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2017 Regional Progress Report



Improve Quality
Of Life



Efficiently
Transport
People



Support Economic
Growth, Activity and
Goods Movement

January 2018

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I. INTRODUCTION

The Wilmington Area Planning Council (WILMAPCO) is the Metropolitan Planning Organization (MPO) for Cecil County, Maryland and New Castle County, Delaware. We are charged with planning and coordinating transportation investments for the Wilmington region.



The Wilmington region is home to nearly 660,600 people, most of whom (84%) live in New Castle County. Wilmington, a financial hub supporting a population of more than 71,000, serves as the principal city. Urbanized development stretches outside of Wilmington along the I-95 corridor, from the Town of Elkton to the Pennsylvania border. Natural and rural landscapes, sprawling suburbs, and small towns blanket the rest of the region.

WILMAPCO's mission is to create the best transportation Plan for the region, one that meets all the requirements mandated by the Federal Clean Air Act and its Amendments (CAAA) and the Fixing America's Surface Transportation Act (FAST).

WILMAPCO's Regional Transportation Plan (RTP) establishes the region's long-term transportation goals, and identifies objectives and actions to realize them. Below are the goals and objectives listed in the 2040 RTP, 2015 Update, adopted in 2015.

WILMAPCO RTP Goals and Objectives

Improve Quality of Life

- Protect public health and safety
- Preserve natural and cultural resources
- Promote active transportation
- Ensure transportation choice and equity

Efficiently Transport People

- Improve transportation system performance
- Promote accessibility and connectivity
- Engage the public via an open involvement process

Support Sustainable Economic Development and Goods Movement

- Maximize our investments
- Develop effective transportation networks
- Plan for energy security and climate change

The Regional Progress Report tracks the progress of various **actions** associated with the objectives above.

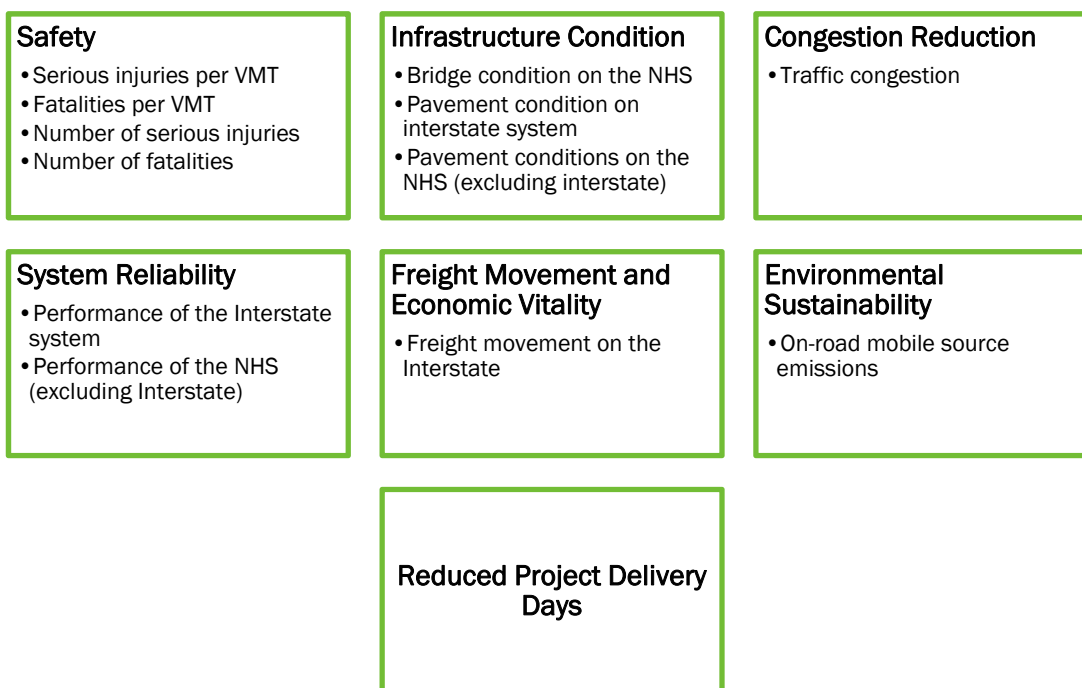
Each action is assessed individually with a quantitative or qualitative performance indicator or measure. Potential performance measures were identified in the 2015 Update to the 2040 RTP. They are identified in the report, along with National Performance Measures (discussed in the next section), and other measures. Considering the assessment, each action is assigned one of three traffic light colors to indicate its progress. Reds are given to those actions which are off track from their objectives. Yellows are given for actions partially off track; and greens for actions which are on target.

Taken as a whole, the Progress Report identifies where we have made good progress with our long-range plan and where more attention is needed.

II. NATIONAL PERFORMANCE MANAGEMENT UPDATE

Performance measurement was a chief aspiration of the Moving Ahead for Progress in the 21st Century, (MAP-21) the preceding federal transportation legislation and is carried over in the current FAST Act.

National Goal Areas and Performance Measures¹



Performance measures are to be developed by both state DOTs and their corresponding MPOs in coordination with one another. Our coordination with the Maryland and Delaware Departments of Transportation (MDOT and DeIDOT) began with the 2014 Progress Report. Measures have been generally agreed upon, but are still being developed.

Data unavailability precludes us from presenting the eventual performance measures or targets in this report. The required national performance measures are highlighted where they might fit in each action, even if the measure is not ready.

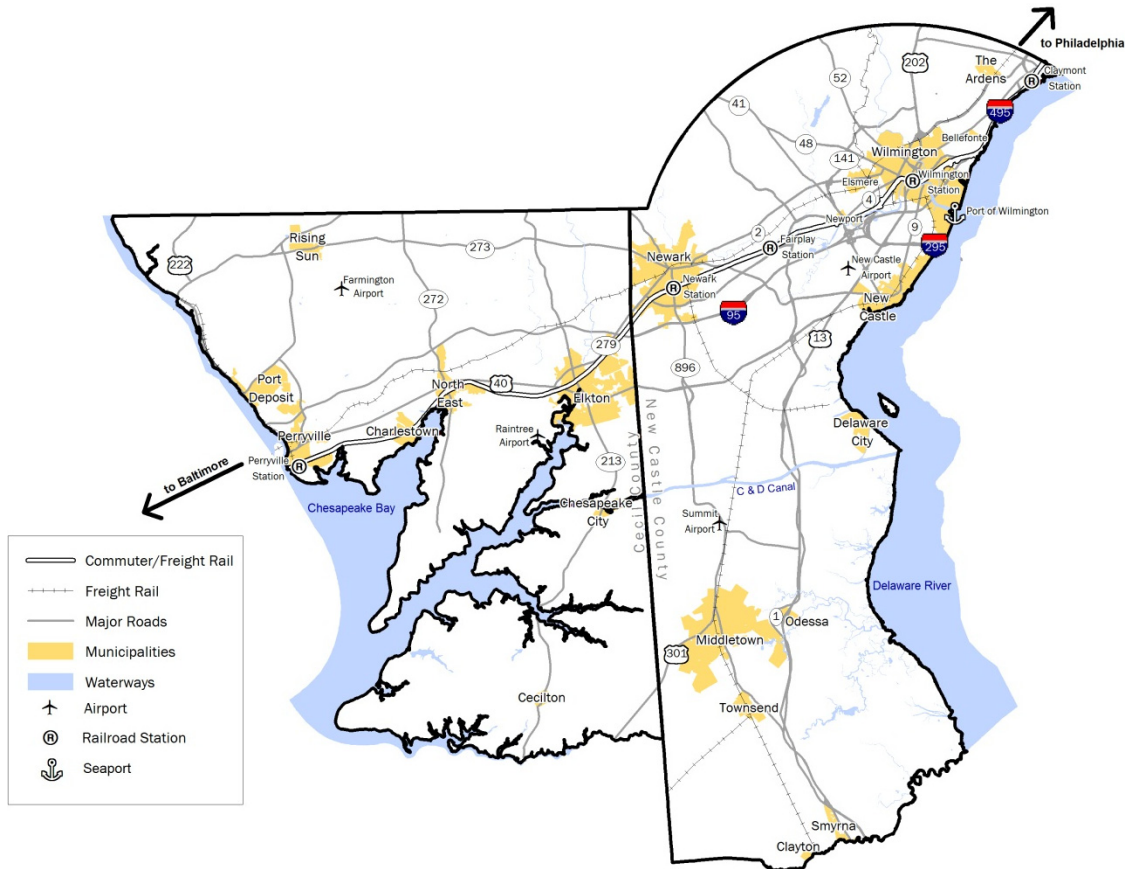
While these national performance measures are useful for establishing universal measures across the country, they only assess baseline conditions, year-to-year. They do not examine the “why,” or root causes, of an observed trend. This report strives to do just that. Often our indicators take a deeper dive into the trends, and “connect the dots” as to why performance in one area is excelling, while in another it is flagging.

¹ AASHTO. MAP-21 Analysis: Performance Management Provisions. July 2012.

III. SYSTEM STATUS AND CORE TRENDS

The WILMAPCO region is home to some 660,600 people and 329,600 jobs, most of which are situated around the I-95 and commuter/freight rail corridor in the region's north. The highways which run along this corridor, and those which connect it from the north and south, form the bedrock of the region's transportation system.

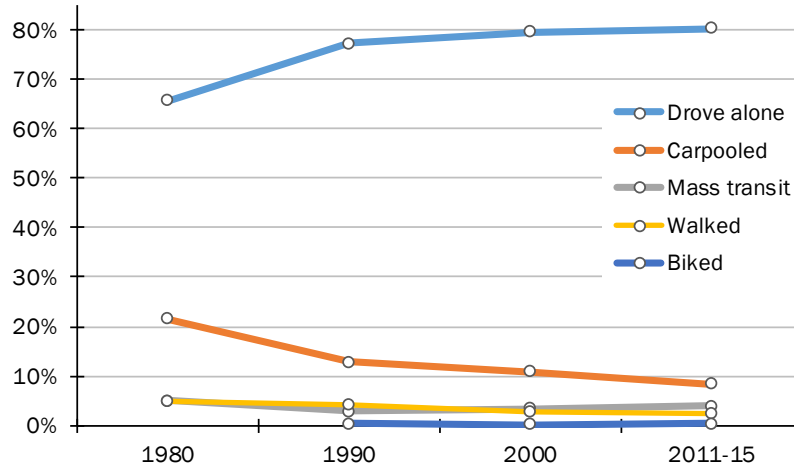
Regional Transportation Network



During the past century, land and transportation policies combined with affordable fuel and technology to enable the dispersion of population and jobs from the City of Wilmington. In 1920 more than 74% of New Castle County's residents lived within that city's limits – today the figure is only about 13%. Housing developments along new suburban highways captured most of the in migration.

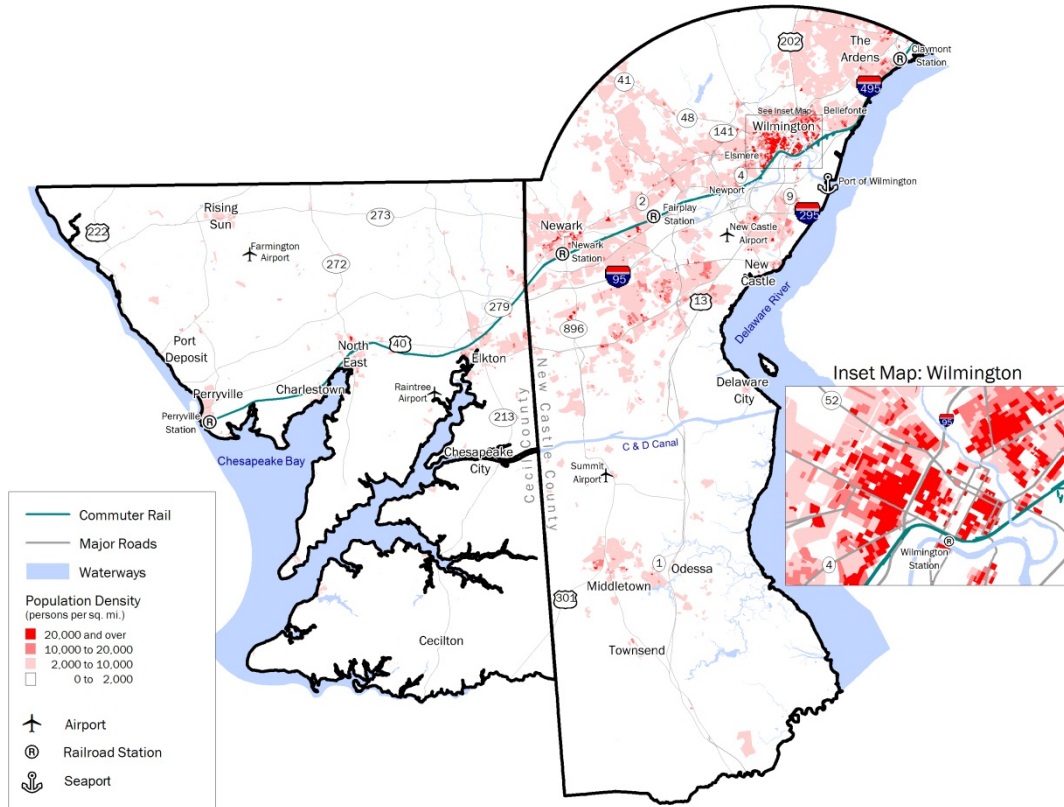
Car travel became the mode of choice for this increasingly dispersed population. Today, more workers drive alone to work than ever before, according to the U.S. Census. Cars, and the increasingly advanced web of highways on which they operate, have brought fast, efficient and unprecedented mobility to many of our region's residents and visitors.

Regional Means of Transportation to Work, U.S. Census, since 1980



Land use and transportation policies continue to support further de-densification, and, by extension, car travel. Current laws make it more difficult to redevelop existing property than to develop on open land. Crucially, our regional transportation planning has little influence over land use planning. It is, in practice, reactionary to it.

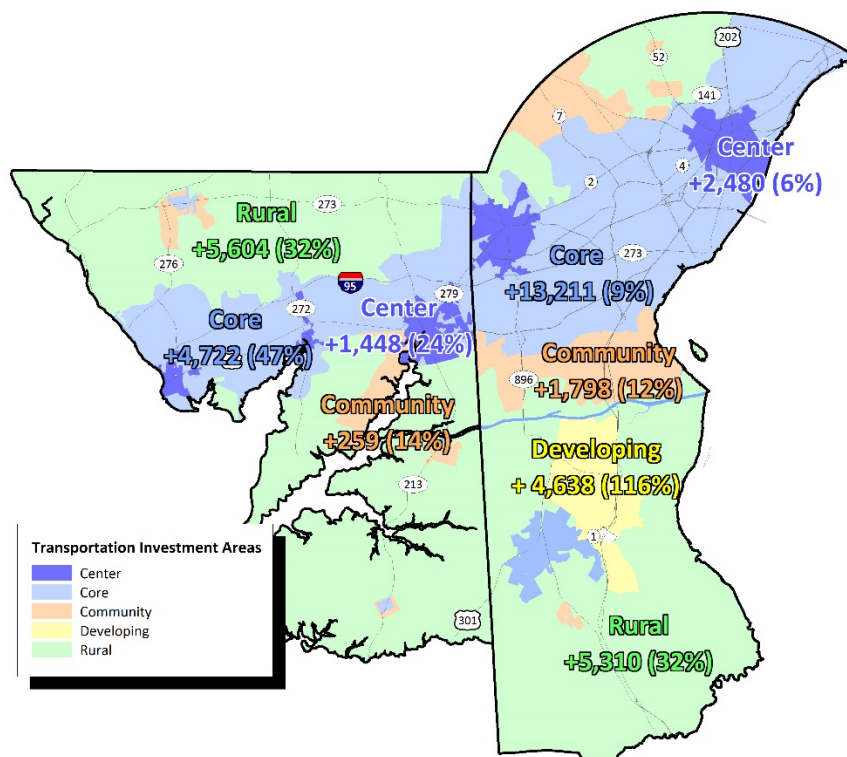
Regional Population Density, 2010 U.S. Census



Conceptually, fresh development on the region's edge triggers new highways, capacity and flow improvements to existing ones, and stifles expansion of mass transit. Each year, for example, a lower and lower percentage of our region's residents live within walking distance of a bus stop.

Mapped household projections from 2017 through 2040 illustrate the de-densification trend. Nearly half (45%) of household growth between 2017 and 2040 is projected to occur outside our Center and Core Transportation Investment Areas (TIAs²) along the I-95 corridor. These 17,600 new households will continue to create demand for highway expansion, especially in southern New Castle County, where the infrastructure is today underdeveloped. This limits available funding for transportation enhancements in the developed areas.

Projected Household Change through 2040

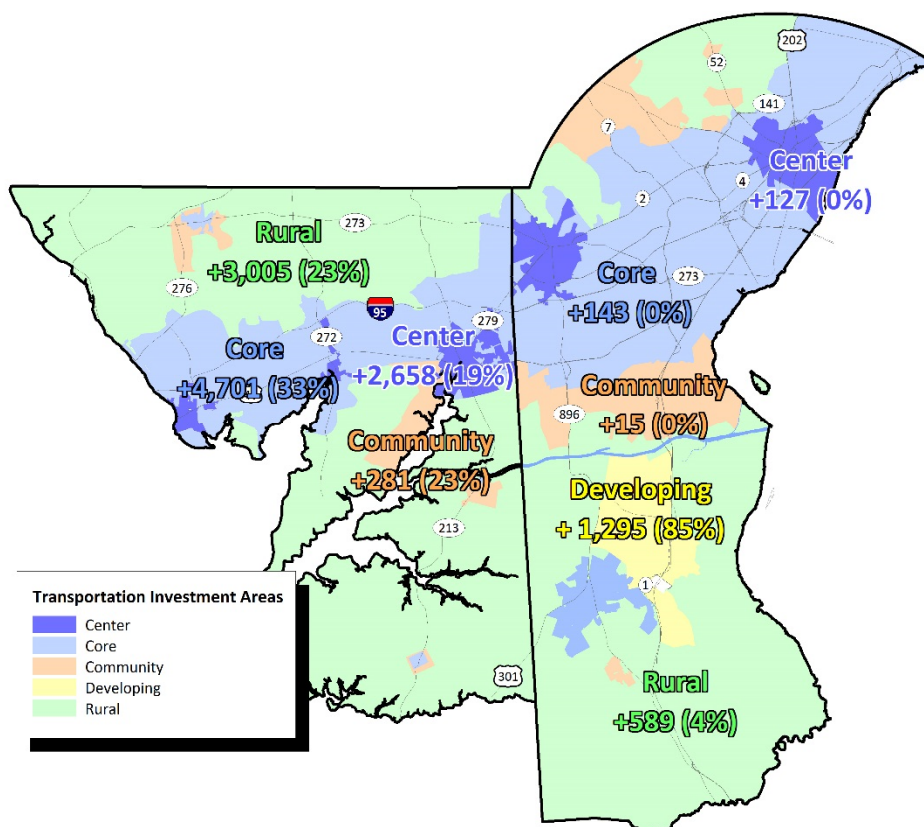


Further, this impressive household growth outside the Center/Core is projected to be matched by employment growth. Forty percent of new jobs through 2040 are expected to

² Transportation Investment Areas (TIAs) are identified in the 2040 RTP. Each has a different transportation investment profile, with the most intensive investments reserved for the Centers and the least intensive for the Rural areas.

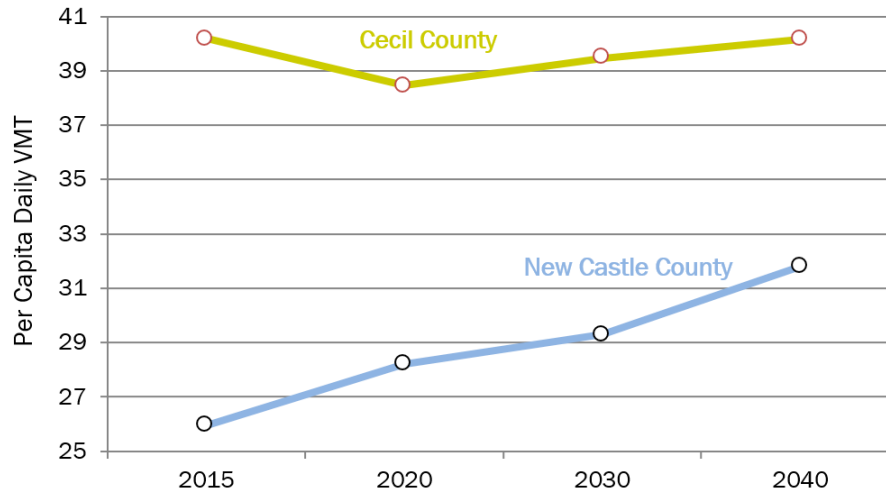
take root in Community, Developing and Rural TIAs. In New Castle County, 60% of the new jobs are expected to fall within its “Developing” TIA in the south.

Projected Employment Change through 2040



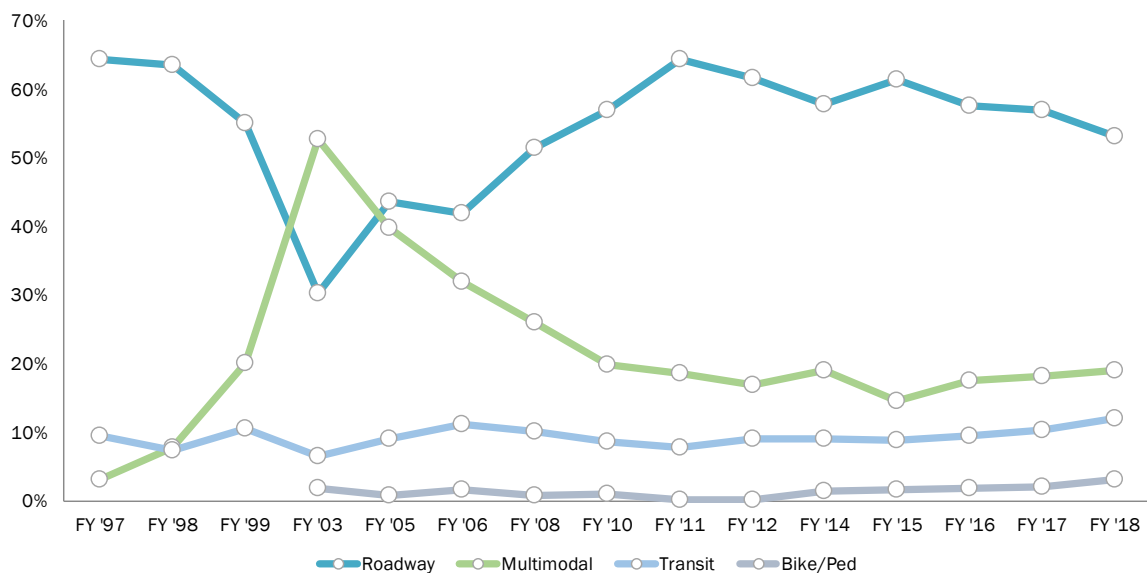
These demographic projections are helping push projected vehicle miles traveled (VMT) to new heights. Regionally, we expect VMT to increase by 32% between 2015 and 2040, though households are only expected to grow by 19% during that period. New Castle County’s southwards growth is largely behind the figures, compelling future households to log an additional eight miles of driving each day. These figures challenge our RTP action to lower VMT.

Projected Daily VMT per Households, 2015 – 2040³



Continued sprawl and VMT growth has correlated with a roadway-dominate Transportation Improvement Program (TIP) during the last decade⁴. As shown in the graph below, roadway projects typically receive well over half of the planned capital expenditures. Transit projects usually account for about 10% of capital spending, with even less assigned to dedicated pedestrian and bicycle projects.

TIP Funding by Mode, since FY 1997⁵



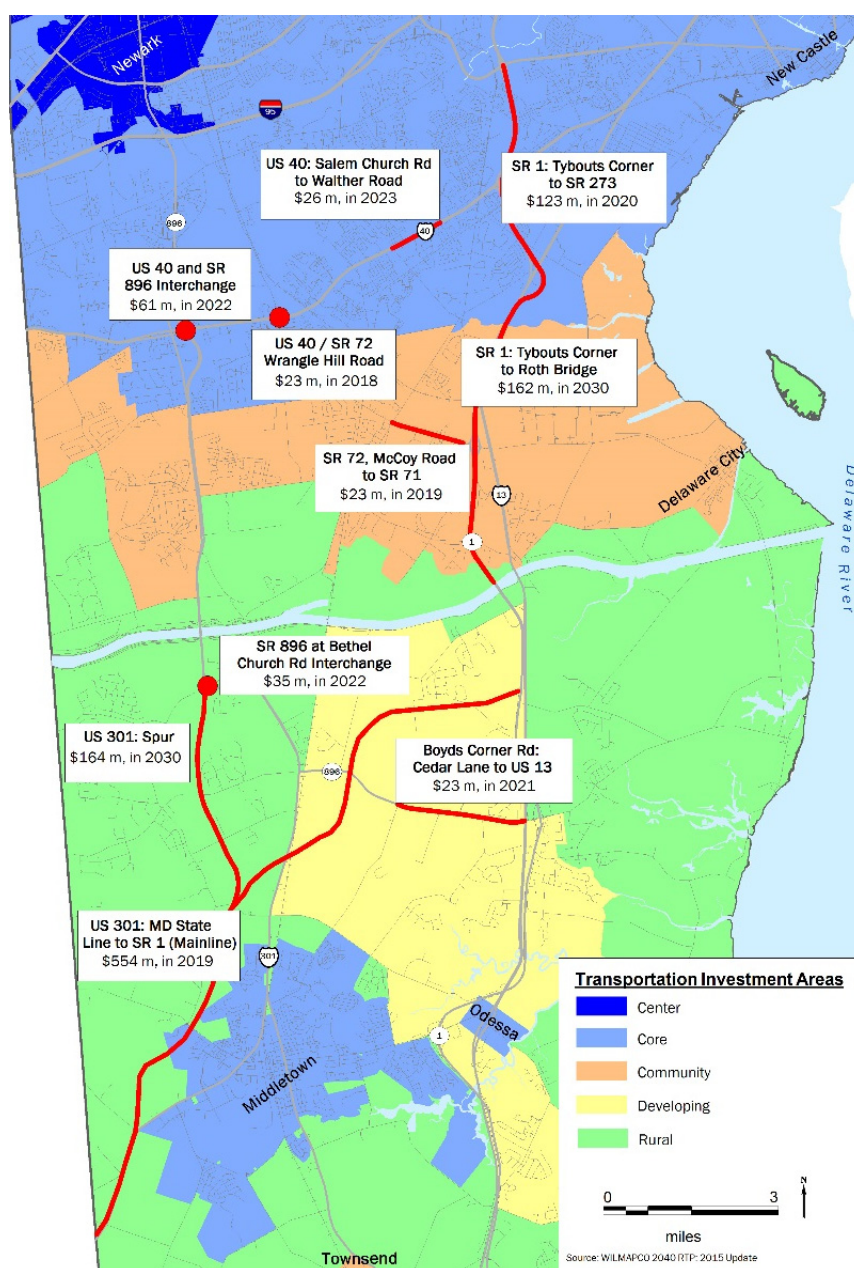
³ Figures for 2025 and 2035 are interpolated.

⁴ The TIP is an annually updated, four-year listing of planned transportation project spending.

⁵ Source: WILMAPCO TIP. Note the chart does not include funding for projects categorized as "other."

The map on the following page illustrates where much of this highway investment is going. Most planned spending (\$1.1 billion or 60%) in New Castle County is tied to ten major projects south of US 40. These projects are responses to the ongoing southwards sprawl and help drive continued VMT growth.

Major 2040 RTP Projects (Above \$15 Million) in Southern New Castle County



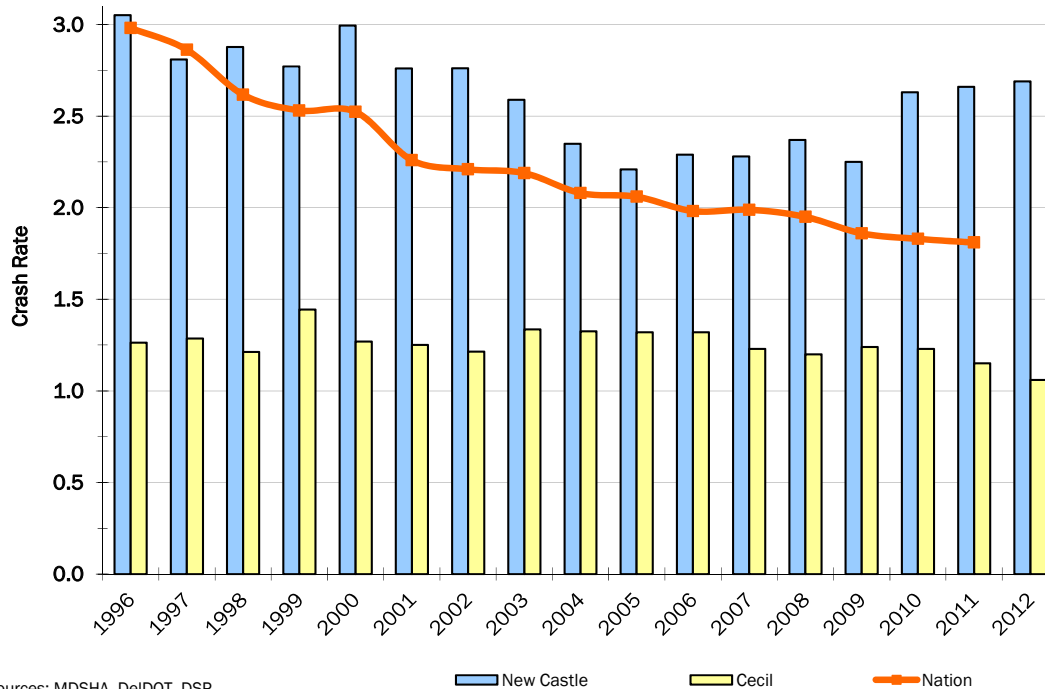


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Technological advances in cars and on the highways where they operate have led to a safer and cleaner transportation system. These two indicators are perhaps the brightest "green lights" we have uncovered in the present report.

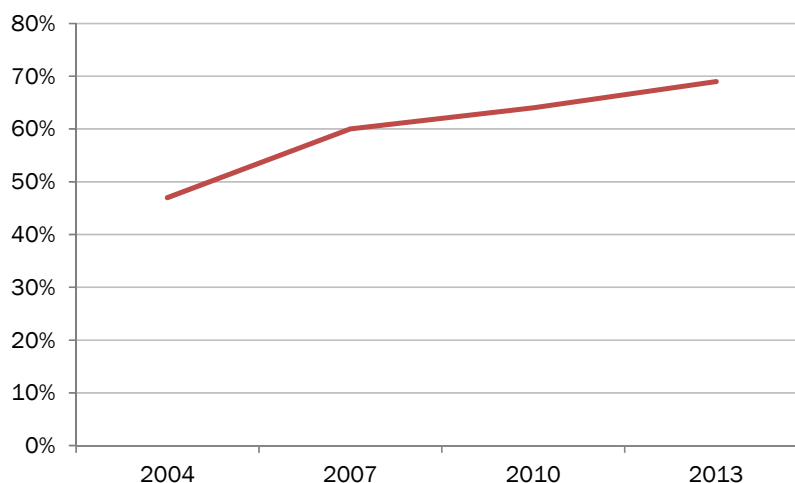
The leading cause of unintentional death in the United States, vehicle crashes have dropped over the past decade. Since 1996, total crashes are down by 12% in New Castle County and 16% in Cecil County. While these figures are good, they have not kept pace with crash declines nationally (down 39%).

Crash Rate per Annual Vehicle Miles Traveled, since 1996



In addition to fewer crashes, more vehicles are using EZ-Pass, an automatic tolling device. This promotes free flowing traffic along our tolled highways, shortening travel times. The graph below averages EZ-Pass use at tolling sites along the I-95 and SR 1 expressways in the WILMAPCO region, as reported by the Maryland and Delaware Departments of Transportation. In 2004 fewer than half (47%) of vehicles utilized the technology along these routes; in 2013, 69% did so.

EZ-Pass Adoption along Regional Expressways, since 2004



Additionally, as will be detailed in the first section of this report, cleaner engines and fuels have helped slash emissions in regulated pollutants. Reductions in ozone and fine particulate matter emissions improve population health.

V. SUMMARY OF PROGRESS REPORT FINDINGS

Like other previous Progress Reports, the present document has uncovered reasons for optimism and concern. Overall, half (50%) of our actions received green lights, 34% yellow lights and 15% red lights.

Key areas of success include, but are not limited to: conforming to air-quality requirements, safer highway travel, our congestion mitigation process, our freight work, social justice initiatives, and complete streets, scenic byway and Greenway planning efforts.

Problem areas include, but are not limited to: encouraging future growth in places with existing infrastructure, continued growth in single occupancy vehicle trips, the decline of population within walking distance to bus stops, ensuring affordable transportation choices, and identifying transportation funding.

GOAL: IMPROVE QUALITY OF LIFE

Obj. 1: Protect Public Health and Safety



Wilmington's western neighborhoods and beyond from atop St. Francis Hospital

Actions

- Develop and maintain a safe transportation system
- Support disaster planning efforts
- Reduce and mitigate the impacts of transportation emissions
- Improve access to healthy and affordable food, employment, and services

Develop and Maintain a Safe Transportation System



Injuries/fatalities per VMT (RTP)

Pedestrian and bicycle crashes (RTP)

Number and rate of serious injuries and fatalities (NPM)

Number of nonmotorized serious injuries and fatalities (NPM)

The RTP identifies safety as the “first priority” in making transportation investments.

Safety features into much planning at WILMAPCO. Staff supports the development and interpretation of individual crash data in Delaware. These data feed into our project prioritization processes. Additionally, staff provides annual feedback and technical support with the Delaware Department of Transportation’s (DelDOT’s) Hazard Elimination Program, which aims to improve road safety.

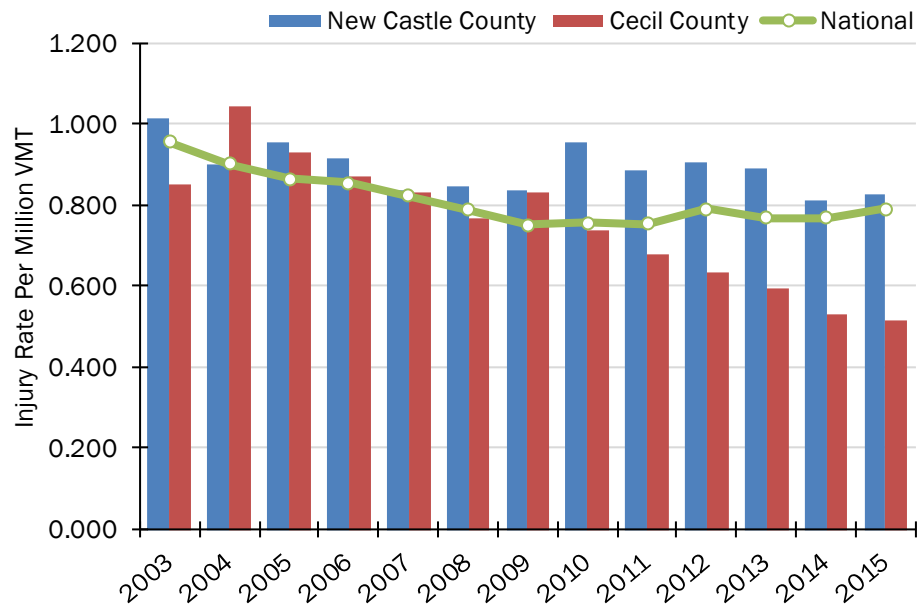
Progress with improving safety can be measured via injury and fatality crash rates. Overall, following years of steady declines, injuries and fatalities have increased in recent years. More crashes (along with more miles traveled) are driving the rise, which correlates with our continued heavy investment in highway travel.

In 2015, more than 15,200 crashes occurred on New Castle County roads – the highest figure in our records, which date to 1993. New Castle County’s 26 fatal pedestrian crashes in 2015 were the highest in our records, helping give Delaware the dubious distinction of being the most dangerous US state for people walking. And Cecil County’s 1,400 total crashes in 2016 reversed two years of steady declines.

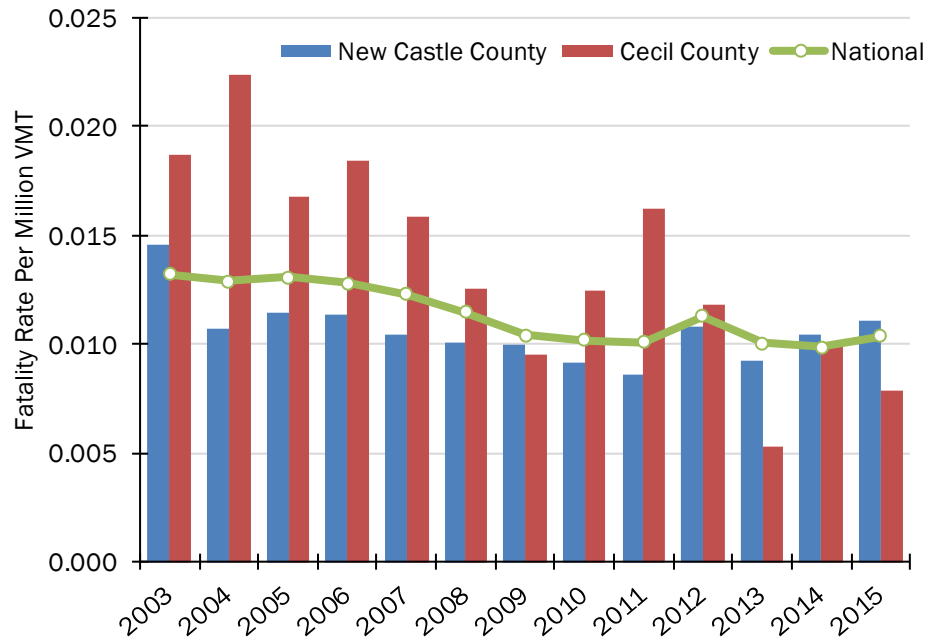
Regional bicycle crashes, meanwhile, have been trending downwards. Cecil County’s 4 bicycle crashes in 2016 were the lowest figure in our records.

Though made safer over the past century, vehicle travel is still downright dangerous. Efforts to support alternative means of transportation must be stepped up, which requires a pivot towards denser land policy and rethinking highway design along stretches where people do or could walk.

Road Injuries per VMT¹



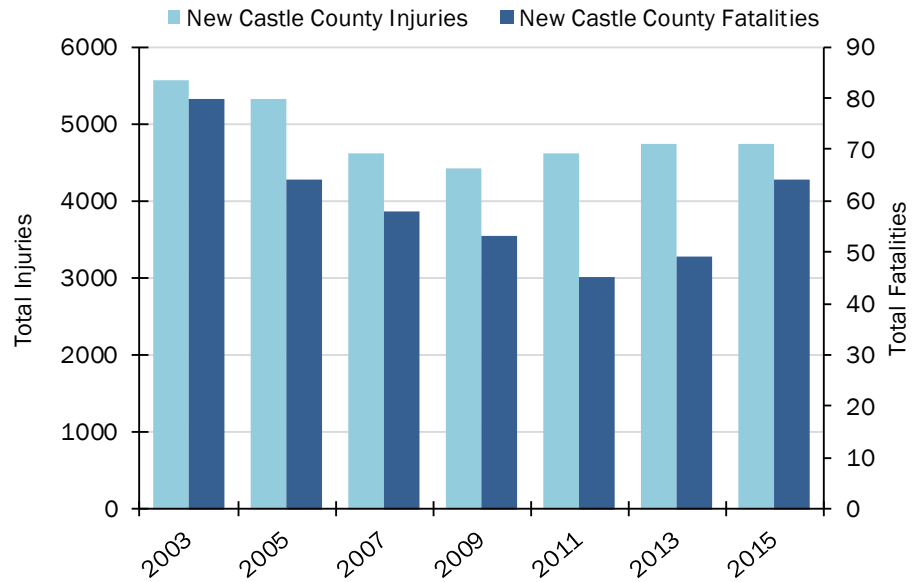
Road Fatalities per VMT²



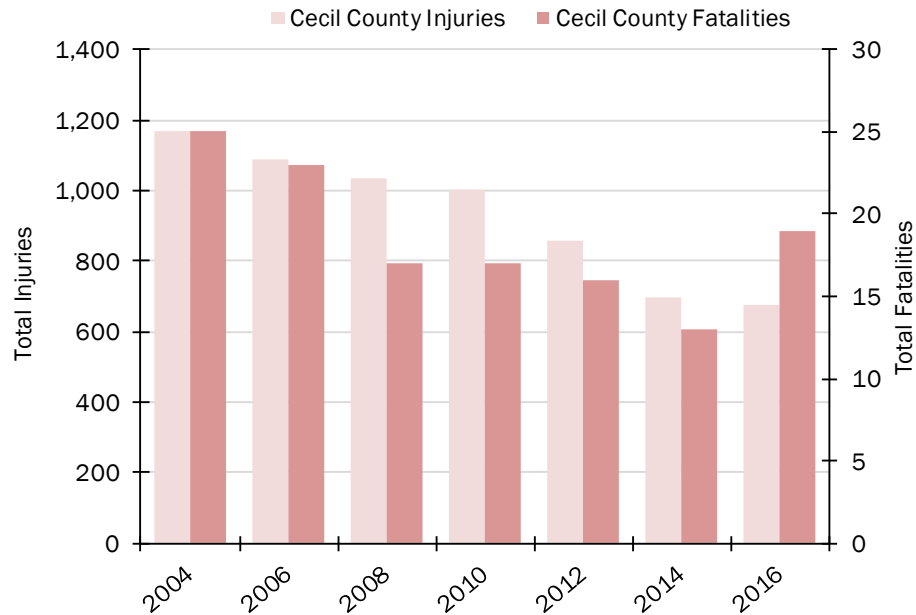
¹ Sources: SHA, DeIDOT, DSP

² Sources: SHA, DeIDOT, DSP

Total Road Injuries and Fatalities, New Castle County³



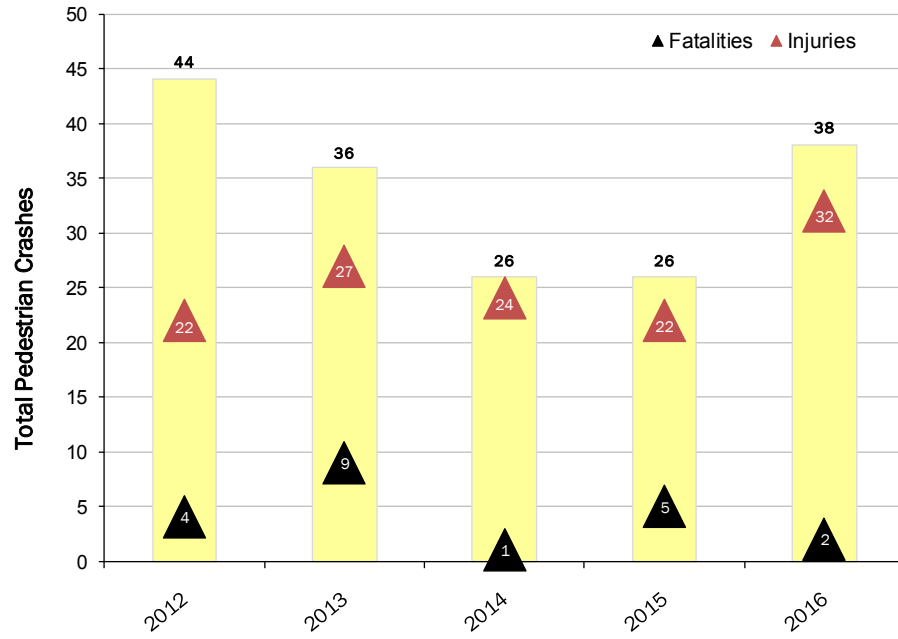
Total Road Injuries and Fatalities, Cecil County⁴



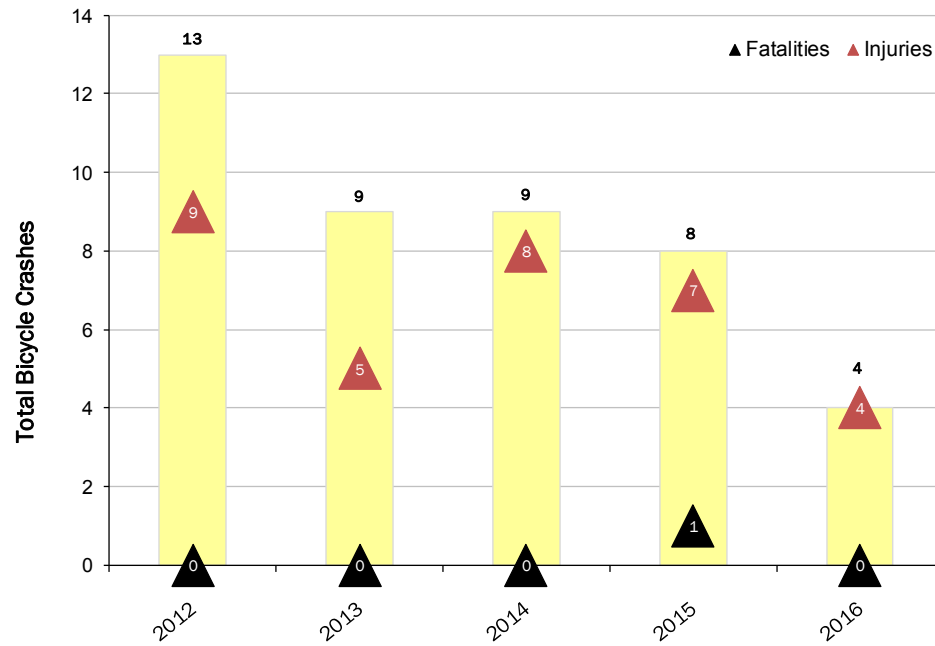
³ Source: DSP

⁴ Source: SHA

Pedestrian Crashes in Cecil County⁵



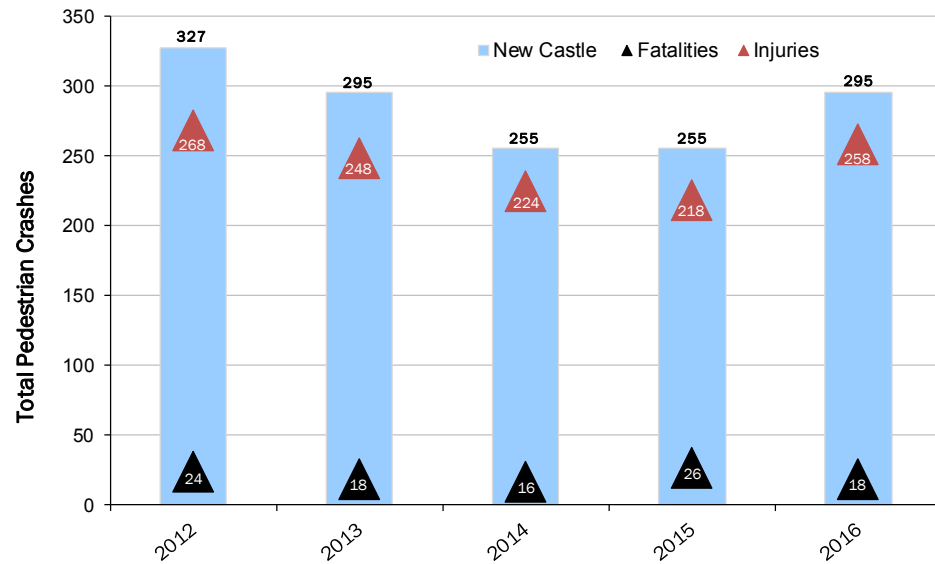
Bicycle Crashes in Cecil County⁶



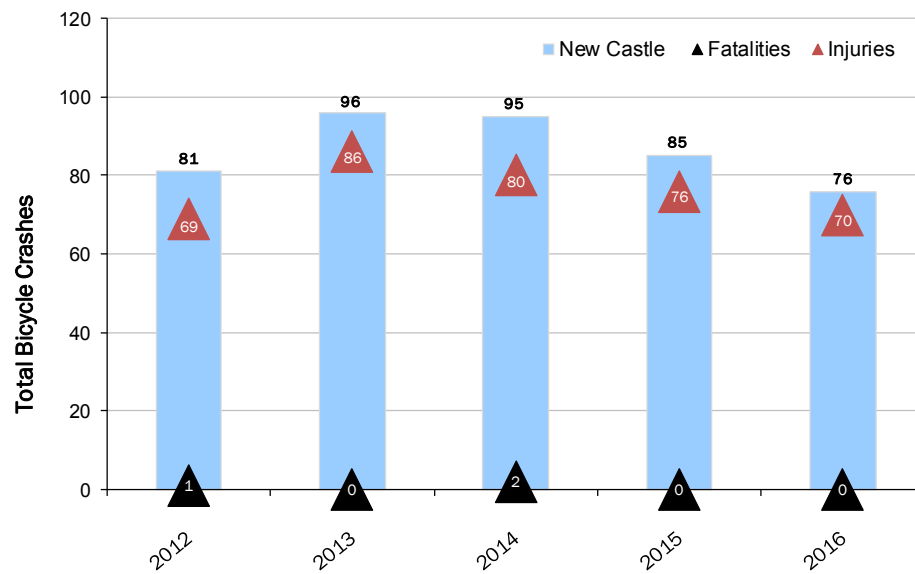
⁵ Source: SHA

⁶ Source: SHA

Pedestrian Crashes in New Castle County⁷



Bicycle Crashes in New Castle County⁸



⁷ Source DSP

⁸ Source: DSP

Support Disaster Planning Efforts



Qualitative review of UPWP (RTP)

The RTP asks WILMAPCO to use our strength in technical analyses to support national security efforts, and emergency preparedness planning.

WILMAPCO is meeting this charge. We have assisted our partners with traffic data collection and analyses, and have increased general awareness of emergency preparation. For example, we created a webpage (<http://www.wilmapco.org/emergency-preparedness>) to help prepare residents for emergencies, and highlighted the impacts to state-designated evacuation routes in our Sea-level Rise Vulnerability Assessment. We are also a member of DelDOT's Transportation Management Team, which aims to quicken the response to travel incidents.

Reduce and Mitigate the Impacts of Transportation Emissions



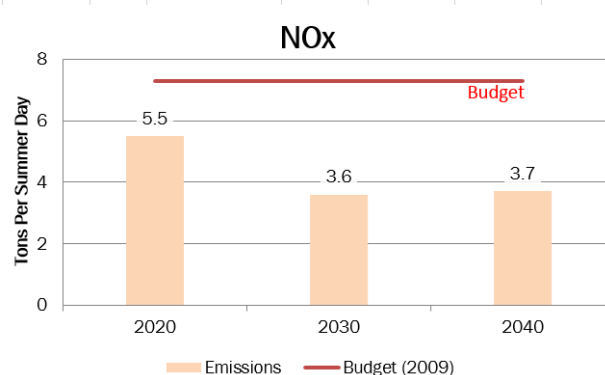
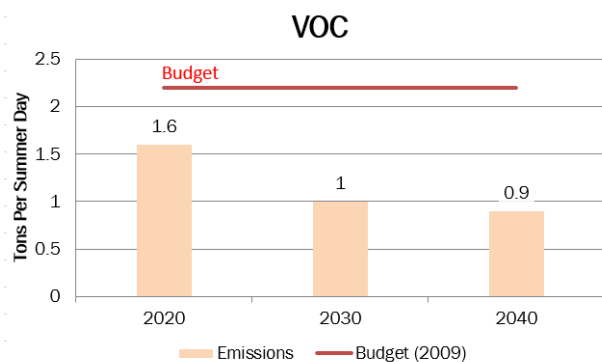
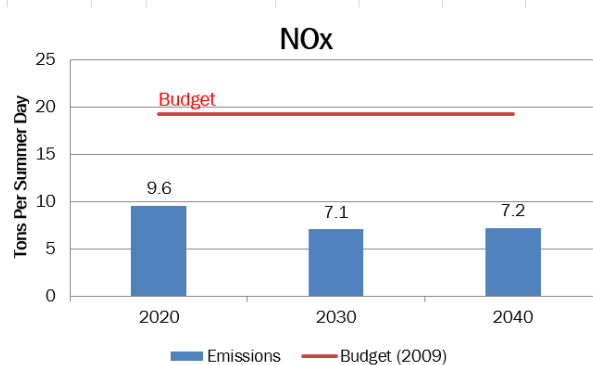
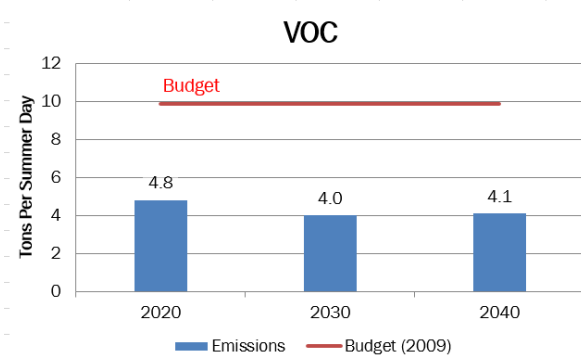
Air quality conformity (RTP)

Qualitative review of UPWP (RTP)

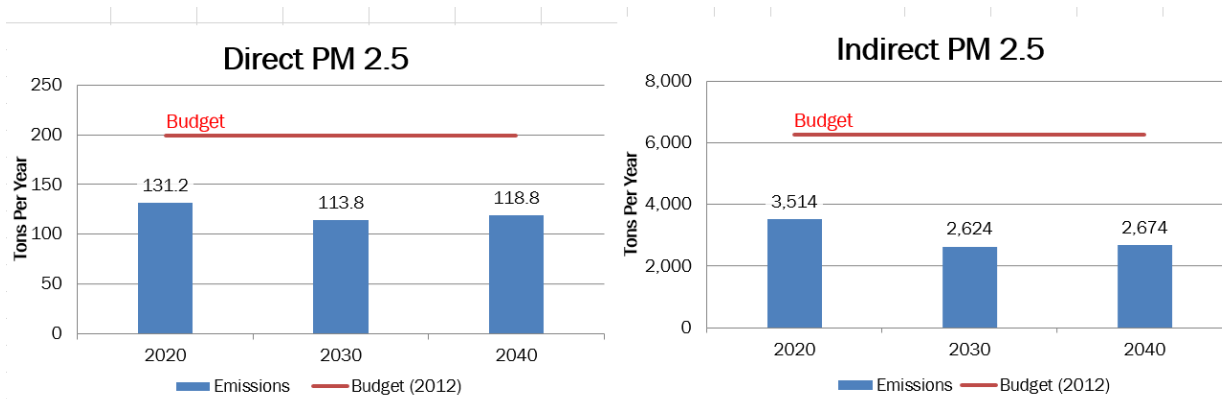
As New Castle County and Cecil County are in nonattainment for ozone and New Castle County is in maintenance for fine particulate matter (PM_{2.5}), one action in the 2040 RTP charged WILMAPCO with conforming to required air quality standards.

WILMAPCO has shown that our planned projects do conform with these standards. As shown in the graphs below, the projected emissions from the on-road transportation sector (including planned projects) fall below the required budgets and baselines. A word of caution, however, is necessary. Our projections indicate a slight uptick in transportation emissions during the 2030s. This is a result of increasing Vehicle Miles Traveled (VMT) and the implementation of all known vehicle technologies.

WILMAPCO is also a leader in promoting air quality awareness efforts through the Air Quality Partnership of Delaware. The partnership – a coalition of government agencies, businesses, and individuals – provides education about the health and environmental impacts of poor air quality, ways individuals can stay safe when air quality is particularly bad, and ways individuals can help reduce their contribution to air pollution.

On-road Mobile Source Ozone Projections in Cecil County⁹On-road Mobile Source Ozone Projections in New Castle County¹⁰⁹ Source: MDOT¹⁰ Source: DelDOT

On-road Mobile Source Particulate Matter (PM_{2.5}) Projections in New Castle County¹¹



Improve Access to Healthy and Affordable Food, Employment, and Services



Connectivity analysis (RTP)

The RTP directs WILMAPCO to improve access to healthy and affordable food, employment, and services. We have partially met this charge. A “connectivity analysis” was conducted in the 2015 Transportation Justice report that accessed connectivity from places with concentrations of seniors, the disabled, and zero car households. This analysis will be replicated regionwide for all neighborhoods with the next iteration of our Environmental Justice/Title VI Report in 2018.

Major sub-regional level studies conducted by WILMAPCO should also aim to meet this action. While improving transportation accessibility to employment and services is featured in all recent planning efforts, only the North Claymont Area Master Plan and the Route 9 Corridor Master Plan explicitly considered access to healthy and affordable food.

¹¹ Source: DeIDOT

GOAL: IMPROVE QUALITY OF LIFE

Obj. 2: Promote Active Transportation



People walking on a summer day in Downtown Elkton

Actions

- Fund alternative transportation in the TIP
- Apply a Complete Streets Policy in all WILMAPCO studies
- Prioritize TAP investments within areas of greatest need/capacity
- Develop and implement SRTS Programs

Fund Alternative Transportation in the TIP

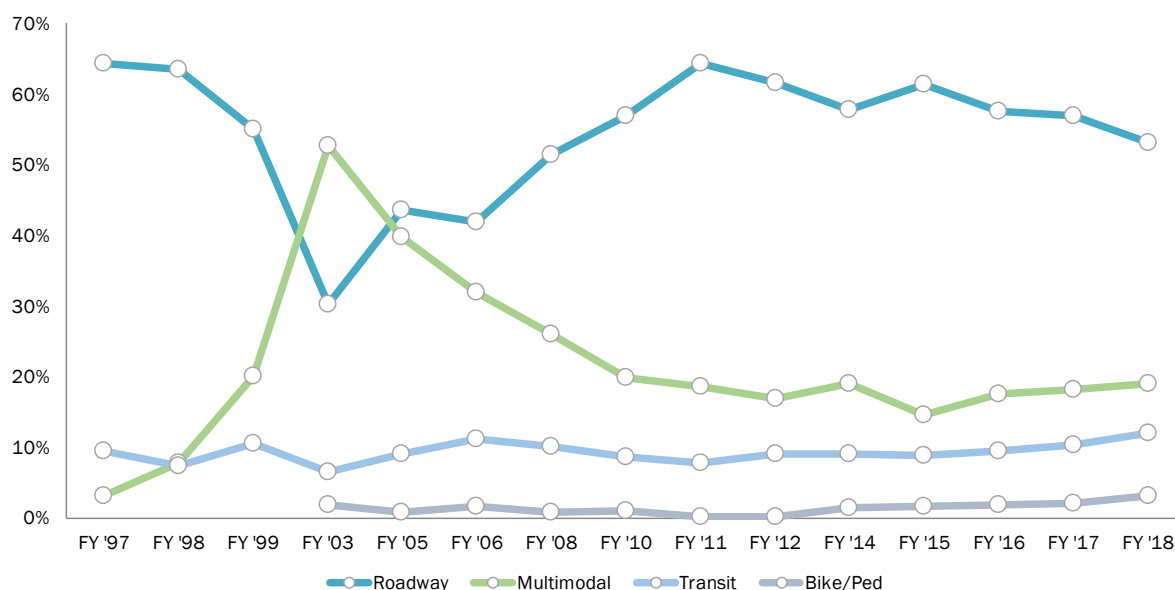


TIP funding trends (RTP)

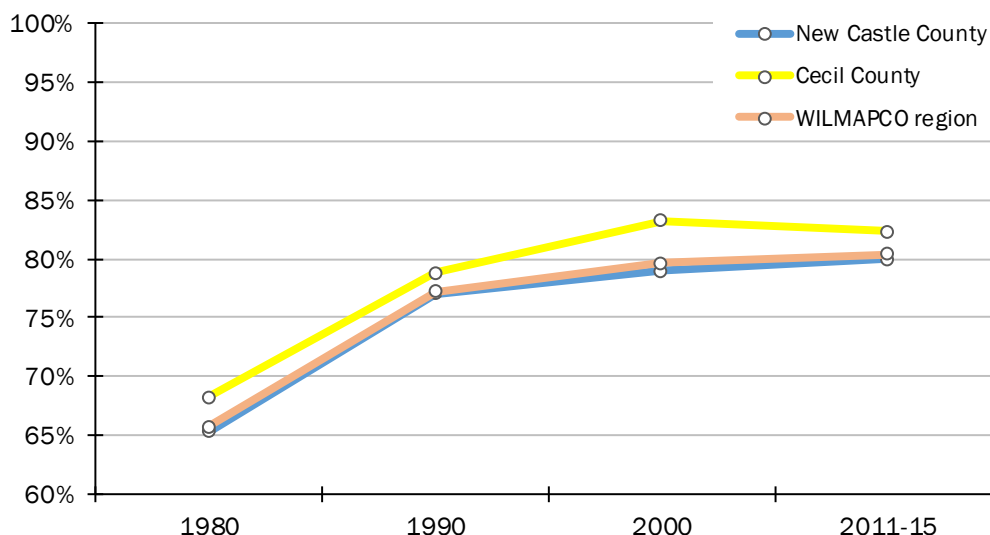
Percentage of pedestrian and bicycle trips (new)

The RTP asks WILMAPCO to fund alternative transportation in the Transportation Improvement Program (TIP) our listing of planned projects which have received federal funding. While still accounting for over half of planned TIP spending this year, the percentage of funding dedicated to roadway-only projects has dropped eight percentage points since the 2015 fiscal year. Those dollars have shifted to multimodal, transit, and bicycle/pedestrian projects. In 2018, transit and bicycle/pedestrian projects enjoyed their highest share of funding on record – 12% and 3% respectively. It remains to be seen if this additional funding will help stem the still-increasing percentage of regional workers who drive alone to work each day.

TIP Funding Trends, since 1997¹²



¹² Source: WILMAPCO

Percentage of Commuters Driving Alone, since 1980¹³

Apply a Complete Streets Policy in all WILMAPCO Studies



Qualitative review of UPWP (RTP)

The 2040 RTP urged WILMAPCO to apply a complete streets policy in all studies.

This action continues to be met. WILMAPCO sub-regional plans always consider multimodal options. Recent studies such as the SR 141 Corridor 20-year Land Use and Transportation Plan, the Glasgow Avenue Planning Study, the North Claymont Area Master Plan, and the Route 9 Corridor Master Plan all called for marked improvements to roadside pedestrian and bicycle facilities.

Prioritize TAP Investments Within Areas of Greatest Need/Capacity



Qualitative review of UPWP (RTP)

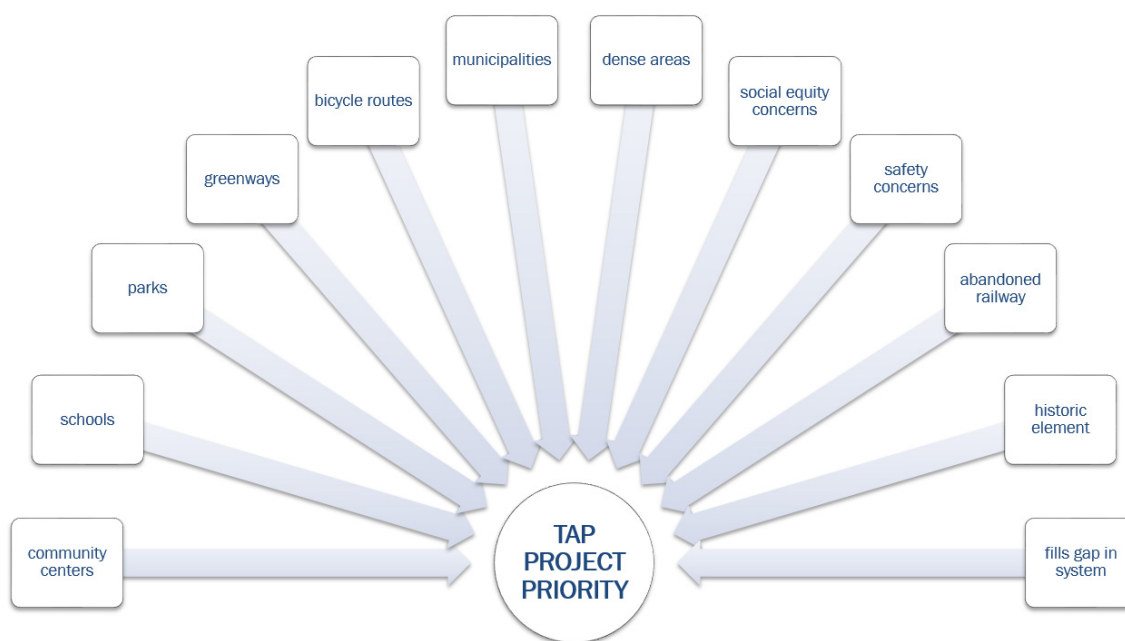
The 2040 RTP asked WILMAPCO to prioritize Transportation Alternative Program (TAP) investments within the areas of greatest need and capacity.

WILMAPCO has a separate project prioritization process to score TAP submissions and projects. Projects are scored based on the projects proximity to pedestrian and bicycle generating activities, its support for redevelopment, social equity, and overall potential

¹³ Source: ACS

use. Criteria are mostly quantitative, though a few measures are judged qualitatively. Projects can receive up to 36 points, with factors such as safety (5 possible points), bus stop proximity (4 possible points) and filling a gap in the nonmotorized system (4 possible points) weighted heaviest. Ultimately, the WILMAPCO Council ranks the proposed projects, with input from the Technical Advisory Committee, considering their technical score, cost-effectiveness, and other factors.

Elements of WILMAPCO's TAP Technical Scoring Index¹⁴



Unfortunately, this process was not consulted by DeIDOT with the latest round of funded TAP projects. Several high-ranking projects in Wilmington were bumped in favor of a new project in Wilmington and a low-scoring suburban bridge project. More consultation and a smoother administrative transition in Wilmington would have avoided this outcome.

¹⁴ For more information, and to see a full breakdown of the TAP project prioritization weighting, please visit: <http://www.wilmapco.org/priority>.

Develop and Implement SRTS Programs



Qualitative review of UPWP; percentage of school children walking/biking in participating schools (RTP)

The RTP asked planners to help develop and implement Safe Routes to School (SRTS) Programs. This federal initiative provides improved infrastructure and educational support to encourage more children to walk and bike to school.

WILMAPCO continues to successfully address this effort. In New Castle County, we have partnered with DeIDOT to support SRTS programs at about a dozen schools. We are today actively engaged in seven schools: Claymont, Downes, Eisenberg, Elbert-Palmer, McCullough, Stubbs, and Wilmington Montessori.

GOAL: IMPROVE QUALITY OF LIFE

Obj. 3: Ensure Transportation Choice and Equity



A typical streetscape in Wilmington's West Center City neighborhood

Actions

- Analyze the inequities EJ groups experience in the transportation network
- Reduce transportation costs
- Ensure EJ communities receive their fair share of transportation spending
- Plan for livable sustainable and prosperous neighborhoods

Analyze the Inequities EJ Groups Experience in the Transportation Network



Maintain an EJ report (RTP)

The RTP challenged WILMAPCO to analyze the inequities low-income and ethnic and racial minorities, or Environmental Justice (EJ) groups, experience with the transportation system.

This action continues to be met. Our last EJ study was conducted in 2013, and is due for an update next year. The 2013 study analyzed transportation funding equity, food desert analysis, bus connectivity, and more.

Reduce Transportation Costs

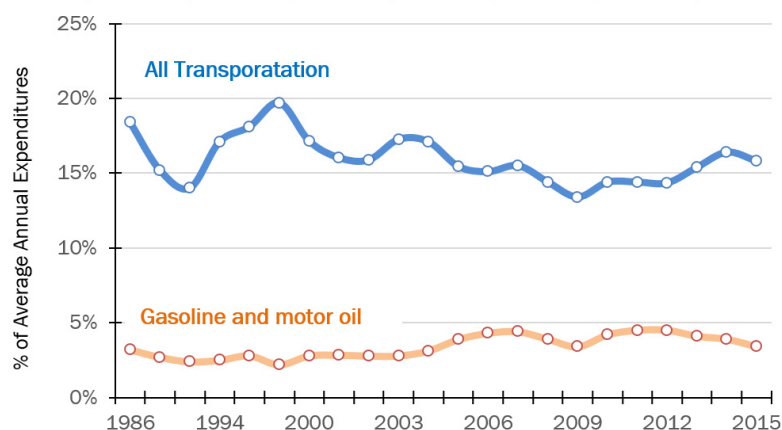


Transportation as a percentage of household spending (RTP)

The RTP asked that planners help ensure affordable transportation choices for residents. These include providing reliable alternative transportation options and reducing single occupancy vehicle trips.

The graph below tracks consumer spending on transportation generally and gasoline specifically in the Philadelphia Metropolitan Statistical Area (which includes the WILMAPCO region). Since the late 1990s, residents have spent a higher percentage of annual household spending on gasoline, but less on transportation.

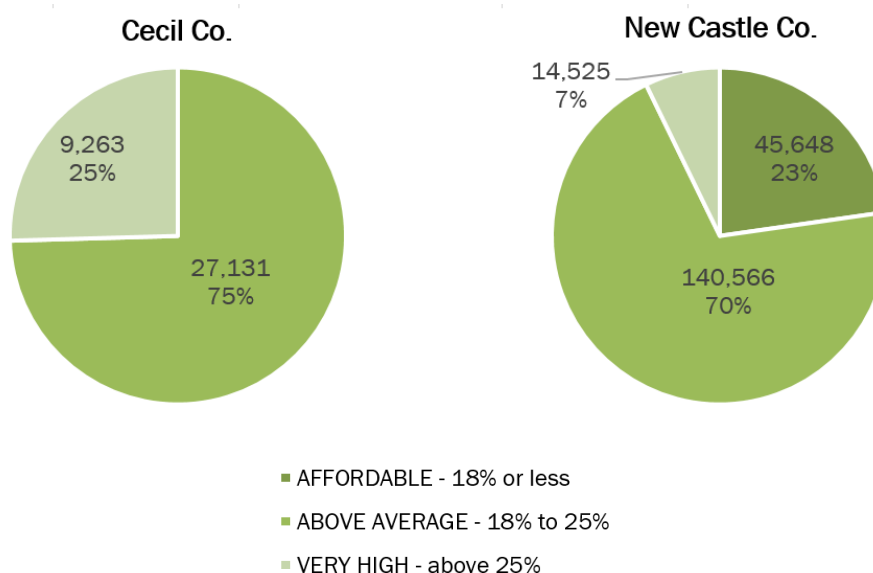
Percentage of Household Expenditures on Transportation and Gasoline, Metropolitan Philadelphia, since 1986¹⁵



¹⁵ Source: BLS

More specific to our region, WILMAPCO recently completed an analysis¹⁶, examining transportation and housing costs, by neighborhood. Only the City of Wilmington was found to be home to location efficient communities. Elsewhere, in the growing suburban and rural areas where most of our population resides, most households (81%) were estimated to spend more than 18% (the national average) of annual household income on transportation costs alone. The analysis showed that the average household in our region spends more than expected on transportation.

Median Transportation Costs of Households within WILMAPCO's Block Groups¹⁷



Our efforts regarding this action could improve. Logical long-term steps include fostering more location efficient places, curbing sprawl, and redistributing our heavy planned transportation spending away from suburban highways and into alternative transportation and urban street network redevelopment.

¹⁶ See the Transportation and Housing Costs Data Report. September 2016.

http://www.wilmapco.org/data/TranspHousingCosts_DataReport.pdf.

¹⁷ Source: Transportation and Housing Costs Data Report, WILMAPCO, September 2016.

http://www.wilmapco.org/data/TranspHousingCosts_DataReport.pdf. Cost data are measured at the census block group level against the area median income. Household numbers represent the total number of households in the block groups for each cost range. Original data source: Center for Neighborhood Technology.

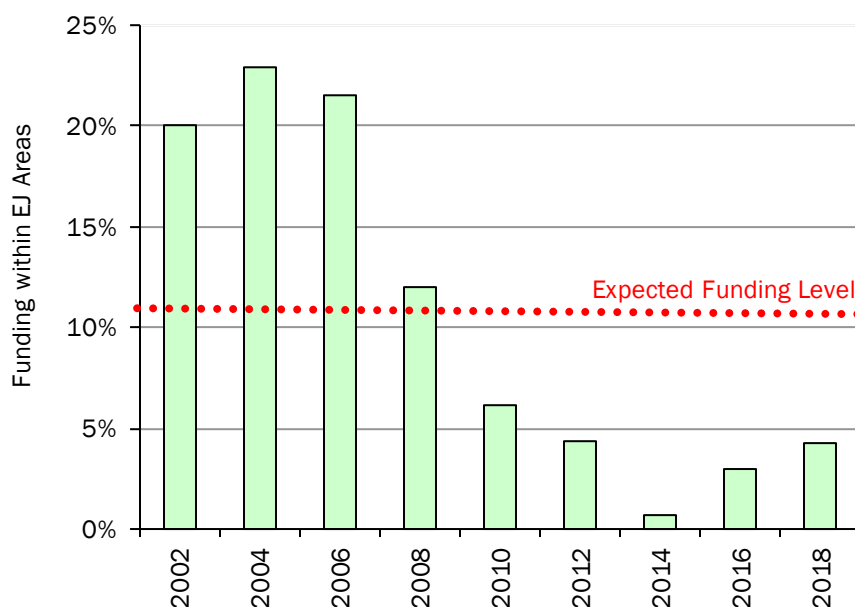
Ensure EJ Communities Receive their Fair Share of Transportation Spending



Tip spending within EJ communities (RTP)

The RTP asks WILMAPCO to ensure that EJ communities receive their fair share of transportation spending. The graph below updates our transportation equity benchmark analysis, found in EJ report. The analysis places the percentage of transportation project funding slated for EJ areas¹⁸ against the expected funding level, or benchmark. This benchmark is simply the percentage of the region's population within EJ areas.

TIP Spending Equity Benchmark, since FY 2002¹⁹



As shown in the graph above, funding for projects within EJ areas has dropped since the FY 2004 TIP. This is a result of a greater percentage of funding being directed to suburban highway expansion projects during the past decade, as outlined in the

¹⁸ Only TIP projects with specific spatial geometry were included in this analysis. Additionally, TIP projects within EJ neighborhoods were not counted if they fell on an expressway, such as I-95. A repaving project on a raised section of I-95, for example, represents little direct benefit to the surrounding neighborhoods. Data source: WILMAPCO.

¹⁹ Source: WILMAPCO. Only TIP projects with specific spatial geometry were included in this analysis. Additionally, TIP projects within EJ neighborhoods were not counted if they fell on an expressway, such as I-95. A repaving project on a raised section of I-95, for example, represents little direct benefit to the surrounding neighborhoods. Data source: WILMAPCO.

introduction and shown elsewhere in this report. WILMAPCO must work to reverse this inequitable spending pattern by funding a fair share of projects in low income and minority neighborhoods.

Plan for Livable, Sustainable, and Prosperous Neighborhoods



Qualitative review of UPWP (RTP)

The 2040 RTP directs WILMAPCO to plan for livable, sustainable, and prosperous neighborhoods. Recent studies such as the Glasgow Avenue Planning Study, the North Claymont Area Master Plan, and the Route 9 Corridor Master Plan all addressed improvements to quality of life, environmental sustainability, and economic development. WILMAPCO ultimately strives for a comprehensive approach to planning, that harmonizes diverse interests to produce the best plan for our region and its places.

GOAL: IMPROVE QUALITY OF LIFE

Obj. 4: Preserve our Natural and Cultural Resources



A natural area off Route 213 near Bohemia

Actions

- Support the designation and implementation of scenic byways
- Limit projects within Rural TIAs to preservation and safety
- Avoid projects within sensitive ecological areas
- Establish a better relationship between transportation and tourism

Support the Designation and Implementation of Scenic Byways



Qualitative review of UPWP (RTP)

Corridor management plans (RTP)

The RTP sought to support the designation and implementation of scenic byways. WILMAPCO has met this charge. Specifically, in 2016, we led the development of the Red Clay Valley Scenic Byways Design Standards. Staff also strengthened the recognition of the Harriet Tubman Underground Railroad Byway through our role with the South Wilmington Planning Network, along with recommendations to enhance signage for that byway along the Route 9 corridor with the Route 9 Corridor Master Plan.

Limit projects within Rural Transportation Investment Areas to Preservation and Safety & Avoid Projects Within Sensitive Ecological Areas



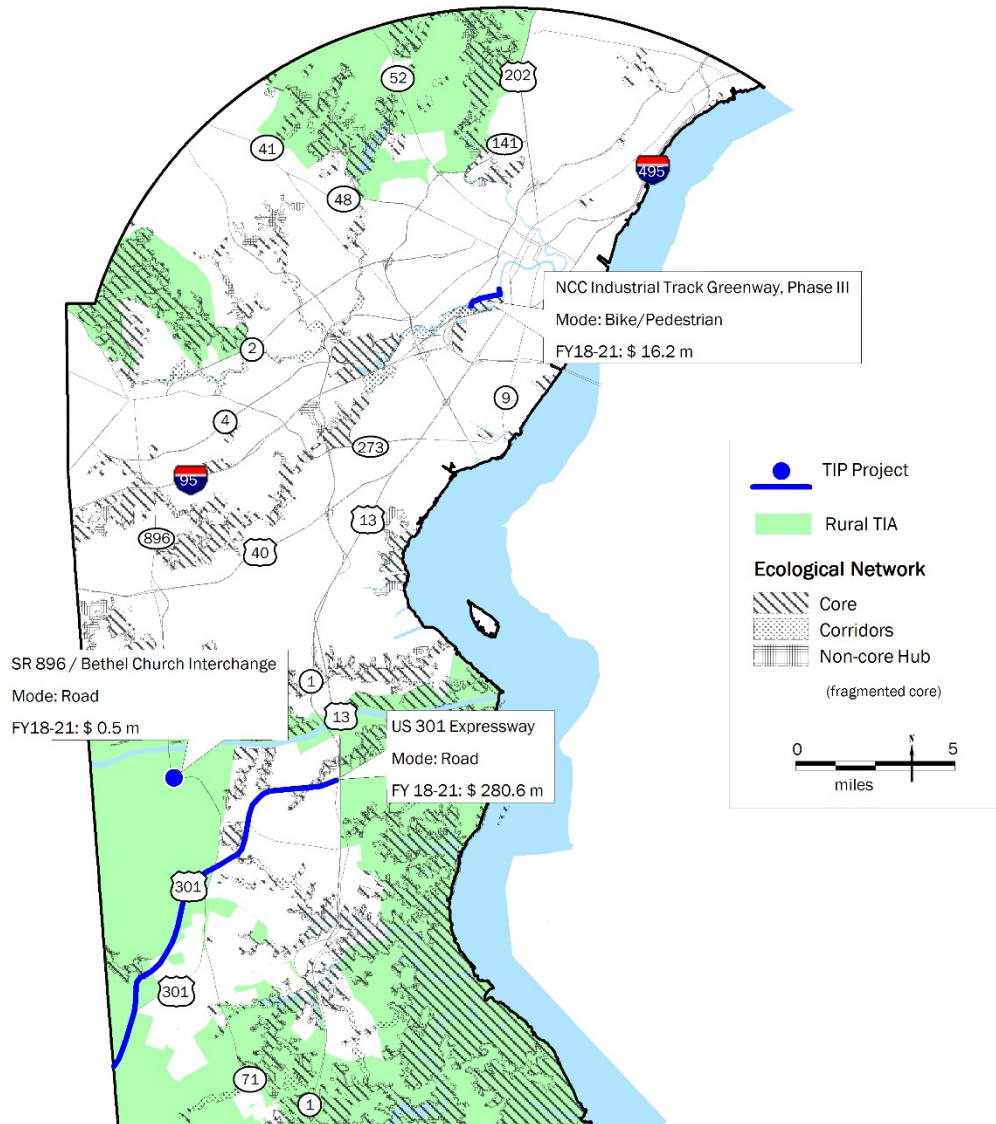
Analysis of RTP/aspiration projects (RTP)

The RTP identified certain types of projects to be discouraged in Rural Transportation Investment Areas²⁰. These include: intersection capacity projects, park-and-ride expansions, road building and widening, mass transit expansions and so on. Similarly, the RTP also directs WILMAPCO to avoid planning projects within sensitive ecological areas.

The map below illustrates a trio of expansion projects from the FY 2018-21 TIP which pass through rural lands and/or ecologically sensitive areas. The most significant of these is the continued building of the US 301 Expressway – a major new highway just north of Middletown. While each project these projects was approved after findings of no major local environmental impacts, each will bring lasting change to a sensitive landscape, and may trigger nearby land development.

²⁰ See the appendix for a matrix.

Current TIP Expansion Projects in Rural and Sensitive Natural Areas²¹



²¹ Source: WILMAPCO

Establish a Better Relationship Between Transportation and Tourism

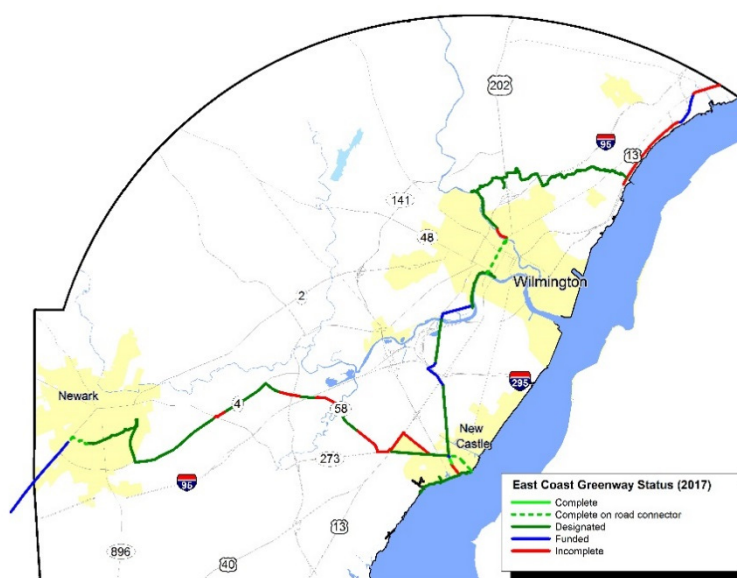
Greenway progress (RTP)



The RTP called for establishing a better relationship between transportation and tourism. Optimizing the transportation system generally will further this action, including improving wayfinding signage and transportation communication technologies. Progress has been made developing mobile apps that communicate traffic conditions and real-time bus information. WILMAPCO sub-regional studies also have an eye towards promoting tourism. In the Route 9 Corridor Master Plan, for example, increased attention to promoting the Harriet Tubman Underground Railroad Byway along the corridor was recommended.

Another key initiative which helps promote local mobility and tourism is the East Coast Greenway. The Greenway is a 3,000-mile trail linking Canada to Key West, which traverses the WILMAPCO region. New Castle County has completed (or funded) 78.5% of the network, which is up from 77% in 2015. Cecil County continues to lag behind in completing and designating its segments.

East Coast Greenway Status in New Castle County ²²



²² Source: WILMAPCO

GOAL: EFFICIENTLY TRANSPORT PEOPLE

Obj. 1: Improve System Performance



A view of the I-95 and SR 1 Interchange in Christiana

Actions

- Support high technology transit and highway projects
- Fund preservation projects first
- Support carpooling initiatives
- Fund expansion projects within Center and Core TIAs when necessary

Support High Technology Transit and Highway Projects

EZ-Pass use (RTP)

Reduce commuter bus travel times (RTP)

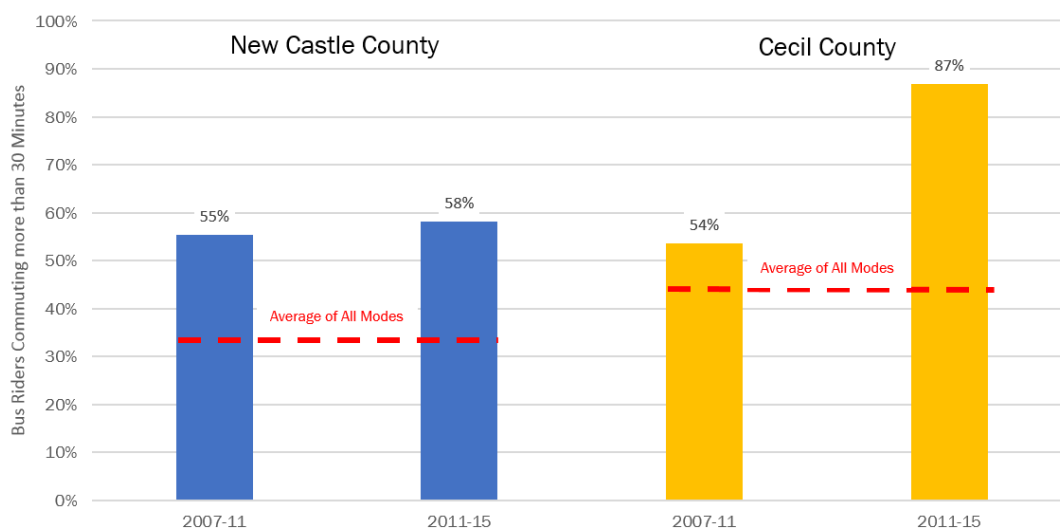
Transit on-time performance (RTP)



EZ-Pass data not received from DeIDOT. Requested multiple times.

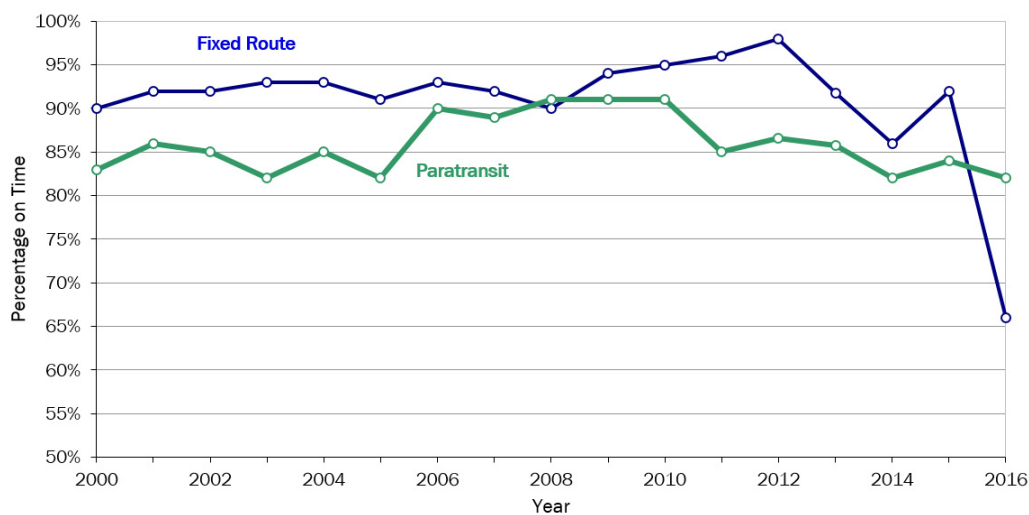
EZ-Pass data received from SHA. Subsequently requested in different format, but did not receive.

Bus Commutes of More Than 30 Minutes, since 2007-2011²³



²³ Source: ACS

On-time Bus Performance in New Castle County, since 2000²⁴



Fund Preservation Projects First

TIP preservation spending (RTP)

Municipal Street aid (RTP)

Road and bridge conditions (RTP)

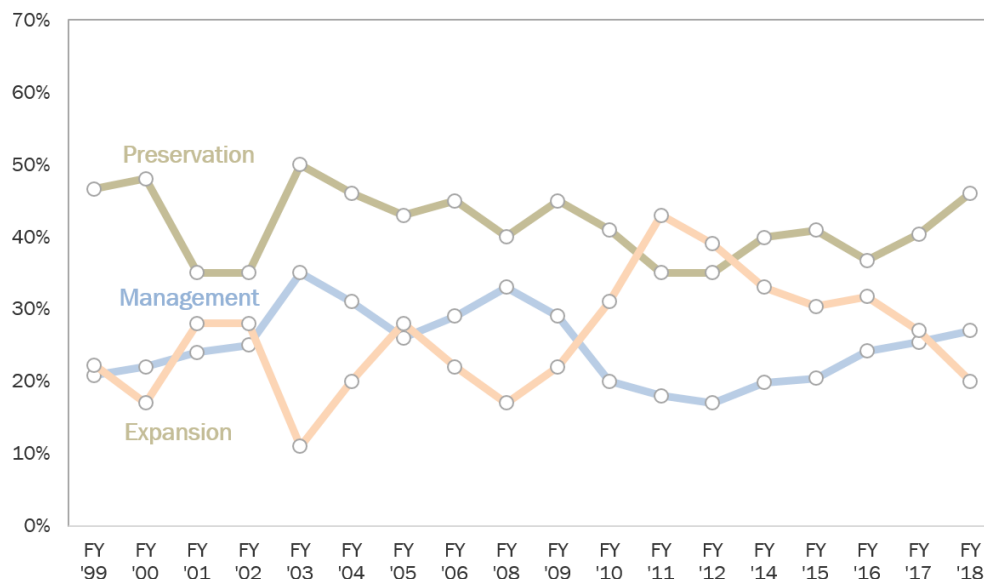


Road and bridge condition data not received from DeIDOT. Requested multiple times.

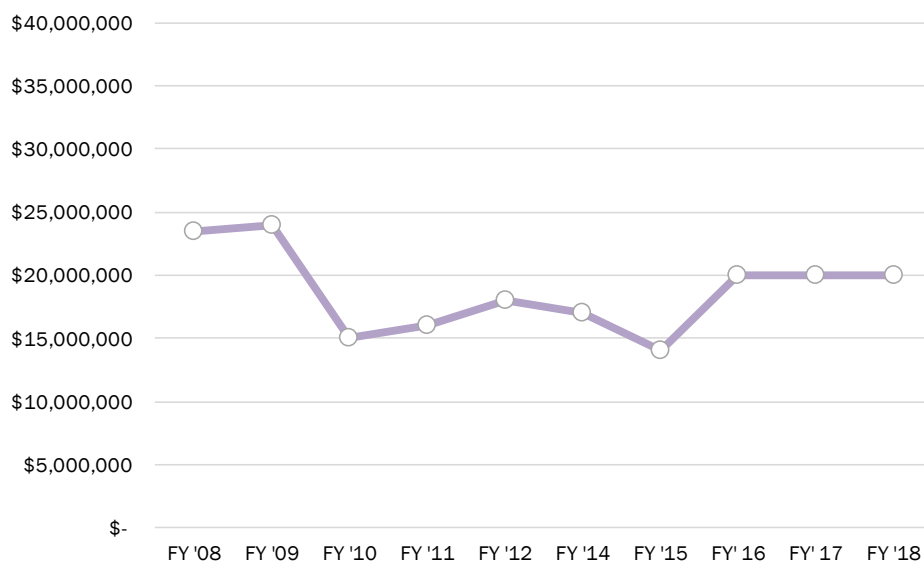
Bridge condition data received from SHA. Subsequently requested in different format, but did not receive.

²⁴ Source: DTC. Note: DTC began using Transit Master data to calculate Fixed Route on-time performance May 2016 vs manual checks.

TIP Funding by Category, since FY 1999²⁵



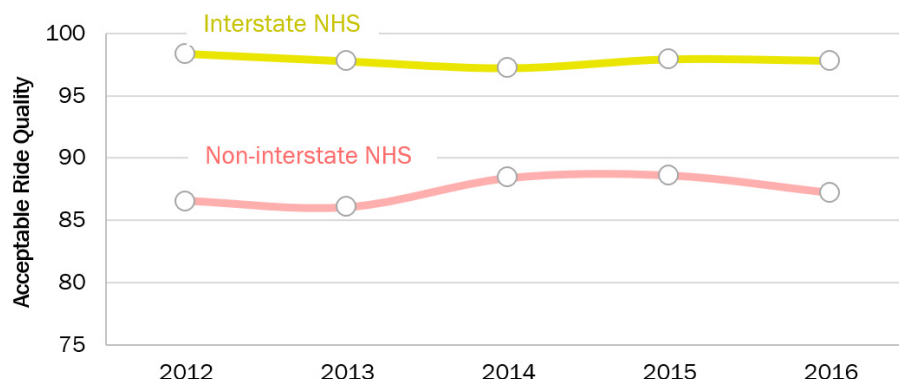
Municipal Street Aid Funding in the TIP, since FY 2008²⁶



²⁵ Source: WILMAPCO

²⁶ Source: WILMAPCO

Cecil County Highway Conditions, since 2012²⁷



Support Carpooling Initiatives



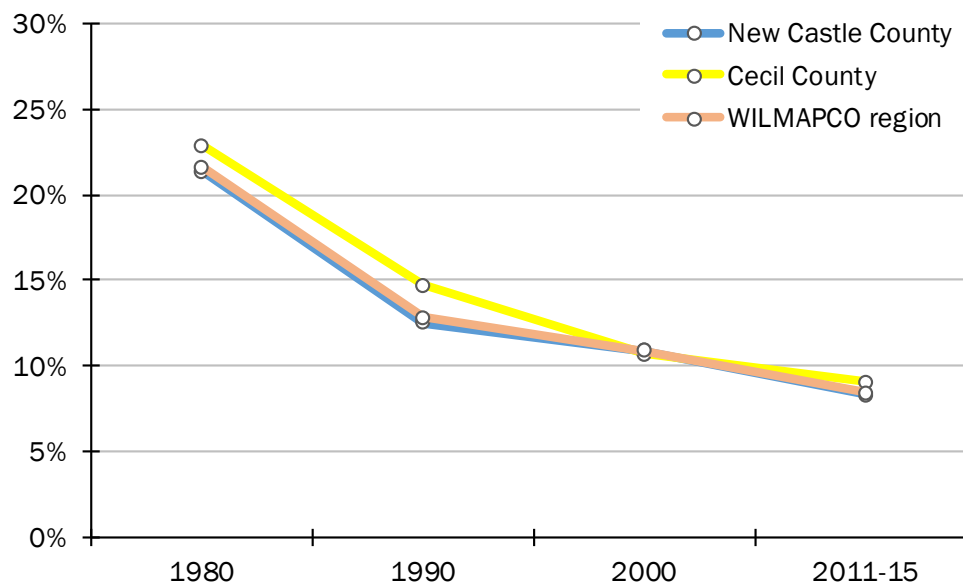
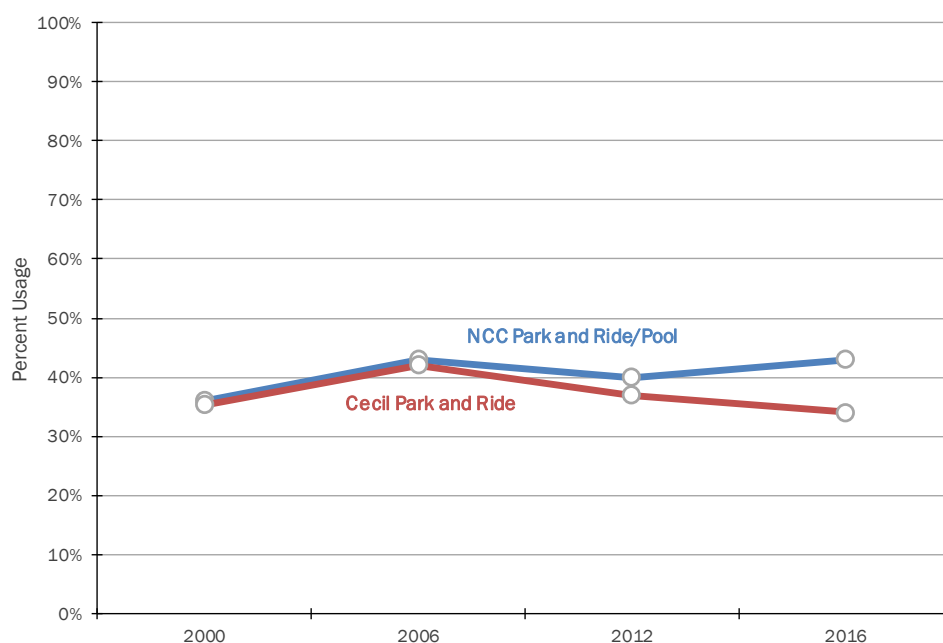
Percentage of workers carpooling (RTP)

Park-and-Ride lot use (RTP)

The RTP asks WILMAPCO to support carpooling initiatives. While Rideshare Delaware, a group which promotes car sharing, has been consistently funded in the TIP, carpooling commutes have remained in freefall since 1980. As shown in the graph below, in that year, over 21% of commutes regionally were made via carpool. Today the figure is less than 9%. Park and ride lots are also generally underutilized. As shown in the other graph below, on average, they are utilized to less than half of capacity.

Additional attention and resources should be provided to support carpooling. Beyond reversing our sprawling development pattern, emerging technologies may offer the best path forward to reducing single occupancy vehicle trips.

²⁷ Source: SHA. Note: in 2012 data collection was carried out in the inventory direction only.

Percentage of Workers Commuting via Carpool, since 1980 ²⁸Usage of Park and Ride/Pool Parking Lots, since 2000²⁹²⁸ Source: ACS²⁹ Sources: WILMAPCO, SHA

Fund Expansion Projects Within Center and Core TIAs When Necessary

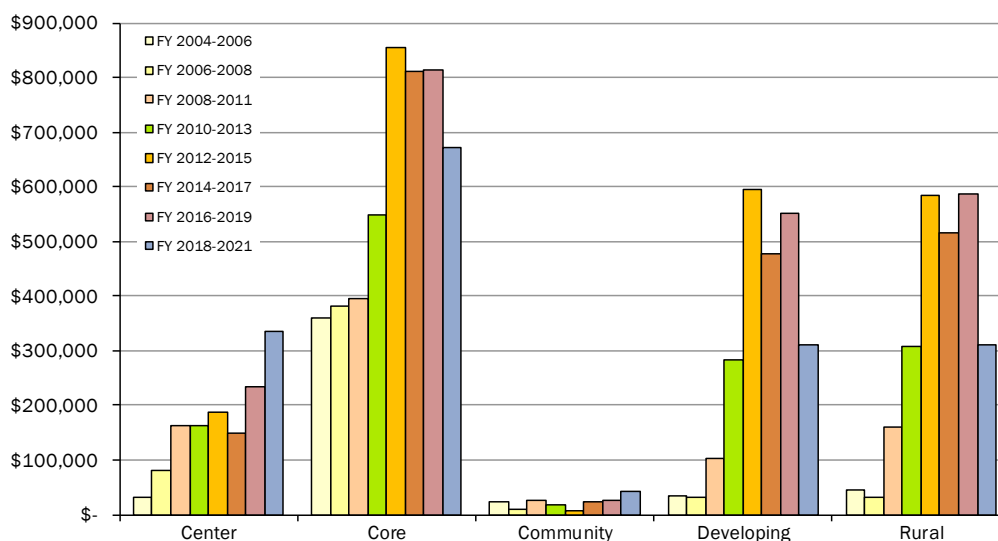


Percentage of funding within Centers and Cores versus projects on the shelf (RTP)

The RTP asks WILMAPCO to fund expansion projects within our Center and Core TIAs when necessary. Home to the most people and jobs, the Core TIA has historically received the heaviest amount of planned spending, as shown on the graph below. Most of the funding there, and in the generally less well-funded Centers, are going towards preserving existing infrastructure and not expanding it. System expansions, such as new rail infrastructure and highway interchange upgrades, however, are sometimes necessary in Center and Core TIAs to help promote redevelopment there.

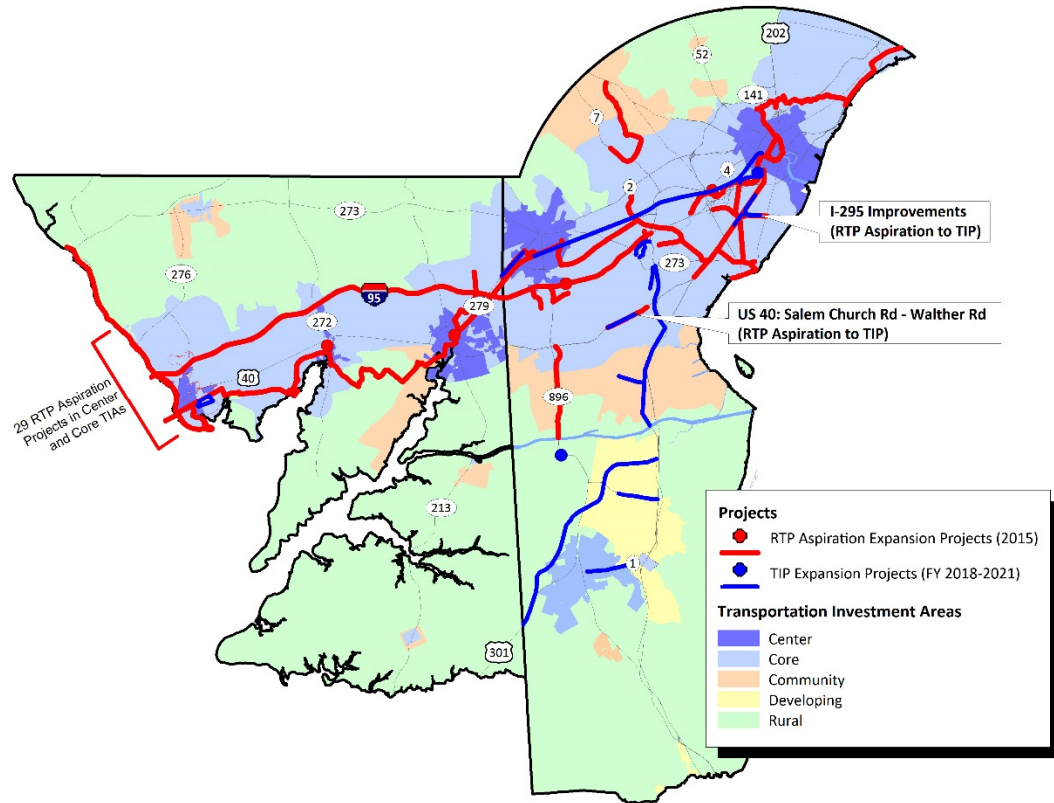
More than two dozen (29) expansion projects were listed in the RTP there. During the past two years, only two have transitioned onto the TIP, the funded project listing. Many of the funded expansion projects are indeed outside the Center and Core TIAs.

TIP Spending by Transportation Investment Area, since FY 2004³⁰



³⁰ Source: WILMAPCO

Aspirational and Funded (TIP) Expansion Projects³¹



³¹ Source: WILMAPCO

GOAL: EFFICIENTLY TRANSPORT PEOPLE

Obj. 2: Promote Accessibility and Connectivity



Bus riders in Downtown Elkton

Actions

- Ensure access to public transportation
- Analyze barriers TJ groups experience in the transportation network
- Fund strategic improvements to the public transit
- Develop a complete and safe nonmotorized transportation network

Ensure Access to Public Transportation



Walking distance to bus stops (RTP)

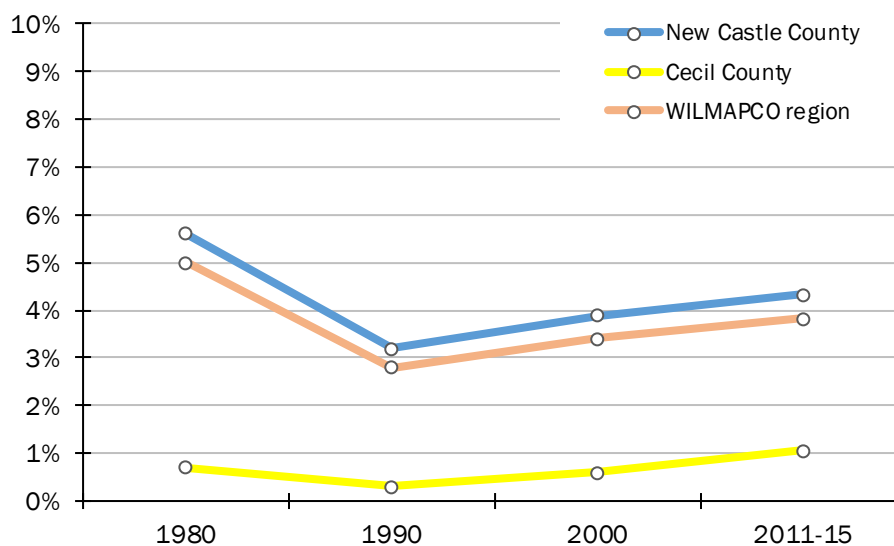
Percentage of transit trips (other)

Ensuring access to public transportation was called for in the RTP. While rates of public transit use among regional workers have declined since 1980, they have rebounded ever so slightly. As shown on the graph below, today about 4% of regional workers commute via public transit, compared to about 3% in 1990.

These rates would likely improve if more jobs and people were located closer to the system. As shown on the graph below, 40% of jobs in New Castle County are located beyond walking distance to a bus stop. The percentage of that county's population within walking distance to a bus stop has dropped over the past two decades from 56% to 49%. In rural Cecil County, these figures are even lower, though they are improving with upgrades to its growing bus system.

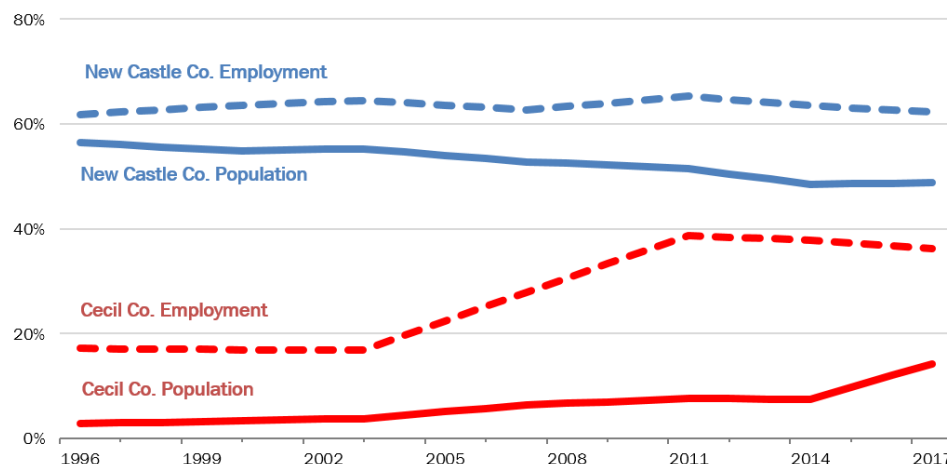
Encouraging a denser development pattern while increasing spending to produce a more robust and reliable public transportation system will help make public transportation a more viable mode of travel regionally.

Percentage of Workers Commuting via Transit, since 1980 ³²



³² Source: ACS

Employment and Population within Walking Distance to a Bus Stop, since 1996³³



Analyze Barriers TJ Groups Experience in the Transportation Network



Maintain a TJ Report (RTP)

Connectivity matrix (RTP)

The RTP challenged WILMAPCO to analyze the barriers faced by Transportation Justice (TJ) groups while using the transportation network. TJ populations include: seniors, the disabled, and households without motorized vehicles.

In 2015, WILMAPCO produced an TJ Report³⁴ that considered the needs and barriers faced by these populations. We found that seniors are often burdened and by the financial cost of car ownership and decreasing physical ability to safely operate vehicles and survive crashes. People with disabilities, who are often seniors themselves, are more likely to encounter problems with travel due to their limitations. Households that vehicle present or mobility constrained by having to negotiate a transportation system or car travel that is often their only viable option.

A “connectivity matrix” was introduced in that report, that measured the transportation connectivity between concentrations of TJ populations and key destinations (libraries, grocery stores, hospitals, and senior center) with four modes of travel (walking, biking, public bus, and car). We found that TJ communities inside Wilmington and Elkton were very well connected to these destinations, areas on the outskirts of these places had some connections, while TJ areas on the edges of our region were poorly connected. A

³³ Sources: WILMAPCO, DTC, Cecil County Transit

³⁴ http://www.wilmapco.org/EJ/WILMAPCO_2015_TJ_hd.pdf

separate analysis was completed to consider public transit and walking connections in and around our suburban age restricted communities. Here we found that over half the communities were a great distance from existing pedestrian and bus routes, making future connections unlikely, or, at best, a long-term prospect.

WILMAPCO aims to continue to build on this analysis with our next Environmental Justice report, expected next year.

Fund Strategic Improvements to the Public Transit Network



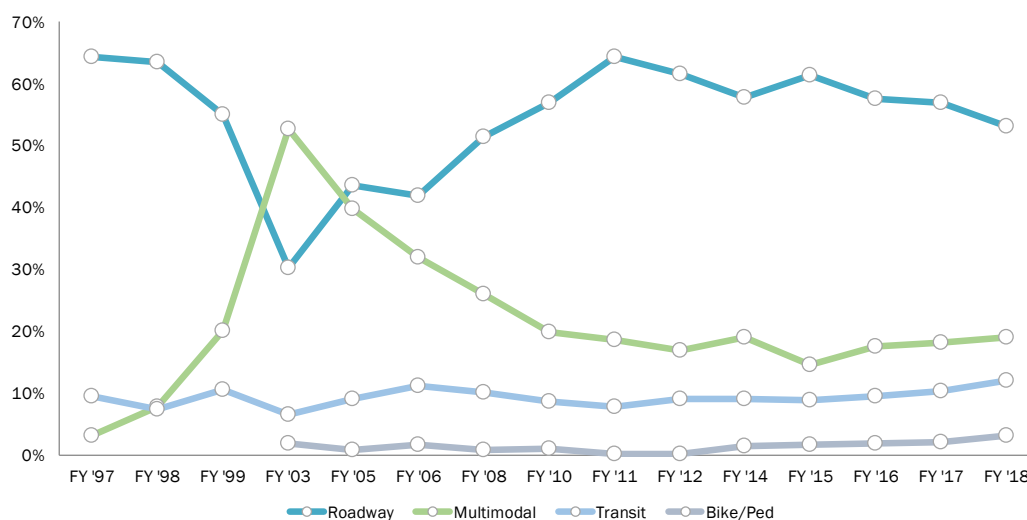
TIP transit funding trends (RTP)

Ridership and transit use analysis (RTP)

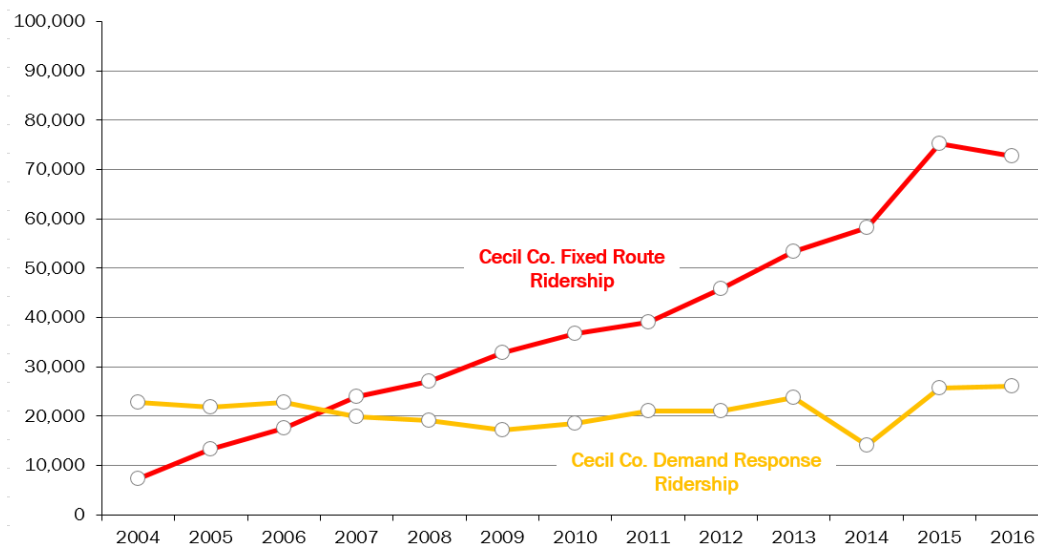
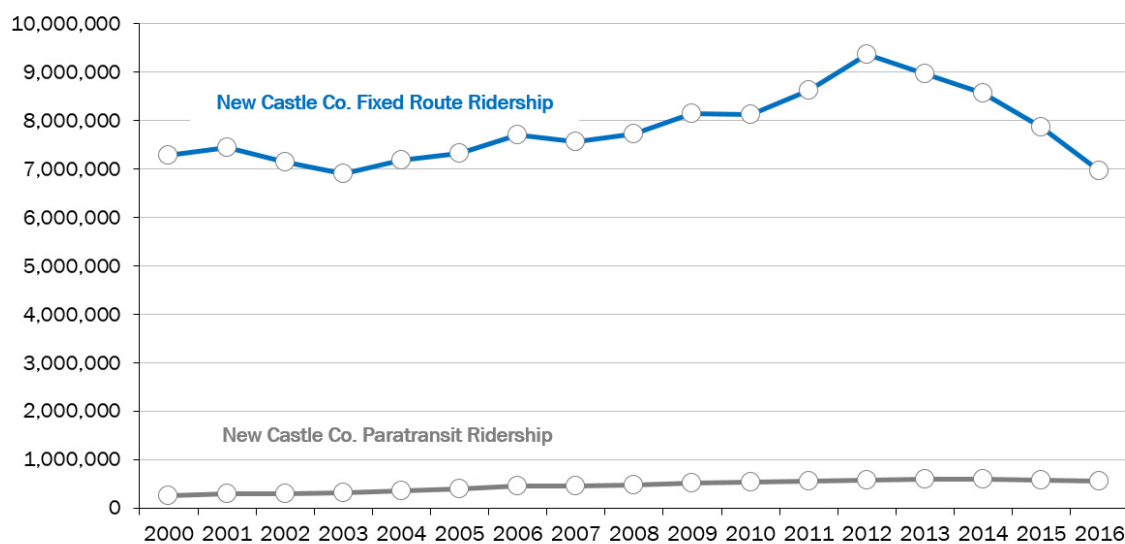
Filling the commuter rail gap progress (RTP)

Funding strategic improvements to our regional transit system was an action of the RTP. The aim of the action was to curb increasing reliance on private cars in the region. While funding for public transit has increased as a percentage in recent TIPs and bus ridership is up in Cecil County, bus ridership has plummeted in New Castle County since 2012. Additionally, despite much study and discussion, little progress has been made in filling the commuter rail gap in Cecil County. A cornerstone project of the RTP, this project aims to link the Baltimore and Philadelphia regional rail systems together.

TIP Funding Trends, since 1997³⁵



³⁵ Source: WILMAPCO

Public Bus Ridership, Cecil County, since 2004³⁶Public Bus Ridership, New Castle County, since 2000³⁷³⁶ Source: Cecil County Transit³⁷ Source: DTC

Develop a Complete and Safe Nonmotorized Transportation Network



Greenway progress (RTP)

Nonmotorized use analysis (RTP)

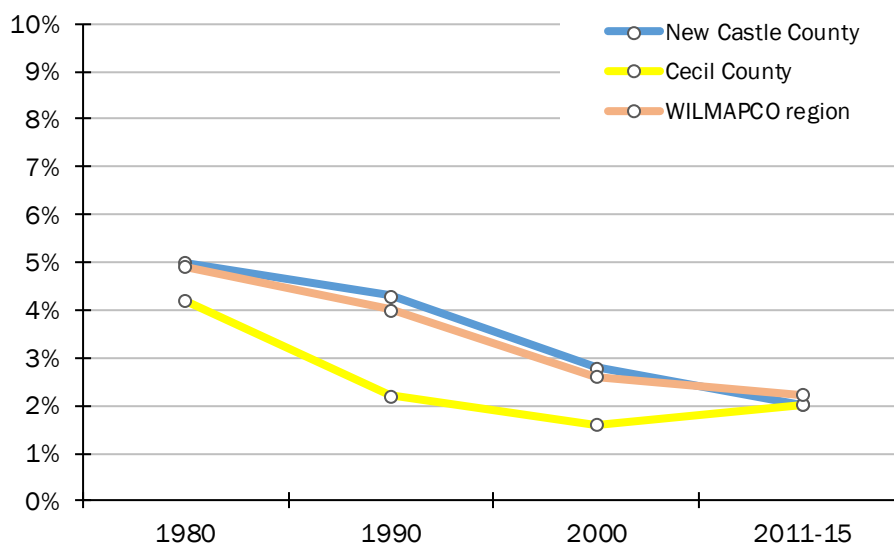
TIP funding trends (other)

The RTP called for the development of a complete and safe nonmotorized transportation network. Results here have been mixed. Steady progress has been made completing the East Coast Greenway in New Castle County. Bicycle crashes are trending downward across the region and the percentage of funding for multimodal and pedestrian/bike projects has clawed slowly upwards in recent TIPs.

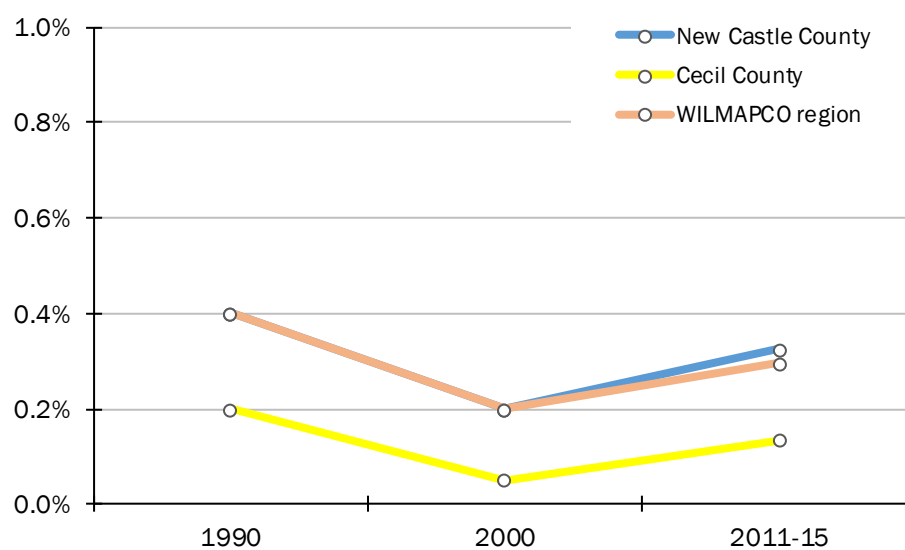
Still, as shown earlier, the percentage of commute trips made on foot has slid steadily over the past decades, and travel along Delaware highways is often not only uncomfortable, but downright unsafe for pedestrians.

Translating the emerging nonmotorized network into a functional and safe transportation network requires revisions to land development policy and rethinking the design and use of our highways.

Percentage of Workers Commuting via Walking, since 1980³⁸



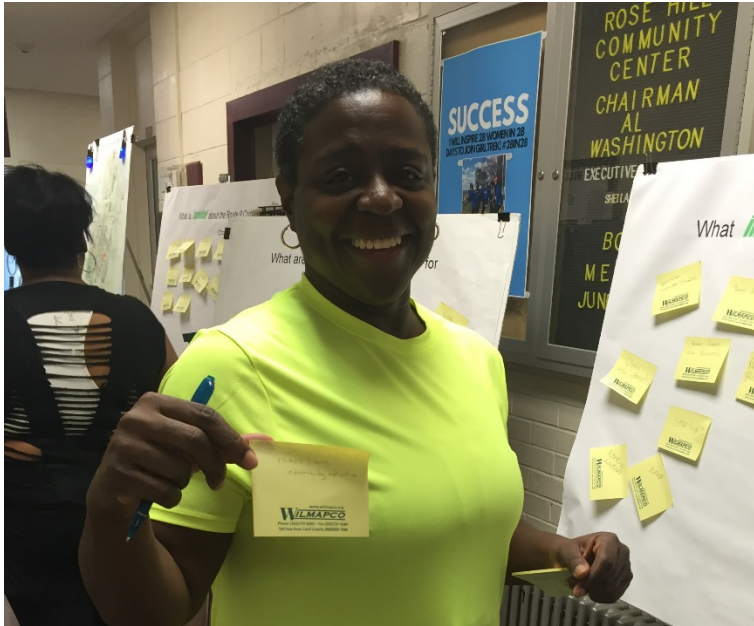
³⁸ Source: ACS

Percentage of Workers Commuting via Bicycling, since 1990³⁹

³⁹ Source: ACS

GOAL: EFFICIENTLY TRANSPORT PEOPLE

Obj. 3: Engage the Public Via an Open Involvement Process



A public outreach participant in the Route 9 Corridor Master Plan

Actions

- Reach a wide and growing public audience
- Achieve an early, open, ongoing and transparent public dialogue in all WILMAPCO projects
- Realize an inclusionary public participation process

Reach a Wide and Growing Public Audience



Transporter distribution (RTP)

Festival attendance (RTP)

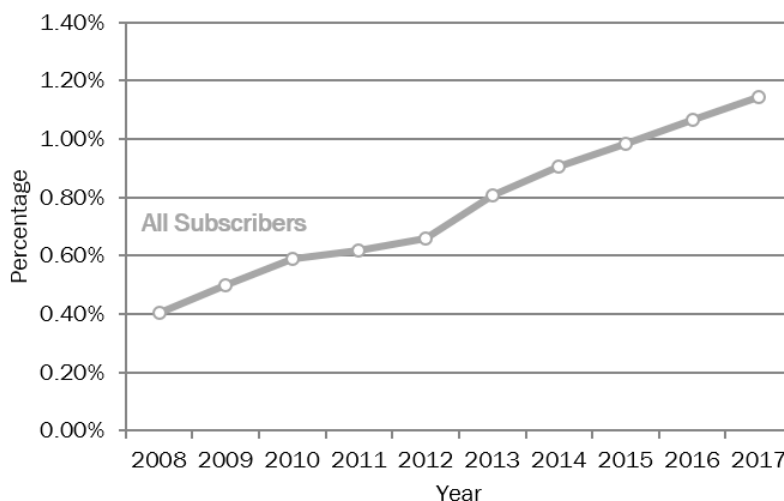
Media attention (RTP)

Electronic reach (RTP)

Familiarity with WILMAPCO (RTP)

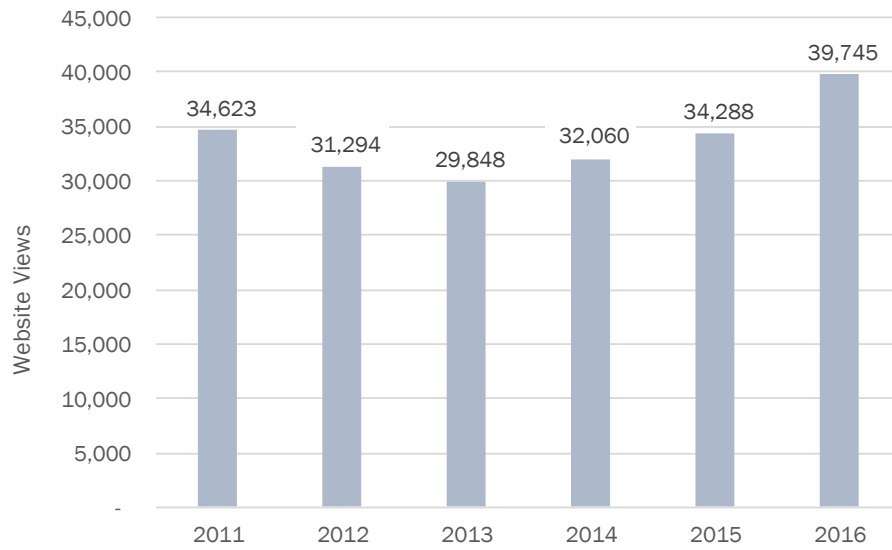
The RTP urged WILMAPCO to reach a wide and growing public audience. As demonstrated in the graphs below, we are trending in the right direction. Readership of both the hard copy "Transporter" newsletter and electronic newsletter has grown. Webpage hits and Facebook followers are also up. It remains to be seen, however, whether these better numbers can nudge up the percentage of residents who say they are familiar with WILMAPCO in our regional public opinion survey due in 2018.

"Transporter" Newsletter Readership, since 2008⁴⁰

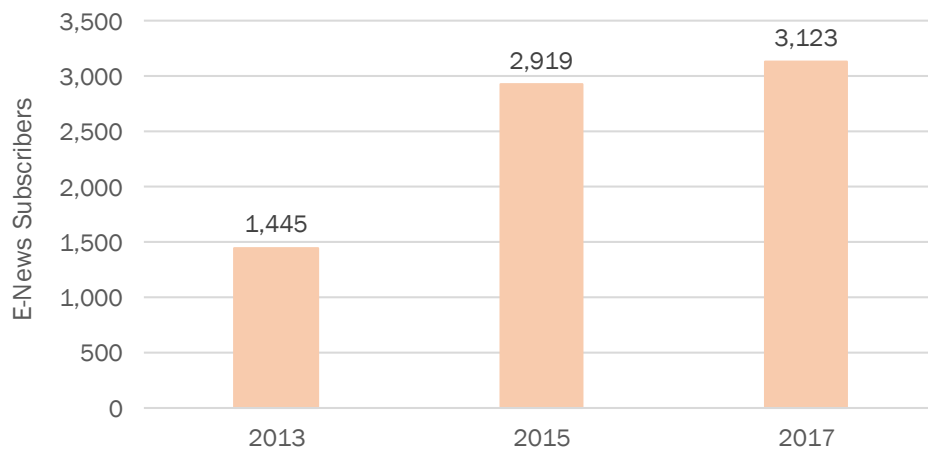


⁴⁰ Source: WILMAPCO. The analysis excludes recipients with a PO Box and those with a specific affiliation to an agency or community group.

Website Views, since 2011⁴¹



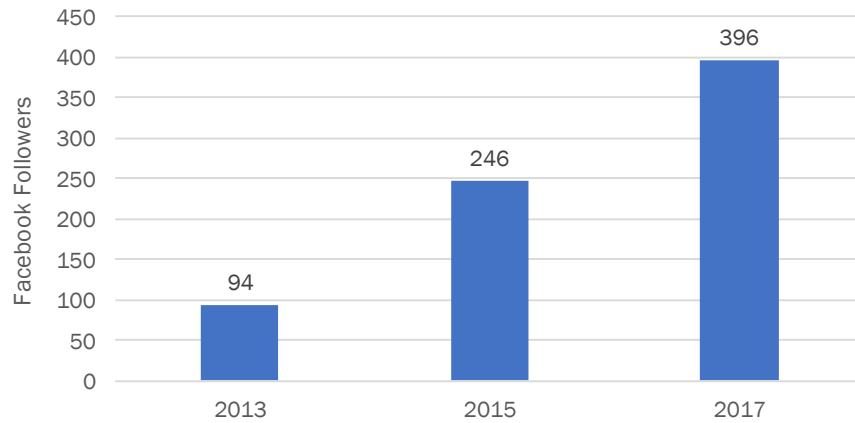
E-Newsletter Subscribers, since 2013⁴²



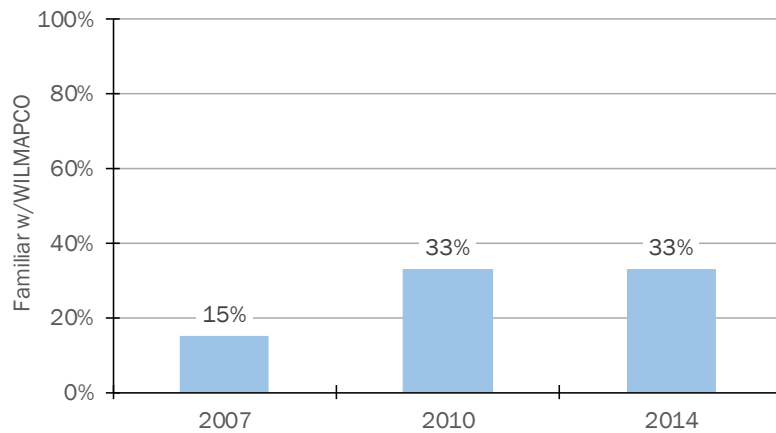
⁴¹ Source: WILMAPCO.

⁴² Source: WILMAPCO.

Facebook Followers, since 2013⁴³



Those Familiar with WILMAPCO, since 2007⁴⁴



⁴³ Source: WILMAPCO.

⁴⁴ Source: WILMAPCO Public Opinion Surveys.

Achieve an early, open, ongoing, and transparent public dialogue in all WILMAPCO Projects



Review of public participation components of studies (RTP)

The RTP asks WILMAPCO to foster strong community engagement in all projects. While this largely has been achieved, there is room for improvement. The matrix below assesses key aspirational outreach components, as documented in the Public Participation Plan, against each recent sub-regional study. Project managers were asked to assess how well their study met each of the outreach components – achieved (green), somewhat achieved (yellow), not achieved (red) or not relevant (gray).

Overall, our studies achieved most the good public outreach components. Several measures, however, were not achieved. For example, specific outreach to support limited English proficient and low-literacy population should have occurred with the North Claymont Plan, and both the Route 141 and Glasgow Avenue plans did not invite community representatives to sit on their steering or decision-making committees.

	Adentown Paths Plan	Red Clay Valley Scenic Byway Standards	North Claymont Area Master Plan	Route 9 Corridor Master Plan	Route 141 Land Use and Transportation Plan	Glasgow Avenue Planning Study
Community representatives invited to participate in committees						
Local stakeholders (elected officials, civic leaders, local businesses, etc.) engaged throughout planning process						
Webpage created						
Social media presence established						
Visioning workshop held early in the planning process						
Follow-up workshop(s) held						
Workshops held in ADA-accessible, convenient, and unimposing (nongovernmental, non-business) location						
Variety of visualization techniques used during workshop/outreach (written, graphic, oral, etc.)						
Variety of methods to collect public feedback (online, verbal, paper, etc.)						
At least two weeks notice given for all public workshops						
Wide advertisement for workshop notices: web, social media, flyers, radio, community events, etc.						
Workshops well attended						
Specific outreach and support to LEP and low-literacy populations, if present, in study area						
Specific outreach to low income and minority populations, if present, in study area						
Representative demographic/socio-economic community participation						
All workshop materials and draft plan posted to webpage for review						
PAC review of draft plan						
30 day public review period of draft plan						

Cell Key
Grey: not relevant
Green: achieved
Yellow: Somewhat achieved
Red: not achieved

Realize an Inclusionary Public Participation Process



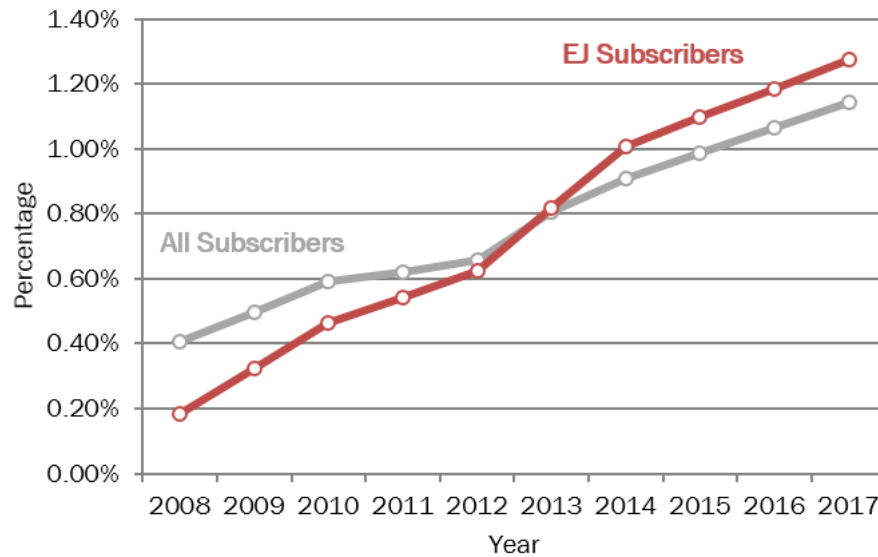
EJ/TJ Report (RTP)

Transporter distribution analysis (RTP)

The RTP asked WILMAPCO to realize an inclusionary public participation process. Overall, this has been achieved.

Both the Environmental Justice (2013) Report, which examines the burdens carried by low-income and minority populations, and Transportation Justice (2015) Report, which examines the transportation needs of seniors, the disabled, and households without motorized vehicles, are up to date. These social justice initiatives feature both technical analyses of the transportation system, and recommendations for improved public outreach. A joint update of the EJ and TJ work is planned next year.

WILMAPCO's refined focus on Environmental Justice, which began in 2008, has produced encouraging results from a public outreach perspective. When we first analyzed the readership of our "Transporter" newsletter within concentrations of low-income and minority neighborhoods, or EJ areas, a clear disparity emerged. Subscription rates in these places fell behind the regional average. Beginning around 2010, targeted public outreach occurred within EJ areas to help boost subscriptions. It worked. As shown below, while readership is up across the board, readership within EJ neighborhoods began outpacing the regional average beginning in 2013. The focused EJ outreach has also spawned successful Safe Routes to School Programs at Edison Charter and Elbert-Palmer and Stubbs Elementary Schools, three low-income schools in Wilmington.

“Transporter” Newsletter Readership in EJ Areas, since 2008⁴⁵

A separate initiative in 2013 introduced racial/ethnic and income response quotas for our regional public opinion telephone survey, which up until that point, was not collecting a representative sample of opinion from minority and lower income residents.

⁴⁵ Source: WILMAPCO. The analysis excludes recipients with a PO Box and those with a specific affiliation to an agency or community group.

GOAL: SUPPORT SUSTAINABLE ECONOMIC DEVELOPMENT AND GOODS MOVEMENT

Obj. 1: Maximize our Investments



A view of the C & D Canal Trail in Chesapeake City

Actions

- Encourage increased density and future growth in Center and Core Transportation Investment Areas
- Use WILMAPCO's approved project prioritization process to select projects for funding
- Create and support the implementation of sub-regional plans
- Support municipalities and existing communities
- Seek additional and innovative funding sources for transportation improvements

Encourage Increased Density and Future Growth in Center and Core TIAs



Household growth by TIA (RTP)

Employment growth by TIA

TIP spending by TIA (RTP)

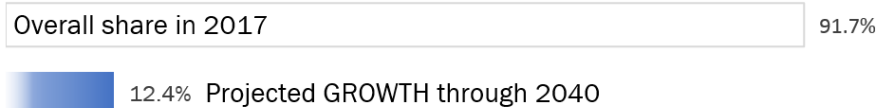
The RTP seeks to encourage increased density and future growth within Center and Core Transportation Investment Areas (TIAs). These places roughly follow the I-95 corridor through our region. As shown in the “Core Trends” section at the beginning of this document, this has proven difficult to achieve.

While most of our region’s households (78%) and jobs (88%) are located within Center and Core TIAs, they are only expected to capture about half of household and employment growth through 2040. And, as shown in the graphs below, differences emerge by county.

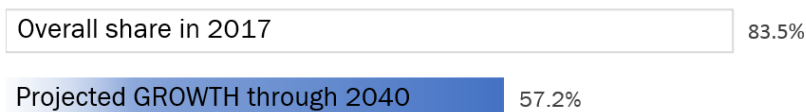
New Castle County is projected to experience weak employment and household growth within its Center and Core TIAs. While over 91% of jobs are found in these places today, only 12% of new jobs over the next two decades are expected to locate there. Further, while 84% of New Castle County’s households are in Center and Core TIAs, they are expected to only receive a 57% share of the household growth through 2040. Both employment and households are expected to continue growing at a much faster rate outside of Center and Core TIAs.

New Castle County Employment and Households within Center and Core TIAs in 2017⁴⁶

EMPLOYMENT



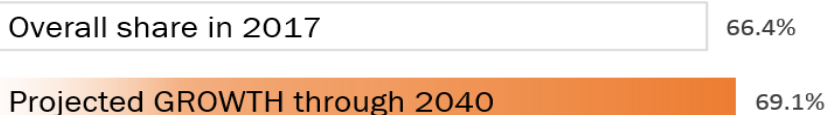
HOUSEHOLDS



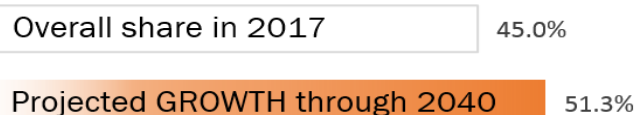
⁴⁶ Source: WILMAPCO.

Cecil County Employment and Households within Center and Core TIAs in 2017⁴⁷

EMPLOYMENT



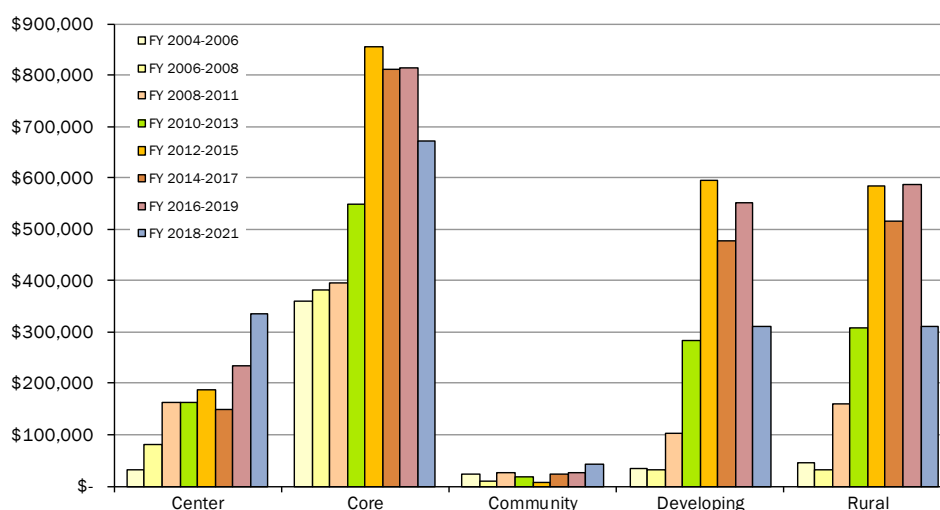
HOUSEHOLDS



In the less dense and more rural Cecil County, the situation is balanced. There, Center and Core TIAs are expected to capture a slightly higher proportion (relative to their existing share) of job and household growth through 2040.

While Core TIAs have consistently received the bulk of planned transportation spending, heavy recent spending in Rural and Developing TIAs (namely related to the US 301 Expressway project) can be identified. The transportation upgrades, in turn, encourage further development and population growth outside of the I-95 corridor.

TIP Spending by TIAs, since FY 2004⁴⁸



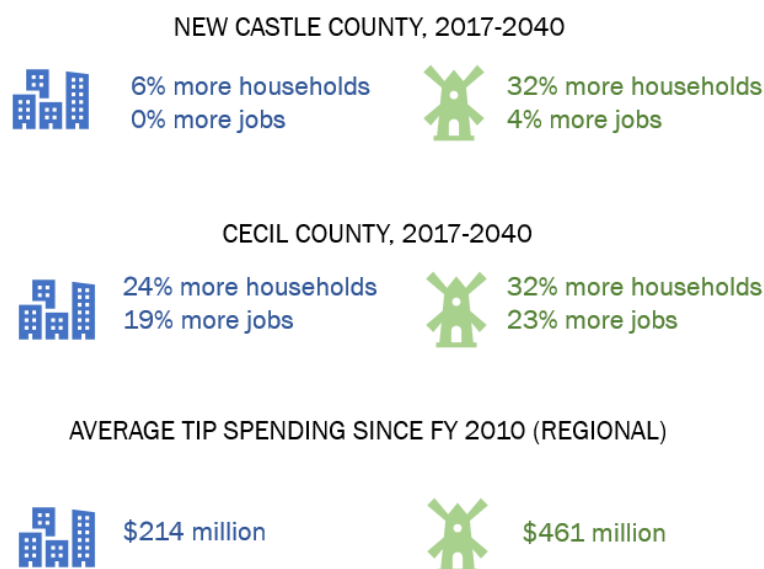
⁴⁷ Source: WILMAPCO.

⁴⁸ Source: WILMAPCO.

Perhaps hardest hit by this pattern is our Center TIAs, Newark and Wilmington, in New Castle County. While home to the most job and population density in the region, little growth is expected in the cities through 2040. Only 2,400 new households are expected to form (a 6% increase) with a shade over 100 new jobs (0% increase).

These figures can be compared to those in Rural TIAs, with fewer people and jobs, where growth is supposed to be discouraged. There, over 5,000 new households are expected through 2040 (a 32% increase) and 600 new jobs (a 4% increase). Perhaps not surprisingly, in response to past and projected growth, planned transportation spending in Rural TIAs is more than double that of Center TIAs.

Demographic Projections and TIP Spending in Center and Rural TIAs⁴⁹



Use WILMAPCO's Approved Project Prioritization Process to Select Projects for Funding



Prioritization versus eventual funding (RTP)

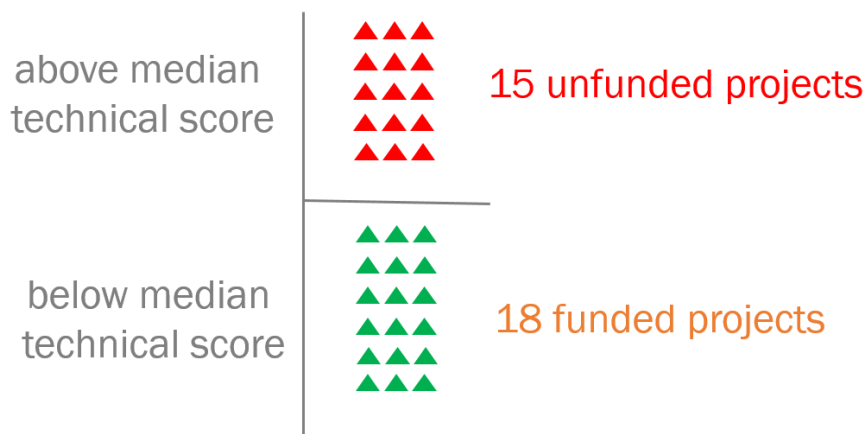
The RTP directs WILMAPCO to use our approved project prioritization process in selecting projects for funding. While the approved prioritization exercise is utilized with each TIP, lots of high-scoring projects remain on the shelf while even more lower-scoring projects have received funding.

⁴⁹ Source: WILMAPCO.

The WILMAPCO prioritization process is centered around a geographically based, largely qualitative analysis of the project's ability to realize the goals of the RTP. Projects located in congested corridors, areas of heavy freight and transit movement, Environmental and Transportation Justice neighborhoods, and several other measures receive points in the analysis⁵⁰. This technical analysis informs, but does not serve as the ultimate prioritized ranking of the projects. Because of the ambiguity of other parts of our prioritization process – such as the priority given by a project's sponsoring agency and “special considerations” that ultimately may influence their ranking – it is difficult to measure how successfully we have met this measure.

What can be done is an analysis of project technical scores and the projects that found their way into and out of the TIP, our mechanism for assigning funding to projects. Of the 37 projects in the FY 2018-21 TIP, the median technical score was 12, with 18 funded projects scoring under 12. We actively track 46 other unfunded projects not currently in the TIP that were, however, in a recent TIP. Of those 46 projects, one-third (15) have earned technical scores over 12. Most of these projects are bicycle/pedestrian and transit projects.

Projects in the FY 2018 TIP vs Unfunded Projects in a Previous TIP⁵¹



While the percentage of funding for bicycle/pedestrian and transit projects has inched up in the current TIP, this analysis shows that many high-scoring transportation projects remain shelved. While occasionally low-scoring projects may be of special interest to a sponsoring agency (almost always DeIDOT), and should be bumped up in the process as intended, the large number of these projects compared to high-scoring projects on the shelf suggests that the WILMAPCO technical scoring is not informing project selection.

⁵⁰ See: <http://www.wilmapco.org/priority>

⁵¹ Source: WILMAPCO.

High-scoring unfunded projects ought to be considered strongly for adding into the next TIP. Additionally, the technical scoring analysis should be updated and re-applied to the dozens of other unfunded aspirational projects in the RTP which never made it into a TIP. High-scoring projects on that list too should be considered equally strongly for funding.

Create and Support the Implementation of Sub-Regional Plans

Qualitative review of Unified Plan Work Program (RTP)

Implementation progress (RTP)

The RTP directs WILMAPCO to create and support the implementation of sub-regional plans. This has been accomplished. Many sub-regional plans were requested and completed over the past four years, including five major plans from New Castle County alone: SR 141, Glasgow Avenue, North Claymont, Red Clay Valley, and Route 9. The only sub-regional plan to not proceed as expected was the Charlestown Paths Plan, but this was due to a lack of responsiveness from the Town.



[insert subregional plan progress]

Support Municipalities and Existing Communities



Qualitative review of Unified Plan Work Program (RTP)

Summarize transportation recommendations within comprehensive plans (Other)

The RTP asks WILMAPCO to support municipalities and existing communities. This has largely been accomplished through the previous successful action – creating and supporting the implementation of sub-regional plans. Additionally, WILMAPCO's leadership on both Wilmington Initiatives and the South Wilmington Planning Network have provided an extra layer of ongoing project implementation support to our largest city. Staff has provided extra support to the City of Newark as well, through our support of Bike Newark and the traffic committee. Additionally, we have also supported Claymont in the implementation of its plans, as well as the City of New Castle's parking subcommittee.

Transportation-related recommendations from comprehensive plans across the region are summarized in the appendix. We keep this list current with each progress report to maintain a list of the transportation aspirations at the local level.

Seek Additional and Innovative Funding Sources for Transportation Improvements



Capital funding available versus alternative funding sources secured (RTP)

The RTP asks WILMAPCO to seek additional and innovative funding sources for transportation improvements. We have met this charge through helping to acquire major alternative grant funding for four significant projects. Both the Newark Regional Transportation Center and Claymont Train Station projects were awarded competitive TIGER (Transportation Investment Generating Economic Recovery) funding – \$12.25 million for Newark and \$10 million for Claymont. WILMAPCO helped show that each project was of national interest to obtain the grants. Additionally, WILMAPCO supported the securing of mostly private investment to construct the Wilmington Transit Center (a \$18 million project) and \$159 million in private bond investment to support the US 301 Expressway.

GOAL: SUPPORT SUSTAINABLE ECONOMIC DEVELOPMENT AND GOODS MOVEMENT

Obj. 2: Develop Effective Transportation Networks



Heavy trucks coming and going to the Port of Wilmington

Actions

- Manage congestion
- Streamline freight movement
- Enhance intermodal systems connectivity
- Promote seamless interregional travel

Manage Congestion

Complete Congestion Management Process (RTP)

Integrate CMP into the Transportation Improvement Program (RTP)

Free flowing traffic facilitates economic development. Each year, WILMAPCO identifies the region's most congested traffic corridors. Transportation projects within these corridors receive extra points in our project prioritization process to help speed their implementation.



map of the current congested corridors and associated projects.

JG

Streamline Freight Movement

Maintain a freight plan (RTP)

The RTP asks WILMAPCO to help support streamlined freight movement. Ten years ago, WILMAPCO produced a regional Freight Plan, in which freight traffic bottlenecks were identified. In the year since, we have improved data collection efforts and have developed a better understanding of regional freight patterns through studies such as the Chesapeake Connector Study, the Delmarva Freight Study, and supply chain analysis.

Our identified freight bottlenecks ultimately feature in our project prioritization process. Proposed projects located within the bottlenecks receive points to help streamline their implementation.

A map of the current freight bottlenecks and associated projects can be found below.



[DB to send freight bottleneck map, along with signal timing upgrades map]

Enhance Intermodal Systems Connectivity



Qualitative review of UPWP (RTP)

The RTP asked WILMAPCO to enhance intermodal systems connectivity. This has been largely accomplished through sub-regional planning studies. In the Route 9 Corridor Master Plan, for example, new road and highway connections to the Port of Wilmington were proposed to streamline current and future freight movement. Other key regional studies, such as the Chesapeake Connector Study, the Delmarva Freight Study, and our supply chain analysis all promote intermodal systems connectivity.

Promote Seamless Interregional Travel



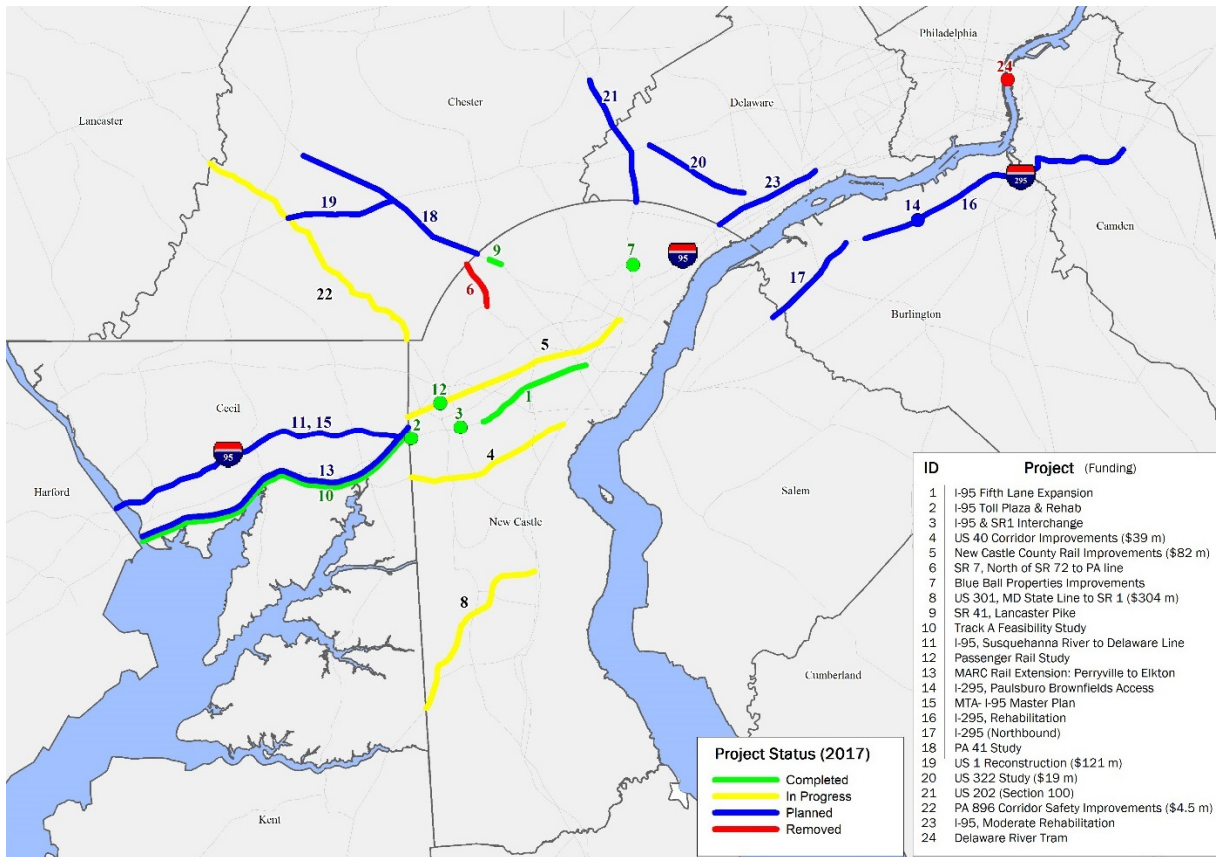
Maintain an interregional plan (RTP)

The RTP asks WILMAPCO to promote seamless travel between and through the Wilmington region to neighboring regions, such as Philadelphia and Baltimore.

We have accomplished this through maintaining an Interregional Report. Updated about every four years, the report is a broad demographic and traffic survey of the WILMAPCO region and beyond. It identifies major interregional corridors, and lists the planned transportation projects of significance for interregional travel. The Interregional Report was last updated in 2012; a new report is expected by next year.

The map below provides a status update to major transportation projects identified in the previous Interregional Report. Each of the projects identified in New Castle County have been completed, are funded, or, in the case of an SR 7 widening project, have been removed from consideration. In the other surrounding counties, most of the projects are still planned but without funding.

2017 Status of Major Interregional Projects⁵²



⁵² Source: WILMAPCO, DVRPC, NJDOT, Chester County, PA.

GOAL: SUPPORT SUSTAINABLE ECONOMIC DEVELOPMENT AND GOODS MOVEMENT

Obj. 3: Plan for Energy Security and Climate Change



An electric vehicle charging station at the I-95 rest stop in Delaware

Actions

- Reduce Vehicle Miles Traveled
- Support cleaner vehicle infrastructure
- Understand and adapt to sea level rise

Reduce Vehicle Miles Traveled

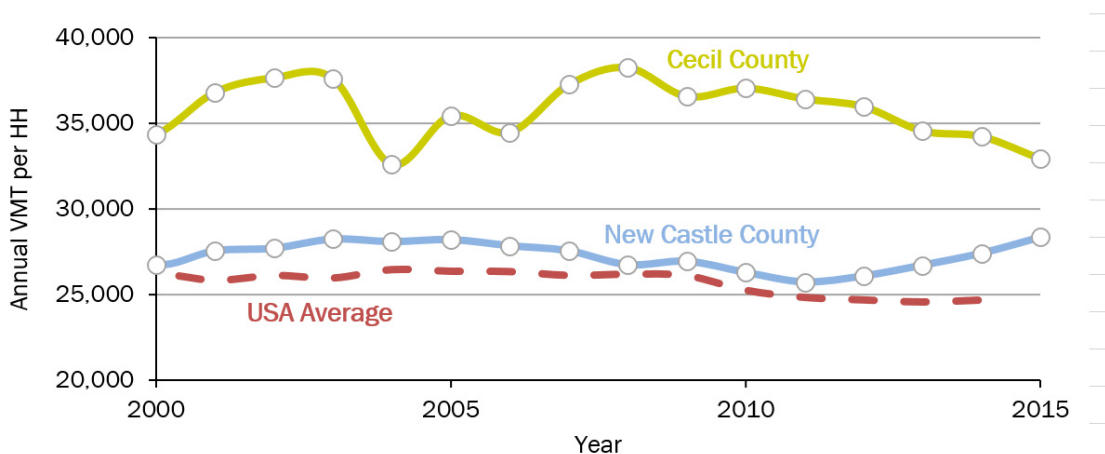


Per capita VMT (RTP)

The RTP aspires to reduce the amount of vehicle miles traveled, regionally. As shown on the graph below, the typical household in the WILMAPCO region clocks more vehicle miles traveled (VMT) than the national average. Per capita VMT has been falling steadily in Cecil County since the Great Recession a decade ago. It is projected to increase again in the 2020s. Meanwhile, per capita VMT in New Castle County began increasing in 2012 and is projected to continue doing so through 2040.

Unchecked suburban sprawl and relatively low fuel prices are behind the rise in VMT. Encouraging a denser development pattern while simultaneously transitioning to a direct tax on VMT and providing alternative transportation options will help reverse these trends.

Average Annual Vehicle Miles Traveled by Household, Since 2000⁵³



Support Cleaner Vehicle Infrastructure



Qualitative review of UPWP (RTP)

% of private clean fuel fleet (RTP)

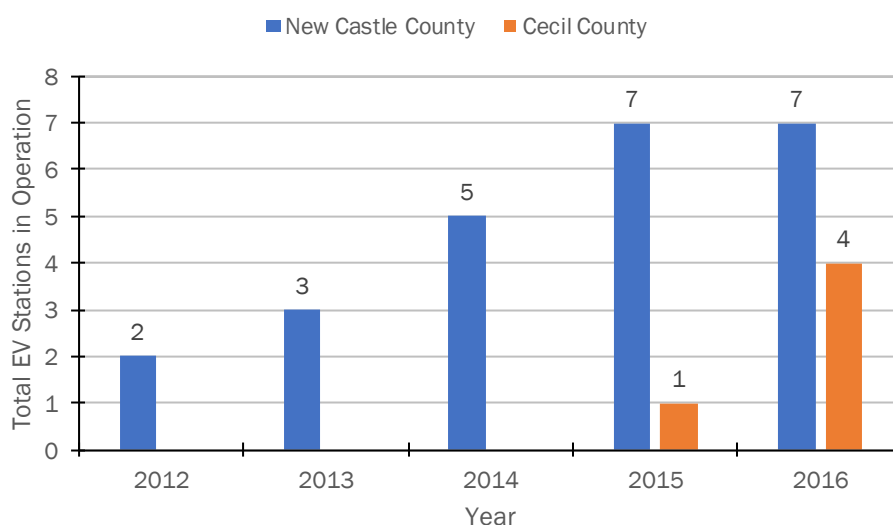
The RTP directs WILMAPCO to support the deployment of cleaner vehicle infrastructure. We have accomplished this action. In 2014, WILMAPCO developed a methodology and

⁵³ Sources: DeIDOT, SHA, FHWA, ACS

report to help support the implementation of electric vehicle charging stations. The report was key in securing grant funds to implement Elkton's first public charging station. Additionally, we have coordinated with DNREC and Electrify America to help bring additional propane and electric charging stations to the Wilmington area.

As shown in the graph below, public EV charging infrastructure is starting to slowly take seed. Today, there are 11 public charging stations across the region, compared to only two in 2012. While almost certainly on the rise, data showing the percentage of our clean fuel vehicle fleet was unavailable.

Electric Vehicle (EV) Charging Stations in the WILMAPCO Region, Since 2012⁵⁴



Understand and Adapt to Sea Level Rise

Qualitative review of UPWP (RTP)

Vulnerability assessment of infrastructure and planned projects (RTP)



[Update to the analysis using TIP data, analysis – JT]

⁵⁴ Source: Alternative Fuels Data Center

APPENDIX

Contents

- Summary of Transportation Recommendations in Comprehensive Plans

	Transportation Recommendations			
	Demographics	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
	2010 Pop. Pop. Projections			
Cecil County (2010)	103,828 129,996 (2020) 154,954 (2030)	1. Widen I-95 through Cecil County 2. Upgrade MD 213 from US 40 to Fenchtown Rd. to 4 lanes 3. Upgrade MD 272 from US 40 to Lums Rd. to 4 lanes 4. Complete North-South connection between MD 7 and US 40 to serve mixed use employment area west of Elkton 5. Continue general bridge rehabilitation and replacement	1. Extend MARC commuter rail service to North East and Elkton and possibly to Newark 2. Extend SEPTA service from Newark to Elkton 3. Develop a countywide transit system 4. Promote ridesharing through expanded park and ride locations 5. Encourage accessible transit to area commercial airports	1. Develop bicycle and pedestrian facilities in accordance to 2020 20 Bicycle and Pedestrian Access Master Plan 2. Develop pedestrian access to new community facilities as they are developed 3. Create a trails network building on the Land Preservation Parks and Recreation Plan
New Castle County (2012)	538,170 567,764 (2020) 589,267 (2030) 606,881 (2040)	1. Improve designated roadways as shown in the WILMAPCO 2040 Regional Transportation Plan	1. Coordination with DelDOT and DART to identify bus stop and Park and Ride facilities in development review process 2. Participate in articulating transportation investment priorities that ensure concurrent delivery of services 3. Encourage expansion of commuter rail system by encouraging transit supportive density	1. Revise the UDC to improve walkability and interconnectivity and support mobility friendly development and design 2. Promote walking and bicycling by enhancing pedestrian and bicycle connections in the county 3. Coordinate with DelDOT in producing a statewide pedestrian action plan

	Demographics		Transportation Recommendations		
	2010 Pop.	Pop. Projections	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
Elkton (2010)	15,443	14,403 (2010) 18,277 (2020) 22,070 (2030)	1. Construct Northern loop road around Elkton, from MD 781 to MD 279, through Elkton west to Marley Road and to US 40 2. Intersection upgrade at US 40 and MD 213 3. Extension of Chesapeake Boulevard to Frenchtown Rd. 4. Divided 2 to 4 lane on MD 213 from US 40 to Frenchtown road 5. Highway reconstruction projects as outlined by MDOT 6. Reconstruction to improve drainage on Delaware Avenue between Main St. and Whitehall Road 7. Beautification project for US 40 8. Adopt an access management program to limit the number of new entry points along US 40 9. Improve north-south connections between US 40 and I-95 10. Improve east-west connections on MD 279, 281 and US 40	1. Support expansion of MARC, SEPTA and bus transit service	1. Include right-of way for bicycles in road widening plans 2. Install sidewalks on MD 213 between US 40 and MD 279 and along MD 7 from US 40 to Main St. 3. Bicycle improvement projects as outlined by MDOT 4. Support development of East Coast Greenway and Mason Dixon Trail plans and create a trail network 5. Ensure multiple safe crossings across US 40, MD 213, and MD 279
	Demographics		Transportation Recommendations		
	2010 Pop.	Pop. Projections	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
Wilmington (Various Years)	70,851	71,727 (2010) 70,445 (2020) 69,097 (2030)	1. Link 23rd and 25th St. as part of any future development of the B & O tract 2. Apply ITS to Delaware Ave., West 4th St., West 2nd St., Washington St., and MLK through West Center City 3. Change direction of 6th St. to westbound between King St. and either Adams or Jackson St. 4. Change the direction of 5th St. to eastbound between King and Monroe St. 5. Change direction of Windsor St. to southbound between 6th and 9th St. 6. Improve signage for westbound traffic on 4th St. at Union St. 7. Upgrade (curbs, traffic control) "A" St. between Heald and Market St. 8. Implement alternative east-west routes in South Wilmington 9. Create a formal entrance to Todds Lane Business Park 10. Possibly implement ITS on Walnut St., East 10th St., East 4th St., East 2nd St., Church St., and Spruce St. in the East Side 11. Move forward with the 12th St./I-495 Connector 12. ITS should also be applied on N. Market St, Northeast Blvd., E 12th St., E 30th St., North Thatcher St., Locust St., and Claymont St. in Riverside 13. Increase enforcement of Traffic and Parking regulations in Riverside and Price's Run 14. Implement the West Center City portion of the Delaware Avenue Project, Phase I	1. Realign all bus stops located along regular routes in West Center City, the East Side, Riverside, and the Northwest 2. Augment Saturday and Sunday bus service 3. Establish an unlimited ride monthly bus pass program with CBD employers to improve mobility within the CBD during the workday 4. DART should operate smaller buses in Wilmington to complement its tighter geometry 5. Establish Transit On Patrol neighborhood watch program	1. Develop a City-wide bike route plan 2. Coordinate with the East Coast Greenway Plan 3. Conduct a traffic engineering analysis of the Lea Blvd., Tatnall St., Shipley St., and West Park Dr. intersections 4. Improve access to the Train Station 5. Enhance streetscape of Northern Walnut St. and East 4th Street in the East Side 6. Implement streetscape enhancement projects on the N. Market St. and Northeast Blvd. corridors to enhance pedestrian accessibility. 7. Enhance the streetscape environment of West 4th Street

	Demographics		Transportation Recommendations		
	2010 Pop.	Pop. Projections	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
Bellefonte (2007)	1,193	1,361 (2010) 1,452 (2020) 1,507 (2030)	1. Implement traffic calming techniques 2. Improve parking and traffic enforcement 3. Add a traffic light and signage at the intersection of Philadelphia Pike and Beeson Rd. 4. Regularly inspect streets and identify improvement projects 5. Explore streetscape improvements along the central business district (Brandywine Blvd.)	1. Improve non-motorized modes and safety by adding sidewalks and crosswalk signs 2. Promote public transit, carpools, and explore the use of a local shuttle service	1. Explore the installation of bicycle paths and greenway paths
Delaware City (2014)	1,695	2,053 (2010) 2,372 (2020) 2,616 (2030)	1. Implement traffic-calming, pedestrian and bicycle elements to SR 9 2. Improvements to Washington St. based on comprehensive corridor proposal 3. Seek state improvements to SR 9 and SR 72 for evacuation purposes 4. Retain and upgrade existing roads to maintain Fort DuPont's sense of place 5. Reconstruct Canal Street along the Branch Canal	1. Coordinate with DART to extend Route 25 and 72 transit service into Delaware City	1. Implement series of proposals to increase bicycle and pedestrian facilities 2. Adopt regulations requiring developers to construct sidewalks 3. Encourage bike/ped connections to adjacent developments 4. Construct a pedestrian and vehicular bascule bridge to connect Delaware City and Fort DuPont at Officers' Row 5. Provide a minimum 10' wide pedestrian and bicycle zone on all bridge crossings of the Branch Canal 6. Enhance the interpretive trail system and connect to the park beyond Route 9 7. Connect the C&D Canal Trail 8. Expand access to the water through boat launches, piers and pedestrian promenades
Clayton (2008)	2,918	2,456 (2008)	1. Consider re-opening the RR crossing at Old Duck Creek Rd and Duck Creek Pkwy 2. Improvements at the intersection of the railroad and Main St. 3. Evaluate on and off-street parking areas for efficiency	1. Investigate possibility of rehabilitating and operating one of the railroad stations 2. Provide additional bus service	1. Find opportunities to use unused Main St. North and Clayton-Easton railroads right-of-way for hiking/biking trails 2. Development of two bike routes to connect with the Smyrna trails 3. Installation of sidewalks in the area east of S. Bassett St. 4. Conduct a sidewalk inventory and ranking system for ped improvements 5. Continue the bicycle route from industrial Way to Main St.
Elsmere (2010)	6,131	5,687 (2010) 5,569 (2020) 5,441 (2030)	1. Address safety and noise issues associated with North Dupont Road 2. Work to reduce speed on Kirkwood Hwy by decreasing posted speed limits 3. Rearrange traffic patterns on Kirkwood Hwy to accommodate new Main St.	1. Upgrade bus stops on Kirkwood Hwy 2. Continue to monitor activities of CSX	1. Revise code to require sidewalks in all new residential and non-residential development 2. Implement a sidewalk-inspection-and-repair program 3. Review right-of-way maintenance programs 4. Update sidewalks to ADA standards and add striped crosswalks at necessary intersections
Middletown (2012)	18,871	23,000-33,000 (2020)	1. Create a new limited access highway for US 301 from the state line to SR1 and a spur from the Armstrong Corner Rd and Summit Bridge Rd vicinity 2. Construct new connector road from Bunker Hill Rd to St. Anne's Church Rd. and Industrial Dr. to Level's Rd. 3. Reconstruct portions of US 301, Bunker Hill Rd., Level's Rd., St. Anne's Church Rd., and Wiggins Mill Rd. 4. Project Development for SR 299 from Silver Lake Rd. to SR 1 5. Reconstruct Cedar Lane Rd from Marl Pit rd to Boyds Corner Rd. 6. Creation of a connection to the planned scenic byway along the Chesapeake and Delaware Canal	1. Explore a rail route from Wilmington and Newark to Middletown (Study Complete) 2. Provide passenger rail service south to Dover as development along SR 1 continues	1. Develop a Multi-Modal plan that identifies ped/bike routes 2. Brick sidewalks downtown should be repaired 3. Maximize pedestrian and bicycle interconnectivity and new and existing development 4. Discuss with Odessa and Townsend regarding bikeways and trains connecting the three towns

	Demographics		Transportation Recommendations		
	2010 Pop.	Pop. Projections	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
New Castle (2009)	5,285	5,530 (2010) 6,324 (2020) 6,894 (2030)	1. Implement Delaware State Plan for improvements to Rt. 273 as described in TIP 2. Install clear signage on Rt. 9 (New Castle St., Ferry Cut-off, 7th St.) 3. Determine feasibility of a Rt. 9 bypass south of downtown 4. Prohibit large trucks from utilizing small City streets (6th St. & Delaware St.) 5. Implement traffic calming on 7th St. 6. Gateway improvements (Rt. 273, Rt. 9, Rt. 141)		1. Revise city codes to include requirements for sidewalks along all streets 2. Addition of bike lanes and appropriate signage to roadways 3. Plan for routing, construction, maintenance of East Coast Greenway through the City 4. Pursue grant funding to improve ped. safety at intersections
Newark (2016)	31,454	30,738 (2010) 31,066 (2015) 31,119 (2020) 31,612 (2025) 31,971 (2030)	1. Implement complete streets and traffic calming 2. Create a corridor-optimization program 3. Add road capacity to targeted areas to accommodate future growth	1. Improve the coordination and enhance the services of DART, UNICITY, and UD Transit 2. Develop and distribute a guide titled <i>Car-Free Newark</i> 3. Improve transit hubs 4. Expand University bus service and UNICITY	1. Streetscape improvements to East and South Main Streets 2. Mid-block crossing with improved median for Library Avenue between Delaware Avenue and East Main Street 3. Citywide initiatives for walkability 4. Improve signalized detection systems at intersections for bicycles 5. Use bicycle lanes and shared-lane markings (sharrows) 6. Install a two-way bicycle lane (cycle track) on Delaware Avenue

	Demographics		Transportation Recommendations		
	2010 Pop.	Pop. Projections	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
Newport (2014)	1,055		1. Manage traffic on SR 141/41 and SR 4: limit speed through town, buffer noise creation, reduce pollution 2. Evaluate traffic calming methods, especially downtown, and development design standards (such as on street parking) to enhance non motorized safety and mobility 3. Regularly monitor vehicle traffic and air quality 4. In the process of identifying priority road renovation projects including both residential districts and water street in Newport Industrial Park 5. DelDOT secured the funding for the replacement of the James Street Bridge 6. Capitalize on Newport's accessibility to I-95, I-295, I-495, SR 141/41 and SR 4 while concurrently implement measures to manage regional traffic 7. Develop a plan for the regular monitoring of vehicular traffic and establish a seasonal air quality monitoring program in the vicinity of SR 141/41 and SR 4	1. Periodically survey Town citizens to see if their mass transit needs are fulfilled. Report findings to DART. 2. WILMAPCO has completed an analysis to create new modern rail stop in Newport.	1. Improve ped. accessibility along SR 4, install signalized ped. crossings through Market St. section of SR 4 2. Develop pathfinder signage throughout Newport 3. Provide for the safe, efficient and convenient movement of people and goods within the Town by integrating land uses, circulation routes and transportation facilities 4. Explore opportunities for developing pedestrian and bicycle pathways to link residential and commercial sections of Town as well as to link the boat ramp and nature center to the Town's residential and commercial areas. Consider extending the recommended pedestrian/bike path along the Christiana River.
Odessa (2012)	364	310 (2010) 329 (2020) 343 (2030)	1. Coordination with DelDOT to implement a transportation plan for the town. 2. Improve SR 299 and U.S. 13 through Town 3. Explore a creating a connection to the proposed SR 9 scenic byway		1. Improved crosswalk signals across US 13 2. Reduce impact of the car 3. Add additional pathways through the Town, especially to Memorial Park 4. Improve conditions of brick sidewalks 5. Creation of a pedestrian path along river
Smyrna (2006)	10,023	8,813 (2010) 9,207 (2015) 9,579 (2020)	1. Upgrade Carter Rd. from Sunnyside Rd. to Route 300 and traffic improvements to Route 300/ Glenwood Ave. 2. Construct Carter Rd. to SR 1 Connector and Green Meadows/ Locust Street Connector 3. Possible widening and improvements to Sunnyside Rd. 4. Enhance Downtown Street Network and reconfigure Main St./Commerce St. Intersection 5. Route 13 improvements consistent with a Commercial Corridor Concept Plan 6. Conduct a Regional Westerly Connection Study to address traffic congestion, including a new connector/bypass west of the railroad	1. Conduct a transit study that identifies potential services 2. Relocate DART bus stop from Route 13 to a site within the community closer to walk/ride and park/ride options 3. Identify and develop potential locations for a Park and Ride Plan	1. Improvements to Duck Creek Parkway and North Main Street Extended to accommodate all user types 2. Establish a Bike and Pedestrian Plan
Townsend (2010)	2,049		1. Traffic-calming improvements to Brook Ramble Lane and conduct a traffic survey of the new Townsend Early Childhood Center 2. Coordinate with DelDOT regarding the U.S. Rt. 301 connector project and how it will affect traffic in Townsend 3. Annexation of park at intersection of South and Commerce Streets and replacing it with a safe intersection with a new traffic pattern 4. Crossing at Route 71 and Main Street Intersection address through crosswalk and a turning lane 5. Coordinate with DelDOT to secure emergency access to SR 1 north at Pine Tree Corners	1. Continue to communicate with county and DART First State concerning the acquisition of public transportation stops and routes servicing Townsend 2. Completion of a feasibility study of what types of public transportation would be appropriate for the area 3. Continue the multi-year study to determine feasibility, cost, and preliminary planning to restore passenger-rail service between New Castle County and Dover	1. Complete the sidewalk system and make sure that all new development is pedestrian-oriented 2. Consider extending the sidewalks on Main Street in front of the fire hall or paint in an extended crosswalk 3. Investigate a pedestrian cut-through or trailhead from the end of Gray Street west toward the proposed park 4. Petition DelDOT to install a well-marked and signalized crosswalk at the intersection of Main Street and Summit Bridge 5. Continue negotiations with the rail line to mitigate pedestrian conflicts and potentially redesign the confluence of Main Street and the rail road tracks 6. Re-stripe and nominally realign the town's crosswalks to ensure they are readily visible to pedestrians and drivers 7. Consult with DelDOT and hire an engineering firm to scope out the feasibility of large-scale streetscaping to bury utilities, widen sidewalks, etc. 8. Mark bicycle lanes on Main Street and Wiggins Mill Rd

	Demographics		Transportation Recommendations		
	2010 Pop.	Pop. Projections	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
Cecilton (2010)	663	541 (2010) 673 (2020) 800 (2030)	1. Extend Center St. to Douglas Ln. to form connection to MD 213 2. Traffic calming devices on MD 213 at north and south entrances to town 3. If dualization of MD 213 occurs, consider a boulevard concept that is compatible with growth patterns		1. Proposed greenbelt system surrounding growth areas, anchored by Cecilton Park and Cecilton Elem. School 2. Consider bike link from MD 282 to MD 213 via Cecilton Park 3. Provide safe ped. links to and from Cecilton Elem. School 4. Implement network of ped. trails and greenways 5. Improve sidewalks
Charlestown (2008)	1,183		1. Increase route choices by providing for additional access to Route 40		1. Improve pedestrian connectivity to activity centers (e.g., waterfront, town hall. Recreation areas, shopping) 2. Recommended pedestrian link between the subdivisions Scott Gardens, Trinity Woods, and Cool Springs
Chesapeake City (2009)	673	900 (2010) 1,080 (2020)	1. Add southern route to Biddle St. 2. Add roundabout at Lock and Hemphill Streets 3. Add connection to Boat Yard Rd. 4. Extend Hemphill Street eastward to provide direct access to Rt. 213 5. Access management along Rt. 213 6. Traffic study to identify improvements needed for Boat Yard Rd., Biddle St., & Lock St.	1. Add bus service to Elkton if commuter rail is re-introduced to Elkton	1. Develop town-wide trail network plan 2. Require that roads in growth areas include bike and ped. facilities 3. Include bike lanes along Hemphill Rd. & Bridgeview Dr. extension 4. Sidewalk study 5. Expand C&D Canal greenway

	Demographics		Transportation Recommendations		
	2010 Pop.	Pop. Projections	Key Roadways to be Improved/Studied	Transit Needs	Bike/Ped Needs
North East (2012)	3,572	3,187 (2010) 3,306 (2020)	1. Reconstruct MD 272 bridge over Amtrak line. 2. MD 7 from east Charlestown to MD 272. MD 7, Ridgely Forest impacts. A Traffic Signal Warrant Study at the MD 7/Mechanics Valley Road-Cemetery Road intersection. 3. MD 272 from the north end of the couplet in the North East to Lums Rd. 4. US 40 from MD 272 to the DE line. 5. Reconstruction of East Cecil Avenue	1. Identify the transportation impacts of rail service to the town in relationship to the State Highway Systems. 2. Add North East as one of the stops for the extension of the existing MARC Penn Line commuter rail service. 3. Create appropriate design guidelines and standards to implement Transit Oriented Design (TOD) principles and practices.	1. Create a more pedestrian/ bike friendly CBD 2. Extend sidewalks along Cecil Ave to connect with proposed Greenway 3. Extend other existing sidewalks, bike paths, etc. to connect with the County's proposed Greenway on the east side of town 4. Link between MD Rt. 7 at the Mechanics Valley cross-walk and the Elk Neck State Forest and Park Trail. This will provide recreational and mobility improvements to the Town's residents.
Perryville (2010)	4,361	4,691 (2010) 5,783 (2020) 6,336(2025)	1. Create an improved access road that bears off to the left from IKEA Way and continues across Mill Creek to the Perryville Community Park 2. Create a Riverfront loop system beginning on Broad St. at MD 222 3. Resurface Broad St.; Construct New River Rd. 4. New access street where current municipal driveway is located 5. Extension of Coudon Boulevard Across US40 to MD222 6. Reserve a right-of-way, redirect MD 222, and extend Aiken Ave to 4 lanes to better handle traffic at the MD 222/US 40 intersection 7. Widen and extend Front St. to Susquehanna Ave. 8. Connect the west ends of Franklin and Charles Streets	1. Redesign MARC station with additional parking and bike paths 2. Extended MARC service times and routes and consider links with SEPTA 3. Pier/Boat ramp/water taxi 4. Addition of AMTRAK service	1. Create pedestrian and bicycle travel over the Susquehanna river 2. Build boardwalk along shore at Rodgers Tavern 3. Adopt greenway plans, specifically the Lower Susquehanna Heritage Greenway 4. Improve sidewalk along MD 7 5. Create a bike loop to connect major community facilities 6. Create a pedestrian and bike path that follows most of the proposed loop road 7. Undertake a sidewalk study to find which areas need repair or replacement
Port Deposit (2009)	653	834 (2010) 896 (2020)	1. 3000 slot machine casino on the west side of MD 275 will generate large amounts of traffic in the area	1. Water taxi at Marina Park	1. Bike route from I-95 underpass, Frenchtown Road to MD 222 2. Bike route along MD 222 to Main Street Port Deposit 3. Bike route alternative from MD 222 connect with old access road to Tomes School for Boys 4. Marina Park pedestrian route 5. Amend Port Deposit Subdivision regulations to incorporate design guidelines for sidewalks
Rising Sun (2010)	2,781	1,913 (2010) 2,106 (2020) 2,252 (2030)	1. Control truck traffic on MD 274, possibly by diverting traffic from MD 274 to US 1 on an alternative route 2. Secure a "roundabout" intersection at MD 1 and N. Walnut St. 3. Develop outer loop system to divert east and westbound traffic on MD 273 4. Investigate issues with the intersection at MD 273 and 274	1. Cooperate with the state to plan and provide possible "park and ride" facilities	1. Amend zoning to require bike parking in non-residential developments 2. Plan for bikeways along town streets 3. Adopt proposed Greenways and Pedestrian trails 4. Develop abandoned railroad right of way as ped/bicycle path 5. Pay special attention to creating pedestrian friendly streets and streetscapes