

**WILMINGTON AREA PLANNING COUNCIL**



*Providing Guidance and Direction for Transportation Planning  
in New Castle County, Delaware and Cecil County, Maryland*

**Adopted March 22, 2007**

***WILMAPCO***

# Wilmington Area Planning Council

850 Library Avenue, Suite 100  
Newark, Delaware 19711  
302-737-6205; Fax 302-737-9584  
From Cecil County: 888-808-7088  
e-mail: [wilmapco@wilmapco.org](mailto:wilmapco@wilmapco.org)  
web site: [www.wilmapco.org](http://www.wilmapco.org)

## RESOLUTION

**WILMAPCO Council:**  
James M. Baker  
Mayor of Wilmington

Christopher A. Coons  
New Castle County  
County Executive

Joseph L. Fisona  
Mayor of Elkton

Stephen Kingsberry  
Delaware Transit Corporation  
Director

John F. Klingmeyer  
Mayor of New Castle

Brian Lockhart  
Cecil County Commissioner

Samuel F. Minnitte, Jr.  
Maryland Dept of Transportation  
Director, Office of Planning

Lee Ann Walling  
Delaware Office of the Governor  
Policy Advisor for Environment  
and Quality of Life Policy

Carolann Wicks  
Delaware Dept of Transportation  
Secretary

WILMAPCO Executive Director  
Tigist Zegeye

### BY THE WILMINGTON AREA PLANNING COUNCIL (WILMAPCO) ADOPTING THE REGIONAL TRANSPORTATION PLAN, 2030 UPDATE (2030 RTP)

**WHEREAS**, the Wilmington Area Planning Council (WILMAPCO) has been designated the Metropolitan Planning Organization for Cecil County, Maryland and New Castle County, Delaware by the Governors of Maryland and Delaware, respectively; and

**WHEREAS**, WILMAPCO adopted the 2025 Regional Transportation Plan (RTP) on March 6, 2003; and

**WHEREAS**, the United States Department of Transportation (USDOT) Regulations of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Metropolitan Planning Requirements require that MPOs with over 200,000 population, in cooperation with participants in the planning process, update the long-range transportation plan or Regional Transportation Plan (RTP) at least every four years; and

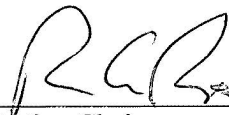
**WHEREAS**, the RTP must be determined to be air quality conforming in accordance with SAFETEA-LU and Clean Air Act and Amendments (CAAA) of 1990 requirements; and

**WHEREAS**, the RTP must be found financially reasonable; and

**WHEREAS**, the development of the RTP has followed WILMAPCO's Public Participation Plan, meeting or exceeding public involvement requirements of SAFETEA\_LU;

**NOW, THEREFORE, BE IT RESOLVED** that the Wilmington Area Planning Council does hereby adopt the Regional Transportation Plan, 2030 Update (2030 RTP).

March 22, 2007  
Date:

  
\_\_\_\_\_  
Ralph Reeb, Acting Chairperson  
Wilmington Area Planning Council

G:\Public\Resolutions\RTP 2030 rtp.doc

**WILMAPCO**

Partners with you in transportation planning



**Table of Contents**

**INTRODUCTION AND THE PLANNING PROCESS ..... 5**

WHO IS WILMAPCO? ..... 5

WHAT IS A REGIONAL TRANSPORTATION PLAN ..... 5

THE PLANNING PROCESS ..... 6

HOW DOES THE RTP RELATE TO STATE, COUNTY, AND MUNICIPAL PLANS? ..... 6

**SECTION 1: WHERE HAVE WE BEEN: BUILDING ON TEN YEARS OF PROCESS? ..... 7**

TEN YEARS OF PLANNING AND POLICY ..... 7

OUR CHANGING REGION..... 8

ANNUAL PROGRESS REPORT: ACCOMPLISHMENTS, 1996-2006..... 9

**SECTION 2: WHERE ARE WE NOW AND WHERE ARE WE GOING?..... 11**

CHALLENGES FOR THE REGION..... 11

HOW WILL WILMAPCO ADDRESS THESE ISSUES AND OPPORTUNITIES? ..... 13

**SECTION 3: HOW DO WE GET THERE?.....15**

REGIONAL GOALS AND OBJECTIVES ..... 15

CARRYING OUT OUR PLAN THROUGH THE UPWP AND TIP ..... 15

BUILDING PARTNERSHIPS CARRY OUT OUR PLAN ..... 16

TAKING ACTION..... 16

**GOAL: SUPPORT ECONOMIC ACTIVITY, GROWTH AND GOODS MOVEMENT .....17**

ENSURE A PREDICTABLE PUBLIC INVESTMENT PROGRAM..... 17

PLAN AND INVEST TO PROMOTE ATTRACTIVENESS OF THE REGION..... 27

**GOAL: EFFICIENTLY TRANSPORT PEOPLE .....33**

IMPROVE TRANSPORTATION SYSTEM PERFORMANCE ..... 33

PROMOTE ACCESSIBILITY, MOBILITY AND TRANSPORTATION ALTERNATIVES ..... 38

**GOAL:IMPROVE QUALITY OF LIFE.....46**

PROTECT PUBLIC HEATH, SAFETY & WELFARE ..... 46

PRESERVE OUR NATURAL, HISTORIC, AND CULTURAL RESOURCES ..... 53

SUPPORT EXISTING MUNICIPALITIES AND COMMUNITIES ..... 54

PROVIDE AND PROMOTE TRANSPORTATION OPPORTUNITY & CHOICE ..... 56

**SECTION 4: WHAT INVESTMENTS ARE PLANNED.....59**

FINANCIAL ANALYSIS ..... 59

FINANCIALLY CONSTRAINED PROJECT LIST..... 60

PROJECT ASPIRATIONS LIST ..... 63

**SECTION 5: HOW WILL WE KNOW IF WE SUCCEED: MEASURING OUR PERFORMANCE? ....71**

**SECTION 6: HOW DE WE MEET THE FEDERAL REQUIREMENTS? ..... 75**

**APPENDICES**

A. Glossary	E. Air Quality Conformity	I. Congestion Management Analysis
B. Project Listing, 2006-2030	F. Scenario Analysis	J. Environmental/Transportation Justice
C. Financial Analysis	G. Public Opinion Survey, Comments and Outreach	K. Regional Progress Report
D. Demographics Analysis	H. New Castle Greenway Plan	

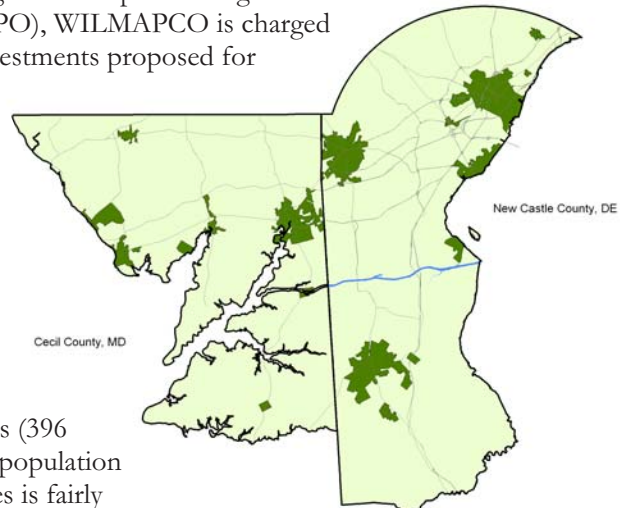


## Introduction & the Planning Process

### Who is WILMAPCO?

The Wilmington Area Planning Council (WILMAPCO) is the regional transportation planning agency for the Cecil County and New Castle County area, known as the Wilmington Metropolitan Region. As the federally designated metropolitan planning organization (MPO), WILMAPCO is charged with planning and coordinating the many transportation investments proposed for this region. Our nine member Council consists of:

- Delaware and Maryland departments of transportation
- Delaware Transit Corporation
- New Castle and Cecil counties
- Appointee of the Delaware Governor
- City of Wilmington
- Municipal representatives from New Castle and Cecil counties



The WILMAPCO region has a total area of 744 square miles (396 in New Castle County and 348 in Cecil County) and a 2005 population of 620,804. Although the square mileage of the two counties is fairly similar, their population figures are quite disparate: Cecil County had a 2005 population of 97,796, while New Castle County had 523,008. New Castle County is an urbanized county with a density of 1,229 persons per square mile while Cecil County is largely rural, with 282 persons per square mile.

WILMAPCO's mission is to ensure the implementation of the best multi-modal transportation plan which meets all the requirements mandated by the Federal Clean Air Act and its Amendments (CAAA) and SAFETEA-LU and which promotes the attainment of the Goals for the Region.

### What is a Regional Transportation Plan?

Every four years, the MPO must update a long-range transportation plan with at least a 20 year planning horizon. This long-range plan must be financially reasonable and conform to air-quality standards. Significantly, no transportation projects in this region may be funded with federal money unless the projects are found in an approved long-range transportation plan. Additional discussion about an MPO's planning responsibilities can be found in Section. WILMAPCO annually implements projects in one of two ways: through the inclusion of studies and analysis in the Unified Planning Work Program (UPWP) document or through the inclusion of projects in the Transportation Improvement Program (TIP) document. The UPWP is produced annually and covers all the planning activities to be completed in the region for the fiscal year (July through June). Examples of tasks programmed in the UPWP are areawide studies, corridor studies, data analysis, and public outreach and education. These planning activities are undertaken either by WILMAPCO staff or WILMAPCO's member agencies and are funded largely through the UPWP. The TIP is a four-year funding program that is produced annually. The TIP includes all federally funded and regionally significant projects. These projects must work to implement the RTP, and are typically done by the state departments of transportation, but may be implemented by local governments.

The purpose of a long-range transportation plan (RTP) is to first examine the forecasted trends for the region such as population, employment, housing, and trip making. We then identify the transportation challenges that these trends predict, and propose transportation investments that will mitigate these challenges. Its purpose is to steer our region into a transportation future that will provide the quality of life our citizens desire. The long-range transportation plan provides not only a framework for future decision making, such that all future proposed transportation projects must support the goals of the Plan, but it also lists all of the anticipated short and long term transportation projects. In this respect, the long-range transportation plan is both a policy document and an action document. The goals of the long-range plan will be accomplished through the efforts of the member Departments of Transportation, Transit Authorities, States, Counties and municipalities.

The RTP must demonstrate Air Quality conformity goals set by EPA and demonstrate financial reasonableness. Additionally, this Plan is subject to continual review with a new update published every four years. This updating process ensures that the Plan will remain relevant and viable in the years to come. A Regional Progress Report is also produced on an annual basis to assess if we are successful in implementing the RTP actions and achieving our regional goals.

### **The Planning Process**

A sound planning process combines quality technical analysis with broad community and agency participation. Throughout this Plan, maps and data, “best practices” from across the nation, and guidance we have received from the public and member agencies are used. This approach allows us to plan for our future in a way that is proactive and relevant to our region. Over the past ten years we have reached out to thousands of citizens, local governments, neighborhoods, businesses and interest groups, bringing many voices and views into our planning process to guide the direction this RTP takes.

### **How does the RTP relate to state, county and municipal plans?**

WILMAPCO is a council of governments made up of representatives from both states and counties, as well as representatives from towns in both counties. As such, the WILMAPCO RTP represents a concerted and coordinated effort between all of the participating jurisdictions and agencies. Member agency plans have been incorporated into this plan and correspondingly, this plan will be implemented in part, by the member agencies. Likewise, this RTP serves as the transportation section of New Castle County’s Comprehensive Plan and provides guidance to other local jurisdictions, DelDOT and MDOT as they plan for the region’s future.



## Section 1: Where have we been: *Building on ten years of progress*

### Ten Years of Planning and Policy

A vision for our region’s transportation was established ten years ago in WILMAPCO’s March 1996 long-range plan, with goals, strategies and actions revisited in February 2000 and March 2003 plan updates. Born from the 1991 Intermodal Surface Transportation Efficiency Act, (ISTEA), this long-range plan was our first that comprehensively addressed mobility and access, system preservation and performance, the environment and quality of life. The 1996 plan and subsequent updates serve as a living document, a tool for making informed transportation investment and policy decisions. Thus, the plan is subject to continual review to remain relevant and viable as our region continues to undergo significant demographic, land use and transportation changes.

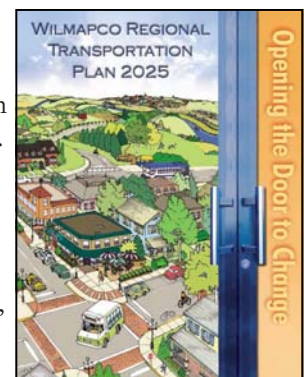
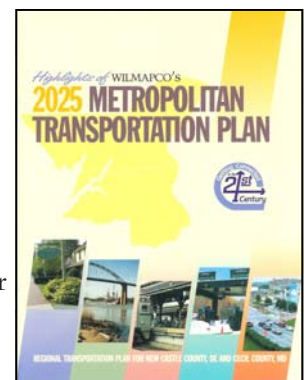
Built upon the foundation established in the 1996 plan and subsequent updates, this 2030 RTP lays out actions to achieve our long-range vision for how our region’s surface transportation system will develop. Past regional transportation plans have laid the groundwork for major transportation system improvements, such as the expansion of bus and rail transit services and facilities, completion of Delaware Route 1, new options for bicycling and walking, and implementation of the latest technologies to improve system performance.

Each update provides an opportunity to re-evaluate regional transportation policies and practices, and to develop a plan that reflects the current understanding of our region’s transportation investment needs and financial realities. Updates, now occurring every four years, not only allow us to comply with federal law, but are critical for our transportation and regional planning to remain relevant and useful.

The 1996 plan placed transportation into a much broader context than had been considered in the past, and it represented a significant departure from past planning practices. That plan recognized that the central purpose of transportation investment was to improve the quality of life for citizens of the region. The impetus for this dramatic change in planning practices was stimulated in large part by changes in federal transportation policy. By 1990, the National Interstate System was essentially complete so federal policies shifted emphasis towards maintenance and operation of the transportation system and away from system expansion, which had been the focus of federal transportation policies since the Federal Aid Highway Act of 1956. ISTEA marked a new era, recognizing the link between transportation, community vitality, environmental quality, economic growth, and social equity, which required planners and decision-makers to broaden their focus to consider these factors when developing plans and programs. Another distinct element of ISTEA that redefined transportation planning practices was the principle of financial constraint, meaning that the short- and long-range investment plans must demonstrate that anticipated revenues are sufficient to cover the cost of proposed investments. That fiscal constraint, which must consider the costs of maintaining the existing system as well as the costs of projects to enhance the efficiency and effectiveness of the system, became a controlling factor in developing investment plans. No longer could a plan be simply a wish list of projects; it had to balance and set priorities among the myriad transportation needs of the region.

ISTEA too has undergone several updates that have built on the planning principals first established in 1991. TEA-21 (enacted in 1998) and SAFETEA-LU (enacted in 2005) strengthened the key aspects of ISTEA, keeping federal legislation current and relevant.

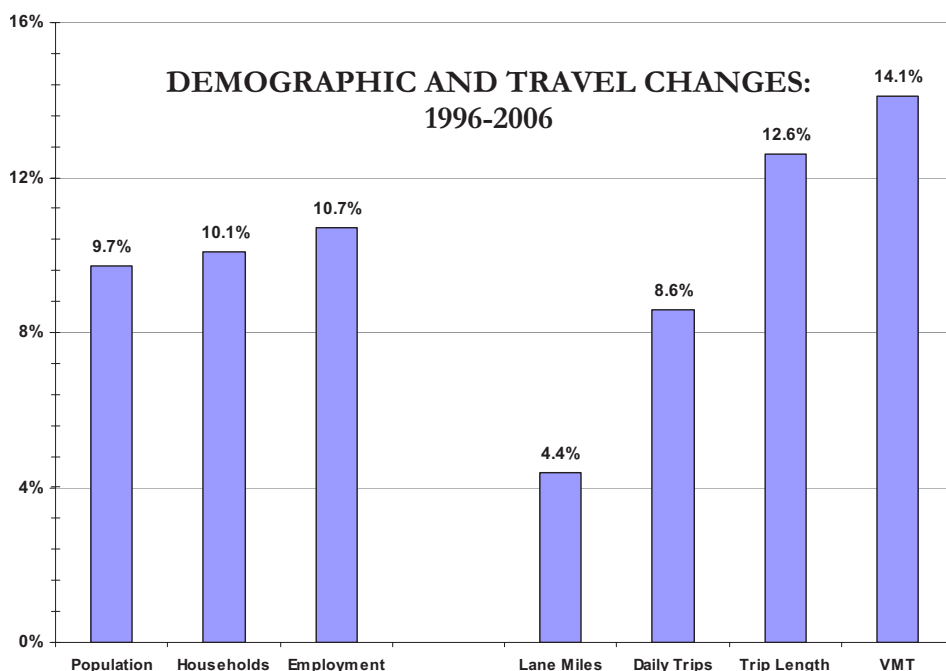
Thus, this 2030 RTP should not be seen as a “new” plan. Rather, this plan builds upon the projects, policies and plans developed over the last ten years to identify how we should continue our work during the next 20 years.





**Our Changing Region**

During the last ten years, growth in households and jobs (10.1 percent and 10.7 percent respectively) has slightly outpaced growth in population, which has grown 9.7 percent. This is due to a healthy economy and smaller household sizes. For transportation, increasing trip lengths and vehicle miles traveled have far outpaced increased lane miles. We have only increase capacity on our roads by 4.4 percent, yet we are taking more trips and traveling further distances leading to an overall increase in the total miles we travel.



The 1996 Plan had an ambitious goal of shifting 10 percent of drive alone trips to other modes. Since that time we have seen trends move in the direction of more commute trips by driving alone in both counties, and a larger percentage of commutes by driving alone. Across the region, the number of transit commuters showed a increase in the 2000 census, but recent data from the 2005 American Community Survey shows the regional number below 1990 numbers. The number of people who work at home has grown substantially, and now surpasses commuter using all other modes other than driving and carpooling.

**TRAVEL MODE COMMUTE CHANGES, 1990-2005**

		1990		2000		2005	
<b>Region</b>	Drove alone	202,525	77%	228,546	80%	242,595	81%
	Carpool	33,480	13%	31,359	11%	30,563	10%
	Transit	7,425	3%	9,680	3%	7,369	2%
	Walk	10,475	4%	7,427	3%	5,351	2%
	Bike	936	0.4%	na			
	Other	7,503	3%	2,503	1%	1,952	1%
	Work at home	5,231	2%	7,674	3%	10,213	3%
<b>Cecil County</b>	Drove alone	27,327	79%	34,982	83%	38,773	83%
	Carpool	5,110	15%	4,517	11%	4,329	9%
	Transit	98	0%	238	1%	559	1%
	Walk	773	2%	679	2%	559	1%
	Bike	84	0.2%	na		n/a	
	Other	1,308	4%	393	1%	186	0%
	Work at home	918	3%	1,246	3%	2,141	5%
<b>New Castle County</b>	Drove alone	175,198	77%	193,564	79%	203,822	81%
	Carpool	28,370	12%	26,842	11%	26,235	10%
	Transit	7,327	3%	9,442	4%	6,811	3%
	Walk	9,702	4%	6,748	3%	4,793	2%
	Bike	852	0.4%	NA		757	0.3%
	Other	6,195	3%	2,110	1%	1,766	1%
	Work at home	4,313	2%	6,428	3%	8,072	3%

Source: 1990 & 2000 Census and 2005 American Community Survey

**Annual Progress Report: Accomplishments 1996-2006**

Since the adoption of the 1996 plan, WILMAPCO has produced several Regional Progress Reports/Effectiveness Reviews. These reports contain numerous performance measures to indicate how we are achieving our goals. Our most recent Progress Report identifies Areas of Success and Areas of Improvement. A complete copy of the most recent progress report can be found in the Appendix.

**Areas of Success:**

- ***VOC & NOx emissions remain below allowable levels***—Based on the budget set by the EPA, emissions in both Cecil County and New Castle County are currently below those levels. Through cleaner fuels, transit ridership and service increases and several other mitigation strategies, we have achieved compliance, thereby reducing the emissions that cause ground level ozone.
- ***Ozone non-attainment status has improved***—As of October 2005 the Philadelphia ozone area, which includes the WILMAPCO region, has been reclassified from a “severe” non-attainment area to a “moderate” non-attainment area.
- ***Over 92,000 acres of open space and farmland preserved in both counties***—Through various state, county, municipal and nonprofit group efforts, thousands of acres of land have been protected (either temporarily or permanently) from development.
- ***Scenic Byway designations*** – Since 2000, a total of 106 miles of roadways have been designated as scenic byways throughout our region, adding 27 miles since 2004. In September 2005, Delaware received its first National Scenic Byway designation for the Brandywine Valley Scenic Byway. In June 2002, the Chesapeake Country Scenic Byway receive National designation in Cecil County.
- ***Increased options for carpooling in New Castle County***—The Transportation Management Association of Delaware (TMA) has aided in implementing the Rideshare Delaware program which has paired workers for van/carpooling. Since 1997, the TMA has estimated a reduction of nearly 1.7 million work trips through carpooling and vanpooling efforts, subsequently decreasing the vehicle miles traveled.
- ***Population growth remains highest in the desired Center/Community Investment Areas***—Since 1996, 70% of population growth has occurred in these two areas. This is in line with the goal of the RTP to focus investments within these locations, where roughly 85% of TIP spending has been allocated.
- ***Unemployment rate remains below regional and national trends***—A low unemployment rate is a solid measure of good job diversity within a region. Avoiding spikes in unemployment can be viewed as a result of having the right mix of employment types, minimizing the impacts of a downturn in any particular sector. With the exception of 1996 and 2000, the region has generally been below the rates of the surrounding metro areas, as well as the nation.

**Areas in need of improvement:**

The items below are some indicators that show the strain being placed on the transportation system.

- ***Ozone exceedences are above the EPA 8-hour standards***—Under new regulations, we must meet tougher 8-hour standards, as opposed to the prior 1-hour standards. While we have reduced the number of ozone exceedences in recent years, we have yet to have a 3-year period in which we have met the requirements set by the EPA for ozone levels. As a result, both our counties are in non-attainment.
- ***Part of the region has been designated as a non-attainment area for PM2.5***—In addition to ozone, we must now reduce the amount of particulate matter in the air, caused by vehicle emissions, construction and road dust. As of April 2005, the New Castle County portion of the WILMAPCO region has been designated as a non-attainment area for exceeding the annual standard for particulate matter 2.5 (PM2.5 refers to particles equal to or less than 2.5 microns.)
- ***Slight decrease in population within ¼ mile of a transit stop***—An increasing number of housing developments have broken ground in previously unsettled parts of our region, with little to no transit access. These auto-dependent neighborhoods make it very difficult to achieve our goals of reduced VMT, and improved air quality.
- ***Transit ridership growth falling below long range plan target trend***—Since 2002 we have begun to fall below the target trend set by the DTC Long Range Plan. The plan called for a 130 percent increase in ridership by 2025. Fixed route ridership bus has been the source of the falloff, while SEPTA and paratransit ridership have increased.
- ***Increased demand in paratransit routes straining DTC budget***—Paratransit, while seeing the largest percentage increase in ridership since 1996, is the costliest transit service per trip to fund. With a cost of roughly \$28 per trip, DTC has had to increase its paratransit funding from \$7.3 million to \$15.7 million in 7 years, a 115 percent increase. If transit funding remains constant, this level of service may not be sustainable.
- ***Park & Ride usage falling despite increased facilities***—While there has been a successful effort to add Park & Ride facilities, they are not being used extensively. The overall usage decreased in recent years. Between 2000 and 2004, the overall usage for park and ride (and park & pool) facilities has fallen from 35.6% to 33.8%.
- ***Transportation funds insufficient to meet the goals of the RTP***—Due to financial shortfalls in New Castle County, several projects are falling well behind the schedule set by the RTP. Because funding levels are not keeping pace with rising project costs and changing transportation needs of the region, we may be unable to achieve many of our goals.

## **Section 2: Where are we now and where are we going: Challenges and opportunities facing our region**

While the 2030 RTP builds upon the progress from the past ten years, this plan must also address a number of current and future driving forces that affect our transportation needs. An overriding challenge is that our anticipated transportation needs far exceed the funds available to pay for them. Other challenges include anticipated demographic changes (particularly an aging population), likely economic changes (including workforce changes), rising gas prices (and likely demands for alternative energy sources), and the challenge of making transportation changes that do not harm our environment. Over the past ten years, regional land use trends have increased development in rural areas of the region. New land use policies have emerged including the Cecil County Priority Funding Areas, Delaware Strategies for State Policies and Spending, and those contained in the 2006 New Castle County Comprehensive Plan.

### **Challenges for the Region**

Expected major changes for our region's future include rapidly changing growth patterns, evolving lifestyle choices, stresses on the quality of our human and natural environments, public health risks, and the ramifications of past planning practices and policies. This plan strives to address these challenges, while providing for our transportation needs. For us to have a successful regional plan, we must develop a series of actions to address the following items:

***Financing the Transportation System:*** Many of the projects previously programmed in our RTP are currently not scheduled for completion. Significant funding issues have arisen on a regional and national level causing delays in completion of previously approved projects. For instance over the past 10 years, an estimated \$2.9 billion has been spent in capital improvements across Delaware. This is an average of \$270 million invested in the infrastructure annually. Based on the needs brought forward by the region, it will take an estimated \$700 million annually to adequately fund all of the projects requested by the state in the next 10 years. Several factors, however, have put this funding level in jeopardy. These include: rising material and labor costs, system expansion into previously rural areas, Transportation Trust Fund collection not keeping pace with expansion, and increased operating costs for transit and paratransit services. **More information about financing our transportation system can be found in Section 3 of this document.**

***Meeting increased demand for goods movement:*** Our transportation system is not only designed to move people but also commodities. Trucks, rail cars, and ships, carry goods to air and sea ports, factories, stores, and other locations. This has a significant impact on our transportation system. Nearly 57 million tons of freight (worth about \$38 billion) enters the WILMAPCO region. Trucks and freight rail compete with passenger vehicles and passenger rail for limited space on the region's transportation system. Interstate highways, such as I-95, and regional rail corridors, such as the Northeast Corridor, carry a great deal of freight. With our close proximity to both Baltimore and Philadelphia - cities with major ports and international airports - we experience a lot of freight traffic on our major roads

***Addressing increased inter-regional strains:*** Being located near several large metropolitan areas, increasingly, people and goods travel through our region to reach other destinations. This places a further strain on our transportation network, since many of these people do not contribute to its upkeep.

***Creating alternatives to the automobile:*** In the past, most transportation agencies concentrated on meeting the needs of automobile traffic, often neglecting to consider the needs of those who walk, bike, and use transit. The focus of our transportation planning and design has been broadened more recently to accommodate these modes.

***Accommodating the needs of older and disabled citizens:*** Our senior and disabled communities must negotiate a transportation system designed to facilitate the movement of younger, non-disabled adults. The unfortunate result is high rates of isolation for older adults and disabled persons who do not drive. Older adults who do get behind the wheel face higher rates of death, due to a weaker tolerance for surviving crashes. Heavy projected increases in both populations compound the need to address these issues further.

***Addressing Congestion:*** Traffic congestion results from stretching transportation facilities beyond their vehicle capacity. Recent congestion is the result of several lifestyle changes prevalent, not only in our region, but throughout the country. Dispersed land use patterns, high rates of single occupancy trips, and our high rate of automobile ownership all contribute to congestion. The continuing trend towards smaller household size means that more households are generating more trips from more locations.

***Maintaining economic prosperity:*** Economic development is necessary to ensure the prosperity of the region, maintain a healthy tax base, and provide employment to residents of the region. Economic development also generates demand for transportation and other infrastructure. The key to a sustainable economy is to support economic growth in a manner consistent with the goals and plans of the region.

***Preserving aging infrastructure:*** Every investment we make in transportation, whether for a new road, bus, or traffic signal, ages over time. Some of our infrastructure is quite new, while other parts are considerably older. As the size of the transportation system grows, a greater amount of infrastructure has to be repaired or replaced over time. Deferring needed maintenance generally increases the long-term costs of maintenance, and can reduce the quality and efficiency of the transportation system. However, keeping pace with required maintenance limits the amount of transportation funds that can be used to support new projects and services.

***Addressing implications of rising gas prices & alternative forms of energy:*** Gasoline is not a sustainable form of energy and is in limited supply. As we have seen recently, rising gas prices can be an obstacle to affordable transportation if good alternatives do not exist. As motor vehicles will continue to be a primary source of transportation for both people and goods, availability of dependable and affordable sources of fuel is critical to our future.

***Ensuring transportation equity:*** While Civil Rights legislation has been well established in the United States for many years, clear class and racial inequity remains. We must increase our awareness of low-income and minority communities, traditionally left out of the planning process. Greater effort is necessary to include these groups in our public involvement process, overcoming barriers such as language, education and culture.

Environmental Justice (EJ), an outgrowth of the Civil Rights Act of 1964, is an initiative to ensure the fair representation and participation of low-income and minority communities in the planning process. As mandated by a 1994 Executive Order, EJ must be included in the mission of every federal agency. WILMAPCO must take three steps to ensure compliance with EJ:

- Identify residential, employment, and transportation patterns of low-income and minority populations.
- Enhance analytical capabilities for use in the TIP and RTP to ensure continued compliance with federal requirements.
- Evaluate and, when necessary, improve public outreach measures to eliminate potential barriers EJ groups may encounter in the transportation decision-making process.

The 2003 Report, “Environmental Justice: Transportation Equity Analysis for the WILMAPCO Region” began a process of addressing these concerns. This report can be found in the Appendix.

***Supporting traditional communities:*** One regrettable consequence of our past planning and policies has been the reduced emphasis on our communities as centers of commerce, culture, and community. Our traditional centers represent concentrations of infrastructure and investment that should be utilized to our advantage. They serve as places of higher density, mixed land uses, and social diversity that support our policies and goals. Typically, centers have transit supportive patterns of land use that also promote walking, bicycling, and shorter trip destinations. Their history, design, and other intrinsic qualities, make these places treasures in our region that should be supported. By providing increased transportation investments and supporting development in these areas with existing infrastructure, we can enhance and expand access in a way that complements their unique character.

***Improving our air quality:*** One of the greatest challenges facing our region, as well as many other metropolitan areas, is meeting air quality standards. Failing to meet air quality standards damages the health of all the citizens of the region, especially the health of children, older citizens, and those with respiratory diseases. Moreover, if our region does not develop and implement adequate plans to meet air quality standards, then millions of dollars in federal transportation funding may be lost.

**How will WILMAPCO address these issues and opportunities?**

The 2030 RTP consists of goals and objectives that are designed to address each one of these challenges. In addition, a list of actions are produced for each goal to guide WILMAPCO staff and member agencies over the next several years.

Also, staff will continue to further develop performance measure indicators, detailing relevant trends that can help us track progress. Historic trends reveal how indicators have changed through time. With the addition of performance targets, a direct correlation between the current trends and desired future goals can be established. This allows us to see exactly where we are and if we are moving in the right direction. This creates the opportunity to identify where policy and actual conditions are in sync and where additional resources are needed to fill the gaps.





## Section 3: How do we get there?

### Regional goals, strategies and objectives

Three goals will continue to guide the direction of our plan: (1) support economic growth, activity and goods movement, (2) efficiently transport people, and (3) improve quality of life. These goals recognize that we enjoy the tremendous advantage of being centrally located on the eastern seaboard, and that we should build on our advantage in shaping both our economy and the transportation system of the future. They respond to a strong community interest in connecting the issues of land use and transportation, which are primarily handled at different levels of government in both states. And, in recognition of the latter, they call for better intergovernmental working arrangements to foster these goals. Each goal is clarified through more specific objectives, which in turn are carried out through specific action. These actions are a mix of studies to be completed through our Unified Planning Work Program (UPWP) and projects to be completed through our Transportation Improvement Program in partnership with the community and our member agencies.

### Carrying out our plan through the UPWP and TIP

WILMAPCO prepares the UPWP annually, which guides the MPO and summarizes transportation planning activities for various agencies in the WILMAPCO region. It shows who will do planning studies, when the work will be completed, and what the final products and benefits will be.

The UPWP contains corridor and area studies, data collection and analysis, and regional transportation analysis and planning for WILMAPCO and its member agencies as well as extensive public involvement and education elements. Strategic studies of land use and transportation issues give an accurate picture of the region's condition and provide us with information to find solutions to transportation problems. WILMAPCO serves as the project manager for some of these studies; on others we are a partner, providing advice and guidance to the agency responsible for the project.

The TIP is a four-year document listing all regionally significant or federally funded transportation projects and services in New Castle County and Cecil County. It functions like a budget and projects can only be funded if they are consistent with the goals of the RTP. Once approved, the TIP is incorporated into the Delaware Capital Transportation Program (CTP) and the Maryland Consolidated Transportation Program (CTP).

### Our Goals and Objectives

#### Support Economic Growth, Activity and Goods Movement

*Objectives:*

- Ensure a Predictable and Adequate Public Investment Program to Guide Private Sector Investment Decisions
- Plan and Invest to Promote the Attractiveness of the Region

#### Efficiently Transport People

*Objectives:*

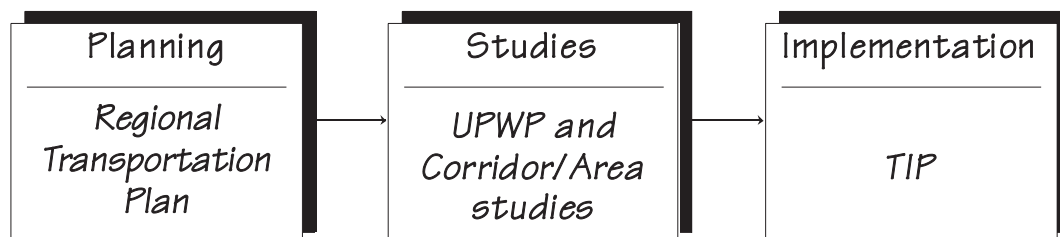
- Improve Transportation System Performance
- Promote Accessibility, Mobility, and Transportation Alternatives

#### Improve Quality of Life

*Objectives:*

- Protect the Public Health, Safety, and Welfare
- Preserve our Natural, Historic, and Cultural Resources
- Support Existing Municipalities and Communities
- Provide Transportation Opportunity and Choice

### THE PLANNING PROCESS



**Building partnerships to carry out our plan**

WILMAPCO, as a planning agency, depends on state and local government and the private sector to coordinate with us to make this plan a reality. Our policies, goals and projects are affected by the decisions of our member agencies. State, county and municipal zoning dictates where development occurs. Transportation funding is dictated by legislators at both the state and federal level. WILMAPCO's aim is to provide tools for decision makers to make wise choices about projects and policies that advance the implementation of the RTP.

Our partnership with the public is crucial to the implementation of this plan. As we carry out the plan, important decisions will be made that will affect the lives of those living in and visiting our region. Constant dialogue about the community's thoughts and preferences is needed to make our planning relevant, ensure limited funding is spent wisely, and be responsive to our constituents.

To build this partnership with the public we hold regular public meetings, attend community events, and participate in events and meetings held by others. A quarterly newsletter, monthly enews and web site provide up to date information to the community as we implement the RTP. As part of this RTP update, we have completed a public opinion survey to assess community support for the objectives and actions in the Plan.

More details about the public outreach during the RTP development, including a listing of comments are included in the Appendix.

**Taking Action**

The remainder of this section contains details about the actions which are part of each goal and objective. Actions detail both the types of transportation project that should be funded and the planning activities WILMAPCO staff will work on over the next several years.

**Goal: Support Economic Activity, Growth and Goods Movement**

**Goal: Support Economic Activity, Growth and Goods Movement**

**Objective #1 Ensure a Predictable Public Investment Program**

Objective #2 Plan and Invest to Promote Attractiveness of the Region

**Ensure a Predictable Public Investment Program: Actions**

Adequately and appropriately invest in our designated Transportation Investment Areas
Coordinate with DOTs and land use agencies as they implement completed subregional plans
Work with land use agencies to encourage future growth in areas with existing infrastructure to efficiently use our limited transportation resources.
Use WILMAPCO's approved project prioritization process to select projects for funding
Seek additional and innovative funding sources for transportation improvements
Identify dedicated funding sources for transit operating and capital budgets that will keep pace with inflation, rising demand and changing ridership patterns.
Continue to coordinate with community stakeholders on transportation decision making
Develop more comprehensive performance targets for the region
Continue to complete annual Congestion Management Process report and integrate findings into the TIP

This Plan recognizes that the “timely, efficient, and cost-effective” movement of people and goods is essential for the region to remain competitive. It is also essential to maintain and expand our future transportation system to provide a competitive edge for business and industry. Implementing this Plan would result in a future where our transportation system is an economic development asset. To support growth and vitality within our region, we need a systematic approach to investment. Coordinated investment into designated areas is needed to help support desired development patterns.

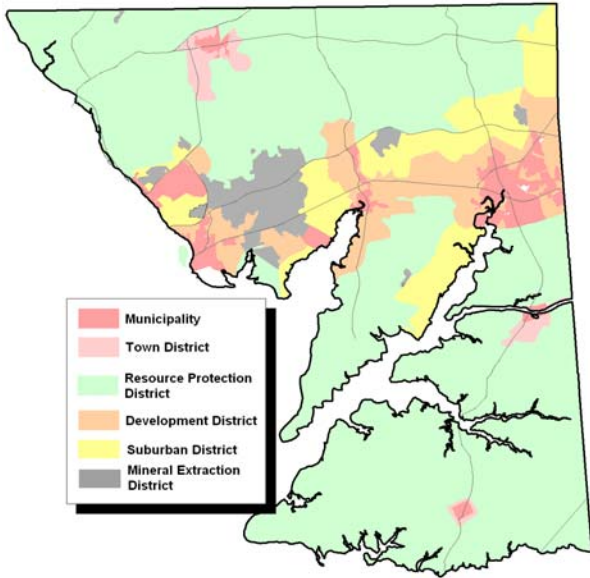
This approach has strong public support, according to the 2006 Public Opinion Survey. Almost two-thirds of residents consider managing growth and development, and preserving open space and farmland to be critical issues facing the region. Residents showed strong support for seeking additional innovative funding sources for transportation improvements and utilizing existing funds more effectively.

**Action: Adequately and appropriately invest in our designated Transportation Investment Areas**

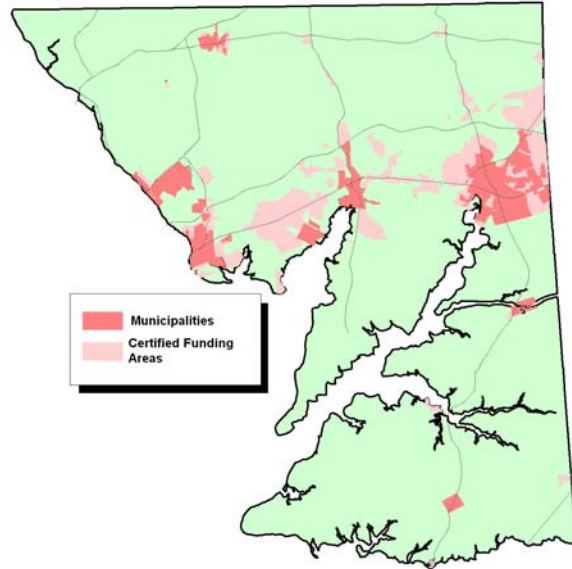
Linking land use and transportation has been one of the greatest challenges for virtually all growing metropolitan areas. The decision where to focus our transportation dollars is critical to ensure that the needs of our citizens are properly addressed. The location, type, density, and design of land uses is determined through a combination of public policy, market forces, and private investor decisions. In the 1996 Plan, WILMAPCO began targeting transportation investment according to defined Transportation Investment Areas (TIAs). These Transportation Investment Areas (TIAs) were designated as Center, Community, Developing and Rural, each with a different emphasis for investment.

Since 1996, TIAs have been revised with regional plan updates, to remain consistent with state and local land use plans. TIAs represent where and what type of public transportation investments are appropriate over the next 20-25 years. Local, county and statewide plans are as follows:

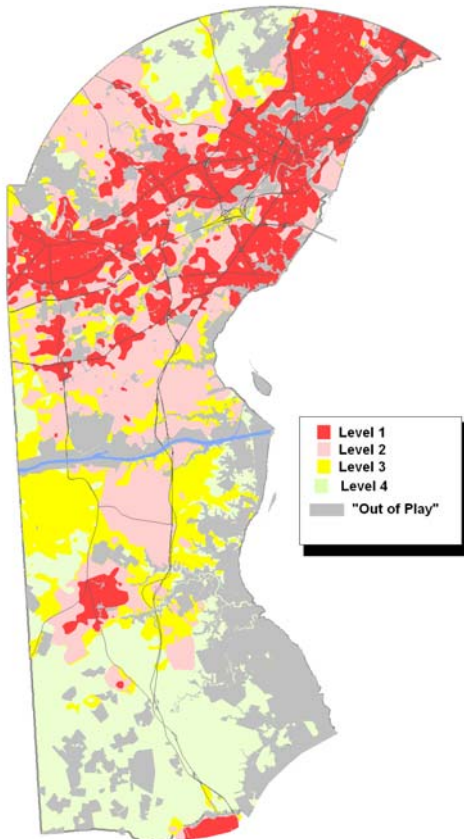
Cecil County Comprehensive Plan (1998)



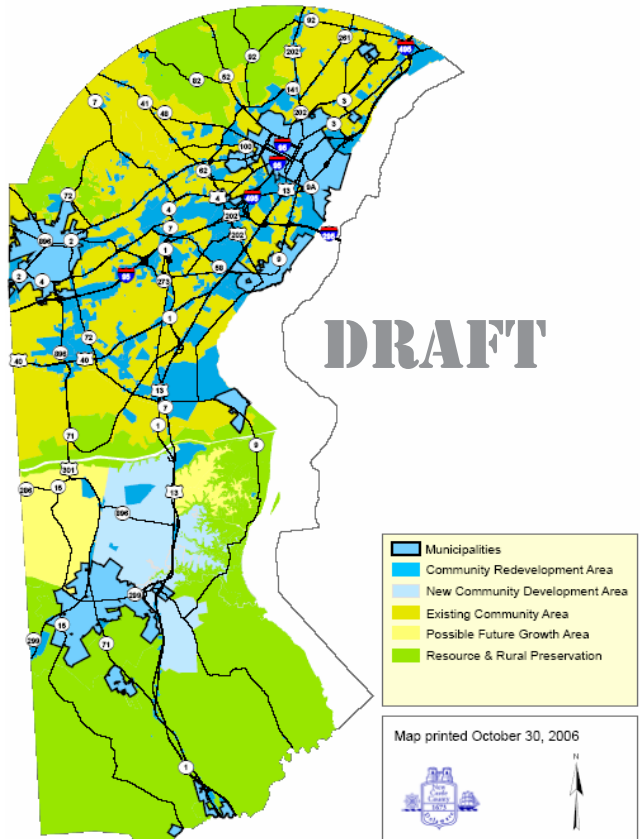
State of Maryland Priority Funding Areas (1997)



State of Delaware State Strategies for Policy & Spending (2004)



New Castle County Comprehensive Plan (2007)





Thus, WILMAPCO’s TIAs have been revised for this 2030 update to support land use and investment goals and plans defined by our member agencies.

**Center**– These are municipal areas with the highest concentrations of population and/or employment with well-established land uses and development patterns and opportunities for significant re-development. The transportation objective for these areas is to provide intensive transportation investment with an emphasis on public transportation, walking and bicycling, and to make existing and planned improvements as safe and efficient as possible.

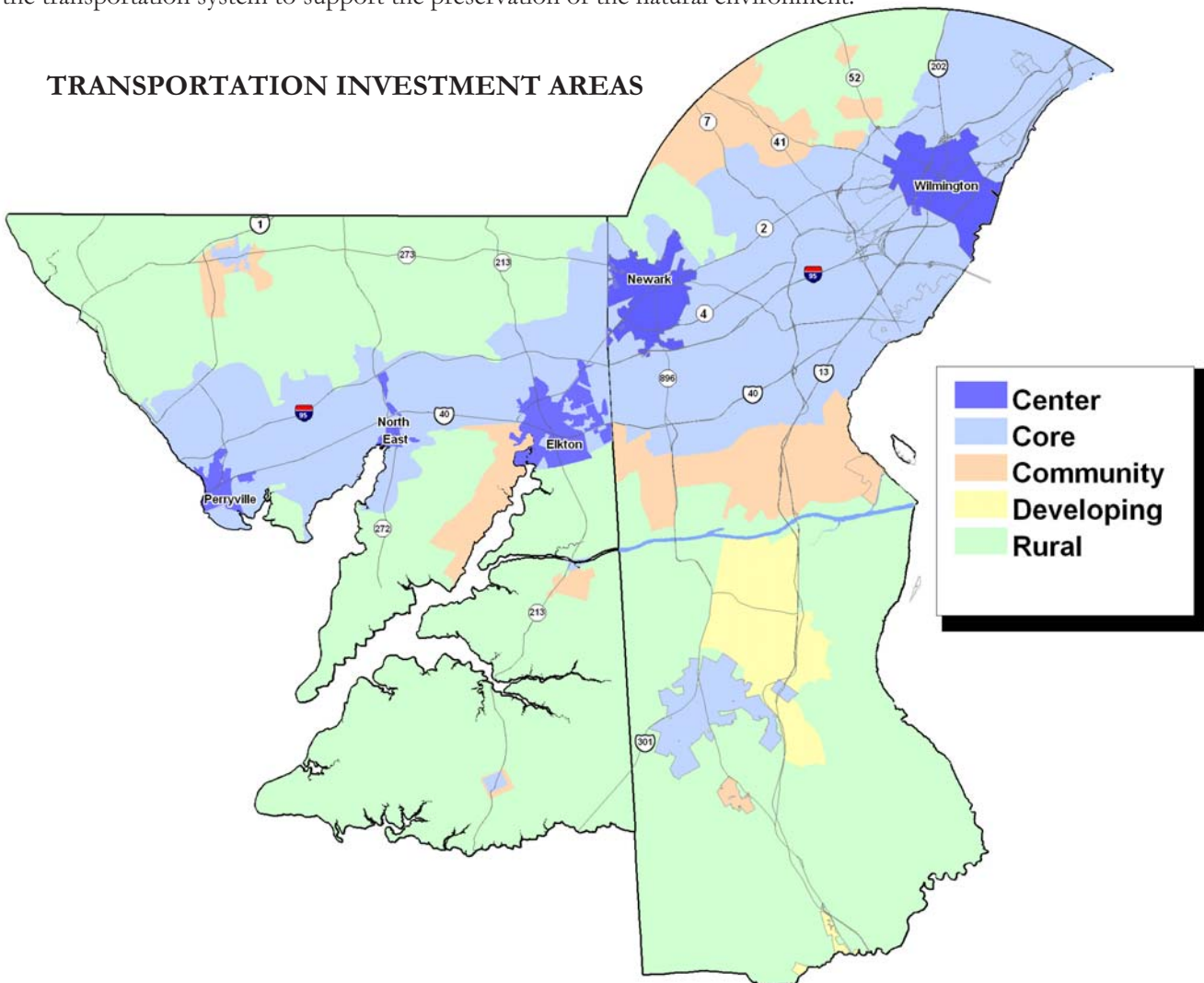
**Core** - These are municipal and non-municipal areas which contain densely settled population and employment patterns. In addition, these areas contain a substantial amount of key regional transportation infrastructure encompassing all modes. The transportation objective for these areas is to maintain the existing infrastructure while allowing for system expansion for all modes of transportation, including the expansion of rail service and the addition of roadway capacity.

**Community** - These are areas with well-established land uses and development patterns and where growth and development pressures are expected to be moderate. The transportation objective for these areas is to expand and improve transportation facilities and services, and to make each as safe and efficient as possible.

**Developing** - These are areas where land uses and development patterns are not yet set and where they continue to emerge. The transportation objective for these areas is to appropriately encourage growth and rational development through a planned set of phased investments, land use coordination, and policy actions consistent with zoning densities and designations.

**Rural** - These are rural areas where limited growth and development exist or are expected, where transportation facilities and services are considered adequate to meet needs, and where natural resources are to be preserved. The transportation objective of these areas is to preserve existing transportation facilities and services, and to manage the transportation system to support the preservation of the natural environment.

**TRANSPORTATION INVESTMENT AREAS**



To elaborate on the differences in the transportation investment areas, WILMAPCO has developed a project matrix. This matrix is to highlight what project types are desirable for implementation using public funding within each area.

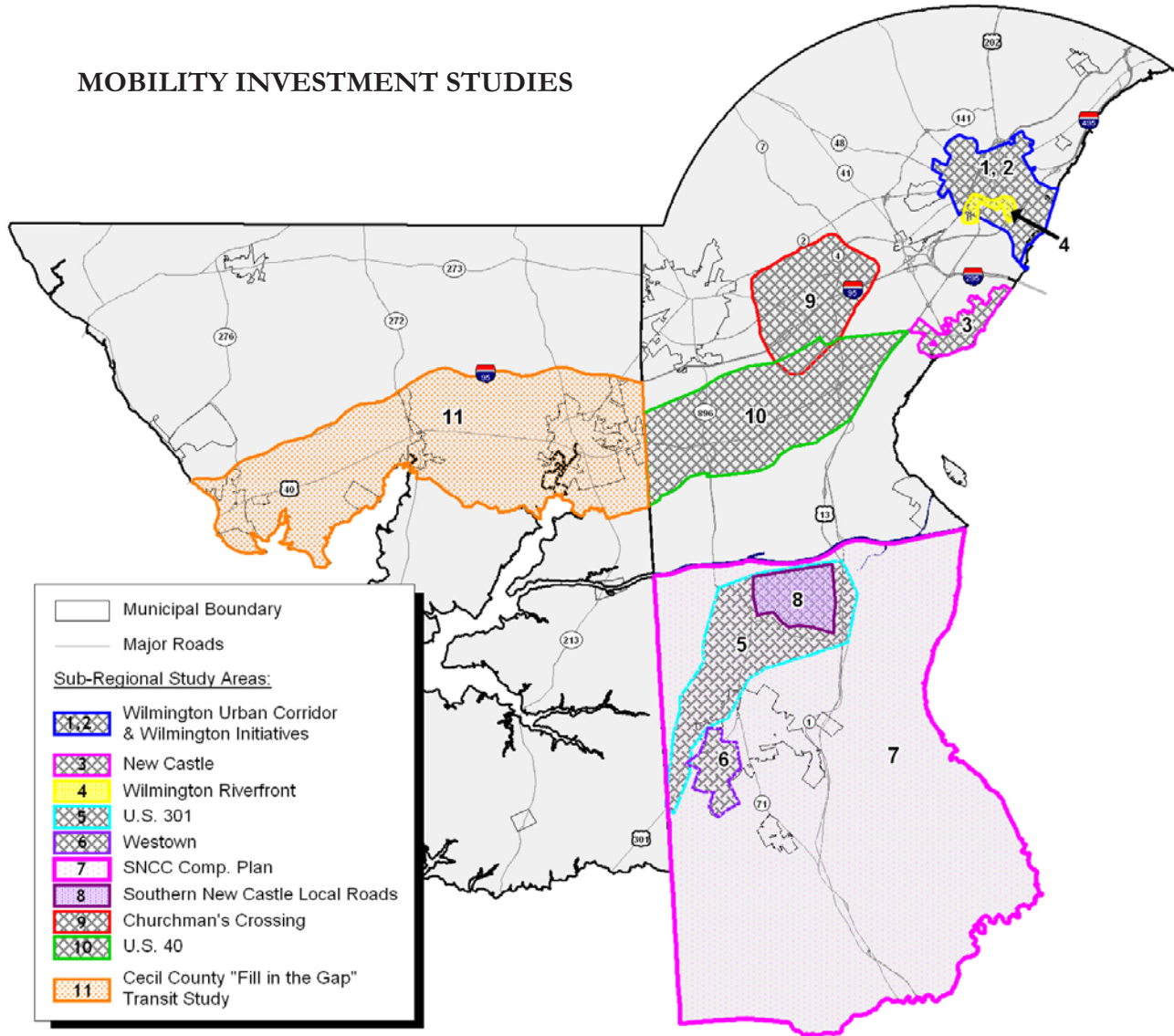
**TRANSPORTATION INVESTMENT AREA PROJECT MATRIX**

Investment Type	Center Investment Area	Core Investment Area	Community Investment Area	Developing Investment Area	Rural Investment Area
<b>Preservation</b>					
Safety Projects	x	x	x	x	x
Transportation Enhancements	x	x	x	x	x
Pavement Rehabilitation	x	x	x	x	x
Bridge Rehabilitation	x	x	x	x	x
Drainage Improvements	x	x	x	x	x
Scenic Byway Easement Purchasing					x
<b>Management</b>					
Truck Weigh Station Facilities			x	x	x
Intersection Capacity Improvements	x	x	x	x	
Increase/enhance park & ride facilities	x	x	x	x	
Access Management	x	x	x	x	
Minor Roadway Improvements (small-scale lane/shoulder widening)	x	x	x	x	
Enhance the movement of Freight	x	x	x		
Retro-fitting of sidewalks	x	x	x		
Expand existing rail stations	x	x			
ITS Facilities expansion	x	x			
Development/Enhancement of Transit Centers	x				
<b>Expansion</b>					
Pathways	x	x	x	x	x
Sidewalks	x	x	x	x	x
Bikelanes	x	x	x	x	x
Pedestrian Facilities Expansion	x	x	x	x	
New Roadway Construction	x	x	x	x	
Major Roadway Widening/Addition of Capacity	x	x	x		
New Train Station Expansion	x	x			
Frequent Bus Service (1 bus/10 min.)	x	x			
Bus Rapid Transit	x	x			
Commuter Rail Service Expansion	x	x			
Regional Rail Service Expansion	x	x			
Express Bus Service	x	x			
Light Bus Service (1bus/hr.)			x	x	
Interchanges/Grade Separations		x			
Intermediate Bus Service (1bus/30 min.)		x			

**Action: Coordinate with DOTs and land use agencies in the development and implementation of existing and future subregional plans.**

Subregional plans provide long-range transportation and land use strategies for communities, regional commercial areas, or transportation corridors. Bringing together WILMAPCO, community stakeholders, and land use and transportation decision-makers this model for developing and implementing plans assesses transportation needs based on development activity to coordinate the timing and type of improvements.

**MOBILITY INVESTMENT STUDIES**



In addition to the specific mobility strategies discussed in other sections, several areas in the region are currently undergoing extensive study. These major mobility investment studies, when completed, will become components of this Plan through formal amendments by the WILMAPCO Council. Therefore, to be consistent with the balance of the Plan, their common goal is to increase the efficiency and the mobility of the region's transportation system.

Thus, these studies will support the overall direction of the Regional Transportation Plan efforts; they each will carefully and thoroughly consider a full range of available options. These options include a wide array of highway and intersection capacity management and expansion strategies and improvements, transit and other non-SOV management and expansion strategies and improvements, and travel demand management measures including strategies to improve connectivity.



**Action: Work with land use agencies to encourage future growth in areas with existing infrastructure to efficiently use our limited transportation resources.**

With limited transportation funding, it is important to locate and design development in ways that minimize the need for transportation expansion and investment. Growth planned in such a manner will not only decrease transportation burdens, but decrease impacts on natural resources and other infrastructures' funding. Our TIA map indicates which areas are rural in character. According to the Rural TIA, appropriate transportation expenditures in these areas are safety and preservation projects.

The New Castle County Department of Land Use has recently completed their comprehensive land use plan. In that plan, the county has designated several areas of very low density development which do not support system expansions. Many of these areas are far removed from major roadways and would require significant transportation investment expand and enhance transportation facilities.

Cecil County also has a well defined development area in which it focuses its transportation investment dollars. Maryland's 1997 Priority Funding Areas Act directs infrastructure spending to Priority Funding Areas and County-Designated Smart Growth Areas in existing communities and where future growth is desired.

**Action: Use WILMAPCO's approved project prioritization process to select projects for funding**

The prioritization process uses quantifiable measures that are tied to the goals and vision of the RTP. Using this process to select projects will ensure that those funded projects will advance our regional goals and address areas having the greatest need. Scoring criteria include: safety, air quality, congestion, traffic and transit volumes, environmental and transportation justice, economic development, freight, and local/private funding contributions. The prioritization process is included in the Appendix.

**Action: Seek additional and innovative funding sources for transportation improvements**

Revenues for operations and capital improvements have not kept pace with costs, as detailed in the Maryland Transportation Needs and Funding Report in 2003 and the Delaware Transportation Development and Funding Options Task Force Report in 2005. Projections indicate that even core services will lack sufficient funds beyond 2015. A stable, dedicated funding source for both transit and roadway improvements is needed and far preferable to year-to-year, ad-hoc funding. Without reliable funding, we face the deterioration of equipment and facilities, as well as a potential reduction of services. Deferral of transit system expansions and planned service increases has already resulted from this funding shortfall. Loss or reduction of transit services results in shifting demand and cost to an already overburdened social service system and increasing demand on our roadways. Roadways too have insufficient funding. This in turn may lead to possible increases in structurally deficient bridges, delays in road maintenance, and roadway management and expansion projects being delayed. To maximize available funding and gain additional funding WILMAPCO will:

- **Encourage intra-regional cooperation to promote growth which minimizes overall transportation infrastructure costs.** Work with land use agencies to encourage future growth in areas with existing infrastructure to efficiently use our limited transportation resources. Growth planned in such a manner will not only decrease transportation burdens, but decrease impacts on natural resources and other infrastructures' funding.
- **Seek new funding sources for transportation improvements and innovative financing to utilize existing funds more effectively.** Review options identified in Delaware Governor's Transportation Development and Funding Options Task Force Report, the Maryland Transportation Task Force: Transportation Funding and Needs Report, and the Maryland Current Practices in Public-Private Partnerships for Highways Study. Also, research and review successful strategies being used in other regions to fund projects in creative and non-traditional ways.

Methods used by other jurisdictions include:

- Motor fuel tax – increase rate per gallon or base rate on wholesale price rather than quantity due to the desire to see revenue keep up with inflation while seeing an increase in overall fleet fuel economy.
- Motor vehicle registration and licensing fees/other related fees.

- Real estate property tax and/or income tax dedicated to transportation projects – this has the advantage of broad tax base but, without varying rates by location, does not accurately charge residents in proportion to their demands on transportation infrastructure.
- Increased developer financing—may involve payment of capital transportation improvements in return for dedicated land, construction of specific facilities, traffic control measures, changes in zoning/building regulations, or subsidized facilities. The developer may be directly responsible for providing roadway improvements for at least part of the traffic from the development and may have some influence over the selected improvements. Negotiated investments involve voluntary contributions by private developers to the cost of public transportation improvements in return for flexibility in zoning/building regulations.
- Private ownership—sharing of ownership costs between transportation agencies and private entrepreneurs, employer subsidies for transportation or transit, or a private consortium with the authority to finance, construct, and charge fees.
- Private donations—may involve land or capital contributions by parties with a strong interest in seeing a specific project completed.
- Transportation Infrastructure Finance and Innovation Act—federal credit program, under which loans, loan guarantees and lines of credit are provided to public and private sponsors of major surface transportation projects. Designed for large scale projects of regional significance.
- State Infrastructure Banks—can offer loans to public and private transportation project sponsors.
- GARVEEs – permit states to pay debt service and other bond-related expenses with future federal highway apportionments.
- Flexible match to federal funds - Allows a variety of public and private contributions to be counted toward the local match for projects. Eligible matches include private, state and local funds and right-of-way, private and local materials, and some private, state and local services.
- Toll revenues – additional toll may be collected, however, short distances between access points and the wide availability of parallel routes may result in toll evasion if the cost of the toll is seen as too high.
- Impact fees-impact fees allow developers to pay in direct relation to their impact, rather than bear the burden of previous development. Fees are flexible and offer the advantage that they can be used either on- or off-site, however fees can also be pooled and used within defined Transportation Improvement Districts.

**Action: Identify dedicated funding sources for transit operating and capital budgets that will keep pace with inflation**

WILMAPCO will work with transit agencies to identify dedicated transit funding sources, such as a Transit Trust Fund. New sources of revenue for this fund could include:

- Expand advertising on buses, wrapped buses, in bus shelters and on DART (fare) cards.
- Investigate newspaper sales on buses. For example, Fredericksburg (VA) Regional Transit (FRED) added newspaper racks and a collection box on their buses for local newspaper and receives a commission for each paper sold. The newspaper also runs free ads for FRED.
- Expand in-house driver-training programs to include extra seats for purchase to outside organizations seeking similar training (customer sensitivity, defensive driving, etc.).
- Investigate new statewide funding opportunities. In Arizona a vehicle license tax (VLT) and state Powerball earnings are used fund transit.
- Another potential funding source could be development impact fees. Within the last few years, developers in New Castle County who have built along existing transit routes have been required by the County to construct transit passenger amenities, as directed by DTC. However, this process has not been applied to development occurring away from transit service areas, or in areas where the passenger amenities are already in place. A transit impact fee schedule would enable DTC to “bank” the developer’s cost of an improved bus stop and shelter where the shelter exists, while assessing that same cost to development that is along future transit routes or in areas that lay well outside any foreseeable transit expansion. The fee could be scaled by proximity to transit routes, with fees increasing as the distance to transit service increases since this development creates the greatest cost on infrastructure.
- CMAQ and STP funds can be used for purchasing vehicles, building passenger facilities, and to provide operating support for transit service. CMAQ funds can also be used to support transit operations from attainment to non-attainment areas.

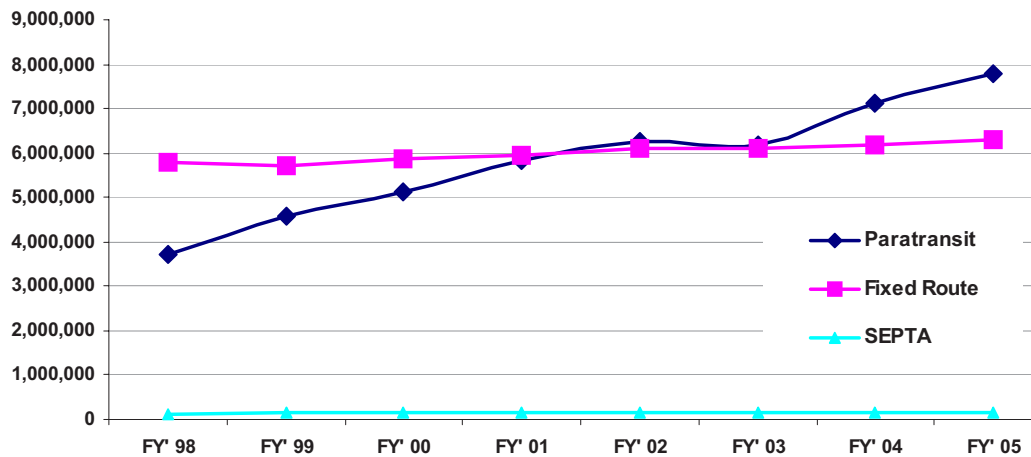
- Trust Fund revenue could be used, dedicating for example, an annual payment of \$2.85 million from the State's rental vehicle tax.
- Seek new partnerships to preserve existing transit service levels and/or expand service areas and hours.
- Create funding partnerships with existing charitable foundations that share similar goals, such as clean air and transit-dependent populations.
- Coordinate with the Department of Education and school districts to provide student transportation. Shift current funding from private carriers in situations where older students can easily utilize existing transit routes.
- Create partnerships with our higher education institutions, including the University of Delaware, Delaware State, DelTech, Wesley and Wilmington College in which students pay a transportation fee (which would transfer to DTC) in return for free transit rides with a student ID.
- Look for partners in retail areas. Two Michigan transit providers (SMART and ALTRANS) studied the number of riders using transit to access retail destinations, and calculated that each customer was worth \$10 of value to the retailer. Major retail destinations were approached to provide annual funding subsidies based on the number of riders delivered.
- Look for partners in commercial areas. Fredericksburg, VA, Regional Transit (FRED) created a program in 1996 in which partners contribute annual operating funds for specific routes which serve their facilities. Partners including retailers, hospitals and colleges, add an additional \$125,000 to FRED's funding each year and also place representatives on an advisory board to ensure that transit and community planning are coordinated.
- Expand existing partnerships: DTC entered an Agreement with Creekwood LLC, the developer involved in the construction of the new office, which resulted in a temporary funding subsidy for the extension of an existing bus route. An expanded program to extend service hours for routes serving malls and businesses with late shifts could feed into a new transit fund, similar to the Night Owl Shuttle Seek funding partnerships with municipalities, business districts and major employers to subsidize transit in return for a "reduced fare zone."

**Action: Examine transit funding levels to support changing ridership patterns and/or restructure paratransit to meet rising demand**

The structure of DART Paratransit services must be reconsidered, as ridership is continuing to grow, and the high per-passenger costs are continuing to increase, draining operating funds from fixed route service. The growth of paratransit has created a strain on the operations budget, causing its portion of the total budget to rise from 26% (\$7.3 million) to 33% (\$15.7 million) since 1997. At this current rate, service cuts for this or other transit services may occur if funding levels do not keep pace with demand. Trip demand also strains the system and results in decreased on-time performance. The DART paratransit service area covers the entire state, far exceeding the Federal ADA coverage requirements and creating an inequity that places regular transit riders at a distinct disadvantage. In addition, single passenger paratransit trips have a much higher cost per-mile than other transit services. A mandate to limit paratransit service strictly to the federally required ADA service area (within  $\frac{3}{4}$  of a mile of existing transit routes) would be a difficult process to undertake. Other strategies should be considered including:

- Create a new paratransit fare schedule, with a premium fee charged for trips located outside the ADA area, and a medium fare for trips which operate within the ADA area, but begin or end outside this area. Existing fares would be charged for trips which operate within the Federally mandated service area. Prioritize medical visits and work commute trips during peak service hours.
- Create scheduled trip services for lower priority trips that are outside of the ADA service area. This could increase efficiency and on-time performance for paratransit customers and could also allow for service expansion for fixed route riders. A pilot program of this type has been implemented by DTC in Dover, DE.

**TRANSIT ROUTE MILES**



Source: Delaware Transit Corp: Figures are Statewide

**Action: Continue to coordinate with community stakeholders on transportation decision making**

WILMAPCO will continue our extensive outreach programs to bring community groups and citizens together with county and state agencies in order to create balanced transportation plans and programs that are designed to satisfy local and regional needs. To this end, WILMAPCO will also seek new forums with which to provide education and information to citizens of the region to ensure that they will be well-informed of their transportation options.

**Action: Develop specific performance measure targets**

While the regional progress report contains numerous performance measures, many lack identifiable goals against which we can measure our success in implementing the RTP. For instance, the Delaware Transit Corp. has set 90 percent on-time service as a performance measure goal. This is easily measured each year to ensure that goals are met. Efforts should be made to develop a consensus on the other goals for which no targets have been set. More details about performance measures are in Section 5.

**Action: Continue to complete annual Congestion Management System report and integrate findings into the TIP.**

The WILMAPCO Congestion Management System (CMS) Summary is a process designed to meet the federal requirement set by the transportation legislation; ISTEA, and subsequent updates including the current SAFETEA-LU, requires that all urbanized areas with a population greater than 200,000 develop a CMS and implement it as part of the metropolitan planning process. The FHWA defines a congestion management process as “a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing mobility.” These regulations requires this analysis to include an ongoing methods to monitor congestion, both traditional and nontraditional congestion strategies, implementation plans, and performance measures.

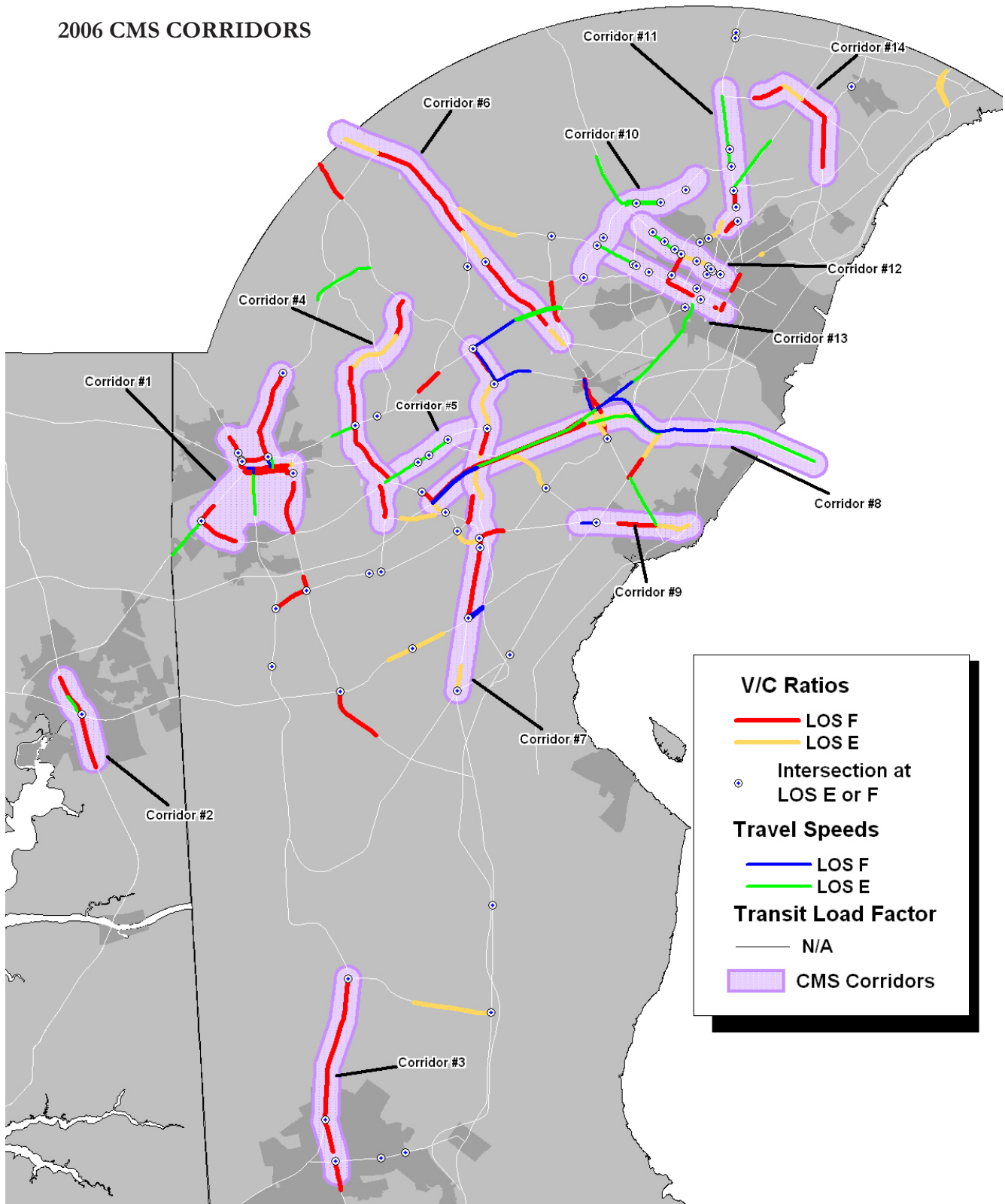
The WILMAPCO CMS examines:

- Level of Service (Roadway segment Volume to Capacity Ratio)
- Intersection Level of Service
- Actual travel speeds compared to posted speed limits
- Transit Volume to Capacity Ratio

Congested areas and corridors are identified and tools to address the congestion are defined through a top-down approach that places the greatest emphasis on eliminating trips and reducing peak-hour Vehicle Miles Traveled (VMT). Other strategies in order of emphasis are shifting auto trips to other modes, shifting drive alone trips to carpooling and vanpooling, improving roadway operations, and adding capacity.

A copy of the most recent CMS report can be found in the Appendix.

**2006 CMS CORRIDORS**





**Goal: Support Economic Activity, Growth and Goods Movement**

Objective #1 Ensure a Predictable Public Investment Program

**Objective #2 Plan and Invest to Promote Attractiveness of the Region**

**Plan and Invest to Promote the Attractiveness of the Region: Actions**

Continue to evaluate intracounty rapid transit for New Castle County
Work with economic development, tourism and transportation agencies to establish a better relationship between transportation and tourism
Continue to work towards intercounty transit with Cecil County and filling the regional transit gap with passenger rail service from Perryville to Newark
Support efforts to extend passenger rail service from Wilmington to Dover, including the creation of transit supportive development along the intended corridor.
Enhance the Freight/Goods Movement Analysis Capacity
Enhance our Goods Movement Capabilities
Plan, fund and implement a comprehensive goods movement program
Continue partnership with ridesharing agencies

One strength of our region is its diverse and vibrant economy. To attract businesses, our transportation system needs to allow for the free flow of goods, customers and employees into, out of, and through the region. Also, providing adequate transportation choices enhances the attractiveness of our communities which promotes growth and development as well as a sense of community pride.

Commuters and their employers require access to airports, train stations, hotels and offices and therefore, need roads, transit, and other transportation options that are convenient and easy to use. It is also important to have adequate transportation facilities in place surrounding identified potential economic development sites. Goods need to flow to and from the port with smooth intermodal connections to allow manufacturers in the region to thrive while allowing products to reach their destinations. The availability of a well-functioning transportation system makes this region desirable to current and future employees and employers, helping to attract and retain jobs.

As part of the development of this Plan, research on current and forecasted employment was conducted. Knowing the location and amount of significant employment and distribution centers is critical to the planning of supportive transportation facilities and services. Economic development activities follow zoning and County Comprehensive plans. We should ensure that county zoning is compatible with available or planned infrastructure. The transportation investments and policies implemented over the coming years will work to support targeted growth by making investments in the Community and Center TIAs and by promoting access to all modes at employment centers.

**Action: Work with economic development, tourism and transportation agencies to establish a better relationship between transportation and tourism**

A well-managed, intermodal transportation system with the necessary supporting strategies will improve tourism in our region. By increasing transit, improving transit centers and intermodal access centers, and implementing general improvements that enhance our quality of life, we will help to make this region an attractive tourist destination. We can accomplish this using various communication technologies. Personal, portable information devices or kiosk type information points can provide transportation information either before a trip or en-route. They can be used by local tourism-dependent businesses to advertise their services, enabling them to not only reach a wider audience, but also to accurately target information to the customer.

**Action: Continue to evaluate intracounty rapid transit for New Castle County**

WILMAPCO has been working with the DelDOT, DTC, and others to explore the potential of fixed guideway systems to provide additional transportation options in New Castle County. An expanded fixed guideway system could tie into and support the current rail system. Although investigation is still in the early stage, this service is anticipated to run approximately parallel to I-95 in New Castle County, with the potential to relieve congestion in one of the most congested corridors of the region. WILMAPCO will also work with DTC to investigate the use of bus rapid transit (BRT) systems to further this goal. A BRT system could be designed as an expansion of services along existing corridors with productive transit routes and transit supportive land uses and densities. These systems would also have the potential to provide transportation capacity to support future economic development, reinforce most cost-effective land use and growth patterns and improve air quality. Expanding the transit system though this method may gain quicker federal approval because it would not result in many of the negative environmental consequences experienced by roadway expansion.

**Action: Continue to work towards intercounty transit with Cecil County and filling the regional transit gap with passenger rail service from Perryville to Newark**

Currently, only AMTRAK, the national rail service carrier, provides passenger rail service completely across the WILMAPCO region. Due to its nature, this service has limited stops (Newark, DE) away from the Amtrak Station in Wilmington, so it is not intended to serve as a local rail service. Local SEPTA commuter passenger service, originating in Philadelphia, only serves New Castle County as far west as Newark. From the west, MARC commuter passenger service in Maryland extends from Baltimore to Perryville, the western edge of Cecil County. To the south, MARC service extends to Washington D.C. The WILMAPCO Regional Transportation Plan calls for the implementation of commuter rail service between Newark and Elkton, which would eliminate one notable gap in the regional rail system.

WILMAPCO would ultimately like to see commuter rail extended between Newark, DE and Perryville, MD. Filling in this transit gap would provide greater transit access for the citizens of Cecil County to the population and employment centers in the region and along the entire east coast. Also, Cecil County will be impacted by the Base Re-alignment and Closure Commission (BRAC) decision to add jobs and personnel to the Aberdeen Proving Ground in Harford County, which lies just across the Susquehanna River from Cecil County. It is expected that many military and civilian families will choose to live in Cecil County, resulting in additional population growth above what was previously expected within Cecil County's growth area. Adding rail service will encourage and reinforce more concentrated patterns of land use, that in turn make transit service more efficient and cost effective. It also acts to preserve open space and improve air quality. This service would also provide an alternative to the east-to-west automobile travel flow across the WILMAPCO region, one of the most important and highly used travel patterns. This gap has been partially addressed by both DTC and Cecil County Transit services. DTC operates DART Route 65 between Newark, DE and Elkton, MD. Cecil County Transit operates "The Bus" which has service to Glasgow, DE and a recent extension from Elkton to Perryville, MD. With this extension of bus service to Perryville, the last gap in regional bus service could be removed by coordination between Cecil and Harford Counties to extend their services across the Susquehanna River. MTA has begun an initiative to consider this issue, and WILMAPCO is a member of the *Filling the Gap* Working Group that is examining potential solutions and funding to create this linkage.



**Action: Support efforts to extend passenger rail service from Wilmington to Dover, including the creation of transit supportive development along the intended corridor.**

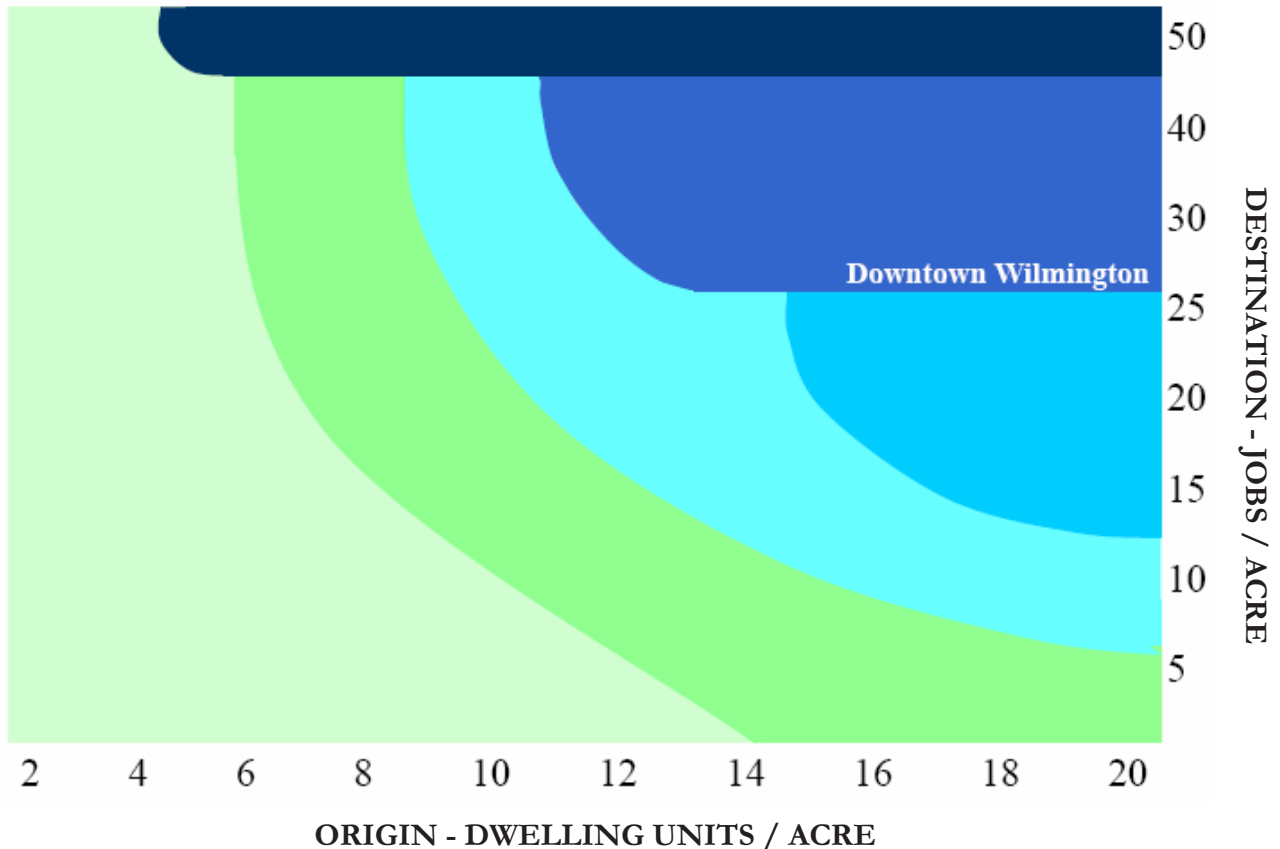
Led by members of the Delaware State Legislature, a Commuter Rail Task Force has been investigating the feasibility of extending rail service from northern New Castle County to Dover. This concept was also presented in the updated Delaware Transit Corporation Plan as a transit vision to support Livable Delaware, Governor Minner’s Smart Growth initiative.

One of the most important elements of the plan presented by DTC was the idea of creating transit supportive development patterns along the potential rail route. These land use patterns would promote ridership, improve efficiency of the service, help to reduce demand for driving, reduce congestion, and improve air quality. Planning to provide rail access to points south of the canal in New Castle County provides an opportunity to link land use patterns and transit services as these areas of the County grow to accommodate future population and employment.

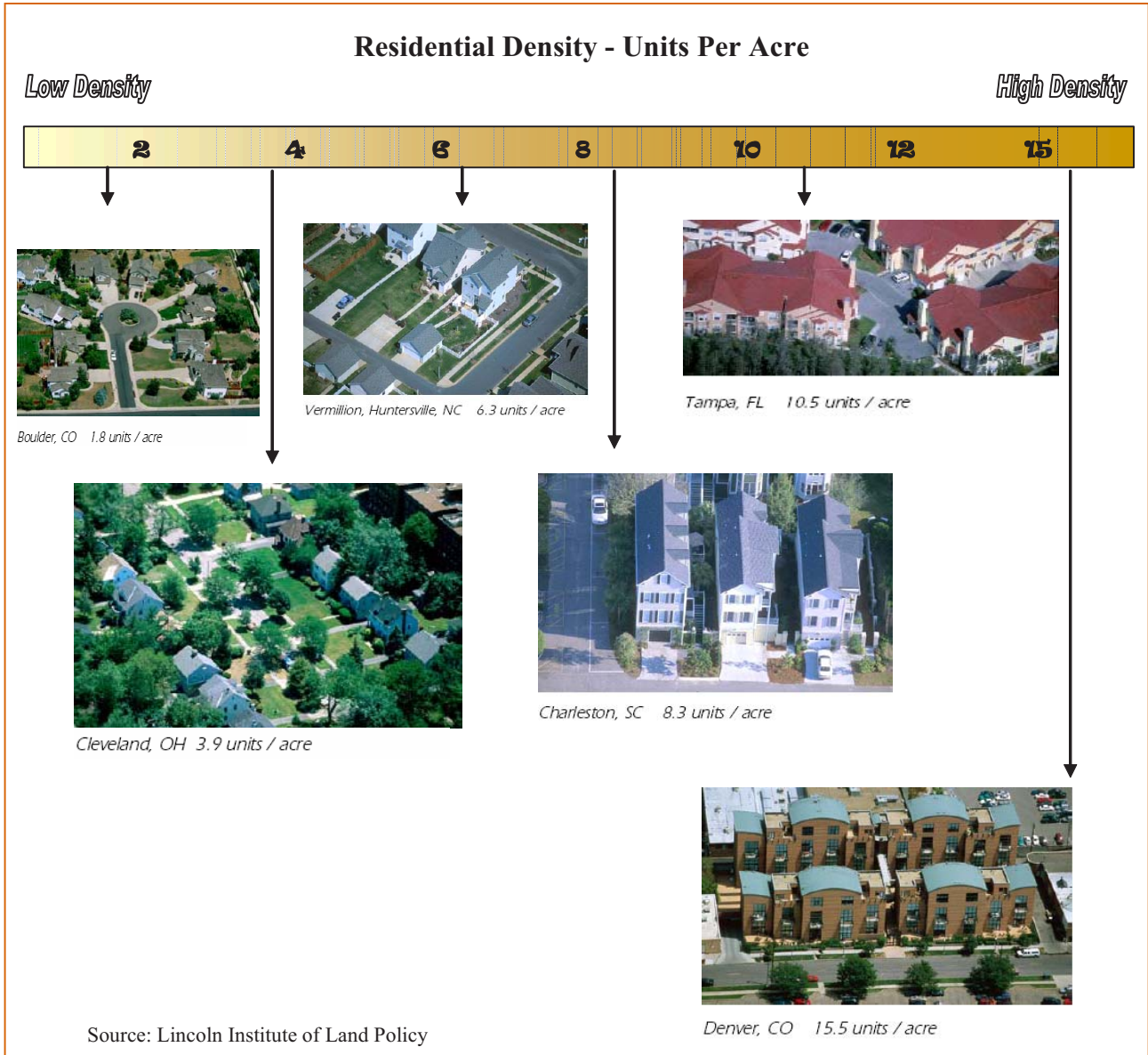
Transit Oriented Development (TOD) is a critical ingredient for a successful commuter rail system, and will also benefit bus routes, both local and commuter varieties. Creating neighborhoods and corridors with higher residential densities, mixed land use and good connections to transit stops creates populations that are more likely to use other modes of travel than just auto trips. Proximity to transit stops can be especially important – studies show that for every 100 foot increase in walking distance to transit, there is a drop in ridership - 0.65% in Washington D.C.; 0.85% in San Francisco, Sacramento and San Diego. People who seek to use transit on a regular basis are more willing to walk the traditional ¼ mile to a bus stop, but casual transit users may not. Transit use in successful TODs is not guaranteed, as some studies show that only 10-18% of residents may use transit on a regular basis. However, that reduction in vehicle miles traveled (VMT) is still beneficial to all residents.

**TRANSIT & LAND USE DENSITY MATRIX**

Transit not feasible	Intermediate Bus Service - 1 Bus/30 Min.	Bus Rapid Transit - 1 Bus/5 Min.
Light Bus Service -1 Bus/Hour	Frequent/Express Bus Service - 1 Bus/10 Min.	Commuter Rail - 20 Trains/Day



Another important factor is the connection between residential density and the size of the downtown employment center. Suburban developments do not necessarily require high-density residential neighborhoods (15 units/acre and up) to support transit service, as long as there is sufficient employment density (20 jobs/acre and up) that is well-served by various transit types. The *Transit and Land Use Density Matrix* provides a correlation between residential and employment densities and transit types. The *Residential Density* figure shows examples of what these different residential densities can look like.



**Action: Continue our Partnership with ridesharing agencies**

The TMA is a non-profit organization of private corporations and public agencies that manages DTC’s programs to achieve reductions in traffic congestion, provide mobility to citizens and improve air quality. The TMA also serves a support role for DTC, using transportation fairs and other promotions to educate employers and their employees about transportation alternatives. To this end, the TMA manages DTC’s RideShare Delaware Com-muter Program, coordinating car- and van-pools, operating the HomeFree Guarantee, the School Pool the TRAV-ELINK tax credit and other programs. The TMA also manages DTC’s Night Owl Shuttle, in partnership with lo-cal employers, to subsidize a subscription bus service which operates when DART service hours end on Week-nights and weekends. WILMAPCO is an active member of the TMA in carrying out its mission.

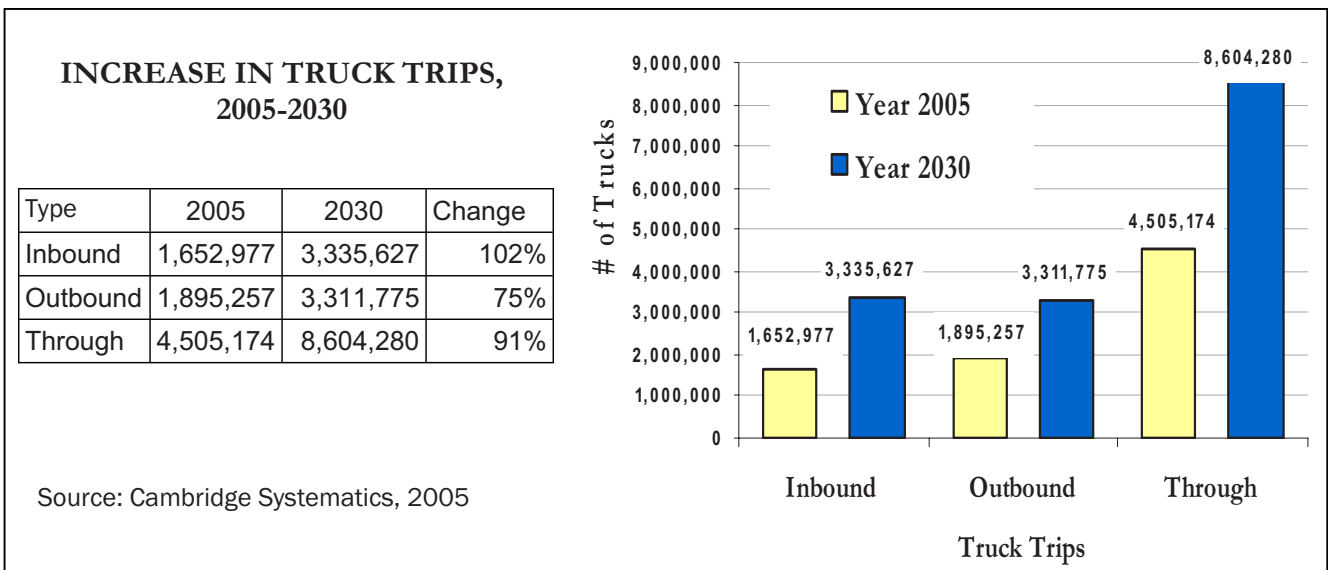
**Action: Plan, fund and implement a comprehensive goods movement program based upon the findings of the WILMAPCO Freight Plan**

The safe and efficient movement of goods is a critical yet difficult aspect of our planning practices. The movement of goods must be quick and dependable enough to allow for our economy to grow, yet it must be balanced against keeping the quality of life at a high level for our residents.

In 2005, over 135 million tons of goods were moved by trucks in, out and through the WILMAPCO region. This translates into roughly 8 million annual truck trips on regional roads. By 2030, these trips are forecasted to increase by 90% to just over 15 million trucks as the chart below indicates.

In 2007, WILMAPCO will complete a comprehensive Freight and Goods Movement analysis to develop a path forward for addressing goods movement. Its goal is to gather what information is available on the current condi-tions and trends of freight and its impact on the transportation system. The scope of work has been developed to set the stage to answer these broad questions regarding freight:

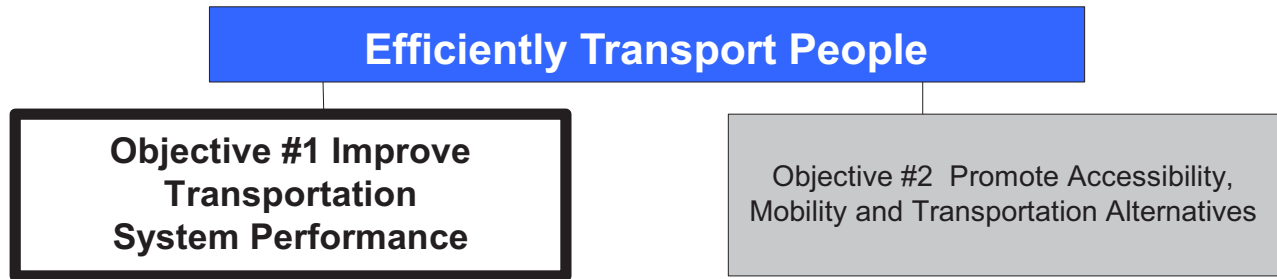
- What do we know about freight movement within our region?
- What knowledge gaps do we have in our understanding of freight activities?
- What have recent studies about goods movement recommended?
- What are our future needs to better address efficient goods movement while maintaining a safe and healthy quality of life for our residents?
- How will these recommended policies, projects, and plans be effectively incorporated into WILMAPCO's process?



For details on the methodology for the selection of these location and to view additional material, please view the entire Freight & Goods Movement Analysis report.



**Goal: Efficiently Transport People**



**Improve Transportation System Performance: Actions**

Work with transit providers to expand Regional Transit and Ridesharing Information through implementation of real-time travel information via telephone, on-site, and computer based systems
Work with transit providers to expand the use of smart cards regionwide
Fund projects that make better use of Intelligent Transportation Systems (ITS)
Improve implementation of "Maintenance First" Policy by funding a TIP that makes improving the condition of the existing transportation network the top priority
Work with DOTs to design transportation facilities to reduce future maintenance costs
Work with transit agencies to improve transit efficiency and desirability by recommending and funding projects that reduce bus travel times.
Fund enhancements to Park & Ride Facilities
Expand Transportation Systems within the Center and Community Transportation Investment Areas where necessary

Limited transportation funding and ever expanding needs requires that we work to make our existing infrastructure perform at its peak. Making use of the best materials, latest technology and good user information can help maximize our existing system and reduce the need for more costly system expansions. Preserving our existing infrastructure will allow for quality transportation services within our existing communities, and thus support a continued quality of life within the developed areas of our region.

**Action: Work with transit providers to expand Regional Transit and Ridesharing Information through implementation of real-time travel information via telephone, on-site, and computer based systems**

Technology can be used both to increase transit’s operational efficiency and to provide new information to transit customers, resulting in an overall improved transit experience. DTC has implemented an automatic vehicle location system for the entire DART fleet, which improves operational efficiency and will allow DART to provide real-time schedule information at selected transfer centers and bus stops (DTC Long Range Plan). When fully implemented, the system would also allow this information to be distributed to customers via cell phone and web-based technology. Improved web-based technology has resulted in improvements to DART’s website, which now allows patrons to purchase DART fare cards online.

The next step should be comprehensive regional transit information that will allow riders to plan trips within the entire WILMAPCO region and throughout the east coast. Creating inter-agency linkages between regional transit services would allow access to real-time travel information for SEPTA, MARC and Cecil County Transit. Customers could plan trips and purchase fare cards in advance, and technology links could allow for smoother transfers between different transit systems.

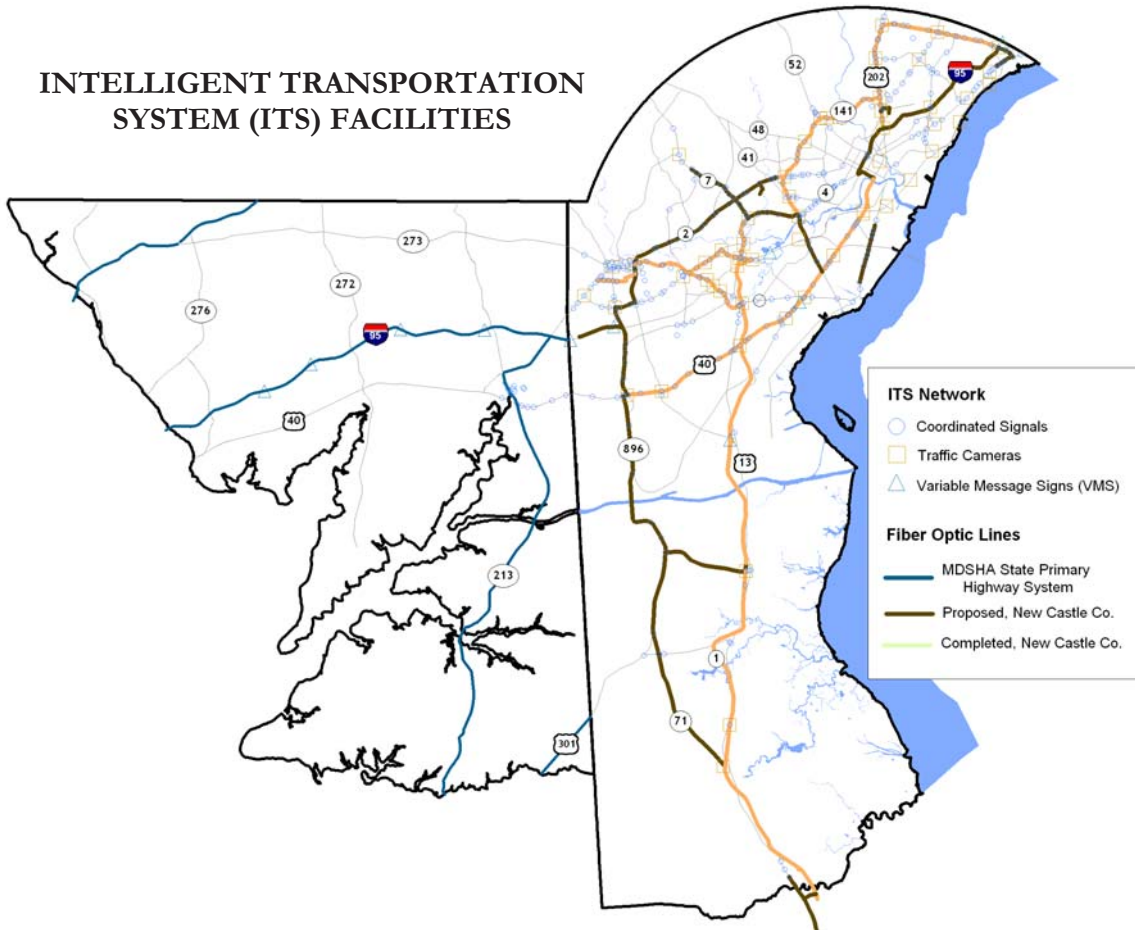
**Action: Work with transit providers to expand the use of smart cards regionwide**

Shared technology should allow for the development of smart fare cards that could be accepted by SEPTA, MARC, DART and Cecil County Transit. Smart cards could also be accepted by parking garages at transit stations. Smart cards, already accepted on DTC buses, is included are DTC’s Long Range Plan.

**Action: Fund projects that make better use of Intelligent Transportation Systems (ITS)**

ITS plays a vital role in the solution for traffic congestion. Many of the ITS strategies deal with the management of traffic capacity, not ways to increase it. Thus, ITS technology can extend a roadway’s ability to function at an acceptable level of service given its current capacity while being less expensive than roadway expansion. There are several elements of Intelligent ITS that demonstrate how improved technology can help improve our mobility. Many of these elements are just beginning to take shape and have already generated many positive results. ITS is comprised of several different types of facilities including coordinated traffic signals, live traffic cameras, Variable Message Signs (VMS), deployment of fiber-optic cable along roadways, and EZ Pass toll collection.

Another benefit of ITS is that it can help provide faster response times by emergency personnel. Not only does



this help save lives, but on average, every minute saved in response time to an incident saves about 5 minutes in traffic delay. The bottom line is the faster the response to an incident, the less delay the incident will cause.

In addition, EZ-Pass has proven to be a valuable tool in reducing congestion along our region’s toll facilities. E-ZPass lanes have the ability to process between 1200-1800 cars per hour for each lane, depending on whether they are a traditional or high speed facility. While records do not date back very far, we have seen the share of transactions made using E-ZPass increase at all locations.

The WILMAPCO Congestion Management System (CMS) lists along every corridor that enhancing ITS facilities are a viable option in reducing congestion along our identified corridors. The proposed network along US 896/301 and SR 2 are two key areas in which traffic growth should be managed by ITS.



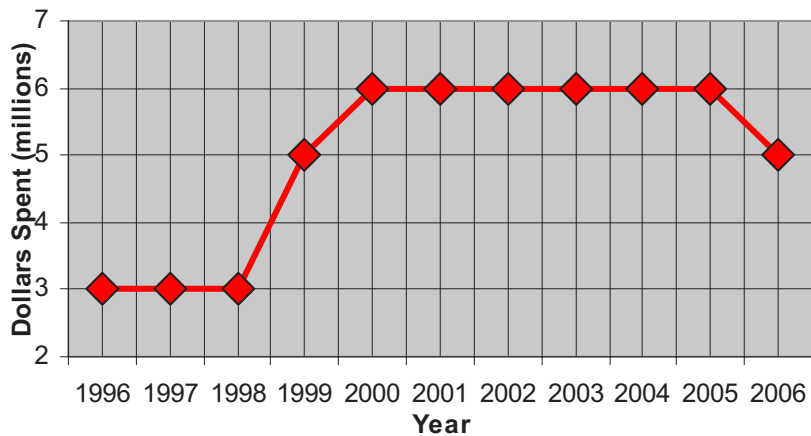
**Action: Improve implementation of “Maintenance First” Policy by funding a TIP that makes improving the condition of the existing transportation network the top priority.**

Constrained transportation funding makes it critical that we follow our approved “Maintenance First” Policy that was part of the WILMAPCO Plan adopted March 1996. This policy places preservation, repair, and restoration needs ahead of expansion needs. Limited resources should first and foremost keep our transportation system is safe, convenient, and economical. To implement in cooperation with our member agencies we shall:

- **Fund a TIP that makes improving the condition of the existing transportation network the top priority.** The TIP should target investments to make travel conditions safer, use efficient means to transport people and goods, and rehabilitate or replace bridges, transit vehicles, pavement and other critical infrastructure.

- **Increase aid for municipal street maintenance.** The Municipal Street Aid Program is funded through the Delaware Transportation Trust Fund, with funding levels determined annually based on population and mileage of municipal streets. Municipal street aid has recently decreased while the cost to maintain municipal streets has increased substantially. During the past ten years, municipal street aid has decreased from 2.1 percent of Delaware’s statewide TIP to only 1.0 percent in 2006. To assess how municipal transportation needs were being met, WIL-

**DELAWARE MUNICIPAL STREET AID, 1996-2006**



MUNAPCO surveyed municipalities in New Castle County. Municipalities who responded indicated that while the program is extremely helpful, funding levels are insufficient for meeting basic needs. Respondents told us that funds are used primarily for street lighting, fixing potholes and minor repairs. However, major street reconstructions and some routine maintenance must be deferred and has led to poor pavement conditions on many local roads. While many of the local roads in need of Municipal Street Funds are not eligible for federal funds, we recommend increasing use of federal funds for arterials and collectors to free up state transportation dollars for local preservation.

- **Dedicate funding for maintenance of bicycle and pedestrian facilities including operating funds to routinely sweep bicycle facilities.** Maintenance is critical to protect our investment in pedestrian and bicycle facilities. Repair of sidewalks and pavement, sweeping of roads and shoulders, and repainting pavement markings are especially important. Good maintenance is not only a low cost way to make communities pedestrian and bicycle friendly, it is essential to the lasting success of all improvements. All bike and pedestrian facilities must be well maintained in order to ensure their safety and continued use. System maintenance activities include sweeping, filling of cracks, filling of potholes, replacing tire-catching or below-grade grates, and repainting pavement markings. Local jurisdictions and state DOTs should reach out to pedestrians and cyclists to identify hazards by publicizing phone numbers or web sites where problems can be reported. However, relying on public notification is not enough; governmental entities responsible should clean roadways and shoulders of debris after accidents and construction activity, include snow removal on bicycle and pedestrian facilities as a regular part of winter maintenance, and develop schedules for routine maintenance.



- **Dedicate sufficient funding for timely replacement of refurbishment of transit equipment**  
Funds must be included in the TIP for scheduled replacement of buses, shelters and other transit facilities. Without timely replacement, buses have an increased risk of breakdowns, thus no longer allowing transit to be a reliable form of transportation.

**Action: Work with DOTs to design transportation facilities to reduce future maintenance costs**

Analysis should be done when funding projects to assess if the use of higher quality paving materials and landscaping may reduce long term project costs. Design should be done to minimize future maintenance and operation costs including energy use, even if this results in a larger up-front capital cost. DOTs should consider using a collaborative approach during project development to complete a systematic review of a project, product, or process to improve performance, quality, and/or life-cycle cost by an independent multidisciplinary team of specialists.

**Action: Fund enhancements to Park & Ride Facilities**

Park & Ride facilities create regular meeting places where riders can carpool to work and other activities. Since 1996, considerable efforts have been made in Cecil and New Castle Counties to build new facilities. With over 4,400 spaces now available, Park & Rides will continue to make transit efficient by creating an artificial density in suburban areas which would otherwise not have sufficient population density to support cost efficient transit.

**Action: Expand Transportation Systems within the Center and Community Transportation Investment Areas where necessary**

In keeping with the definition of the Center and Community Investment Areas, fund improvements as appropriate. The objective for Centers is to provide the greatest number of transportation options with an emphasis on public transportation, walking and bicycling, and to make existing and planned improvement as safe and efficient as possible. For Community TIA, the objective is to expand and improve transportation facilities and services, and to make each as safe and efficient as possible.

**Action: Work with transit agencies to improve transit efficiency and desirability by recommending and funding projects that reduce bus travel times.**

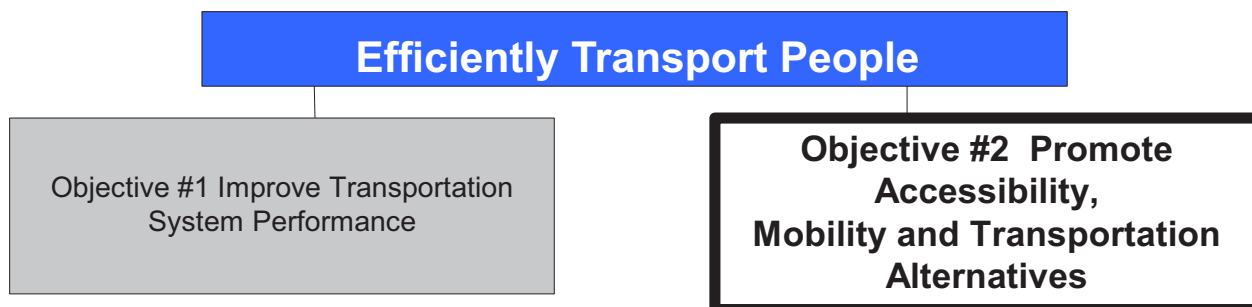
Reduced bus travel time is a key ingredient to increase transit ridership in areas where there are congested roadways. There is little incentive for drivers to leave their cars if the bus moves at the same pace in the same traffic. New solutions should be considered within our region, for example:

- Implement Bus and HOV lanes on the shoulders of congested roadways such as I-95 and SR-1: bus bypass shoulders (BBS) are used in some form in many metropolitan areas in the United States and abroad including Minneapolis-St. Paul; Falls Church, VA; Seattle; Burtonsville and Bethesda, MD; Mountainside, NJ; Alpharetta, GA; San Diego; Auckland, New Zealand; Dublin, Ireland; Toronto and Ottawa, Canada. Delaware has a limited example of this technique on southbound US-202 at Foulk Road. Existing bus routes could utilize a BBS on I-95 between SR-896 and SR-141 to move through heavy congestion at speeds up to 40 mph. This would also allow future implementation of an Express Shuttle route from the I-95 Service Area Park & Ride to downtown Wilmington.
- Consider implementing new Bus Rapid Transit (BRT) services along existing transit corridors. High ridership DART Routes (1, 2, 4, 6, 41 and 301) could be upgraded with higher capacity vehicles, more frequent trips, signal priority systems and capital improvements to operate express-type service to increase efficiency and ridership.
- Implement traffic signal priority systems for transit vehicles region-wide. DART transit ridership would benefit if transit vehicles were given signal-priority over automobiles.
- Consider creating fixed guideways that bypass highway congestion, either via rail or bus lanes, to shorten trip times for commuters.

**Action: Reduce the need for expensive roadway expansions by funding projects that increase transit ridership.**

DTC's Long Range Plan sets a goal of increasing transit ridership by 130% while increasing annual operating and capital subsidies by just 31%. This would double transit's mode share and alleviate some of the need for expensive roadway expansions. The DTC plan would reduce public subsidy from \$7.96 per trip to \$4.54 per trip, including capital and operating expenses, and provide a 1.2% reduction in VMT. Ridership projections show a 1% mode shift, effectively increasing transit ridership by 130%. These recommendations are supported by WILMAPCO, and include:

- Expanding service up to 25% on existing bus and rail routes, particularly routes oriented toward off-peak and reverse commute travel.
- Expand transfer capacity and improve coordination with new hubs at existing connection points with high demand.
- Improve park-and-ride facilities to encourage increased transit use in areas where residential densities are not supportive of traditional transit services.
- Provide community circulators, small busses that create a convenient alternative to short auto trips.
- Expand bus service to provide public transit service in areas that are currently underserved areas.



**Promote Accessibility, Mobility and Transportation Alternatives: Actions**

Continue to plan for and fund multimodal projects
Increase access to transit with technology, service expansion, park-and-rides, bus stop facilities, sidewalks and bicycle racks on transit vehicles
Coordinate with implementing agencies on planning and design of complete streets and implement a Complete Streets Policy through the TIP
Improve Facilities for Walking in Pedestrian Priority Areas by funding pedestrian improvements within pedestrian priority areas and work through the development process to complete projects
Work with transportation agencies to improve pedestrian crossing facilities
Work with DOTs, counties and municipalities to implement Multimodal Level of Service (LOS) Standards, and perform multimodal LOS analysis
Implement improved fixed-route public transit service to Transportation Justice (TJ) areas, where necessary
Implement recommended walkability enhancements within TJ areas, where identified, and continue to retrofit facilities to meet ADA standards
Continually monitor the progress of recommended strategies to address the transportation needs of TJ communities, especially households without access to an automobile
Begin a dialogue to address accessibility and mobility concerns raised by seniors in our region
Fund strategic improvements to our region’s transit system to address the key issues and challenges facing our region.
Establish a network of Pedestrian and Bicycle Facilities in partnership with member agencies

This objective focuses on increasing mobility and accessibility by providing people with transportation choices. Mobility is an attribute of people— is the ease with which people can reach their destinations. Accessibility, on the other hand, is an attribute of place. Accessibility is the opportunity to reach a given place without being impeded by economic or physical barriers.

A theme consistently heard from participants over the course of our public outreach effort was that public transit needs to assume an increased role in the array of transportation options. However, in order to make public transit more attractive and accessible, several related and supporting strategies need to be included in the overall approach. These actions focus on the expansion of connections between travel options (intermodal connections) which will establish a more comprehensive travel system.

The actions that follow promote increased walking, biking, and utilization of public transit; better serve that portion of the population without access or desire to use an automobile; reduce the use of the automobile (in particular single-occupant vehicles); reduce roadway congestion; and result in an overall improvement in the transportation system's efficiency and availability of travel options. While all strategies help shift trips from SOVs to other modes, these strategies to improve mobility directly contribute to shifting trips from driving alone to other means by supporting public transit.

**Action: Continue to plan for and fund multimodal projects**

To establish other transportation modes, we must invest in transportation choices. Through the Transportation Improvement Program (TIP) we have funded construction projects that address more than one mode. Instead of traditional road improvements, projects now contain sidewalks, bike paths and transit stops. Efforts must continue to make transportation projects as multimodal as possible in order to reduce auto dependency by making options available.

**Action: Increase access to transit with technology, service expansion, park-and-rides, bus stop facilities, sidewalks and bicycle lockers.**

In order to make transit competitive with the automobile, we must strive to make it more accessible. Proximity to transit stops can be especially important – studies show that for every 100 foot increase in walking distance to transit, there is a drop in ridership - 0.65% in Washington D.C.; 0.85% in San Francisco, Sacramento and San Diego. People who seek to use transit on a regular basis are more willing to walk the traditional ¼ mile to a bus stop, but casual transit users may not. Using the generally accepted standard of ¼ mile distance from a transit stop, The chart, *Proximity to Transit*, shows that while New Castle County has increased the overall number of people having access to transit, the percentage has fallen slightly. This has been caused in part by a decrease in-route mileage along fixed service routes to free funding for added paratransit operations. While this has helped thousands with limited transportation options gain mobility, it has come at the expense of preserving and expanding fixed route service. This traditional type of service plays an important role as the backbone of the public transit system; however, for transit to be a more viable mobility option, it needs to be less isolated and more convenient, efficient, and accessible. To begin achieving this goal, this plan also calls for a number of innovative public transit options that tie services together as a comprehensive mobility system. Candidate services include:

- Computer technology to increase the level of information easily available to transit customers about arrival times, trip lengths, and transit options.
- Midday linkages between senior citizen residential areas and shopping areas and daytime cultural events.
- Evening service to sporting events from workplaces, and to residential areas following the events.
- Weekend service to area parks and recreational activities as well as shopping and amusement venues.
- Safe, convenient park-and-ride locations (where drivers meet to carpool or take public transit to a common destination, usually a workplace).
- Sheltered bus stops along all existing and future transit routes
- New jitney services in Wilmington, Churchman's Crossing, and Middletown/Odessa.
- Basic transit access enhancements like sidewalks along all existing and future transit routes and bicycle lockers at all park-and-rides and transit centers.

**PROXIMITY TO TRANSIT**

<b>County</b>	<b>1996</b>	<b>2000</b>	<b>2004</b>
New Castle	272,913 (56.4%)	275,567 (54.9%)	284,404 (54.7%)
Cecil	2,193 (2.8%)	2,931 (3.4%)	3,441 (3.7%)
<b>Regional Total</b>	<b>275,106 (49.2%)</b>	<b>278,498 (47.3%)</b>	<b>287,845 (46.9%)</b>

Source: WILMAPCO, DTC, Cecil Dept. of Aging

**Action: Coordinate with implementing agencies on planning and design of complete streets, and implement a Complete Streets Policy through the TIP**

While we would never force someone to bicycle to work or say they must walk to the supermarket, our society has for years been telling us that ‘if you want to get there you must go by car’. For decades our streets have been built to move cars and not people, leaving many without transportation choices. It is estimated that nearly 1/3 of the U.S. population does not drive because of age, economics or ability leaving millions of people literally stranded without a safe and accessible means to travel.

“Complete Streets” is a relatively new term used to describe streets that are designed with all potential users in mind. The idea is that a street is not complete until it has considered the needs of everyone including bicyclists, pedestrians, transit users and the disabled.

**Complete Streets Policy**

All projects funded through the TIP shall address bicycles and pedestrian facilities in both planning and design. In particular, sidewalks, shared use paths, street crossings, pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways should be designed, constructed, operated and maintained so that all modes, including pedestrians and people with disabilities, can travel safely and independently.

Bicycle and pedestrian facilities shall be included in new construction and reconstruction of road and bridge projects (as per the 2000 U.S. DOT Transportation Policy Statement, *Accommodating Bicycle and Pedestrian Travel*) unless one or more of five conditions are met:

- Bicyclists and pedestrians are prohibited by law from using the roadway. *In this instance, a greater effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right of way or the same transportation corridor.*
- The cost of establishing bikeways or walkways that meet applicable standards would exceed twenty percent of the cost of the larger transportation project. *In this case, the implementing agency may propose an alternate design or spend 20 percent of the project cost of the larger project to improve bicycle and pedestrian accommodations.*
- There are extreme topographic or natural resource constraints.
- The 2030 AADT is projected to be less than 1,000 vehicles per day.
- The project is limited exclusively to preservation/resurfacing and is not in an identified pedestrian priority area. *In the case of preservation/resurfacing projects within pedestrian priority areas, CMAQ funds can be used to improve pedestrian and bicycling facilities.*

The design and development of the transportation infrastructure shall improve conditions for bicycling and walking by:

- Planning projects shall be designed for the long-term. The design and construction of new facilities should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements.
- Designing context-appropriate facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow commonly used design guidelines and standards such as the *AASHTO Guide for the Development of Bicycle Facilities*, *AASHTO’s A Policy on Geometric Design of Highways and Streets*, the ITE Recommended Practice “Design and Safety of Pedestrian Facilities”, and the Americans with Disabilities Act Accessibility Guidelines.
- Addressing the need for bicyclists and pedestrians to cross-corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly travel along a corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.
- Address the need for pedestrians and bicyclist to access transit. Transit users rely on walking and cycling to link transit stops with destinations and special attention must be given to facilities near transit for traveling along roads, crossing roadways, and connectivity to destinations.
- Planning for the future maintenance of pedestrian and bicycle facilities. All proposed designs should be closely examined to minimize future maintenance costs. Plans should also identify a reliable source of funding to cover future maintenance needs.



**WILMAPCO will coordinate with implementing agencies on planning and design of complete streets**

WILMAPCO will work with implementing agencies to develop guidelines and processes for project scoping and design review to ensure that these policies are implemented. WILMAPCO will also revise the TIP submission and amendment forms to require project implementers to specify how Complete Streets have been addressed and document the justification when bicyclists and pedestrians have not been accommodated.

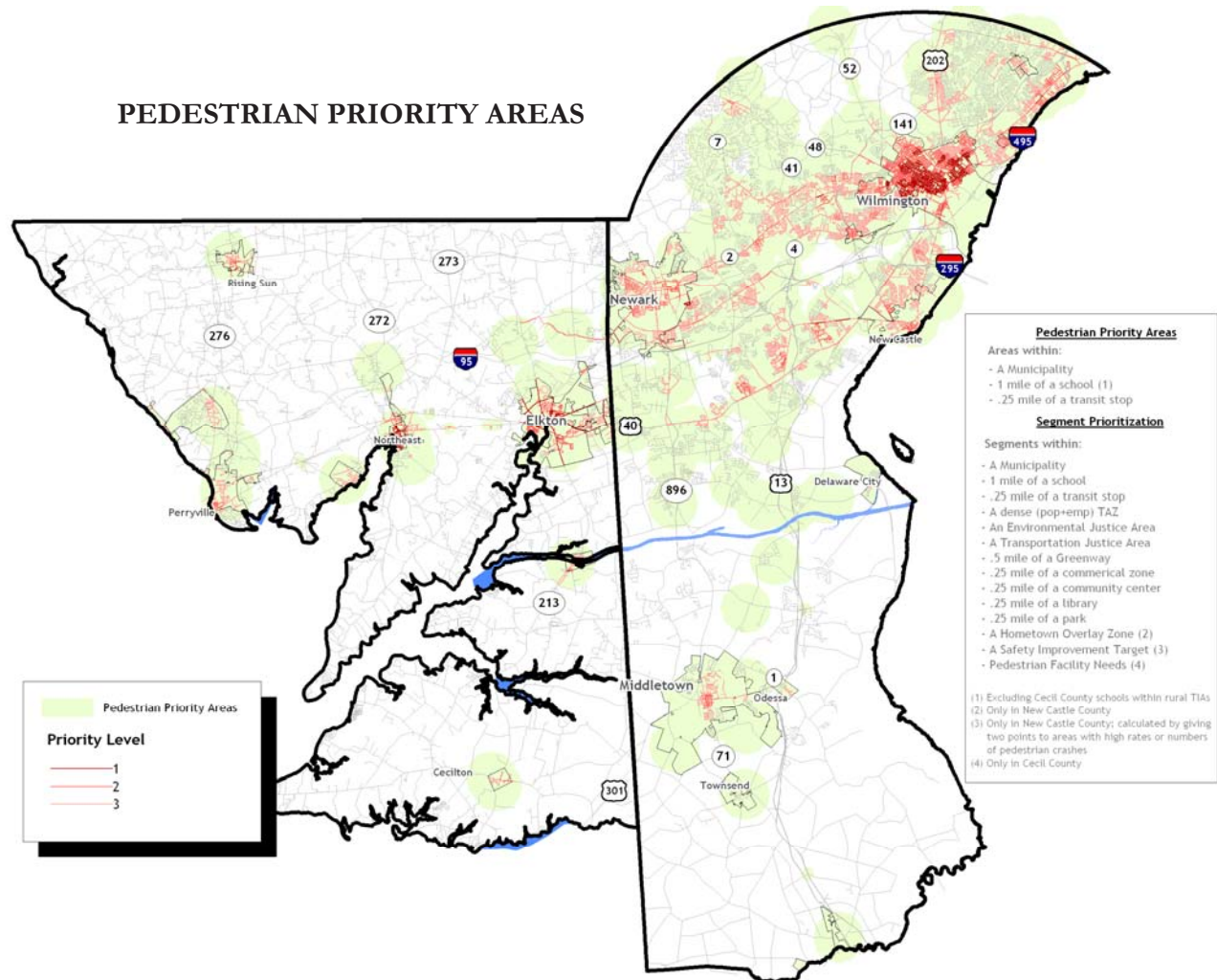
**WILMAPCO will measure success of the Complete Streets strategy**

Develop benchmarks and monitor success through the Annual Progress Report.

**Action: Improve Facilities for Walking in Pedestrian Priority Areas by funding pedestrian improvements within pedestrian priority areas and work through the development process to complete projects**

Currently, gaps in our pedestrian network prevent people from walking where they need to go. Certain densities of population and activity, and certain public facilities, create a strong rationale for a particular focus on improving pedestrian facilities in targeted areas. Pedestrian Priority Areas include municipalities, ¼ mile radii around transit stops, and 1 mile radii around schools. Within these areas, greater priority is given to facilities that complete gaps in the nonmotorized network, serve commercial, recreational and community destinations, promote safer walking and cycling, and promote transportation choices to those populations who need them most.

In addition to the identified priority areas, WILMAPCO will continue to work with civic associations to identify and prioritize gaps in the pedestrian network. WILMAPCO has identified pedestrian priority areas to help focus pedestrian facility studies and investments. It is the policy of WILMAPCO that all areas of the region are appropriate areas for pedestrian facilities, and Pedestrian Priority Areas should not be interpreted as indicating that the designated areas are the only places where these facilities should be implemented.





**Action: Work with transportation agencies to improve pedestrian crossing facilities**

Transit and the pedestrian network depend on more than our ability to travel along the street; we must also be able to safely and conveniently get across the street. Transportation projects should install and maintain marked crosswalks at all locations where there is likely to be conflict between vehicle and pedestrian movements, where pedestrian concentrations occur, where pedestrians would not otherwise recognize the proper place to cross, and where traffic movements are controlled, including within pedestrian priority areas. Where standard, 2-line style crosswalks exist, these should be replaced with block style marking for enhanced driver visibility. Colored and textured crosswalks may be appropriate in some locations but should be combined with white lines for enhance visibility. DOTs and local government should also continue to retrofit crossings with ADA accessible curb ramps.

Enhanced pedestrian crossing facilities should be provided at schools, pedestrian/bicycle pathway crossings and other high pedestrian volume locations. This may include in-street pedestrian crossing signs, thermoplastic imprints, flashing lights, countdown signals, and other best practice measures to improve pedestrian visibility, safety, and convenience.

**Action: Work with DOTs, counties and municipalities to implement Multimodal Level of Service (LOS) Standards, and perform multimodal LOS analysis**

Transportation Level of Service (LOS) is a measure of freedom from travel delay, discomfort and inconvenience. Traditionally, transportation system evaluations focus on LOS for vehicles only. Now, new approaches allow LOS to also consider capacity and comfort for transit users, pedestrians, and cyclists. Multi-modal LOS is an approach that considers and attempts to balance LOS for users of all modes (auto, transit, bike and walk), with a composite benefit or LOS “weighted” or proportioned by the relative number of users of each mode. When used for Transportation Impact Studies (TIS), a multimodal LOS will give a better assessment of the available transportation capacity for infill and redevelopment projects.

First proposed in the 1996 plan, this action would revise the current processes to be consistent with the RTP. Specifically, this action would revise the existing TIS process by shifting it from a singular traffic—or auto-oriented—focus to a wider multimodal transportation view. Other performance measures besides traffic LOS should be incorporated into the process to achieve a more regional perspective with a broader mobility focus. A broader regional perspective would allow for “proportionate share” contributions from developers toward concurrency requirements and a more realistic assessment of available capacity, accounting for available transit, pedestrian and bicycling facilities.

The application of traditional LOS analysis (volume to capacity ratios) results in an emphasis on road widening solutions to maintain roadway capacity and detracts from transit or multimodal solutions. It also creates an assumption that capacity only applies to roadways, and therefore appears to ignore the role of multimodal improvements.

Currently, the WILMAPCO Congestion Management System incorporates Level of Service for transit, motor vehicles, and bicycles within New Castle County and motor vehicles in Cecil County. Multimodal LOS analysis should be expanded regionally, and the results should be considered in land use decision-making.

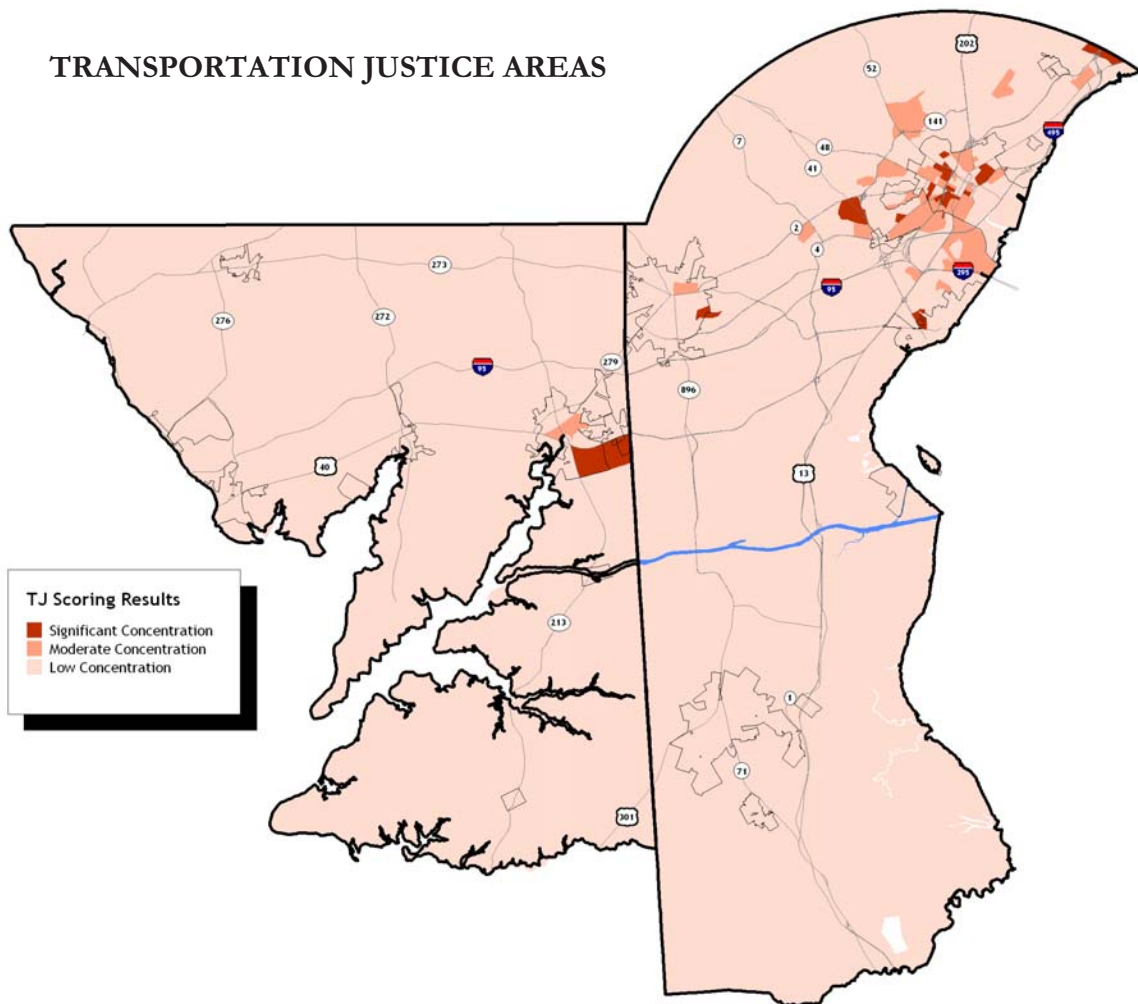
**Action: Implement improved fixed-route public transit service to identified Transportation Justice areas, where necessary**

WILMAPCO consistently strives to better integrate Environmental Justice (EJ) into our transportation plans and policies. To that end, we have broadened the spectrum of communities considered transportation disadvantaged beyond those required by federal mandate. Separate from EJ (low-income and minority) populations, these Transportation Justice (TJ) populations include the elderly, the disabled, and households without an automobile.

WILMAPCO took its first step in addressing the needs of these TJ groups in 2006. The “Accessibility and Mobility Report: A Transportation Justice Study of the WILMAPCO Region” first delineated concentrations of these populations in our region before providing a multi-tiered analysis of their existing transportation infrastructure. Accessibility to bus stops, the frequency of transit trips, safety concerns, and overall walkability within TJ areas were discussed. Moreover, the results of a brief transportation survey, completed by more than 300 seniors in our region, were provided. This report is available in the Appendix.

The identification of pockets of TJ groups in the region began with a look at their overall population size. Regional averages were drawn from county-wide statistics from the 2000 U.S. Census. These are summarized in the *Transportation Justice Areas Map*. The regional percentages of elderly, disabled, and zero-car households were calculated for a baseline. These regional percentages were then compared to elderly, disabled and zero-car household figures at the block-group level. Block-groups which either moderately or significantly exceeded the regional percentages were flagged as TJ areas.

**TRANSPORTATION JUSTICE AREAS**



Generally, there is a need for a better fixed route transit system in the region because costs associated with Delaware's paratransit services render its rate of growth economically unsustainable. Alternatives to help relieve pressure on this system must be explored, with priority given to TJ areas. Identified areas underserved by transit should be considered for additional service. Specifically, these include areas with unreasonable public transit commuting times, low transit use, areas where a significant number of households fall outside walking distance to bus stops, active adult communities outside walking distance to a stop, and TJ areas where route frequency is low.

**Action: Implement recommended walkability enhancements within identified Transportation Justice areas, and continue to retrofit facilities to meet ADA standards**

Along with recommended transit improvements, walkability within TJ areas should be enhanced. Recommended improvements found within the TJ report—such as the addition of crosswalks at key intersections, the replacement of crumbling stretches of sidewalk, and the implementation of traffic calming techniques—should be completed. These will better serve the needs of our elderly, disabled, and zero-car household communities by improving connections to neighborhood establishments (such as parks, centers, and shops) and transit stops. Further, intersections with high pedestrian and bicycle crash rates should be re-examined for improvements. WILMAPCO will continue to support efforts to retrofit facilities, such as sidewalks and crosswalks, to conform to ADA standards. This action will increase mobility options for our disabled population.

**Action: Continually monitor the progress of recommended strategies to implement and address the transportation needs of identified Transportation Justice communities, especially households without access to an automobile**

WILMAPCO produces four documents that will ensure TJ principals are reflected in our regional transportation plans. As part of our newly adopted prioritization process, projects within our TIP and RTP which fall within TJ areas will be weighted. If a given project improves mobility within the area, it receives a positive score. If it hampers mobility, a negative score for the TJ category will be given. The highest positive scores are awarded to projects within significant TJ areas. TJ areas will also receive special attention within the context of WILMAPCO's Congestion Management Program (CMP). The CMP assesses traffic congestion within the region's heavily traveled corridors. If a corridor falls within a TJ area, planners can apply that information to better determine mitigation strategies. The regional "Progress Report" will update the public and our partner agencies with the evolution of TJ. Updated and additional analysis of TJ communities will be provided in this annually-updated document

Beyond official documents, TJ concerns have already made an impact on WILMAPCO plans. A prime example of this is New Castle County's Greenway Plan. Following the delineation of a proposed pathway network in the county, TJ areas were overlaid. Staff considered connections into TJ areas, where they did not exist. Another example involves New Castle County's evacuation plan. The aftermath of the Gulf Coast hurricanes in 2005 crystallized the need for public officials to be better aware of where transportation disadvantaged populations were located in their region. As a partner agency in the development of the plan, WILMAPCO pushed for the consideration of zero-car household data.

**Action: Begin a dialogue to address accessibility and mobility concerns raised by seniors in our region and improve public awareness of Transportation Justice**

The 2006 Senior Transportation Survey, summarized within our TJ report, found that of the over 300 senior respondents, 25% had at least some difficulty with transportation—both motorized and non-motorized. Among residents in New Castle County, 44% regarded DART's fixed route bus service as inadequate. In contrast, responses to the addition more community-centered bussing were positive. WILMAPCO will further study the results of this survey, make any findings and/or recommendations available to the public, and consider the production of additional senior surveys to monitor trends.

More generally, working through our Public Advisory Committee (PAC), WILMAPCO will develop strategies to engage the Transportation Justice communities in our region. This includes a more concerted effort to have representatives from each of these communities on our PAC and the development of alternative methods to better reach these underserved communities. Further, staff at WILMAPCO will take an active role in participating with existing public organizations (such as the Delaware Aging Network and the Cecil County Department of Aging) who involve themselves directly or indirectly with TJ communities.

**Action: Fund strategic improvements to our region's transit system to address the key issues and challenges facing our region.**

Public transit services are at a crossroads within the WILMAPCO region. While total ridership on bus, rail and paratransit have increased, we still fall one million riders below the projections made in the 2000 Regional Transportation Plan. In order to attain our goals to reduce vehicle miles traveled and air pollutant levels while operating within a limited budget, new transit options will have to be considered.

The DTC Long Range Plan (2000 – 2025) considered the areas of basic mobility, changing demographics, land use and regional transportation needs to craft a plan for the future of mass transit in the region. The Plan listed its objectives, which are supported by WILMAPCO's RTP:

- Contribute to the improvement of the State's Air Quality.
- Accommodate Delaware's rapidly growing elderly population.
- Expand the basic mobility opportunities of transit-dependent households.
- Promote sustained economic growth and cultural vitality.
- Reduce congestion.
- Strengthen the connections between transportation and land use planning.

To reach these goals, WILMAPCO recommends strategic improvements to the region's transit system. Fluctuating gas prices have created an opportunity to attract new riders who are looking for a less expensive commute choice. Nationally, individuals spend between 10 – 40% of income on auto commutes and the average family spends 18 cents of every dollar on auto-related costs. Another issue affecting commuters is parking costs, which have also risen over the past year. According to a nationwide survey by Colliers International, daily parking rates are up 10% and monthly rates are up over 4%. However, convincing commuters to switch their travel mode will also require creating new incentives to use transit, or disincentives to complete reliance on automobiles:

Charging the true cost of parking can help remove an incentive to driving. Providing high-quality transit service, where land use is transit supportive, frequent trips during commute hours, and midday and evening service to serve those with flexible hours can help promote transit. WILMAPCO, transit agencies and the TMA should work with employers to offer transit subsidies, rather than parking subsidies to workers.

**Action: Establish a network of Pedestrian and Bicycle Facilities in partnership with member agencies**

By coordinating with New Castle County, DelDOT, DNREC and local government to implement New Castle County Greenway Plan, working with DelDOT and local government to implement Delaware Bicycle Plan, and working with MDOT and local government to implement Maryland Statewide Bicycle and Pedestrian Access Plan WILMAPCO will further the development of a network for facilities for bicycling and walking.

WILMAPCO, in partnership with DelDOT, New Castle County, DE State Parks, Delaware Greenways and local government have developed a plan for a basic network of multi-use pedestrian and bicycle pathways in New Castle County. The plan was developed using County and State Park plans, the East Coast Greenway Plan and other existing and potential pathway connection identified through public outreach. This plan will complement the DelDOT Bicycle Plan, which addresses on road facilities, and other state and local plans. The New Castle County Pathway Plan will assist New Castle County and DelDOT to coordinate land use development and transportation projects with pathway/greenway trail implementation. The Greenway Plan identifies existing and potential multi-use pathways, emphasizing a network of sidepaths and pathways/greenway trails with proposed actions and policies to promote their implementation and local connections.

**Goal: Improve Quality of Life**

**Goal: Improve Quality of Life**

**Objective #1  
Protect Public  
Health, Safety &  
Welfare**

Objective #2  
Preserve our  
Natural, Historic,  
and Cultural  
Resources

Objective #3  
Support Existing  
Municipalities and  
Communities

Objective #4 Provide  
and Promote  
Transportation  
Opportunity & Choice

**Protect Public Health, Safety and Welfare: Actions**

Ensure a safe transportation system for all users
Assist Homeland Security agencies in developing and assessing the effectiveness of transportation security and evacuation plans
Coordinate with DOTs and schools to develop and implement Safe Routes to School Programs
Continue to fund traffic calming in residential areas, near schools and business districts, and areas where arterial roads bisect incorporated and unincorporated communities
Promote the healthy communities through transportation
Conform to Air Quality Conformity requirements

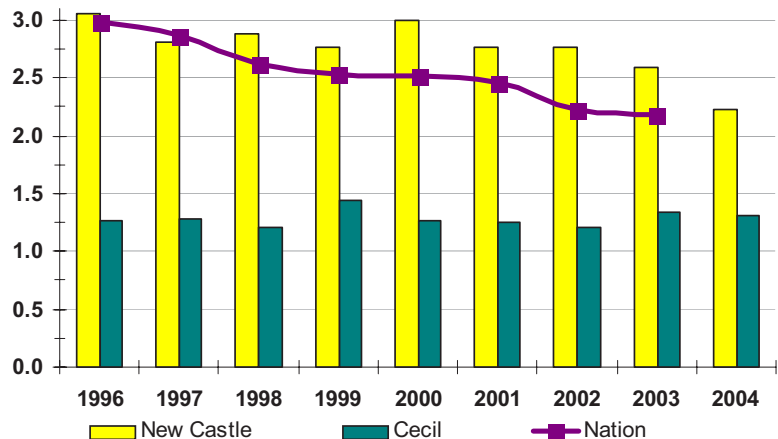
This goal is rooted in ensuring a safe transportation system for all users, a sound environment, less congestion, better and more appropriate use of land, instilling a sense of security, and providing opportunities for employment and better education.

This Plan envisions a regional transportation future where the rural and scenic character outside our livable communities will be preserved and protected. It is a transportation future in which people will have the option to walk on greenways and sidewalks, or bike on bikeways that are fully connected and integrated into an intermodal transportation system. Such non-motorized corridors will be linked to the transit system that supports existing communities, reduces congestion and limits the production of transportation-related air pollution

**Action: Ensure a safe transportation system for all users**

The first priority in our transportation investments is to make our system safe. Safety projects will continue to be a major priority. Safety projects not only look at automobile safety, but also address pedestrian and bicyclist safety. Roadway safety improvements that create unsafe conditions for pedestrians and bicyclists should be avoided. Bicycle and pedestrian issues and needs should be established before the design phase begins.

**AUTOMOBILE CRASHES PER MILLION MILES TRAVELED**



Source: MDSA, DelDOT, DE/MD State Police



**Action: Assist Homeland Security agencies in developing and assessing the effectiveness of transportation security and evacuation plans**

WILMAPCO's possible strength in security and emergency response planning lies in our ability to do technical analysis of the existing and planned transportation system, to bring many players to the table to coordinate activities and disseminate appropriate information to the public about how to respond in the event of an emergency. However, WILMAPCO must proceed with caution, because of our open and highly visible planning process. Our most appropriate roles include coordination and funding projects.

**Data and Coordination:** WILMAPCO will provide regional emergency operations agencies with relevant data and coordination services as needed. We should also increase, as appropriate, citizen involvement and awareness of emergency preparedness issues.

**Funding:** WILMAPCO should fund projects, actions and technologies that help prevent emergency events and improve system performance during emergencies through the TIP. Projects may include:

- Improvements, as needed, to congested links identified in the *Salem-Hope Nuclear Generating Station Evacuation Time Estimate*. Many of these improvements can be made as part of the Southern New Castle County Local Roads project in the TIP.
- Drainage improvements to key evacuation routes.
- Capital improvements to increase cargo security.
- Capital improvements to passenger and freight rail corridors and stations.
- Improved technology to reduce risks from cyber terrorism and increase monitoring of threats.
- Implementation of recommendations in the *Delaware Department of Transportation Security Plan*, the *Delaware Transportation Incident and Event Management Plan*, the *Maryland Transit Administration (MTA) Security Assessments*, the *MDOT/SHA Terrorism Emergency Operations Plan*, and any other adopted security plans in the region.

WILMAPCO's role is primarily related to emergency prevention. Both Maryland and Delaware have Emergency Management Centers staffed with transportation officials.

**Action: Coordinate with DOTs and schools to develop and implement Safe Routes to School programs**

Both Delaware and Maryland have instituted pilot Safe Routes to Schools (SRTS) programs in the past several years. Nationally, the Safe Routes to Schools program was established as part of SAFETEA-LU. This law provides multi-year funding for the surface transportation programs that guide spending of federal gas tax revenue. Section 1404 of this legislation provides funding for the first time for State Departments of Transportation to create and administer SRTS programs which allow communities to compete for funding for local SRTS projects.

The program was established to address the fact that fewer than 15 percent of all school trips are made by walking or bicycling. Instead, one-quarter are made by school bus, and over half of all children arrive at school in private automobiles—a dramatic change from decades ago when many students walked or bicycled to school. This decline in walking and bicycling has had an adverse effect on traffic congestion and air quality around schools, as well as pedestrian and bicycle safety. In addition, a growing body of evidence has shown that children who lead sedentary lifestyles are at risk for a variety of health problems such as obesity, diabetes, and cardiovascular disease. Safety issues are a big concern for parents, who consistently cite traffic danger as a reason why their children are unable to bicycle or walk to school. The SRTS Program empowers communities to make walking and bicycling to school a safe and routine activity once again and makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.



**Action: Promote the healthy communities through transportation**

Public health professionals and land use and transportation planners now recognize the value of coordinating to promote community design and transportation which integrates physical activity into our lives. Physical activity plays a significant role in the most chronic diseases we face, including heart disease, stroke, diabetes and obesity.

Having land use and a transportation network where it is difficult to get around, except by automobile, adversely affects air quality and safety, and discourages physical activity. A balanced transportation system offers affordable exercise options—walking and bicycling—while providing travel choices. Research has found that people who have access to sidewalks are 28 percent more likely to be physically active. People who live in mixed use communities with interconnected streets are also far more likely to walk and have the ability to substitute walking trips for driving.

In addition to other actions in the RTP which enhance and expand options for walking and bicycling, WILMAPCO will continue to offer Walkable Community Workshops. These interactive events bring together residents, elected officials, advocates, public agency staff, public health practitioners, educators, planners and engineers to focus attention on making communities safer and easier to walk in. During workshops, participants learn about the elements of a walkable community and solutions to common issues. Staff then lead a walking tour of the study area and emphasize seeing the community from the perspective of a pedestrian. Participants identify specific measures to improve conditions for pedestrians and priority actions they can take to create a more walkable community.

**Action: Continue to fund traffic calming in residential areas, near schools and business districts, and areas where arterial roads bisect incorporated and unincorporated communities**

Traffic calming uses physical measures to reduce the negative effects of motor vehicle use, alter driver behavior and improve safety for non-motorized street users and drivers. The purpose of traffic calming is to reduce the speed of traffic to safe and appropriate levels. It can also help mitigate the impact of through traffic on a community's livability. WILMAPCO will continue to work with local government and communities to develop traffic calming programs and projects.

Red light cameras and radar speed cameras are also effective techniques to slow speeding traffic in other jurisdiction throughout the country. WILMAPCO encourages expanding the use of red light cameras, currently legal in both Maryland and Delaware. Delaware's limited implementation of red light cameras has shown that they effectively decrease red light running. Radar speed cameras would require state legislation in Maryland and Delaware before they can be implemented; if legislation is passed, WILMAPCO encourages their implementation.

**Action: Conform to Air Quality Conformity Requirements**

Enacted in 1963 and last amended in 1990, the Clean Air Act mandates the U.S. Environmental Protection Agency (EPA) to set national standards for air pollutants considered harmful to the environment and public health. In compliance, the EPA created National Ambient Air Quality Standards (NAAQS) for several principal pollutants. These include: the precursors to ozone (VOCs and NO<sub>x</sub>), CO, coarse and fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), SO<sub>2</sub>, and Pb. Regions which do not meet one or more of these standards are classified as in "non-attainment." They must demonstrate conformity to goals set forth in respective State Air Quality Implementation Plans (SIPs) or eventually face the loss of federal transportation funding. The entire WILMAPCO region is considered in moderate non-attainment for ozone and New Castle County in non-attainment for PM<sub>2.5</sub>.

Ground level ozone is a noxious pollutant and major contributor to smog. Ozone is not emitted directly into the air, but is formed through complex chemical reactions between precursor emissions of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO<sub>x</sub>) in the presence of sunlight. Even at low levels, ozone can damage lung tissue, reduce lung function and sensitize the respiratory system to other irritants. This pollutant is commonly created through automotive emissions. Both precursors are the result of the "imperfect" combustion within a vehicle's engine.

Fine particulate matter (PM2.5) includes both solid particles and liquid droplets found in air. Both manmade and natural sources emit PM2.5 directly or emit other pollutants that later react in the atmosphere to form PM2.5. These fine particles can lodge deeply into lung tissue and lead to respiratory and cardiovascular disease, and premature death.

WILMAPCO's demonstration of transportation conformity can be found below. This demonstration tests the constrained RTP project list against current Delaware and Maryland SIP budgets; or, in the case of PM2.5 where a budget does not exist, against the baseline year of 2002. All pollutants were determined to pass conformity for the three years tested: 2010, 2020, and 2030.

Air quality conformity for each year was easily attained in spite of a projected upward trend in Vehicle Miles Traveled (VMT). In New Castle County, daily VMT is projected to trend from 17.3 million miles in 2010 to 21.3 million miles in 2030. Similarly, figures for Cecil County are projected to rise from 4 million miles in 2010 to 6.3 million miles by 2030. On the surface these projected increases in VMT would seem only to result in increased emissions. However, emissions reductions gained through assumed advances in automotive technology (i.e. cleaner engines and fleet turnover), which are built into transportation conformity models, override projected increases in VMT.

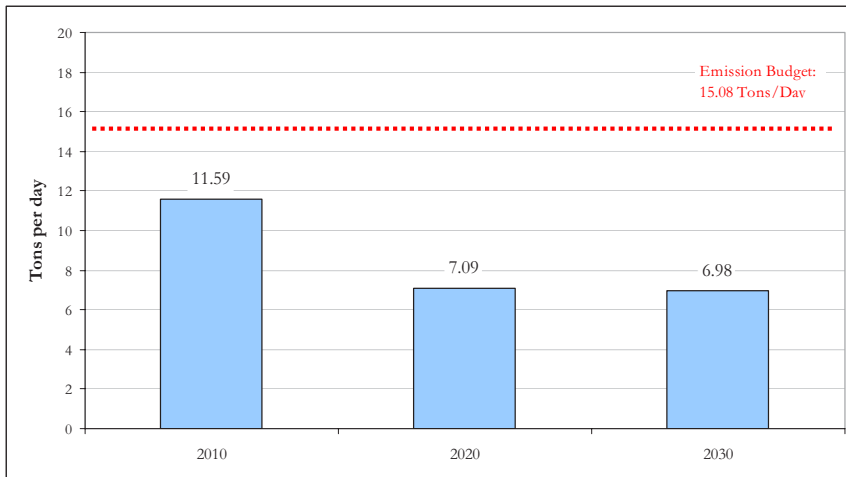
New Castle County

Ozone emissions in New Castle County are predicted to fall well within the county’s accorded budget in the modeled years. The table and two graphs below display the results for VOCs and NOx, the precursor pollutants modeled.

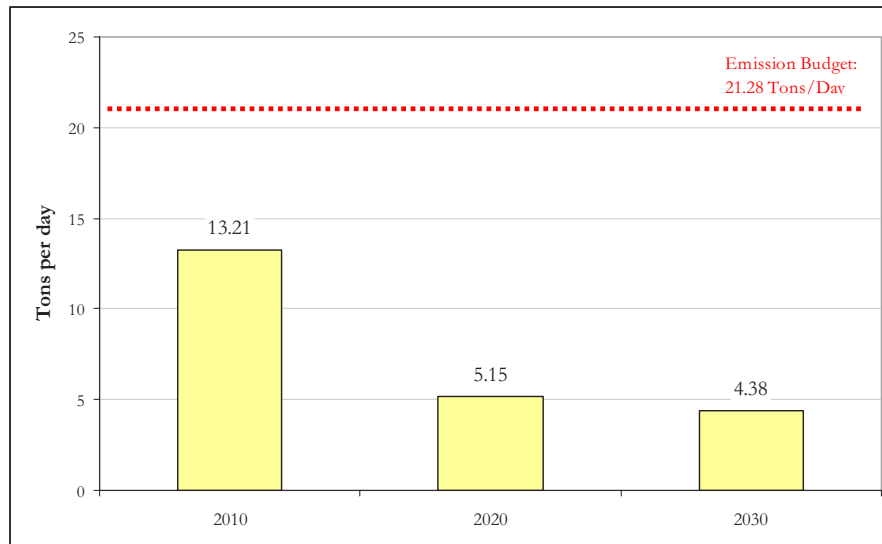
VOC AND NOX EMISSIONS (TONS PER DAY), NEW CASTLE COUNTY

	Budget	2010	2020	2030
VOCs	15.08	11.59	7.09	6.98
NOx	21.28	13.21	5.15	4.38

VOC EMISSIONS, NEW CASTLE COUNTY



NOX EMISSIONS, NEW CASTLE COUNTY



Besides ozone, New Castle County is also in non-attainment for PM2.5. With the absence of adopted budgets, results were tested against the base year of 2002. In showing fewer tons of PM2.5 emissions than in 2002, each modeled year thus passed conformity. Direct PM2.5 emissions are displayed in the first table and graph, its NOx precursor in the second.

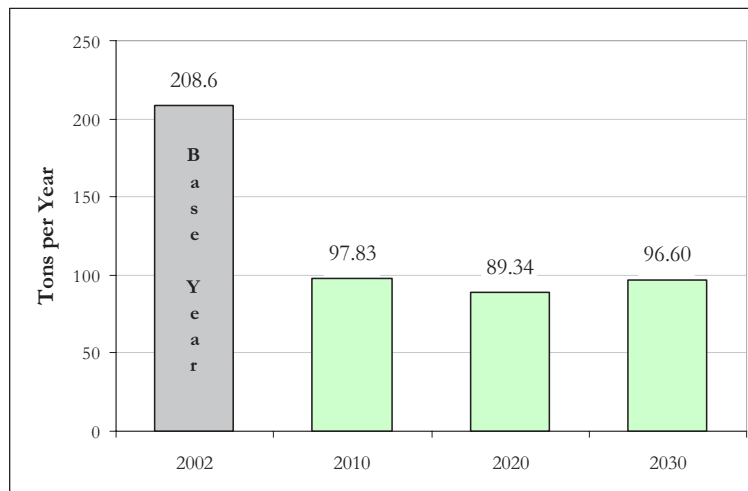
**DIRECT PM2.5 EMISSIONS (TONS PER YEAR), NEW CASTLE COUNTY**

	2002	2010	2020	2030
<b>Direct PM2.5</b>	208.6	97.83	89.34	96.60
<b>Result</b>	Baseline	<i>Pass</i>	<i>Pass</i>	<i>Pass</i>

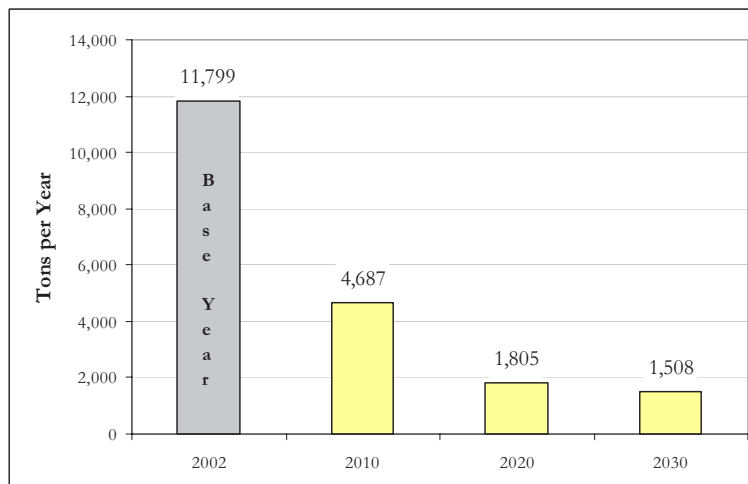
**(NOX) PRECURSOR PM2.5 EMISSIONS (TONS PER YEAR), NEW CASTLE COUNTY**

	2002	2010	2020	2030
<b>Precursor PM2.5 (NOx)</b>	11,799	4,687	1,805	1,508
<b>Result</b>	Baseline	<i>Pass</i>	<i>Pass</i>	<i>Pass</i>

**DIRECT PM2.5 EMISSIONS, NEW CASTLE COUNTY**



**(NOX) PRECURSOR PM2.5 EMISSIONS, NEW CASTLE COUNTY**



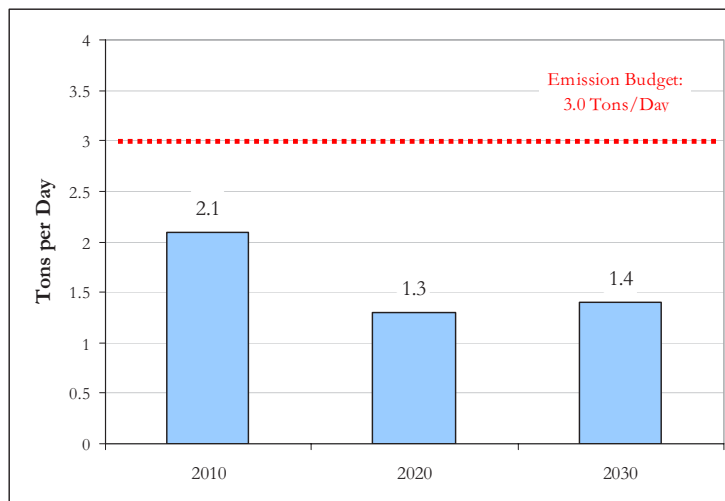
**Cecil County**

As was the case with New Castle County, Cecil County also fell well within its ozone budget in the years modeled. Attainment is demonstrated for VOCs and NOx in the table and graphs that follow.

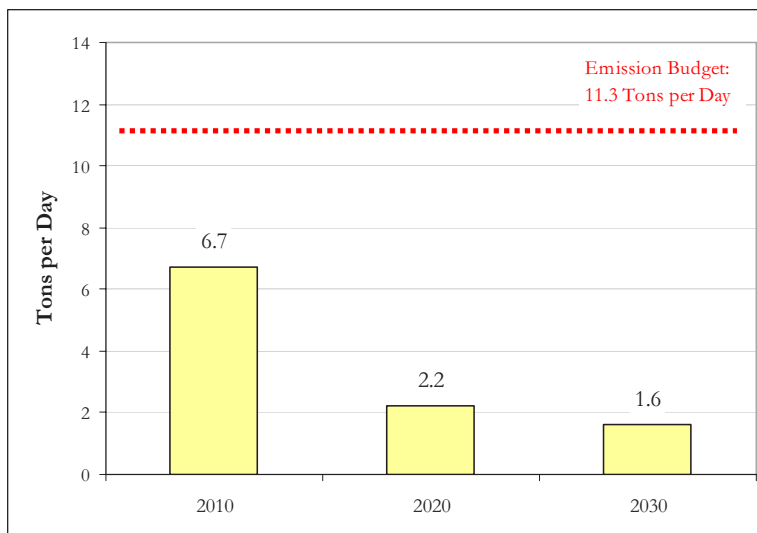
**VOC AND NOX EMISSIONS (TONS PER DAY), CECIL COUNTY**

	Budget	2010	2020	2030
VOCs	3.0	2.1	1.3	1.4
NOx	11.3	6.7	2.2	1.6

**VOC EMISSIONS, CECIL COUNTY**



**NOX EMISSIONS, CECIL COUNTY**





**Preserve Natural, Historic and Cultural Resources: Actions**

Provide assistance in the development of Byway Corridor Management Plans and work with DOTs to implement Context Sensitive transportation improvements, as identified in Corridor Management Plans
Limit projects within Rural Transportation Investment Area to preservation and safety

Preserving of our region’s unique natural, historic and cultural resources is important to the citizens of our region. With our predicted growth, it is critical to balance growth with the existing natural character of this region. From the historic landmarks in northern Delaware to our scenic routes along the Chesapeake, these treasures need to be preserved for future generations.

**Action: Provide assistance in the development of Byway Corridor Management Plans and work with DOTs to implement Context Sensitive transportation improvements, as identified in Corridor Management Plans**

The WILMAPCO region is rich with historic treasures and natural resources which, when coordinated with the transportation system, offer tremendous tourism potential. Currently six scenic byways have been designated in our region. In Cecil County these include the Chesapeake County, Old Turkey Point Road, Lower Susquehanna River Tour, and Atlantic to Appalachians byways. In New Castle County these include the Brandywine Valley Scenic Byway and the Red Clay Valley Scenic Byway. Other historic and scenic routes are currently being planned in New Castle County including Route 9, Philadelphia Pike, the Washington Rochambeau Revolutionary Route, and the Northern Delaware Heritage Coalition. With designation of these routes comes a commitment from state and local agencies to preserve and enhance these corridors for both local and tourist enjoyment.

**Action: Limit projects within Rural Transportation Investment Area to preservation and safety**

Rural TIAs are located where major infrastructure investments and land use development are discouraged. Only projects which are designed to preserve and ensure safe travels along roadways should completed within Rural TIAs. Our rural investment areas coincide with very low density residential development zoning classifications in each county, at most 1 unit per 5 acres. Since 2000, roughly 5 percent of all TIP spending has occurred in the rural investment areas, almost all of which was for safety and preservation. Efforts should be made to keep large scale investment into areas which serve the greatest number of users and support continued quality of life within our existing communities and economic centers.





**Support Existing Municipalities and Communities: Actions**

Incorporate the objectives of county and municipal Comprehensive Plans into transportation plans
Implement context sensitive solutions for livable streets
Work with land use agencies and other stakeholders to encourage use of mobility friendly design and to develop and adopt mobility friendly design standards for additional jurisdictions

Our region has a unique mix of densely settled municipalities, as well as some very defined unincorporated communities. These areas serve as central locations in which citizens shop and gather and have unique identities that often generate community pride. These areas, identified as Centers and Community TIAs are where we encourage increased multimodal funding to support the denser populations that live and work within them. As our actions indicate, this is a way to maintain or foster growth, while allowing communities to preserve their sense of place.

Centers represent concentrations of infrastructure and investment that should be utilized to our advantage. Traditionally, our municipalities have served as hubs of economic growth and activity along with several tourist attractions. They serve as places of higher population and employment densities, mixed land uses, and diversity that support our policies and goals. As such, they have transit supportive patterns of land use that also promote walking, bicycling, and shorter trip distances. Their history, design, or other intrinsic qualities make these places treasures that should be supported.

Place	1980	1990	2000	2005 Estimate	1980-2005 Changes	% Change 1980-2005
<b>Cecil County</b>	60,430	71,347	85,951	97,796	37,366	61.8%
Total Municipal Population	13,394	17,192	22,956	25,909	12,515	93.4%
Percent Living in Municipalities	22.2%	24.1%	26.7%	26.5%	4.3%	
<b>New Castle County</b>	398,115	441,946	500,265	523,008	124,893	31.4%
Total Municipal Population	116,055	117,107	123,531	135,660	19,605	16.9%
Percent Living in Municipalities	29.2%	26.5%	24.7%	25.9%	-3.2%	
<b>Regional Totals</b>	458,545	513,293	586,216	620,804	162,259	35.4%
Total Municipal Population	129,449	134,299	146,487	161,569	32,120	24.8%
Percent Living in Municipalities	28.2%	26.2%	25.0%	26.0%	-2.2%	

Source: U.S. Census

**Action: Incorporate the objectives of county and municipal Comprehensive Plans into transportation plans**

Governmental coordination at all levels is essential in the development of a seamless and efficient transportation plan. WILMAPCO actively coordinates with various municipalities and county governments to understand the transportation needs of all residents. With assistance from WILMAPCO, the University of Delaware, and private agencies, all municipalities in our region have completed comprehensive plans. These plans detail current and planned land use, existing and planned infrastructure (such as transportation), demographic and socio-economic indicators, town history, government services, and the vision of residents. The plans give WILMAPCO a starting point to begin incorporating municipal and county needs and goals into the metropolitan planning process.

**STATUS OF COUNTY AND MUNICIPAL COMPREHENSIVE PLANS**

<b>New Castle County</b>	<b>Certified/ Adopted</b>	<b>Complete</b>	<b>Update in Progress</b>
New Castle County	X (2002)		X
Arden Village*	X (2002)		
Ardencroft Village*	X (2002)		
Ardentown Village*	X (2002)		
Bellefonte *	X (2002)		
Delaware City		X (2001)	X
Elsmere	X (2004)		
Middletown	X (2005)		
Newark	X (2003)		
New Castle	X (2003)		
Newport	X (2003)		
Odessa	X (2006)		
Townsend	X (2003)		
Wilmington	X (various years)		
<b>Cecil County</b>			
Cecil County	X(1998)		X
Cecilton	X(1998)		
Charlestown	X(1993)		
Chesapeake City		X (1998)	
Elkton		X (1998)	X
North East	X(2004)		
Perryville	X(1999)		X
Port Deposit	X(1999)		
Rising Sun			X

Source: University of Delaware, Cecil County Office of Planning & Zoning, New Castle County Department of Land Use  
 \*- Under County Jurisdiction

**Action: Work with land use agencies and other stakeholders to encourage use of mobility friendly design and to develop and adopt mobility friendly design standards for additional jurisdictions.**

WILMAPCO has worked with Middletown and municipalities throughout Cecil County to develop Mobility Friendly Design Standards. These manuals give local and state planners and developers practical guidance in the preparation and review of site plans to ensure non-automotive mobility options are considered in site plan development.

**Action: Implement context sensitive solutions for livable streets:** Implement context sensitive solutions for livable streets as detailed in: DelDOT *Traffic Calming Manual*, Maryland *When Main Street is a State Highway* Report, and the Maryland Context Sensitive Design/Thinking Beyond the Pavement program.



**Provide and Promote Transportation Opportunity and Choice: Actions**

Enhance analytical capabilities and explore new methodologies for addressing the transportation needs of EJ groups
Improve coordination with our PAC, member agencies, and the general public to enhance EJ-related activities and public awareness
Continually monitor the progress of recommended strategies to combat issues of under-representation, isolation, and lack of transportation alternatives found within EJ communities
Ensure Affordable Transportation Choices
Coordinated with Human Service and Transit Agencies to plan United We Ride, New Freedom, Job Access and Reverse Commute, and Special Needs of Elderly Individuals and Individuals with Disabilities Programs

WILMAPCO seeks to provide equal and equitable access to transportation and the transportation planning process, regardless of economic status, race, or special needs. Fair access to needed transportation is essential for all citizens in our region to have access to employment, goods and services.

**Action: Enhance analytical capabilities and explore new methodologies for addressing the transportation needs of identified Environmental Justice groups**

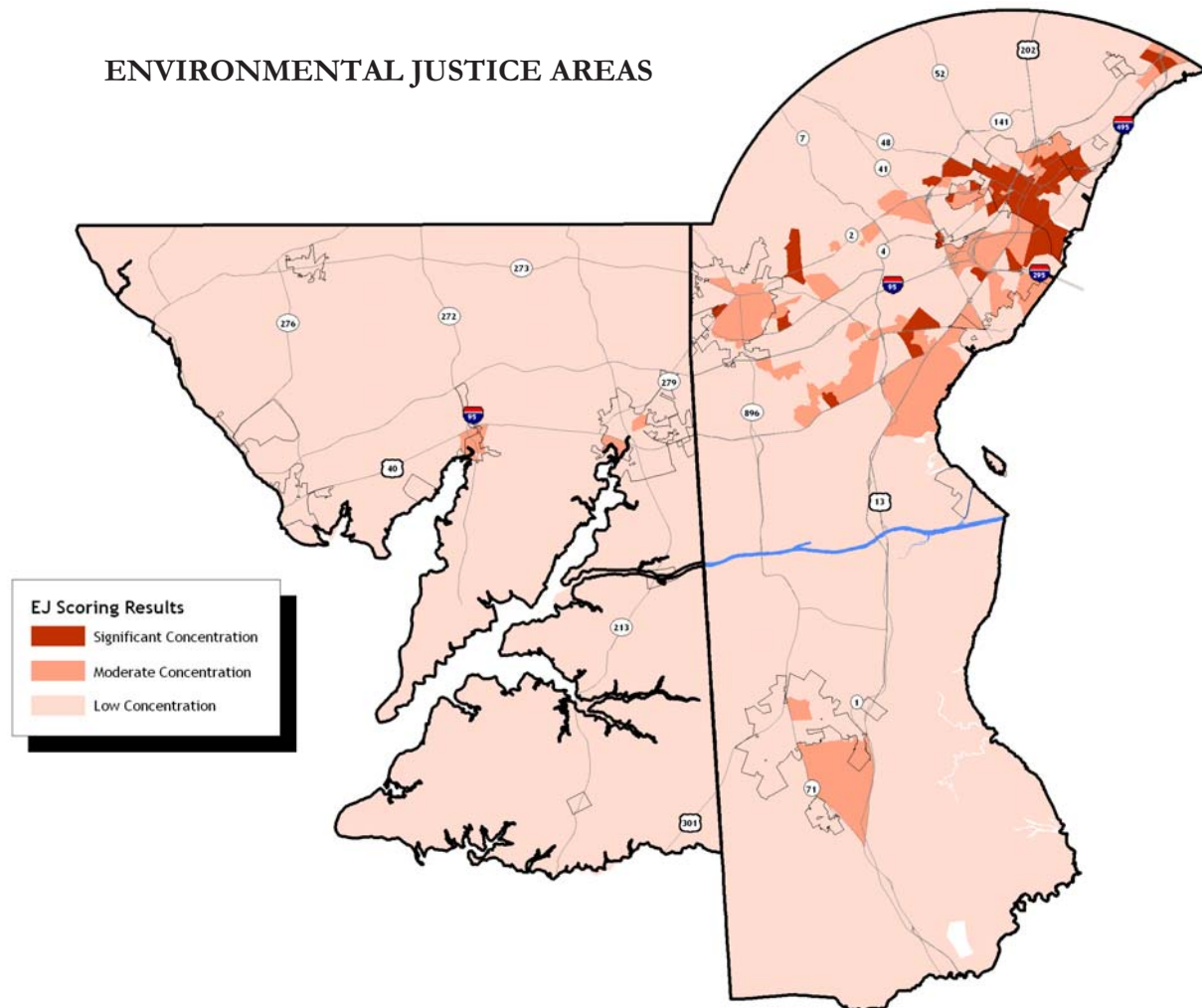
WILMAPCO has completed an initial analysis of Environmental Justice. This analysis developed criteria to identify pockets of disadvantaged groups (low-income and minority) within the region. The regional percentage of low-income and minorities were calculated for a baseline. Then, these regional percentages were then compared to low-income and minority figures at the block-group level. Block-groups which either moderately or significantly exceeded the regional percentages were flagged as EJ areas. Statistical profiles of moderate and significantly scoring EJ areas include their access to transit stops, and each area’s location relative to congested highway corridors. TIP and RTP projects which fell into EJ areas were also listed.

WILMAPCO will explore new approaches to better assess the challenges faced by EJ communities in our region. Research is underway involving the production of a follow-up EJ report. Better methods for identifying EJ neighborhoods, improved means for analyzing the performance of the transportation system within EJ neighborhoods, and alternative public outreach strategies will be identified in the coming months.

**Action: Improve coordination with our Public Advisory Committee (PAC), member agencies, and the general public to enhance EJ-related public outreach.**

By ensuring fair and equitable access to a range of transportation options for all areas of our region, we can achieve the Environmental Justice (EJ) standards set by the Federal Highway Administration. Alternative ways to reach disadvantaged groups include the development and distribution of non-English literature and targeted coordination with local establishments (churches, community centers) and civic leaders. At all times, we will encourage and seek the participation of underrepresented communities in planning process. This is especially true within the PAC itself, where minorities are not adequately represented. While already substantial, WILMAPCO will work to improve EJ monitoring efforts. Finally, WILMAPCO will consider the production of an updated EJ report in the coming months to better assess the needs of our region’s low-income and minority communities.

## ENVIRONMENTAL JUSTICE AREAS



**Action: Continually monitor the progress of recommended strategies to combat issues of under-representation, isolation, and lack of transportation alternatives found within identified Environmental Justice communities**

While already substantial, WILMAPCO will work to improve EJ monitoring efforts. Each year, EJ is specifically addressed in the regional Progress Report and CMP report. Additionally, as part of our project prioritization process, projects in EJ areas that improve quality of life receive additional points while those that negatively impact EJ areas receive fewer points.

A practical example of WILMAPCO's commitment to EJ principles is our involvement with South Wilmington's Special Area Management Plan in 2005-2006. The plan centered on the re-development of Southbridge, a predominately black, low-income Wilmington neighborhood. Partnering with the Delaware's Department of Natural Resources and Environmental Protection (DNREC)—the lead agency—and other governmental and civic groups, WILMAPCO offered countless hours of staff time, data, and expertise.

**Action: Ensure Affordable Transportation Choices**

Transportation spending is the second highest household expense, second only to housing, according to the Bureau of Labor Statistics. Transportation costs in 2004 claimed 18 percent of all household expenditures. Rising gas prices have resulted in consumers spending a larger share of their income on fuel.

Transportation may account for a greater share of household expenses if gas prices continue to rise as they have over recent years. Thus, in order for residents of our region to get to and from work, home, shopping and services, we will need to ensure the availability of affordable transportation choices. Affordable choices may include

more flexible forms of public transit, car sharing and car ownership programs, reverse commute services, and employer-provided transit. Investments in pedestrian and bicycle facilities and in the quality of existing bus services may particularly benefit residents seeking relief from high gasoline prices.

As a region, we should promote sustainable transportation energy use. This includes developing infrastructure for alternative energy sources, recommending transportation system improvements which reduce vehicle idling, and promoting measures which decrease single occupancy vehicles.

**Action: Coordinated with Human Service and Transit Agencies to plan United We Ride, New Freedom, Job Access and Reverse Commute, and Special Needs of Elderly Individuals and Individuals with Disabilities Programs**

Following the theme of Federal Executive Order #13330, Human Service Transportation Coordination, SAFETEA-LU provides expanded program authority and funding opportunities to provide transit service to individuals with job access and specialized transportation needs. These programs, 5310 (Special Needs of Elderly Individuals and Individuals with Disabilities), 5316 (Job Access and Reverse Commute), and 5317 (New Freedom) all require an extensive coordination among DOT and non-DOT-funded services, including preparation of a locally-developed coordinated human service transportation plan as the basis for project-level funding decisions. The plan has to be developed by local area representatives of public, private, and nonprofit transportation human services providers, as well as involve participation by the public, including older adults, people with disabilities, and individuals with lower incomes. SAFETEA-LU further outlines that project “competition” for funding awards at the local level should be coordinated with the MPO.

In Delaware, DTC began the statewide coordination process in September 2005 utilizing the United We Ride (UWR) initiative of the Coordinating Council on Access and Mobility (CCAM). This program includes a number of tools and strategies for building a coordinated human service transportation system across programs and funding streams.

WILMAPCO has been a partner with DTC in the Statewide Coordination Process and with the UWR Initiative. It has become apparent that the three counties in Delaware have different needs and may require individual solutions. At this time, WILMAPCO is expanding our role to address the UWR Process in New Castle County. The next step for us is to create a New Castle County Coordination Committee and recruit stakeholders at the local level.

In Cecil County, a Coordinating Council has stakeholders from both public and private agencies. Goals for the Cecil County coordination project, with the related performance measures include:

**Maintain or Improve Quality of Agency and Public Transportation Services**

- Serve More People (more Trips) with the Same Resources
- Share Information on Transportation Services among Agencies to Avoid Service Duplication and/or Overlap
- Identify Barriers to Local Coordination and Take to State Coordinating Committee and/or State Agency

The Department of Aging has hired a part-time Transportation Coordinator to assist in managing this process. WILMAPCO has been a partner throughout this initiative

## **Section 4: What investments are planned? Financially constrained projects, 2006-2030**

Federal regulations require the RTP to contain a list of projects that are planned over the next 20 years. For these projects, WILMAPCO must identify sources of revenue that are reasonably expected to be available to carry out these projects. Fiscal realities in the WILMAPCO region, particularly New Castle County, have had a dramatic impact in determining what is financially reasonable. WILMAPCO forecasts funding shortfalls for capital projects in Delaware well before 2030. Simply put, not enough revenue will be available to build all the projects identified as desirable for our growing region. SAFETEA-LU does allow MPO's to identify additional projects for illustrative purposes that would be included if additional revenue resources become available; this list of projects is called the "Aspirations List". The "Financially Constrained" project list contains projects with expected future revenue, however this project list contains far fewer projects than the 2025 RTP and the 2030 RTP "Aspirations List."

### **Financial Analysis**

Revenue projections have been developed in cooperation with MDOT and DelDOT. For Cecil County, we anticipate \$80,100,000 in funds for capital improvements through 2030. For New Castle, we anticipate \$785,867,000 in funds for capital improvements through 2030.

	Cecil County	New Castle County
Projected Revenues	\$80,100,000 and 505,084,000 toll funds	\$785,867,000
Projected Costs, Constrained RTP	27,900,000 and 505,084,000 toll funds	785,867,000
Project Costs, Aspirations List	229,711,000 (Some project costs TBD)	1,809,732,000
Surplus/Deficit (Revenues vs. Constrained and Aspirations Projects)	-177,511,000 (Minus aspirations costs TBD)	-1,809,732,000
To be implemented with municipal or non transportation funding sources		187,343,280

In New Castle County, projected revenue shortfall 1.8 billion dollars. In Cecil County, we have identified a shortfall of \$178 million based on project with identified costs; other Cecil projects may add to this shortfall as expected costs are determined.

Additional information about the revenue projections are in the Appendix.



**Financially Constrained Project List**

The following table and map shows projects for which funding is available or anticipated with projected revenue for implementation. This is a conservative listing of projects that does not include additional desired projects for which funding may become available in the future.

Projects listed have been submitted by members of the public and our member agencies and have been selected as priority projects. This listing does not include preservation and safety projects, which remain our highest priority and should be funded along with the proposed management and expansion investments.

The short term listing shows projects currently funded through the Transportation Improvement Program. Medium and long term projects will need to be programmed through the TIP prior to their project development, engineering and construction phases.

**Projects to be In-Service by 2010 (Short Term)**

Project Name	Location	Category	Cost
Brackenville Road: SR 41 to Barley Mill Road	NCC	Intersection / Road	4,000
Bunker Hill Rd: US301 to Choptank Rd	NCC	Westtown	1,800
City of New Castle Improvements (SR9/3rd) & (SR9/6th)	NCC	City of New Castle	4,000
City of New Castle Improvements, SR 9, River Rd. Area Dobbinsville	NCC	City of New Castle	2,020
City of New Castle Improvements, Washington Street	NCC	City of New Castle	5,125
I-295 Westbound: I-95 to US 13	NCC	Intersection / Road	5,200
I-295: Third Lane, SR 141 ro SR 9	NCC	Intersection / Road	45,000
I-295: Weave Elimination from I-95 to US 13	NCC	Road Expansion / Management	7,100
I-95 Widening: DE 1 to DE 141	NCC	I-95 MD Line to I-295 Program	65,000
I-95/SR 896 Interchange	NCC	I-95 MD Line to I-295 Program	1,500
Newark Transit Hub	NCC	Transit	500
Mill Creek Road and Stoney Batter Road Intersection	NCC	Intersection / Road	2,300
Pomeroy Branch Pedestrian Corridor	NCC	Newark / Elkton Plan	2,981
Rail Improvements, Newark to Wilmington	NCC	Transit	23,182
School Bell Road: US 40 to SR 7	NCC	US 40 Plan	5,200
Southern New Castle County Improvements	NCC	US 301	65,850
SR 4, Christiana Pkwy from SR 2, Elkton Rd. to SR 896 South College Ave	NCC	Newark / Elkton Plan	4,840
SR 72, Possum Park Rd., Possum Hollow Rd., to Old Possum Park Rd.	NCC	Intersection / Road	4,000
SR 896 at N 54 & N 396 Intersection, including Howell School Rd to SR 71	NCC	US 301	10,800
St. Annes Church Rd: Levels Road to SR71	NCC	Westtown	4,790
Truck Weigh Station along SR 1, North of Smyrna	NCC	Intersection / Road	4,600
US 13 and SR 896, Boyd's Corner Rd. and SR 896, Boyd's Corner Road	NCC	US 301	9,400
US 301, Middleneck Rd. to Peterson Rd.	NCC	Westtown	23,600
US 40, Eden Square Connector	NCC	US 40 Plan	3,620
US 40, Bear-Glasgow Bus Stop Improvements	NCC	US 40 Plan	500
Walther Road Sidewalks: US 40 to Old Baltimore Pike	NCC	US 40 Plan	1,300
Wiggins Mill Road	NCC	Westtown	2,100
Wilmington Signal Improvements	NCC	Wilmington	3,300
<b>SHORT TERM TOTAL</b>	<b>NCC</b>		<b>313,608</b>
<b>SHORT TERM TOTAL</b>	<b>CC</b>		<b>0</b>

All \$ X 1,000

**Projects to be In-Service by 2020 (Medium Term)**

Project Name	Location	Category	Cost
Grubb Road, SR 261, Foulk road to SR 92, Naamans Rd., Pedestrian Improvements	NCC	Intersection / Road	3,300
I-95 & US 202	NCC	US 202 / DE 141 Area	36,200
I-95 Carr Rd and Marsh Rd Interchange Improvements	NCC	Intersection / Road	2,900
I-95 Turnpike Toll Plaza	NCC	I-95 MD Line to I-295 Program	41,000
I-95 Widening: Susquehanna River to DE Line	Cecil	Road Expansion	505,084
MD 272: US 40 to Lums Rd.	Cecil	Roads	12,900
Rail: Newark Train Station	NCC	Transit	24,656
SR 1/I-95 Interchange	NCC	I-95 MD Line to I-295 Program	132,750
SR 141, SR 2, Kirkwood Hwy. to Faulkland Rd. (includes Br -160	NCC	Road Expansion / Management	21,640
SR 2-Elkton Rd. MD Line to Delaware Ave	NCC	Newark / Elkton Plan	67,020
SR 2, South Union St from Railroad Bridge to Sycamore St	NCC	Intersection / Road	
SR 4, Harmony Rd Intersection Improvements	NCC	Churchmans Crossing Plan	15,240
SR 7, Newtown Road to SR 273	NCC	US 40 Plan	12,000
SR 72, McCoy Rd to SR 71 Sidewalks	NCC	Bicycle / Pedestrian	17,800
Transit Vehicle Replacement and Refurbishment—Fixed Route	NCC	Transit	40,058
Transit Vehicle Replacement and Refurbishment—Paratransit	NCC	Transit	14,685
Tyler McConnell Bridge, SR 141, Montchanin Road to Alapocas Rd	NCC	US 202 / DE 141 Area	8,000
US 13, Philadelphia Pike, Claymont Transportation Plan Implementation	NCC	Intersection / Road	19,000
US 301 Truck Weigh Station and Inspection Facility	NCC	Intersection / Road	4,600
US 40 Pulaski Highway/SR 72, Wrangle Hill Road (Includes Del Laws Road Intersection)	NCC	US 40 Plan	15,280
Walnut Street, Martin Luther King Blvd to 16th Street (Paving & Streetscape)	NCC	Wilmington Initiatives Plan	10,800
<b>MEDIUM TERM TOTAL</b>	<b>NCC</b>		<b>472,259</b>
<b>MEDIUM TERM TOTAL</b>	<b>CC</b>		<b>517,984</b>

All \$ X 1,000

**Projects to be In-Service by 2030 (Long Term)**

Project Name	Location	Category	Cost
MD 213: Frenchtown Road to US 40	Cecil	Roads	15,000
<b>LONG TERM TOTAL</b>	<b>NCC</b>		<b>0</b>
<b>LONG TERM TOTAL</b>	<b>CC</b>		<b>15,000</b>

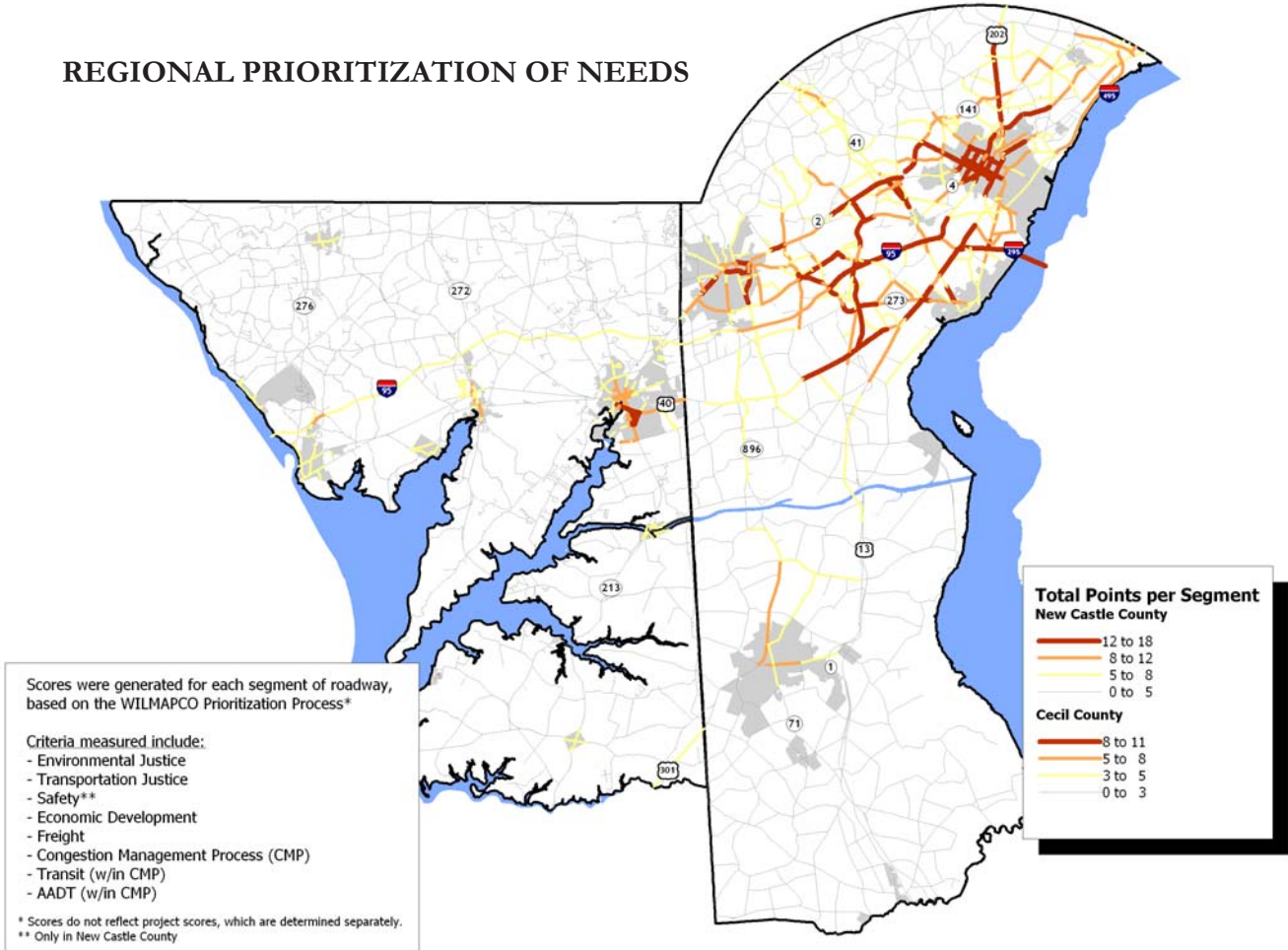
All \$ X 1,000



**Prioritization of Needs**

Given the limited funding for transportation projects, our future needs far outweigh what is included in the financially constrained project listing. Using a modified version of criteria from our prioritization process we have conducted a region-wide analysis to identify areas with the greatest transportation needs. This prioritization of needs uses a composite score developed from environmental justice areas, transportation justice areas, crash data, land use and investment plans, freight routes, system user data including congestion, traffic volumes and transit.

**REGIONAL PRIORITIZATION OF NEEDS**



This needs based identification of problem areas, when used in combination with the aspirations list, will help direct additional funds identified in the future towards the greatest problems.

**2030 RTP Project Aspirations List**

Federal legislation allows us to show projects for illustrative purposes that would be included if additional revenue resources become available. These projects are shown on the following tables and maps. It is anticipated that additional funding may be identified over the lifetime of this Plan; thus, this prioritized listing of projects should be the source of additional management and expansion projects when funding is identified. When funding becomes available these project should be amended into the “constrained” portion of the Plan and the TIP.

These project have been prioritized using our approved prioritization process. This process was created provide a quantitative method to compare projects proposed for our Transportation Improvement Program (TIP) and RTP using measurable criteria based on the goals of the RTP.

As it has been demonstrated that we simply cannot fund all of our transportation need at this time, it is necessary to develop a “wish list” of projects.

The list has been prioritized using the WILMAPCO project prioritization process so that in the next few years additional funding becomes available, we can select the ones which can bring us the best benefit for the system.

**Major Regional Project "Aspirations List"**

ID	Project Name	Project Category
2	SR 4, Churchmans Road Intersection Improvements	Churchmans Crossing Plan
3	SR 4 / SR 7 (JP Morgan) Intersection Improvements	Churchmans Crossing Plan
4	SR 4, Ogletown Stanton Road / SR 7, Christiana Stanton Road Phase 1, Stanton Split	Churchmans Crossing Plan
5	Road A / SB DE 1 Ramps (Dual)	Churchmans Crossing Plan
6	SR 273 / Harmony Rd. Intersection Improvements	Churchmans Crossing Plan
7	SR 273 / Chapman Intersection Improvements	Churchmans Crossing Plan
8	Churchmans Crossing FY 2005 Sidewalks & Bus Stop Improvements	Churchmans Crossing Plan
9	SR 2, Kirkwood Hwy / Harmony Rd.	Churchmans Crossing Plan
10	Christiana Bypass, I-95 to Road A	Churchmans Crossing Plan
11	Churchmans Extended, SR2 to SR4	Churchmans Crossing Plan
19	Transportation Center Phase III	Wilmington Initiatives Plan
20	King Street and Orange Street, MLK Boulevard to 13'th Street	Wilmington Initiatives Plan
24	Fourth Street, Walnut Street to I-95	Wilmington Initiatives Plan
58	Interstate Access	Wilmington Riverfront Improvements
60	Christina River Bridge	Wilmington Riverfront Improvements
125	DE 141 and Old Barley Mill Road	US 202 / DE 141 Area
148	DE 141 from Jay Drive to Newport including I-95 Ramp at Commons Boulevard	Road Expansion and Management
151	SR 2 / Red Mill Rd. Intersection Improvements	Other Intersection / Road Improvements
154	Harvey Road Traffic Calming	Other Intersection / Road Improvements
157	DE 7 North of Valley Rd. to PA Line, Dualization	Other Intersection / Road Improvements
161	Mill Creek Road / McKennan's Church Road Intersection Improvements	Other Intersection / Road Improvements
172	SR141, I-95 to Burnside Blvd	Other Intersection / Road Improvements
182	Mill Creek/Hockessin Greenway	Bike/Ped
183	Powder Mill Greenway	Bike/Ped
185	Christina River Bikeway	Bike/Ped
194	25% More Metro Transit Service	Transit
239	SR 52 Intersection Improvements	Centerville Village Plan
249	CSX Rail Crossing over Newport Rd, near Delcastle HS	Other Intersection / Road Improvements
252	I-95 & SR 141 Interchange	I-95 MD Line to I-295 Program
274	Commuter Rail: Perryville to Wilmington	Transit





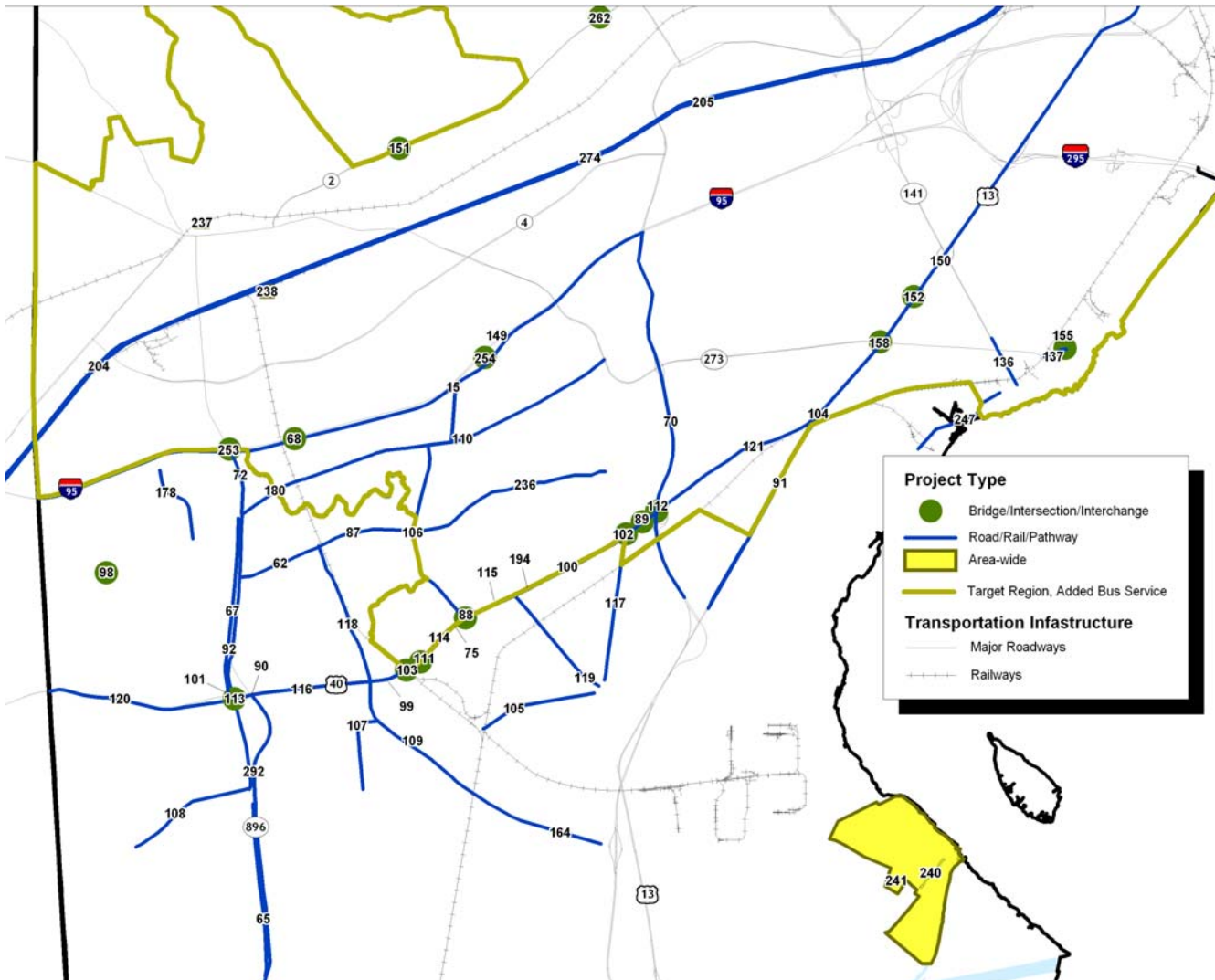


**Major Regional Project "Aspirations List"**

<b>ID</b>	<b>Project Name</b>	<b>Project Category</b>
15	I-95 Widening MD Line to SR 1	I-95 MD Line to I-295 Program
62	Newtown Rd., SR 896, South College Ave. to SR 72, South Chapel St.	US 301
65	Bicycle and pedestrian path on the west side of DE 896 between DE 71 and Glasgow	US 301
67	Local Glasgow Circulator Roads - to include sidewalks and bicycle accommodations	US 40 Plan
68	I-95/DE 72 partial interchange - northbound entrance, southbound exit only	US 301
70	SR 1 from Tybouts Corner to SR 273, Reconstruction	US 301
72	Widen DE 896 to 6 lanes - between Old Baltimore Pike and I-95	US 301
75	US 40 (DE 72 to DE 1)	US 40 Plan
87	Reybold Road, SR 72 to Salem Church Rd	US 40 Plan
88	Salem Church Road/US 40/Porter Road Intersection	US 40 Plan
89	DE 1 southbound ramp/US 40 Intersection	US 40 Plan
90	US 40 (DE 896 to DE 72) Sidepaths	US 40 Plan
91	US 13 (US 40 to Tybouts Corner) Sidepaths	US 40 Plan
92	DE 896 (Old Baltimore Pike to Porter Road) Sidepaths	US 40 Plan
98	US 40 & Pleasant Valley Road Intersection	US 40 Plan
99	US 40, SR 72 to Salem Church Rd	US 40 Plan
100	US 40, Salem Church Rd to Walther Road	US 40 Plan
101	US40/SR896 Interchange	US 40 Plan
102	US40/SR7 Interchange	US 40 Plan
103	US40 Overpass of Norfolk Southern RR	US 40 Plan
104	US40/US13 Interchange	US 40 Plan
105	Old Porter Road, Porter Road to SR 71	US 40 Plan
106	Salem Church Rd, I-95 to US40, Sidewalks	US 40 Plan
107	Del Laws Road, Sidewalks	US 40 Plan
108	Old County Road	US 40 Plan
109	SR72 Sidewalks, US40 to SR71	US 40 Plan
110	Old Baltimore Pike, SR72 to SR273, Sidepath	US 40 Plan
111	Scotland Drive/US 40, Intersection	US 40 Plan
112	SR1 NB Ramp to US40	US 40 Plan
113	US40/Glasgow Avenue Intersection	US 40 Plan
114	US 40, Scotland Drive to Salem Church Road	US 40 Plan
115	US 40, Salem Church Road to Church Road	US 40 Plan
116	US 40, SR896 to SR72	US 40 Plan
117	DE 7 (US 40 to DE 71)	US 40 Plan
118	SR72, Reybold to US40	US 40 Plan
119	Church Road, Wynnfield to SR 71	US 40 Plan
120	US 40, MD State Line to SR896, Sidepaths	US 40 Plan
121	US 40, SR1 to US13, Sidepaths	US 40 Plan
135	City of New Castle Improvements (SR9/Delaware St)	City of New Castle
137	Reconstruct Ferry Cutoff as 4 lanes	City of New Castle
149	I-95 NB off ramp relocation to EB Chapman Road - New Ramp	Road Expansion and Management
150	US 13 - Tybouts Corner to Wilmington - Add additional capacity	Road Expansion and Management
152	US 13 and School Lane Pedestrian Crossing	Bike/Ped
155	Frenchtown Road at DE 9	Other Intersection / Road Improvements
158	US 13 and DE 273 Intersection Improvements	Other Intersection / Road Improvements

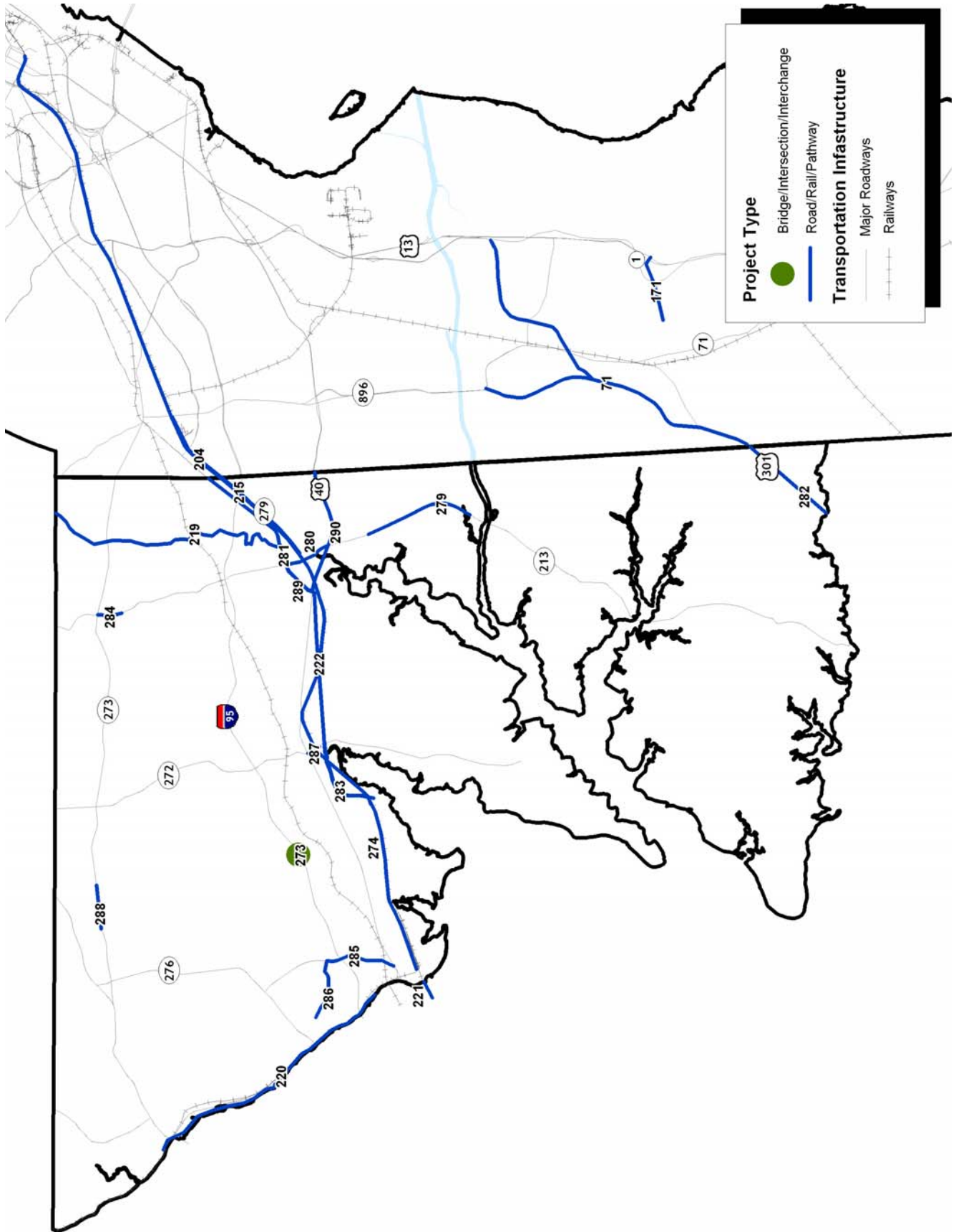
WILMAPCO REGIONAL TRANSPORTATION PLAN 2030

ID	Project Name	Project Category
178	Iron Hill Bikeway	Bike/Ped
180	Cooch's Bridge/Old Baltimore Pike Greenway	Bike/Ped
194	25% More Metro Transit Service	Transit
204	Rail - Newark to Elkton	Transit
215	Rail - Newark to Elkton	Transit
236	Newtown Rd. Trail	US 40 Plan
240	Washington Street Enhancements	Delaware City Plan
241	Delaware City Flood Mitigation	Delaware City Plan
253	I-95: SR 896 Interchange	I-95 MD Line to I-295 Program
254	I-95 Service Plaza ADA	I-95 MD Line to I-295 Program
274	Commuter Rail: Perryville to Wilmington	Transit
292	SR 896 Widening, C&D Canal to US 40	US 301



**Major Regional Project "Aspirations List"**

<b>ID</b>	<b>Project Name</b>	<b>Project Category</b>
71	US 301, MD State Line to SR 896	US 301
171	SR299, Middletown Odessa Road, Silver Lane Rd to SR1	Other Intersection / Road Improvements
204	Rail - Newark to Elkton	Transit
215	Rail - Newark to Elkton	Transit
219	Elk Neck Greenway	Bike/Ped
220	Lower Susquehanna Greenway	Bike/Ped
221	Susquehanna River Pedestrian/Bicycle Crossing	Bike/Ped
222	Elkton Greenway (East Coast Greenway)	Bike/Ped
273	I-95 Interchange: Between Perryville and North East	Roads
274	Commuter Rail: Perryville to Wilmington	Transit
279	MD 213 (Augustine Herman Highway), MD 285 to Frenchtown Rd: Divided highway reconstruction	Roads
280	MD 213 (Bridge St.), US 40 to MD 279: Multi-lane urban reconstruction	Roads
281	MD 279 (Elkton-Newark Rd.), MD 213 to MD 316: Multi-lane urban reconstruction	Roads
282	US 301 (Blue Star Memorial Highway), Kent County line to Delaware State line: Access control improvements	Roads
283	MD 7 (Philadelphia Rd.-Cecil Ave.), East limits of Charlestown to MD 272: 2 lane reconstruction	Roads
284	MD 213 (Singerly Rd.), North of Providence Rd. to MD 273: 2 lane reconstruction	Roads
285	MD 222 (Perryville/Bainbridge Rd.), US 40 to MD 275: Multi-lane reconstruction	Roads
286	MD 222 (Bainbridge Rd.), MD 275 to Bainbridge entrance: 2 lane reconstruction	Roads
287	MD 272 (North East Rd.), North end of couplet to US 40: Multi-lane urban reconstruction	Roads
288	MD 273 (Telegraph Rd.), East Limits of Rising Sun to Sylmar Rd: 2 lane reconstruction	Roads
289	MD 279 (Elkton Rd./Newark Ave.), North of US 40 to west of MD 213: Divided Highway Reconstruction	Roads
290	US 40 (Pulaski Highway) MD 279 to Delaware State line: Divided highway reconstruction	Roads
297	MD 213 Expansion in Conjunction w/U.S. 301 Improvements	Roads
299	MD 213 / MD 282 Intersection	Roads
300	MD 213: New Overpass to Cheseapeake City	Roads





## **Section 5: How will we know if we succeeded?**

### **How We Measure Our Performance**

In 1996, WILMAPCO adopted its first long range transportation plan that established goals for our region's future and called for an annual review of the progress made towards achieving these goals. This plan was updated in 2000 and again in 2003, with the adoption of our Regional Transportation Plan 2025 (RTP 2025). The Regional Progress Report tracks these regional statistics on an annual basis, using the specific performance indicators. As a result, we can monitor a select group of criteria that pertain to each of the goals that were illustrated in the RTP and measure them against either established quantitative goals or national averages.

By using this format of data-driven, performance-based monitoring, we can annually compare the results of the indicators versus our goals to ensure we are on the right path. We recognize that all of our goals cannot be achieved at once. Therefore, if we find areas where we are not progressing as hoped, we can incorporate mid-course corrections into our planning activities to put us back on the right track. With the continued belt tightening of state governments, it is even more important to wisely expend the dollars allotted to us. A full copy of the most recent Regional Progress Report can be found in the Appendix.

The 2005 Regional Progress Report brings together data and information from several agencies across our region that are:

- Reliable, relevant and regional in scope
- Easy to understand for the general public
- Available from public sources of data
- Available over a period of time
- Able to be tied to RTP goals/objectives

The report is primarily made up of indicators, detailing the relevant trends we have identified. Using historic patterns (most data going back to 1996), we can see how indicators have changed through time. When possible, we have established performance targets for indicators. If a performance target is not available, we have used the national average as a target goal. With the addition of performance targets, a direct correlation between the current trends and desired future goals can be established. This allows us to see exactly where we are currently and if we are moving in the right direction towards meeting goals set by the 2025 RTP. This creates the opportunity to see where policy and actual conditions are not meeting and where we should direct additional resources to fill the gap.

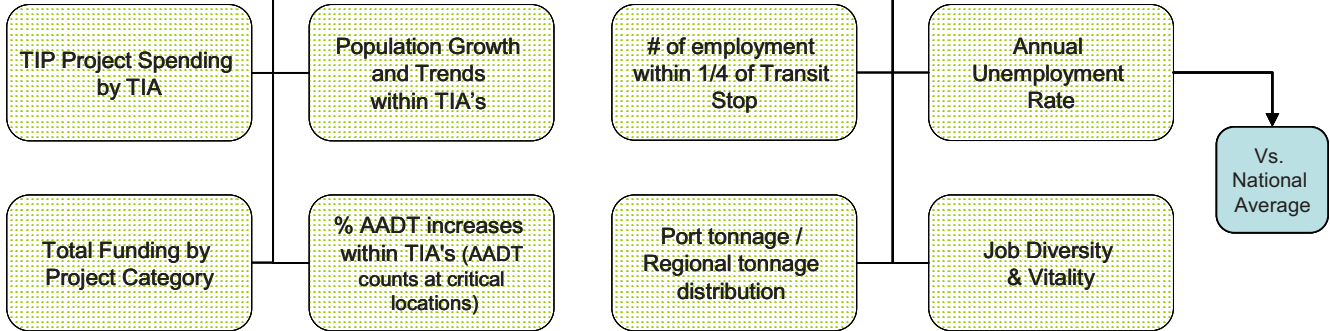
The following pages list the current performance measures used in the document and their respective performance targets/national averages.



**Support Economic Activity, Growth and Goods Movement**

**Objective**  
Ensure a Predictable Public Investment Program

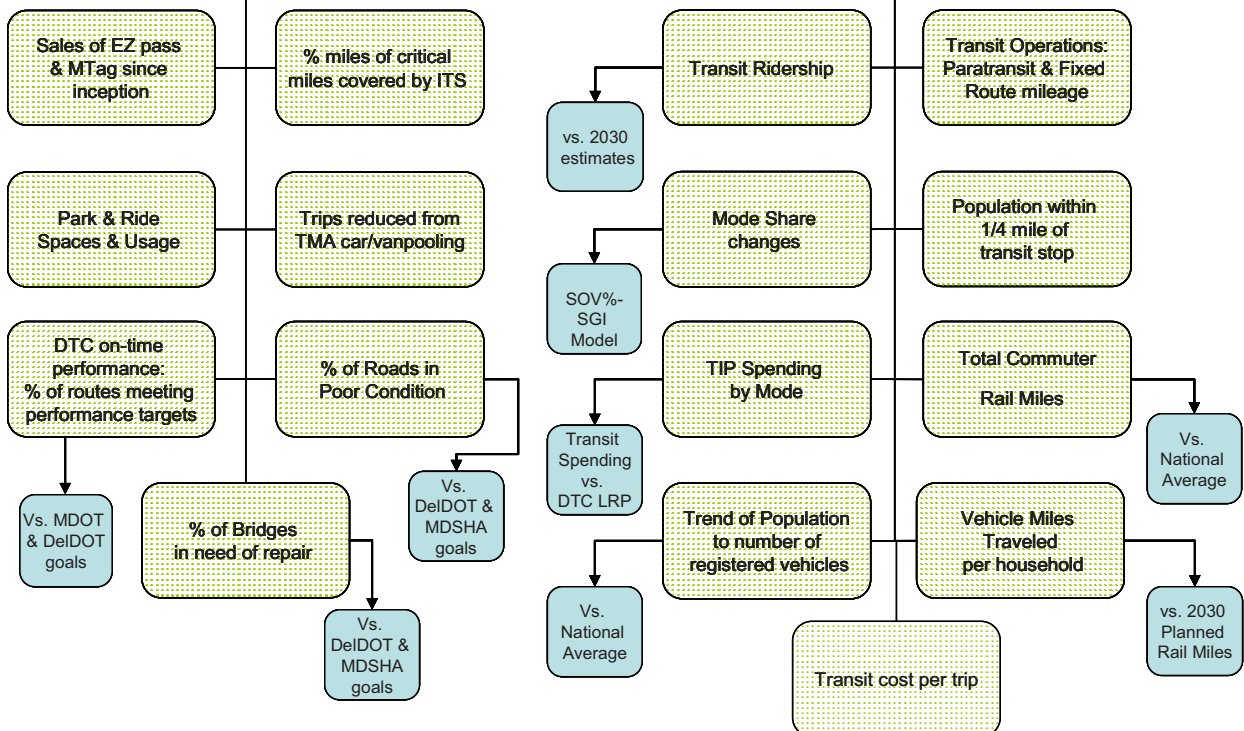
**Objective**  
Plan and Invest to Promote the Attractiveness of the Region

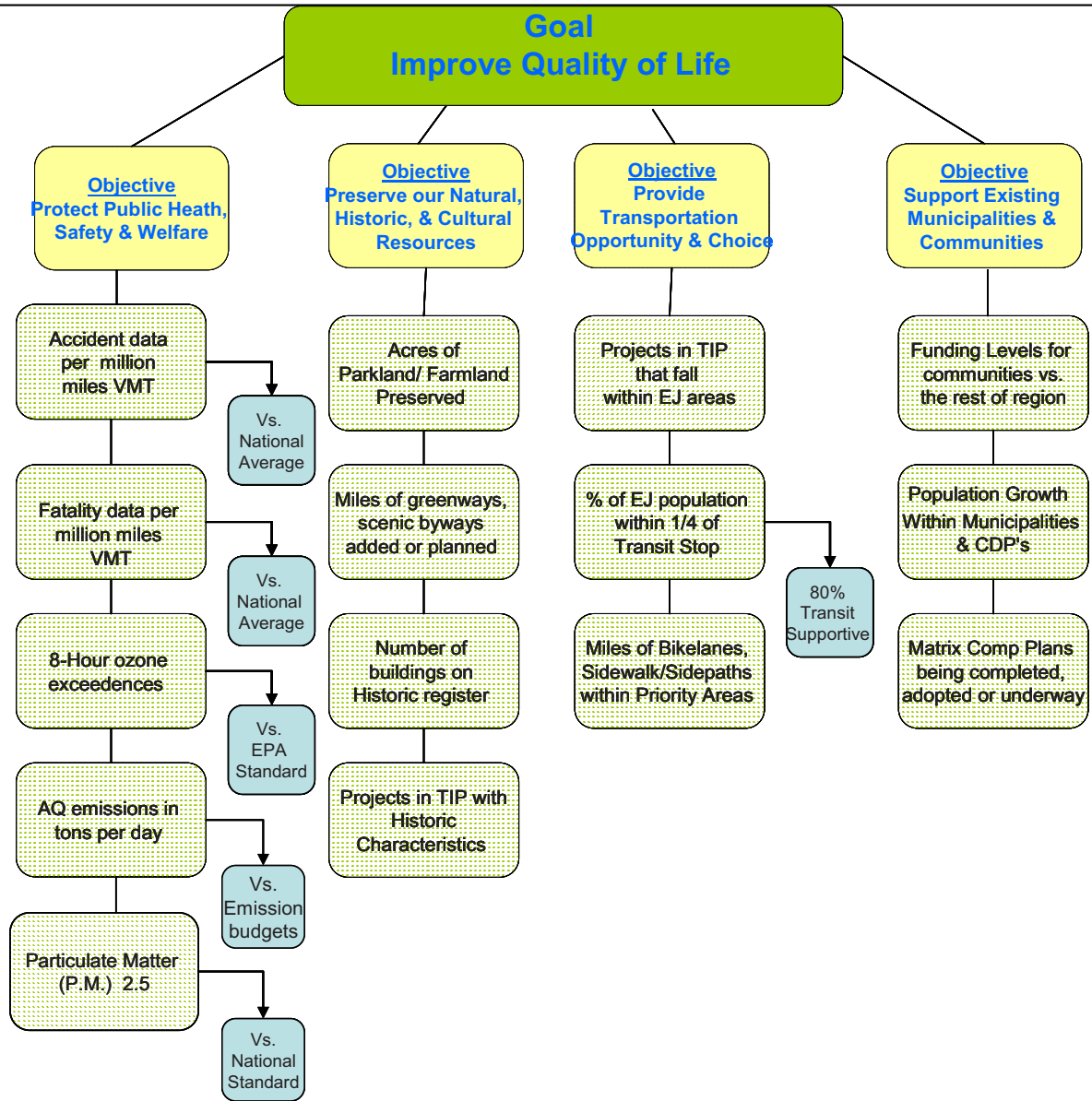


**Goal**  
Transport People and Goods

**Objective**  
Improve Transportation System Performance

**Objective**  
Promote Accessibility, Mobility, and Transportation Alternatives







## Section 6: How do we meet the federal requirements?

### Federally Required Planning Factors in SAFETEA-LU

Under the provisions of the Federal Transportation Act, SAFETEA-LU, Metropolitan Planning Organizations (MPOs) are required to consider eight planning factors in the development of transportation plans and programs.

Federally Required Planning Factors	
FACTORS	HOW THE 2030 RTP IMPLEMENTS THE FACTORS
Support Economic Vitality	Primarily addressed by actions part of the Goal: Support Economic Activity, Growth and Goods Movement. Also part of Project Prioritization Process.
Increase Accessibility and Mobility	Primarily addressed by actions part of the Goal: Efficiently Transport People. Also part of Project Prioritization Process.
Protect the Environment (including promote consistency with planned growth and economic development patterns)	Primarily addressed by actions part of the Goal: Improve Quality of Life. Also part of Project Prioritization Process and Transportation Investment Areas.
Enhance Modal Integration	Primarily addressed by actions part of the Goal: Efficiently Transport People.
Promote Efficient System Management	Primarily addressed by actions part of the Goal: Efficiently Transport People.
Preserve the Existing System	Primarily addressed by actions part of the Goal: Efficiently Transport People.
Increase Safety	Primarily addressed by actions part of the Goal: Improve Quality of Life. Also part of Project Prioritization Process and Pedestrian Priority Areas.
Increase Transportation Security	Primarily addressed by actions part of the Goal: Improve Quality of Life.

### Planning Emphasis Areas in SAFETEA-LU

Under the provisions of the Federal Transportation Act, SAFETEA-LU, Metropolitan Planning Organizations (MPOs) are required to five areas in the development of transportation plans and programs.

Planning Emphasis Areas	
Emphasis Area	How the 2030 RTP Implement this Planning Emphasis Area
Consideration of Safety and Security in the Transportation Planning Process	Primarily addressed by actions part of the Goal: Improve Quality of Life. Also part of Project Prioritization Process and Pedestrian Priority Areas.
Linking the Planning and NEPA Processes	TBD
Consideration of Management and Operations within Planning Processes.	TBD
Enhancing the Technical Capacity of Planning Processes	To be carried out as recommended in annual Regional Progress Report.
Coordination of Human Service Transportation	Primarily addressed by actions part of the Goal: Efficiently Transport People. Coordination done through Cecil County Transportation Coordination Council and Delaware United We Ride.

**SAFETEA-LU RTP Requirements**

SAFETEA-LU requires a fully compliant long range plan be adopted by July 2007. Although SAFETEA-LU was signed into law on August 10, 2005, many of the provisions require additional rulemaking in order to implement the requirements of the law. The proposed rulemaking was published in the Federal Register on June 9, 2006 and requires the following.

SAFETEA-LU Requirements	
SAFETEA-LU Requirements	How the 2030 RTP Meet This Requirement
Plan Cycle – Plans shall be updated every four (4) years in air quality nonattainment and maintenance areas.	Our previous update, the 2025 RTP, was approved March 7, 2003.
Fiscal Constraint	Documentation regarding this fiscally constrained RTP are included in the Appendix. Unfunded projects are included in a aspirations list.
Transportation System Security – SAFETEA-LU calls for the security of the transportation system to be a stand-alone planning factor.	Security is addressed as part of the Goal: Improve Quality of Life, Protect Public Health, Safety and Welfare. A document, <i>Safety and Security in the WILMAPCO Transportation Planning Process</i> , was completed in December 2004 and detailed WILMAPCO’s role.
Environmental Mitigation – Plans must include a discussion of the types of potential environmental mitigation activities, to be developed in consultation with federal, state, and tribal wildlife, land management, and regulatory agencies.	To be implemented as part of Program Development for relevant projects in the TIP.
Consultations – MPOs must consult “as appropriate” with “State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation” in developing long range transportation plans.	Listed organizations and agencies are part of the WILMAPCO Technical Advisory Committee and its subcommittees and the Public Advisory Committee. All WILMAPCO committee provide input and guidance on the RTP and other plan development.
Consistency of Plan with Planned Growth and Development Plans- Revises the previous planning factor related to environmental factors to add promoting consistency between transportation improvements, and state and local planned growth and economic development patterns.	WILMAPCO’s Transportation Investment Areas have been developed to be consistent with Delaware State Strategy on Spending map, Maryland Priority Funding Areas, and the New Castle County Comprehensive Plan (draft), all of which define both areas to target growth and economic development and areas to be preserved. Details about the TIAs can be found as part of Goal: Support Economic Activity, Growth and Goods Movement, Ensure a Predictable Public Investment Program.
Operational and Management Strategies – Plans shall include operational and management strategies to improve the performance of the existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.	Operational and management strategies are promoted through the Goal: Efficiently Transport People and the WILMAPCO’s Congestion Management Process (the Congestion Management System or CMS).

SAFETEA-LU Requirements	
SAFETEA-LU Requirements	How the 2030 RTP Meet This Requirement
<p>Participation Plan – MPOs must develop and utilize a “Participation Plan” that provides reasonable opportunity for interested parties to comment on the content of the plan and TIP. Further this “Participation Plan” must be developed “in consultation with all interested parties”. This consultation requirement is intended to afford parties, who participate in the metropolitan planning process, a specific opportunity to comment on the Participation Plan prior to its approval.</p>	<p>WILMAPCO’s Public Participation Plan was adopted March 4, 2003. Details about the public outreach and comments obtained during the development of the RTP are available in the Appendix.</p>
<p>Visualization Techniques in Plans and TIP Development – As part of the transportation plan and TIP development, MPOs shall employ visualization techniques.</p>	<p>This document employs maps, photos, and charts to visually present information. Graphics are displayed throughout this document and in the accompanying Executive Summary</p>
<p>Publication of Plans and TIP – MPOs shall publish or otherwise make available for public review the transportation plans and TIPs “including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web”.</p>	<p>Most WILMAPCO documents, including this RTP and our current TIP are available at <a href="http://www.wilmapco.org">www.wilmapco.org</a> or at our office and can also be obtained electronically or as a hard copy by contacting WILMAPCO.</p>
<p>Air Quality Conformity</p>	<p>This TIP has been found to be in compliance with Air Quality requirement. The Air Quality Conformity analysis is in the Appendix.</p>