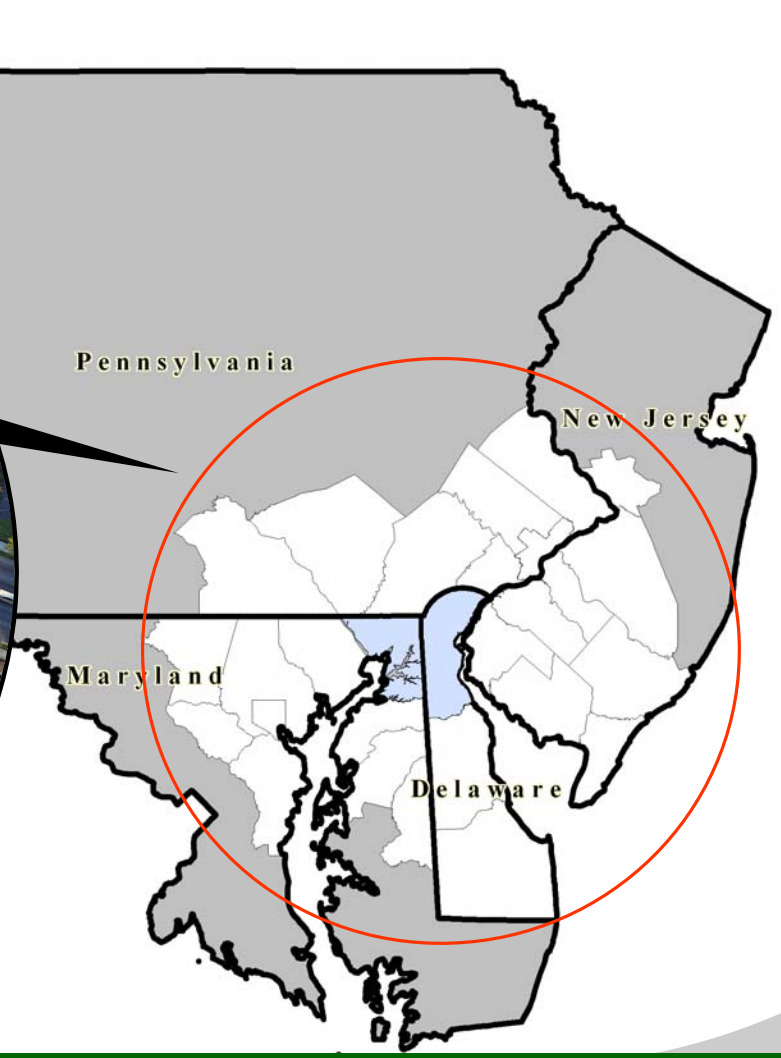
WILMAPCO

2012
Inter-Regional Report

Making Connections Across Our Region's Borders



WILMAPCO

2012 Inter-Regional Report

Prepared by the staff of the
Wilmington Area Planning Council

Adopted September 6, 2012

The preparation of this document was financed in part with funds provided by the Federal Government, including the Federal Transit Administration and the Federal Highway Administration of the United States Department of Transportation.

Table of Contents

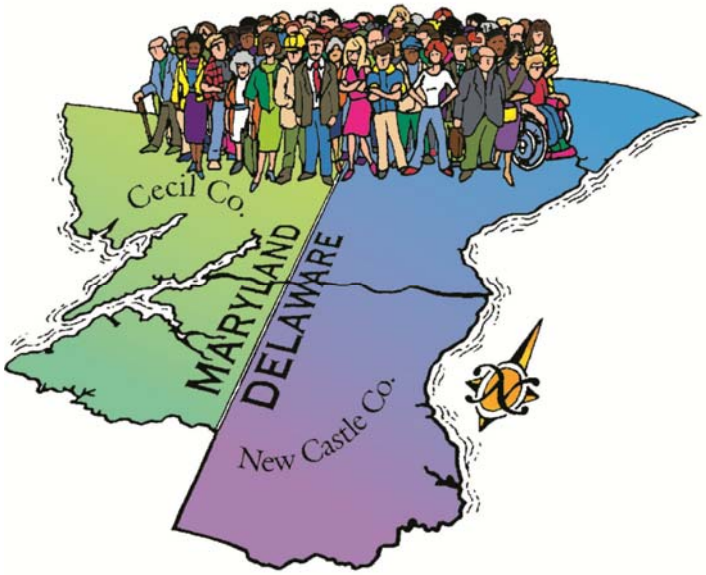
List of Tables

List of Figures

Who is WILMAPCO?

The Wilmington Area Planning Council (WILMAPCO) is a federally mandated Metropolitan Planning Organization (MPO) consisting of two counties; Cecil County, Maryland and New Castle County, Delaware. Our mission is to serve the citizens and stakeholders of the Wilmington region by carrying out a comprehensive, continuing and cooperative regional transportation planning process consistent with federal transportation legislation. WILMAPCO informs and involves the public on transportation planning decisions, guides the investment of federal transportation funds, coordinates transportation investments with local land use decisions, and promotes the national transportation policy expressed in federal transportation law.

WILMAPCO is responsible to all the residents of the region to ensure the development of the best transportation plan for the region. The implementation of the transportation plan is carried out by WILMAPCO's member agencies. We collect, analyze and evaluate demographic, land use and transportation-related data and seek public input to understand the transportation system requirements of the region. Understanding these requirements allows for the development of plans and programs and the implementation of a transportation system that provides for the efficient transport of people, goods and services.



Executive Summary

Nationally, major demographic changes and travel challenges are foreseen that will impact many regions. The Wilmington Area Planning Council (WILMAPCO) has a vested interest in our region's infrastructure, conditions that will shape it in the future, and how it can more effectively serve current and future users.

In response, WILMAPCO has adopted an Inter-Regional Report which is updated every four years, dating back to 2004. WILMAPCO has utilized a two-step approach to inter-regional studies which entails improving communication with adjacent planning agencies, and strengthening data collection and sharing with those agencies. This report provides snapshots of trends beyond our regional borders to ensure every necessary measure is taken to preserve and enhance the transportation system.

The broad goals of this report are to provide a current and future demographic and travel behavior profile of the study area, and to gain an understanding of the effects of growth on transportation infrastructure. The report begins by identifying the study area which consists of Metropolitan Planning Organizations (MPO) and county planning departments surrounding the region. It then captures a variety of data which include travel speeds, work commute time, volume to capacity, projected freight volumes, transportation equity, and more. The report closes with a list of inter-regional transportation corridors that will be significant to many regions in the future.

Below are some of the major findings:

- From 2010 to 2035, the population of the study area is expected to grow by more than 1 million residents.
- Cecil County, Maryland is expected to see the highest rate of growth in population and employment by 2035.
- By 2035, employment for the study area is forecasted to grow by 14.5%, adding more than 835,000 new jobs.
- In the last four years workers who drove alone to work has risen from 75% to 78%.
- Since 2006, the average commute time improved by 1.6 minutes. However, more than half of the counties exceed the regional average of 25.5 minutes for commuting.
- Numerous roadways are projected to see truck volumes expand more than 150% by 2035.
- Since the 2004 report, eight projects with an inter-regional element have been completed.
- Within the study area roughly 12% of the population is below poverty and close to 32% are minority.
- Similar to the national expansion of urban areas, the study area is becoming more urban in its composition.

Based on the results of the analyses, one of the important targets for future actions is to work more closely with neighboring planning agencies to establish a coordinated plan of action to accommodate significant future growth.

A Broad Perspective of Key Issues

The future of the United States is being shaped by significant population growth and demographic shifts such as employment changes and aging population. The nation's population is expected to grow by nearly 40%, reaching 420 million people by 2050, which will create both opportunities and challenges[1]. It is recognized at national, state, and regional levels that critical investments are essential to accommodate growth, propel sustainable land use and transportation, maintain economic competitiveness in a global market, and enhance quality of life.

These demographic changes are transforming existing metropolitan regions into emerging megaregions. Mega-regions are geographical units described as clusters of major metropolitan regions interconnected by job markets, transportation networks, and land use that have similar social, cultural and environmental characteristics. In decades to come, more than 70% of the nation's population growth is expected to occur within eleven identified mega-regions[2].

The Northeast megaregion stretches over 11 states from Maine to Maryland and the District of Columbia. It is a major thoroughfare for travel along the Northeast Corridor via Interstate 95 and railways, and encompasses several east coast metropolitan areas such as Philadelphia, New York, and Baltimore.

Additionally, 46 million acres of existing urban land could exceed 200 million acres by 2050 if current population growth and land consumption continue to climb[3]. Along with notable rates of growth and expansion of urban areas, other expected trends include aging transportation infrastructure, longer commute times, global climate change, rising goods movements, and congested airports.

Understanding the future impact of these present and future planning challenges will help in the identification of necessary measures to ensure that our future growth contributes to the success of the greater Northeast region. In an effort to coordinate future transportation planning and other goals, the following pages of this report will evaluate the transportation network of surrounding counties which border the WILMAPCO region.






[1]Regional Plan Association, "America 2050: A Prospectus" New York: September 2006
[2]Ross, Catherine L., "Megaregions, Competiveness and Freight Planning". July 2009
[3]Carbonell, Armando, "American Spatial Development and the New Megalopolis". April 2008

Introduction

Study History and Goals

In step with the goals of our region's long-range transportation plan, WILMAPCO began including inter-regional coordination as part of our core planning work dating back to 2000. During that time the MPO joined conversations with other planning agencies from Delaware, Maryland, and New Jersey to define common inter-regional issues. These early collaboration efforts led to WILMAPCO's development and adoption of its first Inter-Regional Report in 2004.

The goals of this report are to:

- Re-evaluate present and future demographic and travel changes.
- Examine key roadways where large amounts of traffic traverse our borders.
- Identify existing and potential conflicts within the inter-regional transportation system and ways to devise solutions through coordinated efforts.

The initial 2004 report looked at projected demographics and travel behavior from 2000 to 2025. In 2008, a new report included updated analyses that expanded to 2030, and 2035 where data was available. This present 2012 report includes new Census data, recalculated projections, a transit service feasibility scoring, and the framework to begin monitoring nationally designated marine highways. Overall, the Inter-Regional Reports are intended for use as a technical tool to guide transportation investments and informed decision making, with cross-border coordination in mind.

Along with compiling these reports, WILMAPCO has been involved in a number of organizations and committees with an inter-regional focus that brings together a variety of agencies from various jurisdictions. A complete list and summary of these initiatives and WILMAPCO's involvement is found in Section 8: Path Forward.

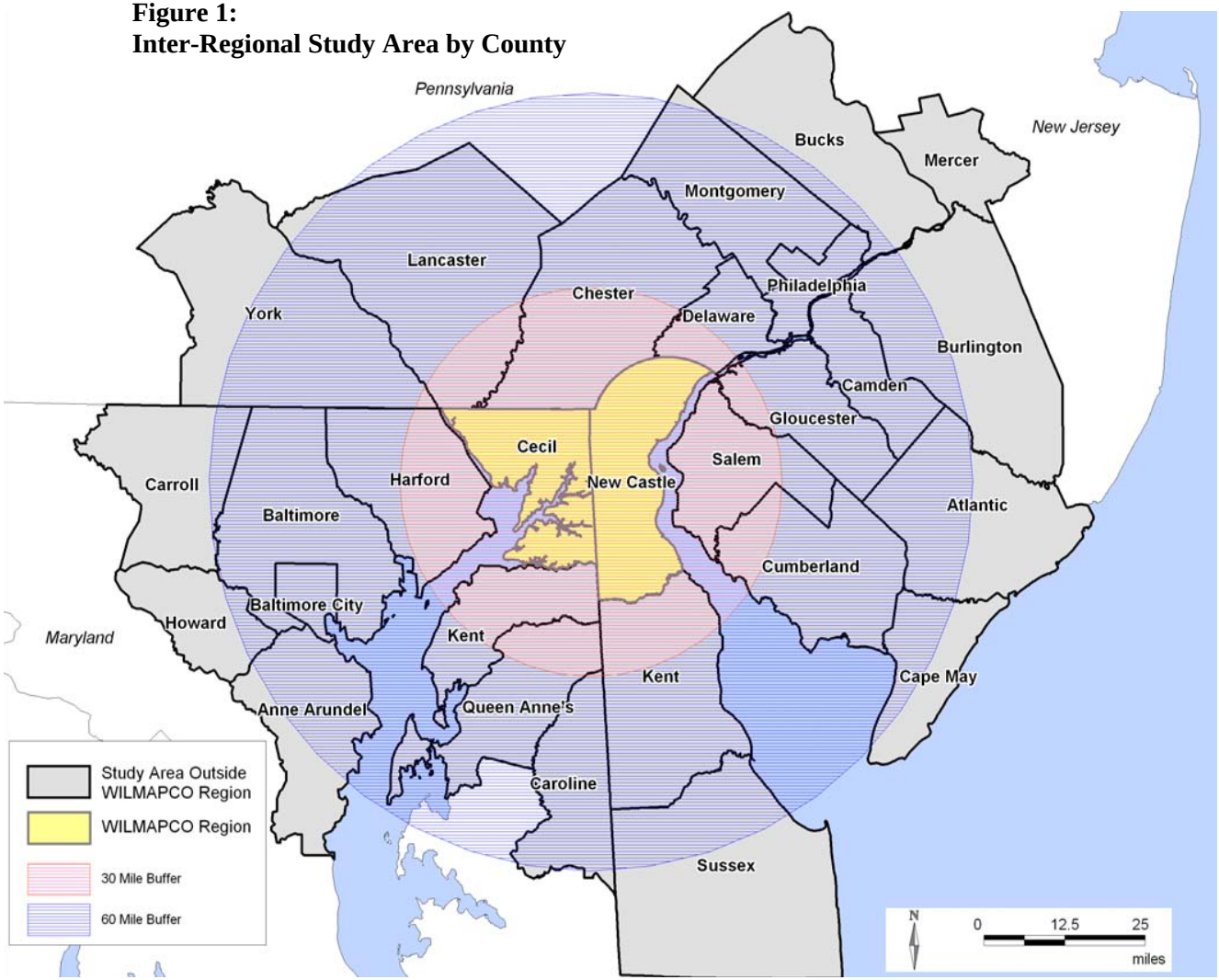
Study Area

At the center of the study area is the WILMAPCO region, which is a major thoroughfare for travel along the Northeast Corridor via Interstate 95 and rail lines. The Port of Wilmington in New Castle County serves as a major Mid-Atlantic access point for a myriad of import and export commodities. Our region is also in close proximity to several east coast metropolitan areas such as Philadelphia, New York, and Baltimore. In addition to goods, large amounts of people travel through the two WILMAPCO counties to reach other prime destinations. Due to vast amounts of traffic, transportation conflicts along the Northeast Corridor and within the WILMAPCO region are expected. Many of our region's challenges are shared by adjacent counties and planning organizations, and the findings of this Inter-Regional Report seeks to frame those issues.

Inter-Regional Study Area

The study area, shown in **Figure 1**, was derived by identifying Metropolitan Planning Organizations (MPOs) and counties that are approximately 60 miles from the center of the WILMAPCO region. In total, the report looks at 28 counties, covering four states. Regional data from the study area was collected to analyze the effects that changing demographics, transportation, and land use issues have on the WILMAPCO region.

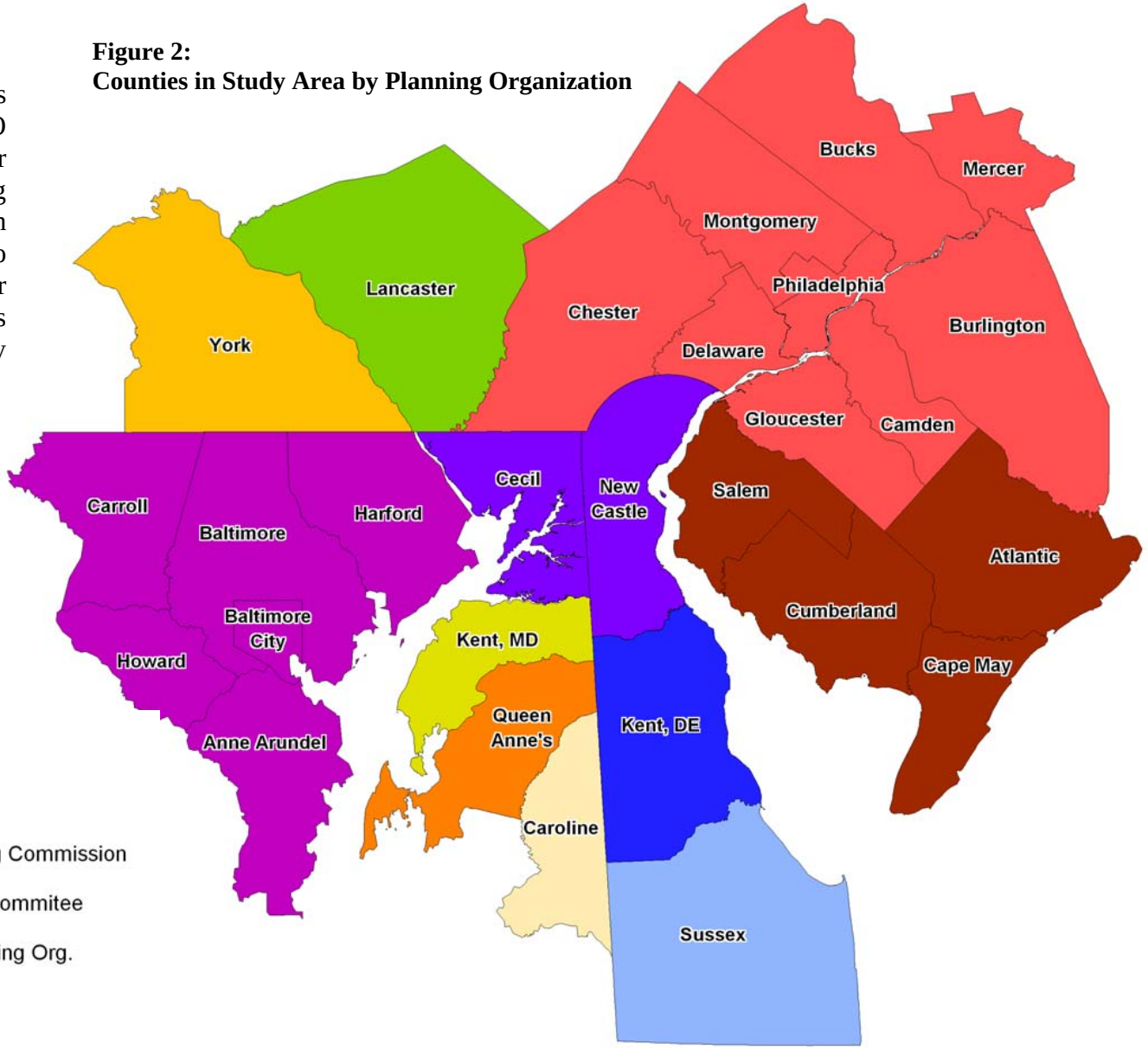
Figure 1:
Inter-Regional Study Area by County



Regional Agencies

There are ten planning entities that surround the WILMAPCO region, which include other MPOs and county planning departments. Collaboration with these agencies will help us to identify regional agendas for improvements. **Figure 2** depicts the counties in the study area by their planning organization.

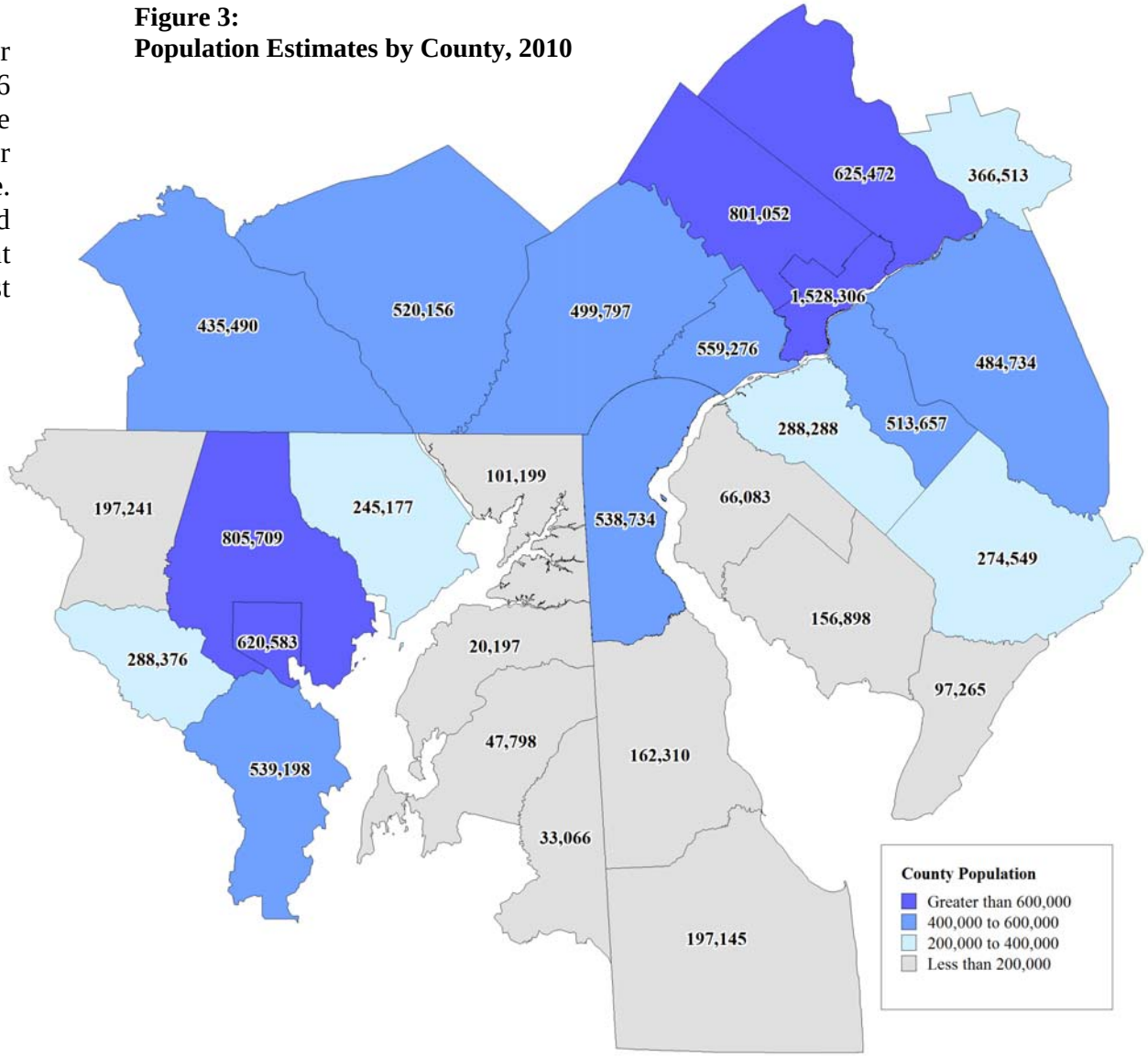
Figure 2:
Counties in Study Area by Planning Organization



Population by County

In 2000 and 2005, the population for the study area was about 10.3 and 10.6 million, respectively. By 2010, the population increased by 7.1%, or roughly 11 million people in a decade. The counties of Baltimore and Philadelphia, and several adjacent counties have maintained the highest populations during the last five years.

Figure 3:
Population Estimates by County, 2010



Sources: American Community Survey, 2010, DE Population Consortium, MD State Data Center, SJTPO, YCPC

Population Change by County

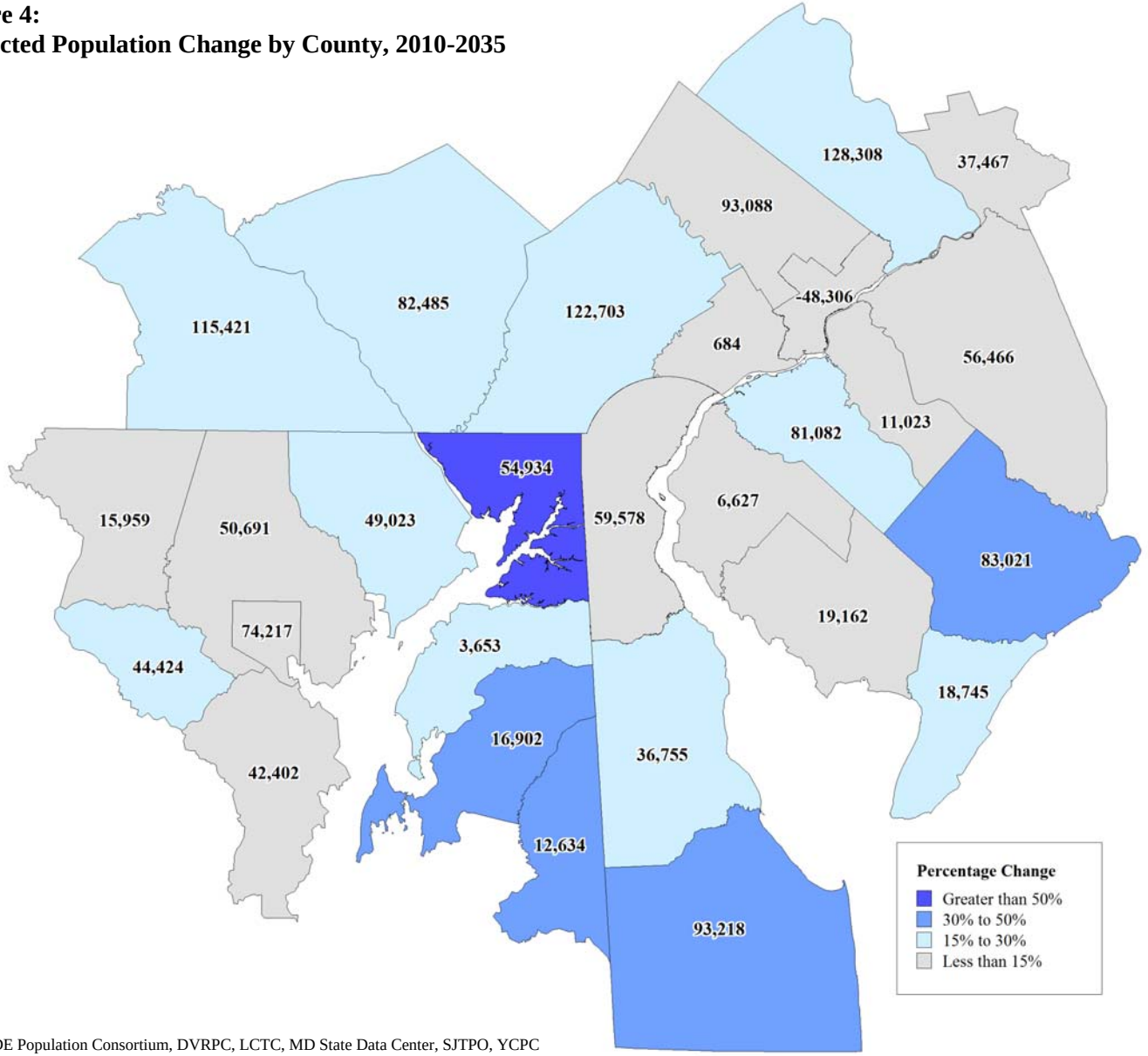
Anticipating population growth is one way planners adequately prepare for future travel demand. In the study area, from 2010 to 2035, the total population is expected to grow by more than 1.3 million, or 12.4%. While Philadelphia is the area's largest city, it is the only county expected to decline in population. Other studies have determined that many of the City's residents have moved into surrounding suburban counties. Opposite of Philadelphia's decline, Cecil County is predicted to have the greatest percentage increase. While other counties will double or triple Cecil County's absolute population change, Cecil's rate of growth is unparalleled. Current figures are also scaled back to roughly 55% from past projections of an estimated growth greater than 60%. Sussex County is expected to follow behind Cecil with the second largest proportion of growth. Current 2035 projections for Baltimore City have also shifted towards a 12% growth, up from 4% estimated for 2030. Delaware County's population is expected to remain fairly static during the next 25 years.

Table 1: Projected Population Change, 2010-2035

State, County	2010	Rank	2035	Rank	Absolute Change	2010-35 % Change	Rank
Delaware							
Kent	162,310	21	199,065	21	36,755	22.6%	9
New Castle	538,734	8	598,312	8	59,578	11.1%	20
Sussex	197,145	20	290,363	19	93,218	47.3%	2
Maryland							
Anne Arundel	539,198	7	581,600	9	42,402	7.9%	24
Baltimore	805,709	2	856,400	3	50,691	6.3%	25
Baltimore City	620,583	5	694,800	5	74,217	12.0%	17
Caroline	33,066	27	45,700	27	12,634	38.2%	3
Carroll	197,241	19	213,200	20	15,959	8.1%	23
Cecil	101,199	23	156,133	23	54,934	54.3%	1
Harford	245,177	18	294,200	18	49,023	20.0%	11
Howard	288,376	15	332,800	17	44,424	15.4%	15
Kent	20,197	28	23,850	28	3,653	18.1%	13
Queen Anne's	47,798	26	64,700	26	16,902	35.4%	4
New Jersey							
Atlantic	274,549	17	357,570	16	83,021	30.2%	5
Burlington	484,734	12	541,200	12	56,466	11.6%	18
Camden	513,657	10	524,680	13	11,023	2.1%	26
Cape May	97,265	24	116,010	24	18,745	19.3%	12
Cumberland	156,898	22	176,060	22	19,162	12.2%	16
Gloucester	288,288	16	369,370	15	81,082	28.1%	6
Mercer	366,513	14	403,980	14	37,467	10.2%	21
Salem	66,083	25	72,710	25	6,627	10.0%	22
Pennsylvania							
Bucks	625,472	4	753,780	4	128,308	20.5%	10
Chester	499,797	11	622,500	6	122,703	24.6%	8
Delaware	559,276	6	559,960	10	684	0.1%	27
Lancaster	520,156	9	602,641	7	82,485	15.9%	14
Montgomery	801,052	3	894,140	2	93,088	11.6%	19
Philadelphia	1,528,306	1	1,480,000	1	-48,306	-3.2%	28
York	435,490	13	550,911	11	115,421	26.5%	7
Total Study Area	**11,014,269**		**12,376,635**		**1,362,366**	**12.4%**	

Sources: 2010 Census, Delaware Population Consortium, DVRPC, LCTC, MD State Data Center, SJTPO, YCPC

Figure 4:
Projected Population Change by County, 2010-2035



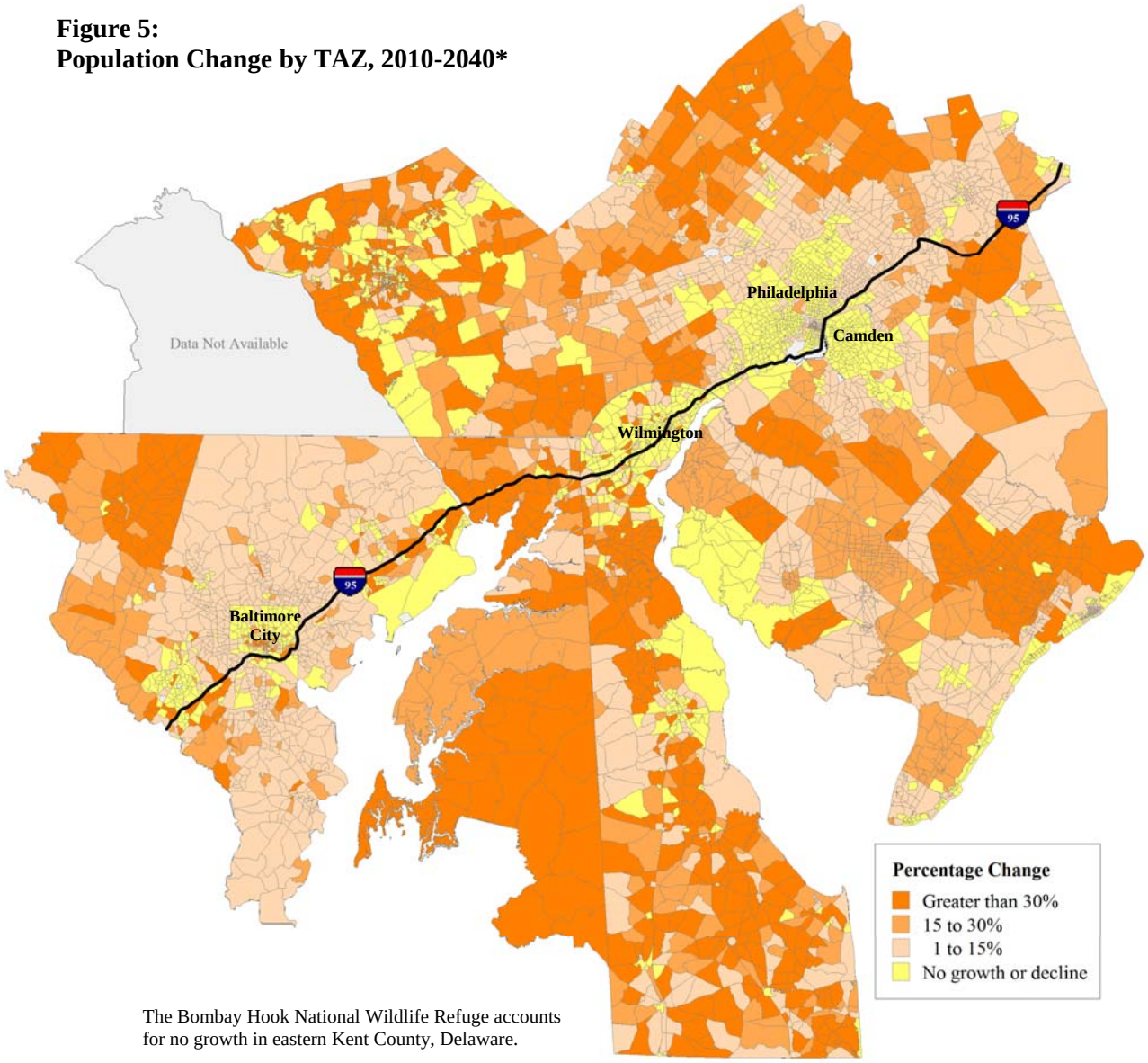
Sources: 2010 US Census, DE Population Consortium, DVRPC, LCTC, MD State Data Center, SJTPO, YCPC

Population Change by Traffic Analysis Zone

Traffic Analysis Zones (TAZ) were used to identify where average or above average population changes may take place beyond the county level. Areas in and surrounding Philadelphia, Wilmington, Camden, and Baltimore City continue to show either a static or declining population, similar to past projections. Future growth estimates remain higher outside of these urban cores and away from the I-95 corridor.

In the WILMAPCO region, higher increases of population will occur in several small pockets of northern New Castle County, southern New Castle County, Kent County, Sussex County, and in the majority of Cecil County. While absolute gains for the counties of Maryland's upper eastern shore are modest, percentage wise these counties are slated to grow significantly.

Figure 5:
Population Change by TAZ, 2010-2040*



The Bombay Hook National Wildlife Refuge accounts for no growth in eastern Kent County, Delaware.

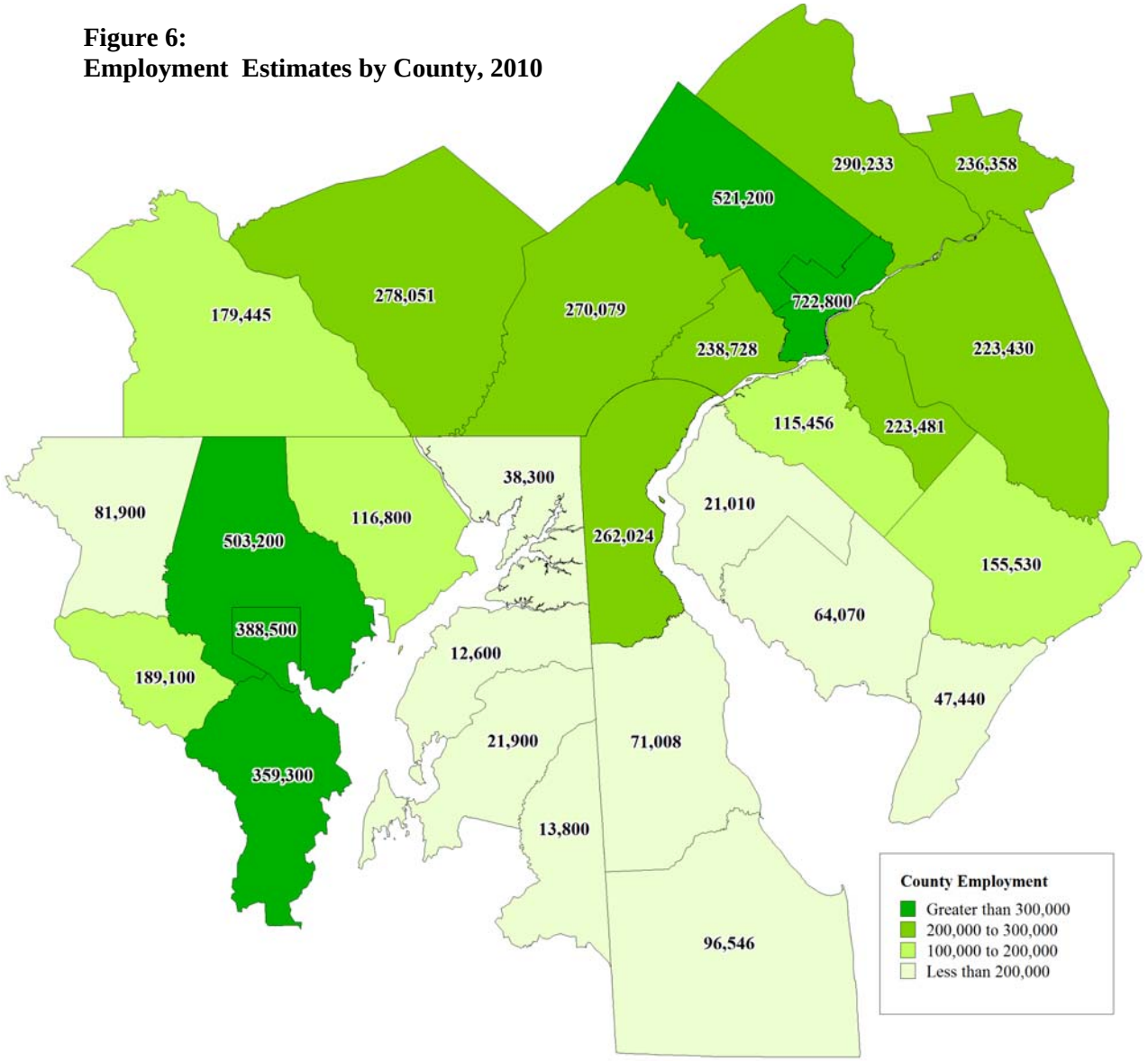
Sources: BMC (*2010-35), DVRPC, Lancaster County Planning (*2007-40), SJTPO, WILMAPCO

Employment by County

In 2010, total employment for the study area was about 5.7 million jobs, compared to 5.2 in 2000 and 5.6 million in 2005. In the past decade, employment grew by 10%. Similar to 2000, the majority of jobs in 2010 were located in and around the major cities of Philadelphia and Baltimore. Philadelphia continues to hold the greatest number of jobs; however, it has declined by seven percent over ten years. Montgomery County follows with the second highest employment, and it has grown by three percent.

Counties that continue to maintain the least employment were located along Maryland's eastern shore. Along with its population, Kent County, Maryland had the least number of jobs. However, the county's employment has been steady with a net loss of 100 jobs over a decade. In New Jersey, southern counties had low employment when compared to the central counties.

Figure 6:
Employment Estimates by County, 2010



Sources: 2010 American Community Survey, DVRPC, LCTC, YCPC, SJTPO

Employment Change by County

In conjunction with population projections, future employment figures help with strategies to maintain and strengthen mobility for the region. Looking out to 2035, employment for the total study area is forecasted to grow by 14.5%. Despite adding just under one million new jobs, the area is expected to see much less growth during the next 25 years compared to the last decade.

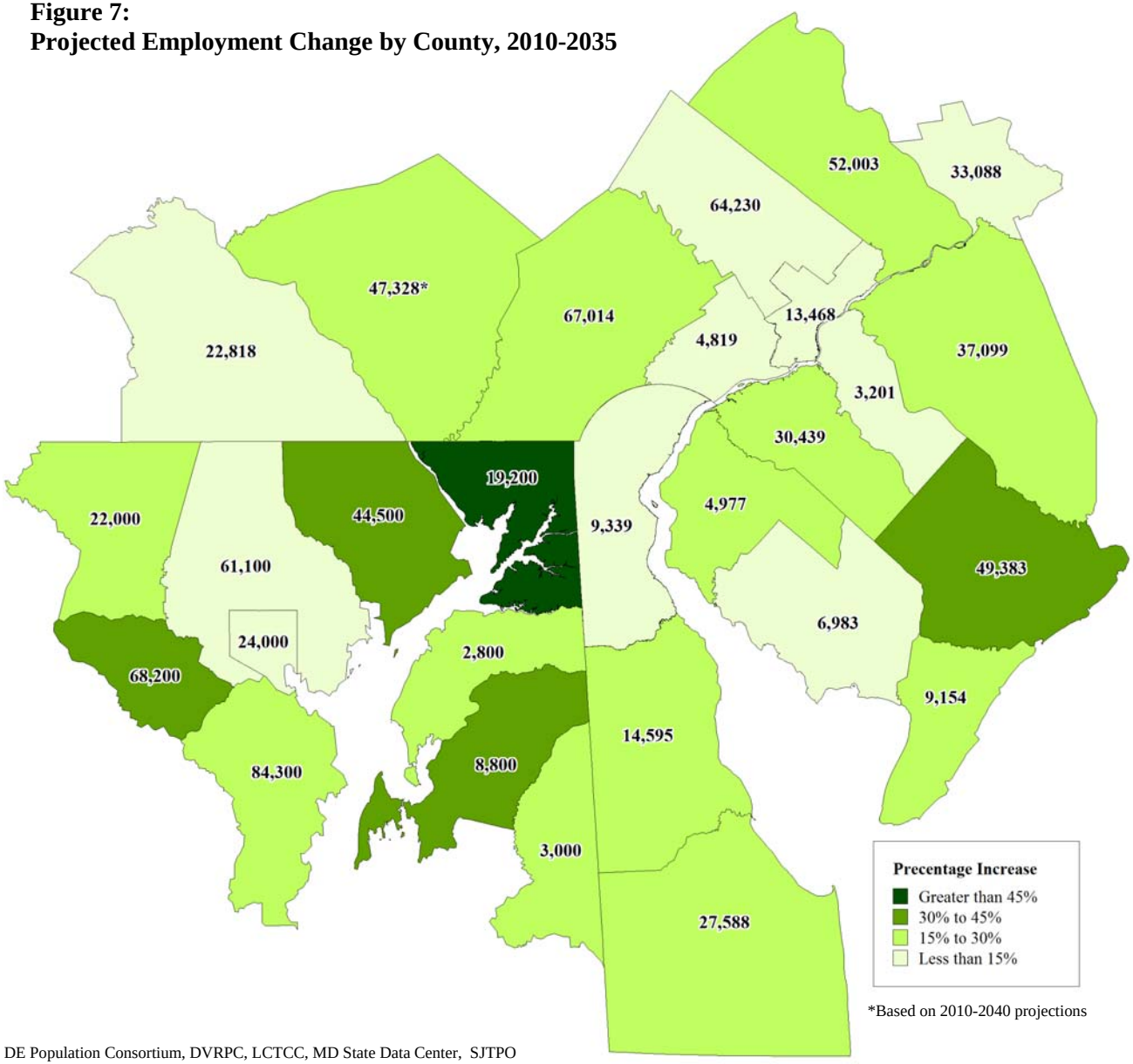
By 2035, Anne Arundel County will encompass the bulk of growth from a single county, adding more than 84,000 jobs alone. Maryland and Pennsylvania counties in the study area could comprise more than 70% towards the 6.5 million total jobs in the area by 2035. In terms of percentage growth, Cecil County leads in the ranking as a doubling in employment, even with considerable scaled back projections. In contrast, with less than two percent increases, Philadelphia and Camden will not add any significant contributions to future growth. Others with minor impacts on employment growth include New Castle, Baltimore City, and Cumberland Counties.

Table 2: Employment Change, 2010-2035

State, County	2010	Rank	2035	Rank	Absolute Change	2010-35 % Change	Rank
Delaware							
Kent	71,008	21	85,603	21	14,595	20.6%	14
New Castle	262,024	9	271,363	9	9,339	3.6%	26
Sussex	96,546	19	124,134	19	27,588	28.6%	6
Maryland							
Anne Arundel	359,300	5	443,600	4	84,300	23.5%	11
Baltimore City	388,500	4	412,500	5	24,000	6.2%	25
Baltimore	503,200	3	564,300	3	61,100	12.1%	23
Caroline	13,800	27	16,800	27	3,000	21.7%	13
Carroll	81,900	20	103,900	20	22,000	26.9%	7
Cecil	38,300	24	57,500	23	19,200	50.1%	1
Harford	116,800	17	161,300	17	44,500	38.1%	3
Howard	189,100	14	257,300	12	68,200	36.1%	4
Kent	12,600	28	15,400	28	2,800	22.2%	12
Queen Anne's	21,900	25	30,700	25	8,800	40.2%	2
New Jersey							
Atlantic	155,530	16	204,913	15	49,383	31.8%	5
Burlington	223,430	13	260,529	11	37,099	16.6%	18
Camden	223,481	12	226,682	14	3,201	1.4%	29
Cape May	47,440	23	56,594	24	9,154	19.3%	15
Cumberland	64,070	22	71,053	22	6,983	10.9%	24
Gloucester	115,456	18	145,895	18	30,439	26.4%	8
Mercer	236,358	11	269,446	10	33,088	14.0%	20
Salem	21,010	26	25,987	26	4,977	23.7%	10
Pennsylvania							
Bucks	290,233	6	342,236	6	52,003	17.9%	16
Chester	270,079	8	337,093	7	67,014	24.8%	9
Delaware	238,728	10	243,547	13	4,819	2.0%	27
Lancaster	278,051	7	325,379	8	47,328	17.0%	17
Montgomery	521,200	2	585,430	2	64,230	12.3%	22
Philadelphia	722,800	1	736,268	1	13,468	1.9%	28
York	179,445	15	202,263	16	22,818	12.7%	21
Total Study Area	**5,742,289**		**6,577,715**		**835,426**	**14.5%**	

Sources: Delaware Population Consortium, DVRPC, LCTCCC, Maryland State Data Center, SJTPO

Figure 7:
Projected Employment Change by County, 2010-2035



*Based on 2010-2040 projections

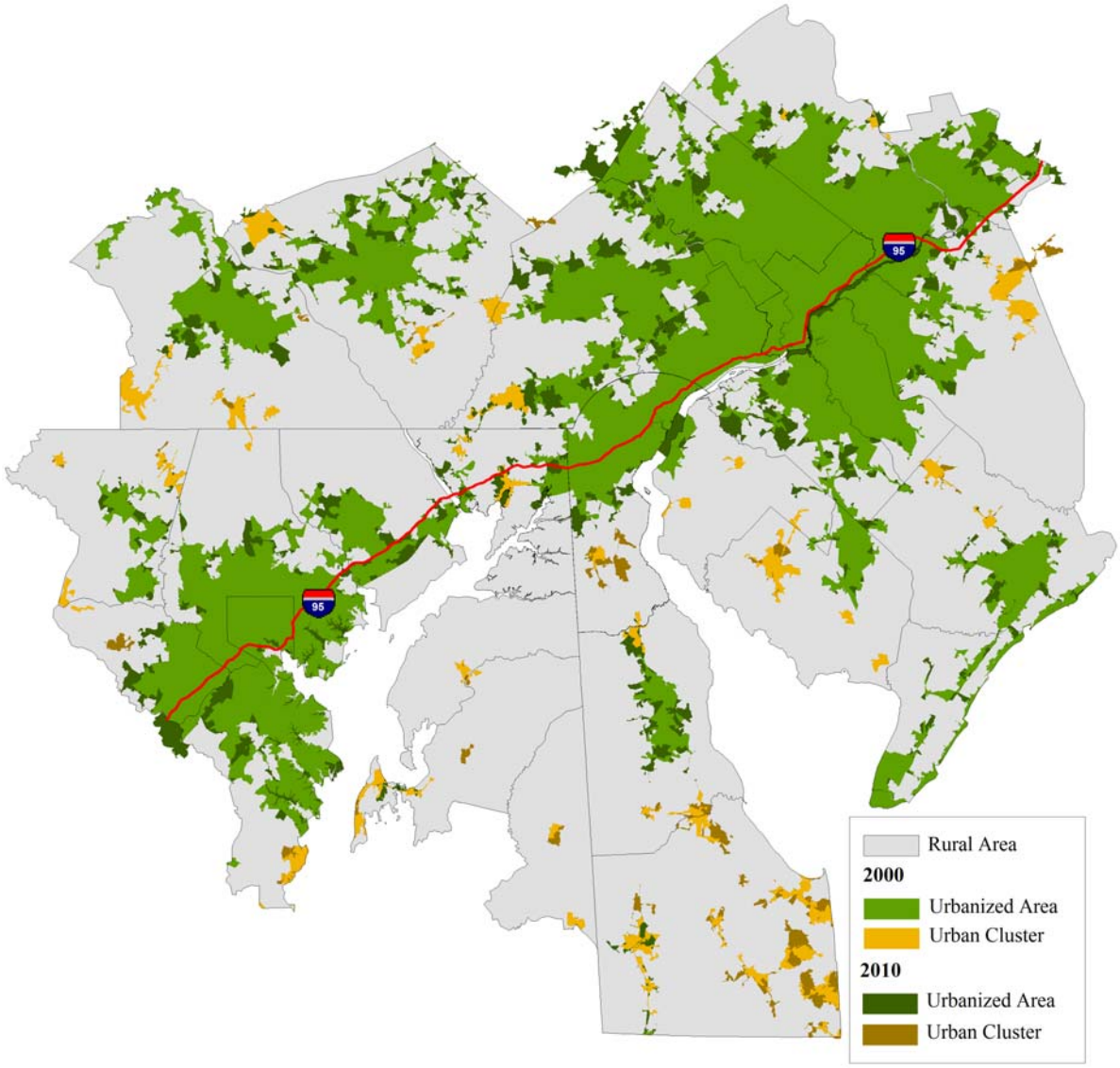
Sources: 2010 Census, DE Population Consortium, DVRPC, LCTCC, MD State Data Center, SJTPO

Urban and Rural Areas

Urban areas have densely settled cores of population and more intense land uses, which support greater numbers of population and employment. Urban areas are classified by two categories. Urbanized areas have 50,000 or more people, whereas urban clusters have less than 50,000, but greater than 2,500 people.

As a nation, we are becoming more urban. In 2000, 79% of the United States population was defined as urban. By 2010 it grew to 80.7%. Similarly, the study area is becoming more urban in its composition due to expanding urban areas over the last decade. More noticeable is the spreading of urbanized areas than urban clusters. However, rather urban clusters within southern New Castle County and Sussex County, Delaware have grown significantly in comparison to other counties. Maryland's upper eastern shore counties have remained largely rural.

Figure 8: Changes in Urban Areas and Urban Clusters, 2000-2010



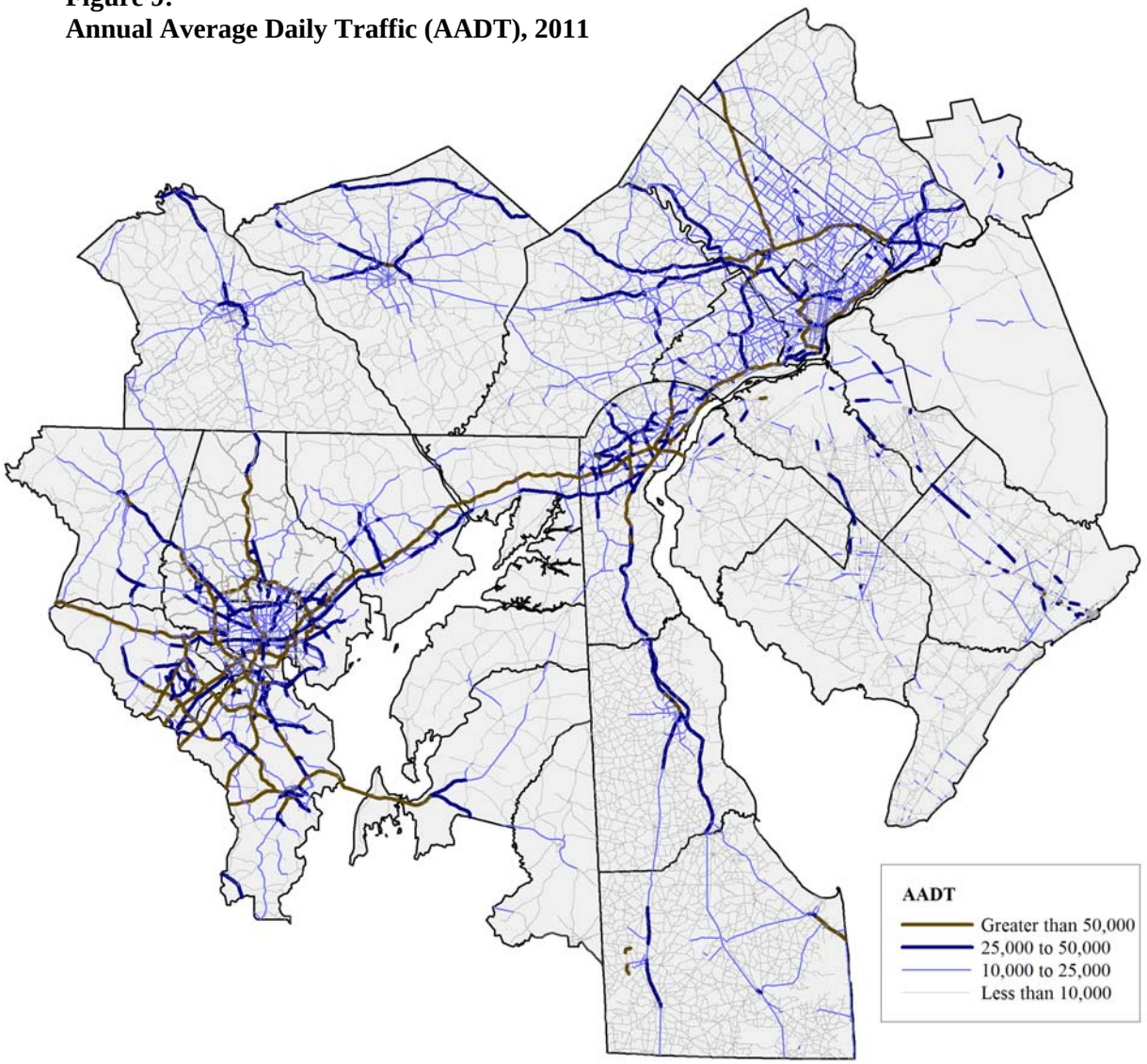
Source: U.S. Census Bureau, 2000-10

Current Traffic Volumes

Figure 9 depicts the annual average daily traffic in 2011. More than 150 million cars and trucks moved through the 28-county study area, up from 2006 figures. The I-95 corridor continues to carry significant amounts of regional traffic, contributing to mobility challenge within the Mid-Atlantic region. Generally, the heaviest traffic moves north and south between Baltimore and Philadelphia, including northern New Castle County. In New Castle County, SR north of the Chesapeake and Delaware Canal witnessed increases in total traffic.

In Chester and Lancaster

Figure 9:
Annual Average Daily Traffic (AADT), 2011

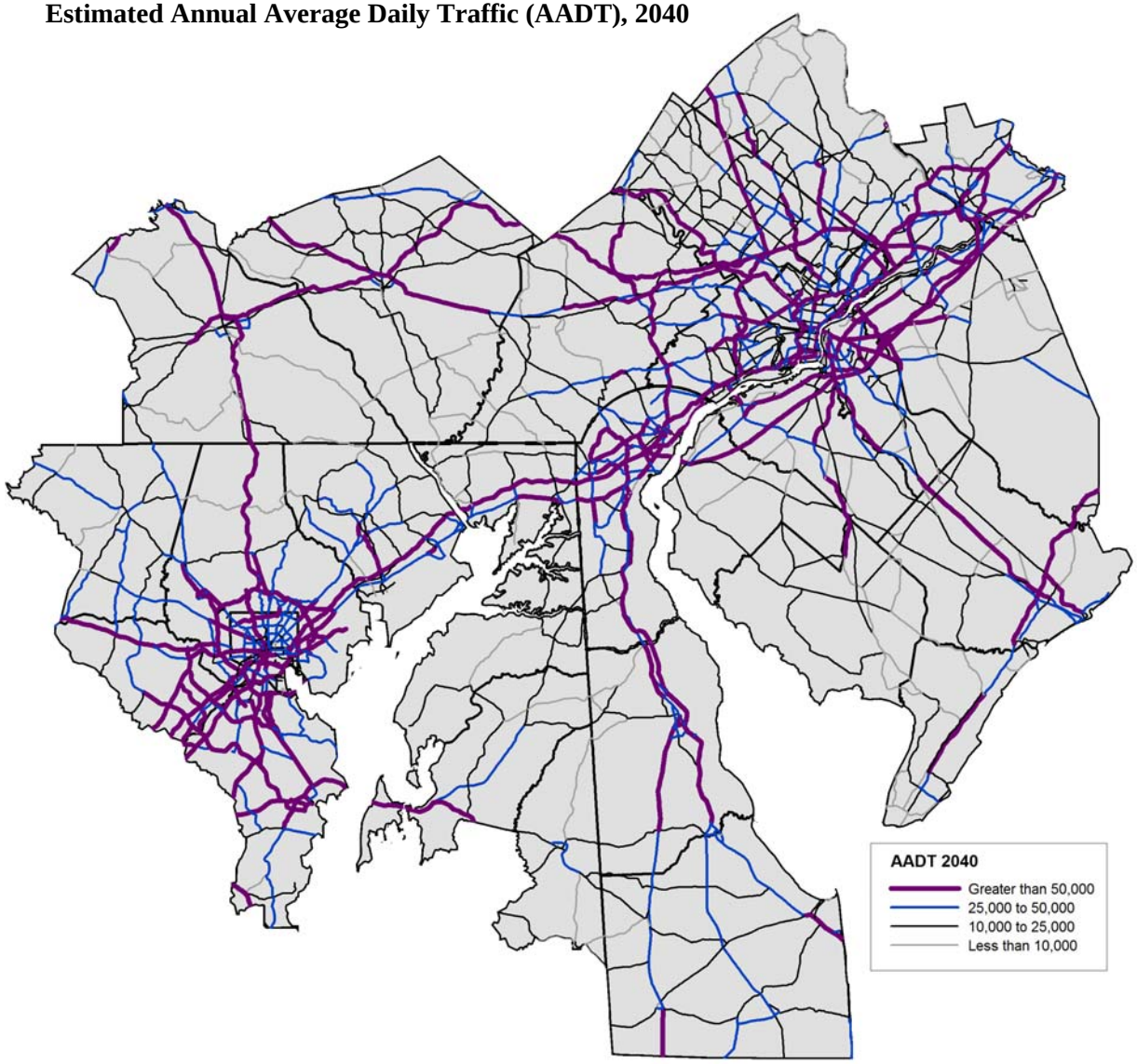


Source: DelDOT, DVRPC, MD SHA, PA Spatial Data Access, SJTPO

Projected Traffic Volumes

Concurrent with increases in population and jobs, traffic volumes are forecasted to increase in the study area. From 2007 to 2040, traffic volumes are estimated to rise by 54%, or greater than 95 million more than the annual average of daily traffic. By 2040, 62.2% or greater than 8 million more vehicles are expected to traverse the I-95 corridor throughout the study area. More than 9 million vehicles per day (72% increase) will move through the WILMAPCO region by 2040. Much less traffic is expected on major roads along Maryland's upper eastern shore counties and southern coastal New Jersey counties.

Figure 10:
Estimated Annual Average Daily Traffic (AADT), 2040



Source: FHWA, Freight Analysis Framework

Travel Speeds

As traffic volumes within the study area are projected to rise, travel speeds are foreseen to decline. Speeds below the posted limits contribute to daily congestion, especially during peak times of the day when traffic is heaviest. Air quality is also negatively affected as automobiles are stalled in traffic. Shown in **Table 3**, average travel speeds are projected to 2040. Average travel speed for the study area will drop from just over 38 miles per hour, down to roughly 31 miles per hour. Speeds significantly below posted limits will drop cumulatively by roughly one-fifth. Howard, Ann Arundel, and Baltimore Counties in Maryland are expected to lead with the greatest percent decrease in travel speeds. Atlantic, Cumberland, and Cape May Counties in New Jersey will experience the least declines.

Table 3: Percentage Change in Travel Speeds by County

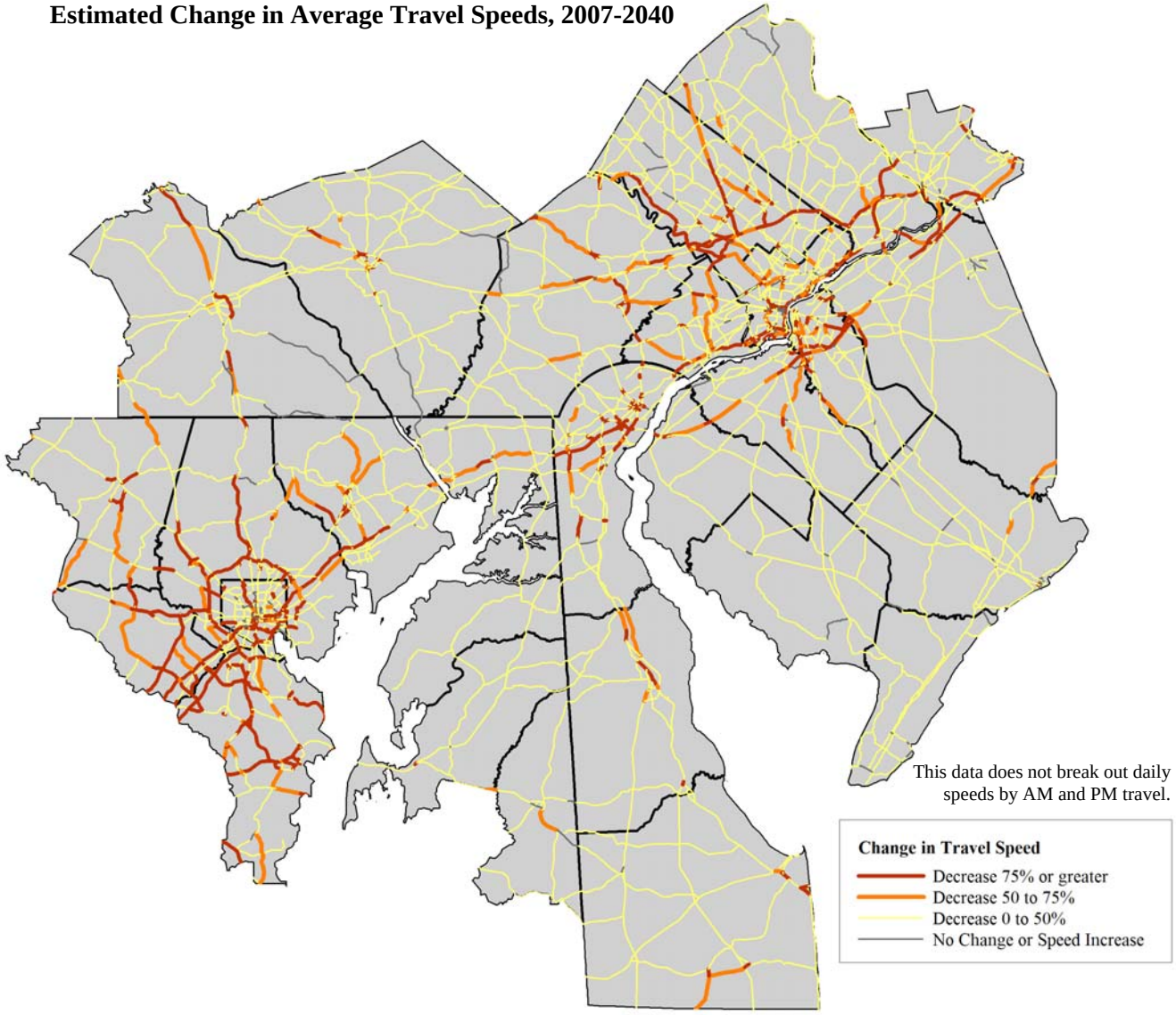
State, County	2007 Avg Mph	2040 Avg Mph	% Change	Rank
Delaware				
Kent	40.23	34.04	-15.39%	18
New Castle	40.46	27.67	-31.61%	4
Sussex	39.38	34.04	-13.56%	19
Maryland				
Anne Arundel	38.52	17.94	-53.43%	2
Baltimore City	37.72	28.88	-23.44%	7
Baltimore	38.21	22.68	-40.64%	3
Caroline	44.39	41.96	-5.47%	25
Carroll	34.08	26.23	-23.03%	8
Cecil	41.28	37.71	-8.65%	23
Harford	38.50	31.41	-18.42%	15
Howard	39.77	17.70	-55.49%	1
Kent	42.14	39.49	-6.29%	24
Queen Anne's	49.29	44.50	-9.72%	22
New Jersey				
Atlantic	36.98	35.95	-2.79%	26
Burlington	40.25	31.86	-20.84%	11
Camden	37.77	27.56	-27.03%	5
Cape May	35.31	34.74	-1.61%	28
Cumberland	36.79	36.13	-1.79%	27
Gloucester	40.19	36.06	-10.28%	21
Mercer	38.70	31.85	-17.70%	16
Salem	39.11	30.72	-21.45%	10
Pennsylvania				
Bucks	39.03	30.31	-22.34%	9
Chester	36.83	29.70	-19.36%	14
Delaware	33.31	26.55	-20.29%	12
Lancaster	33.97	30.44	-10.39%	20
Montgomery	36.83	27.98	-24.03%	6
Philadelphia	35.06	29.19	-16.74%	17
York	38.01	30.63	-19.42%	13
Total Study Area	**38.65**	**31.21**	**-19.24%**	

Source: FHWA, Freight Analysis Network

Travel Speeds, Continued

Alongside increasing traffic volumes, average travel speeds are projected to dramatically decrease on major roadways over three decades. There will be minimal mileage of roadways that will realize speed improvements. Roadways around the cities of Philadelphia and Baltimore are expected to experience major slowing. These areas are stated to decline in travel speed by 75% or more. Similarly, some counties in Maryland and New Jersey will experience minor slowing.

Figure 11:
Estimated Change in Average Travel Speeds, 2007-2040



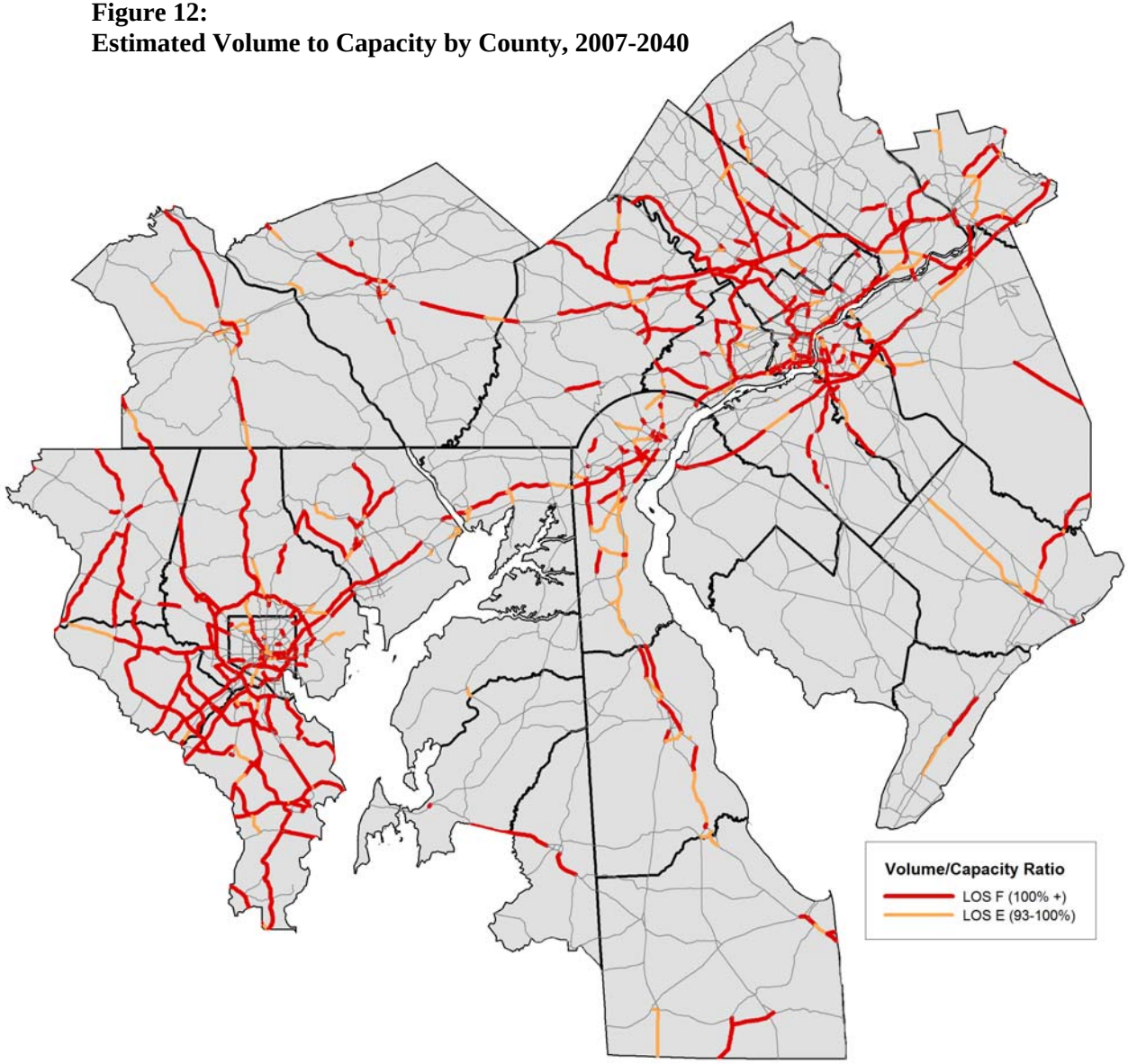
Source: FHWA, Freight Analysis Network

Projected 2040 Volume to Capacity Ratios

Managing congestion improves mobility and travel time reliability. One measure of congestion is the volume to capacity ratio. The higher the ratio, the closer a road is to surpassing its carrying capacity. Associated letter grades represent the roadways level of service it provides, where "A" means free-flowing conditions, and "F" indicates failing conditions. The map displays projected capacity of major roadways.

By 2040, congestion is expected to significantly impede traffic flows throughout the region, especially counties within the DVRPC and BMC regions. Based on estimates, roadway segments at and beyond capacity are expected to increase by more than 60% in annual average of daily traffic. Similar to past 2035 projections, capacity exceedance continues along the I-95 corridor. Also keeping consistent with past estimates, Southern New Jersey, Southern Delaware, and Upper Eastern Maryland are not expected to witness many failing roadways.

Figure 12:
Estimated Volume to Capacity by County, 2007-2040

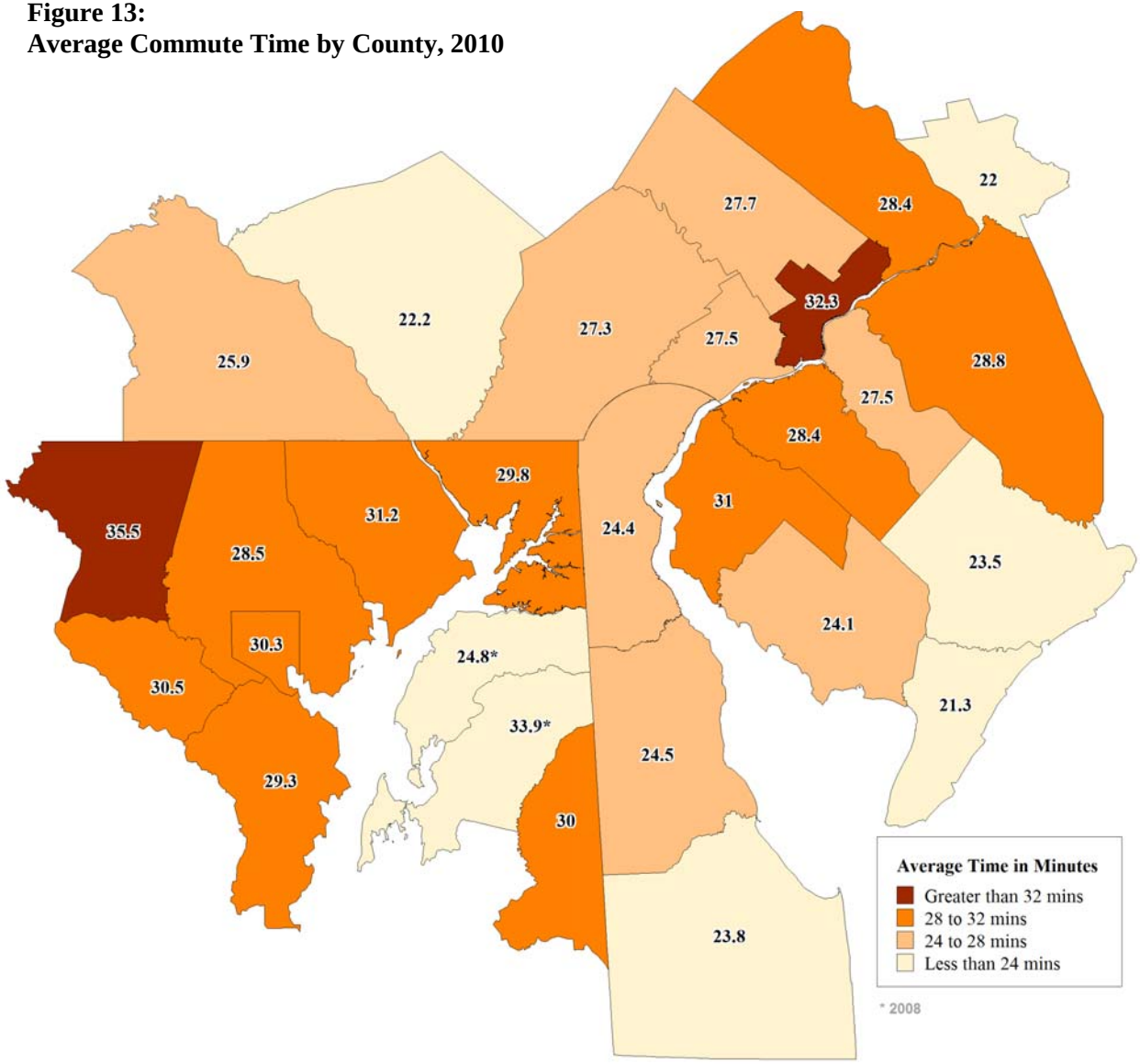


Source: FHWA, Freight Analysis Framework

Commute Patterns

Much of the roadway traffic in the WILMAPCO region is work-related, as large numbers of commuters travel to and from neighboring counties. Congestion during peak times cause undesirable delays and lengthen trip times to work. Since 2006, the average commute time in the study area improved by 1.6 minutes, from 27.1 to 25.5 minutes. However, **Figure 13** displays that more than half of the counties exceeded the regional average of 25.5 minutes for commuting. Well above the regional average with greater than 32 minutes each way, both Philadelphia, Pennsylvania and Carroll, Maryland counties had the greatest commute times. During the last four years, Cape May, New Jersey and Lancaster, Pennsylvania maintained their status quo of least commute time. Mercer, New Jersey also witness below average travel time to work.

Figure 13:
Average Commute Time by County, 2010



Sources: American Community Survey, 2008, 2010

Commute Patterns

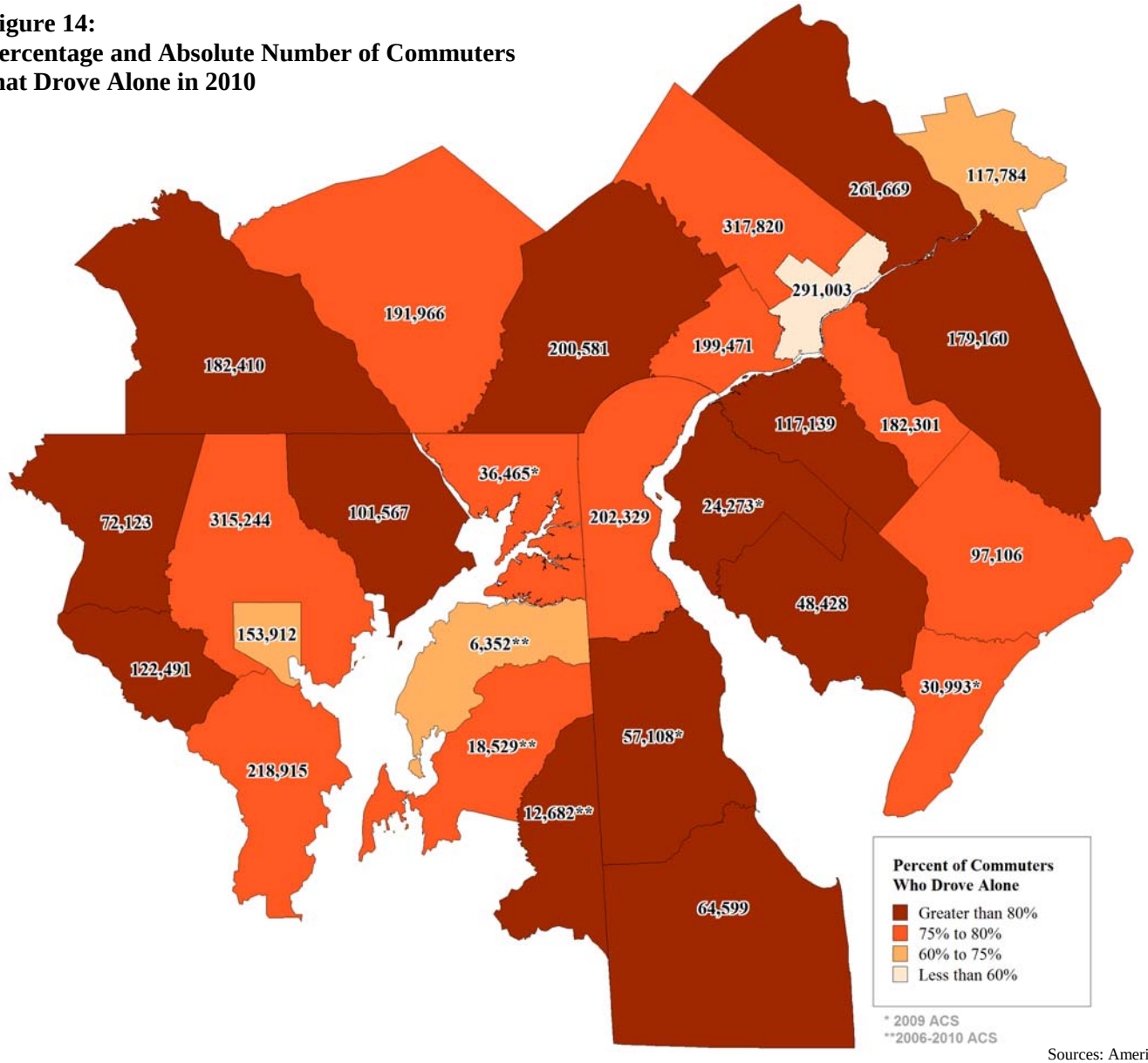
Most congestion on roadways is the result of more vehicles than the road can physically carry at any given time. Many of these vehicles are single passenger vehicles travelling for work commutes. Counties with the greatest percent of commuters who drove alone were Caroline and Salem in New Jersey, followed by York County, Pennsylvania. Philadelphia and Baltimore City, the two most populous counties in the study area had the lowest percent of drivers who drove alone in 2006 and 2010. Philadelphia witnessed a minor decrease in percentage of single occupancy vehicles to work. The availability of public transit, dense land use patterns conducive for walk commutes, and carpooling give residents more travel choices. In 2006, roughly 80% of commuters drove alone in the WILMAPCO region, which remained steady in 2010. Other counties with the least percent of commuters who drove alone were Kent, Maryland, Mercer and Cape May, New Jersey.

Table 4: Percent of Workers who Drove Alone by County, 2006-2010

State, County	2006	% Drove Alone	Rank	2010	% Drove Alone	Rank	% Change 2006-10
Delaware							
Kent	54,927	82.4	9	57,848	83.1	7	5.3%
New Castle	200,343	79.4	18	202,329	79.2	17	1.0%
Sussex	66,595	84.0	4	64,599	81.7	10	-3.0%
Maryland							
Anne Arundel	209,696	79.9	17	218,915	79.4	15	4.4%
Baltimore	316,214	79.0	20	315,244	79.4	16	-0.3%
Baltimore City	149,697	57.9	27	153,912	60	27	2.8%
Caroline	10,854	77.0	22	12,682	88.6	1	16.8%
Carroll	74,928	82.7	7	72,123	82.8	8	-3.7%
Cecil	41,145	84.2	3	37,749	80.7	13	-8.3%
Harford	104,613	82.3	11	101,567	84	5	-2.9%
Howard	117,739	80.3	16	122,491	80.9	12	4.0%
Kent	6,658	82.4	8	6,352	66	26	-4.6%
Queen Anne's	16,520	79.2	19	18,529	78.5	21	12.2%
New Jersey							
Atlantic	93,245	82.3	10	97,106	78.5	20	4.1%
Burlington	179,487	71.8	26	179,160	82.8	9	-0.2%
Camden	181,732	84.3	2	182,301	78.1	22	0.3%
Cape May	34,790	80.7	14	30,993	75.2	24	-10.9%
Cumberland	49,957	81.0	12	48,428	80.5	14	-3.1%
Gloucester	119,686	85.4	1	117,139	86.1	4	-2.1%
Mercer	125,112	73.0	25	117,784	69.3	25	-5.9%
Salem	26,245	74.8	23	23,251	87.2	2	-11.4%
Pennsylvania							
Bucks	264,050	82.8	6	261,669	83.5	6	-0.9%
Chester	195,229	80.5	15	200,581	80.9	11	2.7%
Delaware	191,065	74.8	24	199,471	76.6	23	4.4%
Lancaster	190,803	78.6	21	191,966	78.6	19	0.6%
Montgomery	316,673	80.9	13	317,820	78.8	18	0.4%
Philadelphia	279,650	50.6	28	291,003	49.9	28	4.1%
York	180,394	83.8	5	182,410	86.4	3	1.1%
Area	**3,798,047**	**75.5%**		**3,825,422**	**78.5**		**0.7%**

Sources: American Community Survey, 2006; 2010 US Census

Figure 14:
Percentage and Absolute Number of Commuters that Drove Alone in 2010

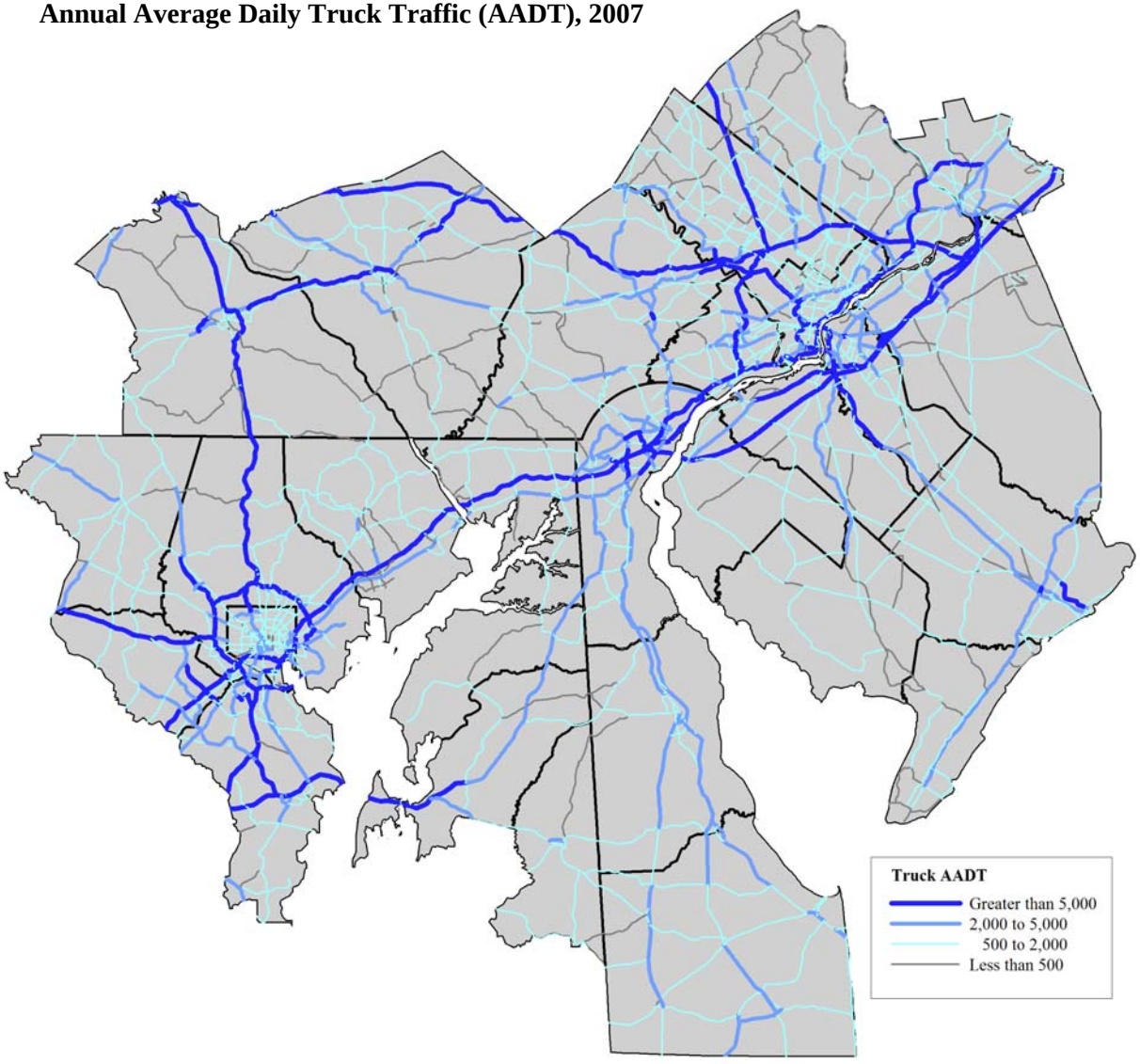


Sources: American Community Survey, 2006-2010

Current Truck Volumes

Traffic congestion and vehicle delay can impede the efficient movement of goods and services and economic activity. Freight shipments and services serving the region moves mostly along I-95. Nationally, I-95 in the Mid-Atlantic region is the most heavily traveled truck route. Throughout the study area, I-95 carried just over 947,000 trucks per day in 2007, of which 16% comprised local truck traffic. Regional highways with truck volumes of more than 2,000 trucks per day comprised 82.2% of total daily volume, compared to 66.6% of roads with more than 5,000 trucks daily. In the WILMAPCO region, trucks made up 26.5% of all traffic on major roadways. In addition to the I-95 corridor, a notable amount of trucks moved along I-83 connecting Baltimore City and York County, I-76 connecting Philadelphia to Lancaster County, and I-295 connecting New Jersey counties.

Figure 15:
Annual Average Daily Truck Traffic (AADT), 2007

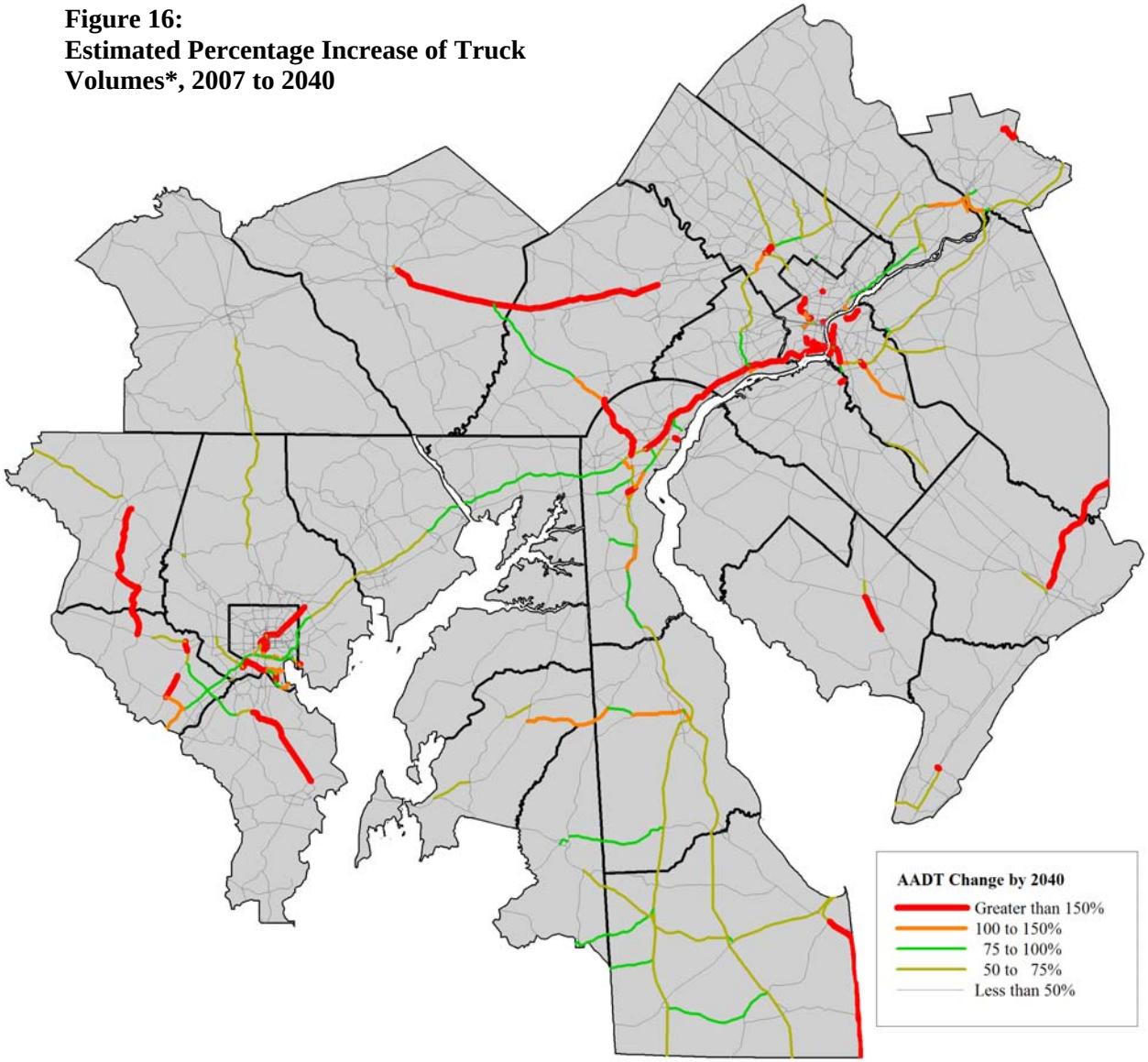


Source: FHWA, Freight Analysis Framework

Projected Truck Volumes

Moving trucks and other modes for freight activity is essential to maintaining an efficient and reliable system that meets regional needs. In just over two decades about one-third of vehicles moving throughout the study area is expected to be trucks. By 2040, daily truck volumes along I-95 are estimated to double (100.1%) from 2007. Generally, much of this growth in traffic is predicted to represent long distance trips, rather than local trips. In 2007, 57.8% of traffic was classified as long distance. This figure is expected to rise to 69.8% by 2040. Corridors most encumbered by rises in truck volumes (greater than 150%) include portions of I-95, Route 30 linking Chester and Lancaster counties in Pennsylvania, Route 444 connecting Atlantic and Burlington counties in New Jersey, and Route 1 in Sussex, Delaware.

Figure 16:
Estimated Percentage Increase of Truck Volumes*, 2007 to 2040



*Projected truck volumes represent long distance truck trips of 50 miles or greater.

Source: FHWA, Freight Analysis Framework

Freight Impact on the WILMAPCO Region

The WILMAPCO region is a major thoroughfare for goods moving along the busy northeast corridor on Interstate 95, the CSX Transportation (CSXT), and Norfolk Southern (NS) railroads. Much of this freight passes through on the interstates and rail lines to the major population centers in the Northeast, but a significant portion travels on local roads serving places like Harrisburg and the Delmarva Peninsula. It is clear that I-95 is a major route that sees heavy traffic flows, and likely carries the majority of the region's freight traffic, connecting key locations of Wilmington, Newark, and Elkton. Also connected are major economic and population centers of Philadelphia and New York to the north and Baltimore and Washington to the south of the region. Commodity flow data indicates that freight is moving primarily north and south along I-95, US 301, US 40 and US 13. All these routes travel through multiple states and metropolitan areas.

The WILMAPCO region generates a small percentage of overall movement in the country. However, along the I-95 corridor, large amounts of through trips occur on our roadways. In 2005, roughly 135 million tons originated, terminated, or moved through the region by truck. By 2030, that total is projected to increase by about 84% to approximately 249 million tons annually. Assuming a weight of 17 tons per truck, nearly 8 million truck trips impact the WILMAPCO region's roadways annually.

Figures 17 and 18 illustrate the total goods (in tons) that either originate or terminate in the WILMAPCO region in 2005. Overall the region exported approximately 37 million tons out of the region and received 25 million tons. Our top trading partners are located along the Southeastern U.S, the upper Midwest and the Northeast and over one-half of our total trading takes place in these regions. Yet, there is a significant portion that stays within a 13 county area around WILMAPCO. Roughly 15 million tons, or one-quarter of our total tonnage originate and terminate close to home.

Figure 17: WILMAPCO Truck Tonnage by Direction 2005-2030

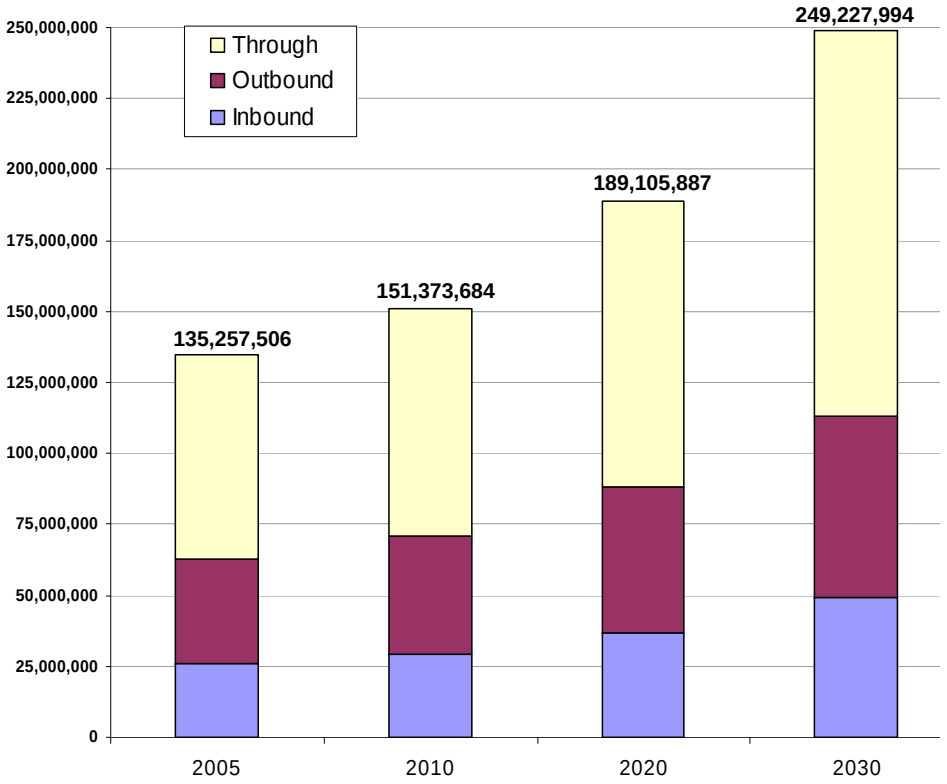
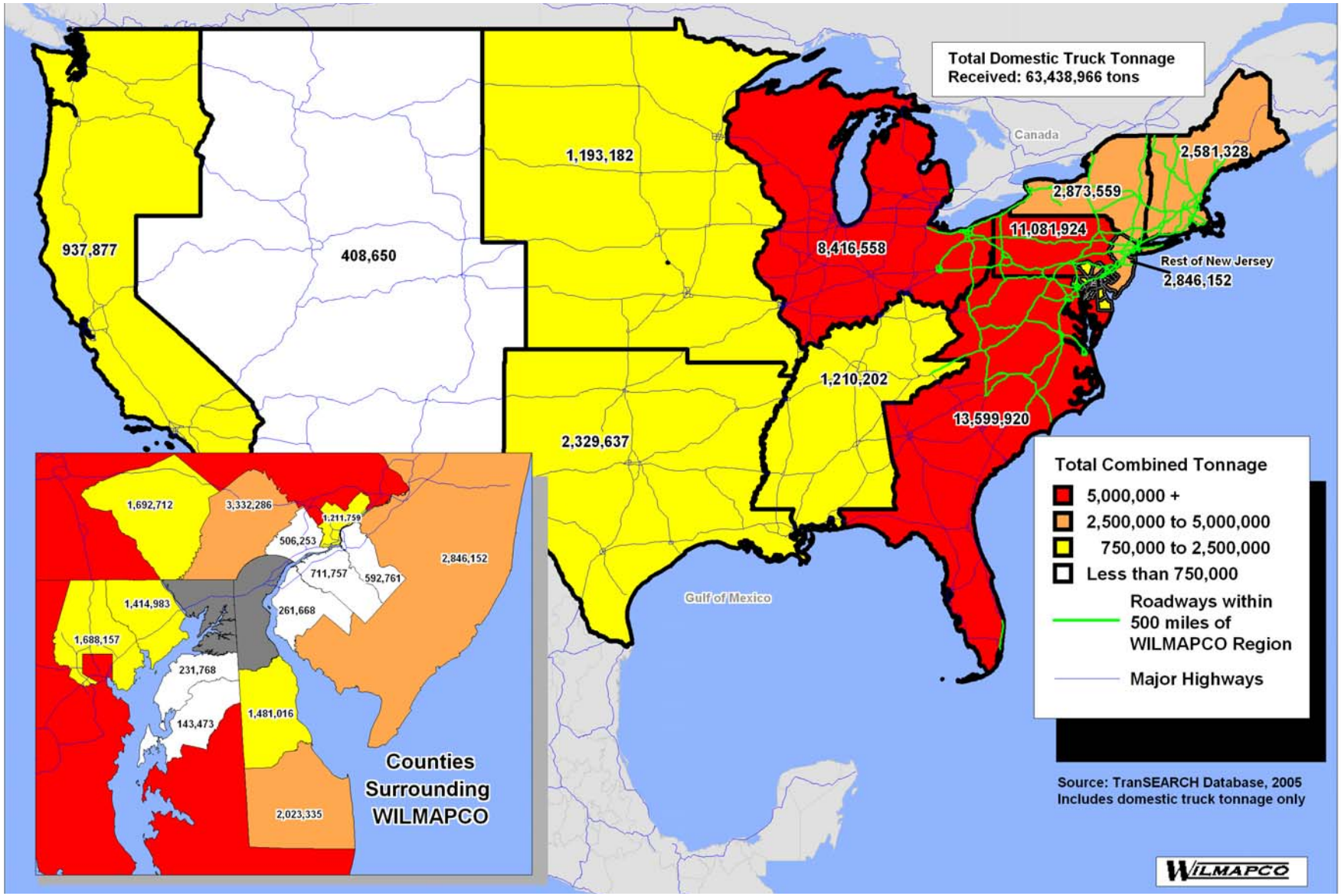


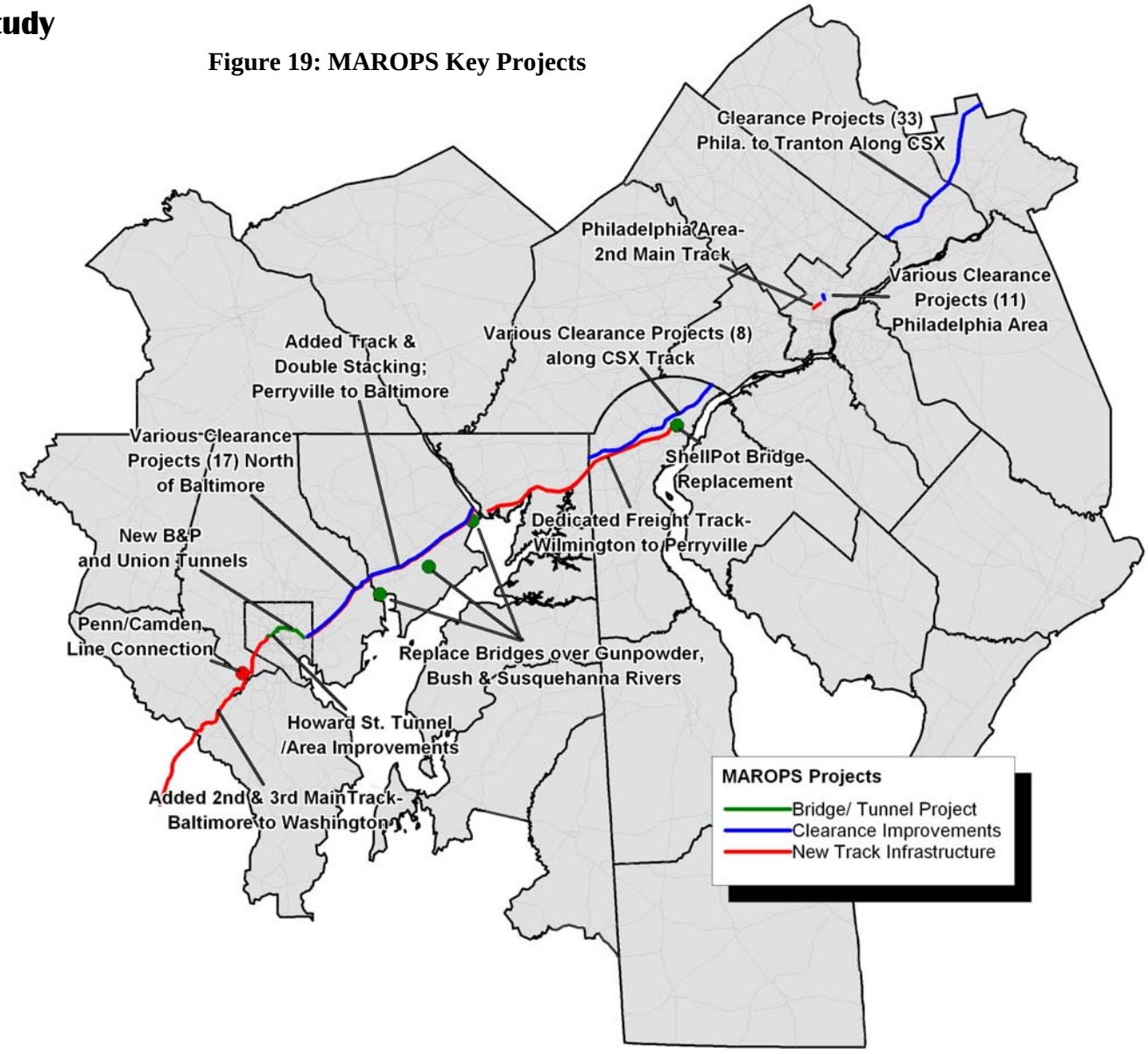
Figure 18: Total Domestic Truck Tonnage Originating/Terminating in the WILMAPCO Region 2005



Mid-Atlantic Rail Operations Study

In 2003, the I-95 Corridor Coalition completed the Mid-Atlantic Rail Operations Study (MAROPS) which recognizes that rail activity in the Mid-Atlantic contributes to the region's political and financial status. The report concludes that the Mid-Atlantic region has and will continue to experience severe capacity issues along its major highways. To alleviate some burdens, Class I railroads within the five states of the Mid-Atlantic region and the District of Columbia must be improved to reduce the demand on the roadway network. A total of 71 infrastructure projects and information and technology improvements were proposed, estimated to cost more than $6 billion (excluding engineering). **Figure 19** shows projects within the study area, estimated to cost more than $1 billion. With the exception of the Shellpot Bridge, however, many of these projects are still awaiting funds for design, engineering and construction. The Mid-Atlantic has an extensive rail network that is capable of serving a much larger role in meeting the region's transportation needs. Additional funding has become available to complete a study update in FY 2013.

Figure 19: MAROPS Key Projects



Source: The Interstate 95 Corridor Coalition

Marine Highways

Ports, railways, and highways across that nation have become increasingly congested. In response in 2010, U.S. DOT identified 18 marine corridors, eight projects, and six initiatives for further development as part of "America's Marine Highway Program." The entire Eastern seaboard was selected as a corridor. This effort is the first step to focus public and private efforts on using waterways to relieve congested land corridors, reduce greenhouse gas emissions, curb energy use, and increase system resiliency, and reduce landside infrastructure costs. Initial selected projects that total $7 million in funding are listed below:

Figure 20: U.S. Marine Highways Key Projects

Table 5: Marine Highway Projects

Project Title	Description
Cross Sound Enhancements Project (Connecticut DOT)	Improve ferry capacity operating between CT and NY
New England Marine Highway Expansion Project (Maine DOT)	Improve capacity and reilability, expand an existing container-on-barge service operation
Cross Gulf Container Expansion (Ports of Manatee, FL, & Brownsville, TX)	Expand frequency and capacity of existing container-on-barge operation
Tenn-Tom Waterway Pilot Project (Port Itawamba, MS)	Establiah new container-on-barge service to function as the inland leg of a new route
Gulf Atlantic Marine Highway Project (South Carolina State Ports Authority and Port of Galveston, TX)	Transport containerized freight on a modern fleet of U.S. flag vessels.
Detroit-Wayne County Ferry (Detroit/Wayne County Port Authority)	Develop a cross-border passenger service between Detroit, MI, and Windsor, Ontario, Canada
Trans-Hudson Rail Service (Port Authority of New York & New Jersey)	Expand the quality and capacity of an ongoing cross-harbor rail float service
James River Container Expansion (Virginia Port Authority)	Expand existing container-on-barge service by increasing frequencies and a new barge service

Source: US DOT, Marine Highway Initiative

Inter-Regional Transit

Even though prices have dropped, filling up on gasoline is still costly. Fostering transportation choice is critical to reducing automobile usage and can significantly reduce household transportation costs. The WILMAPCO region is presently served by four inter-county transit routes; DTC's Route 301 from Wilmington to Dover, Delaware; the Route 65 from Newark, DE to Elkton, Maryland; SEPTA's R2 rail service from Newark to as far north as Warminster, Pennsylvania; and "The Bus" from Elkton to Newark, Delaware. While annual ridership for the Route 65 has steadily declined, ridership for the Route 301 has climbed by 96%. The Bus, and R2 has seen steady gains since 2001. Both weekday and weekend ridership for the R2 has increased by 52% and 57%, respectively. There is a need to strengthen existing services and fill in transit gaps throughout the study area. Improving transit system efficiency, and creating more transit supportive land use patterns can help make transit more viable and attractive to new users.

Figure 21: Ridership for Inter-County Routes in WILMAPCO Region

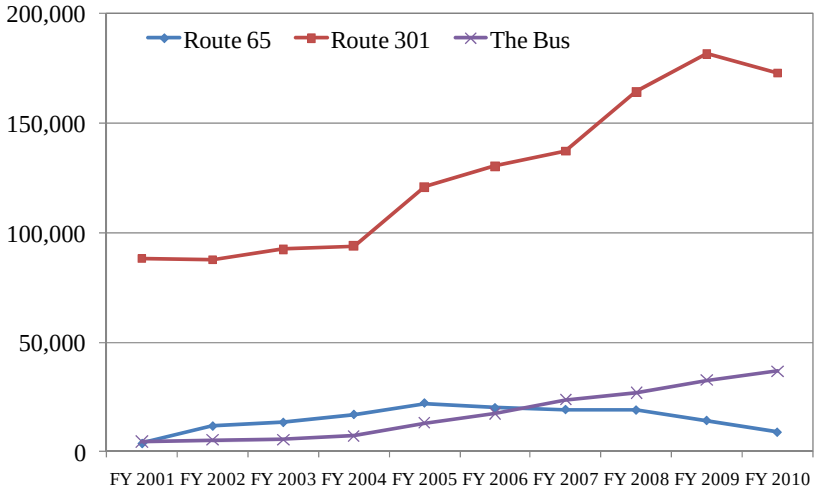
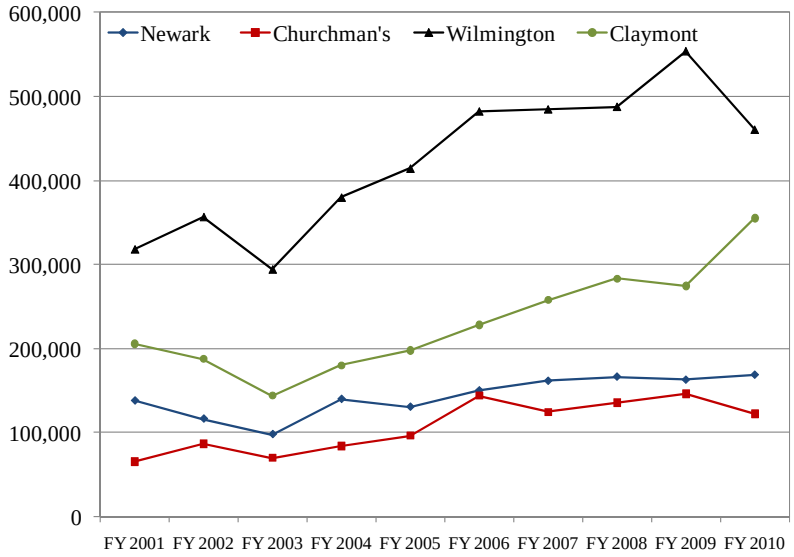


Figure 22: Ridership for Septa Wilmington/ Newark Regional Rail Line*



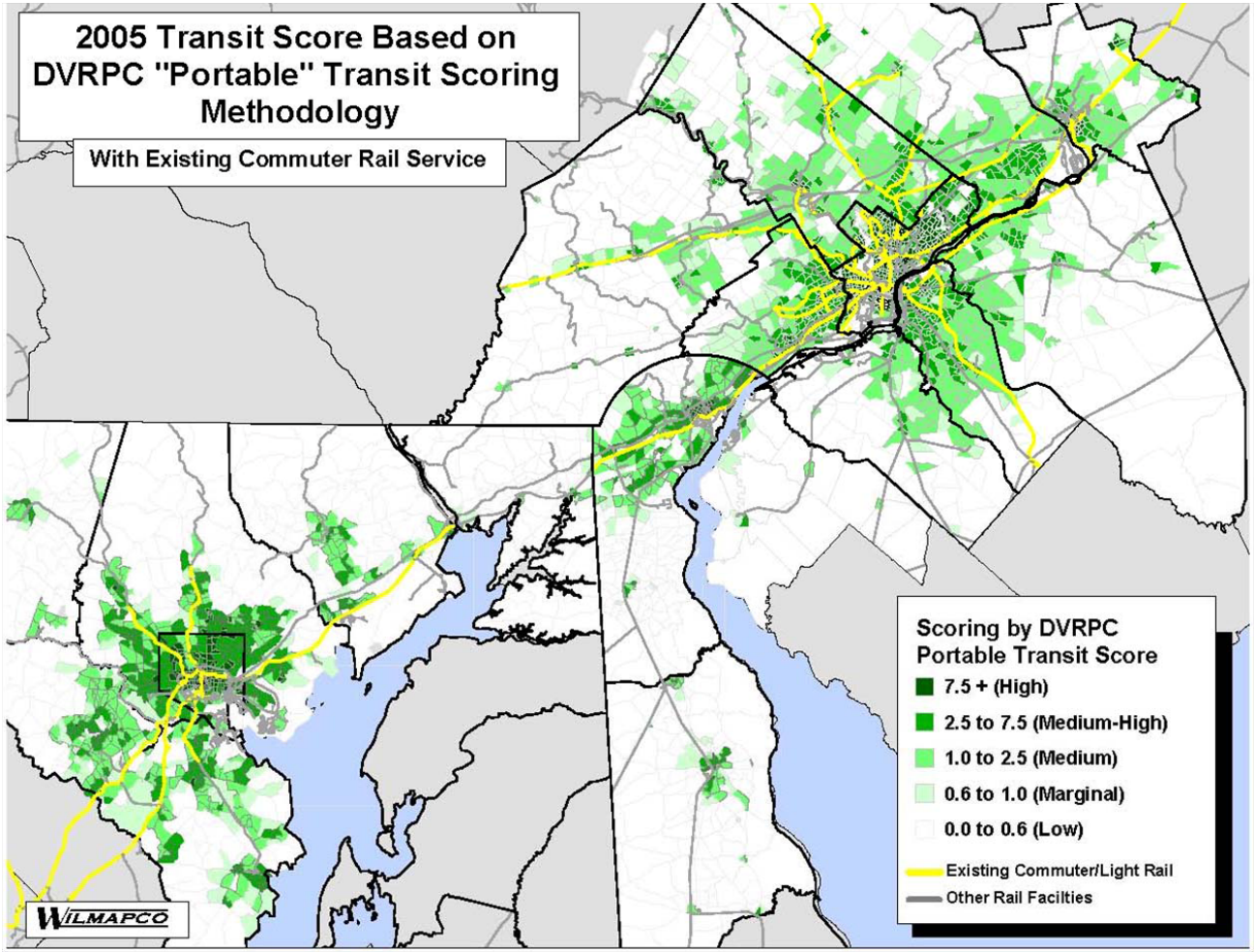
* Includes weekday and Saturday services

Sources: MTA 2007 MARC Growth and Investment Plan, Delaware Transit Corporation (DTC)

Transit Assessment By TAZ

Using a transit score equation the appropriateness of various transit modes (BRT, light rail, commuter rail, local circulator bus, etc.) and intensities per transit analysis zone (TAZ) can be assessed. Factors in the assessment include population and housing densities, zero and one car households, employment destinations and densities, and distance to existing transit services. The results in **Figure 23** display that lighter shaded TAZ's warrant smaller investments, whereas darker shaded areas can support intense transit investments and services. Level of transit investments decline in surrounding suburbs of dense city cores, such as Baltimore, Wilmington, and Philadelphia. Transit score can also reflect regional growth projections. Overall, the tool has broad applicability from a regional planning standpoint and can be useful in congestion management and long-range plans.

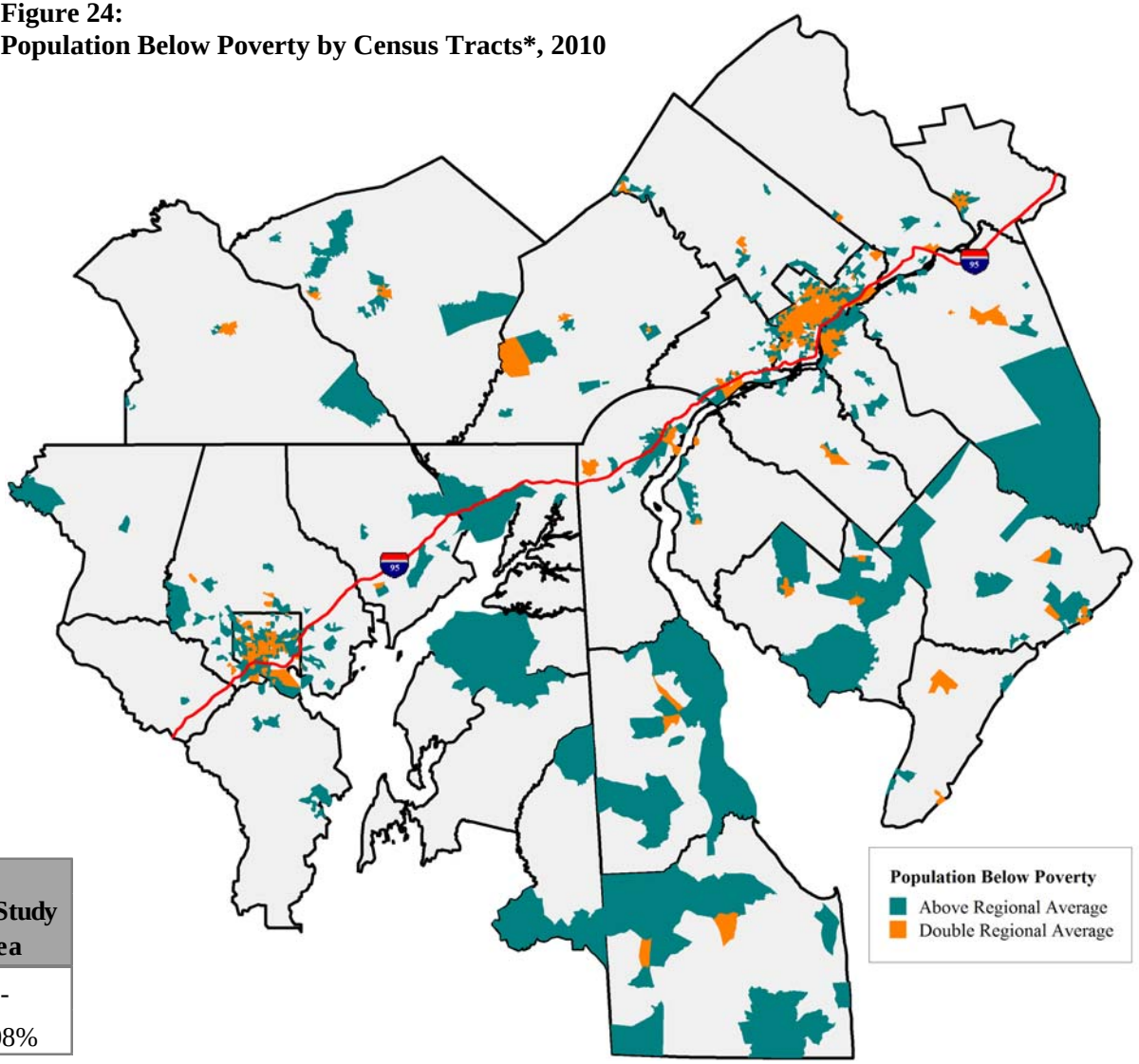
Figure 23: Transit Scoring by TAZ



Identification of Low-Income Populations

Under the law, transportation equity must consider the needs and participation in the planning process of low-income and minority communities. Low-income is defined as populations below the poverty threshold. During the last decade, low-income individuals have expanded compared to concentrations of low-income households of the past decade. Higher concentrations of low-income individuals are located within major cities along I-95, especially in Philadelphia, Camden, Chester, Wilmington, and Baltimore. Both significant and moderate concentrations can be found in suburban classified counties and some rural areas.

Figure 24:
Population Below Poverty by Census Tracts*, 2010



	2010	
	Total Study Area	% of Study Area
Total Population	11,014,269	---
Population Below Poverty	1,330,523	12.08%

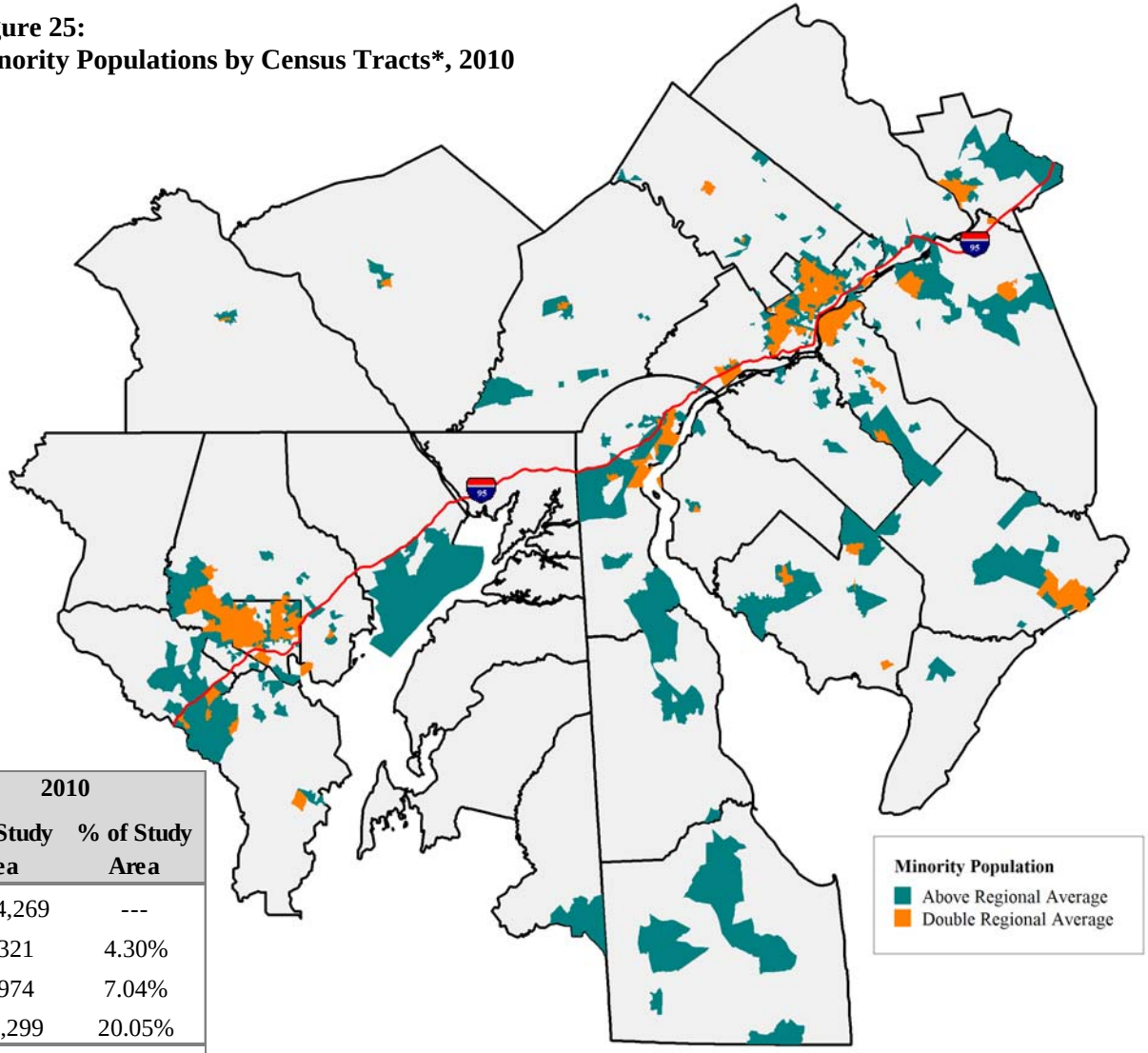
*For each category, every tract received 1 point if greater than the regional average for percentage of households below poverty, or two points if double the regional average.

Source: U.S. Census Bureau, 2010

Identification of Minority Populations

Both low-income groups and ethnic and racial minorities are historically known to bear undue burdens of transportation investments, and a fewer share of the benefits. In the last decade more than 660,000 people were added to the region, which represented one of the three largest minority groups. More than one-third of the region's population include minority individuals (31.4%). The spatial arrangement of significant populations has remained fairly static. Similar to low-income groups, highest concentrations are within major cities along I-95, with smaller pockets sprinkled throughout suburban communities.

Figure 25:
Minority Populations by Census Tracts*, 2010



	2000		2010	
	Total Study Area	% of Study Area	Total Study Area	% of Study Area
Total Population	10,276,931	---	11,014,269	---
Asian	296, 290	2.88%	473,321	4.30%
Hispanic	481, 379	4.68%	774,974	7.04%
Black	2,016,682	19.62%	2,208,299	20.05%
Minority Population	2,794,351	27.19%	3,456,594	31.38%

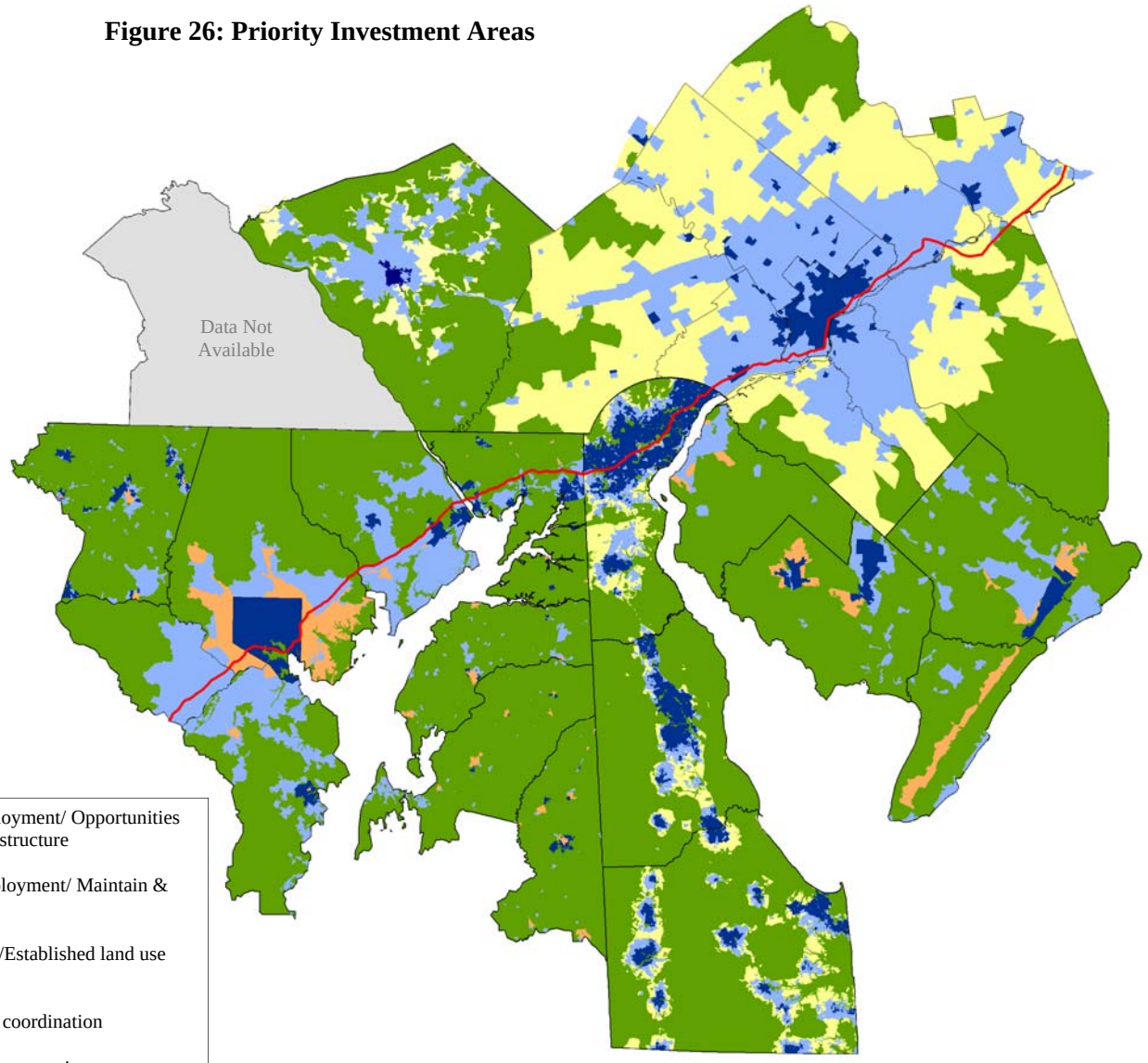
*For each category, every tract received 1 point if greater than the regional average for percentage of largest minority groups, or two points if double the regional average.

Source: U.S. Census Bureau, 2010

Transportation Investments

Investment strategies are used to create links between transportation and land use, and to coordinate local government spending. Well defined strategies maximize limited resources and help to address growth management issues. Overall, investment strategies vary across MPO's and counties included in the study area. The DVRPC region has expanded areas for development. The state of Delaware has recently updated investment priorities.

Figure 26: Priority Investment Areas



Source: MD Dept. of Planning , DE Dept. of Planning, DVRPC, NJ State Data, PA Spatial Data Access

Section 7: Inter-regional Projects

Significant Regional Transportation Projects

Based on the Transportation Improvement Programs (TIP) of surrounding agencies, there are several major projects in progress or slated for completion in the future. **Table 6** lists projects within or near WILMAPCO's borders that may have a significant effect on traffic flows to and from the region. More than $1.3 billion is estimated to be spent on these projects to FY 2015 and beyond. As the table reflects, the vast majority of our major transportation projects are highway upgrades, suggesting our continued over-reliance on that system. Most recently completed projects include toll facilities and added capacity along the I-95 corridor through Delaware, and US 202 corridor improvements through Pennsylvania. A map corresponding to this table is shown on the next page.

Table 6: Significant Inter-Regional Projects

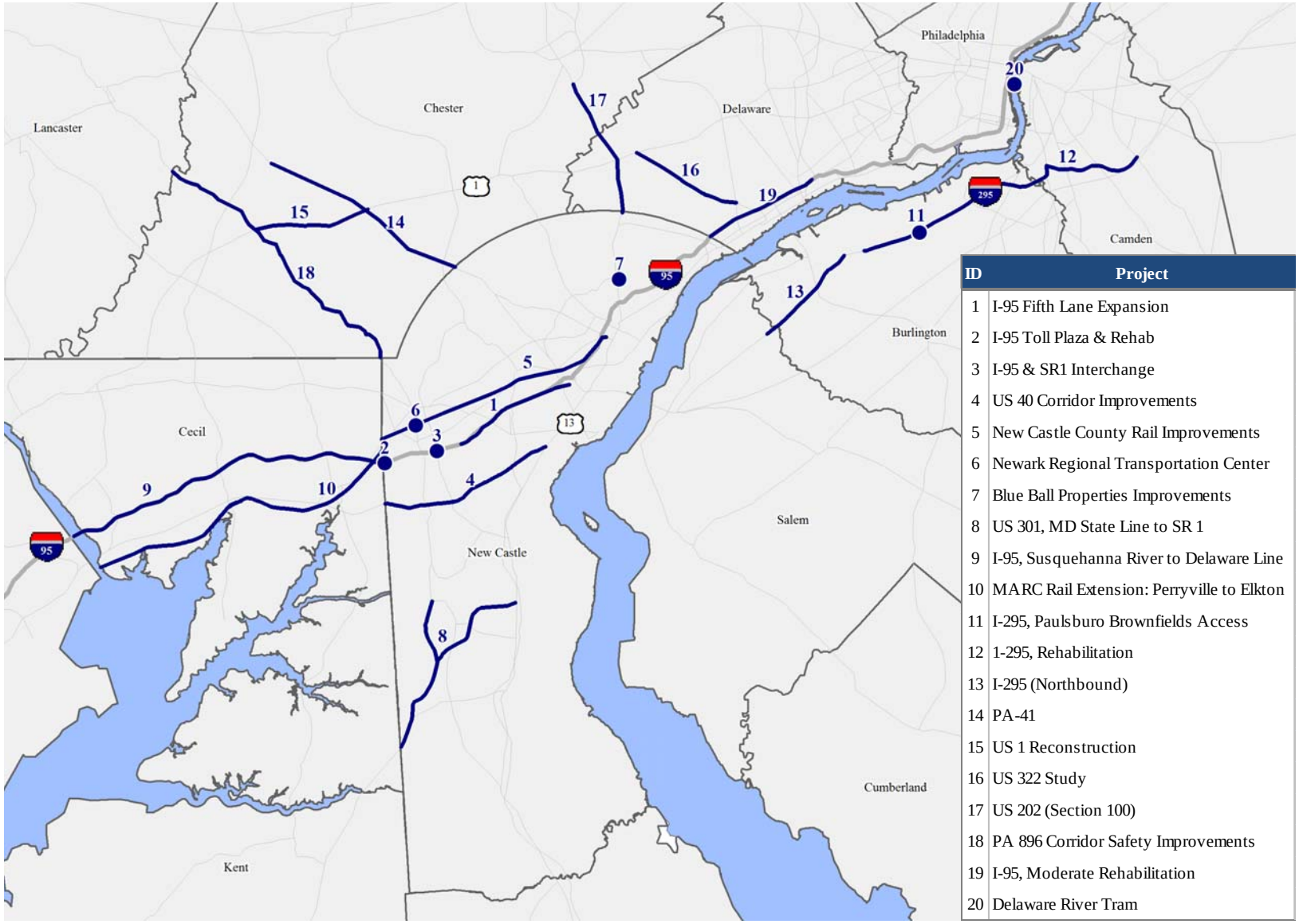
ID	ST	Project	Description	Current Funding*	Outyear Funding
1	DE	I-95 Fifth Lane Expansion	5th Lane (Churchman's Bridge to SR141)	n/a	n/a
2	DE	I-95 Toll Plaza & Rehab	E-Z pass Improvements	$5,583.9	$0.0
3	DE	I-95 & SR1 Interchange	New multilpe lane interchange	$127,841.9	$0.0
4	DE	US 40 Corridor Improvements	Intersection, roadway, & bike/ped. improvements	$10,800.4	$14,870.0
5	DE	New Castle County Rail Improvements	new train cars for R2 line, third track expansion	$68,536.0	$0.0
6	DE	Newark Regional Transportation Center	Expand passenger rail platform; new freight track	$17,398.9	$0.0
7	DE	Blue Ball Properties Improvements	SR 141 and US 202 area improvements	n/a	n/a
8	DE	US 301, MD State Line to SR 1	Construction four-lane limited access highway	$577,465.8	$93,380.2
9	MD	I-95, Susquehanna River to DE Line	Lanes and brige expansion	$0.0	$0.0
10	MD	MARC Extension: Perryville to Elkton	Expand passenger rail service	$0.0	$0.0
11	NJ	I-295, Paulsburo Brownfields Access	Access to I-295 (design/row/construction)	$0.0	$0.0
12	NJ	1-295, Rehabilitation	Rehabilitation, increase auxiliary lanes/shoulders	$0.0	$0.0
13	NJ	I-295 (Northbound)	Resurfacing	$0.0	$0.0
14	PA	PA-41	Reconstruction & widening	$3,385.0	$0.0
15	PA	US 1 Reconstruction	Roadway reconstruction	$0.0	$0.0
16	PA	US 322 Study	Road widening, median barriers	$11,380.0	$61,330.0
17	PA	US 202: Matlack Street to DE Line	Improve traffic flow, add lanes	$1,093.0	$374,866.0
18	PA	PA 896 Corridor Safety Improvements	Corridor safety and mobility improvements	$0.0	$0.0
19	PA	I-95, Moderate Rehabilitation	Moderate rehabilitation	$0.0	$0.0
20	PA, NJ	Delaware River Tram	Design & construction aerial tramway over river	$0.0	$0.0

Shaded lines are completed projects; other are not complete.

Sources: DVPRC 2007-10 TIP and 2005-08 TIP* for NJ and PA,WILMAPCO TIP 2012-15, BMC TIP, Chester County, Kent/Dover MPO, NJDOT

Section 7: Inter-regional Projects

Figure 27:
Major Transportation Improvement Projects, FY 2012-2015



ID	Project
1	I-95 Fifth Lane Expansion
2	I-95 Toll Plaza & Rehab
3	I-95 & SR1 Interchange
4	US 40 Corridor Improvements
5	New Castle County Rail Improvements
6	Newark Regional Transportation Center
7	Blue Ball Properties Improvements
8	US 301, MD State Line to SR 1
9	I-95, Susquehanna River to Delaware Line
10	MARC Rail Extension: Perryville to Elkton
11	I-295, Paulsburo Brownfields Access
12	1-295, Rehabilitation
13	I-295 (Northbound)
14	PA-41
15	US 1 Reconstruction
16	US 322 Study
17	US 202 (Section 100)
18	PA 896 Corridor Safety Improvements
19	I-95, Moderate Rehabilitation
20	Delaware River Tram

Sources: DVPRC 2007-10 TIP and 2005-08 TIP* for NJ and PA,WILMAPCO TIP 2012-15, BMC TIP, Chester County, Kent/Dover MPO, NJDOT

Section 8: Path Forward

KEY REGIONAL CORRIDORS

In the previous 2008 Inter-Regional Report, seven corridors that span across more than one metropolitan area and would benefit from planning and coordination at a wider multi-state level were identified. These corridors are based on a variety of past plans and studies. Likewise, future development activity within these corridors also make them of interest to a variety of planning stakeholders. Key points for each corridor along with some updated projection figures, are summarized here:

1.**SR 41**—This busy corridor stretches from SR-141 in Delaware to Lancaster, PA, and is widely used by commuters and trucks. While this roadway was previously identified on both the WILMAPCO and DVRPC congested corridors list, it currently is not. However, several roadway segments and intersections (particularly around Wilmington in the WILMAPCO region) are currently functioning at LOS E or F in the a.m. and p.m. peak periods. The corridor falls within the Developing and Rural/Agricultural Transportation Investment Areas (TIAs) and notably lacks significant transit service.

Future population and employment is projected to grow 15% to 30% for New Castle and Chester Counties, where the corridor stretches. Along the Pennsylvania section, roughly a 25% population increase by TAZs is estimated, while Delaware sections grew by 10%. In 2010, more than 80% of workers living nearby this roadway drove alone to work.

The Average Annual Daily Traffic (AADT) is projected to increase as well. On average, annual daily traffic is projected to rise by 52% from just under 15,000 vehicles per day in 2007 to roughly 22,300. More recent truck volumes along SR 41 are projected to rise between 100% to 150% by 2040, up from past projects of 75% and above. Speeds along the roadway are expected to decrease by a minimum of 50% by 2040.

Both current Transportation Improvement Programs covering New Castle and Chester Counties, include a Highway Safety Improvement project for new signal and pedestrian improvements and funding for the PA Route 41 Study from the Delaware State line to PA Route 926. This project scope includes the completion of an environmental study and to continue to study alternatives, which include widening and a slight realignment of the road.

US 1— This thoroughfare makes connections from Philadelphia to Baltimore and destinations beyond the study area. Most of the corridor is located in Developing or Rural/ Agricultural designated TIAs, and traffic is expected to grow. While much less developed than further east on US 1, the area is comprised of suburban development with commuting primarily to New Castle County. Between 2006 and 2010 more than 80% of commuters drove alone, as transit services are lacking. US 1 west of US 202 is classified by the DVRPC as a congested corridor. Appropriate strategies identified through the Congestion Management Process include improving circulation, providing park-and-ride lots, turning movement enhancements, and enhancements to transit services. This corridor was also identified as being potentially under pressure as result of BRAC activities.

Based on updated projections, the population in this corridor is still expected to increase by more than 30% across stretches of

Delaware, Chester, and Cecil Counties by 2040. Many of these areas coincide with notable future employment estimates in counties between Baltimore and Philadelphia.

The majority of roadway sections, especially near Philadelphia and Baltimore are expected to see more than 50,000 AADT per segment by 2040. Percentage change in AADT by 2040 is estimated to be up to 50%, while increases in truck volumes will vary. Travel speeds along the corridor will slow modestly, under 50%, in comparison to other major roadways.

3. **US 202**— Like US 1 and many other roadways, US 202 is identified as a congested corridor. Several strategies identified as being most effective along this corridor while maintaining existing capacity include Intelligent Transportation Systems (ITS) improvements, signal upgrades, incident management, and better design for pedestrian and bicycle travel. The corridor does not presently provide transit services. For a short time, the SEPTA Route 306 provided bus service between Claymont, Delaware and Malvern, Pennsylvania, working as an inter-regional transit service. In 2010 the service, which was funded as part of major US 202 corridor improvements, has been terminated due to lack of funds and strong ridership.

Most of the corridor is located in Developing or Rural/ Agricultural designated TIAs, and is recognized as one of the most heavily developed corridors in the region. Population totals by TAZs along the corridor are expected to increase the most within Chester County, whereas growth along the corridor in New Castle and Montgomery Counties is expected to grow at a slower pace. On the other hand, employment by TAZs along the corridor demonstrates static growth to 2040. Commute times average just under 25 minutes per trip, which is below the regional average. While travel speeds are expected to slow along the corridor, the decrease is not estimated to decline as severely as nearby Philadelphia. Most segments along the corridor remain projected to reach LOS E or F by 2040.

4. **I-95**— Mobility along this corridor will continue to remain challenged within the Mid-Atlantic region and throughout the study area. Most of the I-95 corridor is located in the Core designated TIA. Accordingly it is slated to receive funding for a number of roadway and railway improvements, several of which were identified by the I-95 Corridor Coalition. Investments along this major corridor must also be sensitive to underserved populations, especially within and surrounding large urban centers.

According to recent Census block group data, a significant percentage of low-income and monitories are concentrated nearby this major interstate and have grown since 2000. These populations could be inadvertently burdened by transportation investments. Population growth by TAZs continue past trends of shifts away from this corridor. Further, more recent projections continue to confirm that both passenger vehicles and truck volumes along I-95 will increase significantly. While heavy use of I-95 will continue, other roadways that travel through more suburban areas such as US 202 and US 1 will become more burdened.

By 2030, local and long distance trucks are projected to increase and carry approximately 249 million tons annually. By 2040, 62.2% more vehicles are expected to traverse the I-95

corridor throughout the study area. Congestion is expected to slow traffic flowing through the corridor, especially near large cities. In years to come, the I-95 corridor is expected to exceed its carrying capacity if significant improvements are not made. These challenges further support the need for investments in waterways to move freight and relieve pressure along roadways, especially along a major truck route of I-95.

5. **AMTRAK's Northeast Corridor (NEC)**—Recognized as one of the busiest and most complex track structures, AMTRAK's NEC is the primary corridor for AMTRAK, MARC and SEPTA passenger rail, and freight trains in the WILMAPCO region. All these trains must share the same overcrowded track. Currently, only AMTRAK provides passenger rail service across the entire WILMAPCO region. However, this service has limited stops (Newark, Delaware) and it is not intended to serve as a local rail service. WILMAPCO's Regional Transportation Plan urges the implementation of commuter rail service between Newark and Elkton, which would eliminate the one notable gap in the regional passenger rail system. Several rail projects will improve service levels, and capacity and passenger amenities within the WILMAPCO Region.

The historic Wilmington Train Station recently underwent a restoration project totaling $37.7 million to restore the exterior including the façade, platforms and canopies, and to renovate the interior to improve passenger amenities and add revenue-generating retail space. In FY 2011, this station was cited as AMTRAK's 12th busiest in the nation, serving 90 trains per day and close to 730,000 passengers per year. During the last ten years, ridership has increased more than 60%.

Roughly eleven miles north of the Wilmington station, the Claymont Train Station attracts riders from a wide area, including Pennsylvania. Ridership at this station has grown more than 22% during the last decade. Located in the Core designated TIA, population and employment growth is estimated to remain stable by 2040. The FY 2012-15 Transportation Improvement Program includes funding for a project at the site that would upgrade platforms and basic structures, add passenger amenities, and increase parking capacity, while also improving pedestrian and multi-modal access and limiting traffic increases. There is also the potential for transit-oriented development (TOD) at the site.

To address the need for rail capacity, the current TIP includes funding for a Third Rail Track Expansion project in New Castle County that will add tracks and interlocking to increase capacity for commuter service between Wilmington and Newark. This project will eliminate a choke point and improve reliability, and will begin construction in FY12. This project will also include the purchase of two SEPTA rail cars, adding interlocks, and southbound platform and a pedestrian bridge at the Fairplay Station (Churchmans Crossing). Separate funds have also been expended for a parking expansion for Fairplay Station.

Another funded project includes the Newark Train Station, which has received two competitive grants totaling $12.25 million for economic recovery from the US DOT. The funds will be used to create a Regional Transportation Center at a 272-acre site proposed for transit-oriented development (TOD). Some improvements for this project will include a relocated and expanded passenger rail platform (with ADA-

compliance) and a new freight track to preserve existing train movements. This funding represents the first of several phases of improvements to the site.

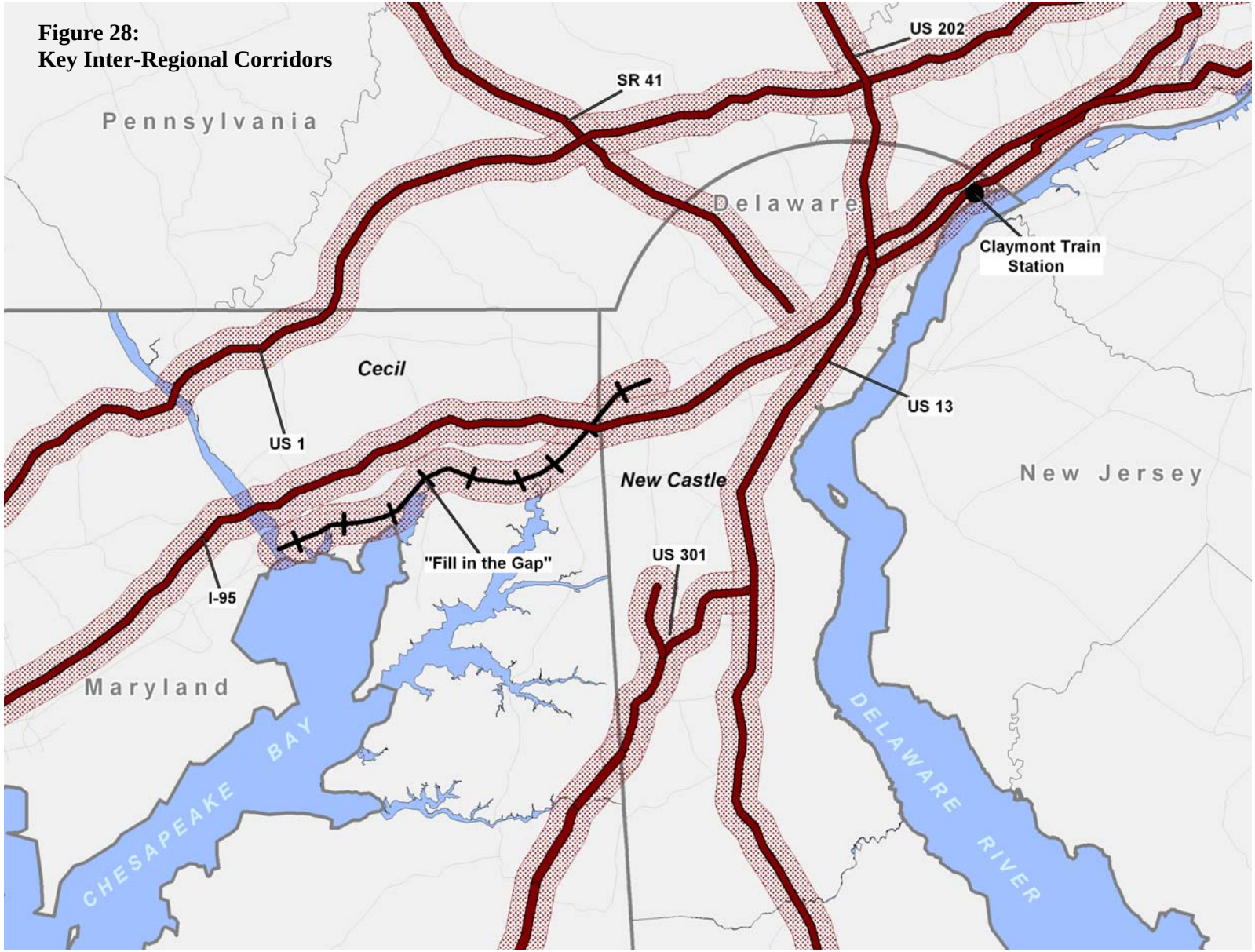
In Cecil County, there are ongoing efforts to fund a project that would add track length and interlocks between Perryville and Northeast, Maryland. Closing this rail gap would allow for the expansion of MARC train service to Elkton, Maryland, Newark and Wilmington, Delaware, as proposed in the MTA Growth & Expansion Plan. Recent estimates for 2040 throughout this corridor indicate increases by more than 50% for both population and employment. This rail corridor is located in the Center/Core/CBD designated TIAs, is a significant metropolitan transit link, and is home to pockets of low-income communities. Another element tying everything together within this corridor is the "NEC Future", which is a comprehensive plan developed by the Federal Rail Administration (FRA). NEC Future creates a framework for investments needed to improve passenger rail capacity and service through 2040. The effort brings together stakeholders to determine the direction of critical investments within the corridor.

6. **US 301**—Primarily used as a truck diversion route for I-95 between Delaware and Maryland, this corridor has seen increases in truck volumes and safety concerns have mounted. There is a significant amount of funding in the approved Transportation Improvement Program to create a four-lane limited access expressway from the Maryland state line to SR 1. Most of the corridor is located in Developing or Rural/ Agricultural designated TIAs. The project is intended to reduce traffic congestion, improve safety, and manage truck traffic. However, an impact may be an increased volume in truck traffic along the eastern shore of Maryland and surrounding points.

The population in this corridor is expected to double between 2010 and 2040, concurrent with steady employment gains along Maryland's eastern shore by 2040. Its AADT is projected to increase significantly. Truck volumes are also projected to increase beyond 150% by 2040. Speeds along the roadway are expected to slow by 50% or less across most of the corridor by 2040. Transit service is lacking along the corridor, and there are no future plans for transit. However, there are notable pockets of low-income households that would benefit from the service.

7. **US 13**—With a current population exceeding 400,000, most of the corridor is located in the Center/Core/CBD designated TIAs. The corridor is home to increasing pockets of low-income and minority communities that are well served by transit options in the area. Along the Delaware River there are several large scale economic development projects in the towns of Chester and Marcus Hook in addition to the redevelopment activity in Claymont, Delaware, as well as station improvements. With new potential land use opportunities along this corridor, increased demand is likely. Updated projections by TAZs continue to support that the population in this corridor is expected to remain stable or decrease north of the Chesapeake and Delaware Canal by 2035. To the south of the canal, more than a 30% increase is expected in most TAZs. Total employment is projected to rise from 62,000 in 2010 to 97,440 by 2040. Its AADT and truck volumes are estimated to double by 2035. Travel speeds along the roadway are expected to slow between 50 and 75% by 2040.

Figure 28:
Key Inter-Regional Corridors



Section 8: Path Forward

INTER-REGIONAL ACTIVITY UPDATES

Along with updating this report WILMAPCO has gauged its inter-regional efforts based on participation in committees and initiatives having an inter-regional element. Several of these listed efforts are summarized below:

- Base Realignment and Closure (BRAC) Initiatives
- Chesapeake Science and Security Corridor (CSSC)
- DVRPC Freight Task Force
- East Coast Greenway Alliance
- Interstate 95 Corridor Coalition
- Planning at the Edge (PEAC)
- Mid-Atlantic Round-Table

BRAC/ Chesapeake Science Security Corridor

September 2011, Base Realignment and Closure (BRAC) efforts at the Aberdeen Proving Ground Army base (APG) in Hartford County, Maryland reached implementation. Since 2005, BRAC recommendations have been carried out at APG. Over the course of six years, positions were relocated from Ft. Monmouth, New Jersey and northern Virginia. Overall, substantial changes throughout the surrounding area have taken place as Harford County and surrounding Counties have been preparing to accommodate a larger number of relocating people and jobs. Sixty percent of hired personnel relocated to Harford County, along with 18.2% to Cecil County and 6.7% to New Castle County, Delaware.

Five Regional BRAC Action Plans were previously endorsed for Harford, Cecil, Baltimore City, Baltimore County, and Maryland Statewide. These plans address land use, transportation and infrastructure, education, technology, workforce development, public safety, health, and community services. Some transportation related successes presently include a transportation demand management plan, increased vanpools, MARC schedule modifications, and retention of federal subsidy.

The Chesapeake Science & Security Corridor (CSSC), joined together Harford, Baltimore and Cecil Counties and Baltimore City, Maryland, Chester, York and Lancaster Counties in Pennsylvania, New Castle County, Delaware, the Greater Baltimore Committee, and the Economic Alliance of Greater Baltimore. This collaboration of jurisdictions has ensured successful implementation of BRAC.

DVRPC Goods Movement Task Force

The Delaware Valley Goods Movement Task Force is DVRPC's freight advisory committee. This group is open to all trucking, railroad, port, airport, shipper, freight forwarder, economic development, and member government representatives. The Task Force meets quarterly, and staff from WILMAPCO attend to discuss and participate in formulating regional policies, plans, and programs.

In 2007 WILMAPCO adopted its Regional Freight and Goods Movement Analysis, which provides a profile of goods movement in and out of our region for surface freight transportation (i.e. trucking and rail). The purpose of the study is to report what is known about projected freight

movement, to identify bottlenecks in the freight system, and to recommend actions. DVRPC's Freight Task Force serves as a sounding board for innovative ideas and an exchange of best practices regarding freight that not only benefits the WILMAPCO region, but surrounding planning agencies as well.

Regional Rail Capacity Improvements

The MTA announced expanded service on the MARC Penn Line effective on Monday, February 11, 2008. The expanded Penn Line service is the first installment of the MARC Growth and Investment Plan. The MARC Growth and Investment Plan is a multi-phased, multi-year plan to triple the capacity of the MARC system. The State of Maryland will invest $6 million to cover costs. The MARC expansion will provide greater commuter comfort, expand service hours, and help reduce traffic gridlock in Maryland communities by allowing MARC customers greater flexibility. The new service is also designed to provide additional capacity, and meet the projected needs that will result as part of the federal government's upcoming Base Realignment and Closure effort (BRAC). Currently, MARC carries 30,000 riders a day. The Penn Line averages 19,597 riders each day and runs from Perryville, in Cecil County Maryland to Union Station in Washington, D.C.

East Coast Greenway

The East Coast Greenway will be a long-distance urban trail system that will link from Florida to Maine. Once completed, the multi-use trail network will connect multiple cities by existing and proposed trails, park paths, waterfronts, abandoned railroads, and other facilities.

Forty-three miles of the greenway travel through Delaware, with 40% of off-road completed. Presently, New Castle County has several completed trails designated as East Coast Greenway: portions of Route 4 and 72, Churchmans Road, the James F. Hall Trail in Newark; the Christina Riverwalk in Wilmington; and the Riverfront Greenway in New Castle. The Delaware East Coast Greenway, DelDOT, WILMAPCO, and local agencies are working to plan and implement additional segments in conjunction with larger transportation improvements. In Maryland, 166 miles of greenway are planned. To date, Cecil County has not improved or signed segments of the greenway.

Section 8: Path Forward

Summary and Recommendations

Based on the findings of this report, more people, jobs, passenger vehicles, and trucks will continue to move in and through the inter-regional study area. By 2035, overall population is anticipated to increase by 12.4%, while employment is expected to grow by 14.5%. From 2002 records, total traffic and truck volumes are projected to rise by 54% and 69.8%, respectively.

One of the reasons for the increase in population and employment in this region is attributed to the Maryland Base Realignment and Closure (BRAC) which began in 2005 and was completed in 2011. BRAC, which was initiated through the U.S. Department of Defense, closes and realigns military installations to ensure that the military is provided efficient infrastructure and to increase operation readiness.

Of particular interest to the WILMAPCO region is the expansion of the Aberdeen Proving Grounds in Harford County, Maryland. Planning and advocacy work must continue for transportation improvements that are critical to workforce mobility. Several transportation and infrastructure improvements have been suggested to help accommodate the influx of new residents and employment positions during the next few years. Closing the rail service gap in Cecil County (from Newark, Delaware to Perryville, Maryland) continues to remain a key initiative.

Continued efforts should be made to expand inter-county transit services and reduce commuter related automobile activity, put more freight on rails to mitigate the increasing congestion on major roadways, and coordinate overall planning activities to reduce greenhouse gases. Overall, current inter-regional involvement and activities should continue. And through further inter-agency communication, additional measures to take can be determined.

It is the aim with each iteration of this document, that reported demographic and travel forecasts for 2035 and 2040 would prompt planning agencies to explore innovative strategies that will result in a desirable and prosperous outcome. By using this document as a resource to identify strengths and opportunities for improvements, all participating agencies should be better prepared to communicate with one another in a manner which will ultimately accomplish shared inter-regional objectives.

Appendix: Regional Coordination Agencies

The following agencies comprise the study area.

Baltimore Metropolitan Council (BMC)

The BMC is an organization of the elected executives of Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties. The executives identify regional interests and develop collaborative strategies, plans, and programs which will improve the quality of life and economic vitality throughout the area. BMC staff provides technical support to the Baltimore Regional Transportation Board, and is also engaged in economic and demographic research, computer mapping applications, air and water quality programs, cooperative purchasing, and rideshare coordination.

Contact Information
Larry Klimovitz
Phone: (410) 732-9563
email: lklimovitz@baltometro.org
www.baltometro.org

Caroline County, Maryland Department of Planning and Codes

The Department of Planning and Codes Administration identifies and plans for the appropriate scale, type and location for the county's future residential growth, public facilities and economic development while working to preserve important agricultural industry and natural resources. The Department also protects public safety and welfare, property values and the environment by implementing and enforcing land development, building construction, and licensing regulations.

Contact Information
Katheleen Freeman
Phone: (410) 479-8100
email: info@carolineplancode.org
www.carolinemd.org/governmt/planning

Delaware Valley Regional Planning Commission (DVRPC)

Established in 1965, the DVRPC provides transportation planning for Bucks, Chester, Delaware, Montgomery and Philadelphia counties in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC's mission is to plan for future growth providing technical assistance and services; conducting high priority studies ; foster cooperation among various constituencies on diverse regional issues; determine and meet the needs of the private sector; and continuing public outreach efforts that promote two-way communication and public awareness of regional issues.

Contact Information
Barry Seymour
Phone: (215) 238-2831
email: bseymour@dvrpc.org
www.dvrpc.org

Dover/Kent County Metropolitan Planning Organization

The Dover/Kent County MPO is the federally-designated agency responsible for coordinating transportation planning and programming in Kent County, DE, including the towns of Milford and Smyrna. Plans and programs adopted by the MPO outline how federal transportation funds will be spent and must comply with federal laws governing clean air and transportation.

Contact Information
Rich Vetter
Phone: (302)387-6030
email: rich.vetter@doverkentmpo.org
www.doverentmpo.org

Appendix: Regional Coordination Agencies

Kent County, Maryland Department of Planning and Zoning

The Kent County Department of Planning and Zoning conducts long range plans, provides preservation and enhancement and guides development in Kent County, Maryland.

Contact Information
Gail Webb Owings
Phone: (410) 778-7475
email: gowings@kentgov.org
www.kentcounty.com/gov/planzone

Lancaster County Transportation Coordinating Committee (LCTCC)

The LCTCC is the MPO designated by the Governor of Pennsylvania to carry out the transportation planning process in Lancaster County. The 22-member LCTCC includes all nine Lancaster County Planning Commission members and other members representing the County Commissioners, City of Lancaster, State Legislature, the local transit and airport authorities, and PennDOT. Staff along with PennDOT and other planning partners and consultants, is responsible for developing federally required plans and programs.

Contact Information
James R. Cowhey
Phone: (717) 299-8333
email: planning@co.lancaster.pa.us
www.co.lancaster.pa.us/planning

South Jersey Transportation Planning Organization (SJTPO)

The SJTPO is the MPO for the southern New Jersey area, covering Atlantic, Cape May, Cumberland, and Salem counties. Formed in mid-1993, SJTPO replaced three smaller, existing MPOs while incorporating other areas not previously served. SJTPO works to provide a regional approach to solving transportation problems. SJTPO coordinates the planning activities of participating agencies and provides a forum for cooperative decision-making among state and local officials, transit operators, and the general public.

Contact Information
Timothy Chelius
Phone: (856) 794-1941
email: sjtpo@sjtpo.org
www.sjtpo.org

Queen Anne's County, Maryland Department of Planning

Queen Anne's is a Code Home Rule County located to the south and west of WILMAPCO. Queen Anne's County is a part of the Baltimore, Maryland Primary Metropolitan Statistical Area. It is governed by a five-member elected Board of County Commissioners. The staff consist of a county administrator, engineers, planners and those specializing in financial analysis, housing and community development, emergency services and parks and recreation.

Contact Information
Faith Elliot-Rossing
Phone: (410)758-1255
email: felliottrossing@qac.org
www.qac.org/depts/planzone

Appendix: Regional Coordination Agencies

Sussex County, Delaware Department of Planning

Transportation Planning for Sussex County is conducted by the Delaware Department of Transportation in cooperation with Sussex County.

Contact Information
Lawerence Lank
Phone: (302) 855-7878
www.sussexcountyde.gov/dept/pz

York County Planning Commission (YCPC)

The YCPC was created in 1959 by the Board of County Commissioners. The commission prepares a comprehensive plan, as well as administers Federal programs such as the Community Development Block Grant Program and the Metropolitan Transportation Planning Program. Technical assistance is provided to municipalities requesting planning services such as development of Comprehensive Plans, Zoning Ordinances and Subdivision\Land Development Ordinances. The Planning Commission also reviews and makes recommendations to municipalities on proposed plans, ordinances and ordinance amendments as well as all subdivision and land development plans.

Contact Information
Felicia Dell
Phone: (717)771-9870
email: fdell@ycpc.org
www.ycpc.org