

# **2004 Regional Progress Report**



# September 2004

# **Table of Contents**

I. Executive Summarypage i
II. Introductionpage v
III Regional Progress Report
Goal #1 To Improve Quality of LifeObjective #1: Protect Our Historic and Cultural Resources
Goal #2 To Transport People and Goods Objective #1: Improve Transportation System Performance
Goal #3 Plan and Invest to Promote the Attractiveness of the Region Objective #1: To Ensure a Predictable and Adequate Public Investment Program to Guide Private Sector Investment Decisionspage 28 Objective #2: To Plan and Invest to Promote the Attractiveness of the Region page 33
IV. Conclusion & Future Challengespage 37



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

# I. - Executive Summary

Since the adoption of its first Long Range Plan in 1996, the WILMAPCO region has worked to meet the objectives of its Regional Transportation Plan (RTP 2025). This document is designed to summarize the efforts WILMAPCO and its member agencies have undertaken to fulfill the goals set out in our RTP. By providing performance indicators for each goal and objective, we can determine which aspects of the plan are moving in the right direction, as well as those that need attention.

First, it is important to understand what has changed in the region between 1996 and 2003:

- > Nearly 18,000 new households added (8.6% increase)
- > Over 46,000 more people in the region (8.3% increase)
- > 28,200 jobs created (9.7% increase)
- > 178,000 additional daily trips made (11.0% increase)
- > Average Trip lengths increased from 7.9 to 8.9 miles (12.6% increase)
- 2.35 million more vehicle miles of travel (14.1% increase) despite only a 4.2% increase in lane miles

**Areas of Success**– In spite of the challenges we face, progress can be seen towards meeting several of the goals set by the RTP:

- Nearly 67,000 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 permanently protected from development.
- VOC & NOx emissions remain below mandated levels Based on the emissions budget set by the EPA, both Cecil County and New Castle County are currently below those levels. Through cleaner fuels, transit increases and several other mitigation strategies, we have achieved compliance.
- Scenic Byway designations Since 2000, a total of 79 miles of roadways have been designated as scenic byways throughout our region.
- Increased use of carpooling in New Castle County According to annual surveys, there has been a 7.8% increase in workers carpooling to work. The Transportation Management Association (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 1.2 million work trips, subsequently decreasing the vehicle miles traveled.
- Significant increase in multimodal project funding Instead of traditional projects that include only road improvements, projects now contain sidewalks, bike paths and transit stops. Multimodal projects now represent around 40% of the total transportation projects investment, up from only 5% of the budget in FY1997.
- Increased E-ZPass usage A proven effective method to reduce congestion along our toll roadways, usage of E-ZPass has been on a steady increase. In its short history, we have seen usage up 4.1% along US 40 and I-95 locations in Maryland between FY2002 and FY2003.

- Population growth remains highest in the desired Center/Community Investment Areas 70% of population growth has occurred in these two areas since 1996. 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 another solid measure of good job diversity within a region. Avoiding large spikes in unemployment rates can be viewed as being a result of having the right mix of employment type to minimize the impacts of a downturn in any particular job 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 – In some cases however we have found some indicators showing signs of strain on the transportation system.

- Ozone exceedences above EPA allowances for both 1 hour and 8 hour standards We have yet to have a 3 year period in which we have met the standard set by the EPA for ozone levels. In 2005 the stakes become greater. A new 8-hour standard will be instituted for compliance, making this challenge all the more difficult.
- Slight decrease in population within ¼ mile of a transit stop With an increasing number of housing developments taking place in previously unsettled parts of our region, these areas have little to no transit access. These auto-dependent neighborhoods make it very difficult to achieve our goals of reduced VMT and air quality standards.
- 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% increase in ridership by 2025. Fixed route ridership has been the source of the falloff, while SEPTA and paratransit ridership has increased.
- Increased demand in paratransit routes straining DTC budget Paratransit, while seeing the largest percentage increase in ridership since 1996, is unfortunately the costliest per trip. With transit funding remaining relatively constant, this level of service may not be sustainable. With a cost of roughly \$27 per trip, DTC has had to increase its paratransit funding from \$7.3 million to \$15.7 million in 7 years, a 115% increase.
- 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 has shown a decrease in recent years. Between 2000 and 2003, the overall usage for park and ride (and park & pool) facilities has fallen from 35.6% to 33.8%.

# **Status of RTP Projects**

Although we are only a few years into our 25-year plan, we have made progress in completing several of the projects detailed in the plan. With the help of sub-regional studies such as Route 40, Churchman's Crossing and Wilmington Initiatives, we have been able to turn many concept ideas into completed projects. Since the adoption of the plan in 2002, 8 projects have been completed from the list:

- Wilmington Courthouse Area Streetscape Improvements
- Bulkhead Rehabilitation along Christiana River
- Water Street East Extension
- Wilton Boulevard and Appleby Road Sidewalk
   Improvements
- US202, Augustine Cutoff to Independence Mall Roadway Improvements
- Blue Ball Area Utility Relocation
- Harvey Road Traffic Calming
- US 202 West Side Roads

There have been modifications to the scheduling for 35 of the planned projects with 17 of these being moved forward and 10 being pushed back. Table 1 lists these projects in more detail including from which sub-regional study (if any) they emerged.

	RTP In-		Legend
	Service		Project Not Completed or Funded
Projects with Changes in Completion Year	Date	Comments	for Construction
Churchmans Crossing Plan			
DE 4 / DE 7 Christiana Center	2005	Not Completed/ No Construction Funding	Project scheduled for completion
DE 273/ Harmony Rd	2005	Not Completed/ No Construction Funding	AFTER RTP date
DE 273/W. Main St/ Christiana Connector East	2004	Not Completed/ No Construction Funding	
DE 273/ Old Baltimore Pike	2003	Not Completed/ No Construction Funding	
DE 2 / Harmony Rd	2006	Scheduled for Construction in FY 2007	Project scheduled for completion
DE 273/Chapman Rd	2007	Scheduled for Construction in FY 2005	BEFORE RTP date
I-95, Maryland Line to Churchmans Marsh			
New Toll Booth on I-95	2005	Scheduled for Construction in FY 2007	
Wilmington Initiatives Plan			
West Street Connector	2006	Scheduled for Construction in FY 2007	
King / Orange Transit Corridor	2008	Scheduled for Construction in FY 2007	
Walnut Street Corridor Improvements	2008	Scheduled for Construction in FY 2005	
Market Street Retail Corridor Improvements	2008	Scheduled for Construction in FY 2005	1
Downtown 4th Street Project	2008	Scheduled for Construction in FY 2007	
Riverwalk VII	2009	Scheduled for Construction in FY 2006	
Other Wilmington Improvements			
Interstate Access	2005	Not Completed/ No Construction Funding	
Water Street West	2005	Project Scope Expanded	
West Street Connector	2005	Scheduled for Construction in FY 2007	
Riverwalk VII	2000	Scheduled for Construction in FY 2006	
US 40 Plan (2003-2008)	2003		
Newtown Road Ramps-Full interchange with DE 1	2005	Not Completed/ No Construction Funding	
DE 72/US 40	2008	Scheduled for Construction in FY 2006	
Walther Road/US 40	2008	Scheduled for Construction in FY 2005	
US 40 Plan (2003-2008) (Cont'd)			
Eden Square Connector	2008	Scheduled for Construction in FY 2005	
Sidepaths - US 40 (DE 72 to DE 1)	2008	Scheduled for Construction in FY 2007	
Walther Road (Old Baltimore Pike to US 40)	2008	Scheduled for Construction in FY 2005	
US 202 / DE 141 Area	2000		
Widen Tyler McConnell Bridge to 4 lanes	2005	Scheduled for Construction in FY 2006	
I-95/US 202 Interchange - Widen NB I-95 off-ramps to 2 lanes	2008	Scheduled for Construction in FY 2006	
DE 141 and Old Barley Mill Road	2005	Scheduled for Program Development in FY 2005	
Blue Ball Area	2005	Scheddled for Frogram Development in Fr 2000	
US202, Broom Street to I-95	2005	Scheduled for Construction in FY 2006	
City of New Castle	2005	Scheddled for Construction In 1 2000	
Rebuild 6th/Chestnut/DE 9 Intersection	0000		
	2008	Scheduled for Construction in FY 2006	
Rebuild 3rd Street/DE 9 Intersection	2008	Scheduled for Construction in FY 2005	
Other Intersection / Road Improvements			
Iron Hill Bikeway	2005	Not Completed/ No Construction Funding	
DE 2 and Red Mill Road Intersection Improvements	2005	Scheduled for Program Development in FY 2007	
DE 7 North of Valley Road to PA line	2005	Scheduled for Program Development in FY 2005	5
US 13 and DE 273 Intersection Improvements	2005	Scheduled for Program Development in FY 2008	
Brackenville Road, Lancaster Pike to Barley Mill Road	2000	Scheduled for Construction in FY 2006	1
· · · · · ·			1
Possum Park Road from Possum Hollow Road to Old Possum Park Road	2009	Scheduled for Construction in FY 2007	1

#### Table 1: RTP Project Status List

# **Conclusions and Future Challenges**

"Opening the Door to Change" is the title of our latest long range regional transportation plan. Its goal was to lay the groundwork for changing policies, procedures and spending within our region. Listed below are several short and long-term items that WILMAPCO staff will work on and report back the status in next year's Regional Progress Report:

Short Term (1-3 years)

- Revisit Transportation Investment Areas: Starting this fall, WILMAPCO will open up a discussion with state, county and local governments on possible revisions to our Transportation Investment Areas.
- Review and report on findings from recent municipal comprehensive plans: With virtually
  all municipalities completing comprehensive plans in the past 2 years, staff needs to review
  the plans and work with the municipalities to get their transportation goals implemented.
- Begin work on transportation equity analysis addressing the needs of the elderly: WILMAPCO is planning to produce a second Environmental Justice report dealing with the mobility issues of our aging population. It will review current and future demographic patterns and attempt to get a firm handle on how to address the needs of this growing group in our region.
- Continue to plan for multimodal projects: Efforts must continue to make transportation projects as multimodal as possible in order to reduce auto dependency by making options available.
- Examine transit funding levels to support changing ridership patterns: 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 match demand.

Long Term (4+ years)

- Help keep the Port of Wilmington competitive in the world market: In the highly competitive shipping industry, ports must remain accessible and convenient for a variety of goods and vessels. Efforts should be made to provide assistance to keep the port an active part of our economy.
- Make efforts to address "Knowledge Gaps": Throughout the document, there are identified areas that are important to monitor for which there is inadequate data. Efforts should be made to locate (or create) data that helps us track changing conditions. A section will be included in subsequent Progress Reports to maintain a status on these and what activity is occurring with each.

- If you don't measure results, you can't tell success from failure
- If you can't see success, you can't reward it
- If you can't see failure, you can't correct it (From Reinventing Government, Osbourne & Gaebler; 1992)

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. The latest theme, "Opening the Door to Change" recognized that all of the regional issues cannot be solved in a single document. Therefore the Regional Progress Report has been designed to track regional statistics on an annual basis. By doing so, we can monitor a select group of criteria that pertain to each of the goals that were illustrated in the RTP. The format and performance measures have been altered from previous years so that they can be based on selected information that can be appropriately applied to the goals and strategies in the 2025 RTP.

By using this format of data-driven, performance-based monitoring, we can annually compare the results of the indicators versus our RTP goals to ensure we are on the right path. 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 track set by our RTP goals. With the continued belt tightening of state governments, it is even more important to wisely expend the dollars allotted to us.

The 2004 Regional Progress Report brings together data and information from several agencies across our region that is:

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

#### How the Report is Formatted

The Regional Progress Report has been carefully designed to demonstrate how we are achieving our goals. Our three goals are:

- 1. To Improve Quality of Life
- 2. To Transport of People and Goods
- 3. To Support of Economic Growth and Activity

In order for our region to reach the vision that we have set, our actions and subsequent projects must keep these three goals in balance. We cannot allow a project to solely benefit one while hurting another. For example, if we build a bypass to solve a congestion problem in the short term, there will be lingering effects to the environment, as well as lasting effects to the quality of life of the local community. By selecting projects that keep all three goals in balance, we ensure the betterment of our region, now and in the future.

Our three goals have a total of eight objectives we hope to achieve. Each of the eight objectives has been assigned indicators related to them that will show us the direction in which we are moving.

This diagram is an illustration of how our three goals are closely related. The three overlapping circles will show how many of our indicators overlap multiple goals.

# Goal 1 – To Improve Quality of Life

<u>Objectives</u>

- 1. To Protect the Public Health, Safety, and Welfare
- 2. To Preserve our Natural, Historic, and Cultural Resources
- 3. To Support Existing Municipalities and Communities
- 4. To Provide Transportation Opportunity and Choice

# Goal 2 – To Transport People and Goods

#### **Objectives**

- 1. To Improve Transportation System Performance
- 2. To Promote Accessibility, Mobility, and Transportation Alternatives

# **Goal 3 – To Support Economic Growth and Activity**

#### **Objectives**

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



For each objective we list:

- The Strategies to accomplish this objective,
- The Regional Indicators that will identify our progress
- The Knowledge Gaps that need to be closed in order to give us more relevant indicators in the future.

The report is primarily made up of indicators, detailing the relevant trends we've 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 toward meeting the 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. While it has only been a short time since the RTP was adopted, it is helpful to begin tracking to identify small shifts in direction as a result of decisions made directly from our Plan.

There is also a section that serves as a RTP status check, identifying any projects that were listed in the RTP that have changed in scope or in-service year. Given the volume of projects and funding constraints we normally experience, it may be necessary for projects scheduled far out in our planning horizon to be modified. This section allows us to identify them and state the reason for the revision, along with a new target date.

Finally, the report provides a summary of our findings and charts a course of action to be taken over the next year. It contains a variety of recommendations such as new UPWP activities to be undertaken, development of additional data sources for use as indicators, or the creation of Memoranda of Understanding between agencies to coordinate roles.

# Tools of the Trade

WILMAPCO creates three documents to guide us as we coordinate local and regional transportation plans: the Regional Transportation Plan (RTP), the Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP). The RTP is a 25-year transportation plan for our region. The TIP outlines funding for the projects to be undertaken over the next three years. The UPWP is a one-year document that outlines planning activities for WILMAPCO staff and member agencies to undertake in the upcoming year. In addition, because one of our main tenets is to involve the public in transportation planning, we need to understand what the public wants. To accomplish this, we provide comment sheets with most of our programs and we offer public opinion surveys. These help guide the direction of many of our planning documents. The following provides a more detailed description of each of these documents.

#### **Regional Transportation Plan**

The purpose of a long-range transportation plan 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 the 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, in 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 our member Departments of Transportation, Transit Authorities, States, Counties and Municipalities.

#### **Transportation Improvement Program**

WILMAPCO is responsible for developing a TIP in cooperation with the Maryland Department of Transportation (MDOT), the Delaware Department of Transportation (DelDOT) and affected transit operators. Under the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), a collaborative process has been developed wherein state, county and local governments and transportation providers are partners in the planning and programming process and the public is given a voice in the decision making. The program should be updated at least every two years and is approved by the MPO and the Governors of each state. The Fiscal year 2005-2007 TIP contains transportation investments totaling more than \$1.17 billion up from a total of \$998 million in the 2004-2006 TIP. Included is a broad mix of transportation options such as expansion of biking, pedestrian and transit facilities and bridge and roadway improvements. During FY 2004, 164 projects were completed in the region: 161 by DelDOT and 3 by MDOT. In terms of funding allocation, 43 percent of the cost was for pavement rehabilitation projects (\$507 million). Twenty-eight safety projects were completed; however, safety and alternative mode elements were part of some highway corridor projects.

#### **Unified Planning Work Program**

WILMAPCO's UPWP discusses the planning priorities facing our metropolitan area and describes all metropolitan transportation and transportation-related air quality planning activities anticipated within the next year. It indicates which agency will perform the work, the schedule for completing the work and the products that will be produced. Included are the sources for funding each work task and the allocation of funds to perform them. This chart shows the UPWP tasks to be performed by the WILMAPCO staff that were programmed in fiscal year 2004.





#### **Public Opinion Surveys**

In 2004, we offered three surveys to gather public opinions on various transportation and land use topics. Key results from these surveys have been included in the Progress Report.

In the spring of every year, we conduct a Public Opinion Survey where a telemarketing company speaks with 500 residents (300 in New Castle County, 200 in Cecil County). This 15 minute survey captures data on transportation methods, WILMAPCO awareness, and development preferences

In the fall, we have displays at the Wilmington Transportation Day Festival and Newark's Community Day to provide transportation information to the public. At these events we typically survey 150-200 people using a two-page written survey. Due to the type of crowds these events attract, there is often a greater awareness of transportation issues among the respondents than among our telephone survey respondents.

# III. – Regional Progress Report

# Goal One - To Improve Quality of Life

# **Objective #1:** Protect Public Heath, Safety & Welfare



The protection of the public's heath and safety is paramount for WILMAPCO. By using measures such as accident statistics, air quality data, ridership on Ozone Action Days and Highway Safety Improvement Program (HSIP) funded projects, we can get a sense of how well we are addressing this objective.

# **Regional Indicators:**

1. Auto Accidents: rates	relatively unchanged since 1996	page 2
2. Bike/Ped Accidents:	trending downward in region	page 2

- 3. Safety Projects: 112 completed in region between 1997 and 2003 ...... page 2





#### Knowledge Gaps:

- Need to quantify the impact of auto-dependency and how health data (e.g., incidence of asthma or obesity) can be used as a measure for this objective
- Develop information on the public's preference of transportation modes based on safety. For instance, why do or don't they use certain modes of transportation due to safety concern
- Need to develop more detailed accident statistics for specific roadway segments to allow for increased aid in accident-prone areas
- Determine how to incorporate the new Particulate Matter (PM 2.5) standards into our air quality conformity efforts.

#### Automobile Safety

Safety has always been a top priority in all of WILMAPCO's Long Range Plans and activities. Through programs like the Highway Safety Improvement Program (HSIP), funding has been allocated specifically to enhance safety along our region's roadways. The simplest measure of how well we are managing safety is the accident rate. Figure 2 illustrates that over the last several years the crash rate has remained virtually unchanged. Compared to the national average, New Castle County has historically been above the nation while Cecil County remains well below.

Figure 2: Automobile Crashes per Million Miles Traveled



#### **Bike/Ped Safety**

Figure 3 shows the crash rate of all accidents involving an automobile and a pedestrian or bicycle. With the exception of 2002, Cecil County is once again below the national average while New Castle County remains above.

#### Figure 3: Crashes Involving Bicycle/Pedestrians per Million Miles Traveled



## **Safety Projects**

Both counties have programs that deal specifically with addressing safety issues on our roadways. Funding is requested for selected safety improvements statewide, including intersection safety improvements, highway/rail crossing improvements, and Safe Routes to School, among others. Table 2 shows the number of projects and total funding allotted each year.

#### **Table 2: Safety Projects**

New Castle	<b>Total Projects</b>	Total Funding
1997	20	\$704,150
1999	17	\$135,500
2000	21	\$844,450
2001	17	\$324,950
2002	18	\$1,161,500
2003	24	\$768,974
Cecil	Total Projects	Total Funding
FY 2000	0	\$0
FY 2001	0	\$0
FY 2002	0	\$0
FY 2003	1	\$8,000
FY 2004	4	\$1,508,000

Source: WILMAPCO Transportation Improvement Program

# **Air Quality Emissions**

One of the greatest challenges facing our region, as well as many others, is meeting air quality standards. Our region has been determined to be in "Severe Non Attainment" for Ozone. We are required to abide by conformity regulations set by the Environmental Protection Agency (EPA).

While you may not be able to see it, ozone is out there. Ground level ozone is a byproduct of vehicle emissions that, when exposed to sunlight, converts into a colorless, odorless gas that mixes with the air we breathe. In high concentrations, ozone can irritate the respiratory system and aggravate the symptoms of asthma sufferers and those with chronic lung disease As you can see, improving air quality is not just an exercise in complying with federal requirements. It is a major health issue for all of us.

To demonstrate that we are meeting the EPA's regulations, we must remain below a determined budget for current and future emissions from vehicles for two pollutants: Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOCs).



Since 1999, both Cecil County and New Castle County have been able to keep their emissions below those standards. Based on the current model results projecting our emission rates for 2005, NOx emissions have fallen by 28% and VOC emissions have fallen approximately 41% since 1999.



#### Figure 5: Cecil County Emissions vs. Allowable Budgets

#### **Ozone Exceedences**

As with VOC and NOx emissions, the EPA has established standards for ozone levels in the region. Currently the region is under a 1-hour threshold for determining if we have reached an unhealthy level of ozone on a given day at the monitoring stations located throughout the region. These exceedences are reported to the EPA. The goal is to have no more than 3 exceedences in a 3-year time frame. As figure 6 shows, we have yet to have a 3 year period during which we have met this standard. New Castle County has come close over the past few years, and has seen an overall decline in exceedences.





In 2005. the stakes become greater. A new 8-hour standard will be mandated for compliance. This new standard sets a threshold at 0.08 parts per million (ppm), which is more strict than the 1-hour standard of 0.12 ppm. As Figure 7 indicates, our region records far more ozone exceedence days with the new standard versus the 1-hour standard. Several short term and long term strategies are being developed to solve this problem, but it remains a difficult hurdle to clear.



#### Figure 7: 8-hour Ozone Exceedences vs. EPA Allowance

## **Public Opinion Survey Results**

Our public opinion surveys ask a few questions that reflect how our residents feel about several safety issues pertaining to our transportation system. This helps monitor the trade-offs people will accept when balancing safety with convenience.

**2004 Public Opinion Survey**: In your opinion, should we design roads for lower speeds to allow safe bike and pedestrian travel, or should we design the roads for faster and less congested vehicle travel?



Though there is support for designing roads in favor of pedestrian and bike travel, more respondents favor designing roads for faster vehicle travel. This illustrates the challenges we face when trying to provide safe transportation alternatives while still satisfying the demands of drivers.

# Goal One - To Improve Quality of Life

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



Largely a quality of life indicator, the preservation of our resources is important to the citizens of our region. With the predicted growth within our region, 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 need to remain for future generations.

# **Regional Indicators:**

1.	Land	Pre	eservatio	n: 66,969	acres	of	farmland/open	space	preserv	vedpage 7	7

2. Historical Resources: nearly 1,000 protected sites in the region ......page 8

3. Historic Projects:	19 projects that have historic characteristics	
	funded in the TIP since EV2001	

funded in the TIP since FY2001	page 8
4. Scenic Byways: 79 miles designated in WILMAPCO region	page 8
5. East Coast Greenway: 7.0 miles completed out of 75 total miles	page 8
Public Opinion Survey Results:	page 9



#### Knowledge Gaps:

 Need to gather more data on both public and private use of alternative fuel vehicles in the region

# **Land Preservation**

Farmland and open space play an important role in the quality of life in the WILMAPCO region. Recent national trends indicate that these resources are diminishing at an accelerating rate. Both Cecil and New Castle Counties have worked to ensure that these lands are protected. Through coordinated efforts with state, county and local governments, thousands of acres have been preserved in some fashion throughout the region. The table below shows each county's efforts in preserving farmland. Table 3 illustrates the locations of these lands. One thing to note is that the bulk of the preserved lands fall within our rural investment areas(Figure 8), which are where limited growth and development exists or is expected.

Farmland - New Castle	Acres
Active Farmland 2002	77,314
Temporarily Protected*	6,204
Permanently Protected	6,407
Open Space - New Castle	Acres
County-Owned	14,151
State-Owned	19,315
Federally-Owned	5,759
Conservation Easments	3,815
Municipal_Owned	1,298
Total Open Space Acreage	44,338

#### **Table 3: Protected Lands**

Cecil County	Acres	
MD. Agricultural Land Preservation (MALPF)	10,438	
Protected Farmland (Temporary)	7,882	
Rural Legacy Program	1,210	
Forest Legacy Program	668	
Donated Easements	3,928	
Total Protected Acres	24,126	

Source: Cecil County Office of Planning & Zoning

\* 10-Year Maximum

Source: New Castle County Land Use Dept.



## **Objective – Preserve our Natural, Historic and Cultural Resources**

## **Historic Resources & Projects**

From Swede's Landing in Wilmington to Port Deposit in Cecil County, the WILMAPCO region is rich in historic sites and structures. Efforts to preserve these sites and the areas surrounding them have been a priority for municipal and county governments. A recent count shows 913 historic buildings located in New Castle County as well as 74 historic overlay districts. In Cecil County, there are a total of 32 properties of historic significance along with 14 districts totaling 716 acres.

Additional measures in support of this goal can be seen annually in the Transportation Improvement Program (TIP). Construction projects that have historic characteristics are being identified and efforts are being made to rehabilitate roads and bridges without damaging their historic nature. Table 4 shows the funding allocated to projects with historical value in the last 5 TIPs.

#### **Table 4: Historic TIP Projects**

	# of	
TIP year	projects	Total Funding
FY 2001-03	3	\$826,000
FY 2002-04	6	\$4,070,000
FY 2003-05	4	\$3,860,000
FY 2004-06	4	\$7,356,200
FY 2005-07	2	\$42,701,100

Source: WILMAPCO Transportation Improvement Program

### **Scenic Byways & Greenways**

The National and State Scenic Byways Programs recognize roads that are outstanding examples of scenic, historic, recreational, cultural, archeological and/or natural qualities. With the rich history and landscape of this region, several roads have qualified for this title. Several additional submissions have been made over the last two years including Route 9, Philadelphia Pike near Claymont, and Shipley Road. Both DeIDOT and MDSHA have programs dedicated to these facilities.

The East Coast Greenway, a 2,600 mile autofree path linking cities from Maine to Florida, will be the nation's first long-distance, city-tocity, multimodal transportation corridor for cyclists, hikers, and other non-motorized users. This route is scheduled to be built through the WILMAPCO Region. So far, just under 10% has been completed out of the 75 miles that make up our portion of the greenway. Nationally, 20% of the greenway is complete, with a goal of the entire stretch being completed by 2010.

#### Table 5: Scenic Byway Mileage

Cecil	Miles	Designated
Chesapeake Country*	13	2000
Atlantic to Appalachians	30	2000
Old Turkey Point Rd.	12	2000
Lower Susquehanna River	11	2000
New Castle		
Brandywine Valley	13	2002
Totals Scenic Byway mileage	79	

Source: MDOT, WILMAPCO

\* Nationally designated in 2002

#### **Table 6: East Coast Greenway Progress**

Sections & Mileage Completed	
Total Greenway miles planned within region	75.0
Wilmington Riverfront	1.25
Newark Hall Trail	1.75
Northern DE Greenway	4.0
Total Sections Completed	7.0 (9.3%)

Source: Delaware Greenways, WILMAPCO

# **Objective – Preserve our Natural, Historic and Cultural Resources**

# **Public Opinion**

Using the WILMAPCO Public Opinion Survey, we wanted to gauge people's level of support for protecting farmland and open space preservation. Given the results we've seen over the last 6 years, it appears that the majority of our residents would like to see these initiatives succeed.

**Question:** Tell us if you agree or disagree with these statements: We should support farmland or open space preservation through tax incentives or subsidies to help direct development to other areas.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Don't Know	% Agree
Total	56	24	4	6	9	80%
New Castle	54	20	7	10	9	74%
Cecil	63	20	4	6	9	83%

Question: I support having my tax dollars go towards reserving farmland or open space.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Don't Know	% Agree
Total	56	20	6	10	9	75%
New Castle	54	20	7	10	9	74%
Cecil	63	20	4	6	9	81%

\* All figures provided are in Percentages.

Support is slightly stronger in Cecil County than in New Castle County, but there is strong agreement that we should support preservation efforts. Results over the past 6 years have shown consistent support, and in fact, the strongly agree category has seen a steady increase from 45% to 56%

# Goal One – To Improve Quality of Life Objective #3 Support Existing Municipalities and Communities



Our region has a unique mix of densely settled municipalities, as well as very defined unincorporated communities. These areas serve as central locations in which citizens shop and gather and with which they identify. We refer to these areas as *Centers* and *Community* areas in our Transportation Investment Area map that encourages increased multimodal funding in designated areas. As our strategies indicate, we see this as a way to maintain (or foster) growth, while allowing communities to preserve their sense of place.

# **Regional Indicators:**

. FY 2004 Completed Projects	: 164 completed throughout regionpa	age 11
------------------------------	-------------------------------------	--------

- 2. Municipal Population: rises in Cecil County, falls in New Castle......page 12
- 3. Municipal Funding: levels rise since 1996......page 12
- 4. Municipal Comprehensive Plans: largely completed as of 2004......page 13 Public Opinion Survey Results:.....page 14



## Knowledge Gaps:

- Need to better define boundaries for non-incorporated communities
- Need to incorporate findings from local government comprehensive plans into RTP
- Need to develop a better system of reporting completed projects for use in this document

#### FY 2004 Projects Completed

Over fiscal year 2004, a total of 164 projects have been completed in the WILMAPCO region. Projects range from larger roadway improvements to small scale community improvements (e.g. gutter/curb improvements, sidewalk additions/repairs, roadway patching, etc.). Table 7 shows the number of projects completed by type.

#### Table 7: FY 2004 Completed Projects

Project Type	# of Projects
Bridge Improvements	13
Community Transportation Needs	80
Roadway Landscaping	1
Intersection Improvements	6
Multimodal Improvements	8
Pavement Rehabilitation	51
Pedestrian Improvements	4
Roadway Improvements	1
TOTAL	164

Source: DelDOT, MDSHA

Figure 9 shows the location of all completed projects. As the figure shows, the bulk of the projects have been focused in the Center/Community investment areas. Of the 164 projects, 94.5% (155 projects) were located in these areas. This closely matches the annual TIP funding that has been traditionally allotted to these areas.



## **Objective – Support Existing Municipalities and Communities**

## **Municipal Population & Funding**

Our traditional centers represent concentrations of infrastructure and investment that should be utilized to our advantage. They serve as places of higher population and employment densities, mixed land uses, and diversity that support our policies and goals. Traditionally, our municipalities have

served as hubs of economic growth and activity along with several tourism attractions. Typically, 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	2000	2002 Estimate	Changes 1980-2002
Cecil County	60,430	85,951	90,335	29,905
Total Municipal Population	13,394	22,956	24,289	10,895
Percent of County	22.2%	26.7%	26.9%	4.7%
New Castle County	398,115	500,265	512,370	114,255
Total Municipal Population	116,055	123,531	124,809	8,754
Percent of County	29.2%	24.7%	24.4%	-4.8%
Regional Totals	458,545	586,216	602,705	144,160
Total Municipal Population	129,449	146,487	149,098	19,649
Percent of Region	28.2%	25.0%	24.7%	-3.5%

 Table 8: Population Changes within Municipalities 1980-2002

Source: U.S. Census

However, in recent years, incorporated areas in the New Castle County portion of the region have had difficultly in keeping their populations growing. While the population has been rising in cities, it is being vastly outpaced by greenfield growth in New Castle County. Cecil County, on the other hand, has seen their municipal population nearly double since 1980.

Most municipalities in the area have transportation infrastructure dating back several decades. To maintain these facilities, we need adequate funding allocated to these locations. Since the FY 1996-98 TIP, funding devoted to projects within municipalities has increased.



Figure 10: TIP Funding allocated to Municipalities

#### **Overview of Comprehensive Plans**

Governmental coordination at all levels is key to developing a seamless and efficient transportation plan. WILMAPCO is actively seeking to work with various municipalities and both county governments in order to understand the transportation needs of all of the citizens of our region. With assistance from WILMAPCO and the University of Delaware, several small municipalities have recently completed comprehensive plans. These plans detail the long term land use projections and transportation issues that they face. The plans give WILMAPCO a starting point to begin to incorporate these needs into the metropolitan planning process. Table 9 shows the current status of all municipal and county comprehensive plans.

	Certified/		Update in	
New Castle	Adopted	Complete		No Plan
County Comprehensive Plan	X (2002)			
Arden Village*	X (2002)			
Ardencroft Village*	X (2002)			
Ardentown Village*	X (2002)			
Bellefonte *	X (2002)			
Delaware City		X (2001)		
Elsmere			Х	
Middletown		X (2001)	Х	
Newark	X (2003)			
New Castle	X (2003)			
Newport	X (2003)			
Odessa		X (2001)		
Townsend	X (2003)			
Wilmington	X (2003)			
Cecil County				
County Comprehensive Plan			Х	
Cecilton	X(1998)			
Charlestown	X(1993)			
Chesapeake City			Х	
Elkton			Х	
North East	X(2004)			
Perryville	X(1999)			
Port Deposit	X(1999)			
Rising Sun			Х	

#### Table 9: Status of Local Government Comprehensive Plans

Source: University of Delaware, Cecil County Office of Planning & Zoning, New Castle

County Department of Land Use

\*- Under County Jurisdiction

# **Public Opinion**

In our Public Opinion Survey, when we asked people what strategies may be effective in improving our transportation system, the second most frequent answer was "Design communities that make it easier for people to walk and bike to stores, schools and other public facilities and neighborhoods. This supports WILMAPCO's effort to encourage land use design that will reduce our dependency on the automobile.

In order to support our communities and municipalities, it is important that we maintain or improve our existing transportation facilities. Many improvements have been made recently, including the addition of bus stops and shelters along most major roads in New Castle County, providing bike lanes and sidewalks along Route 40, in Centreville and Porter Road, as well as numerous road projects. Has the public noticed? Not as much as we'd like.

**Question:** The state has been working to make improvements to the transportation systems in the areas. Have you noticed any improvements in the last year, such as new bus shelters, bike lanes, sidewalks or other alternatives?

Because there are more transportation options in New Castle County than Cecil County, the disparity in the respondents noticing improvements is not surprising (51% vs. 27%). The surveys taken during community events have a much higher percentage of people who notice changes (79%), perhaps because the respondents are more involved in community activities and are more cognizant of changes.

#### 80 70 60 50 40 30 20 10 0 Total New Castle Cecil

#### 2004 Public Opinion Survey



#### **Transportation and Community Day Surveys**



# Goal One - To Improve Quality of Life

# **Objective #4** Provide and Promote Transportation Opportunity & Choice



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. Although this objective contains several strategies, this section will deal exclusively with Environmental Justice. Measures that deal with pedestrian planning and transportation/land use planning will be addressed in other sections of this document.

## **Regional Indicators:**

**1. TIP Projects in EJ Areas:** funding increases over last years TIP......page 16 **2. Transit Access in EJ Areas:** 75% fall within 1/4 mile of a transit stop..page 16

#### Knowledge Gaps:



- Need to incorporate "Safe Routes to school" initiative results when complete
- Need to develop specific strategies that address the transportation needs of our aging population, which is projected to double by 2025
- Revisit RTP Goal & Objectives to more clearly define Environmental Justice initiatives

## **Objective – Provide and Promote Transportation Opportunity & Choice**

#### **TIP Projects in Identified EJ Areas**

When creating transportation projects, care must be taken to ensure minority and low income communities are not disproportionately affected by negative impacts brought by the changes. In 2002, WILMAPCO created a document that identified areas that have high concentrations of minority and low-income populations. Since then we have been tracking the transportation related activities located within these identified areas. As table 10 indicates, much of the funding has been for projects that are preserving and maintaining the current transportation system. The funding for expansion projects has gone toward providing additional transit service within these areas.

#### Table 10: TIP Projects within Identified Environmental Justice Areas

		Preservation	Management	Expansion	Preservation	Management	Expansion	Total funding in Designated Environmental
TIP year	# of projects	Projects	Projects	Projects	Funding	Funding	Funding	Justice Areas
FY 04-06	33	6	21	6	\$ 60,039	\$ 109,169	\$ 32,400	\$ 201,674
FY 05-07	19	11	6	2	\$ 89,120	\$ 129,228	\$ 24,263	\$ 242,611

Source: WILMAPCO; \* Funding (X \$1,000)

## Transit Access in EJ Areas

When analyzing mobility within the identified areas, we must look at transit, as well as roads, since 60.3% of all those who use transit as their primary mode to work live within the identified areas. One way to evaluate the transit network is to overlay the identified areas with the area that falls within a 1/4 mile radius of each transit stop. The map below provides an estimate of this measurement along Delaware Transit Corporation's (DTC) fixed route bus service.

The analysis shows that 75.7% of the EJ identified areas fall within 1/4 mile of a transit stop. This, however, may not be the most accurate assessment of transit accessibility as there is no data to measure the actual walking distance to these stops. The true walking distance could be much longer. It has been noted in our knowledge gaps to look for a better way to calculate this.

#### Figure 11: Transit Access to EJ Areas



# Goal Two – To Transport People and Goods

# **Objective #1** Improve Transportation System Performance



With the rapid increase in vehicle miles of travel, it is not feasible to believe we can build our way to a better transportation system. What we can do is utilize tools to maximize the efficiency and capacity of the current system. The goal is to keep the current system in good working order and to incorporate new technologies such as ITS. By doing so, we can meet the transportation needs of our growing population and businesses while being fiscally responsible.

# **Regional Indicators:**

1. DeIDOT Critical Miles: 34% equipped with ITS infrastructure	page 18
2. EZ Pass/MTag usage: Up 4.1% between 2002 and 2003	page 18
3. Park & Rides: Spaces increase, but usage falls at some locations	.page 18
4. TMA-DE Impacts: Reduces trips by 336,000 statewide in FY 2003	.page 19
5. Road Conditions: Current conditions below targeted goals	.page 19
6. Bridge Conditions: Currently meeting national standard levels	page 20
7. Transit Reliability: Fixed route service above targeted goal	. page 20



#### Knowledge Gaps:

 Need to get more detailed updates on how ITS improves the overall performance of the existing highway system.

# **Objective – Improve Transportation System Performance**

## **Critical Miles**

DelDOT has identified 250 "critical miles" throughout Delaware's transportation network as their focal point for investing in new technology, commonly referred to as Intelligent Transportation Systems (ITS). ITS has many features associated with it, but it most commonly refers to coordinated signals, traffic cameras, EZ-Pass and variable message signs. These investments are designed to extend the

life of the existing system without the expense and delays caused by lengthy expansion projects. Their goal is to establish an underground infrastructure (generally fiberoptic cabling) to connect these road segments with the Traffic Management Center in Smyrna to immediately address traffic problems along Delaware's critical roadways. Table 11 gives details as to the status of the program.

#### Table 11: Critical Miles Infrastructure

Total mileage in New Castle	168.58	
Completed	57.65	34.2%
Proposed for improvement	19.54	11.6%
Scheduled	52.79	31.3%
No schedule	38.6	22.9%
0 D ID 07		

Source: DelDOT

## E-ZPass

This technology has proven to be a valuable tool in reducing congestion along our region 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 EZ-Pass increase at all locations.

## **Park & Ride Facilities**

Another method used to help reduce congestion along the road network is by providing Park & Ride facilities throughout the region. This allows for 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. Table 13 shows the changes in total facilities added over the period. With over 4,400 locations, there has been a 51% increase in facilities. While there has been a concerted effort to add these facilities, their usage has not fared as well. The overall usage, or average lot capacity, has seen a decrease in recent years.

#### Table 12: EZ Pass/MTag Usage

(US 40) @ Harford/ Cecil	2002	2003	I-95 @ Cecil/ Harford Border	2002	2003
Total vehicle transactions	5,010,878	5,228,100	Total vehicle transactions	14,949,210	14,828,990
Number EZ Pass Transactions	145,917	209,639	Number EZ Pass Transactions	4,567,752	5,352,631
Pct of EZ Pass use	2.9%	4.0%	Pct of EZ Pass use	30.6%	36.1%

Source: MDSHA

#### Table 13: Park & Ride Capacity Changes

	1996	1999	2000	2003	1996-2003
					Changes
NCC Park & Ride	1902	2550	2,736	3,268	71.8%
NCC Park & Pool	939	939	1,089	1,061	13.0%
Cecil Park & Ride	127	127	157	157	23.6%
Overal Totals	2,968	3,616	3,982	4,486	51.1%
Overal Totals	2,968	3,616	3,982	4,486	i

Source: DelDOT, MDSHA



# **Objective – Improve Transportation System Performance**

# **TMA** Impact

Mandated by the Federal Highway Administration based on our urban area size (greater than 200,000 people), the TMA has orchestrated a rapid increase in car/ vanpooling throughout Delaware and into Cecil County. The TMA has been a major contributor in reducing the number of single occupant vehicles on our roadways.



#### **Road & Bridge Conditions**

Although it is the DOT's responsibility to add infrastructure where needed, it also must maintain the existing network. Funding needs to be allocated on an annual basis and be adequate enough to deal with deteriorating bridges and roadways. Figures 13 & 14 show the current condition of our roads and bridges. Both measures have corresponding targets set by the respective DOTs. Bridge conditions (figure 13) show both counties having high percentages of bridges meeting the federal standards. However, both counties have not been able to maintain their targeted goal for road conditions.









# **Objective – Improve Transportation System Performance**

# **Transit Reliability**



Figure 15: On-Time Performance for DTC Bus Routes

## **Public Opinion**

level.

For most people, the biggest complaint about our transportation system is that there is too much congestion on our roads. We ask several questions in our survey to measure the level of congestion people experience and how they define congestion. These help us in the development of our Congestion Management System report.

In our Public Opinion Survey, we asked people what strategies may be effective in improving our transportation system. This chart shows the top four answers and the final 2 answers.

Eighty-six percent of respondents answered that better timed traffic lights and better designed communities would be Very or Somewhat Effective. Only 54% felt building more highways would be Very or Somewhat Effective and 28% felt it would be Not At All Effective.



# Goal Two – To Transport People and Goods

# **Objective #2 Promote Accessibility, Mobility and Transportation Alternatives**

#### **Strategies**

- Ensure fair and equitable access to a range of transportation modes
- Coordinate the planning of transportation and land use to provide travel choices to the citizens of the region
- Address the special transportation facility needs of the citizens of the region
- Ensure that pedestrian and bicycle facilities are an integral part of transportation project design
- Plan for an integrated multi-modal transportation system, including roadways, rail and bus services, bicycle and pedestrian facilities, and air and water transportation
- Support travel demand reduction measures



There are numerous indicators are available to measure this objective. By being able to measure several data outcomes and actions, we can get a very good feel as to how well we are providing transportation alternatives. More importantly, we have indicators with very solid long range performance targets. These will show us just exactly where we stand on those indicators and whether we need to make adjustments

# **Regional Indicators:**

1. Transit Access: Population within ¼ of a transit stop falls since 1996	page 22
2. Passenger Rail Miles: Remain unchanged since 1996	page 22
3. Mode Share: Carpooling increases in New Castle County	page 22
4. Transit Ridership: Overall ridership slips in 2002 and 2003	page 23
5. Transit Operations: Paratransit mileage surpasses fixed route	page 24
6. Multimodal Projects: Funding increases significantly for since 1996	page 25
7. VMT per Household: Both counties above national average	page 25
8. Population to Autos ratio: Both counties above national average	
Public Opinion Survey Results:	page 26



#### Knowledge Gaps

- Need to develop better source for travel characteristics data for Cecil County
- Need a better measure of transit accessibility. Current methods do not account for actual bus service schedules or a true 1/4 mile access to transit stops

#### **Transit Access**

Using Geographic Information Systems (GIS) it is possible to develop a fairly accurate assessment of exactly how many citizens have reasonable access to transit. Using the generally accepted standard of ¼ mile distance from a transit stop, table 14 shows that, while New Castle County has increased the overall number of people having access to transit, the percentage has fallen slightly. Cecil County, on the other hand, has seen growth in overall population and the percentage that has access to transit.

County	1996	2000	2003
New Castle	272,913 (56.4%)	275,567 (54.9%)	283,551 (55.3%)
Cecil	2,193 (2.8%)	2,931 (3.4%)	3,346 (3.8%)
Regional Total	275,106 (49.2%	278,498 (47.3%)	286,897 (47.7%)

#### Table 14: Percent of population within 1/4 mile of a transit stop 1996-2003

Source: WILMAPCO, DTC, Cecil Dept. of Aging

#### **Passenger Rail Miles**

The 2025 RTP laid out initiatives to increase overall rail service through Cecil County and toward the southern part of Delaware. So far no new rail has been added, but due to the large capital outlay, this cannot happen as quickly as other efforts.

#### Table 15: Rail Mileage

	1999	2025 Goal	Pct. Completed
New Castle*	20.82	66.53	0.0%
Cecil**	0.0	20.61	0.0%
Total	20.82	87.14	0.0%

\* Includes Wilmington Connector & Rail to Dover "Newark Option" from RTP

\*\* Includes Newark to Elkton Rail Extension and MARC Extension from Perryville to Elkton

#### **Mode Share**

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. Now, a renewed push to provide multimodal transportation options has been underway to reduce our auto dependency. Retrofitting many of our existing communities and providing multimodal planning and design for new projects are both important efforts for the future. Through data collected from a



#### Figure 16: Changes in New Castle County Mode Share 1996-2002

Source: Univ. of Delaw are Center for Applied Demography & Survey Research

comprehensive household survey in New Castle County, we can see that there has been a change in travel habits. Current trends are showing that carpooling has been increasing, but the share of other modes (i.e. walking, biking and transit) has been falling, when compared to driving alone.

# **Transit Ridership**

In 2001, the DTC adopted a long range plan to lay out their vision of transit in the future. A need for a strong transit system is critical to help alleviate congestion along roads, help reduce harmful emissions and to give choices to residents who do not have the ability to drive. Our elderly population, which is expected to double by



Looking more closely at ridership trends, we can see some of the areas of concern illustrated in figure 16. Traditional fixed route ridership represents the bulk of the transit users, hovering near the 7 million mark. However, since 2001, it has experienced a downward trend.

Conversely, the other transit sectors have witnessed steady growth. Demand response transit, or paratransit, is a service provided for ADA-eligible patients and the elderly. It has more than doubled in ridership since 1996. Ridership on the SEPTA rail service, which has 4 stations in New Castle County, has increased 64% in the same period. Although representing a small portion of transit service in the region, the Cecil County Department of Aging has vastly increased their ridership. As of 2003, nearly 5,800 trips were made using their fixed route service.



#### Figure 18: Transit Ridership by Type

Source: Delaware Transit Corp.; Cecil Dept. of Aging

## **Transit Operations**

Between 2000 and 2025, the population of people over the age of 65 will grow from 67,000 to nearly 127,000. Even now we are beginning to see some of these effects when it comes to transit demand. In Delaware, elderly persons are eligible to use "door-to-door" paratransit service. Since 1998 the route miles devoted to paratransit have risen 92%, while fixed route service has actually been risen by just under 7%. SEPTA has seen a modest 14% increase in route miles in the



Figure 19: Transit Route Miles 1998-2003

same period. Based on the allotted funding, DTC has to make difficult decisions in determining which routes (and route types) to fund annually. In FY 2002, the total route miles for paratransit surpassed fixed route mileage.

While the effort must be made to accommodate this portion of the population, it does come at a high price. Paratransit represents by far the highest cost per trip subsidy of all types of public transit. As figure 20 indicates, paratransit requires over 8 times the subsidy of traditional fixed route transit. Since 1997, the per trip subsidy for fixed route service has risen about \$1 per trip while paratransit has risen nearly \$6 per trip.



Figure 20: Transit Costs per Trip

# Multimodalism

To establish other transportation modes, we must invest in transportation choices. Through the Transportation Improvement Program (TIP) we can see a trend toward construction projects that address more than one mode. Instead of traditional road improvements, projects now contain sidewalks, bike paths and transit stops. Multimodal projects now represent around 40% of the total transportation projects investment, up from only 5% of the budget in FY1997.



Figure 22: Annual Vehicle Miles Traveled Per Household

#### Figure 21: Percentage of TIP Funding by project Type

Despite the alternatives being provided, we are driving more 40,000 than we used to. Figure 22 35,000 shows the annual VMT per 30,000 household for both counties. Cecil County is well above the 25,000 national average, while New 20,000 Castle County hovers close to 15,000 the national average. Overall, 10,000 New Castle County has risen 5.2% and Cecil 0.4% over the time period. While this may look as if there is relatively little change, the population per household has been on a steady decline through the 1990's.

A measure that further demonstrates our growing dependence on the automobile is the ratio of population to registered vehicles. Since 1996 there has been a steady climb both regionally and nationally. With many people owning multiple vehicles, we are getting closer to having an average of one vehicle per person for the entire population. In the case of our region, Cecil County outpaces New Castle County and the nation, exceeding 0.9 vehicles per person.





#### Figure 23: Population to Registered Vehicles ratio
### **Objective - Promote Accessibility, Mobility and Transportation Alternatives**

### **Public Opinion**

There are two questions in our telephone survey we use to determine how well we are servicing the public regarding our transportation options. We then ask them how we can improve our efforts.

Question: How well do you feel the transportation system meets your travel needs?

Results show the number of citizens responding either Very Well or Somewhat Well has remained fairly high over time, averaging 75%-80% over time. There was a slight drop in satisfaction in 2002.

When comparing results by county, the majority of New Castle County and Cecil County residents feel that the transportation system meets their needs either Very Well or Somewhat Well. Slightly more New Castle County residents felt their needs were met Very Well while a larger percentage of Cecil County residents felt their needs were Not Met at All.



Results by Year

Total Dew Castle Cecil

**Question:** Would you say you have many different transportation alternatives to choose from or would you say you have few options to choose from?

Again, it is evident that Cecil County residents currently have fewer choices available. While there is a study underway to determine the feasibility of expanding rail in Cecil County, the state has proposed to reduce bus service. With the lower satisfaction levels and fewer options available, Maryland may need to investigate what services their residents would most like to see added.



Different Alternatives Few Options No Answer

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

# **Public Opinion**

WILMAPCO has tried to address the topic of increased accessibility.

Question: Which travel options would you like to be more accessible?



Over time, we have found the greatest demand for better roads and additional bus service. This result has been consistent over the past 5 years

■ Bus ■ Train ■ Sidewalks ■ Bike Paths ■ Roadways

# **Goal Three - To Support Economic Activity and Growth**



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. These Transportation Investment Areas (TIAs) are designated Center, Community, Developing and Rural, each with a different emphasis on investment. To initiate smart growth development designs like Transit Oriented Development (TOD) we will require the cooperation of multiple agencies and the public.

## **Regional Indicators:**

1. Population Growth: Concentrated in Center/Community TIA's	page 29
2. TIP Funding by TIA: Community TIA receives bulk of funding	page 29
3. TIP Funding by Type: Preservation makes up largest funding type	page 30
4. Traffic Volumes: Growing quickly on Interstate and major arterials	.page 30
Public Opinion Survey Results.	page 31



### Knowledge Gaps:

- Need to gain consensus on a revised Transportation Investment Area map that better illustrates areas of focus.
- Additional effort needed to plan, fund and implement a comprehensive goods movement program

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

### **Population Growth by TIA**

Linking land use and transportation has been one of the greatest challenges for virtually all growing metropolitan areas. The decision on where to focus our transportation dollars is critical to ensure that we are properly addressing the needs of our citizens. To aid in this, WILMAPCO has created Transportation Investment Areas (TIAs) to help prioritize funding and project types that should be permitted in these areas. Figure 24 illustrates the changes in population growth that have taken place in the four designated TIAs. In the seven year period, the Center/ Community investment areas have added approximately 29,000 people while the Developing and Rural areas have added 7,700 and 5,100 people respectively.



### **TIP Funding**

Based on this information, it is logical to properly fund the management and maintenance of the Center/Community areas for the continued efficient movement of people and goods. Figure 25 shows how TIP funding has been allocated since FY1999. On average, roughly 85% of all TIP projects lie within the Center/Community investment areas.



#### Figure 25: Percent of TIP Funding by TIA

Source: WILMAPCO Transportation Improvement Program

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

## **TIP Funding**

The bulk of development and growth is still taking place in our core investment areas. These areas are also the more mature portions of our region with well established infrastructure. Considerable funding must be reserved for the preservation of our existing transportation infrastructure. Aging infrastructure will require an increasing amount of care and attention. Currently we can see that the largest share of funding is being devoted to the preservation of our transportation system. Since FY 1999, this figure has grown from \$320 million to nearly \$500 million for the FY 2005 TIP.



### Figure 26: TIP Spending by Project Type

### **Traffic Volumes**

Transportation improvements should also be made where we are experiencing the greatest growth in traffic volumes. Both Departments of Transportation count annual traffic volumes, otherwise known as AADT, along key road segments. Table 16 is a breakdown of the changes in AADT between 1996 and 2003. Interstates have seen the largest absolute increases, but significant increases have occurred at locations in the Rural and Developing investment areas.

New Castle	Road Type	1996 AADT	2003 AADT	Change	% Change	Lowend
I-95, east of SR 7	Interstate	135,962	188,827	52,865	38.9%	Legend
I-495, near Blvd Body Shop	Interstate	43,922	67,192	23,270	53.0%	Center/
I-95, near Naamans Rd	Interstate	41,416	59,238	17,822	43.0%	Community TIA
I-295, Del. Mem. Br.	Interstate	79,687	94,331	14,644	18.4%	Community HA
I-95 @ Toll Plaza	Interstate	66,529	76,774	10,245	15.4%	Developing TIA
US 301, west of Middletown	Principal Arterial	4,707	14,439	9,732	206.8%	
US 202, near Widner College	Principal Arterial	43,226	51,327	8,101	18.7%	Rural TIA
US 202 North of Naamans Rd.	Principal Arterial	36,484	44,219	7,735	21.2%	
SR 1 at Biddles Corner Toll Plaza	Principal Arterial	N/A	37,228	N/A	N/A	
SR 896, Summit Bridge	Principal Arterial	21,363	27,690	6,327	29.6%	
US 40 near MD Border	Principal Arterial	26,520	31,592	5,072	19.1%	
US 13, St. Georges Bridge	Minor Arterial	2,367	6,968	4,601	194.4%	
US 301 south of NC 15	Principal Arterial	18,275	22,281	4,006	21.9%	
Cedar Lane Rd, North of Marl Pit Rd.	Local Road	1,266	3,007	1,741	137.5%	
SR 7, near PA border	Principal Arterial	12,749	14,470	1,721	13.5%	
SR 92, East of US 202	Principal Arterial	25,717	27,157	1,440	5.6%	
SR 52, near PA border	Principal Arterial	10,573	11,312	739	7.0%	
SR 273, near MD border	Minor Arterial	8,148	8,836	688	8.4%	
SR 896 East of Mt Pleasant Rd.	Principal Arterial	11,838	11,670	-168	-1.4%	
SR 71, North of US 13	Minor Arterial	5,942	5,709	-233	-3.9%	
SR 9, Reedy Pt. Bridge	Collector Road	1,875	1,504	-371	-19.8%	
SR 4 at Chrysler Entrance	Principal Arterial	22,772	22,143	-629	-2.8%	
SR 7, North of Milltown Rd.	Principal Arterial	37,961	36,737	-1,224	-3.2%	
SR 9, North of I-295	Minor Arterial	18,540	17,291	-1,249	-6.7%	
SR 2, East of Windy Hills	Principal Arterial	35,188	32,314	-2,874	-8.2%	
US 13 North of Blackbird Rd.	Principal Arterial	37,535	25,160	-12,375	-33.0%	
Cecil	Road Type	1996 AADT	2003 AADT	Change	% Change	
MD 213 North of Cayots Corner Rd.	Minor Arterial	69,638	81,314	11,676	16.8%	
US 40 @ Cecil Harford Line	Principal Arterial	23,033	28,508	5,475	23.8%	
I-95 @ Harford/Cecil Line	Interstate	4,350	6,925	2,575	59.2%	
MD 279 South of I-95*	Minor Arterial	5,725	7,425	1,700	29.7%	
MD 273 East of Rising Sun*	Minor Arterial	12,425	14,075	1,650	13.3%	
MD 272 @ PA Line*	Minor Arterial	9,354	10,409	1,055	11.3%	
MD 213 South of MD 273*	Minor Arterial	4,750	5,450	700	14.7%	30
Source: DelDOT, MDSHA; *- Not from a per	manent count location			•		

#### Table 16: Traffic Volume Changes 1996-2003

Source: DelDOT, MDSHA; \*- Not from a permanent count location

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

## **Public Opinion**

In addition to transportation questions, we needed to gauge the public's stance on where and how development should occur in our region. This will be crucial when setting policy regarding transportation facilities.

**Question:** In your opinion, should new development be directed to certain areas, such as in existing towns and villages, or unlimited throughout the state?

The demand for unlimited growth has been steadily increasing for the last three years.



Existing Unlimited Don't know

**Question:** Some people say that they don't want any new development in their community because growth and congestion is out of control and has hurt the quality of life. Other people accept development and somewhat more congestion, because they feel the growth improves our economy. Which side do you agree with most?



Don't want new development
 Accept development and congestion
 Don't know

**Question:** Do you feel residential and commercial growth below the C and D Canal should be...? Encouraged, Discouraged or Allowed if Controlled

The stigma against growth in lower New Castle County appears to be dissipating, as more and more residents feel growth below the Canal should be encouraged.



Encouraged Discouraged Allowed if Controlled Don't Know

# Objective - Ensure a Predictable Public Investment Program Public Opinion

**Question:** Should we revise zoning codes to promote land uses and site designs that better support transit use, bicycling and walking?

The public is strongly in favor of ensuring that developers do not have restrictions that prevent them from creating multimodal communities.



Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree

# Goal Three – To Support Economic Growth and Activity

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

### **Strategies**

- Identify the investment needs required to ensure the economic attractiveness and competitiveness of the region, and work with citizens, elected leaders, and the private sector to identify funding alternatives
- Plan to meet the transportation and information needs of tourists and recreational travelers, including pedestrian and bicycle facilities
- Identify and respond to the changing transportation needs of employers and employees through planning and effective public and private sector



One of the strengths of our region is its diverse and vibrant economy. In order to attract businesses, our transportation system needs to be free flowing for movement of goods and employees going in and out of the region. Also, enhancing the attractiveness of our communities by providing adequate transportation choices will aid in promoting growth and development along with establishing a sense of community pride.

### **Regional Indicators:**

Employment Transit Access: Gains in New Castle, falls in Cecil......page 34
 Job Diversity: Region maintains higher paying employment sectors .....page 34
 Unemployment: Remains low in comparison to region and nation......page 34
 Goods Movement: Port deliveries din in total toppage since 2001 page 35

4. Goods Movement: Port deliveries dip in total tonnage since 2001......page 35



### Knowledge Gaps:

• Need to establish better relationship between transportation and tourism

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

# **Employment Access to Transit**

Employment within ¼ mile of a transit stop was calculated to show alternative access to work. Table 17 shows that New Castle County has seen a rise in employment that is close to transit. With the I-95 corridor still representing the core of commercial/ industrial land in the county, employment has not seen the kind of migration that housing has undergone. Cecil County has remained fairly steady since 1996.

Table 17: Employment within ¼ mile of a Transit Stop

County	1996	2000	2003
New Castle	61.8%	63.6%	64.5%
Cecil	17.2%	16.9%	16.9%
TOTAL	57.6%	59.0%	59.7%

Source: WILMAPCO, Delaware Transit Corp.

### **Job Diversity**

A sign of a healthy and stable economy is having a variety of employment types, thus avoiding a sharp drop in iobs. While somewhat difficult to compare in terms of overall numbers, we can gauge the diversity of our job growth. Since 1996, the WILMAPCO region has seen healthy gains in several sectors, in particular the information technology sector. This represents the highest salaried sector out of the 11 sectors reported by the Bureau of Labor Statistics.

### **Unemployment Rate**

A low unemployment rate can also signal good job diversity within a region. Avoiding large spikes in unemployment demonstrates the right mix of employment types, minimizing the impact of a downturn in a particular sector. With the exception of 1996 and 2000, the unemployment rate in the region has been below the averages of our neighboring metropolitan areas as well as below the national average.



Figure 27: Changes in Employment by sector 1996-2003

Source: Bureau of Labor Statistics



#### Figure 28: Annual Unemployment Rate 1996-2003

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

### **Goods Movement**

Our transportation system is not only designed to move people, but also to transport commodities needed for businesses and consumers. An estimated \$38 billion of goods totaling 57 million tons originates in the WILMAPCO region, making freight a vital portion of our economy. Ensuring that there is adequate infrastructure in place for it to remain a fixture in our economy is critical.

When we think of our transportation system, water-borne commerce sometimes does not get the attention it deserves. The Port of Wilmington serves as our largest generator of goods in our region. Figure 29 shows the annual tonnage the port receives annually. After having several years of growth, port tonnage has declined since 2001.





As with the overall employment statistics, diversity is a plus when it comes to a healthy port facility. Over the past decade, the port has seen its commodities shift from a liquid/petroleum domination to a more balanced mix, with breakbulk and container cargo increasing their share of the total tonnage received at the port. Automobiles, buoyed by the addition of the autobirth, have rebounded somewhat from their drop off in 1997.



### Figure 30: Port of Wilmington Cargo by Type 1991-2003

# V. – Conclusions and Future Challenges

"Opening the Door to Change" is the title of our latest long range regional transportation plan. Its goal was to lay the groundwork for changing policies, procedures and spending within our region. However, change comes at a price and, with our current economic climate, priorities must be set. With what may seem to be an endless list of challenges that face our region, we only have a finite level of funding to address them. Timely, efficient planning is critical to achieve the goals set forth by the plan.

This progress report was designed to review these challenges and to gain a better understanding of which areas need the most attention. Since this report will be produced annually, it can serve as a catalyst to initiate modifications to planning activities such as data collection, regional studies and research analysis. These activities allow for continuous course correction as needs are identified, rather than waiting on the three-year RTP cycle. Based on the findings from this year's effort, our indicators show that the following items need to be addressed, since they represent some of the more pressing issues:

### Significant Trends

- The new stricter ozone standards will continue to challenge our ability to meet conformity. Beginning next year, additional requirements will be set for Particulate Matter (PM 2.5). New measure will need to be introduced to ensure we reach conformity for all air quality standards under the Clean Air Act.
- Auto crashes, and bicycle and pedestrian accidents in New Castle County remain higher than the national average. We need to work with our agencies to determine the causes and how we can reverse this trend.
- According to our residents, fear of accidents is their primary reason for not bicycling more. As our statistics show, this is a valid concern.
- A higher percentage of people are choosing to drive alone and carpool, while other multimodal usage (transit, walking or biking) has seen a decline. From a high of 6.8% in 2002, non-auto usage dropped to 3.9% in 2002.
- In New Castle County, bus ridership has not increased since 2001 when it dropped from 7.4 million riders to 6.9 million in 2003. In order to meet DTC's goal of 18.57 million riders by 2025, we will need to begin promoting transit more or provide services that will attract more riders. Ridership in Cecil County has seen a steady increase of riders on The Bus where 1,600 riders in 1998 has swelled to 5,700 riders in 2003.
- Progress on the East Coast Greenways is slow. While the project goal is to see the entire stretch completed by 2010, less than 10% of the Greenway has been completed in our region.
- Respondents to our surveys are steadily accepting growth below the C and D Canal. But
  according to the other land use questions we have asked, they would like to see developments
  that provide better design for walking and biking and more access to transit, while preserving
  farmland and openspace.

Many of these trends may be the result of our current development patters. By rethinking how new neighborhoods and communities are built, we can provide safe multimodal alternatives. This will require our agencies to encourage new land use patterns that reduce our dependency on the automobile, while still providing adequate services to maintain our much needed roadway system.

### Future Challenges

Short Term (1-3 years)

- **Revisit Transportation Investment Areas:** Starting this fall, WILMAPCO will open up a discussion with state, county and local governments on possible revisions to our Transportation Investment Areas.
- **Review and report on findings from recent municipal comprehensive plans:** With virtually all municipalities completing comprehensive plans in the past two years, staff needs to review the plans and work with the municipalities to get their transportation goals implemented.
- **Begin work on transportation equity analysis addressing the needs of the elderly:** WILMAPCO is planning to produce a second Environmental Justice report dealing with the mobility issues of our aging population. It will review current and future demographic patterns and attempt to get a firm handle on how to address the needs of this growing group in our region.
- **Continue to plan for multimodal projects:** Efforts must continue to make transportation projects as multimodal as possible in order to reduce auto dependency by making options available.
- **Examine transit funding levels to support changing ridership patterns:** 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 match demand.

Long Term (4+ years)

- Help keep the Port of Wilmington competitive in the world market: In the highly competitive shipping industry, ports must remain accessible and convenient for a variety of goods and vessels. Efforts should be made to provide assistance to keep the port an active part of our economy.
- *Make efforts to address "Knowledge Gaps":* Throughout the document, there are identified areas that are important to monitor for which there is inadequate data. Efforts should be made to locate (or create) data that helps us track changing conditions. A section will be included in subsequent Progress Reports to maintain a status on these and what activity is occurring with each.
- Increase Rail Alternatives: Two rail studies are underway potentially linking existing commuter service in Wilmington, Churchmans Crossing and Newark with Elkton, Perryville, Middletown and Dover.

Thank you for taking the time to read the WILMAPCO 2004 Regional Progress Report. This document is designed to give the public an overview of what WILMAPCO is looking to accomplish. If you have any questions or comments on ways we can improve the effectiveness of this report, we would like to hear from you. Below is contact information for WILMAPCO and a list of our staff and Council members. Please provide your ideas for future reports.

Who is WILMAPCO?

### WILMAPCO Council

Ray Miller, Chair	Delaware Transit Corporation
Nelson Bolender	Vice-Chair – Cecil County Commissioner
James M. Baker	City of Wilmington, Mayor
Thomas P. Gordon	New Castle County, County Executive
Nathan Hayward III	Delaware Dept. of Transportation
John F. Klingmeyer	Mayor of New Castle
Andrea Kreiner	Delaware Governor's Office
Joseph L. Fisona	Mayor, Town of Elkton
Marsha J. Kaiser	Maryland Department of Transportation

#### WILMAPCO Staff

Tigist Zegeye
Heather Dunigan
Betty Reeder
Alison Burris
Dan Blevins
Ginny Craig
Scott Hanson
Frank Pisani
Eleanor Rafalli
Bernie Yacobucci

Executive Director Principal Planner Director of Administration Outreach Manager Sr. Transportation Planner Receptionist Transportation Planner Transportation Planner Administrative Assistant Transportation Planner



#### WILMAPCO

850 Library Ave., Suite 100, Newark, DE 19711 (302) 737-6205 Toll Free (888) 808-7088 Fax (302) 737-9584 www.wilmapco.org wilmapco@wilmapco.org