration of barrier islands.

A strategy for resilient land use is unified zoning, which is a framework for regional coordination among jurisdictions (e.g. state, county, and municipalities) that directly integrates hazard mitigation and local comprehensive plans. Unified zoning carries out hazard mitigation through both development regulations and public expenditures. According to FEMA, development regulations are most effective when they are reinforced by a comprehensive master plan, developed with input from all of the stakeholders (including emergency management

State-Level

Florida has a Coastal Construction Control Line (CCCL) which establishes an area of jurisdiction in which special siting and design criteria are applied to future development. Structures located seaward of the CCCL must be designed and built to withstand the high winds and storm surges that come with strong storm events. These standards may be more stringent than those already applied in the rest of the coastal building zone because of the greater forces expected to occur in the more seaward zone of the beach during a storm event.



Town of Bourne, Massachusetts

The Cape Cod Commission worked with managers from 15 towns, including the Town of Bourne, on an emergency preparedness handbook. Bourne’s handbook identified hurricane-related damage as a primary threat and included measures in its master plan and zoning bylaws to protect against flood and weather damage, bank erosion, sea level rise, and sand migration. The town has plans to redevelop the Village of Buzzard’s Bay by relocating structures outside and/or elevated above the flood inundation zone. The town also used zoning and development regulations to create a Floodplain Overlay District (FOD) with exact boundaries defined by the 100-year base flood elevation shown on the FIRM and further defined by a Flood Insurance Study (FIS). All development within the FOD, including structural and non-structural activities, whether permitted by special permit, must comply with the State Building Code which addresses floodplain and coastal high hazard areas in addition to the Massachusetts State DEP’s Wetlands Protection Regulations, Inland Wetlands Restrictions, Coastal Wetlands Restrictions, and Minimum Requirements for the Subsurface Disposal of Sanitary Sewage. Substantial damage and substantial improvements are subject to cumulative costs, and prohibited uses in the FOD are mobile homes, campers, mobile home parks, and campgrounds. Also in the Zone VE, any manmade alteration of sand dunes are prohibited since it would increase potential flood damage.

County-Level

In 2008, the Kauai County government in Hawaii adopted a proactive shoreline ordinance that requires new buildings on small lots (less than 5,000 square feet) to be set back 40 feet from shoreline plus 70 years multiplied by the average annual erosion rate (for structures greater than 5,000 square feet, it is 100 years). The primary purpose of this setback ordinance is to preserve the beneficial functions of coastal resources, preserve lateral public beach access, improve public safety and property value protection, avoid shoreline armoring, and prohibit the alteration of primary coastal dunes except to add more sand (James F. O’Connell).

agencies), supplemented by proactive measures (capital improvement plans, property owner incentives), and integrated into strategies that respond to emerging issues (sea level rise).

12.3 Emerging Issues and Long Range Challenges

Although there are several different funding sources available for Monmouth County residents trying to rebuild, a funding gap remains between federal assistance and the cost of rebuilding (e.g. home elevation, building permits, and reliable contractors). According to a Monmouth University poll taken two years after Sandy hit (October 2014), nearly 60% of property owners impacted still needed money to rebuild or elevate their homes. The poll also determined that most of those property owners were unaware NJ had a program to help pay mortgages, rents, and bills during the rebuilding process (NJ.com). Even if residents were awarded assistance to rebuild, many assistance programs expire after two years. Property owners are left with mortgage payments, rebuilding costs, and rent on their temporary homes, potentially causing homes along the shore to slip into foreclosure. This was an emerging trend in the Bayshore Region where a majority of homes in foreclosure were damaged during Sandy.

12.3.1 Connecting Communities to Funding: In an attempt to better connect residents and businesses to funding opportunities, a year after Sandy hit, NJ nonprofit organizations and academic institutions started working with affected communities to provide free training on resiliency tools and maps, strategies and community outreach, and connect them with federal and state assistance. Two examples include the Jacques Cousteau National Estuarine Research Reserve (explained in 12.4.4 Partnership Efforts) and the New Jersey Resiliency Network, which is facilitated by the nonprofit Sustainable Jersey and partners with resource providers to match their tools and services to communities in need. In order to understand the specific needs of a community, the network created an online survey asking local officials to provide their top recovery and resilience issues and identify their interest in recovery



services. As of 2015, the network received assessments from 86 municipalities in NJ, revealing these Emerging Issues:

“...most at risk municipalities have not adequately assessed their vulnerability to future storms, municipalities need technical expertise in all areas of flood resiliency planning and projects, and municipalities prioritize funding to critical infrastructure, energy supply, and back-up power improvements over funding for flood protection and long-term resilient strategies.”

12.3.2 Changes to the [National Flood Insurance Program \(NFIP\)](#) and Impacts on Policy Holders: Congress created the NFIP in 1968 (through the National Flood Insurance Act) to help property owners financially protect themselves from flood events. The NFIP underwrites almost all residential flood risk in the U.S. and allows homeowners, renters, and business owners in participating communities (local jurisdictions that adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding) to purchase flood insurance from the government, with the goal to lower dependency on *post-disaster* federal assistance. The NFIP is in partnership with the local government (adopts and enforces minimum federal regulations for floodplain management), the county and state (oversight, NFIP coordination, assistance to local government), the Federal Government (funding/coordination for flood maps, federally backed flood insurance, Executive Orders), and the private flood insurance industry.

NFIP was set up to be a self-sustaining program, borrowing funds from the U.S. Treasury only when needed. However, with the rising costs, occurrences, and consequences of flood events, NFIP’s fund was losing more money than it was acquiring. Therefore, a reform to the program was created to address these Emerging Issues: the Biggert-Waters Flood Insurance Reform Act of 2012 was passed by Congress and signed by President Obama. The Act extended the NFIP for five years (through September 30, 2017) and created premium rate structure reforms, such

as phasing out subsidies for second homes, business properties, severe repetitive loss properties, or substantially improved/damaged properties by increasing rates for these properties by 25% until premiums meet the full actuarial cost. Often criticized for its increases in flood insurance premiums, two years later and post Superstorm Sandy, sections of the Biggert-Waters Act were repealed and modified by the Homeowner and Flood Insurance Affordability Act (HFIAA) of 2014. The HFIAA created supplementary program changes not covered by Biggert-Waters, restored grandfathering (the exemption based on previously existing circumstances), lowered the recent rate increases on certain policies, prevented some future rate increases, and implemented a surcharge on all policyholders. The Act also repealed certain rate increases that have already gone into effect and provides refunds to those policyholders (FEMA, 2014). Despite modifications made by the HFIAA, as flood events continue to become the new normal, the cost of living in floodprone areas is rising due to the cost building to development standards to withstand future storms (e.g. elevated structures) and the cost of flood insurance.

12.3.3 Pending Changes to [Flood Insurance Rate Maps \(FIRMs\)](#): Before Sandy hit, the FEMA Region II office had initiated a study to update the coastal storm surge elevations within the states of NY and NJ including the Atlantic Ocean, Barnegat Bay, Raritan Bay, Jamaica Bay, Long Island Sound, and their tributaries. The study replaces outdated coastal analyses as well as previously published storm surge stillwater elevations for all Flood Insurance Studies (FIS) in the study area, including Monmouth County, and serves as the basis for updated FIRMs (FEMA, 2015). FEMA along with state, local, and tribal officials collect current and historic flood-related data on an ongoing basis including hydrology, infrastructure, hydraulics, land use, and existing floodplain, base, and flood maps. As factors change, such as population growth and development, changes in climate, and new or revised scientific/technical data becomes available, FEMA modifies the FIRMs. FEMA had not released the Preliminary Work Maps when Sandy hit in 2012. As an



interim measure, FEMA released Advisory Base Flood Elevation (ABFE) maps for the NJ/NY coastal region following Superstorm Sandy because in some cases, the effective FIRMs were more than 25 years old and did not accurately reflect coastal flood hazards in the area. There was confusion for property owners trying to rebuild post-Sandy as property owners were not clear on which floodplain development regulation to follow for reconstruction. In January 2013, Governor Christie announced that the state was adopting FEMA's updated advisory flood maps to provide communities with clearer guidance for rebuilding and to expedite reconstruction. Preliminary Work Maps were later released in 2013 and Preliminary FIRMs were released in 2014.

As part of the FIRM update, Monmouth County went through the open house and 90-day appeal and comment period in early 2015. After the 90-day time period and all of the appeals are resolved, FEMA will issue a Letter of Final Determination to Monmouth County communities that initiates the six month adoption period before the maps become effective. Once effective, the new FIRMs will determine flood insurance rates for properties and the locations where floodplain development regulations apply, helping communities plan for future storms and reducing the risk of future loss of property and life. As of spring of 2016, FEMA is addressing appeals from the 90-day comment period.

12.3.4 Confusion Over Flood Insurance Coverage: Prior to Sandy, there was a common misconception that homeowners insurance covered flooding damage. According to a 2007 National Association of Insurance Commissioners survey, more than 30% of U.S. heads of households who have homeowners insurance mistakenly believed flood damage is covered by standard homeowners' policy. That is incorrect; residents *must* purchase flood insurance if they want flood damage to be covered by insurance. NFIP will cover most flood damage above the basement, whereas coverage under homeowners and renters insurance depends on an individual's policy.

12.3.5 Keeping Community Character and Historic Fabric: Superstorm Sandy brought flooding and severe damage to several historic areas along the east coast. While many structures have the option to elevate above the [Base Flood Elevation \(BFE\)](#), historic buildings often cannot elevate due to aging physical condition, proximity to other buildings, building type, and intensity of development. Another challenge to elevating historic structures is that it changes the overall historic urban fabric; raising historic buildings or floodproofing them so that the first floor is vacant can hurt the cultural and historic streetscape of urban neighborhoods. The New Jersey Institute of Technology's (NJIT) Center for Resilient Design hosted a conference on floodproofing historic cities where dry and wet floodproofing were discussed as popular alternatives to elevating the entire structure, in addition to elevating mechanical and electrical equipment above the BFE. These alternatives are discussed in more detail in 12.3.2 Best Management Practices in Resiliency.

12.3.6 Aging Infrastructure: The East Coast is older and denser than a majority of the coastal U.S. While there has been talk to increase the gas tax to repair the state's aging transportation infrastructure, other NJ politicians have discussed developing a master plan aimed at improving the state's infrastructure. In 2015, Rutgers University's Alan M. Voorhees Transportation Policy Center (VTC) was enlisted to help develop a plan to go beyond the immediate crisis and plan for the long-term future. According to [Infrastructure Report Card](#), NJ has 218 high hazard dams (Association of State Dam Safety Officials, 2012), 624 of its 6,566 bridges are structurally deficient (U.S.DOT, 2013), over \$7.9 billion is needed over the next 20 years for drinking water infrastructure (U.S. EPA, 2013), and 35% of the state's roads are in poor condition (TRIP, 2014). Although infrastructure throughout America faces similar statistics, the infrastructure in NJ is extremely vulnerable due to its age, daily usage, and location in [Special Flood Hazard Areas \(SFHAs\)](#). Monmouth County municipalities are encouraged to conduct routine inspections of infrastructure and when applicable, replace it with



reinforced infrastructure that absorbs storm surge and controls stormwater runoff to better withstand future storm events.

12.3.7 Loss of Property Tax Revenue (Short-Term): An emerging post-Sandy theme for NJ municipalities is a loss of property tax revenue. Many residents with houses and businesses completely destroyed by Sandy appealed their tax assessments, abandoned, or demolished their structure resulting in a loss to the local tax base. The loss of tax revenue was a wide-spread concern for municipalities along the Jersey Shore.

12.3.8 Increased Property Tax Revenue (Long-Term): Although Sandy caused abandoned or demolished structures along shore communities, in the long-term, the replacement housing stock along the shore might be at a higher value than that before Sandy hit. While historic bungalows and houses with slab or on grade foundations once populated the shore, new floodplain development regulations are requiring structures in SFHAs to meet stronger building codes, such as raised utilities and structures, breakaway panels, and floodproofed lower levels. In many instances, the replacement buildings are often larger, more expensive, and of better quality than the prior structure. These higher building standards reduce property damage from future storm events and attribute to the building's higher assessed property values, resulting in additional property tax revenue.

12.3.9 Cost of Housing and Displaced Homeowners: With the recent reforms to flood insurance acts and updated FIRMs, insurance rates across the country are significantly increasing and so is the number of people now located in a SFHA. Combined with the associated costs of rebuilding after Sandy, complying with FEMA's new floodplain regulations, and making structures more resilient, an Emerging Issue and Long Range Challenge for Monmouth County is housing affordability along the shore. Many residents that once could afford to live along the shore now cannot afford the higher flood insurance rates and/or the costs to comply with new regulations. Therefore, many

houses remain in foreclosure. The rising cost to live on the Shore has the potential to create an enclave of wealthy residents.

12.3.10 Preparing for Sea Level Rise: Sea level rise is not a factor in the designation of flood zones on the NFIP's FIRMs. Although helpful in predicting future flood events, the FIRMs may give a false sense of safety by not considering the effects of the rising ocean in their flood risk analysis. There are sea level rise viewers available that can be helpful as a tool for enhancing preparedness and land use planning decisions including [NJ Flood Mapper](#), an interactive mapping website for NJ communities.

12.3.11 Long Range Challenges: During the Community Resiliency Working Groups in the summer of 2014, the Division of Planning facilitated a discussion with county stakeholders and residents on the strengths, weaknesses, opportunities, and threats (SWOT) of community resiliency specific to Monmouth County. Through the SWOT analysis, it became clear which ongoing challenges the county will continue to face beyond the 10-year *Master Plan* horizon. These Long Range Challenges provided a context to Working Group discussions which the *Master Plan* Recommendations attempt to address along with other Emerging Issues.

- There are typically three types of adaptation strategies used by communities to address the increasing likelihood of flooding: retreat, accommodate, or protect. Each jurisdiction must determine the most appropriate and effective response(s) for their own community ([Borough of Atlantic Highlands Getting to Resiliency Recommendations Report, 2015](#)). 
- Reverting residential and commercial properties back to their natural state is perceived as a long-term conflict with expanding a community's tax base.



- Sea level rise combined with land subsidence will result in the intrusion of floodwater into areas that are not currently identified as susceptible or located within a SFHA.
- Continue to work with Naval Weapons Station Earle on local and regional flood hazards mitigation projects that support their continual operation in Monmouth County.
- Address the impacts of saltwater intrusion on fresh water supplies and its corrosive effects on public infrastructure.
- Replace older infrastructure with equipment designed to better withstand future storm events.
- Any significant level of sea level rise could make the current SLOSH (Sea, Lake, and Overland Surges from Hurricane) model outdated and less accurate at modeling storm surge events.
- The lack of understanding of what resiliency is and how it can help a community.

12.4 Community Resiliency Stakeholder Actions and Efforts

12.4.1 Monmouth County Efforts

[Multi-Jurisdictional Natural Hazard Mitigation Plan \(HMP\) for Monmouth County \(2015\)](#): The Division of Planning assisted the Monmouth County Office of Emergency Management (OEM) with *HMP* for Monmouth County in 2015. The last *HMP* for Monmouth County was created in 2009 and the update started in 2012 but was postponed due to Sandy. The plan evaluates community susceptibility to natural hazards and the extent to which these events will occur. It identifies municipal vulnerability to the effects of natural hazards and defines the goals, objectives, and actions required to minimize future loss. The plan provides mitigation strategies which if implemented, gradually lessening the impacts from hazard events.

Municipalities that participated in the creation of the most recent *HMP* for Monmouth County (2015) became eligible to apply to FEMA for hazard mitigation project funding, including monies that became

available after Hurricane Irene and Superstorm Sandy. For this update, all 53 municipalities in Monmouth County opted to participate which included attending meetings, providing feedback, reaching out to its residents and community stakeholders, and developing an updated mitigation strategy. *Master Plan* Recommendation 12.1 calls for Monmouth County Planning Board adoption of the *HMP* for Monmouth County as an Element of the *Monmouth County Master Plan*.

Additionally, the OEM also adopted three plans in 2013 to help with storm recovery: *Shore Re-Entry Plan*, *Debris Management Plan*, and *Short-Term Recovery Plan*. There are also several plans housed in the OEM to assist in emergency response operations. Those plans include: the *County Continuity of Operations/Continuity of Government Plan (COOP/COG)*, *County Emergency Operations Plan (2013)*, *County Hazmat Response Plan*, *County Medical Needs Sheltering Plan* (in coordination with Monmouth County Health Department), and the statewide emergency medical service (EMS) plans *Staging Area Management Plan*, *Ferry Terminals Plan*, *Hospital Evacuation Plan*, *Tropical Storm/Hurricane Plan*, and the *Passenger Rail Response Plan*.

[Monmouth County Community Rating System \(CRS\) Assistance Program](#): The National Flood Insurance Program (NFIP) administers CRS which scores and classifies towns on their effectiveness in dealing with the mitigation of flood hazard events. In participating towns, earning CRS points lowers flood insurance premiums for homeowners and businesses located in Special Flood Hazard Areas (SFHAs). SFHAs are areas where NFIP's floodplain management regulations must be enforced and the area where the purchase of flood insurance is mandatory (FEMA, 2015). On March 13, 2014, the Monmouth County Board of Chosen Freeholders passed a resolution with Municipal Program Guidelines for the county to serve as a CRS planning and support system. Specifically, the resolution initiated quarterly Monmouth County CRS Users Group meetings. Facilitated by the Division of Planning and the OEM, the Users Group meetings provide a

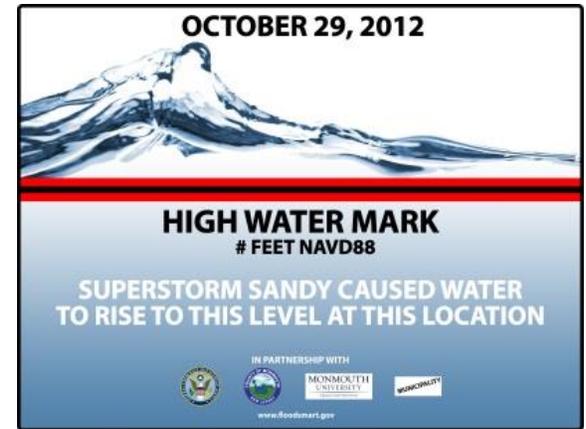


peer learning forum for municipalities to learn about the CRS program, exchange strategies for program advancement, and the opportunity to ask the county for professional assistance, with no cost accrued to the municipality. The Monmouth County CRS Assistance Program is aimed at municipalities that may not have the technical, financial, or administrative capacity to successfully participate in the CRS program. The Monmouth County CRS Assistance Program is the first regional assistance program in Region II.

The CRS classification is on a range from CRS Class 1, the best score and therefore highest discounts on flood insurance premiums, to a CRS Class 9. A classification of 10 means a town is not yet eligible for the CRS program. Each class improvement produces a 5% greater discount on flood insurance premiums for properties in the SFHA. Most communities enter the program at a CRS Class 9, with a 5% discount on premiums, or as a CRS Class 8, with a 10% discount (FEMA, 2014). The benefit to NJ municipalities participating in the CRS program is that all towns are already eligible for advanced points due to New Jersey’s strict building requirements. NFIP’s CRS program has three goals: reduce and avoid flood damage to insurable property, strengthen and support the insurance aspects of the NFIP, and encourage comprehensive floodplain management (FEMA, 2014). Creditable activities within the CRS program include stormwater management techniques, flood data maintenance, open space preservation, low density zoning, and flood protection information and outreach, to name a few. Municipal participation in the CRS program is voluntary, however the municipality is entirely accountable for their role in the management and implementation of credited activities to keep their CRS classification status.

In 2015, Monmouth County launched a High Water Mark (HWM) Initiative, in conjunction with FEMA’s High Water Mark Initiative and Monmouth University’s Urban Coast Institute (UCI), as a way for participating towns in the CRS program to gain points when they

install high water mark signs in their community. These HWM signs show flood heights from severe storm events (such as Sandy), which raises flood risk awareness in the local community. Through this initiative, FEMA funded the cost of the signs, the county formed a committee to design a uniform countywide sign, and UCI surveyed the location of the HWM, with no cost incurred to the municipality. The Monmouth County HWM Initiative is available to any municipality; however the town must adopt



Monmouth County HWM Sign designed by the Monmouth County Division of Planning

a resolution to be a partner in the initiative (the Monmouth County HWM Committee created a sample resolution for municipalities to use). In this partnership, the municipalities are responsible for outreach and project completion. On June 27, 2016, Monmouth County hosted an event at the Belford Ferry Terminal in Middletown to launch the Monmouth County HWM



First HWM Sign Installation at the Belford Ferry Terminal in Middletown
Source: Monmouth County Department of Public Information and Tourism



Initiative, and the first of the county HWM signs were installed at the ferry docks. The Monmouth County HWM Initiative is the first in Region II to partner with FEMA.

The county is receiving national and state recognition for its regional resiliency planning efforts. Monmouth County was one of eleven participants awarded the 2014 Walter B. Jones Memorial Awards for Excellence in Coastal Resource Management, an award given to individuals and organizations by NOAA's Office for Coastal Management. The award is for exemplary leadership and commitment to balancing the human use of coastal and ocean resources with the needs of the environment. Due to county coordination between the OEM and the Division of Planning, the county provided leadership and direction for its municipalities interested in becoming part of the CRS program. Monmouth County was also among three counties mentioned as a case study in the National Association of Counties (NACo) November 2014 [Severe Weather Adaption, Coastal Resiliency County Case Studies, Volume 2](#) issue, which explored approaches to reduce vulnerability and exposure through planning, technology, and collaboration tools. In 2014, the Division of Planning spoke about its involvement with CRS at a panel discussion with ISO Community Hazard Mitigation, New Jersey Department of Environmental Protection (NJDEP), and New Jersey Association of Floodplain Management at the American Planning Association's New Jersey Chapter (APA-NJ) annual planning conference in New Brunswick, NJ. The Monmouth County OEM and Division of Planning also presented at the 99th New Jersey State League of Municipalities Conference in Atlantic City in October 2014. Most recently, NACo awarded Monmouth County a 2016 Achievement Award for the Monmouth County CRS Assistance Program. Monmouth County received the honor of Best of Category in the "County Resiliency: Infrastructure, Energy and Sustainability" category.

Master Plan Recommendations 12.2 and 12.3 speak directly to county efforts in advancing the CRS program in Monmouth County and

supporting regional resiliency by expanding CRS influence throughout the state's vulnerable coastal communities. For more information on Monmouth County municipal CRS participation, see Section 12.4.3, Municipal Partner Efforts.

Maintain Flood Insurance Rate Maps (FIRMs) and Historic Flood Information: The FIRMs, historic flood information, and flood studies promote countywide resiliency by informing municipalities of past flood events and current FEMA standards, which should influence decisions on where to locate future development to reduce loss of life and property. *Master Plan* Recommendation 12.5 calls for the county to maintain a collection of FIRMs and historic flood information for use in countywide resiliency and municipal CRS program advancement; however, a municipality *would continue to request a FIRM through NJDEP*. Municipalities that maintain their own map collections and historic flood information can further their placement in NFIP's CRS program, as points are awarded specific to FIRM maintenance and historical/repetitive flood information. The FIRMs and historic flood maps will inform municipalities on appropriate locations for future infrastructure, transportation routes, redevelopment, and utility services that supports vibrant and sustainable communities.

Monmouth County Mutual Aid and Assistance Agreements (MAAs): In 2015, the Monmouth County OEM coordinated an intra-county MAAs for municipalities. In the case of a federally declared emergency, municipalities that have formally adopted the agreement are allowed to share department services (e.g. fire, police, emergency medical services, building construction, and public works) with other participating municipalities and are eligible for reimbursement for those services by FEMA. The MAA, while particularly important during federally declared disaster, also works for daily emergencies as well. The network of shared emergency response services allows for a quicker recovery, therefore enabling a community to adapt physically and economically to long-term environmental changes, emergencies, and natural hazards.



The Division of Planning will assist OEM with implementation and program outreach (See *Master Plan* Recommendation 12.4).

Public Works and Engineering: The Monmouth County Highway Division in the Department of Public Works and Engineering assisted Naval Weapon Station Earle by mowing Phragmites in the Ware Creek Salt Marsh to control invasive species, improve habitat, and increase stormwater capacity.

The Monmouth-Ocean County Building Officials Association (MOCBOA)

The MOCBOA, a nationally recognized Code Official Association, is included in Monmouth County’s intra-county MAA. The MAA agreement is free for municipalities to participate and the MOCBOA will train and certify municipal construction employees in unified safety evaluation teams. The agreement assisted Union Beach when a house under construction collapsed in June 2015. When the incident occurred, the Borough Construction Code Official was out-of-state and thus requested assistance through the Monmouth County MAA, granting full authority to the Safety Evaluation Team (S.E.T.) coordinator. Within two hours of the incident, a formal S.E.T. response was made, detailed evaluations performed, consultation with municipal leaders was conducted, and written UCC orders were carried out with established S.E.T. Standard Operating Guidelines. If the mutual assistance agreement did not exist, the house would have remained a danger to the community until the Borough Construction Code Official was able to return.

12.4.2 State and Federal Partnership Efforts

The Federal Government and State of New Jersey have varying stakes in community resiliency. The Disaster Mitigation Act of 2000 that “amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing the previous mitigation planning provisions

and replacing them with a new set of requirements that emphasize the need for state, local, and Indian Tribal entities to closely coordinate mitigation planning and implementation efforts” (FEMA, 2015). It is important to note that the U.S. Army Corps of Engineers (USACE) has authority over navigable waterways which affects where infrastructure is built. NJ has delegated “police power” to local governments and usually requires zoning to be based on a comprehensive master plan.

Federal Emergency Management Agency (FEMA): FEMA coordinates the Federal Government’s role in the preparation, prevention, and mitigation of all domestic, natural, manmade, and terror disasters (FEMA, 2014). As mentioned earlier, NJ is in FEMA Region II. FEMA’s website provides additional resources to encourage community resiliency including information on programs such as Community Emergency Response Teams (CERTs), which educates people about disaster preparedness for hazards that may impact their community and trains them in disaster response skills. There are training webinars with topics including Social Media in Emergency Management, Fundamentals of Emergency Management, Emergency Planning, and Multi-Hazard Emergency Planning for Schools. FEMA also provides information for properties located in federally declared disaster areas along with links to the U.S. Department of Homeland Security’s Financial Assistance and U.S. Fire Administration grants and funding.

As part of its Community Resilience Toolkit initiative, FEMA interviewed Belmar and Manasquan in early 2016 to identify current resiliency projects occurring in their community, the barriers each face in implementing resiliency at the local level, and which of FEMA’s tools could assist Belmar and Manasquan in becoming more resilient. The toolkit includes programs and strategies that have been proven beneficial in building community resilience.

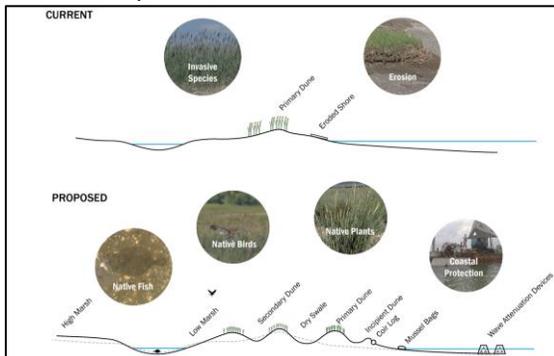
U.S. Navy and Department of Defense (DoD): The DoD is currently taking action to increase resiliency at the federal-level. The DoD



released its [2014 Climate Change Adaptation Roadmap](#) in October 2014 which focuses on planning actions the department is taking to increase

Oyster Restoration at Naval Weapons Station Earle

Although oysters once thrived in the Raritan Bay and New York Harbor, by the 20th century the reefs were in decline and currently no oyster reefs exist. The U.S. Navy is working with [NY/NJ Baykeeper](#), an environmental nonprofit organization, to reintroduce oyster reefs at [Naval Weapons Station Earle’s](#) 2.2-mile pier in Middletown. At this location over five years of research has proved that the water quality is good enough for oysters to flourish. In the summer of 2015, the Baykeeper began seeding oyster castles, which are interlocking concrete blocks, inside five hundred gallon setting tanks. Once the oyster larvae attach to the oyster castles and begin to grow, the oysters can be placed on the bottom on the Raritan Bay. If the oysters prove to prosper in the Bay, the next phase in 2016 will be to place around a thousand oyster castles to the west of the Navy piers. The oysters and oyster reefs contribute to community resiliency in many ways. For example, an adult oyster can filter up to fifty gallons of seawater per day, which considerably improves water quality. The offshore reef provides habitat for marine life, reduces maximum wave height by dissipating wave energy before hitting the shore, and encourages sediment deposit to rebuild the beach, which according to the U.S. Navy, has receded 250 to 300 feet since the 1940s.



Source: [Rutgers Center for Urban Environmental Sustainability \(CUES\)](#) and [Biohabitats Inc.](#)

**Oyster reefs are the wave attenuation devices.*

its resilience to the impacts of climate change, because “climate change will affect the Department of Defense’s ability to defend the Nation and poses immediate risks to U.S. national security.” As part of their first phase of planning, the U.S. Navy completed a detailed study in Norfolk, Virginia of all coastal naval facilities. The Navy’s guidance as of June 2014 is to plan for 1.5 to 7.5 feet of relative sea level rise by 2100.

According to the Navy, the rate of sea level rise is accelerating and a rise up to 1.5 feet is anticipated if the rate becomes stable, which is unlikely. The Navy is projecting it will lose critical infrastructure (e.g. piers and wastewater stations) between 1.5 feet to 3 feet of sea level rise, which may occur as soon as 2045 to 2055, assuming a worst case scenario. The Navy aims to replace 2% of the aging infrastructure each year with new infrastructure that has an approximate 68-year lifespan. As of mid-2015, the Navy is onto their next phase of planning which includes studying all naval bases, including Naval Weapons Station Earle, and convening a 125-member Navy Climate Change Working.

In 2014, the Monmouth County Board of Chosen Freeholders passed a resolution supporting a Superstorm Sandy Coastal Resiliency Competitive Grant Application by Middletown. Naval Weapons Station Earle approached Monmouth County and Middletown with a concept project for the 200-acre salt marsh site along the Raritan Bay between Belford Ferry Terminal and the Naval Weapons Station pier. The project would restore the salt marsh, improve stormwater capacity, increase storm surge resistance, restore the natural ecosystem, and lessen localized flooding around Ware Creek. Although the project was not funded, elements of the salt marsh restoration project have been implemented and the Monmouth County Board of Chosen Freeholders resolved in December 2014 to enter into a partnership with the Navy to preserve land for the purpose of natural resiliency.

U.S. Department of Housing and Urban Development (HUD): In 2013, The [Hurricane Sandy Rebuilding Task Force](#) and HUD initiated a design



competition, known as [Rebuild by Design](#) to connect researchers and designers with local businesses, policymakers, and community groups in Sandy-affected areas along the East Coast. The goal of the initiative was to redevelop communities that are environmentally and economically healthier and better prepared for future storm events. Monmouth County's Asbury Park and Bayshore Region were selected as case studies for two finalist design teams.

Full Reports: [Sasaki/Rutgers/Arup Proposal \(Asbury Park and the Bayshore\)](#) and [HR&A Advisors and Cooper, Robertson & Partners Proposal \(Asbury Park\)](#)

Although the Rebuild by Design proposals are specific to Asbury Park and the Bayshore Region, several Monmouth County seaside communities with boardwalks and coastal lakes can incorporate resilient design ideas, concepts, and strategies proposed from the two design teams. The [American Littoral Society](#) designed a project as part of its "Creating Nature-based Infrastructure to Promote Community Resiliency and Awareness in Monmouth County" initiative. The forest provides protection to local residents, decreases the amount of runoff by increasing groundwater infiltration, provides a habitat, increases biodiversity, provides a natural vegetated buffer strip along the shoreline by the flume which improves water quality of the nearby lake, and creates a space for environmental education and interaction. [Surfrider Foundation](#) has also hosted several dune grass planting events for Monmouth County communities which was an activity during the Rebuild One City Parade and Party Event.

New Jersey Department of Environmental Protection (NJDEP): A network of NJDEP programs, facilitated by their Office of Coastal Management, plans and coordinates coastal resiliency through community planning, identifying and expanding management tools, developing new approaches to resiliency, and informing effective policies, regulations, and planning. The NJDEP created the NJ Resilient

Coastal Communities Initiative (RCCI) to advance community resiliency efforts. The RCCI is part of the [Coastal Resilience Networks Grant Program](#). The project duration is from June 1, 2014 to May 30, 2016 and partners with Jacques Cousteau National Estuarine Research Reserve (JC NERR), Rutgers University's Bloustein School, Sustainable Jersey, New Jersey Future, and Monmouth University's Urban Coast Institute. RCCI's objectives are to provide assistance to communities either affected by Sandy and/or vulnerable to future storms, implement strategies that reduce risk and vulnerability to coastal hazards, provide tools, guidance, and technical assistance to coastal resilience planning, and advance government policy and actions that support community-based recovery and resiliency efforts. The four tasks of the RCCI are coastal hazards vulnerability assessment, coastal hazard response through tool development, resiliency planning through expanding existing efforts and capacity, and the design and implementation of the Resilient Coastal Communities Program.

12.4.3 Municipal Partner Efforts

Strategic Recovery Planning Reports (SRPRs) Municipal Highlights: The NJ Department of Consumer Affairs (DCA) awarded the Monmouth County municipalities of Belmar, Deal, [Highlands](#), Keansburg, Keyport, Monmouth Beach, Neptune Township, Ocean Township, Oceanport, Rumson, [Sea Bright](#), and [Union Beach](#) with Phase I funding to complete SRPRs. Some towns, such as Rumson, were also awarded Phase II funding to implement the SRPR. While each municipality experienced different types of storm damage and therefore faces different rebuilding strategies, a trend of municipal action steps began to form. The common action steps recommended in Monmouth County municipal SRPRs are:

- Participate (or continue to participate) in NFIP's CRS program
- Write master plans or master plan reexamination reports that address post-Sandy strategies and policies related to hazard mitigation and resiliency



- Update municipal maps to include FEMA's FIRM maps, critical community facilities, open space/natural features, etc.
- Locate municipal services (e.g. borough halls, fire stations, and public works) out of floodprone areas/SFHA
- Prepare a redevelopment plan and Capital Improvement Plan;
- Install emergency generators
- Replace sewage pump stations
- Conduct dune restoration and hardening
- Investigate problems with storm drain systems
- Improve streets vulnerable to flooding through elevation, new grades, curbs, and street repairs
- Repair sea walls

Aberdeen Township: In 2013, DCA awarded Aberdeen \$20,000 to complete a SRPR. Aberdeen was also among one of the first municipalities to receive Phase II funding; \$50,000 in 2014. The recommended municipal actions for Aberdeen that emerged from the SRPR included reconstruction of the sanitary sewer pumps, the elevation of the Route 35 bridge and roadways, complete dune restoration along Raritan Bay, Cliffwood Beach seawall repair, a master plan reexamination report to address hazard mitigation and resiliency measures, and continued participation in the CRS program. The SRPR encouraged Aberdeen to use its Phase II funding to write their municipal *2015 Master Plan Reexamination Report and Master Plan Amendments*, an Upstream Development Impact Study, and a Flood Control Assessment.

As a result, Aberdeen recently reexamined its master plan and created an executive summary to its reexamination explaining the impacts of Superstorm Sandy and the damage the Aberdeen sustained. The summary included local and regional action the municipality is taking in response to Sandy, such as their SRPR and involvement with the *HMP* for Monmouth County. The summary concludes with specific changes

recommended for the master plan and development regulations to promote resiliency to future storms.

Highlands Borough: In 2014, DCA awarded Highlands \$20,000 to complete a SRPR. The report explained the highest priority projects for Highlands which included improving stormwater management through the construction of a direct stormwater pipe to Route 36, mitigation to address steep slope stability issues, the creation of a municipal facilities plan with a multi-purpose municipal building, and sanitary system improvements. The SRPR encouraged Highlands to apply for the Phase II grant to fund increases in property maintenance and code compliance, participate in the CRS program, perform an economic viability study of the existing clamming industry and a redevelopment study, and develop an ordinance update to adopt the latest version of FEMA's flood maps.

Rumson Borough: Rumson was awarded both Phase I and Phase II of the Post Sandy Planning Assistance Grant. Phase II granted \$255,000 to Rumson to implement its SRPR which recommended the creation of these resiliency plans and programs: a capital improvement plan, [2015 Master Plan Reexamination Report & Amendments](#), an update to their emergency operations plan, the [Rumson 2015 Floodplain Management Plan](#), community resiliency geographic information system (GIS) development, a hazard mitigation plan, and improvements to their permit application process. Due to its persistence in creating and implement resiliency plans and programs, Rumson was the recipient of the 2015 Monmouth County Planning Merit Award.

Master Plans and Reexamination Reports: The New Jersey Municipal Land Use Law (MLUL) requires that each municipality in New Jersey undertake a periodic review of its local master plan every ten years by evaluating its master plan and development regulations to determine the need for updates due to local and regional changes that might affect the municipality. The Monmouth County Division of Planning strongly recommends that municipalities incorporate information on the impacts



from Superstorm Sandy along with recent resilience and hazard mitigation measures into their master plans and reexamination reports, as Aberdeen, Rumson, and Union Beach did in their 2015 reexamination reports.

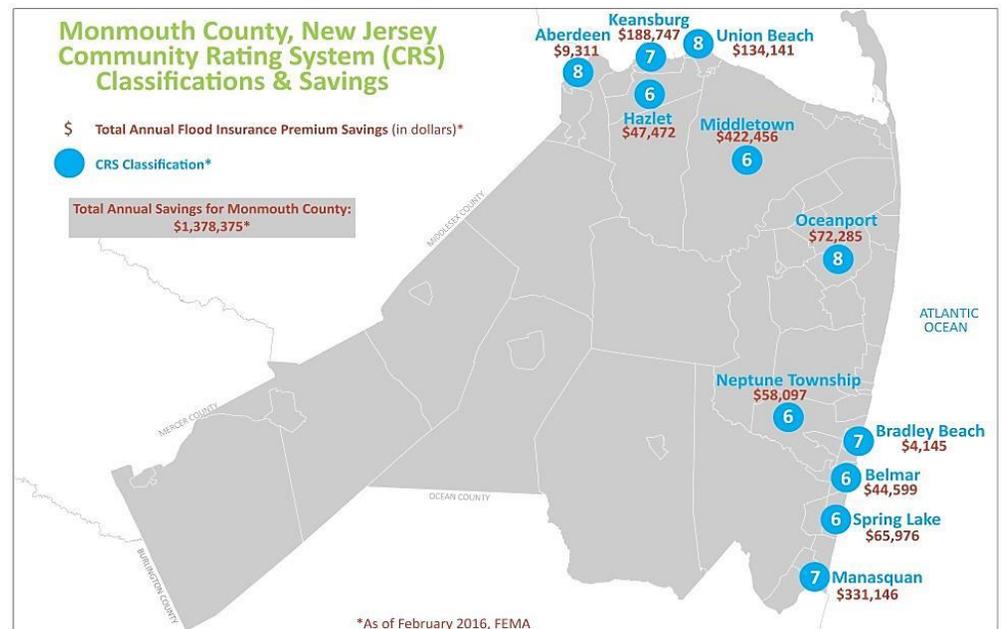
Recovery and Redevelopment Plans: As a recommendation from the Strategic Recovery Planning Reports (SDRPs), many municipalities have adopted redevelopment plans with a focus on resilient development. The **Borough of Union Beach** adopted the [Commercial Corridor Resiliency Plan: Route 36 and Union Avenue \(2015\)](#) a redevelopment plan for the Route 36 Corridor because that area flooded during Sandy and many buildings were subsequently demolished. Union Beach’s redevelopment plan combines flood protection and commercial revitalization in the Borough to “provide a stronger response to the next major storm event” both physically and economically.” FEMA’s Long-Term Community Recovery Team assisted the **Borough of Highlands** in the creation and adoption of a recovery plan in 2013 that highlighted key recovery issues, summarizes recovery projects to address those issues, and outlines the community’s strategy for moving forward post-Sandy.

Other Resiliency Projects: In addition to the creation of recovery and resiliency plans, Monmouth County municipalities are implementing their own local projects to lessen storm damage. One example includes Belmar which shortly after Superstorm Sandy installed a new drainage system in Silver Lake, which was the cause for massive flooding during Sandy. Belmar also used federal funds to install a new outfall pipe in Lake Como to mitigate flooding and is reviewing its ordinances to make it easier for residents to elevate their homes when they surpass the maximum building height, as mandated by borough code. Manasquan has strengthened its approach to resiliency by increasing communication with residents in the wake of an emergency. Manasquan installed automated flood alerts, flashing

sign systems connected to broadcasts, and emergency siren in addition to increasing their use of social media to rely emergency information to residents.

Participation in NFIP’s Community Rating System (CRS) Program: Although voluntary, Monmouth County strongly encourages and assists municipal participation and advancement in the [CRS program](#). Since the Monmouth County CRS Assistance Program began in 2013, four additional municipalities have joined the program and two have improved their CRS Classification. Figure 12.5: CRS Classification and Savings displays the 11 municipalities within the county that are currently participating in the program, their CRS Classification, and their annual savings on flood insurance premiums, as of February 2016. The total annual savings for Monmouth County is \$1,378,375, as of February

Figure 12.5: CRS Classifications and Savings



2016. Avon applied to enter the program in 2016 and is currently being evaluated. Their savings is not included in the county total.

12.4.4 Partnership Efforts

Jacques Cousteau National Estuarine Research Reserve (JC NERR): Administered through Rutgers University, the JC NERR is one of the national estuarine reserves created to promote the responsible use and management of the nation's estuaries through a program combining scientific research, education, and stewardship. JC NERR offers [Coastal Training Programs](#) that Division of Planning staff and municipalities regularly attend. JC NERR also offers training on NJ Flood Mapper, an interactive mapping website offering a user-friendly visualization tool to assist local officials with the data to make decisions concerning flooding hazards and sea level rise. JC NERR attends the Monmouth County CRS Users Group meetings to give information on their resources and use their experience working with other municipalities in NJ to answer resiliency questions.

In addition to training opportunities, JC NERR offers [Getting to Resilience \(GTR\)](#), a non-regulatory tool to assist local decision makers in the identification of opportunities to reduce vulnerability to coastal storms and sea level rise. GTR has become a useful tool for seven Monmouth County municipalities, with interest from several other municipalities. The first step in the GTR process is for a diverse group of municipal decision makers (planners, floodplain managers, emergency managers, administrators, etc.) to use the online mapping tool to evaluate their risks and vulnerabilities to natural disasters. Then the local group must complete an online assessment of municipal preparedness, planning, and public outreach activities around flood hazards. Based on current risk, vulnerabilities, and municipal activities, the JC NERR staff then creates municipal-specific recommendations that encourage community resiliency. The staff reviews those recommendations with the decision makers and prioritizes the next steps. Participation in GTR can generate points for the Sustainable

Jersey certification and can identify where activity points are being earned in the CRS program.

Monmouth University Urban Coast Institute (UCI): Monmouth University's UCI is working with Monmouth County and FEMA to provide free land surveying for county municipalities interested in participating in the Monmouth County High Water Mark (HWM) Initiative. See 12.4.1 Monmouth County Efforts for additional information.

New Jersey Future: New Jersey Future is currently involved in [three significant recovery initiatives](#): local recovery planning management, the development of a national model for state recovery, and community vulnerability assessments. In 2015, there were local recovery planning managers in two Monmouth County communities, the Highlands and Sea Bright. The managers help municipalities work towards creating and adopting a Strategic Recovery Planning Report (SRPR), establishing a recovery planning and implementation steering committee, adding a community vulnerability assessment to municipal master plans, establishing a community engagement program, aiding with the application of Sandy recovery grants, and establishing or improving participation in the CRS program. New Jersey Future encourages municipalities to integrate all their plans and departments (subdivision regulations, zoning, master plans, budgets, stormwater regulations, etc.) to plan for community resiliency.

Monmouth County Long-Term Recovery Group (MCLTRG): The MCLTRG was founded following Superstorm Sandy to help expedite recovery in the county. The MCLTRG creates partnerships with organizations in the area to work together and pool resources to help residents still struggling to recover from Sandy. MCLTRG provides recovery services to both Monmouth County property owners and renters that suffered damage or loss to residential property as a result of any natural disaster. Those recovery services include access to case



managers and information on long-term recovery topics such as grants, mental health and wellness programs, food, clothing, and temporary housing.

12.5 Additional Resources and Funding Opportunities

Federal

- [Community Rating System \(CRS\) Official Website](#)
- Federal Emergency Management Agency (FEMA)
 - [Community Emergency Response Teams \(CERT\)](#)
 - [Community Rating System \(CRS\) Coordinator’s Manual \(2014\)](#)
 - [Grants](#)
 - [Hazard Mitigation Assistance \(HMA\)](#)
 - [Pre-Disaster Mitigation \(PDM\)](#)
 - [Flood Mitigation Assistance \(FMA\)](#)
 - [Repetitive Flood Claim](#)
 - [Severe Repetitive Loss](#)
 - [Hazard Mitigation Grant Program \(HMGP\)](#)
 - [Homeowner Flood Insurance Affordability Act of 2014](#)
 - [Increased Cost of Compliance Coverage \(ICCC\)](#)
 - Information on [Mitigation](#)
 - [Integrating Hazard Mitigation Into Local Planning \(March 2013\)](#)
- [The President’s Climate Action Plan](#)
- National Association of Counties (NACO)
 - [Digital Coast: Tools to Promote County Resilience, October 2013](#)
- National Oceanic and Atmospheric Administration (NOAA)
 - [Coastal and Estuarine Land Conservation Program](#)
 - [Coastal Inundation Mapping and Training on GIS](#)
 - [Coastal Resilience](#)
 - [Competitive Federal Funding Opportunities \(FFOs\)](#)
 - [High Water Mark Information Toolbox](#)
 - [National Sea Grant Resilience Toolkit](#)
 - [Natural and Structural Measures for Shoreline Stabilization](#)
 - [Regional Coastal Resilience Grants](#)

- [Storm Ready, National Weather Service](#)
- National Wildlife Federation (NWF)
 - [Natural Defenses to Hurricanes and Floods](#)
- U.S. Department of Housing and Urban Development (HUD)
 - [Economic Resilience](#)
 - [Hurricane Sandy Rebuilding Task Force](#)
- U.S. Department of the Interior
 - [Hurricane Sandy Coastal Resiliency Competition Grant Program](#)
- U.S. Environmental Protection Agency (EPA)
 - [Climate Ready Estuaries Program](#)
 - [Climate Resilience Evaluation and Awareness Tool \(CREAT\)](#)
 - [Combined Heat and Power Partnership \(CHP\)](#)
- U.S. Small Business Administration (SBA)
 - [Business Physical Disaster Loans](#)
 - [Home and Personal Property Loans](#)

State

- [Database of State Incentives for Renewables & Efficiency \(DSIRE\)](#)
- [New Jersey Coastal Management Program](#)
- New Jersey Department of Community Affairs (DCA)
 - [Post-Sandy Planning Assistance Grant Program](#)
- New Jersey Department of Environmental Protection (NJDEP)
 - [Blue Acres Program](#)
 - [Disaster Debris Management Planning Tool Kit for New Jersey Municipalities](#)
 - [Shoreline Protection](#)
- [New Jersey Energy Resilience Bank \(ERB\)](#)
- [New Jersey Environmental Infrastructure Trust \(NJEIT\)](#)
- [New Jersey Governor’s Office of Recovery and Rebuilding](#)
- [New Jersey Office of Emergency Management \(NJOEM\)](#)
 - [Alert Systems](#)
- [NJ Sea Grant Consortium](#)



County and Local

- [Monmouth County Community Rating System \(CRS\) Assistance Program](#)
- [Monmouth County Hazard Mitigation Planning](#)

Nonprofits, Research Centers, and Other Stakeholders

- [Affordable Housing Alliance](#)
- [Center for Coastal Resiliency and Urban eXcellence \(CRUX\), Stevens Institute of Technology](#)
- [Center for Disaster Philanthropy](#)
- [Center for Resilient Design, New Jersey Institute of Technology](#)
- [Center for Resilient Landscapes, Rutgers University](#)
- [Clean Ocean Action](#)
- [Climate Reality Project](#)
- [Consortium for Climate Risk in the Urban Northeast](#)
- [Georgetown Climate Center](#)
- [Hearts & Hands Disaster Recovery](#)
- [International Conference on Amphibious Architecture, Design, and Engineering \(ICAADE 2015\)](#)
- [Jersey Shore Partnership](#)
- [New Jersey Future](#)
- [Operation Hope](#)
- [Resilient by Design by Joseph Fiksel](#)
- [Sustainable Jersey \(SJ\)](#)

Visualization and Analysis Tools

- [Climate Resilience Evaluation and Awareness Tool \(CREAT\)](#)
- [Coastal Hazard Profiler](#)
- [FEMA Region II \(Monmouth County\) Mapping](#)
- [HURREVAC](#)
- [Hurricane Sandy Storm Tide Mapper](#)
- [NJ Flood Mapper](#)
- [NJADAPT](#)

- [SLOSH Models](#)
- [U.S. Climate Resilience Toolkit](#)

12.6 Master Plan Recommendations and Stakeholder Strategies

Five *Master Plan* Recommendations and numerous Stakeholder Strategies emerged from meetings and conversations with residents and community stakeholders.

Master Plan Recommendations

Recommendation 12.1: Incorporate the approved Multi-Jurisdictional Natural Hazard Mitigation Plan (HMP) for Monmouth County (2015) update into the Monmouth County Master Plan by reference; recognizing that the HMP is the broadest approach to implementing community resiliency activities at both the local- and county-level. Hazard mitigation is the only phase of emergency management that is specifically dedicated to breaking the cycle of damage, reconstruction, and repeated damage. Recommendation 12.1 advocates the continued integration of hazard mitigation and planning by having the Division of Planning and the Monmouth County Office of Emergency Management (OEM), the manager of hazard mitigation planning for the county, work together in the development and implementation of the *Multi-Jurisdictional Natural Hazard Mitigation Plan* for Monmouth County (2015).

Recommendation 12.2: In partnership with the Monmouth County Office of Emergency Management (OEM), continue to encourage and advance municipal participation in the National Flood Insurance Program's (NFIP) Community Ratings System (CRS) program. The NFIP administers the CRS program which scores (and classifies) communities on their effectiveness in dealing with the mitigation of flood hazard events. In participating towns, earning CRS points may lower flood insurance premiums for homeowners and businesses located in Special Flood Hazard Areas (SFHAs). Together, the OEM and Division of Planning encourage municipal participation in the program through the creation



of the Monmouth County CRS Users Group, a quarterly meeting that serves as a peer learning forum for municipalities to gain knowledge about the program and exchange strategies for program advancement. The Division of Planning offers professional assistance with CRS, such as generating the required geographic information system (GIS) maps and guidance on the overall program.

Recommendation 12.3: Partner with jurisdictions outside of Monmouth County to expand participation in the county’s CRS Users Group, eventually resulting in a more influential regional forum. The Division of Planning and Monmouth County Office of Emergency Management (OEM) intend to build upon the existing CRS Users Group as the foundation for an expanded regional forum for CRS since community resiliency often requires a regional approach. Surrounding counties, especially Ocean and Middlesex Counties, share Monmouth County’s Emerging Issues and Long Range Challenges. Additionally, development in those counties directly impact Monmouth County. Regional cooperation with other counties will only further advance local resiliency efforts.

Recommendation 12.4: Support the Monmouth County Office of Emergency Management (OEM) in providing a network of shared emergency response services across the county. The recent Monmouth County Mutual Aid Agreement (MAA) for municipalities provides additional aid and assistance in protecting persons or property against loss, damage, or destruction caused by fire, civil unrest, hazardous material, major criminal or emergency events, and natural or manmade disasters. The network of shared emergency response services promotes resiliency as it allows for a quicker recovery, therefore enabling a community to adapt physically and economically to emergencies, and natural hazards.

Recommendation 12.5: Maintain a collection of Flood Insurance Rate Maps (FIRMs) and historic flood information for use in countywide

resiliency and municipal CRS program advancement. The FIRMs, historic flood information, and flood studies promote countywide resiliency by informing municipalities of past flood events and current Federal Emergency Management Agency (FEMA) standards, which should influence decisions on where to locate future development in order to reduce loss of life and property. Municipalities that maintain their map collection and historic flood information can further their placement in NFIP’s CRS program, as points are awarded specific to FIRM maintenance and historical/repetitive flood information. The FIRMs and historic flood maps will inform municipalities on appropriate locations for future infrastructure, transportation routes, redevelopment, and utility service that supports vibrant and sustainable communities.

Stakeholder Strategies

General

- Establish a subcommittee of Bayshore and coastal municipalities to address regional shoreline issues.
- Incorporate more resiliency language, conversations, and recommendations into municipal master plans and land development ordinances.
- Consider adding resilient building and infrastructure expertise (engineer, architect, code enforcement officer) to the development review boards if your community has development located in Special Flood Hazard Areas (SFHAs).
- Explore architectural and/or an engineering designs that highlight different construction methods intended to work with reoccurring flooding events rather than resisting floodwater impacts.
- Encourage municipalities to incorporate building codes that exceed the minimum requirements for SFHAs and to expand these codes outside of SFHAs for potential floodprone areas in anticipation of the effects caused by eventual sea level rise.



- Encourage municipal environmental commissions to work with local and county planning departments, OEM departments, construction and code enforcement officials, and engineering departments, in the floodplain management process.
- Partner with institutions and organizations such as the New Jersey Association of Floodplain Managers, Jacques Cousteau National Estuarine Research Reserve, Rutgers University, Urban Coast Institute of Monmouth University, and New Jersey Institute of Technology (NJIT), to assist towns in identifying ways to improve resiliency to future storm events.
- Provide technical and professional support to towns in the creation of detailed flood mitigation plans for areas that experience repetitive loss from storm damage (*Borough of Atlantic Highlands Getting to Resiliency Recommendations Report, 2015*). 
- Encourage municipalities to pursue designation as a StormReady Community by the National Weather Service, which assists towns as they develop plans for a wide variety of storm events (*Borough of Atlantic Highlands Getting to Resiliency Recommendations Report, 2015*). 
- Municipalities should prepare a Continuity of Operations Plan that ensures that essential functions are coordinated before, during, and after a wide range of emergency scenarios, different than and non-conflicting to Emergency Operations or Response Plan (*Borough of Atlantic Highlands Getting to Resiliency Recommendations Report, 2015*). 
- Support local jurisdictions in their advancement of dune restoration and beach replenishment projects.

Sustainable Places

- Continue to support the Monmouth County Board of Chosen Freeholder’s ongoing efforts in establishing sustainable state funding for the preservation and stewardship of open space, waterways, parks, farmland, and historic sites throughout NJ.

- Long-term sustainability becomes more dependent upon a community’s ability to withstand, respond, and quickly recover from such events; this is best done through planning for and implementing hazard mitigation strategies.
- Work with our stakeholder partners including municipalities, the Jacques Cousteau National Estuarine Research Reserve, Sustainable Jersey, and Clean Ocean Action in identifying action steps for resiliency in the Sustainable Jersey certification program; building upon efforts already begun under Sustainable Jersey’s Climate Mitigation and Adaptation Task Force and Clean Ocean Action’s Blue Star Program.
- Preserve undeveloped properties in floodplains and SFHAs to prevent further development in high-risk locations and to help improve municipal CRS ratings; encouraging towns to work together in securing and leveraging funds to acquire open space in shared locations that impact their communities.
- Leverage funds through the New Jersey Department of Environmental Protection’s (NJDEP) Blue Acres Program for those communities seeking to purchase property in repetitive loss locations and NJDEP’s Green Acres Program funding for the procurement of open space in floodplains.
- Transfer personal knowledge, documents, and other records of coastal storms and flooding events into digital formats with redundant, remote off-site storage (*Borough of Atlantic Highlands Getting to Resiliency Recommendations Report, 2015*). 
- Promote comprehensive floodplain management in communities with guidance from Certified Floodplain Managers, the NJDEP, Monmouth County OEM, construction code officials, and the NFIP.
- Foster social sustainability through neighborhood emergency preparedness, awareness campaigns, and cultural events such as concerts and festivals.
- Encourage the expansion of recycling programs and single stream approaches to recycling to simplify the participation process.



- Municipalities should consider implementing land use ordinances that provide for onsite residential groundwater recharge systems rather than curb to gutter flows. These ordinances would provide for better aquifer recharge for drinking water supplies as well as sustain groundwater pressure to prevent the encroachment of saltwater intrusion and land subsidence along the coast.
- Encourage projects like the SURE HOUSE in Seaside Park, NJ that partner with colleges to build energy efficient, solar-powered, net-zero, storm-ready structures that serve as an emergency management and coastal resilience center ([SU+RE House](#)).

Community Development & Housing

- Prioritize Community Development Block Grant (CDBG) funding of public infrastructure projects that promote resiliency to future storm events.
- Prioritize CDBG funding for maintenance and upkeep of drainage facilities along emergency evacuation routes.
- Incorporate a review of “Best Practices for Hazard Resiliency” including conformance to enhanced building code requirements as part of the environmental review for Office of CD projects located in a SFHA.
- Discourage CDBG project funding in high-risk flood areas and those locations that do not provide for effective onsite hazard mitigation. However, deference should be given to projects that will permanently preserve and/or create easements on project owned land in the SFHA.
- Discourage zoning that allows the placement of residential facilities that are difficult to evacuate in a SFHA (e.g. nursing homes, group homes, special needs facilities, schools, day care facilities, senior centers, etc.).

Healthy Communities

- Ensure that new emergency response facilities are not located in hazard vulnerable areas, whereas preexisting facilities should

receive enhanced flood hazard mitigation and protection in accordance with NFIP guidelines.

- Protect sources of drinking water from contamination caused by flooding.
- Help maintain the Monmouth County Long-Term Recovery Group (MCLTRG) support services after disaster recovery funds expire.
- Whenever possible, keep septic systems, fuel tanks, utilities, backup generators, and the storage of onsite hazardous materials either outside the SFHA or above the Base Flood Elevation (BFE).
- Organize outreach projects and neighborhood events that foster a sense of community cohesiveness and build upon our social networks which are often our first defense in the face of adversity.
- Culturally-based community recovery programs provide individuals and communities with a positive and productive means to cope with the stress, grief, and emotional strain in the aftermath of a disaster.
- Continually encourage individual households to be action ready in the face of an emergency; advising them on the importance of creating a family emergency plan and keeping emergency supplies at home.

Natural Resources

- Protect and restore natural features, such as riverbanks, wetlands, dunes, rain gardens, maritime gardens and forests, vegetative buffers and tree roots which provide natural mitigation relief.
- Create living shoreline protections around coastal lakes in the county; coastal lake revitalization provides flood protection for nearby properties, restores recreational access, improves local ecology, and mitigates water quality issues ([HR&A Advisors and Cooper, Robertson & Partners Proposal \(Asbury Park\)](#)).
- Utilize beachfront properties to incorporate resilient design such as combined boardwalk dune systems that protect beachfront communities and support local habitats ([Sasaki/Rutgers/Arup Proposal \(Asbury Park and the Bayshore\)](#)).



Open Space

- Preserve undeveloped properties in SFHAs as open space to retain natural floodplain functions of the property, helping to alleviate flooding and serving as a natural buffer to nearby built environments.
- Encourage the use of open space for community programming and resilient landscaping. In times of recovery, these open spaces often serve as a gathering place for residents and business owners to receive information and assistance ([HR&A Advisors and Cooper, Robertson & Partners Proposal \(Asbury Park\)](#)).

Farmland Preservation

- Preserving farms proximate to floodplains reduces the built environment’s impact on riverine systems and downstream impacts.
- Incentivize farmland preservation in SFHAs.
- Provide education and public awareness about the benefits and significance of preserving farmland within the floodplain.

Arts, Historic, & Cultural Resources

- Monmouth Arts is recognized as the county’s primary Art Responder to help connect the arts community to information, resources, and emergency funding in the aftermath of a disaster.
- People and organizations entrusted with the stewardship of important community cultural and historic artifacts, archives, and exhibits should develop specialized hazard mitigation and disaster response plans to protect collections from damage.
- Art organizations collaboratively develop contingency programming for conflict resolution and avoidance implementation in the wake of disaster.
- Identify and implement appropriate hazard mitigation protection strategies that protect historic resources without diminishing the historical integrity of buildings or structures.

- Work with local artists and art organizations to incorporate public art and art spaces into resiliency infrastructure such as sea walls and barriers.
- Use local historic commission resources and knowledge to help determine the extent of prior flood events in the community (Jacques Cousteau feedback). 

Utilities

- Encourage municipalities to work with utility companies and authorities to conduct regular maintenance, repair, cleaning, and inspections for integrated utility systems to ensure proper function before and during storm events.
- Consider increasing the overall capacity of storm drainage systems and onsite retention basins for drainage systems.
- Install elevated backup generators for emergency facilities and public administration.
- Replace old and failing utilities with more efficient, higher capacity systems to better withstand climate and weather conditions.
- Encourage private owners to recapture rainwater onsite to reduce the amount of rainwater in storm drains and the need to supply water to private homes.
- In accordance with NFIP guidelines and Best Management Practices (BMPs), flood proof those facilities that cannot be relocated out of floodprone areas (e.g. water treatment plants, sewerage treatment plants, transformers, transfer stations, etc.).
- As a cost-savings measure, encourage municipalities, boards of education, and local and regional utility authorities to utilize public finance options offered through the Monmouth County Improvement Authority to maintain and improve their utilities.
- Protect potable water supplies by having a standby source, anchor and protect pipes, and protect opening to water sources (wellhead) to prevent contamination.



Planning Services, Outreach, & Coordination

- Utilize municipal websites to publish information to property owners about flood mitigation techniques, flood maps, purchasing flood insurance, and flood risk and safety.
- Coordinate with local nonprofits, such as Clean Ocean Action, to provide public education on community sustainability and resiliency.
- Develop a pre-flood plan for public information projects that will be implemented during and after a flood (Jacques Cousteau feedback) 
- Encourage libraries to maintain an onsite collection of flood insurance brochures and reference information.
- Organize and support New Jersey Clean Communities activities, such as stream clean ups to help alleviate flooding caused by the buildup of debris in floodways.

Transportation & Mobility

- Coordinate county improvements along emergency evacuation routes with other local and state agencies.
- Clearly mark and maintain coastal evacuation routes through communities within a regional context, giving priority to the maintenance and upkeep of drainage facilities along these routes.
- Provide for real-time emergency information through electronic messaging, social media, and crowdsourcing applications.
- Elevate future bridges and roads above the BFE.
- Upgrade streets and sidewalks in SFHAs to better absorb storm surge and control stormwater runoff.
- Improve east-west travel bottleneck points in the roadway network to provide more efficient movement of people, goods, and supplies during and after emergency events.

Agricultural & Economic Development

- Improve means and methods of communicating information between responders, government, and businesses during emergency and storm events.

- Reduce the number of flood-impacted agriculture and commercial structures by improving inadequate drainage facilities and increased structural floodproofing.
- Encourage farms and small businesses to develop debris clean up and removal plans that prevent their timely reopening after storm events.
- Find program funding that provides small business training in resiliency planning, methods, and practices.
- Refer to “Additional Guidance on Building Requirements to Mitigate Agricultural Structures’ Damage in High-Risk Areas Is Needed” ([GAO-14-583, 20144](#)) for recommendations on how to better protect agricultural property in high-risk flood hazard areas.
- Refer to [Homestead and Farm Resiliency, Principles and Practice, NOFA 2013](#) (Ben Falk) as a case study in small farming and gardening methods for resiliency and sustainability.
- Involve local Chambers of Commerce in working with their business constituents in resiliency planning, particularly in downtown commercial business districts.
- Plan for livestock accommodations prior to severe storm events and possible relocation to safer areas.





13.0 Sustainable Places

13.0 SUSTAINABLE PLACES

MASTER PLAN RECOMMENDATION 13.1

13.1: Review proposed environmental and sustainability related legislation and regulations to determine their potential impacts to Monmouth County and our municipalities, and prepare appropriate responses to promulgating authorities.

Purpose

As changes to policies and regulations continue to evolve regarding environmental and sustainability matters, evaluating their potential environmental, social, and economic impact to the residents and businesses of Monmouth County is necessary and may warrant an appropriate response from the county.

Monmouth County Departments & Organizations Involvement

Division of Planning	Review proposed environmental and sustainability related state and federal legislation and regulations; coordinate and prepare responses for review and consideration by the Monmouth County Planning Board (MCPB); provide assistance to county departments that are responding to legislation or regulations that directly affect their purview.
MCPB	Authorize official MCPB responses to pending legislation and regulations; recommend appropriate response/action to the Monmouth County Board of Chosen Freeholders (MCBCF).
Other County Departments/ Agencies	Work with the Division of Planning on the review of proposed legislation and regulations; provide comments to the Division of Planning for incorporation into official responses.

Other Project Stakeholder Involvement

NJ Department of Environmental Protection (NJDEP)	Provide notification of proposed rule changes and respond to comments.
Municipalities	Provide recommendations and comments to the lead agency.
Other State Agencies	Through the State of New Jersey Register and outreach, provide notification of proposed rule changes and opportunities to respond to comments.



Tinton Falls Solar Field, Tinton Falls

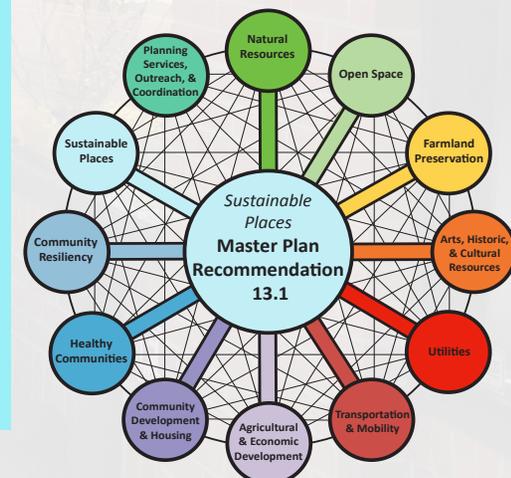
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 13.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic Preservation														
G. Investments														
H. Vibrant & Sustainable Communities														
I. Community Preservation														
J. Housing														
K. Economic Development														
L. Agricultural Development														
M. Recovery & Resiliency														
N. Growth Investments														

Implementation Strategy

- Continue to monitor promulgated legislation and proposed regulatory actions to determine their potential impacts to the county.
- Disseminate proposed or approved legislation to our planning partners for their review and consideration.
- Seek input from other county departments, municipalities, and community stakeholders when developing responses to proposed or amended legislation.
- Prepare comments for consideration by the MCPB and to the lead agency of the proposed action.



Strongest Associated Master Plan Elements

13.0 SUSTAINABLE PLACES

MASTER PLAN RECOMMENDATION 13.2

13.2: Develop internal sustainability indicators, such as those used by U.S. Environmental Protection Agency (USEPA) and other federal and state agencies, to be used as a guideline in the evaluation of local and county *Master Plan* sustainability goals and policies.

Purpose

As part of the planning process, the use of such indicators should be incorporated as a tool to either measure success or to help identify policy deficiencies in achieving the Goals, Principles, and Objectives (GPOs) of the *Monmouth County Master Plan*.

Monmouth County Departments & Organizations Involvement

Division of Planning	The Environmental and Sustainability Section of the Division of Planning will develop sustainability and environmental indicators to be used in the evaluation of the <i>Master Plan's</i> GPOs; facilitate the Sustainable Jersey (SJ) Monmouth County Hub for those municipalities seeking to improve community sustainability.
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Other Project Stakeholder Involvement

SJ	Assist the Division of Planning with developing sustainability indicators; provide assistance to municipalities in their efforts to achieve SJ certification.
Municipalities	Coordinate with the SJ Monmouth County Hub to assist Municipal Green Teams in achieving their SJ certification goals.



Tinton Falls Solar Field, Tinton Falls

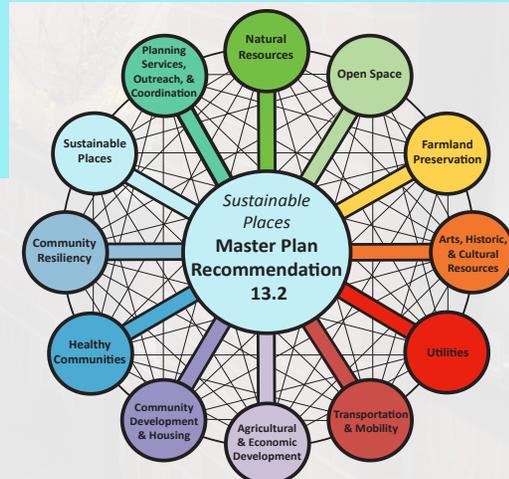
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 13.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Develop sustainability indicators that correlate with SJ priority actions.
- Using the established sustainability indicators, provide assistance to municipalities in their master planning process and the creation of environmental policies.



Strongest Associated Master Plan Elements

13.0 SUSTAINABLE PLACES

MASTER PLAN RECOMMENDATION 13.3

13.3: With assistance from the Monmouth County Environmental Council (MCEC), and through the Monmouth County Green Team Hub, offer support to our municipalities in their efforts to improve local sustainability.

Purpose

Sustainable Jersey (SJ) is a certification program offered through The College of New Jersey that provides municipalities with tools and resources to reduce costs and “green” their communities through a series of locally implementable sustainable actions and alternate solutions to standard operational practices and procedures. Once municipalities become SJ certified, they become more likely to receive SJ grant support to implement sustainable projects. Monmouth County has accepted designation as a Green Team “Hub” for information and assistance to participating municipalities and has agreed to facilitate Municipal Green Team meetings in regional forums.

Monmouth County Departments & Organizations Involvement

Division of Planning	Coordinate with SJ to provide assistance to Municipal Green Teams seeking to achieve various levels of certification; provide assistance to municipalities in their planning efforts to attain SJ certification; facilitate and participate on the SJ Monmouth County Hub (also known as Monmouth County Hub for Municipal Green Teams).
MCEC	Coordinate outreach and education efforts in assisting municipalities with SJ initiatives; include the SJ certification program as a topic of discussion at roundtable events.
Brookdale Community College (BCC)	Help accommodate Monmouth County Hub for Municipal Green Teams; offer opportunities for better engagement between Municipal Green Teams, BCC students, and academic departments.

Other Project Stakeholder Involvement

SJ	Coordinate with municipalities to provide assistance in SJ certification; work with the county, as a hub, for dissemination of information and resources.
Municipalities	Municipalities interested in increasing sustainability and/or implementing sustainable approaches should seek certification with SJ; actively participate as a member of the Monmouth County Hub for Municipal Green Teams; attend MCEC roundtable events.
Residents and Local Businesses	Assist their local communities with implementing municipal actions to attain SJ certification, as needed.
Boards of Education	Boards of Education interested in sustainability and sustainable approaches should seek certification with the SJ for Schools program.



Tinton Falls Solar Field, Tinton Falls

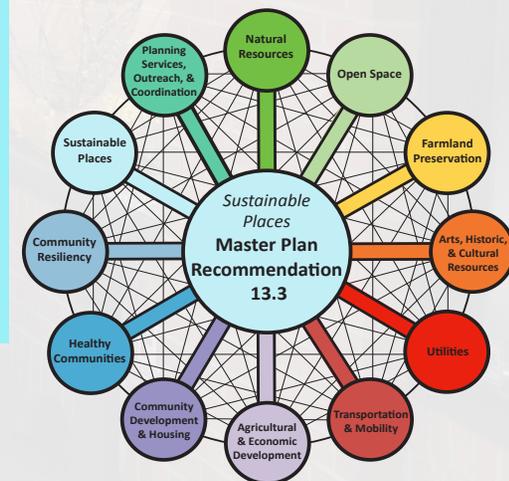
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 13.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning		●		●		●		●				●		
B. Coordination			●					●			●	●		
C. Planning Approach	●		●		●	●		●		●	●	●		●
D. Environmental Resources			●	●				●				●		
E. Farmland Preservation	●	●	●	●	●			●				●	●	●
F. Arts, Culture, & Historic			●				●							●
G. Preservation Investments				●				●						
H. Vibrant & Sustainable Communities								●						
I. Community Preservation								●	●					
J. Housing								●	●					
K. Economic Development								●	●					
L. Agricultural Development								●	●					
M. Recovery & Resiliency								●	●					
N. Growth Investments								●	●					●

Implementation Strategy

- Continue to provide staff from the Environmental and Sustainability Section to assist municipalities seeking SJ certification through the Monmouth County Hub for Municipal Green Teams.
- Continue to provide assistance to municipalities seeking to enter the certification program or achieve higher SJ certification levels.
- Foster MCEC’s relationship with municipalities through organizing and hosting opportunities such as events and roundtables to promote SJ priority actions.



Strongest Associated Master Plan Elements

13.0 SUSTAINABLE PLACES

MASTER PLAN RECOMMENDATION 13.4

13.4: Educate local decision makers and the public about the importance of issues related to maintaining a sustainable county with educational programs, roundtable events, municipal presentations, and the development of informative documents.

Purpose

This recommendation emphasizes the necessary outreach and education components of the planning process. Providing opportunities to educate the general public, as well as decision makers on all aspects of a topic, allows for a better understanding of what must be accomplished in order to achieve optimum results for the county. The Monmouth County Environmental Council (MCEC) provides annual opportunities to educate the public through roundtable events on relevant topics. The MCEC also assists in the preparation of educational documents and has prepared written recommendations to the Monmouth County Planning Board (MCPB) on environmental concerns that may impact the county. The Division of Planning provides a host agency site for a member of the NJ Department of Environmental Protection (NJDEP) AmeriCorps Ambassador Program, whose responsibility is to provide education to members of Monmouth County municipalities on the environmental issues that impact the watersheds of the county.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide assistance to county agencies and the public through outreach and education on sustainability issues.
MCEC	Provide opportunities to educate the public on issues related to sustainability through roundtable events; assist staff with the preparation of informative documents.
Other County Departments	Build internal knowledge and understanding of sustainability issues and topics.
Brookdale Community College (BCC)	Provide a venue for public forums.

Other Project Stakeholder Involvement

NJDEP	Provide a Watershed Ambassador to the Monmouth Coastal Watersheds (WMA12) as part of the AmeriCorps Program to educate the public on water and watershed issues; provide outreach and educational resources to schools, groups, and the general public on environmental issues.
Sustainable Jersey (SJ)	Coordinate with municipalities to provide assistance in SJ certification and with the county, as a Hub for information and resources.



Tinton Falls Solar Field, Tinton Falls

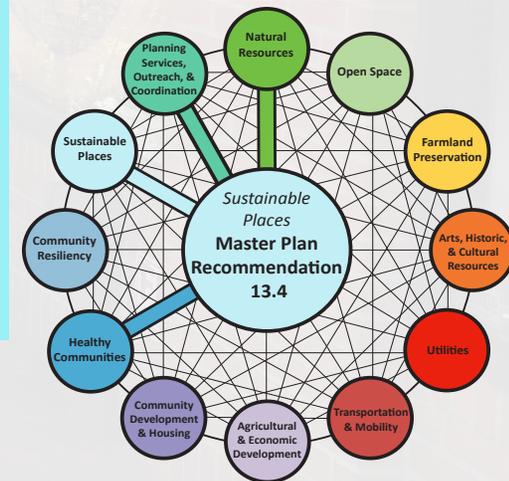
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 13.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning	●	●	●					●			●	●	●	
B. Coordination		●	●								●			
C. Planning Approach	●	●	●								●			
D. Environmental Resources		●	●			●							●	
E. Farmland Preservation		●	●			●							●	
F. Arts, Culture, & Historic Preservation Investments						●							●	
G. Vibrant & Sustainable Communities														
H. Community Preservation														
I. Housing														
J. Economic Development														
K. Agricultural Development														
L. Recovery & Resiliency														
M. Growth Investments														
N.														

Implementation Strategy

- Continue to provide documents, information, and support to municipalities on sustainability issues.
- Continue to host the NJDEP Watershed Ambassador for the Monmouth Coastal Watersheds and to support the local work of other ambassadors when their watersheds extend into Monmouth County.
- The MCEC will provide opportunities to educate the public by sponsoring annual roundtable events and providing outreach to local communities.



Strongest Associated Master Plan Elements

13.0 SUSTAINABLE PLACES

MASTER PLAN RECOMMENDATION 13.5

13.5: Build inter-departmental knowledge about the potential benefits and applications of green approaches, incorporating these actions into county plans, programs, and projects when it is financially feasible to do so.

Purpose

Applying green approaches, such as low impact design and sustainable design, to county plans, programs, and projects has the potential to reduce long-term project costs, project maintenance, and negative environmental impacts while creating a healthier natural and built environment for the county. Programs and resources available through our sustainable project stakeholders can assist the Division of Planning in building internal knowledge and inter-departmental capacity to apply innovative, green approaches, when financially feasible.

Monmouth County Departments & Organizations Involvement

Division of Planning	Attend conferences, webinars, and any other educational workshops to build internal understanding and capacity about innovative tools, resources, and Best Management Practices (BMPs) that can be applied to county projects; work with other county departments to incorporate green, cost effective approaches into future county projects; continue to participate on the Monmouth County Energy Committee.
Department of Public Works and Engineering	Attend conferences, webinars, and any other educational workshops to build internal understanding and capacity about innovative tools, resources, and BMPs that can be applied to county projects; seek ways to incorporate green, cost effective approaches into future county projects; consider the short and long-term cost/benefit of sustainable approaches for county infrastructure projects.
Park System (MCPS)	Attend conferences, webinars, and any other educational workshops to build internal understanding and capacity about innovative tools, resources, and BMPs that can be applied to county projects; seek more ways to incorporate green, cost effective approaches into future MCPS projects; continue to implement the sustainability principles and concepts of the MCPS Environmental Sustainability Policy.
Agriculture Development Board (MCADB)	Continue to support sustainable agricultural practices and the use of agricultural management practices (AMPs) on preserved farmland.
Brookdale Community College (BCC)	Facilitate discussions regarding green approaches and potential implementations.

Other Project Stakeholder Involvement

Sustainable Jersey (SJ)	Provide tools, training, and financial incentives to support and reward communities as they pursue sustainability programs.
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Tinton Falls Solar Field, Tinton Falls

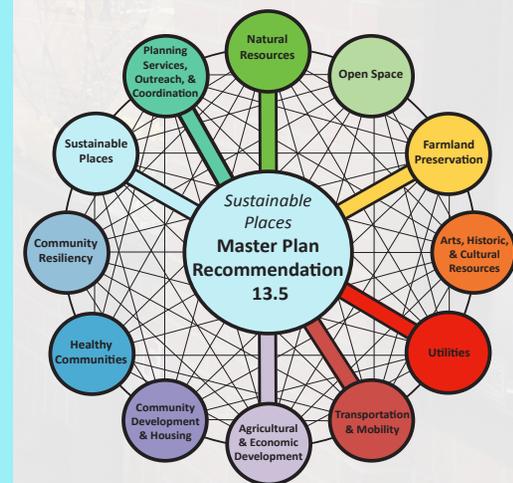
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 13.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Network and attend educational workshops and events hosted by sustainable stakeholders, such as U.S. Green Building Council (USGBC) and SJ.
- Facilitate discussions regarding the potential use of more sustainable approaches in county plans, programs, and projects with the Department of Public Works and Engineering, MCPS, MCPB, Development Review Section of the Division of Planning, and MCADB.
- Upon request, the Division of Planning staff will assist other departments with implementation of county sustainability.
- Continue to provide staff support to the Monmouth County Energy Committee.
- Continue to pursue grant funding opportunities for sustainable energy and development initiatives.



Strongest Associated Master Plan Elements

13.0 SUSTAINABLE PLACES

MASTER PLAN RECOMMENDATION 13.6

13.6: Consult with municipalities to create strategy toolkits tailored to their community's specific needs utilizing form-based codes, living streets principles, green design, case studies, policy recommendations, and sample ordinances that result in safer and healthier places to live, work, play, and stay.

Purpose

Continue to assist municipalities achieve a higher quality-of-life by providing professional resources, technical expertise, and information to meet their individual needs in planning for sustainable places.

Monmouth County Departments & Organizations Involvement

Division of Planning	Provide planning assistance to other county agencies in providing their programming and services; research and recommend effective planning implementation strategies; partner with municipalities and nonprofits in the development of strategy toolkits.
Monmouth County Health Department (MCHD)	The MCHD and local health departments offer numerous programs and services that are aimed at improving the health and quality-of-life for local residents.

Other Project Stakeholder Involvement

Municipalities	Adopt planning strategies and ordinances that result in safer and healthier places to live, work, play, and stay.
Other Counties	Coordinate on projects with overlapping jurisdictions.
Sustainable Jersey (SJ)	Coordinate with municipalities to provide assistance in SJ certification; provide resources to municipalities in the creation of their strategy toolkits.
Monmouth Arts	Work with Monmouth Arts to incorporate creative placemaking into cultural plans and development projects.
NJ Department of Transportation (NJDOT)	Work with municipalities interested in receiving transit village designation from NJDOT; use NJDOT as a resource for Best Practices for Transit Oriented Development (TOD).
NJ Department of Environmental Protection (NJDEP)	Seek assistance from NJDEP's Planning and Sustainable Communities program; assist communities with applying for grants and loans that support sustainability initiatives.
North Jersey Transportation Planning Agency (NJTPA)/Together North Jersey (TNJ)	Coordinate with NJTPA/TNJ on local pilot projects that promote sustainable places



Tinton Falls Solar Field, Tinton Falls

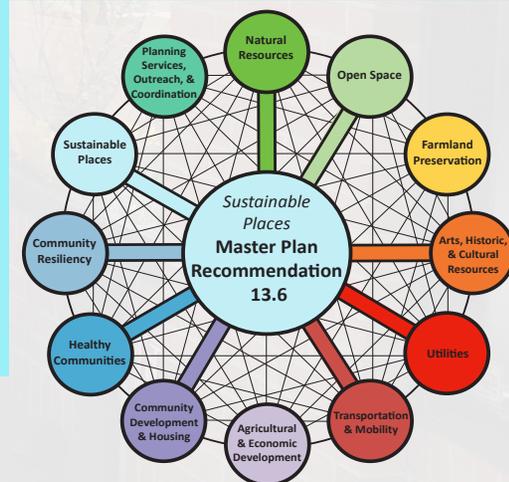
Source: Steve daCosta

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 13.6

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
A. Comprehensive Planning														
B. Coordination														
C. Planning Approach														
D. Environmental Resources														
E. Farmland Preservation														
F. Arts, Culture, & Historic Preservation Investments														
G. Vibrant & Sustainable Communities														
H. Community Preservation														
I. Housing														
J. Economic Development														
K. Agricultural Development														
L. Recovery & Resiliency														
M. Growth Investments														
N.														

Implementation Strategy

- Consult with other county departments and agencies along with nonprofits in assisting municipalities in the creation of strategy toolkits.
- Facilitate county departments' response to municipal assistance requests for strategy toolkits.
- Coordinate with municipalities and counties where sustainability matters overlap jurisdictions.
- Continue to facilitate the SJ Monmouth County Hub for municipalities seeking entry to the program or advanced sustainability certification.



Strongest Associated Master Plan Elements

13.0 Sustainable Places

13.1 Introduction

“No matter the definition, it is important to keep in mind that in most communities, sustainability is a process, not an end-state. A fully sustainable community would be one that has zero net impact on our environment and other systems—a noble but unreachable goal. Rather, sustainability is a process of continuous, ongoing improvement, and a realignment of community goals and practices to grow in a more responsible and resilient manner.”

Portland, OR

“Sustainability, as used in the Plan should be read in the context of “sustaining”, namely to sustain the beauty, culture and history that have made our Town among the most desirable places to live and vacation. For those of us who live and work here, this document should be seen as a way to preserve the essence of the Town in perpetuity so that what we treasure most will remain for generations to come.”

Southampton, NY

“The concept of “sustainability” in city plans and actions arose out of recognition that a society that consumes natural resources at a rate that depletes them for future generations is not sustainable. The concept also gives recognition to the interconnection of the well-being of the natural environment with the economy of a community and the social well-being of its citizens.”

Omaha, NE

Communities that endure are those that successfully adapt to changing socioeconomic, environmental, technological, cultural, and market forces. How effective a community is in its response will determine its ability to sustain long-term social dividends in the form of public health and safety, economic security, environmental regeneration, and civic stability. Sustainability is not a new concept by any means. The Great Law of the Iroquois Federation required their decision makers to take into consideration the impact their choices would have on their children seven generations into the future (*Working Effectively with Aboriginal Peoples, 2016*). When discussing sustainable communities, one of the greatest challenges is to convey an understanding of what is meant by the term “sustainable.” There are countless definitions and interpretations; many depending upon what is being examined and who may be determining whether or not a method, action, “way-of-life,” or “doing business” results in a sustainable outcome.

The Monmouth County Planning Board views sustainability as:

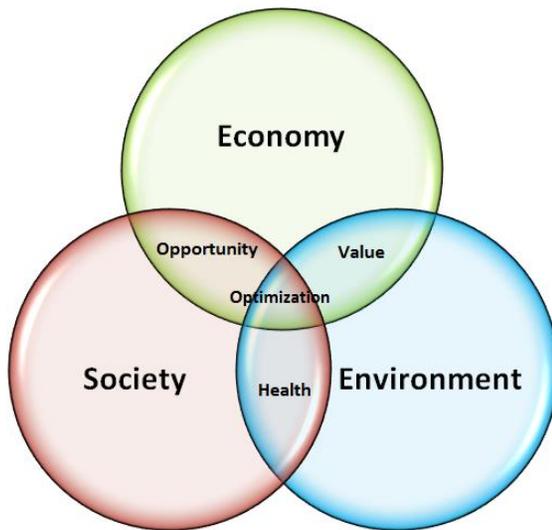
“The balance sought between the conservation and consumption of resources that reserve their inherent value and/or generative ability for a perpetual use or purpose.”

Therefore, sustainable places exist where people implement methods and engage in practices that result in sustainability. Instead of fixating on one issue at a time, sustainable communities purposely evaluate the commonalities of problems and offer integrated design and behavioral solutions resulting in places that are healthier and more resilient environmentally, economically, and socially.



Figure 13.1: Primary Tenets of Sustainability shows the three primary tenets (environment, economy, and society) and the interrelationship they have upon each other. Sustainable places are achieved when actions optimize systemic longevity resulting in increased health, opportunity, and value in a community.

Figure 13:1 Primary Tenets of Sustainability



Sustainability is not simply being “green” or eco-friendly. The triple bottom line for sustainable places is an integrated approach of people (society), profit (economy), and planet (environment). People or societal values of sustainability include wellness, health care, education, employment opportunities, and justice. Profit or economic factors can be viewed in terms of job growth, income, and the creation of wealth. Planet or environmental variables include changes in land use, conservation, energy use, and waste management. Many businesses and governments benefit from implementing a triple bottom line approach for sustainability in their development, practices, and

operations. By recognizing profits in terms of environmental and social outcomes in addition to financial gains, businesses, organizations, and governments have been tapping into a growing customer base that values this approach to doing business.

The goals of New Jersey’s draft [State Strategic Plan](#) are also aligned to this triple bottom line approach:

- Goal 1: Targeted Economic Growth:** Enhance opportunities to attract and grow industries of statewide, regional, and international importance.
- Goal 2: Effective Planning for Vibrant Regions:** Guide and inform regional planning enabling each region of the state to experience appropriate growth based on its desires and assets.
- Goal 3: Preservation, Protection, and Enhancement of Critical State Resources:** Ensure that strategies for growth include preservation, protection, and enhancement of the state's critical natural, agricultural, scenic, recreation, and historic resources, recognizing their role in economic growth and the quality-of-life for New Jersey residents.
- Goal 4: Tactical Alignment of Government:** Prioritize effective resource allocation, coordination, and communication among entities that play a role in meeting the mission of this Plan.

The vision of the draft *State Strategic Plan* is to “be the national leader in coordinated private and public investment which supports sustainable communities that attract and provide strong **economic** opportunities, preserve our state’s **natural** resources, and create healthier **communities** to work, reside, and recreate.”

To achieve sustainability whether at the municipal, county, or state-level, a community must openly engage in a discussion about its reason and purpose in seeking a more sustainable path forward. Community stakeholders must be educated and knowledgeable about the three



principle tenets and their integrations. This includes discussions about viable goals, the evaluation of impacts, costs, and outcomes (performance assessments), and identifying a host of implementation strategies that could be employed to advance a purposeful existence. Ultimately, sustainability is the collaboration between community organizations, residents, businesses, entrepreneurs, and civic and government leaders that consider the long-term consequences of their actions in the decision-making process on subsequent generations.

13.2 Planning for Sustaining Places

In 2010, the American Planning Association (APA) announced its Sustaining Places Initiative and introduced [Sustaining Places: Best Practices for Comprehensive Plans](#) providing standards for communities to follow when seeking more sustainable outcomes from their planning process. The comprehensive plan (master plan) standards for sustaining places include **six principles, two processes, and two attributes**, all of which are expressed in the *Monmouth County Master Plan* Goals, Principles, and Objectives (GPOs) while supported by *Master Plan* Recommendations and Stakeholder Strategies within each of the plan's elements. As stated in the APA document, collectively, these principles, processes, and attributes along with supporting best practices define what the comprehensive plan for sustaining places should do. APA's principles, processes, and attributes for sustaining places along with the *Monmouth County Master Plan* Element which best aligns within their description are detailed.



American Planning Association
Making Great Communities Happen



The **Six Principles of Sustaining Places** are statements of intent that underlie the plan's overall strategy including the plan's goals, principles, objectives, policy recommendations, maps, and other content.

1. Livable Built Environment: Ensure that all elements of the built environment – including land use, transportation, housing, energy, and infrastructure – work together to provide sustainable, green places for living, working, and recreating, with a high quality-of-life.

Master Plan Elements: Land Use, Transportation & Mobility, Community Development & Housing, Utilities, Arts, Historic, & Cultural Resources

2. Harmony with Nature: Ensure that the contribution of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.

Master Plan Elements: Natural Resources, Open Space, Farmland Preservation

3. Resilient Economy: Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiative sustainable urban development and redevelopment strategies that foster green business growth and business reliance on local assets

Master Plan Elements: Land Use, Natural Resources, Arts, Historic, & Cultural Resources, Utilities, Transportation & Mobility, Agricultural & Economic Development

4. Interwoven Equity: Ensures fairness and equity in providing for housing, services, health, safety, and livelihood needs of all citizens and groups

Master Plan Elements: Land Use, Open Space, Arts, Historic, & Cultural, Resources, Transportation & Mobility, Agricultural & Economic Development, Community Development & Housing, Healthy Communities, Community Resiliency

5. Healthy Community: Ensure that public health needs are recognized and addressed through provision of healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods

Master Plan Elements: Land Use, Natural Resources, Open Space, Farmland Preservation, Arts, Historic, & Cultural, Resources, Transportation & Mobility, Agricultural & Economic Development, Healthy Communities, Community Resiliency

6. Responsible Regionalism: Ensure that all local proposals account for, connect with, and support plans of adjacent jurisdictions and surrounding areas.

Master Plan Elements: Land Use, Natural Resources, Transportation & Mobility, Agricultural & Economic Development, Community Resiliency, Planning Services, Outreach, & Coordination

The **Two Processes of Sustaining Places** are activities that take place during the preparation of the plan.

1. Authentic Participation: Ensure that the planning process actively involves all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.

This process has been accomplished through the *Master Plan* kick-off meeting, the dissemination of information at monthly planning board public meetings, the publication of draft documents on our website as they become available for public review and comment, at gatherings and activities of our topical Working Groups, as well as during our final public hearing process. Public participation is vital to planning success. Stakeholder Working Group meetings for each Element were held numerous times before and during the creation of this *Master Plan*. Outlook contact lists for each Working Group have provided the county the ability to directly notify all

stakeholders when new *Master Plan* information is available for review.

2. Accountable Implementation: Ensure that responsibilities for carrying out the plan are clearly stated, along with metrics for evaluating progress in achieving desired outcomes.

The county’s *Master Plan* Recommendations will guide the Division of Planning’s work program for the anticipated 10-year life cycle of the *Plan*. Once the *Plan* is adopted, annual work programs will be prepared for each Section within the Division of Planning identifying what efforts are being made to implement and achieve *Master Plan* Recommendations. In addition, each year the Division will provide the Planning Board with a year-end report highlighting progress on master plan implementation.

The **Two Attributes of Sustaining Places** are plan-making design standards that shape the content and characteristics of the plan.

1. Consistent Content: Ensure that the Master Plan contains a consistent set of visions, goals, policies, objectives, and actions that are based on evidence about community conditions, major issues, and impacts.

The Monmouth County Division of Planning staff ensured consistency through all components during the initial *Master Plan* Process and proceeding forward. These steps are clearly identified in 1.0 Introduction & Purpose.

2. Coordinated Characteristics: Ensure that the Master Plan includes creative and innovative strategies and recommendations and coordinates them internally with each other, vertically with federal and state requirements, and horizontally with plans of adjacent jurisdictions.



- [Panhandle Region Plan \(2011\)](#)

Monmouth County Energy Action Plan (Draft): The Monmouth County Planning Board was designated as the lead agency for the preparation of the *Monmouth County Energy Action Plan*, with the support of the [Greenhouse Gas Reduction Advisory Committee](#) (GHGRAC). During 2011, the key basis and background chapters of the *Energy Action Plan* were completed and approved by the GHGRAC including a detailed study of the climate of Monmouth County. Through the New Jersey County Planners Association, staff conducted an energy initiatives survey to gauge what types of projects were considered practical in other NJ counties. The county facility Greenhouse Gas Inventory was expanded and the data was updated and analyzed. Facility energy use was compared to targets set for buildings of similar size and use, as developed by the Federal Energy Information Administration following a comprehensive study.

Basic energy audits were performed at several representative Public Works and Park System facilities and discussions were held with the building management staff regarding potential implementation measures. After review of the research and county inventory data, draft proposals for further improvements in energy efficiency and reductions of greenhouse gas emissions were considered. Members of the GHGRAC determined that the plan should be expanded to include cost-benefit analyses of each potential proposal.

Simultaneously, a number of energy and cost saving measures were implemented at numerous county facilities, some of which were funded through two grant programs: the [New Jersey Clean Energy Program's Local Government Energy Audit Grant](#) and a federal American Recovery and Reinvestment Act of 2009 stimulus grant known as the Energy Efficiency and Conservation Block Grant. Lessons learned from these projects will help further shape the proposals of the *Monmouth County Energy Action Plan* when it is completed.



Manasquan Reservoir Environmental Center Solar Project

Source: MCPS

Monmouth County Complete Streets Policy: In July 2010, Monmouth County became the first county in NJ to enact a countywide Complete Streets Policy. In the policy, Complete Streets is defined as a means to provide safe access for all users by designing and operating a comprehensive, integrated, and connected multi-modal network of transportation operations.

Monmouth County Comprehensive Economic Development Strategy (CEDS): In 2012, Monmouth County received a Planning Investment Grant from the U.S. Economic Development Agency (USEDA) to support the process of establishing *Monmouth County CEDS*. Participants from the county's public, nonprofit, and private sectors provided information and input throughout the process to develop a comprehensive industry



analysis and help establish a solid path for future economic development within the county.

Monmouth County Water Quality Management (WQM) Plan: Planned and programmed sewer service areas remain the most influential determinants in the location and intensity of growth and development. Refer to the 7.0 Utilities Element for more information regarding the WQM Plan.

Monmouth County Park System (MCPS)

Open Space Plan: The MCPS [Monmouth County Open Space Plan \(2006\)](#) includes an introduction (the system and plan purpose), the planning process, land preservation goals and policies (roles and responsibilities and needs analysis), an action plan (advocacy, stewardship, acquisition, and reexamination), a list of proposed open space sites (additions to existing county parks, new county park sites, and greenways). The existing 2006 plan is anticipated to be updated in 2016.

Environmental Sustainability Policy: On February 24, 2014, the Monmouth County Board of Recreation Commissioners adopted by resolution this policy to include environmental sustainability concepts and principles into the design and maintenance of all MCPS facilities, infrastructure, and land. The policy applies to all operations, alterations, renovations, and new projects when feasible. With the assistance of funding through the U.S. Department of Energy's Energy Efficiency and Conservation Block Grant (EECBG) Program, the MCPS installed several [solar system projects](#) on various MCPS facilities as part of their efforts to reduce their carbon footprint by promoting sound environmental practices through the incorporation of renewable energy.

[The New Jersey State Development and Redevelopment Plan \(SDRP\):](#) The state's *SDRP* works in tandem with county and municipal master

plans in aligning local, county, and state plans and policies regarding investment in growth and preservation.

New Jersey's Stormwater Management Rules: [N.J.A.C. 7:8](#) went into effect in 2004 requiring the creation of regional and municipal stormwater management plans as well as the stormwater management standards for new development. The Monmouth County Board of Chosen Freeholders designated the Monmouth County Planning Board (MCPB) as its review agency for Municipal Stormwater Management Plans. The MCPB subsequently created the Stormwater Technical Advisory Committee (STAC) to review and approve municipal stormwater management plans and ordinances. The new standards include groundwater recharge, controls for runoff quantity and quality, and Category One antidegradation designation (C1 Waters) buffers. The New Jersey Department of Environmental Protection (NJDEP) implements these rules through the review of permit applications issued by the Division of Land Use Regulation. The rules are also implemented at the local level by the authority given to municipalities through the Municipal Land Use Law (MLUL). Existing stormwater runoff resulting in discharge of pollutants is addressed through the implementation of the Phase II [New Jersey Pollutant Discharge Elimination System Stormwater Regulation Program \(NJPDES\) rules \(N.J.A.C. 7:14A\)](#). The Phase II rules require the issuance of permits to entities that own or operate small municipal separate storm sewer systems, known as MS4s. The intention behind the permit requirement is to reduce the nonpoint source pollution generated from these systems. As of 2015, all municipalities have approved municipal stormwater management plans and ordinances.

13.3.2 Local Conditions

[New Jersey Municipal Land Use Law \(MLUL\):](#) The MLUL grants municipal planning boards the authority and responsibility to prepare and adopt a Green Buildings and Environmental Sustainability Plan Element. Contents of such an element are described in [N.J.S.A. 40:55D-](#)



28, “which shall provide for, encourage, and promote the efficient use of natural resources; consider the impact of buildings on the local, regional and global environment; allow ecosystems to function naturally; conserve and reuse water; treat stormwater onsite; and optimize climatic conditions through site orientation and design.” Municipalities also have the authority to adopt environmental-and health-based regulations and ordinances. In February of 2015, the City of Camden passed New Jersey’s first Sustainability Site Plan Ordinance.

To date, Marlboro, Shrewsbury Borough, Little Silver, and Neptune Township have all adopted Green Buildings and Environmental Sustainability Plan Elements to their master plans. Middletown, Manalapan, Rumson, and Highlands have included them as recommendations in recent master plan reexamination reports. The Monmouth County Division of Planning provides technical assistance to local communities in the creation of sustainability plans as part of their local master plan efforts.

Sustainable Jersey (SJ): SJ is a nonprofit organization based out of The College of New Jersey (TCNJ) that provides tools, training, and financial incentives to support communities pursue sustainable programs. Municipalities that become SJ certified are more likely to receive grant funding to implement sustainability and resiliency programs, plans, and ordinances within their community. SJ has a list of “Actions” in various categories, which if implemented, help further sustainability at the local level. During 2015, the organization produced [The 2015 New Jersey Sustainable State of the State Report: Volume I A Vision and Progress Report for a Sustainable New Jersey](#). This report contains valuable information on 57 goals, indicators, and assessments which define their vision of sustainability for the state as a whole. [Volume II Technical Report](#) includes a narrative Summary Report and Technical Report providing sources, data, and other detail. Sustainable Jersey received a 2016 Leadership Award from the American Planning Association.



Figure 13.3: Sustainable Jersey Communities in Monmouth County details a list of certified towns in Monmouth County and their current SJ certification status.

In order to plan for a better future, we must educate the next generation. In 2014, the [Sustainable Jersey for Schools](#) certification program launched which provides tools, training, and financial incentives to support and reward schools as they pursue sustainability.

Figure 13.3: Sustainable Jersey Communities in Monmouth County

Municipality	Certification
Atlantic Highlands	Bronze
Eatontown	Bronze
Holmdel	Bronze
Howell	Bronze
Keyport	Bronze
Little Silver	Bronze
Long Branch	Bronze
Marlboro	Bronze
Middletown	Bronze
Ocean	Bronze
Red Bank	Bronze
Shrewsbury Borough	Bronze
Spring Lake Borough	Bronze
Wall	Bronze





Summerfield Elementary School in Neptune Township is New Jersey’s first LEED Gold Certified Public School

Source: Steve daCosta

13.4 Emerging Issues and Long Range Challenges

13.4.1 Measuring a Fair Return on Investment: Decision makers often have a difficult time approving sustainable approaches that have high upfront costs even though the long-term investment may be more cost-effective. Much of this has to do with the way we measure the cost/benefit of a project and how fair that assessment is when dealing with and evaluation of the three tenets of sustainability. An excellent example of how to better measure a fair return on investment is the use of green infrastructure as a replacement for traditional design approaches. [Green Infrastructure](#) is a stormwater management method

that reduces runoff through infiltration into the soil, recharging of aquifers, and increases in stream base flow. An important benefit of green infrastructure methods is the improvement to water quality through the infiltration of stormwater provided by vegetation and the soil that reduces the impurities of runoff and allows for its potential reuse. In addition to protecting a community from the impacts of flooding, green infrastructure methods provide for cleaner air and enhance wildlife habitats and areas for recreation. A number of green infrastructure practices commonly utilized include bio-retention basins, rain gardens, pervious paving, and vegetated swales. Along with the enhancement of environmental resources, green infrastructure provides economic value to a community by reducing the impacts of stormwater and encouraging other green practices as part of a sustainable community. However, when comparing the hard costs of traditional construction methods, many of the benefits derived from green infrastructure are unquantifiable on a financial spreadsheet and therefore not captured in a cost/benefit analysis, leaving many green alternatives and environmentally sound projects

redlined. To redress this type of oversight during the scoping of its own projects, the county may wish to consider developing a new set of metrics to capture the proper value and benefit derived from the implementation and use of green infrastructure.

13.4.2 Advancing Community Engagement and Outreach: Community engagement and citizen participation is a fundamental aspect of implementing sustainable community practices. Sustainable Jersey has created a Community Information and Citizen Initiative to encourage community engagement and outreach. This initiative provides government leaders with a toolbox to create or strengthen their citizen



engagement through public communication software and information accessibility. Strategies include live streaming of public meetings and providing online accessibility of information, similar to the current *Master Plan* update. In addition, it is encouraged for these entities to develop digital outlets for the distribution of public notices, emergency alerts, and other critical information. More information about the use of new technology for community outreach can be found in the 14.0 Planning Services, Outreach, & Coordination Element, Section 14.4.2 Outreach Methods Using Technology.

13.4.3 Measuring Sustainable Results through Indicators: Accountable implementation ensures metrics are being engaged in evaluating sustainable plan outcomes. It is one of two processes of sustaining places as presented in the American Planning Association's [Sustaining Places: Best Practices for Comprehensive Plans](#) (see Section 13.3.2 Local Conditions). Indicators are used as a measurement to determine if a policy, program, or approach was effective in achieving its intended goal or outcome. They may be used at any time during the planning process to determine whether or not the steps to reaching a goal are on target or may need to be modified or re-defined. The [World Health Organization \(WHO\)](#) categorizes indicators into four classifications depending on what they measure:

- Descriptive indicators measure the current status of a specific element of interest to a community for comparison purposes or when measuring trends over time.
- Performance indicators are used in reference to a baseline measurement to determine if and at what rate progress is being made towards a specific goal or target. Performance indicators are a measuring tool in determining the outcome of a project or policy to be implemented.
- Efficiency indicators relate to the correlation between efficiency of production and consumption processes.

Monmouth County Reclamation Center Green Vehicle Wash Facility

Located at the Monmouth County Reclamation Center in Tinton Falls, the county opened its first automated Green Vehicle Wash Facility in 2012. This facility provides all 53 municipalities and trash haulers who use the landfill the means to clean their vehicles in compliance with state regulations regarding the discharge of wastewater into the ground and surface waters. Through a collaborative effort between NJDEP and Monmouth County, this Green Vehicle Wash Facility filters and recycles the water used to wash vehicles until it is no longer useable for vehicle washing. When the greywater, or recycled water, can no longer be used by the washing facility it is diverted to an 8,000-gallon underground holding tank. From the holding tank, the greywater is pumped into a water tanker truck and used for dust-control measures throughout the landfill and roads. NJDEP defines greywater as the portion of sanitary sewage generated within a residential, commercial, or institutional facility which does not include discharges from water closets and urinals. The recycled greywater reduces the amount of potable water the county uses for dust control saving thousands of dollars annually.

- Aggregate indicators are a combination of several measurements into one overall indicator of progress.
- [A Framework for Sustainability Indicators at EPA](#): This document provides guidance on the application of sustainability indicators in EPA decision-making.



- [Sustainable Community Indicator Catalog](#): With funding provided by the Ford Foundation, the University of Pennsylvania's Penn Institute for Urban Research (PennIUR) developed an online measurement tool for communities to identify and track their progress towards sustainability. The three indicators in the catalog focus on land use, housing, and transportation.
- United Nations Commission on Sustainable Development: [Indicators of Sustainable Development: Guidelines and Methodologies](#)

Master Plan Recommendation 13.2 seeks to develop internal sustainability indicators, such as those used by EPA and other federal and state agencies, to be used as a guideline in the evaluation of local and county master plan sustainability goals and policies.

13.4.4: Sustainable Community Design: Traditional zoning methods intended to separate uses and the physical nuisances associated with them contributed greatly to the 20th century's legacy of sprawl, visual incohesiveness, and automobile dependence. This traditional model of urban planning implemented through Euclidian zoning has giving way to new, comprehensive techniques that focus more on environmental impacts, mobility, aesthetics, and social interaction within and between spaces. From building structures to whole communities, sustainability principles are being incorporated as a basic tenet of 21st century urban design. Today's Green Building design and construction practices provide greater efficiency, environmental resource benefits, and/or long-term cost savings. Even more so, new communities are using this design philosophy to provide people with better connectivity to one another and accessibility to the environment around them.

New urbanism began in the 1990s as a sustainable design approach that, "...promotes the creation and restoration of diverse, walkable, compact, vibrant, mixed-use communities composed of the same components as conventional development, but assembled in a more

integrated fashion, in the form of complete communities. These contain housing, work places, shops, entertainment, schools, parks, and civic facilities essential to the daily lives of the residents, all within easy walking distance of each other. New Urbanism promotes the increased use of trains and light rail, instead of more highways and roads" (www.newurbanism.org). New urbanism techniques are implemented through form-based codes rather than traditional zoning.

Form-based codes focus less on land use through prescriptive regulations and more on visual descriptions and land use outcomes derived from specific urban forms. The ultimate objective of form-based zoning is to control physical form in order to achieve certain desired outcomes, i.e. traditional neighborhoods, transit-oriented and transit-supportive development, mixed-use downtowns, and in general, compact development (Regional Plan Association, 2010). The Borough of Haddonfield, Camden County, became the first NJ municipality to implement a form-based code known as the Downtown Vision Plan. The code is based on four districts with fourteen permitted building types where permitted uses are not assigned by zoning districts, but rather by building type. Most Transit-Oriented Development (TOD) now uses some form or combination of form-based code as it synthesizes use with design that is easily adaptable and compatible with an existing mixed-use or downtown location.

Organizations such as the Form-Based Codes Institute, U.S. Green Building Council, and Congress of New Urbanism provide extensive discussion, examples, and resources on the application of various types of sustainable community design.

13.4.5 Long Range Challenges: Other Long Range Challenges identified by Working Groups and community stakeholders that have not been addressed in this section so far include:



- *There is a lack of clear understanding as to what it means to be sustainable and the value of sustainability itself.* The Introduction to this Element describes the basic concept of sustainable places. Some of the more notable sustainable actions already being performed by the county include farmland preservation, buy fresh/buy local campaigns through our Made in Monmouth and Grown in Monmouth programs, energy audits, recycling, complete streets program, Shade Tree Commission, and community outreach and education on environmental matters through the Monmouth County Environmental Council. There are many more actions the county could follow to improve sustainable outcomes. As previously stated, the Division of Planning is committed to helping identifying cost-effective sustainable solutions that provide a positive return-on-investment for the county over the long-run.
- *Currently, there is a disconnection between food growers in western Monmouth County and food deserts in the more urbanized areas of eastern Monmouth County. Also, the seasonality of local food production and the lack of available value-added farm products reduce local food security and limits the economic opportunity for local farmers.* In October 2014, the Monmouth County Division of Economic Development, in conjunction with the Division of Planning and Rutgers Cooperative Extension, applied for a [U.S. Department of Agriculture \(USDA\) Rural Business Enterprise Grant](#) to obtain funding to lay the groundwork for a marketing and branding initiative referred to as Grown in Monmouth. In the fall of 2015, USDA awarded Monmouth County a Rural Business Enterprise Grant to assess the rural agricultural industry in Monmouth County, evaluate current trends and future opportunities to expand the industry, and to develop a marketing strategy to promote and market local agricultural products. The goal is to provide marketing assistance and business training to small and emerging agricultural producers located in rural areas of the county. Grown in Monmouth

aims to connect producers and buyers, expand small agricultural businesses, and contribute to job growth in the local area. The project's kick-off meeting took place on January 26, 2016.

13.5 Sustainable Places Stakeholder Actions and Efforts

13.5.1 Monmouth County Efforts

Monmouth County Hub for Municipal Green Teams: In 2015, the Monmouth County Division of Planning began facilitating the Monmouth County Hub for Municipal Green Team Hubs. The "Hub" provides municipal Green Teams in the Sustainable Jersey (SJ) Municipal certification program a peer-to-peer forum to discuss and explore sustainable actions and to coordinate local initiatives at a regional level. Rather than identify individual best practices or specific actions, the *Monmouth County Master Plan* defers to the "Actions for Sustainable Communities" identified in the SJ program as the most comprehensive list of locally implementable strategies that support sustainable places in Monmouth County. As such, *Master Plan* Recommendation 13.3 calls on the Monmouth County Environmental Council (MCEC) and the Division of Planning to assist Municipal Green Teams in their efforts to obtain and advance local sustainability initiatives, including those associated with SJ certification, effectively increasing sustainable outcomes throughout the county. Other sustainable resources including tools, strategies, best management practices, and funding opportunities can be found in Section 13.6 Additional Resources and Funding Opportunities of this Element.



Monmouth County Environmental Council (MCEC): On October 10, 2007, the MCEC and Brookdale Community College's Environmental and Physical Science Department sponsored a seminar to address Monmouth County's role in the issue of climate change. Over 100 participants including municipal officials, environmental interest groups,



students, and county residents were provided with information surrounding the science of climate change and its potential impacts on Monmouth County. The attendees had the opportunity to address their concerns and questions to a panel of experts, resulting in a better understanding as to the role each member of a community may play to implement measures aimed to assure the county’s future energy needs will be met.

In recognition of the 2007 Earth Day and Arbor Day, the MCEC enlisted the assistance of public and private schools in Monmouth County in planting trees to help provide a “greener” county. The MCEC provided all county schools with the opportunity to receive a free gift of 30 native tree seedlings to be planted on public land. The packets included Northern Red Oak, Eastern White Pine, and Norway Spruce seedlings which were obtained from the NJ State Forest seedling nursery located in Jackson, NJ as part of their Home Grown Tree Program. Ten schools throughout the county applied to be part of the project, enlisting the participation of students and faculty in the planting and maintenance of the trees. The MCEC provided this initial opportunity to schools as a learning experience through the creation of an “outdoor classroom” as a means to bring to life a school’s environmental curriculum. The project also provided an educational awareness to the benefits trees can provide for wildlife habitat, shade, clean air, and energy efficiency.

On April 29, 2009, the MCEC and the Environmental and Physical Science Department at Brookdale Community College sponsored an energy forum providing attendees with ideas, resources, and incentives to implement sustainable energy measures at the residential, business, and municipal level. A year later, the MCEC sponsored a roundtable on community gardens, highlighting the benefits to the community through the transformation of a vacant lot into a productive and beneficial site. Attendees were inspired by representatives of the Rutgers Master Gardener Program and other community garden organizers who have been instrumental in promoting community gardens in their own

municipalities. The roundtable was intended to highlight community gardens as another means to promote sustainability at the local level by encouraging residents to unite in an effort with benefits that reach beyond the garden.

Grown in Monmouth: In the 9.0 Agricultural & Economic Development Element, *Master Plan* Recommendation 9.1 seeks to coordinate the county’s agricultural initiatives such as the *Monmouth County Farmland Preservation Plan* and Grown in Monmouth through one comprehensive guiding document called the *Agricultural Sustainability Plan (ASP)* for Monmouth County. The Grown in Monmouth marketing strategy and plan, a joint effort of the Monmouth County Division of Economic Development, Division of Planning, and Rutgers Cooperative Extension, is the first step in the development of a broader *ASP*.



Made in Monmouth (MIM) Expo:

This annual buy local exhibition showcases consumer products entirely produced within the county borders. Beginning with the first event in 2012, MIM has been free for vendors and open to the public at no charge. 2016 brought the 5th exposition and featured over 220 participating vendors, attracting over 5,000 shoppers to its Monmouth University location in West Long Branch. The expo also allows local businesses the opportunity to network with one another and explore the possibility of establishing new business relationships. Many of the consumer goods presented at MIM are agriculturally based, associated, or value-added products. See Element 9.0 Agricultural & Economic Development for more details on this program.



Also Refer to Section 13.4 Emerging Issues and Long Range Challenges for additional examples.

13.5.2 Agency Efforts

New Jersey Department Environmental Protection (NJDEP): Now in its 15th year, the [AmeriCorps New Jersey Watershed Ambassadors Program](#), part of the national AmeriCorps service initiative, provides a service to the communities they support by educating the public about the environmental importance of a watershed and the waterways that play such an important role in the health of that watershed. Administered by the NJDEP since 2000, members of the NJ AmeriCorps Program are based at host agency locations at each of the 20 Watershed Management Areas (WMAs) throughout the state, for the purpose of educating and engaging the local members of the community in activities that will help to improve New Jersey's water quality. AmeriCorps Ambassadors conduct stream monitoring through visual and biological assessments, provide educational trainings at schools and community events, and also participate in cleanups within their watersheds. The Monmouth County Planning Board has been the host agency for an AmeriCorps Ambassador representing WMA12 since the program began.

Rutgers New Jersey Agriculture Experiment Station's (NJAES) Water Resources Program: By providing science-based solutions to New Jersey's water related concerns, the Water Resources Program assists communities in their sustainability efforts by identifying some of the community's water resources needs and issues and developing a plan to find resolutions that will improve water quality, reduce their costs, and improve their infrastructure. The three major areas they specialize in are stormwater management, drinking water conservation and protection, and wastewater management.

Sustainable Jersey (SJ): SJ is a nonprofit organization that provides tools, training, and financial incentives to support communities as they

pursue sustainability programs towards SJ certification. The [Sustainable Jersey Small Grants Program](#) provides funding intended to help local governments in their efforts toward a sustainable future. Funding is provided for projects addressing issues such as renewable energy and green building design, waste reduction, a sustainable master plan, water conservation, natural resources management, energy management, and transportation issues.

Association of New Jersey Environmental Commissions (ANJEC): ANJEC is a statewide organization that provides support, training, and other resources for municipalities seeking guidance including funding opportunities for sustainability initiatives.

New Jersey Clean Energy Program: A statewide program that offers financial incentives, programs, and services for NJ residents, business owners, and local governments to help them save energy, money, and the environment. The [Commercial, Industrial, and Local Government Programs](#) offer financial incentives to qualifying entities to create a more efficient NJ. The [Residential Programs](#) aim increase energy efficiency and energy savings.

13.6 Additional Resources and Funding Opportunities

Federal

- Center for Disease Control and Prevention (CDC)
 - [Sustainability Planning Guide for Healthy Communities](#)
- United States Environmental Protection Agency (USEPA)
 - [Sustainability](#)
 - [Planning for a Sustainable Future A Guide for Local Governments](#)
 - [Green Infrastructure](#)
 - [Enhancing Sustainable Communities with Green Infrastructure: A Guide to Help Communities Better Manage Stormwater While](#)



[Achieving Other Environmental, Public Health, Social, and Economic Benefits \(2014\)](#)

- [Clean Water State Revolving Fund](#)
- Smart Growth
- [Tools and Resources for Sustainable Communities](#)
- [Creating Equitable, Healthy, and Sustainable Communities: Strategies for Advancing Smart Growth, Environmental Justice, and Equitable Development \(2013\)](#)
- [Building Blocks for Sustainable Communities](#)
- [Regional, State, and Local Opportunities for Funding Smart Growth Projects](#)
- [Federal Facilities Environmental Stewardship and Compliance Assistance Center, Sustainability Program:](#)
- [HUD-DOT-EPA Partnership for Sustainable Communities](#)

State

- [NJ Department of Environmental Protection \(NJDEP\)](#)
 - [Clean Water NJ](#)
 - [Green Infrastructure in NJ](#)
 - [New Jersey Stormwater Best Management Practices \(BMPs\) Manual](#)
 - Office of Planning and Sustainable Communities
 - [How to Become an Environmentally Sustainable Community](#)
 - [A Guide to Sustainable Grants and Loans that Support Sustainability Initiatives](#)
 - [How to Conduct an Energy Audit Guide](#)
 - [Green Purchasing: A Guide for Local Governments and Communities](#)
 - [Grants for Municipalities](#)

County and Local

- Monmouth County Hub for Municipal Green Teams
- [Monmouth University Sustainability Advisory Council](#)
- Municipal Green Teams

Nonprofits, Research Centers, and Other Stakeholders

- [American Planning Association \(APA\) Sustaining Places Initiative:](#)
- [Association of New Jersey Environmental Commissions \(ANJEC\)](#)
- [Center for Watershed Protection, Inc.](#)
- [Clean Ocean Action](#)
- [Congress of New Urbanism](#)
- [Development Center for Appropriate Technology](#)
- [Form-Based Code Institute](#)
- [Institute for Sustainable Communities](#)
- [New Jersey Audubon](#)
- [New Jersey Sierra Club](#)
- [NJ Higher Education Partnership for Sustainability](#)
- Rutgers University
 - [Rutgers Center for Green Building](#)
 - [Green Infrastructure Guidance Manual for New Jersey](#)
 - [Rutgers Water Resources Program](#)
- [Smart Communities Network Creating Energy Smart Communities :](#)
- [STAR Communities](#)
- [Sustainable Communities Online](#)
- [Sustainable Jersey \(Discussed in 13.3.2 Local Conditions\)](#)
- [Sustainable Jersey for School](#)
- [The College of New Jersey The Sustainability Institute](#)
- [Toward a Sustainable Community: A Toolkit for Local Government](#)
- [United Nations \(UN\) Division for Sustainable Development \(DSD\)](#)
- [University of New Hampshire \(UNH\) Stormwater Center](#)
- [Urban Land Institute \(ULI\):](#) a research and education nonprofit who facilitates open exchange of information, ideas, and experiences among policy makers and industry leaders dedicated to creating better places.
 The ULI assisted Freehold Borough through a Technical Assistance Panel (TAP) regarding downtown land use issues and produce [An Opportunity for Community Driven Development \(2015\).](#)



- [U.S. Green Building Council \(USGBC\)](#)
 - [New Jersey Chapter](#)

13.7 Master Plan Recommendations and Stakeholder Strategies

These five *Master Plan* Recommendations and numerous Stakeholder Strategies were identified from Working Group meetings and additional input from stakeholders.

Master Plan Recommendations

Recommendation 13.1: Review proposed environmental and sustainability related legislation and regulations to determine their potential impacts to Monmouth County and our municipalities, and prepare appropriate responses to promulgating authorities. When evaluating new or amended environmental legislation, changes in regulatory requirements and/or new policies, the interdependent and cumulative impacts of implementation must be considered as part of the review. The county should support policies and legislation that promote sustainable communities, strengthen the county's resiliency and recovery, and protect environmental resources. The county should also oppose those that threaten the preservation of a community's economic, social, and cultural value and character.

Recommendation 13.2: Develop internal sustainability indicators, such as those used by U.S. Environmental Protection Agency (USEPA) and other federal and state agencies, to be used as a guideline in the evaluation of local and county *Master Plan* sustainability goals and policies. Comprehensive planning incorporates targets and indicators when evaluating the attainment of plan goals and objectives. Indicators are used in planning to gauge effectiveness and outcomes of adopted plans. Developing measurable planning indicators to provide evaluation of master plan effectiveness involves collaboration with other planning partners.

Recommendations 13.3: With assistance from the Monmouth County Environmental Council (MCEC), and through the Monmouth County Green Team Hub, offer support to our municipalities in their efforts to improve local sustainability. Through the Monmouth County Hub for Municipal Green Teams and the MCEC, the Division of Planning will assist with the dissemination of information to Municipal Green Teams in their efforts to improve local sustainability and/or obtain Sustainable Jersey (SJ) certification by providing technical assistance, and a peer-to-peer regional forum for mentoring and participation.

Recommendations 13.4: Educate local decision makers and the public about the importance of issues related to maintaining a sustainable county with educational programs, roundtable events, municipal presentations, and the development of informative documents. There is a need to build internal institutional knowledge regarding sustainability and conduct outreach with our planning partners on these issues. By providing opportunities to educate the public on matters of concern by way of public forums and resources of information, the result is a better and more thorough understanding of the measures required when addressing those issues.

Recommendations 13.5: Build inter-departmental knowledge about the potential benefits and applications of green approaches, incorporating these actions into county plans, programs, and projects when it is financially feasible to do so. New green infrastructure, technology, and design have the potential to reduce long-term project costs and maintenance. The Division of Planning will initiate discussions and share information with other county departments and agencies for future improvement projects regarding 'greener' approaches to traditional county improvement projects, while keeping up with Best Management Practices (BMPs) for sustainability.

Recommendation 13.6: Consult with municipalities to create strategy toolkits tailored to their community's specific needs utilizing form-



based codes, living streets principles, green design, case studies, policy recommendations, and sample ordinances that result in safer and healthier places to live, work, play, and stay. Planning should take into account the impacts of decisions and investments that result in a safer and healthier quality-of-life. With assistance from the Division of Planning, communities should incorporate designs and facilities that encourage healthy lifestyles and promote public safety in their healthy community initiatives. By developing place specific design and land use strategies, communities can benefit from a reduction in expenditures and an increase in efficiency in the interest of the public’s health and safety while also protecting the character of a community.

Stakeholder Strategies

General

- Promote policies that foster healthy, sustainable, and resilient communities.
- Participate in and promote municipal recycling programs to reduce waste, conserve natural resources, prevents pollution, reduces environmental degradation, etc.
- Encourage the use of ‘Green’ Best Management Practices.
- Encourage innovative land use planning and design to address current and future growth needs within the context of sustainability.
- Encourage the incorporation of sustainability related recommendations, goals, and policies in municipal master plans and land development ordinances.
- Municipal Green Teams work with the county and other community stakeholders in bring about sustainable outcomes through action.
- Municipalities interested in incorporating sustainable approaches should seek certification with Sustainable Jersey (SJ). Assist in the development of appropriate master plan indicators.
- Schools interested in incorporating sustainable approaches should seek certification with SJ.

Natural Resources

- Keep floodplains undeveloped to provide wildlife and trail linkages while increasing community resiliency after flooding.
- Encourage habitat preservation and restoration around water bodies, floodplains, wetlands, along shorelines, and streams that will maintain and improve water quality.
- Support tree planting and management programs to enhance both the environmental benefits and aesthetics of a community.
- Promote the protection of threatened and endangered species and their habitats by encouraging the development and implementation of plans designed to manage negative impacts associated with their environment.

Open Space

- Encourage property and easement acquisitions that will promote community resiliency and sustainability.
- Support urban recreation acquisitions, partnerships, and programs.
- Promote management strategies designed to maintain natural resources that are beneficial to the viability of open space habitats.

Farmland Preservation

- Identify farms that do not qualify for preservation through state and local programs in conjunction with exploring new options to encourage agricultural retention.
- Encourage private property owners to preserve sensitive environments and farmland through conservation easements.
- Encourage innovative land use planning and design to accommodate future growth while avoiding conflicts with existing agricultural uses.

Arts, Historic, & Cultural Resources

- Foster the development of arts councils and historic commissions, while promoting their inter-relations.



- Promote the adaptive reuse of historic and architecturally significant structures when determining the redevelopment and revitalization needs of a community.
- Promote and assist with local efforts to identify and preserve historic sites and districts through land use techniques for inclusion in federal, state, and local historic registers and inventories.

Utilities

- Encourage municipal coordination to strengthen regional stormwater management within local ordinances.
- Discourage inter-basin transfers of water.
- Explore the use of innovative technologies for water conservation and wastewater treatment as methods for protecting surface and groundwater quantity and quality while increasing recharge.
- Encourage stormwater infiltration for groundwater recharge where feasible.
- Support the use of alternative, renewable energy resources such as geothermal, solar, hydro, tidal, and wind power.
- Encourage distributed energy generation solutions to enhance system efficiency, reliability, and resiliency.

Transportation & Mobility

- Encourage sustainable streetscape design, including elements like rain gardens, green infrastructure, and native species plantings, which improve environmental quality, social well-being, economic vitality, and community fabric.
- Promote the expansion of both regional and local bicycle/pedestrian networks to create safe alternative options for public transportation to destinations.
- Encourage transportation improvements that would reduce existing obstacles (e.g. traffic) and expedite moving food between the local source and potential destinations.

Agricultural & Economic Development

- Identify the county’s food deserts and promote local and walkable food system solutions, such as community gardens and farm markets.
- Encourage the production and processing of year-round local food products to increase food security and economic opportunities for farmers.
- Assist in identifying appropriate and suitable locations for businesses in Monmouth County.
- Proceed with agricultural sustainability planning efforts that increase our understanding of the agricultural industry in a regional context and recommends improvements that promote a sustainable economic future for local farmers.

Community Development & Housing

- Encourage the adjacency of clusters where practical to generate larger habitat areas.
- Generate management plans for the undeveloped areas that result from cluster developments in order to avoid the spread of invasive species.
- Support the use of measures designed for energy efficiency as well as stormwater management techniques that will promote groundwater infiltration to reduce runoff, when designing new construction or retrofitting buildings and facilities.

Healthy Communities

- Support municipalities that are considering sustainable ordinances that would allow such things as xeriscaping, front yard vegetable gardens, etc.
- Promote safe and secure neighborhoods through outreach and community involvement.
- Support the integration of locally grown products into communities, particularly those with limited access to fresh, healthy produce.



- Encourage and provide opportunities for physical activities and social interaction that create a sense of community and provide for the mental and physical health needs of its residents.

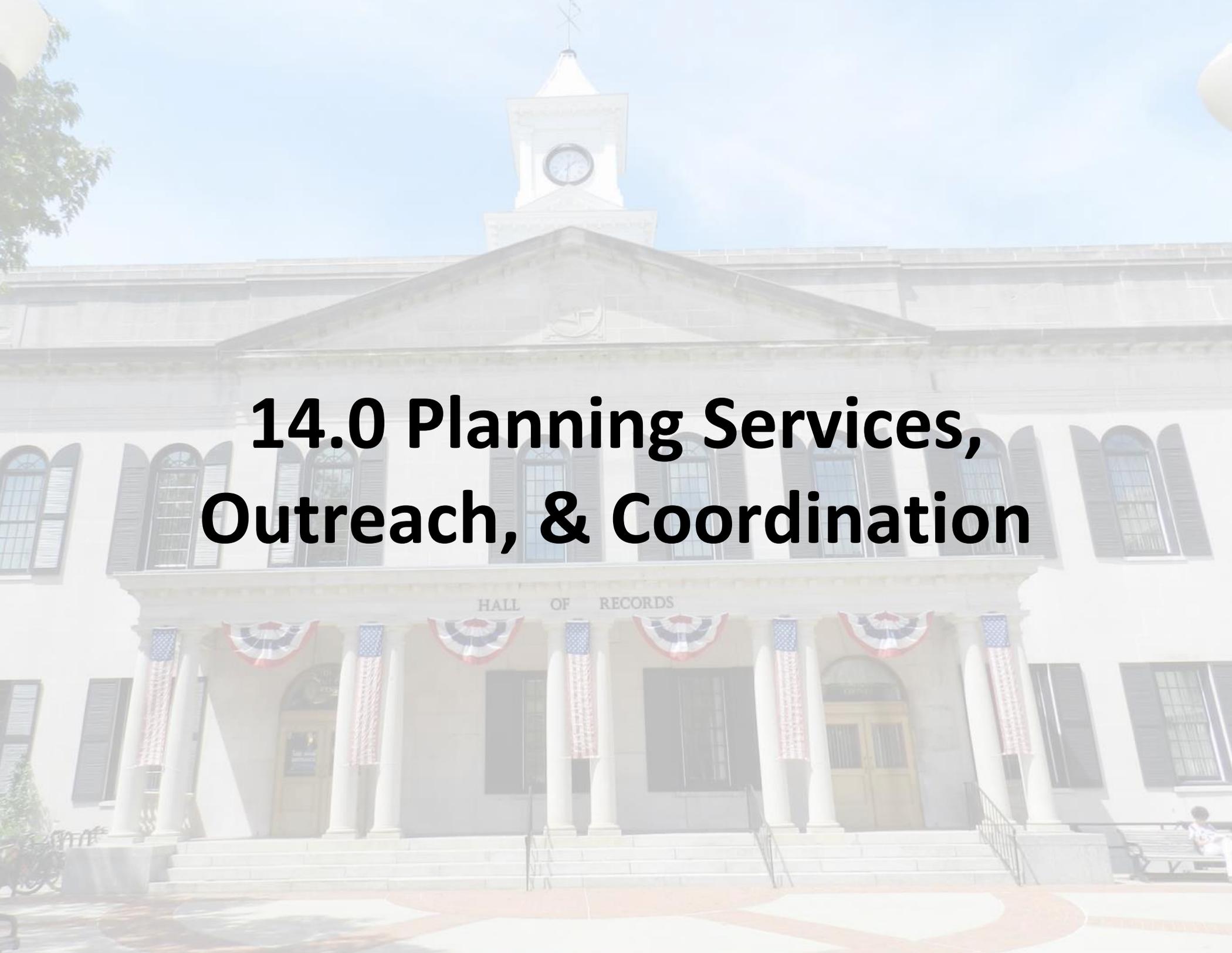
Community Resiliency

- Support the work of towns seeking to participate or advance in the SJ certification program.
- Support coastal communities when reviewing preparations for flooding and evacuation routes.
- Recognize potential economic, environmental, and health needs to be addressed in planning post-disaster recovery efforts.

Planning Services, Outreach, & Coordination

- Encourage public awareness of the three tenets to community sustainability: Environmental Sustainability, Economic Sustainability, and Social Sustainability.
- Support energy audit programs for existing facilities to identify needs and options to improve energy efficiency.
- Promote the adaptive reuse of older buildings, incorporating the use of sustainable materials in repair or reconstruction.
- Provide education and outreach opportunities with public involvement in stewardship activities.
- Review current methods of communication to the public, with an emphasis on adequate and effective distribution of information to those with limited access; notably non-English speaking, seniors, homeless, etc.





14.0 Planning Services, Outreach, & Coordination

HALL OF RECORDS

14.0 PLANNING SERVICES, OUTREACH, & COORDINATION

MASTER PLAN RECOMMENDATION 14.1



Master Plan Working Group Meeting, Thompson Park Visitor Center

Source: Brittany Ashman

14.1: Develop an online geographic information system (GIS) platform that allows for the creation of interactive web-based maps and retrieve publically available data accessed through a user-friendly GIS interface.

Purpose

This type of service permits other county departments and the public to create and generate their own maps and sort data from accessible data sets. This will allow the Division of Planning's GIS Section to spend less time creating static maps for display purposes and more time to focus on its primary mission: to create, maintain, and update countywide data for use with mapping and analysis.

Monmouth County Departments & Organizations Involvement

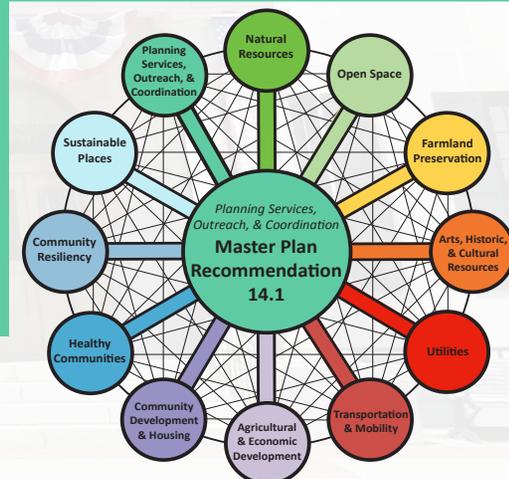
Division of Planning	Create a GIS online mapping service with limited access for public use; provide more mapping and data capabilities for county departments.
Other County Departments	Provide feedback to the GIS Section on their mapping and data needs.
Municipalities	Provide feedback to the GIS Section on their mapping and data needs.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 14.1

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning	●													
Coordination		●												
Planning Approach			●											
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- The GIS Section is to develop a plan outlining what type of online services to provide and to what extent these services will be made available to the public or enhanced for use by other county departments.
- The GIS Section is to work with our service provider in using ArcGIS Online to create maps and applications that can be viewed through a computer, tablet, or mobile device.
- Develop web and mobile applications for use with GIS.



Strongest Associated Master Plan Elements

14.0 PLANNING SERVICES, OUTREACH, & COORDINATION

MASTER PLAN RECOMMENDATION 14.2

14.2: Act as a clearinghouse for demographic, school enrollment, housing, and economic data that assists county departments and other government agencies in the development of their own facility and service plans.

Purpose

The Division of Planning has access to and uses many of the data sources used by other county departments and government agencies for their planning reports and documents. Rather than create duplicative work, the Division of Planning can provide this data, research, and analysis to our partners as a cost cutting, shared service.

Monmouth County Departments & Organizations Involvement

Division of Planning	Maintain and update data used in planning reports and studies; assist other departments in identifying data sets and creating tables for their reports and studies; participate on steering committees for other county departments developing their own in-house plans; create new methods for disseminating data and information online, particularly through the creation of programs that allow users to create customized tables.
Brookdale Community College (BCC)	Provide feedback to the Division of Planning on their data needs; place Planning staff on their plan/report steering committees; consider BCC students for internship opportunities for development of this platform and implementation of innovative technologies.
Finance Department	Provide feedback to the Division of Planning on their data needs; place Planning staff on their plan/report steering committees.
Administration	
Health Department	
Office of Emergency Management	
Department of Human Services	
Park System	
Department of Public Works and Engineering	
Library System	

Other Project Stakeholder Involvement

Municipalities	Provide feedback to the Division of Planning on their data needs; assist the county with acquiring locally collected data.
School Boards	
Regional Utility Authorities	
Local Health Departments	



Master Plan Working Group Meeting, Thompson Park Visitor Center

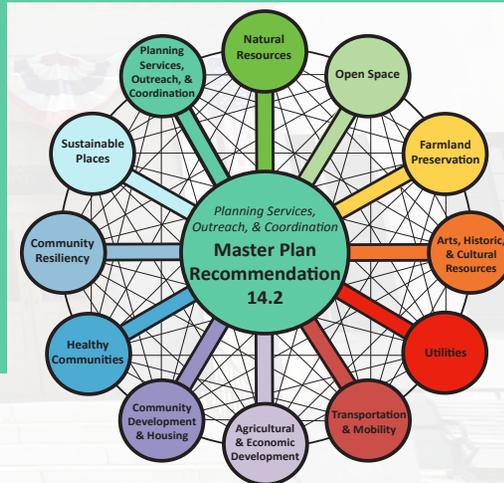
Source: Brittany Ashman

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 14.2

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Create an internal clearinghouse of data sources used in Division of Planning reports such as *Monmouth County At-A-Glance*, *Monmouth County Profile*, and the *Monmouth County Master Plan*.
- Provide online accessibility to the data clearinghouse for viewing and file download.
- Develop programs that allow for custom tabulations.
- Upload data and generate new tables as information becomes available.



Strongest Associated Master Plan Elements

14.0 PLANNING SERVICES, OUTREACH, & COORDINATION

MASTER PLAN RECOMMENDATION 14.3

14.3: Be an “insight engine” that provides decision makers and the public with meaningful knowledge and understanding about the complex planning issues facing Monmouth County and the resources available to address them.

Purpose

In addition to housing and disseminating data, the Division of Planning uses information to help convey trends and planning issues into relevant context for Monmouth County. Division of Planning performs data-driven analyses to create special reports and graphics (e.g. maps, charts, and tables) to visualize and explain what is occurring in Monmouth

Monmouth County Departments & Organizations Involvement

Division of Planning	Use the data clearinghouse to perform analyses of the trends and issues facing Monmouth County.
Finance Department	Use the Division of Planning to understand and visualize datasets, along with the context that gives the data meaning.
Administration	
Health Department	
Office of Emergency Management	
Department of Human Services	
Park System	
Department of Public Works and Engineering	
Brookdale Community College (BCC)	

Other Project Stakeholder Involvement

Municipalities	Use the Division of Planning to help understand the complex planning issues that affect municipal decision-making.
School Boards	
Regional Utility Authorities	
Local Health Departments	



Master Plan Working Group Meeting, Thompson Park Visitor Center

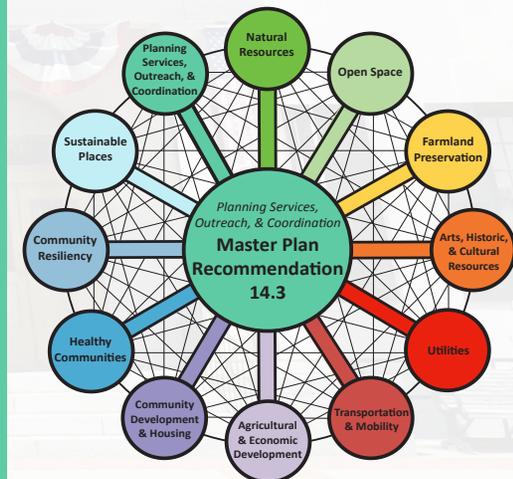
Source: Brittany Ashman

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 14.3

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Maintain up-to-date with data and information about Monmouth County that shapes planning and policy decisions.
- Continue to highlight existing assets (e.g. creative industries) and identify ways they can connect to add value and contribute to the uniqueness of Monmouth County.
- By using insightful analysis, identify potential assets that can be developed or attracted to Monmouth County.
- Offer assistance, as needed, to help other county departments, planning partners, and the public to comprehend, visualize, and apply data about the county in their local decisions.
- Keep abreast of national and regional trends that could influence planning in the county.



Strongest Associated Master Plan Elements

14.0 PLANNING SERVICES, OUTREACH, & COORDINATION

MASTER PLAN RECOMMENDATION 14.4

14.4: Expand the use of innovative and emerging technologies (e.g. social media, crowdsourcing, and web-based collaboration tools) to improve public outreach efforts and communication, resulting in increased accessibility and stronger community engagement in our planning process.

Purpose

With innovative technologies becoming more common and accessible through smartphones, tablets, and computers, Monmouth County can capitalize on technology to gather feedback and communicate with residents about upcoming meetings, workshops, ongoing projects, and events. Currently the Division of Planning, in conjunction with the Sustainable Jersey (SJ) program, is partaking in an online crowdsourcing forum to post grant opportunities, new sustainable resources, and event notifications for Municipal Green Teams. The Division of Planning is enhancing the visual display of information through presentation programs (i.e. Prezi) and is placing more emphasis on informational graphics (i.e. infographics) which has become the professional standard for planning documents.

Monmouth County Departments & Organizations Involvement

Division of Planning	Coordinate with the Office of Emergency Management (OEM) and the Department of Public Information and Tourism on the most effective technologies for the dissemination of program information; continue to participate with SJ's online crowdsourcing efforts while identifying additional technological forums to enhance our planning outreach efforts.
OEM	Continue to improve ways of using technology to communicate vital information to residents before, during, and after storm events.
Department of Public Information and Tourism	Continue to improve ways of using technology to communicate vital information to residents before and after storm events.
Information Technology Services	Provide web-based online community applications for program outreach.

Other Project Stakeholder Involvement

SJ	Continue to provide technical resources (i.e. Crowdmap, Greenmap, and Basecamp) to facilitate online, regional discussions on sustainability.
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Master Plan Working Group Meeting, Thompson Park Visitor Center

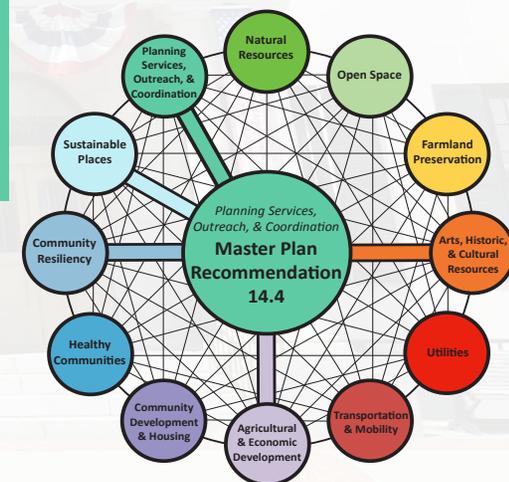
Source: Brittany Ashman

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 14.4

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
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Recovery & Resiliency														
Growth Investments														
A.														
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C.														
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E.														
F.														
G.														
H.														
I.														
J.														
K.														
L.														
M.														
N.														

Implementation Strategy

- Research additional technical forums to join which would strengthen communication between the county and its municipalities in the planning process.
- Coordinate with OEM and the Department of Public Information and Tourism on most effective technology to use in the planning outreach process.



Strongest Associated Master Plan Elements

14.0 PLANNING SERVICES, OUTREACH, & COORDINATION

MASTER PLAN RECOMMENDATION 14.5



Master Plan Working Group Meeting, Thompson Park Visitor Center

Source: Brittany Ashman

14.5: Continue to make Monmouth County planning reports, studies, information, and *Master Plan* materials easily accessible online, in addition to updating reports in a timely manner as new data becomes available.

Purpose

It is important that the public have access to the studies and reports produced by the Division of Planning as many municipalities, other government agencies, citizens, and businesses rely on our publications as primary sources for data and information. Many of these documents are currently updated on an annual basis even though information from various sources is released at different times throughout the year. It has become increasingly important in an age of instantaneous information updates to reduce the lag time between data release and its incorporation into reports. Therefore, the Division of Planning will take the initiative to expedite the incorporation of newly released data into documents as it becomes available. Some of these reports will become online “working drafts” until their official adoption by the Monmouth County Planning Board (MCPB).

Monmouth County Departments & Organizations Involvement

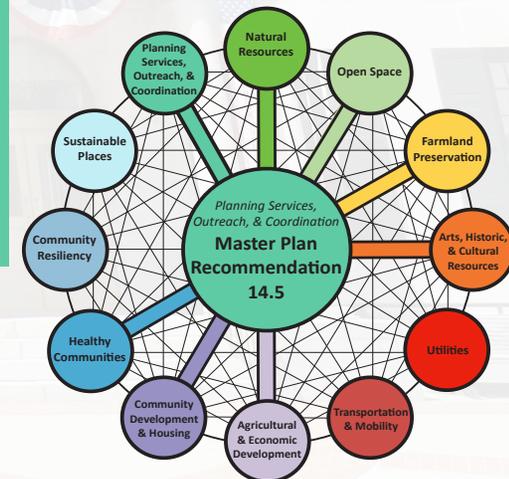
Division of Planning	The Division of Planning will update documents accordingly in response to the release of new data and information available from a variety of sources; manage the Division webpage with public notices, upcoming events, and Division reports; maintain links to relevant resources and information.
Planning Board (MCPB)	Adopt Division of Planning reports, studies, and plans for publication.

Master Plan Goals, Principles, & Objectives (GPOs) Relating to 14.5

PRINCIPLES	GOAL 1			GOAL 2				GOAL 3						
	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Comprehensive Planning														
Coordination														
Planning Approach														
Environmental Resources														
Farmland Preservation														
Arts, Culture, & Historic														
Preservation Investments														
Vibrant & Sustainable Communities														
Community Preservation														
Housing														
Economic Development														
Agricultural Development														
Recovery & Resiliency														
Growth Investments														

Implementation Strategy

- Identify release dates for data sources used in reports, studies, and plans.
- Update tables and reports once data becomes available.
- Maintain Division of Planning website with public notices, upcoming events, and Division reports, in addition to relevant resources and information.



Strongest Associated Master Plan Elements

14.0 Planning Services, Outreach, & Coordination

14.1 Introduction

The Monmouth County Division of Planning provides professional staff services to the Monmouth County Planning Board (MCPB) as well as other county agencies. Division staff represents a broad range of education and experience in planning; growth management; environmental, economic, and demographic issues; and geographic information systems (GIS). There are six core sections within the Monmouth County Division of Planning dedicated to performing these tasks. These sections include the Office of Community Development, Environmental and Sustainability Planning, Transportation Planning, GIS, Development Review, and Strategic and Long Range Planning. The Division of Planning is responsible for developing regional plans, reports, and programs that engage citizens and community leaders in directing future growth, investment, and development while protecting and enhancing our natural, cultural, and historic resources. The Division's work program is mandated through a variety of state or federal laws and directives which necessitates the inclusion of several advisory boards in the discussion of policy matters such as the Monmouth County Agriculture Development Board (MCADB), Monmouth County Development Review Committee, Monmouth County Environmental Council (MCEC), Monmouth County Fair Housing Board, Monmouth County Transportation Council (MCTC), Amendment Review Committee (ARC), and the Stormwater Technical Advisory Committee. The Monmouth County Division of Planning offers professional and technical services to other county departments in fulfillment of their missions and by doing so supports the goals and objectives identified in the *Monmouth County Strategic Plan (2009)* (refer to 14.2.2 Supportive Reports and Guiding Documents) as

approved by the Board of Chosen Freeholders and advanced through County Administration.

14.2 Existing Conditions

14.2.1 Monmouth County Division of Planning Sections

The six sections that comprise the Monmouth County Division of Planning create an annual work program detailing projects and programs for the upcoming year. Summaries include of each section's responsibilities, existing conditions, and the guiding reports that influence the Division of Planning's overall work program.

Office of Community Development (CD): The Monmouth County Office of CD coordinates, implements, and monitors participant compliance for the following federal entitlement programs the: Community Development Block Grant (CDBG), HOME Investment Partnerships Program, and Emergency Solutions Grant (ESG). From façade improvement for downtown businesses to housing improvement projects for low-to moderate-income residents, Office of CD programming helps to develop and maintain viable communities in Monmouth County. The Office of CD is required by the U.S. Department of Housing and Urban Development (HUD) to complete a *Five-Year Consolidated Plan* outlining how federal funds will be allocated to specified local programs and projects. This *Five-Year Consolidated Plan* serves as Monmouth County's official housing policy and community development planning guide. The Office of CD is also required to provide an annual update to their comprehensive plan, an *Annual Action Plan*, and a *Consolidated Annual Performance and Evaluation Report (CAPER)*, which summarizes program accomplishments and expenditures. Other supportive reports and guiding documents developed in this section include program policy guidelines which are presently under review for update, the *Citizen Participation Plan*, and the *Limited English Proficiency/Language Assistance Plan (LEP/LAP)*. For detailed information on CD programming, see the 10.0 Community Development & Housing Element.



Environmental and Sustainability Planning (ESP): ESP focuses on areawide water quality management planning, environmental assessments and sustainability, and agricultural sustainability. Areawide water quality management includes amendments to the [Monmouth County Future Wastewater Service Area \(FWSA\) Map \(2013\)](#), watershed partnerships, education and outreach, and water supply planning. Environmental assessments and sustainability projects include updating the *Natural Features Study*, the Areas of Significant Environment Quality (ASEQ), and the New Jersey Clean Energy Program for Local Government Energy Audits (LGEA), as well as providing environmental reviews of proposed projects. Housed within this section is the Farmland Preservation Program which includes farmland monitoring, agricultural sustainability planning, County Planning Incentive Grant (PIG) Program management, the eight-year preservation program implementation, Right to Farm Program matters, and outreach through the Monmouth County Greentables. Staff from ESP also provides technical and administrative support to the Grown in Monmouth program (an initiative of the Division of Economic Development), Amendment Review Committee (ARC), Stormwater Technical Advisory Committee, Monmouth County Environmental Council (MCEC), and Monmouth County Agriculture Development Board (MCADB). For more information on ESP see 3.0 Natural Resources, 5.0 Farmland Preservation, 7.0 Utilities, 9.0 Agricultural & Economic Development, and 13.0 Sustainable Places.

Transportation Planning: The Transportation Planning Section is responsible for managing and conducting the New Jersey Transportation Planning Authority's (NJTPA) grant programs including the Subregional Transportation Planning (STP) Program and Subregional Studies Program (SSP) which funds studies on highway and transit systems, transportation outreach efforts, and data management. In 2015, the Division of Planning worked with NJTPA and Together North Jersey to complete the [Monmouth County Bus Rapid Transit Opportunities Study \(2015\)](#) along Route 9 in Monmouth County. Future

projects include development of a Travel Demand Model (TDM). In addition to these efforts, the Transportation Section acts as Staff Advisor to the Monmouth County Transportation Council (MCTC). For more information on transportation services and projects, see the 8.0 Transportation & Mobility Element.

Geographic Information Systems (GIS): GIS combines geography and cartography within a framework of computer hardware, software, and databases to view, manage, and analyze spatial data, produce maps, and develop web-based mapping applications. The GIS Section is the clearinghouse for countywide spatial-based data and aerial imagery. It is responsible for implementing software upgrades and providing technical support to GIS users for mapping, analysis, application development, and modeling. GIS works with county and municipal departments and agencies on local and regional projects such as the Monmouth County Community Rating System (CRS) Assistance Program and coastal flood evacuation zone mapping. GIS users under the section's purview include a number of municipal partners and several county departments outside the Division of Planning, such as the county's Department of Public Works and Engineering, Park System, Health Department, Department of Human Services, Board of Taxation, County Clerk, Board of Elections, Division of Economic Development, Historical Commission, Sheriff's Office including the Office of Emergency Management, and the Prosecutor's Office. The GIS Section also responds to public requests for digital spatial data, imagery, and maps. For more specific information on GIS, see to Section 14.2.4 Geographic Information Systems (GIS) and Spatial Data in this Element.

Development Review (DR): The DR Section is responsible for administering the mandated requirements of the New Jersey County Planning Act pertinent to the review and approval of subdivisions and site plan applications under Monmouth County's jurisdiction. The section reviews all development applications submitted to the MCPB and serves as staff advisors to the Monmouth County Development



Review Committee (DRC). This committee has the authority to take action on behalf of the Planning Board regarding approval of subdivisions and site plans affecting county roads and drainage facilities. In addition, the DR Section maintains a database of all development applications submitted to the MCPB. This section enforces the County of Monmouth Development Regulations consisting of Volume I Application Review and Approval Procedures and Volume II Design Standards, which were adopted in 2004. Staff is presently working on amending these regulations with current state and federal standards. A new Monmouth County Planning Board Portal will also be launched in 2016 allowing for the electronic submission and management of development applications.

Figure 14.1: Total Number of Applications Received by Development Review (1990 – 2015) displays the total number of development applications for site plans and subdivisions from 1990 to 2015. Over this period, the county processed a total of 8,122 site plan applications and 2,970 subdivision applications. As the chart shows, the number of site plan applications peaked in 2002 and the number of subdivision applications peaked in 2001.

Strategic and Long Range Planning (SLR): SLR is responsible for the creation of regional plans, special studies, and the preparation and dissemination of demographic and economic data which is available to its residents and stakeholders on request. In addition to producing the

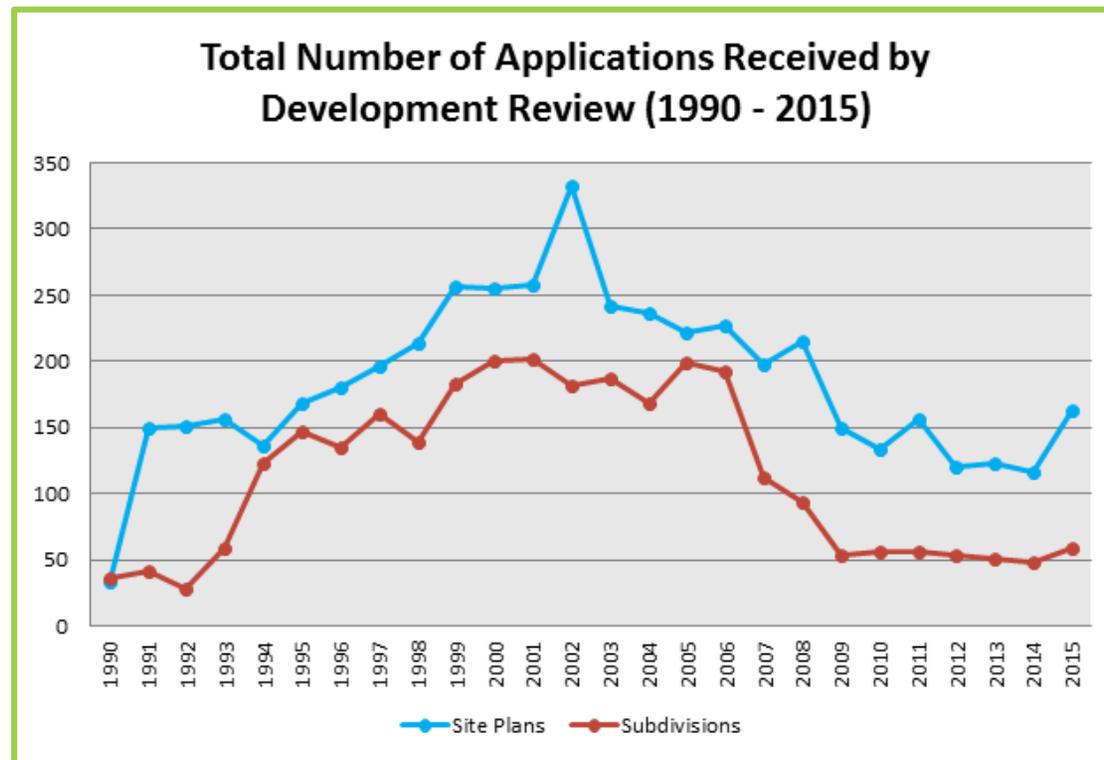


Figure 14.1:
Total Number of
Applications
Received by
Development Review
(1990 – 2015)



annual *Profile Report* and *At-A-Glance*, this section reviews municipal master plan documents and land use ordinances submitted to the Planning Board per the requirements of New Jersey’s Municipal Land Use Law (MLUL). Along with the Office of Emergency Management (OEM), SLR coordinates the Monmouth County Community Rating System (CRS) Assistance Program. It also provides general planning assistance to other county departments, municipalities, and nonprofit partners (e.g. Monmouth Arts, MoCo Arts Corridor Partnership, and Upper Freehold Scenic Byway Technical Advisory Committee).

14.2.2 Supportive Reports and Guiding Documents

Monmouth County Strategic Plan (2009): The primary purpose of this plan is to provide the Board of Chosen Freeholders with a set of recommendations for action that will assist the county government in moving into the future with a clear sense of vision and purpose, a measurable set of strategic objectives, and a method of sustaining positive change (*Monmouth County Strategic Plan, 2009*). A Strategic Planning Committee comprised of Freeholders, senior leadership, members of the public and management was formed to help guide and inform the planning process. This plan evaluated county services through the evaluation of nine focus areas including:



Emerging themes within the county were identified and a series of strategic goals, objectives, and actions were framed within a *Strategic Action Plan* providing decision makers with an implementation strategy through five Strategic Areas intended to achieve its vision. These Strategic Areas include:

Strategic Area I. Provide leadership with regard to spending, taxes, and return on investment through smart, effective, efficient, and responsive resident-centered county government.

Strategic Area II. Promote responsible and sustainable development and economic growth through quality planning, education, workforce development, and business development.

Strategic Area III. Promote the safety, security, and well-being of all county residents in a manner which is responsive to demographic, social, and community trends.

Strategic Area IV. Steward the preservation and enhancement of natural resources, respect for local history, and quality of community life.

Strategic Area V. Impact public policy, statutes, and regulations that impede county goals.

Within the *Strategic Action Plan*, the Planning Board (Division of Planning) is identified as the lead-department or joint lead-department for implementing several actions items including:

Strategic Area I; Goal I-A: Improve public communication and information about county services and how to access them. In addition, conduct ongoing feedback strategies with county residents.

Objective 4: Improve information availability regarding land and facilities throughout the county.

Strategic Area II; Goal II-E: Develop partnerships with municipalities and other stakeholders to promote sustainable, well-planned communities.

Objective 1: Undertake activities to promote sustainable, well-planned communities.



Strategic Area II; Goal IV-C: Reduce traffic congestion through smart routing and public transportation.

Objective 1: Increase transportation capacity.

Each of these Strategic Areas includes defined objectives, actions, the lead department, target completion date, and budget impact.

Monmouth County Growth Management Guide (GMG) and its Adopted Elements: Prior to the adoption of this *Master Plan*, the *Monmouth County Growth Management Guide (1982)* served as the county's official master plan providing, "a framework indicating the desired future growth patterns for Monmouth County." Subsequent to the 1982 *GMG*, the Planning Board adopted a number of additional studies, reports, and plans as "Elements" to the *GMG*. These documents guided the Division of Planning's work program and Planning Board's decisions between 1982 and the adoption of this *Master Plan*.

Land Use in the Swimming and Manasquan River Reservoir Watersheds (1985): This report addresses problems associated with growth in the Swimming and Manasquan River Watersheds and recommended strategies for channeling growth and reducing its impact on the water supply.

Bayshore Waterfront Access Plan (1987, amended in 1991): The *Bayshore Waterfront Access Plan* was created to ensure that the new development trends of the Bayshore Region would not limit public access opportunities along the waterfront.

Monmouth County Park and Recreation Plan (1991, 1998): These updates to the *Park and Recreation Plan* replaced the 1970 plan and its 1983 amendment. In 2006, a more comprehensive [Monmouth County Open Space Plan \(2006\)](#) was produced by the Monmouth County Park System (MCPS).

Bayshore Trail System Design Manual (1993): The *Bayshore Trail System Design Manual* was adopted as a component of the *Bayshore Waterfront Access Plan (1987)* in addition to being an Element of the *GMG*. The manual establishes the concept of the Bayshore Trail System along the Raritan and Sandy Hook Bays and provided an inventory of existing conditions along the trail and recommendations for possible locations of recreational facilities.

Monmouth County Growth Management Guide Goals, Objectives, and Policies (1995): The document was updated by the Planning Board in December 1995 to provide specific goals, objectives, and policies to implement the "master plan."

Monmouth County Farmland Preservation Plan: The Comprehensive Plan (2000, 2008 update): This plan is intended to guide Monmouth County's farmland preservation program for the next ten years by providing a course of action to aggressively preserve remaining farmlands.

The Monmouth County Scenic Roadway Plan (2001): *The Monmouth County Scenic Roadway Plan* intends to retain scenic qualities and features possessed by many county roads.

Route 9/ Western Monmouth Development Plan (2004): This plan focuses on seven municipalities in Western Monmouth County that have experienced rapid growth along U.S. Route 9. With growing sprawling suburban development on farms and fields, the corresponding loss of open space, and an increase in traffic congestion, the plan addressed these issues and recommended the formation of more livable communities with natural resource preservation.

Monmouth County Open Space Plan (2006): Prepared by the MCPS and adopted by the Planning Board, the plan sets acquisition goals,



targets specific project areas, and discusses joint efforts with the Farmland Preservation Program. For more information, see 4.0 Open Space Element.

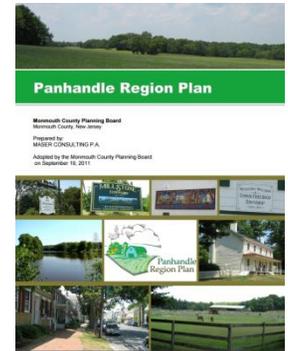
Bayshore Region Strategic Plan (2006): The goal of this plan is to create a vision and planning strategy to spur economic development while preserving the region’s natural resources and maritime character. This plan resulted in the creation of the Monmouth County (MoCo) Arts Corridor, created by the MoCo Partnership, that works with the county to leverage the economic power of the arts. See 6.0 Arts, Historic, & Cultural Resources Element for more information on the MoCo Arts Corridor.

Monmouth County Farmland Preservation Plan (2008): The *Monmouth County Farmland Preservation Plan* replaces the previous 2000 plan and includes topics such as the county’s agricultural land base, industry trends, land use planning, agricultural industry sustainability, and past and future preservation program activities. See 5.0 Farmland Preservation Element for more information.



Coastal Monmouth Plan (2010): The *Coastal Monmouth Plan* intends to guide the future development and conservation of natural resources in the county’s Atlantic coastal region, including 30 municipalities from the Red Bank/Sea Bright area to Manasquan, which includes approximately 40% of the county’s population.

Panhandle Region Plan (2011): The *Panhandle Region Plan* is a regional plan for the four westernmost municipalities in Monmouth County: Allentown, Roosevelt, Millstone, and Upper Freehold. Although different in population density, these four municipalities have a common goal to preserve their community character through open space, historic, and farmland preservation.



Monmouth County Road Plan (1996, 2012 update): The *Monmouth County Road Plan* informs the public of the location, design, and right-of-way widths of the county road system. It is a long range plan that provides the framework for coordinating our regional road system with the growth and development of the county.

Monmouth County Master Plan (2016) Standalone Documents

Documents Incorporated into the Master Plan by Reference: The *Monmouth County Master Plan (2016)* is comprised of a compilation of standalone policy documents and inventories produced by the Division of Planning, other Monmouth County departments, and closely related stakeholder agencies that promote and advance of the Goals, Principles, and Objectives (GPOs) identified in the *Master Plan*.

This *Master Plan* carries over some Elements from the prior *Growth Management Guide* in addition to integrating several new documents that are officially incorporated into this *Master Plan* by reference. As such, the documents in Figure 14.2: Documents Incorporated into the Master Plan by Reference are recognized as components of one or more *Master Plan* Elements and subject to the provisions established under N.J.S.A. 40:27-4.



FIGURE
14.2

DOCUMENTS INCORPORATED INTO THE
MASTER PLAN BY REFERENCE

- *Monmouth County Scenic Roadway Plan (2001)*
- *Monmouth County Open Space Plan (2006)*
- *Monmouth County Farmland Preservation Plan (2008)*
- *Monmouth County Solid Waste Management Plan (2009)*
- *Monmouth County Road Plan (2012)*
- *Monmouth County Community Health Improvement Plan 2012-2016 (2012)*
- *Monmouth Arts Plan: Imagine, Envision, Create (2012)*
- *Monmouth County Comprehensive Economic Development Strategy (2014)*
- *Multi-Jurisdictional Natural Hazard Mitigation Plan for Monmouth County (2015)*
- *Agricultural Sustainability Plan for Monmouth County (proposed)*

This list identifies the *Master Plan* Element and corresponding documents integrated by reference:

4.0 Open Space

- *Monmouth County Open Space Plan (2006)* by the Monmouth County Park System

5.0 Farmland Preservation

- *Monmouth County Farmland Preservation Plan (2008)*

6.0 Arts, Historic, & Cultural Resources

- *Monmouth Arts Plan: Imagine, Envision, Create (2012)* by Monmouth Arts

8.0 Transportation & Mobility

- *The Monmouth County Scenic Roadway Plan (2001)*
- *Monmouth County Road Plan (2012)*

9.0 Agricultural & Economic Development

- *Monmouth County Comprehensive Economic Development Strategy (2014)* by the Monmouth County Division of Economic Development
- *Agricultural Sustainability Plan (ASP), proposed*

11.0 Healthy Communities

- *Monmouth County Solid Waste Management Plan (2009)* by the Monmouth County Reclamation Center
- *Monmouth County Community Health Improvement Plan 2012-2016 (2012)* by the Health Improvement Coalition of Monmouth County

12.0 Community Resiliency

- *Multi-Jurisdictional Natural Hazard Mitigation Plan for Monmouth County (2015)* by the Monmouth County Office of Emergency Management



Consultative and Supportive Documents: This *Master Plan* also cites numerous other documents of significance (e.g. maps, plans, reports, inventories, studies, etc.) that provide important information and resources that support specific plan elements and are consistent with the *Plan's* GPOs. Although the documents identified in Figure 14.3: Master Plan Consultative and Supportive Documents are not recognized as official components of the adopted *Monmouth County Master Plan*, they complement one or more *Master Plan* Elements and should be consulted alongside the *Master Plan* during policy formation and program development.

In accordance with the New Jersey County Planning Act (N.J.S.A. 40:27-4), before adopting the master plan or any amendment to the master plan, the Planning Board must have at least one public hearing, appropriately noticed said hearing at least 20 days prior. A copy of the proposed master plan, or part thereof or any proposed amendment thereof, must be provided to the municipal clerk and secretary of the planning board of each municipality in the county. The adoption of the plan in total, in-part, or amendment thereto must be certified to the Board of Chosen Freeholders, the Monmouth County Park Commission and the legislative body of every municipality within the county. Therefore, official documents identified as components (Figure 14.2: Documents Incorporated into the Master Plan by Reference) of the *Monmouth County Master Plan*, subsequent to this plan's adoption, remain subject to approval requirements established by N.J.S.A. 40:27-4. Documents not recognized as official components (Figure 14.3: Master Plan Consultative and Supportive Documents) of the adopted *Monmouth County Master Plan* are not subject to the same approval requirements.

Annual Insight Reports: The Division of Planning creates, maintains, and updates a number of annual planning reports for public consumption. These reports, along with special studies,

FIGURE
14.3

MASTER PLAN CONSULTATIVE AND SUPPORTIVE DOCUMENTS

- *Monmouth County Historic Sites Inventory (1984 and amendments)*
- *Monmouth County Historic Preservation Guide (1989)*
- *Monmouth County Recreation Services Plan (2001)*
- *Monmouth County Park Development and Maintenance Plan (2003)*
- *Route 9/Western Monmouth Development Plan (2004)*
- *Bayshore Region Strategic Plan (2006)*
- *Monmouth County Coastal Evacuation Routes Study (2009)*
- *Monmouth County Strategic Plan (2009)*
- *Monmouth County Bicycle Map (2010)*
- *Monmouth County Complete Streets Policy (2010)*
- *Upper Freehold Historic Farmland Byway Corridor Management Plan (2010)*
- *Coastal Monmouth Plan (2010)*
- *Panhandle Region Plan (2011)*
- *Monmouth County Environmental Sustainability Policy (2014)*
- *Monmouth County Bus Rapid Transit Opportunities Study (2015)*
- *Monmouth County Emergency Operations Plan (2013)*
- *Monmouth County At-A-Glance (annually adopted)*
- *Monmouth County Profile Report (annually adopted)*
- Monmouth County Corridor Studies (see 8.0 Transportation & Mobility for prior studies)
- Other Local Health Department Documents and Studies
- Monmouth County Future Wastewater Service Area Map (*as adopted* and amendments)
- *Monmouth County Water Quality Management Plan (continuous)*
- *Monmouth County Natural Resources Inventory (pending completion)*
- Monmouth County Office of Community Development Plans:
 - *Analysis of Impediment to Affirmatively Further Fair Housing (2011)*
 - *Annual Action Plan (annually adopted)*
 - *Citizen Participation Plan (2014)*
 - *Monmouth County Strategic Plan to Prevent and End Homelessness (2014)*
 - *Limited English Proficiency/Language Assistance Plan (2015)*
- Other Agency Plans:
 - U.S. DOD, Naval Weapons Station Earle : *Joint Land Use Study (proposed)*
 - FEMA: *Flood Insurance Rate Maps (currently effective and proposed)*
 - FMERA: *Fort Monmouth Reuse and Redevelopment Plan (2008 and amendments)*
 - NJDEP: *Geoweb*
 - NJDEP: *Recreational and Open Space Inventory (current)*
 - NJDEP: *New Jersey and National Registers of Historic Places (current)*
 - *New Jersey State Development and Redevelopment Plan (2001 and pending amendment)*
 - Together North Jersey: *The Plan (2015)*
 - Municipal Master Plans and Redevelopment Plans



support *Master Plan* Recommendation 14.3 which calls for the Division of Planning to not simply produce reports that compile facts, figures, and data, but to analyze and provide the information as an “insight engine.” In doing so, the Division provides decision makers and the public with meaningful knowledge and understanding about the complex planning issues facing Monmouth County.

Monmouth County Profile Report: This annual report serves as a comprehensive narrative of Monmouth County’s demographics, housing, education, economics, and development data for that given year. The *Profile Report* assists the county with maintaining its AAA bond rating, which can result in financial assistance to municipalities for large projects, boards of education, utility authorities, and other government entities. The most recent [2016 Profile](#) version is on the county website.

Monmouth County At-A-Glance: The annual *At-A-Glance* report is a snapshot of the county and its 53 municipalities. This report publishes commonly requested demographic, housing, economic, employment, and land use data, in addition to a brief background summary and list of current planning and development issues for each municipality. In 2015, the SLR Section updated the design of the report in addition to adding new datasets and text to reflect changes occurring in the county. Whenever new U.S. Census Bureau data or American Community Survey (ACS) data is released, staff will update the *At-A-Glance* report and publish it online, treating the report as a “living” document. The most recent [At-A Glance 2016](#) report is on the county website.

Economic Insight Reports: In 2015, the Monmouth County Division of Planning initiated an annual insight report series beginning with [Measuring Monmouth County’s Creative Economy](#), a white paper examining the economic contributions and employee size of both for profit and nonprofit creative and cultural industries. These reports are

intended to provide valuable insight into relevant planning issues facing Monmouth County as well as answer policy questions about specific industries or topics through data-driven analysis.

Outreach Guidance Documents: In 2014, the Monmouth County Division of Planning, Office of Community Development developed the *Citizen Participation Plan (CCP)* and the *Limited English Proficiency/Language Assistance Plan (LEP/LAP)*. These two HUD required documents specifically outline how the county will provide citizens, especially underrepresented groups, opportunities to participate in the planning, implementation, and assessment of programs and projects funded through CDBG and other federal grant programs.

Citizen Participation Plan (CPP): Monmouth County developed a detailed *CCP* outlining how community members and other stakeholders can engage in planning, implementation, and evaluation of housing and community development programs. The most recent *CCP* was adopted by the Monmouth County Board of Chosen Freeholders on March 13, 2014.

Limited English Proficiency/Language Assistance Plan (LEP/LAP): The Office of Community Development’s LEP/LAP details specific methodology utilized by staff to encourage participation by non-English speaking persons.

For more information refer to 10.0 Community Development & Housing.

14.2.3 Datasets and Databases: The Division of Planning prepares, analyzes, and disseminates demographic and economic data for county departments, municipalities, and various stakeholders such as businesses, nonprofit organizations, libraries, school boards, and colleges. The following datasets and databases are most referenced utilized by the Division of Planning.



Federal Sources

U.S. Bureau of Labor Statistics (BLS): The BLS includes programs and databases such as Quarterly Census of Employment and Wages (QCEW) and the Location Quotient Calculator. The QCEW provides employment data by industry for all employees covered by unemployment insurance and the Location Quotient Calculator uses the QCEW data to calculate a county-level location quotient. These tools are used as a resource by the Division of Planning for bond calls and public requests.

U.S. Census Bureau: The U.S. Census Bureau serves as a data clearinghouse that consolidates various types of demographic and economic data. The Longitudinal Employer-Household Dynamics (LEHD) is a program at the Bureau that provides several data products to research and characterize workforce dynamics in specific user-specified classifications (e.g. occupations, age groups, employment locations, and educational attainment). The LEHD produces Quarterly Workforce Indicators (QWI) and Origin-Destination Employment Statistics (LODES). QWIs are local labor market statistics by industry, worker demographics, employer age, and size. LODES computes origin-destination (commute data), residence area characteristics, and workplace area characteristics down to the census block geographic detail. LODES can be downloaded in its raw form or accessed by a specific area on the online application.

Monmouth County also utilizes the U.S. Census Bureau's Job-to-Job Flows, U.S. Economic Census, County Business Patterns, Non-Employer Statistics, American Housing Survey, and American Community Survey in the county's annual *Profile Report*, *At-A-Glance* report, public data requests, and other research reports.

U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS): The NASS conducts both the U.S. Agricultural Census (performed every five years) and weekly reports on crop, soil,

and weather conditions. This census provides data concerning all areas of farming and ranching operations, including production expenses, market value of products, and operator characteristics on farms, ranches, and the people who operate them. The Division of Planning uses the both the U.S. Census and weekly reports to write planning reports such as the *Monmouth County Farmland Preservation Plan*, to further the county's agricultural and economic development initiatives (e.g. Grown in Monmouth), and to apply for grants.

Census Transportation Planning Products (CTPP): CTPP is data available at the county-level and compares commuting patterns between counties (i.e. which county Monmouth County residents are employed in). CTPP is used in the *Profile Report* for transportation commuting studies.

Internal Revenue Service (IRS): Provides in-migration and out-migration data for Monmouth County based on year-to-year address changes reported on individual income tax returns, which helps the Division of Planning understand development trends within the county.

State of New Jersey Sources

New Jersey Construction Reporter: Under the NJ Department of Community Affairs, the New Jersey Construction Reporter compiles records on building permits, demolition permits, new home warranties, and certificates of occupancy. The Division of Planning uses these datasets to analyze development trends for commercial and residential uses in the county.

New Jersey State Data Center: Under the NJ Department of Labor and Workforce Development, the NJ State Data Center provides a wide array of tools and databases to research labor markets. This helps reveal monthly and yearly changes in the local economy and labor force which helps with public requests and bond calls.



New Jersey Department of Treasury, Division of Taxation: Provides a search engine which allows for the viewing and printing of assessment records annually submitted to the Division of Taxation. Additionally property tax information for individual municipalities can be accessed through the Division of Taxation's website, which allows the Division of Planning to analyze municipal property tax data.

New Jersey Department of Education: The NJ Department of Education provides school enrollment data used in the annual *Profile Report*.

Monmouth County Sources

Monmouth County Farmland Assessment Data: Available through Monmouth County's Open Public Records Search System (OPRS), the Farmland Assessment Data is used for grant applications, monitoring of already preserved farms, and Right to Farm cases and inquiries.

Monmouth County Tax Board: Provides county-generated tax data used in Division of Planning publications to analysis the county's ratable base and changes in assessed values.

Other Sources

National Center for Charitable Statistics (NCCS): NCCS provides data on nonprofit organizations including revenues, expenditures, and number of employees. The data is useful for county studies, such as the recent creative industries study, to generate a comprehensive outlook on nonprofits in Monmouth County.

14.2.4 Geographic Information Systems (GIS) and Spatial Data: GIS is used in the Division of Planning for a variety of operations ranging from data development and management, data modeling and analysis, map production, and the creation of online mapping tools.

Data Development/Management: The Monmouth County GIS Section creates and updates countywide spatial data including roads, parcels, contours, and building footprint data. The GIS

Section also creates data as it pertains to county programs and projects including farmland preservation properties and composite zoning. Local, state, and federal datasets are also retained from other reliable GIS resources on a per project basis. In addition to spatial data, Monmouth County acquires aerial imagery of the county landscape on a regular basis. These images are useful in analyzing periodic land use changes.

Web Maps and Applications: GIS is used in web-based mapping to provide information to the public. ArcGIS Online is a web tool available to Monmouth County as part of its annual licensing agreement with Esri and is used to share data and create interactive web maps/applications for internal or external use. As part of the subscription, Monmouth County can access additional GIS data and features including map services, basemaps, analysis tools, and templates to build map applications. ArcGIS Online also provides up-to-date authoritative data made available by other local, state, or federal agencies and can be added to Monmouth County web maps and applications.

Examples of some of the web maps and applications GIS has developed include the [Monmouth County Property Viewer](#) (a web-based property search which enables the user to download parcels data and view aerial imagery), the [Monmouth County Wastewater Management Plan Viewer](#) used to search if properties are located in franchise sewer service areas, and Social Services interactive maps used to locate mental health and addiction facilities in the county.

Demand for online mapping applications and accessibility to digital data increases regardless of internal technology limitations. *Master Plan Recommendation 14.1* calls for improving the county's GIS capabilities and public interface by developing of a GIS online platform that allows for the creation of interactive web-based maps and applications from publically accessible geodatabases. Creating secure internal and



external access is detrimental to the GIS ecosystem and to the fidelity of the county’s authoritative data.

Monmouth County Virtual Public Art Story Map

Modernization offers local government ample opportunities to increase effective public awareness and education. The Monmouth County Division of Planning has the internal capabilities to generate Story Maps, which use GIS technology to configure online storytelling applications featuring an interactive map, photos, text, and a thumbnail carousel. In a joint endeavor with Monmouth Arts in 2016, the Division of Planning has pioneered this initiative with a Public Art Story Map. The Division of Planning began working with Monmouth Arts to collect data on the location of public art throughout the county. This information was uploaded through a GeoForm webpage that can then be internally reviewed and approved prior to posting on the Story Map. The Public Art Story Map is accessible online where one can find the location of the public art installations, as well as learn about the artist and history of the pieces. 6.0 Arts, Historic, and Cultural Resources Element encourages local arts councils to maintain public art inventories. Through this technology, the County and its cultural partner organizations can begin creating virtual tours of our intrinsic cultural amenities including those found along the MoCo Arts Corridor and the Upper Freehold Historic Farmland Bvwav.

14.3 Planning Coordination

Planning issues are to be addressed from interdisciplinary perspectives to identify and assess both the interdependent and collective impacts as well as new opportunities. *Master Plan* Recommendation 14.2 views the

Division of Planning as a clearinghouse for demographic, school enrollment, housing, and economic data that assists county departments and other government agencies in the development of their own facility and service plans. Many of the reports and data produced by the Division can be used for such a purpose. While comprehensive planning integrates county-level initiatives with plans at the federal, state, regional, and local-levels to achieve effective coordination across jurisdictions and disciplines, successful planning requires collaborating with stakeholders along with integration and coordination both internally between county agencies (horizontally) and with other planning efforts and/or levels of government (vertically).

14.3.1 Interagency Coordination (Horizontal)

Brookdale Community College (BCC): The Division of Planning provides BCC with technical assistance including data analysis for projects such as the College’s Strategic Enrollment Program. The Division is also a member on several of the schools’ committees including Transportation (which is currently seeking ways to improve student access to and between the various campuses and learning centers) and the Western Monmouth Branch Steering Committee (which is seeking ways to improve services at that campus). The BCC campus rain gardens were developed with the assistance of the ESP Section and the Monmouth County Environmental Council (MCEC). The Division of Planning also works jointly with BCC to hold environmentally-oriented educational outreach programs and is a partner on the Monmouth County Hub for Municipal Green Teams.

Monmouth Arts: As the official County Arts agency, the Division provides specialized assistance upon request and is an active partner in the advancement of the MoCo Arts Corridor (see 6.0 Arts, Historic, & Cultural Resources Element). Monmouth Arts has sought Division assistance on a number of projects including the development of [*Imagine, Envision, Create*](#) (a five-year cultural arts plan for the organization), the development of arts maps which identify the location



of arts and cultural venues and offerings throughout the county, and letters of support for state and federal grants.

Monmouth County Board of Taxation: The GIS Section provides useful information to the Monmouth County Board of Taxation by incorporating the state’s Mod IV tax data when regularly updating the county’s parcel data layer.

Monmouth County Clerk and Board of Elections: County voting district maps are prepared annually during election cycles by the GIS Section.

Monmouth County Connection: The Monmouth County Connection Office in Neptune offers a variety of services including passport processing, passport photos, free notary public, veterans IDs, election/voter information, senior and veterans’ services, public access computers, and more. The office was awarded a Certificate of Excellence by the U.S. Department of State for its excellence in passport services in 2016.

Monmouth County Division of Economic Development: The Divisions of Planning and Economic Development coordinate with Rutgers Cooperative Extension to provide marketing assistance and business training to emerging agricultural producers through Grown in Monmouth initiative. The Division of Planning also works with the Division of Economic Development to allocate CDBG funds for local businesses in HUD-designated areas, known as the Façade Improvement Program, and provides environmental reviews for potential project sites. Planning assisted with Economic Development’s *Monmouth County Comprehensive Economic Development Strategy (CEDS) (2014)* and its annual update, conducts quarterly reviews on new commercial and residential development, helps to market and works the annual Made in Monmouth Expo, runs location-based socioeconomic and demographic analysis reports, and works alongside Economic Development for the MoCo Arts Corridor.

Monmouth County Finance Department: The Division of Planning provides population, employment by industrial sector, major employer, labor force, median income per capita, housing, and construction-value (both residential and nonresidential) data to assist with the financing analysis of the county. In the past year, the Transportation Planning Section worked with Finance to manage four separate grants: Subregional Transportation Planning (STP) Program, Subregional Studies Program (SSP), Jobs Access Reverse Commute Program (JARC), and the Local Government Capacity Grants Program. Additionally, a representative of the Finance Department is also on the CDBG HOME Project Selection Committee.

Monmouth County Health Department (MCHD): The MCHD recently requested GIS assistance from the Division of Planning to geocode and map lead-testing occurring in the county. Other projects have included geocoding monitoring and sampling sites for ongoing bioassessments and emergency response preparedness planning. ESP has worked extensively with the Health Department over the years on such projects as No Discharge Zones for Monmouth County Waterways, wastewater and stormwater committee reviews, and partnering with the MCEC on projects and roundtables.

The GIS Section assisted the Mosquito Control with the installation of GIS data into the county helicopter’s new global positioning system (GPS). The system tracks the ground application of mosquito eradication spraying operations. The ESP Section also assists the Mosquito Control Commission with energy-related grants for their facilities.



Monmouth County Department of Human Services: The GIS Section helps the Division of Mental Health and Addiction Services maintain their Mental Health Facilities and Addiction database, resulting in the development of two GIS applications to help citizens locate mental health and/or addiction services in the county. The Office of Community Development Director is a member of the Monmouth County Homeless System’s Collaborative (HSC) Executive Committee. As stated on the HSC webpage, the Continuum of Care (CoC) is charged with overseeing the annual application process to the U.S. Department of Housing and Urban Development (HUD). It provides a forum for analysis and discussion of emerging needs, development of program standards, and assessment of progress toward ending homelessness and identification and coordination of other sources of funding. The CoC implements the [Monmouth County Strategic Plan to End Homelessness \(2014\)](#) and monitor progress towards the plan goals.

Monmouth County Information Technology Services (ITS): The GIS Section assists in the reorganization and file migration of county server resources for the Division of Planning and the independent GIS servers.

Monmouth County Public Library System: With headquarters’ in Manalapan and twelve other locations, the Library assists the Division of Planning with the CRS Initiative by posting required National Flood Insurance Program (NFIP) documents online as well as maintaining hard copies of these documents onsite. The Library System has also hosted a number of sustainability and environmentally oriented events.



Office of the Monmouth County Prosecutor: The Division of Planning provides GIS software support and data layers to the Prosecutor’s Office for the creation of GIS maps for ongoing criminal cases.

Monmouth County Park System (MCPS): The MCPS was an active community stakeholder in the *Master Plan* Working Groups during the summer of 2014, offering strategies for various Elements, such as 3.0 Natural Resources, 4.0 Open Space and 12.0 Community Resiliency. MCPS staff is working closely with the Division of Planning in the identification and review of the county’s Areas of Significant Environmental Quality (ASEQ) and in preparation of the update to the Natural Features Study. The Division of Planning assists the MCPS with demographic data for their annual reports and GIS data of park boundaries and trails. The Division of Planning also undertakes joint land preservation projects and coordinates the review of development regulations that border county parks and recreation facilities, assists with natural resource related studies, contributes to energy grants and programs, and assists with wastewater issues in parks. The Division of Planning has partnered with the MCPS and other stakeholders to host Greentable events. The MCPS has participated in the MCEC Roundtables.



Monmouth County Department of Public Works and Engineering: Traffic and Civil Engineers assist the Division of Planning with reviewing site plan and subdivision applications in conjunction with implementing the County of Monmouth Development Regulations. The regulations give the Development Review Committee (DRC) authority to review applications and mitigate adverse impacts to Monmouth County roads and drainage facilities which are anticipated to be caused by proposed development.

The Department of Public Works and Engineering and the GIS Section are working jointly on updating the public works asset management system software known as Cartegraph. Engineering uses Cartegraph to



assess the condition of the public infrastructure, analyze costs, and plan when repairs and replacements will be needed. The Division of Engineering maintains records of projects and resources and then uses GIS to assign a geospatial component to the asset (e.g. bridges, signs, guiderails, and traffic signals). GIS has developed an application to assist County Engineers with stormwater outfall inspections and also prepares watershed drainage maps to see the effects of development on county structures.

The Division of Planning works with the Department of Public Works and Engineering to determine the current and future right-of-ways for county and municipal roads that are adjacent to agricultural easements. The ESP Section assists Engineering with energy grants and programs, facility energy audits, and partnership projects (e.g. the Wreck Pond Watershed). The Transportation Planning Section works alongside Engineering on the Travel Demand Model in addition to NJTPA and Together North Jersey projects. Engineering is represented on the Wastewater, Stormwater, and Energy Committees, the Amendment Review Council (ARC), and the Monmouth County Planning Board (MCPB).

Monmouth County Sheriff's Office, Office of Emergency Management (OEM): As mentioned in the 12.0 Community Resiliency Element, the Division of Planning assists OEM with hazard mitigation planning. Specifically, the Division of Planning assisted with public outreach and implementation of the *Multi-Jurisdictional Natural Hazard Mitigation Plan* for Monmouth County (2015). The Division of Planning also regularly communicates to its municipalities alongside OEM staff to circulate Community Rating System (CRS) information and to facilitate the quarterly Monmouth County CRS Users Group meetings. The Division of Planning's GIS Section assists with coastal flood evacuation zone mapping and updating e-911 dispatch maps data to expedite emergency response times.

14.3.2 Coordination with Planning Partners (Vertical)

Federal Coordination

Fort Monmouth Economic Revitalization Authority (FMERA): As stated in the *Fort Monmouth Reuse and Redevelopment Plan (2008)*, "The strength and viability of the plan would rely on multi-level partnerships. These should include partnerships between the State of New Jersey, Monmouth County, and the host and adjacent Boroughs, the Department of the Army, the Department of Housing and Urban Development (HUD), local advocates, and the redevelopment community." Monmouth County, represented by the Board of Chosen Freeholders, is a voting member on the FMERA Board which oversees implementation of the *Fort Monmouth Reuse and Redevelopment Plan*. Officials from the county worked collaboratively with FMERA during the plan's formation to coordinate future land use and development with the county roadway network. The MCPS acquired the Fort Monmouth Recreation Center from FMERA which is a 21,000 square foot building that is the MCPS's first indoor recreation facility and recipient of a 2015 Monmouth County Planning Merit Award.

Naval Weapon Station (NWS) Earle: The Division of Planning works closely with NWS Earle on projects that aim to benefit both the installation and the local community. Most recently, NWS Earle and the county are working together to develop the scope of a federally-funded *Joint Land Use Study (JLUS)* in the area surrounding the property under the jurisdiction of NWS Earle.

U.S. Department of Housing and Urban Development (HUD): The Office of Community Development's the *Five-Year Consolidated Plan* serves as the (HUD recognized) official housing policy and community development planning guide for Monmouth County. HUD sets forth three identifiable goals when evaluating a jurisdiction's *Five-Year Consolidated Plan*:



1. Increasing the availability, affordability, and sustainability of decent housing
2. Suitable living environments
3. Promotion of economic development

Every five years, the county assesses affordable housing market conditions and community development needs to make strategic decisions about how to best invest allocated federal funds. *Master Plan* Recommendation 10.2 seeks to incorporate the Goals, Principles, and Objectives of the *Monmouth County Master Plan* into the Office of Community Development's *Five-Year Consolidated Plan* to better align Community Development projects and programs with intended outcomes through the appropriation of funds from the Community Development Block Grant (CDBG) Program, HOME Investment Partnerships Program (HOME), and Emergency Solutions Grants (ESG) Program. The *Annual Action Plan* submission includes coordinating the Office of Community Development structure with the Division of Planning programming to help ensure the sustainability and viability of the *Monmouth County Master Plan*.

State-Level Coordination

New Jersey Department of Environmental Protection (NJDEP): The ESP Section works very closely with the NJDEP on numerous issues and topics, such as wastewater, stormwater, coastal planning and policy issues, and energy planning. Planning staff serve on technical advisory committees which help develop rules, policies, and guidelines for programs including Blue Acres, wastewater management, and coastal policies. Each year the Division works in coordination with NJDEP to host an AmeriCorps Watershed Ambassador for Watershed Management Area 12 (Monmouth Coastal Watersheds). The AmeriCorps Ambassador works out of the Division of Planning office for approximately nine to ten months providing water quality monitoring, watershed education, and assistance to watershed partnerships. Staff from the Division of Planning has worked closely with NJDEP on a

number of state initiatives including stormwater management planning and the wastewater management plan.

New Jersey Office of Information Technology (NJOIT): NJOIT provides newsletters on technology infrastructure, data sharing, workshops, and GIS updates to the county. NJOIT holds quarterly Geospatial Forum meetings to discuss the future of GIS in New Jersey, which Monmouth County GIS staff regularly attends. NJOIT maintains the NJ Geographic Information Network (NJGIN) as a spatial data clearinghouse for New Jersey.

New Jersey State Planning Commission, Office of Planning Advocacy (OPA): The State Planning Act of 1985 ([N.J.S.A. 52:18A-196 et seq.](#)) was created the New Jersey State Planning Commission and the Office of State Planning. The act requires the Commission to prepare and adopt a *State Development and Redevelopment Plan (SDRP)*. The current *SDRP* was adopted in 2001 and sets forth a vision for the future of our state along with strategies to achieve that vision. Since 2010, the OPA has been working on developing a new *State Strategic Plan*, one that is more streamlined than previous versions. The *Monmouth County Master Plan (2016)* recognizes the importance of aligning planning with policy investment strategies that broadly support and reinforce the economic, cultural, physical, and natural landscapes that define our community. Although the framework strategy presented in the 2.0 Land Use Element of this document is similar to the intent and approach presented in the draft *State Strategic Plan (2012)* and supported by Together North Jersey's regional *The Plan. (2015)*, the criteria and definitions used by Monmouth County are slightly modified to reflect the issues, concerns, values, and priorities specific to Monmouth County.

New Jersey Department of Transportation (NJDOT): The Division of Planning has been a key stakeholder alongside NJDOT to implement a historic scenic byway in Monmouth County, which resulted in [Upper](#)



[Freehold Historic Farmland Byway Corridor Management Plan \(2010\).](#)

The Division is an active member of the Scenic Byway Committee alongside NJDOT and the two municipalities in the county that the byway is located in (Upper Freehold and Allentown). NJDOT was also a participant on the Steering Advisory Committee for the *Monmouth County Bus Rapid Transit Opportunities Study (2015)*. The Transportation Section also continuously monitors potential NJDOT grant funding opportunities.

New Jersey Transit (NJ TRANSIT): NJ TRANSIT administers the [Job Access Reverse Commute \(JARC\) Program](#), which the Division of Planning manages and uses to fund extended service hours on NJ TRANSIT's Route 836 Bus between Freehold Township and Asbury Park. NJ TRANSIT was also a representative on the Steering Advisory Committee for the *Monmouth County Bus Rapid Transit Opportunities Study*.

North Jersey Transportation Planning Authority (NJTPA): NJTPA administers the Subregional Transportation Planning (STP), which pays for Division of Planning's Transportation Section salaries, and the SSP, which is used to fund the Travel Demand Model. NJTPA is the driving force behind the organization Together North Jersey (TNJ), which funded the *Monmouth County Bus Rapid Transit Opportunities Study*. The Division also gave feedback on TNJ's regional *The Plan*. in 2015 and worked with NJTPA on their efforts to create an Asset Management Data Model. On September 10, 2013, the NJTPA Board of Trustees approved *Plan 2040*, the latest update to the NJTPA's Regional Transportation Plan (RTP) which will guide capital investment decisions for transportation related projects.

Together North Jersey (TNJ): This collaboration of public, private, and nonprofit organizations, and community stakeholders in the NJTPA planning region recently completed a Regional Plan for Sustainable Development (RPSD), *The Plan. 2015*. This plan provides a context for

future discussions about regional investments strategies related to housing, jobs, education, cultural, and recreational opportunities with the intent of increasing accessibility while reducing automobile dependency. Monmouth County participated in the development of the RPSD as both a project partner and as a member of the 35-seat Steering Committee. TNJ representatives met with staff from the Monmouth County Division of Planning, Division of Economic Development, and members of the Transportation Council during the plan's development to better coordinate and align the RPSD with the *Monmouth County Master Plan (2016)*. Monmouth County Division of Planning also participated as a stakeholder in TNJ's Local Demonstration Project, the *Connecting Community Corridors Study (2014)* for the regional transportation corridors (North Jersey Coast Line/ Main Street/ Memorial Drive) shared by Asbury Park, Neptune Township, and Bradley Beach. These initiatives were funded by a \$5 million Sustainable Communities Regional Planning Grant awarded by the HUD.

Municipal Coordination

The county's Division of Planning provides a variety of consultative professional services upon request to our municipal partners. Examples include coordinating various stakeholders in the development of the Upper Freehold Historic Farmland Byway, the Monmouth County CRS Assistance Program, participation on Hazlet Township's PPI (Program for Public Information), as regional committee stakeholders, and preparers of nomination applications on behalf of Freehold Borough, Atlantic Highlands, and Bradley Beach for New Jersey Planning Association's Great Places. Municipalities, along with local sewer and water authorities, are primary stakeholders in wastewater management planning. Perhaps most importantly, municipalities have been the county's primary stakeholders in the Division's regional and corridor planning studies and regional resource inventories. The Division of Planning can also provide assistance to towns undergoing their own master plan reexamination reports, amendments, or updates with GIS support as well as demographic, school enrollment, housing, and



economic data. Towns are welcome to call upon Division of Planning staff to participate on local steering committees as agency partners in planning related matters.

Local Boards of Education: Demographic data and analysis is available to any school board upon request that is seeking insight into their district's emerging population trends. The annual Watershed Ambassador, hosted by the MCPB, provides watershed and water quality programs to any interested Monmouth County school. The ESP Section offers environmental educational opportunities, including a series of three award-winning nonpoint source pollution coloring books with lesson plans for kindergarten to third grade, and Eco-Tips Brochures on a wide variety of topics.

14.4 Community Outreach and Engagement

Community outreach gives all residents and community stakeholders the opportunity to give input in planning, development, and conservation decisions that affect their community. Outreach increases communication between residents, stakeholders, and the elected officials. It can take the form of public hearings, public meetings, visioning sessions, focus groups, open houses, workshops, charrettes, and surveys. The most effective techniques for conducting community outreach include engaging neighborhood groups, special interest groups, and citizen committee in outreach efforts, using innovative technological resources to attract a wider audience (14.3.1), overcoming obstacles to participation (e.g. child care, food, translators, accessibly for all people, and variety of meeting times), and providing public notices in a variety of forms and languages (e.g. hard copies, websites, social media, and press releases).

In addition to holding monthly Monmouth County Planning Board (MCPB) meetings (which are open to the public), the Division of Planning works to bring public awareness of county activities by posting documents and resources on the county website, working the

Monmouth County information table at the annual Monmouth County Fair, submitting press releases to the Department of Public Information and Tourism, and co-hosting outreach events with county partners. For example, in the summer of 2015, Monmouth County partnered with Sustainable Jersey to co-host their first "Green Open House" for the public and other individuals interested in learning what sustainable programs and resources are available within Monmouth County.

Rather than list all our outreach partners, each element of this master plan identifies working partners, community stakeholder groups, and issue-based advocates that are most engaged in that particular topic of discussion.

14.4.1 Monmouth County Master Plan (2016) Outreach

The Division of Planning used public outreach throughout this Master Planning process to provide awareness of the update to the *Master Plan* and to empower citizens to give feedback. Specifically, the Division's outreach contributed directly to the revision of the *Master Plan* Goals, Principles, and Objectives (GPOs), the creation of the *Master Plan* Recommendations, Stakeholder Strategies, and Long Range Challenges (RSCs), and document text. At the beginning of the Master Planning process, the Division of Planning staff created a list of community stakeholders and project partners to invite to the meetings, in addition to inviting the general public. In October 2013, the Division of Planning hosted a "kick-off" open house meeting which included a study overview, the Elements of the plan, background, findings, and a Q&A session. This "kick-off" event introduced the *Master Plan* project to the public and outlined a path to be followed through its conclusion.

Between May 2014 and October 2014, the Division of Planning hosted over 20 "Working Group" meetings to gather public and community stakeholder feedback. The Working Groups were specific to the *Master Plan* Elements and for several Elements, there were a series of meetings. For example, the Arts, Historic, & Cultural (AHC) Resources



Working Group had three meetings; the first meeting met in May 2014 to provide an introduction to the AHC topic, the master planning process, and the initial GPOs. Additionally, there was an open discussion on the SWOT (strengths, weaknesses, opportunities, and threats) for AHC resources. The second Working Group met in June 2014 to review the revised GPOs based on comments from the first meeting, discussed emerging themes, and held small group exercises identifying how AHC Resources relate to the other 11 Primary *Master Plan* Elements. The final Working Group met in September 2014 to further revise the GPOs and provide feedback on the *Master Plan* Recommendations, Stakeholder Strategies, and Long Range Challenges (RSCs) that were developed from their engagement in the process. In 2016, the Working Groups, stakeholders, and municipalities were invited to the Open House of the *Monmouth County Master Plan* to give their final input on the draft plan before the *Plan* goes before the Monmouth County Board of Chosen Freeholders and the Monmouth County Planning Board (MCPB).

(Reserved for adoption) A Public Hearing in accordance with the New Jersey County Planning Act (N.J.S.A. 40:27-1 et seq.) for the *Monmouth County Master Plan* was held on September 19, 2016 during the regularly scheduled monthly meeting of the MCPB. This public hearing provided the public with a final opportunity to comment on the *Master Plan*. Final adoption of the *Plan* by the MCPB took place at their October 17, 2016 meeting. The Division of Planning staff will continue to work on the graphic format of the *Plan* to make it easier for the public to assess and use. See Figure 1.5: Master Plan Process Timeline in Element 1.0 Introduction & Purpose as well as the *Master Plan* Project webpage for additional information on the timeline of the *Plan*.

14.4.2 Outreach Methods Using Technology

The availability of innovative mobile technologies (e.g. laptops, tablets, and smartphones) is strengthening communication between government entities and the public. If government agencies and

Crowdsourcing in Fairfax County, Virginia

Fairfax County, in northeast Virginia, adopted a *Bicycle Master Plan* in 2014 with a long-term vision to add additional bicycle facilities throughout the County. In order to prioritize future bicycle improvement projects, the County reached out to bicyclists to identify which routes are most popular. The County utilized a web-based crowdsourcing tool called [Wikimap](#) to gather public input. Wikimap allows the public to provide geographical data directly on a map that can then be analyzed by the County, along with the option for the public to complete a brief survey on how the bike facilities can be improved. Visit [Fairfax County's Wikimapping](#) project webpage for additional information.

departments utilize mobile technologies to disperse information to the public, there will be a greater awareness of available resources and opportunities for the public to give input. The *Monmouth County Master Plan (2016)* calls for expanding the use of innovative and emerging technologies (e.g. social media, crowdsourcing, and web-based collaboration tools) to improve public outreach efforts and communication, resulting in increased accessibility and stronger community engagement in our planning processes (see *Master Plan* Recommendation 14.4).

Presentation Platforms: Prezi is a free, interactive, web-based presentation program that replaces the typical linear, slide-by-slide presentation. This presentation platform provides flexibility in the directional flow and focus of the presentation by creating a visual link between the text and images. For example, Prezi can zoom to



prominent words within the presentation while zooming further into images, maps, and videos of that prominent word, connecting the text with corresponding media. Every Prezi presentation is available online via a link. The Division of Planning used Prezi during the 2014 *Master Plan* Working Groups presentations and saw an improvement in interest and involvement from participants.

The Smart Board is another interactive presentation platform that allows its user to use touch detection to operate the presentation. The main benefit to a Smart Board is that it can display and share documents with remote participants and is interactive for the audience by allowing participants and presenters to write notes/edits in digital ink and saves the document. The ability to brainstorm and write notes directly on the presentation or document is a strong asset for informal community outreach meetings where ideas are usually free-flowing. The Division of Planning will enhance its presentation capabilities with the pending installation of a Smart Board.

Crowdsourcing: Crowdsourcing is becoming a popular alternative to physical outreach events such as public meetings and open houses. According to the Merriam-Webster Dictionary, crowdsourcing is the practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, especially from the *online* community (2015). Rather than limiting public participation to only those residents that attend meetings, which are often scheduled during the workday, crowdsourcing gives more flexibility to when the public can give their feedback.

Engage Citizen: Engage Citizen is an example of a crowdsourcing tool that serves as a platform for communication between citizens and the government. Engage Citizen's mobile app allows citizens to take pictures of a specific site and share what they "wish" was there, report on problems in their community, start a petition,

access municipal information, post about city improvement projects, and receive local news updates.

Webcasts and Podcasts: In contrast to posting meeting notes or documents online, government agencies can use webcasts and podcasts to expand the reach and impact of information. With a podcast or webcast, the information is verbally communicated to the user via a video (e.g. live streaming) or a sound recording. With the growing number of smartphones, webcasts, and podcasts can be accessed virtually anywhere and can be listened while doing other activities. The online audience can remain as engaged as if they were physically present at the meeting.

Mobile-Friendly Websites and Mobile Applications (Apps): According to Urbanists Brent Toderian and Jillian Glover, as smartphones and mobile applications become increasingly popular, communities are making their municipal services available via a mobile device. In 2012, the City of Surrey in British Columbia reviewed its website data and found that 30% of all website visits came from a mobile device. As a result, the city developed "a mobile-friendly website and several apps to provide information and access to city services such as waste collection schedules, recreation services and locations, and building inspections" increasing citizen awareness and involvement ([10 Lessons in More Engaging Citizen Engagement](#), 2014). In 2016, Jennifer Evans-Cowley posted the top trending apps for planners; one of which can be very useful in community outreach. "Polls Everywhere" is an app that allows users to create a survey that can be answered in real-time using mobile phones, web browsers, and via Twitter. For a complete list of trending apps, visit the Planetizen's article, [The Best Planning Apps for 2016](#) (Evans-Cowley, 2016).

Social Media: Government agencies are finding new ways to leverage social platforms (e.g. Facebook and Twitter) as a low-cost



and effective communication tool. Social media expands the reach of public outreach by allowing residents to communicate in a way that is most convenient for them, channels real-time discussions and data, improves communication between the public and government, and strengthens community trust of its government by becoming more transparent and accessible. The City of Vancouver in British Columbia, Canada, created an online town hall meeting which encouraged the public to use social media to ask the mayor questions during a scheduled timeframe. The government encourages its residents to use Twitter and its hashtag feature to connect residents directly to the mayor to get an instant response ([10 Lessons in More Engaging Citizen Engagement](#), 2014).

Infographics and Graphic-Rich Documents: Infographics and graphic-rich documents combine images, colors, and content that naturally attracts the reader's eye. With dense, wordy government documents, readers often scan rather than read the entire text, especially if the reader does not understand the context. Infographics and graphics communicate the main points of dense datasets or documents to tell a story, in a visual-appealing and easy format. For an example of an infographic graphic, see the Resiliency Word Cloud in Element 12.0 Community Resiliency.

Imbedded Web Links: Links to websites imbedded within online documents allow users to easily connect to other related sources or documents through their browser while reading and reviewing plans allowing for much more flexibility in structure and design. The *Monmouth County Master Plan (2016)* utilizes imbedded web links.

14.5 Emerging Issues and Long Range Challenges

During the Working Groups outreach meetings in the summer of 2014, the Division of Planning asked community stakeholders and the public to identify issues and Long Range Challenges for planning services and outreach as the county moves forward over the next ten years.

- The cost of acquiring new technology and providing adequate training can be viewed by decision makers as unnecessary or cost prohibited.
- Technology is advancing faster than government's ability to incorporate it in the planning process.
- More people are relying on social media for community engagement and their primary source for disseminating information.
- Combating the spread of misinformation is just as important as getting the correct information out to the public.
- Our ability to use ever evolving social media platforms, cloud-based collaboration tools, and online program management applications for public outreach is limited by internal information technology protocols.

14.6 Additional Resources and Funding Opportunities

Federal Resources

- [American Community Survey \(ACS\)](#)
- [American Housing Survey](#)
- [Bureau of Labor Statistics \(BLS\)](#)
- [Census Transportation Planning Products \(CTPP\)](#)
- [County Business Patterns](#)
- [Internal Revenue Service \(IRS\)](#)
- [Job-to-Job Flows](#)
- [NOAA's Stakeholder Participation](#)
- [Non-Employer Statistics](#)
- [OnTheMap](#)
- [U.S. Census Bureau](#)
- [U.S. Economic Census](#)

State Resources

- [NJ Construction Report](#)
- [NJ Department of Treasury, Division of Taxation](#)



- [NJ Geographic Information Network \(NJGIN\)](#)
- [NJ Mobile Apps Directory](#)
- [NJ Social Media Directory](#)
- [NJ State Data Center](#)

County and Local

- [Farmland Assessment Data](#)
- [GIS Data Downloads and Obtaining Maps](#)
- [GIS Resource Page](#)
- [Tax Board](#)

Nonprofits, Research Centers, and Other Stakeholders

- [ESRI \(ArcGIS\)](#)
 - [ArcGIS Story Map](#)
- [GetApp](#)
- [Infographics](#)
- [National Center for Charitable Statistics \(NCCS\)](#)
- [Your Economy](#)

14.7 Master Plan Recommendations and Stakeholder Strategies

Five Master Plan Recommendations and numerous Stakeholder Strategies emerged from meetings and conversations with residents and community stakeholders.

Master Plan Recommendations

Recommendation 14.1: Develop an online geographic information system (GIS) platform that allows for the creation of interactive web-based maps and retrieve publically available data accessed through a user-friendly GIS interface. GIS is a powerful visualization and data analysis tool used in almost every planning report and study. These types of services permit other county departments and the public to use available web mapping applications to view and generate maps and obtain downloadable datasets. This will allow the GIS Section to spend less time creating static maps and more time to focusing on its primary mission to develop GIS resources on a countywide-level.

Recommendation 14.2: Act as a clearinghouse for demographic, school enrollment, housing, and economic data that assists county departments and other government agencies in the development of their own facility and service plans. The Division of Planning accesses and analyzes many of the data sources used by other county departments and government agencies for their planning reports and documents. The Division can collaborate with other county departments and government agencies in helping aggregate and format data for use in their specialized reports and studies. Rather than recreate duplicative work, the Division can provide this data, research, and analysis to our partners as a cost cutting, shared service. Government agencies can save time and money by using data already aggregated by the Division for use in their reports and studies.

Recommendation 14.3: Be an “insight engine” that provides decision makers and the public with meaningful knowledge and understanding about the complex planning issues facing Monmouth County and the resources available to address them. In addition to aggregating and formatting data, the Division of Planning performs data-driven analysis to report trends in Monmouth County, provide valuable insight into relevant planning issues facing the county, as well as answer policy questions about specific industries or topics.

Recommendation 14.4: Expand the use of innovative and emerging technologies (e.g. social media, crowdsourcing, and web-based collaboration tools) to improve public outreach efforts and communication, resulting in increased accessibility and stronger community engagement in our planning process. With innovative technologies becoming more common and accessible through smartphones, tablets, and computers, Monmouth County can capitalize on technology to gather feedback and communicate with residents about upcoming meetings, workshops, ongoing projects, and events.



Recommendation 14.5: Continue to make Monmouth County planning reports, studies, information, and Master Plan materials easily accessible online, in addition to updating reports in a timely manner as new data becomes available. It is important that the public have access to the studies and reports produced by the Division of Planning as many municipalities, other government agencies, citizens, and businesses rely on our publications as primary sources for data and information. Many of these documents are currently updated on an annual basis even though information from various sources is released at different times throughout the year. It has become increasingly important in an age of instantaneous information updates to reduce the lag time between data release and its incorporation into reports and studies. Therefore, the Division will take the initiative to expedite the incorporation of newly released data into documents as it becomes available. Some of these reports will become online “working drafts” until their official adoption by the Monmouth County Planning Board.

Stakeholder Strategies

General

- Visually enhance municipal and county planning reports, studies, and master plans to improve understanding and therefore strengthening community engagement.

Natural Resources

- Continue to provide resource conservation and environmental education resources to schools and community organizations, as requested.
- Encourage local and regional educational facilities to incorporate environmental education throughout all aspects of their curriculum.
- Support the development or retention of municipal Sustainable Jersey Green Teams and similar initiatives that promote a local awareness of environmental issues, conservation, and the need for resource protection.

- Use our environment and natural systems as outdoor classrooms and laboratories for student lessons and public education.

Open Space

- Provide for a variety of open spaces close to work and home to facilitate social networking and civic engagement.
- Encourage the use of public lands and facilities for environmental educational experiences.
- Continue to provide scholastic and recreational educational opportunities in nature, science, technology, art, culture, health, and physical fitness by providing a variety of classes, interpretations, and programs available to all.
- Continue to make county recreational buildings available for community activities.

Farmland Preservation

- Utilize county facilities as a venue to promote preservation outreach and awareness education.
- Encourage the continuation of weekly summer farmers markets, such as the one located outside the Hall of Records in Downtown Freehold, as a community outreach effort for the agricultural community.
- Promote community, municipal, and school gardens in partnership with Rutgers Cooperative Extension (RCE) of Monmouth County.
- Encourage the development of agricultural-related classes in county vocational schools and at Brookdale Community College to ensure that the upcoming generation of local farmers has suitable educational opportunities.
- Promote participation in the annual agricultural stakeholders input meetings.



Arts, Historic, & Cultural Resources

- Incorporate flexible creative spaces for performances, events, exhibits, and public art displays, both indoor and outdoor, when remodeling or designing new facilities.
- Work with art partners such as ArtPride, Monmouth Arts, and the New Jersey State Council on the Arts on securing funding opportunities for local art education initiatives.
- Use local cultural and historic resources as an educational resource.

Utilities

- Encourage the conservation of water resources through education, advanced technologies, and the reuse of captured wastewater.
- Share energy saving lessons learned at the county-level with our municipalities, school districts, businesses, and residents.

Transportation & Mobility

- Work with New Jersey Transportation Authority (NJTPA) and a local municipality on advancing Street Smart NJ Pedestrian Safety campaigns. This public/private venture is in partnership with the Federal Highway Administration, New Jersey Department of Transportation, the New Jersey Division of Highway Safety, and local law enforcement to educate drivers, pedestrians and cyclists on travel safety laws.
- Public outreach on pedestrian/cyclist safety should be done in the prevalent languages and within the cultural context of the community seeking to reduce dangerous traffic conflicts.

Agricultural & Economic Development

- Encourage 4-H Youth Development and Mentoring Programs and Future Farmers of America (FFA) programming in schools and nonprofit organizations to provide local agricultural education in addition to business and life skills.
- Utilize county facilities and Brookdale Community College to provide workforce training.

- Encourage nonprofits, businesses, and local institutions to sponsor educational workshops, internships, and apprenticeships.
- Match vocational training/educational opportunities to current and emerging job markets.
- Encourage institutions to offer programs like those found at the FoodBank of Monmouth and Ocean Counties that use locally grown produce in their culinary courses and that operate their own gardens as a source of much needed fresh food for clients.

Community Development & Housing

- Monmouth County higher education institutions can partner and collaborate with affordable housing, community development, and other nonprofit stakeholder organizations to provide student opportunities for active engagement in community development projects through outreach, volunteerism, internships, and community awareness events.

Community Resiliency

- Locate community facilities outside of Special Flood Hazard Areas (SFHAs).
- Utilize municipal and county websites to publish information to property owners about flood mitigation techniques, flood maps, purchasing flood insurance, and flood risks and safety.
- Coordinate with local nonprofits, such as Clean Ocean Action, to provide public educational opportunities on community sustainability and resiliency.
- Attend public workshops (such as Rebuild by Design) on community sustainability and resiliency.
- Develop a pre-flood plan for public information projects that will be implemented during and after a flood.
- Have libraries maintain an onsite collection of flood insurance brochures and reference information.
- Organize and support [New Jersey Clean Communities](#) activities such as stream clean-ups to help remove debris from floodways.



Sustainable Places

- Encourage sustainable and resilient design for community facilities through replacement of aging and inefficient building systems with energy efficient improvements and the incorporation of new building materials and designs that are economically feasible to reduce energy use and lower greenhouse emissions.
- Design 'green' community shelters and facilities that collect and store energy so that when there are power outages during severe storm events, the facilities can go off the grid and maintain power.





Master Plan Glossary of Terms

A

ACCESSIBILITY: The ability of a person to fully participate as active member of their community without physical, economic, or cultural constraints.

ACE HUBS: Communities that host a robust mix of arts, cultural, and entertainment (ACE) activities.

ACQUACULTURE: The science and practice of farming aquatic organisms in controlled environments for commercial purposes.

ADAPTIVE REUSE: A revitalization tool that seeks to repurpose a site, building, or structure for a reason or use other than its original intent.

ADAPTIVE TRAFFIC CONTROL SYSTEMS: A traffic management strategy whereby traffic signal timing changes and adapts based on actual, real-time traffic demand.

AFFIRMATIVELY FURTHERING FAIR HOUSING (AFFH): U.S. Department of Housing and Urban Development (HUD) requirement for certain grantees to conduct an Assessment of Fair Housing (AFH) planning process. The AFH planning process help communities analyze challenges to fair housing choice and establish their own goals and priorities to address the fair housing barriers in their community.

AGRICULTURAL DEVELOPMENT AREA (ADA): Designated places in the county that encompass productive agricultural lands which tend to be consistent with municipal zoning ordinances and remain fairly free of encroachment from commercial and suburban development.

AGRICULTURAL EASEMENT: The acquisition of building rights to a property in order to restrict development and preserve its agricultural purpose.

AGRICULTURAL MANAGEMENT PRACTICE (AMP): Best managing practices for farm operations necessary for Right to Farm Act protections as recognized by the State Agriculture Development Committee (SADC).

AGRICULTURAL SUSTAINABILITY: The implementation of policies, programs, and resources that expand the presence and viability of the agriculture industry to support of its long-term success.

AGRICULTURE: The science and practice of farming including the cultivation of soil for growing crops and the rearing of animals for food and their byproducts.

AGRICULTURE, SUSTAINABLE: *SEE SUSTAINABLE AGRICULTURE*

AGRI-TOURISM: Agricultural activities that brings visitors to a farm including direct to consumer sales, educational tourism, entertainment, lodging/accommodations, and outdoor recreation.

ALTERNATIVE FUEL VEHICLES: Vehicles that rely upon fuel sources other than traditional petroleum based products such as gasoline or diesel.

ARTS, HISTORIC, & CULTURAL RESOURCES: Distinctive physical and intangible assets, practices, rituals, heritage, places, and/or evidence held in common significance by a population due to their mutual relationship to and association with such resources.

ART, PUBLIC: *SEE PUBLIC ART*

ARTS RESPONDER: An organization that prepares for and responds to the needs of arts community in post disaster situations by providing a variety of services to artists, arts organizations, and arts-related businesses including information gathering and dissemination, networking, financial assistance, and advocacy.

B

BAYSHORE: A region in northern Monmouth County typically viewed as the municipalities and places located in close proximity to the Raritan Bay.

BEST MANAGEMENT PRACTICES (BMPs): Generally sought and agreed upon preferred methods and/or techniques used to achieve a desired result while preventing or minimizing potential environmental and health impacts.



BOARD OF PUBLIC UTILITIES: A New Jersey state agency with authority to oversee regulated utilities that provide critical services such as natural gas, electricity, water, telecommunications, and cable television.

BROWNFIELD: "Any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant." (N.J.S.A. 58:10B-23.d). Generally, brownfields are properties that are abandoned or underutilized because of either real or perceived contamination.

BUS RAPID TRANSIT (BRT): A bus-based system that provides efficient, high quality transit service through the dedication of roadway lanes, street modifications, facilities, and accommodations that expedite the ability to accommodate passengers.

C

CLEARINGHOUSE: A central organization that acquires, maintains, organizes, creates, and disseminates specialized data and information for use by others.

COASTAL MONMOUTH: The region in Monmouth County comprised of municipalities and places which are located along or in close proximity to the Atlantic Ocean coastline; generally considered by many to be the towns east of the Garden State Parkway and south of the Navesink River.

COMMUNITY DEVELOPMENT: A collective and collaborative process to empower individuals and organizations by offering them the skills and support they need to help overcome inequitable social, economic, cultural, political, and/or environmental disadvantages they face in their community.

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG): The U.S. Department of Housing and Urban Development (HUD) program that provides annual grants to eligible communities to assist with affordable housing and job creation through the retention and expansion of business opportunities.

COMMUNITY LANDSCAPES: A general description of the physical characteristics of places people may experience as they travel through the county; intended to be used as a planning tool to assist residents, stakeholders,

and decisions makers in visualizing existing conditions and desired planning outcomes.

COMMUNITY OUTREACH AND ENGAGEMENT: Actions and efforts undertaken by an organization/agency to effectively identify, contact, involve, and garner input and feedback from the public and a broad spectrum of community stakeholders in the planning process.

COMMUNITY RATING SYSTEM (CRS): A voluntary incentive program offered to communities through the National Flood Insurance Program (NFIP) that recognizes and encourages floodplain management activities which exceed the minimum NFIP requirements which may result in discounts for flood insurance policy holders.

COMMUNITY STAKEHOLDER: Any individual or organization that has an inherent interest in the policy decisions and actions that may affect them or their community.

COMPLETE STREETS: Streets designed, operated, and maintained to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY (CEDs): Funded by the U.S. Economic Development Administration (USEDA), the *CEDs* is a locally-based, regionally-driven economic planning initiative that strategically analyzes the economic opportunities and strengths of a given community.

CONSERVATION: A strategy that employs methods and approaches to manage the protection or restoration of natural resources, ecosystems, or habitat for its proper and intended use.

CONNECTIVITY: The capacity or state of being connected. In transportation, the term often refers to intermodal connections while in design and land use, the term may refer to the connection between uses, buildings, structures, services, and facilities.



CREATIVE INDUSTRIES: Industries that have occupations with some basis in creativity, typically those in which the final product requires the application of creativity or industries in which the final product is cultural in form.

CREATIVE PLACEMAKING: A comprehensive approach to planning that leverages the use of arts, indigenous cultures, artists, and creative people to attract interest and investment into a place with the intent of generating more equitable economic, social, and cultural outcomes.

CROWDSOURCING: The practice of obtaining needed services, ideas, data, or content by soliciting contributions from a large group of people, especially through online sources and social media.

CULTURAL ARTS PLAN: A set of visions, goals, objectives, actions, and policy recommendations centered on the protection and advancement of arts, artists, and cultural resources and the integration of the community's creative capital into larger planning outcomes.

D

DEMAND MANAGEMENT STRATEGY: A number of approaches that seek to manage congestion during peak demand periods to ensure that the transportation system is operating at or near peak efficiency.

E

EASEMENT: An acquired legal right to use another person's property for a specific purpose.

EASEMENT, AGRICULTURAL: *SEE AGRICULTURAL EASEMENT*

ECONOMIC DEVELOPMENT: Programmed and coordinated efforts that seek to improve a community's economic prospects and long-term sustainability.

ECONOMIC DEVELOPMENT FOCUSED ELEMENTS: *Master Plan* Elements that place emphasis on issues pertaining to economic development.

ECOSYSTEM: A biological community of interacting organisms and their physical surroundings within a given area.

ECO-TOURISM: Tourism that is ecology or environmentally-based.

ENDANGERED SPECIES: Any species whose prospects for survival are in immediate danger because of a loss or change in habitat, over-exploitation, predation, competition, disease, disturbance, or contamination.

EMERGENCY SOLUTIONS GRANT (ESG): U.S. Department of Housing and Urban Development (HUD) funded program intended to assist individuals and families in quickly regaining stability in permanent housing after experiencing a housing crisis or homelessness.

ENVIRONMENTAL JUSTICE: A community principle that seeks fair involvement of all people and populations in the development, implementation, and enforcement of environmental laws, regulations, and policies so that everyone may expect and is given the same level of protection from environmental hazards.

F

FAIR HOUSING ACT of 1968: Title VIII of the Civil Rights Act of 1968 (Fair Housing Act) prohibits discrimination in the sale, rental, and financing of dwellings based on race, color, religion, sex or national origin. It was amended in 1988 (effective March 12, 1989) to prohibit discrimination based on disability or on familial status (presence of child under age of 18 and pregnant women).

FAIR RETURN ON INVESTMENT: Monetizes the long-term environmental value and benefits derived from a potential infrastructure investment as part of a project's cost/benefit.

FARM: Land together with agricultural or horticultural buildings, structures, and facilities necessary for producing agricultural or horticultural products.

FARMLAND PRESERVATION: The acquisition of a farm or development easements that restricts development and permanently preserves agricultural uses on a property.

FARM TO TABLE: Locally grown foods and products served at restaurants and institutions that have been purchased from a local farmer or producer.



FLOOD INSURANCE: Offered through the National Flood Insurance Program (NFIP), policy holders including homeowners, renters, condo owners/renters, and commercial owners/renters may be covered for buildings and contents destroyed by a flood event.

FLOOD INSURANCE RATE MAP (FIRM): Based on the Flood Insurance Study (FIS), it is the official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the special hazard areas and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY (FIS): A compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community.

FLOODPROOFING, DRY: Floodproofing designed to prevent water from entering a building or structure.

FLOODPROOFING, WET: Floodproofing designed to allow water to flow in and out of a structure as a means to minimize structural damage.

FOOD DESERT: A location where affordably nutritious or healthy food choice is highly inaccessible.

FORM-BASED CODE: A land use technique that relies less on prohibitive, prescriptive written regulations and more on visual descriptions and land use outcomes derived from specific urban forms.

G

GEOGRAPHIC INFORMATION SYSTEM (GIS): Computer software used to capture, store, analyze, manage, and display spatial or geographic data.

GOALS, PRINCIPLES, and OBJECTIVES (GPOs): Three fundamental components of the *Master Plan* used to formulate implementable recommendations necessary to achieve the community's vision as expressed in the Vision Statement:

GOALS articulate the *Plan's* intended through broad based outcomes;

PRINCIPLES represent the community values that drive the need for taking action towards reaching a goal;

OBJECTIVES are incremental, results oriented actions and strategies that advance a particular goal.

GREEN DESIGN/CONSTRUCTION: The use of design and construction methods intended to minimize or eliminate harmful environmental impacts.

GREEN INFRASTRUCTURE: An array of practices and techniques that rely more on the natural carrying capacity of systems to manage and treat stormwater runoff beginning at its source through its release back into the environment for beneficial purposes.

GREEN TEAM HUB: Facilitated by the Division of Planning, the "Hub" is a consortium of Sustainable Jersey Certified Municipal Green Teams in Monmouth County that meets regularly to discuss programming sustainable actions in a broader, countywide context.

GROUNDWATER (WATER) RECHARGE AREAS: Locations where water infiltrating the surface into groundwater provides for aquifer recharge.

GROW MONMOUTH INITIATIVE: A long-term, community-wide suite of programs managed through the Division of Economic Development that promotes the economic health of Monmouth County.

GROWN IN MONMOUTH: A Grow Monmouth program focused on implementing agricultural sustainability measures as an important component of the county's economic development strategy.

H

HAZARD MITIGATION: Planning for and taking actions that reduce the long-term risk to health, safety, property, and infrastructure posed by hazards.

HEALTHY COMMUNITY: A Whole Community approach that seeks to improve the health, safety, and well-being of inhabitants through design, programs, services, and education.



HIGH WATER MARK INITIATIVE/SIGNS: NFIP's initiative to increase community awareness about flood risk and encourage action to mitigate such risk through the use of signs indicating the highest elevation of water at a particular location caused by a major flood event.

HISTORIC DISTRICT: One or more historic sites and intervening or surrounding property significantly affecting or affected by the quality and character of the historic site or sites (N.J.S.A. 40:55D-4).

HISTORIC SITE: Any real property, manmade structure, natural object or configuration or any portion or group of the foregoing of historical, archeological, cultural, scenic, or architectural significance (N.J.S.A. 40:55D-4).

HISTORIC SITES INVENTORY (HSI): A listing, register, catalog, or survey of buildings, structures, and sites of historic, cultural, or architectural significance.

HOME INVESTMENT PARTNERSHIPS PROGRAM (HOME): Established by Congress in 1990, HOME is a federal block grant program specifically designated to support affordable housing programs.

HOME RULE: Refers to authority conveyed to municipalities by the state through the New Jersey State Constitution and the Home Rule act of 1917 N.J.S.A. 40:42 et. seq.

HOUSING, AFFORDABILITY: The ability of a typical household to earn enough income to either purchase or rent a home in a given location, as measured by the Housing Affordability Index.

HOUSING, AFFORDABLE: A general term commonly used in New Jersey to describe housing that is often associated with government mandated or incentivized housing programs intended for low- and moderate-income households. However, the term may also be used colloquially to describe affordability among market rate housing.

HUC (Hydrological Unit Code): Each hydrologic unit (watershed and/or subwatershed) is identified by a unique hydrologic unit code (HUC) consisting of two to eight digits based on the four levels of classification in the hydrologic

unit system ranging from the largest geographic area (regions) to the smallest geographic area (cataloging units).

L

INCOME, EXTREMELY LOW: A persons having an income at or below 30% of the area medium income (HUD).

INCOME, LOW: A persons having an income at or below 80% of the area medium income (HUD).

INCOME, MODERATE: A persons having a cash- income of 140% of the area medium income (HUD).

INCOME, VERY LOW: A persons having an income at or below 50% of the area medium income (HUD).

INDICATOR: A relevant, observable, and quantifiable characteristic that can be used to show change or progress toward achieving a predetermined outcome.

INDIGINOUS SPECIES: Species that are native to a given location.

INFOGRAPHIC: A graphic-rich display of images, colors, and content in a visual-appealing and easy to decipher format that is intended to tell an often complex story through imagery rather than text.

INFRASTRUCTURE: A broad term that describes a vast network of engineered and constructed (hard) systems which the public is dependent upon for health, safety, and economic prosperity such as water treatment and distribution, sanitary sewer conveyance, treatment and discharge, storm sewers, utilities, roadway, bridges, canals, and rail lines. The term "soft" infrastructure typically implies public services such as schools, hospitals, libraries, and emergency services.

INFRASTRUCTURE, GREEN: *SEE GREEN INFRASTRUCTURE*

INSIGHT REPORT: Any number of annual reports and white papers produced by the Division of Planning that provide decision makers and the public with



meaningful knowledge and understanding about the complex planning issues facing Monmouth County.

INTEGRATED PEST MANAGEMENT: An ecosystem-based strategy for pest control which focuses on long-term prevention through a combination of techniques such as biological control, habitat manipulation, and the modification of cultural practices rather than strictly pesticide applications.

INVASIVE SPECIES: An introduced (non-native) plants or animal species whose proliferation may damage or threaten indigenous species populations as well as the entire ecosystem.

INVESTMENT AREA, LIMITED GROWTH (LGIA): Areas located outside of existing or programmed sewer service areas intended for low-density residential uses, compatible rural patterns, and supportive commercial uses.

INVESTMENT AREA, PRIORITY GROWTH (PGIA): Areas with either existing or planned infrastructure that lend to development and redevelopment opportunities.

INVESTMENT AREA, PRIORITY GROWTH WATER SUPPLY WATERSHED (PG-WSWA): Locations within a Priority Growth Investment Area (PGIA) that contain a natural resource value pertaining to water quality and supply.

INVESTMENT AREA/SITE, PRIORITY GROWTH-REINVESTMENT (PG-RAS): Areas or sites located within the PGIA where more intensive or significant development, redevelopment, revitalization, and hazard mitigation investments are highly encouraged.

INVESTMENT AREA/SITE, PRIORITY PRESERVATION (PPIAS): An area or site where an investment in land preservation, agricultural development and retention, historic preservation, or environmental protection and stewardship is preferred and encouraged.

L

LAND USE REGULATIONS: A general term used to describe a series of document and permits that regulate land uses in a given jurisdiction typically

accomplished in New Jersey through a zoning ordinance, subdivision/site plan regulations, design guidelines, building codes, and environmental rules.

LIVING SHORELINES: Hazard mitigation and environmental restoration technique that uses a combination of natural (e.g. plants, sand, and rocks) and structural materials to provide shoreline protection, maintain valuable habitat, prevent erosion, and protect the built environment against storms.

LONG RANGE CHALLENGES: Continual or ongoing challenges that need to be considered now and beyond the *Master Plan's* 10-year lifecycle.

M

MASTER PLAN DOCUMENTS, CONSULTATIVE AND SUPPORTIVE: Though not an official component of the *Master Plan*, these documents (e.g. maps, plans, reports, inventories, studies, etc.) provide important information and resources that support specific *Master Plan* Elements.

MASTER PLAN DOCUMENTS, REFERENCE: Standalone policy documents produced by the Division of Planning, other Monmouth County Departments, or closely related stakeholder agencies that support the *Master Plan's* GPOs and as such are officially incorporated into the *Master Plan* by reference.

MASTER PLAN RECOMMENDATIONS: Formal recommendations representing action steps intended to guide the Division of Planning work program during the *Master Plan's* 10-year lifecycle in order to achieve the purpose and intent of the *Plan's* Goals, Principles, and Objectives (GPOs).

MOBILITY: The ability to move around freely and easily without obstructions or barriers.

MOCO ARTS CORRIDOR: A regional Creative Placemaking effort coordinated by the MoCo Arts Partnership to brand 41 towns in Monmouth County (MoCo) proximate to and connected through the NJ TRANSIT's North Jersey Coast Line as a regional arts and cultural destination of choice.

MOCO ARTS PARTNERSHIP: A consortium of Monmouth County (MoCo) government agencies, civic groups, artists, businesses, educational institutions,



tourism, and transportation organizations committed to building a more sustainable and resilient community through the creation of the MoCo Arts Corridor and by leveraging the economic power the arts to benefit the entire community.

MONMOUTH COUNTY GENERAL DEVELOPMENT PLAN (1969): Monmouth County's first comprehensive Master Plan.

MONMOUTH COUNTY GROWTH MANAGEMENT GUIDE (1982): Monmouth County's second comprehensive Master Plan and subsequent adopted elements which reinforced the concept of growth and preservation areas.

MONMOUTH COUNTY MASTER PLAN (2016): Principal guiding document regarding land use coordination in the county and concurrence on planning outcomes with the county's municipal partners and community stakeholders.

MONMOUTH COUNTY STRATEGIC PLAN (2009): Adopted by the Board of Chosen Freeholders and approved by County Administration, this plan provides a set of recommendations for action that will assist the county government in moving into the future with a clear sense of vision and purpose, a measurable set of strategic objectives, and a method of sustaining positive change.

MULTI-MODAL: A transportation network that encourages broader mobility and connectivity by providing system users with multiple transportation options.

N

NATIONAL FLOOD INSURANCE PROGRAM (NFIP): Federal insurance program created by Congress in 1968 that provides flood insurance to property owners, encourages communities to adopt and enforce floodplain management regulations, and supports the mitigation of flood hazards.

NATIONAL HERITAGE AREA: A region recognized by the U.S. Congress for its unique qualities where a combination of natural, cultural, historic, and recreational resources have shaped a cohesive, nationally distinctive landscape (Alliance of National Heritage Areas).

NATURAL RESOURCES: Environmentally-based infrastructure and life-supporting systems relating to air, water, and land that all species rely upon and the built environment is dependent upon to function and prosper.

NATURAL RESOURCES INVENTORY: Generally, a report that includes listing, register, catalog, or survey along with detailed descriptions of an area's significant environmental features.

NONPROFIT ORGANIZATION: An organization recognized as tax exempt under the federal tax code and operated as a charitable organization for purposes that are beneficial to the public interest.

O

OPEN SPACE, PRESERVED: Land preserved and held in the public trust through a variety of acquisition techniques at multiple jurisdictional levels intended for preservation, conservation, education, or recreation.

P

PANHANDLE: Refers to the four western most municipalities in Monmouth County including Allentown Borough, Millstone Township, Roosevelt Borough, and Upper Freehold Township.

PARATRANSIT: Supportive and supplemental transit services for people that require special accommodations.

PLAN COORDINATION, HORIZONTAL: The coordination and integration of plans among Monmouth County departments and agencies.

PLAN COORDINATION, VERTICAL: The coordination and implementation of plans with community stakeholders, other levels of government, and regional planning agencies.

PLAN ELEMENT: A fundamental *Master Plan* component that explores, evaluates, and discusses a specific topical area of interest within the context of the Goals, Principles, and Objectives (GPOs).

PRESERVATION: In environmental terms, it is a strategy that leaves land, the environment, and natural resources untouched in their pristine form. For



historic preservation, the term is applied more broadly as the intent to preserve, conserve, and protect buildings, objects, landscapes or other artifacts of historical significance.

PRESERVATION FOCUED ELEMENT: *Master Plan* Elements that place emphasis on the preservation of resources.

PRIME SOILS: These nutrient rich soils sustain high yields of crops, are not excessively erodible or saturated with water for a long period of time, and either do not flood frequently or are protected from flooding.

PROPERTY CLASSIFICATION: Coding system with prescribed categories used by municipal tax assessors to categorize a property's use for assessment purposes.

PUBLIC ART: Generally a fixed art installation placed in a public accessible location intended for the viewing, use, and enjoyment of everyone.

R

RECOMMENDATIONS, MASTER PLAN: *SEE MASTER PLAN RECOMMENDATIONS.*

REDEVELOPMENT: The use of infill or new construction on a vacant, abandoned, or underutilized property.

REGISTER OF HISTORIC PLACES: NJ and/or National Registers of historic properties and districts that meet the criteria for significance in American history, archaeology, architecture, engineering or culture, and possess integrity of location, design, setting, materials, workmanship, feeling, and association.

REHABILITATION: Strategy which emphasizes the retention, repair, and/or refurbishment of building or neighborhoods, permitting for the replacement of materials and fixtures because of a property's decayed or deteriorated condition.

RENEWABLE/CLEAN ENERGY: Sources of energy that are collected from naturally replenished resources such as sunlight, wind, wave, geothermal, tides, etc. that create little or no disturbance, pollution, or harmful emissions.

RESILIENCY: The ability to recover to a preexisting condition after experiencing a debilitating and/or disruptive event.

RESILIENT DESIGN/CONSTRUCTION: The use of design and construction methods intended to improve occupant safety and minimize building damage caused by anticipated and reoccurring natural hazards.

RESTORATION: Strategy that focuses on the retention and refurbishment of materials from the most significant time in a property's history, while permitting the removal of materials from less significant eras.

REVITALIZATION: The restoration of the physical and social components of a distressed place.

RIDESOURCING SERVICES: Online service providers that use smart phone apps, global positioning systems, and social networks to offer customers on demand transportation.

RIGHT TO FARM: Protections available to responsible commercial farms from nuisance complaints and unreasonably restrictive municipal ordinances that hinder the ability to continue agricultural production.

S

SCENIC BYWAY: A road officially recognized by the New Jersey Department of Transportation (NJDOT) for possessing one or more of six *intrinsic qualities*: archeological, cultural, historic, natural, recreational, and scenic.

SCENIC ROADWAY: A road or segment of roadway identified in *The Monmouth County Scenic Roadway Plan* that possesses a high degree of visual quality for the roadway traveler.

SEA LEVEL RISE: The incremental increase in sea level caused by thermal expansion of water bodies, the melting of glaciers and polar ice caps, and loss of ice from continental ice sheets that contributes greatly to the increased long-term vulnerability of coastal communities to storm surge events.



SPECIAL FLOOD HAZARD AREA (SFHA): Areas identified on the Flood Insurance Rate Map (FIRM) where National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and where the mandatory purchase of flood insurance applies.

STAKEHOLDER STRATEGY: A list of suggestions, recommendations, and ideas organized by *Master Plan* Element intended for consideration by the county's municipal partners and community stakeholders when developing their own plans, programming, and outreach efforts.

STORMWATER MANAGEMENT: The planning and construction of systems by which runoff is conveyed and discharged safely and responsibly.

SUSTAINABILITY: The balance sought between the conservation and consumption of resources that reserve their inherent value and/or generative ability for a perpetual use or purpose.

SUSTAINABILITY, AGRICULTURAL: *SEE AGRICULTURAL SUSTAINABILITY*

SUSTAINABILITY, PRIMARY TENETS: The triple bottom line for sustainability is an integrated approach of people (society), profit (economy), and planet (environment).

SUSTAINABLE AGRICULTURE: Methods and practices in farming that use and rely upon natural systems and the carrying capacity of the environment for production.

SUSTAINABLE PLACES: Places such as a building, site, structure, neighborhood, or an entire community where people implement methods and engage in practices that result in sustainability.

I

TAX ASSESSMENT: An estimate of a property's value, as determined by a tax assessor, used to determine an appropriate tax rate to support the community's annual budget.

TRANSIT-ORIENTED DEVELOPMENT: A mixed-use residential and commercial development or redevelopment approach providing access to a nearby transit facility and usually includes amenities to encourage ridership.

THREATENED SPECIES: Any species that may become endangered if conditions surrounding them begin to or continue to deteriorate

U

UTILITY, PUBLIC: Business enterprises, public-service corporations, or quasi-governmental authorities that provide a government regulated essential community service including regional sewage collection, treatment and discharge; the collection, storage, treatment and distribution of potable water on a regional scale; provision of telecommunications and/or paid television service; and the development, transmission and distribution of energy resources, such as electricity and natural gas.

V

VIEWSHEDS and VISTAS: The visual perspective experienced from a particular vantage point that conveys exceptional or distinct beauty, interest, or frames the historic context of a place to the observer

VISION STATEMENT: An aspirational statement describing the intended community driven results sought through the *Master Plan* and the inspiration for the Goal, Principles, and Objectives (GPOs).

W

WASTEWATER MANAGEMENT PLANS (WMP): A written and graphic description of existing and future wastewater-related jurisdictions, wastewater service areas, and selected environmental features and treatment works

WATER QUALITY MANAGEMENT (WQM) PLANS: Plans prepared pursuant to Sections 208 and 303 of the Clean Water Act, 33 U.S.C. §§ 1251 et seq., and the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., including the statewide, areawide, and county WQM Plans intended to promote efficient and comprehensive programs for controlling water pollution from point and nonpoint sources for a defined geographic area.



WATERSHED: A geographic area where all rainwater and streams drain to a common outflow.

WESTERN MONMOUTH: An area of Monmouth County located along the Route 9 corridor comprised of towns that share a mutual affiliation with the Freehold Regional High School District.

WHITE PAPER: An authoritative research paper that provide valuable information and insight into a particular topic or issue.

WHOLE COMMUNITY FOCUSED ELEMENTS: This suite of *Master Plan* Elements that take the results sought through the Preservation and Economic Development Focused Elements and applies them to a broader context, one that seeks to achieve safer, stronger, more secure, healthier, and publically engaged communities.

Z

ZONING, EUCLIDIAN: Traditional land use technique that is typified by its emphasis on the separation of land uses and the physical nuisances associated with them.

