Monmouth County, NJ
Comprehensive Economic Development Strategy:

Final Report

Revised as of December 2014

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CHAPTER ONE: INTRODUCTION & METHODOLOGY

Monmouth County received a Planning Grant Investment in 2012 from the U.S. Economic Development Agency (EDA) to support the process of formulating and implementing a comprehensive economic development strategy (CEDS). The purpose of the CEDS is to bring together public, non-profit, and private sectors involved in all aspects of economic development to help set the roadmap for economic development in the County.

Economic Base Analysis

Development of the CEDS began with a thorough investigation of the County's economic base using a compilation of data from multiple sources that provided insight into the County's industries, occupations, competitive advantages, educational offerings, and labor force characteristics. The purpose of this analysis was to provide a host of information to help frame the discussion around potential actions to be proposed in the CEDS. This framework allows the County to understand and convey what actions are possible, likely, and supported by the trends in the County, region, and nation as a whole. Findings from the Economic Base Analysis are provided in Appendix A.

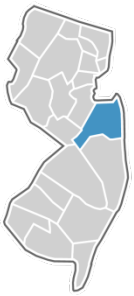
Competitiveness Assessment

This Economic Competitiveness Assessment for Monmouth County is based on executive interviews, Steering Committee and Advisory Group Workshops, the Economic Base Analysis and qualitative research to date as part of the longer term CEDS Project. This analysis was prepared to provide context of Monmouth County's competitive value relative to other regions/communities primarily within New Jersey and other states in the immediate proximity, where the most likely future business recruitment/attraction/retention/growth will concentrate. It is important to note that Hurricane Sandy's short- and long-term impact on the County as a business location was considered, but difficult to determine at this stage.

Community & Private Sector Participation: The Facilitation Process

We wish to acknowledge and thank the many public and private sector individuals that donated their time and contributed their wealth of knowledge and ideas to the development of the CEDS for Monmouth County. A list can be found in Appendix B of the individuals and groups who assisted us. Input was collected via the

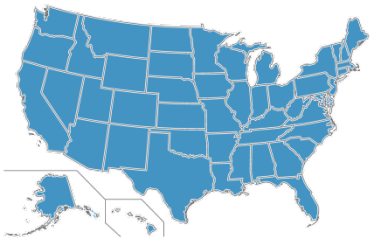
Geographies Studied



Monmouth County, NJ

State of New Jersey

New-York-Northern New Jersey-Long Island, NY-NJ-PA MSA



United States

following groups and activities:

- Steering Committee Meetings
- Advisory Group Meetings
- Stakeholder Interviews
- General & Targeted Workshops

Stakeholder Interviews

Camoin Associates interviewed 36 stakeholders during the months of September and October 2012 as part of the baseline data gathering for the CEDS. Interviewees represented a full cross-section of sectors, geographies, public and private employers, business owners, and elected officials. Information collected during the stakeholder interviews was used to develop a complete sector analysis for the County, including recommendations and targets for future economic growth.

General & Targeted Workshops

Projects that were suggested during the general workshops by participants in the community engagement process were subject to assessment and further development during four targeted workshops. Attendees were asked to help define/refine and prioritize the projects; identify stakeholders and partners interested in the implementation phase; and discuss how Monmouth County and its partners could move projects forward. Using findings from the analysis above, four themes for the key targeted areas were identified:

1) **Community Resilience, Systems Integration, and Cross-Boundary Collaboration and Governance:** This group reviewed and further developed a series of projects designed to achieve greater countywide resilience in the face of accelerating change, greater complexity, and unexpected events.
2) **Infrastructure and Planning Based Economic Development:** This group addressed critical infrastructure needs and its impact on economic development countywide.
3) **Workforce - Skills Development and Alignment with Future Trends:** This group focused on projects that will support the development of Monmouth County's workforce so that people will have the training and education necessary to meet the current and future needs of industry and community.
4) **Entrepreneurial and Business Formation and Development:** This group focused on projects to grow businesses and employment throughout Monmouth County that capitalize on the unique resources and features of the region in a synergistic and collaborative way.

Many of the projects from the targeted workshops have been incorporated into the CEDS and may become the basis for formal applications for funding to the EDA.

CHAPTER TWO: ECONOMIC BASE ANALYSIS

This report is a compilation of data from multiple sources that provide insight into Monmouth County's industries, occupations, competitive advantages, educational offerings and labor force characteristics. The purpose of this document is to provide a host of information to help frame the discussion around potential actions to be proposed in the Comprehensive Economic Development Strategy. This framework allows us to understand and convey what actions are possible, likely and supported by the trends in the County, region and nation as a whole.

Geographies

To provide trends and comparisons, we use four geographies of interest: (1) Monmouth County, (2) the State of New Jersey, (3) the Metropolitan Statistical Area (MSA) as defined by the U.S. Census Bureau to include portions of New York, New Jersey and Pennsylvania, and (4) the United States.

Each section of the *Industry Analysis* and *Occupation Analysis* begins with a brief introduction to the data, including a chart comparing the Top 25 industries or occupations in each of the study areas. The top five Monmouth County industries are shaded with dark blue in each of the tables for easy comparison of the County's top performing industries across the benchmark geographies.

Data Sources

Industry and occupation data used in this analysis are provided by EMSI (Economic Modeling Specialists, Inc.). EMSI combines employment data from the Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with data from the Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA) and augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau.

Projections are based on the latest available EMSI industry data combined with past trends in each industry, national growth rates of industries (Bureau of Labor Statistics), and data from the New Jersey State Department of Labor. Projections provided in this report are informed guesses based on past and current trends. EMSI creates long-term, 10-year industry projections starting from the current year.

The data include all employment covered by unemployment insurance. Unlike the decennial Census, QCEW measures jobs by place of work, not place of residence, and this is a strong measure of economic activity taking place in a particular region. Unlike most data sources, EMSI data include Nonemployer Statistics, an annual series that provides sub-national economic data for businesses that have no paid employees and are subject to federal income tax.[1] While some student workers, unpaid family workers, and some agricultural workers are excluded, EMSI is able to capture most self-employed workers and sole proprietors.

Demographic Overview

As mentioned above, this analysis compares the Monmouth County economy to that of the State, MSA, and Nation. A summary of some basic demographic and economic indicators for these geographies is provided in the following table as context for how the County stacks up against the comparison or "benchmark" geographies. From this data, we note that over the past five years Monmouth County's population increased by 1.1%, which was a slower rate than the comparison geographies. Average earnings in the County are currently lower than the State or MSA, but about $2,200 higher than the Nation.

[1] http://www.census.gov/econ/nonemployer/index.html.

Demographic & Economic Overview of Benchmark Geographies (2012)				
	Monmouth County	New Jersey	NY-NJ-PA MSA	USA
Population	633,600	8,878,300	19,092,200	315,300,000
Population Growth (07-12)	1.1%	2.3%	2.8%	4.7%
Jobs	271,200	4,160,000	9,111,800	148,100,000
Average Earnings	$58,000	$66,300	$77,200	$55,800
Total Unemployment (4/12)	31,600	470,600	921,500	13,400,000

Source: EMSI

About 80,000 residents or 12.6% of the County's population is foreign born, compared to 21.3% in the State. Regarding race, over 50% of the County's foreign born population is white and almost 25% is Asian.

Foreign Born Population		
	Monmouth County	New Jersey
Total Population	633,600	8,878,300
Foreign Born Population	79,968	1,893,186
% Foreign Born	12.6%	21.3%
Race of Foreign Born Population		
One race	96.6%	97.2%
White	54.0%	43.6%
Black or African American	10.9%	10.7%
American Indian and Alaska Native	1.7%	0.3%
Asian	24.7%	28.1%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%
Some other race	5.3%	14.4%
Two or more races	3.4%	2.8%
Hispanic or Latino origin (of any race)	28.7%	36.3%
White alone, not Hispanic or Latino	34.5%	23.4%

Source: 2011 ACS, 1-year estimates, S0501

The earning in the table above are reflective of those employed in Monmouth County and the not the earnings of those who live in the county. With respect to the "foreign born population" figures, these include only naturalized foreign born citizens and not documented green card worker who reside in the county.

Industry Analysis

In general, there are two ways of looking at employment within a local economy: from the industry perspective (*Which companies are driving an economy?*) and from the workforce perspective (*What are the top occupations?*). We begin this analysis by looking at industry composition.

To analyze the industrial makeup of the County and region, industry data organized by the North American Industrial Classification System (NAICS) is assessed. NAICS codes are maintained by the U.S. Census Bureau and are the standard used by Federal statistical agencies in classifying business establishments. 2-digit codes are the highest aggregate NAICS code level and represent broad categories such as "retail", whereas 4-digit industry codes present a finer level of detail such as "grocery stores". For those interested in understanding the composition of the NAICS and for more detail about what is included in each industry, we direct the reader to http://www.census.gov/eos/www/naics/.

This *Industry Analysis* organizes data in several ways: Largest Industries, Fastest Growing Industries (2002-2012 and 2012-2022), Concentrated Industries, and Competitive Industries. This section first presents all industries in the County at the 2-digit level to get an overview of how the County is performing as a whole. This is followed by a detailed analysis of the Top 25 performing industries at the 4-digit NAICS code level. To assess the degree to which the County's economy aligns with the regional and national economy, 4-digit NAICS code data are also analyzed for the benchmark geographies.

Reading the Tables: We have presented the information in such a way as to assist the reader in identifying key data points. Specifically, we highlight information in two ways:

1. The top five industry/occupation categories for the County are highlighted in dark blue in each table. So, when viewing the table related to top industries in New Jersey, the reader can quickly see how Monmouth's top industries compare to those reference geographies.

2. For each reference geography (State, MSA and Nation), we show in bold those industries/occupations that do **not** appear on the County's list. In that way, the reader can see which industries are growing in the State, MSA or Nation that are not growing locally. These may or may not be opportunities for the County to consider

Largest Industries

The relative size of each industry is determined by looking at industry employment data for 2-digit and 4-digit NAICS codes. Each industry is ranked from largest to smallest by the number of jobs in 2012. The percent of total employment that this industry represents within the region is shown as well. This data is used to identify the largest industries and industry sectors, based on the number of individuals employed in that sector, within each community. It is also used to evaluate the distribution of employment by industry.

The general industrial makeup of the County's economy is provided in the table below. The top five largest industries by employment are highlighted in blue. The largest 2-digit industry sectors employ over 40,700 jobs each and include *Government* and *Health Care and Social Assistance*. *Retail Trade* is the third largest 2-digit industry, with almost 37,000 jobs available. This is followed by the *Accommodation and Food Services* industry, which has almost 23,000 jobs in the County. Rounding out the top five largest industries in the County is *Professional, Scientific, and Technical Services*, which has 21,500 jobs.

Largest 2-digit Industries: Monmouth County				
NAICS Code	Description	2012 Jobs	% of Total Workforce	2012 Avg. Wage
90	Government	40,762	15.0%	$73,364
62	Health Care and Social Assistance	40,725	15.0%	$58,688
44	Retail Trade	36,920	13.6%	$34,169
72	Accommodation and Food Services	22,931	8.5%	$19,837
54	Professional, Scientific, and Technical Services	21,500	7.9%	$92,971
81	Other Services (except Public Administration)	14,883	5.5%	$29,397
23	Construction	13,882	5.1%	$66,948
56	Administrative and Support and Waste Management and Remediation Services	12,904	4.8%	$45,671
52	Finance and Insurance	11,526	4.3%	$93,627
31	Manufacturing	8,894	3.3%	$74,622
42	Wholesale Trade	8,522	3.1%	$82,826
71	Arts, Entertainment, and Recreation	8,445	3.1%	$24,603
61	Educational Services (Private)	7,107	2.6%	$39,079
51	Information	6,443	2.4%	$117,508
48	Transportation and Warehousing	6,210	2.3%	$45,409
53	Real Estate and Rental and Leasing	4,823	1.8%	$51,717
55	Management of Companies and Enterprises	1,992	0.7%	$90,232
22	Utilities	1,499	0.6%	$147,902
11	Agriculture, Forestry, Fishing and Hunting	1,159	0.4%	$34,981
21	Mining, Quarrying, and Oil and Gas Extraction	23	0.0%	$63,212
99	Unclassified Industry	18	0.0%	$23,183
	Total	271,168	100.0%	$62,378

Source: EMSI

Below are the Top 25 industries at the 4-digit NAICS code level for Monmouth County. The largest 4-digit NAICS code industry is *Education and Hospitals (Local Government)*, which makes up approximately 6.9% of the total workforce in the County and has almost 19,000 jobs[2]. This industry is the largest industry in all of the comparison geographies (MSA, State, Nation) making up around 6% of the workforce of each.

Local Government, excluding education and hospitals, is the second largest industry in Monmouth County. With over 11,000 jobs, it employs approximately 4.2% of the County's workforce, which is a greater percentage than the state (3.7%) but lower than the MSA (6.1%) and the U.S. (5.7%). With over 10,700 employees and 4.0% of the workforce, *Full-Service Restaurants* is the third largest industry in the County. This industry is the fourth largest in the State and MSA economy and makes up 2.6% and 2.9% of the workforce respectively. At the national level, this is the third largest industry and makes up 3.2% of the nation's workforce. *General Medical and Surgical Hospitals (Private)* is the fourth largest employer in the County, with almost 9,500 jobs making up 3.5% of the workforce. This industry ranks among the top five in each of the comparison geographies as well.

Largest 4-digit Industries: Monmouth County				
NAICS Code	Description	2012 Jobs	% of Total Workforce	2012 Avg. Wage
9036	Education and Hospitals (Local Government)	18,804	6.9%	$67,607
9039	Local Government, Excluding Education and Hospitals	11,371	4.2%	$65,322
7221	Full-Service Restaurants	10,720	4.0%	$20,022
6221	General Medical and Surgical Hospitals (Private)	9,470	3.5%	$66,353
4451	Grocery Stores	7,414	2.7%	$32,089
6211	Offices of Physicians	7,316	2.7%	$99,490
7222	Limited-Service Eating Places	7,265	2.7%	$17,850
9011	Federal Government, Civilian	6,496	2.4%	$106,029
7139	Other Amusement and Recreation Industries	6,235	2.3%	$23,348
5617	Services to Buildings and Dwellings	5,273	1.9%	$31,272
4521	Department Stores	5,177	1.9%	$24,044
2382	Building Equipment Contractors	4,316	1.6%	$70,040
5413	Architectural, Engineering, and Related Services	3,884	1.4%	$119,801
8121	Personal Care Services	3,842	1.4%	$21,314
5171	Wired Telecommunications Carriers	3,740	1.4%	$138,656
5415	Computer Systems Design and Related Services	3,455	1.3%	$111,588
4481	Clothing Stores	3,392	1.3%	$20,077
6231	Nursing Care Facilities	3,290	1.2%	$42,060
6111	Elementary and Secondary Schools (Private)	3,173	1.2%	$42,148
6244	Child Day Care Services	3,142	1.2%	$23,529
2361	Residential Building Construction	3,105	1.1%	$67,122
5411	Legal Services	3,094	1.1%	$78,926
5416	Management, Scientific, and Technical Consulting Services	3,090	1.1%	$70,455
6233	Community Care Facilities for the Elderly	3,033	1.1%	$36,670
4411	Automobile Dealers	2,940	1.1%	$71,788
	Total	143,037	53%	

Source: EMSI

[2] This NAICS code (i.e. 9036) is a data enhancement by EMSI, which breaks down general reporting of governmental employment into finer levels of detail. Education and Hospitals (Local Government) includes any hospital or school that is classified under local government. This includes Elementary and Secondary Schools; Colleges, Universities, and Professional Schools; All Other Schools and Educational Support Services; Hospitals.

Below are the Top 25 industries by 4-digit NAICS code in the State of New Jersey. Of note is that certain industries are heavily represented at the State level, but do not appear in the "Top 25" list for the County, *Employment Services* and *State Government* in particular.

Largest 4-digit Industries: New Jersey			
NAICS Code	Description	2012 Jobs	% of Total Workforce
9036	Education and Hospitals (Local Government)	257,370	6.2%
9039	Local Government, Excluding Education and Hospitals	154,472	3.7%
6221	General Medical and Surgical Hospitals (Private)	139,943	3.4%
7221	Full-Service Restaurants	107,519	2.6%
5613	**Employment Services**	**101,387**	**2.4%**
7222	Limited-Service Eating Places	89,059	2.1%
4451	Grocery Stores	87,585	2.1%
9029	**State Government, Excluding Education and Hospitals**	**80,736**	**1.9%**
6211	Offices of Physicians	76,533	1.8%
5617	Services to Buildings and Dwellings	75,566	1.8%
5511	**Management of Companies and Enterprises**	**74,605**	**1.8%**
5415	Computer Systems Design and Related Services	70,223	1.7%
9026	**Education and Hospitals (State Government)**	**63,219**	**1.5%**
7211	**Traveler Accommodation**	**58,904**	**1.4%**
4521	Department Stores	58,519	1.4%
9011	Federal Government, Civilian	56,944	1.4%
2382	Building Equipment Contractors	55,210	1.3%
5221	**Depository Credit Intermediation**	**50,609**	**1.2%**
6231	Nursing Care Facilities	50,527	1.2%
5416	Management, Scientific, and Technical Consulting Services	47,226	1.1%
5411	Legal Services	45,393	1.1%
6244	Child Day Care Services	44,337	1.1%
5412	**Accounting, Tax Preparation, Bookkeeping, and Payro**	**42,160**	**1.0%**
4481	Clothing Stores	41,810	1.0%
5241	**Insurance Carriers**	**41,103**	**1.0%**
	Total	1,970,959	47%

Source: EMSI

For an explanation of the bolding of certain lines in the tables, please see the inset text on page seven of this document.

Below are the Top 25 4-digit NAICS code industries by employment in the MSA. In dark blue are the five top industries for the County. Some of the same observations can be made as above, in that the County does not share certain top industries with the MSA, including *Colleges, Universities, and Professional Schools* and *Individual and Family Services*.

Largest 4-digit Industries: NY-NJ-PA MSA			
NAICS Code	Description	2012 Jobs	% of Total Workforce
9036	Education and Hospitals (Local Government)	554,361	6.1%
9039	Local Government, Excluding Education and Hospitals	415,864	4.6%
6221	General Medical and Surgical Hospitals (Private)	311,846	3.4%
7221	Full-Service Restaurants	262,725	2.9%
6241	**Individual and Family Services**	**187,390**	**2.1%**
7222	Limited-Service Eating Places	180,168	2.0%
6113	**Colleges, Universities, and Professional Schools (Priva**	**164,630**	**1.8%**
6211	Offices of Physicians	163,246	1.8%
4451	Grocery Stores	163,170	1.8%
5613	**Employment Services**	**159,721**	**1.8%**
5411	Legal Services	152,874	1.7%
5511	**Management of Companies and Enterprises**	**152,747**	**1.7%**
6216	**Home Health Care Services**	**143,388**	**1.6%**
5231	**Securities and Commodity Contracts Intermediation an**	**141,416**	**1.6%**
5617	Services to Buildings and Dwellings	135,285	1.5%
5415	Computer Systems Design and Related Services	122,268	1.3%
9011	Federal Government, Civilian	118,060	1.3%
4481	Clothing Stores	114,792	1.3%
2382	Building Equipment Contractors	114,717	1.3%
6231	Nursing Care Facilities	112,528	1.2%
6244	Child Day Care Services	109,081	1.2%
5412	**Accounting, Tax Preparation, Bookkeeping, and Payro**	**108,049**	**1.2%**
5311	**Lessors of Real Estate**	**107,397**	**1.2%**
5221	**Depository Credit Intermediation**	**103,940**	**1.1%**
4521	Department Stores	99,392	1.1%
	Total	4,399,055	48%

Source: EMSI

Below are the Top 25 4-digit NAICS code industries by employment in the Nation. In dark blue are the five top industries for the County.

Largest 4-digit Industries: United States			
NAICS Code	Description	2012 Jobs	% of Total Workforce
9036	Education and Hospitals (Local Government)	8,421,261	5.7%
9039	Local Government, Excluding Education and Hospitals	5,494,975	3.7%
7221	Full-Service Restaurants	4,734,417	3.2%
6221	General Medical and Surgical Hospitals (Private)	4,446,198	3.0%
7222	Limited-Service Eating Places	4,267,637	2.9%
5613	**Employment Services**	**3,229,797**	**2.2%**
9011	Federal Government, Civilian	2,943,813	2.0%
9026	**Education and Hospitals (State Government)**	**2,852,938**	**1.9%**
4451	Grocery Stores	2,549,789	1.7%
5617	Services to Buildings and Dwellings	2,509,198	1.7%
6211	Offices of Physicians	2,496,711	1.7%
9029	**State Government, Excluding Education and Hospitals**	**2,270,866**	**1.5%**
9012	**Federal Government, Military**	**2,082,449**	**1.4%**
2382	Building Equipment Contractors	1,965,413	1.3%
5511	**Management of Companies and Enterprises**	**1,946,829**	**1.3%**
6113	**Colleges, Universities, and Professional Schools (Priva**	**1,842,094**	**1.2%**
5415	Computer Systems Design and Related Services	1,766,945	1.2%
7211	**Traveler Accommodation**	**1,754,604**	**1.2%**
5221	**Depository Credit Intermediation**	**1,744,243**	**1.2%**
8131	**Religious Organizations**	**1,705,077**	**1.2%**
6231	Nursing Care Facilities	1,662,887	1.1%
4529	**Other General Merchandise Stores**	**1,555,624**	**1.1%**
4521	Department Stores	1,543,333	1.0%
6241	**Individual and Family Services**	**1,486,555**	**1.0%**
5416	Management, Scientific, and Technical Consulting Services	1,431,932	1.0%
	Total	68,705,585	46%

Source: EMSI

As we can see, the Top 25 industries in the County are very similar to those at the State, MSA and National levels. However, there are numerous industries of different concentrations in the reference geographies that do not make the Top 25 list for the County. It also appears that the County is slightly more concentrated in its Top 25 industries (53% of all employment, versus 46% for the US).

Fastest Growing Industries 2002-2012

It is important to look at past changes in employment by industry to identify which industries have experienced rapid growth/decline. This information can be used to detect industries that might be struggling or, on the other hand, those that are thriving. To identify the fastest growing industries in Monmouth County, the historic change in employment is presented by the number of employees lost or gained and the percent change within each industry over the last ten years (2002-2012). The top five fastest growing industries in Monmouth County are highlighted in darker blue in each of the data tables.

At the 2-digit level, the fastest growing industry over the past ten years was *Health Care and Social Assistance*. This industry added over 7,000 jobs in the County, which was almost a 21% increase. The second, third, and fourth fastest growing industries in the County are all service related industries: *Accommodation and Food Services; Arts, Entertainment and Recreation*, and *Other Services*. These industries each added around 2,000 to 3,000 employees in the last ten years.

The construction industry lost over 4,000 jobs in the County from 2002 to 2012; this significant job loss is primarily related to the national housing market crash and is not a local phenomenon. However, the significant job loss in the information industry (almost 3,000 jobs) was a local hardship experienced by the County related to the loss of significant telecommunications industry employment. Additionally, the loss of over 1,600 jobs in the government industry was directly related to the closure of Fort Monmouth.

Fastest Growing 2-digit Industries (2002-12): Monmouth County

NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
62	Health Care and Social Assistance	33,695	40,725	7,030	20.9%
72	Accommodation and Food Services	19,895	22,931	3,036	15.3%
71	Arts, Entertainment, and Recreation	6,143	8,445	2,302	37.5%
81	Other Services (except Public Administration)	12,838	14,883	2,045	15.9%
55	Management of Companies and Enterprises	1,132	1,992	860	76.0%
48	Transportation and Warehousing	5,915	6,210	295	5.0%
56	Administrative and Support and Waste Management and Remediation Services	12,753	12,904	151	1.2%
22	Utilities	1,359	1,499	140	10.3%
61	Educational Services (Private)	7,063	7,107	44	0.6%
21	Mining, Quarrying, and Oil and Gas Extraction	32	23	(9)	-28.1%
53	Real Estate and Rental and Leasing	4,945	4,823	(122)	-2.5%
11	Agriculture, Forestry, Fishing and Hunting	1,689	1,159	(530)	-31.4%
42	Wholesale Trade	9,261	8,522	(739)	-8.0%
52	Finance and Insurance	12,440	11,526	(914)	-7.3%
44	Retail Trade	37,871	36,920	(951)	-2.5%
99	Unclassified Industry	1,078	18	(1,060)	-98.3%
90	Government	42,433	40,762	(1,671)	-3.9%
31	Manufacturing	10,803	8,894	(1,909)	-17.7%
54	Professional, Scientific, and Technical Services	23,489	21,500	(1,989)	-8.5%
51	Information	9,253	6,443	(2,810)	-30.4%
23	Construction	18,032	13,882	(4,150)	-23.0%
	Total	272,119	271,168	(951)	-0.3%

Source: EMSI

As shown on the following page, the Top 25 fastest growing 4-digit industries in Monmouth County over the past 10-years (2002-2012) include *Full-Service Restaurants; Offices of Physicians; Other Amusement and Recreation Industries; Limited-Service Eating Places*; and *Personal Care Services*.

The fastest growing industry in the County, *Full-Service Restaurants*, added almost 2,000 jobs from 2002-2012, which was a 22.3% increase. This industry is growing locally, regionally, and nationally and is either the first or second fastest growing industry in the State, MSA, and Nation. A similar industry, *Limited-Service Eating Places*, is also one of the fastest growing both locally in the County (1,400 new jobs and 25% growth) as well as in each of the comparison geographies (either the second or third fastest growing in each).

Offices of Physicians was the second fastest growing industry in the County, adding 1,900 jobs and increasing by 35%. This rate of growth in the County exceeded the comparison geographies, which grew around 20% during this time period. Other healthcare related industries in the County made the Top 25 as well: *Offices of Other Health Practitioners* added 990 jobs, *Community Care Facilities for the Elderly* added 980 jobs, *Individual and Family Services* added 870 jobs, and *Home Health Care Services* added 460 jobs.

Other Amusement and Recreation Industries, the third fastest growing industry in the County, added almost 1,900 jobs and increased by 43% from 2002-2012 in the County. This is primarily due to a large increase in the number of gyms, yoga studios and day spas in the County in the 2000's. (Source: County staff.)

The fifth fastest growing industry, *Personal Care Services*, added almost 1,300 jobs and grew by about 49% from 2002-2012. This industry is comprised of establishments such as barber and beauty shops that provide appearance care services to individuals.[3] This industry also includes diet and weight reducing centers, tanning salons, massage parlors, tattoo parlors, saunas, ear piercing services, etc.

[3] U.S. Census Bureau North American Industry Classification System website: http://www.census.gov/eos/www/naics/index.html

Below is a list of the Top 25 growing industries (4-digit NAICS code) over the last ten years, sorted by the job change number.

Fastest Growing Industries (2002-12): Monmouth County					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
7221	Full-Service Restaurants	8,764	10,720	1,956	22.3%
6211	Offices of Physicians	5,417	7,316	1,899	35.1%
7139	Other Amusement and Recreation Industries	4,350	6,235	1,885	43.3%
7222	Limited-Service Eating Places	5,824	7,265	1,441	24.7%
8121	Personal Care Services	2,573	3,842	1,269	49.3%
6213	Offices of Other Health Practitioners	1,808	2,801	993	54.9%
6233	Community Care Facilities for the Elderly	2,056	3,033	977	47.5%
5416	Management, Scientific, and Technical Consulting Services	2,157	3,090	933	43.3%
6241	Individual and Family Services	1,068	1,936	868	81.3%
5511	Management of Companies and Enterprises	1,132	1,992	860	76.0%
4451	Grocery Stores	6,587	7,414	827	12.6%
9036	Education and Hospitals (Local Government)	18,004	18,804	800	4.4%
9029	State Government, Excluding Education and Hospitals	1,513	2,310	797	52.7%
5617	Services to Buildings and Dwellings	4,608	5,273	665	14.4%
5419	Other Professional, Scientific, and Technical Services	1,543	2,203	660	42.8%
5611	Office Administrative Services	487	1,129	642	131.8%
3391	Medical Equipment and Supplies Manufacturing	334	960	626	187.4%
4521	Department Stores	4,567	5,177	610	13.4%
4931	Warehousing and Storage	312	897	585	187.5%
6116	Other Schools and Instruction (Private)	1,043	1,623	580	55.6%
5413	Architectural, Engineering, and Related Services	3,326	3,884	558	16.8%
6216	Home Health Care Services	1,521	1,984	463	30.4%
6219	Other Ambulatory Health Care Services	414	840	426	102.9%
5241	Insurance Carriers	2,135	2,500	365	17.1%
5311	Lessors of Real Estate	1,333	1,684	351	26.3%
	Total	82,876	104,912	22,036	26.6%

Source: EMSI

Below are the Top 25 fastest growing 4-digit NAICS code industries in the State. While there is general overlap with the County's fastest growing industries, the State's list includes private post-secondary institutions (6113), *Computer Systems Design and Related Services* (5415), a few health care related fields (6221, 6232), and accounting/bookkeeping (5412) as major job growth sources not seen in the Top 25 within the County.

Fastest Growing Industries (2002-12): New Jersey					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
7221	Full-Service Restaurants	225,130	288,230	63,100	28.0%
6216	Home Health Care Services	71,121	133,693	62,572	88.0%
7222	Limited-Service Eating Places	144,521	201,671	57,150	39.5%
6113	**Colleges, Universities, and Professional Schools (Private)**	**193,827**	**248,878**	**55,051**	**28.4%**
6241	Individual and Family Services	173,531	212,109	38,578	22.2%
6211	Offices of Physicians	134,747	163,845	29,098	21.6%
5416	Management, Scientific, and Technical Consulting Services	57,890	85,991	28,101	48.5%
5415	**Computer Systems Design and Related Services**	**74,946**	**101,385**	**26,439**	**35.3%**
6221	**General Medical and Surgical Hospitals (Private)**	**307,315**	**330,630**	**23,315**	**7.6%**
5412	**Accounting, Tax Preparation, Bookkeeping, and Payroll Services**	**77,705**	**98,727**	**21,022**	**27.1%**
8121	Personal Care Services	57,806	76,722	18,916	32.7%
6232	**Residential Mental Retardation, Mental Health and Substance Abuse Facilities**	**50,200**	**68,502**	**18,302**	**36.5%**
5313	**Activities Related to Real Estate**	**39,077**	**57,317**	**18,240**	**46.7%**
9036	Education and Hospitals (Local Government)	592,014	610,239	18,225	3.1%
5239	**Other Financial Investment Activities**	**54,519**	**72,254**	**17,735**	**32.5%**
5511	Management of Companies and Enterprises	118,817	136,033	17,216	14.5%
6116	Other Schools and Instruction (Private)	27,504	44,492	16,988	61.8%
4451	Grocery Stores	160,378	176,100	15,722	9.8%
4481	**Clothing Stores**	**91,524**	**106,687**	**15,163**	**16.6%**
6244	**Child Day Care Services**	**89,417**	**103,539**	**14,122**	**15.8%**
2361	**Residential Building Construction**	**55,757**	**69,047**	**13,290**	**23.8%**
9026	**Education and Hospitals (State Government)**	**82,296**	**95,181**	**12,885**	**15.7%**
5418	**Advertising, Public Relations, and Related Services**	**70,805**	**83,082**	**12,277**	**17.3%**
4529	**Other General Merchandise Stores**	**39,376**	**51,429**	**12,053**	**30.6%**
6213	Offices of Other Health Practitioners	41,466	53,243	11,777	28.4%
	Total	3,031,689	3,669,026	637,337	21.0%

Source: EMSI

Below are the Top 25 fastest growing 4-digit NAICS code industries in the MSA. As with the State, certain industries appear here that are not on the County's Top 25 list (including the same as above: private post-secondary, computers and accounting/bookkeeping).

Fastest Growing Industries (2002-12): NY-NJ-PA MSA					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
6216	Home Health Care Services	71,574	143,388	71,814	100.3%
7221	Full-Service Restaurants	194,998	262,725	67,727	34.7%
7222	Limited-Service Eating Places	122,671	180,168	57,497	46.9%
6113	**Colleges, Universities, and Professional Schools (Private)**	**125,548**	**164,630**	**39,082**	**31.1%**
6241	Individual and Family Services	150,215	187,390	37,175	24.7%
5416	Management, Scientific, and Technical Consulting Services	70,054	98,537	28,483	40.7%
4451	Grocery Stores	134,799	163,170	28,371	21.0%
9036	Education and Hospitals (Local Government)	526,758	554,361	27,603	5.2%
6211	Offices of Physicians	135,700	163,246	27,546	20.3%
5415	**Computer Systems Design and Related Services**	**96,029**	**122,268**	**26,239**	**27.3%**
4521	Department Stores	74,834	99,392	24,558	32.8%
8121	Personal Care Services	60,164	83,882	23,718	39.4%
6116	Other Schools and Instruction (Private)	29,653	50,387	20,734	69.9%
5511	Management of Companies and Enterprises	132,876	152,747	19,871	15.0%
5239	**Other Financial Investment Activities**	**61,761**	**80,621**	**18,860**	**30.5%**
6221	**General Medical and Surgical Hospitals (Private)**	**293,324**	**311,846**	**18,522**	**6.3%**
6244	**Child Day Care Services**	**91,884**	**109,081**	**17,197**	**18.7%**
5313	**Activities Related to Real Estate**	**43,508**	**60,175**	**16,667**	**38.3%**
5412	**Accounting, Tax Preparation, Bookkeeping, and Payroll Services**	**91,591**	**108,049**	**16,458**	**18.0%**
6213	Offices of Other Health Practitioners	43,165	58,287	15,122	35.0%
8141	**Private Households**	**59,317**	**74,009**	**14,692**	**24.8%**
6232	**Residential Mental Retardation, Mental Health and Substance Abuse Facilities**	**35,293**	**48,020**	**12,727**	**36.1%**
7139	Other Amusement and Recreation Industries	62,787	75,324	12,537	20.0%
5418	**Advertising, Public Relations, and Related Services**	**76,697**	**87,799**	**11,102**	**14.5%**
7211	**Traveler Accommodation**	**62,445**	**73,476**	**11,031**	**17.7%**
	Total	2,847,645	3,512,978	665,333	23.4%

Source: EMSI

Below are the Top 25 fastest growing 4-digit NAICS code industries in the Nation.

Fastest Growing Industries (2002-12): United States					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
7221	Full-Service Restaurants	4,015,033	4,734,417	719,384	17.9%
7222	Limited-Service Eating Places	3,585,081	4,267,637	682,556	19.0%
6241	Individual and Family Services	871,298	1,486,555	615,257	70.6%
6221	**General Medical and Surgical Hospitals (Private)**	**3,881,448**	**4,446,198**	**564,750**	**14.5%**
6216	Home Health Care Services	721,587	1,269,273	547,686	75.9%
5416	Management, Scientific, and Technical Consulting Services	932,214	1,431,932	499,718	53.6%
5415	**Computer Systems Design and Related Services**	**1,305,015**	**1,766,945**	**461,930**	**35.4%**
6211	Offices of Physicians	2,058,127	2,496,711	438,584	21.3%
4529	**Other General Merchandise Stores**	**1,120,189**	**1,555,624**	**435,435**	**38.9%**
6113	**Colleges, Universities, and Professional Schools (Private)**	**1,441,456**	**1,842,094**	**400,638**	**27.8%**
5617	Services to Buildings and Dwellings	2,163,646	2,509,198	345,552	16.0%
8141	**Private Households**	**936,521**	**1,202,707**	**266,186**	**28.4%**
6233	Community Care Facilities for the Elderly	534,145	797,184	263,039	49.2%
6214	**Outpatient Care Centers**	**427,492**	**686,170**	**258,678**	**60.5%**
5511	Management of Companies and Enterprises	1,695,553	1,946,829	251,276	14.8%
4251	**Wholesale Electronic Markets and Agents and Brokers**	**638,560**	**874,617**	**236,057**	**37.0%**
6213	Offices of Other Health Practitioners	592,961	828,155	235,194	39.7%
2131	**Support Activities for Mining**	**182,653**	**399,535**	**216,882**	**118.7%**
9026	**Education and Hospitals (State Government)**	**2,649,834**	**2,852,938**	**203,104**	**7.7%**
8121	Personal Care Services	941,386	1,140,405	199,019	21.1%
6116	Other Schools and Instruction (Private)	310,095	488,531	178,436	57.5%
9036	Education and Hospitals (Local Government)	8,255,985	8,421,261	165,276	2.0%
9039	**Local Government, Excluding Education and Hospitals**	**5,332,998**	**5,494,975**	**161,977**	**3.0%**
4931	Warehousing and Storage	514,757	661,775	147,018	28.6%
5313	**Activities Related to Real Estate**	**577,622**	**720,697**	**143,075**	**24.8%**
	Total	45,685,656	54,322,363	8,636,707	18.9%

Source: EMSI

Projected Industry Growth 2012-2022

Projected changes in employment from 2012 to 2022 are presented in the following tables. Information about how EMSI makes its projections can be found in the *Additional Information & Resources* section under sub-heading: *A. EMSI Methodology for Making Projections*.

At the 2-digit level, *Health Care and Social Assistance* is expected to be the fastest growing industry in the County, adding 6,500 jobs (16% increase) over the next ten years.

The second fastest growing industry in the County is expected to be *Other Services*. It is projected that this industry will add over 2,000 jobs (14% increase). The *Other Services* industry includes establishments that provide services not defined elsewhere in the NAICS system and can include equipment and machinery repair, promoting religious activities, grant making, advocacy, providing dry-cleaning and laundry services, personal care services, etc.

Accommodation and Food Services is expected to be the third fastest growing industry, adding over 1,100 jobs (5% increase).

Fastest Growing 2-digit Industries (2012-22): Monmouth County					
NAICS Code	Description	2012 Jobs	2022 Jobs	Change	% Change
62	Health Care and Social Assistance	40,725	47,187	6,462	15.9%
81	Other Services (except Public Administration)	14,883	16,941	2,058	13.8%
72	Accommodation and Food Services	22,931	24,070	1,139	5.0%
61	Educational Services (Private)	7,107	8,156	1,049	14.8%
71	Arts, Entertainment, and Recreation	8,445	9,269	824	9.8%
23	Construction	13,882	14,534	652	4.7%
52	Finance and Insurance	11,526	12,153	627	5.4%
44	Retail Trade	36,920	37,518	598	1.6%
53	Real Estate and Rental and Leasing	4,823	5,195	372	7.7%
90	Government	40,762	41,090	328	0.8%
54	Professional, Scientific, and Technical Services	21,500	21,821	321	1.5%
42	Wholesale Trade	8,522	8,736	214	2.5%
55	Management of Companies and Enterprises	1,992	2,098	106	5.3%
48	Transportation and Warehousing	6,210	6,239	29	0.5%
22	Utilities	1,499	1,498	(1)	-0.1%
21	Mining, Quarrying, and Oil and Gas Extraction	23	20	(3)	-13.0%
99	Unclassified Industry	18	0	(18)	-100.0%
11	Agriculture, Forestry, Fishing and Hunting	1,159	1,092	(67)	-5.8%
56	Administrative and Support and Waste Management and Remediation Services	12,904	12,543	(361)	-2.8%
51	Information	6,443	5,623	(820)	-12.7%
31	Manufacturing	8,894	7,357	(1,537)	-17.3%
	Total	271,168	283,140	11,972	4.4%

Source: EMSI

The table below shows the Top 25 growth industries in the County at the 4-digit level. Health related industries occupy the top three slots, including *Community Care Facilities for the Elderly*, *Offices of Physicians* and *Education and Hospitals*.

Fastest Growing Industries (2012-22): Monmouth County					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
6233	Community Care Facilities for the Elderly	3,033	4,440	1,407	46.4%
6211	Offices of Physicians	7,316	8,694	1,378	18.8%
9036	Education and Hospitals (Local Government)	18,804	20,142	1,338	7.1%
2382	Building Equipment Contractors	4,316	5,472	1,156	26.8%
7221	Full-Service Restaurants	10,720	11,789	1,069	10.0%
5413	Architectural, Engineering, and Related Services	3,884	4,905	1,021	26.3%
8121	Personal Care Services	3,842	4,862	1,020	26.5%
5416	Management, Scientific, and Technical Consulting Services	3,090	4,078	988	32.0%
7139	Other Amusement and Recreation Industries	6,235	7,147	912	14.6%
6213	Offices of Other Health Practitioners	2,801	3,651	850	30.3%
6241	Individual and Family Services	1,936	2,763	827	42.7%
6113	Colleges, Universities, and Professional Schools (Private)	1,953	2,578	625	32.0%
5419	Other Professional, Scientific, and Technical Services	2,203	2,795	592	26.9%
6216	Home Health Care Services	1,984	2,575	591	29.8%
8111	Automotive Repair and Maintenance	2,357	2,890	533	22.6%
4411	Automobile Dealers	2,940	3,386	446	15.2%
4441	Building Material and Supplies Dealers	2,560	2,998	438	17.1%
6116	Other Schools and Instruction (Private)	1,623	2,050	427	26.3%
8131	Religious Organizations	2,795	3,156	361	12.9%
4451	Grocery Stores	7,414	7,757	343	4.6%
5311	Lessors of Real Estate	1,684	2,027	343	20.4%
5239	Other Financial Investment Activities	1,312	1,628	316	24.1%
8133	Social Advocacy Organizations	453	762	309	68.2%
4233	Lumber and Other Construction Materials Merchant Wholesalers	522	824	302	57.9%
5112	Software Publishers	544	832	288	52.9%
	Total	96,321	114,201	17,880	18.6%

Source: EMSI

The next table shows the Top 25 fastest projected growth industries at the state level. As a reminder, we highlight in a darker shade of blue those industries that appear in the top five for the County and we show in bold any industries do not appear in the County's Top 25 list. As with the 2002-2012 numbers, we see *Computer Systems Design and Related Services* appear at the state level but not the County level. For these projections, we also see *Depository Credit Information* as a significant growth driver for the State but not the County (this industry classification includes commercial banking, savings and loans, credit unions, private banks and several miscellaneous financial institutions).

Fastest Growing Industries (2012-22): New Jersey					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
6216	Home Health Care Services	40,242	59,733	19,491	48.4%
9036	Education and Hospitals (Local Government)	257,370	274,821	17,451	6.8%
6241	Individual and Family Services	33,405	49,805	16,400	49.1%
7221	Full-Service Restaurants	107,519	117,736	10,217	9.5%
5415	**Computer Systems Design and Related Services**	**70,223**	**79,687**	**9,464**	**13.5%**
5416	Management, Scientific, and Technical Consulting Services	47,226	56,420	9,194	19.5%
6211	Offices of Physicians	76,533	84,939	8,406	11.0%
5221	**Depository Credit Intermediation**	**50,609**	**58,600**	**7,991**	**15.8%**
6233	Community Care Facilities for the Elderly	20,300	27,939	7,639	37.6%
6113	Colleges, Universities, and Professional Schools (Private)	34,437	41,621	7,184	20.9%
8121	Personal Care Services	39,010	45,929	6,919	17.7%
6213	Offices of Other Health Practitioners	27,694	34,491	6,797	24.5%
6232	**Residential Mental Retardation, Mental Health and Substance Abuse Facilities**	**16,872**	**23,210**	**6,338**	**37.6%**
5613	**Employment Services**	**101,387**	**107,187**	**5,800**	**5.7%**
2382	Building Equipment Contractors	55,210	60,753	5,543	10.0%
7222	**Limited-Service Eating Places**	**89,059**	**94,336**	**5,277**	**5.9%**
6116	Other Schools and Instruction (Private)	22,635	27,905	5,270	23.3%
9026	**Education and Hospitals (State Government)**	**63,219**	**67,943**	**4,724**	**7.5%**
5617	**Services to Buildings and Dwellings**	**75,566**	**80,204**	**4,638**	**6.1%**
5511	**Management of Companies and Enterprises**	**74,605**	**79,184**	**4,579**	**6.1%**
4239	**Miscellaneous Durable Goods Merchant Wholesalers**	**14,569**	**19,130**	**4,561**	**31.3%**
6244	**Child Day Care Services**	**44,337**	**48,325**	**3,988**	**9.0%**
5242	**Agencies, Brokerages, and Other Insurance Related Activities**	**35,586**	**39,493**	**3,907**	**11.0%**
7139	Other Amusement and Recreation Industries	38,159	42,053	3,894	10.2%
4251	**Wholesale Electronic Markets and Agents and Brokers**	**24,187**	**27,926**	**3,739**	**15.5%**
	Total	1,459,959	1,649,370	189,411	13.0%

Source: EMSI

Below is a table showing the Top 25 industries in the MSA with respect to anticipated growth. We again see the *Computer Systems Design* industry represented here but not at the County level, as well as a few health and human services type industries.

Fastest Growing Industries (2012-22): NY-NJ-PA MSA					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
6216	Home Health Care Services	143,388	216,012	72,624	50.6%
6241	Individual and Family Services	187,390	245,432	58,042	31.0%
6113	Colleges, Universities, and Professional Schools (Private)	164,630	194,957	30,327	18.4%
5416	Management, Scientific, and Technical Consulting Services	98,537	125,050	26,513	26.9%
7221	Full-Service Restaurants	262,725	285,918	23,193	8.8%
5415	**Computer Systems Design and Related Services**	**122,268**	**143,809**	**21,541**	**17.6%**
9036	Education and Hospitals (Local Government)	554,361	575,581	21,220	3.8%
6232	**Residential Mental Retardation, Mental Health and Substance Abuse Facilities**	**48,020**	**68,138**	**20,118**	**41.9%**
8121	Personal Care Services	83,882	100,236	16,354	19.5%
6211	Offices of Physicians	163,246	178,124	14,878	9.1%
7222	**Limited-Service Eating Places**	**180,168**	**194,970**	**14,802**	**8.2%**
6244	**Child Day Care Services**	**109,081**	**123,356**	**14,275**	**13.1%**
6213	Offices of Other Health Practitioners	58,287	72,287	14,000	24.0%
5418	**Advertising, Public Relations, and Related Services**	**87,799**	**101,200**	**13,401**	**15.3%**
6116	Other Schools and Instruction (Private)	50,387	62,127	11,740	23.3%
4451	Grocery Stores	163,170	174,807	11,637	7.1%
7139	Other Amusement and Recreation Industries	75,324	86,899	11,575	15.4%
6233	Community Care Facilities for the Elderly	25,249	35,997	10,748	42.6%
5239	Other Financial Investment Activities	80,621	90,918	10,297	12.8%
5413	Architectural, Engineering, and Related Services	74,919	84,089	9,170	12.2%
4461	**Health and Personal Care Stores**	**83,428**	**91,831**	**8,403**	**10.1%**
8141	**Private Households**	**74,009**	**82,241**	**8,232**	**11.1%**
6231	**Nursing Care Facilities**	**112,528**	**120,628**	**8,100**	**7.2%**
2361	**Residential Building Construction**	**65,095**	**72,975**	**7,880**	**12.1%**
2381	**Foundation, Structure, and Building Exterior Contractors**	**38,707**	**46,254**	**7,547**	**19.5%**
	Total	3,107,219	3,573,836	466,617	15.0%

Source: EMSI

Below is a table showing the Top 25 industries in the nation with respect to anticipated growth.

Fastest Growing Industries (2012-22): United States					
NAICS Code	Description	2002 Jobs	2012 Jobs	Change	% Change
9036	Education and Hospitals (Local Government)	8,421,261	9,225,886	804,625	9.6%
7221	Full-Service Restaurants	4,734,417	5,366,990	632,573	13.4%
6216	Home Health Care Services	1,269,273	1,889,333	620,060	48.9%
6241	Individual and Family Services	1,486,555	2,104,530	617,975	41.6%
5416	Management, Scientific, and Technical Consulting Services	1,431,932	2,048,439	616,507	43.1%
5415	**Computer Systems Design and Related Services**	**1,766,945**	**2,370,982**	**604,037**	**34.2%**
7222	**Limited-Service Eating Places**	**4,267,637**	**4,862,088**	**594,451**	**13.9%**
6221	**General Medical and Surgical Hospitals (Private)**	**4,446,198**	**5,012,563**	**566,365**	**12.7%**
5613	**Employment Services**	**3,229,797**	**3,786,186**	**556,389**	**17.2%**
6211	Offices of Physicians	2,496,711	3,025,092	528,381	21.2%
4529	**Other General Merchandise Stores**	**1,555,624**	**2,050,966**	**495,342**	**31.8%**
9039	**Local Government, Excluding Education and Hospitals**	**5,494,975**	**5,916,261**	**421,286**	**7.7%**
6113	Colleges, Universities, and Professional Schools (Private)	1,842,094	2,240,908	398,814	21.7%
5617	**Services to Buildings and Dwellings**	**2,509,198**	**2,904,404**	**395,206**	**15.8%**
6233	Community Care Facilities for the Elderly	797,184	1,141,927	344,743	43.2%
4251	**Wholesale Electronic Markets and Agents and Brokers**	**874,617**	**1,183,649**	**309,032**	**35.3%**
2382	Building Equipment Contractors	1,965,413	2,251,755	286,342	14.6%
9026	**Education and Hospitals (State Government)**	**2,852,938**	**3,133,143**	**280,205**	**9.8%**
6213	Offices of Other Health Practitioners	828,155	1,095,342	267,187	32.3%
5413	Architectural, Engineering, and Related Services	1,429,460	1,678,383	248,923	17.4%
8131	Religious Organizations	1,705,077	1,909,742	204,665	12.0%
8141	**Private Households**	**1,202,707**	**1,388,554**	**185,847**	**15.5%**
6231	**Nursing Care Facilities**	**1,662,887**	**1,848,540**	**185,653**	**11.2%**
6214	**Outpatient Care Centers**	**686,170**	**870,137**	**183,967**	**26.8%**
7139	Other Amusement and Recreation Industries	1,151,344	1,327,915	176,571	15.3%
	Total	60,108,569	70,633,715	10,525,146	17.5%

Source: EMSI

Concentrated Industries: Location Quotient

Location Quotient (LQ) analysis compares a specific geographic region to a larger reference area by quantifying how concentrated a particular industry, demographic group, or other variable is as compared to the larger geography. In this section, employment by industry in Monmouth County is compared to the State and U.S. to identify which industries are more highly concentrated in the County than at the state or national level.

LQ is calculated by dividing the percent of jobs within each industry locally by the percent of jobs in the same industry at the state or national level. For example, if the finance and insurance industry accounts for 2% of jobs in a community and at the national level this industry has 1% of the total jobs, the community has an LQ of 2.0 (0.02 ÷ 0.01 = 2). In this example, the local community employs twice as many individuals in the industry as expected based on national employment patterns. Typically, only values above 1.20 or below 0.80 are considered "significant" findings for in LQ analysis. Industries with a high LQ and high employment numbers are assumed to produce more than what is needed locally (i.e. a surplus) and export their products and services.

The following tables contain the results of the state and national LQ analysis for Monmouth County industries. **We note that any industry with fewer than 500 jobs at the 2-digit level or 250 jobs at the 4-digit level has been removed** from the tables to avoid any extreme values that are simply the result of sparse employment in an industry. For the 2-digit level, industries found to be significant at the state LQ analysis level are shaded in a darker blue.

Monmouth County 2-digit LQs Sorted by State LQ

NAICS Code	Description	2012 National LQ	2012 State LQ
71	Arts, Entertainment, and Recreation	1.97	2.09
22	Utilities	1.47	1.67
51	Information	1.27	1.43
11	Agriculture, Forestry, Fishing and Hunting	0.35	1.27
23	Construction	0.99	1.26
44	Retail Trade	1.31	1.24
72	Accommodation and Food Services	1.05	1.18
81	Other Services (except Public Administration)	1.08	1.15
62	Health Care and Social Assistance	1.24	1.14
54	Professional, Scientific, and Technical Services	1.27	1.02
53	Real Estate and Rental and Leasing	1.05	1.01
61	Educational Services (Private)	1.03	1.01
90	Government	0.92	0.98
52	Finance and Insurance	1.05	0.91
56	Administrative and Support and Waste Management and Remediation Services	0.79	0.74
42	Wholesale Trade	0.80	0.61
48	Transportation and Warehousing	0.72	0.58
31	Manufacturing	0.40	0.54
55	Management of Companies and Enterprises	0.56	0.41

Source: EMSI

Below are the Top 25 highest LQs in Monmouth County at the 4-digit NAICS level compared to the State of New Jersey. As noted, we have suppressed high LQs in industries with negligible employment (defined as employment in 2012 of less than 250 individuals).

Top 25 Monmouth County 4-digit LQs Sorted by State LQ		
NAICS Code	Description	2012 State LQ
3352	Household Appliance Manufacturing	*
4872	Scenic and Sightseeing Transportation, Water	*
7213	Rooming and Boarding Houses	*
5122	Sound Recording Industries	*
3326	Spring and Wire Product Manufacturing	3.25
1120	Animal Production	*
1152	Support Activities for Animal Production	*
7112	Spectator Sports	3.03
2212	Natural Gas Distribution	2.89
7139	Other Amusement and Recreation Industries	2.51
5171	Wired Telecommunications Carriers	2.36
3117	Seafood Product Preparation and Packaging	*
4855	Charter Bus Industry	2.34
6233	Community Care Facilities for the Elderly	2.29
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2.13
7111	Performing Arts Companies	2.05
5112	Software Publishers	2.04
3262	Rubber Product Manufacturing	*
7224	Drinking Places (Alcoholic Beverages)	2.03
5612	Facilities Support Services	1.99
2373	Highway, Street, and Bridge Construction	1.89
4452	Specialty Food Stores	1.88
2361	Residential Building Construction	1.76
6243	Vocational Rehabilitation Services	1.75
9011	Federal Government, Civilian	1.75

*LQs not calculated due to low employment levels in industry.
Source: EMSI

The next table shows the Top 25 LQs in Monmouth County at the 4-digit NAICS compared to the nation. As noted, we have suppressed any LQs in industries with negligible employment (defined as employment in 2012 of less than 250 individuals). Those industries in bold typeface in the table below do not appear in the Top 25 LQs using the state as the basis for comparison.

Top 25 Monmouth County 4-digit LQs Sorted by National LQ		
NAICS Code	Description	2012 National LQ
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	5.81
4855	Charter Bus Industry	5.08
4854	**School and Employee Bus Transportation**	**4.81**
4872	Scenic and Sightseeing Transportation, Water	*
2212	Natural Gas Distribution	3.80
5171	Wired Telecommunications Carriers	3.67
3326	Spring and Wire Product Manufacturing	3.47
4232	**Furniture and Home Furnishing Merchant Wholesalers**	**3.34**
7139	Other Amusement and Recreation Industries	2.96
4453	**Beer, Wine, and Liquor Stores**	**2.75**
4452	Specialty Food Stores	2.71
7213	Rooming and Boarding Houses	*
2213	**Water, Sewage and Other Systems**	*****
1152	Support Activities for Animal Production	*
5612	Facilities Support Services	2.17
7112	Spectator Sports	2.11
6233	Community Care Facilities for the Elderly	2.08
3254	**Pharmaceutical and Medicine Manufacturing**	**2.01**
3256	**Soap, Cleaning Compound, and Toilet Preparation Manufacturing**	**1.99**
4821	**Rail Transportation**	**1.97**
3352	Household Appliance Manufacturing	*
5417	**Scientific Research and Development Services**	**1.93**
6213	**Offices of Other Health Practitioners**	**1.85**
8121	**Personal Care Services**	**1.84**
7224	Drinking Places (Alcoholic Beverages)	1.83

*LQs not calculated due to low employment levels in industry.
Source: EMSI

Sub-Industries of Interest

Industries with a significant LQ at either the state or national levels that were also identified as top performing industries (size, historic growth, projected growth) in the previous analyses include:

- *Other Amusement and Recreation Industries*
- *Other Financial Investment Activities*
- *Offices of Other Health Care Practitioners*

Additionally, the LQ analyses identified several industries that may not be the largest or fastest growing, but have a higher concentration in Monmouth County compared to the state and/or nation:

- *Facilities Support Services*
- *Community Care Facilities for the Elderly*
- *Wired Telecommunication Carriers*
- *Spectator Sports*
- *Natural Gas Distribution*
- *School and Employee Bus Transportation (nation only)*
- *Furniture and Home Furnishing Merchant Wholesalers (nation only)*
- *Specialty Food Stores*

Competitive Industries: Shift Share

Whereas the Location Quotient is fixed at a specific point in time, the Shift Share analysis looks at changes in employment by industry over a period of time (in this case, the period between 2002-2012). Shift Share attempts to determine how much of a community's job growth can be attributed to national trends and how much is due to unique local factors. It is a way to evaluate how a local industry 'stacks up' against the national average in that industry.

Using changes in the national economy in general and changes in each particular industry at the national level over a specific time period, Shift Share calculates an expected change in employment for that same industry locally. It then compares the expected change to the actual change in that time period. The extent to which the actual change exceeds/falls short of the expected change is considered the result of the competitiveness of that local industry, known as the Competitive Effect. For example, if a certain industry in a community grows by 500 jobs, but 200 of those jobs are expected due to overall economic growth in the nation and industry specific trends at the national level, then the remaining 300 jobs cannot be explained by national trends. These unexplained jobs were presumably created by unique conditions occurring locally that contributed to job growth. In this example, these 300 jobs are the Competitive Effect for that local industry.

In contrast to LQ analysis, there is no a specific threshold in which the Competitive Effect of a particular industry is considered significant. However, we typically identify those industries where the "Competitive Effect" number is large relative to the overall employment levels of the community.

Below is a table showing all industries in Monmouth County at the 2-digit NAICS code level, sorted by the number of jobs in the "Competitive Effect" column. Two industries appear to enjoy a strong competitive effect: Arts, Entertainment, and Recreation and Other Services. Also of note is that Manufacturing, while declining in total job numbers, performed significantly better than expected. By far the largest divergence from expected changes is in Professional, Scientific and Technical Services, where employment dropped by approximately 2,000 despite being expected to grow by 4,000.

Most Competitive Monmouth County 2-digit Industries (Shift Share)						
NAICS Code	Description	2002 Jobs	2012 Jobs	Expected Change	Actual Change	Competitive Effect
71	Arts, Entertainment, and Recreation	6,143	8,445	495	2,302	1,807
81	Other Services (except Public Administration)	12,838	14,883	760	2,045	1,285
55	Management of Companies and Enterprises	1,132	1,992	168	860	692
31	Manufacturing	10,803	8,894	(2,325)	(1,909)	416
72	Accommodation and Food Services	19,895	22,931	2,812	3,036	224
22	Utilities	1,359	1,499	(78)	140	218
48	Transportation and Warehousing	5,915	6,210	225	295	70
21	Mining, Quarrying, and Oil and Gas Extraction	32	23	18	(9)	-27
53	Real Estate and Rental and Leasing	4,945	4,823	(47)	(122)	-75
44	Retail Trade	37,871	36,920	(843)	(951)	-108
11	Agriculture, Forestry, Fishing and Hunting	1,689	1,159	(88)	(530)	-442
56	Administrative and Support and Waste Management and Remediation Services	12,753	12,904	821	151	-670
52	Finance and Insurance	12,440	11,526	(193)	(914)	-721
42	Wholesale Trade	9,261	8,522	(7)	(739)	-732
99	Unclassified Industry	1,078	18	(173)	(1,060)	-887
51	Information	9,253	6,443	(1,920)	(2,810)	-890
62	Health Care and Social Assistance	33,695	40,725	8,414	7,030	-1,384
61	Educational Services (Private)	7,063	7,107	1,976	44	-1,932
23	Construction	18,032	13,882	(2,091)	(4,150)	-2,059
90	Government	42,433	40,762	886	(1,671)	-2,557
54	Professional, Scientific, and Technical Services	23,489	21,500	4,115	(1,989)	-6,104
	Total	272,119	271,168	12,925	-951	-13,876

Source: EMSI

The table below presents the same analysis for the County, but at the 4-digit NAICS level. We display the Top 25 industries sorted by number of jobs in the Competitive Effect column.

Most Competitive Monmouth County 4-digit Industries (Shift Share)						
NAICS Code	Description	2002 Jobs	2012 Jobs	Expected Change	Actual Change	Competitive Effect
7139	Other Amusement and Recreation Industries	4,350	6,235	314	1,885	1,572
4521	Department Stores	4,567	5,177	(434)	610	1,045
9029	State Government, Excluding Education and Hospitals	1,513	2,310	(95)	797	892
4451	Grocery Stores	6,587	7,414	66	827	761
6211	Offices of Physicians	5,417	7,316	1,155	1,899	744
8121	Personal Care Services	2,573	3,842	544	1,269	725
5511	Management of Companies and Enterprises	1,132	1,992	168	860	693
5171	Wired Telecommunications Carriers	4,709	3,740	(1,603)	(969)	633
3391	Medical Equipment and Supplies Manufacturing	334	960	12	626	614
5241	Insurance Carriers	2,135	2,500	(184)	365	549
4931	Warehousing and Storage	312	897	89	585	496
8111	Automotive Repair and Maintenance	2,010	2,357	(143)	347	489
9036	Education and Hospitals (Local Government)	18,004	18,804	360	800	440
5611	Office Administrative Services	487	1,129	227	642	415
4411	Automobile Dealers	2,917	2,940	(375)	23	399
7221	Full-Service Restaurants	8,764	10,720	1,570	1,956	385
5413	Architectural, Engineering, and Related Services	3,326	3,884	199	558	358
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals (Private)	<10	350	0	--	349
3254	Pharmaceutical and Medicine Manufacturing	712	1,014	(46)	302	347
5311	Lessors of Real Estate	1,333	1,684	10	351	341
7222	Limited-Service Eating Places	5,824	7,265	1,109	1,441	332
5112	Software Publishers	207	544	24	337	313
5419	Other Professional, Scientific, and Technical Services	1,543	2,203	356	660	305
5221	Depository Credit Intermediation	2,594	2,912	19	318	298
6219	Other Ambulatory Health Care Services	414	840	132	426	294
	Total	64,747	77,893	3,623	12,796	9,519

Source: EMSI

The largest Competitive Effect is in *Other Amusement and Recreation Industries*. We examined this at the six-digit level and found that the majority of the job change fell into "*713940 – Fitness and Recreational Sports Centers*" which includes the following: aerobic dance and exercise centers, athletic clubs, body building studios, dance centers, exercise centers, fitness centers and salons, gymnasiums, ice skating rinks, spas, tennis clubs and other.

Industry Composition & Growth

Data from YourEconomy.org provides an understanding of the business mix in the County across the various "sectors" (indicating the location of the entity's headquarters) and "stages" (based on the number of employees).

"Sectors" are defined as:

- **Noncommercial** - educational institutions, post offices, government agencies, and other nonprofit organizations
- **Nonresident** - businesses located in the County but headquartered in a different state
- **Resident** - Either stand-alone businesses in the area or businesses with headquarters in New Jersey

Understanding where company headquarters are located is vitally important when it comes to economic development. For example, if there is a local manufacturing plant whose headquarters are located in a different part of the country, that means the company's top decision makers are likely not tied in with the local community. Such businesses could be more apt to make decisions that negatively impact job growth.

"Stages" apply only to "resident businesses" in the County (see definition above) and are meant to capture the approximate phase that the business is in (ranging from entrepreneur to small start-up to mid-size and mature businesses):

- **Self-employed:** 1 employee
- **Stage 1**: 2-9 employees
- **Stage 2**: 10-99 employees
- **Stage 3**: 100-499 employees
- **Stage 4**: 500+ employees

The table below shows the breakdown by sector and stage for businesses within Monmouth County and New Jersey. We see that the County has a lower reliance on Nonresident employment sources (data current here as of 2009) as compared to the State, with 15% versus 18% of jobs in that category. The County is more heavily concentrated in employment at relatively small establishments, with a total of 69% in Stage 1 and 2 enterprises versus the State figure of 62%. Conversely, the County has relatively less employment in Stage 3 and 4 establishments (25% versus 33% at the State).

Composition: Average Jobs (2009)		
Sectors	Monmouth	New Jersey
Noncommercial	16%	16%
Nonresident	15%	18%
Resident	69%	66%
Resident Stages	Monmouth	New Jersey
Self-Employed (1)	6%	5%
Stage 1 (2-9)	31%	27%
Stage 2 (10-99)	38%	35%
Stage 3 (100-499)	13%	16%
Stage 4 (500+)	12%	17%

Source: YourEconomy.org

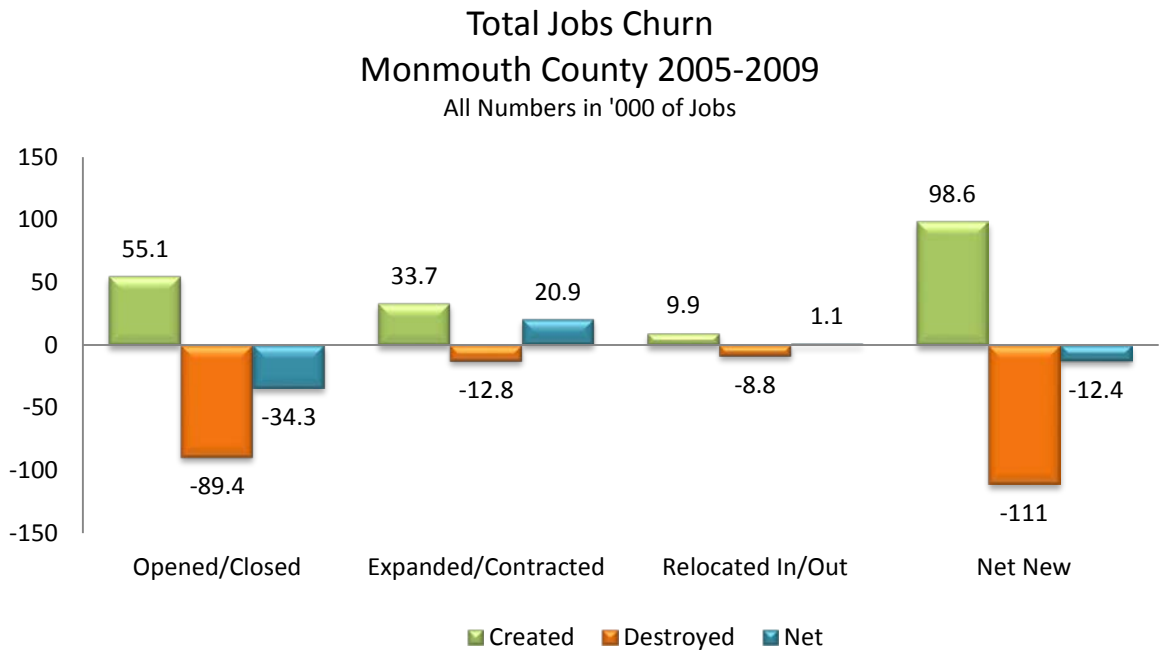
Using the same terminology for "stages" and "sectors", the table below shows changes in establishments, jobs and sales from 2005-2009 in the County compared to the State. Interestingly, while nonresident establishments declined in this time period by 206 (-11.9%), employment at those establishments actually grew by 2,246 jobs (4.3%). In comparison, during the same time period, resident business establishments grew by 5,186 (13.4%) but employed 13,094 fewer people (-5.3%).

Monmouth County Establishments, Jobs and Sales Growth Compared to NJ					
Establishments	2005	2009	Change	% Change	NJ % Change
TOTAL	**42,717**	**47,715**	**4,998**	**11.7%**	**10.7%**
Noncommercial	2,377	2,395	18	0.8%	1.0%
Nonresident	1,724	1,518	-206	-11.9%	-15.7%
Resident	38,616	43,802	5,186	13.4%	12.8%
Resident Establishments Only					
Self-Employed (1)	12,253	14,382	2,129	17.4%	20.3%
Stage 1 (2-9)	21,929	25,374	3,445	15.7%	13.7%
Stage 2 (10-99)	4,208	3,837	-371	-8.8%	-9.4%
Stage 3 (100-499)	199	188	-11	-5.5%	-6.9%
Stage 4 (500+)	27	21	-6	-22.2%	-14.7%
Jobs	2005	2009	Change	% Change	NJ % Change
TOTAL	**358,843**	**346,450**	**-12,393**	**-3.5%**	**-6.7%**
Noncommercial	57,982	56,437	-1,545	-2.7%	-9.0%
Nonresident	51,698	53,944	2,246	4.3%	-12.9%
Resident	249,163	236,069	-13,094	-5.3%	-4.4%
Resident Establishments Only					
Self-Employed (1)	12,253	14,382	2,129	17.4%	20.3%
Stage 1 (2-9)	72,503	78,569	6,066	8.4%	7.3%
Stage 2 (10-99)	95,098	87,577	-7,521	-7.9%	-8.0%
Stage 3 (100-499)	33,718	31,291	-2,427	-7.2%	-7.3%
Stage 4 (500+)	35,591	24,250	-11,341	-31.9%	-16.6%
Sales (M)	2005	2009	Change	% Change	NJ % Change
TOTAL	**$39,602**	**$39,715**	**$112**	**0.3%**	**-6.5%**
Noncommercial	$2,092	$2,421	$329	15.7%	3.5%
Nonresident	$7,011	$6,534	-$476	-6.8%	-15.5%
Resident	$30,499	$30,759	$260	0.9%	-4.2%
Resident Establishments Only					
Self-Employed (1)	$1,293	$1,375	$82	6.4%	8.9%
Stage 1 (2-9)	$8,705	$8,836	$130	1.5%	2.2%
Stage 2 (10-99)	$13,535	$13,241	-$294	-2.2%	-2.4%
Stage 3 (100-499)	$3,836	$4,067	$230	6.0%	-1.3%
Stage 4 (500+)	$3,130	$3,240	$110	3.5%	-20.7%

Source: YourEconomy.org

Looking only at resident business employment patterns by "stage", we see that employment growth was positive in the Self-Employed and Stage 1 levels, but declined in the Stage 2, 3 and 4 categories. This is consistent with patterns at the State level.

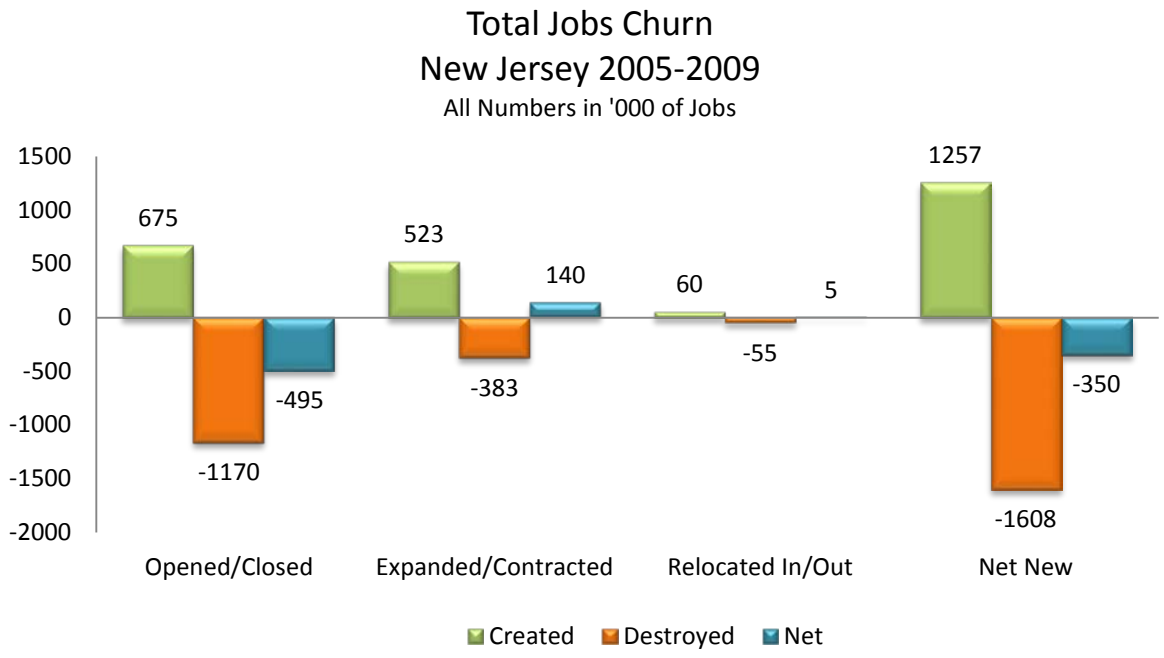
Another way to understand job growth and decline is to classify jobs by how the establishments themselves are changing with time: by opening up or closing down, expanding or contracting, or relocating into or out of a community. The bar graph below shows this pattern in job changes from 2005-2009 by these categories on a job increase, job decrease and net basis. For example, in looking at the first set of bars in the graph, we see that 55,100 jobs were created in this time period from the opening of new businesses in the County, which was more than offset by the loss of 89,400 jobs from business closures, resulting in a net loss of 34,300 jobs attributable to businesses opening or closing.



Source: YourEconomy.org

We can see that the greatest net contribution in this time period was from the expansion of existing establishments. Relocations were a wash and new businesses actually provided negative growth.

The same information is shown below for the State of New Jersey as a whole. The conclusion is similar to the County, in that net job creation was positive only for expansions/contractions within the State. Relocations were a wash and openings/closing contributed negative growth. (We note that this is also consistent with national trends during the time period, likely the result of a tough economy).



Source: YourEconomy.org

Occupation Analysis

In addition to looking at employment by industry, we review employment by occupation. Occupations refer not to the product or service being provided, but to the defined set of tasks required by a job. To illustrate the difference, we point out that the health care industry contains occupations such as doctors and nurses who provide health services to patients. However, the same industry also contains occupations such as management, real estate professionals, information technology professionals, human resource experts, janitors and cleaners, and clerical staff.

Occupation data is used to evaluate how the skills, education, and certifications of the resident population match up with the County's current and future workforce needs. Occupations are classified using the Standard Occupational Classification (SOC) system. This is the system used by Federal statistical agencies to classify workers into one of 840 occupational categories. 2-digit SOC codes for Monmouth County are listed in the following table, with the five largest occupations highlighted in blue. As with NAICS codes, 2-digit SOC codes include broad occupational categories such as "healthcare practitioners and technical occupations" whereas the 5-digit level, the level at which the Occupation Analysis is conducted, includes occupations such as "chiropractors".

For more detail on occupations and the SOC system, we refer the reader to http://www.bls.gov/soc/.

Largest Occupations

This table displays all occupations in the County at the two-digit SOC code level. The largest occupation in Monmouth County is *Office and Administrative Support Occupations* with 43,724 jobs or 16% of all jobs.

Largest Occupations: Monmouth County (2-digit SOC)			
SOC Code	Description	2012 Jobs	%
43-0000	Office and Administrative Support Occupations	43,724	16.1%
41-0000	Sales and Related Occupations	31,526	11.6%
35-0000	Food Preparation and Serving Related Occupations	23,823	8.8%
25-0000	Education, Training, and Library Occupations	20,940	7.7%
29-0000	Healthcare Practitioners and Technical Occupations	15,947	5.9%
53-0000	Transportation and Material Moving Occupations	15,549	5.7%
11-0000	Management Occupations	13,698	5.1%
13-0000	Business and Financial Operations Occupations	13,128	4.8%
39-0000	Personal Care and Service Occupations	12,564	4.6%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	10,573	3.9%
47-0000	Construction and Extraction Occupations	10,027	3.7%
49-0000	Installation, Maintenance, and Repair Occupations	9,898	3.7%
31-0000	Healthcare Support Occupations	9,093	3.4%
15-0000	Computer and Mathematical Occupations	7,816	2.9%
51-0000	Production Occupations	7,636	2.8%
33-0000	Protective Service Occupations	5,384	2.0%
21-0000	Community and Social Service Occupations	4,440	1.6%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	4,100	1.5%
17-0000	Architecture and Engineering Occupations	4,054	1.5%
23-0000	Legal Occupations	2,622	1.0%
19-0000	Life, Physical, and Social Science Occupations	2,244	0.8%
55-0000	Military occupations	1,708	0.6%
45-0000	Farming, Fishing, and Forestry Occupations	669	0.2%
99-0000	Unclassified Occupation	0	0.0%
	Total	271,163	100%

Source: EMSI

Below is a list of the Top 25 largest occupations in Monmouth County at the 4-digit SOC code level. We compare those same occupational concentration levels (as a percent of total employment) across the State of New Jersey, the MSA and the nation. To help provide depth to these numbers, we highlighted the reference geographies as follows:

1. If the concentration of that occupation was 25%+ lower in the reference geography, we highlighted it in red.
2. If the concentration of that occupation was 25%+ greater in the reference geography, we highlighted it in green.

25 Largest Occupations: Monmouth County (4-digit SOC)						
SOC Code	Description	2012 Jobs	% County	% NJ	& MSA	% USA
41-2031	Retail Salespersons	9,122	3.4%	2.9%	3.0%	3.0%
41-2011	Cashiers	8,081	3.0%	2.6%	**2.1%**	2.3%
35-3031	Waiters and Waitresses	5,584	2.1%	**1.4%**	**1.4%**	1.6%
43-9061	Office Clerks, General	5,472	2.0%	2.2%	2.5%	2.2%
29-1111	Registered Nurses	5,168	1.9%	1.9%	1.9%	1.9%
43-5081	Stock Clerks and Order Fillers	4,595	1.7%	1.6%	1.3%	**1.2%**
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	4,485	1.7%	1.9%	**2.1%**	1.7%
43-4171	Receptionists and Information Clerks	4,279	1.6%	1.2%	**1.1%**	**0.7%**
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	4,276	1.6%	1.5%	1.4%	2.0%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	4,262	1.6%	1.6%	**2.0%**	1.6%
31-1012	Nursing Aides, Orderlies, and Attendants	3,655	1.3%	1.3%	1.1%	1.0%
43-4051	Customer Service Representatives	3,457	1.3%	1.4%	1.4%	1.5%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3,455	1.3%	**1.8%**	1.2%	1.5%
25-9041	Teacher Assistants	3,271	1.2%	1.2%	1.2%	**0.9%**
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	3,261	1.2%	**0.9%**	**0.7%**	**0.7%**
37-3011	Landscaping and Groundskeeping Workers	3,020	1.1%	**0.8%**	**0.6%**	**0.8%**
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,014	1.1%	1.3%	1.3%	1.3%
25-2021	Elementary School Teachers, Except Special Education	2,937	1.1%	1.1%	0.9%	0.9%
41-1011	First-Line Supervisors of Retail Sales Workers	2,809	1.0%	0.9%	0.8%	1.0%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,774	1.0%	1.1%	1.2%	1.0%
11-1021	General and Operations Managers	2,725	1.0%	1.0%	1.2%	**1.3%**
13-1199	Business Operations Specialists, All Other	2,588	1.0%	1.2%	**0.6%**	**0.7%**
39-9011	Childcare Workers	2,494	0.9%	0.9%	**1.3%**	1.0%
13-2011	Accountants and Auditors	2,346	0.9%	1.0%	**1.2%**	0.9%
25-3999	Teachers and Instructors, All Other	2,298	0.8%	0.7%	**0.6%**	**0.6%**
	Total	99,428	37%	35%	34%	33%

Source: EMSI

One observation that may strike the reader is that there are two occupations for which Monmouth is significantly more concentrated than all three reference geographies: *Secondary School Teachers* and *Landscaping and Groundskeeping Workers*. We also note a higher concentration of *Teachers and Instructors* as compared to the MSA and Nation, which is true for *Business Operations Specialists* and *Receptionists and Information Clerks*.

Fastest Growing Occupation 2002-2012

To determine which occupations have experienced the highest growth rate in the past ten years, the anticipated change in employment (i.e. increase in the number of jobs) is provided for 2002 to 2012 in the table below. The table displays the Top 25 fastest growing occupations by increase in number of jobs from 2002-2012. As with the previous table, what is interesting to consider is not just the job change that occurred locally, but to understand to what extent that pattern diverges from the State, MSA and national trends. We highlighted the reference geographies as follows:

1. If the percent change of that occupation was 50%+ lower in the reference geography, we highlighted it in red.
2. If the percent change of that occupation was 50%+ greater in the reference geography, we highlighted it in green.

Fastest Growing Occupations (2002-12): Monmouth County, NJ, MSA and USA

SOC Code	Description	2002 Jobs	2012 Jobs	Change	% Change	% NJ	% MSA	% USA
35-3031	Waiters and Waitresses	4,738	5,584	846	17.9%	10.9%	**27.7%**	13.7%
43-4171	Receptionists and Information Clerks	3,446	4,279	833	24.2%	13.2%	14.3%	**11.7%**
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	3,468	4,276	808	23.3%	32.0%	**42.7%**	22.5%
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,386	2,129	743	53.6%	42.0%	44.8%	**22.2%**
39-9031	Fitness Trainers and Aerobics Instructors	940	1,621	681	72.4%	**31.6%**	**27.8%**	**16.3%**
31-1011	Home Health Aides	783	1,437	654	83.5%	124.0%	118.9%	99.5%
37-3011	Landscaping and Groundskeeping Workers	2,470	3,020	550	22.3%	21.2%	17.6%	18.2%
29-1111	Registered Nurses	4,650	5,168	518	11.1%	14.7%	11.0%	**19.5%**
39-9021	Personal Care Aides	581	1,082	501	86.2%	99.2%	91.4%	112.4%
29-2041	Emergency Medical Technicians and Paramedics	220	541	321	145.9%	**49.4%**	**37.9%**	**33.2%**
39-2021	Nonfarm Animal Caretakers	437	748	311	71.2%	53.8%	43.6%	**35.2%**
35-2014	Cooks, Restaurant	1,380	1,681	301	21.8%	15.1%	**38.0%**	20.4%
43-6013	Medical Secretaries	684	977	293	42.8%	36.9%	28.2%	43.9%
25-3021	Self-Enrichment Education Teachers	806	1,081	275	34.1%	36.1%	36.6%	26.0%
39-5092	Manicurists and Pedicurists	360	626	266	73.9%	53.0%	63.8%	**35.7%**
31-1012	Nursing Aides, Orderlies, and Attendants	3,397	3,655	258	7.6%	**12.9%**	5.5%	11.3%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,472	1,694	222	15.1%	15.9%	**26.0%**	13.1%
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	681	900	219	32.2%	**13.7%**	**12.4%**	**14.7%**
35-2021	Food Preparation Workers	1,663	1,880	217	13.0%	10.6%	**21.6%**	10.6%
33-9032	Security Guards	1,398	1,604	206	14.7%	9.5%	7.4%	9.2%
31-9092	Medical Assistants	930	1,126	196	21.1%	12.9%	14.4%	20.4%
13-1161	Market Research Analysts and Marketing Specialists	487	681	194	39.8%	35.9%	47.5%	47.5%
21-1013	Marriage and Family Therapists	273	456	183	67.0%	52.4%	48.2%	49.4%
39-3091	Amusement and Recreation Attendants	603	784	181	30.0%	**7.6%**	**12.0%**	**6.9%**
41-9022	Real Estate Sales Agents	878	1,058	180	20.5%	23.1%	22.9%	14.4%
	Total	38,131	48,088	9,957	26%			

Source: EMSI

To see why the relative change can be important, we direct the reader to the *Registered Nurses* occupation as an example. While it is one of the fastest growing occupations in the County, the growth rate is only about half that of the nation (11% versus 20%.) A similar observation could be made as well with respect to occupations in the restaurant business, with *Waiters and Waitresses*, *Combined Food Preparation and Serving Workers*, *First-line Supervisors of Food Preparation*, and *Food Preparation Workers* all growing significantly but at lower rates than the MSA.

Fastest Growing Occupations, Education and Wages 2012-2022

To determine which occupations are expected to experience the highest growth rate into the future, the anticipated change in employment (i.e. increase in the number of jobs) is provided for 2012 to 2022. (See the appendix "EMSI Methodology for Making Projections" for explanations as to how these projections are made.)

Below is a table showing the projected Top 25 fastest growing occupations (5-digit SOC) based on EMSI's outlook for growth over the next decade. We provide the job change number, percentage growth, median wage specific to the area and the minimum educational level required.

Fastest Growing Occupations (2012-22): Monmouth County

SOC Code	Description	2012 Jobs	2022 Jobs	Change	% Change	Median Wage	Education Level
31-1011	Home Health Aides	1,437	2,135	698	48.6%	$24,482	Short-term on-the-job training
39-5012	Hairdressers, Hairstylists, and Cosmetologists	2,129	2,773	644	30.2%	$28,850	Postsecondary non-degree award
41-2031	Retail Salespersons	9,122	9,763	641	7.0%	$20,405	Short-term on-the-job training
39-9021	Personal Care Aides	1,082	1,657	575	53.1%	$23,483	Short-term on-the-job training
29-1111	**Registered Nurses**	**5,168**	**5,726**	**558**	**10.8%**	**$77,771**	**Associate's degree**
43-4171	Receptionists and Information Clerks	4,279	4,816	537	12.5%	$26,312	Short-term on-the-job training
35-3031	Waiters and Waitresses	5,584	6,053	469	8.4%	$19,531	Short-term on-the-job training
39-9031	**Fitness Trainers and Aerobics Instructors**	**1,621**	**2,043**	**422**	**26.0%**	**$37,835**	**Postsecondary non-degree award**
49-9021	**Heating, Air Conditioning, and Refrigeration Mechanics and Installers**	**900**	**1,287**	**387**	**43.0%**	**$51,626**	**Postsecondary non-degree award**
43-9061	Office Clerks, General	5,472	5,828	356	6.5%	$28,018	Short-term on-the-job training
25-2021	**Elementary School Teachers, Except Special Education**	**2,937**	**3,284**	**347**	**11.8%**	**$60,320**	**Bachelor's degree**
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	4,276	4,616	340	8.0%	$18,387	Short-term on-the-job training
31-1012	Nursing Aides, Orderlies, and Attendants	3,655	3,991	336	9.2%	$26,645	Postsecondary non-degree award
37-3011	Landscaping and Groundskeeping Workers	3,020	3,322	302	10.0%	$23,109	Short-term on-the-job training
25-9041	Teacher Assistants	3,271	3,548	277	8.5%	$24,211	Short-term on-the-job training
43-6013	**Medical Secretaries**	**977**	**1,253**	**276**	**28.2%**	**$37,336**	**Moderate-term on-the-job training**
47-2152	**Plumbers, Pipefitters, and Steamfitters**	**848**	**1,117**	**269**	**31.7%**	**$58,989**	**Long-term on-the-job training**
35-2014	Cooks, Restaurant	1,681	1,919	238	14.2%	$22,298	Moderate-term on-the-job training
25-2022	**Middle School Teachers, Except Special and Career/Technical Education**	**2,126**	**2,353**	**227**	**10.7%**	**$59,966**	**Bachelor's degree**
39-2021	Nonfarm Animal Caretakers	748	963	215	28.7%	$21,466	Short-term on-the-job training
31-9092	Medical Assistants	1,126	1,322	196	17.4%	$32,074	Moderate-term on-the-job training
29-2041	**Emergency Medical Technicians and Paramedics**	**541**	**726**	**185**	**34.2%**	**$37,211**	**Postsecondary non-degree award**
39-9011	Childcare Workers	2,494	2,665	171	6.9%	$18,637	Short-term on-the-job training
13-1161	**Market Research Analysts and Marketing Specialists**	**681**	**852**	**171**	**25.1%**	**$64,168**	**Bachelor's degree**
25-3021	**Self-Enrichment Education Teachers**	**1,081**	**1,247**	**166**	**15.4%**	**$39,894**	**Work experience in a related occupation**
	Total	66,256	75,259	9,003	13.6%		

Source: EMSI

Any occupational classifications for which the median wage is $35,000 and greater is shown in boldface type in the table above. Not coincidentally, most of those jobs require post-secondary education in either a degree or non-degree program.

Industry Groups of Interest

Camoin Associates identified five groupings of industries that may be "of interest" to the Monmouth County CEDS process, based on analysis of industry data, stakeholder interviews, and other research conducted for this report. These five groups came up either as potential sources of growth and/or groups of industries that have experienced significant changes in recent years due to economic circumstances in the County. At this stage of the CEDS process, these are not "Targeted Industries" as often identified in a CEDS. They are simply a preliminary listing of potential opportunities to be further considered in later stages of the planning process. Before delving into detail on each group, we first present a brief overview of why they were selected for further consideration.

- Financial and Management System Industries
  - Historic growth.
  - Proximity to major metro areas important to the sector.
  - Connection to NYC finance and management.
  - Monmouth may be a good place to locate medium and small scale companies that are looking for presence outside NYC.
  - Very high wages.
  - Good fit with education levels and education assets.

- Professional, Scientific, Technical Services Industries
  - Growth in key subsectors.
  - High level of education of local base and strong education assets.
  - Proximity to major metro areas important to the sector.
  - Very high wages.

- Health and Related Industries
  - Strong local consumer demand.
  - Historic and projected growth.
  - Good fit with education levels and education assets.

- Visitation and Related Industries
  - Significant size of industry currently – one of the largest in County in terms of employment.
  - While wages are typically lower and the many of the jobs are part time and/or seasonal, presence of industry attracts dollars from outside of region and provides amenities for residents and workers, increasing the quality of life.
  - County has considerable oceanfront and open space; already has music scene and arts.
  - Good fit for attracting and retaining younger population and creative.

- IT/Telecommunications Industries
  - Historic strength due to Fort Monmouth, Lucent, and AT&T.
  - Proximity to major metro areas important to the sector.

- Excellent IT infrastructure in region.
- High wages.
- Occupations and skills benefit all industries.
- Good fit with education levels and education assets.

Given the above, we examined each of the five industry groupings in detail, including:

- Total employment, historic change in employment, and forecasted change in employment.
- Location quotient and local competitive effects.
- Historic and projected occupational trends.

Each industry group is covered in the same manner with the same statistics. Because this is only a preliminary statistical review, we do not provide commentary on the tables. Instead, we refer the reader to the previous section for definitions of terms and explanations of the analytic methodology.

Financial and Management Industries

Financial and Management Industry Group Summary	
Establishments (2011)	1,725
Jobs (2011)	18,341
Average Earnings per Job (2011)	$82,238

Source: EMSI

Growth in the Financial and Management Industry Group (2002-22)								
					2002-2012		2012-2022	
NAICS Code	Description	2002 Jobs	2012 Jobs	2022 Jobs	Change	% Change	Change	% Change
5511	Management of Companies and Enterprises	1,132	1,992	2,098	860	76.0%	106	5.3%
5241	Insurance Carriers	2,135	2,500	2,733	365	17.1%	233	9.3%
5311	Lessors of Real Estate	1,333	1,684	2,027	351	26.3%	343	20.4%
5239	Other Financial Investment Activities	989	1,312	1,628	323	32.7%	316	24.1%
5221	Depository Credit Intermediation	2,594	2,912	3,155	318	12.3%	243	8.3%
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	39	251	500	212	543.6%	249	99.2%
5223	Activities Related to Credit Intermediation	321	472	329	151	47.0%	-143	-30.3%
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	41	83	97	42	102.4%	14	16.9%
5211	Monetary Authorities-Central Bank	18	<10	N/A	N/A	N/A	N/A	N/A
5323	General Rental Centers	85	22	N/A	-63	-74.1%	N/A	N/A
5321	Automotive Equipment Rental and Leasing	266	157	107	-109	-41.0%	-50	-31.8%
5312	Offices of Real Estate Agents and Brokers	1,342	1,219	1,285	-123	-9.2%	66	5.4%
5322	Consumer Goods Rental	349	137	109	-212	-60.7%	-28	-20.4%
5231	Securities and Commodity Contracts Intermediation and Brokerage	1,454	1,234	1,413	-220	-15.1%	179	14.5%
5313	Activities Related to Real Estate	1,491	1,270	1,065	-221	-14.8%	-205	-16.1%
5242	Agencies, Brokerages, and Other Insurance Related Activities	3,059	2,722	2,757	-337	-11.0%	35	1.3%
5222	Nondepository Credit Intermediation	790	341	116	-449	-56.8%	-225	-66.0%
5251	Insurance and Employee Benefit Funds	1,073	17	13	-1,056	-98.4%	-4	-23.5%
	Total	18,511	18,325	19,432	-186	-1.0%	1,129	6.2%

Source: EMSI

Financial and Management Industry Group Location Quotient 2012			
NAICS Code	Description	National LQ	State LQ
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	5.81	2.13
5312	Offices of Real Estate Agents and Brokers	1.53	1.25
5239	Other Financial Investment Activities	1.66	1.22
5242	Agencies, Brokerages, and Other Insurance Related Activities	1.26	1.17
5311	Lessors of Real Estate	1.15	1.12
5223	Activities Related to Credit Intermediation	0.90	1.09
5313	Activities Related to Real Estate	0.96	1.08
5241	Insurance Carriers	1.12	0.93
5221	Depository Credit Intermediation	0.91	0.88
5231	Securities and Commodity Contracts Intermediation and Brokerage	1.46	0.60
5322	Consumer Goods Rental	0.41	0.44
5222	Nondepository Credit Intermediation	0.33	0.43
5511	Management of Companies and Enterprises	0.56	0.41
5251	Insurance and Employee Benefit Funds	0.20	0.41
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0.35	0.40
5321	Automotive Equipment Rental and Leasing	0.49	0.39

Source: EMSI

Competitiveness of Financial and Management Industry Group				
NAICS Code	Description	Expected Change	Actual Change	Competitive Effect
5511	Management of Companies and Enterprises	168	860	693
5241	Insurance Carriers	(184)	365	549
5311	Lessors of Real Estate	10	351	341
5221	Depository Credit Intermediation	19	318	298
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	(5)	212	218
5223	Activities Related to Credit Intermediation	8	151	144
5239	Other Financial Investment Activities	250	323	73
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	10	42	32
5312	Offices of Real Estate Agents and Brokers	(100)	(123)	(23)
5231	Securities and Commodity Contracts Intermediation and Brokerage	(194)	(220)	(27)
5323	General Rental Centers	(32)	(63)	(31)
5321	Automotive Equipment Rental and Leasing	(35)	(109)	(74)
5322	Consumer Goods Rental	(131)	(212)	(81)
5222	Nondepository Credit Intermediation	(146)	(449)	(303)
5313	Activities Related to Real Estate	369	(221)	(591)
5242	Agencies, Brokerages, and Other Insurance Related Activities	344	(337)	(681)
5251	Insurance and Employee Benefit Funds	(15)	(1056)	(1041)
		336	-168	-504

Source: EMSI

Growth in the Financial and Management Group Occupations - Top 25 (2002-12)					
SOC Code	Description	2002 Jobs	2012 Jobs	Change	% Change
41-9022	Real Estate Sales Agents	838	1,024	186	22%
43-3071	Tellers	979	1,122	143	15%
13-2052	Personal Financial Advisors	345	432	87	25%
41-3021	Insurance Sales Agents	1,338	1,420	82	6%
13-1199	Business Operations Specialists, All Other	288	325	37	13%
15-1121	Computer Systems Analysts	203	239	36	18%
13-1161	Market Research Analysts and Marketing Specialists	82	118	36	44%
13-2099	Financial Specialists, All Other	285	308	23	8%
11-9199	Managers, All Other	124	146	22	18%
41-9021	Real Estate Brokers	227	247	20	9%
11-3021	Computer and Information Systems Managers	125	145	20	16%
11-2021	Marketing Managers	87	106	19	22%
41-3099	Sales Representatives, Services, All Other	109	127	18	17%
13-2051	Financial Analysts	287	304	17	6%
15-1132	Software Developers, Applications	192	209	17	9%
23-2093	Title Examiners, Abstractors, and Searchers	90	107	17	19%
15-1142	Network and Computer Systems Administrators	67	82	15	22%
11-9141	Property, Real Estate, and Community Association Managers	446	460	14	3%
43-4141	New Accounts Clerks	91	102	11	12%
13-1078	Human Resources, Training, and Labor Relations Specialists, All Other	64	73	9	14%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	31	40	9	29%
13-1022	Wholesale and Retail Buyers, Except Farm Products	13	21	8	62%
15-1179	Information Security Analysts, Web Developers, and Computer Network Architects	87	94	7	8%
13-1041	Compliance Officers	53	60	7	13%
15-1799	Computer Occupations, All Other	49	56	7	14%
	Total	6,500	7,367	867	13%

Source: EMSI

Growth in the Financial and Management Group Occupations - Top 25 (2012-22)							
SOC Code	Description	2012 Jobs	2022 Jobs	Change	% Change	Median Wage	Education Level
41-9022	Real Estate Sales Agents	1,024	1,147	123	12%	$28,392	Postsecondary non-degree award
13-2052	Personal Financial Advisors	432	555	123	28%	$79,747	Bachelor's degree
41-3021	Insurance Sales Agents	1,420	1,536	116	8%	$52,312	Postsecondary non-degree award
41-3031	Securities, Commodities, and Financial Services Sales Agents	906	1,012	106	12%	$61,859	Bachelor's degree
13-2051	Financial Analysts	304	359	55	18%	$74,485	Bachelor's degree
43-3071	Tellers	1,122	1,169	47	4%	$24,086	Short-term on-the-job training
43-4051	Customer Service Representatives	806	851	45	6%	$31,096	Short-term on-the-job training
43-9061	Office Clerks, General	580	625	45	8%	$28,018	Short-term on-the-job training
13-2011	Accountants and Auditors	319	363	44	14%	$65,998	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	118	157	39	33%	$64,168	Bachelor's degree
43-9041	Insurance Claims and Policy Processing Clerks	553	584	31	6%	$32,552	Moderate-term on-the-job training
15-1121	Computer Systems Analysts	239	266	27	11%	$79,664	Bachelor's degree
43-6011	Executive Secretaries and Executive Administrative Assistants	210	237	27	13%	$53,061	Work experience in a related occupation
43-3031	Bookkeeping, Accounting, and Auditing Clerks	366	391	25	7%	$37,232	Moderate-term on-the-job training
13-2053	Insurance Underwriters	140	165	25	18%	$66,165	Bachelor's degree
41-9021	Real Estate Brokers	247	270	23	9%	$69,056	Work experience in a related occupation
43-1011	First-Line Supervisors of Office and Administrative Support Workers	475	494	19	4%	$48,589	Work experience in a related occupation
43-4171	Receptionists and Information Clerks	263	281	18	7%	$26,312	Short-term on-the-job training
11-3021	Computer and Information Systems Managers	145	162	17	12%	$121,326	Bachelor's or higher degree, plus work experience
15-1142	Network and Computer Systems Administrators	82	98	16	20%	$75,712	Bachelor's degree
13-1151	Training and Development Specialists	43	59	16	37%	$61,630	Bachelor's degree
41-3099	Sales Representatives, Services, All Other	127	142	15	12%	$62,213	Short-term on-the-job training
13-1111	Management Analysts	115	130	15	13%	$71,781	Bachelor's or higher degree, plus work experience
13-1199	Business Operations Specialists, All Other	325	339	14	4%	$63,232	Long-term on-the-job training
15-1132	Software Developers, Applications	209	223	14	7%	$80,662	Bachelor's degree
	Total	10,570	11,615	1,045	10%		

Source: EMSI

Professional Services Industries

Professional Services Industry Group Summary	
Establishments (2011)	2,969
Jobs (2011)	21,500
Average Earnings per Job (2011)	$92,971

Source: EMSI

Growth in the Professional Services Industry Group (2002-22)								
					2002-2012		2012-2022	
NAICS Code	Description	2002 Jobs	2012 Jobs	2022 Jobs	Change	% Change	Change	% Change
5416	Management, Scientific, and Technical Consulting Services	2,157	3,090	4,078	933	43.3%	988	32.0%
5419	Other Professional, Scientific, and Technical Services	1,543	2,203	2,795	660	42.8%	592	26.9%
5413	Architectural, Engineering, and Related Services	3,326	3,884	4,905	558	16.8%	1,021	26.3%
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	2,114	2,186	2,353	72	3.4%	167	7.6%
5414	Specialized Design Services	619	567	669	-52	-8.4%	102	18.0%
5418	Advertising, Public Relations, and Related Services	769	645	610	-124	-16.1%	-35	-5.4%
5411	Legal Services	3,245	3,094	3,255	-151	-4.7%	161	5.2%
5415	Computer Systems Design and Related Services	4,110	3,455	2,556	-655	-15.9%	-899	-26.0%
5417	Scientific Research and Development Services	5,607	2,378	600	-3,229	-57.6%	-1,778	-74.8%
	Total	23,490	21,502	21,821	-1,988	-8.5%	319	1.5%

Source: EMSI

Professional Services Industry Group Location Quotient 2012			
NAICS Code	Description	National LQ	State LQ
5413	Architectural, Engineering, and Related Services	1.48	1.54
5419	Other Professional, Scientific, and Technical Services	1.69	1.47
5414	Specialized Design Services	1.24	1.17
5417	Scientific Research and Development Services	1.93	1.14
5411	Legal Services	1.25	1.05
5416	Management, Scientific, and Technical Consulting Services	1.18	1.00
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	1.09	0.80
5415	Computer Systems Design and Related Services	1.07	0.75
5418	Advertising, Public Relations, and Related Services	0.67	0.58

Source: EMSI

Competitiveness of Professional Services Industry Group				
NAICS Code	Description	Expected Change	Actual Change	Competitive Effect
5413	Architectural, Engineering, and Related Services	199	558	358
5419	Other Professional, Scientific, and Technical Services	356	660	305
5414	Specialized Design Services	15	(52)	(67)
5418	Advertising, Public Relations, and Related Services	(32)	(124)	(92)
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	183	72	(111)
5411	Legal Services	21	(151)	(172)
5416	Management, Scientific, and Technical Consulting Services	1,156	933	(223)
5415	Computer Systems Design and Related Services	1,455	(655)	(2,110)
5417	Scientific Research and Development Services	1,238	(3,229)	(4,467)
	Total	4,591	-1,988	-6,579

Source: EMSI

Growth in the Professional Services Group Occupations - Top 25 (2002-12)					
SOC Code	Description	2002 Jobs	2012 Jobs	Change	% Change
29-2056	Veterinary Technologists and Technicians	134	301	167	125%
29-1131	Veterinarians	158	311	153	97%
17-2051	Civil Engineers	411	501	90	22%
13-1161	Market Research Analysts and Marketing Specialists	175	263	88	50%
39-2021	Nonfarm Animal Caretakers	68	137	69	101%
43-4171	Receptionists and Information Clerks	362	426	64	18%
23-2011	Paralegals and Legal Assistants	332	367	35	11%
43-3021	Billing and Posting Clerks	139	174	35	25%
15-1133	Software Developers, Systems Software	313	344	31	10%
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	154	182	28	18%
13-1111	Management Analysts	711	736	25	4%
47-4011	Construction and Building Inspectors	96	119	23	24%
27-3091	Interpreters and Translators	34	57	23	68%
17-2081	Environmental Engineers	104	125	21	20%
13-1081	Logisticians	45	65	20	44%
17-3025	Environmental Engineering Technicians	31	42	11	35%
27-1025	Interior Designers	112	122	10	9%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	69	78	9	13%
17-1011	Architects, Except Landscape and Naval	133	141	8	6%
17-1022	Surveyors	66	73	7	11%
43-4051	Customer Service Representatives	230	236	6	3%
17-3022	Civil Engineering Technicians	98	104	6	6%
27-1024	Graphic Designers	257	262	5	2%
19-2042	Geoscientists, Except Hydrologists and Geographers	49	54	5	10%
15-1141	Database Administrators	82	86	4	5%
	Total	4,363	5,306	943	22%

Source: EMSI

Growth in the Professional Services Group Occupations - Top 25 (2012-22)							
SOC Code	Description	2012 Jobs	2022 Jobs	Change	% Change	Median Wage	Education Level
17-2051	Civil Engineers	501	670	169	34%	$93,600	Bachelor's degree
29-2056	Veterinary Technologists and Technicians	301	453	152	50%	$35,942	Associate's degree
13-1111	Management Analysts	736	840	104	14%	$71,781	Bachelor's or higher degree, plus work experience
29-1131	Veterinarians	311	413	102	33%	$114,774	First professional degree
13-2011	Accountants and Auditors	1,084	1,171	87	8%	$65,998	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	263	336	73	28%	$64,168	Bachelor's degree
23-2011	Paralegals and Legal Assistants	367	436	69	19%	$47,403	Associate's degree
39-2021	Nonfarm Animal Caretakers	137	198	61	45%	$21,466	Short-term on-the-job training
43-4171	Receptionists and Information Clerks	426	485	59	14%	$26,312	Short-term on-the-job training
43-3021	Billing and Posting Clerks	174	217	43	25%	$32,469	Short-term on-the-job training
43-6012	Legal Secretaries	484	525	41	8%	$43,077	Associate's degree
43-9061	Office Clerks, General	494	531	37	7%	$28,018	Short-term on-the-job training
27-1024	Graphic Designers	262	299	37	14%	$38,979	Bachelor's degree
17-2141	Mechanical Engineers	204	239	35	17%	$87,339	Bachelor's degree
17-2081	Environmental Engineers	125	156	31	25%	$94,786	Bachelor's degree
17-3022	Civil Engineering Technicians	104	132	28	27%	$54,413	Associate's degree
47-4011	Construction and Building Inspectors	119	146	27	23%	$62,962	Work experience in a related occupation
43-3031	Bookkeeping, Accounting, and Auditing Clerks	498	524	26	5%	$37,232	Moderate-term on-the-job training
23-1011	Lawyers	1,365	1,390	25	2%	$99,798	First professional degree
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	182	206	24	13%	$20,904	Short-term on-the-job training
43-4051	Customer Service Representatives	236	259	23	10%	$31,096	Short-term on-the-job training
17-2071	Electrical Engineers	118	140	22	19%	$83,990	Bachelor's degree
41-3099	Sales Representatives, Services, All Other	423	444	21	5%	$62,213	Short-term on-the-job training
27-1025	Interior Designers	122	143	21	17%	$46,114	Associate's degree
27-3091	Interpreters and Translators	57	77	20	35%	$48,194	Long-term on-the-job training
	Total	9,093	10,430	1,337	15%		

Source: EMSI

Health and Related Industries

Health Industry Group Summary	
Establishments (2011)	2,268
Jobs (2011)	40,725
Average Earnings per Job (2011)	$58,688

Source: EMSI

Growth in the Health Industry Group (2002-22)								
					2002-2012		2012-2022	
NAICS Code	Description	2002 Jobs	2012 Jobs	2022 Jobs	Change	% Change	Change	% Change
6211	Offices of Physicians	5,417	7,316	8,694	1,899	35.1%	1,378	18.8%
6213	Offices of Other Health Practitioners	1,808	2,801	3,651	993	54.9%	850	30.3%
6233	Community Care Facilities for the Elderly	2,056	3,033	4,440	977	47.5%	1,407	46.4%
6241	Individual and Family Services	1,068	1,936	2,763	868	81.3%	827	42.7%
6216	Home Health Care Services	1,521	1,984	2,575	463	30.4%	591	29.8%
6219	Other Ambulatory Health Care Services	414	840	1,043	426	102.9%	203	24.2%
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals (Private)	<10	350	533	345	N/A	183	52.3%
6243	Vocational Rehabilitation Services	602	934	1,184	332	55.1%	250	26.8%
6221	General Medical and Surgical Hospitals (Private)	9,142	9,470	9,522	328	3.6%	52	0.5%
6212	Offices of Dentists	2,567	2,854	3,115	287	11.2%	261	9.1%
6214	Outpatient Care Centers	1,024	1,310	1,425	286	27.9%	115	8.8%
6242	Community Food and Housing, and Emergency and Other Relief Services	194	279	321	85	43.8%	42	15.1%
6232	Residential Mental Retardation, Mental Health and Substance Abuse Facilities	631	686	753	55	8.7%	67	9.8%
6244	Child Day Care Services	3,125	3,142	3,422	17	0.5%	280	8.9%
6239	Other Residential Care Facilities	103	101	99	-2	-1.9%	-2	-2.0%
6222	Psychiatric and Substance Abuse Hospitals (Private)	64	0	0	-64	N/A	N/A	N/A
6231	Nursing Care Facilities	3,378	3,290	3,295	-88	-2.6%	5	0.2%
6215	Medical and Diagnostic Laboratories	582	398	353	-184	-31.6%	-45	-11.3%
	Total	33,696	40,724	47,188	7,023	20.9%	6,464	15.9%

Source: EMSI

Health Industry Group Location Quotient 2012			
NAICS Code	Description	National LQ	State LQ
6233	Community Care Facilities for the Elderly	2.08	2.29
6243	Vocational Rehabilitation Services	1.42	1.75
6213	Offices of Other Health Practitioners	1.85	1.55
6211	Offices of Physicians	1.60	1.47
6212	Offices of Dentists	1.74	1.43
6219	Other Ambulatory Health Care Services	1.54	1.34
6244	Child Day Care Services	1.36	1.09
6214	Outpatient Care Centers	1.04	1.04
6221	General Medical and Surgical Hospitals (Private)	1.16	1.04
6242	Community Food and Housing, and Emergency and Other Relief Services	0.96	1.01
6231	Nursing Care Facilities	1.08	1.00
6241	Individual and Family Services	0.71	0.89
6216	Home Health Care Services	0.85	0.76
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals (Private)	0.87	0.75
6232	Residential Mental Retardation, Mental Health and Substance Abuse Facilities	0.64	0.62
6239	Other Residential Care Facilities	0.35	0.49
6215	Medical and Diagnostic Laboratories	0.87	0.43
6222	Psychiatric and Substance Abuse Hospitals (Private)	0.00	0.00

Source: EMSI

Competitiveness of Health Industry Group				
NAICS Code	Description	Expected Change	Actual Change	Competitive Effect
6211	Offices of Physicians	1,155	1,899	744
6223	Specialty (except Psychiatric and Substance Abuse)	0	345	349
6219	Other Ambulatory Health Care Services	132	426	294
6243	Vocational Rehabilitation Services	49	332	283
6213	Offices of Other Health Practitioners	717	993	275
6241	Individual and Family Services	754	868	114
6242	Community Food and Housing, and Emergency and Other Relief Services	32	85	53
6239	Other Residential Care Facilities	(5)	(2)	2
6233	Community Care Facilities for the Elderly	1,013	977	(35)
6222	Psychiatric and Substance Abuse Hospitals (Private)	13	(64)	(77)
6232	Residential Mental Retardation, Mental Health and Substance Abuse Facilities	143	55	(88)
6212	Offices of Dentists	399	287	(112)
6244	Child Day Care Services	194	17	(176)
6231	Nursing Care Facilities	191	(88)	(279)
6214	Outpatient Care Centers	620	286	(334)
6215	Medical and Diagnostic Laboratories	196	(184)	(379)
6216	Home Health Care Services	1,154	463	(691)
6221	General Medical and Surgical Hospitals (Private)	1,330	328	(1,002)
	Total	8,087	7,023	-1,059

Source: EMSI

Growth in the Health Group Occupations - Top 25 (2002-12)					
SOC Code	Description	2002 Jobs	2012 Jobs	Change	% Change
29-1111	Registered Nurses	3,976	4,669	693	17%
31-1011	Home Health Aides	717	1,370	653	91%
43-4171	Receptionists and Information Clerks	1,415	2,033	618	44%
39-9021	Personal Care Aides	375	832	457	122%
29-2041	Emergency Medical Technicians and Paramedics	120	421	301	251%
43-6013	Medical Secretaries	657	948	291	44%
31-1012	Nursing Aides, Orderlies, and Attendants	3,150	3,435	285	9%
31-9092	Medical Assistants	864	1,076	212	25%
29-1123	Physical Therapists	356	541	185	52%
29-1069	Physicians and Surgeons, All Other	735	911	176	24%
35-3041	Food Servers, Nonrestaurant	445	604	159	36%
31-2022	Physical Therapist Aides	154	309	155	101%
21-1013	Marriage and Family Therapists	206	360	154	75%
29-2021	Dental Hygienists	456	580	124	27%
21-1093	Social and Human Service Assistants	362	483	121	33%
43-9061	Office Clerks, General	697	816	119	17%
31-9091	Dental Assistants	696	802	106	15%
29-1122	Occupational Therapists	168	261	93	55%
29-1127	Speech-Language Pathologists	144	234	90	63%
43-3021	Billing and Posting Clerks	574	660	86	15%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	455	541	86	19%
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	27	112	85	315%
29-1062	Family and General Practitioners	247	314	67	27%
39-9032	Recreation Workers	165	227	62	38%
21-1015	Rehabilitation Counselors	141	200	59	42%
	Total	17,302	22,739	5,437	31%

Source: EMSI

Growth in the Health Group Occupations - Top 25 (2012-22)							
SOC Code	Description	2012 Jobs	2022 Jobs	Change	% Change	Median Wage	Education Level
31-1011	Home Health Aides	1,370	2,065	695	50.7%	$24,482	Short-term on-the-job training
29-1111	Registered Nurses	4,669	5,245	576	12.3%	$77,771	Associate's degree
39-9021	Personal Care Aides	832	1,383	551	66.2%	$23,483	Short-term on-the-job training
43-4171	Receptionists and Information Clerks	2,033	2,410	377	18.5%	$26,312	Short-term on-the-job training
31-1012	Nursing Aides, Orderlies, and Attendants	3,435	3,778	343	10.0%	$26,645	Postsecondary non-degree award
43-6013	Medical Secretaries	948	1,214	266	28.1%	$37,336	Moderate-term on-the-job training
31-9092	Medical Assistants	1,076	1,277	201	18.7%	$32,074	Moderate-term on-the-job training
29-2041	Emergency Medical Technicians and Paramedics	421	595	174	41.3%	$37,211	Postsecondary non-degree award
29-2061	Licensed Practical and Licensed Vocational Nurses	970	1,122	152	15.7%	$56,098	Postsecondary non-degree award
29-1123	Physical Therapists	541	692	151	27.9%	$92,102	Master's degree
43-9061	Office Clerks, General	816	940	124	15.2%	$28,018	Short-term on-the-job training
35-3041	Food Servers, Nonrestaurant	604	728	124	20.5%	$18,637	Short-term on-the-job training
31-9091	Dental Assistants	802	918	116	14.5%	$35,547	Postsecondary non-degree award
29-1069	Physicians and Surgeons, All Other	911	1,020	109	12.0%	$201,926	First professional degree
25-2011	Preschool Teachers, Except Special Education	853	959	106	12.4%	$32,614	Postsecondary non-degree award
29-2021	Dental Hygienists	580	682	102	17.6%	$80,558	Associate's degree
21-1093	Social and Human Service Assistants	483	567	84	17.4%	$31,741	Short-term on-the-job training
31-2022	Physical Therapist Aides	309	387	78	25.2%	$23,421	Moderate-term on-the-job training
35-2012	Cooks, Institution and Cafeteria	206	279	73	35.4%	$28,018	Short-term on-the-job training
43-1011	First-Line Supervisors of Office and Administrative Support Workers	541	611	70	12.9%	$48,589	Work experience in a related occupation
39-9011	Childcare Workers	1,253	1,320	67	5.3%	$18,637	Short-term on-the-job training
29-1122	Occupational Therapists	261	327	66	25.3%	$86,611	Master's degree
25-9041	Teacher Assistants	546	610	64	11.7%	$24,211	Short-term on-the-job training
39-9032	Recreation Workers	227	291	64	28.2%	$22,048	Short-term on-the-job training
29-1127	Speech-Language Pathologists	234	293	59	25.2%	$81,162	Master's degree
	Total	24,921	29,713	4,792	19.2%		

Source: EMSI

Visitation and Related Industries

Visitation Industry Group Summary	
Establishments (2011)	4,191
Jobs (2011)	57,636
Average Earnings per Job (2011)	$28,291

Source: EMSI

Note that this particular group contains many more industry subsectors than the others. For ease of viewing, we have limited all tables related to the Visitation Industry Group to only the Top 25 industry NAICS codes. So, the total jobs figures below are not comparable to the total jobs figure above (which includes every NAICS code).

Growth in the Visitation Industry Group (2002-22)								
					2002-2012		2012-2022	
NAICS Code	Description	2002 Jobs	2012 Jobs	2022 Jobs	Change	% Change	Change	% Change
7221	Full-Service Restaurants	8,764	10,720	11,789	1,956	22.3%	1,069	10.0%
7139	Other Amusement and Recreation Industries	4,350	6,235	7,147	1,885	43.3%	912	14.6%
7222	Limited-Service Eating Places	5,824	7,265	7,403	1,441	24.7%	138	1.9%
4451	Grocery Stores	6,587	7,414	7,757	827	12.6%	343	4.6%
7111	Performing Arts Companies	206	431	547	225	109.2%	116	26.9%
4481	Clothing Stores	3,244	3,392	3,638	148	4.6%	246	7.3%
4413	Automotive Parts, Accessories, and Tire Stores	631	776	832	145	23.0%	56	7.2%
4453	Beer, Wine, and Liquor Stores	623	759	805	136	21.8%	46	6.1%
7131	Amusement Parks and Arcades	106	237	264	131	123.6%	27	11.4%
7115	Independent Artists, Writers, and Performers	468	566	549	98	20.9%	-17	-3.0%
7211	Traveler Accommodation	1,316	1,409	1,463	93	7.1%	54	3.8%
4483	Jewelry, Luggage, and Leather Goods Stores	434	492	647	58	13.4%	155	31.5%
4482	Shoe Stores	478	535	602	57	11.9%	67	12.5%
4431	Electronics and Appliance Stores	1,251	1,295	1,451	44	3.5%	156	12.0%
4441	Building Material and Supplies Dealers	2,528	2,560	2,998	32	1.3%	438	17.1%
7121	Museums, Historical Sites, and Similar Institutions	61	91	78	30	49.2%	-13	-14.3%
4411	Automobile Dealers	2,917	2,940	3,386	23	0.8%	446	15.2%
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	40	42	33	2	5.0%	-9	-21.4%
7212	RV (Recreational Vehicle) Parks and Recreational Camps	78	78	128	0	0.0%	50	64.1%
4471	Gasoline Stations	1,044	1,033	N/A	-11	-1.1%	N/A	N/A
7113	Promoters of Performing Arts, Sports, and Similar Events	141	124	103	-17	-12.1%	-21	-16.9%
7132	Gambling Industries	48	30	24	-18	-37.5%	-6	-20.0%
7213	Rooming and Boarding Houses	89	70	50	-19	-21.3%	-20	-28.6%
7112	Spectator Sports	723	689	N/A	-34	-4.7%	N/A	N/A
4422	Home Furnishings Stores	844	804	889	-40	-4.7%	85	10.6%
	Total	42,795	49,987	52,583	7,192	16.8%	4,318	8.6%

Note: Limited to only the top 25 industries by 2002-2012 change in employment.

Source: EMSI

Visitation Industry Group Location Quotient 2012			
NAICS Code	Description	National LQ	State LQ
7213	Rooming and Boarding Houses	2.51	4.76
7112	Spectator Sports	2.11	3.03
7139	Other Amusement and Recreation Industries	2.96	2.51
7111	Performing Arts Companies	1.72	2.05
7224	Drinking Places (Alcoholic Beverages)	1.83	2.03
4452	Specialty Food Stores	2.71	1.88
4483	Jewelry, Luggage, and Leather Goods Stores	1.65	1.59
7221	Full-Service Restaurants	1.24	1.53
7132	Gambling Industries	0.12	1.44
4411	Automobile Dealers	1.43	1.39
4441	Building Material and Supplies Dealers	1.33	1.38
4422	Home Furnishings Stores	1.73	1.37
7115	Independent Artists, Writers, and Performers	1.12	1.32
4451	Grocery Stores	1.59	1.30
4482	Shoe Stores	1.49	1.27
7222	Limited-Service Eating Places	0.93	1.25
4442	Lawn and Garden Equipment and Supplies Stores	0.94	1.24
4481	Clothing Stores	1.71	1.24
4412	Other Motor Vehicle Dealers	0.67	1.19
4453	Beer, Wine, and Liquor Stores	2.75	1.15
4431	Electronics and Appliance Stores	1.40	1.11
7223	Special Food Services	1.73	1.08
4413	Automotive Parts, Accessories, and Tire Stores	0.81	1.04
4461	Health and Personal Care Stores	1.23	1.02
4471	Gasoline Stations	0.68	0.87

Source: EMSI

Competitiveness of Visitation Industry Group				
NAICS Code	Description	Expected Change	Actual Change	Competitive Effect
7139	Other Amusement and Recreation Industries	314	1,885	1,572
4451	Grocery Stores	66	827	761
4411	Automobile Dealers	(375)	23	399
7221	Full-Service Restaurants	1,570	1,956	385
7222	Limited-Service Eating Places	1,109	1,441	332
7111	Performing Arts Companies	7	225	218
4431	Electronics and Appliance Stores	(125)	44	169
4483	Jewelry, Luggage, and Leather Goods Stores	(78)	58	136
4453	Beer, Wine, and Liquor Stores	2	136	134
4413	Automotive Parts, Accessories, and Tire Stores	30	145	114
7131	Amusement Parks and Arcades	17	131	114
4452	Specialty Food Stores	(196)	(101)	94
7115	Independent Artists, Writers, and Performers	19	98	79
7211	Traveler Accommodation	18	93	76
4471	Gasoline Stations	(86)	(11)	74
4422	Home Furnishings Stores	(100)	(40)	60
4441	Building Material and Supplies Dealers	(10)	32	41
4482	Shoe Stores	26	57	31
7224	Drinking Places (Alcoholic Beverages)	(137)	(116)	21
7121	Museums, Historical Sites, and Similar Institutions	11	30	20
7212	RV (Recreational Vehicle) Parks and Recreational Camps	2	0	(2)
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	5	2	(3)
7213	Rooming and Boarding Houses	(8)	(19)	(11)
7132	Gambling Industries	(4)	(18)	(15)
7113	Promoters of Performing Arts, Sports, and Similar Events	56	(17)	(74)
	Total	2,133	6,861	4,725

Source: EMSI

Growth in the Visitation Group Occupations - Top 25 (2002-12)					
SOC Code	Description	2002 Jobs	2012 Jobs	Change	% Change
41-2031	Retail Salespersons	5,987	6,771	784	13%
35-3031	Waiters and Waitresses	5,451	5,889	438	8%
39-9031	Fitness Trainers and Aerobics Instructors	1,415	1,810	395	28%
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	3,995	4,293	298	7%
35-2014	Cooks, Restaurant	1,654	1,891	237	14%
35-3011	Bartenders	1,346	1,497	151	11%
41-2011	Cashiers	6,132	6,264	132	2%
41-1011	First-Line Supervisors of Retail Sales Workers	1,939	2,068	129	7%
35-2021	Food Preparation Workers	1,529	1,651	122	8%
29-2052	Pharmacy Technicians	414	500	86	21%
39-3091	Amusement and Recreation Attendants	651	721	70	11%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,517	1,581	64	4%
39-9011	Childcare Workers	259	315	56	22%
43-4171	Receptionists and Information Clerks	487	537	50	10%
29-1051	Pharmacists	309	359	50	16%
43-4051	Customer Service Representatives	498	540	42	8%
35-9021	Dishwashers	782	821	39	5%
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	852	885	33	4%
43-9061	Office Clerks, General	559	590	31	6%
49-3023	Automotive Service Technicians and Mechanics	635	664	29	5%
41-3099	Sales Representatives, Services, All Other	219	248	29	13%
27-2022	Coaches and Scouts	215	244	29	13%
53-7061	Cleaners of Vehicles and Equipment	183	211	28	15%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	457	484	27	6%
37-2012	Maids and Housekeeping Cleaners	437	463	26	6%
	Total	37,922	41,297	3,375	9%

Source: EMSI

Growth in the Visitation Group Occupations - Top 25 (2012-22)							
SOC Code	Description	2012 Jobs	2022 Jobs	Change	% Change	Median Wage	Education Level
35-3031	Waiters and Waitresses	4,593	5,451	858	18.7%	$19,531	Short-term on-the-job training
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	3,161	3,995	834	26.4%	$18,387	Short-term on-the-job training
39-9031	Fitness Trainers and Aerobics Instructors	765	1,415	650	85.0%	$37,835	Postsecondary non-degree award
41-2011	Cashiers	5,733	6,132	399	7.0%	$18,762	Short-term on-the-job training
41-2031	Retail Salespersons	5,623	5,987	364	6.5%	$20,405	Short-term on-the-job training
35-2014	Cooks, Restaurant	1,344	1,654	310	23.1%	$22,298	Moderate-term on-the-job training
35-2021	Food Preparation Workers	1,266	1,529	263	20.8%	$18,658	Short-term on-the-job training
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,294	1,517	223	17.2%	$37,357	Work experience in a related occupation
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,083	1,260	177	16.3%	$17,971	Short-term on-the-job training
39-3091	Amusement and Recreation Attendants	476	651	175	36.8%	$17,867	Short-term on-the-job training
43-4171	Receptionists and Information Clerks	359	487	128	35.7%	$26,312	Short-term on-the-job training
35-3011	Bartenders	1,222	1,346	124	10.1%	$22,194	Short-term on-the-job training
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	734	852	118	16.1%	$18,554	Short-term on-the-job training
39-9011	Childcare Workers	159	259	100	62.9%	$18,637	Short-term on-the-job training
37-3011	Landscaping and Groundskeeping Workers	379	455	76	20.1%	$23,109	Short-term on-the-job training
35-9021	Dishwashers	707	782	75	10.6%	$17,264	Short-term on-the-job training
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	461	525	64	13.9%	$24,898	Short-term on-the-job training
39-1021	First-Line Supervisors of Personal Service Workers	160	223	63	39.4%	$39,998	Work experience in a related occupation
41-1011	First-Line Supervisors of Retail Sales Workers	1,877	1,939	62	3.3%	$36,899	Work experience in a related occupation
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	678	740	62	9.1%	$17,347	Short-term on-the-job training
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	162	223	61	37.7%	$17,638	Short-term on-the-job training
35-2015	Cooks, Short Order	431	490	59	13.7%	$19,989	Short-term on-the-job training
27-2022	Coaches and Scouts	158	215	57	36.1%	$34,320	Long-term on-the-job training
53-7064	Packers and Packagers, Hand	811	866	55	6.8%	$18,013	Short-term on-the-job training
29-2052	Pharmacy Technicians	359	414	55	15.3%	$26,770	Moderate-term on-the-job training
	Total	33,995	39,407	5,412	15.9%		

Source: EMSI

IT/Telecommunications Industries

IT/Telecommunications Industry Group Summary	
Establishments (2012)	735
Jobs (2012)	8,264
Average Earnings per Job (2012)	$129,428

Source: EMSI

Growth in the IT/Telecommunications Services Industry Group (2002-22)								
					2002-2012		2012-2022	
NAICS Code	Description	2002 Jobs	2012 Jobs	2022 Jobs	Change	% Change	Change	% Change
5112	Software Publishers	207	476	840	269	130.0%	364	76.5%
5191	Other Information Services	72	81	75	9	12.5%	-6	-7.4%
5179	Other Telecommunications	286	183	780	-103	-36.0%	597	326.2%
5415	Computer Systems Design and Related Services	4,110	3,393	3,030	-717	-17.4%	-363	-10.7%
5182	Data Processing, Hosting, and Related Services	1,057	334	67	-723	-68.4%	-267	-79.9%
5171	Wired Telecommunications Carriers	4,709	3,784	3,116	-925	-19.6%	-668	-17.7%
	Total	10,441	8,251	3,977	-2,190	-21.0%	-4,274	-51.8%

Source: EMSI

IT/Telecommunications Industry Group Location Quotient 2012			
NAICS Code	Description	National LQ	State LQ
5171	Wired Telecommunications Carriers	3.57	2.14
5112	Software Publishers	0.94	1.87
5179	Other Telecommunications	0.92	1.49
5415	Computer Systems Design and Related Services	1.05	0.75
5182	Data Processing, Hosting, and Related Services	0.73	0.65
5191	Other Information Services	0.26	0.32

Source: EMSI

Competitiveness of IT/Telecommunications Industry Group				
NAICS Code	Description	Expected Change	Actual Change	Competitive Effect
5171	Wired Telecommunications Carriers	(1,472)	(925)	547
5112	Software Publishers	22	269	248
5179	Other Telecommunications	(154)	(103)	51
5191	Other Information Services	56	9	(47)
5182	Data Processing, Hosting, and Related Services	(193)	(723)	(530)
5415	Computer Systems Design and Related Services	1,472	(717)	(2,188)
	Total	-269	-2,190	-1,919

Source: EMSI

Growth in the IT/Telecommunications Group Occupations - Top 25 (2002-12)					
SOC Code	Description	2002 Jobs	2012 Jobs	Change	% Change
11-9041	Architectural and Engineering Managers	17	13	-4	-24%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	16	12	-4	-25%
41-9799	Sales and Related Workers, All Other	15	11	-4	-27%
43-4199	Information and Record Clerks, All Other	14	10	-4	-29%
43-5081	Stock Clerks and Order Fillers	15	10	-5	-33%
13-1161	Market Research Analysts and Marketing Specialists	34	28	-6	-18%
11-3011	Administrative Services Managers	17	11	-6	-35%
13-1151	Training and Development Specialists	16	10	-6	-38%
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	22	15	-7	-32%
43-5032	Dispatchers, Except Police, Fire, and Ambulance	31	23	-8	-26%
41-9041	Telemarketers	26	18	-8	-31%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	37	28	-9	-24%
17-3023	Electrical and Electronics Engineering Technicians	30	21	-9	-30%
41-9031	Sales Engineers	39	29	-10	-26%
13-2051	Financial Analysts	37	26	-11	-30%
11-2022	Sales Managers	35	24	-11	-31%
43-3021	Billing and Posting Clerks	34	23	-11	-32%
41-1012	First-Line Supervisors of Non-Retail Sales Workers	33	22	-11	-33%
11-2021	Marketing Managers	30	19	-11	-37%
13-1078	Human Resources, Training, and Labor Relations Specialists, All Other	30	19	-11	-37%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	29	18	-11	-38%
11-9199	Managers, All Other	39	27	-12	-31%
11-3031	Financial Managers	34	22	-12	-35%
43-6011	Executive Secretaries and Executive Administrative Assistants	30	18	-12	-40%
43-4071	File Clerks	29	17	-12	-41%
	Total	689	474	-215	-31%

Source: EMSI

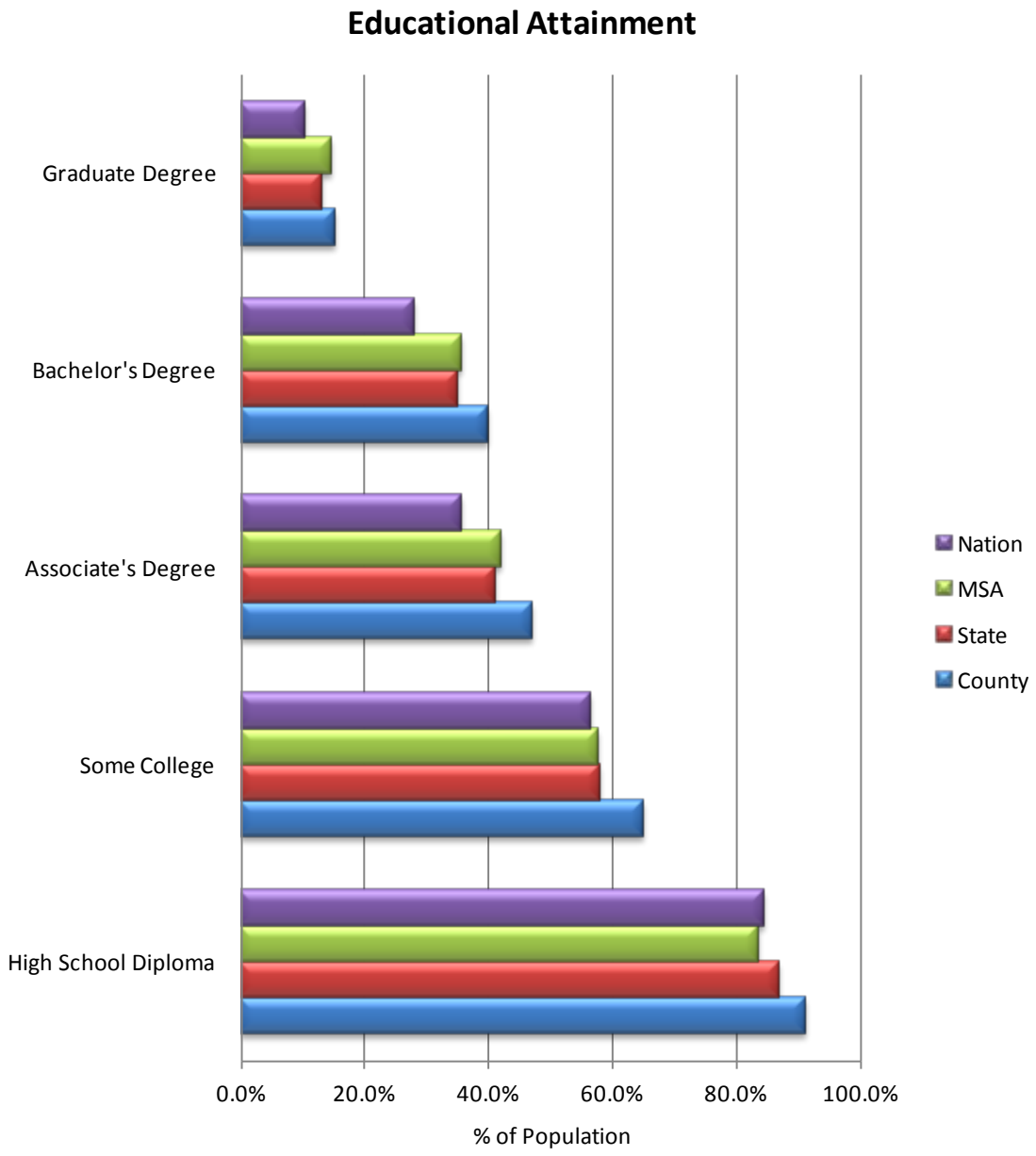
Growth in the IT/Telecommunications Group Occupations - Top 25 (2012-22)							
SOC Code	Description	2012 Jobs	2022 Jobs	Change	% Change	Median Wage	Education Level
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	515	563	48	9%	$64,376	Postsecondary non-degree award
49-9052	Telecommunications Line Installers and Repairers	407	410	3	1%	$64,646	Long-term on-the-job training
15-1142	Network and Computer Systems Administrators	105	108	3	3%	$75,712	Bachelor's degree
41-2031	Retail Salespersons	16	19	3	19%	$20,405	Short-term on-the-job training
13-1161	Market Research Analysts and Marketing Specialists	28	30	2	7%	$64,168	Bachelor's degree
41-9031	Sales Engineers	29	30	1	3%	$101,046	Bachelor's degree
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	28	29	1	4%	$24,898	Short-term on-the-job training
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	18	19	1	6%	$58,469	Moderate-term on-the-job training
41-9041	Telemarketers	18	19	1	6%	$22,547	Short-term on-the-job training
41-1012	First-Line Supervisors of Non-Retail Sales Workers	22	22	0	0%	$64,979	Work experience in a related occupation
17-3023	Electrical and Electronics Engineering Technicians	21	21	0	0%	$60,861	Associate's degree
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	15	15	0	0%	$63,502	Long-term on-the-job training
11-9041	Architectural and Engineering Managers	13	13	0	0%	$132,413	Bachelor's or higher degree, plus work experience
13-1151	Training and Development Specialists	10	10	0	0%	$61,630	Bachelor's degree
43-5061	Production, Planning, and Expediting Clerks	34	33	-1	-3%	$39,562	Moderate-term on-the-job training
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	29	28	-1	-3%	$89,336	Bachelor's degree
11-2022	Sales Managers	24	23	-1	-4%	$109,762	Bachelor's or higher degree, plus work experience
43-5032	Dispatchers, Except Police, Fire, and Ambulance	23	22	-1	-4%	$38,854	Moderate-term on-the-job training
43-6011	Executive Secretaries and Executive Administrative Assistants	18	17	-1	-6%	$53,061	Work experience in a related occupation
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	12	11	-1	-8%	$21,611	Short-term on-the-job training
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	73	71	-2	-3%	$67,246	Work experience in a related occupation
11-9199	Managers, All Other	27	25	-2	-7%	$83,720	Work experience in a related occupation
13-2051	Financial Analysts	26	24	-2	-8%	$74,485	Bachelor's degree
43-3021	Billing and Posting Clerks	23	21	-2	-9%	$32,469	Short-term on-the-job training
13-1078	Human Resources, Training, and Labor Relations Specialists, All Other	19	17	-2	-11%	$59,238	Bachelor's degree
	Total	1,553	1,600	47	3%		

Source: EMSI

Workforce Analysis

Educational Attainment

The following graph illustrates the level of educational attainment for Monmouth County residents compared to the benchmark geographies. As shown, Monmouth County has the highest rate of educational attainment of all of the comparison geographies. Approximately 91% of the County's adult population has a high school diploma whereas none of the other regions break 90%. Almost 40% of County adult residents have a Bachelor's degree and over 15% have attained a Graduate degree. Overall, Monmouth County offers a highly educated workforce.



Source: EMSI

Post-Secondary Program Completions and Regional Openings

Comparing regional program completions (the number of students graduating from a post-secondary program) to regional job openings is one method of assessing the labor market supply/demand for various post-secondary programs. The following is a list of the post-secondary institutions in Monmouth County. [4]

- Brookdale Community College
- Monmouth University
- Fairleigh Dickinson University (branch campus)
- Rutgers University (branch campus)
- Brookdale's Communiversity (partnership with many 4 year colleges and universities)

Before getting into the specifics of the data, there are two terms that require explanation in the table below. First, "Regional Openings" refers to the sum of new and replacement jobs, taking into account typical turnover rates in each field on an annual basis. "Regional Completions" refers to the number of students that graduated with a degree.

Another point worth explaining is that these data do not take into account the movement of students in and out of the County or those that continue on to obtain advanced degrees. For example, there is a very high completion rate for liberal arts degrees with very few openings. However, it is likely that some of the students that obtain a liberal arts degree will not enter the workforce right away, instead moving on to continue their education and obtain an advanced degree or certification.

The primary observations drawn from the table below are:

- The program with the highest demand is *Health Services/Allied Health/Health Sciences, General*, which has about 1,140 job openings for individuals with these degrees annually; however, only about 40 individuals graduate with one of these degrees from Monmouth University each year.
- *Business Administration and Management, General* programs are offered at Monmouth University and Brookdale Community College. They have the second highest labor market demand in the County with about 780 openings annually. At 740, the rate of completions almost matches the openings rate. The same cannot be said for *Business/Commerce, General*, which has about 16 completions from Brookdale Community College but over 700 openings annually in the County.
- With about 425 total completions from Brookdale Community College and Monmouth University and 415 openings annually, *Education, General* ranks fourth among regional openings in the County.

[4] Source: State of New Jersey Higher Education: http://www.nj.gov/highereducation/colleges/schools_county.htm#mon.

Program Completions: Monmouth County						
Program	Regional Completions (2010)	Regional Openings (2012)	2012 Jobs	2022 Jobs	Job Growth 2012-2022	Median Annual Earnings
Health Services/Allied Health/Health Sciences, General	43	1,139	26,055	30,533	17%	$63,773
Business Administration and Management, General	740	779	15,128	17,607	16%	$79,581
Business/Commerce, General	16	713	13,783	16,108	17%	$83,450
Education, General	426	414	11,583	12,788	10%	$54,870
Accounting	2	202	4,101	4,873	19%	$68,494
Cosmetology/Cosmetologist, General	120	183	3,273	4,200	28%	$28,371
Registered Nursing/Registered Nurse	131	178	5,394	6,059	12%	$75,088
Nursing Science	50	178	5,394	6,059	12%	$75,088
Adult Health Nurse/Nursing	2	178	5,394	6,059	12%	$75,088
Reading Teacher Education	14	174	4,801	5,160	7%	$57,554
International Business/Trade/Commerce	2	172	3,497	3,799	9%	$113,901
Accounting Technology/Technician and Bookkeeping	8	148	6,051	6,373	5%	$36,338
Computer and Information Sciences, General	79	145	5,491	5,669	3%	$82,306
Administrative Assistant and Secretarial Science, General	6	143	7,289	7,509	3%	$36,920
Elementary Education and Teaching	13	128	3,569	3,975	11%	$55,827
Art/Art Studies, General	31	122	2,480	2,828	14%	$42,141
Fashion Merchandising	37	105	3,026	3,179	5%	$52,666
Public Policy Analysis, General	11	104	1,473	1,876	27%	$74,360
Culinary Arts/Chef Training	36	96	2,118	2,330	10%	$23,442
Psychology, General	80	94	1,313	1,632	24%	$83,034
Nursing Assistant/Aide and Patient Care Assistant/Aide	20	94	3,588	3,977	11%	$27,602
Graphic Design	2	92	1,767	1,948	10%	$38,917
Marketing/Marketing Management, General	7	79	1,824	2,159	18%	$98,072
Speech Communication and Rhetoric	162	70	1,452	1,661	14%	$46,613
Special Education and Teaching, General	78	67	1,638	1,846	13%	$57,075
Total	2,116	5,797	141,482	160,207	13%	

Source: EMSI

Additional Information & Resources

A. EMSI Methodology for Making Projections

The following explanation is provided by EMSI as to their methodology for making projections on industry employment.

"EMSI creates long-term, 10-year industry projections starting from the current year. They are based on a combination of

- Recent trends in all industries for every local geography
- National industry projections produced by the BLS
- State and sub-state regional projections produced by individual states.

This methodology is designed to capture the expertise embodied in federal and state agencies, but since their official projections typically have a base year that lags 2-3 years behind the current year, EMSI projections are also informed by the most recent data and trends available.

The first step in the process is to track recent local trends using a linear regression function. Taking into account the previous base data from 15, 10, and 5 years prior to the base year, a line is plotted as a function of year and employment. This line is dampened (flattened) to curb any wild growth or decline and smooth out the effects of any volatility. Once this is done, state and local government industries (as well as Postal Service) are projected based on the growth or decline of local economies rather than projected through linear regression. Federal government and military, however, are projected through linear regression at the national level and their growth rate is then applied to the states and counties. Once this is done for each county, all counties' projections are adjusted so that they sum to state- and national-level numbers.

Once these initial projections are completed, we begin a series of controls and adjustments to other data sources. The first of these is an adjustment to the BLS staffing patterns. Essentially our projected national growth rate is changed to match the growth rate of the BLS numbers. This adjusts the curve up or down while staying as close to our projected values as possible. Following this, we adjust our county and state-level projections to the state-produced state and substate regional projections. Our county values are controlled to the regional data and our state projections are controlled to the reported state data.

Once these adjustments and controls are completed, the final state-level numbers are aggregated to determine the final national projections. This causes EMSI data to match state projections very closely, but it also means that EMSI projections can stray from the national projections."

B. Total Jobs vs. Openings, Why look at both?

While "jobs" refers to the total number of positions in a region, "openings" represents the sum of **new and replacement jobs** in the position. Replacement jobs are estimated based on average turnover rates in a particular field (e.g. workers switching occupations, retiring, receiving promotions, etc.). Certain occupations have much higher turnover rates than others. For example, a good portion of wait-staff and retail cashier occupations are often filled by high school or college students who may only work in the position for a summer or semester, which drives the openings number up. It is important to consider new and replacement jobs for an occupation rather than just change in total jobs because there can be instances when there is occupational demand while at the same time the pool of total jobs is shrinking.

CHAPTER THREE: ECONOMIC COMPETITIVENESS ASSESSMENT

Overview

This Economic Competitiveness Assessment for Monmouth County is based on executive interviews, Steering Committee and Advisory Group Workshops, the Economic Base Analysis previously completed and qualitative research to date as part of the longer term CEDS Project.

This analysis is prepared in the context of Monmouth County's competitive value relative to other regions/communities primarily within New Jersey and other states in the immediate proximity, where the most likely future business recruitment/attraction/retention/growth will concentrate. It is important to note that Hurricane Sandy's short- and long-term impact on the County as a business location is difficult to determine at this stage.

General Assessment

Virtually all of New Jersey is experiencing a slow economic recovery from the national financial crisis with persistent vacancy and sporadic commercial real estate activity. Monmouth is seeing this in high vacancy rates across the commercial product spectrum as well. The County has experienced some large economic losses in recent years, including the closure of Fort Monmouth and the departure of Lucent from its large campus location in Holmdel.

Despite the setback brought on by Hurricane Sandy, Monmouth County is well positioned to hold its own during this slow recovery and to seize opportunities that new investment and business activity will bring. While unemployment remains relatively high, it is below the State average. While Monmouth has pockets of a wide range of industries, including agriculture, IT, and entertainment/tourism, that give it some economic diversity, overall the County is somewhat reliant on retail and health care and the vast majority of businesses in the County are small businesses. Generally, the County is well positioned for growth and has desirable assets to facilitate future development and investment, though there are some issues that must be addressed that could hold back or deter activity.

Global rating agency Fitch Ratings' recent November 2012 high bond rating for the Monmouth County Improvement Authority provides some instructive insight by pointing to a number of key factors that highlight the County's overall strength and competitiveness.

Key drivers according to Fitch's statement include:

- **HEALTHY ECONOMY**: The County is positively situated in the greater New York metropolitan area with 27 miles of Atlantic coastline and benefits from high income levels and a diversified economy.
- **MODERATE DEBT LEVELS:** County debt levels are manageable with very rapid amortization.
- **STRONG BUT WEAKENING FINANCES:** The County maintains a comfortable fund balance level despite noticeable declines over the past three years. The county's practice of conservative budgeting has allowed for relative stability in its financial flexibility and liquidity remains strong.
- **AGGRESSIVE COST CUTTING:** County management has actively sought expenditure reductions through attrition, shared services and reduced capital expenses.

- **PROXIMITY TO NEW YORK CITY CREATES STRONG ECONOMIC CORE**: The County's economy remains strong, which is reflected in a diversified employment base, solid growth and wealth levels exceeding high state averages and well above national levels.

Key County Competitive Assets

Within the greater New Jersey region, there are a few elements of Monmouth County that stand out when assessing its economic development competitiveness.

County Management and Reputation

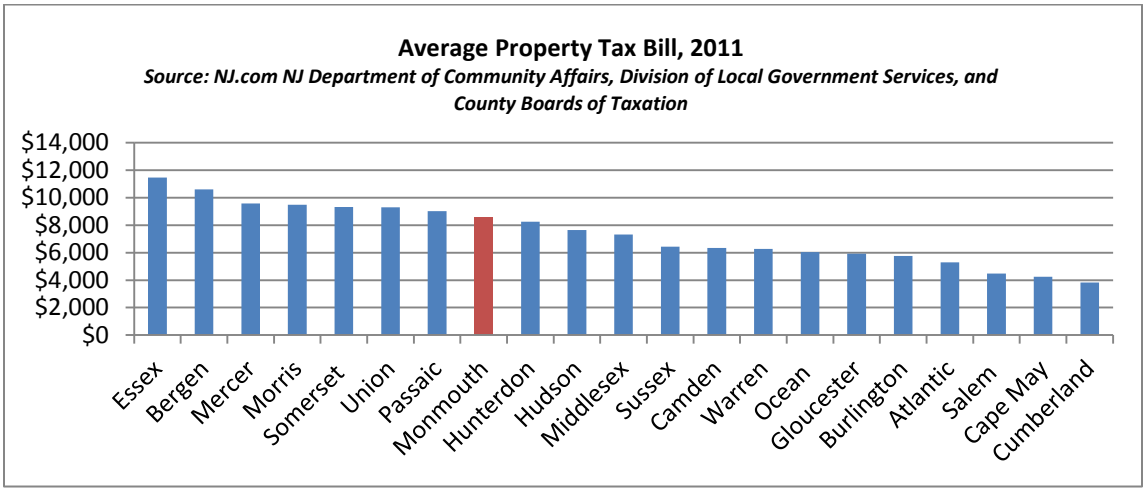
When businesses or investors/developers seek new locations, one of the top priorities for them is the quality of the government, services and overall management. Monmouth is recognized for having a stable government that is well managed and is focused on business and economic development.

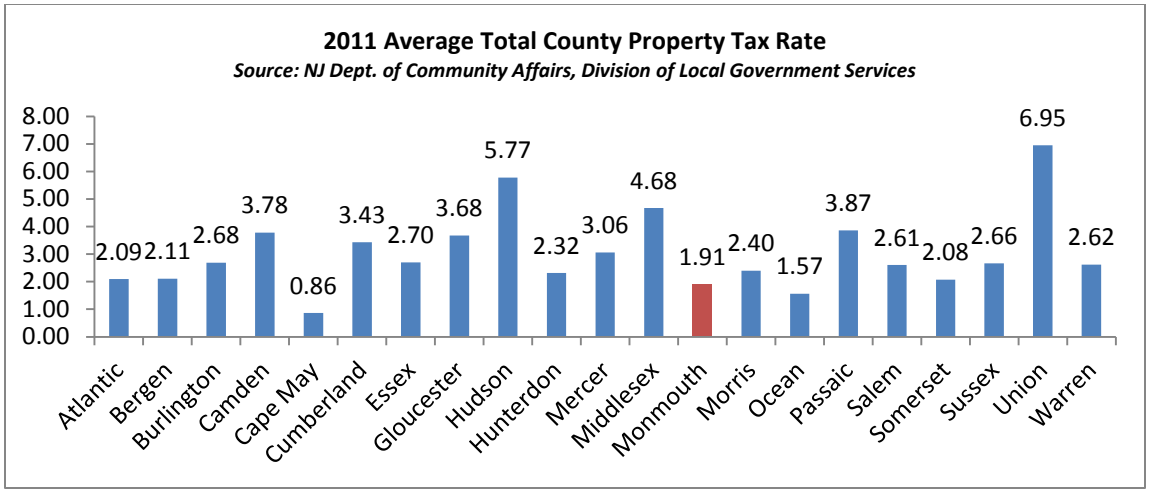
The County's economic development staff and the aggressive strategies underway show how committed the County is to business growth, which sets it apart not only from neighboring counties but even the more robust commercial and industrial hubs in North Jersey.

Stable and Moderate Taxes

By avoiding any increase in taxes over the past two years, the County has demonstrated its ability to control its budget during the downturn.

While some interviews conducted for this project identified taxes as a concern, Monmouth is in fact reasonably well positioned among other counties in New Jersey, particularly those that would be considered "peers" in residential make-up and economic activity. The following charts indicate where Monmouth stands relative to other areas of the state:





It would be natural to presume this is a result of the number of coastal communities with low tax rates bringing down Monmouth's average, since nineteen of the lowest one hundred tax rates are from communities in the County. However, only two of the top two hundred highest rate communities in the state are in Monmouth. Monmouth County offers fairly moderate taxes in most of its communities, particularly when compared to Middlesex and Mercer counties, two areas that can viewed as competition for economic growth and development.

Education Assets

Monmouth can boast excellent K-12 education that is further enhanced by the "Blue Ribbon Schools" in the County. The higher education and technical training resources are also strong. This is an advantage in recruiting and retaining companies, as business leaders and owners see a solid pipeline producing the workforce they need in the future and also a school system where they want to send their own kids.

It is important to note, however, that more coordination is needed among the workforce training and higher education assets in the County to ensure that pipeline continues to keep pace with demand and is able to innovate and adapt to new skills needs of local businesses.

Diverse Economy

Monmouth's geographic diversity is mirrored by the diversity of its business population. While generally heavily reliant on tourism and retail activity, the County's mix of health care resources, some agriculture, and remaining telecommunications businesses can help insulate the County from major dips in one particular sector. See the Location Quotient analysis (included in the Economic Base Analysis report) which underscores this fact.

Cultural/Entertainment Offerings

Monmouth is close to major urban areas but serves as an "enclave" for residents and visitors. Rural areas, beachfront communities, cultural attractions, high end shopping and quaint downtowns all attract dollars from outside the County while also benefiting residents and local workers. The strength of this area is also highlighted in the Economic Base Analysis, which shows the high amount of activity and employment in this area.

Identified Liabilities

Concerns about Future Workforce

Interview results and data suggest that there is a gap in the available workforce in Monmouth at the low and middle skill level. While the academic resources in the County are aggressively working to address this gap, a lack of trained mid-level employees could be a deterrent to some company relocations or expansions. Current companies are concerned about their ability to maintain skilled, dedicated workers in Monmouth County. The relatively high residential costs within the County and the transportation difficulties (detailed further below) only exacerbate this problem.

Lack of a Recognized "Brand"

Monmouth is known more for its residential and coastal assets than as a commercial or business hub. This lack of "brand awareness" in the business locational marketplace can be rectified and is currently being addressed through the Grow Monmouth initiative. While economic diversity is an advantage in that it offers flexibility and avoids a dependency on one industry, it also tends to dilute the appeal for some sectors.

Perceived Development Process

While not unique to Monmouth County, some in the development community see permitting and approval processes at all levels of government to be confusing, time consuming or inconsistent. This reputation for difficult processes can deter existing businesses from undergoing expansion projects and potential new businesses from considering the County in site location decisions.

Congestion/Infrastructure

Traffic congestion is not just a drawback for residents and commuters. Businesses must consider how their employees, their products and goods, or their customers travel to and within the region. The current roadway infrastructure is insufficient to accommodate the growth the County has seen in recent years and it is inadequate to meet the needs that future growth will bring. Limited public and private transit offerings are not enough to address the current situation. Even if there is acceptance that transportation-intensive industries such as warehousing and logistics are not going to be the future of the County, in order to recruit and retain employers in the County, the infrastructure issues will need to remain a top priority.

CHAPTER FOUR: INTERVIEW FINDINGS

Camoin Associates interviewed 36 stakeholders during the months of September and October 2012 as part of the baseline data gathering for the Monmouth County CEDS. Interviewees represented a full cross-section of sectors, geographies, public and private employers, business owners, and elected officials (a list of all those interviewed and their affiliations can be found at the end of this report). The following is a summary of the information gathered through these interviews. This and other information will be used to develop a complete sector analysis for the County, including recommendations and targets for future economic growth.

Note: *The findings expressed below are taken from our interviews. As such, these are the opinions of the interviewees and not necessarily the opinion of Camoin Associates, Monmouth County or the CEDS steering committee.*

Note: *These interviews were conducted prior to the region being hit by Hurricane Sandy in late October 2012. These perspectives and recommendations—particularly related to the coastal communities—may be quite different currently as the individuals address the damage and aftermath of the storm.*

General Findings

Strengths

Overall, Monmouth County is viewed very favorably. County leadership is highly regarded both in economic development leadership and at the elected official level. There is great pride in the K-12 school system and attractive residential options available in the County. A particular strength is its economic diversity, with vibrant small business and retail activity as well as some larger corporations, coastal tourism and agriculture, considerable open space alongside a large population base, and significant higher education and health care institutions. This is a strategic competitive advantage for the County which will allow it to manage through a decline in one or more of these sectors at any one time.

Challenges

Several challenges were identified during the interview process. Some interviewees shared frustration with the pace of development approvals and the difficulty in navigating local, county, and state regulatory and permitting agencies, though much of this may have been in the past. There appears to be a “love-hate” relationship with home rule. While many revere the institution and feel it keeps decision-making at the local and most important level, there is also recognition that it can be cumbersome to navigate and that slowing or stalling a project can be far easier than obtaining approvals. Some respondents commented that taxes are high in the County, though that is a relatively common refrain in such interviews and likely not unique to Monmouth.

Due to the preponderance of residential land uses throughout the County, most towns and the County itself are heavily reliant on residential ratables. Diversification of the tax base needs to be a major priority. The County is spread out, with inconsistent connections east-west and north-south. There are two robust “downtowns” in Freehold, Belmar, Manasquan and Red Bank, but they generally only serve the population in their immediate proximity. This lack of central gathering places with amenities and entertainment could be a drawback in recruiting younger residents, workers, or entrepreneurs who increasingly seek the sense of community or “place” that such locations offer.

The two racetracks in the County are economic development priorities. As consumers’ entertainment tastes evolve, attendance at the tracks has been in steady decline. Should either or both close, it would

have an impact particularly on the western portion of the County, which relies somewhat on the equine industry for its employment base. These workers may be generations at their craft and would need to be trained for other jobs should the tracks close. The redevelopment of both locations will be critical to the future growth of the County and may present opportunities for commercial or industrial investment, or multi-modal transit hubs, for example. The tracks should be a consideration in any ongoing planning, both to prepare for mitigation of the impact of closure and for effective reuse of those properties should that occur.

Across the board, the most common issue seen as a challenge to future business growth is the County's workforce. Simply stated, finding and retaining skilled workers, workers with a strong work ethic, and workers with basic skills is a challenge across all industries. This issue is exacerbated by lack of workforce housing options and transportation options.

Finally, while also identified as a strength, economic diversity does present the challenge of not having any defining industry or "brand" for Monmouth. The rural west and more developed east have differing economic development goals and require more customized approaches. This mix of assets, priorities, and concerns necessitates a creative and comprehensive approach to economic development.

Development

There was general consensus from those interviewed that portions of the County have largely reached the saturation point and that their focus should be on redeveloping existing real estate assets that no longer meet current needs. There is limited unused developable land and there remains significant vacancy in both small and large commercial industrial buildings. Any new development or redevelopment seems destined for the eastern portion of the County, as the western communities have made it clear through statements and actions—ten-acre zoning, for example—that significant development is not desired.

In terms of housing development, there is a diverse and substantial housing stock throughout the County. Much of it is higher-end residences, and the market seems to suggest a demand for more lower-cost or rental housing to support the middle-skilled workforce the County needs for retail, service, health care and industrial activity. However, the stigma of rental units, the low property tax revenue and the transient nature of tenants tend to cause reluctance of the part of communities to encourage or improve rental development.

Transportation

Interviewees reported that traffic congestion throughout the County is a challenge, particularly for east-west travel, which contributes to the lack of retail, commercial, and social interactions among different elements of the County. There are some proposals for additional or improved roadways that could alleviate some of this congestion, but none are without controversy. Continuing to press for solutions to traffic should remain a priority for the County, though the responsibility and cost for these projects should be shared among the County, state, and federal governments.

New Jersey Transit ("NJT") service is highly regarded for commuting patterns into New York City and for access to the Monmouth coastal communities. There is also an extensive network of private shuttles and bus lines that serve commuters throughout Monmouth. However, not all areas of the County are well served by mass transportation. The existing private providers are likely to be the source of any near-term expansion of local bus service, as NJT faces significant budget constraints and other regional priorities.

Transit-Oriented Development ("TOD") is often an approach communities take to address persistent traffic congestion. The interviews suggest that towns in Monmouth have been reluctant to support TOD

proposals for reasons including aversion to the density required for the developments to be financially feasible and concern that residences in close proximity to transit nodes would only exacerbate existing parking and traffic problems around the stations.

Monmouth Workforce

From the Blue Ribbon Schools that produce the top talent of the future to the vocational technical schools and Brookdale Community College, the County possesses valuable assets for continuing to develop the workforce of the future. While the College and technical schools do a good job of producing the mid-level workers many businesses in the County need, both indicate they are having a difficult time keeping up with the demand for this set of workers. Interviews revealed concerns about businesses' ability to fill needed low- and middle-skilled positions within the County. Generally high-priced housing stock throughout Monmouth makes it difficult for these workers to live nearby; yet the traffic and somewhat limited regional transit options can impair their ability to commute into the County for work.

This plan recognizes the importance of workforce development as a partner to economic development and has reviewed and incorporated workforce development strategies as a result. The state and local government has done work on workforce development planning as well, including:

- New Jersey Unified Workforce Investment Plan – New Jersey's Talent Connection
- New Jersey Health Care Workforce Strategic Plan Initiative
- Monmouth County One-Stop Career Centers
- Monmouth County Workforce Investment Board Strategic Plan

This document includes substantial research, analysis, and recommendations around workforce development, please see pages: 5, 37-41, 64-66, 71, 72, 81-82, 89-91, 95-96. Additionally, the action plan matrix and specific recommendations take workforce development needs into account as well.

Fort Monmouth Redevelopment

Several interviewees expressed frustration with the slow pace of redevelopment at Fort Monmouth and pointed out that good facilities on the base that could be reused (i.e. library, cinema, gymnasium, some housing, etc.) are wasting away from neglect and lack of maintenance. There are a few office buildings that could be reused, but the consensus is that most need to be scrapped. In the time that it has been taking to redevelop the base, the talent that had worked there in IT and other industries has moved on, either to other bases or to civilian professions outside the County. The Commvault development is a positive step,. Some reuse ideas that came up during the interview process include:

- Technology incubator
- Green tech lab/incubator
- Creation of east-west rail line through the Fort
- National Testing Service
- Preserve base housing for returning veterans
- Conference facility (excellent nearby assets such as golf course)
- Parkway interchange into the Fort to combine with NJT priority/express bus hub

Tourism & Visitation

Tourism, entertainment, hospitality, and cultural activities collectively are a key element of the Monmouth County economy. The summer economy of the coastal communities and resort towns often carries them through the remainder of the year because activity drops off precipitously after late

summer/ fall. If a town has an average or "off" summer season, this can significantly constrain its ability to provide necessary services to its year-round residents. Interviewees encouraged the County to play a more direct and aggressive role in marketing and promoting all the coastal communities and their cultural offerings. Some towns have partnered with New Jersey Transit for targeted marketing strategies that have proven to be successful in drawing more people to the coast. Bringing more people (and their money) from outside the County, outside the state, and outside the country will help support these towns as well as amenities and entertainment facilities throughout the County. Though typically paying lower wages and benefits, this sector not only contributes a high number of jobs but also supports venues, activities, and amenities enjoyed by residents and workers year-round that contribute to a high quality of life. Some suggested steps the County could take that arose from the interviews include:

- Coordinate websites of all coastal communities so that activities, events, festivals and other amenities are promoted as one, so that visitors do not have to shop from town-site to town-site
- Help with tourism marketing for coastal communities by dedicating county staff and resources to tourism
- Continue joint promotion with New Jersey Transit for summer activities and the arts train
- Work with the state to market the Jersey Shore beyond NYC to Canada and Europe—great beaches, amenities, and places to visit.

Health Care

Health-related industries are a growing and important element of the Monmouth economy. The County is home to multiple top-rated hospitals and extensive medical service offices and clinics. The residential population of the County offers a strong pipeline for health care services, while the graying of the population and increase in senior living facilities indicate more consumers of health services in the future. The County provides desirable locations for the doctors and other highly paid staff to live, but there is significant competition for employees on the lower end—technicians, certified nurse assistants, maintenance personnel, etc.—that mostly are commuting in from surrounding counties.

A large new project by Memorial Sloan Kettering in Middletown is a positive sign for the strength of the sector but could put further pressure on the competition for middle- and lower-skilled employees. The community college and technical schools are making a concerted commitment to focus on training for these jobs, which should help to keep these positions filled in the health care industry. The health care industry is a major part of the county's economy and should be one of the prime industries explored for growth opportunities.

Environment

The environment has an impact on the County's economy in a number of ways including the ability to attract talent and businesses by providing a high quality of life but it can also cause major disruptions in the form of natural disasters. Monmouth County has a number of substantial environmental resources that are a positive additional to the quality of life for residents and businesses in the County. Some of these natural resources include 20 inland lakes, 9 coastal lakes, Shark River, miles of oceanfront, varied walking/hiking trails, a comprehensive park system, the Huber Woods Environmental Center and the Manasquan Reservoir Environmental Center, and other opportunities to enjoy the natural environment.

Environmental and natural disasters also impact the county's economy by disrupting productivity, preventing people from getting to work, and damaging infrastructure. As noted throughout this report, the impact of Hurricane Sandy on Monmouth County was substantial and ongoing. The frequency of

these types of major storms has increased in recent years and natural disasters such as this one are expected to continue to play an important role in the growth of the economy moving forward, for better or worse. Monmouth County businesses should be prepared for these natural disasters through the development of business continuity disaster plans to allow them to react in a proactive, planned, and comprehensive way so that they can remain in business and not lose inventory, manpower, or productivity for large periods of time.

Interviewee List

1. Jill Stambler, Director of Personnel, International Vitamin Corporation
2. Vince Domidion, Chair, Monmouth County Planning Board
3. Doug Twyman, Cassidy Turley
4. Ben Waldron, Executive Director, Monmouth Ocean Development Council
5. Adam Puharic, Danskin Insurance
6. Rich Gatto, President, Freehold Partnership
7. Linda Millstein, Brookdale Community College
8. Shari Scaramuzzo, VP, Investors Bank
9. Nancy Adams, Executive Director, Red Bank River Center
10. Bill Young, Administrator, Town of Belmar
11. Nancy Grebelja, Mayor, Millstone Township
12. Ed Gurskis, Sr. VP, Valley National Bank
13. Steve Corodemus, Attorney and former state legislator
14. Vito Cardinale, Developer, Cardinale Industries
15. Mayor Donald Burden , Shrewsbury Township
16. Mary Eileen Fouratt, Monmouth County Arts Council
17. Jason Greenspan, Director of Planning Middletown Township
18. John Gagilano, Chair Monmouth County Workforce Investment Board
19. Anthony Ammiano, Mayor Freehold Township
20. Tom Clark, Govt & Community Relations, New Jersey Transit; Vivian Baker, Assistant Director, Transit Friendly Land Use & Development; Mike Murphy, Real Estate
21. Toby Stark, Stark Insurance
22. Linda Kellner, Chief of Staff, NJ Natural Gas; former Exec. Dir. NJ Business Action Center
23. Joseph Passiment, Executive Business Administrator, Monmouth County Schools
24. Janis Lewandowski, Economic Development Manager, First Energy
25. Neil Cavaleri, Air Cruisers
26. Dr. Frank Vozas, President & CEO, Monmouth Medical Center
27. Dennis Blazak, Community Liaison, Naval Weapons Station Earle
28. Rainey Alwell, Sales Manager, Oyster Point and Molly Pitcher Hotels, Red Bank
29. Corbett Donato, Developer
30. Tom Gilmour, Economic Development Director, Asbury Park
31. John Gribbin, CEO, CentraState Medical Center
32. Dave Nuse, NJ EDA real estate specialist assigned to Ft. Monmouth project
33. Freeholder Arnone, Monmouth County
34. Chuck Sampson, Superintendent, Freehold Regional High School District
35. Randy Bishop, Mayor, Neptune Township and B&B Owner
36. John Lloyd, President & CEO, Meridian Health

CHAPTER FIVE: TARGETED INDUSTRIES

In order to provide information and guidance for the Grow Monmouth effort, a comprehensive analysis of industry trends was conducted. Based on this analysis, the following is an overview of industry sectors that offer opportunities for growth and diversification of the County economy. These 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. Additionally, each has challenges to reaching growth and wealth potential. But given limited resources, these deserve focused strategies above and beyond overall economic development strategies in the County. Targeted industries include:

- Health Care and Related Industries
- IT/Telecommunications
- Professional/Technical & Business/Finance
- Visitation and Related Industries

In addition to focused strategies in these industry sectors, the County should continue to support businesses in all sectors of all sizes through its Grow Monmouth effort. This includes providing technical assistance as well as marketing around business expansion and attraction.

Health and Related Industries

Health Care and Social Assistance includes industries and subsectors related to the profession of medical, health, social and related services. The following table indicates specific industries by the North American Industrial Classification System (NAICS).

Health and Related Industries Group	
NAICS	Description
6211	Offices of Physicians
6213	Offices of Other Health Practitioners
6233	Community Care Facilities for the Elderly
6241	Individual and Family Services
6216	Home Health Care Services
6219	Other Ambulatory Health Care Services
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals (Private)
6243	Vocational Rehabilitation Services
6221	General Medical and Surgical Hospitals (Private)
6212	Offices of Dentists
6214	Outpatient Care Centers
6242	Community Food and Housing, and Emergency and Other Relief Services
6232	Residential Mental Retardation, Mental Health and Substance Abuse Facilities
6244	Child Day Care Services
6239	Other Residential Care Facilities
6222	Psychiatric and Substance Abuse Hospitals (Private)
6231	Nursing Care Facilities
6215	Medical and Diagnostic Laboratories

Source: EMSI

Data Overview

- In 2011, there were 2,268 business establishments in the Health Care and Social Assistance sector.
- At the major industry level (2-digit NAICS) in 2012, Health Care and Social Assistance is the second largest employment sector in Monmouth County with 40,725 jobs, or 15% of all employment in the County. The largest subsectors include: General Medical and Surgical Hospitals (Private) (9,470 jobs), Office of Physicians (7,316 jobs), Nursing Care Facilities (3,290 jobs), Child Care Services (3,142 jobs), Community Care Facilities for the Elderly (3,033 jobs), Offices of Dentists (2,854 jobs), and Offices of Other Health Practitioners (2,801 jobs).
- In 2012, average wages in the Health Care and Social Assistance industry sector were $58,588 in the County, which was slightly higher than the average for all industries $57,966.
- Between 2002 and 2012, the County gained 7,023 jobs in the Health Care and Social Assistance sector, or a 21.0% increase. The largest actual increases were in the subsectors Office of Physicians (1,899 jobs gained), Offices of Other Health Practitioners (993 jobs gained), Community Care Facilities for the Elderly (977 jobs gained), and Individual and Family Services (868 jobs gained). Only three subsectors loss jobs in the County during this period including Medical and Diagnostic Laboratories (184 jobs lost), Nursing Care Facilities (88 jobs lost),and private psychiatric and substance abuse hospitals (64 jobs lost).
- From 2012 to 2022, jobs in the Health Care and Social Assistance sector in Monmouth are projected to grow by 6,464 or 15.9%.
- Industry concentration (as measured by location quotient) is high in the subsectors of Community Care Facilities for the Elderly (2.08), Offices of Other Health Practitioners (1.85), Offices of Dentists (1.74), and Offices of Physicians (1.60).
- In 2012, there were 40,249 Health Related Occupations in Monmouth County Representing 15% of all occupations in the County.
- The largest categories in Health Related occupations in 2012 in Monmouth County include: Registered Nurses (4,669 jobs), Nursing Aides, Orderlies, and Attendants (3,435 jobs), Receptionists and Information Clerks (2,033 jobs), Home Health Aides (1,370 jobs), and Medical Assistants (1,076 jobs).
- Actual growth between 2002 and 2012 was highest for Registered Nurses (693 jobs), Home Health Aides (653 jobs), Receptionists and Information Clerks (618 jobs). These same jobs are projected to be the highest growing through 2022.
- In 2012, median hourly wages in Health Related Occupations in Monmouth County was $28.55, which compared to $21.83 for all occupations in Monmouth County.
- Education levels typically required for Health Related occupations range all the way from on-the-job training to Ph.D.

Data on recent occupation demands sheds light on the trends in Health Related occupations in Monmouth County.[5] Between January 15 and March 15, 2013 in Monmouth County, among the top 21 occupations with the most listings (help wanted) included:

[5] Burning Glass Technologies, Labor Insight, Prepared by: New Jersey Department of Labor & Workforce Development, Division of Labor Market & Demographic Research, March 2013.

- Registered Nurses (82)
- Physical Therapists (63)

And among the industries with the most occupational listings include:

- Ambulatory Care Services (198)
- Hospitals (193)

Market Assessment

Health-related industries are a growing and important element of the Monmouth economy. The County is home to multiple top-rated hospitals and extensive medical service offices and clinics. The residential population of the County offers a strong pipeline for health care services, while the graying of the population and increase in assisted living facilities and age restricted housing indicate more consumers of health services in the future. The County provides desirable locations for doctors and other highly paid staff to live, but there is significant competition for employees on the lower end—technicians, certified nurse assistants, maintenance personnel, etc.—that mostly are commuting in from surrounding counties.

A large new project by Memorial Sloan Kettering in Middletown is a positive sign for the strength of the sector but could put further pressure on the competition for middle- and lower-skilled employees. The community college and technical schools are making a concerted commitment to focus on training for these jobs, which should help to keep these positions filled in the health care industry. The health care industry is a major part of the County's economy and should be one of the prime industries explored for growth opportunities.

Opportunities

- Strong local consumer demand
- Historic and projected growth
- Good fit with education levels and education assets:

  Brookdale Community College - www.brookdalecc.edu/pages/1.asp - Brookdale, located in Monmouth County, offers a wide array of career oriented programs in Health and Related industries, including:

  Associate Programs in:

  - Biology A.A.S.
  - Chemistry A.A.S.
  - Dental Hygiene Program A.A.S.
  - Diagnostic Medical Sonography A.A.S.
  - Health Information Technology A.A.S.
  - Human Services A.A.S. – Generalist & Addiction Studies Option
  - Medical Laboratory Technology A.A.S.
  - Nursing Program A.A.S.
  - Radiologic Technology Program A.A.S.
  - Respiratory Care Program A.A.S.

  Certificate Programs in:

  - Dental Assisting

- Legal Nurse Consultant
- Medical Coding

Communiversity Programs in:

- BS Nursing
- RN-BSN
- Accelerated BSN
- School Nurse Certificate
- Graduate School Nurse Certificate

Monmouth University - www.monmouth.edu – Monmouth University offers numerous undergraduate, graduate, and certificate programs in Health Care intensive fields, including:

Bachelor of Programs in:

- Bachelor of Science in Health Studies
- Bachelor of Science in Nursing
- Bachelor of Science in Biology
- Bachelor of Science in Chemistry
- Bachelor of Science in Clinical Laboratory Sciences
- Bachelor of Science in Medical Technology for Jersey Shore University Medical Center & Monmouth Medical Center

Masters and Beyond Programs in:

- Doctorate and Masters Programs in Nursing

Certificate Programs in:

- Graduate Certificate Programs in Nursing, Autism
- Post-Master's Certificate Programs in Advanced Practice Nursing: Adult and Gerontological Nurse Practitioner, Advanced Practice Nursing: Family Nurse Practitioner, Advanced Practice Nursing: Family Psychiatric and Mental Health Nurse Practitioner, Healthcare Management, Nursing Administration, and Nursing Education

Monmouth County Academy of Allied Health and Sciences - www.aahs.mcvsd.org/index2.html - The Monmouth County Vocational High School System includes six specialty focus schools that are national award winning and highly valued in the County.

Challenges

- Lack of options for housing and transportation that make attracting and retaining workers particularly challenging at entry-level and mid-to-low end wage jobs.
- Need for continuous training including on-the-job and a lack of a focused, consistent workforce development initiative to specifically address the industry needs. Monmouth County Economic Development will work directly with industry sector representatives and educational partners to conduct a broad-based needs assessment. The County will then identify and connect industry to available resources for delivery of services.
- Concern among hospitals over market saturation due to new providers and expansions.

Strategies and Recommendations

Objective: Continue to grow healthcare and related sectors in terms of expanded and new business and employment, and to provide residents access to health related careers from entry-level to advanced.

Action Steps for Health and Related Industries
• **Stay connected and engaged with existing health care industry representatives and stakeholders** to collaboratively understand and address industry needs to support sector growth for County residents. Key stakeholders include providers (hospitals, physicians, services provider networks, etc.), higher education (Brookdale Community College, Monmouth University), High School Allied Health Sciences Academy, and transportation and housing agencies.
• **Provide start-up and small business support** to help those interested in starting small, new health related businesses including those in home health services and personal health services. Services should include assistance with business planning, market research, licensing and permitting, and access to start-up and growth capital.
• **Continue to promote the availability of the toolkit under the Grow Monmouth initiative.** As part of the Grow Monmouth effort, the County uses ESRI's business analyst tool for a variety of functions. One of its strongest features is the ability to assess residential consumer market preferences and trends within a unique trade area using market segmentation - this alone is a powerful feature. To aid in the promotion of this tool, develop a few brief case studies of how this tool, and the other tools in the toolkit—including personalized marketing assistance, can be used by existing businesses, site selectors, entrepreneurs, and communities to understand the area's consumer market and identify opportunities to fill unmet demand. These case studies can be posted on the County's website and even included in welcome letters to new businesses that the County currently sends out.

IT/Telecommunications Industries

Information technology includes industries and subsectors related to telecommunications, data procession, software development and publishing, systems and network design and management, and hosting. The following table indicates specific industries by North American Industrial Classification System (NAICS).

IT/Telecommunications Industry Group	
NAICS	Description
5112	Software Publishers
5171	Wired Telecommunications Carriers
5172	Wireless Telecommunications Carriers (except Satellite)
5174	Satellite Telecommunications
5179	Other Telecommunications
5182	Data Processing, Hosting, and Related Services
5191	Other Information Services
5415	Computer Systems Design and Related Services

Data Overview

- In 2011, there were 735 business establishments in the IT/Telecommunications sector, 550 of these were in Computer Systems Design and Related Services.
- In 2012, employment in IT/Telecommunications sectors totaled 8,284 representing 3% of all jobs in the County. The largest employment subsectors included Computer Systems Design and Related Services (3,393), Wired Telecommunications Carriers (3,784), Software Publishers (476), and Data Processing, Hosting, and Related Services (334).
- In 2012, average earnings per job in the IT/Telecommunications sector were $129,428 in the County, which was considerably higher than the average for all industries $57,966.
- Between 2002 and 2012, the County lost 2,190 jobs in the IT/Telecommunications sector, or 21% of the jobs in this sector. Largest actual decreases were experienced in the subsectors of Wired Telecommunications Carriers, which include cable television, landline phone and internet (925 jobs lost), Data Processing, Hosting, and Related Services (723 jobs lost), and Computer Systems Design and Related Services (717 jobs lost).
- Job gains were experienced in the subsector Software Publishers (269 jobs gained). During this period of time, losses were driven by the loss of Bell Labs and related companies in the County, the closing of Fort Monmouth, which was an IT-intensive military base, and the national recession. Recently Commvault, a data information and management software company that has been in the County, announced plans to expand employment at Fort Monmouth. Additionally, recent job listings suggest that the demand for IT jobs is growing in the region.
- Industry concentration (as measured by location quotient) is high in the subsector of Wired Telecommunications Carriers (2.14) and Software Publishers (1.87).

Occupations

- In 2012, there were 7,739 jobs in Computer and Mathematic related occupations in Monmouth County representing 2.9% of all occupations in the County.[6] The largest occupations in these fields include Application Developers (1,569 jobs), Computer Systems Analysts (1,324 jobs), Computer Support Specialists (889 jobs), Information Security Analysts, Web Developers, and Computer Network Architects (881 jobs), Computer Programmers (749 jobs), and Systems Software Developers (615 jobs). Between 2002 and 2012, the County lost 974 jobs representing 11.2% of occupations in these fields.
- Median hourly earnings in Computer and Mathematic related occupations were $36.48 and this compares to $21.83 for the County as a whole.
- All of the occupations in Computer and Mathematic related occupations typically require a Bachelor's or higher, with the exception of computer support specialists that require an Associate's or higher.

[6] Occupations differ from employment as they are measured by the skills and tasks of the job as opposed to employment, which is measured by the sector the job is in. IT occupations are present in many industry sectors.

Data on recent occupation demands sheds light on the importance of IT/Telecommunications to Monmouth County.[7] Between January 15 and March 15, 2013, the top 21 occupations with the most listings (help wanted) in Monmouth County included:

- Computer Programmers (127)
- Software Developers, Applications (97)
- Computer Systems Engineers/Architects (66)
- Software Developers, Systems Software (65)
- Information Technology Project Managers (59)
- Web Developers (39)

Venture Capital

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 2003-2005 and then declined considerably due to both national trends and the loss of major telecommunication players in the County.

Venture Capital Investments in Monmouth County by Year 2003-2009 - in Millions $	
Year	**Amount**
2003	$35.00
2004	$150.00
2005	$205.05
2006	$14.24
2007	$11.60
2008	$3.76
2009	$6.00
Compiled by Camoin Associates from Decision Data Resources, InnovationEconomy360, http://www.ie360.net/	

[7] Burning Glass Technologies, Labor Insight, Prepared by: New Jersey Department of Labor & Workforce Development, Division of Labor Market & Demographic Research, March 2013.

Companies Receiving Venture Capital Investment in Monmouth County 2003-2009	
Company	**Industry**
CebaTech	Semiconductors
Lightspeed Audio Labs	Internet
pdway Ltd.	ECommerce
Preclick	Software
Quintum Technologies	Networking
Ranch Networks	Communications
uReach Technologies	Communications
V12 Group	IT
Vonage Holdings Corp.	Internet
VPIsystems	Networking
York Telecom Corporation	Telecom
Compiled by Camoin Associates from Decision Data Resources, InnovationEconomy360, http://www.ie360.net/	

Market Assessment

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. The following is a brief summary of market trends.

Enterprise Security, Data Security, Network Security

Enterprise Security Market to Exceed $22 billion in 2012: Canalys outlines top IT security market trends for the SMB segment in 2012 - Palo Alto, Shanghai, Singapore and Reading (UK) – Tuesday, 20 December 2011 - www.canalys.com/newsroom/enterprise-security-market-exceed-22-billion-2012 - Canalys today announced the results of its latest enterprise security forecasts, indicating that total investment is expected to grow 8.7% year-on-year in 2012 to reach a market value of $22.9 billion worldwide. Currently accounting for 11.3% of the total market, the anti-virus (AV) segment will remain one of the strongest parts of the security industry next year, and is expected to increase by 6.8% year-on-year. Though a mature technology, AV software continues to drive revenue for many resellers, both large and small. It is the first step most small and medium-sized businesses (SMBs) take in securing their infrastructure.

Global Cloud Security Software Market 2010-2014: Technavio Insights - www.trendmicro.com/cloud-content/us/pdfs/business/reports/rpt_technavio-global-security-software-market.pdf - The Global Cloud Security Software market was valued at $241 million in 2010 and is expected to reach $963.4 million in 2014. The Global Cloud Security Software market mainly caters to the Banking, Insurance, Healthcare, E-commerce, and Government sectors. It is witnessing strong growth compared to the Global Security Software market. Currently, the market is growing at a rate of just over 25%. Geographically, the main revenue generator of this market is the Americas, particularly the United States (U.S.) because it is the major adopter of cloud services solutions. Western European countries such as the United Kingdom (U.K.), France, Germany, and some other European Union (EU) countries are also expected to aggressively adopt cloud security solutions in the future. Thus, buoyed by a strong rate of adoption, the growth of the Global Cloud Security Software market is expected to increase to just over 50% by 2014.

Enterprise network and data security market to reach $10bn by 2016: ABI Research - Computer Business Review - http://security.cbronline.com/news/enterprise-network-and-data-security-market-to-reach-10bn-by-2016-abi-research-110111 - Enterprise network and data security market registered 11% growth to reach $6bn in 2010. Worldwide global enterprise network and data security market is expected to cross $10bn by 2016, according to a report by ABI Research. The market includes secure routers, unified threat management (UTM) appliances, firewalls, virtual private networks (VPN), intrusion detection/prevention systems (IDS/IPS), and network access control (NAC). The report revealed that in 2010 the global enterprise network and data security market has showed resilience and spending recovery by registering 11% growth to reach $6bn. Growth is being influenced by increasing complexity of enterprise networks; greater use of cloud services; and more endpoints such as smartphones and media tablets connecting to enterprise networks. It also includes connections by business users to consumer cloud services and applications such as social networking sites, particularly via mobile devices. The report also said the small and medium-sized businesses (SMBs), which have limited IT resources and budgets, share similar security concerns as large enterprises do, and face comparable threat levels.

Application Development

Worldwide Application Development Software Market to exceed $9 Billion in 2012: Gartner – IBTimes - www.ibtimes.com/worldwide-application-development-software-market-exceed-9-billion-2012-gartner-752680 - According to a new Gartner report, the worldwide application development (AD) software market is expected to cross $9 billion in 2012, an increase of 1.8% over 2011. The report said that the growth will be driven by developing software delivery models, new development methodologies, emerging mobile application development and open source software. According to a new Gartner report titled, "Market Trends: Application Development Software, Worldwide, 2012-2016," cloud is changing the way applications are designed, tested and deployed, resulting in a significant shift in AD priorities. Cost is a major driver, but also agility, flexibility and speed to deploy new applications. The report said that 90% of large, mainstream enterprises and government agencies will use some aspect of cloud computing by 2015. Gartner also predicted that mobile application development projects targeting smartphones and tablets will outnumber native PC projects by a ratio of 4:1 by 2015. Emerging mobile applications, systems and devices are transforming the AD space rapidly, and are one of the top three CIO priorities at the enterprise level.

The Application Development Market Will Grow to $100 billion in 2015: Research2Guidance – www.research2guidance.com/the-application-development-market-will-grow-to-us100bn-in-2015/ - The market for app development services, including application creation, management, distribution and extension services will grow in value from $10 billion in 2010 to $100 billion in 2015. The number of applications developed by third party application developers represents 66% of all applications. This share will increase over the next few years as more and more companies want to publish applications but do not have the resources in-house. Most developers started out as publishers, but the increased level of competition in the main app stores, along with high failure rates, made more and more application developers alter their business model. Concentrating on developing applications for third parties, as opposed to creating their own applications, was seen as a more profitable business alternative. Today most app project revenue is generated from app creation services (concept creation, design and coding). In 2010, app maintenance, analytics, distribution and extension services constituted merely 2% of earnings. The need for additional services is growing, however, and this share will grow significantly between now and 2015.

Small Businesses Dominate Mobile App Market: http://mashable.com/2012/07/24/small-business-mobile-app/ - The emergence of the $20 billion mobile applications market is not only revolutionizing the software industry, it is also having a profound impact on the national economy as well, a new study

found. With smartphones and tablets providing new platforms for software developers, an entire new class of software entrepreneurs has emerged. And the majority of these new players are small businesses. Small businesses dominate across all top apps categories — games, education, productivity and business. The growth of startups and new businesses to support this mobile apps ecosystem, which is predicted to top $100 billion by 2015, has also led to significant job creation during an otherwise troubled economic period, the ACT survey found. Research conducted by ACT and Microsoft's TechNet shows that the app economy has created between 400,000 and 600,000 jobs. "The app marketplace is quickly expanding and creating opportunity all across America," said ACT executive director Morgan Reed. "The massive growth of startups and the rapid emergence of new business models demonstrate that the app economy is strong and will be an economic force for years to come. These findings confirm what we've been hearing in our meetings with app developers across the country. Small app companies are finding success with innovative new technologies, reaching foreign markets and creating jobs here at home."

App development market hit $20.5B in 2011: TechJournal - www.techjournal.org/2012/01/app-development-market-hit-20-5b-in-2011/ - In 2011 publishers created $6.8 billion in application download revenues while app development revenues reached $US 20.5 billion. The development service became a mass market almost 3 times of the size of the application download market today. Prices for application development services vary significantly between regions. UK developers charge $626 per day whereas competitors from India charge, on average, $138 per working day. App development partners using price as the main criteria for selection will not be lead to an optimal solution as most of the price differences are offset by the additional time needed by offshore app developers.

Cloud Services

Why CIOs Are Quickly Prioritizing Analytics, Cloud and Mobile – A Passion for Research: http://softwarestrategiesblog.com/tag/idc-saas-forecasts/ - The luxury of long technology evaluation cycles, introspective analysis of systems, and long deployment timeframes are giving way to rapid deployments and systems designed for accuracy and speed. CIOs need to be just as strong at strategic planning and execution as they are at technology. Many are quickly prioritizing analytics, cloud and mobile strategies to stay in step with their rapidly changing customer bases. This is especially true for those companies with less than $1B in sales, as analytics, cloud computing and mobility can be combined to compete very effectively against their much bigger rivals. What's Driving CIOs – A Look At Technology Priorities - Gartner's annual survey of CIOs includes 2,300 respondents located in 44 countries, competing in all major industries. As of the last annual survey, the three-highest rated priorities for investment from 2012 to 2015 included Analytics and Business Intelligence (BI), Mobile Technologies, and Cloud Computing.

Cloud Computing Market Size – Facts And Trends: CloudTweaks - By Rick Blaisdell - www.cloudtweaks.com/2012/07/cloud-computing-market-size-facts-and-trends/ - Although estimates of the overall cloud market size vary considerably, the consensus is that cloud computing is growing rapidly. Market Research Media, cited in the Bloomberg report, says the cloud market will reach $270 billion in 2020 while Forrester is not that optimistic, predicting last year that the market will hit $241 billion by that time and says the market will hit about $55 billion by 2014. Software-as-a-Service (SaaS) offers more growth opportunities than any other segment. SaaS will retain its position as a leading segment in cloud computing. Gartner tracks ten different categories of SaaS applications in this latest forecast with CRM, ERP, and Web Conferencing, Teaming Platforms, and Social Software Suites being the three largest in terms of global revenue growth.

Gartner Says Worldwide Application Infrastructure and Middleware Market Revenue Grew 10 Percent in 2011: Gartner - www.gartner.com/it/page.jsp?id=2001115 - The worldwide application infrastructure

and middleware (AIM) software revenue market totaled $19.3 billion in 2011, a 9.9% increase from 2010, according to Gartner, Inc. In 2010, worldwide AIM revenue grew 7.3% and reached $17.6 billion. "Application infrastructure and middleware projects increasingly span on-premises, cloud and external business partners," said Fabrizio Biscotti, research director at Gartner. "The impacts of using multiple delivery models, increased reliance on governance technologies, and convergence of application and data integration requirements are driving organizations to sustain significant investment in AIM technologies and skills." "Cloud computing is increasingly becoming mainstream and gaining traction in the market. Middleware vendors should leverage their expertise to offer competitive cloud services in addition to on-premises software products," said Mr. Biscotti. "Although the transition from on-premises to cloud computing will take an extended period of time, the demand for hybrid use of platform technologies is present now, and is projected to grow rapidly during the next two to four years. The AIM market includes several segments that comprise general-purpose portal products, business-process-management-enabling technologies, integration and platform middleware, business-to-business/multi-enterprise middleware products, SOA governance technologies, and AIM appliances.

Opportunities

- Historic strength due to Fort Monmouth, Lucent, and AT&T
- Proximity to major metro areas that are important to the sector
- Excellent IT infrastructure in the region
- High wages
- Occupations and skills benefit all industries
- A highly educated workforce - Monmouth County has the highest rate of educational attainment of all of the comparison geographies. Approximately 91% of the County's adult population has a high school diploma whereas none of the other regions break 90%. Almost 40% of County adult residents have a Bachelor's degree and over 15% have attained a Graduate degree. Overall, Monmouth County offers a highly educated workforce.
- Strong recent demand as measured by job listings
- History of attracting venture capital investment in IT/Telecommunications
- Strong potential demand for IT skills and hence jobs in sectors outside of IT that are growth sectors for Monmouth including healthcare/life sciences, business and financial, and professional technical
- Support among participants in the stakeholder engagement process conducted for this CEDS in focusing in the re-emergence of IT and related industries
- Good fit with education levels and education assets of Brookdale Community College, Monmouth University, and Monmouth County's High Technology High School:

  Brookdale Community College - www.brookdalecc.edu/pages/1.asp - Brookdale, located in Monmouth County, offers a wide array of career oriented programs in IT/and telecommunications including:

  Associate Programs in:

  - Computer Aided Drafting and Design Technology Program A.A.S.
  - Computer Science Program A.A.S. and A.S.
  - Digital Animation & 3D Design Program A.A.S. Degree

- Electronics Technology A.A.S.
- Graphics Design A.A.
- Network Information Technology A.A.S.
- Web Site Development A.A.S.

Certificate Programs in:

- Computer-Aided Drafting and Design
- Computer Repair
- LAN/WAN
- Web Administration

Communiversity Programs:

- BS in Information Technology (online)
- BA in Information Systems (online)
- MS in Engineering Management (online)
- MS in Information Systems (online)
- MS in Professional and Technical Communications (online)

Monmouth University - www.monmouth.edu – Monmouth University located in Monmouth County offers numerous undergraduate, graduate, and certificate programs in IT intensive fields including:

Bachelor of Science Programs in:

- Computer Science with a Concentration in Advanced Computing
- Computer Science with a Concentration in Applied Computing
- Software Engineering

Masters Programs in:

- Computer Networks
- Databases and Intelligent Information Systems
- Computer Science
- Security of Information Systems and Networks Non-Thesis Track
- Software Engineering

Certificate Programs in:

- Information Technology - Undergrad
- Network Technologies – Undergrad
- Computer Science Software Design and Development - Graduate
- Software Development - Graduate
- Software Engineering - Graduate

Monmouth County High Technology High School - www.hths.mcvsd.org - The Monmouth County Public High School System includes six specialty focus schools that are national award winning and highly valued in the County. They include High Technology High School with a focus on science, mathematics, and technology.

High Technology High School is a specialized school that concentrates in science, math, and technology:

"Along with its sister schools: The Marine Academy of Science and Technology (MAST), The Academy of Allied Health and Science (AAHS), Communications High School (CHS), and Biotechnology High School (BTHS), High Technology and Monmouth County Vocational School District are redefining education for the twenty-first century. Recognized twice as both a NJ Star School and a No Child Left Behind Blue Ribbon School, the US Department of Education has described HTHS as a "benchmark school." It went on to say the school "evidences that its approach embraces student, faculty, staff, and administration alike in a mission of excellence, requiring the most of, and providing the most to, all who enter there." A member of the National Consortium of Specialized Secondary Schools of Mathematics, Science and Technology (NCSSSMST), High Technology along with local science and technology firms has established a program that enriches the learning experience and motivates students to academic excellence."[8]

Challenges

- Historical job loss due to withdrawal of industry anchors
- Perception that industry has and will continue to decline due to major setbacks in a few companies and Fort Monmouth
- As with the previous targeted industry, there is a need for broad based assessment with industry representatives to address the industries needs for training, higher education, transportation, workforce housing, and other needs.
- Lack of industry and entrepreneurial driven networks representing this sector

Strategies and Recommendations

Objective: Develop new talent, companies, and entrepreneurs to grow the IT/Telecommunications sector and increase demand for IT workforce across all industries, thus increasing high wage jobs and income.

Action Steps for IT/Telecommunication Industries
• **Do not give up on the IT/Telecommunications sector**. Losses were at first driven by a few large companies and the loss of the base. Recovery was then further impacted by the national recession. The end to the national recession and the resulting recovery, though slow, will present opportunities for this sector. The planned expansion of Commvault provides an example. The jobs are high paying and still an important percent of overall employment. Recent job listings and national and global trends point to strong growth in the sector.
• **Conduct a broad-based needs assessment** to address industry needs for training, higher education, transportation, workforce housing, and other needs**,** e.g. Smaller and more flexible work spaces and industry specific networking events.
• **Make IT/Telecommunications a targeted industry in business expansion and attraction efforts.**

[8] www.hths.mcvsd.org

Action Steps for IT/Telecommunication Industries

a) Include large and small businesses as well as single entrepreneurs in business visitation efforts. Discuss current and future needs including related workforce, growth capital, infrastructure, and amenities.

b) Develop a targeted list of companies (domestic and foreign) to attract using reputable list service and keep companies informed of opportunities in Monmouth. Recruit existing industry leaders in Monmouth to assist with attraction efforts.

c) Create a dedicated webpage for business attraction and expansion on the County economic development website and integrate with social media, audio, and video.

- Besides IT /Telecommunications in general, **subsectors within IT to focus on include: Computer Systems Design, Network and Data Security, and Software and Application Development.**

- Continue to promote the availability of the toolkit under the Grow Monmouth initiative. As part of the Grow Monmouth effort, the County uses ESRI's business analyst tool for a variety of functions. One of its strongest features is the ability to assess residential consumer market preferences and trends within a unique trade area using market segmentation - this alone is a powerful feature. To aid in the promotion of this tool, develop a few brief case studies of how this tool can be used by existing businesses, site selectors, entrepreneurs, and communities to understand the area's consumer market and identify opportunities to fill unmet demand. These case studies can be posted on the County's website and even included in welcome letters to new businesses that the County currently sends out.

Professional/Technical & Business/Finance Industries

For this targeted sector we combined two industry areas: Professional/Technical & Business/Finance. This includes industries and sectors associated with Management, Finance, Insurance, Scientific and Technical Consulting, Advertising, Legal, Architectural, and Design services. The following table indicates specific industries by North American Industrial Classification System (NAICS).

Professional/Technical & Business/Finance Industry Group	
NAICS	Description
	Business/Finance
5211	Monetary Authorities-Central Bank
5221	Depository Credit Intermediation
5222	Nondepository Credit Intermediation
5223	Activities Related to Credit Intermediation
5231	Securities and Commodity Contracts Intermediation and Brokerage
5239	Other Financial Investment Activities
5241	Insurance Carriers
5242	Agencies, Brokerages, and Other Insurance Related Activities
5251	Insurance and Employee Benefit Funds
5311	Lessors of Real Estate
5312	Offices of Real Estate Agents and Brokers
5313	Activities Related to Real Estate
5321	Automotive Equipment Rental and Leasing
5322	Consumer Goods Rental
5323	General Rental Centers
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
5511	Management of Companies and Enterprises
	Professional/Technical
5411	Legal Services
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services
5413	Architectural, Engineering, and Related Services
5414	Specialized Design Services
5415	Computer Systems Design and Related Services
5416	Management, Scientific, and Technical Consulting Services
5417	Scientific Research and Development Services
5418	Advertising, Public Relations, and Related Services
5419	Other Professional, Scientific, and Technical Services

Data Overview

- In 2011, there were 1,725 business establishments in the Business/Finance sector and 2,969 in the Professional/Technical sector.
- In 2012, there were 18,325 jobs in the Business/Finance sector and 21,502 jobs in the Professional/Technical sector, which combined represents 14.7% of all employment in the County. The largest subsectors include: Insurance Agencies, Carriers, and Brokerages (5,222 jobs), Architectural, Engineering and Related Services (3,884 jobs), Computer Systems Design and Related Services (3,455 jobs, note also included in the IT/Telecommunications sector), Legal Services (3,094 jobs), Management, Scientific, and Technical Consulting Services (3,090 jobs), and Depository Credit Intermediation (2,912 jobs).

- In 2012, average wages in the County in the Business/Finance sector were $82,238 and in the Professional/Technical Sector were $92,971, both considerably higher than the average for all industries $57,966.Between 2002 and 2012 the County lost 186 jobs in the Business/Finance sector, or 1%, and lost 1,988 jobs, or 8.5%, in the Professional/Technical sector. Job losses were concentrated in the subsectors of Scientific Research and Development Services (3,299 jobs lost) Insurance and Employee Benefit Funds (1,056 jobs lost), and Computer Systems Design and Related Services (655 jobs lost). Job increases were highest in Management, Scientific, and Consulting Services (933 jobs), Management of Companies and Enterprises (860 jobs), Other Professional and Scientific Consulting Services (660 jobs), and Architectural, Engineering, and Related Services (568 jobs).
- Industry concentration in 2012 in the County (as measured by location quotient) is high in the subsectors of Lessors of Nonfinancial Intangible Assets (entities that assign rights to assets such as patents, trademarks, brand names, etc. for which a royalty payment or licensing fee is paid to the asset holder) (5.81), Scientific Research and Development Services (1.93) Other Professional, Scientific and Technical Services (1.69), and Offices of Real Estate Agents and Brokers (1.53).
- In 2012, there were 20,667 Business/Finance related occupations and 17,794 Professional/Technical related occupations in Monmouth County, together representing 14% of all occupations in the County.
- The largest categories in Professional/Technical related occupations include Management Analysts (711 jobs) and Civil Engineers (411 jobs). The largest categories in Business/Finance related occupations include Insurance Sales Agents (1,420 jobs) and Tellers (1,122 jobs).
- Actual growth between 2002 and 2012 was highest in Professional/Technical related occupations for Veterinary Technologists and Technicians (167 jobs), Veterinarians (153 jobs), and Civil Engineers (90 jobs). Growth in Business/Finance related occupations during this time period was highest for Personal Financial Advisors (123 jobs) and Insurance Sales Agents (116 jobs).
- In 2012, median hourly wages in Professional/Technical occupations in Monmouth County was $29.40 and in Business/Finance occupations was $27.43, compared to $21.83 for all occupations in Monmouth County.
- While education levels typically required for Business/Finance and Professional/Technical occupations include bachelor degrees and beyond, opportunities also exist that require associate degrees and non-degree certificates.

Data on recent occupation demands sheds light on the trends in Business/Finance and Professional/Technical related occupations in Monmouth County.[9] Between January 15 and March 15, 2013, among the top 21 occupations in Monmouth County with the most listings (help wanted) included:

- Tellers (80)
- Marketing Managers (69)
- Sales Managers (52)
- General and Operations Managers (50)
- Accountants (40)

[9] Burning Glass Technologies, Labor Insight, Prepared by: New Jersey Department of Labor & Workforce Development, Division of Labor Market & Demographic Research, March 2013.

And among the industries with the most occupational listings include:

- Professional, Scientific, and Technical Services (204)
- Credit Intermediation and Related (179)
- Insurance Carriers and Related (135)
- Real Estate (41)

Market Assessment

While there was some job loss overall in these two sectors combined (186 jobs lost from 2002-2012) the jobs were concentrated in a few subsectors and 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.

Opportunities

- Great location for being connected to major markets in the Northeast and Mid-Atlantic including adjacent to New York City
- Historic growth except for isolated subsectors and businesses
- Very high wages and high skills
- Recent demand increasing as evident through job listings
- Good fit with education levels and education assets
- Opportunity to support business development of those companies and professionals currently commuting to or within New York City, but may want to develop/grow their business locally
- Local educational assets, including:

  Brookdale Community College - www.brookdalecc.edu/pages/1.asp - Brookdale offers a wide array of career oriented programs in professional/technical and business/finance related fields including:

  Associate Programs in:

  - Accounting Option - Business Administration Program A.A.
  - Accounting Program A.A.S.
  - Architecture Program A.S.
  - Business Administration Program A.A.
  - Business Management A.A.S.
  - Marketing Program A.A.S.
  - Technical Studies Program A.A.S.

  Certificate Programs in:

  - Accounting
  - Paralegal

  Communiveristy Programs:

  - BS Business (Accounting, Administration, Finance, Management, Marketing)
  - BA Business Administration
  - MBA

Monmouth University - www.monmouth.edu – Monmouth University offers numerous undergraduate, graduate, and certificate programs in professional/technical and business/finance intensive fields including:

Through the Leon Hess Business School Monmouth offers bachelor degree programs in Business Administration with a concentration in:

- Accounting
- Economics
- Economics and Finance
- Finance
- International Business
- Management
- Management and Marketing
- Marketing
- Real Estate

And Graduate Degree Programs in:

- Business Administration
- Business Administration - Accounting Track
- Business Administration - Finance Track
- Business Administration - Real Estate Track
- Business Administration with a Concentration in Healthcare Management

Graduate Certificate Programs in:

- Human Resources Management and Communication
- Strategic Public Relations and New Media

And a post-master's certificate program in accounting.

Challenges

- Need for efficient transportation options to allow for travel to and from as well as around the County.
- Need for amenities to support professional small business development including flex-office space and places to meet-up, network, and collaborate as well as start-up capital.
- Housing options for mid-level or even start-up professionals may still be a constraint.
- Professional/Technical industries by and large are not tied to R&D and commercialization institutions located in Monmouth.

Strategies and Recommendations

Objective: To continue to grow the professional/technical and business/finance sectors through small business and professional growth and retaining business and workers that currently reside in the County.

Action Steps for Professional/Technical & Business/Finance Industries
• **Provide start-up and small business support** to help those interested in starting small, new businesses or expanding businesses in the professional/technical and business/finance sectors including professionals that may be commuting from Monmouth County to New York City. Services should include assistance with business planning, market research, licensing and permitting, and access to start-up and growth capital.
• Work to **address transportation improvements** in the County as well as workforce housing options.
• **Continue to promote the availability of the toolkit under the Grow Monmouth initiative**. As part of the Grow Monmouth effort, the County uses ESRI's business analyst tool for a variety of functions. One of its strongest features is the ability to assess residential consumer market preferences and trends within a unique trade area using market segmentation - this alone is a powerful feature. To aid in the promotion of this tool, develop a few brief case studies of how this tool can be used by existing businesses, site selectors, entrepreneurs, and communities to understand the area's consumer market and identify opportunities to fill unmet demand. These case studies can be posted on the County's website and even included in welcome letters to new businesses that the County currently sends out.

Visitation and Related Industries

Visitation and Related Industries 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. The following table indicates specific industries by North American Industrial Classification System (NAICS).

Visitation and Related Industries Group	
NAICS	Description
7221	Full-Service Restaurants
7139	Other Amusement and Recreation Industries
7222	Limited-Service Eating Places
4451	Grocery Stores
7111	Performing Arts Companies
4481	Clothing Stores
4413	Automotive Parts, Accessories, and Tire Stores
4453	Beer, Wine, and Liquor Stores
7131	Amusement Parks and Arcades
7115	Independent Artists, Writers, and Performers
7211	Traveler Accommodation
4483	Jewelry, Luggage, and Leather Goods Stores
4482	Shoe Stores
4431	Electronics and Appliance Stores
4441	Building Material and Supplies Dealers
7121	Museums, Historical Sites, and Similar Institutions
4411	Automobile Dealers
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
7212	RV (Recreational Vehicle) Parks and Recreational Camps
4471	Gasoline Stations
7113	Promoters of Performing Arts, Sports, and Similar Events
7132	Gambling Industries
7213	Rooming and Boarding Houses
7112	Spectator Sports
4422	Home Furnishings Stores

Data Overview

- There over 4,000 establishments in the visitation industry cluster.
- This industry had 57,636 jobs in 2012 (including full-time, part-time, and seasonal jobs).
- From 2002 to 2012, this industry group added over 7,100 jobs (full-time, part-time, and seasonal).
- Within the cluster itself, Full-Service Restaurants account for 10,700 jobs (full-time, part-time, and seasonal) and are projected to increase by 10% in the next 10 years.
- Outside of the restaurant-related industry sectors, growth in the visitation industry cluster over the past 10 years was spread across a variety of industry sectors.
- Performing Arts Companies gained 225 jobs in the past 10-years (over 100% growth) and are expected to add another 116 by 2022.

- Sub-sectors showing strength in this industry over the past 10-years include Theater Companies and Dinner Theaters (230 new jobs) and Musical Groups and Artists (70 new jobs).

Opportunities

- Significant employment sector in the County with strong growth
- Jobs for local residents
- Amenities for workers and residents
- County has considerable oceanfront and open space; already has a diverse cultural scene with music and arts
- Good fit for attracting and retaining younger population, particularly creative types
- MoCo Arts Partnership has been established to help focus marketing for an arts corridor
- According to the Local Arts Index Report for Monmouth County:
    - A higher than average percentage of Monmouth County's population attends live performing arts performances.
    - Expenditures per capita in Monmouth County are much higher than the national and state averages in all expenditure categories measured: admission fees, recorded media, musical instrument, photographic equipment, and reading materials.

Challenges

- Lower wages compared to other industry sectors
- Many jobs are part-time and seasonal, lacking career ladders
- Negative perception of "service jobs"
- Limited knowledge by the business community of resources available to them through the Grow Monmouth initiative
- Arts and cultural institutions receive less grant funding compared to State and National levels
- Lack of distinct identity for cultural community
- Highly seasonal tourism industry
- Workforce housing needs to be affordable to these workers

Strategies & Recommendations

Objective: Augment the quality of life in Monmouth County by identifying and seeking to fulfill unmet needs of the County's resident, workforce, and visitor population. While wages in this industry are within the lower end of the income scale, businesses in this sector provide job opportunities for the County residents that have little to no formal education beyond high school. Not only are the jobs important, these businesses are providing services in demand by the County's workforce, residential base, and visitor market. Visitors bring money into the local economy from outside the region; creating wealth. Without this industry cluster, a robust live-work-play environment is unattainable.

Action Steps for Visitation and Related Industries
• **Support Branding Efforts:** Through the Grow Monmouth campaign, support ongoing branding efforts. The Made in Monmouth event is a great opportunity to both showcase locally made products and local artists, as well as get these businesses all under one roof. Update the event's Facebook page to promote the 2013 event and invite vendors to post on the wall about their plans for 2013. Additionally, continue to support the efforts of the newly formed Tourism Advisory Committee that was shaped to help coordinate promotion and address issues expected in the 2013 tourism season. Continue to support the MoCo Arts Partnership that was established to promote the eastern towns of the County as a unified arts destination.
• **Address Seasonality:** Support the development of visitation activities for the Monmouth County coast that extend year-round. Promote and help co-ordinate the development of cultural, arts, food and other festivals that cater to year-round visitation, especially from overseas and regional visitors. Support efforts of the County's tourism organizations to identify and promote off-season themed stays around unique features that are not beach-dependent, including fisheries, horse/equestrian, farm stays, farmers markets, walking and cycling trails and parks. Use the MoCo brand to promote off-season visitation activities and stays.
• **Continue to promote the availability of the toolkit under the Grow Monmouth initiative.** As part of the Grow Monmouth effort, the County uses ESRI's business analyst tool for a variety of functions. One of its strongest features is the ability to assess residential consumer market preferences and trends within a unique trade area using market segmentation - this alone is a powerful feature. To aid in the promotion of this tool, develop a few brief case studies of how this tool can be used by existing businesses, site selectors, entrepreneurs, and communities to understand the area's consumer market and identify opportunities to fill unmet demand. These case studies can be posted on the County's website and even included in welcome letters to new businesses that the County currently sends out.

CHAPTER SIX: ACTIONS MATRIX

The following is a list of additional activities not already included above in the "Targeted Industries", but form the CEDS plan.

Project	Priority	Objective	Action Steps	Job Creation	Private Investment
Rating System for Flood Insurance	HIGH	Help municipalities obtain and manage their Community Rating for the National Flood Insurance Program.	1. Assist communities in becoming CRS qualified through what the CRS program calls "uniform minimum credit"; those credits achieved based on actions by a state or regional agency on behalf of its communities. Measures: number of communities participating in the CRS program (or) the number of structures located within a participating CRS community's Special Flood Hazard Area*.	1. NA	1. NA
*Note: The county has contributed staff time in the amount of $9,144 in the first quarter of 2014. It is anticipated that the county will spend $45,000 in calendar 2014.					
Resilient Infrastructure R&D	LOW	Encouraging the creation of infrastructure that will be resilient in the face of climate change, unexpected weather events, and sea level rise over the next hundred years to ensure the economic stability of the County.	1. Host a series of roundtables to promote and learn about resilient infrastructure. 2. Support utilities, universities and utility authorities to develop more resilient infrastructure. 3. Identify stakeholders, including potential research and development partners.	1. NA 2. 1,000 + construction 3. Indeterminate	1. NA 2. $500 million 3. NA

Project	Priority	Objective	Action Steps	Job Creation	Private Investment
Review of Transit	MEDIUM	Encourage better access into the area for people who can commute to fill mid- to-low level jobs and improve east-west travel through the region.	1. Undertake a review with NJ Transit, NJ DOT, NJTPA and other transit stakeholders, particularly as it relates to train and light rail*. 2. Advocate for transportation improvement proposals such as bus rapid transit (BRT) on major highway corridors and dual mode locomotives to provide a seamless train service line all the way to Bayhead. 3. Study the opportunities for aviation expansion, particularly as it relates to the Wall airport and intermodal concept.	1. NA 2. 1,000 + construction 3. 300	1. NA 2. NA 3. $500,000
*Note: The county has begun a series of meeting with NJ Transit and NJ Transportation Planning Authority. The county has spent approximately $10,000 in staff time. The county has also secured a grant in the amount of $100,000 for a Bus Rapid Transit study which began in March 2014					
Housing Density at Transportation Nodes	LOW	Improve rail and road transportation in the County by encouraging municipalities to increase housing density at transit nodes.	1. Encourage towns to review zoning and land use regulations to provide medium and high density development around transport nodes to achieve increased ridership. 2. Assist entities to attract additional investment in transportation services, especially integrated services.	1. 500 2. NA	1. Indeterminate 2. NA
Housing for People with Demand Skills	LOW	Encourage the development of housing for people whose skills and presence are critical to the county's economic success but have difficulty affording the	1. Host stakeholder meetings to identify housing needs in industry sectors.	1. NA	1. NA

Project	Priority	Objective	Action Steps	Job Creation	Private Investment
		current housing options.			
Support Agricultural Industries	MEDIUM	Continued support of this sector is critical to the preservation of the high quality of life available in the county.	1. Support branding efforts of a Monmouth County Farm to Table Program: Through Grow Monmouth develop a logo that will be recognizable as Monmouth County Farm to Table*. 2. Encourage additional participation in equine activities: Support the continued presence of both the thoroughbred and standard bred markets through racing at Monmouth Park and Freehold Raceway and through horse shows in the region. 3. Address seasonal limitations: Support additional year round possibilities through expanded growing seasons and farm visitation.	1. 50 seasonal jobs in agriculture industry 2. Supports existing jobs + 50 jobs created 3. NA – Enhancing existing seasonal jobs	1. $5 million 2. Indeterminate 3. Indeterminate
*Note: The county has begun to lay the groundwork for application to U.S. Dept. of Agriculture for a Rural Business Development grant to develop a "Grown in Monmouth" marketing program. The county departments of Economic Development, Planning and the Rutgers Cooperative Extension have put in approximately $6,000 in staff time in the first quarter of 2014. We anticipate expending $15,000 - $20,000 in staff time in the next three quarters.					
Marine Science Sector	HIGH	Promote growth in the marine (non-tourist) sector that is currently underperforming relative to the existing natural asset.	1. Explore the potential for growth in the marine (non-tourist) cluster, including: • Marine and ocean research • Ocean energy • Marine trades such as marinas' boat building and repair and services to the boating community • Coastal planning • Marine transportation and logistics	1. 1,000+ 2. NA	1. $50 million+ 2. NA

Project	Priority	Objective	Action Steps	Job Creation	Private Investment
			• Fisheries, especially clamming 2. Outreach to stakeholders and advocacy groups to assess needs to facilitate growth.		
Roundtables for an Expanded Grow Monmouth	HIGH	Expand the Grow Monmouth regional economic development support program to include regular roundtables and conferences that stimulate synergistic business, learn from best practices in the region and provide exposure to new emerging business opportunities and trends*.	1. Provide exposure to new emerging business opportunities and trends. 2. Encourage new projects and concepts that marry the emerging capacities, talents and resources of Monmouth County with needs of organizations elsewhere in the USA. 3. Facilitate an ecosystem of opportunity creation around libraries, university researchers, local business leaders, investors, social entrepreneurs. 4. Provide local entrepreneurs with exposure to new opportunities that are targeted to their business or service interests. 5. Introduce business/social entrepreneurs to sources of funding. 6. Match local/regional emerging talents, researchers with local businesses seeking new ways to leverage their businesses or social entrepreneurial activities.	Indirect growth through startups	Indeterminate
*Note: The county has begun a series of Grow Monmouth Economic Development roundtables throughout the county. Three roundtables took place in the first quarter of 2014 with 7 more scheduled through second quarter. Staff time, supplies, printing and postage have totaled $12,000 to date. Anticipated that we will spend $40,000 in 2014					
Expand Sewer and Water	HIGH	In accordance with the County's sewer service	1. Meet with municipalities to identify areas to extend water/sewer service	10+ construction	NA

Project	Priority	Objective	Action Steps	Job Creation	Private Investment
		map, encourage economic growth along corridors where lack of water/sewer service is a deterrent to growth.	2. Analyze potential economic growth from investment in infrastructure		
Funding	HIGH	In order for the County to carry out the projects listed above and support the Grow Monmouth campaign, funding is needed in these areas.	1. Business Inventory and Identification System 2. Loan Pool Funding* 3. Funding for technical assistance, i.e. grants to businesses to hire marketing, accountant, lawyers, human resource professionals to increase jobs and to increase business tools such as GIS capability and data base services currently offered through the Grow Monmouth initiative 4. Medical Arts Campus – from medical billing and coding to RNs 5. Veterinary School—to further support the equine industry 6. Funds to market local artisanal farming and equine industry 7. Grow Monmouth Façade Improvement Program**	1. NA 2. Indirect job creation 3. 100+ 4. 500+ construction plus 50+ full time 5. 500+ construction plus 50+ full time 6. Indirect 50+	1. NA 2. Loans to leverage private money, indeterminate 3. Technical assistance to leverage private money, indeterminate 4. If private co-sponsor, $10+ million 5. If private co-sponsor, $10+ million 6. Private match indiscriminate

*Note: **Small Business Revolving Loan Fund**

One of the biggest challenges that our business community expressed during our CEDS outreach meetings was the difficulty in accessing capital. Lack of capital is a contributing factor to the stagnation of our region's economic growth. Areas outside our region like New York City have established revolving loan funds which make them more competitive as they strive to retain and attract businesses and grow their economy. Monmouth County feels that a Small Business Revolving loan fund is critical to the economic health of our region and proposes

Project	Priority	Objective	Action Steps	Job Creation	Private Investment

the following:

Program Proposal - To establish a Small Business Revolving Loan Fund the County would request through the CEDS process a Federal investment of $10 Million. The County would leverage the investment through a competitive process with private lending institutions in order to increase the fund amount. Once established, the program would offer:

- Micro-Loans up to $10,000
- Standard Loans greater than $10,000

Program Benefits - The Small Business Revolving Loan Fund would allow businesses to gain access to capital that would help them grow their business and create jobs. The infusion of capital into our business community would also contribute to the economic growth of our region.

**Note: The county began a Grow Monmouth Façade Improvement Program in late October 2013. Using $85,000 HUD CDBG funds, the county offered grants of $1,850 to businesses in HUD designated areas to improve the façade of their business. The program is sold out as of February 2014 and we currently have a waiting list. We are looking for non-HUD funds in order to offer this same time of program county-wide.

CHAPTER SEVEN: COUNTY TRANSPORTATION PROJECT PRIORITY LIST

The following is a list of priority infrastructure projects to help promote Economic Development.

Priority	Project	Location	Scope	Construction Cost Estimate	Project Status / Funds Expended or Encumbered	Funding Horizon
1	Halls Mill Road & CR 524 (Elton-Adelphia Road) Corridor Improvements	Freehold Twp. & Howell Twp.	Freehold Connector - Improvements to and realignment of Halls Mill Road to complete the Freehold Kozloski Road connector to provide a direct access to/from Route 9 and to serve as an alternate north-south corridor to Route 9. Completion of this alternate corridor will also provide additional opportunities for economic growth/development of areas adjacent to Kozloski and Halls Mill Roads, and also for regional -transient traffic as well as local traffic to access and utilize the existing services and businesses located along the corridor.	$22,000,000	scoping phase, complete RFP for final design being drafted / $610,000	Design: 2014 ROW: 2015 Construction: 2016
2	CR 537 Corridor Improvements W. Main St - Freehold Smithburg Rd	Freehold Twp.	Reconstruction of the corridor to improve traffic safety, reduce traffic congestion, and provide better accommodations for various modes of transportation along the CR 537 corridor between Business Route 33 and Gravel Hill Road. Included in this segment are the Route 9 & Route 33 interchanges (NJDOT jurisdiction), Freehold Raceway Mall, Wal-Mart & Sam's Club, Central State Hospital, public schools, and multitude of small business fronts.	County jurisdiction portion: $23,000,000	concept development phase complete, scope of work for final design being prepared $325,000	Preliminary Engineering: 2015 Design: 2017 ROW: 2018 Construction: 2018
3	CR 537 & SR 34 Intersection Improvements	Colts Neck Twp.	Intersection improvement to increase capacity, improve safety, operational characteristics, and functionality of the intersection to better serve the regional mobility and reduce traffic diversion to local roads. CR 537 is a major East-West corridor carrying commuter, commercial, recreational and local traffic.	$20,000,000	design phase, enviro permits submitted / $950,000	ROW: 2013-2015 Construction: 2016

Priority	Project	Location	Scope	Construction Cost Estimate	Project Status / Funds Expended or Encumbered	Funding Horizon
4	Fort Monmouth - regional transportation improvements	Boroughs of Eatontown, Oceanport and Tinton Falls	Improvements to the existing infrastructure in the vicinity of the former Fort Monmouth property to address major transportation needs that will facilitate economic viability and growth of the former Fort Monmouth, improve access to the Fort property, enhance connectivity through the Fort property and the network of regional roads.	$88,000,000	Exit 105 under construction, next phase in design / $25,000,000	
5	CR 3, Tennent Road Corridor Improvements	Manalapan Twp.	Corridor reconstruction to address concerns with respect to safety, capacity, system linkage, geometric deficiencies, accommodate projected transportation demands, environmental considerations, social and economic impacts, and replace 7 deficient bridges.	$16,000,000	preparing RFP for design / $500,000	Design: 2015 Construction: 2017
6	CR 8, Ocean Blvd / Various	Avon, Belmar Bradley Beach	Restoration of the roadway damaged by Hurricane Sandy	$650,000	$61,750	
7	Bridge S-32 (Rumson-Sea Bright Bridge) CR 520, Rumson Rd	Rumson Bo & Sea Bright Bo	Replacement of a structurally deficient movable bridge spanning over the Shrewsbury River and improvements to the approach roadways. This bridge is a critical link in the emergency evacuation route for the barrier island community of Sea Bright and provides a critical connection between the two adjacent municipalities.	$60,000,000	concept development complete, preparing RFP for preliminary eng. / $350,000	Preliminary Engineering: 2014 Design: 2016 ROW: 2017 Construction: 2018
8	Bridge S-31(Oceanic Bridge) CR 8A, Bingham Ave - Locust Point Rd	Middletown Twp. & Rumson Bo	Replacement of a structurally deficient movable bridge spanning approximately 2,710 feet over the Navesink River to continue to provide a safe, reliable and durable transportation link as well as maintain the existing emergency evacuation route and alternate route for emergency service vehicles.	$100,000,000	scoping phase, preparing alternative analysis report / $600,000	Design: 2016 ROW: 2017 Construction: 2020
9	CR 40A, Evergreen	Neptune City	Improvements at the existing intersection adjacent to NJTransit's Coast Line to facilitate safety of traveling public in this area including traffic signalization with railroad preemption.	$600,000	Dsgn complete, construction contract awarded / $720,000	Construction: 2014

Priority	Project	Location	Scope	Construction Cost Estimate	Project Status / Funds Expended or Encumbered	Funding Horizon
10	CR 526, Sharon Station Rd, Improvements from CR 539 to CR 526 Bridges U-34, U-35 & U-94	Upper Freehold Twp.	Allentown Bypass - Corridor reconstruction to improve safety along the corridor, replace 3 structurally deficient condition bridge structures, create a by-pass route for heavy truck traffic currently utilizing County Route 539 running through historic Allentown, address flooding and drainage issues, as well as limited sight distance, and delays at signalized intersection with CR 526, and improve quality of life of residents in residential neighborhoods adjacent to the corridor.	$16,000,000	design phase, envir permits submitted / $650,000	ROW: 2014-2015 Construction: 2016
11	Bayshore Ferry West Bulkhead Replacement	Middletown Twp.	Replace the deteriorating bulkhead along the western side of Compton's Creek Shoal Harbor channel for the continued operation of the ferry service to/from the financial district of Manhattan as well as the continued operation and growth of the existing commercial fishing business. Active operation of the ferry provides an alternate multimodal evacuation route in case of the need to evacuate New York City.	$10,000,000	preparing RFP for design phase / $50,000	Design: 2014 Construction: 2015
12	Bayshore Ferry Main / Dock & Dredge	Middletown Twp.	Repair/replace the dock system to ensure continued operation of the ferry service to/from the financial district of Manhattan. Active operation of the ferry provides an alternate multimodal evacuation route in case of the need to evacuate New York City.	$350,000	Awarded contract for dredging phase, RFP for dock being prepared / $190,000	Dredging: 2014 Main dock design: 2014 Const: 2016
13	CR 520 Phase I Lincroft Corridor	Middletown Twp.	Improvements to address geometric and operational deficiencies, capacity, system linkage, access concerns to/from the existing properties, projected transportation demands and traffic safety issues.	$2,500,000	Preparing RFP for design / $0	Design: 2014
14	CR 57 / Brighton	Long Branch City	Reconstruction of signalized intersection to facilitate traffic calming and traffic safety, and improve access to Long Branch development areas including housing, restaurants and shopping as well as to the beach.	$625,000	under design / $65,000	Design: 2014 Construction: 2014

Priority	Project	Location	Scope	Construction Cost Estimate	Project Status / Funds Expended or Encumbered	Funding Horizon
15	CR 537, Burnt Tavern Rd	Millstone Twp. / Jackson Twp.	Intersection realignment and signalization in conjunction with Interchange 195 improvements to facilitate travel and access to Jackson Outlets, Great Adventure and various businesses along CR 537 corridor east and west of I-195. These improvements will also enhance alternate access/ connection between Ocean County, I-195 and Monmouth County, as well as safety at the intersection and along the CR 537 corridor.	$10,000,000	Undetermined; NJDOT lead	n/a
16	CR 7, Palmer Ave	Hazlet Twp.	Improvements to address alignment and drainage concerns will enhance accessibility for different modes of transportation to major retail centers and major highways along SR 35 and SR 36.	$450,000	Under design / $10,000	Design: 2014 Cons: 2016
17	Bridge MA-13 & Matawan Lake Dam, Main St	Matawan Boro	Replacement of the bridge and rehabilitation of the significant hazard dam to ensure the roadway and the dam can safety pass the design flood and prevent a catastrophic failure. The roadway links the travelers to the nearby GSP and SR 35, SR 36 and the Matawan Train Station.	$5,000,000	RFP complete, award design / $400,000	Design: 2014 Construction: 2017
18	Bridge MA-9 & Lake Lefferts Dam, CR 6A, Ravine Dr	Matawan Boro	Replacement of the bridge and rehabilitation of the significant hazard dam to ensure that the roadway and the dam remain intact during storm events thus preventing catastrophic failure of the dam and its adverse effects on the downstream area. The roadway links the travelers to the nearby GSP and SR 35, SR 36 and the Matawan Train Station.	$7,000,000	Under design, enviro permits submitted / $490,000	Design: 2014 Construction: 2015
19	Bridge W-1 & Brisbane Lake Dam, CR 524, Atlantic Ave	Wall Twp.	Replacement of the bridge and rehabilitation of the significant hazard dam to ensure that the roadway and the dam remain intact during storm events thus preventing catastrophic failure of the dam and its adverse effects on the downstream area. The roadway links the travelers to the nearby GSP, Interstate 195, SR 138, SR 18 and SR 34.	$4,000,000	Undetermined. Requested NJ Dept. of Dam Safety Bureau to take lead	Unknown
20	Bridge W-43, CR 18, Ocean Ave	Avon-By-The-Sea Boro & Belmar Boro	Rehabilitation of this movable bridge to maintain this vehicular transportation link between Avon and Belmar and the greater Monmouth County shore region while also allowing the boaters access to/from the marinas and the	$3,000,000	Phase I design complete, Phase II const.	Phase I cons 2014 Phase II design 2015,

Priority	Project	Location	Scope	Construction Cost Estimate	Project Status / Funds Expended or Encumbered	Funding Horizon
			Atlantic Ocean.			Const 2017
21	Bridge MS-48 & Perrineville Dam, CR 1, Perrineville Rd	Millstone Twp.	Replacement of the bridge and rehabilitation of the significant hazard dam to ensure that the roadway and the dam remain intact during storm events thus preventing catastrophic failure of the dam and its adverse effects on the downstream area. The roadway links the travelers to the nearby NJTurnpike, Interstate 195, SR 130, and SR 33.	$3,000,000	preparing MOA, requesting NJ Dept. of Dam Safety Bureau to take lead / $unknown	Design: 2015 Construction: 2018
22	Bridges MT-30 & MT-45 & Shadow Lake Dam, CR 12, Hubbard Ave	Middletown Twp.	Replacement of the bridge and rehabilitation of the significant hazard dam to ensure that the roadway and the dam remain intact during storm events, thus preventing catastrophic failure of the dam and its adverse effects on the downstream area. The roadway links the travelers to the nearby GSP and SR 35 as well as the greater downtown Red Bank.	$5,000,000	Preparing design RFP / $5,000	Design: 2015 Const: 2017
23	Bridge W-18 & Hurley Pond Dam, Allenwood Rd	Wall Twp.	Replacement of the bridge and rehabilitation of the significant hazard dam to ensure that the roadway and the dam remain intact during storm events thus preventing catastrophic failure of the dam and its adverse effects on the downstream area. The roadway links the travelers to the nearby GSP, Interstate 195, SR 138, SR 18 and SR 34.	$3,000,000	no schedule / $unknown	Unknown
24	Bridge S-31 Slope Stabilization	Middletown Twp.	Repair the eroded coastal bluff at the west side of CR 8A at the north approach (Middletown side) to Bridge S-31. Bridge S-31 is a critical regional transportation link and is an emergency evacuation route and alternate route for emergency service vehicles.	$160,000	Under construction / $190,000	Construction: 2014
25	CR 46, Dutch Lane / CR 4, Crine Rd / Heulitt Rd	Colts Neck Twp.	Realignment of the intersection including traffic calming components to improve safety, sight distance and traffic flow.	$1,000,000	Design complete, contract awarded $1,200,000	Construction: 2014

Priority	Project	Location	Scope	Construction Cost Estimate	Project Status / Funds Expended or Encumbered	Funding Horizon
26	CR 47, Warren / Old Mill	Spring Lake Heights Boro	Reconstruction, including realignment and signalization, to improve traffic flow, safety, and minimize delays on the side streets.	$400,000	Under design / $150,000	Design 2014, Const 2015
27	CR 8A / CR 8B & Stone Church	Middletown Twp.	Reconstruction / realignment of a five legged intersection with traffic calming elements (roundabouts) to facilitate safer traveling movements.	$1,000,000	Under design / $200,000	Design 2014 ROW 2015 Const 2016
28	CR 50 / Kings Highway / Church St	Middletown Twp.	Intersection reconstruction, including signalization, to improve sight distance, safety, and traffic flow and minimize delays on side streets.	$450,000	design phase / $50,000	Construction: 2015
29	CR 524 / CR 571 / Paint Island	Millstone Twp.	Reconstruction / realignment of a five legged intersection with traffic calming elements (roundabouts) to facilitate safer traveling movements.	$800,000	Under design / $200,000	Design 2014 Const 2016
30	CR 21 / CR 524 Spur / Ramshorn Dr	Wall Twp.	Intersection reconstruction, including signalization, to facilitate safe passage and accommodate safe bike trail crossing.	$1,000,000	design phase / $150,000	Design 2014 ROW 2015 Const 2016
31	CR 527 / Conover / South Main	Englishtown Boro	Roadway and intersection improvements to address safety concerns and bring the roadways to current safety standards.	$550,000	Under design / $80,000	Design: 2014 Construction: 2016
32	CR 21 / CR 547 / CR 549 / Bridge HL-49	Howell Twp.	Intersection improvement and bridge reconstruction to improve traffic safety and address the bridge's deficiencies. This intersection along with the bridge provides access to I - 195, which is a corridor vital to regional traffic.	$3,500,000	preparing RFP for final design / $75,000	Design: 2014 Construction: 2016
33	CR 13A / CR 51 / Hope Rd	Tinton Falls Boro	Intersection improvement, including signalization, to address operational and traffic safety issues.	$750,000	concept development phase	Pending resolution of support from municipality
34	Bridge R-11, Laurel Ave	Keansburg Boro	The replacement of this structurally deficient bridge along with Bridge R-13 will maintain one of the major roadways linking Keansburg and its surrounding municipalities and to the regional roadway systems such as SR 36.	$2,000,000	Preparing design RFP / $0	Design 2015 Const 2018

Priority	Project	Location	Scope	Construction Cost Estimate	Project Status / Funds Expended or Encumbered	Funding Horizon
35	Bridge U-33, CR 539, Trenton-Forked River Rd	Upper Freehold Twp.	The replacement of this fracture critical deteriorating bridge will maintain one of the major rural roadways linking Upper Freehold and its surrounding regional areas to the major State roadway systems such as NJTurnpike and Interstate 195.	$1,500,000	Preparing RFP / $0	Design 2015 Const 2017
36	Bridge R-13, Tenth Ave	Keansburg Boro	The replacement of this structurally deficient bridge along with Bridge R-11 will maintain one of the major roadways linking Keansburg and its surrounding municipalities and to the regional roadway systems such as SR 36.	$2,000,000	RFP complete / $10,000	Design 2014 Const 2016
37	Bridge R-5, CR 39, Florence Ave	Union Beach Boro	The replacement of this deteriorating culvert bridge will maintain one of the major roadways linking Keansburg and its surrounding municipalities and to the regional roadway systems such as SR 36.	$1,500,000	Preparing RFP / $0	Design 2015 Const 2018
38	CR 516 / Union Phase II	Hazlet Twp.	Improvements to an existing roadway to facilitate access to/from satellite campus of Brookdale College, enhance safety to traveling students and college staff, and address commuter time congestion.	$1,000,000	Design complete / $300,000	Design 2014 Const 2014

CHAPTER SEVEN: PERFORMANCE MEASURES

Introduction

Critical to success in economic development planning is measuring, tracking and reporting performance on actions. Plans are based on a "snapshot in time" and while they consider historical and projected trends, regional economies are constantly changing and evolving due to local, regional, national, and global events. It is important to build in a process for regular review and reporting of measures that are designed to track progress and use this information to make regular adjustments to the plan. For Monmouth County, the process for tracking and measuring performance should be based on the following criteria:

- **How often?** – Track annually to review measures, assess meaning, and make adjustments to strategies and action plans.
- **By whom?** – This is best accomplished by economic development and planning staff working with a small advisory committee of stakeholders that are interested in and knowledgeable of economic development data and analysis, then reporting to the larger steering committee for review of findings and adjustments to plans, actions, priorities, and policies.
- **How it is used?** – Use results to communicate progress internally (among staff and officials) as well as externally to citizens, taxpayers, and stakeholders.

Measures

Below are measures for each of the strategy and action areas. These are a mix of input, output and outcome measures. *Input measures* track the effort or resources being put into a program or activity, such as staff hours and funding. *Output measures* include the actual programs or activities that have occurred and are meant to affect change such as site visits and clients/businesses served. *Outcome measures* are the resulting improvements in key economic indicators such as employment, wages, and income.

Targeted Industries

The economic plan recommends industries and related subsectors, which include:

- Health Care and Related Industries
- IT/Telecommunications
- Professional/Technical & Business/Finance
- Visitation and Related Industries
- Agricultural Industries

For these industries, Monmouth County should annually track and report on:

- Establishment levels and growth – how many businesses are there in the sectors and how has this changed from the previous year?
- Employment levels and growth – how many employees are there in the sectors and how has this changed from the previous year?
- Average wage levels and growth – what are averages wages in the sectors and how has this changed from the previous year?

- Key occupation levels, growth and projected growth – what are the key occupations in the sectors, how has this changed from the previous year?

Data for these measures is available from the following sources:

- New Jersey Department of Labor & Workforce Development, Division of Labor Market & Demographic Research – http://lwd.dol.state.nj.us/labor/lpa/employ/emp_index.html
- Economic Modeling Specialists Intl. (EMSI) – requires fee for subscription and was used by Camoin Associates for the CEDS analysis. Data combines reporting from federal Department of Labor and Bureau of Economic Analysis – www.economicmodeling.com

Items from Actions Matrix

The CEDS also has recommended specific projects and actions resulting from the analysis and stakeholder engagement process. Below are performance measures to track and related data sources for each of these.

Rating System for Flood Insurance – Help municipalities obtain and manage their Community Rating for the National Flood Insurance Program. ***Overall Measures:*** *savings on flood insurance throughout County communities – Data available from FEMA - www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-rating-system#purpose*. Also, this project includes two specific tasks:

- • Assist communities in becoming CRS qualified through what the CRS program calls "uniform minimum credit"; those credits achieved based on actions by a state or regional agency on behalf of its communities. Measures: number of communities participating in the CRS program (or) the number of structures located within a participating CRS community's Special Flood Hazard Area. Resilient Infrastructure R&D – Encouraging the creation of an infrastructure that will be resilient in the face of climate change, unexpected weather events, and sea level rise over the next hundred years to ensure the economic stability of the County.
  1. Host a series of roundtables to promote and learn about resilient infrastructures.
- *Support utilities, universities and utility authorities to develop more resilient infrastructure.*

4. Identify stakeholders, including potential research and development partners. Review of Transit – Encourage better access into the area for people who can commute to fill mid- to-low level jobs, and improve east-west travel through the region. ***Measures:*** *new transportation investment to address issue – data to be generated by County.* Also, this project includes two specific tasks:

- Undertake a review with NJ Transit, NJ DOT and other stakeholders. ***Measures:*** *completion of review with partners - data to be generated by County.*
- Advocate for transportation improvement proposals such as bus rapid transit (BRT) on major highway corridors and dual mode locomotives to provide a seamless train service line all the way to Bayhead. ***Measures:*** *number of proposals considered – data to be generated by County.*

Housing Density at Transportation Nodes – Improve rail and road transportation in the County by encouraging municipalities to increase housing density at transport nodes. ***Overall measures:*** *change in density at targeted nodes – data to be provided by County and municipal planning.* Also, this project includes two specific tasks:

- Encourage towns to review zoning and land use regulations to provide medium and high density development around transport nodes to achieve increased ridership. ***Measures:*** *increased density of housing units in areas surrounding transportation nodes*
- Assist entities to attract additional investment in transportation services, especially integrated services. ***Measures:*** *new investment in transportation to serve nodes – data to be provided by County and municipal planning.*

Housing for People with Demand Skills – Encourage the development of housing for people whose skills and presence are critical to the county's economic success but have difficulty affording the current housing options. ***Overall measures:*** *number of new units developed that are in mid-priced range – data to be provided by County and municipal planning; housing and rental affordability (cost as a percent of income) – American Community Survey, www.census.gov/acs/www.*

Marine Science Sector – Promote growth in the marine (non-tourist) sector that is currently underperforming relative to the existing natural asset. ***Measures:*** *establishment and employment growth in the Marine science sectors.* This project includes two initial components:

- Explore the potential for growth in the marine (non-tourist) cluster, including:
    - Marine and ocean research
    - Ocean energy
    - Marine trades such as marinas' boat building and repair and services to the boating community
    - Coastal planning
    - Marine transportation and logistics
    - Fisheries, especially clamming

  Measures: *involved Outreach to stakeholders and advocacy groups to assess needs to facilitate growth.* Develop a work plan for next steps to consider, including ways to diversify the economy and grow investment and employment in the cluster, including identification of stakeholders to be involved. ***Measures:*** *completion of cluster study and business plan for this sector – data to be provided by County.*

Roundtables for an Expanded Grow Monmouth – Expand the Grow Monmouth regional economic development support program to include regular roundtables and conferences that stimulate synergistic business, learn from best practices in the region and provide exposure to new emerging business opportunities and trends. ***Measures:*** *formation of roundtables, number of times meeting annually, number of persons participating, new projects, programs, and initiatives planned for – data to be provided by County.* This project includes six components resulting from roundtables and all are related to planning and networking with the same measures as the overall project:

- Provide exposure to new emerging business opportunities and trends.
- encourage new projects and concepts that marry the emerging capacities, talents and resources of Monmouth County with needs of organizations elsewhere in the USA.
- Facilitate an ecosystem of opportunity creation around libraries, university researchers, local business leaders, investors, social entrepreneurs.
- Provide local entrepreneurs with exposure to new opportunities that are targeted to their business or service interests.
- Introduce business/social entrepreneurs to sources of funding.

- Match local/regional emerging talents, researchers with local businesses seeking new ways to leverage their businesses or social entrepreneurial activities.

Expand Sewer and Water – In accordance with the County's sewer service map, encourage economic growth along corridors where lack of water/sewer is a deterrent to growth. ***Measures:*** *new development value and square footage along areas newly served by water and sewer expansions – data to be provided by County.* This project includes three components:

- Meet with municipalities to identify areas to extend water/sewer service. ***Measures:*** *number of municipalities met with resulting in identification of resource – data to be provided by County.*
- Analyze potential economic growth from investment in infrastructure – ***Measures:*** *completion of analysis – data to be provided by County.*

AGRICULTURAL INDUSTRIES:

- *Support branding efforts of a Monmouth County Farm to Table and Sea to Table Programs: Through Grow Monmouth develop a logo that will be recognizable as Monmouth County Farm & Sea to Table.*
- *Encourage additional participation in equine activities: Support the continued presence of both the thoroughbred and standard bred markets through racing at Monmouth Park and Freehold Raceway and through horse shows in the region.*
- *Address seasonal limitations: Support additional year round possibilities through expanded growing seasons and farm visitation NEEDS A LOT MORE*

Funding - In order for the County to carry out the projects listed above and support the Grow Monmouth campaign, funding is needed in these areas. ***Measures:*** *Funding provided – data to be provided by County.* This project includes three components all with the same measures and data source:

- Business Inventory and Identification System
- Loan Pool Funding
- Funding for technical assistance, i.e. grants to businesses to hire marketing, accountant, lawyers, human resource professionals to increase jobs and to increase business tools such as GIS capability and data base services currently offered through the Grow Monmouth initiative
- Medical Arts Campus – from medical billing and coding to RNs
- Veterinary School study
- Agricultural/Equine Marketing program
-

Other – Economic Performance Dashboard

In addition to the specific measures detailed above, the County could track certain measurements related to the CEDS and Grow Monmouth initiatives. When combined with the targeted industry data referenced above, these are meant to provide a dashboard of economic performance. We suggest that data on these indicators for the County be compared to data for the State of New Jersey and the US as a whole.

Education attainment by level of education – American Community Survey, www.census.gov/acs/www

Higher education completions – Economic Modeling Specialists Intl. (EMSI), www.economicmodeling.com

Openings – While "jobs" refers to the total number of positions in a region, "openings" represents the sum of **new and replacement jobs** in the position, Economic Modeling Specialists Intl. (EMSI), www.economicmodeling.com

Population growth – U.S. Census Bureau, www.census.gov/popest/

Labor force growth – Local Area Unemployment Statistics (LAUS) program, U.S. Bureau of Labor Statistics, www.bls.gov/lau/home.htm

Unemployment rate – Local Area Unemployment Statistics (LAUS) program, U.S. Bureau of Labor Statistics, www.bls.gov/lau/home.htm

Total employment growth – New Jersey Department of Labor & Workforce Development, Division of Labor Market & Demographic Research http://lwd.dol.state.nj.us/labor/lpa/employ/emp_index.html or Economic Modeling Specialists Intl. (EMSI) – requires fee for subscription and was used by Camoin associates for the CEDS analysis. Data combines reporting from federal Department of Labor and Bureau of Economic Analysis - www.economicmodeling.com, or State and Area Employment, Hours, and Earnings, Current Employment Statistics (CES) program; U.S. Bureau of Labor Statistics; www.bls.gov/sae/home.htm

Personal income growth – Bureau of Economic Analysis, U.S. Department of Commerce, www.bea.gov

Commercial and industrial vacancy rates – Cassidy Turley, www.cassidyturley.com/research

Venture capital dollars and deals – Innovation Economy 360, www.ie360.net

Number of patents – Innovation Economy 360, www.ie360.net

GLOSSARY AND ABBREVIATIONS

Economic Development Administration (EDA) is a division of the US Department of Commerce that handles economic development planning and grants.

Economic Modeling Specialists, Intl. (EMSI) is a provider of aggregated data from across the United States and Canada.

Location Quotient (LQ) analysis compares a specific geographic region to a larger reference area by quantifying how concentrated a particular industry, demographic group, or other variable is as compared to the larger geography.

Metropolitan Statistical Area (MSA) as established by the US government entitled "New York-Newark-Jersey City, NY-NJ-PA Metropolitan Statistical Area". The 25-county metropolitan area includes twelve counties in New York State (coinciding with the five boroughs of New York City, the two counties of Long Island, and five counties in the lower Hudson Valley); 12 counties in Northern and Central New Jersey; and one county in northeastern Pennsylvania.

North American Industrial Classification System (NAICS) as established by the US Census Bureau is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. EMSI (see above) enhances NAICS classifications for certain industry sectors to provide additional levels of detail.

Shift Share analysis looks at changes in employment by industry over a period of time (in this case, the period between 2002-2012). Shift Share attempts to determine how much of a community's job growth can be attributed to national trends and how much is due to unique local factors. It is a way to evaluate how a local industry 'stacks up' against the national average in that industry.

Standard Occupational Classification (SOC) system used by Federal statistical agencies to classify workers into one of 840 occupational categories.

Abbreviations

BLS – Bureau of Labor Statistics

CBP – County Business Patterns

CEDS – Comprehensive Economic Development Strategy

NES – Non-employer Statistics

QCEW – Quarterly Census of Employment and Wages

STEERING COMMITTEE MEMBERSHIP

CEDS STEERING COMMITTEE

Name	Title	Company
Teri O'Connor	Administrator	Monmouth County
John Tobia	Director Public Works and Engineering	Monmouth County
Joe Ettore	Director Engineering	Monmouth County
Linda Kellner	Chief of Staff	NJNG
Janis Lewandowski	Economic Dev. Manager	JCPL
Kevin Keane	Field operations supt.	NJAWC
Dr. Maureen Murphy	President	Brookdale Community College
Paul Dement	Director of Government and Community Relations	Monmouth University
Vince Domidion	Chairman	Monmouth County Planning Board
Kevin Kirwan	Senior Director Field Operations	NJAWC
Tom Arnone	Freeholder, Deputy Director Board of Freeholders	Monmouth County
Gina Behnfeldt	NJEDA	
Staff		
Darlene DiLeo	Aide to Freeholder Arnone	Monmouth County
Geri Elias	Sect. to Administrator	Monmouth County

Note that the CEDS Steering Committee is governed by the Board of Freeholders.

ADVISORY GROUP MEMBERSHIP

First	Last	Company
Jackie	Pappas	Asbury Park Chamber of Commerce
Teri	O'Connor	County Of Monmouth
Joseph	Ettore	County of Monmouth
John	Ciufo	Monmouth County
Mary	Fouratt	Monmouth County Arts Council
Gina	Behnfeldt	EDA
Michael	Bascom	Neptune Twp. Economic Development Corp.
Freeholder	Arnone	
Timothy	Lizura	NJEDA
John	Kaye	Cushman & Wakefield of NJ
Maureen	Murphy	Brookdale Community College
Admiral Paul	Gaffney	Monmouth University
Janis	Lewandowski	JCPL
Corbett	Donato	The Donato Group
John E.	Gagliano	EPS
Vincent	Domidion	Monmouth County Planning Board
Jason	Greenspan	Middletown Twp.
Bill	Sitar	Sitar Realty
Jeff	Hein	Assemblyman Robert Clifton
Lou	Lifrieri	CACI
Edward	Gurskis	Valley National Bank
Sophia	Mangalee	Monmouth Park
Lea	Shave	Northern Monmouth Chamber of Commerce
Joseph	Kyrillos	NJ Legislature
Tom	Orgo	Colts Neck
Robert	Bucco	BPM Engineering LLC
Don	Irvin	NJ Natural Gas
Robert	Clifton	NJ Legislator
Tom	Eck	Bespoke Software Development
John	Booth	Commvault
Edith	Legg	Investors Bank
Samuel	Thompson	NJ Legislature
Robert	McGirr	Freehold Township
W.	Dempsey	Spring Lake
Julie	Schreck	
Odis	Jones	FMERA
Gary	Dorfman	Millstone
Ben	Waldron	MODC
Mickey	Virgilio	East Coast Public Relations
Nancy	Orlando	Red Cross
Susan	Ellman	NJNG
Annie	Smith	Press Communications Radio
Russ	Molloy	Meridian Health
Jay	Amberg	Sea Girt
Evelyn	Mars	Southern Monmouth Chamber of Commerce
Scott	Aagre	Hazlet Twp.
Randy	Bishop	Neptune Township
Bob	Walsh	Howell Twp.

Anthony	Ammiano	Freehold Twp.
Jonathan	Hornik	Marlboro
Steven	Corodemus	Giordano, Halleran & Ciesla, P.C.
James	Bollerman	Bollerman Development Corporation
Douglas	Twyman	Cassidy Turley
Ben	Shapiro	CBRE, Inc., Brokerage Services
Anthony	Fiore	Middletown
Michel	Berger	Forefront
Steven	Schertz	Steven P. Schertz, LLC
Denise	Fritz	Holmdel
Robert	Baerenbach	First Hope Bank
Joseph	Romano	Score
Donna	Gould	Matawan
Corey	Folta	Folta Marketing Services
Jim	Bagley	CACI
Kevin	Averell	Freehold Raceway Mall
Michael	Gianforte	Two River Reclamation Authority
Nancy	Buhagiar	PL Custom Emergency Vehicles
Joseph	Dyer	Vonage
Roberta	Sheridan	Central Jersey Power & Light
J.	O'Malley	Garden State Precast, Inc
Loretta	Kuhnert	Greater Monmouth Chamber of Comm.
Kathryn	Guadagno	St. Barnabas Health Care System
Terry	Bereheiko	Vornado Realty Trust
Paul	Dement	Monmouth University
Kevin	Keane	NJ American Water Co.
James	Markey	JCP&L
Lynda	Rose	Eastern Mon Chamber of Commerce
Susan	DiVila	AUSA Ft. Monmouth Chapter
Mary	Angelini	Prevention First
Mark	Killough	Hartz
Lorene	Wright	Keyport
Keith	Miller	Interlaken
Joseph	Constance	New Jersey Business Action Center
Jennifer	Beck	NJ Senate
Gerald	Turning	Tinton Falls
George	Newberry	Wall Twp. Committee
Declan	O'Scanlon	NJ Legislature
David	Rible	NJ State Assembly
Stewart	Bruder	Holmdel EDC
Richard	Kachmar	Sea Bright
Tom	Gilmour	
Bob	Brown	Neptune City
Anthony	Mercantante	Middletown Twp.
Nancy	Adams	Red Bank River Center
Adam	Puharic	Danskin Agency
Carol	Paul	Meridian Health
William	Lang	Same
Anna	Mayer	The Donato Group
Bruce	Steadman	FMERA
Shari	Scaramuzzo	Investors Bank

Linda	Milstein	Brookdale Community College
Linda	Kellner	Chief of Staff
Dennis	Blazak	Naval Weapons Station Earle
John	Gribbin	Centra State Medical Center
Christopher	Cobb	Jersey Shore Premium Outlets
Ron	Wollner	Computer Data Source
Donald	Burden	Borough of Shrewsbury
William	Young	Belmar
George	Corbin	Orgnao Gold
Joe	Barris	Dept. of Planning
Laura	Kirkpatrick	County of Monmouth
Joseph	Passiment	
Elizabeth	Murphy	Creative New Jersey