

8.0 Transportation & Mobility

Master Plan Recommendations Updates

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*. **(No significant action since 2016)**

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. **(Continuous)** NJTPA has awarded Monmouth County with a Subregional Support Program Grant for FY 2018 – 2019 for the evaluation of the effect freight movement is having on other modes of transportation in Allentown and the surrounding municipalities of Upper Freehold and Robbinsville. The contract has been awarded and a kickoff meeting was held on June 12, 2018 with the consultants.

Recommendation 8.3: Finalize, disseminate, and maintain the *Monmouth County Transit Map* and create a *Monmouth County Multi-Modal Transportation Guide*. **(Nearing Completion)** Updated bus routes have been obtained and updated information on ticketing and service times has been collected. The tables included in the map are in the process of being updated. The map text is being updated to include new transit features and abilities such as ticketing and scheduling applications for cellular devices as well as improved instructions on how to access and utilize transit. All map layers have been acquired for the

updated bus and rail service and are in the process of being organized into a map.

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. **(Initiated)** The *Monmouth County Bus Rapid Transit Opportunities Study* should be modified to reflect staff's intent to assist NJTPA's efforts for adaptive signal control and bus lane extension along State Route 9 in Monmouth County. This conversation should be referenced in both the BRT section (8.2.1) and the Intelligent Transportation Systems (ITS) section, with direct references to Route 9 transit signal priority (TSP) and bus on shoulder lanes (BOS).

Recommendation 8.5: Proceed with efforts to develop a *Travel Demand Model (MCTDM)* to assist the County and the NJTPA in coordinating regional and subregional transportation planning studies and projects. **(Completed)** The *MCTDM* has been completed.

Recommendation 8.6: Review and amend the *Monmouth County Transportation Council's (MCTC) purpose and mission to align its programming with the GPOs of the Monmouth County Master Plan*. **(Initiated)** The MCTC has been reinvigorated since adoption of the new *Master Plan*. The Council been the recipient of a variety of presentations on topics important to the County, and have contacted outside entities to discuss their issues and ideas. Additionally, Planning Board staff has brought the Council into their projects for feedback on projects including updates to the *County Bike Map* and *Transit Map*.

The MCTC has also modernized its relationship with the public. In a world of instant communications the liaison program had become obsolete. The MCTC changed their outreach model to include an outgoing messaging channel that includes a quarterly online newsletter and the electronic distribution of agendas and notices, and an incoming

channel in the form of the transportation@co.monmouth.nj.us email address, monitored by the staff advisors.

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. (Initiated) Staff has evaluated existing transit resources and transportation information sites and decided on a plan and format for the County’s online transportation resource page. The updated *Monmouth County Transit Map* will be the basis for the page which will include helpful tips and locations of infrastructure, ticketing, and scheduling for all modes of transportation. Staff has created a web application to assist with the collection of bicycle infrastructure throughout the County which is to be included in the transportation resource webpage.

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. (Continuous) The Transportation Section has coordinated with the Engineering Department on bicycle and pedestrian issues, and the application for and implementation of the *Freight Related Transportation in Western Monmouth and Southern Mercer Counties Study*. Additionally, regular meetings have begun between the two groups.

8.2 Existing Conditions

- **Ferry Service** | Section 8.2.2, Transportation Network, is amended to include seasonal ferry service to Sandy Hook by Sea Streak between Memorial Day and Labor Day weekends (see Figure 8.6 below).
- **Monmouth County Bicycle Map** | Update the *Monmouth County Bicycle Map* to include all currently installed bicycle infrastructure

being collected using a collector application, and updated level of stress analysis. Criteria for determining a level of stress includes, but is not limited to lane widths, traffic counts, speed limits, and the presence of bike facilities.

- **Virtual Heritage & Cultural Byways** | The 2016 *Monmouth County Master Plan* recommends providing a County-based network of interconnected historic, cultural, and arts assets modeled similarly to State and Federal scenic byway programs. Three (3) proposed byways have been converted into virtual, online tours and posted on the Planning Board webpage. Over the next year or so, the Division of Planning will continue work on four (4) additional tours approved by the Planning Board. (see Chapter 6.0, Recommendation 6.1)

8.3 Emerging Issues & Long Range Challenges

- **NEW! Wildlife Permeability Strategies (WPS)** | More transportation departments are incorporating appropriate Wildlife Permeability Strategies into their overall infrastructure design. Beyond reducing potentially dangerous and harmful conflicts between humans and animals, applying WPS principles also counters the effects of habitat fragmentation caused by human disturbance and development; providing contiguous wildlife habitat corridors that allow for safe, uninterrupted wildlife movement and migration. (Also see Section 8.4, Assunpink WMA Wildlife Passage System)

The following are some of the elements and considerations that comprise a generalized Wildlife Permeability or Passage Strategy:

- Permeable and native landscaping
- Wildlife overpasses
- Wildlife bridges
- Viaducts
- Expanded bridges
- Oversize stream culverts
- Upland culverts

- Dry drainage culverts
- Fencing
- Angled curb facing
- Travel distance
- Light type and intensity

A practical strategy for mitigating highway impacts on wildlife should include:

- Incorporate WPS into guidance documents
- Use of landscape-based analyses to identify “permeability zones” where a variety of mitigation efforts should be concentrated to maintain ecosystem processes
- Development of species specific strategies
- Restrict the use of highway fencing and Jersey barriers when not used in association with wildlife passage structures
- Use of small amphibian and reptile passages wherever roadways pass along the boundary between wetlands and uplands or between wetlands
- Use of oversized culverts and expanded bridges at stream crossings
- Selective use of viaducts instead of bridges at important stream or river crossings
- Selective use of wildlife overpasses and large wildlife bridges within “permeability zones,”
- Monitoring and maintenance plans to ensure that mitigation systems continue to function over time and that knowledge gained from these projects can be used to further refine our mitigation techniques.

Source: Jackson, S.D. and C.R. Griffin, 2000

■ **Emerging Technologies**

- Implementation of automatic tolling (license plate readers) replacing traditional cash and exact change tolls lanes on highways such as the Garden State Parkway.
- Parking Phone Applications that assist drivers by allowing them to reserve parking spots in advance, find presently available parking, and pay for spots in lots, on street, and in garages.
- Vehicle Sharing Services –Car Sharing (electric and conventional, including peer-to-peer), scooters, bikes, etc...
- Monmouth County is experiencing an aging population which will require more assistance with transportation. One way the needs of seniors can be met is through the use of ride-hailing services. EZ Ride, the Transportation Management Association (TMA) for Monmouth County, has a program to connect non-smartphone users with rides from ride hailing services, increasing their access to on-demand transportation. Mobile applications, and services that connect non-smartphone users with app-linked services can bridge a significant gap for many transportation disadvantaged people.

■ **Intelligent Transportation Systems Application for Traffic Signals |**

Include ITS applications for transit and the management of automobile traffic. A reference should be made to the potential for TSP to be enabled on Route 9 along with BOS lanes. These are key elements of a bus rapid transit system, and supported by the *Monmouth County Bus Rapid Transit Opportunities Study*.

■ **Transit Oriented Development |**

Freehold Emerging Centers project, an effort of NJTPA’s to undertake a transit village initiative, is nearing completion.

■ **The Monmouth County Arts Corridor (MoCo) |**

Refer to Jersey Coast Arts Line Concept in Chapter 6.0 Arts, Historic, & Cultural Resources.

- **NEW! Mixed Rail Service** | With the completion of the *Monmouth County Travel Demand Model (MCTDM)*, the transportation section is able to provide study teams with information, or the model itself, to analyze issues. For example, the *MCTDM* will be referenced in the development of recommendations for the *Comprehensive Freight Related Transportation Study in Western Monmouth and Southern Mercer Counties*. Additionally, the results of the model are clear: congestion in the County worsens over time. With little opportunity to expand or build new facilities efforts must be made to better utilize existing assets and infrastructure. Implementing TDM strategies in the County can mitigate congestion by reducing the amount of travel undertaken, especially in single occupancy vehicles. Enabling people to change their mode of travel from single occupancy vehicles to car and vanpooling, cycling and walking, and transit is how TDM measures are able to make a difference on our roadways. The installation of bike lanes, BRT features, and improved intra-county rail services combined with transit-oriented development (TOD) have the potential to significantly reduce travel demand.

One interesting concept that may be useful in Monmouth County is the combination of Light Rail with Commuter Rail services on the North Jersey Coast Line (NJCL). While higher density redevelopment at the shore has been booming in places like Long Branch and Asbury Park, overall ridership on the commuter line has declined in recent years. Currently, commuter rail vehicles traverse the rail line with large gaps between trains operating south of Long Branch. For example, someone wishing to travel from Asbury Park to points north on a weekday evening would have to schedule around a gap in service as long as 2 hours and 23 minutes. North of Long Branch on the electrified portion of the line, there is still almost an hour between trains. A concept called Expanded Light Rail (XLR) was written about in the New Jersey Institute of Technology white paper, *Shared Service: Mixing Commuter and Light Rail in New*

Jersey, that discusses the potential for supplementing the long distance commuter rail with smaller light rail vehicles, able to operate less expensively and more often to connect towns along the NJCL without adding travelers to the roadway. With so much happening year round in the communities along the rail line both on the weekends and during off-peak hours, it may be time to consider a XLR type concept that provides better inter-municipal mobility, accommodates peak tourism demands, and supports economic development along portions of the coastline.

8.4 Stakeholder Actions and Efforts

- **Transportation Demand Model (TDM)** | Update “Previous studies” section found on page 8-29 to include the *Monmouth County Transportation Demand Model* (See Recommendation 8.5)
- **NEW! Moving Mindfully: Monmouth-Mercer Freight Study** | Monmouth County was awarded a SSP Grant from NJTPA for state fiscal years 2018 and 2019 in the amount of \$310,000. The program is a reimbursement program, and the County will received 80 percent of the project cost, including consultant and staff time, up to \$248,000. The purpose of the study is to better understand freight related travel needs in the Upper Freehold Township, Allentown, and Robbinsville area. The study seeks to provide a comprehensive approach to truck routing and other strategies to meet freight related travel needs in ways that are compatible with other travelers’ needs in this area. A consultant selection committee with representatives from Monmouth County, NJDOT, and NJTPA has selected WSP as the prime consultant for this study.
- **EZ Ride** | Monmouth County’s TMA, Meadowlink, has changed their name to EZ Ride. This should be reflected in the text of section 8.4.2 Partnership Efforts under “Meadowlink Transportation Management Association (TMA)” and should replace instances of “Meadowlink” in future editions of the *Monmouth County Master Plan*.

- ***NEW!* Assunpink Wildlife Management Area (WMA) Wildlife Passage System** | The Division of Fish and Wildlife is constructing a wildlife passage system at the Assunpink WMA, located in Upper Freehold Township. The passage system consists of two (2) under-road tunnels and fencing that will guide animals to the tunnels and prevent them from entering the roadway. The goal of the project is to reconnect fragmented patches of wetland habitat and provide a safe passageway for animals to move between the wetland areas.

Roads pose a number of threats to wildlife and their habitats. They can physically separate important patches of land and expose animals to vehicles while trying to cross a road, which can result in injury or death. This project was identified as a priority and guided by a larger, statewide effort called [Connecting Habitat Across New Jersey](#) (CHANJ). (Source: NJ Division of Fish and Wildlife)

***NEW!* Stakeholder Strategies**

- Encourage municipalities to change development requirements to allow for parking maximums rather than parking minimums as well as shared parking lots to mitigate the impacts of increasing amount of impervious surfaces.
- Encourage municipalities to require developers install electric vehicle charging infrastructure to allow for the future installation of electric vehicle chargers.
- Encourage the incorporation of appropriate wildlife passage systems in infrastructure project designs to reduce harmful conflicts between humans and wildlife as well as provide contiguous, uninterrupted wildlife habitat.

Updated Figures for Chapter 8.0 Transportation & Mobility

Figure 8.1 | Garden State Parkway (GSP) Exits in Monmouth County

- Renumber GSP exits 100A,B,C and Exit 118.

Figure 8.1: Garden State Parkway in Monmouth County				
Exit	Mile Marker	Location	Toll	Notes
118	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
100A	101.24		None	Southbound exit for Rt. 33 East Northbound Exit for Rt. 33 East
100B	101.49		None	Southbound exit for Rt. 33 West Northbound Exit for Rt. 66 East
100C	101.74		None	Northbound Exit for Rt. 33/Rt. 66 West
98	98.23		Wall	\$.50
SB: Southbound		NB: Northbound		

Figure 8.6 | Monmouth County Transportation and Mobility Map

■ Includes seasonal ferry service between NYC and Sandy Hook.

