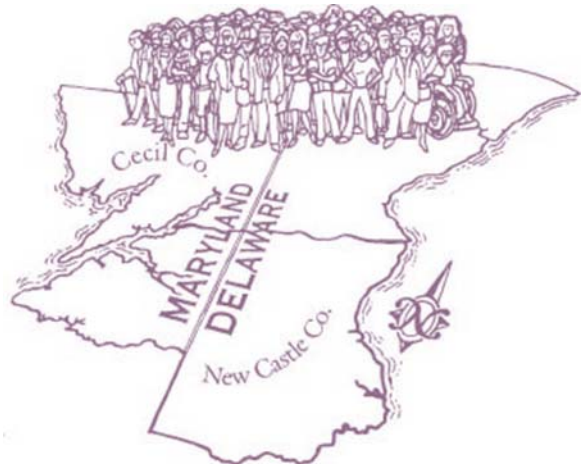
Transportation Improvement Program

Fiscal Years 2017-2020



WILMAPCO

Partners with you in transportation planning

Adopted March 10, 2016
Amended September 8, 2016

FY 2017-2020
Transportation Improvement Program (TIP)

Prepared by the staff of the
Wilmington Area Planning Council

850 Library Avenue, Suite 100
Newark, Delaware 19711
(302) 737-6205
www.wilmapco.org

Adopted March 10, 2016
Amended September 8, 2016

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.
The public participation process for the Transportation Improvement Program (TIP) will also meet the public participation requirements for MTA's and DTC's Program of Projects. The TIP also considers effects upon low income and minority residents.

CONTACT LIST

The WILMAPCO Transportation Improvement Program (TIP) is created in cooperation with many state and local agencies. If you have questions regarding any projects or suggestions for future projects, please contact the appropriate agency below.

Agency	Responsible For:	Address	Phone Number	Website
WILMAPCO	Regional transportation planning agency in Cecil County, Maryland and New Castle County, Delaware	850 Library Ave. Suite 100 Newark, DE 19711	(302) 737-6205	www.wilmapco.org
Delaware Agencies				
City of Wilmington Department of Public Works – Transportation Division	Maintains and repairs all City streets, traffic signals, street lights, and street signs	Wilmington Dept of Public Works Louis L. Redding City/County Bldg. 800 N. French Street Wilmington, DE 19801	(302) 576-3060	www.ci.wilmington.de.us
DelDOT	Constructs, maintains, and repairs most of Delaware's roads, sidewalks, bike paths, traffic signals and street signs	DelDOT External Affairs P.O. Box 778 Dover, DE 19903	(800) 652-5600	www.deldot.gov
DE Transit Corporation (DART First State)	Provides bus, Paratransit, and passenger rail services (SEPTA service) in Delaware	900 Public Safety Blvd. Dover, DE 19711	(302) 652-DART	www.dartfirststate.com
Maryland Agencies				
Cecil County Department of Public Works – Road Maintenance Division	Maintains and repairs all County roads, mows roadway shoulders and agricultural ditches, and makes minor bridge repairs	Cecil County Department of Public Works 200 Chesapeake Blvd. Elkton, MD 21921	(410) 996-6270	www.ccgov.org
Maryland State Highway Administration (SHA)	Constructs and maintains Maryland's state roads, sidewalks, traffic signals & street signs	MD State Highway Administration 707 North Calvert Street Baltimore, MD 21202	(888) 204-4828	www.sha.state.md.us
"The Bus" Cecil County Transit	Provides transit service in Cecil County	Cecil County Dept. of Senior Services and Community Transit 200 Chesapeake Blvd. Elkton, MD 21921	(410) 996-5295	www.ceciltransit.com
Maryland Mass Transit Administration (MTA)	Operates the MARC system, light rail, Metro Subway and bus routes in Maryland	MD Mass Transit Administration 6 St. Paul Street Baltimore, MD 21202	(800) 543-9809	www.mtamaryland.com

Table of Contents

Introduction....i
Public Participation Process....iii
The TIP Process....iv
How It's Organized....v
Performance Based Planning and the TIP....vi
Project Prioritization Process....viii
TIP Summary Tables....x
Integrating the Congestion Management System....xxiii
Addressing Transportation Equity....xxv
Comparison of FY2017 TIP with FY 2016 TIP....xxvii
Project Maps....xxxiii
Sample TIP Project Page....xxxvii

Project Listing
Delaware Statewide Element....1-1
New Castle County Element....2-1
Cecil County Element....3-1

Appendices
Glossary of Acronyms....A-1
WILMAPCO Council Resolutions and Staff Organizational Chart....B-1
Air Quality Conformity....C-1
Financial Plan and Annual Listing of Obligated Projects....D-1
TIP Development and Amendment Process....E-1
Prioritization and Project Submissions....F-1
Public Comments....G-1
Alphabetical Index of Projects....H-1

Introduction

The **Wilmington Area Planning Council** (WILMAPCO) is the metropolitan planning organization (MPO) for New Castle County, DE and Cecil County, MD. It is designated by the governors of both states to plan for, coordinate, and program the many transportation investments in the region. Under federal law and regulation, all plans and programs that involve federal funds or are of regional significance must be reviewed and approved through WILMAPCO. This document, the **Fiscal Year (FY) 2017-2020 Transportation Improvement Program** (TIP), provides a listing of all the transportation projects that will be funded in our region over the next four years.

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 planning requirements of FAST, 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 has a voice. The program should be updated at least every four years and shall be approved by the MPO and the Governors of each state. WILMAPCO typically adopts a revised TIP annually, and may periodically amend the TIP.

This TIP represents a continued shift from the traditional highway building emphasis of prior years to a more multi-modal approach to transportation planning and programming. Many of the projects provide an increase in transit facilities, an expansion in the network of sidewalks, bike paths and greenways and an improvement in the appearance of all transportation designs. The mandates of FAST ACT, the Clean Air Act and its Amendments and, most importantly, your vision for this region, require that more emphasis be placed on system preservation and management. This TIP is consistent with the vision of WILMAPCO's *2040 Regional Transportation Plan.*

TIP Terms

FAST – Signed into law on December 4, 2015, the Fixing America's Surface Transportation Act, or "FAST Act" - the first Federal law in over ten years to provide long-term funding certainty for surface transportation. It authorizes $305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology and statistics programs. (Predecessor: MAP-21, SAFETEA-LU, TEA-21 and ISTEA).

MPO - Metropolitan Planning Organization: A federally designated, locally governed agency charged with developing long range transportation plans and programming federal transportation funds for specific metropolitan areas. WILMAPCO is this region's MPO.

TIP – Transportation Improvement Program: a document containing priority transportation investments proposed over the next four years for New Castle County, Delaware and Cecil County, Maryland.

WILMAPCO – Wilmington Area Planning Council: the metropolitan planning organization for New Castle County, DE and Cecil County, MD.

WILMAPCO Council – Comprised of representatives of Delaware and Maryland including a representative of Cecil County municipalities, a representative of New Castle County municipalities, a Cecil County Commissioner, the New Castle County Executive, a Maryland Governor's appointee, a Delaware Governor's appointee, the Mayor of Wilmington, the Secretary of DelDOT, and the Director of the Delaware Transit Corporation.

(For a complete glossary of terms, see Appendix A)

Air quality is also very important in the region. The Clean Air Act Amendments of 1990 stipulate that projects in the TIP must not lead to any further degradation in the region's air quality, but instead should begin to improve the air and contribute to attainment of the region's emission budget. The TIP also needs to be financially constrained which means a financial plan has to be developed to demonstrate funding sources for the projects in the TIP. This TIP has been found to be air quality conforming and financially constrained.

WILMAPCO develops its TIP annually by receiving submissions from its member agencies: DelDOT, MDOT, municipalities, and county officials. The projects are ranked according to how well they reflect the strategies in our long-range plan. The public is kept involved and informed throughout the process. WILMAPCO held a workshop on February 24, 2016 to receive public comments regarding the proposed program, and again during on date to be determined in August 2016 for proposed amendments. WILMAPCO participated in MDOT's annual Tour meeting in October to review the slate of new projects with members of the public and elected officials. After the public hearings, WILMAPCO presented the TIP to its Technical Advisory Committee (TAC) and Public Advisory Committee (PAC) for their recommendation and, finally, to the Council. The WILMAPCO Council voted to adopt the FY 2017-2020 TIP on March 10, 2016. The TIP will now become part of Delaware and Maryland's Statewide Transportation Improvement Program to be presented to the Governors and Legislators of each state.

The TIP is amended each year following the approval of matching funds through the Bond Bill, as well as when needed throughout the year due to project changes. Many amendments necessitate additional public outreach.

Developing the FY 2017-2020 Transportation Improvement Program

Process and Schedule – Summary

2015	January-March	Staff meets upon request with local government and community groups to discuss transportation needs.
	April-May	• Staff develops technical score based upon adopted prioritization criteria • TAC proposes project prioritization • Air Quality Subcommittee reviews project list Council reviews community and committee comments and votes on proposed ranking • Ranked project listing to submitted DelDOT
	August	Joint public workshop with DelDOT and the Council on Transportation
2016	January-March	TIP & Air Quality Conformity released for public comment January 19-March 2 (including local government/public outreach). • Revise TIP based on public comments • AQ (Feb. 11)/TAC (Feb. 18)/PAC (Feb. 29) recommendation for adoption TIP Public Workshop – February 24. 4 -7 p.m. • Council adoption of TIP (March 10)

Amending the TIP – Summary

The TIP is amended each year following the approval of matching funds through the Bond Bill, as well as when needed throughout the year due to project changes. Many amendments necessitate additional public outreach.

July-September 2016	TIP & Air Quality Conformity released for public comment July 25 – September 6 • Revise TIP based on public comments • TAC (Aug. 18) /PAC (Aug. 22) recommendation for adoption TIP Public Meeting - August 31, 4-7 p.m. • Council adoption of TIP as amended (Sept. 8)
Amendments as needed	Public comment period extending at least 30 days will be scheduled with amendments as needed.

Indicates best opportunities for public comment

Public Participation Process

WILMAPCO believes that public involvement in transportation decision-making is critical. When preparing the TIP, WILMAPCO provides citizens, affected public agencies, representatives of transportation agencies, private providers of transportation, and other interested parties full access to plans and programs, their supporting materials, and an opportunity to participate in all stages of the planning process. The public participation process for the TIP also meets the public participation requirements for MTA's and DTC's Program of Projects. The TIP also considers effects upon low income and minority residents.

The Public Advisory Committee (PAC) is the driving force for direct, ongoing public participation. Comprised of a diverse group of individuals representing regional business, environmental, minority and neighborhood groups, the PAC assists WILMAPCO staff and member organizations in developing methods and avenues for public involvement in WILMAPCO activities and may monitor and report findings to the Council regarding opportunities for, and responses to, public involvement strategies. The PAC advises WILMAPCO on the public participation process for developing the TIP. All PAC meetings, as well as meetings of the Technical Advisory Committee and WILMAPCO Council are open to the public and time is allotted for public comment on the TIP or other transportation issues.

WILMAPCO provides the public and interested groups the opportunity to review the draft TIP during a 30-day public comment period. WILMAPCO held a public meeting with the Delaware Council on Transportation to receive comments on the proposed program. Press releases announcing the meetings were sent to newspapers and radio and television stations throughout the region. All public comments received were presented to the Council before the final adoption of the TIP.

When and How the Public Gets Involved

August
WILMAPCO, together with DelDOT, MDOT and the Delaware Council on Transportation, holds a public hearing to introduce the new projects under consideration and get ideas for additional projects. Amendments to the prior year's TIP are also available during this meeting. Announcements of these meetings are printed in local newspapers, posted in libraries, listed on WILMAPCO's website and a flyer is mailed out to WILMAPCO's mailing list. The public is invited to review the proposed projects, provide comments on existing projects and propose new suggestions.

January - March

- Public workshop is held on the draft TIP
- The Final Draft TIP is submitted to the WILMAPCO Council for release for 30-day public comment period.
- The final document is then available at the WILMAPCO office and at www.wilmapco.org.
- Presentations given to local government and civic groups upon request

Ongoing
Projects in the TIP come out of the WILMAPCO Regional Transportation Plan and the many community and corridor studies that WILMAPCO takes part in. We encourage you to sign up for our newsletter or enews and visit www.wilmapco.org. Contact us at (302)737-6205 to be added to our mailing list.

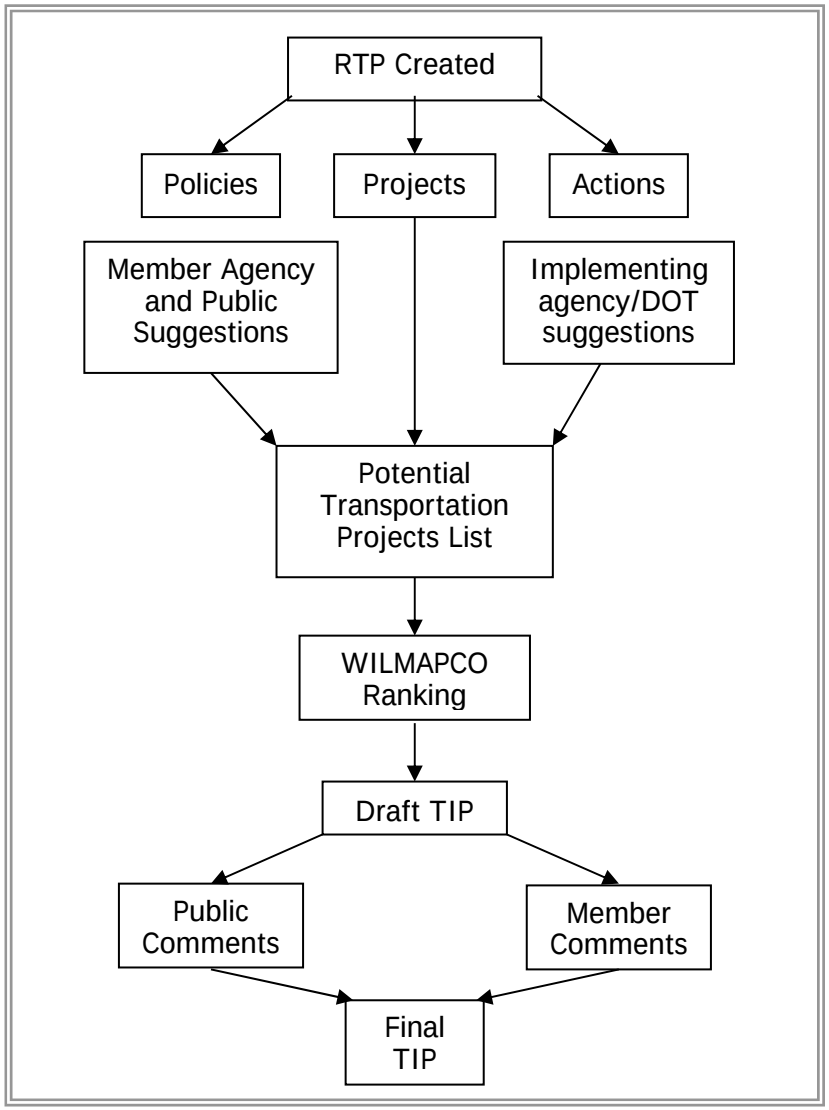
The TIP Process

How It Works

The TIP, one of several documents used for transportation planning, spans only four years. Projects it funds are developed through several methods, some of which may span more than four years.

First, WILMAPCO creates a long-range plan, currently known as *the 2040 Regional Transportation Plan* (RTP). This plan is the culmination of many months of effort involving WILMAPCO staff, member agencies and the public to develop a vision for the region we all can embrace. The RTP summarizes the transportation trends, investments and goals for the next 20 years. It indicates certain areas that need our attention, ranging from gaps in our transportation system, to congested regions in need of relief, to far reaching issues such as air quality or land use planning. From this, we recommend projects or policy changes that need to be undertaken in the coming years.

Transportation projects identified in our RTP are then combined with submissions from local governments, county governments, the public and the DOT's to form a potential transportation project list. These projects are then ranked by WILMAPCO's Technical Advisory Committee and a draft TIP is created. The draft TIP is made available to the public at several points during the process; a document then emerges that can be agreed upon by Council.



How It's Organized

The TIP has a **Delaware Statewide** element (for which New Castle County funding is not broken out), a **New Castle County** element and a **Cecil County** element. Within each element, the projects are separated by category and alphabetized within categories.

Projects within each element are arranged by the following categories:

- System Preservation
- System Management
- System Expansion

Following the project information are the Appendices which contain a glossary, information about WILMAPCO, and details on the analysis undertaken to ensure the TIP meets federal regulations. The final section provides an alphabetical listing of all the projects listed in the FY 2017-2020 TIP.

TIP Terms

System Preservation - maintains and preserves the existing transportation infrastructure including bridges, pavement, rail lines and existing roads. It also funds equipment replacement and operational costs.

System Management - sustains service level through management techniques and improvements to items such as coordinated signals, intersection improvements, streetscaping, transit facilities and sidewalks.

System Expansion - provides new or expanded services and infrastructure. This includes projects such the development of new roadways and transit services, highway interchanges and addition of road lanes.

Performance Based Planning and the TIP

Performance based planning is an emphasis of FAST, which includes seven performance goals promoted through the TIP. FAST requires MPOs to establish and use a performance-based approach to transportation decision making and development of transportation plans. FAST also requires that the TIP include a description of its anticipated effect toward achieving the established performance targets, linking investment priorities to those performance targets.

WILMAPCO is working to establish performance targets that address the FAST surface transportation performance measures in coordination with DelDOT and MDOT and through our RTP update process.

WILMAPCO's TIP links performance based planning with project implementation in a number of ways.

Goal area	National goal	Promoted through the TIP
WILMAPCO Goal: Improve Quality of Life		
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads	Safety, along with preservation of existing infrastructure, is a top funding priority for the TIP. The TIP promotes projects to fund safety areas identified through the Delaware and Maryland Strategic Highway Safety Plans as well as through the ongoing analysis of crash frequencies and rates to identify and address high crash locations.
Environmental sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment	Appendix C contains the results of the Air Quality Conformity Analysis performed on the TIP. This analysis measures anticipated air pollution emissions from regional transportation and measure the anticipated impact on the TIP toward achieving our air quality goals. Other measures are tracked by DelDOT and MDOT with funding for analysis and mitigation funded through the TIP proper maintenance of storm water discharge systems, wetland mitigation monitoring, and environmental impact analysis and mitigation for individual projects as needed.
WILMAPCO Goal: Efficiently Transport People		
Infrastructure condition	To maintain the highway infrastructure asset system in a state of good repair	System preservation, along with safety, is a top funding priority for the TIP. Maryland and Delaware assess infrastructure through their Bridge Management System and Pavement Management System to monitor conditions and identify needed preservation early, rather than later when maintenance may be more costly.
Congestion reduction	To achieve a significant reduction in congestion on the National Highway System	The WILMAPCO Congestion Management System collects and analyzes data to identify the most congested locations and identify cost effective measures to address the congestion for inclusion in the TIP.
System reliability	To improve the efficiency of the surface transportation system	Projects fund efficiency improvements using intelligent transportation system technologies along priority corridors. Maryland's CHART program and Delaware's DelTRAC program provide data collections and real time monitoring of priority corridors.

Goal area	National goal	Promoted through the TIP
Reduced project delivery delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices	Every Day Counts program seeks to speed project completion through a variety of means including expedited contractor procurement, design-build projects, and innovative construction methods and paving materials.
WILMAPCO Goal: Support Economic Growth Activity and Good Movement		
Freight movement and economic vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development	Regional freight planning has identified bottleneck locations along key corridors. Bottlenecks are a factor in the WILMAPCO project prioritization process.

The WILMAPCO Regional Progress Report measures actions and results towards implementing the RTP and achieving our region's goals. Measures relating to the TIP in the Regional Progress Report include:

- Funding for traffic calming by year
- Expansion projects in Rural Transportation Investment Areas (TIAs)
- Funding in Environmental Justice Areas
- Percent of funding dedicated to system preservation
- Municipal Street Aid funding by year
- TIP projects for Park and Rides
- TIP funding for multimodal projects
- Implementation of Complete Streets through the TIP
- TIP funding for transit projects
- TIP funding by TIA
- TIP projects along Congestion Management System (CMS) Corridors

Project Prioritization Process

How Projects Are Prioritized

To determine what projects should be included in the TIP; a prioritization process was developed by a subcommittee of the TAC and approved by WILMAPCO Council on May 11, 2006. Under federal law, WILMAPCO is responsible for prioritizing and programming all projects that are regionally significant and receive federal funds; while the states retain responsibility for other statewide projects and state funded projects. The TIP must include a priority list of projects to be carried out in the next four years.

Preservation of existing infrastructure is WILMAPCO's greatest priority. For management and expansion projects, the process connects the prioritization criteria with WILMAPCO goals, simplifies the ranking process, and maximizes use of existing data. In a typical year, the process will prioritize program development projects, to influence projects going into the statewide TIPs at an earlier stage. This year, we prioritized both funded and unfunded projects for both the TIP and RTP.

A summary 4-step project prioritization process is included on the following page; the complete process is in the Appendix. First, projects are screened for consistency with the RTP and state and local transportation and land use plans. If projects are consistent, staff calculates a technical score based upon the strategies in the RTP. Then, the Technical Advisory Committee reviews the technical score for its accuracy and submits comments for Council consideration. Council ranks the projects, considering the technical scoring and other relevant issues. This ranking is then shared with the DOT's for their use in developing statewide priorities.

Factors used to rank TIP projects:

- Air Quality
- Environmental Justice/Equitable Access
- Congestion
- Safety
- Pedestrian Priority
- Transportation Justice
- Freight
- Local/private Funding
- Support for Economic Initiatives

Prioritization Process

Provides a quantitative method to compare projects

- Criteria based on the goals of our long-range Regional Transportation Plan (RTP)
- Process was adopted by WILMAPCO Council on May 11, 2006
- Ranked projects get submitted to DelDOT/MDOT for use in their statewide process

STEP 1: Apply screening criteria

- Projects reviewed for consistency with RTP and local, county and state transportation plans and land use plans.
- If not consistent, it will not be ranked or the RTP must be amended.

STEP 2: Technical score

- Staff calculates a score for each project based on the goals and objectives of the RTP
- Criteria are designed to be objective measures using data available to WILMAPCO.

STEP 3: TAC review

- Technical Advisory Committee (TAC) reviews technical scoring for accuracy and prepares comments for Council consideration

STEP 4: Council ranks submissions

Council considers:

- Technical score
- TAC comments
- Cost effectiveness
- Urgency of project
- Other considerations

Goals and Criteria:

GOAL: IMPROVE QUALITY OF LIFE

AIR QUALITY: Expected to impact air quality, based on project types:

ENVIRONMENTAL JUSTICE: Project impacts in locations with a high percentage of low-income and/or minority residents.

SAFETY: Intersections scored using crash frequency, type, and severity.

GOAL: EFFICIENTLY TRANSPORT PEOPLE

CONGESTION: Corridor improvement recommended in Congestion Management System (CMS) or location with level of service (LOS) E or F. Along congested areas, addition points are awarded based upon average annual daily traffic and tranit use.

TRANSPORTATION JUSTICE: Project impacts in locations with high percentage of zero-car households, elderly & persons with disabilities..

PEDESTRIAN PRIORITY: Project supports pedestrian improvement based on pedestrian priority area scoring.

GOAL: SUPPORT SUSTAINABLE ECONOMIC DEVELOPMENT AND GOODS MOVEMENT

FREIGHT: Scores using the bottlenecks identified in the WILMAPCO freight & goods movement analysis..

ECONOMIC DEVELOPMENT: Projects that support economic development state and local policies based on DE Office of State Planning Policies and Spending map, Investment Level 1 and Investment Level 2 and Cecil County State Priority Funding Areas and County Certified Areas.

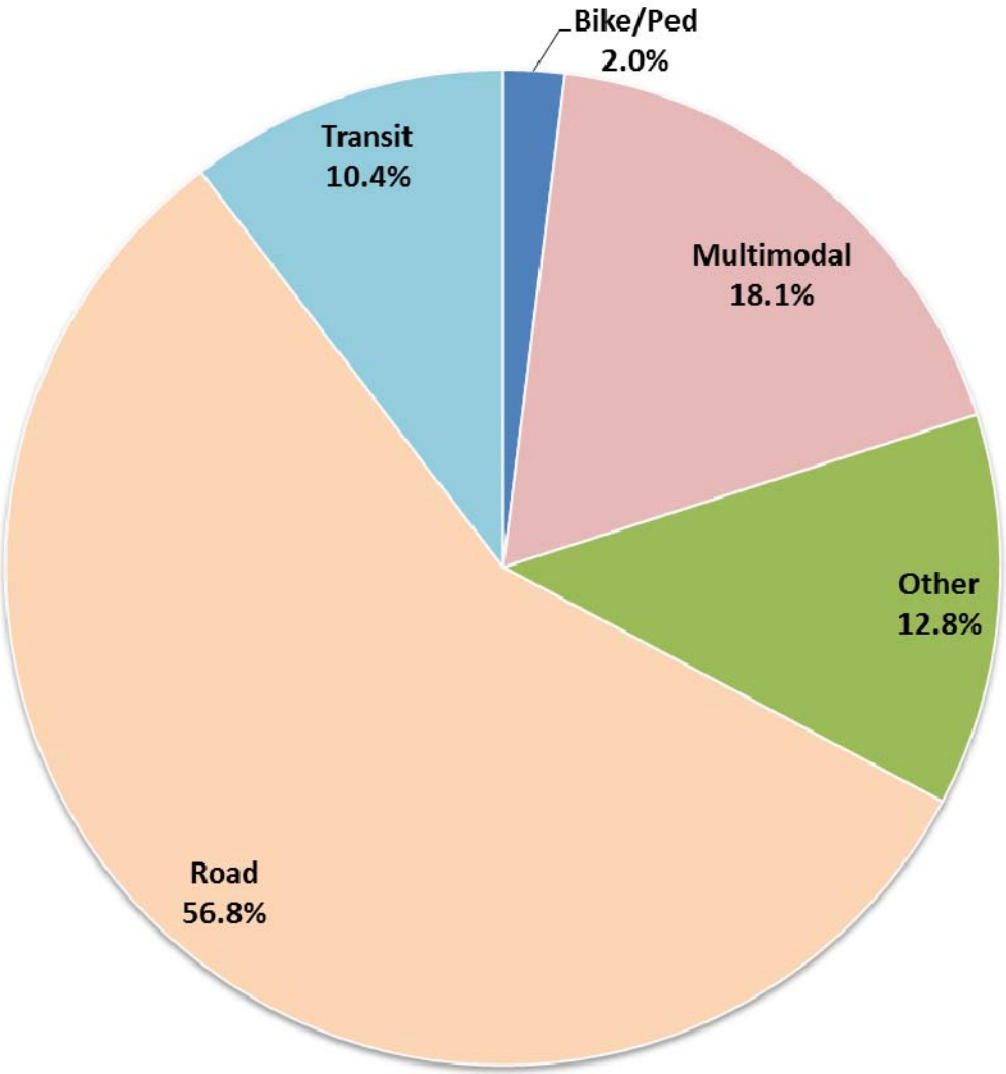
FUNDING CONTRIBUTION: Local and/or private commitment demonstrated by funding contribution.

TIP Summary Tables

FUNDING BY MODE	TOTAL FY 2017-20	PERCENT	OUTYEARS TOTAL FY2021-22
Bike/Ped	46,440	2.0%	13,500
Multimodal	422,371	18.1%	186,149
Other	298,645	12.8%	135,395
Road	1,329,416	56.8%	489,562
Transit	243,047	10.4%	63,417
Total ($s x 1,000)	**2,339,918**	100.0%	**888,023**

FUNDING BY CATEGORY	TOTAL FY 2017-20	PERCENT	OUTYEARS TOTAL FY2021-22
Preservation	944,740	40.4%	495,085
Other	169,435	7.2%	83,227
Management	594,696	25.4%	250,519
Expansion	631,048	27.0%	59,192
Total ($s x 1,000)	**2,339,918**	100.0%	**888,023**

TIP Funding by Mode



- ***Bike/pedestrian*** – Project exclusively for walking/bicycling
- ***Multimodal–*** A complete street project, serves cars, transit, freight, pedestrians and bicycles in a balanced way
- ***Other***– Includes aeronautics, port, contingency funds, environmental, equipment, planning, etc.
- ***Road***-Project exclusively for road
- ***Transit***-Project exclusively for bus transit, passenger rail, or paratransit

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	MODE	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
DE	Bicycle and Pedestrian Improvements	Bike/Pedestrian	19,434.7	8,000.0
CC	Chesapeake & Delaware (C&D) CanalTrail - Maryland	Bike/Pedestrian	-	-
NCC	Claymont Sidewalks: Manor and Myrtle Aves	Bike/Pedestrian	2,570.0	-
NCC	Grubb Rd: Foulk Rd to SR 92, Pedestrian Imp.	Bike/Pedestrian	-	-
NCC	New Castle to Wilmington Industrial Track Greenway, Phase III	Bike/Pedestrian	14,935.0	-
DE	Recreational Trails	Bike/Pedestrian	5,650.0	2,500.0
NCC	US 13: US 40 to Memorial Drive Pedestrian Improvements	Bike/Pedestrian	3,850.0	3,000.0
Bike/Pedestrian Total			46,439.7	13,500.0
CC	Areawide Urban Street Reconstruction	Multimodal	1,400.0	-
NCC	Boyds Corner Rd: Cedar Lane to US 13 (S. NCC Imp)	Multimodal	3,300.0	10,325.0
NCC	BR 191 on Milltown Rd over Mill Creek	Multimodal	72.7	-
NCC	BR 291, Songsmith Dr over Tributary to Smalley's Pond	Multimodal	935.0	-
NCC	Christina River Bridge and Approaches	Multimodal	58,098.2	-
DE	Community Transportation Fund	Multimodal	67,930.0	33,500.0
NCC	Elkton Road: Maryland State Line to Casho Mill Rd	Multimodal	21,150.2	6,000.0
NCC	Garasches Lane	Multimodal	3,800.0	-
NCC	Highway Safety Improvement Program, NCC	Multimodal	51,047.4	21,000.0
NCC	Jamison Corner Rd Relocated to Boyds Corner Rd	Multimodal	7,839.0	-
CC	MD 222 Bridge over Rock Run	Multimodal	1,838.0	-
CC	MD 272 Bridge over Amtrak	Multimodal	7,562.0	-
DE	Municipal Street Aid	Multimodal	20,000.0	10,000.0
NCC	N412, Lorewood Grove Road: Rd 412A to SR 1	Multimodal	3,577.0	6,500.0
NCC	Possum Park Road and Old Possum Park Road Intersection	Multimodal	1,731.6	-
NCC	SR 299, SR 1 to Catherine Street	Multimodal	8,275.4	-
NCC	SR 4, Christina Parkway:SR 2 to SR 896	Multimodal	499.7	500.0
NCC	SR 7: Newtown Road to SR 273	Multimodal	200.0	-
NCC	SR 72: McCoy Road to SR 71	Multimodal	13,094.9	5,000.0
DE	Traffic Calming	Multimodal	600.0	300.0
DE	Transportation Alternatives Program	Multimodal	24,796.4	10,328.0
CC	Transportation Enhancements/Alternatives Program - Cecil County	Multimodal	2,248.5	-

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	MODE	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
DE	Transportation Facilities, Statewide	Multimodal	36,295.5	12,500.0
DE	Transportation Management (inc. rideshare and signals)	Multimodal	44,753.8	20,960.0
NCC	US 13, Duck Creek to SR 1	Multimodal	1,500.0	2,700.0
NCC	US 13, Philadelphia Pike: Claymont Plan Implementation	Multimodal	-	-
NCC	US 40 / SR 72 Intersection	Multimodal	15,834.5	-
NCC	US 40 and SR 896 Grade Separated Intersection	Multimodal	6,000.0	30,000.0
NCC	US 40: Salem Church Road to Walther Road	Multimodal	3,900.0	10,000.0
NCC	Wilmington Initiatives, King and Orange Streets: MLK Blvd to 13th St	Multimodal	6,650.0	-
NCC	Wilmington Initiatives: 4th St., Walnut St. to I-95	Multimodal	500.0	750.0
NCC	Wilmington Initiatives: Walnut St., MLK to 13th St	Multimodal	1,500.0	5,500.0
NCC	Wilmington Initiatives: Walnut Street: Front Street to 4th Street	Multimodal	1,915.0	-
NCC	Wilmington Riverfront Program (Justison Landing, Development, Rail Relocation, Parking)	Multimodal	2,822.0	286.0
NCC	Wilmington Signal Improvements, Phase II	Multimodal	704.0	-
Multimodal Total			422,370.9	186,149.0
DE	Aeronautics, Statewide	Other	2,185.0	980.0
CC	Areawide Environmental Projects	Other	12,510.0	-
DE	Dam Preservation Program	Other	5,383.5	4,000.0
DE	Engineering & Contingency/Education & Training	Other	115,180.0	57,590.0
DE	Environmental Program	Other	2,417.0	1,126.0
DE	Equipment	Other	40,000.0	20,000.0
NCC	Glenville Wetland Bank & Subdivision Improvements	Other	-	-
DE	Planning	Other	51,837.9	24,511.1
DE	Statewide Rail Preservation	Other	1,200.0	600.0
DE	Technology	Other	65,556.4	26,587.5
NCC	Valley Road & Little Baltimore Road	Other	2,375.0	-
Other Total			298,644.8	135,394.6
CC	Areawide Bridge Replacement and Rehabilitation	Road	13,240.0	-
CC	Areawide Congestion Management	Road	3,048.0	-
CC	Areawide Resurfacing and Rehabilitation	Road	30,700.0	-
CC	Areawide Safety and Spot Improvements	Road	21,240.0	-

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	MODE	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
NCC	BR 032 on Foulk Road over S. Branch Naamans Creek	Road	858.9	-
NCC	BR 111 on N253 Benge Road over Red Clay Creek	Road	923.0	
NCC	BR 148A&B on N330 Greenbank Road over Red Clay Creek	Road	922.0	-
NCC	BR 159 on James Street over Christina River	Road	5,081.6	-
NCC	BR 227 on Paper Mill Rd over Middle Run Tributary	Road	1,089.5	-
NCC	BR 238 on Elizabeth Ct over White Clay Creek Tributary	Road	446.0	-
NCC	BR 239 onRed Mill Road over Tributary to White Clay Creek	Road	615.0	-
NCC	BR 251 on N355 Harmony Road over White Clay Creek	Road	1,840.0	-
NCC	BR 254 Old Newark Rd over Cool Run	Road	950.0	-
NCC	BR 294 on N346 Walther Road over Tributary to Christina River	Road	782.0	-
NCC	BR 302 over Toms Creek and BR 304 over Gambles Gut on SR 9	Road	1,275.0	-
NCC	BR 308 on N378 Clarks Corner Road over Dragon Run	Road	722.0	-
NCC	BR 393 on SR 299 over Appoquinimink River	Road	601.9	-
NCC	BR 438, Blackbird Station over Blackbird Creek	Road	1,210.0	-
NCC	BR 488S on US 13 SB over Blackbird Creek, South of Odessa	Road	4,078.6	-
NCC	BR 501 on Newport Viaduct over Christina River Piers Foundation Repairs	Road	5,665.0	-
NCC	BR 501, 501A, 501B on SR 141 Viaduct over SR 4	Road	-	-
NCC	BR 543 on Carr Road over Shellpot Creek	Road	802.8	-
NCC	BR 567 on Hay Rd over Shellpot Creek	Road	2,500.0	-
NCC	BR 577 on Northeast Blvd over Brandywine River	Road	4,540.1	-
NCC	BR 634 on SR100 DuPont Road over Delaware Valley RR	Road	5,307.5	-
NCC	BR 651 on Newport Road over CSX Railroad	Road	744.1	-
NCC	BR 680 on SR 141 over US 13	Road	10,200.0	-
NCC	BR 684 on N028 South Heald Street over Norfolk Southern Railroad	Road	700.0	200.0
NCC	BR 686 on N029 South Walnut Street over Norfolk Southern Railroad	Road	775.0	255.0
NCC	BR 714 on N347 Chapman Road over I-95	Road	9,578.7	-
NCC	BR 717 on I-95 NB over SR1	Road	5,450.8	-
NCC	BR 759 on I-95 over Brandywine River	Road	2,068.6	-
NCC	BR 813 on I-495 over Christina River, Emergency Repairs	Road	422.7	-
NCC	BR 814 on 12th Street over NS RR	Road	2,510.0	-
DE	Bridge Management/Inspection/ Design Training Programs	Road	40,905.1	22,556.0

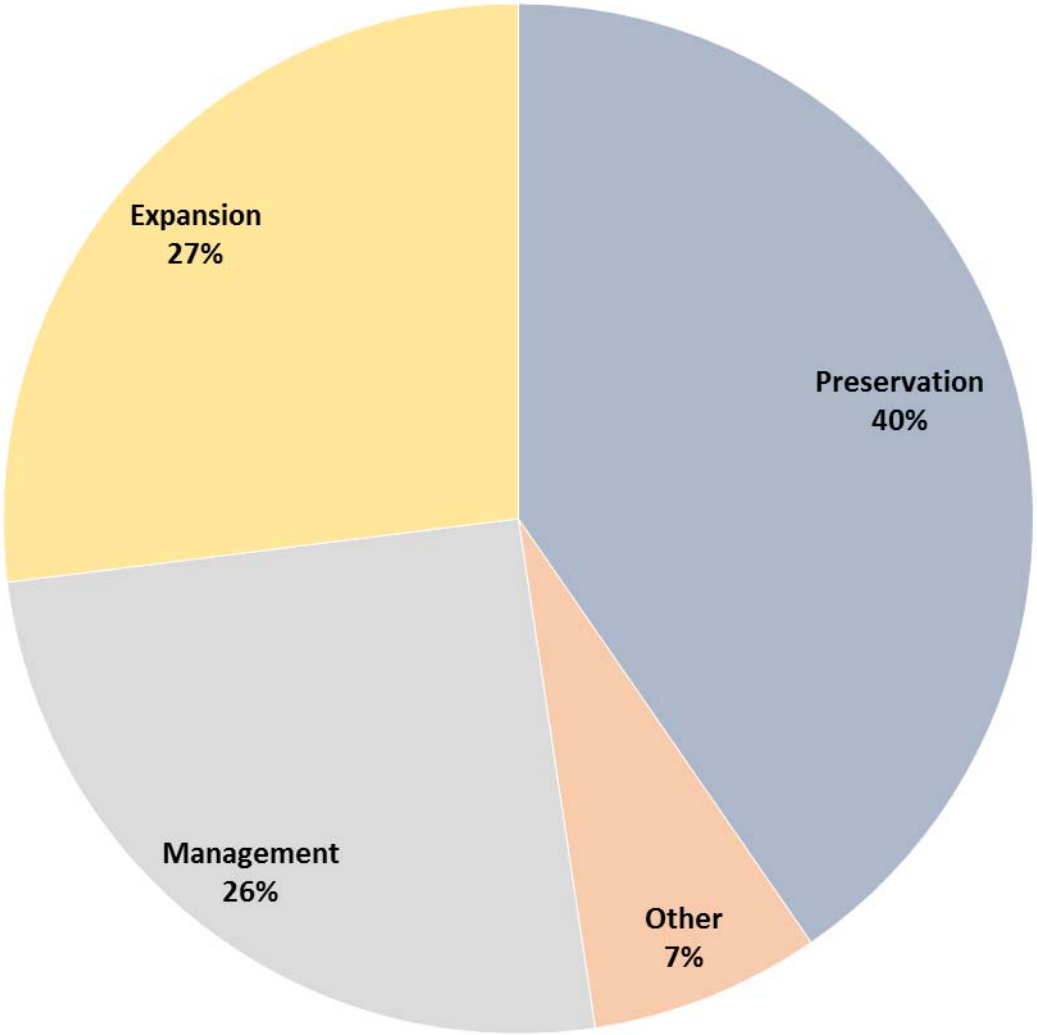
FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	MODE	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
DE	Bridge Preservation / Bridge Painting / Pipe Replacement Programs	Road	100,217.1	70,000.0
NCC	Bridge Structure Rehabilitation	Road	4,880.8	-
NCC	Cantilever and Overhead Sign Structures	Road	8,802.2	-
CC	Cecil County Bridge CE-0042, Mechanics Valley Rd over CSX Railroad	Road	-	-
NCC	Cedar Lane: Marl Pit to Boyds Corner Rd & Marl Pit Int. (S. NCC Imp)	Road	5,193.0	1,900.0
DE	Corridor Capacity Preservation	Road	4,000.0	2,000.0
NCC	I-295 Improvements, Westbound from I-295to US 13	Road	7,000.0	-
NCC	I-495 Lane Extension at I-95, SB	Road	2,900.0	-
NCC	I-95 & SR 896 Interchange Improvements	Road	4,900.0	25,100.0
NCC	I-95 & US 202 Interchange	Road	530.0	-
DE	Industrial Streets	Road	250.0	-
DE	Intersection Improvements	Road	26,400.0	13,200.0
NCC	Interstate Maintenance	Road	3,050.9	-
DE	Materials & Minor Contracts	Road	32,200.0	16,000.0
NCC	Mill Creek Road: Stella Road - Nathalie Drive Slope Stabilization	Road	3,500.0	500.0
DE	Paving & Rehabilitation	Road	305,350.0	160,000.0
DE	Rail Crossing Safety and Rideability	Road	6,652.9	3,223.0
NCC	Rehabilitation of I-95 from I-495 to North of Brandywine River Bridge	Road	31,169.6	115,000.0
NCC	Road A/SR 7 (Road, Bridge and Mall Connector Study)	Road	13,150.0	-
DE	SafetyImprove (Hazard Elim/High Risk Rural Rd/Sect 154/Fut Saf Prog)	Road	33,864.2	20,395.9
DE	Signage & Pavement Markings	Road	21,930.1	10,965.0
NCC	SR 1 Median Barrier Replacement	Road	2,000.0	-
NCC	SR 1 Northbound Auxiliary Lane, US 40 to SR 273	Road	-	-
NCC	SR 1 Widening: Roth Bridge to SR 273	Road	3,595.5	800.0
NCC	SR 1/I-95 Interchange	Road	-	-
NCC	SR 1/SR 72 Diverging Diamond Interchange	Road	5,721.0	-
NCC	SR 141 and Commons Blvd. Intersection SR141: I-95 Interchange to Jay Drive	Road	45,776.4	-
NCC	SR 141/I-95 Interchange - Ramps	Road	35,335.7	-
NCC	SR 9, River Road Flood Remediation	Road	1,200.0	5,500.0
NCC	Tweeds Mill Parking Structure Repairs	Road	979.6	-
NCC	US 301: Maryland Line to SR 1 and GARVEE Debt Service	Road	434,527.3	21,967.3

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	MODE	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
NCC	US 40 and SR 7 Intersection Improvements	Road	2,545.3	-
Road Total			1,329,415.7	489,562.3
NCC	Beech Street Generator	Transit	618.8	-
NCC	Christiana Mall Park and Ride/NCC Transit Center	Transit	3,295.0	1,000.0
NCC	City of Wilmington Bus Stop Beautification	Transit	437.5	-
NCC	Claymont Station	Transit	16,400.0	20,000.0
NCC	Fairplay Station (Churchmans Xing) Elevator	Transit	1,347.7	-
NCC	Fairplay Station Churchman's Crossing Parking Expansion	Transit	-	1,252.0
CC	MARC Maintenance Facility	Transit	5,594.0	-
NCC	Newark Train Station/Regional Transportation Center	Transit	52,205.8	-
NCC	SEPTA New Payment Technology (NPT)	Transit	144.0	-
CC	Small Urban Transit - Capital Assistance	Transit	-	-
CC	Small Urban Transit - Capital Assistance (Section 5307)	Transit	-	-
CC	Small Urban Transit - Capital Assistance (Section 5310)	Transit	90.0	-
CC	Small Urban Transit - Operating Assistance	Transit	1,312.0	-
CC	Susquehanna River Rail Bridge	Transit	3,837.0	-
NCC	Third Rail Track Expansion (NE Corridor Imp., Shipley St BR)	Transit	32,433.1	5,100.0
NCC	Transit (Fixed Route) Vehicle Expansion, NCC	Transit	2,643.2	-
NCC	Transit (Fixed Route) Vehicle Replacement and Refurbishment, NCC	Transit	45,223.2	5,397.5
NCC	Transit (Paratransit) Vehicle Replacement and Refurbishment, NCC	Transit	10,135.4	11,457.3
DE	Transit Facilities, Statewide	Transit	17,185.7	3,580.0
NCC	Transit Preventive Maintenance, NCC	Transit	26,000.0	13,000.0
DE	Transit Vehicles Replace & Refurbish, Statewide	Transit	11,214.3	2,630.5
NCC	Wilmington Transit Facilities	Transit	8,591.5	-
NCC	Wilmington Transit Moving Forward / Christiana Crescent Elevators	Transit	3,950.0	-
NCC	Wilmington UST Replacement - State of Good Repair	Transit	389.4	-
Transit Total			243,047.3	63,417.3
Grand Total			**2,339,918.4**	**888,023.2**

TIP Funding by WILMAPCO Category



- ***Preservation*** – Maintain an existing facility or service
- ***Management –*** Enhance existing facility or service to sustain an acceptable level of service
- ***Expansion*** – New or expanded services and infrastructure
- ***Other--***Engineering & contingency, education & training, environmental program and planning

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	WILMAPCO CATEGORY	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
CC	Areawide Bridge Replacement and Rehabilitation	Preservation	13,240.0	-
CC	Areawide Environmental Projects	Preservation	12,510.0	-
CC	Areawide Resurfacing and Rehabilitation	Preservation	30,700.0	-
CC	Areawide Safety and Spot Improvements	Preservation	21,240.0	-
CC	Areawide Urban Street Reconstruction	Preservation	1,400.0	-
NCC	Beech Street Generator	Preservation	618.8	-
NCC	BR 032 on Foulk Road over S. Branch Naamans Creek	Preservation	858.9	-
NCC	BR 111 on N253 Benge Road over Red Clay Creek	Preservation	923.0	
NCC	BR 148A&B on N330 Greenbank Road over Red Clay Creek	Preservation	922.0	-
NCC	BR 159 on James Street over Christina River	Preservation	5,081.6	-
NCC	BR 191 on Milltown Rd over Mill Creek	Preservation	72.7	-
NCC	BR 227 on Paper Mill Rd over Middle Run Tributary	Preservation	1,089.5	-
NCC	BR 238 on Elizabeth Ct over White Clay Creek Tributary	Preservation	446.0	-
NCC	BR 239 onRed Mill Road over Tributary to White Clay Creek	Preservation	615.0	-
NCC	BR 251 on N355 Harmony Road over White Clay Creek	Preservation	1,840.0	-
NCC	BR 254 Old Newark Rd over Cool Run	Preservation	950.0	-
NCC	BR 291, Songsmith Dr over Tributary to Smalley's Pond	Preservation	935.0	-
NCC	BR 294 on N346 Walther Road over Tributary to Christina River	Preservation	782.0	-
NCC	BR 302 over Toms Creek and BR 304 over Gambles Gut on SR 9	Preservation	1,275.0	-
NCC	BR 308 on N378 Clarks Corner Road over Dragon Run	Preservation	722.0	-
NCC	BR 393 on SR 299 over Appoquinimink River	Preservation	601.9	-
NCC	BR 438, Blackbird Station over Blackbird Creek	Preservation	1,210.0	-
NCC	BR 488S on US 13 SB over Blackbird Creek, South of Odessa	Preservation	4,078.6	-
NCC	BR 501 on Newport Viaduct over Christina River Piers Foundation Repairs	Preservation	5,665.0	-
NCC	BR 501, 501A, 501B on SR 141 Viaduct over SR 4	Preservation	-	-
NCC	BR 543 on Carr Road over Shellpot Creek	Preservation	802.8	-
NCC	BR 567 on Hay Rd over Shellpot Creek	Preservation	2,500.0	-
NCC	BR 577 on Northeast Blvd over Brandywine River	Preservation	4,540.1	-
NCC	BR 634 on SR100 DuPont Road over Delaware Valley RR	Preservation	5,307.5	-
NCC	BR 651 on Newport Road over CSX Railroad	Preservation	744.1	-

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	WILMAPCO CATEGORY	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
NCC	BR 680 on SR 141 over US 13	Preservation	10,200.0	-
NCC	BR 684 on N028 South Heald Street over Norfolk Southern Railroad	Preservation	700.0	200.0
NCC	BR 686 on N029 South Walnut Street over Norfolk Southern Railroad	Preservation	775.0	255.0
NCC	BR 714 on N347 Chapman Road over I-95	Preservation	9,578.7	-
NCC	BR 717 on I-95 NB over SR1	Preservation	5,450.8	-
NCC	BR 759 on I-95 over Brandywine River	Preservation	2,068.6	-
NCC	BR 813 on I-495 over Christina River, Emergency Repairs	Preservation	422.7	-
NCC	BR 814 on 12th Street over NS RR	Preservation	2,510.0	-
DE	Bridge Preservation / Bridge Painting / Pipe Replacement Programs	Preservation	100,217.1	70,000.0
NCC	Bridge Structure Rehabilitation	Preservation	4,880.8	-
CC	Cecil County Bridge CE-0042, Mechanics Valley Rd over CSX Railroad	Preservation	-	-
NCC	City of Wilmington Bus Stop Beautification	Preservation	437.5	-
DE	Community Transportation Fund	Preservation	67,930.0	33,500.0
DE	Dam Preservation Program	Preservation	5,383.5	4,000.0
DE	Equipment	Preservation	40,000.0	20,000.0
NCC	Glenville Wetland Bank & Subdivision Improvements	Preservation	-	-
DE	Industrial Streets	Preservation	250.0	-
NCC	Interstate Maintenance	Preservation	3,050.9	-
DE	Materials & Minor Contracts	Preservation	32,200.0	16,000.0
CC	MD 222 Bridge over Rock Run	Preservation	1,838.0	-
NCC	Mill Creek Road: Stella Road - Nathalie Drive Slope Stabilization	Preservation	3,500.0	500.0
DE	Municipal Street Aid	Preservation	20,000.0	10,000.0
DE	Paving & Rehabilitation	Preservation	305,350.0	160,000.0
NCC	Rehabilitation of I-95 from I-495 to North of Brandywine River Bridge	Preservation	31,169.6	115,000.0
DE	Signage & Pavement Markings	Preservation	21,930.1	10,965.0
CC	Small Urban Transit - Capital Assistance	Preservation	-	-
CC	Small Urban Transit - Capital Assistance (Section 5307)	Preservation	-	-
CC	Small Urban Transit - Capital Assistance (Section 5310)	Preservation	90.0	-
CC	Small Urban Transit - Operating Assistance	Preservation	1,312.0	-
NCC	SR 1 Median Barrier Replacement	Preservation	2,000.0	-
NCC	SR 9, River Road Flood Remediation	Preservation	1,200.0	5,500.0

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	WILMAPCO CATEGORY	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
DE	Statewide Rail Preservation	Preservation	1,200.0	600.0
NCC	Transit (Fixed Route) Vehicle Replacement and Refurbishment, NCC	Preservation	45,223.2	5,397.5
NCC	Transit (Paratransit) Vehicle Replacement and Refurbishment, NCC	Preservation	10,135.4	11,457.3
DE	Transit Facilities, Statewide	Preservation	17,185.7	3,580.0
NCC	Transit Preventive Maintenance, NCC	Preservation	26,000.0	13,000.0
DE	Transit Vehicles Replace & Refurbish, Statewide	Preservation	11,214.3	2,630.5
DE	Transportation Facilities, Statewide	Preservation	36,295.5	12,500.0
NCC	Tweeds Mill Parking Structure Repairs	Preservation	979.6	-
NCC	Wilmington UST Replacement - State of Good Repair	Preservation	389.4	-
Preservation Total			944,739.9	495,085.3
DE	Engineering & Contingency/Education & Training	Other	115,180.0	57,590.0
DE	Environmental Program	Other	2,417.0	1,126.0
DE	Planning	Other	51,837.9	24,511.1
Other Total			169,434.9	83,227.1
DE	Aeronautics, Statewide	Management	2,185.0	980.0
CC	Areawide Congestion Management	Management	3,048.0	-
DE	Bicycle and Pedestrian Improvements	Management	19,434.7	8,000.0
DE	Bridge Management/Inspection/ Design Training Programs	Management	40,905.1	22,556.0
NCC	Cantilever and Overhead Sign Structures	Management	8,802.2	-
NCC	Cedar Lane: Marl Pit to Boyds Corner Rd & Marl Pit Int. (S. NCC Imp)	Management	5,193.0	1,900.0
CC	Chesapeake & Delaware (C&D) CanalTrail - Maryland	Management	-	-
NCC	Christiana Mall Park and Ride/NCC Transit Center	Management	3,295.0	1,000.0
NCC	Claymont Sidewalks: Manor and Myrtle Aves	Management	2,570.0	-
NCC	Claymont Station	Management	16,400.0	20,000.0
DE	Corridor Capacity Preservation	Management	4,000.0	2,000.0
NCC	Fairplay Station (Churchmans Xing) Elevator	Management	1,347.7	-
NCC	Fairplay Station Churchman's Crossing Parking Expansion	Management	-	1,252.0
NCC	Garasches Lane	Management	3,800.0	-
NCC	Grubb Rd: Foulk Rd to SR 92, Pedestrian Imp.	Management	-	-
NCC	Highway Safety Improvement Program, NCC	Management	51,047.4	21,000.0
NCC	I-95 & SR 896 Interchange Improvements	Management	4,900.0	25,100.0

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

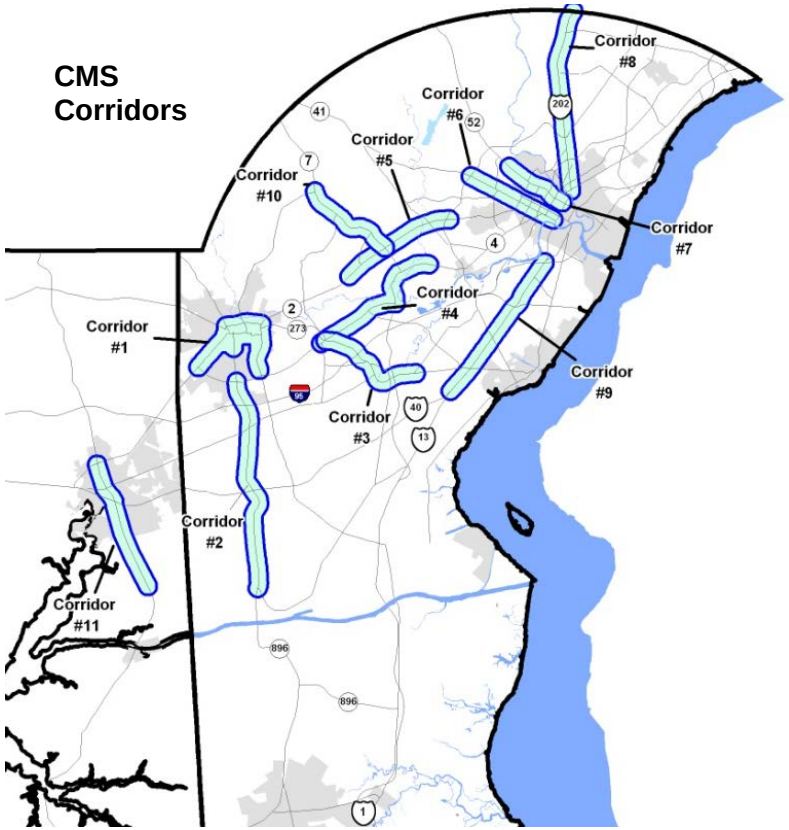
Location	PROJECT TITLE (All $ x 1,000)	WILMAPCO CATEGORY	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
DE	Intersection Improvements	Management	26,400.0	13,200.0
NCC	Jamison Corner Rd Relocated to Boyds Corner Rd	Management	7,839.0	-
CC	MD 272 Bridge over Amtrak	Management	7,562.0	-
NCC	N412, Lorewood Grove Road: Rd 412A to SR 1	Management	3,577.0	6,500.0
NCC	Newark Train Station/Regional Transportation Center	Management	52,205.8	-
NCC	Possum Park Road and Old Possum Park Road Intersection	Management	1,731.6	-
DE	Rail Crossing Safety and Rideability	Management	6,652.9	3,223.0
DE	Recreational Trails	Management	5,650.0	2,500.0
DE	SafetyImprove (Hazard Elim/High Risk Rural Rd/Sect 154/Fut Saf Prog)	Management	33,864.2	20,395.9
NCC	SEPTA New Payment Technology (NPT)	Management	144.0	-
NCC	SR 141 and Commons Blvd. Intersection SR141: I-95 Interchange to Jay Drive	Management	45,776.4	-
NCC	SR 141/I-95 Interchange - Ramps	Management	35,335.7	-
NCC	SR 4, Christina Parkway:SR 2 to SR 896	Management	499.7	500.0
CC	Susquehanna River Rail Bridge	Management	3,837.0	-
DE	Technology	Management	65,556.4	26,587.5
DE	Traffic Calming	Management	600.0	300.0
DE	Transportation Alternatives Program	Management	24,796.4	10,328.0
CC	Transportation Enhancements/Alternatives Program - Cecil County	Management	2,248.5	-
DE	Transportation Management (inc. rideshare and signals)	Management	44,753.8	20,960.0
NCC	US 13, Duck Creek to SR 1	Management	1,500.0	2,700.0
NCC	US 13, Philadelphia Pike: Claymont Plan Implementation	Management	-	-
NCC	US 13: US 40 to Memorial Drive Pedestrian Improvements	Management	3,850.0	3,000.0
NCC	US 40 / SR 72 Intersection	Management	15,834.5	-
NCC	US 40 and SR 7 Intersection Improvements	Management	2,545.3	-
NCC	US 40 and SR 896 Grade Separated Intersection	Management	6,000.0	30,000.0
NCC	Valley Road & Little Baltimore Road	Management	2,375.0	-
NCC	Wilmington Initiatives, King and Orange Streets: MLK Blvd to 13th St	Management	6,650.0	-
NCC	Wilmington Initiatives: 4th St., Walnut St. to I-95	Management	500.0	750.0
NCC	Wilmington Initiatives: Walnut St., MLK to 13th St	Management	1,500.0	5,500.0
NCC	Wilmington Initiatives: Walnut Street: Front Street to 4th Street	Management	1,915.0	-
NCC	Wilmington Riverfront Program (Justison Landing, Development, Rail Relocation, Parking)	Management	2,822.0	286.0

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

Location	PROJECT TITLE (All $ x 1,000)	WILMAPCO CATEGORY	TOTAL FY 2017-20	OUTYEARS TOTAL FY2021-22
NCC	Wilmington Signal Improvements, Phase II	Management	704.0	-
NCC	Wilmington Transit Facilities	Management	8,591.5	-
NCC	Wilmington Transit Moving Forward / Christiana Crescent Elevators	Management	3,950.0	-
Management Total			594,695.8	250,518.5
NCC	Boyds Corner Rd: Cedar Lane to US 13 (S. NCC Imp)	Expansion	3,300.0	10,325.0
NCC	Christina River Bridge and Approaches	Expansion	58,098.2	-
NCC	Elkton Road: Maryland State Line to Casho Mill Rd	Expansion	21,150.2	6,000.0
NCC	I-295 Improvements, Westbound from I-295to US 13	Expansion	7,000.0	-
NCC	I-495 Lane Extension at I-95, SB	Expansion	2,900.0	-
NCC	I-95 & US 202 Interchange	Expansion	530.0	-
CC	MARC Maintenance Facility	Expansion	5,594.0	-
NCC	New Castle to Wilmington Industrial Track Greenway, Phase III	Expansion	14,935.0	-
NCC	Road A/SR 7 (Road, Bridge and Mall Connector Study)	Expansion	13,150.0	-
NCC	SR 1 Northbound Auxiliary Lane, US 40 to SR 273	Expansion	-	-
NCC	SR 1 Widening: Roth Bridge to SR 273	Expansion	3,595.5	800.0
NCC	SR 1/I-95 Interchange	Expansion	-	-
NCC	SR 1/SR 72 Diverging Diamond Interchange	Expansion	5,721.0	-
NCC	SR 299, SR 1 to Catherine Street	Expansion	8,275.4	-
NCC	SR 7: Newtown Road to SR 273	Expansion	200.0	-
NCC	SR 72: McCoy Road to SR 71	Expansion	13,094.9	5,000.0
NCC	Third Rail Track Expansion (NE Corridor Imp., Shipley St BR)	Expansion	32,433.1	5,100.0
NCC	Transit (Fixed Route) Vehicle Expansion, NCC	Expansion	2,643.2	-
NCC	US 301: Maryland Line to SR 1 and GARVEE Debt Service	Expansion	434,527.3	21,967.3
NCC	US 40: Salem Church Road to Walther Road	Expansion	3,900.0	10,000.0
Expansion Total			631,047.8	59,192.3
Grand Total			**2,339,918.4**	**888,023.2**

Integrating the Congestion Management System

Under federal transportation legislation, metropolitan planning areas are required to develop a system wide congestion management process to assist with identifying, analyzing and addressing congestion in the region. Additionally, in areas that are not in attainment of federal air quality standards, such as WILMAPCO's region, a wide range of transportation solutions must be fully investigated and transportation demand strategies implemented wherever feasible before new roadway capacity can be constructed. WILMAPCO's Congestion Management System (CMS) supports the regional transportation planning process by screening the major corridors in our region to determine need and to examine feasible options for improvement. The CMS is multi-modal in that it considers congestion on the regional transit system, as well as the regional roadway system



To facilitate evaluation, a "toolbox" of congestion mitigation measures was assembled that includes all strategies that could be used to address congestion. This strategy "toolbox" was set-up in a hierarchy so that the first strategies take precedence over those below. The general categories for this toolbox are as follows:

WILMAPCO CMS "TOOLBOX" STRATEGIES

Strategy #1: Eliminate car trips or reduce Vehicle Miles Traveled (VMT) during peak congestion hours
Strategy #2: Shift trips from automobile to other modes of transportation
Strategy #3: Shift trips from single-occupancy vehicles to higher-occupancy vehicles (vans, buses, etc.)
Strategy #4: Improve roadway operations (timing of lights, toll booths, highway message boards)
Strategy #5: Add roadway capacity (adding lanes or roads)

This "top-down" approach ensures that solutions which would eliminate or shift auto trips or improve roadway operations are evaluated before adding roadway capacity. This hierarchy is consistent with WILMAPCO's overall goals for the region and with the USDOT charge to address all other possible solutions before recommending road capacity increases.

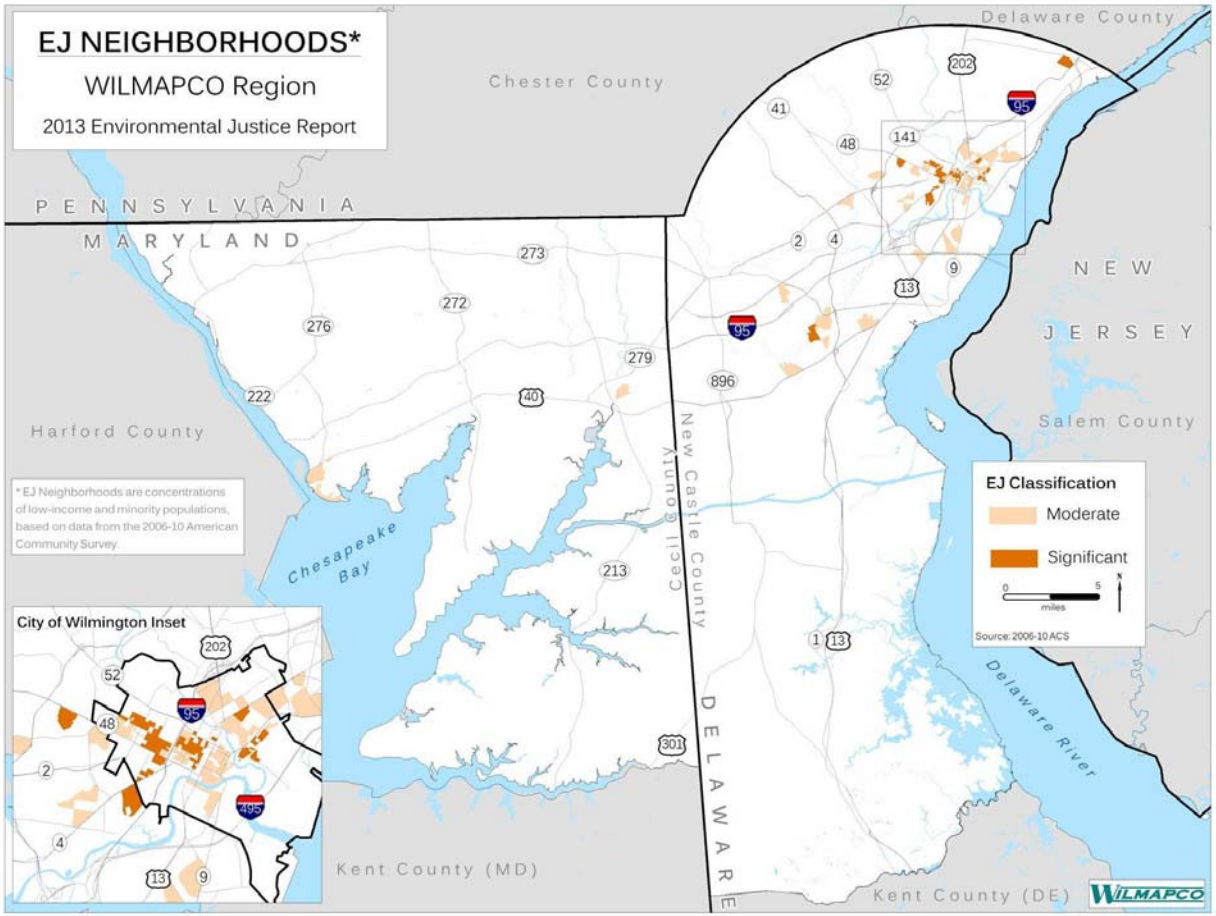
The WILMAPCO Congestion Management System identified 14 corridors in New Castle and Cecil County that met the established criteria for congestion. The following table shows management and expansion projects in each corridor.

CMS Corridor	Project Name	Mitigation Strategy
#1	Elkton Road: MD Line to Casho Mill Rd, Reconstruction, Intersection Improvements	4-1
#1,4,6	Third Rail Track Expansion, Newark to Wilmington	2-1 & 2-3
#2	US 40 and 896 interchange - Grade Separated Intersection	5-2
#3	Road A/SR 7, Widening & reconfiguration of intersections	4-1 & 5-1
#3	SR 7: Newtown Road to SR 273, Widen from 2 to 4 lanes	5-1
#4	Churchman's Crossing, Fairplay Station - Parking Expansion	3-4
#6	Wilmington Riverfront Initiatives	3-4
#6,7,8	Wilmington Signal Improvements, Phase II	4-3
#7	Wilmington Transit Hub (currently unfunded)	2-2, 2-3 & 2-5
#8	I-95 and US 202 Interchange, Widening of Ramp	5-1
#9	I-295 Improvements, from I-295 to US 13	5-1
#10	No projects currently scheduled	----
#11	No projects currently scheduled	----

Addressing Transportation Equity

Transportation Equity, often referred to as Environmental Justice (EJ), is based in Title VI of the Civil Rights Act of 1964 and a 1994 Presidential Executive Order making equity part of the mission of every federal agency. As an MPO, we serve as the forum where DOTs, transit providers, local agencies, state and the public develop local transportation plans and programs for our region. MPO's must carry out three tasks to comply with the Transportation Equity initiative:

- Identify residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed.
- Enhance analytical capabilities for use in the Long Range Plan and the TIP to ensure Title VI requirements are met.
- Evaluate and, where necessary, improve public involvement processes to eliminate participation barriers and include low-income and minority populations in transportation decision making.



To determine where minority and low-income populations are located, a methodology was developed that first defined which population segments should be considered. Guidelines on Environmental Justice provided by the Federal Highway Administration (FHWA) listed the general criteria to use to identify concentrations of Minority / Low Income populations. These criteria are:

- Minority Population
- Hispanic Population
- Low Income (Household Poverty Levels)

In 2007, WILMAPCO completed phase two of our transportation equity analysis which identified "Transportation Justice Areas". This analysis, revised in 2013, 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.

The table below contains a listing of all projects that fall within an identified Environmental Justice or Transportation Justice area.

County	Project Name	EJ	TJ
NCC	Beech St. Generator	Yes	Yes
NCC	BR 585 on N049 Augustine Cutoff over Brandywine Creek	Yes	Yes
NCC	BR 687, 688, 693 Wilmington Drawbridge	Yes	Yes
NCC	Garasches Lane	Yes	Yes
NCC	Interstate Maintenance	Yes	Yes
CC	MD 272 Bridge over Amtrak	Yes	Yes
NCC	Wilmington Initiatives: 4th St., Walnut St. to I-95	Yes	Yes
NCC	Wilmington Initiatives: Walnut St., MLK to 16th St.	Yes	Yes
NCC	Wilmington Signal Improvements, Link to TMC in Smyrna	Yes	Yes
NCC	BR 239 on Red Mill Rd. over Tributary to White Clay Creek	Yes	
NCC	BR 254 Old Newark Rd over Cool Run	Yes	
CC	Small Urban Transit - Capital and Operating Assistance	Yes	
NCC	SR 7: Newtown Road to SR 273, Widen from 2 to 4 lanes	Yes	
NCC	SR 9, New Castle Ave - 3rd St to Heald St, Pavement Reconstruction	Yes	
NCC	Wilmington Operations Center, Operations of Paratransit & Fixed Route	Yes	
NCC	BR 577 on Northeast Blvd over Brandywine River		Yes
NCC	BR 665N & 1-665S on US 13 over Abandon Railroad, Farnhurst		Yes
NCC	BR 748, I-95 Wilmington Viaduct		Yes
NCC	Christina River Bridge Crossing		Yes
NCC	Claymont Transportation Plan Implementation, Safety Improvements		Yes
NCC	NCC Industrial Track Greenway, Phase III		Yes
NCC	Third Rail Track Expansion, Newark to Wilmington		Yes

Comparison of Amended (9/2016) with FY 2017 TIP

New project	Funding restored
Increased funds vs. March FY 2017-20 TIP	Decreased funds vs. March FY 2017-20 TIP
No funds in draft amendements	No funding - complete

	Amendments to FY 2017-2020 Transportation Improvement Program, July 2016							Difference vs. FY 2017-20 TIP, March 2016					
PROJECT TITLE *(All $ x 1,000)*	**FY 2016 TOTAL**	**FY 2017 TOTAL**	**FY 2018 TOTAL**	**FY 2019 TOTAL**	**FY 2020 TOTAL**	**TOTAL FY 2017-20**	**OUTYEARS TOTAL FY2021-22**	**FY 2016 TOTAL**	**FY 2017 TOTAL**	**FY 2018 TOTAL**	**FY 2019 TOTAL**	**FY 2020 TOTAL**	**Difference FY17-20**
DELAWARE- STATEWIDE													
Aeronautics, Statewide	325.3	490.0	790.0	415.0	490.0	2,185.0	980.0	(130.7)	(220.0)	300.0	(75.0)	-	5.0
Bicycle and Pedestrian Improvements	4,530.5	7,434.7	4,000.0	4,000.0	4,000.0	19,434.7	8,000.0	634.1	3,434.7	-	-	1,000.0	4,434.7
Bridge Management/Inspection/ Design Training Programs	6,220.1	11,524.2	10,830.7	9,337.1	9,213.1	40,905.1	22,556.0	(2,356.3)	3,574.2	2,480.7	37.1	(86.9)	6,005.1
Bridge Preservation / Bridge Painting / Pipe Replacement Programs	-	11,507.1	20,320.0	28,440.0	39,950.0	100,217.1	70,000.0	(345.0)	(3,117.9)	3,820.0	6,300.0	5,950.0	12,952.1
Community Transportation Fund	16,750.0	17,680.0	16,750.0	16,750.0	16,750.0	67,930.0	33,500.0	-	930.0	-	-	-	930.0
Corridor Capacity Preservation	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	4,000.0	2,000.0	-	-	-	-	-	-
Dam Preservation Program	474.0	1,033.5	2,150.0	800.0	1,400.0	5,383.5	4,000.0	(1,173.0)	(748.5)	1,400.0	(950.0)	650.0	351.5
Engineering & Contingency/Education & Training	26,636.1	28,795.0	28,795.0	28,795.0	28,795.0	115,180.0	57,590.0	(1,272.1)	1,750.0	1,750.0	1,750.0	1,750.0	7,000.0
Environmental Program	286.8	713.0	578.0	563.0	563.0	2,417.0	1,126.0	(368.0)	-	-	-	-	-
Equipment	22,000.0	10,000.0	10,000.0	10,000.0	10,000.0	40,000.0	20,000.0	2,000.0	-	-	-	-	-
Industrial Streets	250.0	250.0	-	-	-	250.0	-	-	-	-	-	-	-
Intersection Improvements	9,667.4	6,600.0	6,600.0	6,600.0	6,600.0	26,400.0	13,200.0	2,760.0	1,500.0	1,500.0	1,500.0	1,500.0	6,000.0
Materials & Minor Contracts	9,759.7	8,200.0	8,000.0	8,000.0	8,000.0	32,200.0	16,000.0	2,450.0	200.0	-	-	-	200.0
Municipal Street Aid	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	20,000.0	10,000.0	-	-	-	-	-	-
Paving & Rehabilitation	78,800.0	80,350.0	75,000.0	75,000.0	75,000.0	305,350.0	160,000.0	(4,300.0)	350.0	-	-	-	350.0
Planning	14,890.5	15,071.2	12,255.6	12,255.6	12,255.6	51,837.9	24,511.1	(630.0)	2,191.5	(195.4)	104.4	104.4	2,205.0
Rail Crossing Safety and Rideability	1,705.0	1,818.4	1,611.5	1,611.5	1,611.5	6,652.9	3,223.0	(206.7)	206.7	0.0	0.0	(0.0)	206.7
Recreational Trails	1,634.4	1,900.0	1,250.0	1,250.0	1,250.0	5,650.0	2,500.0	-	550.0	117.9	117.9	117.9	903.7
SafetyImprove (Hazard Elim/High Risk Rural Rd/Sect 154/Fut Saf Prog)	6,885.7	5,945.7	5,161.5	11,448.0	11,309.1	33,864.2	20,395.9	(697.3)	1,025.1	155.2	155.2	155.2	1,490.7
Signage & Pavement Markings	5,980.0	5,482.5	5,482.5	5,482.5	5,482.5	21,930.1	10,965.0	497.5	2,000.0	2,000.0	1,710.5	1,710.5	7,421.0
Statewide Rail Preservation	300.0	300.0	300.0	300.0	300.0	1,200.0	600.0	-	-	-	-	-	-
Technology	13,245.8	16,215.3	19,037.4	18,009.9	12,293.8	65,556.4	26,587.5	(862.6)	(1,809.0)	(400.0)	2,531.7	-	322.8
Traffic Calming	151.0	150.0	150.0	150.0	150.0	600.0	300.0	-	-	-	-	-	-
Transit Facilities, Statewide	2,943.8	7,080.7	5,150.0	2,665.0	2,290.0	17,185.7	3,580.0	(241.2)	5,050.7	2,150.0	1,265.0	(10.0)	8,455.7
Transit Vehicles Replace & Refurbish, Statewide	4,262.7	3,004.8	2,825.6	2,673.5	2,710.5	11,214.3	2,630.5	(2,771.3)	(1,714.8)	106.0	78.9	469.1	(1,060.9)
Transportation Alternatives Program	3,183.4	7,949.3	5,171.6	6,511.5	5,164.0	24,796.4	10,328.0	(2,093.6)	4,133.8	1,625.3	2,965.2	1,617.7	10,341.9
Transportation Facilities, Statewide	12,073.0	12,945.5	9,050.0	8,050.0	6,250.0	36,295.5	12,500.0	2,387.8	6,245.5	2,250.0	1,250.0	250.0	9,995.5
Transportation Management (inc. rideshare and signals)	8,013.7	13,403.8	10,450.0	10,450.0	10,450.0	44,753.8	20,960.0	(2,018.2)	2,000.0	500.0	500.0	500.0	3,500.0

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

	Amendments to FY 2017-2020 Transportation Improvement Program, July 2016							Difference vs. FY 2017-20 TIP, March 2016					
NEW CASTLE COUNTY													
Beech Street Generator	55.0	618.8	-	-	-	618.8	-	(0.9)	(0.0)	-	-	-	(0.0)
Boyds Corner Rd: Cedar Lane to US 13 (S. NCC Imp)	-	-	250.0	1,650.0	1,400.0	3,300.0	10,325.0	-	-	-	-	-	-
BR 032 on Foulk Road over S. Branch Naamans Creek	642.8	858.9	-	-	-	858.9	-	(796.5)	858.9	-	-	-	858.9
BR 111 on N253 Benge Road over Red Clay Creek	-	23.0	900.0	-	-	923.0		(19.1)	3.0	400.0	-	-	403.0
BR 148A&B on N330 Greenbank Road over Red Clay Creek	10.9	22.0	900.0	-	-	922.0	-	(10.0)	-	200.0	-	-	200.0
BR 159 on James Street over Christina River	69.9	381.6	700.0	4,000.0	-	5,081.6	-	(1,351.4)	(7,333.3)	(485.0)	4,000.0	-	(3,818.3)
BR 191 on Milltown Rd over Mill Creek	1,147.0	72.7	-	-	-	72.7	-	26.3	72.7	-	-	-	72.7
BR 227 on Paper Mill Rd over Middle Run Tributary	-	89.5	1,000.0	-	-	1,089.5	-	(39.5)	79.5	620.0	-	-	699.5
BR 238 on Elizabeth Ct over White Clay Creek Tributary	-	20.0	426.0	-	-	446.0	-	-	(113.1)	-	-	-	(113.1)
BR 239 onRed Mill Road over Tributary to White Clay Creek	17.1	615.0	-	-	-	615.0	-	-	-	-	-	-	-
BR 251 on N355 Harmony Road over White Clay Creek	69.4	20.0	20.0	1,800.0	-	1,840.0	-	(20.0)	-	(1,780.0)	1,800.0	-	20.0
BR 254 Old Newark Rd over Cool Run	32.8	634.0	316.0	-	-	950.0	-	-	34.0	316.0	-	-	350.0
BR 291, Songsmith Dr over Tributary to Smalley's Pond	28.0	935.0	-	-	-	935.0	-	-	311.0	-	-	-	311.0
BR 294 on N346 Walther Road over Tributary to Christina River	-	22.0	10.0	750.0	-	782.0	-	-	22.0	10.0	750.0	-	782.0
BR 302 over Toms Creek and BR 304 over Gambles Gut on SR 9	-	55.0	20.0	1,200.0	-	1,275.0	-	-	55.0	20.0	1,200.0	-	1,275.0
BR 308 on N378 Clarks Corner Road over Dragon Run	21.2	122.0	600.0	-	-	722.0	-	-	100.0	(100.0)	-	-	-
BR 393 on SR 299 over Appoquinimink River	73.1	601.9	-	-	-	601.9	-	4.0	198.9	-	-	-	198.9
BR 438, Blackbird Station over Blackbird Creek	29.4	1,210.0	-	-	-	1,210.0	-	(25.0)	510.0	-	-	-	510.0
BR 488S on US 13 SB over Blackbird Creek, South of Odessa	21.2	48.6	30.0	4,000.0	-	4,078.6	-	(27.4)	48.6	-	975.0	-	1,023.6
BR 501, 501A, 501B on SR 141 Viaduct over SR 4	554.7	-	-	-	-	-	-	(1,108.6)	(14,400.0)	-	-	-	(14,400.0)
BR 501 on Newport Viaduct over Christina River Piers Foundation Repairs	50.0	645.0	1,020.0	4,000.0	-	5,665.0	-	50.0	645.0	1,020.0	4,000.0	-	5,665.0
BR 543 on Carr Road over Shellpot Creek	7.0	802.8	-	-	-	802.8	-	(28.0)	154.8	-	-	-	154.8
BR 567 on Hay Rd over Shellpot Creek	87.0	2,500.0	-	-	-	2,500.0	-	-	710.0	-	-	-	710.0
BR 577 on Northeast Blvd over Brandywine River	181.0	540.1	4,000.0	-	-	4,540.1	-	(253.0)	282.0	(29.0)	-	-	253.0
BR 634 on SR100 DuPont Road over Delaware Valley RR	547.5	287.5	5,020.0	-	-	5,307.5	-	278.6	87.5	-	-	-	87.5

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

	Amendments to FY 2017-2020 Transportation Improvement Program, July 2016							Difference vs. FY 2017-20 TIP, March 2016					
BR 651 on Newport Road over CSX Railroad	21.0	744.1	-	-	-	744.1	-	-	195.1	-	-	-	195.1
BR 680 on SR 141 over US 13	701.9	700.0	9,500.0	-	-	10,200.0	-	201.9	500.0	4,500.0	-	-	5,000.0
BR 684 on N028 South Heald Street over Norfolk Southern Railroad	200.0	250.0	150.0	150.0	150.0	700.0	200.0	(100.0)	100.0	-	-	-	100.0
BR 686 on N029 South Walnut Street over Norfolk Southern Railroad	250.0	250.0	175.0	175.0	175.0	775.0	255.0	(100.0)	100.0	-	-	-	100.0
BR 714 on N347 Chapman Road over I-95	98.4	1,000.0	578.7	6,000.0	2,000.0	9,578.7	-	(301.6)	665.0	528.7	1,700.0	2,000.0	4,893.7
BR 717 on I-95 NB over SR1	709.0	5,450.8	-	-	-	5,450.8	-	(1,671.0)	3,750.8	-	-	-	3,750.8
BR 759 on I-95 over Brandywine River	631.4	868.6	600.0	600.0	-	2,068.6	-	(268.6)	268.6	-	-	-	268.6
BR 813 on I-495 over Christina River, Emergency Repairs	1,044.1	422.7	-	-	-	422.7	-	694.1	422.7	-	-	-	422.7
BR 814 on 12th Street over NS RR	10.0	-	2,510.0	-	-	2,510.0	-	-	(1,260.0)	1,260.0	-	-	-
Bridge Structure Rehabilitation	2,275.4	4,880.8	-	-	-	4,880.8	-	(5,383.0)	2,485.7	-	-	-	2,485.7
Cedar Lane: Marl Pit to Boyds Corner Rd & Marl Pit Int. (S. NCC Imp)	56.0	585.0	1,658.0	1,250.0	1,700.0	5,193.0	1,900.0	6.0	525.0	318.0	(318.0)	1,200.0	1,725.0
Christiana Mall Park and Ride/NCC Transit Center	46.6	95.0	600.0	1,100.0	1,500.0	3,295.0	1,000.0	(45.0)	(55.0)	-	100.0	-	45.0
City of Wilmington Bus Stop Beautification	62.5	437.5	-	-	-	437.5	-	(437.5)	437.5	-	-	-	437.5
Christina River Bridge and Approaches	2,991.9	17,998.2	24,700.0	15,400.0	-	58,098.2	-	(2,708.1)	8,548.2	1,600.0	300.0	-	10,448.2
Claymont Sidewalks: Manor and Myrtle Aves	401.3	1,820.0	750.0	-	-	2,570.0	-	(380.0)	600.0	(250.0)	-	-	350.0
Claymont Station	300.0	1,200.0	2,500.0	2,700.0	10,000.0	16,400.0	20,000.0	(700.0)	400.0	1,700.0	1,700.0	5,000.0	8,800.0
Cantilever and Overhead Sign Structures	271.6	3,900.0	3,000.0	1,902.2	-	8,802.2	-	(259.0)	1,400.0	500.0	1,402.2	-	3,302.2
Elkton Road: Maryland State Line to Casho Mill Rd	350.2	1,250.2	800.0	1,100.0	18,000.0	21,150.2	6,000.0	(100.0)	191.9	-	-	(6,000.0)	(5,808.1)
Fairplay Station (Churchmans Xing) Elevator	79.5	1,347.7	-	-	-	1,347.7	-	(1,192.3)	1,347.7	-	-	-	1,347.7
Fairplay Station Churchman's Crossing Parking Expansion	-	-	-	-	-	-	1,252.0	-	-	-	-	-	-
Garasches Lane	190.8	600.0	700.0	2,500.0	-	3,800.0	-	(350.0)	-	-	-	-	-
Glenville Wetland Bank & Subdivision Improvements	55.0	-	-	-	-	-	-	55.0	-	-	-	-	-
Grubb Rd: Foulk Rd to SR 92, Pedestrian Imp.	-	-	-	-	-	-	-	-	-	(75.0)	(75.0)	(400.0)	(550.0)
Highway Safety Improvement Program, NCC	5,586.7	19,778.0	20,497.0	6,822.4	3,950.0	51,047.4	21,000.0	(1,621.7)	(28.7)	4,030.7	1,022.4	-	5,024.4
I-295 Improvements, Westbound from I-295to US 13	1.5	-	2,000.0	2,000.0	3,000.0	7,000.0	-	1.5	-	-	(500.0)	500.0	-
I-95 & SR 896 Interchange Improvements	-	1,000.0	1,200.0	1,000.0	1,700.0	4,900.0	25,100.0	(500.0)	-	200.0	-	300.0	500.0
I-95 & US 202 Interchange	3,413.6	530.0	-	-	-	530.0	-	1,579.6	530.0	-	-	-	530.0
I-495 Lane Extension at I-95, SB	-	2,900.0	-	-	-	2,900.0	-	-	2,900.0	-	-	-	2,900.0
Interstate Maintenance	8,077.4	3,050.9	-	-	-	3,050.9	-	4,354.0	2,974.9	-	-	-	2,974.9
Jamison Corner Rd Relocated to Boyds Corner Rd	75.5	7,340.0	499.0	-	-	7,839.0	-	(539.0)	40.0	499.0	-	-	539.0
Mill Creek Road: Stella Road - Nathalie Drive Slope Stabilization	-	-	250.0	250.0	3,000.0	3,500.0	500.0	-	-	250.0	250.0	3,000.0	3,500.0

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

	Amendments to FY 2017-2020 Transportation Improvement Program, July 2016							Difference vs. FY 2017-20 TIP, March 2016					
N412, Lorewood Grove Road: Rd 412A to SR 1	-	30.0	547.0	2,000.0	1,000.0	3,577.0	6,500.0	-	-	2.0	-	-	2.0
New Castle to Wilmington Industrial Track Greenway, Phase III	630.0	9,259.7	5,675.3	-	-	14,935.0	-	-	3,209.7	(324.7)	-	-	2,885.0
Newark Train Station/Regional Transportation Center	2,345.4	4,778.1	22,577.5	14,850.2	10,000.0	52,205.8	-	(1,828.3)	(14,171.7)	(1,472.5)	14,850.2	10,000.0	9,206.0
Possum Park Road and Old Possum Park Road Intersection	-	156.6	85.0	1,490.0	-	1,731.6	-	(131.6)	131.6	(740.0)	740.0	-	131.6
Rehabilitation of I-95 from I-495 to North of Brandywine River Bridge	960.4	2,519.6	1,850.0	1,800.0	25,000.0	31,169.6	115,000.0	(39.6)	1,519.6	750.0	1,200.0	-	3,469.6
Road A/SR 7 (Road, Bridge and Mall Connector Study)	328.5	2,050.0	100.0	100.0	10,900.0	13,150.0	-	(484.0)	470.0	100.0	-	-	570.0
SEPTA New Payment Technology (NPT)	-	144.0	-	-	-	144.0	-	-	144.0	-	-	-	144.0
SR 1/I-95 Interchange	7,393.5	-	-	-	-	-	-	3,724.6	-	-	-	-	-
SR 1 Northbound Auxiliary Lane, US 40 to SR 273	2,495.2	-	-	-	-	-	-	(2,289.8)	-	-	-	-	-
SR 1 Widening: Roth Bridge to SR 273	332.8	1,695.5	1,000.0	400.0	500.0	3,595.5	800.0	(945.5)	1,595.5	-	-	-	1,595.5
SR 1 Median Barrier Replacement	-	2,000.0	-	-	-	2,000.0	-	-	(500.0)	-	-	-	(500.0)
SR 1/SR 72 Diverging Diamond Interchange	3,234.1	5,721.0	-	-	-	5,721.0	-	402.0	721.0	-	-	-	721.0
SR 141/I-95 Interchange - Ramps	3,353.8	18,588.6	16,747.1	-	-	35,335.7	-	(1,938.6)	1,588.6	-	-	-	1,588.6
~~SR 141 and Commons Blvd. Intersection~~ SR141: I-95 Interchange to Jay Drive	1,921.1	576.4	9,200.0	27,000.0	9,000.0	45,776.4	-	-	(200.0)	200.0	9,000.0	(9,000.0)	-
SR 299, SR 1 to Catherine Street	400.0	250.0	1,725.4	3,500.0	2,800.0	8,275.4	-	-	-	55.4	-	-	55.4
SR 4, Christina Parkway:SR 2 to SR 896	3.7	199.7	-	300.0	-	499.7	500.0	(47.6)	(752.4)	(5,000.0)	(9,700.0)	(4,500.0)	(19,952.4)
SR 7: Newtown Road to SR 273	69.4	200.0	-	-	-	200.0	-	(313.2)	200.0	-	-	-	200.0
SR 72: McCoy Road to SR 71	977.4	1,033.7	1,400.0	2,900.0	7,761.2	13,094.9	5,000.0	(797.6)	(1,866.3)	(100.0)	(2,100.0)	-	(4,066.3)
SR 9, River Road Flood Remediation	-	-	-	600.0	600.0	1,200.0	5,500.0	-	-	-	-	-	-
Third Rail Track Expansion (NE Corridor Imp., Shipley St BR)	11,129.4	19,403.6	8,329.5	2,300.0	2,400.0	32,433.1	5,100.0	(7,087.2)	(3,222.8)	6,129.5	-	-	2,906.7
Transit (Fixed Route) Vehicle Expansion, NCC	-	-	950.0	1,693.2	-	2,643.2	-	-	-	(50.0)	70.7	-	20.7
Transit (Fixed Route) Vehicle Replacement and Refurbishment, NCC	169.2	4,096.1	143.4	4,141.4	36,842.4	45,223.2	5,397.5	(661.1)	197.2	31.9	106.9	3,306.3	3,642.2
Transit (Paratransit) Vehicle Replacement and Refurbishment, NCC	5,898.5	3,306.6	2,912.4	3,162.0	754.4	10,135.4	11,457.3	-	(1,278.7)	(275.5)	(364.8)	(105.7)	(2,024.7)
Transit Preventive Maintenance, NCC	6,500.0	6,500.0	6,500.0	6,500.0	6,500.0	26,000.0	13,000.0	-	-	-	-	-	-
Tweeds Mill Parking Structure Repairs	340.0	979.6	-	-	-	979.6	-	(1,412.0)	669.6	-	-	-	669.6
US 13, Duck Creek to SR 1	-	-	400.0	600.0	500.0	1,500.0	2,700.0	-	-	-	-	-	-
US 13, Philadelphia Pike: Claymont Plan Implementation	-	-	-	-	-	-	-	-	-	-	-	(50.0)	(50.0)
US 13: US 40 to Memorial Drive Pedestrian Improvements	150.0	550.0	250.0	600.0	2,450.0	3,850.0	3,000.0	(50.0)	50.0	(450.0)	100.0	450.0	150.0
US 301: Maryland Line to SR 1 and GARVEE Debt Service	105,580.3	159,910.5	159,521.9	104,106.6	10,988.3	434,527.3	21,967.3	(0.3)	-	-	-	-	-

FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

	Amendments to FY 2017-2020 Transportation Improvement Program, July 2016							Difference vs. FY 2017-20 TIP, March 2016					
US 40 and SR 7 Intersection Improvements	19.6	45.3	500.0	2,000.0	-	2,545.3	-	(15.3)	15.3	(250.0)	2,000.0	-	1,765.3
US 40 and SR 896 Grade Separated Intersection	-	1,500.0	1,600.0	1,400.0	1,500.0	6,000.0	30,000.0	(500.0)	-	100.0	400.0	-	500.0
US 40 / SR 72 Intersection	864.3	2,884.5	8,000.0	4,950.0	-	15,834.5	-	(1,320.0)	1,170.0	500.0	(350.0)	-	1,320.0
US 40: Salem Church Road to Walther Road	100.0	1,000.0	900.0	1,000.0	1,000.0	3,900.0	10,000.0	-	-	-	-	-	-
Valley Road & Little Baltimore Road	74.9	200.0	425.0	1,750.0	-	2,375.0	-	(45.9)	75.0	25.0	1,000.0	-	1,100.0
Wilmington Initiatives: 4th St., Walnut St. to I-95	-	-	-	-	500.0	500.0	750.0	-	-	-	-	-	-
Wilmington Initiatives: Walnut Street: Front Street to 4th Street	110.0	252.5	1,662.5	-	-	1,915.0	-	(90.0)	40.0	50.0	-	-	90.0
Wilmington Initiatives: Walnut St., MLK to 13th-St	-	-	-	1,000.0	500.0	1,500.0	5,500.0	-	-	-	-	-	-
Wilmington Initiatives, King and Orange Streets: MLK Blvd to 13th St	50.0	600.0	1,050.0	4,000.0	1,000.0	6,650.0	-	-	-	-	-	-	-
Wilmington Transit Facilities	1,341.1	4,141.5	550.0	3,750.0	150.0	8,591.5	-	(2,579.2)	4,141.5	525.0	3,125.0	150.0	7,941.5
Wilmington Riverfront Program (Justison Landing, Development, Rail Relocation, Parking)	819.7	743.0	1,043.0	893.0	143.0	2,822.0	286.0	329.0	400.0	750.0	750.0	-	1,900.0
Wilmington Signal Improvements, Phase II	1,015.2	704.0	-	-	-	704.0	-	(432.0)	704.0	-	-	-	704.0
Wilmington Transit Moving Forward / Christiana Crescent Elevators	50.0	1,500.0	1,000.0	1,000.0	450.0	3,950.0	-	(950.0)	500.0	-	-	450.0	950.0
Wilmington UST Replacement - State of Good Repair	453.5	389.4	-	-	-	389.4	-	(392.6)	389.4	-	-	-	389.4
CECIL COUNTY													
Areawide Bridge Replacement and Rehabilitation	3,510.0	3,310.0	3,310.0	3,310.0	3,310.0	13,240.0	-	-	-	-	-	-	-
Areawide Congestion Management	660.0	879.0	869.0	650.0	650.0	3,048.0	-	-	-	-	-	-	-
Areawide Environmental Projects	3,630.0	3,150.0	3,120.0	3,120.0	3,120.0	12,510.0	-	-	-	-	-	-	-
Areawide Resurfacing and Rehabilitation	9,050.0	9,050.0	9,050.0	6,300.0	6,300.0	30,700.0	-	-	-	-	-	-	-
Areawide Safety and Spot Improvements	6,210.0	6,210.0	5,010.0	5,010.0	5,010.0	21,240.0	-	-	-	-	-	-	-
Areawide Urban Street Reconstruction	340.0	350.0	350.0	350.0	350.0	1,400.0	-	-	-	-	-	-	-
Cecil County Bridge CE-0042, Mechanics Valley Rd over CSX Railroad	500.0	-	-	-	-	-	-	-	-	-	-	-	-
Chesapeake & Delaware (C&D) CanalTrail - Maryland	360.0	-	-	-	-	-	-	-	-	-	-	-	-
MARC Maintenance Facility	11,008.0	5,594.0	-	-	-	5,594.0	-	6,008.0	594.0	-	-	-	594.0
MD 222 Bridge over Rock Run	854.0	1,800.0	38.0	-	-	1,838.0	-	-	-	-	-	-	-
MD 272 Bridge over Amtrak	7,188.0	5,901.0	1,661.0	-	-	7,562.0	-	-	-	-	-	-	-
Small Urban Transit - Capital Assistance (Section 5310)	20.4	90.0	-	-	-	90.0	-	-	-	-	-	-	-
Small Urban Transit - Capital Assistance (Section 5307)	420.0	-	-	-	-	-	-	-	-	-	-	-	-
Small Urban Transit - Capital Assistance	-	-	-	-	-	-	-	-	-	-	-	-	-

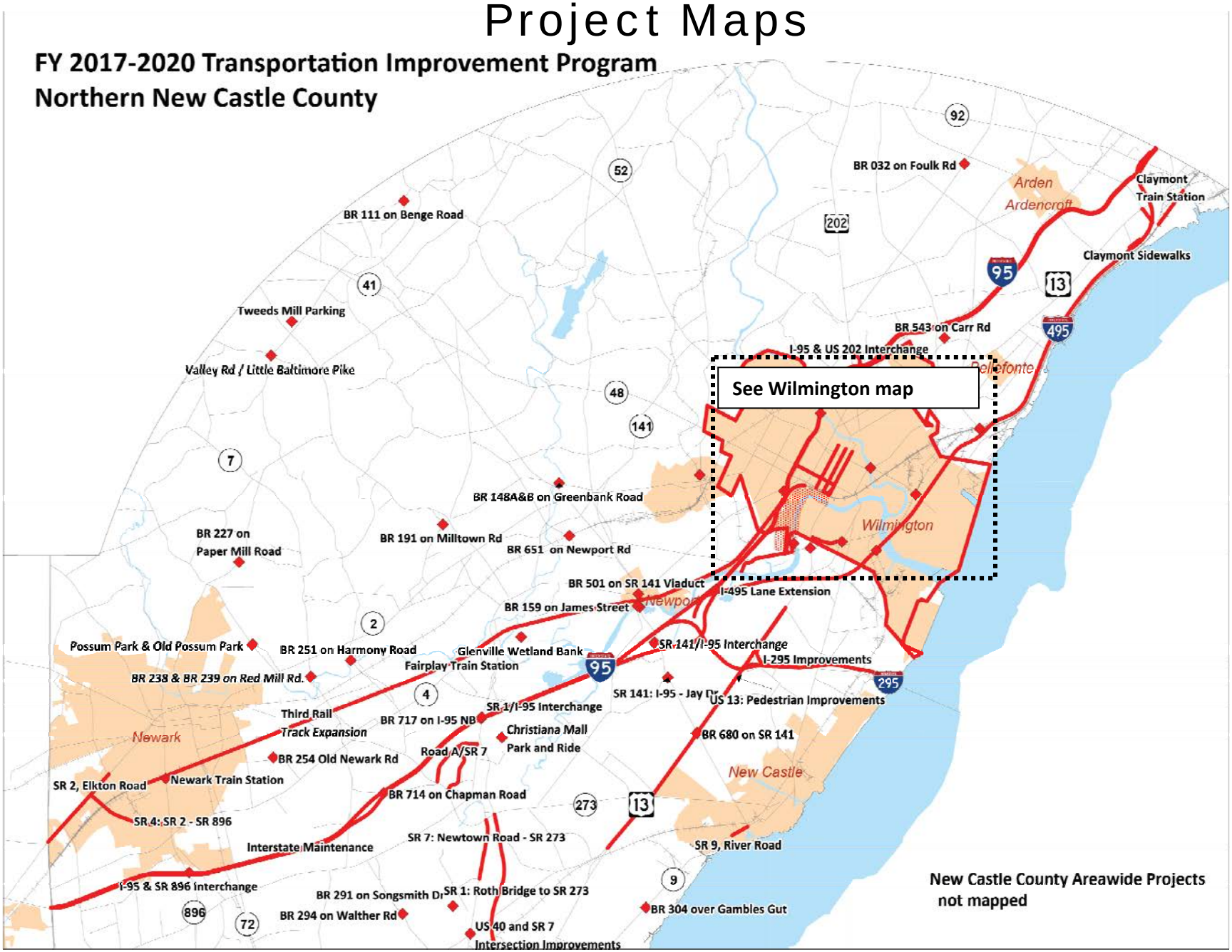
FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

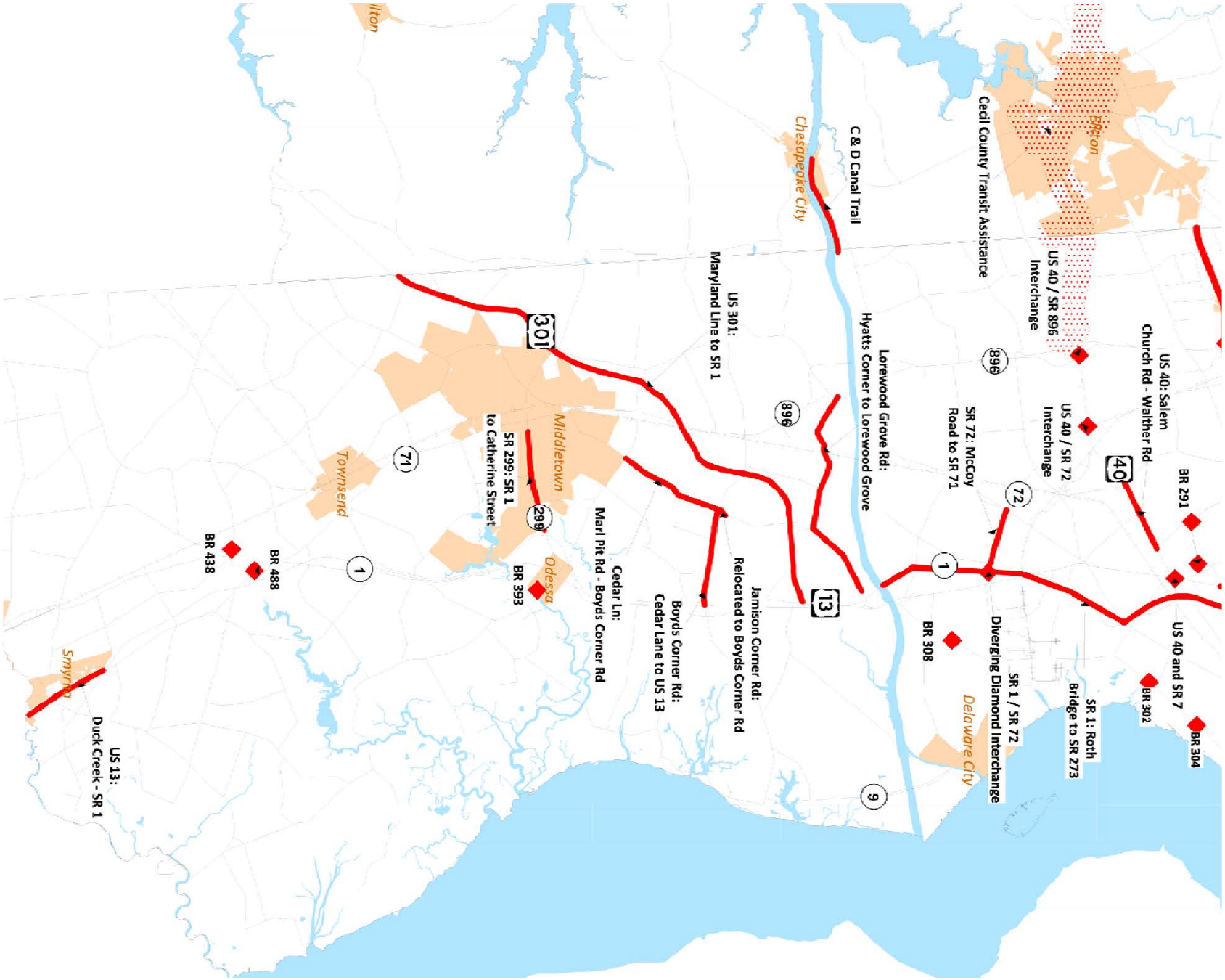
	Amendments to FY 2017-2020 Transportation Improvement Program, July 2016							Difference vs. FY 2017-20 TIP, March 2016					
Small Urban Transit - Operating Assistance	656.0	656.0	656.0	-	-	1,312.0	-	-	-	-	-	-	-
Susquehanna River Rail Bridge	6,500.0	3,337.0	500.0	-	-	3,837.0	-	-	-	-	-	-	-
Transportation Enhancements/Alternatives Program - Cecil County	721.0	1,247.6	640.3	343.6	17.0	2,248.5	-	-	-	-	-	-	-
Delaware Statewide Subtotal	**256,968.6**	**281,844.7**	**267,709.4**	**275,557.5**	**278,278.0**	**1,103,389.6**	**558,033.1**	**(8,736.7)**	**27,531.9**	**19,559.7**	**19,240.9**	**15,677.9**	**82,010.4**
New Castle County Subtotal	**190,657.3**	**347,434.4**	**344,524.7**	**260,135.9**	**179,814.3**	**1,131,909.3**	**329,990.1**	**(32,980.7)**	**5,305.9**	**15,809.5**	**39,134.5**	**6,300.6**	**66,550.5**
Cecil County Subtotal	**51,627.4**	**41,574.6**	**25,204.3**	**19,083.6**	**18,757.0**	**104,619.5**	**-**	**6,008.0**	**594.0**	**-**	**-**	**-**	**594.0**
TOTAL	**499,253.4**	**670,853.7**	**637,438.4**	**554,777.0**	**476,849.3**	**2,339,918.4**	**888,023.2**	**(35,709.4)**	**33,431.9**	**35,369.2**	**58,375.4**	**21,978.5**	**149,154.9**

REMOVED FROM SPREADSHEET DUE TO NO FUNDING OR SCOPE CHANGE
Boyds Corner Park and Ride
BR 110 on N239, Pyles Ford Road
BR 185 on Oak Ridge Road over Hyde Run
BR 424 on Old Corbitt Road, East of Odessa
BR 748, I-95 Wilmington Viaduct
SR 896 and Bethel Church Rd Interchange
Transit (Paratransit) Vehicle Expansion, NCC
US 40 Corridor Intermodal Study
Westown, Wiggins Mill Rd: Green Giant to St Annes
Statewide Lighting

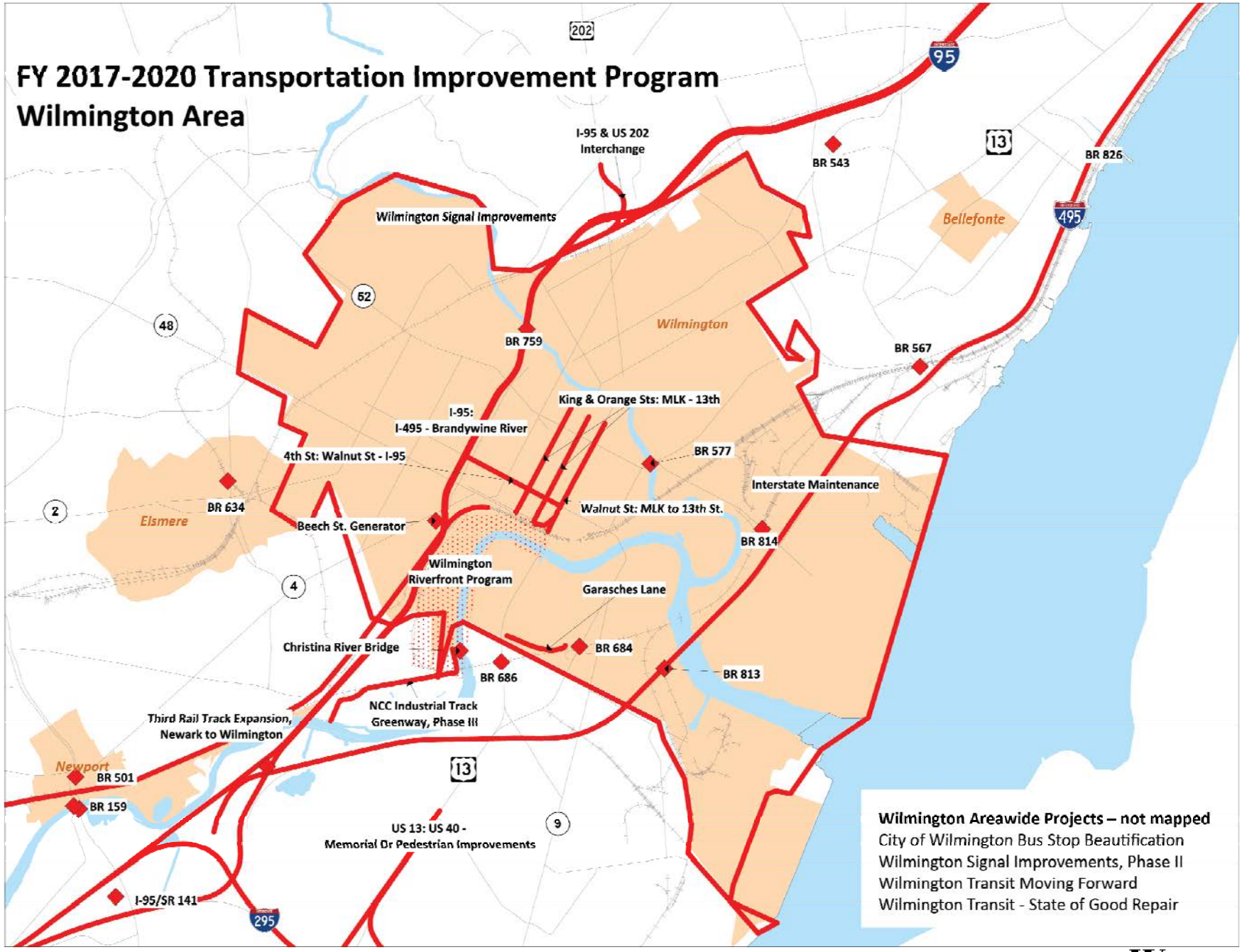
REMOVED FROM SPREADSHEET – COMPLETE
BR 274 on Wedgewood Rd over E. Branch Christina Creek
BR 366 on N399 Chesapeake City Road over Guthrie Run
BR 585 on N049 Augustine Cutoff over Brandywine Creek
BR 665N & 665S on US 13 over Abandon Railroad, Farnhurst
BR 687, 688, 693 Wilmington Drawbridge
BR 826 N & S on I-495 over Stoney Creek
Cavaliers Mitigation
C&D Canal Trail
DTC Mid County Operations Facility Paving
Elkton Road: Casho Mill Rd to Delaware Ave
Glenville Wetland Bank & Subdivision Improvements
Mid County DMV
N412A: Hyetts Corner Rd to Lorewood Grove Rd
Performance Contract
omeroy Trail
Road A and Centre Blvd: Fashion Center Entrance
SR 2, S Union Street: Railroad Bridge to Sycamore St
Talley Rd: East Coast Greenway/Northern DE Greenway
Washington Street, New Castle

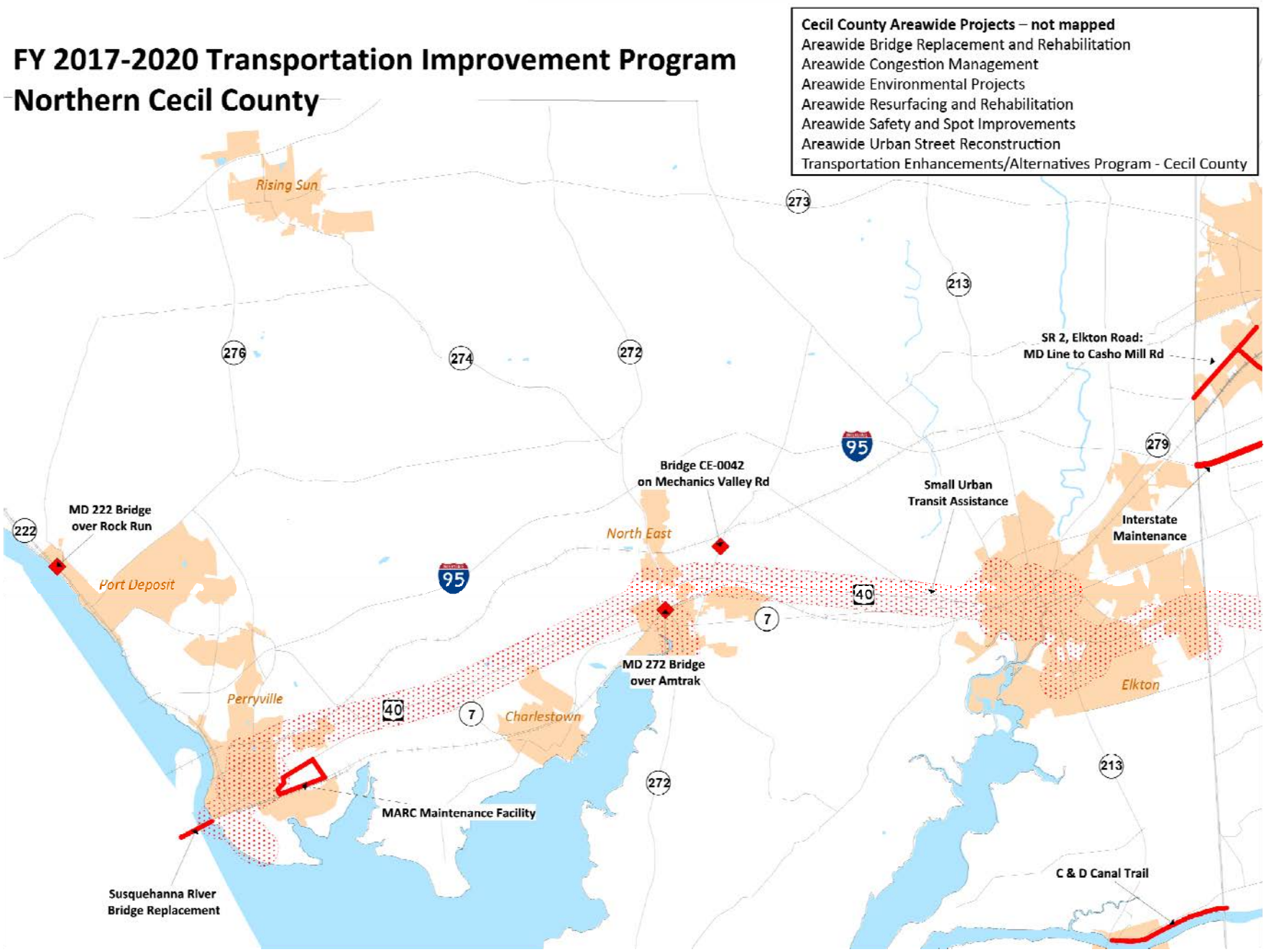
Project Maps





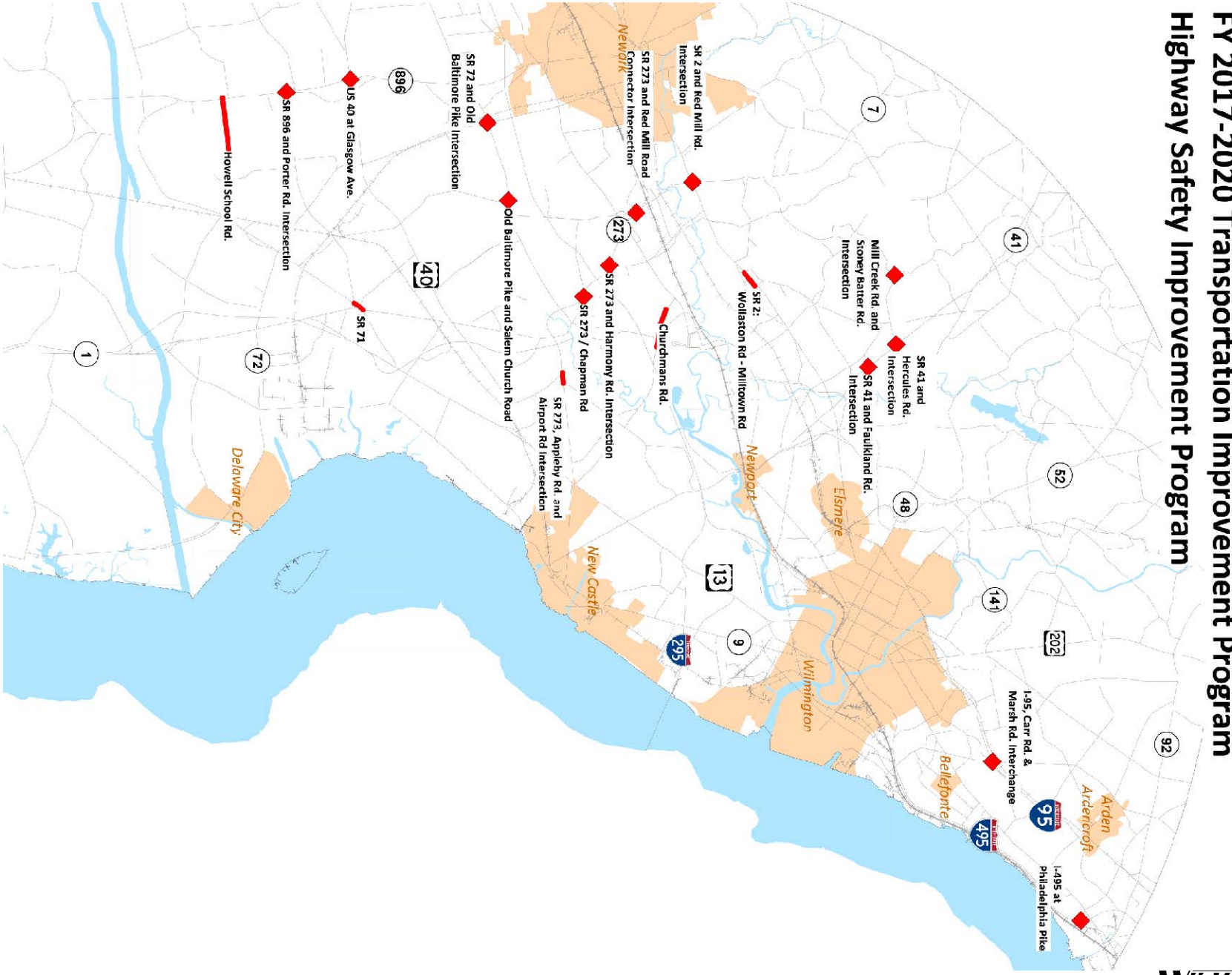
FY 2017-2020 Transportation Improvement Program
Southern WILMAPCO Region


FY 2017-2020 Transportation Improvement Program
Wilmington Area
I-95 & US 202 Interchange
Wilmington Signal Improvements
BR 543
BR 826
Bellefonte
Wilmington
BR 759
BR 567
King & Orange Sts: MLK - 13th
I-95:
I-495 - Brandywine River
4th St: Walnut St - I-95
BR 577
Interstate Maintenance
BR 634
Elsmere
Beech St. Generator
Walnut St: MLK to 13th St.
BR 814
Wilmington Riverfront Program
Garasches Lane
Christina River Bridge
BR 684
BR 686
BR 813
NCC Industrial Track Greenway, Phase III
Third Rail Track Expansion, Newark to Wilmington
Newport
BR 501
BR 159
US 13: US 40 - Memorial Dr Pedestrian Improvements
I-95/SR 141
Wilmington Areawide Projects – not mapped
City of Wilmington Bus Stop Beautification
Wilmington Signal Improvements, Phase II
Wilmington Transit Moving Forward
Wilmington Transit - State of Good Repair


FY 2017-2020 Transportation Improvement Program
Northern Cecil County
Cecil County Areawide Projects – not mapped
Areawide Bridge Replacement and Rehabilitation
Areawide Congestion Management
Areawide Environmental Projects
Areawide Resurfacing and Rehabilitation
Areawide Safety and Spot Improvements
Areawide Urban Street Reconstruction
Transportation Enhancements/Alternatives Program - Cecil County
Rising Sun
273
213
276
274
272
SR 2, Elkton Road:
MD Line to Casho Mill Rd
95
279
Bridge CE-0042
on Mechanics Valley Rd
Small Urban
Transit Assistance
Interstate
Maintenance
MD 222 Bridge
over Rock Run
222
North East
Port Deposit
95
40
7
MD 272 Bridge
over Amtrak
Elkton
Perryville
40
7
Charlestown
213
272
MARC Maintenance Facility
C & D Canal Trail
Susquehanna River
Bridge Replacement

FY 2017-2020 Transportation Improvement Program

Highway Safety Improvement Program



WILMAPCO

Sample TIP Project Page

Investment Area categories are:

Center/Core – Well established areas with the most people and/or jobs. Planned investment emphasizes public transportation, walking and bicycling.

Community – Well established areas with moderate growth and development expected. Planned investment expands and improves existing transportation services and facilities.

Developing – Areas where land uses and development patterns are emerging. Planned investment encourages phased planned growth and rational development.

Rural – Areas where limited growth and development exist or are expected. Planned investment preserves natural resources and existing transportation facilities and services.

Description of project

Why project is being done

Project name

Location map

Icons indicate whether project addresses auto, bicycle, transit or pedestrian modes or historic preservation

Funding source for each project phase by year.

Funding Program
DOT funding category

Functional categories are:

Program Development – Identify a need and decide on a solution

Preservation – Maintain an existing facility or service

Management – Enhance existing facility or service to sustain an acceptable level of service

Expansion – New or expanded services and infrastructure

DRAFT FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

DRAFT 1/19/16

SR 2, ELKTON ROAD: MARYLAND STATE LINE TO SR 273, DELAWARE AVENUE, NEWARK

DESCRIPTION: This project will include roadway reconstruction and intersection improvement. SR 2 from Delaware Avenue to Casho Mill Road is complete. Between Casho Mill Road and the Maryland line, the project includes roadway reconstruction and pedestrian and bicycle improvements. An additional travel lane will be added in each direction from Otts Chapel Road to SR4.

JUSTIFICATION: The roadway surface along this area is crumbling and needs a total reconstruction. The area from Amstel Avenue north of SR 273, Delaware Avenue in Newark has been identified as a Highway Safety Improvement Program (HSIP) site.

County: New Castle
Investment Area: Center
Municipality: Newark
Funding Program: Road System – Arterials
Functional Category: Management/ Expansion
Year Initiated: FY 2004

Project Name	Phase	FY 16 Total	FY17 State	FY17 Fed	FY17 Other	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Elkton Road, MD Line to Casho Mill Road	PE	400.2	0.0	958.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	958.3	0.0
	PE	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ROW	0.0	20.0	80.0	0.0	160.0	640.0	0.0	20.0	80.0	0.0	0.0	0.0	0.0	1,000.0	0.0
	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	200.0	800.0	0.0	4,800.0	19,200.0	0.0	25,000.0	0.0
	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		450.2	20.0	1,038.3	0.0	160.0	640.0	0.0	220.0	880.0	0.0	4,800.0	19,200.0	0.0	26,958.3	0.0

All $ X 1,000

NEW CASTLE COUNTY – SYSTEM MANAGEMENT 2-52

Phases:

- PD: Project Development
- PE: Preliminary Engineering
- ROW: Right of Way Acquisition
- C: Construction
- PRO: Procurement

DELAWARE STATEWIDE

Delaware Statewide Projects are projects applicable to the entire State of Delaware,
such as the Bridge Preservation Program, for which
New Castle County specific funding is not defined.

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING

DESCRIPTION: The Bridge Preservation Program provides for the preservation of over 1,300 bridge structures statewide. Bridges identified for bridge painting; bridge scour; bridge deck preservation; and underwater bridge repairs are addressed through this program. Structure deficiencies are minimized through rehabilitation projects that enhance the longevity of these bridges. As individual bridge projects are identified, they are then listed as separate projects in the capital program.

JUSTIFICATION: The bridge priority rating system is based on deficiency ratings, which are updated annually to target specific bridges for repair/rehabilitation/construction.

County: Statewide
Municipality:
Funding Program: Road System - Bridges
Functional Category: Preservation
Year Initiated: FY 1993 (various name changes)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Design-Build Statewide Pipe Replacements	ROW	-	10.0	40.0	-	10.0	40.0	-	10.0	40.0	-	-	-	-	150.0	-
	CE	-	60.0	240.0	-	120.0	480.0	-	140.0	560.0	-	80.0	320.0	-	2,000.0	-
	C	-	200.0	800.0	-	400.0	1,600.0	-	800.0	3,200.0	-	800.0	3,200.0	-	11,000.0	-
	Util	-	10.0	40.0	-	10.0	40.0	-	10.0	40.0	-	10.0	40.0	-	200.0	-
	Cnt	-	10.0	40.0	-	90.0	360.0	-	100.0	400.0	-	100.0	400.0	-	1,500.0	-
Bridge Painting Program	C	-	-	-	-	600.0	2,400.0	-	600.0	2,400.0	-	600.0	2,400.0	-	9,000.0	6,000.0
Bridge Preservation Program	Pro	-	705.8	9,351.3	-	2,810.0	11,360.0	-	5,000.0	15,140.0	-	8,000.0	24,000.0	-	76,367.1	64,000.0
Total		**0.0**	**995.8**	**10,511.3**	**0.0**	**4,040.0**	**16,280.0**	**0.0**	**6,660.0**	**21,780.0**	**0.0**	**9,590.0**	**30,360.0**	**0.0**	**100,217.1**	**70,000.0**

COMMUNITY TRANSPORTATION FUND

DESCRIPTION: Funding is designated by individual legislators for specific transportation-related projects.

JUSTIFICATION: This fund permits individual legislators to address small transportation projects that may not meet department priorities.

County: Statewide
Municipality:
Funding Program: Grants and Allocations – Community Transportation Fund
Functional Category: Preservation
Year Initiated: FY 1996 (formerly Suburban Streets and Drainage/Suburban Street Fund)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Community Transportation Program	Pro	16,750.0	17,680.0	-	-	16,750.0	-	-	16,750.0	-	-	16,750.0	-	-	67,930.0	33,500.0
Total		**16,750.0**	**17,680.0**	**-**	**-**	**16,750.0**	**-**	**-**	**16,750.0**	**-**	**-**	**16,750.0**	**-**	**-**	**67,930.0**	**33,500.0**

DAM PRESERVATION PROGRAM

DESCRIPTION: Provides emergency planning, monitoring, engineering, and maintenance repairs to state owned dams in partnership with DNREC/DelDOT

JUSTIFICATION: Protects communities and infrastructure.

County: Statewide
Municipality:
Funding Program: Road Systems-Bridge
Functional Category: Preservation
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Dam Preservation Program	Pro	112.5	948.5	-	-	2,150.0	-	-	800.0	-	-	1,400.0	-	-	5,298.5	4,000.0
Statewide Dam H&H Analyses, FY15	PE	131.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statewide Dam H&H Analyses, FY16	PE	230.0	85.0	-	-	-	-	-	-	-	-	-	-	-	85.0	-
Total		**474.1**	**1,033.5**	**0.0**	**0.0**	**2,150.0**	**0.0**	**0.0**	**800.0**	**0.0**	**0.0**	**1,400.0**	**0.0**	**0.0**	**5,383.5**	**4,000.0**

EQUIPMENT

DESCRIPTION: Systematic equipment replacement program for long-life light and heavy equipment used by the department to carry out maintenance and construction jobs. Graders, front-end loaders, rollers, dump trucks, street sweepers, four-wheel drive vehicles, pickup trucks and sewer flushers are typical pieces of equipment.

JUSTIFICATION: As equipment age increases, the maintenance costs for capital assets tend to rise. As these assets near the end of their useful lives, maintenance costs and asset reliability can become prohibitive. This reality has given rise to the concept of economic life, or the age beyond which it is more economical to replace an asset than it is to continue to maintain it. This is a common management practice in private industry.

County: Statewide
Municipality:
Funding Program: Support Systems – Heavy Equipment
Functional Category: Preservation
Year Initiated: FY 1991

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Heavy Equipment Program	Pro	22,000.0	10,000.0	-	-	10,000.0	-	-	10,000.0	-	-	10,000.0	-	-	40,000.0	20,000.0
Total		**22,000.0**	**10,000.0**	**-**	**-**	**10,000.0**	**-**	**-**	**10,000.0**	**-**	**-**	**10,000.0**	**-**	**-**	**40,000.0**	**20,000.0**

MATERIALS AND MINOR CONTRACTS

DESCRIPTION: Examples of capital repairs and minor improvements that would be funded by this program include minor turn lanes at intersections, concrete pavement repairs, repair/replacement of curbs, gutters and sidewalks, traffic control devices (including those necessary for pedestrian, transit and bicycle access), rotomilling, crossover modifications, guardrail installations, and drainage improvements. Annual unit price contracts are issued for various types of work to quickly address specific needs as they are identified. These are projects and programs, which require no acquisition of right-of-way, minimal design, and any location and/or environmental studies or permits. Other improvements include necessary replacements of sign structures, high mast lighting, and traffic signal supports replacements that are identified.

National Pollutant Discharge Elimination System (NPDES): Entities operating stormwater discharge systems in northern Delaware, must meet the requirements of the Federal Water Pollution Control Act (FCWA) with regard to discharges from these systems into federally protected waterways. Most of the requirements relating to satisfying this mandate relate to the proper maintenance and operation of the existing stormwater discharge system.

JUSTIFICATION: Funding is provided to address minor capital problems throughout the year at the maintenance district level.

County: Statewide
Municipality:
Funding Program: Road System – Other
Functional Category: Preservation
Year Initiated: FY 1996

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Materials and Minor Contracts	Pro	9,759.7	8,200.0	-	-	8,000.0	-	-	8,000.0	-	-	8,000.0	-	-	32,200.0	16,000.0
Total		**9,759.7**	**8,200.0**	**-**	**-**	**8,000.0**	**-**	**-**	**8,000.0**	**-**	**-**	**8,000.0**	**-**	**-**	**32,200.0**	**16,000.0**

MUNICIPAL STREET AID

DESCRIPTION: Grants are provided to municipalities to maintain municipal streets and assist in meeting other transportation related needs. These grants are based on population and street mileage for the preceding fiscal year.

JUSTIFICATION: To support our municipalities and maintain and improve their public assets.

County: Statewide
Municipality:
Funding Program: Grants and Allocations – Municipal Street Aid
Functional Category: Preservation
Year Initiated: FY 1996

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Municipal St Aid	Pro	5,000.0	5,000.0	-	-	5,000.0	-	-	5,000.0	-	-	5,000.0	-	-	20,000.0	10,000.0
Total		**5,000.0**	**5,000.0**	**-**	**-**	**5,000.0**	**-**	**-**	**5,000.0**	**-**	**-**	**5,000.0**	**-**	**-**	**20,000.0**	**10,000.0**

PAVING AND REHABILITATION PROGRAM

DESCRIPTION: This program consists of major pavement rehabilitation and pavement resurfacing of state maintained roadways (except for the Community Transportation Fund program). Specific locations are determined after each spring's inspection and paired with new technologies to gain efficiencies.

JUSTIFICATION: These projects are necessary in order to maintain a road inventory that does not become deficient and to improve deteriorating pavement conditions throughout the State.

County: Statewide
Municipality:
Funding Program: Road System – Other
Functional Category: Preservation
Year Initiated: FY 1998

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Paving and Rehabilitation	Pro	78,800.0	57,550.0	22,800.0	-	55,200.0	19,800.0	-	54,200.0	20,800.0	-	55,200.0	19,800.0	-	305,350.0	160,000.0
Total		**78,800.0**	**57,550.0**	**22,800.0**	**-**	**55,200.0**	**19,800.0**	**-**	**54,200.0**	**20,800.0**	**-**	**55,200.0**	**19,800.0**	**-**	**305,350.0**	**160,000.0**

RAIL PRESERVATION

DESCRIPTION: This project will conduct preventative maintenance to sustain and upgrade the condition of rail corridors statewide.

JUSTIFICATION: This project preserves Delaware's competitive position by maintaining its current industrial and agricultural base, thereby retaining employers in the state, reducing truck traffic on Delaware highways, enhancing highway safety and reducing investment in highway infrastructure.

County: Statewide
Municipality:
Funding Program: Transit - Rail
Functional Category: Preservation
Year Initiated: FY 1996

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Rail Preservation	C	300.0	300.0	-	-	300.0	-	-	300.0	-	-	300.0	-	-	1,200.0	600.0
Total		**300.0**	**300.0**	**-**	**-**	**300.0**	**-**	**-**	**300.0**	**-**	**-**	**300.0**	**-**	**-**	**1,200.0**	**600.0**

TRANSIT FACILITIES, DELAWARE STATEWIDE

DESCRIPTION: This project identified for the preservation of transit facilities could include but is not limited to replacement of security cameras, tools, and equipment.

JUSTIFICATION: To enhance transit use and encourage movement of people and goods through other than single occupant vehicles.

County: Statewide
Municipality
Funding Program: Transit – Transit Facilities
Functional Category: Preservation
Year Initiated: FY 1994

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Bus Shelter Glass Replacement - FTA State of Good	C	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bus Stop ADA Accessibility - FTA State of Good Repair Grant	CE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	25.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	441.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bus Stop Improvement Program	Pro	500.0	500.0	-	-	750.0	-	-	750.0	-	-	750.0	-	-	2,750.0	1,500.0
CAD/AVL Modem Upgrade	Pro	-	500.0	-	-	225.0	-	-	100.0	-	-	-	-	-	825.0	-
CAD/AVL System and Trapeze Upgrade	Proc	-	-	-	-	475.0	-	-	475.0	-	-	200.0	-	-	1,150.0	-
Call Center Recorder and Upgrade	PD	24.0	36.0	-	-	-	-	-	-	-	-	-	-	-	36.0	-
Fuel Management Software System	C	-	750.0	-	-	600.0	-	-	-	-	-	-	-	-	1,350.0	-
Statewide Transit Safety and Security Improvements	Proc	250.0	750.0	-	-	500.0	-	-	500.0	-	-	500.0	-	-	2,250.0	1,000.0
Transit Facility Minor Capital Projects	Pro	645.0	800.0	-	-	500.0	-	-	500.0	-	-	500.0	-	-	2,300.0	1,000.0
Transit Systems Equipment	PD	136.4	267.6	-	-	80.0	-	-	40.0	-	-	40.0	-	-	427.6	80.0
Yard Management System & Equipment	PD	-	-	-	-	500.0	-	-	300.0	-	-	300.0	-	-	1,100.0	-
Propane Fueling Stations	C	-	300.0	-	-	-	-	-	-	-	-	-	-	-	300.0	-
Inventory Bar coding	C	130.0	30.0	-	-	-	-	-	-	-	-	-	-	-	30.0	-
Snow Blowers - Statewide	PE	-	-	-	-	100.0	-	-	-	-	-	-	-	-	100.0	-
	C	-	-	-	-	500.0	-	-	-	-	-	-	-	-	500.0	-
Park & Ride Hub Restroom Installation	C	-	300.0	-	-	-	-	-	-	-	-	-	-	-	300.0	-
Absence Management	ProcC	-	-	-	-	120.0	-	-	-	-	-	-	-	-	120.0	-
Traveler Information Signage	ProcC	-	100.0	-	-	100.0	-	-	-	-	-	-	-	-	200.0	-
Control Center Dispatch Statewide	C	220.0	120.0	-	-	-	-	-	-	-	-	-	-	-	120.0	-
CAD/AVL	Proc	558.0	365.4	1,461.6	-	-	-	-	-	-	-	-	-	-	1,827.0	-
Total		**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**	**2,943.9**

TRANSPORTATION FACILITIES

DESCRIPTION: This funding allows for regular maintenance and inspection of existing transportation facilities and support of new facilities.

JUSTIFICATION: Considerable effort over the next six years will begin to accomplish a goal to provide comparable facilities evenly across the state to meet the set criteria for employee needs as well as facilities to meet mission requirements, especially for emergencies. The primary focus in the beginning is on projects that have the most benefit for employees.

North District – Bear Facility

County: Statewide
Funding Program: Support Systems – Transportation Facilities
Functional Category: Preservation
Year Initiated: FY 1991

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Transportation Facilities - Administration	Pro	718.3	3,945.5	-	-	1,050.0	-	-	1,050.0	-	-	1,250.0	-	-	7,295.5	2,500.0
Transportation Facilities - Operations	Pro	11,354.8	9,000.0	-	-	8,000.0	-	-	7,000.0	-	-	5,000.0	-	-	29,000.0	10,000.0
Total		**12,073.1**	**12,945.5**	**0.0**	**0.0**	**9,050.0**	**0.0**	**0.0**	**8,050.0**	**0.0**	**0.0**	**6,250.0**	**0.0**	**0.0**	**36,295.5**	**12,500.0**

TRANSIT VEHICLE REPLACEMENT AND REFURBISHMENT, STATEWIDE

DESCRIPTION: This project includes the purchase of additional buses and support transit vehicles to be used in accordance with the Delaware Department of Transportation (DelDOT)/Delaware Transit Corporation (DTC) approved vehicle replacement schedule, business plan and service plan. This project also includes the replacement of support and diagnostic equipment for fixed route and paratransit bus maintenance. Major equipment supported by this project includes engine and transmission diagnostic equipment, engine service kits, tire maintenance equipment, brake lathes, hydraulic dollies, transmission jack, jib crane, and specialized tools required to maintain vehicle systems.

JUSTIFICATION: This project is necessary to meet the projected vehicle replacement schedule statewide.

County: Statewide
Funding Program: Transit System – Vehicles
Functional Category: Preservation
Year Initiated: FY 1991

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Fare Collection Improvements	Proc	-	800.0	-	-	700.0	-	-	-	-	-	-	-	-	1,500.0	-
Job Access Reverse Commute (JARC) Program	Pro	681.9	-	340.9	340.9	-	340.9	340.9	-	340.9	340.9	-	340.9	340.9	2,727.4	1,363.7
Maintenance Equipment and Tools (Transit) Program	Proc	142.5	128.0	-	-	194.1	-	-	182.0	-	-	184.0	-	-	688.1	301.0
New Freedom Program Statewide 50/50	Plan	539.9	-	240.0	240.0	-	240.0	240.0	-	240.0	240.0	-	240.0	240.0	1,920.0	960.0
Radio Replacement (Hand Held)	Proc	-	245.3	-	-	-	-	-	-	-	-	-	-	-	245.3	-
Taxi Pilot Equipment Start-up	Proc	-	140.0	-	-	140.0	-	-	-	-	-	-	-	-	280.0	-
Transit Vehicle Replacement 5310 Program - Statewide	Proc	1,579.7	741.7	587.9	-	741.7	587.9	-	741.7	587.9	-	741.7	587.9	-	5,318.4	2,659.2
Paratransit Replacement Buses FY15 (11)	Proc	1,293.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transit Vehicles - Support Vehicles - Statewide	Proc	25.3	-	-	-	-	-	-	-	-	-	35.0	-	-	35.0	-
Total		**4,262.7**	**1,255.0**	**1,168.8**	**580.9**	**1,075.8**	**1,168.8**	**580.9**	**923.7**	**1,168.8**	**580.9**	**960.7**	**1,168.8**	**580.9**	**11,214.2**	**5,283.9**

AERONAUTICS, STATEWIDE

DESCRIPTION: Supports general aviation in the State through safety inspections and obstruction removal at public-use airports and improvements to publicly owned airports such as the Civil Air Terminal, the Sussex County Airport, and the Delaware Air Park.

JUSTIFICATION: Preserve the integrity of the current system and increase opportunity for passenger and commercial aircraft use.

County: Statewide
Funding Program: Support System – Aeronautics
Functional Category: Management
Year Initiated: FY 2004

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Aeronautics Planning	Pro	176.0	16.5	148.5	-	16.5	148.5	-	16.5	148.5	-	21.0	189.0	-	705.0	420.0
Aeronautics Program Development	Pro	149.3	325.0	-	-	625.0	-	-	250.0	-	-	280.0	-	-	1,480.0	560.0
Total		**325.3**	**341.5**	**148.5**	**0.0**	**641.5**	**148.5**	**0.0**	**266.5**	**148.5**	**0.0**	**301.0**	**189.0**	**0.0**	**2,185.0**	**980.0**

BICYCLE, PEDESTRIAN AND OTHER IMPROVEMENTS

DESCRIPTION: Supports completion of a statewide network of pedestrian and bicycle pathways, bicycle routes and pedestrian connections.

JUSTIFICATION: Promotes travel by nonmotorized modes for reduced congestion, active transportation choices, access to recreation, and reduced vehicle emissions.

County: Statewide
Funding Program: Road system - other
Functional Category: Management
Year Initiated: FY 2012

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Bicycle, Pedestrian and other Improvements	C	4,530.5	1,243.5	6,191.2	-	800.0	3,200.0	-	800.0	3,200.0	-	800.0	3,200.0	-	19,434.7	8,000.0
Total		**4,530.5**	**1,243.5**	**6,191.2**	**-**	**800.0**	**3,200.0**	**-**	**800.0**	**3,200.0**	**-**	**800.0**	**3,200.0**	**-**	**19,434.7**	**8,000.0**

BRIDGE MANAGEMENT PROGRAM

DESCRIPTION: The Bridge Management Program provides for routine bridge inspections that identify maintenance level improvements and items requiring more extensive repair. This bridge analysis becomes the basis for developing the Bridge Preservation project list.

The Bridge Inspection Program provides safety inspection services, software, training, load testing, inspection equipment and other incidentals required to perform bridge safety inspections to conduct FHWA mandated Bridge Safety Inspections.

JUSTIFICATION: The bridge management program identifies deficient bridges and funding for preliminary engineering, right-of-way, and construction in the Bridge Projects section. As individual bridge projects are identified, they are then listed as separate projects in the capital program.

County: Statewide
Municipality:
Funding Program: Road System - Bridges
Functional Category: Management
Year Initiated: FY 1993, various names including Bridge Inspection Program and part of Bridge Preservation Program

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Bridge Inspection Program	PE	3,632.1	460.7	4,045.5	-	708.1	3,424.6	-	977.3	3,243.2	-	1,006.3	3,090.1	-	16,955.8	8,322.7
Bridge Management	Pro	2,270.8	1,305.3	5,687.9	-	1,467.1	5,230.9	-	1,153.3	3,963.3	-	1,153.3	3,963.3	-	23,924.5	14,233.3
Bridge Design Training Program	PE	317.2	-	24.8	-	-	-	-	-	-	-	-	-	-	24.8	-
Total		**6,220.1**	**1,766.0**	**9,758.2**	**0.0**	**2,175.2**	**8,655.5**	**0.0**	**2,130.6**	**7,206.5**	**0.0**	**2,159.6**	**7,053.4**	**0.0**	**40,905.1**	**22,556.0**

CORRIDOR CAPACITY PRESERVATION

DESCRIPTION: The corridor capacity preservation program has four main goals: maintain a road's ability to handle traffic efficiently and safely; minimize the transportation impacts of increased economic growth; preserve the ability to make future transportation-related improvements as needed; and prevent the need to build an entirely new road. In accordance with these goals, there are several techniques and methods used to preserve the capacity of a transportation corridor. As part of the subdivision review process, the department manages access for new development by requiring entrances onto secondary or frontage roads, as opposed to direct access on to a main highway. Where applicable, shared entrances are also encouraged. As part of the program, the department can purchase property access rights, development rights, or properties in whole, in order to make needed transportation improvements or preserve the corridor's capacity. The program may also include individual improvements such as frontage roads, intersection improvements and overpasses.

In addition to preserving capacity on selected corridors, funds are also used for selected early property acquisitions for proposed projects (those under program development or design) where, under current procedures, it is determined to be in the best interest of the State to purchase (protect) property subject to development and/or when a property owner hardship is identified. This is done in cases where a project has a high probability of proceeding to construction, but has not yet proceeded to a point in design where final right-of-way plans have been developed or funds have been authorized for the right-of-way phase.

JUSTIFICATION: Capacity is maintained along transportation corridors and permits protective buying and hardship acquisitions involving projects under program development or design.

County: Statewide
Municipality:
Funding Program: Road System
Functional Category: Management
Year Initiated:

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Corridor Capacity Preservation	ROW	1,000.0	1,000.0	-	-	1,000.0	-	-	1,000.0	-	-	1,000.0	-	-	4,000.0	2,000.0
Total		**1,000.0**	**1,000.0**	**-**	**-**	**1,000.0**	**-**	**-**	**1,000.0**	**-**	**-**	**1,000.0**	**-**	**-**	**4,000.0**	**2,000.0**

INTERSECTION IMPROVEMENTS

DESCRIPTION: Funding is requested for projects that will involve the selection and improvement of signage statewide, as well as evaluation of corridor signing.

JUSTIFICATION: These improvements are federally mandated safety programs and intersection programs that provide safe turning movements and alleviate congestion.

County: Statewide
Funding Program: Road System
Functional Category: Management
Year Initiated: FY 1997

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Intersection Improvements	Pro	9,667.4	3,500.0	2,500.0	600.0	3,500.0	2,500.0	600.0	3,500.0	2,500.0	600.0	3,500.0	2,500.0	600.0	26,400.0	13,200.0
Total		**9,667.4**	**3,500.0**	**2,500.0**	**600.0**	**3,500.0**	**2,500.0**	**600.0**	**3,500.0**	**2,500.0**	**600.0**	**3,500.0**	**2,500.0**	**600.0**	**26,400.0**	**13,200.0**

RAIL CROSSING SAFETY

DESCRIPTION: Rail Crossing Safety Projects involve the selection of safety improvements at highway/rail crossings throughout the state, as identified by the Safety Rail Improvement Program.

JUSTIFICATION: Federally mandated safety and intersection programs provide safe turning movements and alleviate congestion.

County: Statewide
Funding Program: Road System
Functional Category: Management
Year Initiated: FY 1994

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Rail Crossing Safety	PD	90.0	9.0	81.0	-	9.0	81.0	-	9.0	81.0	-	9.0	81.0	-	360.0	180.0
	C	1,215.0	321.7	1,306.7	-	321.5	1,100.0	-	321.5	1,100.0	-	321.5	1,100.0	-	5,892.9	2,843.0
Statewide Railroad Rideability Program	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	400.0	100.0	-	-	100.0	-	-	100.0	-	-	100.0	-	-	400.0	200.0
Total		**1,705.0**	**430.7**	**1,387.7**	**0.0**	**430.5**	**1,181.0**	**0.0**	**430.5**	**1,181.0**	**0.0**	**430.5**	**1,181.0**	**0.0**	**6,652.9**	**3,223.0**

RECREATIONAL TRAILS

DESCRIPTION: Provides funding for Recreational Trails throughout Delaware

JUSTIFICATION: Develop recreational trails for transportation and recreation.

County: Statewide
Municipality:
Funding Program: Road System
Functional Category: Management
Year Initiated: FY 2007

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Recreational Trails	Pro	1,634.4	-	1,520.0	380.0	-	1,000.0	250.0	-	1,000.0	250.0	-	1,000.0	250.0	5,650.0	2,500.0
Total		**1,634.4**	**-**	**1,520.0**	**380.0**	**-**	**1,000.0**	**250.0**	**-**	**1,000.0**	**250.0**	**-**	**1,000.0**	**250.0**	**5,650.0**	**2,500.0**

SAFETY IMPROVEMENTS

DESCRIPTION: Project includes:

- **Hazard Elimination Program -** To identify locations and reduce the severity and frequency of crashes. This is done through identifying locations and crash patterns, conducting field studies, and developing potential solutions. Improvement alternatives are developed that include low cost safety improvements such as signing, pavement marking and/or traffic signal upgrades.
- **High Risk Rural Roads Program** –To identify locations and reduce the severity and frequency of crashes on rural roadways where the crash rate for fatalities and incapacitating injuries exceeds average crash rates. Improvement alternatives are developed that include low cost safety improvements such as signing, pavement marking and/or traffic signal upgrades, which typically do not require full design or right-of-way acquisition.
- **Section 154 Penalty Transfer -** Annually, Federal Transportation Funds apportioned to the State of Delaware are sanctioned by the Federal Highway Administration because Delaware's Open-Container laws are not compliant with Federal requirements. The funds that are sanctioned from Delaware's overall apportionment are transferred to the Highway Safety Improvement Program (65%) and to the Office of Highway Safety (35%). This program utilizes the 65% of the funds for Delaware's Highway Safety Improvement Program.

JUSTIFICATION: Federally mandated safety and intersection programs provide safe turning movements and alleviate congestion.

County: Statewide
Funding Program: Road System
Functional Category: Management
Year Initiated: FY 1998

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Hazard Elimination Program	Pro	3,882.1	244.4	2,200.0	-	244.4	2,200.0	-	244.4	2,200.0	-	244.4	2,200.0	-	9,777.8	4,888.9
High Risk Rural Rds Program	Pro	905.0	21.2	190.1	-	59.4	237.5	-	-	-	-	-	-	-	508.1	-
Safety Program 80/20	C	-	-	-	-	-	-	-	450.0	1,800.0	-	500.0	2,000.0	-	4,750.0	5,000.0
Safety Program 90/10	ROW	-	-	-	-	-	-	-	88.9	800.0	-	-	-	-	888.9	-
	C	-	-	-	-	-	-	-	344.4	3,100.0	-	394.4	3,550.0	-	7,388.9	5,666.7
Section 154 Penalty Transfer (Sanction) Program	Pro	2,098.7	-	3,290.0	-	-	2,420.2	-	-	2,420.2	-	-	2,420.2	-	10,550.6	4,840.4
Total		**6,885.8**	**265.6**	**5,680.1**	**0.0**	**303.8**	**4,857.7**	**0.0**	**1,127.7**	**10,320.2**	**0.0**	**1,138.8**	**10,170.2**	**0.0**	**33,864.3**	**20,396.0**

SIGNAGE AND PAVEMENT MARKINGS

DESCRIPTION: The signage projects involve the need for statewide improvements of signage throughout the state. The goal is to enable not only visitors, but also residents a clear path with appropriate directional signs and eliminate confusion.

JUSTIFICATION: These improvements will help improve the safety and ease of negotiation of the road system for the traveling public.

County: Statewide
Funding Program: Road System
Functional Category: Management
Year Initiated: FY 2004

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Signage and Pavement Markings	Pro	5,980.0	4,000.0	1,482.5	-	4,000.0	1,482.5	-	4,200.0	1,282.5	-	4,200.0	1,282.5	-	21,930.1	10,965.0
Total		**5,980.0**	**4,000.0**	**1,482.5**	**-**	**4,000.0**	**1,482.5**	**-**	**4,200.0**	**1,282.5**	**-**	**4,200.0**	**1,282.5**	**-**	**21,930.1**	**10,965.0**

TECHNOLOGY

DESCRIPTION: The Office of Information Technology (OIT) provides effective management tools for efficient computer operations throughout the department.

Project includes funds for:

- Disadvantaged Business Enterprise
- Information Technology Initiatives
- Records Management
- DMV System
- On the Job Training
- Summer Transportation Institute

JUSTIFICATION: These projects upgrade applications and equipment to enhance all modes of transportation services statewide.

County: Statewide
Municipality:
Funding Program: Support Systems - Technology
Functional Category: Management
Year Initiated: FY 2003

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Disadvantaged Business Enterprise	Pro	100.0	-	247.8	-	-	125.0	-	-	125.0	-	-	125.0	-	622.8	250.0
DMV Mainframe Modernization Project FY2013	IT	2,820.5	3,200.0	-	-	3,400.0	-	-	1,000.0	-	-	-	-	-	7,600.0	-
Enterprise Document Management	Pro	150.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Information Technology Initiatives Program	Pro	10,000.0	11,000.0	-	-	11,000.0	-	-	12,000.0	-	-	12,000.0	-	-	46,000.0	26,000.0
On the Job Training / Supportive Services	Pro	110.3	-	100.0	-	-	100.0	-	-	100.0	-	-	100.0	-	400.0	200.0
Summer Transportation Institute Program	Pro	65.0	13.8	55.0	-	13.8	55.0	-	13.8	55.0	-	13.8	55.0	-	275.0	137.5
DMV Toll Equipment Upgrade	Pro	-	1,598.8	-	-	4,343.7	-	-	4,716.1	-	-	-	-	-	10,658.6	-
Total		**13,245.8**	**15,812.6**	**402.8**	**0.0**	**18,757.5**	**280.0**	**0.0**	**17,729.9**	**280.0**	**0.0**	**12,013.8**	**280.0**	**0.0**	**65,556.4**	**26,587.5**

TRAFFIC CALMING PROGRAM

DESCRIPTION: This program, initiated in FY 2000, involves the design and construction of traffic calming facilities and non-motorized transportation projects. Traffic calming projects include, but are not limited to, roundabout intersection designs, pedestrian and bicycle facilities, transit access, park and ride facilities, traffic calming and other solutions to slow traffic. The Department is working with several residential communities to plan, develop and construct traffic calming projects. Study, design, and public outreach elements of the residential and development traffic calming projects are funded through the Department via this funding category. Constructions for small projects, such as speed humps, are funded through the sponsoring legislator's Community Transportation Fund (CTF) allocation. Larger projects can be funded with a combination of CTF and DelDOT funds.

JUSTIFICATION: To provide for safe, multi-modal transportation and encourage movement of people and goods through other than single occupant vehicles.

County: Statewide
Municipality:
Funding Program: Road System
Functional Category: Management
Year Initiated: FY 2000

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Traffic Calming	Pro	151.0	150.0	-	-	150.0	-	-	150.0	-	-	150.0	-	-	600.0	300.0
Total		**151.0**	**150.0**	**-**	**-**	**150.0**	**-**	**-**	**150.0**	**-**	**-**	**150.0**	**-**	**-**	**600.0**	**300.0**

TRANSPORTATION ENHANCEMENTS/TRANSPORTATION ALTERNATIVES PROGRAM - DELAWARE

DESCRIPTION: The Transportation Alternatives Program (TAP) provides funding needed to support the development and implementation of a variety of non-traditional projects that highlight the cultural, aesthetic, and environmental aspects of the transportation system. TAP funds projects that fall into one or more of the following categories:

- Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized transportation.
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs.
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other nonmotorized transportation users.
- Construction of turnouts, overlooks, and viewing areas.
- Community improvement activities, including inventory, control, or removal of outdoor advertising; historic preservation and rehabilitation of historic transportation facilities; vegetation management practices for roadway safety, invasive species prevention, and erosion control; and archaeological activities relating transportation projects.
- Environmental mitigation activities, including pollution prevention, abatement, and mitigation to address stormwater management, control, and water pollution related to highway construction or due to highway runoff; or reduce vehicle-caused wildlife mortality or to restore and maintain habitat connectivity.
- The recreational trails program (listed separately in the Delaware Statewide section of the TIP).
- The safe routes to school program
- Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

JUSTIFICATION: This includes a federally mandated program for non-traditional enhancements to transportation infrastructure and services.

County: Statewide
Municipality:
Funding Program: Road System – Other
Functional Category: Management
Year Initiated: FY 1994, previously known as Transportation Enhancements

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Transportation Alternatives Program (FHWA)	Pro	3,183.4	1,801.9	5,947.4	-	1,018.3	3,953.3	-	1,302.3	5,009.2	-	1,032.8	3,931.2	-	23,996.4	9,928.0
Transportation Alternatives Program (FTA)	Pro	-	40.0	160.0	-	40.0	160.0	-	40.0	160.0	-	40.0	160.0	-	800.0	400.0
Safe Routes to School	Pro	1,328.0	1.8	726.8	-	-	-	-	-	-	-	-	-	-	728.5	-
Total		**4,511.4**	**1,843.7**	**6,834.2**	**0.0**	**1,058.3**	**4,113.3**	**0.0**	**1,342.3**	**5,169.2**	**0.0**	**1,072.8**	**4,091.2**	**0.0**	**25,524.9**	**10,328.0**

TRANSPORTATION MANAGEMENT IMPROVEMENTS

DESCRIPTION: To develop a multi-modal approach to improving the movement of people and goods using an Intelligent Transportation System and a Transportation Management Center (TMC, or control room) to monitor travel and adjust signals, signage, transit, etc. to lessen congestion using DelTRAC technology.

- Safer Travel – New traffic control systems can reduce the number of vehicle stops, minimize changes in vehicle speeds, and improve traffic flow - all of which help reduce the number of accidents.

- Less Traffic Congestion – DelTrac reduces traffic jams and travel time by continuously monitoring current conditions and automatically adjusting traffic signals, freeway ramp access, lane use, and transit schedules in response to real-time demand. Less traffic congestion results in safer, less stressful driving conditions.

- Better Travel Information – At home, en route, or at work, travelers will have access to real-time, accurate information about transit, train, and flight schedules, roadway conditions, and other travel information via radio, kiosks, cable TV, internet access, and variable message signs on the bus or highway.

- Improved Multi-modal Coordination – With the help of better travel information, travelers can make better decisions as to mode choice. For example, if a traveler is aware that his or her regular route to work is congested, he or she may opt for taking transit that particular day. Schedule and fare information provided in real-time makes train and bus transfers more convenient. Transportation managers benefit as well, as they can maximize the system's efficiency by coordinating their activities across travel modes. For example, through the automatic vehicle locator system on buses, the TMC can provide buses traveling behind schedule with longer "green time" at signalized intersections to help them get back on schedule.

- Quicker Emergency Response – With monitoring equipment, the TMC may detect, verify, and respond more quickly to incidents on the state's transportation system. Together with its emergency response partners (i.e. Department of Public Safety, Volunteer Firemen's Association, and Department of Natural Resources and Environmental Control), the TMC can act to ensure that incidents are cleared more quickly, reducing congestion and increasing safety. In the future, travelers in need of aid can benefit from communication and information technology which, among other things, can automatically send "mayday signals" to dispatch centers so trained emergency staff may locate an incident more quickly. Cellular call-in programs such as #77 and motorist call boxes are also used to facilitate emergency responses.

- Improved Efficiency – DelTrac technology allows DelDOT to make more efficient use of its existing resources by automating functions, sharing real-time information, and improving safety. It also helps private companies through improved freight delivery. Consumers save money through more efficient travel.

- Variable Message and Speed Limit Signs: To promote safe driving conditions, the department will install variable message boards and variable speed signs on limited-access and heavily traveled roads (I-95, I-295, I-495 and SR 1) throughout the state. These signs will help notify motorists in the event of unsafe driving conditions as a result of excessive traffic, or on Ozone Action Days when speed limits will be reduced, as necessary, to improve air quality. A prototype has been operational along southbound SR 1 near Smyrna since July 2002.

TRANSPORTATION MANAGEMENT IMPROVEMENTS (Continued)

County: Statewide
Municipality:
Funding Program: Support Systems – Transportation Management Systems
Functional Category: Management
Year Initiated: Various prior names: Rideshare FY 1991, ITS FY 1993

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Traffic Signal Revolving Fund Program	Traf	125.0	125.0	-	-	125.0	-	-	125.0	-	-	125.0	-	-	500.0	250.0
MUTCD Compliance Program	Traf	1,103.5	300.0	4,653.8	-	400.0	1,600.0	-	400.0	1,600.0	-	400.0	1,600.0	-	10,953.8	4,000.0
Rideshare Program / Trip Mitigation	Pro	374.4	-	360.0	90.0	-	360.0	90.0	-	360.0	90.0	-	360.0	90.0	1,800.0	960.0
Transportation Management Improvements	Pro	6,410.7	1,975.0	5,900.0	-	1,975.0	5,900.0	-	1,975.0	5,900.0	-	1,975.0	5,900.0	-	31,500.0	15,750.0
Total		**8,013.6**	**2,400.0**	**10,913.8**	**90.0**	**2,500.0**	**7,860.0**	**90.0**	**2,500.0**	**7,860.0**	**90.0**	**2,500.0**	**7,860.0**	**90.0**	**44,753.8**	**20,960.0**

ENGINEERING AND CONTINGENCIES

DESCRIPTION: Allows funding for capital projects that encounter unanticipated design, construction issues, environmental improvements, and training.

JUSTIFICATON: To provide the resources necessary for unforeseen capital expenditures not covered by individual project authorizations.

County: Statewide
Municipality:
Funding Program: Support Systems – Engineering and Contingencies
Functional Category: Other
Year Initiated: FY 1996

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Engineering and Contingencies	Pro	26,322.9	28,595.0	-	-	28,595.0	-	-	28,595.0	-	-	28,595.0	-	-	114,380.0	57,190.0
Environmental Improvements	Plan	286.8	695.0	18.0	-	560.0	18.0	-	545.0	18.0	-	545.0	18.0	-	2,417.0	1,126.0
Education and Training	Audit	313.2	-	200.0	-	-	200.0	-	-	200.0	-	-	200.0	-	800.0	400.0
Total		**26,922.9**	**29,290.0**	**218.0**	**0.0**	**29,155.0**	**218.0**	**0.0**	**29,140.0**	**218.0**	**0.0**	**29,140.0**	**218.0**	**0.0**	**117,597.0**	**58,716.0**

PLANNING

DESCRIPTION: The areas of planning are; management studies; statistics, research, and special projects; technology transfer and technical studies; advanced planning, travel demand modeling, and feasibility studies; integrated transportation management systems; and developing project scopes and location/environmental studies. Planning investigates environmental, cultural, historic, economic, and social issues that will have an impact on the development of alternatives.

JUSTIFICATION: The following programs are necessary to address mobility needs in the state including federally mandated programs.

County: Statewide
Municipality:
Funding Program: Support System – Planning
Functional Category: Other
Year Initiated: FY 1996

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Scenic Byways	Pro	85.2	120.0	476.8	-	-	-	-	-	-	-	-	-	-	596.8	-
Industrial Streets	Pro	250.0	250.0	-	-	-	-	-	-	-	-	-	-	-	250.0	-
Federal Land Access Program	Pro	-	12.0	48.0	-	6.0	24.0	-	6.0	24.0	-	6.0	24.0	-	150.0	60.0
Local Transportation Assistance Program	Pro	352.0	150.0	150.0	-	150.0	150.0	-	150.0	150.0	-	150.0	150.0	-	1,200.0	600.0
Metropolitan Planning Organization / FHWA	Pro	2,119.2	443.6	1,774.5	-	443.6	1,774.5	-	443.6	1,774.5	-	443.6	1,774.5	-	8,872.7	4,436.4
Metropolitan Planning Organization / FTA	Pro	468.3	107.6	430.4	-	107.6	430.4	-	107.6	430.4	-	107.6	430.4	-	2,152.0	1,076.0
Pedestrian ADA Accessibility	Pro	3,000.0	3,000.0	-	-	3,000.0	-	-	3,000.0	-	-	3,000.0	-	-	12,000.0	6,000.0
Planning Program Development	Pro	2,522.4	2,000.0	-	-	2,000.0	-	-	2,000.0	-	-	2,000.0	-	-	8,000.0	4,000.0
Rural Technical Assistance Program	Pro	78.2	20.0	87.7	-	-	87.7	-	-	87.7	-	-	87.7	-	370.6	175.3
Statewide Planning & Research Program / FHWA	Pro	4,167.9	947.3	3,789.3	-	659.3	2,637.0	-	659.3	2,637.0	-	659.3	2,637.0	-	14,625.3	6,592.5
Statewide Planning & Research Program / FTA	Plan	124.3	28.1	112.4	-	28.1	112.4	-	28.1	112.4	-	28.1	112.4	-	561.9	281.0
Truck Weigh Enforcement	Pro	395.0	395.0	-	-	395.0	-	-	395.0	-	-	395.0	-	-	1,580.0	790.0
University Research Program	Pro	250.0	250.0	-	-	250.0	-	-	250.0	-	-	250.0	-	-	1,000.0	500.0
Total		**13,812.5**	**7,723.6**	**6,869.1**	**0.0**	**7,039.6**	**5,216.0**	**0.0**	**7,039.6**	**5,216.0**	**0.0**	**7,039.6**	**5,216.0**	**0.0**	**51,359.3**	**24,511.2**

NEW CASTLE COUNTY

BR 32 ON FOULK ROAD OVER S. BRANCH NAAMANS CREEK

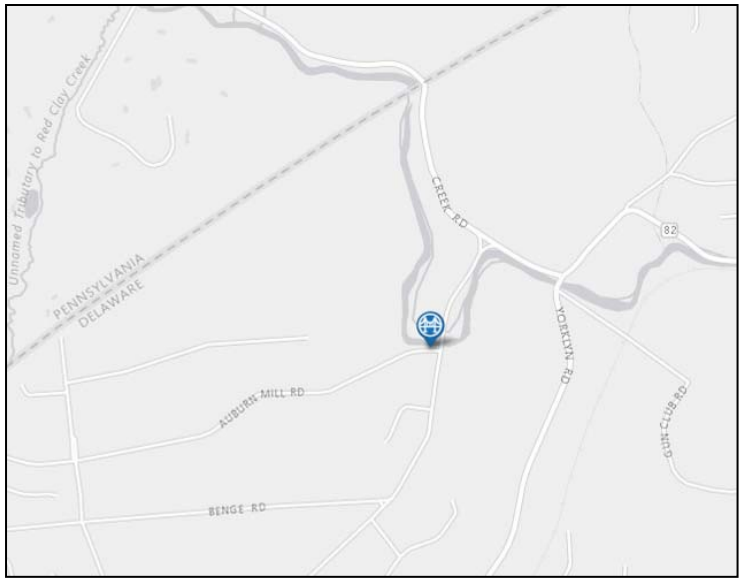
SCOPE/DESCRIPTION: This project involves the replacement of the existing prestressed concrete beams with new prestressed concrete box beams. Additional work includes rehabilitation of the existing abutments, minor reconstruction of the approach roadway, and placement of riprap in the stream to prevent scour. The work will be performed in phases while maintaining traffic on Foulk Road.

JUSTIFICATION: The existing concrete deck slab is showing signs of deterioration including cracks and large spalls with exposed corroded steel reinforcement on the bottom side. The bridge is structurally deficient and was selected by the Pontis Bridge Management System for work. The bridge ranks 68th on the DelDOT 2011 Bridge Deficiency List.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2013

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-032 on N203 Foulk Rd	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
over South Branch Naamans	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Creek	CE	44	-	80	-	-	-	-	-	-	-	-	-	-	80.0	-
	C	533	-	770	-	-	-	-	-	-	-	-	-	-	770.0	-
	Util	-	-	8.9	-	-	-	-	-	-	-	-	-	-	8.9	-
	Cnt	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**642**	**-**	**858**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**858.9**	**-**

BR 111 ON N235 BENGE ROAD OVER RED CLAY CREEK



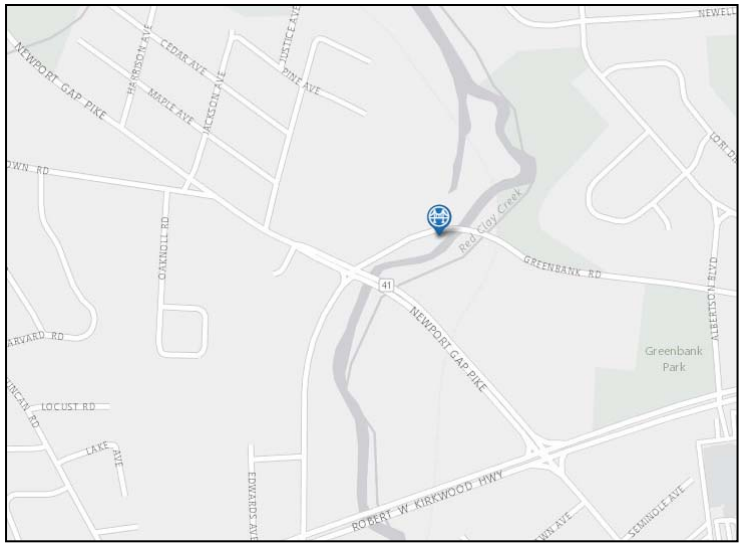
SCOPE/DESCRIPTION: The rehabilitation work of Bridge 111 includes replacing the existing concrete deck with a new concrete deck and barriers, minor repairs of the substructure, and minor approach roadway work.

JUSTIFICATION: Deterioration of the existing concrete deck has caused the bridge to become structurally deficient. The bridge was selected by the Pontis Bridge Management System for work. Rehabilitation of this bridge will help DelDOT meet its performance measure for percentage of bridges in poor condition.

County: New Castle
Investment Area: Rural
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-111 & BR 1-599 on N253 Benge Rd	PE	-	3.0	-	-	-	-	-	-	-	-	-	-	-	3.0	-
over Red Clay Creek and Mill	ROW	-	20.0	-	-	-	-	-	-	-	-	-	-	-	20.0	-
	C	-	-	-	-	180.0	720.0	-	-	-	-	-	-	-	900.0	-
Total		**-**	**23.0**	**-**	**-**	**180.0**	**720.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**923.0**	**-**

BR 148A&B ON N330 GREENBANK ROAD OVER RED CLAY CREEK



SCOPE/DESCRIPTION: The rehabilitation work of Bridges 148A&B includes replacing the existing concrete deck with a new concrete deck and barriers, minor repairs of the substructure, cleaning and painting the existing steel members, and minor approach roadway work. Additional work includes lining Bridge 148B.

JUSTIFICATION: Deterioration of the existing concrete deck of Bridge 148A has caused the bridge to become structurally deficient. Bridge 148B is a corrugated metal pipe with significant corrosion and 100% section loss at the waterline at several locations along the pipe. The bridges were selected by the Pontis Bridge Management System for work. Rehabilitation of these bridges will help DelDOT meet its performance measure for percentage of bridges in poor condition.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-148A&B on N330 Greenbank Rd over Red Clay Creek	PE	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	-	22.0	-	-	-	-	-	-	-	-	-	-	-	22.0	-
	C	-	-	-	-	180.0	720.0	-	-	-	-	-	-	-	900.0	-
Total		**10.9**	**22.0**	**-**	**-**	**180.0**	**720.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**922.0**	**-**

BR 159 ON JAMES STREET OVER CHRISTINA RIVER

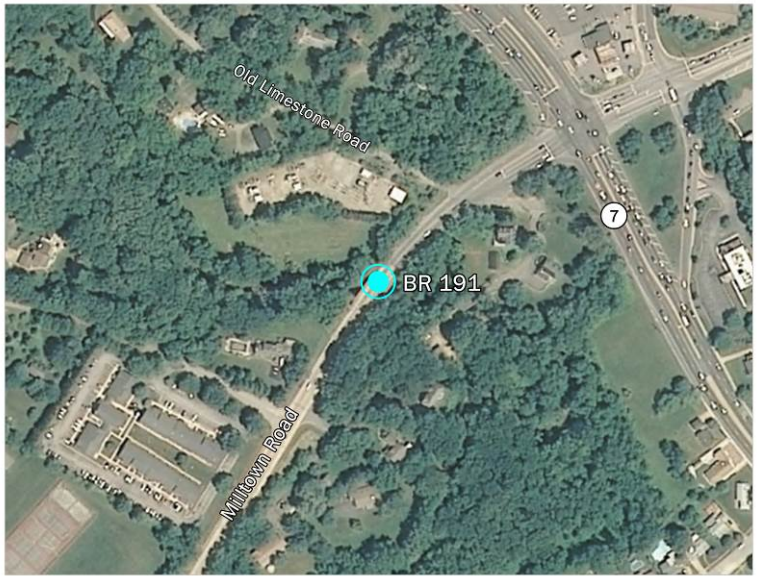
DESCRIPTION: Bridge 159 is an inoperable movable steel superstructure bridge supported on reinforced concrete abutments and piers. It carries James Street over Christina River in Newport, Delaware. This project involves the replacement of the existing bridge with a 5-span pre-stressed concrete box beam bridge supported on new reinforced concrete abutments and piers supported by drilled shafts. The proposed construction will be off the existing alignment to ensure access during the project. The proposed structure will provide higher under clearance to allow for recreational boating.

JUSTIFICATION: According to DelDOT Bridge Management PONTIS records the bridge is ranked 29th on the deficiency list and has a sufficiency rating of 35.8. The bridge was built in 1929. The movable portion of the bridge is inoperable; the steel superstructure exhibits heavy corrosion and section loss. This bridge is the only access road that does not have a height restriction in the region of Newport between Amtrak line and Christina River and is a road which the local businesses rely on. Replacement of this bridge is imperative to the Town of Newport.

County: New Castle
Investment Area: Core
Municipality: Newport
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2008

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-159 on James St over Christina River	PE	33.7	76.3	305.3	-	40.0	160.0	-	-	-	-	-	-	-	581.6	-
	ROW	16.0	-	-	-	100.0	400.0	-	100.0	400.0	-	-	-	-	1,000.0	-
	CE	20.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	700.0	2,800.0	-	-	-	-	3,500.0	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**69.9**	**76.3**	**305.3**	**-**	**140.0**	**560.0**	**-**	**800.0**	**3,200.0**	**-**	**-**	**-**	**-**	**5,081.6**	**-**

BR 191 ON MILLTOWN ROAD OVER MILL CREEK



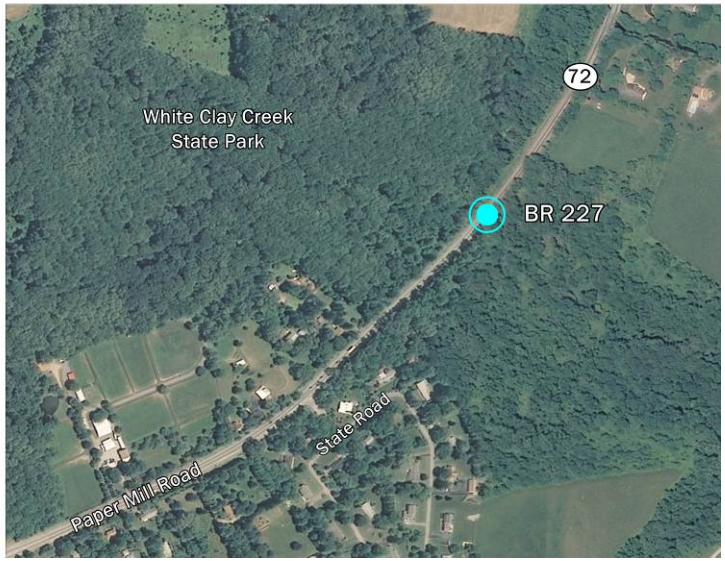
DESCRIPTION: Perform rehab work on Bridge 1-191 to improve the existing condition. Rehab work includes a full deck replacement; Replace the joints; Upgrade the pedestrian rail to current design standards; Repair spalls where needed; Paint beams and seal abutments and piers; Replace bearings; minor riprap placement. Construct sidewalk and reconstruct roadway at the bridge approaches.

JUSTIFICATION: To extend service life and increase safety of the bridge. The deck and approach slabs on this bridge are severely corroded and spalled. The deck has full depth spalls and exposed rebar at multiple locations. The pedestrian railing does not meet current design standards and there is undermining of both slope protection aprons. This bridge qualifies as part of DelDOT's structurally deficient deck inventory. As part of DelDOT's peformance measures, we must maintain 10% or less deficient decks.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-191 on N318 Milltown Rd over Mill Creek	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	97.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	885.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	42.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	120.8	14.5	58.2	-	-	-	-	-	-	-	-	-	-	72.7	-
Total		**1,147.0**	**14.5**	**58.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**72.7**	**-**

BR 227 ON PAPERMILL ROAD OVER MIDDLE RUN TRIBUTARY



DESCRIPTION: This project involves the replacement of a large corrugated aluminum pipe with a precast concrete box culvert. The box culvert will include a pathway to connect the adjacent bike trails in the parks on each side of the culvert. The approach roadways and guardrail will be reconstructed as needed and riprap will be placed in the stream for scour protection. The work will be performed in a manner which minimizes impacts to traffic as much as possible.

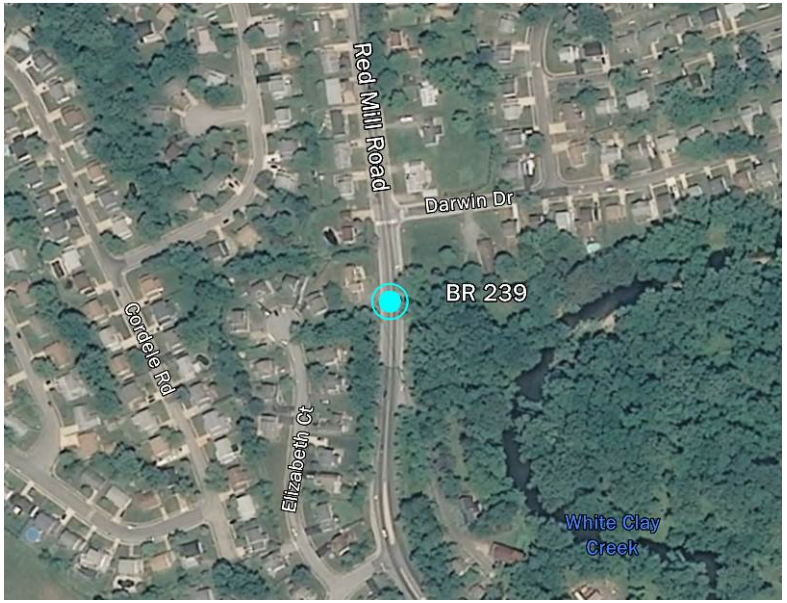
JUSTIFICATION: To extend service life and increase safety of the bridge. The existing pipes are structurally deficient and were selected by the Pontis Bridge Management System for work. It has a sufficiency rating of 71.2. There are random perforations and corrosion at some locations in the pipe and erosion at corners of the bridge. This bridge is currently ranked 77th on the 2013 DelDOT Bridge Deficiency List.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-227 on N013 Paper Mill Rd over Middle Run	PE	-	15.9	63.6	-	-	-	-	-	-	-	-	-	-	79.5	-
	ROW	-	2.0	8.0	-	-	-	-	-	-	-	-	-	-	10.0	-
	C	-	-	-	-	200.0	800.0	-	-	-	-	-	-	-	1,000.0	-
Total		**-**	**17.9**	**71.6**	**-**	**200.0**	**800.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,089.5**	**-**

BR 238 ON ELIZABETH COURT

DESCRIPTION: This project involves the rehabilitation of Bridge 1-238 which consists of two corrugated metal pipes. These pipes will be lined using a high strength fiber reinforced concrete liner, which will allow the roadway to remain open during construction. Riprap will also be placed in the stream to help with scour protection.

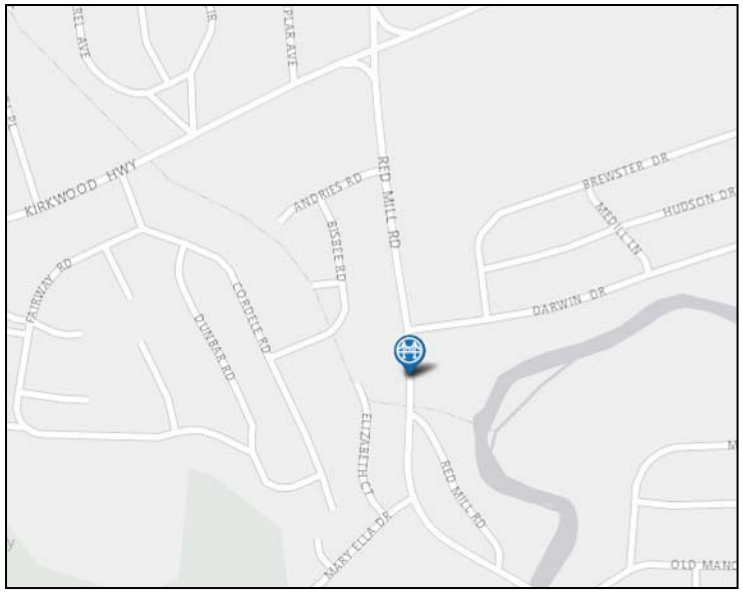


JUSTIFICATION: There is significant corrosion at the waterline with 100% section loss at several locations throughout the pipes. The existing pipes are structurally deficient and were selected by the Pontis Bridge Management System for work. Rehabilitation of this bridge will help meet DelDOT its performance measure for percentage of bridges in poor condition. This bridge is ranked 68th on the 2015 DelDOT Bridge Deficiency List (out of 1625 total bridges).

County: New Castle
Investment Area: Center
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-238 on Elizabeth Court over Tributary to White	ROW	-	20.0	-	-	-	-	-	-	-	-	-	-	-	20.0	-
	CE	-	-	-	-	26.0	-	-	-	-	-	-	-	-	26.0	-
	C	-	-	-	-	400.0	-	-	-	-	-	-	-	-	400.0	-
Total		-	**20.0**	-	-	**426.0**	-	-	-	-	-	-	-	-	**446.0**	-

BR 239 ON N352 RED MILL OVER TRIBUTARY



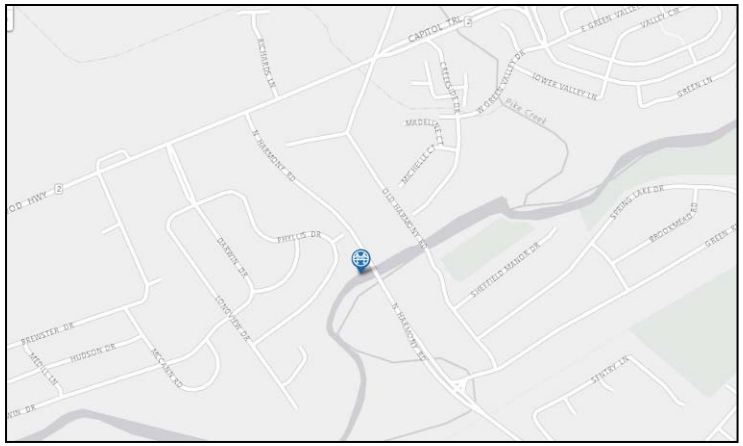
DESCRIPTION: This project involves the replacement of Bridge 239. Work includes the replacement of the two existing corrugated aluminum pipes with a precast reinforced concrete box culvert. Additional work includes minor reconstruction of the approach roadway and sidewalk, installation of guardrail and pedestrian railing as needed, numerous utility relocations, and placement of riprap in the stream to prevent scour. Due to the high traffic volumes on this road, the work will be completed using staged construction.

JUSTIFICATION: There is significant corrosion at the waterline with 100% section loss at several locations throughout the pipes. The existing pipes are structurally deficient and were selected by the Pontis Bridge Management System for work. Bridge 239 has a 70.1 sufficiency rating. The inspection team had originally recommended a NBI rating of 2 for BR 1-239, but decided to keep it at 4 due to several factors.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-239 on N352 Red Mill Rd over Tributary to White Clay Creek	PE	12.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	5.0	-	15.0	-	-	-	-	-	-	-	-	-	-	15.0	-
	C	-	120.0	480.0	-	-	-	-	-	-	-	-	-	-	600.0	-
Total		**17.1**	**120.0**	**495.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**615.0**	**-**

BR 251 ON N355 HARMONY ROAD OVER WHITE CLAY CREEK



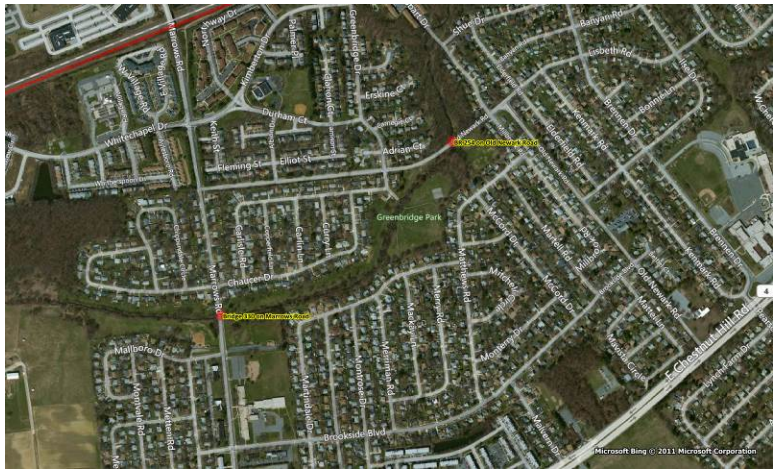
DESCRIPTION: This project involves the replacement of the existing corrugated metal pipes with a precast concrete frame. Additional work includes minor reconstruction of the approach roadway, installation of guardrail as needed, placement of riprap in the stream to prevent scour, and drainage design. The work will be performed under a full road closure with detour. A temporary pedestrian bypass will be provided during construction.

JUSTIFICATION: Deterioration of the existing concrete deck has caused the bridge to become structurally deficient. The bridge was selected by the Pontis Bridge Management System for work. Rehabilitation of this bridge will help DelDOT meet its performance measure for percentage of bridges in poor condition.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-251 on N355 Harmony Rd over White Clay Creek	PE	69.4	20.0	-	-	-	-	-	-	-	-	-	-	-	20.0	-
	ROW	-	-	-	-	20.0	-	-	-	-	-	-	-	-	20.0	-
	C	-	-	-	-	-	-	-	360.0	1,440.0	-	-	-	-	1,800.0	-
Total		**69.4**	**20.0**	**-**	**-**	**20.0**	**-**	**-**	**360.0**	**1,440.0**	**-**	**-**	**-**	**-**	**1,840.0**	**-**

BR 254 ON OLD NEWARK ROAD OVER COOL RUN



DESCRIPTION: This project involves the replacement of the existing corrugated metal pipes with a precast concrete frame. Additional work includes minor reconstruction of the approach roadway, installation of guardrail as needed, and placement of riprap in the stream to prevent scour. The work will be performed under a full road closure with detour.

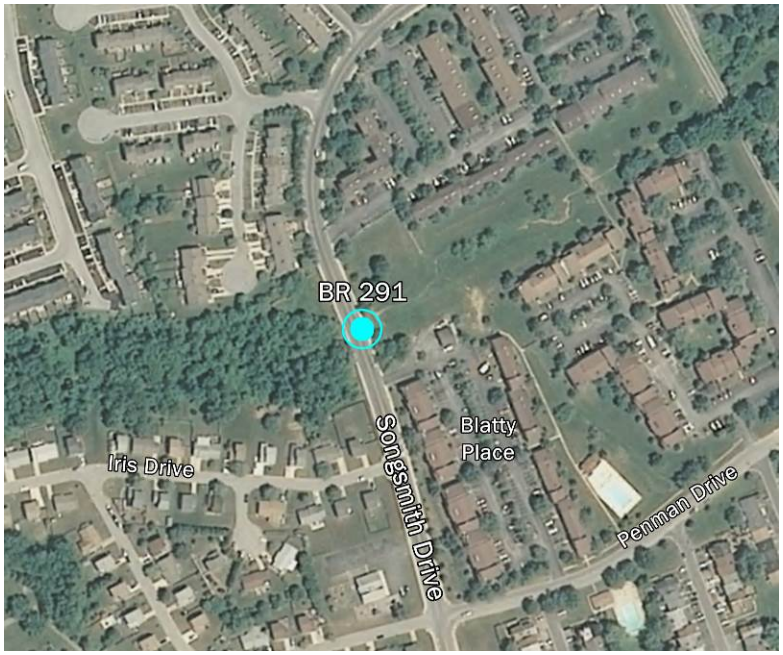
JUSTIFICATION: There is significant corrosion at the waterline with 100% section loss at several locations throughout the pipes. The existing pipes are structurally deficient and were selected by the Pontis Bridge Management System for work. This bridge is currently ranked 97th on the 2012 DelDOT Bridge Deficiency List.

County: New Castle
Investment Area: Center
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2013

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-254 on N350 Old Newark Rd over Cool Run	PE	7.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	126.8	507.2	-	63.2	252.8	-	-	-	-	-	-	-	950.0	-
Total		**32.8**	**126.8**	**507.2**	**-**	**63.2**	**252.8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**950.0**	**-**

BR 291 ON SONGSMITH DRIVE OVER TRIBUTARY TO SMALLEY'S DAM POND

DESCRIPTION: This project involves the replacement of three existing corrugated metal arch-pipes with either three precast concrete pipes or a precast concrete frame. Additional work includes minor reconstruction of the approach roadway and sidewalk, installation of guardrail or pedestrian railing as needed, and placement of riprap in the stream to prevent scour. The work will likely be performed under a full road closure with detour.



JUSTIFICATION: To extend service life and increase safety of the bridge. There is significant corrosion at the waterline with 100% section loss at several locations throughout the pipes. The existing pipes are structurally deficient and were selected by the Pontis Bridge Management System for work. This bridge currently has a 73.0 sufficiency rating and the inspection team has given a NBI rating of 4 for both culvert and channel. This bridge was ranked 104th on the 2013 DelDOT Bridge Deficiency List.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-291 on Songsmith Dr. over Tributary to Smalley's Pond	PE	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	24.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	1.0	187.0	748.0	-	-	-	-	-	-	-	-	-	-	935.0	-
Total		**28.0**	**187.0**	**748.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**935.0**	**-**

BR 294 ON N346 WALTHER RD OVER TRIBUTARY TO CHRISTINA RIVER

DESCRIPTION: This work involves the replacement of the two (2) existing corrugated metal pipes with a precast concrete box culvert. Additional work includes the placement of riprap in the stream for scour protection, installation of guardrail as needed, and reconstruction of the approach roadway as necessary. Work will be performed under a full road closure with detour for vehicular traffic while pedestrian traffic will be maintained.

JUSTIFICATION: There is significant corrosion at the waterline with 100% section loss at several locations throughout the pipes. The existing pipes are structurally deficient and were selected by the Pontis Bridge Management System for work. Replacement of this bridge will help DelDOT meet its performance measures for Bridge Condition. This bridge is ranked 19th on the 2015 DelDOT Bridge Deficiency List (out of 1625 total bridges).

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2017

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-294 on N346 Walther Rd over Tributary to	PE	-	22.0	-	-	-	-	-	-	-	-	-	-	-	22.0	-
Christina River	ROW	-	-	-	-	10.0	-	-	-	-	-	-	-	-	10.0	-
	C	-	-	-	-	-	-	-	150.0	600.0	-	-	-	-	750.0	-
Total		**-**	**22.0**	**-**	**-**	**10.0**	**-**	**-**	**150.0**	**600.0**	**-**	**-**	**-**	**-**	**782.0**	**-**

BR 302 OVER TOM CREEK AND BR 304 OVER GAMBLES GUT ON SR9

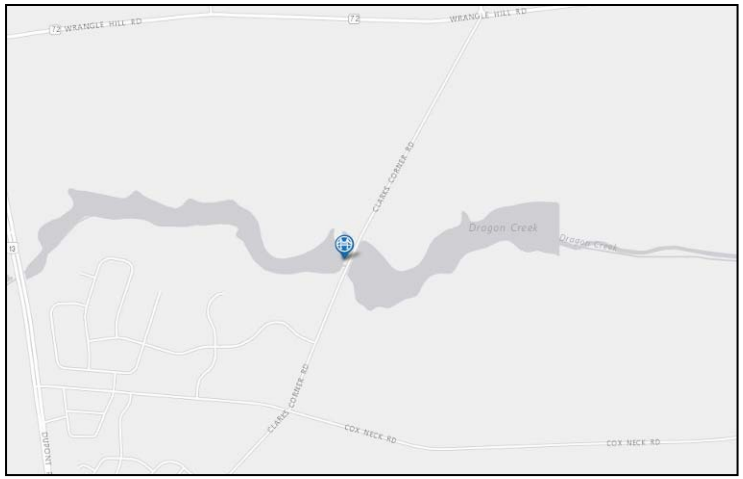
DESCRIPTION: This work involves the replacement of the two (2) existing corrugated metal pipes with precast concrete box culverts at two locations on SR9. Additional work includes the placement of riprap in the stream for scour protection, installation of guardrail as needed, and reconstruction of the approach roadway as necessary. Work will be performed under a full road closure with detour for vehicular traffic while pedestrian traffic will be maintained.

JUSTIFICATION: There is significant corrosion at the waterline in both bridges with easily perforated sections at several locations throughout the pipes at Bridge 1-304. Bridge 1-304 is structurally deficient and was selected by the Pontis Bridge Management System for work. Bridge 1-302 is in fair condition, but it is also consists of metal pipes at the end of their service lives. Since Bridge 1-302 is near Bridge 1-304, it makes sense economically to group the two together. Replacement of these bridges will help DelDOT meet its performance measures for Bridge Condition.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2017

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Bridge Replacements on SR9, BR 1-302 over Tom Creek and BR 1-304 over Gambles Gut	PE	-	55.0	-	-	-	-	-	-	-	-	-	-	-	55.0	-
	ROW	-	-	-	-	20.0	-	-	-	-	-	-	-	-	20.0	-
	C	-	-	-	-	-	-	-	240.0	960.0	-	-	-	-	1,200.0	-
Total		**-**	**55.0**	**-**	**-**	**20.0**	**-**	**-**	**240.0**	**960.0**	**-**	**-**	**-**	**-**	**1,275.0**	**-**

BR 308 ON N378 CLARKS CORNER ROAD OVER DRAGON RUN



DESCRIPTION: The replacement work for Bridge 308 includes replacing the existing concrete box beam bridge with a new bridge consisting of concrete box beams with a concrete deck. Additional work includes placing riprap in the stream for scour protection, installation of guardrail, and reconstruction of the approach roadway as needed.

JUSTIFICATION: The top of the fascia box beam has deteriorated along the gutter line to the point where a hole has formed. This deterioration has caused the bridge to become structurally deficient. The bridge was selected by the Pontis Bridge Management System for work. Replacement of this bridge will help DelDOT meet its performance measure for percentage of bridges in poor condition.

County: New Castle
Investment Area: Community
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-308 on N378 Clark's Corner Rd over Dragon Run	PE	21.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	-	22.0	-	-	-	-	-	-	-	-	-	-	-	22.0	-
	C	-	20.0	80.0	-	120.0	480.0	-	-	-	-	-	-	-	700.0	-
Total		**21.2**	**42.0**	**80.0**	**-**	**120.0**	**480.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**722.0**	**-**

BR 393 ON SR299 MAIN STREET OVER APPOQUINIMINK RIVER

DESCRIPTION: Place scour countermeasures to protect the bridge foundations. Additional work includes minor spall repairs.

JUSTIFICATION: To protect these scour critical bridges from the effects of scour which improves the safety and serviceability of the structures. This is compliance with FHWA efforts to reduce the number of scour critical bridges in the inventory.

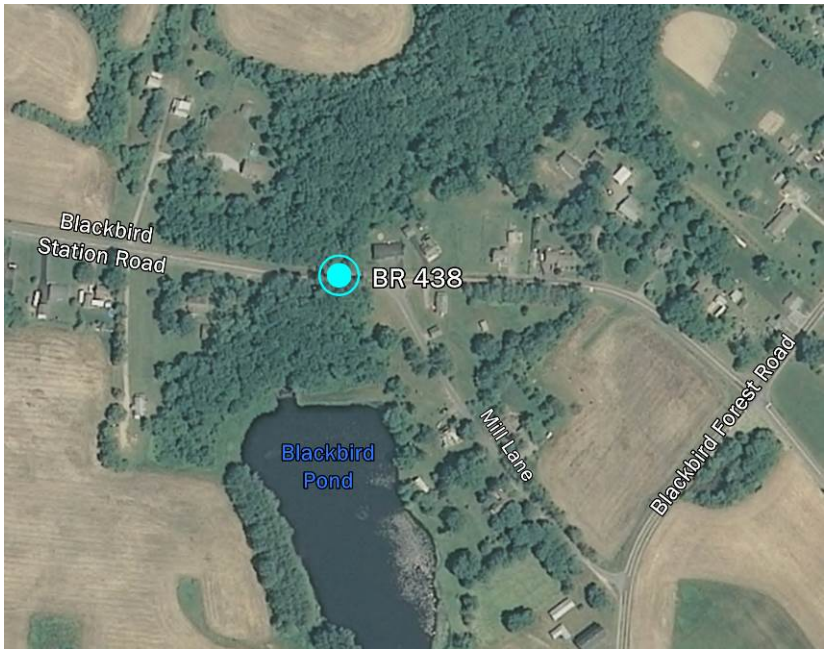
County: New Castle
Investment Area: Developing
Municipality: Odessa
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-393 on SR299 Main St over Appoquinimink River	PE	45.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	-	13.2	52.8	-	-	-	-	-	-	-	-	-	-	66.0	-
	C	-	102.0	408.0	-	-	-	-	-	-	-	-	-	-	510.0	-
	Cnt	-	5.2	20.8	-	-	-	-	-	-	-	-	-	-	25.9	-
Total		**73.1**	**120.4**	**481.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**601.9**	**-**

BR 438 ON BLACKBIRD STATION ROAD OVER BLACKBIRD CREEK

DESCRIPTION: Replace the existing 2 - CMPAs with either a precast three-sided rigid frame or precast prestressed voided slab beams with a GRS substructure. Place riprap for scour protection. Reconstruct approaches as necessary. Place guardrail as needed.

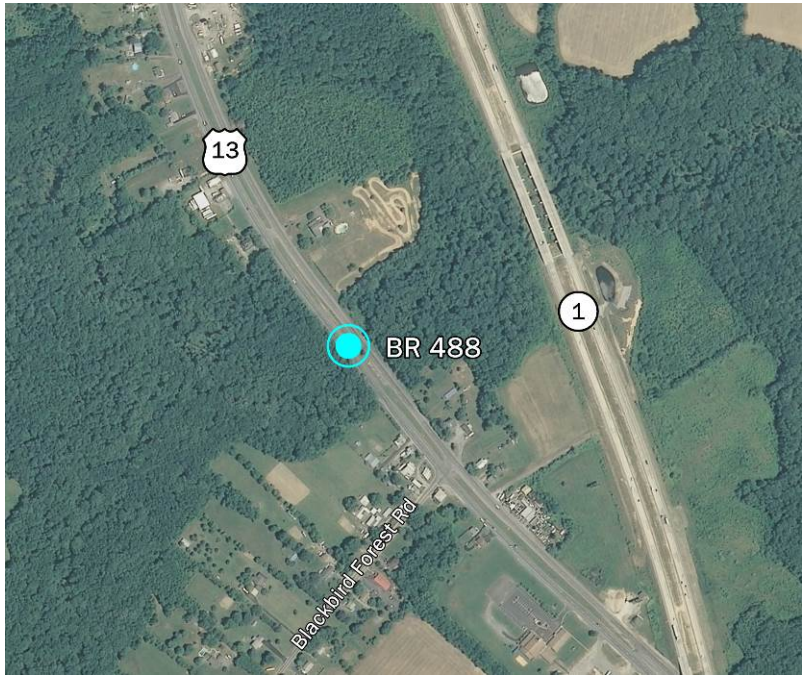
JUSTIFICATION: To extend service life and increase safety of the bridge. There is significant corrosion at the waterline with 100% section loss at several locations throughout the pipes. The existing pipes are structurally deficient and were selected by the Pontis Bridge Management System for work. This bridge currently has a 69.8 sufficiency rating and the inspection team gave the bridge a NBI culvert rating of 4.



County: New Castle
Investment Area: Rural
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-438 on N463 Blackbird Station Rd over Blackbird Creek	PE	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	25.0	2.0	8.0	-	-	-	-	-	-	-	-	-	-	10.0	-
	C	-	240.0	960.0	-	-	-	-	-	-	-	-	-	-	1,200.0	-
Total		**29.4**	**242.0**	**968.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,210.0**	**-**

BR 488 ON US 13 SB, SOUTH OF ODESSA



DESCRIPTION: This project will replace the existing concrete arch with prestressed, precast concrete box beams and composite concrete deck on stub abutments. It will improve the vertical alignment by raising the roadway profile using MSE walls. It also will place riprap in the stream for scour protection, reconstruct roadway approaches, and place guardrail as required.

JUSTIFICATION: To extend service life and increase safety of the bridge. The existing structure is structurally and hydraulically deficient. The concrete arch is deteriorated and has significant spalling, cracks, and corrosion of exposed bar reinforcement. The existing structure is also scour critical. The bridge was selected by the Pontis Bridge Management System for work. This bridge was ranked 138th on 2013 DelDOT Bridge Deficiency List.

County: New Castle
Investment Area: Rural
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-488S on N001 US13 over Blackbird Creek	PE	21.2	9.7	38.8	-	-	-	-	-	-	-	-	-	-	48.6	-
	ROW	-	-	-	-	6.0	24.0	-	-	-	-	-	-	-	30.0	-
	C	-	-	-	-	-	-	-	800.0	3,200.0	-	-	-	-	4,000.0	-
Total		**21.2**	**9.7**	**38.8**	**-**	**6.0**	**24.0**	**-**	**800.0**	**3,200.0**	**-**	**-**	**-**	**-**	**4,078.6**	**-**

BR 501, 501A, 501B ON SR 141 VIADUCT OVER SR 4

DESCRIPTION: Structural rehabilitation of existing 19 span steel tub girder bridge including deck overlay, replacement of bearings and strip seal joints, painting of structural steel, concrete spall repairs, epoxy injection of concrete cracks, replacement of approach slabs and abutment backwalls and drainage improvements.

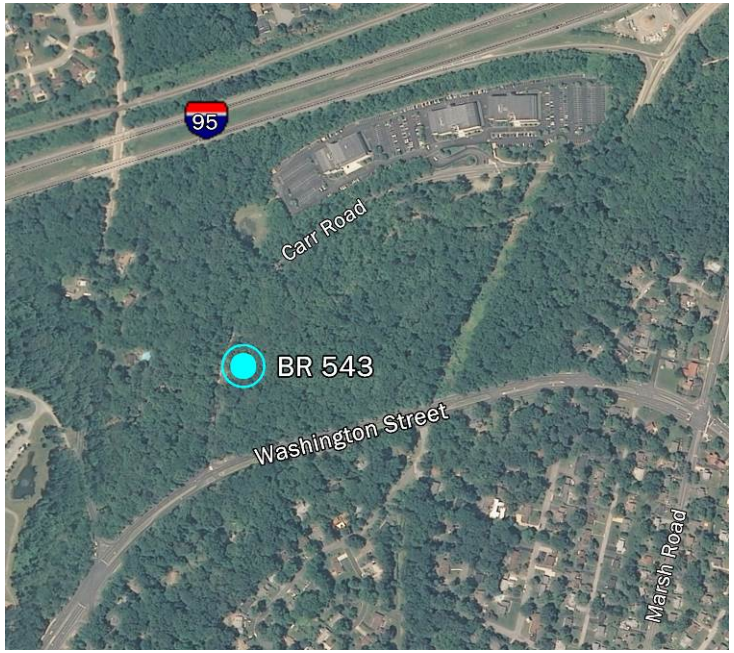
JUSTIFICATION: All three bridges are part of the Newport viaduct and will be worked on together. Bridges are in need of repair to extend their service life. Bridges are ranked 27, 39 and 42 in the 2008 bridge deficiency listing generated by the Bridge Management system.The structure testing and analysis work includes instrumentation, field testing and Finite Element analysis of the structure.

County: New Castle
Investment Area: Core
Municipality: Newport
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2009

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-501, 1-501A & 1-501B SR 141 Viaduct over SR4	PE	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	143.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	409.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BR 1-501 on N006 Newport Viaduct over Christina River Piers 2 and 3	PE	50.0	-	645.0	-	-	-	-	-	-	-	-	-	-	645.0	-
	ROW	-	-	-	-	4.0	16.0	-	-	-	-	-	-	-	20.0	-
	C	-	-	-	-	200.0	800.0	-	800.0	3,200.0	-	-	-	-	5,000.0	-
Total		**604.8**	**0.0**	**645.0**	**0.0**	**204.0**	**816.0**	**0.0**	**800.0**	**3200.0**	**0.0**	**0.0**	**0.0**	**0.0**	**5665.0**	**0.0**

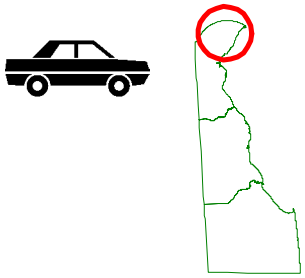
BR 543 ON CARR ROAD OVER SHELLPOT CREEK

DESCRIPTION: This project involves the replacement of the existing superstructure, consisting of steel beams with a hotmix overlay on stone abutments. The proposed superstructure will consist of steel beams with a concrete deck and utilize the same stone facade as is presently there. The existing abutments will be pointed and parged. Additional work includes minor reconstruction of the approach roadway, replacement of guardrail, and placement of riprap in the stream to prevent scour. The work will be performed under a full road closure with detour.



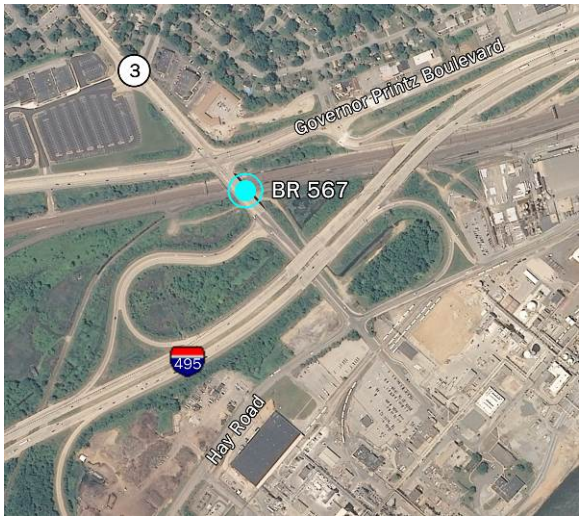
JUSTIFICATION: There is significant deterioration of the steel beams with loss of section. The existing stone abutments have missing stones and require repointing. The bridge was selected by the Pontis Bridge Management System for work. It is ranked 70th on the 2011 DelDOT Bridge Deficiency List.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2013



Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-543 on N213 Carr Rd over Shellpot Creek	PE	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	-	27.9	111.5	-	-	-	-	-	-	-	-	-	-	139.4	-
	C	-	120.4	481.5	-	-	-	-	-	-	-	-	-	-	601.9	-
	Cnt	-	12.3	49.2	-	-	-	-	-	-	-	-	-	-	61.5	-
Total		**7.0**	**160.6**	**642.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**802.8**	**-**

BR 567 ON HAY ROAD OVER SHELLPOT CREEK



DESCRIPTION: The project involves the replacement of the existing single-lane functionally obsolete multi-span concrete girder bridge on timber piles. The proposed bridge will provide for two -way traffic and will be a multi-span concrete girder bridge on piles. Additional work will include the removal of the adjacent steel truss bridge, placement of riprap for scour protection, reconstruction of the approach roadway, and installation of guardrail.

JUSTIFICATION: The bridge is beyond its original design service life. The bridge deck has significant amounts of delaminations, and several of the existing timber piles have cracks and delaminations. It is functionally obsolete and only allows for one-way traffic. The bridge has been selected by the Pontis Bridge Management System for work. The City of Wilmington owns and maintains this bridge, which has become their top bridge priority for improvements.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2010

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-567A on N501 Hay Rd over Shellpot Creek, City of Wilmington	PE	57.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	2,000.0	500.0	-	-	-	-	-	-	-	-	-	2,500.0	-
Total		**87.0**	**-**	**2,000.0**	**500.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,500.0**	**-**

BR 577 ON NORTHEAST BOULEVARD OVER BRANDYWINE CREEK

DESCRIPTION: This project involves jacking the superstructure to repair or replace floor beams and bearings, replacing the joints, repairing spalls where needed, replacing concrete tee beams on the approach spans, spotpaint beams, seal abutments and piers, and various concrete repairs throughout the superstructure and substructure. Additional work includes the addition of a second turn lane from 12th Street to Northeast Boulevard. Traffic will be partially maintained during construction.

JUSTIFICATION: There is significant deterioration of some floor beams, bearings, and joints. The existing barriers, abutments and piers have significant spalls and need repair. The bridge was selected by the Pontis Bridge Management System for work. Rehabilitation of this bridge will help DelDOT meet its performance measure for percentage of bridges in faircondition. This bridge is ranked 93th on the 2015 DelDOT Bridge Deficiency List (out of 1625 total bridges). The addition of the turn lane from 12th Street to Northeast Boulevard is a traffic mitigation improvement in advance of the Wilmington I-95 Improvements project.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-577 on N050 Northeast Boulevard over Brandywine River	PE	181.0	-	515.1	-	-	-	-	-	-	-	-	-	-	515.1	-
	ROW	-	5.0	20.0	-	-	-	-	-	-	-	-	-	-	25.0	-
	C	-	-	-	-	800.0	3,200.0	-	-	-	-	-	-	-	4,000.0	-
Total		**181.0**	**5.0**	**535.1**	**-**	**800.0**	**3,200.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4,540.1**	**-**

BR 634 ON SR100 DUPONT ROAD OVER DELAWARE VALLEY RAILROAD

DESCRIPTION: The scope of work for the rehabilitation of Bridge 634 includes replacement of the concrete deck with a new concrete deck and barriers, cleaning and greasing of the bearings, cleaning and painting of steel members, and repair of cracks and spalls in the concrete piers and abutments. Additional work includes minor approach roadway reconstruction and installation of guardrail as needed.

JUSTIFICATION: Deterioration of the existing concrete deck has caused the bridge to become structurally deficient. Cleaning and painting the steel girders will lengthen the life of the superstructure. The bridge was selected by the Pontis Bridge Management System for work. Rehabilitation of this bridge will help DelDOT meet its performance measure for percentage of bridges in poor condition.

County: New Castle
Investment Area: Core
Municipality: Elsmere
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-634 on SR100 DuPont Rd over East Penn RR	PE	547.5	237.5	-	-	-	-	-	-	-	-	-	-	-	237.5	-
	ROW	-	50.0	-	-	-	-	-	-	-	-	-	-	-	50.0	-
	C	-	-	-	-	1,000.0	4,000.0	-	-	-	-	-	-	-	5,000.0	-
	Rail	-	-	-	-	4.0	16.0	-	-	-	-	-	-	-	20.0	-
Total		**547.5**	**287.5**	**-**	**-**	**1,004.0**	**4,016.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5,307.5**	**-**

BR 651, NEWPORT ROAD OVER CSX

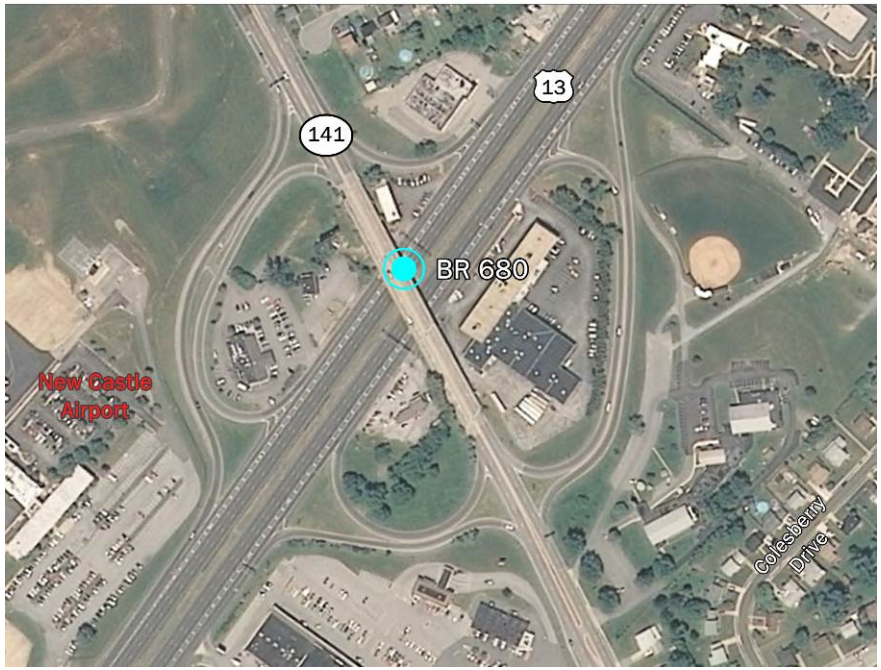
DESCRIPTION: Project includes replacing and raising the new bridge to conform to CSX requirements. Approaches will also need to be raised and tied into the existing roadway. Sidewalk will be provided on the bridge to service surrounding schools.

JUSTIFICATION: CSX is requiring additional railroad clearance under bridge 651.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2007

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-651 on Newport Rd over CSX Railroad	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CE	-	10.5	42.0	-	-	-	-	-	-	-	-	-	-	52.6	
	C	1.0	109.8	439.2	-	-	-	-	-	-	-	-	-	-	549.0	
	Cnt	-	10.5	42.1	-	-	-	-	-	-	-	-	-	-	52.6	
	Rail	20.0	90.0	-	-	-	-	-	-	-	-	-	-	-	90.0	
Total		**21.0**	**220.8**	**523.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**744.1**	

BR 680 ON SR 141 OVER US 13



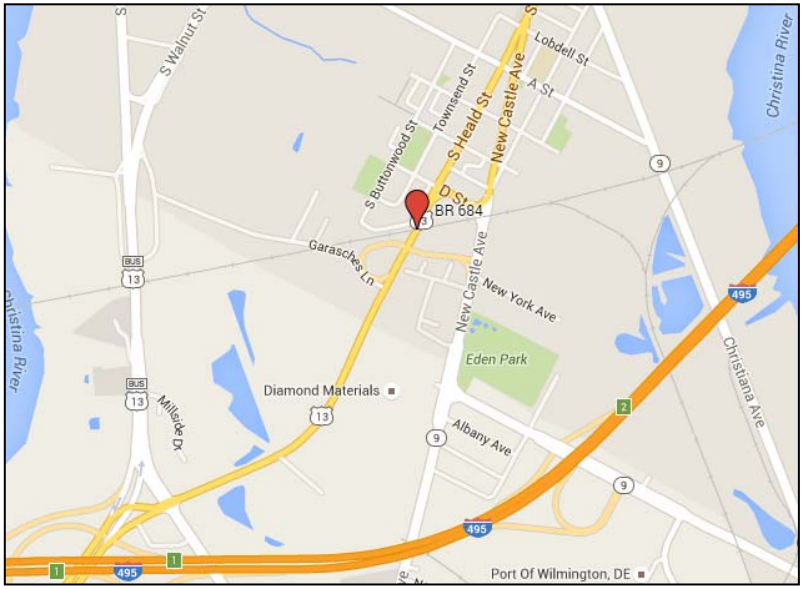
DESCRIPTION: This project involves the replacement of the existing concrete deck with a pre-cast concrete deck. The sidewalk on the SB side will be removed to allow the sidewalk on the NB side to be widened. Existing vertical clearance will be increased a few inches by jacking the bridge up or milling down US 13. The project will be done in phases by detouring one direction and then the other. The project needs to be constructed in the summer due to the close proximity of William Penn High School and George Reed Middle School.

JUSTIFICATION: There is significant spalling and delaminating of the existing concrete deck. The deck has full depth spalls and exposed rebar at multiple locations. The existing steel girders have been impacted by over height trucks multiple times per year because of the substandard under clearance. Due to the under clearance, the bridge is classified as Functionally Obsolete and is eligible for work via DelDOT's Bridge Management System.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-680 on SR 141 Basin Rd over US 13	PE	701.9	20.0	80.0	-	-	-	-	-	-	-	-	-	-	100.0	-
	ROW	-	20.0	80.0	-	-	-	-	-	-	-	-	-	-	100.0	-
	C	-	100.0	400.0	-	1,900.0	7,600.0	-	-	-	-	-	-	-	10,000.0	-
Total		**701.9**	**140.0**	**560.0**	**-**	**1,900.0**	**7,600.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**10,200.0**	**-**

BR 684 ON SOUTH HEALD STREET OVER NORFOLK SOUTHERN RAILROAD



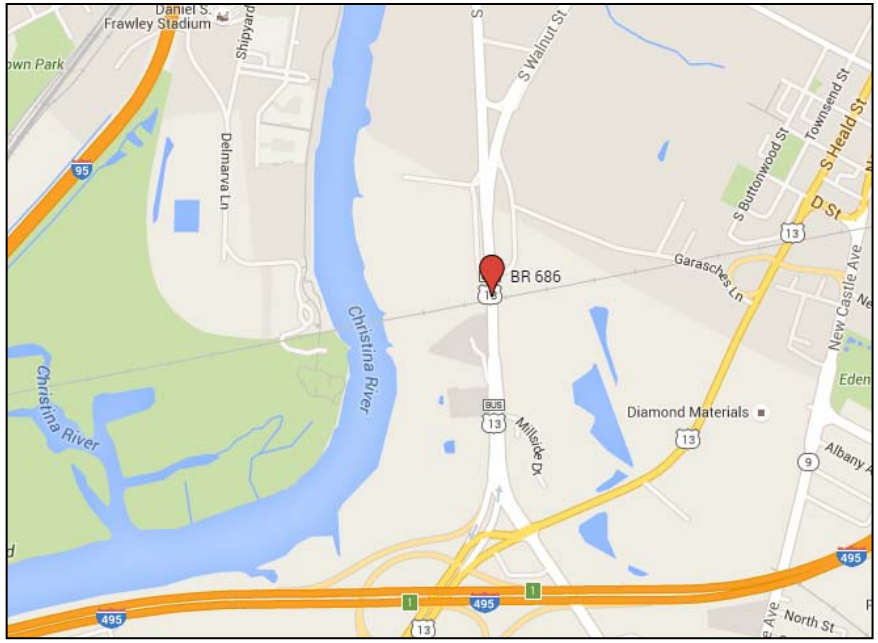
DESCRIPTION: BR 1-684 was constructed in 1942 can carries South Heald Street (US 13) over the NSRR. The bridge is historically eligible and repairs will maintain the historic features of the bridge. Repairs will include replacing the deck joints and bearings, repairs to portions of the deck, sidewalk, bridge rail, and columns, and placing a concrete overlay.

JUSTIFICATION: There is significant spalling and delaminating of the underside of the existing concrete deck. The deck joints are leaking which is causing deterioration of the thickened portion of the concrete slab. The sidewalk and bridge rail are in need of repair and the concrete columns have numerous delamination and spalls. Rehabilitation of this bridge will help the Department meet its performance measure for percentage of bridges in fair or poor condition. This bridge is ranked 133rd on the 2015 DelDOT Bridge Deficiency List (out of 1625 total bridges).

County: New Castle
Investment Area: Core
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-684 on N028 South Heald St over Norfolk Southern Railroad	PD	200.0	20.0	80.0	-	-	-	-	-	-	-	-	-	-	100.0	-
	PE	-	30.0	120.0	-	30.0	120.0	-	30.0	120.0	-	30.0	120.0	-	600.0	200.0
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**200.0**	**50.0**	**200.0**	**-**	**30.0**	**120.0**	**-**	**30.0**	**120.0**	**-**	**30.0**	**120.0**	**-**	**700.0**	**200.0**

BR 686 ON SOUTH WALNUT STREET OVER NORFOLK SOUTHERN RAILROAD



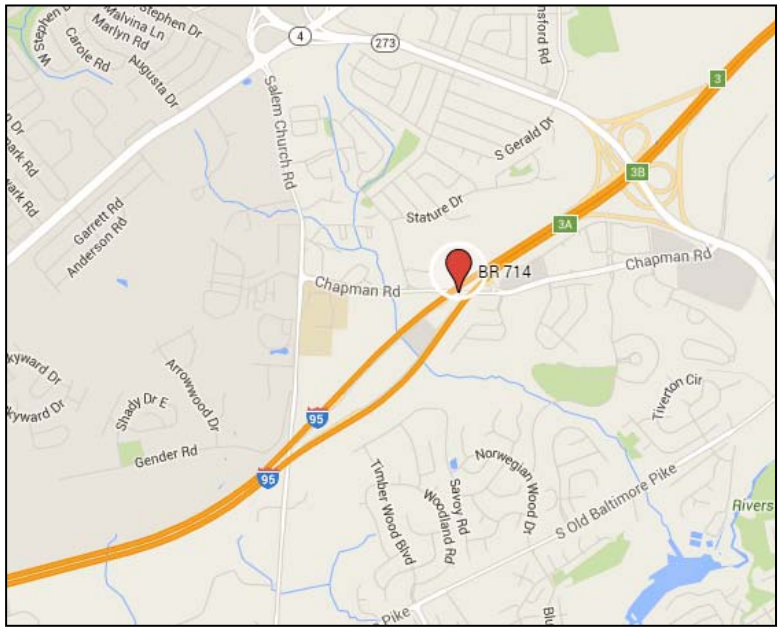
DESCRIPTION: BR 1-686 was constructed in 1938 and carries South Walnut Street (US 13BR) over the NSRR. The bridge is historically eligible and repairs will maintain the historic features of the bridge. Repairs will include replacing the deck joints and bearings, repairs to portions of the deck, sidewalk, bridge rail, and columns, and placing a concrete overlay.

JUSTIFICATION: There is significant spalling and delaminating of the underside of the existing concrete deck. The deck joints are leaking which is causing deterioration of the thickened portion of the concrete slab. The sidewalk and bridge rail are in need of repair and the concrete columns have numerous delamination and spalls. Rehabilitation of this bridge will help the Department meet its performance measure for percentage of bridges in fair or poor condition. This bridge is ranked 125th on the 2015 DelDOT Bridge Deficiency List (out of 1625 total bridges).

County: New Castle
Investment Area: Core
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-686 on N029 South Walnut St over Norfolk Southern Railroad	PD	250.0	20.0	80.0	-	-	-	-	-	-	-	-	-	-	100.0	-
	PE	-	30.0	120.0	-	35.0	140.0	-	35.0	140.0	-	35.0	140.0	-	675.0	225.0
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**250.0**	**50.0**	**200.0**	**-**	**35.0**	**140.0**	**-**	**35.0**	**140.0**	**-**	**35.0**	**140.0**	**-**	**775.0**	**255.0**

BR 714 ON N347 CHAPMAN ROAD OVER I-95



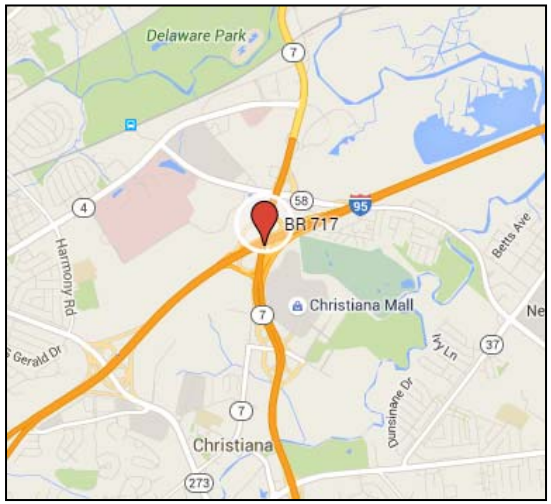
DESCRIPTION: The scope of work for the rehabilitation of Bridge 714 includes replacement of the concrete deck with a new concrete deck and barriers, cleaning and greasing of the bearings, cleaning and painting of steel members, repair of cracks and spalls in the concrete piers and abutments.

JUSTIFICATION: Deterioration of the existing concrete deck has caused the bridge to become structurally deficient. There are also spalls and delaminations on the piers and abutments that need to be repaired. Cleaning and painting the steel girders will lengthen the life of the superstructure. The bridge was selected by the Pontis Bridge Management System for work. Rehabilitation of this bridge will help DelDOT meet its performance measures for percentage of bridges in poor condition and the percentage of structurally deficient bridges by deck area on the NHS.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-714 on N347 Chapman Rd over I-95	PE	98.4	200.0	800.0	-	105.7	423.0	-	-	-	-	-	-	-	1,528.7	-
	ROW	-	-	-	-	10.0	40.0	-	-	-	-	-	-	-	50.0	-
	C	-	-	-	-	-	-	-	1,200.0	4,800.0	-	400.0	1,600.0	-	8,000.0	-
Total		**98.4**	**200.0**	**800.0**	**-**	**115.7**	**463.0**	**-**	**1,200.0**	**4,800.0**	**-**	**400.0**	**1,600.0**	**-**	**9,578.7**	**-**

BR 717 ON I-95 OVER SR 1



DESCRIPTION: The scope of work for the rehabilitation of Bridge 717 includes replacement of the concrete deck with a new concrete deck and barriers and minor repair of cracks and spalls in the concrete substructure.

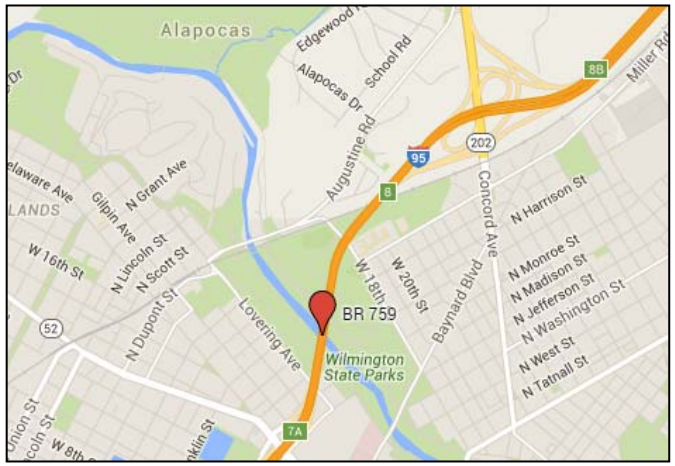
JUSTIFICATION: Deterioration of the existing concrete deck has caused the bridge to become structurally deficient. The bridge was selected by the Pontis Bridge Management System for work. It was ranked 76th on the 2013 DelDOT Bridge Deficiency List. Rehabilitation of this bridge will help DelDOT meet its performance measures for percentage of bridges in poor condition and the percentage of structurally deficient bridges by deck area on the NHS.

County: New Castle
Investment Area: Core

Municipality:
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-717 on I-95 NB over SR1	PE	680.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	29.0	-	500.0	-	-	-	-	-	-	-	-	-	-	500.0	-
	C	-	-	4,740.8	-	-	-	-	-	-	-	-	-	-	4,740.8	-
	Cnt	-	-	210.1	-	-	-	-	-	-	-	-	-	-	210.1	-
Total		**709.0**	**-**	**5,450.8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5,450.8**	**-**

BR 759 ON I-95 OVER BRANDYWINE RIVER



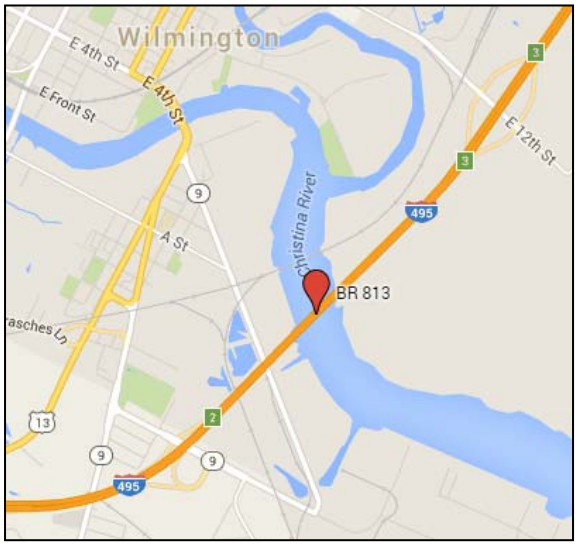
DESCRIPTION: The scope of work for the rehabilitation of Bridge 759 includes replacement of the concrete deck with a new concrete deck and barriers, replacement of the steel fascia girders, replacement of some of the steel diaphragms, cleaning and greasing of the bearings, painting of steel members, repair of cracks and spalls in the concrete piers and abutments.

JUSTIFICATION: The emergency closure of I-495 has accelerated the deterioration of the existing bridge deck. There are also spalls and delaminations on the piers and abutments that need to be repaired. The fascia girders have many fatigue cracks and require replacement. The bridge was selected by the Pontis Bridge Management System for work. Rehabilitation of this bridge will help DelDOT meet its performance measures for percentage of bridges in poor condition and the percentage of structurally deficient bridges by deck area on the NHS.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-759 on I-95 over Brandywine River	PE	631.4	-	868.6	-	-	600.0	-	-	600.0	-	-	-	-	2,068.6	-
Total		**631.4**	**-**	**868.6**	**-**	**-**	**600.0**	**-**	**-**	**600.0**	**-**	**-**	**-**	**-**	**2,068.6**	**-**

BR 813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS



DESCRIPTION: This project involves the emergency repairs to bridge 1-813 on I-495 over Christina River. This work includes constructing drilled shafts, concrete grade beams, and temporary shoring towers; replacing damaged bearings; and jacking the existing superstructure into the correct position. Permanent repairs to Bridge 1-813 on I-495 over Christina River will be completed after the temporary emergency repairs are complete. This work includes the removal of 2 pairs of hammerhead piers and replacement with new reinforced concrete piers. The existing superstructure will be reused and set on the new piers.

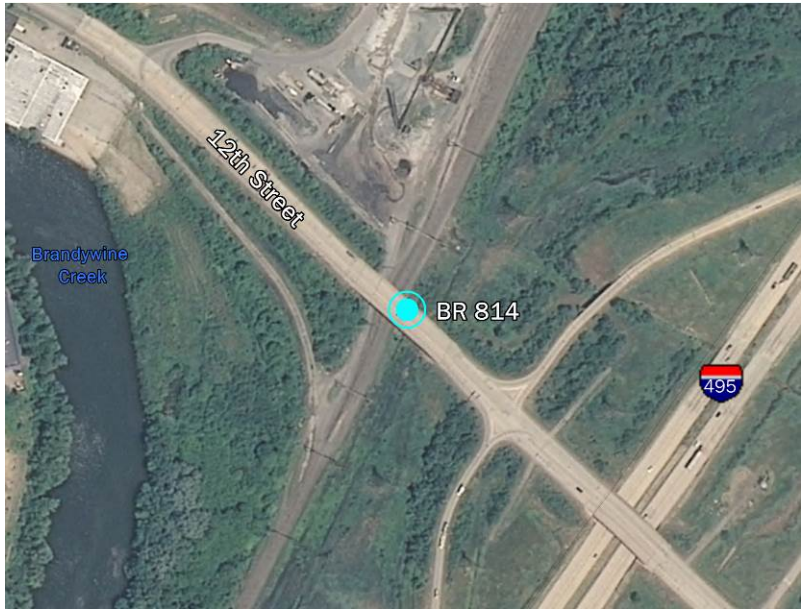
JUSTIFICATION: Four rows of piers have rotated by as much as 2 feet out of plumb. The roadway carries over 90,000 vpd and was closed during the summer of 2014.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-813 on I-495 over Christina River, Emergency Repairs, Phase 2	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	217.3	18.3	164.4	-	-	-	-	-	-	-	-	-	-	182.7	-
	ROW	-	10.0	90.0	-	-	-	-	-	-	-	-	-	-	100.0	-
	CE	322.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	467.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Audit	36.6	4.0	36.0	-	-	-	-	-	-	-	-	-	-	40.0	-
	Cnt	-	10.0	90.0	-	-	-	-	-	-	-	-	-	-	100.0	-
Total		**1,044.1**	**42.3**	**380.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**422.7**	**-**

BR 814 ON 12TH STREET OVER NORFOLK SOUTHERN RAILROAD

DESCRIPTION: This project involves performing rehab work on Bridge 814 to improve the existing condition. Rehab work includes jacking the superstructure to replace the existing bearings and pedestals; Replace the joints; Repair spalls where needed; Paint beams and seal abutments and piers. The substructure work will be done while the bridge is open to traffic. The superstructure work will be performed in phased construction.



JUSTIFICATION: To extend service life and increase safety of the bridge. There is significant deterioration of the bearings, joints and pedestals. The existing abutments and piers have spalls and need repair and the beams need painting. The bridge was selected by the Pontis Bridge Management System for work. It has a sufficiency rating of 48.3.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
BR 1-814 on N009 12th St over Norfolk Southern RR	PE	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	500.0	2,000.0	-	-	-	-	-	-	-	2,500.0	-
	Rail	-	-	-	-	2.0	8.0	-	-	-	-	-	-	-	10.0	-
Total		**10.0**	**-**	**-**	**-**	**502.0**	**2,008.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,510.0**	**-**

BRIDGE STRUCTURE REHABILIATION, NEW CASTLE COUNTY

DESCRIPTION: Repair of various bridges. Elements include:

- Structure Maintenance, North District, Open End
- Interstate Bridge Maintenance, South
- Interstate Structure Maintenance, Open End
- Overhead Sign Structure, I-495
- Bridge Painting

JUSTIFICATION: To extend service life of various bridges.

County: New Castle
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2009

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Bridge Painting, New Castle County, 2015	CE	52.5	-	315.5	-	-	-	-	-	-	-	-	-	-	315.5	-
	C	804.7	-	2,362.0	-	-	-	-	-	-	-	-	-	-	2,362.0	-
	Cnt	-	-	158.3	-	-	-	-	-	-	-	-	-	-	158.3	-
	Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bridge Painting, New Castle County, 2016	PE	-	-	20.0	-	-	-	-	-	-	-	-	-	-	20.0	-
	CE	-	-	225.0	-	-	-	-	-	-	-	-	-	-	225.0	-
	C	-	-	1,500.0	-	-	-	-	-	-	-	-	-	-	1,500.0	-
	Cnt	-	-	100.0	-	-	-	-	-	-	-	-	-	-	100.0	-
	Rail	-	-	200.0	-	-	-	-	-	-	-	-	-	-	200.0	-
Structure Maintenance, North District, Open End, FY15-FY17	CE	166.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	655.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	596.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interstate Bridge Maintenance, South (Advertisement & Construction)	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	486.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CNT	3,746.1	-	10.0	-	-	-	-	-	-	-	-	-	-	**10.0**	-
Cantilever and Overhead Sign Structures, Open End, FY16-18	PE	30.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	100.0	-	444.3	-	-	400.0	-	-	-	-	-	-	-	844.3	-
	C	-	-	3,430.8	-	-	2,575.0	-	-	1,054.9	-	-	-	-	7,060.6	-
	Util	-	-	25.0	-	-	25.0	-	-	-	-	-	-	-	50.0	-
	Cnt	-	-	-	-	-	-	-	-	847.3	-	-	-	-	847.3	-
Total		**6638.5**	**0.0**	**8790.9**	**0.0**	**0.0**	**3000.0**	**0.0**	**0.0**	**1902.2**	**0.0**	**0.0**	**0.0**	**0.0**	**13693.0**	**0.0**

GLENVILLE SUBDIVISION IMPROVEMENTS

DESCRIPTION: This project involves the reconstruction of the remaining streets and sidewalks in the Glenville Subdivision as a result of DelDOTs Glenville Wetland Bank Project. The project will provide a connector road between Harbeson Place and East Netherfield Road.

JUSTIFICATION: This project is a continuation of the Glenville Wetland Banking project that will restore the remaining subdivison streets and reconnect the Glenville Subdivision.

County: New Castle
Funding Program: Other
Functional Category: Preservation
Year Initiated: FY 2005

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Glenville Subdivision Improvements	PE	26.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	28.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**55.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

I-295 IMPROVEMENTS

DESCRIPTION: In FY 2000, the Delaware River and Bay Authority (DRBA) began a rehabilitation project on all approaches and ramps on the west side of the Delaware Memorial Bridge. DRBA is responsible for the remaining portion on I-295 to and including the Delaware Memorial Bridge. New planned improvements will be a joint effort by DelDOT and DRBA. DRBA will design and manage the improvements with oversight from DelDOT. Improvements will include:

I-295 IMPROVEMENTS, WESTBOUND FROM I-295 TO US 13 - DRBA will rehabilitate about one mile of Delaware roadway to their I-295 project. This area is in need of major repairs and has not been worked on for many years. This project enables construction savings for the State and DRBA by eliminating the need to have two separate contractors in the same areas.

JUSTIFICATION: This project enables construction savings for the State and DRBA by eliminating the need to have two separate contractors in the same areas.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Expressways
Functional Category: Preservation
Year Initiated: FY 2002

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
I-295 Improvements, Westbound from I-295 to US 13	PE	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	2,000.0	-	-	2,000.0	-	-	3,000.0	-	-	7,000.0	-
Total		**1.5**	**-**	**-**	**-**	**2,000.0**	**-**	**-**	**2,000.0**	**-**	**-**	**3,000.0**	**-**	**-**	**7,000.0**	**-**

INTERSTATE MAINTENANCE

DESCRIPTION: Maintain our interstate highway facilities. Project will include:

- I-95 Crossover Relocation
- Lighting Replacement and Improvements
- Interstate Maintenance Drainage Repair

JUSTIFICATION: This project will provide needed maintenance along Delaware's interstate highways.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Expressways
Functional Category: Preservation
Year Initiated: FY 2009

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
I-95 Crossover Relocation	CE	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	48.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I-95/I-295/I-495 Interstate High Mast Lighting Improvements	PE	121.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	-	-	125.0	-	-	-	-	-	-	-	-	-	-	125.0	-
	C	-	-	2,504.1	-	-	-	-	-	-	-	-	-	-	2,504.1	-
	Traf	-	-	5.9	-	-	-	-	-	-	-	-	-	-	5.9	-
	Util	-	-	80.0	-	-	-	-	-	-	-	-	-	-	80.0	-
	Cnt	-	-	250.0	-	-	-	-	-	-	-	-	-	-	250.0	-
Interstate Maintenance Drainage Repair, FY14-FY16, Open-End	CE	333.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	1,868.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	256.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lighting Replacement, Interstate, Open End, FY15-FY16	PE	46.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	68.5	-	75.0	-	-	-	-	-	-	-	-	-	-	75.0	-
	C	1,005.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	93.7	-	1.0	-	-	-	-	-	-	-	-	-	-	1.0	-
Overhead Sign Structures, I-495	PE	141.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**3,985.8**	**0.0**	**3,041.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**3,041.0**	**0.0**

SLOPE STABILIZATION

DESCRIPTION: This program will address roadway slopes that need repairs to address current or potential roadway failures. Depending on the specific location, slope stabilization improvements could include, but are not limited to, walls, reinforced slopes, and/or guardrails.

JUSTIFICATION: Many roads, especially in Northern New Castle County that are adjacent to streams and rivers, experience concerns that if the roadway slopes fail, the safety of the roadway will be compromised, which may require either road restrictions or closures. This program dedicates funding to design and construct improvements to address slope issues in various locations throughout the State.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System
Functional Category: Preservation
Year Initiated: FY 2017

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Slope Stabilization, Mill Creek Rd: Stella Rd - Nathalie Dr	PE	-	-	-	-	250.0	-	-	50.0	-	-	-	-	-	300.0	-
	ROW	-	-	-	-	-	-	-	200.0	-	-	-	-	-	200.0	-
	C	-	-	-	-	-	-	-	-	-	-	3,000.0	-	-	3,000.0	500.0
Total		**-**	**-**	**-**	**-**	**250.0**	**-**	**-**	**250.0**	**-**	**-**	**3,000.0**	**-**	**-**	**3,500.0**	**500.0**

REHABILITATION OF I-95 FROM I-495 TO NORTH OF BRANDYWINE RIVER BRIDGE

DESCRIPTION: This project involves the rehabilitation of BR 1-748, 1-748N, 1-748S and 1-759 and associated ramps that comprise the I-95 viaduct through Wilmington. This work includes cleaning and greasing or replacing bearings, patching concrete spalls in the substructure and superstructure, sealing concrete cracks in the substructure and superstructure, repairing or replacing approach slabs, replacing the existing bridge barrier and approach roadway barrier, spot or zone painting of existing steel girders, replacing joints or strip seals, partial replacement of the concrete decks, and constructing a concrete overlay.

JUSTIFICATION: There is spalling and delaminating of the existing concrete deck and serious deterioration of the concrete barriers. The existing joints are leaking, causing deterioration of the substructure at these locations. The substructure has cracks and spalls in need of repair. The existing bearings have some corrosion. These bridges are ranked 62nd, 64th, and 58th, respectively, and are eligible for work via DelDOT's Bridge Management System.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road System – Bridge Improvements
Functional Category: Preservation
Year Initiated: FY 2014 (Previously known as BR 748, I-95 Wilmington Viaduct)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Rehabilitation of I-95 from I-495 to North of Brandywine River Bridge	PE	960.4	503.9	2,015.7	-	350.0	1,400.0	-	340.0	1,360.0	-	-	-	-	5,969.6	-
	ROW	-	-	-	-	20.0	80.0	-	20.0	80.0	-	-	-	-	200.0	-
	C	-	-	-	-	-	-	-	-	-	-	5,000.0	20,000.0	-	25,000.0	115,000.0
Total		**960.4**	**503.9**	**2,015.7**	**-**	**370.0**	**1,480.0**	**-**	**360.0**	**1,440.0**	**-**	**5,000.0**	**20,000.0**	**-**	**31,169.6**	**115,000.0**

TRANSIT FACILITIES PRESERVATION, NEW CASTLE COUNTY

DESCRIPTION: Projects include equipment and facilities to support safe and efficient transit in New Castle County. Elements include:

- Beech Street Generator
- D-Marc Beech Street
- Wilmington Administration Site Asbestos Remediation & Demo
- Wilmington Administration Center Rehabilitation - FTA State of Good Repair Grant
- Wilmington Operations Center Bus Wash
- Wilmington UST Replacement - FTA State of Good Repair Grant

JUSTIFICATION: These projects will provide satellite facilities located in New Castle County for Paratransit and fixed route bus operations, maintenance, and storage; and will increase and preserve Wilmington Train Station and area parking.

County:	New Castle
Investment Area:	
Municipality:	Newark, Wilmington
Funding Program:	Support System – Transit Facilities
Functional Category:	Preservation
Year Initiated:	FY 1991

TRANSIT FACILITIES PRESERVATION, NEW CASTLE COUNTY (Cont)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Beech St Generator	PE	55.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	123.8	495.0	-	-	-	-	-	-	-	-	-	-	618.8	-
D-Marc Beech St	C	80.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wilm Admin Site Asbestos Remediation & Demo	CE	8.5	241.5	-	-	-	-	-	-	-	-	-	-	-	241.5	-
	C	519.5	1,800.0	-	-	-	-	-	-	-	-	-	-	-	1,800.0	-
	Main	638.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wilmington Administration Center Rehabilitation -	PE	94.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FTA State of Good Repair Grant	C	-	210.0	840.0	-	-	-	-	-	-	-	-	-	-	1,050.0	-
Wilmington Operations Center Bus Wash	PE	-	-	-	-	10.0	40.0	-	-	-	-	-	-	-	50.0	-
	C	-	-	-	-	-	-	-	150.0	600.0	-	-	-	-	750.0	-
Wilmington UST Replacement - FTA State of Good	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repair Grant	CE	22.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	403.0	75.8	302.7	-	-	-	-	-	-	-	-	-	-	378.4	-
	Main	27.6	2.2	8.8	-	-	-	-	-	-	-	-	-	-	11.0	-
DART 1 Roof Replacement	PE	-	50.0	-	-	-	-	-	-	-	-	-	-	-	50.0	-
	C	-	400.0	-	-	-	-	-	-	-	-	-	-	-	400.0	-
Beech St Maintenance Building	PE	-	-	-	-	100.0	400.0	-	-	-	-	-	-	-	500.0	-
	C	-	-	-	-	-	-	-	600.0	2,400.0	-	-	-	-	3,000.0	-
Beech St Facility Renovations	C	-	350.0	-	-	-	-	-	-	-	-	-	-	-	350.0	-
DART I Bus Vacuum	C	-	-	-	-	-	-	-	-	-	-	150.0	-	-	150.0	-
DART Parking Lot 4 Paving	C	-	250.0	-	-	-	-	-	-	-	-	-	-	-	250.0	-
Total		**1,849.5**	**3,503.3**	**1,646.5**	**0.0**	**110.0**	**440.0**	**0.0**	**750.0**	**3,000.0**	**0.0**	**150.0**	**0.0**	**0.0**	**9,599.7**	**0.0**

TRANSIT VEHICLE REPLACEMENT AND REFURBISHMENT- NCC

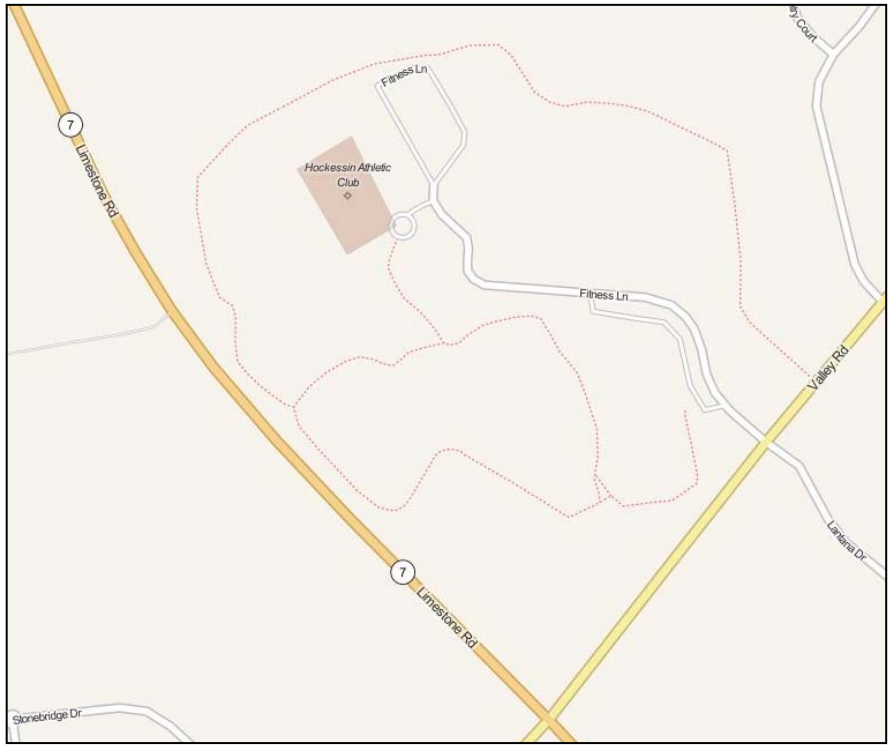
DESCRIPTION: The investment in transit vehicle replacement and refurbishment is necessary to meet the projected vehicle replacement schedule. Includes preventative maintenance.

JUSTIFICATION: Maintain existing transit services.

County: New Castle
Municipality:
New Funding Program: Transit System – Vehicles
Functional Category: Preservation
Year Initiated: FY 1996

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Transit Vehicle Replacement (1) 40' Low Floor Bus NCC	Proc	-	-	-	-	-	-	-	101.3	405.4	-	-	-	-	506.7	-
Transit Vehicle Replacement (1) 45' OTR Bus NCC FY21	Proc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	913.5
Transit Vehicle Replacement (2) 30' Low Floor Buses	Proc	81.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transit Vehicle Replacement (2) 40' Low Floor Buses	Pro	-	183.9	735.5	-	-	-	-	-	-	-	-	-	-	919.4	-
Transit Vehicle Replacement (2) 40' Low Floor FY17	Proc	-	-	919.4	-	-	-	-	-	-	-	-	-	-	919.4	-
Transit Vehicle Replacement (2) 45' OTR Buses NCC FY17	Proc	-	-	1,503.2	-	-	-	-	-	-	-	-	-	-	1,503.2	-
Transit Vehicle Replacement (3) Fixed Route Cutaway	Proc	-	-	405.1	-	-	-	-	-	-	-	-	-	-	405.1	-
Transit Vehicle Replacement (3) Fixed Route Cutaway	Proc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	477.1
Transit Vehicle Replacement (31, 32) 40' Heavy Duty	Proc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transit Vehicle Replacement (60) 40' Low Floor Buses	Proc	-	-	-	-	-	-	-	-	-	-	6,384.0	25,536.0	-	31,920.0	-
Transit Vehicle Replacement (7) 40' Low Floor Buses	Proc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,910.2
Transit Vehicle Replacement (7) 40' Low Floor Buses	Proc	-	-	-	-	-	-	-	709.4	2,837.5	-	-	-	-	3,546.9	-
Transit Vehicle Replacement (9) 30' Low Floor Buses	Proc	-	-	-	-	-	-	-	-	-	-	907.7	3,631.0	-	4,538.7	-
Transit Vehicle Replacement Paratransit Buses NCC	Proc	5,898.5	661.3	2,645.3	-	582.5	2,329.9	-	632.4	2,529.6	-	150.9	603.5	-	10,135.4	11,457.3
Transit Vehicle Replacement Support Vehicles NCC	Proc	87.8	238.2	-	-	143.4	-	-	87.8	-	-	269.6	-	-	739.0	96.7
Transit Vehicle Replacement Unicity Bus Purchase FY16-	Proc	-	110.8	-	-	-	-	-	-	-	-	114.1	-	-	224.8	-
Preventive Maintenance - New Castle County	Proc	6,500.0	-	6,500.0	-	-	5,200.0	1,300.0	-	5,200.0	1,300.0	-	5,200.0	1,300.0	26,000.0	13,000.0
Total		**12,567.7**	**1,194.2**	**12,708.5**	**0.0**	**725.9**	**7,529.9**	**1,300.0**	**1,429.6**	**10,567.1**	**1,300.0**	**7,826.3**	**34,970.5**	**1,300.0**	**80,851.9**	**28,941.3**

TWEEDS MILL PARKING STRUCTURE



DESCRIPTION: This project involves performing structural repairs of the parking garage. The work includes patching concrete spalls in the parking decks, repairing and replacing joint seals, placing a waterproofing membrane on the top parking deck, replacing the staircase canopy, replacing the concrete entrance approach slab, and miscellaneous repairs throughout the structure.

JUSTIFICATION: The parking garage was constructed through a public-private partnership agreement between the Hockessin Athletic Club and the Department of Transportation to provide parking for both the club members and visitors to the adjacent public park as well as to correct a drainage issue in the area. DelDOT is responsible for structural maintenance of the structure. Structural repairs of the parking garage are necessary to maintain and extend the life of the structure. There are many spalls and delaminations in the concrete that need to be repaired and many of the joint seals need to be replaced.

County: New Castle
Investment Area: Community
Municipality:
Funding Program: Road System – Bridges
Functional Category: Preservation
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Tweeds Mill Parking Structure Repairs	PE	340.0	40.0	-	-	-	-	-	-	-	-	-	-	-	40.0	-
	CE	-	120.2	-	-	-	-	-	-	-	-	-	-	-	120.2	-
	C	-	744.9	-	-	-	-	-	-	-	-	-	-	-	744.9	-
	Cnt	-	74.5	-	-	-	-	-	-	-	-	-	-	-	74.5	-
Total		**340.0**	**979.6**	-	-	-	-	-	-	-	-	-	-	-	**979.6**	-

CITY OF NEW CASTLE IMPROVEMENTS

DESCRIPTION:
Historically, the City of New Castle has evolved through careful planning and design, with interconnected streets, walkable neighborhoods, a town center, open spaces and a mix of land uses. However, the City's high quality of life has been threatened by recent regional growth that has led to a variety of transportation problems. In response, the City of New Castle and WILMAPCO have adopted a transportation plan in 2000 to soften the impact of through traffic, ease downtown parking shortages, and enhance pedestrian and bicycling facilities in the City.

Plan recommendations in the TIP include:

- **SR 9, River Road Area -** Design will include raising the approaches of SR 9 on either side of the Army Creek bridge to prevent further settling and flooding. Retrofits of the tide gates will be pursued by DNREC. Frequent flooding of SR 9 in the area of the Army Creek makes the road impassible

JUSTIFICATION: Improvements were recommended in the *City of New Castle Transportation Plan*, adopted by WILMAPCO in January 2000.

County: New Castle
Investment Area: Core
Municipality: New Castle
Funding Program: Road System – Arterials
Functional Category: Management
Year Initiated: FY 2003

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SR 9, River Rd Area Improvements, Flood Remediation	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	-	-	-	-	-	-	-	120.0	480.0	-	120.0	480.0	-	1,200.0	-
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,000.0
		-	-	-	-	-	-	-	120.0	480.0	-	120.0	480.0	-	1,200.0	5,500.0

CLAYMONT SIDEWALKS: MYRTLE AND MANOR AVENUES

DESCRIPTION: This project entails sidewalk improvements for Myrtle and Manor Avenues in Claymont, Delaware. The project consists of proposed sidewalk construction along Myrtle Avenue from the Philadelphia Pike to the I-495 overpass, and along Manor Avenue from the Governor Printz Boulevard to the I-495 pedestrian overpass.

JUSTIFICATION: Projects will provide a safer pedestrian route from the Philadelphia Pike to the Claymont Train Station.

County: New Castle
Investment Area: Core
Municipality:
Funding Program:
Functional Category: Management
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Manor Ave Sidewalk Improvements	PE	178.6	16.0	64.0	-	-	-	-	-	-	-	-	-	-	80.0	-
	ROW	-	4.0	16.0	-	-	-	-	-	-	-	-	-	-	20.0	-
	C	-	200.0	800.0	-	50.0	200.0	-	-	-	-	-	-	-	1,250.0	-
Myrtle Ave Sidewalk Improvements	PE	202.7	8.0	32.0	-	-	-	-	-	-	-	-	-	-	40.0	-
	ROW	20.0	36.0	144.0	-	-	-	-	-	-	-	-	-	-	180.0	-
	C	-	100.0	400.0	-	100.0	400.0	-	-	-	-	-	-	-	1,000.0	-
Total		**401.3**	**364.0**	**1,456.0**	**0.0**	**150.0**	**600.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2,570.0**	**0.0**

CLAYMONT TRAIN STATION

DESCRIPTION: This project will be for the design of a new Claymont commuter rail station integrated with the redevelopment of a former industrial site into an office/commercial complex. The new station will provide full ADA compliance and enhanced passenger facilities.

JUSTIFICATION: The Claymont Rail Station was last upgraded in 1996. The existing Claymont station is heavily used but is physically deficient and cannot be made fully compliant with the Americans with Disabilities Act. The redevelopment of an unused industrial site in Claymont offers an opportunity to construct a new station including ADA-compliant high-level platforms and improved passenger amenities.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Transit
Functional Category: Management
Year Initiated: FY 2012

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Claymont Station	PE	300.0	240.0	960.0	-	500.0	2,000.0	-	540.0	2,160.0	-	-	-	-	6,400.0	-
	CE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	2,000.0	8,000.0	-	10,000.0	20,000.0
		300.0	**240.0**	**960.0**	**-**	**500.0**	**2,000.0**	**-**	**540.0**	**2,160.0**	**-**	**2,000.0**	**8,000.0**	**-**	**16,400.0**	**20,000.0**

GARASCHES LANE

DESCRIPTION: The Garasches Lane project will provide efficient access and safety for all modes of travel between the Southbridge neighborhood and the Wilmington Riverfront.

JUSTIFICATION: DelDOT was awarded a Federal grant to respond to community concerns regarding safe and proper pedestrian and bike connections between the growing Riverfront district in Wilmington and the nearby community of Southbridge. This is keeping with the Federal Highways "Livability" initiatives in urban areas.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road
Functional Category: Management
Year Initiated: FY 2012

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Garasches Lane, Wilmington	PD	190.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	-	40.0	160.0	-	20.0	80.0	-	-	-	-	-	-	-	300.0	-
	ROW	-	80.0	320.0	-	20.0	80.0	-	-	-	-	-	-	-	500.0	-
	C	-	-	-	-	100.0	400.0	-	500.0	2,000.0	-	-	-	-	3,000.0	-
		190.8	**120.0**	**480.0**	**-**	**140.0**	**560.0**	**-**	**500.0**	**2,000.0**	**-**	**-**	**-**	**-**	**3,800.0**	**-**

GRUBB ROAD: FOULK ROAD TO SR 92, NAAMAN'S ROAD, PEDESTRIAN IMPROVEMENTS [REMOVED]

DESCRIPTION: The initial public participation process has been completed that jointly developed a plan for pedestrian movement along the north side of Grubb Road. A concept plan has been completed for this project.

JUSTIFICATION: There is an extensive need for pedestrian improvements along this roadway.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Collectors
Functional Category: Management
Year Initiated: FY 1999

HIGHWAY SAFETY IMPROVEMENT PROGRAM, NEW CASTLE COUNTY

DESCRIPTION: The Highway Safety Improvement Program identifies areas with high concentrations of crashes and develops recommendations to improve identified safety concerns. Projects include:

- SR 2 / Red Mill Road Intersection Improvements - The SR2/Red Mill Road Intersection will be assessed on what improvements are needed to address congestion and safety, including the potential for additional turn lanes and bike and pedestrian improvements. The SR2/Red Mill Road Intersection experiences congestion frequently during the morning and evening peak hours and also has experienced crashes. It also lacks pedestrian and bicycle facilities. Improvements to the intersection were originally identified in the 1997 Churchmans Crossing Program.
- SR 273 / Chapman Road Intersection Improvements - This project includes intersection improvements at the SR273 and Chapman Road Intersection to address congestion, safety, and multi-modal needs. Improvements were identified as part of the Churchmans Crossing Study adopted in 1997. Monitoring of transportation conditions since the study was adopted has shown the continued need for transportation improvements.
- HEP NCC, SR 72 and Old Baltimore Pike Intersection Improvements - This project involves intersection improvements at the intersection of SR72 and Old Baltimore Pike, including median modifications at Royal Farms entrances along SR 72 and Old Baltimore Pike. An additional left-turn lane will be constructed along eastbound Old Baltimore Pike. This is project was identified by the Hazard Elimination Program in 2011 as Site T.
- HEP NCC, SR2, Wollaston Road to Milltown Road - The project will include lengthening of the eastbound left turn lane onto Milltown Road, signal modifications, and the addition of sidewalk on the north side of SR2. Location was identified on the 2010 HEP as Site O.
- HEP NCC, SR41 and Faulkland Road Intersection – The project is currently proposed to lengthen the left turn lane from Newport Gap Pike onto Eastbound Faulkland Road by approximately 400 feet. The concrete medians will be removed from all four legs and a new traffic signal will be installed. This project will also extend and improve the sidewalk along Faulkland road from Oakland drive to the intersection.
- HEP NCC, US 40 at Glasgow Avenue - Project involves constructing a new right turn lane along Northbound Glasgow Avenue at the intersection with Eastbound US 40, signal phase changes, and drainage improvements. This project was identified as Site V from the 2011 HEP program
- HSIP NCC, Churchmans Road WB, Christiana Hospital to SR 1 - This project will modify southbound ramp movement off of SR 7 southbound to address weaves from the ramp to Continental Drive. The left turn lanes on westbound Churchmans Road at the intersection of Continental Drive will be extended. This project will also extend current lane drop on Churchmans Road westbound to the intersection at the Christiana Hospital, which will turn into the new right turn lane into the Center Point Shopping Center, along with pedestrian improvements. This project location was identified on both the 2000 (Site B) and 2006 HSIP (Site E).
- HSIP NCC, I-95, N213 Carr Road & N3, Marsh Road Interchange Improvements - This project will include additional turn lanes at the Marsh Road/Carr Road and Marsh Road/I-95 SB Ramp intersections; and pedestrian and bicycle improvements. This project was identified through the Hazard Elimination Program (HEP) formerly known as Highway Safety Improvement Program (HSIP) 2002 site I.
- HSIP NCC, N282, Mill Creek Road and Stoney Batter Road Intersection - This project will provide improvements to the intersection of Mill Creek Road and Stoney Batter Road to address operational and safety issues. Increased development in the area has increased traffic congestion at this three-legged intersection. The intersection is also on the Hazard Elimination Program (HEP) formerly known as the Highway Safety Improvement Program (HSIP), 2007 list, Site S.
- HSIP NCC, N54, Howell School Road, SR 896 to SR 71 - This project will realign the SR 896, Summit Bridge Road intersections of N396, Denny Road and N54, Howell School Road. In addition, Howell School Road will be widened to provide two 11-foot lanes and two 5-foot shoulders (shared bicycle lanes) from SR 896 to Robert Peoples Boulevard. A roundabout will be constructed at the intersection of Robert Peoples Boulevard and Howell School Road. A multi-use path will also be constructed to connect access to Lums Pond from Denny Road.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (CONTINUED)

- HSIP NCC, Old Baltimore Pike and Salem Church Road - Proposed improvements will include expanding the single left-turns to double left-turns lanes from Old Baltimore Pike onto Salem Church Road.
- HSIP NCC, SR 273 and Harmony Road Intersection Improvement - This project is looking at options to address the safety and capacity issues from the I-95 off ramp being close to Harmony Road, and growth in the area.
- HSIP NCC, SR 273, Appleby Road to Airport Road - This project will include safety, capacity and pedestrian improvements at the SR273 intersections of Airport and Appleby Roads.
- HSIP NCC, SR 41 and Hercules Road Intersection Improvements - The project will consist of capacity improvements including widening to provide additional through lanes on the SR 41 and/or Hercules Road/Mill Creek Road approaches, lengthening of the existing turn lanes, accommodations for bicycles, and shoulders.
- HSIP NCC, SR 71, Old Porter Road to SR 7 - The project includes installing a traffic signal at SR 71 and Old Porter Road, converting Church Road to one-way eastbound east of the residential driveway east of SR 71, and intersection improvements at SR 7 and SR 71.
- HEP NCC, I-495 at Philadelphia Pike – Safety improvements.
- HEP NCC, SR 273 and Red Mill Road Connector Intersection Improvements - Improvements include an exclusive left turn lane on the Red Mill Road Connector approach to SR 273 and retention of stop control along Red Mill Road at the Red Mill Road Connector.

JUSTIFICATION: Improve safety at high accident locations.

County: New Castle
Investment Area:
Municipality:
Funding Program: Road System – Arterials
Functional Category: Management
Year Initiated: FY 1993

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SR 2 / Red Mill Rd Intersection Improvements	PE	25.0	175.0	700.0	-	60.0	240.0	-	-	-	-	-	-	-	1,175.0	-
	ROW	-	-	-	-	-	-	-	350.0	1,400.0	-	350.0	1,400.0	-	3,500.0	-
	C	-	-	-	-	-	-	-	-	-	-	40.0	160.0	-	200.0	7,000.0
HEP NCC, SR 273 and Red Mill Rd Connector Intersection	PE	10.0	4.0	36.0	-	-	-	-	-	-	-	-	-	-	40.0	-
	C	-	-	-	-	200.0	800.0	-	200.0	800.0	-	-	-	-	2,000.0	-

HIGHWAY SAFETY IMPROVEMENT PROGRAM (CONTINUED)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
HEP NCC, SR 72 and Old Baltimore Pike Intersection Improvements	PE	37.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	50.0	-	50.0	-	-	-	-	-	-	-	-	-	-	50.0	-
	C	-	200.0	800.0	-	200.0	800.0	-	-	-	-	-	-	-	2,000.0	-
HEP NCC, SR2, Wollaston Rd to Milltown Rd	PE	22.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	55.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	50.0	42.5	169.8	-	42.5	169.8	-	-	-	-	-	-	-	424.5	-
	C	41.9	301.8	1,207.3	-	144.5	577.9	-	-	-	-	-	-	-	2,231.5	-
	Traf	-	37.4	149.5	-	43.3	173.0	-	-	-	-	-	-	-	403.1	-
	Util	-	30.4	121.6	-	-	-	-	-	-	-	-	-	-	152.0	-
	Cnt	-	-	-	-	45.5	181.9	-	-	-	-	-	-	-	227.4	-
HEP NCC, SR41 and Faulkland Rd Intersection	PE	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	-	5.0	45.0	-	-	-	-	-	-	-	-	-	-	50.0	-
	C	-	-	-	-	100.0	900.0	-	-	-	-	-	-	-	1,000.0	-
HEP NCC, US 40 at Glasgow Ave	PE	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	25.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	337.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	32.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSIP NCC, Churchmans Rd WB, Christiana Hospital to SR 1	PE	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	60.0	540.0	-	100.0	900.0	-	-	-	-	-	-	-	1,600.0	-
HSIP NCC, I-95, N213 Carr Rd & N3, Marsh Rd Interchange	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	300.0	56.1	496.4	-	-	-	-	-	-	-	-	-	-	552.5	-
	ROW	-	10.0	40.0	-	-	-	-	-	-	-	-	-	-	50.0	-
	C	-	-	-	-	500.0	2,000.0	-	200.0	800.0	-	-	-	-	3,500.0	-
HSIP NCC, N282, Mill Creek Rd and Stoney Batter Rd Intersection	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	6.3	0.2	0.8	-	-	-	-	-	-	-	-	-	-	1.0	-
	ROW	54.7	19.0	76.0	-	-	-	-	-	-	-	-	-	-	95.0	-
	CE	-	-	-	-	21.3	191.7	-	5.3	47.9	-	-	-	-	266.2	-
	C	-	-	-	-	223.1	2,008.3	-	26.9	242.4	-	-	-	-	2,500.7	-
	Traf	-	-	-	-	-	-	-	0.5	4.5	-	-	-	-	5.0	-
	Util	-	-	-	-	29.6	266.4	-	7.4	66.6	-	-	-	-	370.0	-
	Cnt	-	-	-	-	-	-	-	13.1	117.8	-	-	-	-	130.9	-

HIGHWAY SAFETY IMPROVEMENT PROGRAM (CONTINUED)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
HSIP NCC, N54, Howell School Rd, SR 896 to SR 71	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	31.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	200.0	-	1,184.7	-	-	132.6	-	-	-	-	-	-	-	1,317.3	-
	C	1,340.9	-	4,532.7	-	-	2,459.7	-	-	-	-	-	-	-	6,992.4	-
	Traf	50.0	-	267.3	-	-	-	-	-	-	-	-	-	-	267.3	-
	Util	-	-	138.2	-	-	-	-	-	-	-	-	-	-	138.2	-
	Cnt	-	-	-	-	-	535.9	-	-	-	-	-	-	-	535.9	-
HSIP NCC, Old Baltimore Pike and Salem Church Rd	PE	9.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	10.0	-	290.0	-	-	-	-	-	-	-	-	-	-	290.0	-
	C	-	1.0	9.0	-	75.0	675.0	-	24.0	216.0	-	-	-	-	1,000.0	-
HSIP NCC, SR 273 and Harmony Rd Intersection Improvement	PE	202.3	45.0	404.7	-	10.0	90.0	-	-	-	-	-	-	-	549.7	-
	ROW	-	-	-	-	-	-	-	50.0	450.0	-	-	-	-	500.0	-
	C	-	-	-	-	-	-	-	-	-	-	150.0	1,350.0	-	1,500.0	1,500.0
HSIP NCC, SR 273, Appleby Rd to Airport Rd	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	115.2	6.0	54.0	-	-	-	-	-	-	-	-	-	-	60.0	-
	ROW	320.0	104.0	956.2	-	-	-	-	-	-	-	-	-	-	1,060.2	-
	C	50.0	170.0	1,530.0	-	420.0	3,780.0	-	155.0	1,395.0	-	-	-	-	7,450.0	-
HSIP NCC, SR 41 and Hercules Rd Intersection Improvements	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	203.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	1,400.0	-	-	1,760.7	-	-	-	-	-	-	-	-	-	1,760.7	-
	Traf	262.9	-	-	50.0	-	-	-	-	-	-	-	-	-	50.0	-
HSIP NCC, SR 71, Old Porter Rd to SR 7	PE	40.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	163.6	-	300.0	-	-	-	-	-	-	-	-	-	-	300.0	-
	CE	-	12.2	109.7	-	-	-	-	-	-	-	-	-	-	121.9	-
	C	-	148.6	1,337.1	-	46.3	416.3	-	-	-	-	-	-	-	1,948.2	-
	Traf	-	32.7	294.1	-	-	-	-	-	-	-	-	-	-	326.8	-
	Util	2.6	15.2	71.3	-	-	-	-	-	-	-	-	-	-	86.5	-
	Cnt	-	-	-	-	23.7	213.7	-	-	-	-	-	-	-	237.4	-
SR 273 / Chapman Rd Intersection Improvements	PE	20.0	116.0	464.0	-	140.0	560.0	-	-	-	-	-	-	-	1,280.0	-
	ROW	-	-	-	-	-	-	-	50.0	200.0	-	100.0	400.0	-	750.0	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,500.0
Total		**5,586.7**	**1,592.1**	**16,375.4**	**1,810.7**	**2,424.8**	**18,072.2**	**0.0**	**1,082.2**	**5,740.2**	**0.0**	**640.0**	**3,310.0**	**0.0**	**51,047.3**	**21,000.0**

POSSUM PARK RD AND OLD POSSUM PARK RD INTERSECTION

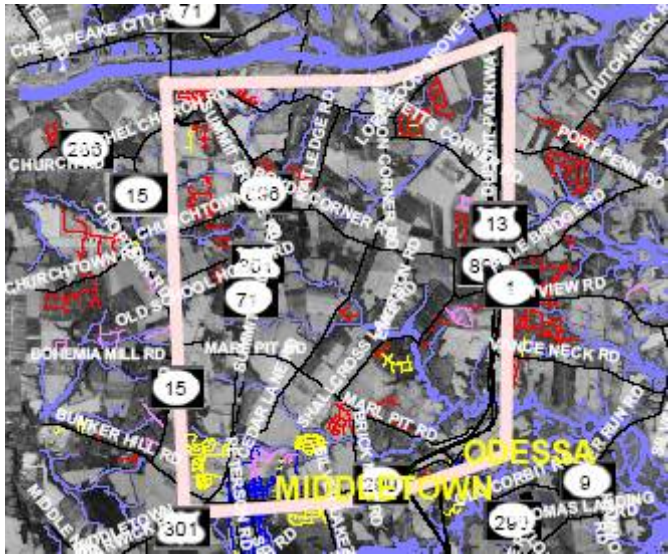
DESCRIPTION: Intersection improvements will take place at this location. Proposed improvements include constructing separate left-turn lanes along Possum Park Road at St Regis Drive and at a relocated Old Possum Park Road.

JUSTIFICATION: Improve traffic flow at intersection. A relocation of the Old Possum Park Road/Possum Park Road intersection is needed because it is too close to the existing Possum Park intersection with St. Regis Drive. This project was identified as a priority breakout project from the larger proposed improvements on Possum Park Road, from Old Possum Park Road to Possum Hollow Road, which was put on hold because the poor pavement condition was addressed separately.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Roadway - Collectors
Functional Category: Management
Year Initiated: FY 2003

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Possum Park Rd and Old Possum Park Rd Intersection Improvements	PE	-	131.6	-	-	-	-	-	-	-	-	-	-	-	131.6	-
	ROW	-	25.0	-	-	75.0	-	-	-	-	-	-	-	-	100.0	-
	C	-	-	-	-	10.0	-	-	1,490.0	-	-	-	-	-	1,500.0	-
		-	**156.6**	**-**	**-**	**85.0**	**-**	**-**	**1,490.0**	**-**	**-**	**-**	**-**	**-**	**1,731.6**	**-**

SOUTHERN NEW CASTLE COUNTY IMPROVEMENTS



DESCRIPTION: The joint New Castle County / DelDOT road system study of approximately 101 miles of collector and local roads has recently been completed. This area of Southern New Castle County roughly encompasses boundaries by the Chesapeake and Delaware Canal, the Maryland State Line, the Delaware River and the Middletown surroundings. This area is designated as a sewer service area by New Castle County for phased sewer construction to meet the needs of this rapidly growing area. The study report recommended intersection, road, and operational safety improvements throughout the area. Improvements are to be prioritized and phased in consideration of existing deficiencies, emerging development, and sewer phasing.

- Cedar Lane Road and Marl Pit Road Intersection Improvements - This project will reconfigure the intersection of Cedar Lane Road and Marl Pit Road from an intersection to a roundabout.
- Jamison Corner Road Relocated at Boyds Corner Road - This project will relocate Jamison Corner Road to the west connecting with Cedar Lane Road at the southern limits. Proposed improvements include: 1) twelve foot travel lanes with an eight foot shoulder; 2) new intersection into Bayberry Town Center, using a combination of open and closed drainage system; and 3) building a ten foot multi-use path on each side of the roadway.
- N15, Boyds Corner Road, Cedar Lane Road to US 13 - This project will improve Boyds Corner Road to four 12-foot lanes with 10-foot shoulders and a 20-foot median, using a combination of open and closed drainage system, and building a 10-foot multi-use path on each side of the roadway.
- N412, Lorewood Grove Road, Rd 412A to SR 1 - This project will improve Lorewood Grove Road to two 12-foot lanes with 8-foot shoulders, open ditch drainage system, and a 10-foot multi-use path on one side of the roadway, from Road 412A to SR 1.
- N427, Cedar Lane Road, Marl Pit Road, to Boyds Corner Road - This project will improve Cedar Lane Road to two 12-foot lanes with 8-foot shoulders, open ditch drainage system, 10-foot multi-use path on west side of the roadway, replacement of Bridge 1-401 and Bridge 1-402, and the construction of a roundabout at the intersection of Cedar Lane Road and Marl Pit Road.

JUSTIFICATION: To develop projects identified through the US 301 Major Investment Study, carry out the local roads plan, and contribute to the economic development effort to bring jobs south of the Chesapeake and Delaware Canal. The area of New Castle County just below the C & D Canal is expected to experience added congestion and safety issues because of the southern New Castle County Sewer expansion and the associated growth that will occur when the sewer goes online. DelDOT and several other agencies have entered into a memorandum of agreement concerning the need to pace necessary infrastructure in conjunction with planned growth. To respond to the need DelDOT will be planning roadway improvement projects throughout the area.

SOUTHERN NEW CASTLE COUNTY IMPROVEMENTS (Continued)

County: New Castle
Investment Area: Developing
Municipality:
Funding Program: Road System – Local Roadways
Functional Category: Management
Year Initiated: FY 2001

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Jamison Corner Rd Relocated at Boyds Corner Rd	PE	64.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	10.0	40.0	-	-	-	-	-	-	-	-	-	-	-	40.0	-
	C	1.0	4,300.0	-	3,000.0	499.0	-	-	-	-	-	-	-	-	7,799.0	-
N15, Boyds Corner Rd, Cedar Lane Rd to US 13	PE	-	-	-	-	250.0	-	-	250.0	-	-	-	-	-	500.0	-
	ROW	-	-	-	-	-	-	-	1,400.0	-	-	1,400.0	-	-	2,800.0	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,325.0
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N412, Lorewood Grove Rd, Rd 412A to SR 1	PE	-	30.0	-	-	47.0	-	-	-	-	-	-	-	-	77.0	-
	ROW	-	-	-	-	500.0	-	-	2,000.0	-	-	500.0	-	-	3,000.0	-
	C	-	-	-	-	-	-	-	-	-	-	500.0	-	-	500.0	6,500.0
N427, Cedar Lane Rd, Marl Pit Rd, to Boyds Corner Rd	PE	-	500.0	-	-	818.0	-	-	500.0	-	-	-	-	-	1,818.0	-
	ROW	-	-	-	-	-	-	-	-	-	-	1,700.0	-	-	1,700.0	900.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,000.0
Cedar Lane Rd and Marl Pit Rd Intersection	PE	56.0	75.0	-	-	-	-	-	-	-	-	-	-	-	75.0	-
	ROW	-	10.0	-	-	90.0	-	-	-	-	-	-	-	-	100.0	-
	C	-	-	-	-	750.0	-	-	750.0	-	-	-	-	-	1,500.0	-
Total		**131.5**	**4,955.0**	**0.0**	**3,000.0**	**2,954.0**	**0.0**	**0.0**	**4,900.0**	**0.0**	**0.0**	**4,100.0**	**0.0**	**0.0**	**19,909.0**	**18,725.0**

SR 141/I-95 INTERCHANGE

DESCRIPTION: Reconfigure the interchange to better accommodate directional traffic; improve ramp connections with I-95; and increase horizontal clearance between through lanes on I-95 and the bridge piers on SR141.

Current projects elements include:

- SR141 and Commons Blvd - Proposed improvements include constructing an additional left turn lane from Commons Boulevard, constructing additional SR141 through lanes at the intersection and pedestrian and transit infrastructure improvements.
- I-95 and SR141 Ramps G & F Improvements - This project will reconfigure the interchange to better accommodate directional traffic, improve ramp connections with I-95, and increase the horizontal clearance between through lanes on I-95 and the bridge piers on SR 141. The project will also reconstruct the SR141 bridges (1-675 & 1-678) that cross over northbound I-95.

JUSTIFICATION: Decrease congestion and improve safety at the interchange.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Expressways
Functional Category: Management
Year Initiated: FY 2007

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
I-95 and SR141 Interchange, Ramps G & F Improvements	PE	178.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	200.0	-	2,650.0	-	-	665.9	-	-	-	-	-	-	-	3,315.9	-
	C	2,900.0	-	15,100.0	-	-	13,421.3	-	-	-	-	-	-	-	28,521.3	-
	Traf	50.0	-	450.0	-	-	104.1	-	-	-	-	-	-	-	554.1	-
	Util	25.0	-	315.5	73.1	-	55.8	-	-	-	-	-	-	-	444.4	-
	Cnt	-	-	-	-	-	2,500.0	-	-	-	-	-	-	-	2,500.0	-
SR141 Improvements, I-95 Interchange to Jay Dr	PE	1,911.1	57.3	229.1	-	-	-	-	-	-	-	-	-	-	286.4	-
	ROW	10.0	290.0	-	-	200.0	-	-	-	-	-	-	-	-	490.0	-
	C	-	-	-	-	1,800.0	7,200.0	-	5,400.0	21,600.0	-	1,800.0	7,200.0	-	45,000.0	-
Total		**5,274.9**	**347.3**	**18,744.6**	**73.1**	**2,000.0**	**23,947.1**	**0.0**	**5,400.0**	**21,600.0**	**0.0**	**1,800.0**	**7,200.0**	**0.0**	**81,112.1**	**0.0**

SR 2, ELKTON ROAD: MARYLAND STATE LINE TO SR 273, DELAWARE AVENUE, NEWARK

DESCRIPTION: This project will include roadway reconstruction and intersection improvement. SR 2 from Delaware Avenue to Casho Mill Road is complete. Between Casho Mill Road and the Maryland line, the project includes roadway reconstruction and pedestrian and bicycle improvements. An additional travel lane will be added in each direction from Otts Chapel Road to SR4.

JUSTIFICATION: The roadway surface along this area is crumbling and needs a total reconstruction. The area from Amstel Avenue north of SR 273, Delaware Avenue in Newark has been identified as a Highway Safety Improvement Program (HSIP) site.

County: New Castle
Investment Area: Center
Municipality: Newark
Funding Program: Road System – Arterials
Functional Category: Management/ Expansion
Year Initiated: FY 2004

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Elkton Rd, MD Line to Casho Mill Rd	PE	350.2	-	1,150.2	-	-	-	-	-	-	-	-	-	-	1,150.2	-
	ROW	-	20.0	80.0	-	160.0	640.0	-	20.0	80.0	-	-	-	-	1,000.0	-
	C	-	-	-	-	-	-	-	200.0	800.0	-	3,600.0	14,400.0	-	19,000.0	6,000.0
		350.2	**20.0**	**1,230.2**	**-**	**160.0**	**640.0**	**-**	**220.0**	**880.0**	**-**	**3,600.0**	**14,400.0**	**-**	**21,150.2**	**6,000.0**

SR 4, CHRISTINA PARKWAY FROM SR 2 TO SR 896

DESCRIPTION: This project will reconstruct the pavement and redesign the roadway to provide two eastbound lanes on SR 4, Christina Parkway from SR 2, Elkton Road to SR 896, South College Avenue. Westbound SR 4, Christina Parkways current configuration of one lane from Elkton Road to the former Chrysler plant will remain. As the former Chrysler plant is redeveloped the sites two entrances on SR 4 will require improvements. Multi-modal improvements will be made as well, including upgrades to the multi-use path along the south side of SR 4, and minor bus stop improvements.

JUSTIFICATION: This project will improve safety in the area.

County: New Castle
Investment Area: Center
Municipality: Newark
Funding Program: Road System – Arterials
Functional Category: Management
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SR 4, Christina Parkway from SR 2, Elkton Rd to SR 896, South College	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	3.7	39.9	159.8	-	-	-	-	-	-	-	-	-	-	199.7	-
	ROW	-	-	-	-	-	-	-	60.0	240.0	-	-	-	-	300.0	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500.0
		3.7	**39.9**	**159.8**	**-**	**-**	**-**	**-**	**60.0**	**240.0**	**-**	**-**	**-**	**-**	**499.7**	**500.0**

TRANSIT FACILITIES, NEW CASTLE COUNTY

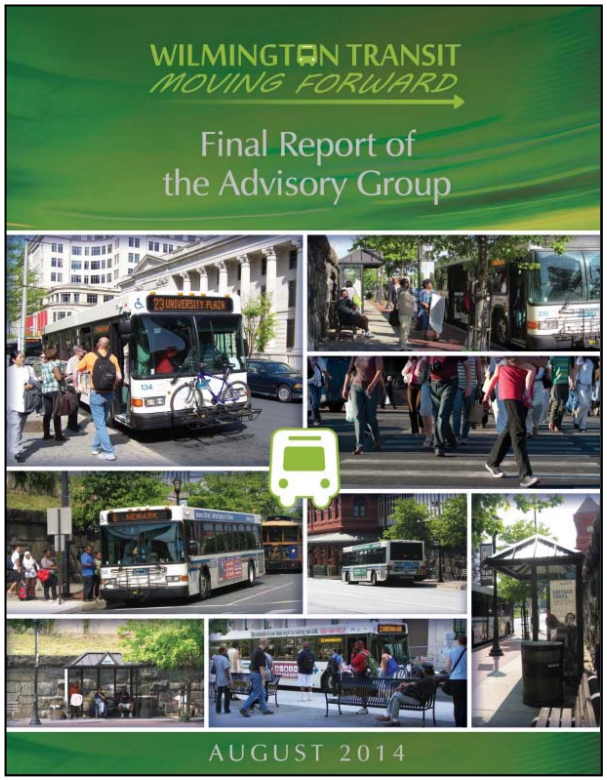
DESCRIPTION: The project will entail the development, design and construction of a new park & ride and transit facility around the Road A/Center Boulevard location. The facility will provide for pedestrians and vehicles as well as buses and other needs for a park & ride transit center. The current Park & Ride; which exists in the middle of the Christiana Mall Parking lots, has developed over the years to provide both park & ride and transit services. Dart First State runs numerous bus routes through the location; both destination and transfer routes. The current portions of the parking lot that has our Park & Ride location is planned to be redeveloped by the Christiana Mall starting in 2016. DelDOT and Dart First State will be working to develop a new location that meets the short term and long term goals of transit services within this developing region.

JUSTIFICATION: Park and rides meet the short term and long term goals of transit services.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Transit
Functional Category: Management
Year Initiated: FY 2013

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
NCC Transit Center (Christiana Mall Park and Ride)	PD	46.6	9.0	36.0	-	-	-	-	-	-	-	-	-	-	45.0	-
	PE	-	10.0	40.0	-	120.0	480.0	-	20.0	80.0	-	-	-	-	750.0	-
	ROW	-	-	-	-	-	-	-	200.0	800.0	-	-	-	-	1,000.0	-
	C	-	-	-	-	-	-	-	-	-	-	300.0	1,200.0	-	1,500.0	1,000.0
		46.6	**19.0**	**76.0**	**-**	**120.0**	**480.0**	**-**	**220.0**	**880.0**	**-**	**300.0**	**1,200.0**	**-**	**3,295.0**	**1,000.0**

TRANSIT FACILITIES, WILMINGTON



DESCRIPTION:

City of Wilmington Bus Stop Beautification - Project includes building and/or providing new bus stop shelters within the City of Wilmington for high volume bus stop locations.

Christiana Crescent Elevators - This project will upgrade or rehabilitate the elevators at the Christiana Crescent Parking Garage in Wilmington. This project is a two and a half story parking facility on the Water Street surface lot. It provides over 400 parking spaces in a secure location adjacent to the Wilmington Train Station. The building matches the architecture of the historic Train Station and will also provide easy access and pedestrian amenities.

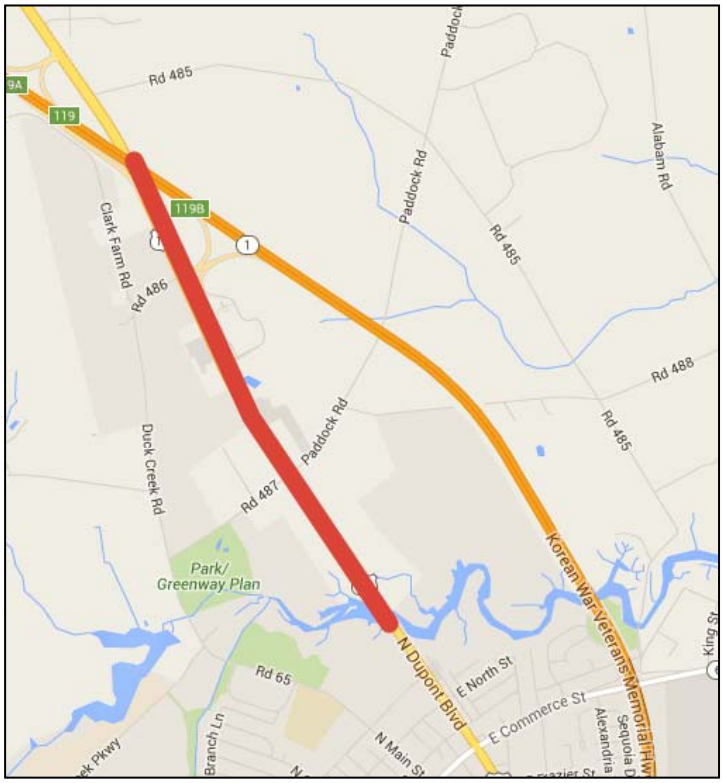
Wilmington Transit Moving Forward - This project involves enhancing and/or developing transit service needs in Wilmington.Wilmington is Delaware's largest city and has the greatest transit needs for its residents and businesses.

JUSTIFICATION: Meet the short term and long term goals of transit services including those identified by the Wilmington Transit Moving Forward report.

County: New Castle
Investment Area: Core
Municipality: City of Wilmington
Funding Program: Transit
Functional Category: Management
Year Initiated: FY 2013

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
City of Wilmington Bus Stop Beautification	C	62.5	437.5	-	-	-	-	-	-	-	-	-	-	-	437.5	-
Christina Crescent Elevators	C	50.0	950.0	-	-	-	-	-	-	-	-	-	-	-	950.0	-
Wilmington Transit Moving Forward (PORTER SITE)	PE	-	300.0	-	-	-	-	-	-	-	-	-	-	-	300.0	-
	C	-	250.0	-	-	1,000.0	-	-	1,000.0	-	-	450.0	-	-	2,700.0	-
Total		**-**	**550.0**	**-**	**-**	**1,000.0**	**-**	**-**	**1,000.0**	**-**	**-**	**450.0**	**-**	**-**	**3,000.0**	**-**

US 13: DUCK CREEK TO SR 1



DESCRIPTION: This project will implement improvements in accordance with the Town of Smyrna's land use and transportation master planning effort. Improvements include controlled access, sidewalk, bike access, and other amenities.

JUSTIFICATION: These improvements on US 13 are consistent with the Town of Smyrna's land use and transportation master plan.

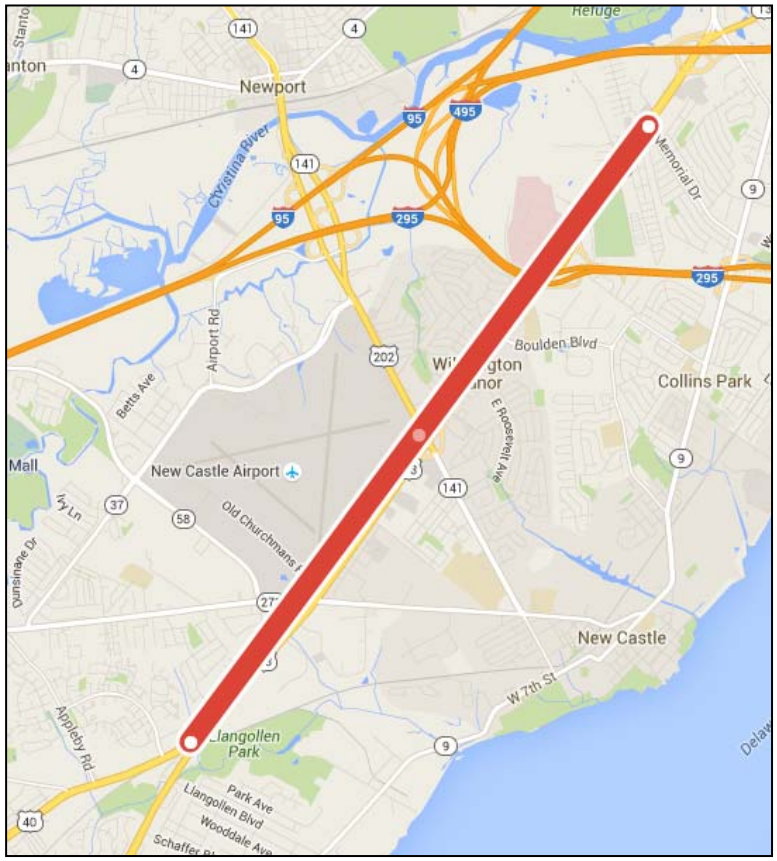
County: New Castle
Investment Area: Developing
Municipality: Smyrna
Funding Program: Road System – Arterials
Functional Category: Management
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
US 13, Duck Creek to SR 1	PE	-	-	-	-	80.0	320.0	-	120.0	480.0	-	-	-	-	1,000.0	-
	ROW	-	-	-	-	-	-	-	-	-	-	100.0	400.0	-	500.0	700.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,000.0
		-	-	-	-	**80.0**	**320.0**	-	**120.0**	**480.0**	-	**100.0**	**400.0**	-	**1,500.0**	**2,700.0**

US 13: US 40 – MEMORIAL DRIVE PEDESTRIAN IMPROVEMENTS

DESCRIPTION: This project will implement sidewalk, bike, and other safety improvements.

JUSTIFICATION: Improve safety along this corridor that experiences a high rate of pedestrian crashes. The US 13 corridor has incomplete accommodations for pedestrians and other non-motorized modes. The corridor has experienced accidents involving pedestrians and the need for improvements has been identified by various studies.



County: New Castle
Investment Area: Center
Municipality:
Funding Program: Road System – Arterials
Functional Category: Management
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
US13, US40 to Memorial Dr Pedestrian Improvements	PE	150.0	110.0	440.0	-	40.0	160.0	-	20.0	80.0	-	-	-	-	850.0	-
	ROW	-	-	-	-	10.0	40.0	-	100.0	400.0	-	90.0	360.0	-	1,000.0	-
	C	-	-	-	-	-	-	-	-	-	-	400.0	1,600.0	-	2,000.0	3,000.0
		150.0	**110.0**	**440.0**	**-**	**50.0**	**200.0**	**-**	**120.0**	**480.0**	**-**	**490.0**	**1,960.0**	**-**	**3,850.0**	**3,000.0**

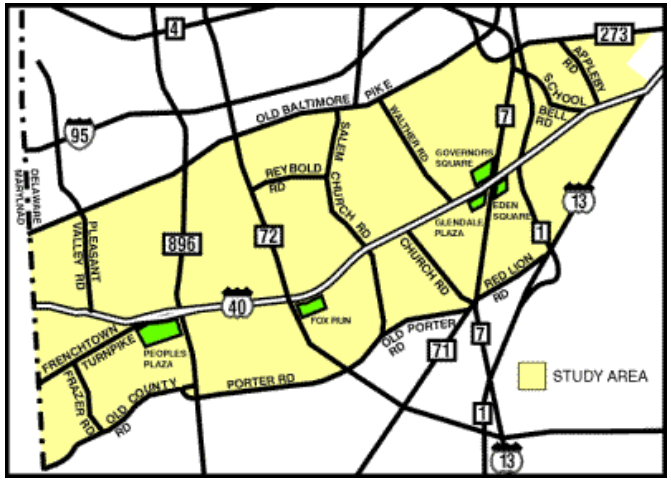
US 13, PHILADELPHIA PIKE: CLAYMONT TRANSPORTATION PLAN IMPLEMENTATION [REMOVED]

DESCRIPTION: This project will focus on the area of Claymont from Perkins Run (south of Harvey Road) to I-495. Improvements will consist of safety improvements, streetscaping, pedestrian/bicycle improvements and on-street parking in desirable areas. Extensive community involvement has occurred and a concept plan has been developed.

JUSTIFICATION: This area was originally identified through the HSIP. Extensive community involvement has been going on for two years, and a concept plan is being finalized. Work will support land use planning in Claymont.

County:	New Castle
Investment Area:	Core
Municipality:	
Funding Program:	Road System – Arterials
Functional Category:	Management
Year Initiated:	FY 2005

US 40: MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS



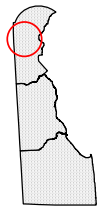
DESCRIPTION: This project implements the recommendations of the Route 40 Steering Committee, a public group that has recommended transportation improvements for the next twenty years, to address planned growth and enhance the quality of life in the Route 40 Corridor. The Committee's recommendations are found in the Route 40 Corridor 20-Year Transportation Plan dated June 19, 2000.

The projects listed below are current improvements included within the Plan.

- **US 40 / SR 72 Intersection Improvements –** Add northbound/southbound through lanes and eastbound/westbound left-turn lanes which will provide double left-turn lanes at all legs of the intersection to address operational problems at the intersection. This project will also include improvements to the SR 72, Wrangle Hill Road/Del Laws Road Intersection.
- **US 40 and SR 896 Grade Separated Intersection-** The purpose of this project is to improve safety and operations along the US40 corridor. The project will convert the US40/SR896 intersection from an at-grade intersection to a grade-separated intersection. The preferred alternative includes a partial loop interchange along with associated improvements to drainage, bike, and pedestrian facilities. A new traffic signal is proposed at terminus of the northbound SR 896 ramps at US40
- **US 40 and SR7 Intersection Improvements -** The project will install signalized pedestrian crossings across the north and south legs of the US 40 at SR 7 intersection and sidewalk connections near the intersection. Currently, no pedestrian accommodations are provided at the US 40 at SR 7 intersection and pedestrian crossings are prohibited via signing across the east and west legs of the intersection. However, land uses surrounding the US 40 at SR 7 intersection generate significant pedestrian activity. Sidewalk is provided on the southeast corner of the intersection, serving theEden Square Shopping Center.
  US 40, Salem Church Road to Walther Road - This project is proposing to add an additional lane in each direction along US40 from Salem Church Road to Walther Road. There will also be pedestrian and bicycle improvements with the addition of a multiuse path for the length of the project.

JUSTIFICATION: The Route 40 Program has been developed through the work of the Route 40 Steering Committee, which was comprised of civic and business leaders, property owners, state and New Castle County legislators and the Project Partners, DelDOT, New Castle County and WILMAPCO. The recommended 20-Year Transportation Plan, adopted in June 2000, intends to address traffic generated from committed developments in the corridor, strives to not promote additional development and traffic through the construction of excess highway capacity in the corridor and implements transportation improvements that enhance the quality of life in the Route 40 Corridor. To meet these goals, the program is based on a Monitoring and Triggering Program, which assesses yearly traffic, land use, transit and safety conditions, among other factors, in the corridor to recommend schedule changes to the funding of the Route 40 Program.

County:	New Castle
Investment Area:	Core
Municipality:	
Funding Category:	Road System – Arterials
Functional Category:	Management
Year Initiated:	FY 1994



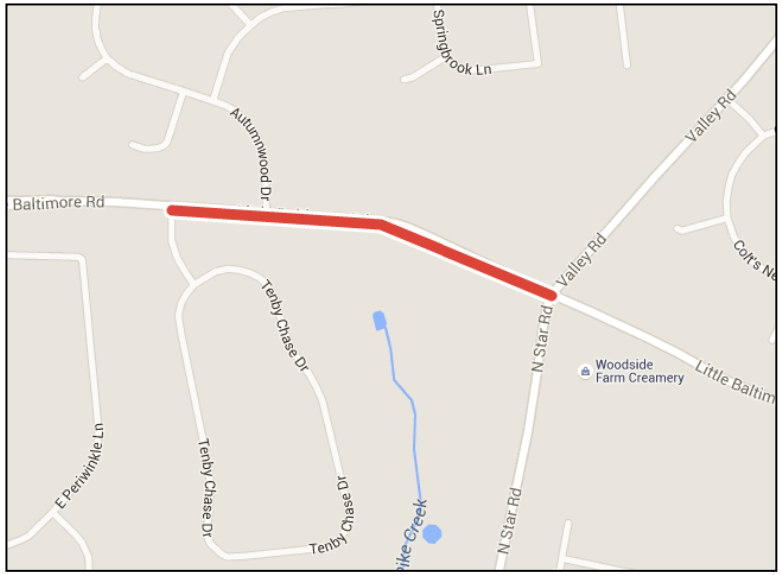
US 40: MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
US 40 and SR7 Intersection Improvements	PE	19.6	-	15.3	-	-	-	-	-	-	-	-	-	-	15.3	-
	ROW	-	6.0	24.0	-	-	-	-	-	-	-	-	-	-	30.0	-
	C	-	-	-	-	100.0	400.0	-	400.0	1,600.0	-	-	-	-	2,500.0	-
US 40 & SR 896 Grade Separated Intersection	PE	-	300.0	1,200.0	-	320.0	1,280.0	-	180.0	720.0	-	-	-	-	4,000.0	-
	ROW	-	-	-	-	-	-	-	100.0	400.0	-	300.0	1,200.0	-	2,000.0	-
	CE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30,000.0
US 40 / SR 72 Intersection Improvements	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	115.0	18.0	72.0	-	-	-	-	-	-	-	-	-	-	90.0	-
	ROW	749.3	-	2,744.5	-	-	-	-	-	-	-	-	-	-	2,744.5	-
	C	-	10.0	40.0	-	1,600.0	6,400.0	-	990.0	3,960.0	-	-	-	-	13,000.0	-
US 40, Salem Church Rd to Walther Rd	PE	100.0	200.0	800.0	-	180.0	720.0	-	-	-	-	-	-	-	1,900.0	-
	ROW	-	-	-	-	-	-	-	200.0	800.0	-	200.0	800.0	-	2,000.0	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,000.0
Total		**983.9**	**534.0**	**4,895.8**	**0.0**	**2,200.0**	**8,800.0**	**0.0**	**1,870.0**	**7,480.0**	**0.0**	**500.0**	**2,000.0**	**0.0**	**28,279.8**	**40,000.0**

VALLEY ROAD / LITTLE BALTIMORE PIKE

DESCRIPTION: The project will assess phased improvements at the intersection of Valley Road and Little Baltimore Road, including all four approaches. Improvements might include sidewalk connections, drainage improvements, and roadway and intersection reconstruction.

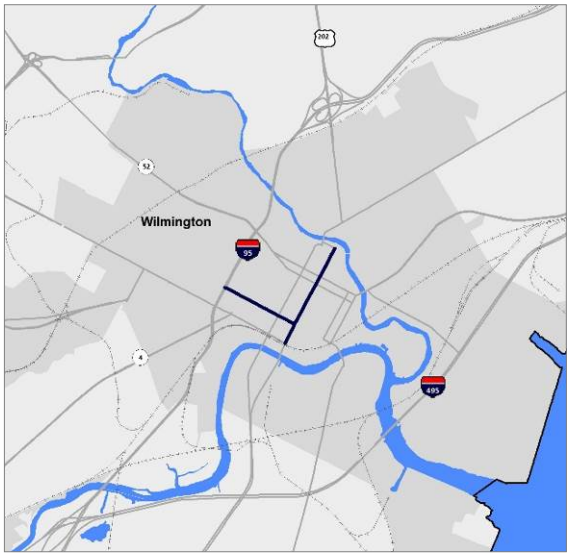
JUSTIFICATION: The sidewalk network is incomplete at and near the intersection. Drainage issues also have been identified



County: New Castle
Investment Area: Center
Municipality:
Funding Program: Road System – Collectors
Functional Category: Management
Year Initiated: FY 2016

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Little Baltimore Rd Drainage Improvements	PD	49.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	25.0	20.0	80.0	-	5.0	20.0	-	-	-	-	-	-	-	125.0	-
	ROW	-	20.0	80.0	-	30.0	120.0	-	-	-	-	-	-	-	250.0	-
	C	-	-	-	-	50.0	200.0	-	350.0	1,400.0	-	-	-	-	2,000.0	-
		74.9	**40.0**	**160.0**	**-**	**85.0**	**340.0**	**-**	**350.0**	**1,400.0**	**-**	**-**	**-**	**-**	**2,375.0**	**-**

WILMINGTON INITIATIVES



DESCRIPTION:

- **Walnut Street, Front Street to 4th Street -** This project will add a second left turn lane from East Front Street onto Walnut Street in the city of Wilmington. This project will also remove the current sweep from East Front Street. Project is needed for traffic mitigation of the Viaduct Project in Wilmington.
- **4th Street, Walnut Street to I-95** –The project's goal is to improve pedestrian safety of the four-lane roadway and create a transit-friendly environment by constructing bus shelters, improving striping and crosswalk location, and re-constructing sidewalks. Improved signalization will also be done as part of the project.
- **King and Orange Streets, MLK Boulevard to 13th Street -** These streets are the major transit corridors within Wilmington's Central Business District. It is the project's goal to improve the transit rider's experience, thereby increasing usage.This will be done by installing state-of-the art bus shelters, making sidewalk and crosswalk improvements and providing better lighting and streetscaping.
- **Walnut Street, MLK to 13th Street -** Walnut Street is a major in-bound route to the Central Business District. This project includes the removal of the "sweep" (MLK to 2nd/Walnut St Intersection); and other elements to improve the operation and safety aspects of the corridor and address needed improvements for pedestrians, bicyclists, and transit users.

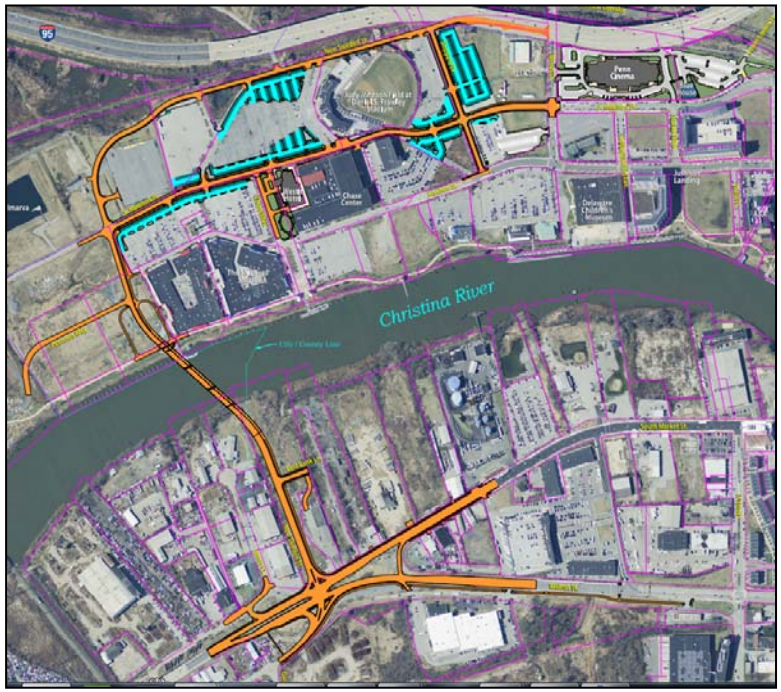
JUSTIFICATION: These projects will improve the multi-modal environment between city neighborhoods and employment centers; create a safer vehicular and pedestrian environment; and improve the visual appearance of the streets.

County:	New Castle
Investment Area:	Center
Municipality:	Wilmington
Funding Program:	Road System – Arterial, Collector
Functional Category:	Management
Year Initiated:	FY 2015

WILMINGTON INITIATIVES (CONTINUED)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Walnut St, Front St to 4th St, Wilmington	PE	110.0	48.0	192.0	-	30.0	120.0	-	-	-	-	-	-	-	390.0	-
	ROW	-	2.5	10.0	-	2.5	10.0	-	-	-	-	-	-	-	25.0	-
	C	-	-	-	-	300.0	1,200.0	-	-	-	-	-	-	-	1,500.0	-
Wilmington Initiatives, 4th St, Walnut St to I-95	PE	-	-	-	-	-	-	-	-	-	-	100.0	400.0	-	500.0	250.0
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wilmington Initiatives, King and Orange Sts, MLK Boulevard to 13th St	PE	50.0	120.0	480.0	-	110.0	440.0	-	-	-	-	-	-	-	1,150.0	-
	ROW	-	-	-	-	100.0	400.0	-	-	-	-	-	-	-	500.0	-
	C	-	-	-	-	-	-	-	800.0	3,200.0	-	200.0	800.0	-	5,000.0	-
Wilmington Initiatives, Walnut St, MLK to 13th St	PE	-	-	-	-	-	-	-	200.0	800.0	-	-	-	-	1,000.0	-
	ROW	-	-	-	-	-	-	-	-	-	-	100.0	400.0	-	500.0	500.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,000.0
Total		**160.0**	**170.5**	**682.0**	**0.0**	**542.5**	**2,170.0**	**0.0**	**1,000.0**	**4,000.0**	**0.0**	**400.0**	**1,600.0**	**0.0**	**10,565.0**	**6,250.0**

WILMINGTON RIVERFRONT



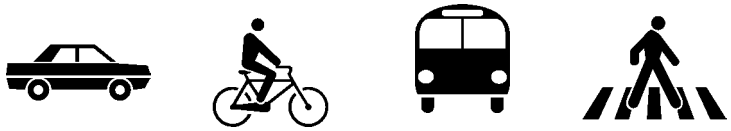
DESCRIPTION: Improvements include better vehicular access and a more pedestrian-friendly environment. New bridge is proposed to be built over the Christina River. Exact location is not yet defined, but the most logical choice will be from the south of Pod III of the Shipyard Shops, connecting South Market Street, South of the Walnut Street/South Market split. Projects include:

- **Christina River Bridge** - This new multi-modal crossing over the Christina River will add another access point to Wilmington Riverfront attractions and improve access to and from US 13, I-495 and I-95. The project includes the bridge approaches and connections to the existing street grid on both sides of the Christina River.
- **Christina River Bridge Approaches** - This project proposes to establish an urban grid system of streets that will connect and access the new bridge crossing over the Christina River from both the east and west banks of the River. The streets will be multi-modal, bike, pedestrian and transit-friendly with access to existing and future development parcels. The success of Wilmington's redevelopment of this area depends on multi-modal transportation improvements. This new street system is needed to properly access the new bridge crossing of the Christina river while maintaining safe connections to development parcels such as Frawley Stadium, the Chase Center, the Westin hotel, the IMAX theater and other shops, restaurants and riverfront attractions.
- **Justison Landing -** This project provides all the infrastructure improvements to create the street grid concept for the Wilmington Riverfront. It is made up of several smaller projects that provide the necessary improvements to support the anticipated development in the area.
- **Riverfront Initiatives Development -** The project, in response to Riverfront development opportunities, will supply traffic studies, parking options and transportation concepts. This may include the design of future transportation facilities as well as investigation of existing roadway, structural, and drainage conditions.
- **Riverfront Rail Relocation and Parking Improvements** - This project will relocate railroad track, remove a highway billboard, construct surface and structured parking, provide pedestrian connections and manage all associated hazmat activities.

JUSTIFICATION: The success of Wilmington's redevelopment of this area depends on multi-modal transportation improvements. The Riverwalk provides a critical pedestrian link from the Wilmington Transit Center and Riverfront Park to riverfront attractions like Frawley Stadium, the Arts Center, Shipyard Shops, restaurants, and entertainment.

WILMINGTON RIVERFRONT (Continued)

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Road System – Locals
Functional Category: Management
Year Initiated: FY 1997



Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Christina River Bridge Approaches	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	2,673.2	-	1,498.2	-	-	-	-	-	-	-	-	-	-	1,498.2	-
	ROW	-	-	5,600.0	-	-	-	-	-	-	-	-	-	-	5,600.0	-
	C	-	400.0	1,600.0	-	2,140.0	8,560.0	-	1,880.0	7,520.0	-	-	-	-	22,100.0	-
	Traf	62.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Main	156.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Christina River Bridge	ROW	100.0	-	4,900.0	-	-	-	-	-	-	-	-	-	-	4,900.0	-
	C	-	800.0	3,200.0	-	2,800.0	11,200.0	-	1,200.0	4,800.0	-	-	-	-	24,000.0	-
Justison Landing	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	218.0	218.0	-	-	218.0	-	-	68.0	-	-	68.0	-	-	572.0	136.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Main	265.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Riverfront Initiatives Development	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	261.1	50.0	-	-	-	-	-	-	-	-	-	-	-	50.0	-
	ROW	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Riverfront Rail Relocation and Parking Improvements	CE	75.0	75.0	-	-	75.0	-	-	75.0	-	-	75.0	-	-	300.0	150.0
Riverfront Deck Repairs	PE	-	400.0	-	-	-	-	-	-	-	-	-	-	-	400.0	-
	C	-	-	-	-	750.0	-	-	750.0	-	-	-	-	-	1,500.0	-
Total		**3,811.6**	**1,943.0**	**16,798.2**	**0.0**	**5,983.0**	**19,760.0**	**0.0**	**3,973.0**	**12,320.0**	**0.0**	**143.0**	**0.0**	**0.0**	**60,920.2**	**286.0**

WILMINGTON SIGNAL IMPROVEMENTS

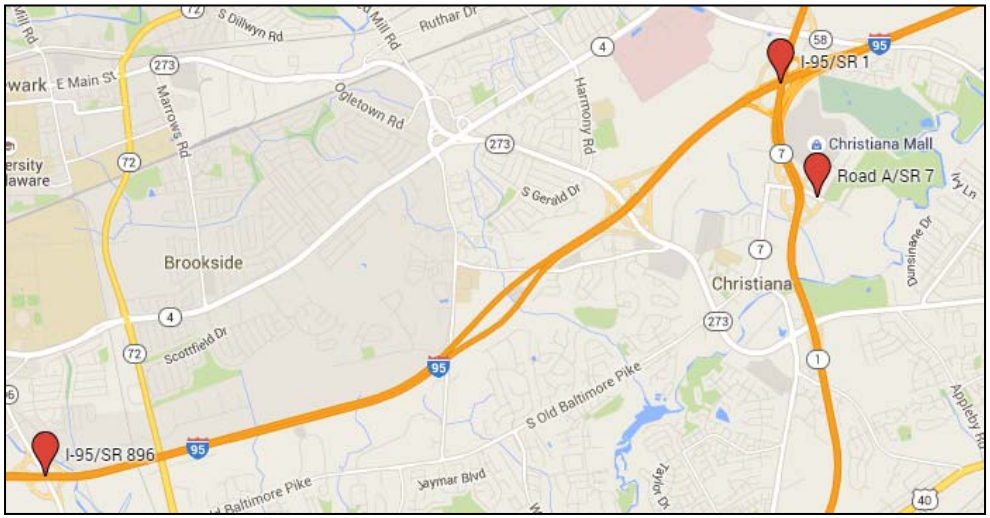
DESCRIPTION: There are roughly fifty intersections in the City which remain to be addressed as part of the Wilmington Signal Improvement Project program. The work will address the remaining intersections, including provisions for modern Americans with Disabilities Act (ADA)-accessible curb-ramps. A key element will be to establish a new communication link between City traffic operations and the Transportation Management Center (TMC) in Smyrna.

JUSTIFICATION: LED's have been installed throughout Delaware as a cost reducing measure as the incandescent bulbs have a much shorter lifespan than LED'S.

County: New Castle
Investment Area: Center
Municipality: Wilmington
Funding Program: Roadways - Locals
Functional Category: Management
Year Initiated: FY 2008

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Wilmington Signal Improvements Project, Phase 2	Pro	1,015.2	-	704.0	-	-	-	-	-	-	-	-	-	-	704.0	-
Total		**1,015.2**	**-**	**704.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**704.0**	**-**

I-95: MARYLAND STATE LINE TO I-495



DESCRIPTION: This project will consist of major improvements throughout the area to help alleviate traffic congestion. Previous improvements included a new Churchmans Road Bridge over I-95 and a 5th travel lane from Churchmans Bridge to SR 141.

Current projects include:

- **I-95 and SR896 Interchange** - The proposed improvements would include ramp realignments and other geometric improvements to address congestion and safety on both I-95 and SR896. The I-95/SR896 Interchange experiences congestion in the peak hours, along with accidents during different times of the day. Improvements at the interchange to address these and other related issues have been discussed for many years as traffic has increased.
- **SR 1 / I-95 Interchange** -- Construction of a new multiple-lane interchange will reduce the traffic weaving around the Christiana Mall, SR 1, and I-95 areas. The project will separate out local traffic movements from high speed movements.
- **Road A/SR 7--** Road A/SR 7 includes the bridge widening project will increase the capacity along Road A from the Center Boulevard intersection to the old SR7 intersection. The project includes increasing capacity on the Road A Bridge and adjacent roadway as well as modifications to the various intersections along Road A from the Center Boulevard Intersection to old SR 7. Accommodations for pedestrians and bicycles will be included in the project.

JUSTIFICATION: The SR 1 / I-95 Interchange project will reduce traffic congestion in the busy I-95 northeast corridor. The Road A/SR 7 project will widen the Road A Bridge over SR1 and roadways and reconfigure the surrounding intersections to maintain an acceptable level of service at the intersections and to manage congestion along the Road A roadway segment.

I-95: MARYLAND STATE LINE TO I-495 (Continued)

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Expressways
Functional Category: Expansion
Year Initiated: FY 2002

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SB I-495 Lane Extension at I-95	PE	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-
	C	-	560.0	2,240.0	-	-	-	-	-	-	-	-	-	-	2,800.0	-
I-95 and SR896 Interchange	PE	-	200.0	800.0	-	240.0	960.0	-	200.0	800.0	-	140.0	560.0	-	3,900.0	100.0
	ROW	-	-	-	-	-	-	-	-	-	-	200.0	800.0	-	1,000.0	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25,000.0
SR 1 / I-95 Interchange	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	321.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	26.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	7,045.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rd A / SR7 Improvements	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	328.5	-	1,050.0	-	-	100.0	-	-	-	-	-	-	-	1,150.0	-
	ROW	-	200.0	800.0	-	-	-	-	-	-	-	-	-	-	1,000.0	-
	C	-	-	-	-	-	-	-	20.0	80.0	-	2,180.0	8,720.0	-	11,000.0	-
Total		**7,722.0**	**200.0**	**1,850.0**	**0.0**	**0.0**	**100.0**	**0.0**	**20.0**	**80.0**	**0.0**	**2,180.0**	**8,720.0**	**0.0**	**13,150.0**	**0.0**

I-95 / US 202 INTERCHANGE

DESCRIPTION: Widen the existing ramp from NB I-95 to NB US202 in the I-95/US202 interchange from one to two lanes. Additional ramp improvements will address weaving problems and develop the US 202 gateway into the City of Wilmington. This project was previously referred to as: I-95 Northbound Ramp to US 202.

JUSTIFICATION: Traffic at this ramp backs up at various times during the day onto I-95 as far south as the City of Wilmington. In so doing, it effectively restricts the capacity of two lanes on I-95, where only three exist, and creates a safety problem. With the improvements to US 202 as part of the Blue Ball Properties project, and the widening of this ramp, the capacity and safety issues on I-95 will be eliminated.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Expressways
Functional Category: Expansion
Year Initiated: FY 2003

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
I-95 & US 202 Interchange	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	778.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	187.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	2,447.6	106.0	424.0	-	-	-	-	-	-	-	-	-	-	530.0	-
		3,413.6	**106.0**	**424.0**	-	-	-	-	-	-	-	-	-	-	**530.0**	-

NEW CASTLE COUNTY INDUSTRIAL TRACK GREENWAY

DESCRIPTION: The first phase of the Industrial Track Greenway begins at SR 273 in the City of New Castle and extends just north of Boulden Boulevard. New Castle County will construct Phase 2 of the Greenway, which will extend from the end of Phase 1 to the Christina River. Phase 3 connects Phase 4 of the Industrial Track will begin at the end of Phase 2, cross the Christina River, and connect to the Wilmington Riverwalk.

JUSTIFICATION: Phase 3 will complete the Industrial Track Greenway, a safe, direct, paved and nearly uninterrupted non-motorized travel route extending six miles between Wilmington and New Castle. In addition to being an important transportation and recreational route, the Industrial Track Greenway will serve significant public health and economic development purposes.

County: New Castle
Investment Area: Core/Center
Municipality: Wilmington
Funding Program: Road System – Local
Functional Category: Expansion
Year Initiated: FY 2010

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Industrial Track Greenway Phase III	PE	580.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	1,851.9	7,407.8	-	1,135.1	4,540.2	-	-	-	-	-	-	-	14,935.0	-
	Plan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		630.0	**1,851.9**	**7,407.8**	**-**	**1,135.1**	**4,540.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**14,935.0**	**-**

RAIL IMPROVEMENTS: NEW CASTLE COUNTY

DESCRIPTION: DelDOT/DTC contracts with the Southeastern Pennsylvania Transportation Authority (SEPTA) to provide commuter train service to Delaware along the Amtrak Northeast Corridor (NEC). Currently thirty-seven (37) trains provide service between Wilmington and the Philadelphia metropolitan area each weekday. Eighteen (18) of these trains (nine round trips) are extended to serve Fairplay at Churchman's Crossing and Newark. In order to extend additional service to Fairplay and Newark, the following investments are required:

- **Third Track Expansion, Newark to Wilmington:** This project will add a third high speed track along a 1.5 mile segment of the NEC which will increase track capacity and allow operation of ten additional SEPTA commuter trains between Wilmington and Newark. This new track will be constructed on the roadbed of an Northeast Corridor track that was removed during the 1970s. Along with the new track several new high speed crossovers and their associated signals and communications will be added. Other funding will be provided by Amtrak.
- **Northeast Corridor Improvements Yard to Ragan, Civil, Structural -** Construct an additional rail line and reconstruct the rail bridge over Mill Creek to provide additional rail capacity on Amtrak rails for DTC commuter trains to Newark.
- **Newark Regional Transportation Center:** The planning, design and construction of an enhanced and improved passenger rail station in Newark, in the general location of the existing SEPTA rail station. The station will provide Americans with Disabilities Act (ADA)-compliant high-level platforms, expand parking, and provide significantly improved passenger amenities including a station building with bathrooms.
- **Shipley Street Bridge:** This project consists of the reconstruction of the Shipley Street railroad overpass on the Amtrak Northeast Corridor in Wilmington. The bridge girder will be replaced, allowing the tracks it carries to be reconfigured to provide three through tracks. Injection grouting and other reinforcement of the abutments and supporting structure will be provided. As the bridge belongs to Amtrak, the project will be managed as a pass-through to them.
- **Fairplay Station Elevator:** The chair lift needs to be replaced at Fairplay Station. An elevator to the platform resolves maintenance issues and maintains Federal Americans with Disabilities Act (ADA) compliance.
- **Fairplay Station Parking Improvements:** Expansion will include a parking garage that is envisioned as a shared facility with the private development (office complex) adjacent to Delaware Park. This type of improvement will minimize land impacts and maximize open space.
- **Northeast Corridor Allocation Policy -** Funding for support of the Northeast Corridor required under the Cost Allocation policy mandated by the federal Passenger Rail Infrastructure Improvement Act (PRIIA). States and agencies using the NEC are required to participate in cost allocation. DTC uses the NEC for SEPTA Regional Rail service.

JUSTIFICATION: Two track constraint causes commuter trains to wait until inter-city trains pass through the area. These improvements will increase commuter rail capacity between Newark and Wilmington. These improvements will provide a viable alternative for riders who would otherwise travel to this area by car on I-95, helping mitigate congestion along the I-95 corridor.

County:	New Castle
Investment Area:	Center, Core
Municipality:	Newark, Wilmington
Funding Program:	Transit - Rail
Functional Category:	Expansion
Year Initiated:	FY 2005

RAIL IMPROVEMENTS: NEW CASTLE COUNTY (Continued)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Churchman's Crossing Fairplay Station Elevator	PE	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	3.0	17.3	68.9	-	-	-	-	-	-	-	-	-	-	86.2	-
	C	50.0	228.3	913.2	-	-	-	-	-	-	-	-	-	-	1,141.5	-
	Cnt	-	24.0	96.0	-	-	-	-	-	-	-	-	-	-	120.0	-
Churchman's Crossing Fairplay Station Parking Expansion	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,252.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Newark Regional Transportation Center, Planning and Design	PE	2,271.7	3,369.4	358.9	-	2,377.5	-	-	-	-	-	-	-	-	6,105.8	-
	Pro	73.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Newark Regional Transportation Center, Parking Lot & Access Rd	ROW	-	20.0	80.0	-	-	-	-	-	-	-	-	-	-	100.0	-
	CE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	100.0	400.0	249.8	1,240.0	4,960.0	-	210.0	840.2	-	-	-	-	8,000.0	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Newark Regional Transportation Center, Station	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	40.0	160.0	-	800.0	3,200.0	-	160.0	640.0	-	-	-	-	5,000.0	-
Newark Regional Transportation Center, Platform and	C	-	-	-	-	2,320.0	7,680.0	-	13,000.0	-	-	10,000.0	-	-	33,000.0	-
SEPTA New Payment Technology (NPT)	Proc	-	144.0	-	-	-	-	-	-	-	-	-	-	-	144.0	-
Shipley St Bridge Rehabilitation	C	-	-	-	3,000.0	629.5	-	4,000.0	-	-	-	-	-	-	7,629.5	-
Third Track Amtrak Phase	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	3,304.0	2,463.8	9,855.3	-	300.0	1,200.0	-	-	-	-	-	-	-	13,819.1	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northeast Corridor Allocation Policy	C	1,500.0	1,100.0	-	-	2,200.0	-	-	2,300.0	-	-	2,400.0	-	-	8,000.0	5,100.0
Northeast Corridor Improvements Yard to Ragan, Civil, Structural	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	934.6	84.8	339.2	-	-	-	-	-	-	-	-	-	-	424.0	-
	C	1,301.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	3,409.1	512.1	2,048.4	-	-	-	-	-	-	-	-	-	-	2,560.5	-
	Main	680.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**13,554.1**	**8,103.7**	**14,319.9**	**3,249.8**	**9,867.0**	**17,040.0**	**4,000.0**	**15,670.0**	**1,480.2**	**0.0**	**12,400.0**	**0.0**	**0.0**	**86,130.6**	**6,352.0**

SR 1 WIDENING

CHRISTIANA
DU PONT PKWY
BIKE
DUPONT
GRANT AVE
FRANCIS
GEORGETOWN
FORREST CIRCLE
DUNLEIGH
DUPONT
CHAPMAN
BROWNS
BIRCHWOOD
MAIN ST
BYRNES
PRESCOTT
PLACE
JONATHAN
SWAIN
LATNER
SWALLEY'S
VERDI
BEAVER
BOND VIEW
TRUEBENS
DENNIS
LIBERTY TERRACE
BOGGS
WALNUT
WELLSPRING
BAYD
CLAIRMONT
RUSHES
KINGSCROFT
TIMBERMILL
ROBERTSON
GLORIA
BEAR CHRISTIANA
PIGEON RUN
WILSON
GOLDEN COVE
DR
AVE
SR 1
HIGHWAY
DOVE
VIOLETTE
NEWPORT
HAMILTON
RIVER
FEDERAL SCHOOL
BUENA VISTA
VINWAY
SURREY
SUSSEX
SALEM
MALLORY
DUDLEY
CARLE
KIVERTSPOE
LANGHORNE
BOTTLEBRUSH
SOUTHERLAND
FAIR
CALLOW
OLD STATE
PKWY
KIRKLEY
SPRING
EXTENSION
DEER
FAIRVIEW
ROMNEY
ROMNEY
HUGHES
DUPONT
DUPONT
ELLEN GREEN
BRANDYWINE
DUPONT
DUPONT
DUPONT

SR 1 (Continued)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SR 72/SR 1 Diverging Diamond Interchange	PE	231.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	600.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	2,121.0	-	5,500.0	-	-	-	-	-	-	-	-	-	-	5,500.0	-
	Traf	281.0	-	221.0	-	-	-	-	-	-	-	-	-	-	221.0	-
SR 1 Widening, SR273 to the Roth Bridge	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	328.3	100.0	400.0	-	200.0	800.0	-	80.0	320.0	-	100.0	400.0	-	2,400.0	-
	ROW	4.5	1,195.5	-	-	-	-	-	-	-	-	-	-	-	1,195.5	800.0
	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SR 1 Northbound Auxiliary Lane, US 40 to SR 273	CE	86.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	2,121.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	287.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SR 1 Median Barrier Replacement	C	-	400.0	1,600.0	-	-	-	-	-	-	-	-	-	-	2,000.0	-
Total		**6,062.1**	**1,695.5**	**7,721.0**	**0.0**	**200.0**	**800.0**	**0.0**	**80.0**	**320.0**	**0.0**	**100.0**	**400.0**	**0.0**	**11,316.5**	**800.0**

SR 299: SR 1 TO CATHERINE STREET

DESCRIPTION: SR 299 will be widened to two lanes in each direction from SR 1 to Cleaver Farm Road, and a two way center lane turn lane will be added from Cleaver Farm Road to Catherine Street, along with pedestrian and bicycle improvements.

JUSTIFICATION: These corridor improvements along SR299 have been identified in the East Middletown Master Plan and have been adopted by the Town Council.

County: New Castle
Investment Area: Core
Municipality: Middletown
Funding Program: Road System – Arterial
Functional Category: Expansion
Year Initiated: FY 2015

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SR299, SR 1 to Catherine St	PE	400.0	-	200.0	-	-	75.4	-	-	-	-	-	-	-	275.4	-
	ROW	-	10.0	40.0	-	290.0	1,160.0	-	-	-	-	-	-	-	1,500.0	-
	C	-	-	-	-	40.0	160.0	-	700.0	2,800.0	-	560.0	2,240.0	-	6,500.0	-
		400.0	**10.0**	**240.0**	**-**	**330.0**	**1,395.4**	**-**	**700.0**	**2,800.0**	**-**	**560.0**	**2,240.0**	**-**	**8,275.4**	**-**

SR 7, BEAR-CHRISTIANA ROAD AND US 40 AREA IMPROVEMENTS

DESCRIPTION: This project will design and construct transportation improvement to address planned growth in the area along SR 7. The improvements also include preservation of open space and park development. Current roadway improvements include:

- **SR 7: Newtown Road to SR 273** will widen SR 7, Bear-Christiana Road from two to four travel lanes, with improvements in pedestrian, bicycle and transit facilities to address congestion and improve mobility.

JUSTIFICATION: The project area has limited infrastructure to support multiple modes of transportation and mitigate congestion. Mobility in the area is limited because of the need to use US 40 and other major roads for many local and through trips. The project area includes all of SR 7, Bear-Christiana Road from south of US 40 to SR273, Frenchtown Pike, including access to SR 1 at Newtown Road.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Collector
Functional Category: Expansion
Year Initiated: FY 1999

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SR 7, Newtown Rd to SR 273	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	62.5	200.0	-	-	-	-	-	-	-	-	-	-	-	200.0	-
	CE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Traf	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Main	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		69.4	**200.0**	-	-	-	-	-	-	-	-	-	-	-	**200.0**	-

SR 72: MCCOY ROAD TO SR 71

DESCRIPTION: The proposed improvements include widening SR 72 from one lane in each direction to two lanes in each direction. The project will add a two-way left turn lane. The project will also include the addition of bike lanes and sidewalks.

JUSTIFICATION: Recent and planned development for the area have necessitated the need for safe optional modes of transportation and to enhance and encourage multi-modal transportation.

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System – Collectors
Functional Category: Expansion
Year Initiated: FY 2006

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
SR 72, Advanced Utility Relocation from McCoy Rd to SR71	C	-	-	-	-	-	400.0	-	-	2,900.0	-	-	-	-	3,300.0	-
SR 72, McCoy Rd to SR 71	PE	41.3	6.7	27.0	-	-	-	-	-	-	-	-	-	-	33.7	-
	ROW	936.1	-	1,000.0	-	-	1,000.0	-	-	-	-	-	-	-	2,000.0	-
	C	-	-	-	-	-	-	-	-	-	-	1,552.2	6,209.0	-	7,761.2	5,000.0
Total		**977.4**	**6.7**	**1,027.0**	**0.0**	**0.0**	**1,000.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1,552.2**	**6,209.0**	**0.0**	**9,794.9**	**5,000.0**

TRANSIT VEHICLE EXPANSION – NEW CASTLE COUNTY

DESCRIPTION: Funding is requested to purchase vehicles for expansion and replacement of inventory.

JUSTIFICATION: The investment in transit vehicle expansion is necessary to meet projected transit service demand based on census information.

County: New Castle
Municipality:
Funding Program: Transit System – Vehicles
Functional Category: Expansion
Year Initiated: Annual program

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
Transit Vehicle Expansion (2) 40' Low Floor Bus - FY18	Proc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transit Vehicle Expansion (2) 30' Low Floor Bus - FY18	Proc	-	-	-	-	190.0	760.0	-	-	-	-	-	-	-	950.0	-
Transit Vehicle Expansion (2) 45' OTR Buses FY19	Proc	-	-	-	-	-	-	-	338.6	1,354.5	-	-	-	-	1,693.2	-
Total		**0.0**	**0.0**	**0.0**	**0.0**	**190.0**	**760.0**	**0.0**	**338.6**	**1,354.5**	**0.0**	**0.0**	**0.0**	**0.0**	**2,643.2**	**0.0**

US 301: MARYLAND STATE LINE TO SR 1

★ Interchange Locations

DESCRIPTION: US 301 has undergone several planning efforts since the early 1960's. The most recent effort began in 2005, and included extensive public outreach and Environmental Resource Agency coordination. The effort concluded in April 2008, with Federal Highway Administration (FHWA) approval of the Selected Alternative, Green North + Spur Road [the Record of Decision (ROD)]. In 2008, FHWA also authorized right-of-way acquisition and final design (preparation of construction bid documents). Both activities are currently underway and the US Army Corps of Engineers has issued a provisional permit for the US 301 project.

The Selected Alternative, Green North+ Spur Road, includes a new, limited access tolled US 301 with 4-lanes (2 lanes in each direction), from the Maryland Line to SR1, south of the C&D Canal (14 miles). The Spur Road includes 2-lanes (1 lane in each direction) as a limited access toll road on a new location from US301, in the vicinity of Armstrong Corner Road to Summit Bridge (3.5 miles).

Design, right-of-way, and advanced utility relocation activities are in process to position the project to move forward with construction when key factors (traffic, revenues, costs and market conditions) result in an acceptable Plan of Finance to sell Toll Revenue Bonds that minimize risk to the State and the Transportation Trust Fund. Several funding concepts are being explored by DelDOT for this project. In the financing of US 301, DelDOT seeks to minimize use of state Transportation Trust Fund revenue and have those who use new US 301 pay for the construction, while preserving DelDOT's credit rating and capacity. DelDOT has proposed a revised funding concept that utilizes minimal TTF revenues, federal funds and three types of debt financing. The plan of finance includes:

- GARVEE bonds secured by federal reimbursements to fund the completion of remaining design and right-of-way activities.
- Toll revenue bonds secured by US 301 toll revenues to fund construction.
- Transportation Infrastructure Finance and Innovation Act (TIFIA) loan secured by US 301 toll revenues to fund construction.

JUSTIFICATION: Existing road lacks capacity for current and future traffic volumes and appears almost yearly on DelDOT's list of high crash locations.

County: New Castle
Investment Area: Developing
Funding Program: Road System – Arterials
Functional Category: Expansion
Year Initiated: FY 2004

US 301: MARYLAND STATE LINE TO SR 1 (Continued)

Project Title (All $ x 1000)	Phase	FY 16 TOTAL	FY 17 State	FY 17 Fed	FY 17 Other	FY 18 State	FY 18 Fed	FY 18 Other	FY 19 State	FY 19 Fed	FY 19 Other	FY 20 State	FY 20 Fed	FY 20 Other	FY 17-20 TOTAL	FY 21-22 TOTAL
US 301, GARVEE Debt Service	Pro	10,986.3	-	10,993.9	-	-	10,988.8	-	-	10,982.5	-	-	10,988.3	-	43,953.5	21,967.3
US 301, Maryland State Line to SR 1	PD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	88.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ROW	10,237.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CE	8,372.0	-	-	18,682.0	-	17,831.0	-	-	10,803.0	-	-	-	-	47,316.0	-
	C	60,670.0	-	-	116,828.0	-	94,737.0	19,136.0	-	61,195.0	11,172.0	-	-	-	303,068.0	-
	Traf	372.0	-	-	841.0	-	2,959.0	-	-	235.0	-	-	-	-	4,035.0	-
	Util	3,618.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cnt	4,116.2	-	-	12,565.6	-	13,870.1	-	-	9,719.1	-	-	-	-	36,154.8	-
	Audit	7,119.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		**105,580.4**	**0.0**	**10,993.9**	**148,916.6**	**0.0**	**140,385.9**	**19,136.0**	**0.0**	**92,934.6**	**11,172.0**	**0.0**	**10,988.3**	**0.0**	**434,527.3**	**21,967.3**

FHWA: Federal Aid Highway Funds (restrictions on use)
GARVEE: Bonds supported by annual apportionment of federal aid highway funds, subject to approval by the General Assembly
Toll Revenue Bonds: Bonds supported by US 301 toll revenues, subject to approval by the General Assembly
TIFIA: Transportation Infrastructure Finance and Innovation Act loan.

CECIL COUNTY

AREAWIDE BRIDGE REPLACEMENT AND REHABILITATION

DESCRIPTION: On-going program to provide major upgrades to state owned bridges that are structurally or functionally deficient. Improvements include complete replacement of structures, rehabilitation, deck replacement, and painting/cleaning.

JUSTIFICATION: Preserve bridges on state highways

County: Cecil
Investment Area: All
Municipality:
Program Category: System Preservation
TIP/STIP Category Number: 4

PROJECT TITLE *(All $ x 1,000)*	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Areawide Bridge Replacement and Rehabilitation	3,510.0	662.0	2,648.0		662.0	2,648.0		662.0	2,648.0		662.0	2,648.0		**13,240.0**
Planning	70.0	14.0	56.0		14.0	56.0		14.0	56.0		14.0	56.0		**280.0**
Engineering	570.0	144.0	576.0		144.0	576.0		144.0	576.0		144.0	576.0		**2,880.0**
ROW	70.0	14.0	56.0		14.0	56.0		14.0	56.0		14.0	56.0		**280.0**
Construction	2,800.0	490.0	1,960.0		490.0	1,960.0		490.0	1,960.0		490.0	1,960.0		**9,800.0**

All $ X 1,000

AREAWIDE ENVIRONMENTAL PROJECTS

DESCRIPTION: On-going program to provide environmental improvements along Maryland highways including noise barriers, wetland mitigation, landscaping, and other beautification efforts.

JUSTIFICATION: Improve environment and aesthetics along state highways. (STP Enhancement projects will be submitted independently)

County: Cecil
Investment Area: All
Municipality:
Program Category: System Preservation
TIP/STIP Category Number: 1

All $ X 1,000

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Areawide Environmental Projects	3,630.0	630.0	2,520.0	0.0	624.0	2,496.0	0.0	624.0	2,496.0	0.0	624.0	2,496.0	0.0	**12,510.0**
Planning	50.0	10.0	40.0		10.0	40.0		10.0	40.0		10.0	40.0		**200.0**
Engineering	550.0	110.0	440.0		104.0	416.0		104.0	416.0		104.0	416.0		**2,110.0**
ROW	50.0	10.0	40.0		10.0	40.0		10.0	40.0		10.0	40.0		**200.0**
Construction	2,980.0	500.0	2,000.0		500.0	2,000.0		500.0	2,000.0		500.0	2,000.0		**10,000.0**

AREAWIDE RESURFACING AND REHABILITATION

DESCRIPTION: On-going program to provide periodic resurfacing of state highways. Projects may also include minor rehabilitation of roadways and maintenance/upgrading of shoulders, drainage, guardrail, and pavement markings.

JUSTIFICATION: To preserve pavement quality on state highways.

County: Cecil
Investment Area: All
Municipality:
Program Category: System Preservation
TIP/STIP Category Number: 3

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Areawide Resurfacing and Rehabilitation	9,050.0	1,810.0	7,240.0	0.0	1,810.0	7,240.0	0.0	1,260.0	5,040.0	0.0	1,260.0	5,040.0	0.0	**30,700.0**
Planning	100.0	20.0	80.0		20.0	80.0		20.0	80.0		20.0	80.0		**400.0**
Engineering	600.0	120.0	480.0		120.0	480.0		120.0	480.0		120.0	480.0		**2,400.0**
ROW	100.0	20.0	80.0		20.0	80.0		20.0	80.0		20.0	80.0		**400.0**
Construction	8,250.0	1,650.0	6,600.0		1,650.0	6,600.0		1,100.0	4,400.0		1,100.0	4,400.0		**27,500.0**

All $ X 1,000

AREAWIDE SAFETY AND SPOT IMPROVEMENTS

DESCRIPTION: On-going program to provide localized improvements that enhance safety and/or operations on state highways. Typical projects are ramp and intersection modifications, sight distance and small drainage improvements, climbing lanes, and localized widening.

JUSTIFICATION: To improve localized safety and operational problems along state highways.

County: Cecil
Investment Area: All
Municipality:
Program Category: System Preservation
TIP/STIP Category Number: 2

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Areawide Safety and Spot Improvements	6,210.0	1,242.0	4,968.0	0.0	1,002.0	4,008.0	0.0	1,002.0	4,008.0	0.0	1,002.0	4,008.0	0.0	**21,240.0**
Planning	80.0	16.0	64.0		16.0	64.0		16.0	64.0		16.0	64.0		**320.0**
Engineering	900.0	180.0	720.0		180.0	720.0		180.0	720.0		180.0	720.0		**3,600.0**
ROW	80.0	16.0	64.0		16.0	64.0		16.0	64.0		16.0	64.0		**320.0**
Construction	5,150.0	1,030.0	4,120.0		790.0	3,160.0		790.0	3,160.0		790.0	3,160.0		**17,000.0**

All $ X 1,000

AREAWIDE URBAN STREET RECONSTRUCTION

DESCRIPTION: On-going program for rehabilitation of state owned streets in towns and urban areas. Projects typically include roadway rehabilitation, closed drainage, utility relocations, sidewalks, landscaping, and street furniture. This may also be associated with local redevelopment efforts.

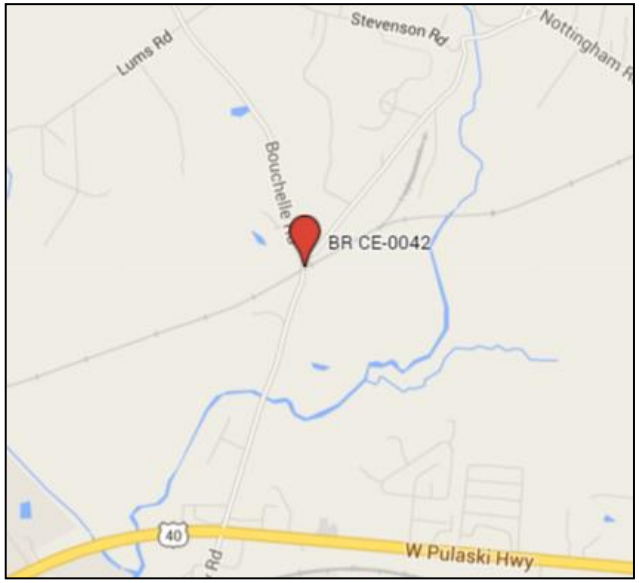
JUSTIFICATION: Preserve and enhance state-owned urban streetscapes.

County: Cecil
Investment Areas: Centers
Municipality:
Program Category: System Preservation
TIP/STIP Category Number: 5

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Areawide Urban Street Reconstruction	340.0	70.0	280.0	0.0	70.0	280.0	0.0	70.0	280.0	0.0	70.0	280.0	0.0	**1,400.0**
Planning	10.0	2.0	8.0		2.0	8.0		2.0	8.0		2.0	8.0		**40.0**
Engineering	70.0	16.0	64.0		16.0	64.0		16.0	64.0		16.0	64.0		**320.0**
ROW	10.0	2.0	8.0		2.0	8.0		2.0	8.0		2.0	8.0		**40.0**
Construction	250.0	50.0	200.0		50.0	200.0		50.0	200.0		50.0	200.0		**1,000.0**

All $ X 1,000

CECIL COUNTY BRIDGE CE-0042, MECHANICS VALLEY RD OVER CSX RAILROAD



DESCRIPTION: Project will replace the existing bridge that is currently in poor condition and is functionally obsolete, with a new, modern bridge on a new alignment that will also improve the intersection of Mechanics Valley Road with Bouchelle Road.

JUSTIFICATION: Bridge preservation.

County: Cecil
Investment Areas: Core
Municipality:
Program Category: System Preservation
TIP/STIP Category Number:

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Cecil County Bridge CE-0042, Mechanics Valley Rd over CSX Railroad	500.0													**0.0**

All $ X 1,000

MARC MAINTENANCE FACILITY

DESCRIPTION: The Maryland Transit Administration (MTA) received State and Federal Transit Administration (FTA) funds to advance preliminary engineering and to prepare a National Environmental Policy Act (NEPA) environmental documentation for a proposed MARC Maintenance Facility in Cecil County, Maryland. The project includes construction of a facility that will provide MARC with the capability of storing, servicing and inspecting complete commuter rail trainsets and performing scheduled and unscheduled maintenance and repair work on both locomotives and passenger cars. The general project area is a 115 acre site in Perryville, Maryland. More details on the required right-of-way and potential environmental impacts will be included in the environmental document.

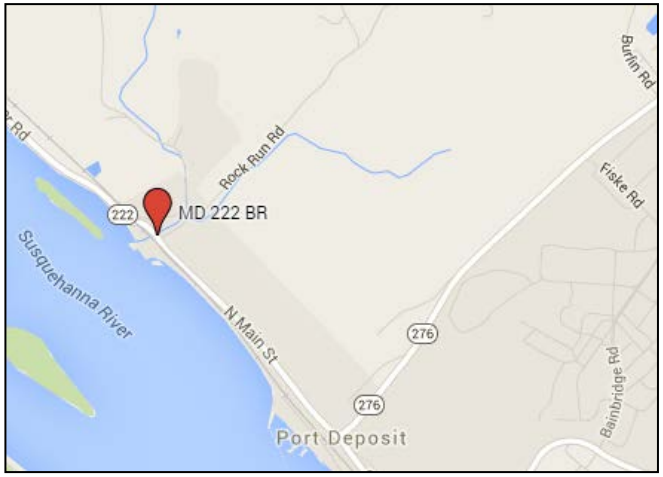
JUSTIFICATION: Support existing train service by improving the capacity to store and maintain trainsets.

County: Cecil
Investment Areas: Center
Municipality:
Program Category: System Preservation

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
MARC Maintenance Facility	5,000.0	1,000.0	4,000.0											**5,000.0**

All $ X 1,000

MD 222 BRIDGE OVER ROCK RUN



DESCRIPTION: Project will replace the existing bridge with a new structure. New bridge will include shoulders, sidewalks and bicycle facilities.

JUSTIFICATION: Existing bridge is structurally deficient.

County: Cecil
Investment Areas: Community
Municipality: Port Deposit
Program Category: System Preservation
TIP/STIP Category Number: 0702700

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
MD 222 Bridge over Rock Run	854.0	1,800.0	0.0	0.0	38.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**1,838.0**
Planning	0.0													**0.0**
Engineering	4.0													**0.0**
ROW	75.0	75.0			38.0									**113.0**
Construction	775.0	1,725.0												**1,725.0**

All $ X 1,000

SMALL URBAN TRANSIT SYSTEM – CAPITAL AND OPERATING ASSISTANCE

DESCRIPTION: Operating assistance to the Cecil County Department of Aging. Operating assistance to enable the Department to provide much needed transportation service in the County.

JUSTIFICATION: Operating assistance will enable the Cecil County Department of Aging to finance the operation of their services including administrative expenses and augment local funds by financing net operating deficit.

County: Cecil
Investment Areas: All
Municipality:
Program Category: System Preservation
TIP/STIP Category Number: MTA LINE 52

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Small Urban Transit - Capital Assistance (Section 5310)	20.4		72.0	18.0										**90.0**
Small Urban Transit - Capital Assistance (Section 5307)	420.0													**0.0**
Small Urban Transit - Capital Assistance	922.0	92.0	92.0	738.0	92.0	92.0	738.0							**1,844.0**
Small Urban Transit - Operating Assistance	666.0	312.0	195.0	159.0	312.0	195.0	159.0							**1,332.0**

All $ X 1,000

AREAWIDE CONGESTION MANAGEMENT

DESCRIPTION: On-going program to provide traffic control, monitoring, and management along state highways. Improvements include signal and signing installation and modification, incident management, ridesharing, and other Transportation System Management (TSM) activities. Any project identified for CMAQ funding will be submitted independently.

JUSTIFICATION: Maintain and improve operation of state highways.

County: Cecil
Investment Area: All
Municipality:
Program Category: System Management
TIP/STIP Category Number: 6

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Areawide Congestion Management	660.0	176.0	703.0		174.0	695.0		130.0	520.0		130.0	520.0		**3,048.0**
Planning	20.0	8.0	32.0		8.0	32.0		4.0	16.0		4.0	16.0		**120.0**
Engineering	100.0	20.0	80.0		20.0	80.0		20.0	80.0		20.0	80.0		**400.0**
ROW	20.0	4.0	16.0		2.0	8.0		2.0	8.0		2.0	8.0		**50.0**
Construction	520.0	144.0	575.0		144.0	575.0		104.0	416.0		104.0	416.0		**2,478.0**

All $ X 1,000

CECIL COUNTY TRANPORTATION ALTERNATIVE/ TRANSPORTATION ENHANCEMENT PROJECTS

DESCRIPTION: These are innovative projects that have received Transportation Alternatives Program funding (TAP – MAP-21) or Transportation Enhancement Program funds (TEP – SAFETEA-LU). Projects include the Jacob Tome Gashouse in Port Deposit, Bohemia Trail in Chesapeake City, US 301 Stream Restoration Project, and the East High Street and Locust Lane Sidewalk Improvement Project in Elkton.

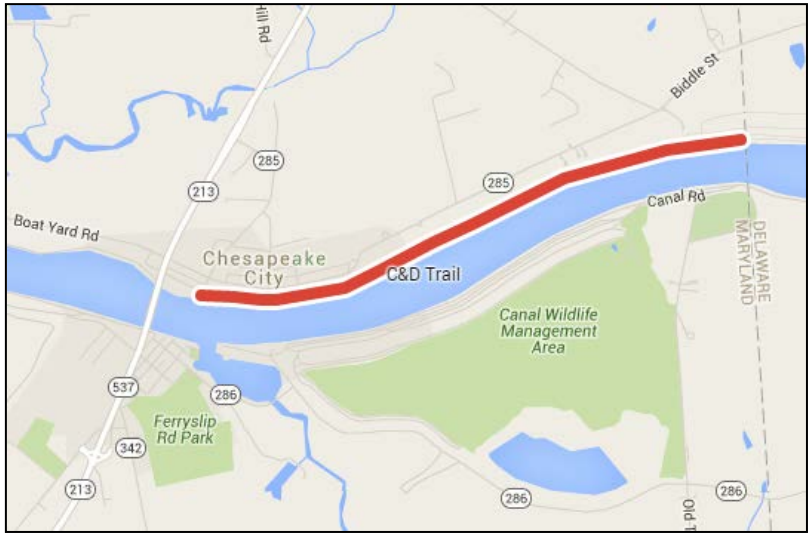
JUSTIFICATION: These projects will improve the environment, provide economic development, and improve safety for bicyclists and pedestrians.

County: Cecil
Investment Area:
Municipality:
Program Category: System Management

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Transportation Enhancements/Alternatives Program - Cecil County	721.0		733.9	513.7		510.8	129.5		274.9	68.7		13.0	4.0	**2,248.5**

All $ X 1,000

CHESAPEAKE AND DELAWARE CANAL TRAIL, MARYLAND



DESCRIPTION: Project will transform the existing gravel service road on the north side of the C&D Canal into a multipurpose trail.

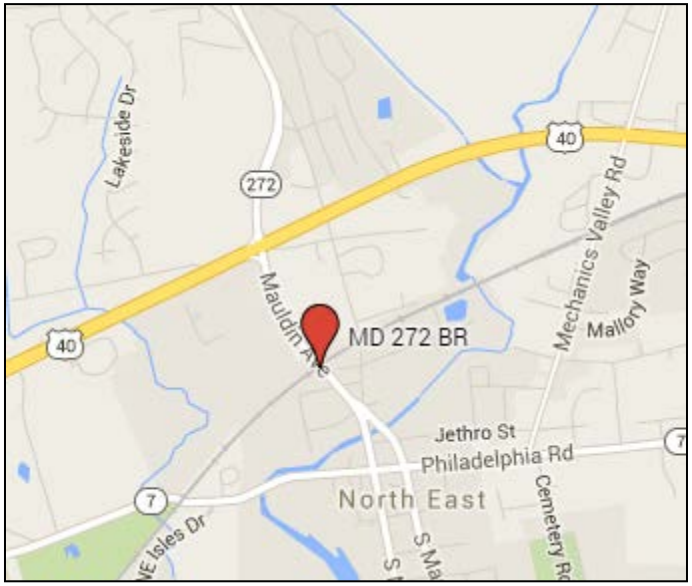
JUSTIFICATION: The trail will link the many historic and environmental resources of Chesapeake MD with the communities of Delaware City, and St. Georges. This 1.8 mile segment will complete the 17-mile northern section.

County: Cecil
Investment Area:
Municipality:
Program Category: System Management
TIP/STIP Category Number:

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Chesapeake & Delaware (C&D) Canal Trail - Maryland	360.0													**0.0**

All $ X 1,000

MD 272 BRIDGE OVER AMTRAK



DESCRIPTION: Project will replace the existing bridge with a new structure. New bridge will be wider to accommodate improved sidewalks and bicycle facilities and higher to accommodate double-stacking of freight rail and future railroad expansion.

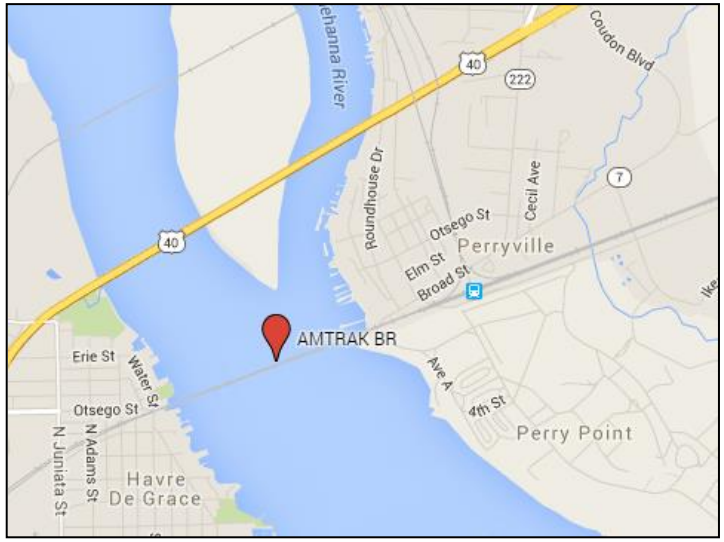
JUSTIFICATION: Existing bridge is deteriorated and structurally deficient.

County: Cecil
Investment Areas: Center
Municipality: North East
Program Category: System Management
TIP/STIP Category Number: CE4461

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
MD 272 Bridge over Amtrak	7,188.0	1,140.0	4,761.0	0.0	319.0	1,342.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**7,562.0**
Planning	0.0													**0.0**
Engineering	0.0													**0.0**
ROW	0.0													**0.0**
Construction	7,188.0	1,140.0	4,761.0		319.0	1,342.0								**7,562.0**

All $ X 1,000

SUSQUEHANNA RIVER RAIL BRIDGE



DESCRIPTION: The Susquehanna River Bridge is the longest movable bridge on the entire NEC, approximately three quarters of a mile long. Completed in 1906, the bridge connects Havre de Grace and Perryville, MD, offering riders stunning views of the Chesapeake Bay. Of the three major bridges in Maryland, the Susquehanna River Bridge is perhaps the worst bottleneck and arguably the most badly in need of replacement. The bridge constricts the NEC down to two tracks and restricts speeds to 90 mph in an otherwise 120-mph territory due to its design and aging components that cannot support faster trains. Susquehanna is required to open approximately a dozen times per year for boats to pass, but its current design is not suited for the task. A crew of over 30 workers is required to manually open the bridge, essentially de-constructing and re-constructing the railroad each time. The process of opening the Susquehanna River Bridge is much more expensive than opening a modern-day movable bridge, which would require just one bridge operator.

The state of Maryland and Amtrak are planning to replace the Susquehanna River Bridge. In 2011, the state was awarded a $22-million HSIPR grant to initiate preliminary engineering and environmental review of new bridge facilities. Plans may include a new two-track fixed bridge, serving primarily passengers trains, that would be high enough to let boats pass without opening and a second two-track bridge that would serve freight trains and other passenger service. The design of the second bridge would be coordinated with existing freight users.

JUSTIFICATION: Investments in new bridge infrastructure over the Susquehanna River would greatly increase speeds for Amtrak and MARC trains, improve reliability, lower operating costs, and support increased service for all passenger and freight operators.

County: Cecil
Investment Area: Core
Municipality:
Program Category: System Management

PROJECT TITLE (All $ x 1,000)	FY 2016 TOTAL	FY 2017 STATE	FY 2017 FEDERAL	FY 2017 OTHER	FY 2018 STATE	FY 2018 FEDERAL	FY 2018 OTHER	FY 2019 STATE	FY 2019 FEDERAL	FY 2019 OTHER	FY 2020 STATE	FY 2020 FEDERAL	FY 2020 OTHER	TOTAL FY 2017-20
Susquehanna River Rail Bridge	6,500.0			3,337.0			500.0							**3,837.0**

All $ X 1,000

APPENDICES

APPENDIX A

Glossary

AADT or Annual Average Daily Traffic – The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

Access – The facilities and services that make it possible to get to any destination, measured by the availability of physical connections (roads, sidewalks, etc.), travel options, ease of movement, and nearness of destinations.

ARRA or American Recovery and Reinvestment Act of 2009— The American Recovery and Reinvestment Act of 2009 (ARRA) is a $787 billion economic stimulus package signed into law by President Barack Obama on Feb. 17, 2009. A percentage of the package targets spending (contracts, grants, and loans) and the rest includes tax cuts and entitlements such as Medicaid and Social Security Administration payments. ARRA has provided 100% federal funding to implement roadway, transit, bicycle and pedestrian preservation and improvement projects.

Amenities - Anything that increases physical or material comfort, such as bus shelters, trees, benches, and landscaping.

C or Construction – Abbreviation used in the WILMAPCO TIP

CAAA or Clean Air Act and its Amendments - The federal law that requires urban areas with high pollution to modify transportation policies in order to reduce emissions. This law makes air quality a primary concern in transportation decision-making.

CBD or Central Business District - Downtown portion of a city that serves as the primary activity center. Its land use is characterized by intense business activity that serves as a destination for a significant number of daily work trips.

CMAQ or Congestion Mitigation and Air Quality - Federal funds available for either transit or highway projects which contribute significantly to a reduction in automobile emissions that cause air pollution.

CMS or Congestion Management System - A process for evaluating the level of congestion on the region's transportation system, and for identifying strategies which will reduce this congestion.

Conformity – An assessment of the compliance of any transportation plan, program, or project with air quality improvement plans. The conformity process is defined by the Clean Air Act.

CTP or Capital Transportation Program - The program devised by the state of Delaware to determine and prioritize transportation capital investments. These needs and cost estimates are updated annually in the program. This process is coordinated with WILMAPCO in the development of its TIP, or Transportation Improvement Program.

CTP or Consolidated Transportation Program – The program devised by the state of Maryland to determine and prioritize transportation capital investments. These needs and cost estimates are updated annually in the program. This process is coordinated with WILMAPCO in the development of its TIP, or Transportation Improvement Program.

Delaware Council on Transportation – Appointed by the Governor and made up of business and community leaders who are interested in transportation subjects and have demonstrated expertise or experience that would help in evaluating relevant issues and programs. It advises DelDOT and the Governor on issues which may aid in providing the best possible transportation services.

DelDOT or Delaware Department of Transportation - DelDOT provides the transportation network throughout Delaware, including design, construction and maintenance of roads and bridges, highway operations and operation of DART First State.

DNREC or Delaware Department of Natural Resources and Environmental Control – Agency charged with protecting and managing Delaware's natural resources, protecting public health and safety, providing outdoor recreation, and educating and the environment.

DRBA or Delaware River and Bay Authority - Overseen by six commissioners from New Jersey and six from Delaware, the DRBA is charged with providing transportation links between the two states and economic development in Delaware and southern New Jersey. The DRBA operates the Delaware Memorial Bridge, Cape May-Lewes Ferry, Three Forts Ferry Crossing, Salem County Business Center and five airports—New Castle, Civil Air Terminal at Dover AFB, and Delaware Airpark, in Delaware, and Millville and Cape May, in New Jersey.

DTC or Delaware Transit Corporation – Operates "DART First State", statewide multimodal and specialized transportation services throughout the State of Delaware.

Demographic Trends - Trends regarding population, such as size, growth, density, distribution and vital statistics.

Design Criteria - Criteria used to guide the design of development and transportation projects. Transit-oriented design (TOD) and mobility-friendly design are examples.

EPA or Environmental Protection Agency – The federal regulatory agency responsible for administrating and enforcing federal environmental laws including the Clean Air Act.

FHWA or Federal Highway Administration – The agency of the U. S. Department of Transportation that funds surface transportation planning and programs, primarily highways.

FTA or Federal Transit Administration – The agency of the U.S. Department of Transportation that funds surface transportation planning and programs, primarily transit.

Fixing America's Surface Transportation (FAST) Act - The $305 billion, five-year funding and authorization bill to govern United States federal surface transportation spending. It was passed by Congress on December 3, 2015, and President Barack Obama signed it on December 4.

Financial Plan - Federal surface transportation spending legislation requires that Plan recommendations are actually affordable. A financial plan must be developed to show that we are reasonably certain that funding sources will be adequate for implementation.

Functional Classification – A hierarchical system of categorizing streets and roads on the basis of the way they are used, the volumes of traffic they carry, and the way they function within the context of the overall transportation system.

FY or Fiscal Year – WILMAPCO's yearly accounting period begins July 1 and ends the following June 30. Fiscal years are denoted by the calendar year in which they end. The federal fiscal year is October 1-September 30. The MDOT and DelDOT fiscal year runs concurrent with WILMAPCO's.

GARVEE or Grant Anticipation Revenue Vehicle-- A GARVEE is any bond or other form of debt repayable, either exclusively or primarily, with future Federal-aid highway funds under Section 122 of Title 23 of the United States Code. Although the source of payment is Federal-aid funds, GARVEEs cannot be backed by a Federal guarantee, but are issued at the sole discretion of, and on the security of, the state issuing entity.

GIS or Geographic Information Systems – GIS is a system of computer software, hardware and data to help manipulate, analyze and present information that is tied to a spatial location.

Greenways - Interconnecting paths designed to accommodate bicycle and pedestrian uses. Greenways link our natural areas and make them accessible to our communities. The Lower Susquehanna Greenway, the East Coast Greenway, and the Delaware Coastal Heritage Greenway are examples.

Infrastructure - The physical structure of a community, such as roads, sidewalks, sewers, rail lines, and bridges.

Intelligent Transportation Systems (ITS) - Technologies that improve the management and efficiency of our transportation system, such as electronic toll collection, timed traffic signals and on-board navigation systems.

Intermodal – Those issues or activities which involve or affect more than one mode of transportation, including transportation connections, choices, cooperation and coordination of various modes. Also known as "multimodal". The term "mode" is used to refer to and to distinguish from each other the various forms of transportation, such as automobile, transit, ship, bicycle and walking.

ISTEA – The acronym for the federal Intermodal Surface Transportation Efficiency Act of 1991, landmark legislation that restructured programs for all methods of transportation. Replaced by MAP-21

Land Use – Activities and structures on the land, such as housing, shopping centers, farms, and office buildings.

Long-Range Plan – A transportation plan covering a time span of 20 or more years.

MAP-21-- Moving Ahead for Progress in the 21st Century Act-- The fourth, and most recent, transportation re-authorization legislation. Enacted on July 6, 2012, MAP-21 authorized funding surface transportation programs at over $105 billion for fiscal years FY 2013 and 2014. Replaces ISTEA, TEA-21 and SAFETEA-LU.

MARC or Maryland Rail Commuter Service - One of the mass transit systems in Baltimore, Washington and Virginia.

MdTA or Maryland Transportation Authority - The Authority is responsible for managing, operating and improving the State's toll facilities.

MDOT or Maryland Department of Transportation - The Department provides Maryland citizens with a transportation network encompassing aviation, highway, marine, mass transit, motor vehicle, railroad and toll facilities.

Metropolitan Planning Organization (MPO) – The organization required by the federal government, designated by states, and operated by local officials for developing transportation programs in urban areas of 50,000 or more people. The MPO for our region is WILMAPCO.

MTA or Maryland Mass Transit Administration - The MTA provides a network of transit, rail and freight services.

Mobility – The movement of people or goods throughout our communities and across the region. Mobility is measured in terms of travel time, comfort, convenience, safety and cost.

Multimodal-- A transportation system or project that accommodates automobiles, public transit, public safety vehicles, freight, pedestrians and bicycles in a balanced way to maximize access and mobility and to minimize congestion throughout the community.

NAAQS or National Ambient Air Quality Standards - The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six air pollutants: ozone, lead, carbon monoxide, sulfur dioxide, nitrogen dioxide, and respirable particulate matter.

NOx or Nitrogen Oxides - is the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the nitrogen oxides are colorless and odorless. However, one common pollutant, nitrogen dioxide (NO_2) along with particles in the air can often be seen as a reddish-brown layer over many urban areas.

PAC or Public Advisory Committee – An advisory committee to the Council that represents a diverse group of organizations. The mission of the PAC is to advise the Council on public participation strategies and to provide a forum for community concerns.

Park-and-Ride – Lots in outlying areas where people can park and then use transit, carpool, or vanpool for the remainder of their trip.

PD or Project Development – The planning phase of a project. An abbreviation used in the WILMAPCO TIP

PE or Preliminary Engineering – An abbreviation used in the WILMAPCO TIP

Pipeline Process – Formerly used by DelDOT to keep track of projects and to help move them from idea state to implementation.

ROW or Right of Way Acquisition – An abbreviation used in the WILMAPCO TIP.

Regional Transportation Plan (RTP)– A blueprint to guide the region's transportation for the next 25 years. Federal law requires the RTP to be updated every four years (in areas that do not meet air quality standards) to ensure that the plan remains current and effective at achieving the goals. Formerly known as the Metropolitan Transportation Plan (MTP).

SAFETEA-LU - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. The third transportation re-authorization legislation. Enacted into law in July of 2005, the bill authorizes $284 billion of federal funding through 2009. Replaces ISTEA and TEA-21.

SEPTA or Southeastern Pennsylvania Transportation Authority - Transit authority for Philadelphia and the surrounding areas.

SHA or (Maryland) State Highway Administration - As part of the Maryland Department of Transportation (MDOT), SHA is responsible for more than 16,000 lane miles of interstate, primary and secondary roads and more than 2,500 bridges.

SIP or Statewide Implementation Plan – Documents prepared by states and submitted to the EPA for approval, which identify actions and programs to carry out the requirements of the Clean Air Act.

Special Use Lanes – Lanes on heavily congested roadways that are used exclusively by carpools, vanpools, buses or any vehicle that transports multiple passengers; also called High Occupancy Vehicle (HOV) lanes.

Sprawl – Commercial and residential development occurring farther away from traditional communities and towns, usually limiting mobility and accessibility to auto use only.

STIP or Statewide Transportation Improvement Program – A multi-year, statewide intermodal program of transportation projects that includes project scheduling and funding information. Known in both Delaware and Maryland as the CTP.

TAC or Technical Advisory Committee – An advisory committee to the Council that represents federal, state, and local planning agencies in Delaware and Maryland. The TAC is responsible for overseeing the technical work of WILMAPCO staff and developing recommendations to the Council on projects and programs.

TEA-21 – The acronym for the 1998 federal Transportation Equity Act for the 21st Century. Replaced ISTEA, but continued and expanded ISTEA's restructured programs for all modes of transportation. It provides guidelines to authorize federal funding of transportation projects.

TIP or Transportation Improvement Program – A program that lists all federally funded projects and services in the WILMAPCO region, covering a period of four years. It is developed annually in cooperation with MDOT, DelDOT and affected transit operators.

Traffic Calming – Design techniques to decrease the speed and volume of vehicle traffic on streets, while still providing vehicle circulation in an area. Techniques include speed bumps, landscaping and roundabouts.

Transit – Passenger service provided to the public along established routes. Paratransit is a variety of smaller, often flexibly scheduled and routed transit services serving the needs of persons that standard transit would serve with difficulty or not at all.

Transit-Oriented Development – Transit-oriented development (TOD) is development characterized by a layout that encourages use of public transit service and walking or bicycling instead of automobile use for many trip purposes. Typically, it places higher density development within an easy walking distance of ¼ to ½ mile of a public transit station or stop and is mixed-use, accessible by all other modes. It is compact, pedestrian friendly, and has a transit stop or station as an activity center.

Transportation Investment Areas (TIA) – Areas for future investments in transportation which will match transportation investments to land use needs.

UPWP or Unified Planning Work Program – A plan, developed by WILMAPCO, that **g**uides all transportation planning activities in the WILMAPCO region.

VOC or Volatile Organic Compounds - VOC's are hydrocarbons released from burning fuel such as gasoline, oil as well as vapors from paints and dry-cleaning solvents. These vapors are released into the atmosphere and are acted upon by the sun and heat and combine with Nitrogen Dioxide (NOx) to form ozone.

VMT or Vehicle Miles of Travel – A standard areawide measure of travel activity, calculated by multiplying average trip length by the total number of trips.

Wilmington Area Planning Council (WILMAPCO) – The MPO for Cecil County, Maryland and New Castle County, Delaware.

APPENDIX B

Self Certification, Resolutions and Organizational Chart

Self-Certifications

Summary of Statutory Requirements

Metropolitan Planning

The State and the MPO shall certify to FHWA and FTA at least every four years that the planning process is addressing major issues facing their area and is being conducted in accordance with all applicable transportation planning requirements. The planning process will undergo joint review and evaluation by FHWA, FTA, and State DOT to determine if the process meets requirements.

The process for developing the MTPs and programs shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems to be addressed.

[23 CFR 450.334; U.S.C. Title 23, Sec. 134, and U.S.C. Title 49, Ch. 53, Sec. 5303]

WILMAPCO Actions

WILMAPCO (Wilmington Area Planning Council) is the metropolitan planning organization (MPO) for Cecil County, Maryland and New Castle County, Delaware. As the MPO, we are required by the federal government to bring local government, state transportation agencies and the public into the transportation decision making process. A range of stakeholders come together through WILMAPCO to develop:

- Regional Transportation Plan (RTP) every four years, http://www.wilmapco.org/rtp/
- Congestion Management System (CMS) annually, http://www.wilmapco.org/cms/
- Unified Planning Work Program (UPWP) annually, http://www.wilmapco.org/upwp/
- Transportation Improvement Program (TIP) annually, http://www.wilmapco.org/tip/
- Performance Based Planning through the regional progress report, http://www.wilmapco.org/regional-progress-report/
- Public Participation Plan, http://www.wilmapco.org/ppp/

Planning is done using a collaborative process that fosters involvement by the public and stakeholders, informs transportation decisions, reflects community's vision, goals and objectives, considers a variety of alternative strategies and a diverse set of concerns, and accounts for all forms of transportation and their impacts. Guidance is provided through the Technical Advisory Committee and its subcommittees, and the Public Advisory Committee.

Measures prohibiting discrimination and exclusion, and requiring equal opportunity

Title VI, Civil Rights Act of 1964
Title VI prohibits exclusion from participation in, denial of benefits of, and discrimination under Federally assisted programs on grounds of race, color, or national origin. Title VI assurance regulations were also executed by each State, prohibiting discrimination on the basis of sex or disability.

[23 U.S.C. 324 and 29 U.S.C. 794]

Disadvantaged Business Enterprises (DBE)
The DBE program ensures equal opportunity in transportation contracting markets, addresses the effects of discrimination in transportation contracting, and promotes increased participation in Federally-funded contracts by small, socially and economically disadvantaged businesses, including minority- and women-owned enterprises. The statute provides that at least 10 percent of the amounts made available for any Federal-aid highways, mass transit, and transportation research and technology program be expended with certified DBEs.

[MAP-21, Pub. L. 109-59, Sec. 1101(b); CFR 49, Subtitle A, Part 26]

Americans with Disabilities Act of 1990 (ADA)
Programs and activities funded with Federal dollars are prohibited from discrimination based on disability. Compliance with the applicable regulations is a condition of receiving Federal financial assistance from the DOT.

Older Americans Act
Confirms opportunity for employment with no discriminatory personnel practices because of age. Also, the Older American Act Amendments of 2006 included provisions relating to transportation in Title III-B (Grants for State and Community Programs on Aging, Title IV [Technical Assistance and Innovation to Improve Transportation for Older Individuals], Title V [Senior Community Service Employment Program], and Title VI [Native American Aging Programs].

[Pub. L. 89-73, as amended, and 42 U.S.C. 6101]

Section 324 of 23 U.S.C.
No one on the basis of gender shall be denied participation in or benefits of any program or activity receiving Federal assistance under Title 23.

Rehabilitation Act of 1973
This law protects qualified individuals from discrimination based on their disability. The nondiscrimination requirements of the law apply to employers and organizations that receive financial assistance from any Federal department or agency, including the U.S. Department of Health and Human Services (DHHS).

[29 U.S.C. 794 and 49 CFR, Part 27]

WILMAPCO Actions

It is the policy of WILMAPCO to afford equal opportunity for participation in programs, activities and employment. All participation decisions are made without regard to race, color, age, sex, religion, national origin, ancestry, marital status, physical or mental handicap that can reasonably be accommodated, or status as a military veteran.

Public involvement is a key component of the transportation planning and programming process. A proactive public involvement process is one that provides complete information, timely public notice, and full public access to major transportation decisions, and supports early and continuing involvement of the public in developing transportation plans and programs.

It is the policy of WILMAPCO to afford equal opportunity for employment. All employment decisions are made without regard to race, color, age, sex, religion, national origin, ancestry, marital status, physical or mental handicap that can reasonably be accommodated, or status as a military veteran.
http://www.wilmapco.org/titlevi/

As an agency, we are committed to incorporating Title VI throughout our planning process. Contracts with third-party firms, as well as our personnel manual, feature all federally-required non-discriminatory clauses and Disadvantaged Business Enterprises (DBE) assurances.

We are also asked to reach out to people who are traditionally left out of the transportation planning process, such as low-income and minority households. Periodically the Public Participation Plan undergoes an evaluation of its public participation activities and initiatives. The PPP is then revised or amended to enhance public participation in the transportation planning process. Evaluation examines geographic distribution of the WILMAPCO Transporter (the newsletter), literature distribution at minority group event(s), contact with minority population media, and creation of foreign language documents and low literacy documents.
http://www.wilmapco.org/ppp/

In addition to conducting special outreach to these communities, we must show if transportation investments are adversely impacting these populations and that improvements are equitably distributed. Our Environmental Justice (EJ) and Title VI initiatives seeks to identify and mitigate the transportation burdens low-income and minority groups carry. It aims to direct spending into these communities, via our project prioritization process, to improve EJ public participation, as well as to plan for and help guide the implementation of community-based transportation projects. Our Transportation Justice (TJ) initiative goes beyond federal mandates, assessing the challenges faced by three other mobility-constrained populations: the elderly, the disabled, and zero-car households. The Appendix of the EJ Report contains EEO, DBE, etc. statements are on pp. 89-93. WILMAPCO also coordinates with DelDOT's Civil Rights Department as needed.
http://www.wilmapco.org/ej/

WILMAPCO is fully committed to the spirit and intent of the ADA legislation. To facilitate participation by people with disabilities, the following guidelines and activities apply:

- All WILMAPCO public meetings and formal events will be held in facilities that are accessible to persons with disabilities.
- All documents available to the public will be provided in alternative formats for qualified individuals with disabilities, upon request.
- The website will be accessible to and usable by individuals with vision impairments.
- Additional accommodations will be provided on an as-needed basis.

Clean Air Act: Air-Pollution Prevention and Control

All State and local transportation officials will take part in a 3C planning process in nonattainment and maintenance areas to determine which planning elements will be developed, adopted, and implemented to maintain or improve the air quality for said area. In nonattainment and maintenance areas that include more than one State, the affected States may jointly undertake and implement air-quality-planning procedures.

The Federal government will not financially support activities that do not conform to approved plans. Priority of funding will be given to those projects or programs that achieve and maintain national primary ambient air-quality standards.

[42 U.S.C., Ch. 85, §§ 7408, 7410, 7504, 7505a, 7511, 7512, 7506(c) and (d), and 7604; 49 U.S.C., Ch. 53, 23 U.S.C., § 134]

WILMAPCO Actions

The WILMAPCO Air Quality Subcommittee has 13 members representing federal, state and local agencies in Delaware and Maryland. The AQS assesses the air quality impacts of transportation projects in WILMAPCO's Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP). Their recommendations help our region attain its air quality goals. WILMAPCO does not adopt or amend a RTP or TIP until conformity has been demonstrated with the State Implementation Plan for Air Quality, including the air quality conformity requirements as set forth in the Clean Air Act Amendments of 1990. Resources are allocated annually as part of the UPWP to ensure the coordination of the transportation and air quality planning activities, and support determination of the air quality conformity process of the RTP and TIP. The WILMAPCO Air Quality Subcommittee meets regularly to foster coordination and provide guidance to WILMAPCO Council.
http://www.wilmapco.org/aqs/

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
web site: www.wilmapco.org

WILMAPCO Council:

John Sisson, Chair
Delaware Transit Corporation
Chief Executive Officer

Robert Alt
Mayor of Elkton

Jennifer Cohan
Delaware Dept. of Transportation
Secretary

Thomas P. Gordon
New Castle County Executive

Connie C. Holland
Delaware Office of State Planning
Coordination, Director

Tari Moore
Cecil County Executive

Heather Murphy
Maryland Dept. of Transportation
Director, Office of Planning and
Capital Programming

Michael Spencer
Mayor of Newport

Dennis P. Williams
Mayor of Wilmington

WILMAPCO Executive Director
Tigist Zegeye

RESOLUTION

BY THE WILMINGTON AREA PLANNING COUNCIL (WILMAPCO) APPROVING THE NEW CASTLE COUNTY AND CECIL COUNTY AIR QUALITY CONFORMITY DETERMINATIONS FOR THE AMENDED FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM AND THE AMENDED 2040 REGIONAL TRANSPORTATION PLAN

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, the United States Environmental Protection Agency has under the National Ambient Air Quality Standards (NAAQS) designated New Castle County, Delaware in maintenance for fine particulate matter and both New Castle County, Delaware and Cecil County, Maryland in nonattainment for ozone; and

WHEREAS, WILMAPCO must demonstrate transportation conformity on its Transportation Improvement Programs and Regional Transportation Plans in accordance with federal requirements; and

WHEREAS, the Air Quality Conformity Determinations for the Amended FY 2017-20 Transportation Improvement Program and the Amended 2040 Regional Transportation Plan have undergone appropriate technical review as required by the interagency conformity consultation process; and

WHEREAS, the emission projections outlined in the Amended FY 2017-20 Transportation Improvement Program and the Amended 2040 Regional Transportation Plan show conformity to all appropriate budgets; and

WHEREAS, the Air Quality Conformity Determinations for the Amended FY 2017-20 Transportation Improvement Program and the Amended 2040 Regional Transportation Plan has undergone a 30-day public review and comment period, including one public open house;

NOW, THEREFORE, BE IT RESOLVED that the Wilmington Area Planning Council approves the New Council County and Cecil County Air Quality Conformity Determinations for the Amended FY 2017-20 Transportation Improvement Program and the Amended 2040 Regional Transportation Plan.

September 8, 2016
Date:

John Sisson, Chairperson
Wilmington Area Planning Council

WILMAPCO

Partners with you in transportation planning

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
web site: www.wilmapco.org

WILMAPCO Council:

John Sisson, Chair
Delaware Transit Corporation Chief Executive Officer

Robert Alt
Mayor of Elkton

Jennifer Cohan
Delaware Dept. of Transportation Secretary

Thomas P. Gordon
New Castle County Executive

Connie C. Holland
Delaware Office of State Planning Coordination, Director

Tari Moore
Cecil County Executive

Heather Murphy
Maryland Dept. of Transportation Director, Office of Planning and Capital Programming

Michael Spencer
Mayor of Newport

Dennis P. Williams
Mayor of Wilmington

WILMAPCO Executive Director
Tigist Zegeye

RESOLUTION

BY THE WILMINGTON AREA PLANNING COUNCIL (WILMAPCO) AMENDING THE NEW CASTLE COUNTY AND DELAWARE STATEWIDE ELEMENTS OF THE FY 2017-20 TRANSPORTATION IMPROVEMENT PROGRAM INCLUDING USE OF URBAN SURFACE TRANSPORTATION PROGRAM, CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM, TRANSPORTATION ALTERNATIVES PROGRAM, FTA URBANIZED AREA, AND FTA 5310 PROGRAM FUNDS

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

WHEREAS, the United States Department of Transportation (USDOT) Regulations and Regulations of Fixing America's Surface Transportation Act (FAST) Metropolitan Planning Requirements require that the MPO, in cooperation with participants in the planning process, develop, and at least every four years, update the Transportation Improvement Program (TIP); and

WHEREAS, the TIP can be amended from time to time by the WILMAPCO Council; and

WHEREAS, the projects to be amended into the FY 2017-2020 TIP have undergone appropriate technical review, where it was determined that an air quality conformity determination is not required; and

WHEREAS, the projects to be amended in the FY 2017-2020 TIP are drawn from the an air quality conforming 2040 *Regional Transportation Plan* (RTP) that is the basis for the New Castle County portion of the Statewide Capital Transportation Program for Delaware; and

WHEREAS, the RTP can be amended from time to time by the WILMAPCO Council; and

WHEREAS, the MPO has determined that the amendments are financially constrained, as directed by 23 CFR 450.324 (e); and

WHEREAS, the FY 2017 projects contained in the amended FY 2017-2020 TIP will be utilized as the priority list of projects;

NOW, THEREFORE, BE IT RESOLVED that the Wilmington Area Planning Council does hereby approve amending the FY 2017-2020 TIP including proposed use of Urban STP, CMAQ, FTA Urbanized Area, FTA 5310, and TAP Funds for FY 2017 projects.

September 8, 2016
Date:

John Sisson, Chairperson
Wilmington Area Planning Council

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
web site: www.wilmapco.org

WILMAPCO Council:

John Sisson, Chair
Delaware Transit Corporation
Chief Executive Officer

Bill Miners, Vice-Chair
Chesapeake City
Councilman

Jennifer Cohan
Delaware Dept. of Transportation
Secretary

Thomas P. Gordon
New Castle County Executive

Connie C. Holland
Delaware Office of State Planning
Coordination, Director

Tari Moore
Cecil County Executive

Heather Murphy
Maryland Dept. of Transportation
Director, Office of Planning and
Capital Programming

Michael Spencer
Mayor of Newport

Dennis P. Williams
Mayor of Wilmington

WILMAPCO Executive Director
Tigist Zegeye

RESOLUTION

BY THE WILMINGTON AREA PLANNING COUNCIL (WILMAPCO) ADOPTING THE FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM

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

WHEREAS, the United States Department of Transportation's (USDOT) Regulations of Fixing America's Surface Transportation (FAST), Metropolitan Planning Requirements, require that, in air quality non-attainment areas, the MPO, in cooperation with participants in the planning process, develop and, at least every four years, updates the Transportation Improvement Program (TIP); and

WHEREAS, the projects included in the FY 2017-2020 TIP are drawn from the air quality conforming *2040 Regional Transportation Plan* (RTP) that is the basis for the Cecil County and New Castle County portions of the respective Statewide Capital Transportation Programs for Maryland and Delaware; and

WHEREAS, the WILMAPCO TIP format incorporates a four-year period for the listing of priority projects to be implemented, as well as a list of program development projects; and

WHEREAS, the FY 2017-2020 TIP has undergone appropriate community and technical reviews; and

WHEREAS, the TIP must be determined to be air quality conforming in accordance with FAST Act and Clean Air Act and Amendments (CAAA) of 1990 requirements; and

WHEREAS, the FY 2017-2020 TIP has been found to be financially constrained, as directed by 23 CFR 450.324 (e), and consistent with the Regional Transportation Plan;

NOW, THEREFORE, BE IT RESOLVED that the Wilmington Area Planning Council does hereby adopt the FY 2017-2020 Transportation Improvement Program.

March 10, 2016
Date:

John Sisson, Chairperson
Wilmington Area Planning Council

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
web site: www.wilmapco.org

WILMAPCO Council:

John Sisson, Chair
Delaware Transit Corporation
Chief Executive Officer

Bill Miners, Vice-Chair
Chesapeake City
Councilman

Jennifer Cohan
Delaware Dept. of Transportation
Secretary

Thomas P. Gordon
New Castle County Executive

Connie C. Holland
Delaware Office of State Planning
Coordination, Director

Tari Moore
Cecil County Executive

Heather Murphy
Maryland Dept. of Transportation
Director, Office of Planning and
Capital Programming

Michael Spencer
Mayor of Newport

Dennis P. Williams
Mayor of Wilmington

WILMAPCO Executive Director
Tigist Zegeye

RESOLUTION
BY THE WILMINGTON AREA PLANNING COUNCIL CERTIFYING THE METROPOLITAN TRANSPORTATION PLANNING PROCESS FOR FISCAL YEAR 2017

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 is responsible for the performance of the transportation planning process in the Wilmington Urbanized Area; and

WHEREAS, it is the responsibility of WILMAPCO to ensure that said policy, planning, and programming process is consistent with applicable Federal Law; and

WHEREAS, the USDOT Fixing America's Surface Transportation (FAST) Act legislation requires the WILMAPCO certify that its transportation planning process is in conformance with regulations; and,

WHEREAS, the Federal Regulations for metropolitan transportation planning in 23 CFR 450.334 state that the State(s) and the MPO shall annually certify to the FHWA and the FTA that the planning process is addressing the major issues facing the area and is being conducted in accordance with all applicable requirements of:

(1) 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
(2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
(3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
(4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex or age in employment or business opportunity;
(5) Section 1101 (b) of the Fixing America's Surface Transportation (FAST) Act –Pub. L. 112-141 and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
(6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
(7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27, 37, and 38;
(8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
(9) Section 324 of title 23, U.S.C., regarding the prohibition of discrimination based on gender; and
(10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 35 regarding discrimination against individuals with disabilities.

NOW, THEREFORE, BE IT RESOLVED, that WILMAPCO does hereby certify that the planning process is being carried on in conformance with all applicable requirements.

BE IT FURTHER RESOLVED, that WILMAPCO does hereby request that the Maryland and Delaware Departments of Transportation join this certification, as signified by their signatures on the attached, and forward this joint self-certification to both FHWA and FTA.

March 10, 2016
Date:

John Sisson, Chairperson
Wilmington Area Planning Council

B-8

METROPOLITAN TRANSPORTATION PLANNING PROCESS
SELF-CERTIFICATION
(To be submitted with each Metropolitan Transportation Improvement Program)

The Maryland Department of Transportation and the Delaware Department of Transportation and the Wilmington Area Planning Council (WILMAPCO), the metropolitan planning organization for the Wilmington urbanized area, hereby certify that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

(1) 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
(2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
(3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1), 49 CFR part 21;
(4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex or age in employment or business opportunity;
(5) Section 1101 (b) of the Fixing America's Surface Transportation (FAST) Act–Pub. L. 112-141 and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
(6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
(7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27, 37, and 38;
(8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
(9) Section 324 of title 23, U.S.C., regarding the prohibition of discrimination based on gender; and
(10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 35 regarding discrimination against individuals with disabilities.

Wilmington Area Planning Council	**Maryland Department of Transportation**	**Delaware Department of Transportation**
Signature	Signature	Signature
Tigist Zegeye	Pete K. Rahn	Jennifer L. Cohan
Printed Name	Printed Name	Printed Name
Executive Director	Secretary	Secretary
Title	Title	Title
3/10/16	3/22/16	4/4/16
Date	Date	Date

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
web site: www.wilmapco.org

WILMAPCO Council:

John Sisson, Chair
Delaware Transit Corporation Chief Executive Officer

Bill Miners, Vice-Chair
Chesapeake City Councilman

Jennifer Cohan
Delaware Dept. of Transportation Secretary

Thomas P. Gordon
New Castle County Executive

Connie C. Holland
Delaware Office of State Planning Coordination, Director

Tari Moore
Cecil County Executive

Heather Murphy
Maryland Dept. of Transportation Director, Office of Planning and Capital Programming

Michael Spencer
Mayor of Newport

Dennis P. Williams
Mayor of Wilmington

WILMAPCO Executive Director
Tigist Zegeye

RESOLUTION

BY THE WILMINGTON AREA PLANNING COUNCIL (WILMAPCO) APPROVING THE RELEASE OF THE DRAFT FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM FOR A PUBLIC REVIEW PERIOD

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

WHEREAS, the United States Department of Transportation's (USDOT) Regulations of Fixing America's Surface Transportation (FAST), Metropolitan Planning Requirements, require that, in air quality non-attainment areas, the MPO, in cooperation with participants in the planning process, develop and, at least every four years, updates the Transportation Improvement Program (TIP); and

WHEREAS, the projects included in the FY 2017-2020 TIP are drawn from the an air quality conforming *2040 Regional Transportation Plan* (RTP) that is the basis for the Cecil County and New Castle County portions of the respective Statewide Capital Transportation Programs for Maryland and Delaware; and

WHEREAS, the FY 2017-2020 TIP has undergone appropriate technical review and has been found to be air quality conforming; and

WHEREAS, the public will have the opportunity to comment on the Draft FY 2017-2020 TIP at the upcoming public workshop; and

WHEREAS, the MPO has determined that the projects are financially constrained, as directed by 23 CFR 450.324 (e); and

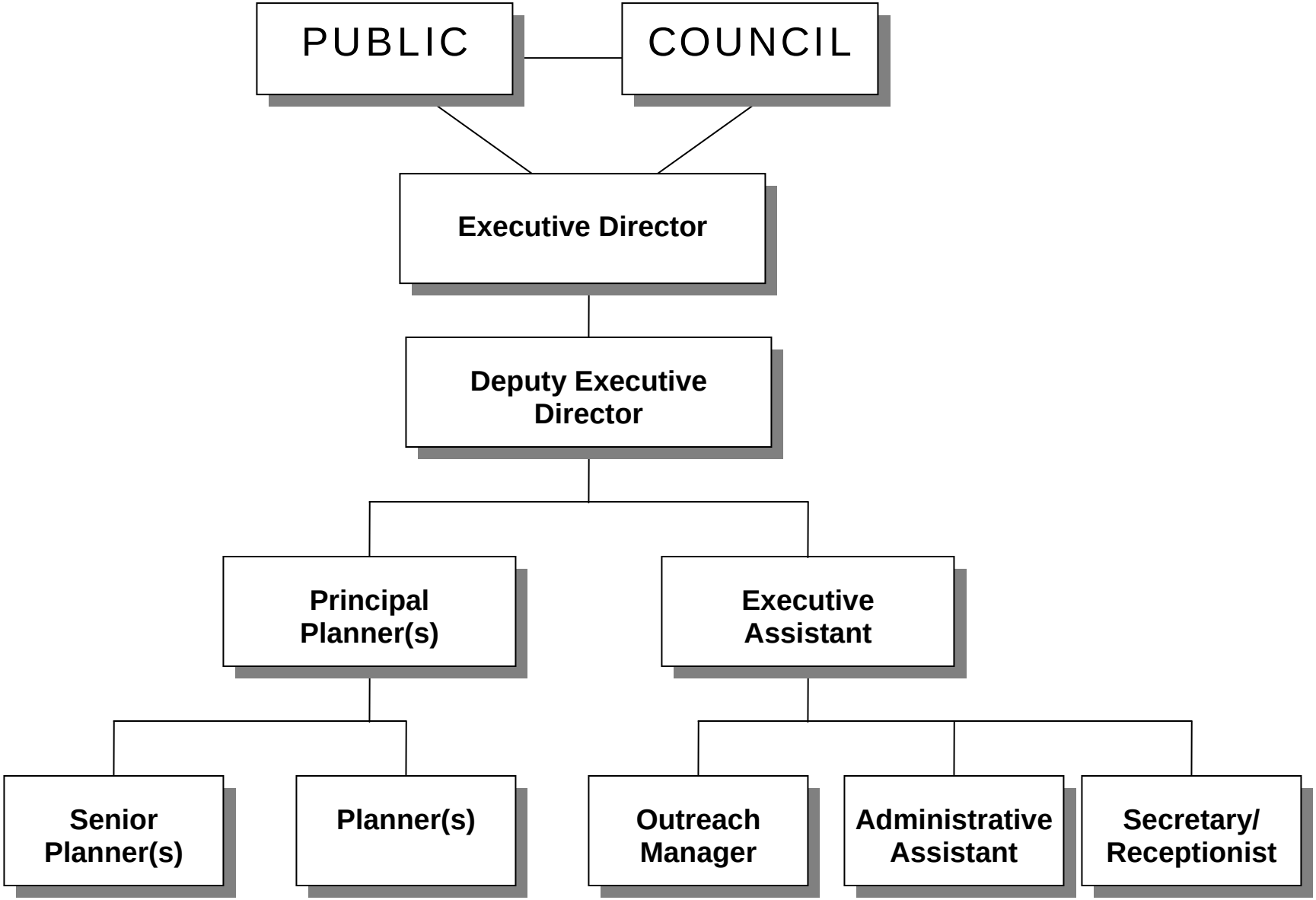
WHEREAS, the FY 2017 projects contained in the amended FY 2017-2020 TIP will be utilized as the priority list of projects;

NOW, THEREFORE, BE IT RESOLVED that the Wilmington Area Planning Council does hereby approve the release of the draft FY 2017-2020 TIP Transportation Improvement Program for a public review period.

January 14, 2016
Date:

John Sisson, Chairperson
Wilmington Area Planning Council

WILMAPCO Organization



APPENDIX C

Air Quality Conformity Analysis

Air Quality Conformity Determination

For the New Castle County, Delaware Portion of the PA-NJ-MD-DE 8-hour Ozone Nonattainment Area & PA-NJ-DE Fine Particulate Matter ($PM_{2.5}$) Maintenance Area

FY2017–2020 Transportation Improvement Program
And 2040 Regional Transportation Plan

September 2016

Table of Contents

Introduction…….1

Interagency Consultation…….5

Determine Planning Assumptions……5

Travel Demand Modeling Methodology……..……...7

Analysis Results……..…13

2040 RTP and FY 2017-2020 TIP Conformity Determination……..……...18

Appendices……..…19

Appendix A: Conformity Question Checklist

Appendix B: Conformity Results (detailed)

Appendix C: Interagency Consultation

Appendix D: Public Participation Materials

Introduction

This report demonstrates transportation conformity of the Wilmington Area Planning Council's (WILMAPCO) Amended Fiscal Year (FY) 2017-2020 Transportation Improvement Program (TIP) and Amended 2040 Regional Transportation Plan (RTP) for the New Castle County, Delaware portion of the PA-NJ-MD-DE 8-hour ozone and PA-NJ-DE fine particulate matter (PM2.5) nonattainment areas.

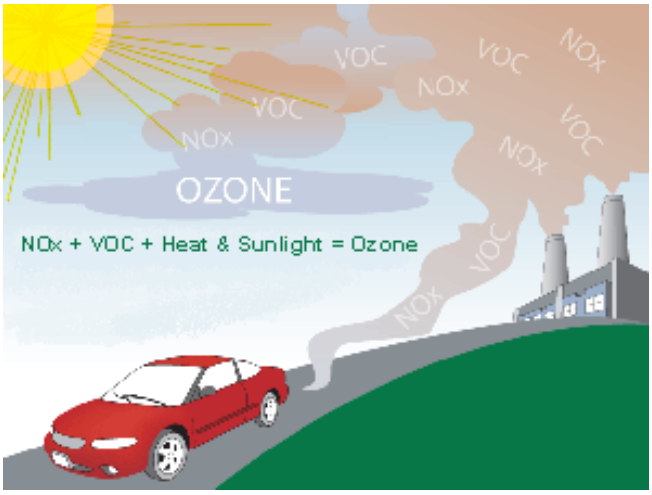
WILMAPCO is the Metropolitan Planning Organization (MPO) for New Castle County, Delaware and Cecil County, Maryland. It is designated by the governors of both states to plan for, coordinate, and program the many transportation investments in the region. Under federal law and regulation, all plans and programs that involve federal funds or are of regional significance must be reviewed and approved through WILMAPCO.

WILMAPCO is responsible for developing a Transportation Improvement Program (TIP) and a regional long-range transportation plan (RTP) in cooperation with the Maryland Department of Transportation (MDOT), the Delaware Department of Transportation (DelDOT) and affected transit operators. In accordance with federal planning requirements, a collaborative process has been developed wherein state, county and local governments and transportation providers are partners in the planning and programming process.

As the Federally-designated MPO for New Castle County, Delaware and Cecil County, Maryland, WILMAPCO is required by law to demonstrate that the RTP and TIP conform to the transportation emission budgets set forth in the Statewide Implementation Plan (SIP) for each state. If emissions generated from the projects programmed in the TIP and RTP are equal to or less than the emission budgets in the SIPs, then conformity has been demonstrated.

8-hour Ozone Background

Ozone is an odorless, colorless, gas and is created by a reaction between nitrogen oxides (NOx) and volatile organic compounds (VOC) in the presence of sunlight. While ozone in the stratosphere forms a protective layer, shielding the earth from the sun's harmful rays, ground level ozone is a key contributor to smog. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents, and natural sources all contribute to NOx and VOC emissions. Since ozone is formed in the presence of heat and sunlight, it is considered a summertime pollutant.



Ozone exposure is detrimental to public health. Ozone can irritate lung airways and cause inflammation similar to sunburn. Other symptoms include wheezing, coughing, and pain when taking a deep breath and breathing difficulties during exercise or outdoor activities. People with respiratory problems, children and the elderly are most vulnerable, but even healthy people that are active outdoors can be affected when ozone levels are high. Even at very low levels, ground-level ozone triggers a variety of health problems including aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses such as pneumonia and bronchitis.

In addition to adverse health effects, ground-level ozone also interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, other pollutants, and harsh weather. As a result, ground-level ozone negatively impacts both agricultural productivity and ecosystem stability. Furthermore, ozone damages the leaves of trees and other plants, ruining the appearance of cities, national parks, and recreation areas.

8-Hour Ozone National Ambient Air Quality Standards

On May 21, 2012, the Environmental Protection Agency (EPA) issued a final rule via the Federal Register (77 FR 30088) establishing initial air quality designations for the 2008 primary and secondary NAAQS for ozone. The 2008 standard is set at an 8-hour average concentration of 0.075 ppm and retains the same general form and averaging time as the 0.080 ppm NAAQS set in 1997. The effective date of the 2008 ozone standard designations was July 20, 2012.

Areas across the United States that have failed to meet the standards outlined above have been designated as nonattainment areas and, as a result, are subject to transportation conformity. Transportation conformity requires nonattainment and maintenance areas to demonstrate that all future transportation projects will not hinder the area from reaching and maintaining its attainment goals. In particular, the projects will not:

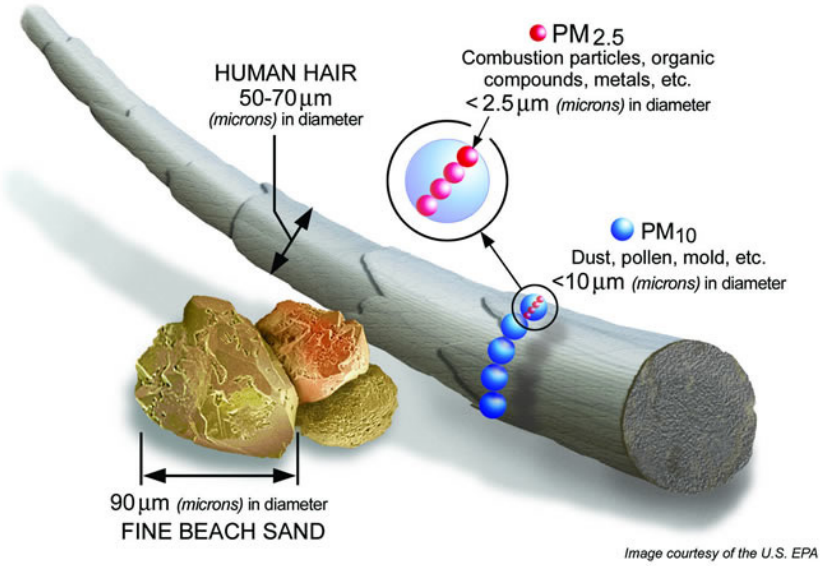
- *Cause or contribute to new air quality violations*
- *Worsen existing violations*
- *Delay timely attainment of the relevant NAAQS*

The PA-NJ-MD-DE area is classified as a marginal nonattainment area, resulting in an attainment date of December 31, 2015. It is made up of 16 counties spanning the states of Pennsylvania, New Jersey, Maryland and Delaware. The counties of Sussex and Kent in Delaware will no longer be included in the PA-NJ-MD-DE nonattainment area under the 2008 standard.

In October 2015, EPA lowered the standard to 0.70 ppm. Nonattainment area designations are expected next year.

PM2.5 Background

Fine particulate matter (PM2.5 hereafter) is a mixture of microscopic solids and liquid droplets suspended in the air, where the size of the particles is less than 2.5 µm (or about one-thirtieth the diameter of a human hair). Fine particles can be emitted directly (such as smoke from a fire, or as a component of automobile exhaust) or be formed indirectly in the air from power plant, industrial and mobile source emissions of gases such as sulfur dioxide and nitrogen oxides.



The health effects associated with exposure to fine particles are significant. Scientific studies have shown significant associations between elevated fine particle levels and premature death. Effects associated with fine particle exposure include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and cardiac arrhythmia. While fine particles are unhealthy for anyone to breathe, people with heart or lung disease, asthmatics, older adults, and children are especially at risk.

PM2.5 National Ambient Air Quality Standards

In July 1997, the EPA issued NAAQS for PM2.5, designed to protect the public from exposure to PM2.5 at levels that may cause health problems. That standard included two elements:

1) An annual standard set at 15 µg/m^3, based on a three-year average of the annual mean PM2.5 concentrations, and

C - 5

2) A 24-hour standard of 65 µg/m^3, based on a three-year average of the 98th percentile of 24-hour concentrations.

Areas need to meet both standards to be considered in attainment of PM2.5 NAAQS[1].

On April 5, 2005, EPA designations under the PM2.5 NAAQS became effective, under which the region consisting of New Castle County in Delaware, Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania, and Burlington, Camden and Gloucester counties in New Jersey were collectively designated as a nonattainment area. This region is known as the Philadelphia-Wilmington, PA-NJ-DE PM2.5 Nonattainment Area.

In December 2006, the EPA revised the 24-hour standard from 65 µg/m^3 to 35 µg/m^3. Three years later, in December 2009, the EPA designated the Philadelphia-Wilmington, PA-NJ-DE PM2.5 Nonattainment Area in nonattainment for the 24-hour standard. The October 2011 PM2.5 SIP's PM2.5 emission budget, calculated using the MOVES model, was found adequate for conformity purposes by EPA in December 2013.

On August 5, 2014, the EPA approved Delaware's request to redesignate to attainment the Delaware portion of the Philadelphia-Wilmington, PA-NJ-DE PM2.5 Nonattainment Area for both the 1997 annual and the 2006 24-hour PM2.5 standards. The EPA simultaneously approved the New Castle County PM2.5 Maintenance Plan, which requires conformity analyses using motor vehicle emission budgets associated with the 1997 annual in the 2006 24-hour PM2.5 standards. The effective date of this final rule was September 4, 2014.

Status of the Amended 2040 RTP and Amended FY 2017-2020 TIP

As the regional transportation-planning agency for Cecil County, Maryland and New Castle County, Delaware, WILMAPCO is charged with authoring a long-range transportation plan with at least a 20-year planning horizon. The RTP presents recommendations for enhanced transportation efficiency and functionality, including the construction of new facilities, improved connectivity to multiple travel modes, and the enhancement of existing highway, transit, and bicycle/pedestrian facilities. Transportation projects that address challenges faced by the region are identified in this plan and placed in the four-year TIP that corresponds to that project's development timetable.

The 2015 Update to the 2040 RTP and the Amended Fiscal Year (FY) 2017 – 2020 TIP were created by the WILMAPCO staff and member agencies. The RTP and present conformity analysis were adopted by the WILMAPCO Council in January 2015. The Amended FY 2017 TIP is set for Council adoption in September 2016.

[1] Meeting the PM2.5 standards nationwide is estimated to prevent at least 15,000 premature deaths; 75,000 cases of chronic bronchitis; 10,000 hospital admissions for respiratory and cardiovascular disease; hundreds of thousands of occurrences of aggravated asthma; and 3.1 million days when people miss work because they are suffering from symptoms related to particle pollution exposure.

Interagency Consultation

As required by the federal transportation conformity rule (40 CFR 93.105) the conformity process includes cooperative interaction among the federal, state and local agencies. Interagency consultation requirements include coordination with the local county representatives, the MPO and representatives from both state and federal agencies including:

- WILMAPCO
- Maryland Department of the Environment (MDE)
- Maryland Department of Transportation (MDOT)
- Delaware Transit Corporation (DTC)
- Delaware Department of Transportation (DelDOT)
- Delaware Department of Natural Resources and Environmental Control (DNREC)
- Cecil County
- New Castle County
- Federal Highway Administration (FHWA)
- Environmental Protection Agency (EPA)
- Federal Transit Administration (FTA)

As part of the interagency consultation, the Technical Advisory Committee (TAC) and Air Quality Subcommittee (AQS) groups met and collaborated in order to achieve the following goals related to the transportation conformity process:

- Determine planning assumptions
- Develop a definitive list of future year projects to be analyzed
- Develop a format for presenting determination
- Develop and standardize the public participation process

Meeting minutes and notes are available at the following webpages:

- http://www.wilmapco.org/aqs/
- http://www.wilmapco.org/tac/

Determine Planning Assumptions

Ozone

The emissions resulting from the implementation of regionally significant transportation projects (those which do not qualify as exempt under 40 CFR 93.126 and 127) will be compared to the Delaware Department of Natural Resources and the Environmental Control's (DNREC) Motor Vehicle Emissions Budget (MVEB).

The ozone emissions budgets of record were developed by DNREC using the MOBILE6b model for 2009. The following budgets were used:

- VOC: 9.89 tons/summer day
- NOx: 19.23 tons/summer day

The EPA regulations, as outlined in the Final Transportation Conformity Rule, Section 93.118, require that emissions analyses for the following years:

- Attainment year
- A near-term year, one-to-five years in the future
- The last year of the RTP's forecast period
- An intermediate year or years such that analyses years are no more than ten years apart.

The following three analysis years were chosen for the ozone analysis:

- 2020 (near-term year)
- 2030 (interim year to keep analysis years less than ten years apart)
- 2040 (WILMAPCO Plan horizon year)

As discussed above, ozone formation is a direct result of VOC and NOx emissions reacting with each other in the presence of sunlight. The EPA has ruled that both precursor emissions, VOC and NOx, must be included in a regional analysis of 8-hour ozone for transportation conformity.

PM2.5

PM2.5 can result from both direct and indirect sources. Gasoline and diesel on-road vehicles emit both direct PM2.5 and other gases that react in the air to form PM2.5. Transportation-related direct PM2.5 emissions can result from particles in exhaust fumes, from brake and tire wear, from road dust kicked up by vehicles, and from highway and transit construction. Transportation-related indirect PM2.5 emissions can result from one or more of several exhaust components, including nitrogen oxides (NOx), volatile organic compounds (VOCs), sulfur oxides (SOx), and ammonia (NH_3).

For the regional analysis of direct PM2.5 emissions, the EPA has ruled that both exhaust and brake/tire wear must be included. However, EPA has ruled that regional emissions analyses for direct PM2.5 should include road dust only if road dust is found to be a significant contributor to PM2.5 by either the EPA Regional Administrator or a state air agency. For this nonattainment area, neither of the EPA Regional Administrators nor any of the three state air agencies have found that road dust is a significant PM2.5 contributor. EPA has also ruled that regional direct PM2.5 analyses need only include fugitive dust from construction of transportation projects if the SIP identifies these emissions as significant contributors to the regional PM2.5 problem. The current submitted PM2.5 SIP has not deemed construction-related dust as a contributor to the regional PM2.5 problem.

Thus, the only components of direct PM2.5 emissions to be considered in the nonattainment area are tailpipe exhaust and brake/tire wear.

For the regional analysis of indirect PM2.5 emissions (also called PM2.5 precursors), the EPA has identified four potential transportation-related PM2.5 precursors: NOx, VOCs, SOx, and NH_3. The current PM2.5 SIP does not identify any precursors identified other than NOx as a significant contributor of PM2.5 emissions in New Castle County.

The following PM2.5 pollutants and precursors were tested:

- Direct PM2.5 source: tailpipe exhaust, brake and tire wear
- PM2.5 Precursor: NOx

The PM2.5 emissions budget of record were developed by DNREC using the MOVES model (described later) for 2012. The following budgets were used:

- Direct PM2.5 2012 budget: 199.0 tons/year (0.545 tons/day)
- Indirect (NOx) PM2.5 2012 budget: 6,273 tons/year (17.19 tons/day)

EPA regulations require that emissions analysis be conducted for specific analysis years. Section 93.119(g) of the *Final Rule* states that these analysis years must include a near-term year (one-to-five years in the future), the last year of the long range plan, and an intermediate year or years such that analysis years are no more than 10 years apart. Additionally, the 2015 analysis year meets a conformity requirement to test conformity for the attainment year.

The following analysis years were chosen for the PM2.5 analysis:

- 2020 (near-term year)
- 2030 (interim year to keep analysis years less than ten years apart)
- 2040 (WILMAPCO Plan horizon year)

Travel Demand Modeling Methodology

The air quality analysis conducted for the Amended FY 2017-2020 TIP and Amended 2040 RTP used a series of computer-based modeling techniques. These techniques are consistent with methods WILMAPCO and DelDOT have used in conducting air quality analyses required by the CAA amendments, and are similar to those used by other state and regional transportation agencies in preparing air quality analyses. They are also consistent with the modeling procedures WILMAPCO and DelDOT have used assisting in the preparation of various SIP documents with the Delaware Department of Natural Resources and Environmental Control (DNREC).

Travel Demand Modeling

A travel demand model for Delaware, including New Castle County, is maintained by DelDOT. The model applies a variety of data regarding roadway network conditions, vehicular travel patterns, automobile ownership, and the location of population and employment sites. The model follows a five-step process of trip generation, distribution, mode split, assignment, and feedback that is commonly used throughout the transportation planning industry. The model components were processed through the CUBE Voyager software package. The primary products of the model used in the air quality analysis were estimated volumes and average speeds for each segment or "link" of the roadway system.

The modeling process developed for the Amended FY 2017-2020 TIP and this update of the 2040 RTP used a 2012 base year network validated against DelDOT traffic counts for 2012. Model networks were developed for the years 2020, 2030, and 2040 for New Castle County. Networks included major capacity improvement projects that are expected to be in place and open to service during these years. The types of projects tested included: roadway upgrades (such as new or improved shoulders), highway widening (one lane or more), and new construction.

Demographic projections, including employment, households, and population, were developed for each of the analysis years through the WILMAPCO Data & Demographic Subcommittee. These forecasts were recommended by the Technical Advisory Committee (TAC) and were adopted by the WILMAPCO Council in July 2014.

Travel estimates were developed for this conformity analysis using a so-called "five-step travel demand" modeling process. The approach includes trip generation, trip distribution, mode split, assignment, and feedback. This type of process is required by Federal air quality conformity regulations, and is a set of planning tools commonly used among MPOs and State DOTs.

The travel demand modeling process uses two sets of primary input data. The first is socio-economic data for Traffic Analysis Zones (TAZ) for the New Castle County MPO region. Since the modeling process maintained for WILMAPCO by the Delaware DOT (Division of Planning) uses a single, integrated model of the Delaware/Maryland portion of the Delmarva Peninsula, WILMAPCO staff have developed a subcommittee process to estimate and manage demographic data for the TAZ in New Castle County. This demographic data generally consists of:

1) Population
2) Dwelling Units
3) Total Employment by Place of Work
4) Employment by Job Sector, by Place of Work
5) Total Employed Persons (Employment by Place of Residence)
6) Average Income
7) Income Quartiles
8) Average Vehicle Ownership

9) Vehicle Ownership Quartiles

For each TAZ, data for each of these items was obtained from the most recent census and updated as needed to the base year of the long range plan. For this conformity analysis, that means data from the 2010 Census was used with other locally obtained information to develop a set of TAZ estimates for 2012. Employment by place of work is not a product of the US Census, but the WILMAPCO Demographics and Data Subcommittee used a series of local, county, and state-agency data sources to develop and achieve consensus on TAZ-based employment locations. The MPO subcommittee also developed demographic forecasts for each TAZ, for the horizon years of 2020, 2030, and 2040.

The second primary travel model input is the so-called "travel network" representation of New Castle County roadways and streets. The network file stores the following data for each street segment:

1) Functional Class (or road type)
2) Number of Lanes
3) Lane Capacity
4) Posted Speed
5) Operating Speed
6) Average Peak Period Capacity (Lanes X Lane Capacity)

The current set of DelDOT/MPO travel demand models is typical of advanced TAZ-based travel models in use in the United States. DelDOT staff (with assistance from Whitman, Requardt and Associates, an engineering consulting firm) estimated these models using data from the 1997 – 2011 Delaware Travel Monitoring Survey (DTMS). The current TAZ-based models are referred to as "aggregate demand models" because they are applied at an aggregate, zonal level with extensive market segmentation.

DTMS data for 2012 - 2015 has not been analyzed at this time and is therefore not yet a part of the DelDOT/MPO travel model process.

The trip generation models include a precursor step, which disaggregates TAZ-based household data using workers per household, persons per household, and vehicles per household data from US Census PUMS, then applies cross classification-based trip generation rates to estimate productions and attractions for each TAZ, for several trip purposes including:

1) Home-Based Work (HBW)
2) Home-Based Local Shopping (HBLS)
3) Home-Based Regional Shopping (HBRS)
4) Home-Based Other (HBO)
5) Non-Home Based (NHB)
6) Journey-to-Work (JTW)
7) Journey-at-Work (JAW)
8) Trucks

The trip distribution models are standard gravity model formulations using trip length frequencies for each trip purpose based on analysis of the entire 1997 – 2011 DTMS dataset.

The mode choice model used by DelDOT and the MPOs is a nested logic choice format. Non-motorized trips (separate modes for bicycle and walk) are included as an option in certain sets of model runs that are based on tax-parcel TAZ geography. Non-motorized trips are not currently modeled in the TAZ-based regional modeling process used for county-based conformity analyses.

The trip assignment procedures use network capacity-constrained equilibrium methods, which emphasize average weekday peak period congestion levels to allocate roadway volumes and speeds by time period of day. Four peak period times are used: AM, Midday, PM, and Offpeak. The process uses customized speed-flow delay curves representing freeway, arterial, collector, and local speeds separately.

The model process methods, as required by conformity regulations, incorporate full feedback from trip assignment back through trip distribution. The travel model was run in the CUBE Voyager software package (Version 6.1.0 of the software dated May 2, 2013) under license from the vendor, Citilabs (http://www.citilabs.com/).

Summary

The modeling process for this conformity analysis used a 2012 base year network validated against DelDOT traffic counts for 2012. Model networks were developed for 2020, 2030, and 2040 for New Castle County and for the Delaware/Maryland peninsula counties within the DelDOT/MPO "Peninsula Travel Model". Modeled transportation projects are listed in Table 1. The types of projects tested were corridor improvements, highway widening, and new roadway construction. Each project was added to the network in the year when the improvement was completed. Socioeconomic projects such as population, employment, and household size were developed for the same planning horizon years.

Table 1: Cecil and New Castle Counties' Regionally Significant Projects

Row	*Project*	*County*	*List*	*Model Year*
1	MD 213: Frenchtown Road to US 40 (two to four lane divided highway)	Cecil	Aspiration	2040
2	I-95: Susquehanna River to DE Line (add a lane in each direction, plus bridge expansic	Cecil	Constrained	2040
3	MD 272: US 40 to Lums Rd. (two to four lane divided highway)	Cecil	Constrained	2040
4	I-95/SR 222 Interchange (two to four lanes on the SR 222 bridge)	Cecil	Constrained	2040
5	MD 222: US 40 to MD 276 (multilane reconstruction)	Cecil	Constrained	2040
6	US 301: MD State Line to SR 1 (new four lane expressway)	NCC	Constrained	2020
7	Christina River Bridge (new bridge)	NCC	Constrained	2020
8	SR 72, McCoy Road to SR 71 (two to four lanes)	NCC	Constrained	2030
9	Road A / SR 7 Improvements (new lane in each direction)	NCC	Constrained	2030
10	SR 299, SR 1 to Catherine Street (widening)	NCC	Constrained	2030
11	Elkton Road, Maryland State Line to Casho Mill Road (widening)	NCC	Constrained	2030
12	SR 141/I-95 Interchange (expansion)	NCC	Constrained	2030
13	US 301: Spur (new two lane road)	NCC	Constrained	2030
14	US 40/SR 896 (grade separated intersection)	NCC	Constrained	2030
15	SR 1: Tybouts Corner to Roth Bridge (widening)	NCC	Constrained	2030
16	SR 896/I-95 Interchange (expansion)	NCC	Constrained	2030
17	SR 896/Bethel Church Road Interchange (expansion)	NCC	Constrained	2030
18	US 40 Widening: Salem Church Road to Walther Road	NCC	Constrained	2030
19	SR 1: Tybouts Corner to SR 273 (four to six lanes)	NCC	Constrained	2030
20	SR 4 (Christina Parkway): SR 2 to SR 896 (widening entire lengh 2 to 4 lanes)	NCC	Constrained	2030
21	Tyler McConnell Bridge, SR141: Montchanin Road to Alapocas Road (bridge expansic	NCC	Constrained	2040
22	I-295 Improvements Eastbound at SR 141 (add third lane)	NCC	Aspiration	2040

Emission Factor Estimate

EPA's Office of Transportation and Air Quality (OTAQ) developed the **MO**tor **V**ehicle **E**mission **S**imulator (MOVES) modeling software. Initial draft versions of the software were released in 2009. This is the required modeling software used in regional or countywide air quality analyses including transportation conformity analyses. The software replaces the previous EPA tool which was called MOBILE6.2. The MOVES software is required for use in conformity analyses after March 2013.

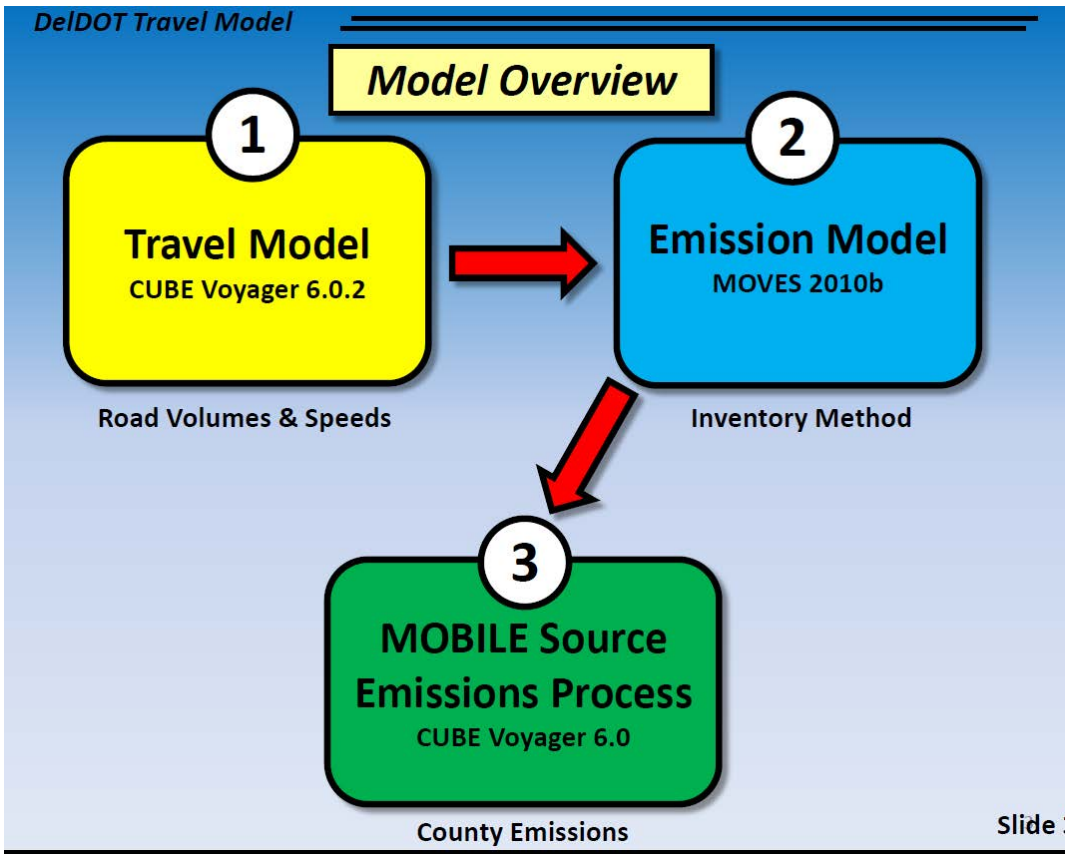
MOVES estimates emissions for mobile sources covering a broad range of mobile source pollutants and allows multiple scale analysis. The MOVES software produces estimates of emissions from cars, trucks and motorcycles.

Figure 3 presents an overview of the process used to generate travel model and emissions model data for this conformity analysis. The travel model software, CUBE Voyager, was arranged by DelDOT staff with consultant assistance to include the DNREC spreadsheet "MOVES inventory method" process for estimating mobile source emissions in New

Castle County. Essentially, DNREC staff developed an Excel-based application of the MOVES inventory method for estimating mobile source emissions. That process was incorporated, step-by-step, into the CUBE Voyager software so that conformity analysis process is based directly on the DNREC application of the MOVES inventory method. A series of quality-control checks were performed by DelDOT and the consulting firm staff ensuring the CUBE-model generated emissions data accurately replicated the DNREC spreadsheet method.

Travel model link volumes are summed to countywide totals. Adjustment factors are then used to account for seasonal traffic variations and alignment of Delaware-based Vehicle Miles Traveled (VMT) estimates with the federally-required Highway Performance Management System (HPMS). HPMS data are used to standardize the Delaware specific VMT data as required by the EPA so that direct comparisons can be made among different years and modeling scenarios.

Figure 1: Overview of Travel Model – Emission Model Process for Conformity



C - 14

Mobile Source Emissions Estimates

The estimates of emissions for New Castle County are generated jointly by DelDOT and DNREC. The model post-processor takes data produced by CUBE Voyager model output for New Castle County and adjusts it for input into the MOVES mobile emissions process noted above. This process links the estimated roadway speeds and volumes generated by the travel demand model with emission trends derived from MOVES. The product of this process is countywide emission estimates presented in this document.

The VMT and emissions data for New Castle County were adjusted to be compatible with the data contained in the current SIPs. The adjustments represent factors to account for seasonal traffic variations and to align the travel demand estimates with DelDOT's and the HPMS traffic level reporting system. These data were used to standardize the Delaware specific VMT data as required by the EPA so that direct comparisons can be made among different years and modeling scenarios.

Analysis Results

The results of the motor vehicle emissions budget tests are presented below in Tables 2 and 3 and 4. Table 2 presents the results of the budget tests for ozone emissions. Tables 3 and 4 present the results of the baseline and budget tests for PM2.5 emissions. All baselines and budget tests pass, which demonstrates conformity.

Table 2: Ozone (VOC & NOx) Emissions Test Results – MVEB Test (tons/summer day)

VOC (tpsd)	2020	2030	2040
Emissions	4.81	4.00	4.11
2009 Budget	9.89	9.89	9.89
Result	Pass	Pass	Pass

NOx (tpsd)	2020	2030	2040
Emissions	9.57	7.10	7.25
2009 Budget	19.23	19.23	19.23
Result	Pass	Pass	Pass

Table 3: Annual PM2.5 Emissions Test Results – MVEB Test (tons/day)

Direct PM2.5 (tpy)	2020	2030	2040
Emissions	131.2	113.8	118.8
2012 Budget	199.0	199.0	199.0
Result	Pass	Pass	Pass

Indirect (NOx) PM2.5 (tpy)	2020	2030	2040
Emissions	3,514	2,624	2,674
2012 Budget	6,273	6,273	6,273
Result	Pass	Pass	Pass

Table 4: Daily PM2.5 Emissions Test Results – MVEB Test (tons/day)

Direct PM2.5 (tpd)	2020	2030	2040
Emissions	0.304	0.254	0.265
2012 Budget	0.545	0.545	0.545
Result	Pass	Pass	Pass

Indirect (NOx) PM2.5 (tpd)	2020	2030	2040
Emissions	9.63	7.19	7.33
2012 Budget	17.19	17.19	17.19
Result	Pass	Pass	Pass

Description of Input Data

A large number of inputs to MOVES are needed to fully account for the numerous vehicle and environmental parameters that affect emissions. These include traffic flow characteristics, vehicle descriptions, fuel parameters, inspection/maintenance (I/M) program parameters, and environmental variables. MOVES includes a default national database of meteorology, vehicle fleet, vehicle activity, fuel, and emissions control program data for every county; but EPA cannot certify that the default data is the most current or best available information for any specific area. As a result, local data is recommended for use when completing a regional conformity analysis. Local data sources are used for all inputs that have a significant impact on calculated emission rates.
These data items are discussed in the following sections.

Roadway Data

The emission calculation process uses key traffic data from the regional travel demand model to estimate regional Vehicle Miles Traveled (VMT) and speeds. This data includes

individual roadway traffic volumes and physical roadway descriptive characteristics including area type, facility type, lanes, distances, capacity, and free-flow speeds. Travel demand model runs are produced for future analysis years and include the impact of regionally significant transportation projects. The model provides a key resource for estimating the impact of population and employment growth on roadway volumes and calculating the diversions due to transportation projects.

VMT was determined for each roadway class/setting by multiplying the length of road by the number of vehicles using the road per day. Additional adjustments to VMT included: seasonal adjustment factors reflecting traffic variation within the spring, summer, fall, and winter months (derived from permanent count station monitoring), and, Highway Performance Monitoring System (HPMS) adjustments used to align annual VMT estimates with HPMS reported totals for the base year.

Speed data was calculated for each highway segment and hour of the day, based on roadway capacity, traffic volume, and other physical roadway features (e.g. traffic signals). Thus, the travel demand model provided VMT according to the speed bins required by the MOVES software, thereby accounting for certain physical highway conditions and congestion caused by traffic volume. A speed bin is essentially an increment of speed range; for example: "VMT for the 30-35 mph range". For future horizon years, congestion (and thereby speed) can be affected by traffic growth and changes in physical conditions due to planned transportation improvements and other projects assumed to be "in-service" in horizon years.

Vehicle Class Data

Emission rates within MOVES vary significantly by vehicle type. The MOVES model produces emissions and rates by thirteen MOVES vehicle source types. However, VMT is input into MOVES by six HPMS vehicle groups.

For this emissions analysis, vehicle type pattern data was developed for New Castle County by functional class based on DelDOT classification counts and internal MOBILE6.2 and MOVES defaults. This follows procedures used for previous conformity analyses for WILMAPCO. The vehicle groups from the count data were expanded to the 28 MOBILE6.2 weight-based vehicle types and then, using procedures provided in EPA MOVES technical guidance the MOBILE6.2 vehicle classes were mapped to the MOVES source type and HPMS class groups.

The impact of trucks on traffic flow is accounted for within the travel demand modeling process. A heavy truck weight factor is used by functional class to adjust the rates at which increasing numbers of vehicles (congestion) cause average traveling speeds to drop. This effect generally is due to larger trucks taking up more roadway space than a given number of cars and also tend to have slower average traveling speeds than cars for most functional classes. The final loaded speeds from the travel model (used to define which speed bin a given road segment's VMT is placed in) reflect this truck adjustment.

Vehicle Age
Vehicle age distributions were input to MOVES for the county by the thirteen source types. The age distributions reflect the percentage of vehicles for each model year in the fleet up to 31 years old. The vehicle age distributions were prepared by DNREC DAQ based on information obtained from DMV registration data.

The age distributions for this conformity analysis were based on 2012 DMV registration data. In the late summer of 2012, DNREC DAQ staff transformed DMV raw data for a July 1, 2012 summary of vehicle age data into MOBILE6.2-16 composite vehicle type system using a spreadsheet method.

The MOVES model input age distributions were produced by DelDOT's travel demand and air quality modeling consulting firm utilizing the available EPA MS-Excel-based vehicle registration converter tool. This tool assisted in converting the MOBILE6.2-16 based data from DNREC DAQ into the MOVES source type categories.

Vehicle Population Data
Vehicle fleet information such as the number and age of vehicles has an impact on the forecasted start and evaporative emissions within MOVES. The MOVES model requires the number of vehicles (called "vehicle population") to be defined for each of the thirteen source type categories, for each year emissions estimates are needed including future horizon years. This data was prepared and provided by DelDOT's travel demand and air quality modeling consulting firm using a spreadsheet.

For the analysis years 2020, 2030, and 2040, the vehicle populations were estimated for New Castle County by developing a growth factor based on the projected increase in total countywide vehicles from 2012 to each horizon year. WILMAPCO staff and the Data and Demographics subcommittee use 2010 Census-based data for vehicles per person and vehicles per household (for each traffic analysis zone) to develop TAZ-based estimates of future year vehicles. To generate future year vehicle populations needed for MOVES (for each horizon year), the TAZ based estimates (again, for each horizon year) were summed and averaged to a countywide growth factor that was then applied to the 2012 age distribution data described above.

Environmental and Fuel Data
Information on environmental, fuel, vehicle technology, and other control strategy assumptions were determined based on a review of MOVES2010b default information by DNREC DAQ.

Fuel Data: DNREC DAQ used the fuel formulation and supply data that has been assigned to New Castle County, Delaware by the EPA in the MOVES model. The EPA obtains data on all fuel shipments from the refineries in the Delaware area and develops the formulations based on these data. Data inputs include fields such as: ethanol content, sulfur content, aromatic content, benzene content, olefin content, and Methyl Ter-Butyl Ether (MTBE) volume.

Meteorological Data: Evaporative emissions are influenced significantly by the temperatures of the surrounding air. DNREC DAQ used the default ozone analysis temperature and humidity values that exist in the MOVES model. These values are presented as month-by-month, hourly data sets for New Castle County.

Other Vehicle Technology and Control Strategy Data

The MOVES2010b default I/M data was reviewed and updated by DNREC DAQ for New Castle County. The current I/M program known as the Vehicle Emission Inspection Program (VEIP) was utilized for these analysis runs and is described below.

DE Vehicle Emission Inspection Program: This program tests the following gasoline-powered and diesel-powered vehicles: model year 1968 and newer light duty passenger cars, as well as 1970 and newer light duty trucks up to 8,500 pounds. The test is done biennially and on change of ownership. There is a five-year grace period for new vehicles. In New Castle County, 1996 and newer light duty vehicles subject to the regulation receive an On-board Diagnostics (OBD) II test. Model year 1968-1980 vehicles subject to the regulation receive an idle test; those of model year 1981-1995 receive a two-speed idle test. In addition, model year 1975-1995 vehicles receive a tank and cap pressure test. Finally, all 1975 and newer light duty vehicles in New Castle County subject to this regulation receive a visual inspection of the catalytic converter. The compliance factors reflect the fail and waiver rates observed in the program, combined with an assumed 96% compliance rate for vehicles showing up for testing.

Federal Programs: Current federal vehicle emissions control and fuel programs are incorporated into the MOVES2010b software. These include the National Program standards covering model year vehicles through 2016. Modifications of default emission rates are required to reflect the implementation of the National Low Emission Vehicle Program (NLEV) program in Delaware. To reflect these impacts, EPA has released instructions and input files that can be used to model these impacts. This inventory utilized the August 2010 version of the files: (http://www.epa.gov/oms/models/moves/tools.htm).

State Vehicle Technology Program:

DE Clean Car Program: Under the Delaware Low Emission Vehicle Program, 7 DE Admin Code 1140, which was revised December 2013, Delaware required manufacturers of 2014 model year vehicles to comply with Non-Methane Organic Gas (NMOG) emission requirements and California Low Emission Vehicle (LEV II) phase-in requirements. The regulation also requires manufacturers of 2015 and subsequent model year vehicles to comply with NMOG plus NOx emission requirements, as well as California LEV III phase-in requirements. Zero emission vehicles are currently not required by this regulation. California adopted the Low-Emission Vehicle regulation entitled LEV III (third generation low emission vehicle standards) in March 2012. These amendments create more stringent emission standards for new motor vehicles. These new standards will be phased-in over the 2015-2025 model years.

The impacts of this program were modeled for all analysis years using EPA's guidance document, *Instructions for Using LEV and NLEV Inputs for MOVES, EPA-420-B-10-003, January 2010*. EPA provided input files to reflect the CAL LEVII program with the standard phase-in schedules for new emission standards. Modifications to those schedules were done per EPA's instructions, to reflect a later start for the State of Delaware beginning with vehicle model year 2014.

Amended 2040 RTP and Amended FY 2017-2020 TIP Conformity Determination

Financial Constraint

The planning regulations, Sections 450.322(b) (11) and 450.324(e) require the transportation plan to be financially constrained while the existing transportation system is being adequately operated and maintained. Only projects for which construction and operating funds are reasonably expected to be available are included. WILMAPCO has developed an estimate of the cost to maintain and operate existing roads and bridges in the MPO area and has compared that with the estimated revenues and maintenance needs of the new roads. As shown in the RTP, WILMAPCO has found that the projected revenues are sufficient to cover the costs; therefore, satisfying the financial constraint requirement.

Public Participation

This conformity document has undergone the public participation requirements set forth in the Final Conformity Rule, and Final Statewide / Metropolitan Planning Rule. The draft analysis was made available for public review and comment beginning on July 25, 2016, and ending on September 6, 2016. The public review and comment period was announced using the following outlets:

- Notices in the Delaware News Journal and Cecil Whig
- WILMAPCO website (www.wilmapco.org)
- WILMAPCO E-NEWS (monthly electronic newsletter)
- WILMAPCO Transporter (quarterly newsletter)
- Public Workshop on August 31, 2016, at the Newark Library in Newark, Delaware

The documentation of the observed 30-day public comment period can be found in Appendix G of the TIP.

Appendices

Appendix A

Conformity Question Checklist

C - 21

Table A-1: Conformity Questions Matrix

SECTION OF 40 CFR PART 93	CRITERIA	YES / NO	COMMENTS
GENERAL CRITERIA APPLICABLE TO BOTH PLAN AND TIP			
93.11	Are the conformity determinations based upon the latest planning assumptions ?	Yes	The conformity determination uses the most recent available information including recent demographics and vehicle registration.
	(a) Is the conformity determination, with respect to all other applicable criteria in §§93.111 - 93.119, based upon the most recent planning assumptions in force at the time of the conformity determination?	Yes	Population, housing and land use data inputs for the Travel Demand Model were updated in July 2014. Vehicle fleet data for 2012 was utilized in the conformity determination.
	(b) Are the assumptions derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other designated agency? Is the conformity determination based upon the latest assumptions about current and future background concentrations?	Yes	Transportation demand end emissions modeling assumptions are developed by the DE Dept of Transportation in conjunction with WILMAPCO and other local, state and federal representatives as part of the consultation process. Standard procedures for projecting future demographics are outlined in the Plan.
	(c) Are any changes in the transit operating policies (including fares and service levels) and assumed transit ridership discussed in the determination? **(d)** The conformity determination must include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.	Yes	Reasonable assumptions have been made with regard to transit fares and operating policies (fare and service levels). Changes to transit policy and tolling may occur during the duration of the Plan. However, these cannot be predicted. Therefore, the model assumes they will remain constant during the life of the Plan.

SECTION OF 40 CFR PART 93	CRITERIA	YES / NO	COMMENTS
	(f) Key assumptions shall be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by §93.105.	Yes	Key planning assumptions are included and explained in the conformity determination document and agreed upon by all participating parties through the interagency consultation process. The conformity document has been made available for public review for the required 30 day period.
93.111	Is the conformity determination based upon the latest emissions model?	Yes	EPA's latest emission model, MOVES, was used for this conformity analysis.
	Did the MPO make the conformity determination according to the consultation procedures of the conformity rule or the state's conformity SIP?		WILMAPCO conducted the conformity determination in accordance with the consultation procedures of the conformity rule.
TRANSPORTATION PLAN			
93.106(a) (1)	Are the Horizon Years correct?	Yes	Analysis horizon years included 2020, 2030 and 2040. These represent the appropriate horizon years for the 8-hour ozone and PM2.5 NAAQS conformity determination.
93.106(a) (2)(i)	Does the plan quantify and document the demographic and employment factors influencing transportation demand?	Yes	Socioeconomic data including population, retail and non retail employment and number of house-holds are included in the body of the conformity document
93.106(a) (2)(ii)	Is the highway and transit system adequately described in terms of the regionally significant additions or modifications to the existing transportation network which the transportation plan envisions to be operational in the horizon years?	Yes	The regional modifications to the highway and transit systems are documented within the conformity determination report and included in the emissions analysis.
93.108	Is the Transportation Plan Fiscally Constrained?	Yes	The transportation plan is in complete agreement with the State's FY 2017 to 2022 Capital Improvement Plan.
93.113(b)	Are TCMs being implemented in a timely manner?	N/A	There are no TCMs included in the Plan.
93.118	For Areas with SIP Budgets:Is the Transportation Plan, TIP or Project consistent with the motor vehicle emissions budget(s) in the applicable SIP?	Yes	Emission totals calculated for each analysis years were tested against the 2009 SIP budgets for ozone and the 2012 PM2.5 budget.

Appendix B

Conformity Results

Detailed VMT and Emissions

By County

By Functional Class

By Analysis Year

Table B-1: Detailed Emission Results

New Castle County Annual PM2.5 and Nox Emission (Tons)

Month	2020			2030			2040		
	VOC	NOx	PM25	VOC	NOx	PM25	VOC	NOx	PM25
1	166.30	314.69	14.80	119.68	236.96	13.27	117.84	240.96	13.84
2	152.51	290.11	13.15	108.77	216.35	11.69	110.38	221.76	12.26
3	149.46	313.34	12.59	116.47	235.58	11.12	116.94	239.76	11.61
4	139.22	301.15	10.49	114.03	224.23	9.04	116.05	228.20	9.44
5	137.37	302.04	9.99	114.24	225.50	8.49	116.77	229.74	8.86
6	138.07	270.42	8.47	115.00	200.50	7.04	117.91	204.59	7.34
7	144.86	270.78	8.57	120.41	200.58	7.11	123.45	204.73	7.41
8	141.57	288.61	8.98	118.07	214.18	7.48	121.06	218.55	7.80
9	130.43	264.74	8.26	108.97	196.13	6.90	111.64	199.82	7.19
10	133.96	280.64	9.74	110.17	210.02	8.39	112.08	213.63	8.75
11	141.20	294.68	11.71	110.35	221.26	10.32	110.88	225.07	10.78
12	163.54	323.18	14.48	120.43	242.73	12.94	119.38	246.91	13.50
Total	**1738.50**	**3514.38**	**131.24**	**1376.60**	**2624.03**	**113.78**	**1394.39**	**2673.73**	**118.77**

New Castle County Summer Weekday Ozone & PM2.5 Emission (Tons)

Month	2020			2030			2040		
	VOC	NOx	PM25	VOC	NOx	PM25	VOC	NOx	PM25
6	4.80	9.56	0.30	3.99	7.09	0.25	4.10	7.24	0.26
7	4.87	9.27	0.30	4.04	6.87	0.25	4.15	7.02	0.26
8	4.77	9.87	0.31	3.97	7.33	0.26	4.07	7.48	0.27
Average	**4.813**	**9.568**	**0.304**	**4.002**	**7.096**	**0.254**	**4.106**	**7.248**	**0.265**

Table B-2: VMT by Vehicle Type

New Castle County Annual VMT by Vehicle Type

HPMSVTypeID	2020 HPMS Annual VMT	2030 HPMS Annual VMT	2040 HPMS Annual VMT
Motorcycles	42,709,270	46,330,590	49,265,158
Passenger Cars	2,644,656,130	2,868,896,538	3,050,611,777
Other 2 axle-4 tire vehicles	2,996,088,248	3,250,126,588	3,455,988,849
Buses	35,774,135	38,807,425	41,265,478
Single Unit Trucks	53,851,516	58,417,586	62,117,743
Combination Trucks	144,979,294	157,272,089	167,233,667
Total	**5,918,058,594**	**6,419,850,816**	**6,826,482,672**

Table B-3: Vehicle Population

New Castle County Vehicle Population

sourceTypeName	2020 SourceType Population	2030 SourceType Population	2040 SourceType Population
Motorcycle	13898	14514	14824
Passenger Car	246212	257118	262615
Passenger Truck	159865	166946	170516
Light Commercial Truck	52605	54935	56109
Intercity Bus	199	208	212
Transit Bus	596	623	636
School Bus	985	1029	1051
Refuse Truck	78	82	84
Single Unit Short-haul Truck	3183	3324	3396
Single Unit Long-haul Truck	224	234	239
Motor Home	390	407	416
Combination Short-haul Truck	1231	1286	1313
Combination Long-haul Truck	925	966	987

Table B-4: VMT by Functional Classification

New Castle County Average Daily VMT by Functional Classification

Functional Class	2020 HPMS Adjusted VMT	2030 HPMS Adjusted VMT	2040 HPMS Adjusted VMT
PA-rural	1,475,198	1,672,544	1,841,440
Minor Arterial-rural	317,436	367,270	398,143
Major collector-rural	185,556	223,117	256,267
Minor collector-rural	62,345	77,680	90,661
Local-rural	268,753	339,365	384,538
Interstate-urban	3,658,500	3,956,280	4,263,386
Freeway-urban	820,731	905,974	963,259
PA-urban	4,054,670	4,338,158	4,559,499
Minor Arterial-urban	1,555,260	1,653,826	1,714,088
Major collector-urban	1,335,056	1,464,876	1,566,373
Local-urban	2,436,054	2,541,487	2,613,940
Total	**16,169,559**	**17,540,577**	**18,651,594**

Appendix C

Interagency Consultation

For a collection of meeting notes, please visit:

wilmapco.org/aqs

Appendix D

Public Participation Materials

Please visit:

wilmapco.org/rtp

wilmapco.org/tip

wilmapco.org/aq

Air Quality Conformity Analysis For the 8-Hour Ozone NAAQS

For the Cecil County Portion of the PA-NJ-MD-DE Nonattainment Area

FY2017–2020 Transportation Improvement Program And 2040 Regional Transportation Plan

Prepared for:

WILMAPCO

In Conjunction with
Maryland Department of Transportation
And
Maryland Department of the Environment

Prepared by:

Michael Baker International

September 2016

Air Quality Conformity Analysis

For the 2040 Regional Transportation Plan and the Fiscal Year 2017-2020 Transportation Improvement Program for Cecil County, MD Portion of the PA-NJ-MD-DE 8-Hour Ozone Nonattainment Area

Table of Contents

Introduction **1**

8-hour Ozone Background 1
8-Hour Ozone National Ambient Air Quality Standards (NAAQS) 2
2008 NAAQS 2
PA-NJ-MD-DE 8-Hour Ozone Nonattainment Area 3
Status of the 2040 RTP & 2017-2020 TIP 3

Interagency Consultation **4**

Determine Planning Assumptions 4
8-Hour Ozone Regional Emissions Test 4
Analysis Years 5
Components of the Regional Emissions Analysis 5
Future Year Projects 5

Analysis Results **5**

Travel Demand Modeling Methodology **6**

Highway Networks 6
Land Use Forecast Methodology 8

Estimation Process for Mobile Source Emissions **9**

Analysis Methodology 9
Description of Input Data 10
Roadway Data 10
Vehicle Class Data 11
Vehicle Age 11
Vehicle Population Data 12
Environmental and Fuel Data 12
Other Vehicle Technology and Control Strategy Data 13
State Vehicle Technology Program: 14

2040 RTP and FY 2017-2020 TIP Conformity Determination **14**

Financial Constraint 14
Public Participation 14
Conformity Statement 15

References **16**

Appendices

Appendix A: Conformity Question Checklist
Appendix B: Conformity Results, Detailed VMT, and Emissions
Appendix C: MOVES Input Files and Parameters
Appendix D: Interagency Consultation
Appendix E: Public Participation Materials

List of Figures

Figure 1: Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE Nonattainment Areas..... 3
Figure 2: Cecil County Network Map..... 7
Figure 3: Summary of Emission Calculation Process 10

List of Tables

Table 1: VOC Emissions Test Results – MVEB Test (tons/day) 6
Table 2: NOx Emissions Test Results – MVEB Test (tons/day) 6
Table 3: Cecil and New Castle Counties Regionally Significant Highway Projects... 8
Table 4: Summary of Land Use Data Used for Modeling Runs 9

Table A-1: Conformity Questions Matrix A-1

Table B-1: 2020 Emissions Budget Test Results B-1
Table B-2: 2030 Emissions Budget Test Results B-1
Table B-3: 2040 Emissions Budget Test Results B-1

Introduction

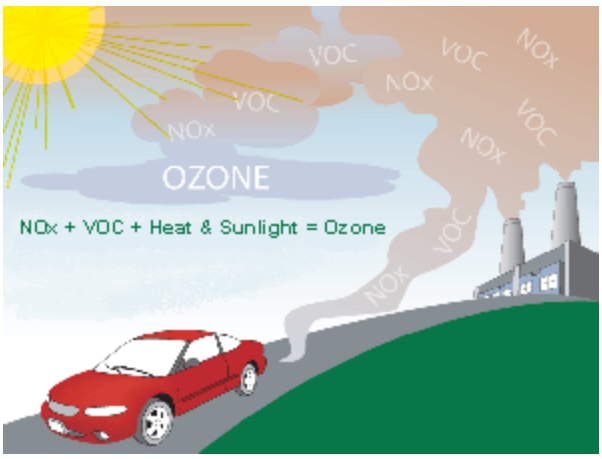
This report demonstrates transportation conformity of the Wilmington Area Planning Council's (WILMAPCO) Fiscal Year (FY) 2017-2020 Transportation Improvement Program (TIP) and 2040 Regional Transportation Plan (RTP) for the Cecil County, Maryland portion of the PA-NJ-MD-DE 8-hour ozone nonattainment area.

WILMAPCO is the Metropolitan Planning Organization (MPO) for New Castle County, Delaware and Cecil County, Maryland. It is designated by the governors of both states to plan for, coordinate, and program the many transportation investments in the region. Under federal law and regulation, all plans and programs that involve federal funds or are of regional significance must be reviewed and approved through WILMAPCO.

WILMAPCO is responsible for developing a Transportation Improvement Program (TIP) and a Regional Transportation Plan (RTP) in cooperation with the Maryland Department of Transportation (MDOT), the Delaware Department of Transportation (DelDOT) and affected transit operators. In accordance with federal planning requirements, a collaborative process has been developed wherein state, county, and local governments and transportation providers are partners in the planning and programming process.

As the Federally-designated MPO for New Castle County, DE and Cecil County, MD, WILMAPCO is required by law to demonstrate that the RTP and TIP conform to the transportation emission budgets set forth in the Statewide Implementation Plan (SIP) for each state. If emissions generated from the projects programmed in the TIP and RTP are equal to or less than the emission budgets in the SIPs, then conformity has been demonstrated.

8-hour Ozone Background



Ozone is an odorless, colorless, gas and is created by a reaction between Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC) in the presence of sunlight. While ozone in the stratosphere forms a protective layer, shielding the earth from the sun's harmful rays, ground level ozone is a key contributor to smog. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents, and natural sources all contribute to NOx and VOC emissions. Since ozone is formed in the presence of heat and sunlight, it is considered a summertime pollutant.

The health effects of ozone vary. Ozone can irritate lung airways and cause inflammation similar to sunburn. Other symptoms include wheezing, coughing, and pain when taking a deep breath and breathing difficulties during exercise or outdoor activities. People with

respiratory problems, children, and the elderly are most vulnerable, but even healthy people that are active outdoors can be affected when ozone levels are high. Even at very low levels, ground-level ozone triggers a variety of health problems including aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses such as pneumonia and bronchitis.

In addition to adverse health effects, ground-level ozone also interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, other pollutants, and harsh weather. Furthermore, ozone damages the leaves of trees and other plants, ruining the appearance of cities, national parks, and recreation areas.

8-Hour Ozone National Ambient Air Quality Standards (NAAQS)

2008 NAAQS

On May 21, 2012, the Environmental Protection Agency (EPA) issued a final rule via the Federal Register (77 FR 30088) establishing initial air quality designations for the 2008 primary and secondary NAAQS for ozone. The 2008 standard is set at an 8-hour average concentration of 0.075 ppm. The fourth highest value in a year, rounded to the nearest 0.01 and averaged over three years, may not exceed this level at any monitor in the area.

Areas that have failed to meet the standards outlined above have been designated as nonattainment areas and, as a result, are subject to transportation conformity. Transportation conformity requires nonattainment and maintenance areas to demonstrate that all future transportation projects will not hinder the area from reaching and maintaining its attainment goals. In particular, the projects will not:

- *Cause or contribute to new air quality violations*
- *Worsen existing violations or*
- *Delay timely attainment of the relevant NAAQS*

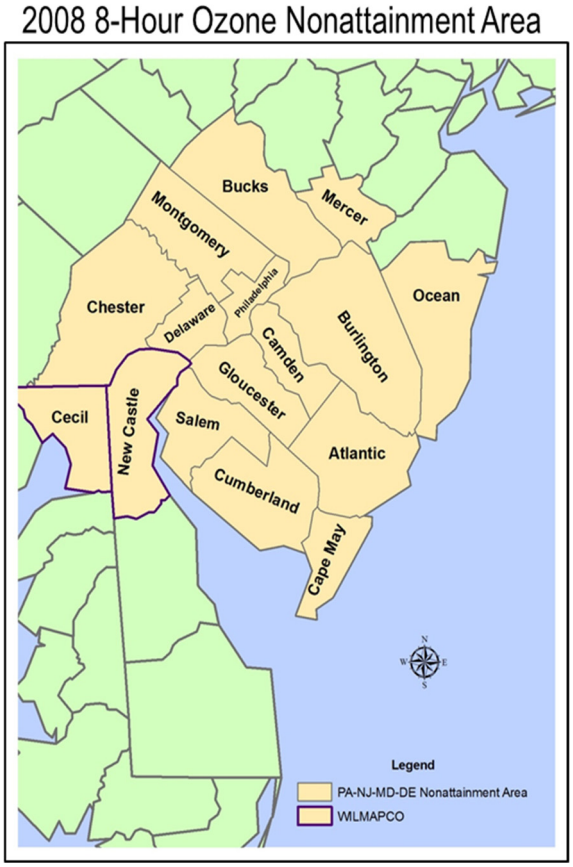
The effective date of the 2008 ozone standard designations was July 20, 2012. Under the final rule for implementation of the 2008 NAAQS (77 FR 30160), also effective on July 20, 2012, the 1997 ozone NAAQS were revoked for transportation conformity purposes 1 year after the effective date of designations for the 2008 ozone NAAQS, July 20, 2013. The PA-NJ-MD-DE area is classified as a marginal nonattainment area, resulting in an attainment date of July 20, 2015. The PA-NJ-MD-DE did not attain the standard by the attainment date. However, EPA granted a 1-year extension to July 20, 2016 by meeting the criteria of CAA section 181(a)(5) of compliance with all commitments and requirements in the SIP, and "clean" data in 2014. EPA's final rule was published in 81 FR 26697, dated May 4, 2016.

EPA published a final rule (77 FR 65488), which became effective on November 28, 2012, approving the attainment demonstration for the 1997 8-hour ozone NAAQS for the Maryland portion of the nonattainment area. The same ruling found adequate the 2009 motor vehicle emission budgets (MVEBs) associated with the attainment demonstration. Since the area was designated as marginal under the 2008 ozone standards, new MVEBs are not required and the previously approved, and 2009 MVEBs must be used for conformity purposes.

PA-NJ-MD-DE 8-Hour Ozone Nonattainment Area

The 2008 8-hour ozone nonattainment area is made up of 16 counties spanning four states. Figure 1 illustrates the entire nonattainment area and the location of the areas covered by WILMAPCO (New Castle and Cecil Counties) for both the 2008 ozone standards.

Figure 1: Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE Nonattainment Areas



Status of the 2040 RTP & 2017-2020 TIP

As the regional transportation-planning agency for Cecil County, Maryland and New Castle County, Delaware, WILMAPCO is charged with authoring a long-range transportation plan with at least a 20-year planning horizon. The Plan presents recommendations for enhanced transportation efficiency and functionality, including the construction of new facilities, improved connectivity to multiple travel modes, and the enhancement of existing highway, transit, and bicycle/pedestrian facilities. Transportation projects that address challenges faced by the region are identified in this plan and placed on the four-year Transportation Improvement Program (TIP) that corresponds to that project's development timetable.

The 2040 update of the Regional Transportation Plan and the Fiscal Year 2017 – 2020 TIP were created by the WILMAPCO staff and member agencies. The TIP and RTP were formally adopted by the WILMAPCO Council on March 10, 2016.

Interagency Consultation

As required by the federal transportation conformity rule (40 CFR 93.105) the conformity process includes a significant level of cooperative interaction among the federal, state, and local agencies. Interagency consultation requirements include coordination with the local county representatives, the MPO and representatives from both state and federal agencies including:

- Wilmington Area Planning Council (WILMAPCO)
- Maryland Department of the Environment (MDE)
- Maryland Department of Transportation (MDOT)
- Maryland State Highway Administration (SHA), Maryland Transit Administration (MTA), and Maryland Transportation Authority (MDTA) (responsible for the State's toll facilities)
- Delaware Transit Corporation (DTC)
- Delaware Department of Transportation (DelDOT)
- Delaware Department of Natural Resources and Environmental Control (DNREC)
- Cecil County
- New Castle County
- Federal Highway Administration (FHWA)
- Environmental Protection Agency (EPA)
- Federal Transit Administration (FTA)

As part of the interagency consultation, the Technical Advisory Committee (TAC) and Air Quality Subcommittee (AQS) groups met and collaborated in order to achieve the following goals related to the transportation conformity process:

- Determine planning assumptions
- Develop a definitive list of future year projects to be analyzed
- Develop a format for presenting determination
- Develop and standardize the public participation process

The TAC met the third Thursday of each month in 2015 and 2016, and the AQS met on August 13, 2015, December 17, 2016, March 10, 2016, May 12, 2016, and July 21, 2016. Please see Appendix D for meeting minutes. (**http://www.wilmapco.org/aqs/**; **http://www.wilmapco.org/tac**)

Determine Planning Assumptions

8-Hour Ozone Regional Emissions Test

The emissions resulting from the implementation of regionally significant transportation projects (those which do not qualify as exempt under 40 CFR 93.126 and 127) will be compared to the 2009 Motor Vehicle Emissions Budgets (MVEB), set forth in the document: *Cecil County, Maryland 8-Hour Ozone State Implementation Plan and Base*

Year Inventory SIP Revision: 07-05, for conformity purposes. The document was submitted to EPA in June 2007. EPA found the 2009 MVEBs adequate for conformity purposes, effective on November 28, 2012 (77 FR 65488).

Analysis Years

EPA regulations, as outlined in the Final Transportation Conformity Rule, Section 93.118, Criteria and Procedures: Motor Vehicle Emissions Budget, state that the regional emissions analysis may be performed for any years in the timeframe of the conformity determination provided that they:

- Include a near-term year, one to five years in the future
- Are not more than ten years apart
- The analysis is performed for the attainment year (if it is in the timeframe of the transportation plan and conformity determination)
- Include the last year of the timeframe of the conformity determination

The attainment year for the 2008 standard, is 2015, which is not within the timeframe of the transportation plan. 2020 was chosen so that the first analysis year is no more than five years beyond the year in which the conformity determination is being made. 2030 was selected as the intermediate year so that the analysis years are no more than 10 years apart. The last year of the plan is 2040, making the analysis years 2020, 2030, and 2040.

Components of the Regional Emissions Analysis

As discussed above, ozone formation is a direct result of VOC and NOx emissions reacting with each other in the presence of sunlight. The EPA has ruled that both precursor emissions, VOC and NOx, must be included in a regional analysis of 8-hour ozone for transportation conformity.

Future Year Projects

The projects listed in Table 3, in the Travel Demand Modeling section of this document, were found to be regionally significant through the interagency consultation process and are analyzed in this conformity determination.

Analysis Results

The results of the motor vehicle emissions budget tests are presented below in Tables 1 and 2. Table 1 presents the results of the budget test for VOC emissions. Table 2 outlines the results of the budget test for NOx emissions. The results show that all analysis years are below the established and approved 2009 MVEB and show a positive conformity determination. The regionally significant projects located in the Cecil County portion of the nonattainment area will not cause or contribute to any new violation of the air quality standard.

Table 1: VOC Emissions Test Results – MVEB Test (tons/day)

	2020	2030	2040
	Modeled	Modeled	Modeled
Cecil County Total	*1.6*	*1.0*	*0.9*
2009 Conformity Budget	2.2	2.2	2.2
Conformity Result	Pass	Pass	Pass

Table 2: NOx Emissions Test Results – MVEB Test (tons/day)

	2020	2030	2040
	Modeled	Modeled	Modeled
Cecil County Total	*5.5*	*3.6*	*3.7*
2009 Conformity Budget	7.3	7.3	7.3
Conformity Result	Pass	Pass	Pass

Travel Demand Modeling Methodology

A travel demand model has been used to estimate future roadway traffic volumes and diversions related to regionally significant transportation improvement projects. The travel model was originally developed in 2006 and revalidated in 2012 for the upper eastern shore of Maryland including Cecil County.

The Upper Eastern Shore (UES) model uses the TP+ software platform and encompasses Kent, Queen Anne's, and Cecil Counties in Maryland, as well as New Castle County, Delaware. This model is a traditional three-step model incorporating trip generation, trip distribution, and traffic assignment. The regional travel model does not contain a formal mode choice or transit assignment module. The model produces vehicle trips for 477 traffic analysis zones and assigns them to highway networks consisting of key regional roadway segments. The base year model is validated against survey data and traffic counts collected for the year 2010. A summary of the model components and validation are presented in a final report available from MDOT.

Highway Networks

For the purpose of this conformity analysis, model highway networks are created for each analysis year: 2020, 2030, and 2040. The networks are comprised of link segments representing freeways, principal arterials, minor arterials, and collectors within the nonattainment region (Figure 2). Links in the network are coded with attributes that portray the facilities' respective capacities and travel speeds. For each horizon year, projects from the RTP and TIP are coded onto the networks by adding links for new construction projects and adjusting the link capacities for projects that add lanes to existing roadways. A list of regionally significant highway projects (as defined in section 93.101 of the Final Transportation Conformity Rule) is shown in Table 3. The primary products of the model used in the air quality analysis are estimated volumes, link distances, free-flow speeds, and link capacities. The impacts of transit on regional vehicle trips are accounted for in the validation count data. Future changes to transit service (as reflected in regionally

significant transit projects) can be accounted for using off-model analysis techniques, such as MAQONE.

Figure 2: Cecil County Network Map

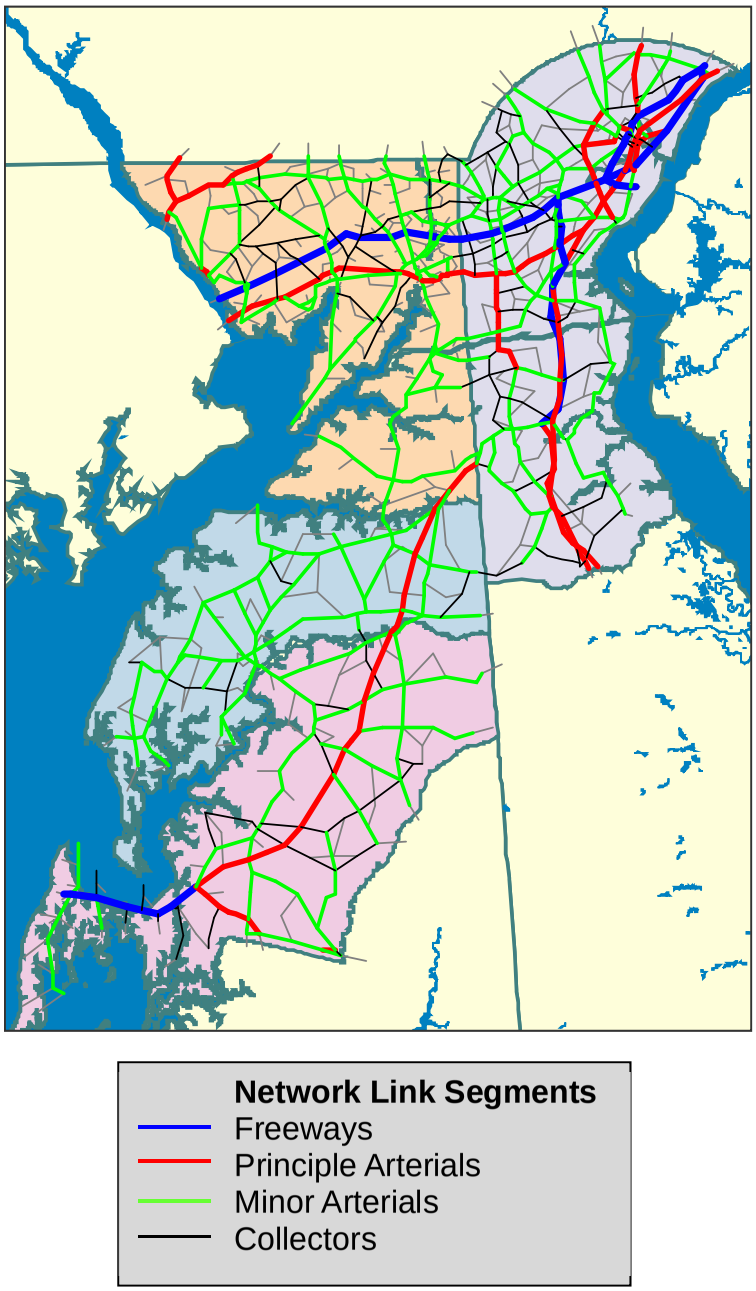


Table 3: Cecil and New Castle Counties Regionally Significant Highway Projects

No.	Project Name	County	Description	In-service Date
1	MD 213: Frenchtown Road to US 40	CC	Two to four lane divided highway	2040
2	I-95: Susquehanna River to DE Line	CC	Add a lane in each direction, plus bridge expansion	2040
3	MD 272: US 40 to Lums Road	CC	Two to four lane divided highway	2040
4	I-95/SR 222 Interchange	CC	Two to four lanes on the SR 222 bridge	2040
5	MD 222: US 40 to MD 276	CC	Multilane reconstruction	2040
6	US 301: MD State Line to SR 1	NCC	New four lane expressway	2020
7	Christina River Bridge	NCC	New bridge	2020
8	SR 72, McCoy Road to SR 71	NCC	Two to four lanes	2030
9	Road A / SR 7 Improvements	NCC	New lane in each direction	2030
10	SR 299, SR 1 to Catherine Street	NCC	Widening	2030
11	Elkton Road, Maryland State Line to Casho Mill Road	NCC	Widening	2030
12	SR 141/I-95 Interchange	NCC	Expansion	2030
13	US 301: Spur	NCC	New two lane road	2030
14	US 40/SR 896	NCC	Grade separated intersection	2030
15	SR 1: Tybouts Corner to Roth Bridge	NCC	Widening	2030
16	SR 896/I-95 Interchange	NCC	Expansion	2030
17	SR 896/Bethel Church Road Interchange	NCC	Expansion	2030
18	US 40 Widening: Salem Church Road to Walther Road	NCC	Widening	2030
19	SR 1: Tybouts Corner to SR 273	NCC	Four to six lanes	2030
20	SR 4 (Christina Parkway): SR 2 to SR 896	NCC	Widening entire length two to four lanes	2030
21	Tyler McConnell Bridge, SR141: Montchanin Road to Alapocas Road	NCC	Bridge expansion	2040
22	I-295 Improvements Eastbound at SR 141	NCC	Add third lane	2040

Note NCC = New Castle County

CC = Cecil County

Land Use Forecast Methodology

Land use estimates for the base and future year models for Cecil County are developed from existing data sources and county comprehensive plans, as well as through

coordination with state and local planning agencies. The land use data for this model is comprised of data describing the population, households, workforce, and employment for the region.

Land use for Cecil County, Maryland and New Castle County, Delaware came directly from the land use demographics approved by WILMAPCO. WILMAPCO's demographic projections for New Castle and Cecil Counties were adopted in July 2014. Table 4 summarizes the land use data used for traffic modeling for the analysis years 2020, 2030, and 2040 for Cecil County.

Table 4: Summary of Land Use Data Used for Modeling Runs

Cecil County						
Year	**Population***	**Households***	**Labor Force***	**Total* Employment**	**Retail* Employment**	**Non-Retail* Employment**
2020	107,557	40,907	53,148	49,817	8,710	41,107
2030	124,360	47,659	61,149	54,785	8,541	46,243
2040	138,105	52,826	67,414	58,530	9,134	49,396

*Note: * Data Source: WILMAPCO Projections (Adopted July 2014*)

Estimation Process for Mobile Source Emissions

This conformity analysis uses MOVES2014 model, EPA's state-of-the-art tool for estimating emissions from highway vehicles. Compared to previous tools, MOVES incorporates the latest emissions data, more sophisticated calculation algorithms, increased user flexibility, new software design, and significant new capabilities.

Analysis Methodology

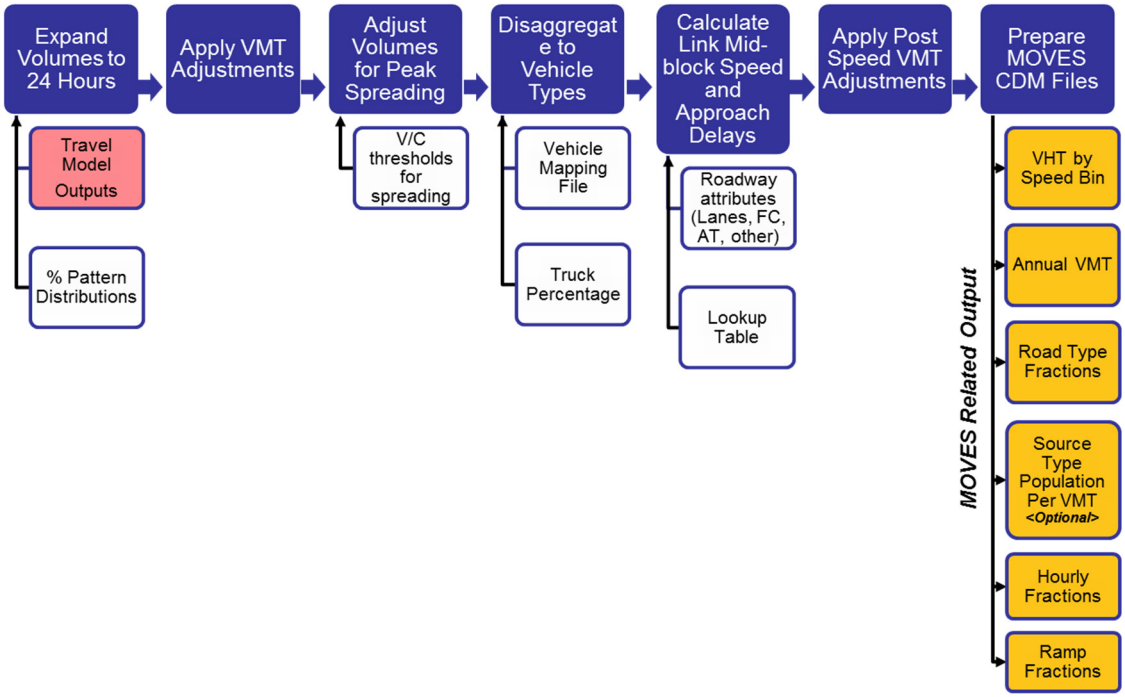
The methodology used to produce the emission data conform to the recommendations provided in EPA's technical guidance. A mix of local data and national default (internal to MOVES2014) data has been used for the conformity analysis. Local data inputs to the analysis process reflect the latest available planning assumptions using data obtained from the Maryland Department of Environment (MDE), Motor Vehicle Administration (MVA), WILMAPCO, and other local/national sources.

The analysis methodology includes the use of regional travel model outputs (as described above) for 2020, 2030, and 2040 to estimate the regional Vehicle Miles Traveled (VMT) along with custom post-processing software (PPSUITE) to prepare key input files to the MOVES2014 emission model. PPSUITE consists of a set of programs that perform the following functions:

- Analyzes highway operating conditions
- Calculates highway speeds
- Compiles VMT and vehicle type mix data
- Prepares MOVES runs and processes MOVES outputs

The PPSUITE system has been used for previous inventory and conformity submissions in Maryland and in other states including Pennsylvania, Virginia, New Jersey, and New York. The software has gone through a significant revision to ensure consistency with the MOVES emissions model. The PPSUITE process is also integral to producing other key input files to the MOVES emission model. Figure 3 summarizes the key functions of PPSUITE and the traffic-related input files prepared for MOVES.

Figure 3: Summary of Emission Calculation Process



Description of Input Data

A large number of inputs to MOVES are needed to fully account for the numerous vehicle and environmental parameters that affect emissions. These include traffic flow characteristics, vehicle descriptions, fuel parameters, inspection/maintenance (I/M) program parameters, and environmental variables. MOVES includes a default national database of meteorology, vehicle fleet, vehicle activity, fuel, and emissions control program data for every county; but EPA cannot certify that the default data is the most current or best available information for any specific area. As a result, local data is recommended for use when completing a regional conformity analysis. Local data sources are used for all inputs that have a significant impact on calculated emission rates. These data items are discussed in the following sections.

Roadway Data

The emission calculation process uses key traffic data from the regional travel demand model to estimate regional Vehicle Miles Traveled (VMT) and speeds. This data includes individual roadway traffic volumes and physical roadway descriptive characteristics including area type, facility type, lanes, distances, capacity, and free-flow speeds. Travel demand model runs are produced for future analysis years and include the impact of regionally significant transportation projects. The model provides a key resource for

estimating the impact of population and employment growth on roadway volumes and calculating the diversions due to transportation projects.

VMT was determined for each roadway class/setting by multiplying the length of road by the number of vehicles using the road per day. Additional adjustments to VMT included: seasonal adjustments to reflect an average weekday for the summer season and Highway Performance Monitoring System (HPMS) adjustments used to align annual VMT estimates with HPMS reported totals for the base year.

Speed data was calculated for each highway segment and hour of the day, based on roadway capacity, traffic volume, and other physical roadway features (e.g. traffic signals) using the post processing software. Thus, average speeds reflect physical highway conditions and congestion caused by traffic volume. For future conditions, congestion (and thereby speed) is affected by traffic growth and changes in physical conditions due to transportation improvement projects.

Vehicle Class Data

Emission rates within MOVES vary significantly by vehicle type. The MOVES model produces emissions and rates by thirteen MOVES vehicle source types. However, VMT is inputted into MOVES by five HPMS vehicle groups.

For this emissions analysis, vehicle type pattern data was developed for the county by functional class based on State Highway Administration (SHA) classification counts and internal MOVES defaults. As the first step, SHA count data was used to develop percentage splits to the four vehicle groups: Autos, Heavy trucks, Motorcycles and Buses. Then the vehicle groups were expanded to the 13 MOVES source types using MOVES2014 default VMT distributions for Maryland, which were recombined to the HPMS vehicle groups as inputs to MOVES.

Vehicle type pattern data, developed from 2014 SHA TMS database and hourly traffic volumes, is used by PPSUITE to distribute the hourly roadway segment volumes among the thirteen MOVES source types. This data contains percentage splits to each source type for every hour of the day.

The vehicle type percentages are also provided to the capacity analysis section of PPSUITE to adjust the speeds in response to trucks. That is, a given number of larger trucks take up more roadway space than a given number of cars, and this is accounted for in the speed estimation process by adjusting capacity using information from the Highway Capacity Manual.

Vehicle Age

Vehicle age distributions are input to MOVES for the county by the thirteen source types. The distributions reflect the percentage of vehicles in the fleet up to 31 years old. The vehicle age distributions were prepared by MDE based on information obtained from the 2014 MVA registration data.

The age distributions for light duty vehicles, buses, refuse trucks, and motor homes are based on the VIN-decoded MVA registration data.

The age distributions for heavy duty trucks (source type 52, 53, 61 and 62) were developed using EPA default age distributions for MOVES2014 for 2020, 2030 and 2040 (downloaded from https://www3.epa.gov/otaq/models/moves/tools.htm).

Vehicle Population Data

Vehicle fleet information such as the number and age of vehicles has an impact on the forecasted start and evaporative emissions within MOVES. The MOVES model requires the population of vehicles to be separated by the thirteen source type categories. This data was prepared and provided by MDE utilizing the 2014 VIN-decoded MVA registration data pre-processed to remove duplicate, expired, and non-eligible vehicles (from the emission standpoint such as trailers and farm tractors).

VIN-decoding was used to estimate vehicle population for light-duty vehicles, buses, refuse trucks and motor homes for Cecil County. Vehicle class, body/style, RGVW, and other information recorded in the MVA vehicle registration data were also utilized in this process.

The vehicle population for heavy-duty trucks (source types 52, 53, 61 and 62) was estimated using Cecil County VMT and MOVES2014 default VMT/population ratios for those source types.

For the analysis years 2020, 2030, and 2040, the vehicle population was forecasted based on projected household and population growth obtained from state and MPO sources. The growth rate methodology included:

- Choosing the highest growth rate between population, households, and VMT growth.
- Default VMT/Population ratio for trucks, i.e., truck population growth based on Truck VMT.

Environmental and Fuel Data

Information on environmental, fuel, vehicle technology, and other control strategy assumptions were determined based on a review of MOVES2014 default information by MDE.

Fuel Data: MDE obtains monthly fuel data reports regularly from the Maryland Fuel Laboratory, which is under the jurisdiction of Maryland Fuel Tax Division of the Office of the Comptroller of Maryland. These fuel reports are generated by testing samples collected in the field (gas stations) for the purpose of fuel regulation enforcement. Three sets of fuel data inputs (Fuel Formulation, Fuel Supply, and Fuel Usage Fractions tables) required by the MOVES2014 model were developed for Cecil County. The fuel parameters that changed from the MOVES2014 defaults include:

fuelFormulationID	Unique ID used for easy recognition
fuelSubtypeID	Selected per guidance based on ethanol content of gasoline
sulfurLevel	Computed from the local fuel data
rvp	Computed from the local fuel data
ETOHVolume	Computed from the local fuel data
aromaticContent	Computed from the local fuel data
olefinContent	Computed from the local fuel data
benzineContent	Computed from the local fuel data
E200	Computed from the local fuel data
E300	Computed from the local fuel data

Meteorological Data: Evaporative emissions are influenced significantly by the temperatures of the surrounding air. Ozone analysis temperature and humidity values were determined by MDE using the procedures documented in EPA's technical guidance. On a triennial basis, meteorological data including hourly temperature and relative humidity is compiled to be used for periodic emission inventories. The data used for this analysis were updated in 2014. The month-by-month, raw hourly-data sets were obtained from the National Climate Data Center of NOAA. Hourly average temperature and humidity computations were developed from the 24 hourly values for every hour in a given month for the county.

Other Vehicle Technology and Control Strategy Data

The MOVES2014 default I/M data was reviewed and updated by MDE for Cecil County. The current I/M program known as the Vehicle Emission Inspection Program (VEIP) was utilized for these analysis runs and is described below.

MD Vehicle Emission Inspection Program (VEIP): This program tests model year 1977 and newer gasoline powered vehicles weighing up to 26,000 pounds. The test is done biennially, and on change of ownership. There is a two-year grace period for new vehicles. Light duty vehicles model year 1996 and newer, and model year 2008 and newer vehicles weighing from 8,501pounds up to 14,000 pounds receive the OBD test. All other vehicles receive an idle test with a gas cap leak test and a visual check for the presence of a catalytic converter. The compliance factors reflect the fail and waiver rates observed in the program, combined with an assumed 96% compliance rate for vehicles showing up for testing. Heavy duty vehicles have an additional factor, reflecting the fraction of vehicles in the weight range covered by the program. This was derived from documentation comparing the MOVES and MOBILE vehicle classes. The significantly higher compliance rate for the gas cap check reflects the much higher retest pass rate for this check.

Federal Programs: Current federal vehicle emissions control and fuel programs are incorporated into the MOVES2014 software. These include the National Program standards covering model year vehicles through 2025, fuel efficiency and greenhouse gas standards for model year 2014 to 2018 medium and heavy-duty vehicles, Tier 3 vehicle and fuel standards beginning with model year 2017. Modifications of default emission rates are required to reflect the early implementation of the National Low Emission Vehicle Program (NLEV) program in Maryland. To reflect these impacts, EPA has released

instructions and input files that can be used to model these impacts. This inventory utilized the October 2014 version of the files:
(http://www.epa.gov/oms/models/moves/tools.htm).

State Vehicle Technology Program:
MD Clean Car Program: Under the Maryland Clean Cars Act of 2007, Maryland adopted the California Low Emission Vehicle (LEV II) program. The program was implemented in 2011 and requires all 2011 model year and newer vehicles (GVWR up to 14,000 lbs.) registered in Maryland to meet California emission standards for both criteria and greenhouse gas pollutants. This program also contains a zero emission vehicles component that requires the manufacturers to produce a certain percentage of zero emission vehicles (electric, fuel cell, etc.) for purchase in the state. California has adopted new amendments to the Low-Emission Vehicle regulation entitled LEV III (third generation low emission vehicle standards). These amendments create more stringent emission standards for new motor vehicles. These new standards will be phased-in over the 2015-2025 model years.

The impacts of this program were modeled for all analysis years using EPA's guidance document, *Instructions for Using LEV and NLEV Inputs for MOVES2014, EPA-420-B-14-060a, October 2014*. EPA provided input files to reflect the CAL LEVIII program with the standard phase-in schedules for new emission standards. Modifications to those schedules were done per EPA's instructions, to reflect a later start for the State of Maryland beginning with vehicle model year 2011.

Financial Constraint

The planning regulations, Sections 450.322(b) (11) and 450.324(e) require the transportation plan to be financially constrained while the existing transportation system is being adequately operated and maintained. Only projects for which construction and operating funds are reasonably expected to be available are included. As shown in the Regional Transportation Plan, WILMAPCO has developed an estimate of the cost to maintain and operate existing roads and bridges in the MPO area and has compared that with the estimated revenues and maintenance needs of the new roads. WILMAPCO has found that the projected revenues are sufficient to cover the costs, therefore satisfying the financial constraint requirement.

Public Participation

This conformity document has undergone the public participation requirements set forth in the Final Conformity Rule, and Final Statewide / Metropolitan Planning Rule. The draft analysis was made available for formal public review and comment beginning on July 25, 2016. The public review and comment period was announced using the following outlets:

- Notices in the Delaware News Journal and Cecil Whig Newspapers
- Radio advertisements
- WILMAPCO website (www.wilmapco.org)
- WILMAPCO E-NEWS (monthly electronic newsletter)

- TIP Public Workshop held at the Newark Library on August 31.

The documentation of the observed 30-day public comment period, comments, and the responses to comments can be found in Appendix E.

Conformity Statement

The conformity rule, as it applies to the Cecil County, MD portion of the PA-NJ-MD-DE 8-hour ozone nonattainment area, requires the RTP and TIP to conform to the motor vehicle emissions budgets established in the SIP. Appendix A contains a matrix, which provides responses to all of EPA's criteria as applicable to this conformity determination.

The results of the conformity analysis for the Cecil County portion of the PA-NJ-MD-DE 8-hour ozone nonattainment area indicate that the projected mobile source emissions are below the EPA-approved motor vehicle emission budgets for the established analysis years of 2020, 2030, and 2040. Based on the conformity analysis, WILMAPCO, in its capacity as the MPO, has concluded that the implementation of the 2040 RTP and 2017-2020 TIP will not worsen the region's air quality or delay the timely attainment of the National Ambient Air Quality Standards.

References

Transportation Conformity Regulations as of April, 2012, EPA-420-B-12-013; http://www.epa.gov/otaq/stateresources/transconf/conf-regs.htm

FHWA, 23 CFR PART 450 – Planning Assistance and Standards, Subpart C -- Metropolitan Transportation Planning and Programming; http://www.ecfr.gov/

FY 2017-2020 Transportation Improvement Program; Wilmington Area Planning Council; *http://www.wilmapco.org/tip/*

Regional Transportation Plan, 2040 Update; Wilmington Area Planning Council*;* http://www.wilmapco.org/rtp/

Modeling Page within EPA's Office of Mobile Sources Website (http://www.epa.gov/omswww/models.htm) contains a downloadable model, MOVES users guide and other information.

Policy Guidance on the Use of MOVES2014 for State Implementation Plan Development, Transportation Conformity, and Other Purposes, US EPA Office of Transportation and Air Quality, EPA-420-B-14-008, July 2014.

Technical Guidance: Using MOVES to prepare Emission Inventories for State Implementation Plans and Transportation Conformity. US EPA Office of Transportation and Air Quality, EPA-420-B-15-007, January 2015.

Motor Vehicle Emission Simulator (MOVES), User Guide for MOVES2014, EPA-420-B-14-055, July 2014.

Highway Capacity Manual 2010, Transportation Research Board, January, 2010.

Traffic Trends System Report Module, 2014 Data, Maryland State Highway Administration.

Appendix A

Conformity Question Checklist

Table A-1: Conformity Questions Matrix

Section	Requirement	Y/N	Response
40 CFR 93.110	Is the conformity determination based on the latest planning assumptions?	Y	See below.
	(a) Is the conformity determination, with respect to all other applicable criteria in §§93.111 - 93.119, based upon the most recent planning assumptions in force at the time of the conformity determination?	Y	The conformity analysis uses the UES travel demand model that is validated (checks the accuracy of the model) to 2010 conditions. Assumptions regarding vehicle mix, hourly patterns, monthly/seasonal factors, and vehicle fleet registration data are based on the latest available (2011) information from the Maryland Department of the environment (MDE) & State Highway Administration (SHA).
	(b) Are the assumptions derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other designated agency? Is the conformity determination based upon the latest assumptions about current and future background concentrations?	Y	Land use for Cecil County, Maryland and New Castle County, Delaware came directly from the land use approved by WILMAPCO. WILMAPCO demographic projections for Cecil and New Castle Counties were adopted in July 2014.
	(c) Are any changes in the transit operating policies (including fares and service levels) and assumed transit ridership discussed in the determination?	Y	The impact of transit on regional vehicle trips is accounted for in the validation count data. Any future changes to transit service can be accounted for using off-model or sketch analysis tools, such as MAQONE. However, there are not any regionally significant transit projects in this analysis.
	(d) The conformity determination must include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.	Y	See above regarding transit. Tolls are included in the validated UES travel demand model.
	(e) The conformity determination must use the latest existing information regarding the effectiveness of the TCMs and other implementation plan measures, which have already been implemented.	N/A	There are no TCMs identified in the SIP.

Section	Requirement	Y/N	Response
	(f) Key assumptions shall be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by §93.105.	Y	Summary provided in Interagency Consultation Section with supporting documents in Appendix D & E.
40 CFR 93.111	Is the conformity determination based on the latest emissions model?	Y	EPA's latest emissions model, Motor Vehicle Emissions Simulator (MOVES) was used for this conformity determination.
40 CFR 93.112	Did the MPO make the conformity determination according to the consultation procedures of the conformity rule or the state conformity SIP?	Y	Consultation procedures were followed in accordance with the Federal Transportation Conformity Rule. WILMAPCO consulted appropriate agencies and provided a scope of work to the following agencies: MDOT, MDE, DelDOT, DNREC, FHWA, FTA, and EPA.
40 CFR 93.106 (a) (1)	Are the horizon years correct?	Y	The years chosen: 2020, 2030, and 2040, represent the appropriate horizon years needed for the 8-hour ozone NAAQS conformity determinations.
93.106(a) (2)(i)	Does the plan quantify and document the demographic and employment factors influencing transportation demand?	Y	A summary is provided in the Land Use Forecast Methodology section and the relevant data is summarized in Table 4 of this document.
93.106(a) (2)(ii)	Is the highway and transit system adequately described in terms of the regionally significant additions or modifications to the existing transportation network that the transportation plan envisions to be operational in the horizon years?	Y	A summary of regionally significant projects can be found in the land use section and Table 3 of this document.
93.108	Is the Transportation Plan Fiscally Constrained?	Y	See Financial Constraint Section.
93.113(b)	Are TCMs being implemented in a timely manner?	N/A	There are no TCMs in the SIP.
40 CFR 93.118	Is the Transportation Plan consistent with the motor vehicle emissions budget in the applicable SIP?	Y	The conformity determination was performed using the 2009 motor vehicle emissions budgets contained in the SIP and found adequate by EPA.

Appendix B

Conformity Results

Detailed VMT and Emissions

By County

By Road Type

By Analysis Year

Table B-1: 2020 Emissions Budget Test Results

2020 Analysis				
Road Type	***VMT***	***Speed (mph)***	***VOC (tons/day)***	***NOX (tons/day)***
Off-Network	-	-	1.17	2.35
Rural Restricted Access	2,185,375	60.6	0.17	1.81
Rural Unrestricted Access	2,032,121	38.5	0.17	1.05
Urban Restricted Access	119,745	59.8	0.01	0.09
Urban Unrestricted Access	358,684	18.2	0.05	0.18
Nonattainment Area Total	4,695,924		1.57	5.48
	2009 Budgets (Submitted)		***2.2***	***7.3***
			PASS	**PASS**

Table B-2: 2030 Emissions Budget Test Results

2030 Analysis				
Road Type	***VMT***	***Speed (mph)***	***VOC (tons/day)***	***NOX (tons/day)***
Off-Network	-	-	0.80	2.24
Rural Restricted Access	2,594,034	53.9	0.09	0.82
Rural Unrestricted Access	2,391,583	37.4	0.10	0.45
Urban Restricted Access	149,689	59.1	0.01	0.04
Urban Unrestricted Access	405,241	17.3	0.03	0.07
Nonattainment Area Total	5,540,547		1.02	3.64
	2009 Budgets (Submitted)		***2.2***	***7.3***
			PASS	**PASS**

Table B-3: 2040 Emissions Budget Test Results

2040 Analysis				
Road Type	***VMT***	***Speed (mph)***	***VOC (tons/day)***	***NOX (tons/day)***
Off-Network	-	-	0.73	2.51
Rural Restricted Access	3,072,760	58.8	0.07	0.71
Rural Unrestricted Access	2,705,928	36.6	0.09	0.36
Urban Restricted Access	179,489	59.5	0.00	0.04
Urban Unrestricted Access	437,144	17.4	0.02	0.05
Nonattainment Area Total	6,395,321		0.91	3.68
	2009 Budgets (Submitted)		***2.2***	***7.3***
			PASS	**PASS**

Appendix C

MOVES Input Files and Parameters
For
Cecil County, MD

Traffic/Air Quality Data Checklist for Cecil County

Data Item	Inputs Assumptions
MOVES RunSpec	
Emission Model	MOVES2014 (default database: MOVESDB20141021)
Scale/Calulation Type	County Scale Inventory Run
Analysis Years	2020, 2030, 2040
Analysis Season	July Weekday
Pollutants	VOC, NOx
Fuel Types	Gasoline, Diesel, CNG, Electricity, E-85
Traffic Data	
Highway Network	Cecil Model Networks (2020, 2030, 2040): Use socio-economic forecast and latest network Inputs updated for 2040 LRTP
Seasonal/Daily Adjustments	Factors to develop MOVES daily and monthly VMT fraction files as inputs. Seasonal adjustment factors developed from 2014 SHA Traffic Trends Report.
County HPMS VMT Adjustments	Apply HPMS Adjustments to ensure Model VMT is consistent with reported HPMS
Mapfile	Use MOVES2014 national defaults VMT distributions for Maryland to dissagregate light duty vehicles/buses/trucks to MOVES 13 source types; consistent with 2014 NEI.
Hourly Patterns	Deveoped based on 2014 SHA Traffic Trends Report
Vehicle Mixes	MOVES VMT required by 5 HPMS vehicle classes. Use 2014 SHA truck count data (TMS database & hourly volumes) to split model traffic volumes into motorcycles, light duty vehicles, buses and trucks, and use MOVES default VMT distributions for the state to divide the four vehicle groups into MOVES 13 source types, which are recombined to the 6 HPMS vehicle classes.
MOVES Inputs	
Annual VMT	Calculated by PPSUITE from Model network / seasonal factors / vehicle mapping
Month VMT Fractions	Calculated based on 2014 seasonal adjustment factors
Day VMT Fractions	Calculated based on 2014 seasonal adjustment factors
Avg. Hourly Speed Distribution	Calculated by PPSUITE (Minimum Speed = 2.5 mph); Based on Model volumes and speed post processing by hour of day.
Road Type Distribution	Calculated by PPSUITE; a RoadType field must be added to the Model network based on FC.
Ramp Fraction	MOVES defaults
Source Type Population	1. Non-trucks: 2014 Inputs provided by MDE --> Adjust/grow to 2020, 2030,and 2040 by applying growth factors developed from Woods & Poole population/households/employment forecast data and limiting to VMT Growth. For non-trucks: maximum of households & population growth. 2. Heavy duty trucks (source type 52, 53 ,61 & 62): Use Cecil county VMT and MOVES2014 default VMT/Population ratios to estimate truck population.
Vehicle Age Distribution	Use MDE-prepared 2020, 2030 and 2040 inputs for light duty vehicles and MOVES2014 naitonal default age distribution inputs for trucks (source type 52, 53 ,61 & 62).
Fuel Supply	Provided by MDE
Fuel Formulation	Provided by MDE
Fuel Usage Fraction	Provided by MDE
Temperatures/Humidity	2014 inputs provided by MDE
I/M Parameters	Provided by MDE
Control Programs	
Early NLEV / CALLEVIII	Include EPA provided MOVES2014 override database for early NLEV implementation and MD-specific CALLEVIII program provided by MDE
California ZEV Program	Included (provided by MDE)

Sample Cecil County MOVES Run Specification File Settings for Analysis Year 2020

Sample xml file format – Run 1


```
<moves>
        <importer mode="county" >
                <filters>
        <geographicselections>
                <geographicselection type="COUNTY" key="24015" description="MARYLAND - Cecil County"/>
        </geographicselections>
        <timespan>
                <year key="2020"/>
                <month id="07"/>
                <day id="2"/>
                <day id="5"/>
                <beginhour id="1"/>
                <endhour id="24"/>
                <aggregateBy key="Hour"/>
        </timespan>
        <onroadvehicleselections>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetypename="Light
Commercial Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetypename="Motor
Home"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21"
sourcetypename="Passenger Car"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
```

```
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51"
sourcetypename="Refuse Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43"
sourcetypename="School Bus"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53"
sourcetypename="Single Unit Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52"
sourcetypename="Single Unit Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42"
sourcetypename="Transit Bus"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetypename="Light
Commercial Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetypename="Motor
Home"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21"
sourcetypename="Passenger Car"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetypename="Refuse
Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetypename="School
Bus"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetypename="Single
Unit Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetypename="Single
Unit Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetypename="Transit
Bus"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
```

```
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32"
sourcetypename="Light Commercial Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54"
sourcetypename="Motor Home"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="21"
sourcetypename="Passenger Car"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51"
sourcetypename="Refuse Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43"
sourcetypename="School Bus"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53"
sourcetypename="Single Unit Long-haul Truck"/>
                     <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52"
sourcetypename="Single Unit Short-haul Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42"
sourcetypename="Transit Bus"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="32"
sourcetypename="Light Commercial Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="54"
sourcetypename="Motor Home"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21"
sourcetypename="Passenger Car"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="51"
sourcetypename="Refuse Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="43"
sourcetypename="School Bus"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="53"
sourcetypename="Single Unit Long-haul Truck"/>
```

```
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="52"
sourcetypename="Single Unit Short-haul Truck"/>
                   <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="42"
sourcetypename="Transit Bus"/>
        </onroadvehicleselections>
        <offroadvehicleselections>
        </offroadvehicleselections>
        <offroadvehiclesccs>
        </offroadvehiclesccs>
        <roadtypes>
                <roadtype roadtypeid="1" roadtypename="Off-Network"/>
                <roadtype roadtypeid="2" roadtypename="Rural Restricted Access"/>
                <roadtype roadtypeid="3" roadtypename="Rural Unrestricted Access"/>
                <roadtype roadtypeid="4" roadtypename="Urban Restricted Access"/>
                <roadtype roadtypeid="5" roadtypename="Urban Unrestricted Access"/>
        </roadtypes>
                </filters>
                <databaseselection servername="localhost" databasename="24015_2020_07_05_Julwkd_Ozone_mi"/>
                <agedistribution>
                        <description><![CDATA[]]></description>
                        <parts>
                                <sourceTypeAgeDistribution>

<filename>C:\CECIL_MOVES14\MOVESInputs\AgeDistribution\2020_DefaultTrucks\24015_2020_SourceTypeAgeDistribution.csv</filen
ame>
                                </sourceTypeAgeDistribution>
                        </parts>
                </agedistribution>

                <avgspeeddistribution>
                        <description><![CDATA[]]></description>
                        <parts>
                                <avgSpeedDistribution>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\avgSpeedDistribution.csv</filename>
                                </avgSpeedDistribution>
                        </parts>
                </avgspeeddistribution>

                <imcoverage>
                        <description><![CDATA[]]></description>
                        <parts>
```

```
                                <imcoverage>
                                        <filename>C:\CECIL_MOVES14\MOVESInputs\IM\24000_2020_IMCoverage.csv</filename>
                                </imcoverage>
                        </parts>
                </imcoverage>

          <fuel>
               <description><![CDATA[]]></description>
               <parts>
                    <FuelSupply>

<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\FuelSupply\2020\24000_2020_FuelSupply_moveS2014.csv</filename>
                    </FuelSupply>
                    <FuelFormulation>

<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\24000_FuelFormulation_moveS2014.csv</filename>
                    </FuelFormulation>
<FuelUsageFraction>
<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\FuelUsageFraction\2020\24000_2020_FuelUsageFraction_MOVES2014.csv</
filename>
</FuelUsageFraction>
<AVFT>
<filename></filename>
</AVFT>
               </parts>
          </fuel>

                <zonemonthhour>
                        <description><![CDATA[]]></description>
                        <parts>
                                <zoneMonthHour>

<filename>C:\CECIL_MOVES14\MOVESInputs\Meteorology\2014\24015_2014_met.csv</filename>
                                </zoneMonthHour>
                        </parts>
                </zonemonthhour>

                <roadtypedistribution>
                        <description><![CDATA[]]></description>
                        <parts>
                                <roadTypeDistribution>
```

```
<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\roadTypeDistribution.csv</filename>
                                </roadTypeDistribution>
                        </parts>
                </roadtypedistribution>

                <sourcetypepopulation>
                        <description><![CDATA[]]></description>
                        <parts>
                                <sourceTypeYear>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\SourceTypePopulation.csv</filename>
                                </sourceTypeYear>
                        </parts>
                </sourcetypepopulation>

                <rampfraction>
                        <description><![CDATA[]]></description>
                        <parts>
                                 <roadType>

<filename>C:\CECIL_MOVES14\MOVESInputs\RampFraction\rampfraction_defaults.csv</filename>
                                 </roadType>
                        </parts>
                </rampfraction>

                <vehicletypevmt>
                        <description><![CDATA[]]></description>
                        <parts>
                                <hpmsVTypeYear>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\hpmsVTypeYear.csv</filename>
                                </hpmsVTypeYear>
                                <monthvmtfraction>
<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\NotUsed\MonthVMTFraction_M2010AB_Import.csv<
/filename>
                                </monthvmtfraction>
                                <dayvmtfraction>

<filename>C:\CECIL_MOVES14\MOVESInputs\MonthDayHourFractions\MOVES2010ab\2014_DayFraction\24015_2014_dayvmtfraction.csv</
filename>
                                </dayvmtfraction>
```

```
                                <hourvmtfraction>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\hourvmtfraction.csv</filename>
                                </hourvmtfraction>
                        </parts>
                </vehicletypevmt>

            <starts>
                <description><![CDATA[]]></description>
                <parts>
                    <startsPerDay>
<filename></filename>
                    </startsPerDay>
                    <startsHourFraction>
<filename></filename>
                    </startsHourFraction>
                    <startsSourceTypeFraction>
<filename></filename>
                    </startsSourceTypeFraction>
                    <startsMonthAdjust>
<filename></filename>
                    </startsMonthAdjust>
                    <importStartsOpModeDistribution>
<filename></filename>
                    </importStartsOpModeDistribution>
                    <Starts>
<filename></filename>
                    </Starts>
                </parts>
            </starts>

            <hotelling>
                <description><![CDATA[]]></description>
                <parts>
                    <hotellingActivityDistribution>
<filename></filename>
                    </hotellingActivityDistribution>
                    <hotellingHours>
<filename></filename>
                    </hotellingHours>
                </parts>
            </hotelling>
```

```
          <onroadretrofit>
               <description><![CDATA[]]></description>
               <parts>
                    <onRoadRetrofit>
                         <filename></filename>
                    </onRoadRetrofit>
               </parts>
          </onroadretrofit>

           <generic>
                <description><![CDATA[]]></description>
                <parts>
                     <anytable>
                          <tablename>regioncounty</tablename>

<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\Defaults\24000_RegionCounty_MOVES2014Defaults.csv</filename>
                     </anytable>
                </parts>
           </generic>

        </importer>
</moves>
```

Sample xml file format – Run 2

```
<moves>
        <importer mode="county" >
                <filters>
        <geographicselections>
                <geographicselection type="COUNTY" key="24015" description="MARYLAND - Cecil County"/>
        </geographicselections>
        <timespan>
                <year key="2020"/>
                <month id="07"/>
                <day id="2"/>
                <day id="5"/>
                <beginhour id="1"/>
                <endhour id="24"/>
                <aggregateBy key="Hour"/>
```

```
        </timespan>
        <onroadvehicleselections>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetypename="Light
Commercial Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetypename="Motor
Home"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21"
sourcetypename="Passenger Car"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51"
sourcetypename="Refuse Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43"
sourcetypename="School Bus"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53"
sourcetypename="Single Unit Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52"
sourcetypename="Single Unit Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42"
sourcetypename="Transit Bus"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetypename="Light
Commercial Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetypename="Motor
Home"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21"
sourcetypename="Passenger Car"/>
```

```
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetypename="Refuse
Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetypename="School
Bus"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetypename="Single
Unit Long-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetypename="Single
Unit Short-haul Truck"/>
                <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetypename="Transit
Bus"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32"
sourcetypename="Light Commercial Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54"
sourcetypename="Motor Home"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="21"
sourcetypename="Passenger Car"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51"
sourcetypename="Refuse Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43"
sourcetypename="School Bus"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53"
sourcetypename="Single Unit Long-haul Truck"/>
                     <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52"
sourcetypename="Single Unit Short-haul Truck"/>
                  <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42"
sourcetypename="Transit Bus"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="62"
sourcetypename="Combination Long-haul Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="61"
sourcetypename="Combination Short-haul Truck"/>
```

```
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="41"
sourcetypename="Intercity Bus"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="32"
sourcetypename="Light Commercial Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="54"
sourcetypename="Motor Home"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="11"
sourcetypename="Motorcycle"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21"
sourcetypename="Passenger Car"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31"
sourcetypename="Passenger Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="51"
sourcetypename="Refuse Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="43"
sourcetypename="School Bus"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="53"
sourcetypename="Single Unit Long-haul Truck"/>
                  <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="52"
sourcetypename="Single Unit Short-haul Truck"/>
                   <onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="42"
sourcetypename="Transit Bus"/>
        </onroadvehicleselections>
        <offroadvehicleselections>
        </offroadvehicleselections>
        <offroadvehiclesccs>
        </offroadvehiclesccs>
        <roadtypes>
                <roadtype roadtypeid="1" roadtypename="Off-Network"/>
                <roadtype roadtypeid="2" roadtypename="Rural Restricted Access"/>
                <roadtype roadtypeid="3" roadtypename="Rural Unrestricted Access"/>
                <roadtype roadtypeid="4" roadtypename="Urban Restricted Access"/>
                <roadtype roadtypeid="5" roadtypename="Urban Unrestricted Access"/>
        </roadtypes>
                </filters>
                <databaseselection servername="localhost" databasename="24015_2020_07_05_Julwkd_Ozone_mi_AVFT"/>
                <agedistribution>
                        <description><![CDATA[]]></description>
                        <parts>
                                <sourceTypeAgeDistribution>
```

```
<filename>C:\CECIL_MOVES14\MOVESInputs\AgeDistribution\2020_DefaultTrucks\24015_2020_SourceTypeAgeDistribution.csv</filen
ame>
                                </sourceTypeAgeDistribution>
                        </parts>
                </agedistribution>

                <avgspeeddistribution>
                        <description><![CDATA[]]></description>
                        <parts>
                                <avgSpeedDistribution>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\avgSpeedDistribution.csv</filename>
                                </avgSpeedDistribution>
                        </parts>
                </avgspeeddistribution>

                <imcoverage>
                        <description><![CDATA[]]></description>
                        <parts>
                                <imcoverage>
                                        <filename>C:\CECIL_MOVES14\MOVESInputs\IM\24000_2020_IMCoverage.csv</filename>
                                </imcoverage>
                        </parts>
                </imcoverage>

          <fuel>
               <description><![CDATA[]]></description>
               <parts>
                    <FuelSupply>

<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\FuelSupply\2020\24000_2020_FuelSupply_moveS2014.csv</filename>
                    </FuelSupply>
                    <FuelFormulation>

<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\24000_FuelFormulation_moveS2014.csv</filename>
                    </FuelFormulation>
<FuelUsageFraction>
<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\FuelUsageFraction\2020\24000_2020_FuelUsageFraction_MOVES2014.csv</
filename>
</FuelUsageFraction>
<AVFT>
```

```
<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\ZEV_AVFT_MOVES2014_MD.xlsx</filename>
</AVFT>
                </parts>
          </fuel>

                <zonemonthhour>
                        <description><![CDATA[]]></description>
                        <parts>
                                <zoneMonthHour>

<filename>C:\CECIL_MOVES14\MOVESInputs\Meteorology\2014\24015_2014_met.csv</filename>
                                </zoneMonthHour>
                        </parts>
                </zonemonthhour>

                <roadtypedistribution>
                        <description><![CDATA[]]></description>
                        <parts>
                                <roadTypeDistribution>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\roadTypeDistribution.csv</filename>
                                </roadTypeDistribution>
                        </parts>
                </roadtypedistribution>

                <sourcetypepopulation>
                        <description><![CDATA[]]></description>
                        <parts>
                                <sourceTypeYear>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\SourceTypePopulation.csv</filename>
                                </sourceTypeYear>
                        </parts>
                </sourcetypepopulation>

                <rampfraction>
                        <description><![CDATA[]]></description>
                        <parts>
                                 <roadType>

<filename>C:\CECIL_MOVES14\MOVESInputs\RampFraction\rampfraction_defaults.csv</filename>
                                 </roadType>
```

```
                        </parts>
                </rampfraction>

                <vehicletypevmt>
                        <description><![CDATA[]]></description>
                        <parts>
                                <hpmsVTypeYear>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\hpmsVTypeYear.csv</filename>
                                </hpmsVTypeYear>
                                <monthvmtfraction>
<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\NotUsed\MonthVMTFraction_M2010AB_Import.csv<
/filename>
                                </monthvmtfraction>
                                <dayvmtfraction>

<filename>C:\CECIL_MOVES14\MOVESInputs\MonthDayHourFractions\MOVES2010ab\2014_DayFraction\24015_2014_dayvmtfraction.csv</
filename>
                                </dayvmtfraction>
                                <hourvmtfraction>

<filename>C:\CECIL_MOVES14\Out\2020_Ozone\\24015_2020_07_05_Julwkd_Ozone\CDM\hourvmtfraction.csv</filename>
                                </hourvmtfraction>
                        </parts>
                </vehicletypevmt>


            <starts>
                <description><![CDATA[]]></description>
                <parts>
                    <startsPerDay>
<filename></filename>
                    </startsPerDay>
                    <startsHourFraction>
<filename></filename>
                    </startsHourFraction>
                    <startsSourceTypeFraction>
<filename></filename>
                    </startsSourceTypeFraction>
                    <startsMonthAdjust>
<filename></filename>
                    </startsMonthAdjust>
```

```
                    <importStartsOpModeDistribution>
<filename></filename>
                    </importStartsOpModeDistribution>
                    <Starts>
<filename></filename>
                    </Starts>
                </parts>
           </starts>

           <hotelling>
                <description><![CDATA[]]></description>
                <parts>
                    <hotellingActivityDistribution>
<filename></filename>
                    </hotellingActivityDistribution>
                    <hotellingHours>
<filename></filename>
                    </hotellingHours>
                </parts>
           </hotelling>

          <onroadretrofit>
               <description><![CDATA[]]></description>
               <parts>
                    <onRoadRetrofit>
                         <filename></filename>
                    </onRoadRetrofit>
               </parts>
          </onroadretrofit>

           <generic>
                <description><![CDATA[]]></description>
                <parts>
                    <anytable>
                         <tablename>regioncounty</tablename>

<filename>C:\CECIL_MOVES14\MOVESInputs\Fuel\MOVES2014\Defaults\24000_RegionCounty_MOVES2014Defaults.csv</filename>
                    </anytable>
                </parts>
           </generic>

        </importer>
```

```
</moves>
```


Sample mrs file format – Run 1


```
<runspec version="MOVES2014-20141021">
<description><![CDATA[MOVES2014 RunSpec Created by CENTRAL4 Scenario: Ceci 2020 JULWKD Julwkd_Ozone Emission Inventory with
user's data]]></description>
<models>
<model value="ONROAD"/>
</models>
<modelscale value="INV"/>
     <modeldomain value="SINGLE"/>
     <geographicselections>
          <geographicselection type="COUNTY" key="24015" description="MARYLAND - Cecil County"/>
     </geographicselections>
     <timespan>
          <year key="2020"/>
<month id="07"/>
<day id="5"/>
          <beginhour id="1"/>
          <endhour id="24"/>
<aggregateBy key="Hour"/>
     </timespan>
     <onroadvehicleselections>

<onroadvehicleselection    fueltypeid="3"    fueltypedesc="Compressed    Natural    Gas    (CNG)"    sourcetypeid="11"
sourcetypename="Motorcycle"/>
<onroadvehicleselection    fueltypeid="3"    fueltypedesc="Compressed    Natural    Gas    (CNG)"    sourcetypeid="21"
sourcetypename="Passenger Car"/>
<onroadvehicleselection    fueltypeid="3"    fueltypedesc="Compressed    Natural    Gas    (CNG)"    sourcetypeid="31"
sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32" sourcetypename="Light
Commercial Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetypename="Passenger Truck"/>
```

```
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>

<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
 >ENDIF

<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="43" sourcetypename="School Bus"/>

<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="43" sourcetypename="School Bus"/>
 >ENDIF

<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetypename="Refuse Truck"/>
```

```
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>

<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="51" sourcetypename="Refuse Truck"/>
```

```
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
 >ENDIF
     </onroadvehicleselections>
     <offroadvehicleselections>
     </offroadvehicleselections>
     <offroadvehiclesccs>
     </offroadvehiclesccs>
     <roadtypes separateramps="false">
          <roadtype roadtypeid="1" roadtypename="Off-Network" modelCombination="M1"/>
          <roadtype roadtypeid="2" roadtypename="Rural Restricted Access" modelCombination="M1"/>
          <roadtype roadtypeid="3" roadtypename="Rural Unrestricted Access" modelCombination="M1"/>
          <roadtype roadtypeid="4" roadtypename="Urban Restricted Access" modelCombination="M1"/>
          <roadtype roadtypeid="5" roadtypename="Urban Unrestricted Access" modelCombination="M1"/>
     </roadtypes>
     <pollutantprocessassociations>

<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="15" processname="Crankcase Running Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="16" processname="Crankcase Start Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="17" processname="Crankcase Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="90" processname="Extended Idle Exhaust"/>

<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="91" processname="Auxiliary Power Exhaust"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="1" processname="Running Exhaust"/>
```

```
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="12" processname="Evap Fuel Vapor Venting"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="13" processname="Evap Fuel Leaks"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="15" processname="Crankcase Running Exhaust"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="16" processname="Crankcase Start Exhaust"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="17" processname="Crankcase Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="12" processname="Evap Fuel Vapor Venting"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="13" processname="Evap Fuel Leaks"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="15" processname="Crankcase Running Exhaust"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="16" processname="Crankcase Start Exhaust"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="17" processname="Crankcase Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="87" pollutantname="Volatile Organic Compounds" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="87" pollutantname="Volatile Organic Compounds" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="87" pollutantname="Volatile Organic Compounds" processkey="12" processname="Evap Fuel Vapor Venting"/>
<pollutantprocessassociation pollutantkey="87" pollutantname="Volatile Organic Compounds" processkey="13" processname="Evap Fuel Leaks"/>
<pollutantprocessassociation pollutantkey="87" pollutantname="Volatile Organic Compounds" processkey="15" processname="Crankcase Running Exhaust"/>
<pollutantprocessassociation pollutantkey="87" pollutantname="Volatile Organic Compounds" processkey="16" processname="Crankcase Start Exhaust"/>
```

```
<pollutantprocessassociation    pollutantkey="87"    pollutantname="Volatile    Organic    Compounds"    processkey="17"
processname="Crankcase Extended Idle Exhaust"/>
<pollutantprocessassociation    pollutantkey="87"    pollutantname="Volatile    Organic    Compounds"    processkey="90"
processname="Extended Idle Exhaust"/>

<pollutantprocessassociation     pollutantkey="79"     pollutantname="Non-Methane     Hydrocarbons"     processkey="91"
processname="Auxiliary Power Exhaust"/>
<pollutantprocessassociation    pollutantkey="1"    pollutantname="Total    Gaseous    Hydrocarbons"    processkey="91"
processname="Auxiliary Power Exhaust"/>
<pollutantprocessassociation    pollutantkey="87"    pollutantname="Volatile    Organic    Compounds"    processkey="91"
processname="Auxiliary Power Exhaust"/>

     </pollutantprocessassociations>
     <databaseselections>

<databaseselection servername="localhost" databasename="MOVES2014_early_NLEV" description=""/>
<databaseselection servername="localhost" databasename="MOVES2014_caleviii2011" description=""/>
                                <databaseselection servername="localhost" databasename="md_stageii" description=""/>
     </databaseselections>
     <inputdatabase servername="" databasename="" description=""/>
     <uncertaintyparameters uncertaintymodeenabled="false" numberofrunspersimulation="0" numberofsimulations="0"/>
<geographicoutputdetail description="COUNTY"/>
     <outputemissionsbreakdownselection>
<modelyear selected="false"/>
<fueltype selected="false"/>
<emissionprocess selected="true"/>
          <onroadoffroad selected="true"/>
<roadtype selected="true"/>
<sourceusetype selected="true"/>
          <movesvehicletype selected="false"/>
<onroadscc selected="false"/>
          <offroadscc selected="false"/>
          <estimateuncertainty selected="false" numberOfIterations="2" keepSampledData="false" keepIterations="false"/>
          <sector selected="false"/>
       <engtechid selected="false"/>
          <hpclass selected="false"/>
     </outputemissionsbreakdownselection>
     <outputdatabase servername="localhost" databasename="24015_2020_07_05_Julwkd_Ozone_mo" description=""/>>
<outputtimestep value="Hour"/>
     <outputvmtdata value="true"/>
     <outputsho value="true"/>
     <outputsh value="true"/>
```

```
     <outputshp value="true"/>
     <outputshidling value="true"/>
     <outputstarts value="true"/>
     <outputpopulation value="true"/>
     <scaleinputdatabase servername="localhost" databasename="24015_2020_07_05_Julwkd_Ozone_mi" description=""/>
     <pmsize value="0"/>
     <outputfactors>
          <timefactors selected="true" units="Hours"/>
          <distancefactors selected="false" units="Miles"/>
          <massfactors selected="false" units="Grams" energyunits="Million BTU"/>
     </outputfactors>
     <savedata>
     </savedata>
     <donotexecute>
     </donotexecute>
     <generatordatabase shouldsave="false" servername="" databasename="" description=""/>
          <donotperformfinalaggregation selected="false"/>
<lookuptableflags scenarioid="" truncateoutput="false" truncateactivity="false"/>
     <internalcontrolstrategies>
<internalcontrolstrategy
classname="gov.epa.otaq.moves.master.implementation.ghg.internalcontrolstrategies.rateofprogress.RateOfProgressStrategy">
<![CDATA[
useParameters No

]]></internalcontrolstrategy>
     </internalcontrolstrategies>
</runspec>
```


Sample mrs file format – Run 2


```
<runspec version="MOVES2014-20140731">
<description><![CDATA[MOVES2014 RunSpec Created by CENTRAL4 Scenario: Ceci 2020 JULWKD Julwkd_Ozone Emission Inventory with
user's data]]></description>
<models>
<model value="ONROAD"/>
</models>
<modelscale value="INV"/>
     <modeldomain value="SINGLE"/>
     <geographicselections>
          <geographicselection type="COUNTY" key="24015" description="MARYLAND - Cecil County"/>
```

```
     </geographicselections>
     <timespan>
          <year key="2020"/>
<month id="07"/>
<day id="5"/>
          <beginhour id="1"/>
          <endhour id="24"/>
<aggregateBy key="Hour"/>
     </timespan>
     <onroadvehicleselections>

<onroadvehicleselection    fueltypeid="3"    fueltypedesc="Compressed    Natural    Gas    (CNG)"    sourcetypeid="11"
sourcetypename="Motorcycle"/>
<onroadvehicleselection    fueltypeid="3"    fueltypedesc="Compressed    Natural    Gas    (CNG)"    sourcetypeid="21"
sourcetypename="Passenger Car"/>
<onroadvehicleselection    fueltypeid="3"    fueltypedesc="Compressed    Natural    Gas    (CNG)"    sourcetypeid="31"
sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32" sourcetypename="Light
Commercial Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection  fueltypeid="2"  fueltypedesc="Diesel  Fuel"  sourcetypeid="32"  sourcetypename="Light  Commercial
Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection  fueltypeid="9"  fueltypedesc="Electricity"  sourcetypeid="32"  sourcetypename="Light  Commercial
Truck"/>

<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection  fueltypeid="5"  fueltypedesc="Ethanol  (E-85)"  sourcetypeid="32"  sourcetypename="Light  Commercial
Truck"/>
 >ENDIF
```

```
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="43" sourcetypename="School Bus"/>

<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="43" sourcetypename="School Bus"/>
 >ENDIF

<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
```

```
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetypename="Combination Long-haul
Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetypename="Single Unit Short-haul
Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetypename="Single Unit Long-haul
Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61" sourcetypename="Combination Short-haul
Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="62" sourcetypename="Combination Long-haul
Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="52" sourcetypename="Single Unit Short-haul
Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="53" sourcetypename="Single Unit Long-haul
Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="61" sourcetypename="Combination Short-haul
Truck"/>
<onroadvehicleselection fueltypeid="9" fueltypedesc="Electricity" sourcetypeid="62" sourcetypename="Combination Long-haul
Truck"/>

<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="52" sourcetypename="Single Unit Short-
haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="53" sourcetypename="Single Unit Long-
haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="61" sourcetypename="Combination Short-
haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="62" sourcetypename="Combination Long-
haul Truck"/>
 >ENDIF
     </onroadvehicleselections>
     <offroadvehicleselections>
     </offroadvehicleselections>
     <offroadvehiclesccs>
     </offroadvehiclesccs>
     <roadtypes separateramps="false">
          <roadtype roadtypeid="1" roadtypename="Off-Network" modelCombination="M1"/>
          <roadtype roadtypeid="2" roadtypename="Rural Restricted Access" modelCombination="M1"/>
```

```
          <roadtype roadtypeid="3" roadtypename="Rural Unrestricted Access" modelCombination="M1"/>
          <roadtype roadtypeid="4" roadtypename="Urban Restricted Access" modelCombination="M1"/>
          <roadtype roadtypeid="5" roadtypename="Urban Unrestricted Access" modelCombination="M1"/>
     </roadtypes>
     <pollutantprocessassociations>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="11" processname="Evap
Permeation"/>
<pollutantprocessassociation pollutantkey="1" pollutantname="Total Gaseous Hydrocarbons" processkey="11" processname="Evap
Permeation"/>
<pollutantprocessassociation pollutantkey="87" pollutantname="Volatile Organic Compounds" processkey="11" processname="Evap
Permeation"/>
     </pollutantprocessassociations>
     <databaseselections>

<databaseselection servername="localhost" databasename="MOVES2014_early_NLEV" description=""/>
<databaseselection servername="localhost" databasename="MOVES2014_caleviii2011" description=""/>
                              <databaseselection servername="localhost" databasename="md_stageii" description=""/>
     </databaseselections>
     <inputdatabase servername="" databasename="" description=""/>
     <uncertaintyparameters uncertaintymodeenabled="false" numberofrunspersimulation="0" numberofsimulations="0"/>
<geographicoutputdetail description="COUNTY"/>
     <outputemissionsbreakdownselection>
<modelyear selected="false"/>
<fueltype selected="false"/>
<emissionprocess selected="true"/>
          <onroadoffroad selected="true"/>
<roadtype selected="true"/>
<sourceusetype selected="true"/>
          <movesvehicletype selected="false"/>
<onroadscc selected="false"/>
          <offroadscc selected="false"/>
          <estimateuncertainty selected="false" numberOfIterations="2" keepSampledData="false" keepIterations="false"/>
          <sector selected="false"/>
       <engtechid selected="false"/>
          <hpclass selected="false"/>
     </outputemissionsbreakdownselection>
     <outputdatabase servername="localhost" databasename="24015_2020_07_05_Julwkd_Ozone_mo" description=""/>>
<outputtimestep value="Hour"/>
     <outputvmtdata value="true"/>
     <outputsho value="true"/>
     <outputsh value="true"/>
     <outputshp value="true"/>
```

```
     <outputshidling value="true"/>
     <outputstarts value="true"/>
     <outputpopulation value="true"/>
<scaleinputdatabase servername="localhost" databasename="24015_2020_07_05_Julwkd_Ozone_mi_AVFT" description=""/>
     <pmsize value="0"/>
     <outputfactors>
          <timefactors selected="true" units="Hours"/>
          <distancefactors selected="false" units="Miles"/>
          <massfactors selected="false" units="Grams" energyunits="Million BTU"/>
     </outputfactors>
     <savedata>
     </savedata>
     <donotexecute>
     </donotexecute>
     <generatordatabase shouldsave="false" servername="" databasename="" description=""/>
          <donotperformfinalaggregation selected="false"/>
<lookuptableflags scenarioid="" truncateoutput="false" truncateactivity="false"/>
     <internalcontrolstrategies>
<internalcontrolstrategy
classname="gov.epa.otaq.moves.master.implementation.ghg.internalcontrolstrategies.rateofprogress.RateOfProgressStrategy">
<![CDATA[
useParameters No

]]></internalcontrolstrategy>
     </internalcontrolstrategies>
</runspec>
```

Appendix D

Interagency Consultation

Please Visit:

http://www.wilmapco.org/aqs

C - 85

The WILMAPCO Air Quality Subcommittee has 13 members representing federal, state and local agencies in Delaware and Maryland. The AQS assesses the air quality impacts of transportation projects in WILMAPCO's Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP). Their recommendations help our region attain its air quality goals.

Appendix E

Public Participation Materials

Please Visit:

http://www.wilmapco.org/aq

Air Quality Conformity is a process which ensures federal funding and approval goes to transportation activities that are consistent with our air quality goals. This process applies to both the long range Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP). Known as “non-attainment areas” or “maintenance areas,” respectively, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) jointly determine conformity within these regions which do not meet air quality standards to ensure that federal actions conform to the purpose of the State Implementation Plan (SIP). The US Department of Transportation cannot fund, authorize, or approve federal actions to support projects that do not conform to Clean Air Act requirements governing the current National Ambient Air Quality Standards (NAAQS).

While ozone and fine particulate emissions have and continue to drop dramatically, the WILMAPCO region still does not meet the rigorous federal air quality standards. Both New Castle and Cecil Counties are designated in non-attainment for ozone. New Castle County is considered in maintenance for fine particulate matter (PM2.5). WILMAPCO is responsible for ensuring a plan is in place to meet the attainment levels in these counties.

http://www.wilmapco.org/rtp

Every four years, MPOs must update their 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 the region may be funded with federal money unless the projects are found in an approved long-range transportation plan. The WILMAPCO long-range plan is called the Regional Transportation Plan (RTP).

APPENDIX D

Financial Plan and Annual Listing of Obligated Projects

FINANCIAL PLAN

The Metropolitan Planning Regulation (23 CFR 450) requires that the Transportation Improvement Program (TIP) be financially constrained, meaning that the amount of funding programmed must not exceed the amount of funding estimated to be reasonably available. In developing the TIP, the WILMAPCO has taken into consideration the transportation funding revenues expected to be available during the four years of the TIP.

This section of the TIP includes the documentation of reasonably available finances that demonstrates how this TIP, once approved, can be implemented. In developing the TIP, MPO members, particularly MDOT, and DelDOT, have cooperatively developed estimates of funds that are reasonably expected to be available to support TIP implementation. The revenue and cost estimates for the TIP reflect year of expenditure dollars, based on reasonable financial principles and information.

The Delaware, Maryland and federal financial forecasts that support the TIP are based on a six-year Financial Plan developed by Maryland and Delaware. The forecasted revenues and expenditures use the latest available economic estimates. The TIP is based on conservative assumptions formulated from historical trends for projected funding. The TIP serves several purposes. It is the documentation of the intent to implement specific facilities and projects from the RTP. It provides a medium for local elected officials, agency staffs, and interested members of the public to review and comment on the priorities assigned to the selected projects. The TIP establishes eligibility for federal funding for those projects selected for implementation during the first program year, detailed in the federal funding letter included in this appendix.

A summary of available federal funds for Delaware and Maryland and their allocation by fund source to implementing agencies is included. The project listings provide specific federal funding amounts and the source of the matching funds.

Detailed funding sources

State Funding:

State funding comes from the Transportation Trust Fund (TTF). In Delaware, this receives revenues from motor fuel taxes, Delaware Turnpike revenues, Route 1 tolls, motor vehicle document fees and motor vehicle registration fees, and miscellaneous sources including include motor carrier registration fees, operator license fees, titling fees, Division of Motor Vehicles record sales, and vanity tag fees. In Maryland, sources of funds include motor fuel taxes, motor vehicle excise (titling) taxes, motor vehicle fees (registrations, licenses and other fees), and federal-aid. In addition, Maryland’s Trust Fund also includes corporate income taxes, operating revenues (e.g., transit fares, port fees, airport fees), and bond proceeds. Federal-aid projections are based on current appropriations and the match required to meet capital program cashflow requirements. Bonds are issued to support the cashflow requirements of the planned capital program while maintaining debt coverage requirements.

Local Funding:

Local funding comes from municipal and private contributions.

Federal Funding:

Federal funding comes from Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) capital funds.

FHWA funds include:

- Surface Transportation Program (STP) Metro is a flexible funding category typically used to fund roadway reconstruction, roadway operational improvements, roadway widening, new roadway, new interchange, interchange reconstruction, and studies.
- Transportation Alternatives Program (TAP) can fund bicycle / pedestrian projects, historic preservation projects, environmental mitigation projects, transportation museum projects, landscaping and beautification projects, and conversion of rails to trails projects. The projects must relate to surface transportation. Includes Recreational Trails (RT) provides funding to DNREC to develop and maintain recreational trails for motorized and nonmotorized recreational trail users and Safe Routes to School (SRS) is designed to enable and encourage children, including those with disabilities, to walk and bicycle to school, and to help plan, develop, and implement projects that will improve safety, reduce traffic, fuel consumption, and air pollution in the vicinity of schools.
- Congestion Mitigation/Air Quality (CMAQ) can fund projects that reduce transportation-related emissions in non-attainment and maintenance areas for ozone, carbon monoxide, and small particulate matter.
- Discretionary funds are additional funds (not formula funds) that the federal government may decide to award to the region. Examples of discretionary funding sources include bridge, Transportation and Community and System Preservation, Congressional Allocation, and Jobs & Growth Tax Relief.
- Other Regional Priorities typically fund construction, widening, and reconstruction on roadways on the state highway system.
- Surface Treatment funds repaving and resurfacing projects on the State Highway System.
- Bridge can fund the replacement, rehabilitation, and widening of any public bridge.
- Safety funds typically fund projects that reduce the number and severity of crashes.
- STP Flexible can fund almost any type of roadway improvement project.
- The Interstate Maintenance Program (IM) provides funding to rehabilitate, restore, and resurface the interstate highway system
- National Highway System (NHS) funds can be used for any type of improvement on roadways designated as part of the National Highway System.
- Highway Safety Improvement Program (HSIP) authorizes a new Federal-aid funding program to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Highway Bridge Replacement and Rehabilitation Program (BRXZ) provides funds to assist States in their programs to rehabilitate deficient highway bridges and retrofit bridges on public roads.

FTA funds include:

- Section 5307 can fund capital, maintenance, operations, and planning assistance for mass transportation in urbanized areas.
- Section 5309 can fund mass transit capital projects, regional rapid transit system construction, and studies to plan and implement the above.
- Section 5310 can fund capital equipment purchases for transportation of elderly and disabled persons within the urbanized area.
- Section 5311 can fund administrative, capital, and operating expenses for continuing public transportation service in the non-urbanized area of the state.
- Section 5337, State of Good Repair Grants, is a formula based program dedicated to repairing and upgrading the nation's rail transit systems along with high -intensity motor bus systems that use high occupancy vehicle lanes, including bus rapid transit (BRT).

FY 2017-2020 Estimated Spending Summary

		State		Federal		Other		TOTAL
All $ x 1000		**Funds**	**Percent**	**Funds**	**Percent**	**Funds**	**Percent**	
Delaware Statewide Element	**2017**	190,346.1	68%	89,847.6	32%	1,650.9	1%	281,844.7
	2018	188,227.1	70%	77,961.3	29%	1,520.9	1%	267,709.4
	2019	184,705.9	67%	89,330.8	32%	1,520.9	1%	275,557.5
	2020	181,186.8	65%	95,570.2	34%	1,520.9	1%	278,278.0
	TOTAL	**744,465.9**	**67%**	**352,709.9**	**32%**	**6,213.7**	**1%**	**1,103,389.6**
New Castle County Element	**2017**	34,078.5	10%	155,805.7	45%	157,550.2	45%	347,434.4
	2018	39,848.0	12%	280,240.7	81%	24,436.0	7%	344,524.7
	2019	49,279.8	19%	198,384.1	76%	12,472.0	5%	260,135.9
	2020	51,216.6	28%	127,297.7	71%	1,300.0	1%	179,814.3
	TOTAL	**174,422.9**	**15%**	**761,728.2**	**67%**	**195,758.2**	**17%**	**1,131,909.3**
Cecil County Element	**2017**	8,758.0	21%	28,728.9	69%	4,087.7	10%	41,574.6
	2018	4,808.0	19%	19,547.8	78%	848.5	3%	25,204.3
	2019	3,748.0	20%	15,266.9	80%	68.7	0%	19,083.6
	2020	3,748.0	20%	15,005.0	80%	4.0	0%	18,757.0
	TOTAL	**21,062.0**	**20%**	**78,548.6**	**75%**	**5,008.9**	**5%**	**104,619.5**
Combined Total	**2017**	233,182.6	35%	274,382.2	41%	163,288.8	24%	670,853.7
	2018	232,883.2	37%	377,749.8	59%	26,805.4	4%	637,438.4
	2019	237,733.6	43%	302,981.7	55%	14,061.6	3%	554,777.0
	2020	236,151.4	50%	237,873.0	50%	2,824.9	1%	476,849.3
	TOTAL	**939,950.8**	**40%**	**1,192,986.7**	**51%**	**206,980.8**	**9%**	**2,339,918.4**

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

JENNIFER COHAN
SECRETARY

July 14, 2016

Ms. Tigist Zegeye
Executive Director
WILMAPCO
850 Library Avenue, Suite 100
Newark, Delaware 19711

Dear Ms. Zegeye:

Pursuant to the adoption of Wilmington Area Planning Council's (WILMAPCO) Fiscal Year 2017 - 2020 TIP and the Delaware Department of Transportation's Fiscal Year 2017 - 2020 STIP, I am recommending programming Federal funds for Fiscal Year 2017 projects as follows:

Urban Surface Transportation Program (STP) (Population over 200,000) (Z230, M23E)

Project	Amount
HSIP NCC, N282, Mill Creek Road and Stoney Batter Road	$2,495,493
Little Baltimore Road Drainage Improvements	$200,000
SR72 and Old Baltimore Pike Intersection	$1,600,000
Garasches Lane, Wilmington	$400,000
Christina Bridge Approaches	$3,000,000
Walnut Street, Front Street to 4th Street, Wilmington	$1,200,000
Bridge Preservation (BR 1-308; 1-577; 1-684; 1-814)	$7,428,000
Bridge Painting, New Castle County	$1,346,837
Total:	**$17,670,330**

FTA Urbanized Area (5307, 5340)

Project	Amount
Preventive Maintenance - New Castle County	$6,500,000
Wilmington Operations Center Bus Wash	$40,000
NRTC, Parking Lot & Access Road	$1,040,000
NRTC, Station Building and Track A Realignment	$1,280,000
NRTC, Platform and Pedestrian Bridge	$7,680,000
Claymont Station	$300,000
Transit Vehicle Replacement Paratransit Buses NCC FY16-22	$ 2,329,883
Total	**$19,169,883**

DelDOT

Congestion Mitigation/Air Quality (CMAQ) (M400, M40E)

Project	**Amount**
Statewide Bike and Pedestrian Improvements	$3,200,000
Statewide Rideshare – Transportation Management Improvements	$360,000
Industrial Track Greenway Phase III	$ 9,646,159
Manor Avenue Sidewalk Improvements	$1,000,000
Myrtle Avenue Sidewalk Improvements	$800,000
Statewide Transportation Management Improvements	$2,900,000
Total	**$17,906,159**

FTA Elderly and Persons with Disabilities (5310)

Project	**Amount**
Statewide Transit Vehicle Replacement	$587,943
Total	**$587,943**

Transportation Alternatives Program (M30E, M3E1, 5307)

Project	**Amount**
New Castle County Transportation Alternatives	$ 730,718
Statewide Transportation Alternatives (FHWA)	$ 1,362,340
Transportation Alternatives Wilmington Urbanized Area (FTA)	$160,000
Total	**$2,253,058**

We respectfully request your approval by way of signature on this document. If you have any questions, please contact me at (302) 760-2693.

D-5

Sincerely,

APPROVED: _____
Tigist Zegeye
Executive Director

_____
Bill Geronimo
Senior Fiscal Management Analyst, Finance

cc: Mary Ridgeway, Division Administrator, FHWA
Theresa Garcia Crews, Regional Administrator, FTA
Jennifer Cohan, Secretary
Hugh E. Curran, Director, Finance
Lanie Thornton, Assistant Director, Finance
Robert McCleary, Director, Transportation Solutions
Shante Hastings, Deputy Director, Transportation Solutions
Drew Boyce, Director, Planning
John T. Sisson, Chief Executive Officer, Delaware Transit Corporation

Federal Fiscal Year 2016 Obligation Plan
State Fiscal Year 2017 Spend

Description	Federal Amount	State Amount	Total	STP/ CMAQ	Justification
ITMS Field Devices /Support - Video Management System	$360,000.00	$90,000.00	$450,000.00	STP	This is the enhancement of the video management system. This includes four pole mounted cameras and two portable trailer mounted cameras.
ITMS Field Devices /Support - Dynamic Message Sign System	$100,000.00	$25,000.00	$125,000.00	CMAQ	This is a phase of a multi-year project to design, construct and implement both fixed location and portable electronic dynamic message signs (DMS). The DMS are controlled and monitored real-time from the TMC. The DMS provide the capability to display travel information prior to key decision points. This project is to build permanent DMS in New Castle and Kent counties.
ITMS Field Devices /Support - Electronic Detection System	$132,000.00	$33,000.00	$165,000.00	CMAQ	This is a phase of a multi-year project to implement a statewide automated real-time vehicle detection system. The detection system will provide a variety of information to include vehicle volumes, classification, speed, travel time and congestion monitoring. The collected data will be used for real-time control, monitoring and information plus the data will be stored for planning purposes. This project phase provides for four fixed location solar powered microwave detection sites to be located at Puncheon Run Exit, Five Points, SR 1 and SR 16 and Argos Corner.
ITMS Field Devices /Support - Roadway Weather Information System	$132,000.00	$33,000.00	$165,000.00	CMAQ	This project is a planned multi-year project to expand the existing roadway weather information system to add four additional sites to include DE 52 between Center Meeting and Twaddle Mill Road, Summit Bridge, US 13 over Records pond and US 113 at US 9.
ITMS Field Devices /Support - Traveler Information System	$212,000.00	$53,000.00	$265,000.00	CMAQ	This project is a planned multi-year project to expand the existing WTMC 1380 AM traveler information radio system to provide statewide coverage. This phase of the project will design, construct and implement four WTMC 1380 AM repeater sites to include: US 13 at SR 9, US 113 at SR 26, US 13 at SR 16 and US 113 at SR 16. The WTMC 1380 AM radio system provides 24 hour real-time multimodal travel, incident and emergency information. WTMC 1380 AM is a component of DelDOT's transportation management and congestion mitigation program. This also includes two traveler advisory signs.
ITMS Field Devices /Support - Incident Management Program	$20,000.00	$5,000.00	$25,000.00	STP	This project provides for aerial monitoring services by the Civil Air Patrol (CAP). The CAP provides daily flights morning and evening peak periods and provide information to the TMC on the states of the transportation system to include the impact of incidents such as accidents and disabled vehicles.
TOTAL FY17 PROGRAM	**$4,000,000.00**	**$1,000,000.00**	**$5,000,000.00**		

STP	**$2,000,000.00**
CMAQ	**$3,000,000.00**
TOTAL FY 17 PROGRAM	**$5,000,000.00**

Federal Fiscal Year 2016 Obligation Plan
State Fiscal Year 2017 Spend

Description	Federal Amount	State Amount	Total	STP/ CMAQ	Justification
ITMS Planning and Engineering	$696,000.00	$174,000.00	$870,000.00	STP	Planning and Engineering consultant support to provide traffic signal software on-call support, on-call ITS planning and engineering, University of Delaware ITS Lab support, transportation homeland security and emergency management planning support, FCC required WTMC radio engineering, Transportation Management Team (TMT) program support, TMC Technician training, and ITMS related software development and network support.
ITMS Planning and Engineering	$960,000.00	$240,000.00	$1,200,000.00	CMAQ	Planning and Engineering consultant services to provide traffic signal timing anlysis; ITMS systems design; development of ITMS systems related specifications; ITMS telecommunications system design to support statewide expansion of computerized traffic signal system, transportation system monitoring devices, and travel information systems. Work under this project shall include the review and retiming of signalized corridors statewide, design of microwave vehicle detection system along SR1 in Kent and Sussex Counties, design of 10 computerized signal system sampling detection sites statewide, and design of 4 weather stations. Work will also include the design of DSRC sites to support connected vehicles.
ITMS/TMC Systems	$192,000.00	$48,000.00	$240,000.00	STP	Provides for purchase of ITMS related Transportation Management Center (TMC) computers and networking equipment, ITMS related software as required to support the continued expansion of the statewide ITMS system, including enhancement of the computerized signal system.
ITMS Telecommunications	$800,000.00	$200,000.00	$1,000,000.00	CMAQ	This project is a phase of a multi-year project to implement a fiber optic and wireless based statewide telecommunication system to support connection of facilities and transportation management control, monitoring and information field devices; to include traffic signals, electronic signing, electronic detection, etc. This phase includes the installation/upgrade of five miles of fiber optics at SR 1 / SR 26 to Fenwick, associated network electronics and facilities; wireless based telecommunication system enhancement in Newark and Georgetown; Fiber hub at IRIB, 2 mini hubs in NCC and Sussex, and the purchase of three fiber hub generators. Implementation of broadband microwave and wireless telecommunication system in a portion of Kent and Sussex Counties to support expansion of the ITMS system. 4.9 GHz project in New Castle and Sussex counties.
ITMS Mobile App	$332,000.00	$83,000.00	$415,000.00	STP	This project is a phase of a multi-year project to enhance DelDOT's mobile app, including the enhancement of voice recognition, real-time bus arrival information, and user personalization. The mobile app provides traveler information for traffic flow, weather information, and transportation system status.
ITMS Field Devices /Support - Traffic Signal System	$64,000.00	$16,000.00	$80,000.00	CMAQ	This is a phase of a multi-year project to add all the DelDOT maintained traffic signals to the computerized signal system. This phase will add 50 more signals to the computerized system.

Bike/Ped Pool Spend Plan

Project Name		contract #	Phase	FY16 State	FY16 Federal	FY17 State	FY17 Federal	FY18 State	FY18 Federal	FY19 State	FY19 Federal
West Street Trail		T201330010		$0.00	$155,000.00	$0.00	$23,000.00	$122,000.00	$488,000.00	$0.00	$0.00
J&B, Rehoboth		T201330012		$0.00	$110,000.00	$0.00	$75,000.00	$56,400.00	$225,600.00	$131,800.00	$527,200.00
Brecknock Trail		T201330011		$0.00	$65,000.00	$0.00	$45,000.00	$123,000.00	$492,000.00	$0.00	$0.00
Feasibility Assistance	T/C	T201601801	PRD	$0.00	$100,000.00	$0.00	$100,000.00	$0.00	$0.00	$0.00	$0.00
Project Development	T/C	T201601802	PE	$0.00	$180,000.00	$0.00	$120,000.00	$0.00	$0.00	$0.00	$0.00
Open End Const. NCC FY16 - FY18		T201630001		$52,000.00	$208,000.00	$192,000.00	$768,000.00	$45,000.00	$180,000.00	$0.00	$0.00
Open End Const Kent & Sussex FY16- FY18		T201630002		$52,000.00	$208,000.00	$193,000.00	$772,000.00	$45,000.00	$180,000.00	$0.00	$0.00
Senator Bikeway		T201630003		$28,000.00	$112,000.00	$20,000.00	$80,000.00	$100,800.00	$403,200.00	$43,200.00	$172,800.00
US 13 sidewalk Improvements		T201601201		$30,000.00	$120,000.00	$19,000.00	$76,000.00	$80,000.00	$320,000.00	$120,000.00	$480,000.00
Georgetown to Lewes Phase I		T201230002		$20,500.00	$230,000.00	$0.00	$1,451,000.00	$0.00	$0.00	$0.00	$0.00
Open End Const. NCC		T201230007		$201,879.00	$1,748,700.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Onen End NCC (lums trailhead)		T201230007		$70,000.00	$280,000.00	$30,000.00	$120,000.00	$0.00	$0.00	$0.00	$0.00
Open End Const. Kent & Sussex		T201230008		$162,000.00	$1,036,500.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Industrial Track R/W		T201330009		$10,000.00	$40,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Open End Const. Kent		T201430001		$0.00	$1,200,700.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Washington Street ADA Improv.		T201601101		$0.00	$30,000.00	$8,000.00	$32,000.00	$32,000.00	$128,000.00	$40,000.00	$160,000.00
Georgetown to Lewes Phase II		T201630004	PE	$240,000.00	$0.00	$260,000.00	$0.00	$40,000.00	$160,000.00	$260,000.00	$1,040,000.00
	Totals			$866,379.00	$5,823,900.00	$722,000.00	$3,662,000.00	$644,200.00	$2,576,800.00	$595,000.00	$2,380,000.00

Transportation Alternative Program (TAP) FY 2017 Spend Plan			Phase	Estimate	State 2017 spend	Federal 2017 spend
	T201220004	Old Lancaster Pike Bidges	CON	767,000	30,000	315,800
			TRAF			330
			CE	120,000		50,000
			Utilities			25,000
Subtotal				**887,000**	**30,000**	**391,130**
	T201220005	Midtown Brandywine	CE	71,000	4,400	28,400
			CON	411,000	54,400	110,000
			TRAF	4,200	800	3,400
Subtotal				**486,200**	**59,600**	**141,800**
	T201220008	St. Georges Streetscape II	CE	21,000	4,200	16,800
			CON	415,900	95,900	320,000
			TRAF	1,200	300	900
Subtotal				**438,100**	**100,400**	**337,700**
	T201320001	City of Wilmington Bike Facility	PE	42,000		
			CON	200,000	50,000	150,000
			TRAF	1,000	200	800
Subtotal				**243,000**	**50,200**	**150,800**
	T201320003	11th Street Streetscape	PE	95,000		70,000
			CON & CE	460,000	120,000	340,000
			TRAF	2,500	500	2,000
Subtotal				**557,500**	**120,500**	**412,000**
	T201320004	North Street Enhancements	PE	120,000	12,000	48,000
			CON & CE	875,000	105,000	420,000.00
			TRAF	5,000		
Subtotal				**1,000,000**	**117,000**	**468,000**
	T201620001	White Clay Creek Bridge	PE	310,000	41,000	164,000
			CON & CE	1,300,000		
			TRAF	2,000		
Subtotal				**1,612,000**	**41,000**	**164,000**
	T201620006	Brandywine South Ped. Imporv.	PE	140,000	19,320	77,280
			CON & CE	860,000		
			TRAF	2,000		
Subtotal				**1,002,000**	**19,320**	**77,280**
	T201620003	St. Georges Streetscape III	PE	110,000	2,000	8,000
			CON & CE	650,000		
			TRAF	2,000		
Subtotal				**762,000**	**2,000**	**8,000**
	T201620002	Concord Avenue Streetscape II	PE	155,000	18,600	74,400
			CON & CE	850,000		
			TRAF	4,000		
Subtotal				**1,009,000**	**18,600**	**74,400**
	T201620010	Old Brandywine Village Improv	PE	150,000	14,000	56,000
			CON & CE	800,000		
			TRAF	2,000		
Subtotal				**952,000**	**14,000**	**56,000**
	T201620007	Wilmington Ped Improvements	PE	150,000	16,500	66,000
			CON & CE	650,000		
			TRAF	2,500		
Subtotal				**802,500**	**16,500**	**66,000**
	T201620008	Town of Townsend Phase II	PE	129,800	16,354	65,419
			CON & CE	900,000		
			TRAF	2,000		
Subtotal				**1,031,800**	**16,354**	**65,419**

Transportation Alternative Program (TAP) FY 2017 Spend Plan			Phase	Estimate	State 2017 spend	Federal 2017 spend
	T201620009	Auburn Valley Trail	PE	160,000	16,000	64,000
			CON & CE	750,000		
			TRAF	1,000		
Subtotal				**911,000**	**16,000**	**64,000**
	T201620011	Southbridge Enhancements II	PE	150,000		
			CON & CE	850,000		
			TRAF	2,000		
Subtotal				**1,002,000**	**-**	**-**
	T201620012	DE City Enhancements	PE	150,000		
			CON & CE	700,000		
			TRAF	2,000		
Subtotal				**852,000**	**-**	**-**
	T201620013	9th Street Enhancements II	PE	125,000	15,000	60,000
			CON & CE	875,000		
			TRAF	2,000		
Subtotal				**1,002,000**	**15,000**	**60,000**
	T201620015	R/W Support Service	Planning	150,000		70,000
Subtotal				**150,000**	**-**	**70,000**
	NA	Transportation Alternative General		2,453,000	809,000	1,054,000
Subtotal				**2,453,000**	**809,000**	**1,054,000**
	NA	**SRTS Program General**		2,000,000	100,000	400,000
Subtotal				**2,000,000**	**100,000**	**400,000**
	T201620014	**Walnut Street Design**	PE	120,000	17,000	68,000
Subtotal					**17,000**	**68,000**
	T01620017	**H. Fletcher Brown Park**	Planning		6,000	24,000
Subtotal					**6,000**	**24,000**
TOTALS				23,296,100	1,801,934	5,915,369

WILMAPCO Annual Listing of Obligated Projects

The Annual Listing of Obligated Projects includes all projects listed in the Transportation Improvement Program (TIP) for which federal funds were obligated during the preceding federal program year by the Delaware Department of Transportation (DelDOT) or Maryland Department of Transportation (MDOT). The Annual Listing is intended to demonstrate transportation spending decisions by providing an accounting for federal funds that have been authorized and committed by the state or designated recipients for expenditure on projects programmed in the TIP. In addition to this introduction, the Annual Listing report includes reports submitted by DelDOT and MDOT. This listing is done to implement the requirement from MAP-21 that Metropolitan Planning Organizations publish an annual listing of obligated projects. Federal transportation law states:

23 CFR 450.332 Annual listing of obligated projects.

a) In metropolitan planning areas, on an annual basis, no later than 90 calendar days following the end of the program year, the State, public transportation operator(s), and the MPO shall cooperatively develop a listing of projects (including investments in pedestrian walkways and bicycle transportation facilities) for which funds under 23 U.S.C. or 49 U.S.C. Chapter 53 were obligated in the preceding program year.

b) The listing shall be prepared in accordance with § 450.314(a) and shall include all federally funded projects authorized or revised to increase obligations in the preceding program year, and shall at a minimum include the TIP information under § 450.324(e)(1) and (4) and identify, for each project, the amount of Federal funds requested in the TIP, the Federal funding that was obligated during the preceding year, and the Federal funding remaining and available for subsequent years.

c) The listing shall be published or otherwise made available in accordance with the MPO's public participation criteria for the TIP.

MDOT FY 2014 Obligated Project Listing

Environmental Projects (Funds 24, 25, 26, 74 and 88)

Route	Description	Obligated Funds	STIP Reference	Contract Num	Approp. Code	Fed Project Num	Phase
	AT VARIOUS LOCATIONS IN DISTRICTS 1 & 2	$129,881.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AT067B51	M240	000A976	CO
	TC35 - VEGETATION MGMT, NATIVE PLANT EST	$287,840.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AT091B21	M240	000A898	PE
	TC40-VEGETATION MGMT/SUSTAINABLE LANDSC	$80,000.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AX197B21	L240	000A833	PE
	SB-LOWER SUSQUEHANNA BYWAY CORR MGMT PL	$50,000.00	WILMAPCO 3-3	AX238B21	Q970	MD06019	PE
	PERMIT PROCESSING/COMPLIANCE MISC ACTIVI	$56,448.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AX748B21	Q240	000A457	PE
	SCENIC BYWAYS PROGRAM MANAGEMENT	$32,000.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AX838B21	L240	0003143	PE
	Total:	$636,169.00					

Safety and Spot Improvements (Funds 23, 27, 30, 32, 33, 75, 76, 79, 85 and 87)

Route	Description	Obligated Funds	STIP Reference	Contract Num	Approp. Code	Fed Project Num	Phase
US 301	TC35-AT MD299-CCTV CAMERAS-CECILTON WEIG	$100,778.00	WILMAPCO 3-5	CE400B51	L050	1271056	CO
	STATEWIDE -12 LOCATIONS-TRUCK WEIGHT INSPECTION STATIONS-FULL DEPTH CONCRETE REPAIRS	$9,345.26	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX515C15	L050	000A419	PP
MD0279	ELKTON NEWARK ROAD AT MD 545	$339,911.00	WILMAPCO 3-5	CE383B21	L400	2931006	PE
MD 273	TELEGRAPH ROAD AT MD 272	$387,892.00	WILMAPCO 3-5	CE384B21	L400	2881008	PE
MD 273	TELEGRAPH ROAD AT MD 213	$292,767.00	WILMAPCO 3-5	CE385C21	L400	2881009	PE
	ADA COMPLIANCE (RETROFIT) PROGRAM FY 13	$216,960.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	XX528B21	L230	000A966	PE
	ADA COMPLIANCE (RETROFIT) PROGRAM FY 13	$941,282.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	XX528B21	M240	000A966	PE
	AUTOMATIC TRAFFIC RECORDS STWD	$673,302.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AT051B51	M001	000B079	CO
	AUTOMATIC TRAFFIC RECORDS STWD	$326,698.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AT051C51	M240	000B079	CO
	MOD/SIGNALIZATION OF HIGHWAY LIGHTING	$2,339.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AT605B51	L240	000A020	CO
	APS/AUDIBLE PEDESTRIAN SIGNALS-PHASE 4	$560,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AT949B52	M240	0003301	CO

85PE TEDD INHOUSE SURVEY REVIEWS	$72,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX769B21	M240	000A469	PE
85PE TEDD CONSULTANT SIGNING DESIGN	$352,613.11	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX773B22	L240	000A473	PE
85PE TEDD CONSULTANT SIGNING DESIGN	$100,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX773C22	L240	000A473	PE
85PE TEDD INHOUSE SIGNAL DESIGN	$1,064,541.72	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX774B21	L240	000A464	PE
85PE TEDD CONSULTANT SIGNAL DESIGN	$1,538,822.83	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX774B22	L240	000A465	PE
85PE TEDD CONSULTANT SIGNAL DESIGN	$140,136.68	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX774F22	H240	000A465	PE
85PE CPD CONSULTANT PE	$100,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX781B21	L050	000A478	PE
TC11-TCD STRU INSP/REMED DESGN FY 12-14	$884,909.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX902B21	M240	000A874	PE
SIGNALS IN DISTRICTS 1 AND 2	$500,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	XX661B51	M232	000A748	CO
SIGNALS IN DISTRICTS 1 AND 2	$400,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	XX661B51	L24E	000A748	CO
INST/MOD/RECONSTRUCT UPS/TRAFFIC SIGNAL	$1,000,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	XY128B51	M240	000A896	CO
TC11-LOCATIONAL ANALYSIS SAFETY FY12-14	$1,000,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AT834C22	LS3E	000A834	PE
PEDESTRIAN SAFETY CAMPAIGN	$1,395,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AW072B11	MS31	000B066	PP
TDSD/IN-HOUSE TRAFFIC STUDY REVIEW	$305,034.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX242B23	LS3E	000A719	PE
AT VARIOUS LOACTIONS IN DISTRICT 2	$497,425.00	WILMAPCO 3-5; RU Safety Spot	XX441B52	MS30	000B076	CO
TC35 - SIDEWALK RETROFIT PROGRAM	$1,000,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AT093B21	M240	000A902	PE
Total:	$14,201,756.60					

Resurfacing and Rehabilitation (Fund 77)

Route	Description	Obligated Funds	STIP Reference	Contract Num	Approp. Code	Fed Project Num	Phase
US 40	TC11-MD 213 TO DELAWARE STATE LINE	$833,749.00	WILMAPCO 3-4	CE326B51	L24E	1251056	CO
US 40	TC11-MD 213 TO DELAWARE STATE LINE	$1,000,000.00	WILMAPCO 3-4	CE326D51	M240	1251056	CO
MD 282	CECILTON TO MD213-WESTERN CORP TOWN LIMI	$243,803.00	WILMAPCO 3-4	CE392B51	M230	1280009	CO
MD 282	CECILTON TO MD213-WESTERN CORP TOWN LIMI	$208,878.00	WILMAPCO 3-4	CE392C51	33C0	1280009	CO
MD 222	TC13-US 40 TO I-95	$75,750.00	WILMAPCO 3-4	CE394B51	L230	2851008	CO
MD 222	TC13-US 40 TO I-95	$141,716.00	WILMAPCO 3-4	CE394D51	L23E	2851008	CO
MD 222	TC13-US 40 TO I-95	$1,127,400.00	WILMAPCO 3-4	CE394F51	M240	2851008	CO
	RESURF VARIOUS LOC IN CECIL COUNTY	$1,376,463.52	WILMAPCO 3-4	XX907B51	M240	000A282	CO
	RESURF VARIOUS LOC IN CECIL COUNTY	$593,544.00	WILMAPCO 3-4	XX907B51	Q250	000A282	CO
	TC94-THINLINE THERMOPLASTIC-VAR LOC D1,2	$1,214,182.00	WILMAPCO 3-4; SW 8-3; RU Resurfacing	XY231B53	M240	000A982	CO

	TC94-THINLINE THERMOPLASTIC-VAR LOC D1,2	$134,909.00	WILMAPCO 3-4; SW 8-3; RU Resurfacing	XY231B53	L05E	000A982	CO
	VARIOUS LOCATIONS IN DISTRICT 2	$25,000.00	WILMAPCO 3-4; RU Resurfacing	XY232B52	MS32	000A970	CO
	VARIOUS LOCATIONS IN DISTRICTS 1 AND 2	$1,795,706.00	WILMAPCO 3-4; SW 8-3; RU Resurfacing	XY236B53	MS30	000B060	CO
	Total:	$8,771,100.52					

Bridge Replacement and Rehabilitation (Fund 80)

Route	Description	Obligated Funds	STIP Reference	Contract Num	Approp. Code	Fed Project Num	Phase
	TC13-INVERT PAVING/RESTORE 47 STRUCTURES	$1,000,000.00	WILMAPCO 3-2; SW 9-4; RU Bridge	AT090B51	M001	000B050	CO
	TC13-INVERT PAVING/RESTORE 47 STRUCTURES	$1,000,000.00	WILMAPCO 3-2; SW 9-4; RU Bridge	AT090C51	M240	000B050	CO
	BRIDGE INSPECTION-STATEWIDE-FY2014 &2015	$3,760,000.00	WILMAPCO 3-2; SW 9-4; RU Bridge	AW139C1P	M001	000B078	PP
	TC12-BRIDGE INSPECTION PROGRAM-FY 2013	$881,073.00	WILMAPCO 3-2; SW 9-4; RU Bridge	AW139C2N	M240	000A950	PE
	BRIDGE INSPECTION-STATEWIDE-FY2014 &2015	$3,760,000.00	WILMAPCO 3-2; SW 9-4; RU Bridge	AW139D1P	M240	000B078	PP
	SMALL STRUCTURE INSPECTIONS STWD-FY 2012	$34,672.00	WILMAPCO 3-2; SW 9-4; RU Bridge	AW140B2M	L24E	000A828	PE
	TC-INVERT PAVING/REPAIR VAR STRUCTURES	$140,624.13	WILMAPCO 3-2; SW 9-4; RU Bridge	AX194B51	M240	000A795	CO
	VAR BRIDGE STRUCTURAL EVALUATION/TESTING	$282,240.00	WILMAPCO 3-2; SW 9-4; RU Bridge	AX971B21	L240	000A612	PE
	Total:	$10,858,609.13					

Congestion Management (Funds 81 and 86)

Route	Description	Obligated Funds	STIP Reference	Contract Num	Approp. Code	Fed Project Num	Phase
	CHART SUPPORT FOR CAPWIN FY 13-14	$336,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AT441B22	M240	0003334	PE
	TC70-CHART RWIS UPGRADE	$221,171.61	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AT620B52	L05E	000A826	CO
	TC11-CATT LAB OPERATION SUPPORT FY 12-14	$350,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX103B2B	L240	0003212	PE
	TC11-CATT LAB OPERATION SUPPORT FY 12-14	$500,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX103C2B	L240	0003212	PE
	TC11-TECH SUPPORT FOR CHART ITS FY 12-14	$57,654.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX104C2B	H240	0003213	PE

TC11-TECH SUPPORT FOR CHART ITS FY 12-14	$1,005,257.07	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX104D2B	M240	0003213	PE
CHART PERFORMANCE EVALUATION CY13-15	$308,448.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX124B1B	M240	0003321	PP
CHART SUPPORT SRV- BCS 2007-06A	$160,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX624B21	L240	3114037	PE
CHART SUPPORT SERVICES - BCS 2007-06B	$160,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX625B21	L240	3114038	PE
CHART SUPPORT SERVICES - BCS 2007-06C	$208,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX626B21	L240	3114039	PE
TC11-CHART SYSTEM NETWORK ENGR FY12-16	$3,035,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX789B23	L24E	0003211	PE
TC11-CHART SYSTEM NETWORK ENGR FY12-16	$1,090,260.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX789C23	LZ2E	0003211	PE
CHART LEASED CIRCUITS FY 10-14	$487,188.59	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX790B21	L240	0003114	PE
CHART LEASED CIRCUITS FY 10-14	$0.41	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX790C21	Q760	0003114	PE
CHART LEASED CIRCUITS FY 10-14	$274,196.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX790F21	H770	0003114	PE
CHART SUPPORT FOR MATOC FY 13-14	$540,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	ZY103B21	M240	0003259	PE
CHART Operation Centers Staffing Support	$500,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX257B61	L24E	3114044	Other
CHART - MSP Staffing and Support FY 13-15	$659,565.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX757B23	M240	0003261	PE
CHART SYSTEM DEVELOPMENT FY 13-14	$2,700,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	SD104B93	LZ1E	0003258	Other
CHART SYSTEM DEVELOPMENT FY 13-14	$300,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	SD104C93	LZ10	0003258	Other
CHART SYSTEM DEVELOPMENT FY 13-14	$1,250,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	SD104C93	LZ10	0003258	Other
CHART SYSTEM DEVELOPMENT FY 13-14	$1,950,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	SD104D93	LZ20	0003258	Other
Total:	$16,092,740.68					

Other Projects

Route	Description	Obligated Funds	STIP Reference	Contract Num	Approp. Code	Fed Project Num	Phase
	LOWER SUSQUEHANNA BYWAY CORRIDOR MGMT	$8,156.00	WILMAPCO 3-3	AX286B26	L970	MD06019	PE

I-95 CC SUPPORT FOR ITS-MCOM YEAR 2	$3,560,000.00	WILMAPCO 3-12	AX350B2B	LT2E	0003329	PE
RECREATIONAL TRAILS FY 14 PROJECTS	$1,112,384.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AX688B24	M940	0003340	PE
RECREATIONAL TRAILS FY 14 PROJECTS	$245,463.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AX688C54	H940	0003340	CO
I-95 CC MULT-STATE MODEL ANALYSIS	$65,000.00	WILMAPCO 3-12	AX791B22	5L50	0003329	PE
I-95 CC MULT-STATE MODEL ANALYSIS	$100,000.00	WILMAPCO 3-12	AX791C22	5L5E	0003329	PE
SB0605 BLUE CRAB BYWAY MANAGEMENT-YEAR 1	$13,644.00	WILMAPCO 3-3; SW 6-1; RU Environmental	AX863B22	L970	MD06020	PE
SAFE ROUTE TO SCHOOL-PLN OF INFRAST PJT	$509,120.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AT011B11	LU3E	0003339	PP
FUEL TAX AUDITING & ACTIVITIES ENFORCE	$5,000.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX019B91	L96E	PTE2013	Other
SAFE ROUTES TO SCHOOLS COORDINATOR	$101,557.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX352B22	LU10	0003232	PE
SAFE ROUTES TO SCHOOLS COORDINATOR	$148,179.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX352C22	LU3E	0003232	PE
SAFE ROUTES TO SCHOOL - GRANT F	$3,330,915.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	AX933B52	LU2E	0003338	CO
SAFE ROUTES TO SCHOOL COORDINATOR&SRTS	$69,808.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	HS193B21	LU3E	0001875	PE
MD STRATEGIC HWY SAFETY PLAN 2011-2014	$217,601.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	HS207B23	LS3E	000A888	PE
PED/BIKE SAFETY PROGRAM - FY 13	$414,500.00	WILMAPCO 3-5; SW 7-2; RU Safety Spot	HS207B25	MS32	0003279	PE
CHART IN-HOUSE STAFF FOR FY 2014	$7,000,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AT040B61	M240	3114048	Other
CHART VEHICLES FOR FY 2014 - OPERATIONS	$2,000,000.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX280B63	M240	0003302	Other
CHART OPERATIONS FY 2013	$1,456,443.00	WILMAPCO 3-12; SW 11-6; RU Congestion Management	AX335B61	M240	3114047	Other
TC11-LEGACY PAVEMENT IMP-DIST 2/DIST 4	$183,939.42	60-9509-38	AX264B51	LZ2E	000A805	CO
Total:	$20,541,709.42					
Grand Total:	$71,102,085.35					

* This information is based on the State Fiscal Year 2014 (July 2013 to June 2014)

**The above report is intended to represent a snapshot of the Federal funds obligated to the specified project within the aforementioned fiscal year. The information above is collected from Federal Highway FMIS System. SHA Program Development Division only compiles the report.

***STIP created prior to 2010. Unable to locate

DelDOT FY 2014 Obligated Project Listing

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
		M400	BIKE PEDESTRIAN	PE,ROW,CONS		576,464
		M400	BIKE PEDESTRIAN TOLL CREDITS	PE,ROW,CONS		172,116
		M400	BIKE PEDESTRIAN	PE,ROW,CONS		280,744
05-10006	12,000,000	M001	BRIDGE PRESERVATION	PE,ROW,CONS		13,558
05-10006	-	M233	BRIDGE PRESERVATION	PE,ROW,CONS		398,600
05-10003	2,400,000	M001	BRIDGE MANAGEMENT	PE,ROW,CONS		400,000
05-10003		M233	BRIDGE MANAGEMENT	PE,ROW,CONS	Revised 11/6/13	280,000
		M233	BRIDGE INSPECTION	PE		400,000
		M233	BRIDGE INSPECTION TOLL CREDITS	PE		100,000
		M001	BRIDGE INSPECTION	PE		586,460
		M001	BRIDGE INSPECTION TOLL CREDITS	PE		146,615
	450,000		STRUCTURE REHABILITATION OPEN END NORTH	CONS		360,000
			STRUCTURE REHABILITATION OPEN END NORTH TOLL CREDITS	CONS		90,000
	450,000		STRUCTURE REHABILITATION OPEN END CANAL	CONS		360,000
			STRUCTURE REHABILITATION OPEN END CANAL TOLL CREDITS	CONS		90,000
	150,000	M233	STRUCTURE REHABILITATION OPEN END CENTRAL	CONS		120,000
		M233	STRUCTURE REHABILITATION OPEN END CENTRAL TOLL CREDITS	CONS		30,000
	150,000	M233	STRUCTURE REHABILITATION OPEN END SOUTH	CONS		120,000
		M233	STRUCTURE REHABILITATION OPEN END SOUTH TOLL CREDITS	CONS		30,000
T201207401	24,000	L110	BR1-032 ON N203 FOULK ROAD OVER SOUTH BRANCH	ROW		24,000
T201207401		L110	BR1-032 ON N203 FOULK ROAD OVER SOUTH BRANCH TOLL CREDITS	ROW		6,000
	14,400	L1CE	BR1-112 ON N257 YORKLYN ROAD OVER RED CLAY CREEK	ROW		
T201207101		L110	BR1-159 ON JAMES STREET OVER CHRISTINA RIVER	PE	MOD 4/25/14	280,000
T201207101		M233	BR1-159 ON JAMES STREET OVER CHRISTINA RIVER	ROW	ADDED 2/15	184,000
T201207101		M233	BR1-159 ON JAMES STREET OVER CHRISTINA RIVER	CONS	Update 6/24	1,600,000
T201207101		M001	BR1-159 ON JAMES STREET OVER CHRISTINA RIVER	CONS	Update 6/24	2,400,000
T201207101		L11E	BR1-159 ON JAMES STREET OVER CHRISTINA RIVER TOLL CREDITS	CONS	Update 6/24	1,000,000
T201407402		M233	BR 1-191 ON N318 MILLTOWN ROAD OVER MILL CREEK	PE	PNR ADDED 4/26/13	12,600
	28,000	M240	BR 1-227 ON N013 PAPER MILL ROAD OVER MIDDLE RUN TRIBUTARY	PE	Update 6/24	
T201307103		M001	BR 1-229B ON SR2 KIRKWOOD HIGHWAY OVER WHITE CLAY CREEK	ROW	Update 6/24	27,200
T201307103		M001	BR 1-229B ON SR2 KIRKWOOD HIGHWAY OVER WHITE CLAY CREEK TOLL CREDITS	ROW	Update 6/24	6,800

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
	37,840	M240	BR 1-239 ON N352 RED MILL ROAD OVER TRIBUTARY TO WHITE CLAY CREEK	PE	Update 6/24	
T201307102		L11E	BR 1-254 ON N350 OLD NEWARK ROAD OVER COOL RUN	ROW	Update 6/24	20,000
T201207102		M240	BR1-274 ON N312 WEDGEWOOD RD.	CONS	Update 6/24	734,400
T201207102		M240	BR1-274 ON N312 WEDGEWOOD RD. TOLL CREDITS	CONS	Update 6/24	183,600
T201407103	29,040	M240	BR 1-291 ON SONGSMITH DR OVER TRIBUTARY TO SMALLEY'S POND	PE	Update 6/24	
T201307401		M001	BR 1-393 ON SR299 MAIN STREET OVER APPOQUINIMINK RIVER	PE		32,000
		M001	BR 1-393 ON SR299 MAIN STREET OVER APPOQUINIMINK RIVER TOLL CREDITS	PE		8,000
T201307401		M240	BR 1-393 ON SR299 MAIN STREET OVER APPOQUINIMINK RIVER	ROW		22,400
T201307401		M240	BR 1-393 ON SR299 MAIN STREET OVER APPOQUINIMINK RIVER TOLL CREDITS	ROW		5,600
T201207103	37,840	M233	BR 1-438 ON N463 BLACKBIRD STATION ROAD OVER BLACKBIRD CREEK	PE		
T200907403		L1C0	BR 1-501, 1-501A & 1-501B SR 141 VIADUCT OVER SR4	CONT INCREASSE	STIP MOD	150,064
T201207103	28,000	L1CE	BR1-543 ON N213 CARR ROAD OVER SHELLPOT CREEK	PE		29,600
T201207103		L1CE	BR1-543 ON N213 CARR ROAD OVER SHELLPOT CREEK TOLL CREDITS	PE		7,400
T201307101		L11E	BR 1-567A ON N501 HAY ROAD OVER SHELLPOT CREEK, CITY OF WILMINGTON	ROW		24,000
T201407403	8,000	L100	BR 1-577 ON N050 NORTHEAST BLVD OVER BRANDYWINE RIVER	PE	Updated 5/23/14 with new PE estimate	408,000
T201407403	8,000	L100	BR 1-577 ON N050 NORTHEAST BLVD OVER BRANDYWINE RIVER TOLL CREDITS	PE	Update 5/30/14	102,000
T201407403	8,000	L1CE	BR 1-577 ON N050 NORTHEAST BLVD OVER BRANDYWINE RIVER	ROW	Update 5/30/14	
T201007402		L1C0	BR1-585 ON AUGUSTINE CUTOFF	CONS		2,407,200
T201107401		M001	BR1-665N & 1-665S ON US 13 OVER	CONS	Update 5/7/14 STIP MOD	561,636
T201107401		M001	BR1-665N & 1-665S ON US 13 OVER	CONVERT	Update 6/24	1,328,800
T201107401		M001	BR1-665N & 1-665S ON US 13 OVER TOLL CREDITS	CONVERT	Update 6/24	332,200
T201407105		M001	BR 1-680 ON SR141 OVER US13	PE	STIP MOD 9/12/14	436,000
T201407105	924,000	L1CE	BR 1-680 ON SR141 OVER US13	PE	Update 6/24	
T201407107		ER90	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	PE	ADDED 6/4/14	2,000,000
T201407107		ER90	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	CONS	ADDED 7/3/14	330,000
T201407107		M001	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	CONS	ADDED 7/3/14	13,500,000
T201407401		M233	BR 1-814 ON N009 12TH STREET OVER NORFOLK SOUTHERN RR	ROW	per 5/23/14 mtg: 0 ROW	26,400

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
					needed PNR ADDED 4/26/13	
T201107402		M001	BR1-826 N & S	CONS		1,840,000
T201107402		M001	BR1-826 N & S TOLL CREDITS	CONS		460,000
	100,000	L480	DISADVANTAGED BUSINESS ENTERPRISE			267,313
		M439	EDUCATION AND TRAINING	CONVERT	New code	64,366
	8,000	M240	ENVIRONMENTAL IMPROVEMENTS	ENV		18,000
	200,000	LS20	SAFETY IMPROVEMENT PROGRAM RURAL ROADS	PE,ROW,CONS		250,000
		LS20	SAFETY IMPROVEMENT PROGRAM RURAL ROADS TOLL CREDITS	PE,ROW,CONS		27,778
	2,200,000	MS30	SAFETY IMPROVEMENT PROGRAM	PE,ROW,CONS		1,790,627
	244,444	MS30	SAFETY IMPROVEMENT PROGRAM TOLL CREDITS	PE,ROW,CONS		198,958
	2,200,000	MS30	HIGHWAY SAFETY IMPROVEMENT PROGRAM, 11407,4050,3200	PE,ROW,CONS		5,135,000
	3,035,000	MS30	HSIP	CONS		
	2,265,000	MS31	SEC 154 PENALTIES-FOR HSIP	PRO	ADD 7/29/14	723,474
T200800702		MS30	CHURCHMANN'S ROAD - CHRISTIANA HOSPITAL TO SR 1	ROW	Update 7/25/14	18,000
T200800702		MS30	CHURCHMANN'S ROAD - CHRISTIANA HOSPITAL TO SR 1 TOLL CREDITS	ROW	Update 7/25/14	2,000
14-77712	260,000	M230	CITY OF NEW CASTLE INTERSECTIONS	PD	ADDED 8/23/13	
T200809001	40,000	M001	I-95 CARR ROAD AND MARSH ROAD	ROW		40,000
T200809001		M001	I-95 CARR ROAD AND MARSH ROAD TOLL CRDITS	ROW		10,000
		L030	LEA BOULEVARD - TATNALL STREET TO MARKET STREET	CONS		1,440,000
		MS30	MILL CREEK AND STONEY BATTER ROAD	CONS		1,700,000
T201200106		MS30	SALEM CHURCH ROAD AT CHRISTIANA HIGH SCHOOL	ROW	Update 6/21	9,000
T201200106		M240	SALEM CHURCH ROAD AT CHRISTIANA HIGH SCHOOL	CONS		240,000
T201200106		M240	SALEM CHURCH ROAD AT CHRISTIANA HIGH SCHOOL TOLL CREDITS	CONS		60,000
	45,000		SR 2 AND CLEVELAND AVENUE INTERSECTION IMPROVEMENTS	PE		
T201200701	135,000	M001	SR2 PIKE CREEK ROAD TO WOODMILL DRIVE	ROW		120,000
T201200701		M001	SR2 PIKE CREEK ROAD TO WOODMILL DRIVE TOLL CREDITS	ROW		30,000
T201200108	90,000	M240	SR72 AND OLD BALTIMORE PIKE INTERSECTION	ROW		80,000
T201200108		M240	SR72 AND OLD BALTIMORE PIKE INTERSECTION TOLL CRDITS	ROW		20,000
	5,580,000	L240	SR273 AND HARMONY ROAD INTERSECTION	CONS		
T200900704		LS3E	SR 273, APPLEBY AND AIRPORT ROAD	ROW		450,000
T200900704		LS3E	SR 273, APPLEBY AND AIRPORT ROAD	CONS		1,870,000
	918,000	LS3E	SR273 INTERSECTION IMPROVEMENTS	CONS		1,870,000
T201200102	16,000	M001	SR 7 AT SKYLINE DRIVE/MERMAID STONEY BATTER ROAD	ROW	X'd 8/22/13	16,000

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
					now NP	
T201200102		M001	SR 7 AT SKYLINE DRIVE/MERMAID STONEY BATTER ROAD TOLL CREDITS	ROW		4,000
T201200102	600,000	M001	SR 7 AT SKYLINE DRIVE/MERMAID STONEY BATTER ROAD	CONS	Update 6/24	680,000
T201200102		M001	SR 7 AT SKYLINE DRIVE/MERMAID STONEY BATTER ROAD TOLL CREDITS	CONS	Update 6/24	170,000
		LZ20	SR7 AND VALLEY ROAD INTERSECTION	CONS		716,000
T201000701		M230	SR71, OLD PORTER ROAD TO SR 7	PE	Update 6/24	45,000
T201000701		M230	SR71, OLD PORTER ROAD TO SR 7	ROW	Update 9/8/14 (inc SIP MOD)	600,000
T201000701		M230	SR71, OLD PORTER ROAD TO SR 7 TOLL CREDITS	ROW	Update 9/8/14 (inc SIP MOD)	150,000
	1,170,000	MS30	SR896 AND OLD CHESTNUT HILL ROAD INTERSECTION	CONS	STIP MOD	1,183,777
	540,000	MS30	SR896 AND PORTER ROAD INTERSECTION	CONS	REVISED 11/27/13bg MOD	956,628
T201200104	45,000	M001	US 40 AND SR7 INTERSECTION IMPROVEMENTS	PE		40,000
T201200104		M001	US 40 AND SR7 INTERSECTION IMPROVEMENTS TOLL CREDITS	PE		10,000
T201200105	450,000	M240	OLD BALTIMORE PIKE AND SALEM CHURCH ROAD	ROW	Update 6/25	240,000
T201200105		M240	OLD BALTIMORE PIKE AND SALEM CHURCH ROAD TOLL CREDITS	ROW	Update 6/25	60,000
T201300102	NEW	MS30	HEP, I495 AT PHILADELPHIA PIKE	ROW		45,000
T201300101	NEW	M240	HEP, US40 AT GLASGOW AVENUE	ROW		80,000
T201300101		M240	HEP, US40 AT GLASGOW AVENUE TOLL CREDITS	ROW		20,000
T200800901		MS30	US 9 (HSIP) CONS	CONVERT		4,053,086
T200800901		MS30	US 9 (HSIP) CONS TOLL CREDITS	CONVERT		450,343
T200512102		M230	CHRISTINA RIVER BRIDGE AND APPROACHES	PE		720,000
T200512102		M230	CHRISTINA RIVER CROSSING TOLL CREDITS	PE		180,000
T200512102		HY20	CHRISTINA RIVER CROSSING	ROW	br pres	3,421,892
T200512102		LY20	CHRISTINA RIVER CROSSING	ROW	br pres	5,538,108
T200512102		LY20	CHRISTINA RIVER CROSSING TOLL CREDITS	ROW		2,240,000
T200512102		M230	CHRISTINA RIVER BRIDGE AND APPROACHES	CONS		1,138,792
T200512102		L23E	CHRISTINA RIVER BRIDGE AND APPROACHES	CONS		3,192,927
T200512102		LY20	CHRISTINA RIVER BRIDGE AND APPROACHES	CONS	ADDED 3/14	5,668,281
T201309002	80,000	M001	CAVALIERS MITIGATION	PE	ADD 6/14	28,000
T201309002	1,200,000	M001	CAVALIERS MITIGATION	CONS	Removed 4/10/14, FY15 ADD	
		M001	I-95 AND SR141 RAMPS G & F IMPROVEMENTS TOLL CREDITS	CONS		1,600,000
		M001	I-95 AND SR141 RAMPS G & F IMPROVEMENTS TOLL CREDITS	CONS		400,000

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
		M240	INTERSECTION IMPROVEMENTS	CONS		800,000
		M240	INTERSECTION IMPROVEMENTS TOLL CREDITS	CONS		200,000
		M001	INTERSTATE ROADWAY LIGHTING	CONVERT		930,000
	170,000	M438	PLANNING - LOCAL TRANSPORTATION ASSISTANCE PROGRAM	PLAN		140,000
	1,472,635	M450	PLANNING - METROPOLITAN PLANNING ORGANIZATION /FHWA	PLAN		1,695,391
	90,642	LT30	MOTOR FUEL TAX COMPLIANCE AND ANTI TAX EVASION	PRO		
T201409001		M001	INTERSTATE OPEN END LIGHTING	CONS	See PNR dated 12/10/13	1,800,000
T201409001		M001	INTERSTATE OPEN END LIGHTING TOLL CREDITS	CONS	See PNR dated 12/10/13	200,000
T201303401		M001	INTERSTATE MAINTENANCE DRAINAGE REPAIR, FY14-FY16, OPEN-END	CONVERT	ADDED 10/3/13	820,322
		M001	INTERSTATE STRUCTURAL MAINTENANCE, OPEN END, FY12-13	CONT INCREASSE	STIP MOD	220,627
		M001	INTERSTATE STRUCTURAL MAINTENANCE	CONS		218,050
		M001	INTERSTATE STRUCTURAL MAINTENANCE TOLL CREDITS	CONS		139,450
		L24E	ON THE JOB TRAINING SUPPORTIVE SERVICES			73,511
	12,800,000	M230	PAVEMENT REHABILITATIONS	CONS		1,490,000
		M231	PAVEMENT REHABILITATIONS	CONS		3,569,133
		M230	PAVEMENT REHABILITATIONS	CONS		484,673
		M232	PAVEMENT REHABILITATIONS	CONS		3,448,664
		M240	PAVEMENT REHABILITATIONS	CONS		1,880,206
T201206201		L20E	PAVEMENT & REHABILITATION, SOUTH I-I, 2012	CONT INCREASSE		32,597
	120,000	41TE		CONS	ADD 6/18	
		M001	PAVEMENT REHABILITATIONS	CONS		4,133,496
T201206105		M230	PAVEMENT & REHABILITATION, NORTH V, 2012	CONS		3,000,000
	1,975,000	M550	PLANNNING - STATEWIDE & REGIONAL PLANNING	PLAN		1,481,659
	596,900	M560	PLANNNING - STATEWIDE & REGIONAL PLANNING	PLAN		310,644
T201466001		L550	SPR PLANNING PROGRAM 2014	PLAN	STIP MOD	776,000
		LS5E	RAIL CROSSING SAFETY	PD		67,500
	550,000	LS40	RAIL CROSSING SAFETY	CONS		
	61,111	LS40	RAIL CROSSING SAFETY TOLL CREDITS	CONS		
		MS50	RAIL CROSSING SAFETY	CONS		85,795
	550,000	MS50	RAIL CROSSING SAFETY TOLL CREDITS	CONS		52,520
T201500513		LS4E	RAILROAD PRELIMINARY ENGINEERING SERVICES	PE	STIP MOD	50,000

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
					9/16	
T201500513		LS5E	RAILROAD PRELIMINARY ENGINEERING SERVICES	PE	STIP MOD 9/16	50,000
T201500508		LS5E	PIGEON POINT ROAD (N-377) RAILROAD CROSSING SAFETY IMPROVEMENTS	RAIL ROAD	STIP MOD 9/16	271,000
	854,068	L94E	REC TRAILS			676,410
		M940	REC TRAILS			169,103
	99,000	LU1E	SAFE ROUTES TO SCHOOL	PLAN		
	693,000	LU2E	SAFE ROUTES TO SCHOOL	CONS		68,043
	198,000	LU3E	SAFE ROUTES TO SCHOOL	CONS		73,000
		L97E	SCENIC BYWAYS			840,500
	800,000	M001	SIGNAGE & PAVEMENT MARKINGS	CONS		800,000
		M001	SIGNAGE & PAVEMENT MARKINGS TOLL CREDITS	CONS		200,000
T200504110	42,381	L49E	TECHNOLOGY - SUMMER INTERN PROGRAM			44,960
T201304601	10,000,000	M230	N54 HOWELL SCHOOL ROAD	CONS	**STIP MOD**	83,161
T201304601		M232	PARK AVENUE RELOCATION	PD		800,000
T201304601		M232	PARK AVENUE RELOCATION TOLL CREDITS	PD		200,000
T201009003		M232	PARK AVENUE RELOCATION	PE	**ADDED 10/24/13 w MOD**	200,000
T201009003		M001	ROAD A / SR 7 IMPROVEMENTS	PE	**UPDATED 8/29/13**	1,200,000
T201309003		M001	ROAD A / SR 7 IMPROVEMENTS	PE	**UPDATED 8/29/13**	300,000
T201009002		M001	ROAD A / SR 7 IMPROVEMENTS	CONT INCREASSE	**STIP MOD 9/17**	331,413
T200511001		M001	SR1 FROM TYBOUTS CORNER TO SR273	PE	**Update 6/21**	4,800,000
T200511001	800,000	M001	SR1 FROM TYBOUTS CORNER TO SR273	ROW		
	200,000	M001	SR1 FROM TYBOUTS CORNER TO SR273 TOLL CREDITS	ROW		
T200410301		L050	SR1 TRUCK WEIGH STATION	CONS		
		L23E	SR 4, CHRISTINA PARKWAY FROM SR 2, ELKTON ROAD TO SR 896, SOUTH COLLEGE AVENUE, NEWARK	PE	**Update 8/29**	185,931
	1,840,000	M240	SR 72, MCCOY ROAD TO SR 71	ROW		800,000
		M240	SR 72, MCCOY ROAD TO SR 71	ROW		200,000
		L230	SR141 - SR2 KIRKWOOD HGY TO FAULKLAND RD	LANDSCAPING		600,000
	360,000	M400	RIDESHARE - TRANSPORTATION MANAGEMENT IMPROVEMENTS	PLAN		360,000
T201350302		M400	40' HEAVY DUTY LOW FLOOR BUSES	**CONVERT**	**veh**	3,815,353
T201350302		L40E	40' HEAVY DUTY LOW FLOOR BUSES	**CONVERT**	**veh**	3,880,546
T201350302		Q400	40' HEAVY DUTY LOW FLOOR BUSES	**CONVERT**	**veh**	1,042,489

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
T201350302		L400	40' HEAVY DUTY LOW FLOOR BUSES	CONVERT	veh	1,107,932
T201350302		M400	40' HEAVY DUTY LOW FLOOR BUSES TOLL CREDIT	CONVERT	veh	2,461,580
09-18004	712,880	M400	30" LOW FLOOR EXPANSION DOVER/REHOBOTH	PRO	UPDATED 7/2/14	
09-18004		M400	30" LOW FLOOR EXPANSION DOVER/REHOBOTH TOLL CREDITS	PRO	UPDATED 7/2/14	178,220
		LZ1R	40' HEAVY DUTY LOW FLOOR BUSES	CONVERT		-
		L40E	40' LOW FLOOR DOVER/REHOBOTH EXPRESS	PRO		712,880
07-22412	1,429,300	L400	TRANSIT VEHICLE EXPANSION (2) 45' OTR BUS - SR 141 CROSSTOWN FY18	PRO	UPDATED 7/2/14	735,600
13-11017	356,480	M400	TRANSIT VEHICLE EXPANSION (1) 30' LOW FLOOR TRANSIT ROUTE 203 FY15		UPDATED 7/2/14	
		Q220	TRANSPORTATION ENHANCEMENTS - FHWA			28,949
		H220	TRANSPORTATION ENHANCEMENTS - FHWA TOLL CREDITS			8,877
	3,400,000	M300	TRANSPORTATION ENHANCEMENTS - FHWA			164,285
	750,000	M300	TRANSPORTATION ENHANCEMENTS - FHWA TOLL CREDITS			56,441
		L22R	TRANSPORTATION ENHANCEMENTS - FHWA			63,720
		L22R	TRANSPORTATION ENHANCEMENTS - FHWA TOLL CREDITS			133,084
	4,240,000	M400	TRANSPORTATION MANAGEMENT IMPROVEMENTS			3,000,000
		M240	TRANSPORTATION MANAGEMENT IMPROVEMENTS TOLL CREDITS			1,870,000
		disc	TRANSPORTATION MANAGEMENT IMPROVEMENTS			2,000,000
		M240	TRANSPORTATION MANAGEMENT IMPROVEMENTS			1,600,000
	7,000,000	L230	US 13, PHILADELPHIA PIKE, CLAYMONT TRANSPORTATION PLAN IMPLEMENTATION	CONS		
T201011303		M001	US 301, GARVEE DEBT SERVICE	DEBT		10,986,513
	3,600,000	L230	WASHINGTON STREET NEW CASTLE	UNAC		1,200,000
T200201104		L23E	WASHINGTON STREET NEW CASTLE	STIP MOD	ADDED 1/16	409,480
T200201104		L23E	WASHINGTON STREET NEW CASTLE	STIP MOD	ADDED 1/30	215,056
T200201104		M230	WASHINGTON STREET NEW CASTLE	STIP MOD	ADDED 8/6/14	732,149
	(5,000,000)		RELEASES			(249,274)
			RELEASES			(331,587)
		L24E	SR 9, DELAWARE AVENUE	ROW		600,000
	-	L24E	SR 9, NEW CASTLE AVE., 3RD STREET TO HEALD STREET	PE		800,000
	400,000	L230	SR 2 ELKTON ROAD - CASHO MILL ROAD TO DELAWARE AVENUE	UNAC		5,000,000
	19,000,000	L230	SR 2 ELKTON ROAD - MD LINE TO CASHO MILL RD	UNAC		
T200401102	3,600,000	M230	SR 2, SOUTH UNION STREET FROM RAILROAD BRIDGE TO SYCAMORE STREET, WILMINGTON	CONVERT		2,141,778
T200401102	900,000	L230	SR 2, SOUTH UNION STREET FROM RAILROAD BRIDGE TO SYCAMORE STREET,	CONVERT		535,444

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	PROGRAM FEDERAL FUNDS	APPORT CODE	PROJECT TITLE	REASON	STIP	FED $ AUTH
			WILMINGTON TOLL CREDITS			
		L23E	SR141 AND COMMONS BOULEVARD INTERSECTION IMPROVEMENTS	PE	2/18 MOD to FY13	440,000
	2,790,000	L010	SR141/I-95 INTERCHANGE	PE		480,000
T200809003		L05E	SR1/I-95 INTERCHANGE	CONVERT	ADDED 10/2 from STIP MOD	1,993,840
T200809003		M001	SR1/I-95 INTERCHANGE	STIP MOD	ADDED 2/26	1,224,335
	6,800,000	L05E	I- 95/US202 INTERCHANGE	CONVERT	Updated 7/10/14	2,620,371
	2,000,000	L230	I- 95/US202 INTERCHANGE	CONVERT		
T200510602		M001	I- 95/US202 INTERCHANGE	STIP MOD	ADDED 2/24	674,908
T201409001		M001	LIGHTING REPLECEMENT, INTERSTATE, OPEN END, FY14-FY17	STIP MOD	ADDED 1/28	125,000
T200411901		M001	US 40, PULASKI HIGHWAY & SR 72, WRANGLE HILL ROAD (INCLUDES DEL LAWS ROAD INTERSECTION)	PE	STIP MOD 9/11/14	158,023
	5,600,000	M230	US 40, PULASKI HIGHWAY & SR 72, WRANGLE HILL ROAD (INCLUDES DEL LAWS ROAD INTERSECTION)	ROW		3,000,000
T200669001		L400	C & D CANAL	STIP MOD	ADDED 11/15	59,283

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T200201104	L23E	WASHINGTON STREET, NEW CASTLE	UTILITY INCREASE	324	11/21	11/25	80,000	80,000
T200201104	L23E	WASHINGTON STREET, NEW CASTLE	CONT INCREASE	STIP MOD	1/15	1/16	409,480	409,480
T200201104	L23E	WASHINGTON STREET, NEW CASTLE	CE INCREASE	STIP MOD	2/4	2/5	215,056	215,056
T200201104	H230	WASHINGTON STREET, NEW CASTLE	CE INCREASE		3/24	3/25	25,080	25,080
T200201104	LS4E	WASHINGTON STREET, NEW CASTLE	RAILROAD	STIP MOD	6/11	6/11	195,018	195,018
T200201104	M230	WASHINGTON STREET, NEW CASTLE	CE/CONT INCREASE	STIP MOD	8/26	8/28	429,960	429,960
T200201104	M240	WASHINGTON STREET, NEW CASTLE	CE/CONT INCREASE	STIP MOD	8/26	8/28	302,190	302,190
T200201501	LY30	POMEROY BRANCH, PEDESTRIAN AND BICYCLE PATH	RELEASE		9/17	9/17	(13,828)	(13,828)
T200201501	L23E	POMEROY BRANCH, PEDESTRIAN AND BICYCLE PATH	RELEASE		9/17	9/17	(217,585)	(217,585)
T200204703	Q400	DELTRAC STATEWIDE INITIATIVES, 2003-2008	RELEASE		10/17	10/17	(28,547)	(28,547)
T200207414	H100	BR 1-137 ON N236A, FOXHILL LANE OVER RED CLAY CREEK AND ROLLING MILL ROAD RETAINING WALL	RELEASE		10/21	10/22	(13,711)	(13,711)

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T200301901	33D0	NEWARK TRANSIT HUB	RELEASE		10/25	10/28	(1,911)	(1,911)
T200301901	Q240	NEWARK TRANSIT HUB	RELEASE		10/25	10/28	(195)	(195)
T200311902	L230	US 40, BEAR-GLASGOW BUS STOP IMPROVEMENTS	RELEASE		2/10	2/10	(13,306)	(13,306)
T200350038	Q050	US 301, WEIGH STATION AND INSPECTION FACILITY	RELEASE		10/17	10/17	(0)	(0)
T200350038	L050	US 301, WEIGH STATION AND INSPECTION FACILITY	RELEASE		10/17	10/17	(70,952)	(70,952)
T200401102	L23E	SR 2, SOUTH UNION STREET FROM RAILROAD BRIDGE TO SYCAMORE STREET, WILMINGTON	TRAFFIC		12/9	12/10	47,243	47,243
T200401102	L230	SR 2, SOUTH UNION STREET FROM RAILROAD BRIDGE TO SYCAMORE STREET, WILMINGTON	CONVERT		3/12	3/13	859,083	859,083
T200401102	L23E	SR 2, SOUTH UNION STREET FROM RAILROAD BRIDGE TO SYCAMORE STREET, WILMINGTON	CONVERT		3/12	3/13	1,796,673	1,796,673
T200410301	L23E	SR4, CHRISTINA PARKWAY FROM SR 2, ELKTON ROAD TO SR 896, SOUTH COLLEGE AVENUE, NEWARK	PE	302	1/6	1/7	185,931	185,931
T200410604	L230	SR 141, KIRKWOOD HIGHWAY TO FAULKLAND ROAD	RELEASE		1/16	1/16	(1,511,489)	(1,511,489)
T200410604	L23E	SR 141, KIRKWOOD HIGHWAY TO FAULKLAND ROAD	RELEASE		1/16	1/16	(3,124)	(3,124)
T200411901	M001	US40/SR72 INTERSECTION IMPROVEMENTS	PE INCRESE	555	9/16	9/17	158,023	158,023
T200501001	Q280	HIGHWAY SAFETY IMPROVEMENT PROGRAM, 2005	RELEASE		11/26	11/27	(8,097)	(8,097)
T200504104	L050	BOYDS CORNER INTERSECTION IMPROVEMENTS	RELEASE		2/26	2/27	(421,363)	(421,363)
T200504104	L050	BOYDS CORNER INTERSECTION IMPROVEMENTS	CONVERT		3/6	3/7	424,945	424,945
T200504104	L050	BOYDS CORNER INTERSECTION IMPROVEMENTS	RELEASE		4/1	4/2	(23,073)	(23,073)
T200504110	M230	HSIP NCC, N54, HOWELL SCHOOL ROAD, SR 896 TO SR 71	UTILITIES	STIP MOD	7/30	8/4	83,161	83,161
T200509007	LY20	I-95 MAINLINE WIDENING (FEDERAL DEMO#4)	RELEASE		10/29	10/29	(70)	(70)
T200510602	M001	I-95 & US 202 INTERCHANGE	CONT INCREASE	STIP MOD	2/24	2/24	674,908	674,908
T200510602	M001	I-95 & US 202 INTERCHANGE	CONVERT		3/12	3/13	5,000,000	5,000,000
T200510602	L050	I-95 & US 202 INTERCHANGE	CE INCREASE		3/25	3/25	43,184	43,184
T200510602	L050	I-95 & US 202 INTERCHANGE	CE ADJUSTMENT		4/11	4/14	(0)	(0)
T200510602	L050	I-95 & US 202 INTERCHANGE	CONT INCREASE	STIP MOD	4/16	4/17	396,897	396,897
T200510602	M001	I-95 & US 202 INTERCHANGE	CE INCREASE	STIP MOD	5/2	5/6	433,963	433,963
T200510602	M001	I-95 & US 202 INTERCHANGE	CE INCREASE	STIP MOD	5/15	5/19	78,036	78,036
T200510602	L050	I-95 & US 202 INTERCHANGE	CONVERT	233	6/10	6/10	179,738	179,738
T200510602	L05E	I-95 & US 202 INTERCHANGE	CONVERT	233	6/10	6/10	10,572	10,572
T200510602	M001	I-95 & US 202 INTERCHANGE	CONVERT	233	6/10	6/10	1,809,690	1,809,690
T200510602	M001	I-95 & US 202 INTERCHANGE	CE INCREASE	233	6/10	6/10	291,710	291,710
T200510602	M001	I-95 & US 202 INTERCHANGE	CONVERT	233	9/25	9/25	146,781	146,781
T200511001	M001	SR 1 WIDENING, SR273 TO THE ROTH BRIDGE	PE	251	8/25	8/25	4,800,000	4,800,000

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T200512102	M230	CHRISTINA RIVER BRIDGE AND APPROACHES	PE INCREASE	340	8/1	8/5	900,000	900,000
T200520012	L220	UNION PARK GARDENS STREETSCAPE IMPROVEMENTS	RELEASE		12/31	12/31	(10,610)	(10,610)
T200520012	H220	UNION PARK GARDENS STREETSCAPE IMPROVEMENTS	RELEASE		12/31	12/31	(1)	(1)
T200520012	Q220	UNION PARK GARDENS STREETSCAPE IMPROVEMENTS	RELEASE		12/31	12/31	(14,564)	(14,564)
T200600501	LS40	BLACKBIRD FOREST ROAD (N471) RAILROAD CROSSING IMPROVEMENT	RELEASE		2/11	2/11	(35,078)	(35,078)
T200600501	H270	BLACKBIRD FOREST ROAD (N471) RAILROAD CROSSING IMPROVEMENT	RELEASE		2/11	2/11	(303)	(303)
T200601102	L230	SR 72, MCCOY ROAD TO SR 71	PE		12/24	12/30	23,200	23,200
T200601102	L230	SR 72, MCCOY ROAD TO SR 71	PE INCRESE		1/28	1/30	160,800	160,800
T200602309	H970	BRANDYWINE VALLEY SCENIC BYWAY	RELEASE		10/17	10/17	(920)	(920)
T200607102	L1C0	BR 1-234 ON SR 2 OVER MILL CREEK, EAST OF NEWARK	RELEASE		5/9	5/9	(8,000)	(8,000)
T200650021	L050	WETLAND MITIGATION COMPLIANCE ACTIVITIES	RELEASE		12/18	12/19	(48,628)	(48,628)
T200650021	L240	WETLAND MITIGATION COMPLIANCE ACTIVITIES	RELEASE		12/18	12/19	(9,600)	(9,600)
T200650021	Q050	WETLAND MITIGATION COMPLIANCE ACTIVITIES	RELEASE		12/18	12/19	(92,307)	(92,307)
T200669001	L400	C & D CANAL RECREATIONAL TRAIL	CE INCREASE	STIP MOD	11/22	11/25	59,283	59,283
T200690106	L050	SIGN STRUCTURE, HIGH MAST LIGHTING & INSPECTIONS STATEWIDE	RELEASE		2/21	2/24	(390,287)	(390,287)
T200700501	LS50	SR 41 (N237) RAILROAD CROSSING IMPROVEMENTS	RELEASE		2/26	2/27	(19,004)	(19,004)
T200707401	HY20	BR 1-651 ON NEWPORT ROAD OVER RAILROAD CROSSING WILMINGTON & MARSHALLTON	RELEASE		5/29	6/2	(41,146)	(41,146)
T200707401	LY20	BR 1-651 ON NEWPORT ROAD OVER RAILROAD CROSSING WILMINGTON & MARSHALLTON	RELEASE		5/29	6/2	(310,058)	(310,058)
T200707401	L1C0	BR 1-651 ON NEWPORT ROAD OVER RAILROAD CROSSING WILMINGTON & MARSHALLTON	RELEASE		5/29	6/2	(563)	(563)
T200707401	L1CE	BR 1-651 ON NEWPORT ROAD OVER RAILROAD CROSSING WILMINGTON & MARSHALLTON	RELEASE		5/29	6/2	(74,814)	(74,814)
T200707401	L1CE	BR 1-651 ON NEWPORT ROAD OVER RAILROAD CROSSING WILMINGTON & MARSHALLTON	RELEASE		6/24	6/25	(61,448)	(61,448)
T200707404	M001	BR 1-488S ON N001 US13 OVER BLACKBIRD CREEK	PE		9/4	9/8	44,700	44,700
T200720005	L220	GREATER BRANDYWINE VILLAGE STREETSCAPE IMPROVEMENTS PHASE IV	RELEASE		2/17	2/18	(32,235)	(32,235)
T200720016	L220	MILLTOWN ROAD SIDEWALK IMPROVEMENTS	RELEASE		2/3	2/3	(93,919)	(93,919)
T200720016	L22E	MILLTOWN ROAD SIDEWALK IMPROVEMENTS	RELEASE		2/3	2/3	(1,604)	(1,604)

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T200751201	L23E	NORTHEAST CORRIDOR IMPROVEMENTS YARD TO RAGAN, CIVIL, STRUCTURAL	CE INCREASE	472	2/19	2/20	45,875	45,875
T200766062	L560	MAROPS PHASE II-POOLEDE FUND STUDY	RELEASE		3/26	3/26	(15,000)	(15,000)
T200769004	LU30	SAFE ROUTES TO SCHOOL, NON-INFRASTRUCTURE ITEMS, STATEWIDE	RELEASE		2/27	2/27	(19,312)	(19,312)
T200769005	LU30	SAFE ROUTES TO SCHOOL, MANAGEMENT SERVICES	RELEASE		2/27	2/27	(69,717)	(69,717)
T200800503	LS50	OLD BALTIMORE PIKE (N026) RAILROAD CROSSING IMPROVEMENT	RELEASE		2/27	2/27	(6,676)	(6,676)
T200800504	LS50	WRANGLE HILL ROAD (N356) RAILROAD CROSSING IMPROVEMENT	RELEASE		2/17	2/18	(17,865)	(17,865)
T200800707	LS30	HSIP NCC, SILVERSIDE ROAD AND MARSH ROAD	RELEASE		4/1	4/2	(102,447)	(102,447)
T200800707	LS3E	HSIP NCC, SILVERSIDE ROAD AND MARSH ROAD	RELEASE		4/1	4/2	(24,896)	(24,896)
T200800710	LS30	HSIP NCC, SR 7 AND VALLEY ROAD INTERSECTION IMPROVEMENTS	RELEASE		10/25	10/28	(6,468)	(6,468)
T200800712	LS30	HSIP NCC, SR 2 AND UPPER PIKE CREEK ROAD INTERSECTION IMPROVEMENTS	RELEASE		5/15	5/15	(146,324)	(146,324)
T200800714	MS30	HSIP NCC, SR 896 AND OLD CHESTNUT HILL ROAD INTERSECTION IMPROVEMENTS	UTILITIES		12/31	12/31	90,000	90,000
T200800714	MS30	HSIP NCC, SR 896 AND OLD CHESTNUT HILL ROAD INTERSECTION IMPROVEMENTS	ADVERTISE	STIP MOD	2/17	2/19	645,613	645,613
T200800714	LS30	HSIP NCC, SR 896 AND OLD CHESTNUT HILL ROAD INTERSECTION IMPROVEMENTS	ADVETISE	STIP MOD	2/17	2/19	534,641	534,641
T200800714	MS30	HSIP NCC, SR 896 AND OLD CHESTNUT HILL ROAD INTERSECTION IMPROVEMENTS	MAINTENANCE	STIP MOD	2/20	2/21	3,523	3,523
T200800714	MS30	HSIP NCC, SR 896 AND OLD CHESTNUT HILL ROAD INTERSECTION IMPROVEMENTS	AWARD		4/24	5/6	206,375	206,375
T200801001	LS30	HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) 2008, 2009, 2010	TRAFFIC		3/7	3/10	12,986	12,986
T200806109	L010	PAVEMENT & REHABILITATION, NORTH - IX, 2008	RELEASE		5/6	5/9	(7,213)	(7,213)
T200806111	L050	PAVEMENT & REHABILITATION, NORTH-XI, 2008	RELEASE		5/21	5/22	(8,325)	(8,325)
T200809001	LS30	HSIP NCC, I-95, N213 CARR ROAD & N3, MARSH ROAD INTERCHANGE IMPROVEMENTS	PE INCREASE		6/2	6/3	36,000	36,000
T200809003	M001	SR 1/I-95 INTERCHANGE	CONT INCREASE	STIP MOD	2/26	2/26	1,224,335	1,224,335
T200809003	L050	SR 1/I-95 INTERCHANGE	CONVERT		4/9	4/10	84,184	84,184
T200809003	H050	SR 1/I-95 INTERCHANGE	CONVERT		4/24	4/25	82,745	82,745

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T200809003	L050	SR 1/I-95 INTERCHANGE	CONVERT		4/24	4/25	506,032	506,032
T200809003	L05E	SR 1/I-95 INTERCHANGE	CONVERT		4/24	4/25	306,273	306,273
T200809003	M001	SR 1/I-95 INTERCHANGE	CONVERT		4/24	4/25	1,098,789	1,098,789
T200809003	M001	SR 1/I-95 INTERCHANGE	CONT INCREASE	STIP MOD	7/15	7/16	1,589,922	1,589,922
T200809002	H010	SR141/I95 INTERCHANGE (PLANNING STUDY)	RELEASE		10/25	10/28	(13,736)	(13,736)
T200820004	L220	BAYNARD BOULEVARD STREETSCAPE IMPROVEMENTS	RELEASE		1/8	1/9	(1,523)	(1,523)
T200820004	L22E	BAYNARD BOULEVARD STREETSCAPE IMPROVEMENTS	RELEASE		1/8	1/9	(173,134)	(173,134)
T200820005	L22E	MEETING HOUSE ROAD PEDESTRIAN IMPROVEMENTS	RELEASE		1/7	1/8	(62,478)	(62,478)
T200820005	L220	MEETING HOUSE ROAD PEDESTRIAN IMPROVEMENTS	RELEASE		1/7	1/8	(20,831)	(20,831)
T200866002	L560	STATEWIDE, RESEARCH FY2008	RELEASE		2/3	2/3	(207,774)	(207,774)
T200900701	LS30	HSIP NCC, SR 273 AT PRANGS LANE	RELEASE		1/31	1/31	(96,433)	(96,433)
T200900703	Q280	HSIP NCC, GREENBANK RD & ALBERTSON BLVD INTERSECTION IMPROVEMENTS	RELEASE		2/25	2/26	(77,153)	(77,153)
T200900703	L28R	HSIP NCC, GREENBANK RD & ALBERTSON BLVD INTERSECTION IMPROVEMENTS	RELEASE		2/25	2/26	(11,746)	(11,746)
T200900703	LS30	HSIP NCC, GREENBANK RD & ALBERTSON BLVD INTERSECTION IMPROVEMENTS	RELEASE		2/25	2/26	(26,336)	(26,336)
T200900704	H280	HSIP NCC, SR273, APPLEBY ROAD AND AIRPORT ROAD INTERSECTION IMPROVEMENTS	PE INCREASE	290	12/13	12/19	78,443	78,443
T200900704	L28R	HSIP NCC, SR273, APPLEBY ROAD AND AIRPORT ROAD INTERSECTION IMPROVEMENTS	PE INCREASE	290	12/13	12/19	11,557	11,557
T200906102	L050	PAVEMENT & REHABILITATION, NORTH II, 2009	RELEASE		5/13	5/14	(180)	(180)
T200906502	L050	SR1 JOINT SEALING, PHASE II, 2009	RELEASE		5/14	5/14	(171,232)	(171,232)
T200907401	L1C0	BR 1-026 AND 1-033, SCOUR COUNTERMEASURES	RELEASE		10/17	10/17	(48,425)	(48,425)
T200907401	L1CE	BR 1-026 AND 1-033, SCOUR COUNTERMEASURES	RELEASE		10/17	10/17	(26,714)	(26,714)
T200907403	L1C0	BR 1-501, 1-501A & 1-501B SR 141 VIADUCT OVER SR4	CE INCREASE	STIP MOD	12/16	12/17	150,064	150,064
T200907403	L1C0	BR 1-501, 1-501A & 1-501B SR 141 VIADUCT OVER SR4	CE INCREASE	STIP MOD	2/3	2/3	16,080	16,080
T200907403	L230	BR 1-501, 1-501A & 1-501B SR 141 VIADUCT OVER SR4	CONT INCREASE	STIP MOD	3/4	3/10	591,615	591,615
T200907406	L01R	INTERSTATE BRIDGE MAINTENANCE, NORTH	RELEASE		10/21	10/22	(70,882)	(70,882)
T200907406	L01E	INTERSTATE BRIDGE MAINTENANCE, NORTH	RELEASE		10/21	10/22	(128,712)	(128,712)
T200907408	C242	INTERSTATE BRIDGE MAINTENANCE, SOUTH (DESIGN)	RELEASE		10/17	10/17	(11)	(11)
T200907408	H010	INTERSTATE BRIDGE MAINTENANCE, SOUTH (DESIGN)	RELEASE		10/17	10/17	(10)	(10)
T200907410	L1C0	BR 1-501A, 1-501B ON SR 141, FIELD TESTING AND STRUCTURE ANALYSIS	RELEASE		5/15	5/15	(19,670)	(19,670)

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T200908302	L050	EPOXY PAVEMENT MARKINGS DISTRIC II 2009, 2010, 2011	RELEASE		12/20	12/23	(822)	(822)
T200920001	M300	CITY OF WILMINGTON 9TH STREET STREETSCAPE IMPROVEMENTS	ADVERTISE		12/2	12/3	296,540	296,540
T200920001	M301	CITY OF WILMINGTON 9TH STREET STREETSCAPE IMPROVEMENTS	ADVERTISE		12/2	12/3	42,550	42,550
T200920001	M300	CITY OF WILMINGTON 9TH STREET STREETSCAPE IMPROVEMENTS	AWARD		2/11	2/12	(14,324)	(14,324)
T200920002	L22E	PAPER MILL ROAD SIDEWALK IMPROVEMENTS	RELEASE	76	11/12	11/13	6,560	6,560
T200920002	L22E	PAPER MILL ROAD SIDEWALK IMPROVEMENTS	TRANSFER	76	11/20	11/20	11,841	11,841
T200920002	L22E	PAPER MILL ROAD SIDEWALK IMPROVEMENTS	CE INCREASE	76	12/13	12/17	22,000	22,000
T200920002	L220	PAPER MILL ROAD SIDEWALK IMPROVEMENTS	UTILITY INCREASE	76	4/28	5/6	26,000	26,000
T200920002	L220	PAPER MILL ROAD SIDEWALK IMPROVEMENTS	CE INCREASE	81	6/24	6/25	13,234	13,234
T200920002	L22E	PAPER MILL ROAD SIDEWALK IMPROVEMENTS	CE INCREASE	81	6/24	6/25	1,566	1,566
T200920002	Q220	PAPER MILL ROAD SIDEWALK IMPROVEMENTS	CE INCREASE	81	8/12	8/13	6,560	6,560
T200920007	L220	ST GEORGES STREETSCAPE IMPROVEMENTS	RELEASE		1/8	1/9	(3,297)	(3,297)
T200920007	L22E	ST GEORGES STREETSCAPE IMPROVEMENTS	RELEASE		1/8	1/9	(105,607)	(105,607)
T200920017	C240	NCC GREENWAY, INDUSTRIAL TRACK-PHASE I	RELEASE		12/4	12/4	(2,684)	(2,684)
T200950019	4L10	LITHIUM SUPPLY	RELEASE		12/27	12/30	(420)	(420)
T201000701	MS30	HSIP NCC, SR 71, OLD PORTER ROAD TO SR 7	PE INCREASE	296	12/2	12/3	45,000	45,000
T201000701	LS30	HSIP NCC, SR 71, OLD PORTER ROAD TO SR 7	PE INCREASE	296	3/24	3/25	22,500	22,500
T201000701	M240	HSIP NCC, SR 71, OLD PORTER ROAD TO SR 7	ROW	STIP MOD	9/15	9/22	396,900	396,900
T201000701	H240	HSIP NCC, SR 71, OLD PORTER ROAD TO SR 7	ROW	STIP MOD	9/15	9/22	353,100	353,100
T201001001	LS30	2010 HIGHWAY SAFETY IMPROVEMENT PROGRAMS	RELEASE		1/9	1/10	(231)	(231)
T201001001	LS30	2010 HIGHWAY SAFETY IMPROVEMENT PROGRAMS	RELEASE		2/18	2/18	(0)	(0)
T201001002	LS20	2010 HIGH RISK RURAL ROADS PROGRAM	RELEASE		2/27	2/27	(838)	(838)
T201004202	C200	WYOMING MILL ROAD REALIGNMENT, CONSTRUCTION	RELEASE		10/23	10/23	(217,646)	(217,646)
T201004202	LY20	WYOMING MILL ROAD REALIGNMENT, CONSTRUCTION	RELEASE		10/23	10/23	(309,848)	(309,848)
T201004801	L40E	RIDESHARE FY10-12	RELEASE		1/13	1/13	(339,302)	(339,302)
T201006104	C243	PAVEMENT & REHABILITATION, NORTH IV, 2010	RELEASE		10/17	10/17	(6)	(6)
T201006104	L24E	PAVEMENT & REHABILITATION, NORTH IV, 2010	RELEASE		10/17	10/17	(129,980)	(129,980)
T201006104	L24E	PAVEMENT & REHABILITATION, NORTH IV, 2010	RELEASE		10/24	10/28	(39,462)	(39,462)
T201006108	C240	PAVEMENT & REHABILITATION, NORTH VIII, 2010	RELEASE		10/23	10/23	(93,058)	(93,058)
T201006108	L00E	PAVEMENT & REHABILITATION, NORTH VIII, 2010	RELEASE		10/23	10/23	(23,579)	(23,579)
T201006109	L24E	PAVEMENT & REHABILITATION, NORTH IX, 2010	RELEASE		2/4	2/4	(8,000)	(8,000)

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201006109	L00E	PAVEMENT & REHABILITATION, NORTH IX, 2010	RELEASE		2/4	2/4	(313,268)	(313,268)
T201006301	L24E	PAVEMENT & REHABILITATION, SOPUTH II-I, 2010	CONT INCREASE		6/12	6/12	83,548	83,548
T201006302	L24E	PAVEMENT & REHABILITATION, SOUTH II-II, 2010	RELEASE		2/24	2/24	(254,566)	(254,566)
T201006302	L24E	PAVEMENT & REHABILITATION, SOUTH II-II, 2010	RELEASE		3/20	3/20	(997)	(997)
T201006306	C240	PAVEMENT & REHABILITATION, SOUTH II-VI, 2010	RELEASE		10/22	10/23	(82,090)	(82,090)
T201006306	L00E	PAVEMENT & REHABILITATION, SOUTH II-VI, 2010	RELEASE		10/22	10/23	(386,992)	(386,992)
T201007203	L110	PIPE REPLACEMENTS, KENT COUNTY	RELEASE		3/24	3/25	(165,425)	(165,425)
T201007405	L1CE	BR 1-687, 1-688, 1-693, SOUTH WALNUT ST, SOUTH MARKET ST AND FORTH ST OVER CHRISTINA RIVER	CE INCREASE		3/24	3/25	18,800	18,800
T201007405	L1CE	BR 1-687, 1-688, 1-693, SOUTH WALNUT ST, SOUTH MARKET ST AND FORTH ST OVER CHRISTINA RIVER	CE INCREASE	419	6/2	6/2	20,400	20,400
T201007406	L1CE	BRIDGE PAINTING, NORTH DISTRICT, 2012	RELEASE		2/17	2/18	(289,617)	(289,617)
T201007406	L1CE	BRIDGE PAINTING, NORTH DISTRICT, 2012	RELEASE		4/1	4/2	(602)	(602)
T201007407	M001	INTERSTATE STRUCTURE MAINTENANCE, OPEN-END, FY12-FY13	CONT INCREASE	STIP MOD	3/20	3/20	220,627	220,627
T201007407	M001	INTERSTATE STRUCTURE MAINTENANCE, OPEN-END, FY12-FY13	CONT INCREASE	STIP MOD	3/27	3/27	450,000	450,000
T201007407	M001	INTERSTATE STRUCTURE MAINTENANCE, OPEN-END, FY12-FY13	CONT INCREASE	STIP MOD	8/11	8/13	679,500	679,500
T201009002	M001	ROAD A/SR7 IMPROVEMENTS	PE		12/3	12/3	1,500,000	1,500,000
T201009004	L00E	SR 1/ I-95 INTERCHANGE-CHRISTIANA MALL ROAD BRIDGE	TRANSFER	249	12/16	12/17	(674,908)	(674,908)
T201009004	L23E	SR 1/ I-95 INTERCHANGE-CHRISTIANA MALL ROAD BRIDGE	TRANSFER	249	12/18	12/19	(46,400)	(46,400)
T201011303	M001	US301 GARVEE DEBT SERVICE	CONVERSION	255	10/16	10/16	10,986,513	10,986,513
T201020001	L22E	6TH STREET ENHANCEMENTS, CITY OF WILMINGTON	CONT INCREASE	81	1/24	1/27	3,585	3,585
T201020001	L22E	6TH STREET ENHANCEMENTS, CITY OF WILMINGTON	CONT INCREASE	81	7/15	7/16	3,946	3,946
T201020003	L22E	SHIPLEY STREET STREETSCAPE IMPROVEMENTS, CITY OF WILMINGTON	RELEASE	76	10/21	10/23	(103,763)	(103,763)
T201020003	L220	SHIPLEY STREET STREETSCAPE IMPROVEMENTS, CITY OF WILMINGTON	RELEASE	76	10/21	10/23	(665)	(665)
T201020004	L22E	GREENHILL AVENUE LANDSCAPE IMPROVEMENTS, CITY OF WILMINGTON	CONT INCREASE	76	10/22	10/23	1,280	1,280
T201020005	L22E	SOUTH PARK DRIVE LIGHTING IMPROVEMENTS, CITY OF WILMINGTON	RELEASE	76	10/21	10/23	(159,736)	(159,736)
T201020006	Q220	BAYARD SQUARE ENHAHCEMENTS, CITY OF WILMINGTON	CONT INCREASE	81	12/17	12/17	18,000	18,000

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201056001	L240	MOTOR FUEL TAX COMPLIANCE AND ANTI-TAX EVASION ACTIVITIES 2010	RELEASE		2/5	2/5	(294)	(294)
T201063002	L24E	SITE VISITS FOR AUDITS	RELEASE		2/26	2/27	(10)	(10)
T201066001	L550	SPR PLANNING AND TRAFFIC PROGRAM 2010	RELEASE		5/20	5/21	(391,005)	(391,005)
T201066001	L550	SPR PLANNING AND TRAFFIC PROGRAM 2010	RELEASE		5/23	5/23	(17,490)	(17,490)
T201100101	LS3E	US 13, US 40 TO SR 273 LIGHTING INSTALLATION	RELEASE		2/27	2/27	(13,666)	(13,666)
T201100202	LS30	CRASH ANALYSIS REPORTING SYSTEM	RELEASE		2/25	2/26	(18,216)	(18,216)
T201100501	LS30	2011 HIGHWAY-RAIL GRADE CROSSING SAFETY PROGRAM-STUDIES	RELEASE		2/26	2/27	(16,263)	(16,263)
T201100502	LS5E	SR 100 MONTCHANIN RD (N225) RAILROAD CROSSING IMPROVEMENTS	RELEASE		6/19	6/20	(165,949)	(165,949)
T201100506	LS5E	STATEWIDE RAILROAD CROSSING REPAIR II, 2011	AWARD	93	1/24	1/27	45	45
T201100506	LS50	STATEWIDE RAILROAD CROSSING REPAIR II, 2011	RR INCREASE	93	2/20	2/21	60,869	60,869
T201100506	LS50	STATEWIDE RAILROAD CROSSING REPAIR II, 2011	CE INCREASE	93	4/16	4/17	25,039	25,039
T201100506	LS5E	STATEWIDE RAILROAD CROSSING REPAIR II, 2011	RR INCREASE	93	7/17	7/17	100,000	100,000
T201104701	L24R	FY11 DELTRAC PROJECTS STATE-WIDE SUPPORT	RELEASE		6/23	6/25	(48,702)	(48,702)
T201106102	L23E	PAVEMENT & REHABILITATION, NORTH II, 2011	RELEASE		2/19	2/20	(171,250)	(171,250)
T201106103	LS5E	PAVEMENT & REHABILITATION, NORTH III, 2011	RELEASE		2/17	2/18	(247,500)	(247,500)
T201106103	L24E	PAVEMENT & REHABILITATION, NORTH III, 2011	RELEASE		2/17	2/18	(91,783)	(91,783)
T201107401	M001	BR 1-665N AND BR 1-665S CARRYING US 13 OVER BAYLOR BLVD	CE INCREASE	STIP MOD	5/14	5/14	561,636	561,636
T201120003	L22E	TOWN OF ELSMERE PEDESTRAIN AND BICYCLE IMPROVEMENTS	PE INCREASE	76	10/22	10/23	20,720	20,720
T201120003	L22R	TOWN OF ELSMERE PEDESTRAIN AND BICYCLE IMPROVEMENTS	ADVERTISE	81	9/19	9/22	426,629	426,629
T201120003	Q220	TOWN OF ELSMERE PEDESTRAIN AND BICYCLE IMPROVEMENTS	ADVERTISE	81	9/19	9/22	27,429	27,429
T201120004	L22E	DELAWARE AVENUE STREETSCAPE IMPROVEMENTS	PE INCREASE	81	1/15	1/16	5,160	5,160
T201120006	M301	GREENHILL AVENUE STREETSCAPE IMPROVEMENTS	AWARD	76	11/14	11/15	(10,861)	(10,861)
T201120006	M301	GREENHILL AVENUE STREETSCAPE IMPROVEMENTS	CE INCREASE	81	1/15	1/16	10,000	10,000
T201120006	M300	GREENHILL AVENUE STREETSCAPE IMPROVEMENTS	CE INCREASE	81	6/24	6/25	112,300	112,300
T201120006	M300	GREENHILL AVENUE STREETSCAPE IMPROVEMENTS	CONT INCREASE	81	9/17	9/17	63,000	63,000
T201120012	L22E	MILLER ROAD STREETSCAPE IMPROVEMENTS	PE	81	1/23	1/23	19,576	19,576
T201120015	M301	VALLEY ROAD PEDESTRIAN IMPROVEMENTS	ADVERTISE	81	1/13	1/16	636,133	636,133
T201120015	M300	VALLEY ROAD PEDESTRIAN IMPROVEMENTS	AWARD	81	4/2	4/4	5,128	5,128

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201120015	M301	VALLEY ROAD PEDESTRIAN IMPROVEMENTS	AWARD	81	4/2	4/4	95,446	95,446
T201120015	M300	VALLEY ROAD PEDESTRIAN IMPROVEMENTS	CE INCREASE	81	4/29	5/1	95,000	95,000
T201150301	L40R	PARATRANSIT REPLACEMENT BUSES FY12 (65)	RELEASE		12/23	12/24	(278,522)	(278,522)
T201150301	L40R	PARATRANSIT REPLACEMENT BUSES FY12 (65)	RELEASE		2/18	2/18	(0)	-
T201160001	H480	DBE/SS WORKSHOPS & TRAINING	RELEASE		3/26	3/26	(147,935)	(147,935)
T201160002	L48E	DBE SUPPORTIVE SERVICES ACTIVITIES-FED FISCAL YR 2010	RELEASE		3/25	3/25	(160,248)	(160,248)
T201200102	M001	HEP, SR 7 AT SKYLINE DRIVE/MERMAID STONEY BATTER ROAD INTERSECTION IMPROVEMENTS	ADVERTISE	304	11/22	11/25	859,502	859,502
T201200102	Q050	HEP, SR 7 AT SKYLINE DRIVE/MERMAID STONEY BATTER ROAD INTERSECTION IMPROVEMENTS	AWARD	STIP MOD	2/10	2/10	92,307	92,307
T201200102	H050	HEP, SR 7 AT SKYLINE DRIVE/MERMAID STONEY BATTER ROAD INTERSECTION IMPROVEMENTS	AWARD	STIP MOD	2/10	2/10	15,532	15,532
T201200104	M001	US 40 AND SR7 INTERSECTION IMPROVEMENTS	PE	318	1/6	1/7	50,000	50,000
T201200106	MS30	HSIP NCC, SALEM CHURCH ROAD AT CHRISTIANA HIGH SCHOOL	ROW	284	12/10	12/12	9,000	9,000
T201200106	M240	HSIP NCC, SALEM CHURCH ROAD AT CHRISTIANA HIGH SCHOOL	ADVERTISE	284	2/17	2/19	258,164	258,164
T201200106	M240	HSIP NCC, SALEM CHURCH ROAD AT CHRISTIANA HIGH SCHOOL	AWARD	28/4	4/21	4/24	31,713	31,713
T201200107	MS30	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	ADVERTISE	STIP MOD	12/13	12/17	956,628	956,628
T201200107	MS30	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	AWARD	306	2/20	2/21	(1,085)	(1,085)
T201201001	LS3E	FY2012 HIGHWAY SAFETY IMPROVEMENT PROGRAM-STUDIES	RELEASE		2/27	2/27	(8,707)	(8,707)
T201201002	LS20	2010 HIGH RISK RURAL ROADS PROGRAM-TRAFFIC CONTROL DEVICE IMPROVEMENTS FY12	RELEASE		2/27	2/27	(878)	(878)
T201201003	LS20	FY2012 HIGH RISK RURAL ROADS PROGRAM-STUDIES	RELEASE		3/25	3/25	(12)	(12)
T201204702	L24E	FY12 DELTRAC PROJECTS STATE-WIDE SUPPORT	RELEASE		4/8	4/8	(98,983)	(98,983)
T201206101	M230	PAVEMENT & REHABILITATION, NORTH I, 2012	AWARD	84	12/20	12/30	(1,188,633)	(1,188,633)
T201206104	L23E	PAVEMENT & REHABILITATION, NORTH IV, 2012	CE INCREASE	84	12/18	12/19	44,500	44,500
T201206105	M230	PAVEMENT & REHABILITATION, NORTH V, 2012	ADVERTISE	84	8/6	8/11	3,000,000	3,000,000
T201206106	Q240	PAVEMENT & REHABILITATION, NORTH VI, 2012	ADVERTISE	84	4/21	4/28	27,569	27,569
T201206106	M230	PAVEMENT & REHABILITATION, NORTH VI, 2012	ADVERTISE	84	4/21	4/28	3,108,673	3,108,673

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201206106	M240	PAVEMENT & REHABILITATION, NORTH VI, 2012	ADVERTISE	84	4/21	4/28	2,699,382	2,699,382
T201206106	L00E	PAVEMENT & REHABILITATION, NORTH VI, 2012	ADVERTISE	84	4/21	4/28	1,398,747	1,398,747
T201206106	L23E	PAVEMENT & REHABILITATION, NORTH VI, 2012	ADVERTISE	84	4/21	4/28	691,327	691,327
T201206106	L240	PAVEMENT & REHABILITATION, NORTH VI, 2012	ADVERTISE	84	4/21	4/28	418,495	418,495
T201206106	L24E	PAVEMENT & REHABILITATION, NORTH VI, 2012	ADVERTISE	84	4/21	4/28	669,184	669,184
T201206106	M240	PAVEMENT & REHABILITATION, NORTH VI, 2012	AWARD	84	6/24	6/25	(87,252)	(87,252)
T201206106	M230	PAVEMENT & REHABILITATION, NORTH VI, 2012	AWARD	84	6/24	6/25	(453,944)	(453,944)
T201006107	L010	PAVEMENT & REHABILITATION, NORTH VII, 2010	RELEASE		5/28	5/28	(173,787)	(173,787)
T201206109	M001	PAVEMENT & REHABILITATION, NORTH IX, 2012	AWARD	79	10/17	10/17	(111,760)	(111,760)
T201206109	M001	PAVEMENT & REHABILITATION, NORTH IX, 2012	TRAFFIC INCREASE	84	7/10	7/10	371,187	371,187
T201206110	M001	PAVEMENT & REHABILITATION, NORTH X, 2012	ADVERTISE	85	4/1	4/2	6,371,640	6,371,640
T201206110	M001	PAVEMENT & REHABILITATION, NORTH X, 2012	AWARD	85	6/4	6/5	(234,618)	(234,618)
T201206111	L23E	PAVEMENT & REHABILITATION, NORTH XI, 2012	CE INCREASE	79	10/24	10/29	10,000	10,000
T201206111	H230	PAVEMENT & REHABILITATION, NORTH XI, 2012	CE INCREASE	84	4/15	4/15	38,284	38,284
T201206111	L23E	PAVEMENT & REHABILITATION, NORTH XI, 2012	CE INCREASE	84	4/15	4/15	156,716	156,716
T201206112	M001	PAVEMENT & REHABILITATION, NORTH XII, 2012	AWARD	79	10/17	10/17	(12,849)	(12,849)
T201206115	M230	PAVEMENT & REHABILITATION, NORTH XV 2012	ADVERTISE	84	12/18	12/19	3,050,971	3,050,971
T201206115	M230	PAVEMENT & REHABILITATION, NORTH XV 2012	AWARD	84	3/12	3/13	(130,216)	(130,216)
T201206116	L050	SR1 JOINT SEALING, NEW CASTLE COUNTY, FY2012	CE INCREASE	84	2/6	2/6	80,000	80,000
T201207002	M240	INSPECTION OF OVERHEAD STRUCTURES, FY12-16	PE INCREASE	74	11/20	11/20	720,000	720,000
T201207002	M240	INSPECTION OF OVERHEAD STRUCTURES, FY12-16	PE INCREASE	72	1/24	1/27	53,589	53,589
T201207101	M233	BR 1-159 ON JAMES STREET OVER CHRISTINA RIVER	ROW	STIP MOD	10/24	10/28	184,000	184,000
T201207101	L11E	BR 1-159 ON JAMES STREET OVER CHRISTINA RIVER	PE INCREASE	373	11/12	11/13	76,000	76,000
T201207101	L110	BR 1-159 ON JAMES STREET OVER CHRISTINA RIVER	PE INCREASE	373	5/2	5/6	280,000	280,000
T201207102	M240	BR 1-274 ON N312 WEDGEWOOD ROAD OVER EAST BRANCH CHRISTINA CREEK	ADVERTISE	385	12/23	12/30	1,017,306	1,017,306
T201207102	M240	BR 1-274 ON N312 WEDGEWOOD ROAD OVER EAST BRANCH CHRISTINA CREEK	AWARD	385	2/27	2/27	13,743	13,743
T201207102	M240	BR 1-274 ON N312 WEDGEWOOD ROAD OVER EAST BRANCH CHRISTINA CREEK	AWARD	385	3/6	3/7	(199,999)	(199,999)
T201207102	L1CE	BR 1-274 ON N312 WEDGEWOOD ROAD OVER EAST BRANCH CHRISTINA CREEK	ROW	577	8/15	8/21	3,825	3,825
T201207103	L1CE	BR 1-543 ON N213 CARR ROAD OVER SHELLPOT CREEK	PE	401	12/2	12/2	37,000	37,000
T201207201	L11E	BR 2-114C ON K114 TODDS CHAPEL ROAD OVER TOMAHAWK BRANCH	CE INCREASE	577	5/15	5/19	2,610	2,610

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201207401	L11E	BR 1-032 ON N203 FOULK ROAD OVER SOUTH BRANCH NAAMANS CREEK	PE INCREASE	367	11/22	11/25	1,862	1,862
T201207401	L1CE	BR 1-032 ON N203 FOULK ROAD OVER SOUTH BRANCH NAAMANS CREEK	ROW	367	7/24	7/30	30,000	30,000
T201207402	M001	INTERSTATE BRIDGE MAINTENANCE, SOUTH (ADVERTISEMENT & CONSTRUCTION)	CONT INCREASE	STIP MOD	6/4	6/10	1,543,100	1,543,100
T201207402	M001	INTERSTATE BRIDGE MAINTENANCE, SOUTH (ADVERTISEMENT & CONSTRUCTION)	CE INCREASE	423	8/19	8/22	104,000	104,000
T201208301	M001	EPOXY PAVEMENT MARKINGS (DISTRICT I) NCC 2012, 2013, 2014	CONT INCREASE	87	7/10	7/11	912,000	912,000
T201220007	L220	RODNEY SQUARE BEAUTIFICATION PHASE II	PE	81	2/10	2/11	130,000	130,000
T201220008	L220	ST. GEORGES STREETSCAPE IMPROVEMENTS PHASE II	PE	81	2/3	2/3	95,000	95,000
T201230005	L40E	NORTHERN DELAWARE GREENWAY-TALLEY ROAD SECTION	CONT INCREASE	330	12/10	12/10	225,741	225,741
T201230005	L40E	NORTHERN DELAWARE GREENWAY-TALLEY ROAD SECTION	CE INCREASE	330	1/6	1/7	163,679	163,679
T201230005	L40E	NORTHERN DELAWARE GREENWAY-TALLEY ROAD SECTION	UTILITIES	330	6/2	6/2	27,080	27,080
T201230005	M400	NORTHERN DELAWARE GREENWAY-TALLEY ROAD SECTION	CONT INCREASE	330	8/4	8/5	280,744	280,744
T201230007	L40E	OPEN END CONSTRUCTION SERVICES, STATEWIDE TRAILS, NCC	TRAFFIC	114	11/12	11/13	112,000	112,000
T201247101	L24E	BR 1-212 ON N322 UPPER PIKE CREEK ROAD, EMERGENCY SCOUR REPAIRS	RELEASE		3/13	3/18	(45,403)	(45,403)
T201260001	L48E	DBE/SS PROGRAM ACTIVITIES FFY 2012	RELEASE		3/26	3/27	(145,112)	(145,112)
T201263702	H940	OJT/SS PROGRAM ACTIVITIES FFY 2012	RELEASE		3/31	3/31	(29,147)	(29,147)
T201263702	L94E	OJT/SS PROGRAM ACTIVITIES FFY 2012	RELEASE		3/31	3/31	(128,379)	(128,379)
T201230007	L400	OPEN END CONSTRUCTION SERVICES, STATEWIDE TRAILS, NCC	CE		5/1	5/2	28,000	28,000
T201300101	M240	HEP NCC, US40 AT GLASGOW AVENUE	ROW	270	2/20	2/25	100,000	100,000
T201301005	LS20	DE RUMBLE STRIPS BROCHURE	RELEASE		3/19	3/20	(3,598)	(3,598)
T201302301	H970	BRANDYWINE HOME TOWN OVERLAY PLAN	PLANNING	106	10/21	10/23	920	920
T201302401	L97E	BYWAY SAFETY/WAYFINDING STUDIES	PLANNING	111	6/3	6/5	89,250	89,250
T201302401	L97E	BYWAY SAFETY/WAYFINDING STUDIES	PLANNING	STIP AMEND	9/18	9/18	182,150	182,150
T201302502	L97E	ROUTE 9 SCENIC OVERLOOKS	RELEASE		3/31	3/31	(320,000)	(320,000)
T201304601	M232	PARK AVENUE RELOCATION	PE INCREASE	STIP MOD	11/22	11/25	200,000	200,000
T201304601	M232	PARK AVENUE RELOCATION	PE INCREASE	STIP MOD	12/5	12/5	800	800

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201304801	L40E	RIDESHARE FY13-15	PD	160	10/23	10/23	320,000	320,000
T201304801	L40E	RIDESHARE FY13-15	PD INCREASE	176	12/24	12/24	40,000	40,000
T201306701	M230	MICROSURFACING B, NORTH DISTRICT, FY 13-FY14	CONT INCREASE	84	6/5	6/10	300,000	300,000
T201307002	L1CE	BRIDGE DESIGN TRAINING PROGRAM	PE INCREASE	76	12/4	12/5	110,000	110,000
T201307103	L11R	BR 1-229B ON SR2 KIRKWOOD HIGHWAY OVER WHITE CLAY CREEK	RELEASE		3/19	3/19	(280,000)	(280,000)
T201307401	L1CE	BR 1-393 ON SR299 MAIN STREET OVER APPOQUINIMINK RIVER	PE INCREASE	391	11/20	11/20	12,000	12,000
T201309002	M001	CAVALIERS MITIGATION	PE	225	4/30	5/1	28,000	28,000
T201309003	M001	ROAD A/SR7/CENTER BLVD INTERSECTION IMPROVEMENTS	AWARD	243	12/13	12/17	92,625	92,625
T201309003	M001	ROAD A/SR7/CENTER BLVD INTERSECTION IMPROVEMENTS	CONT INCREASE	STIP MOD	9/22	9/22	331,412	331,412
T201330009	L40E	INDUSTRIAL TRACK GREENWAY PHASE III	PLANNING	114	10/24	10/28	7,200	7,200
T201330009	L400	INDUSTRIAL TRACK GREENWAY PHASE III	PLANNING	119	5/9	5/13	156,257	156,257
T201330009	L40E	INDUSTRIAL TRACK GREENWAY PHASE III	PLANNING	119	5/9	5/13	3,743	3,743
T201350302	Q400	TRANSIT VEHICLE REPLACEMENT (31,32) 40' HEAVY DUTY LOW FLOOR BUSES NCC FY14-15	CONVERT	514	6/3	6/4	28,547	28,547
T201350302	L40R	TRANSIT VEHICLE REPLACEMENT (31,32) 40' HEAVY DUTY LOW FLOOR BUSES NCC FY14-15	CONVERT	514	6/3	6/4	278,522	278,522
T201350302	L40E	TRANSIT VEHICLE REPLACEMENT (31,32) 40' HEAVY DUTY LOW FLOOR BUSES NCC FY14-15	CONVERT	514	6/3	6/4	2,283,701	2,283,701
T201350302	M400	TRANSIT VEHICLE REPLACEMENT (31,32) 40' HEAVY DUTY LOW FLOOR BUSES NCC FY14-15	CONVERT	514	6/3	6/4	9,717,131	9,717,131
T201360001	L48E	DBE/SS PROGRAM ACTIVITIES FFY 2013	RELEASE		3/26	3/27	(44,816)	(44,816)
T201363601	M490	SUMMER TRANSPORTATION INSTITUTE 2013	RELEASE		3/31	3/31	(290)	(290)
T201363601	M490	SUMMER TRANSPORTATION INSTITUTE 2013	PROGRAM	163	7/22	7/22	290	290
T201363701	L948E	OJT/SS PROGRAM ACTIVITIES FFY 2013	RELEASE		3/31	3/31	(27,578)	(27,578)
T201367001	L450	WILMAPCO, 2013 UPWP	RELEASE	132	11/22	11/25	(136,860)	(136,860)
T201367001	L45E	WILMAPCO, 2013 UPWP	RELEASE	132	11/22	11/25	(198,329)	(198,329)
T201367001	L45E	WILMAPCO, 2013 UPWP	RELEASE	132	11/26	11/27	(217,748)	(217,748)
T201367002	L45E	DOVER/KENT CO MPO, 2013 UPWP	RELEASE	132	11/22	11/25	(16,743)	(16,743)
T201369001	HU20	SAFE ROUTES TO SCHOOL, CLAYMONT MR PLEASANT, AND EDISON SCHOOLS	CONT INCREASE	109	1/24	1/27	54,839	54,839

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201369001	HU20	SAFE ROUTES TO SCHOOL, CLAYMONT MR PLEASANT, AND EDISON SCHOOLS	CE INCREASE	109	3/24	3/25	10,500	10,500
T201400401	MS30	2013 HAZARD ELIMINATION PROGRAM-TRAFFIC CONTROL DEVICE IMPROVEMENTS	TRAFFIC	98	5/15	5/15	454,859	454,859
T201400502	LS40	RAILROAD DESIGN SERVICES	PLANNING	89	11/18	11/20	725,199	725,199
T201400502	LS4E	RAILROAD DESIGN SERVICES	PLANNING	89	11/18	11/20	260,446	260,446
T201400502	LS4R	RAILROAD DESIGN SERVICES	PLANNING	89	11/18	11/20	14,354	14,354
T201400503	LS50	SR 4 MARYLAND AVENUE (N-336) RAILROAD CROSSING SAFETY IMPROVEMENTS	RAILROAD	93	5/15	5/21	149,705	149,705
T201400503	LS5E	SR 4 MARYLAND AVENUE (N-336) RAILROAD CROSSING SAFETY IMPROVEMENTS	RAILROAD	93	5/15	5/21	226,966	226,966
T201400504	LS40	SR9 RIVER ROAD (N378) RAILROAD CROSSING SAFETY IMPROVEMENTS	RAILROAD	93	5/27	5/27	35,078	35,078
T201400504	LS4E	SR9 RIVER ROAD (N378) RAILROAD CROSSING SAFETY IMPROVEMENTS	RAILROAD	93	5/27	5/27	14,923	14,923
T201400504	LS50	SR9 RIVER ROAD (N378) RAILROAD CROSSING SAFETY IMPROVEMENTS	RAILROAD	93	5/27	5/27	50,000	50,000
T201401001	MS31	SR 1 HIGH TENSION CABLE BARRIER, ROTH BRIDGE TO US 13	AWARD	98	1/13	1/13	(414,133)	(414,133)
T201401003	MS30	RUMBLE STRIP INSTALLATION, STATEWIDE, OPEN-END	AWARD	98	1/13	1/13	(64,985)	(64,985)
T201401004	LS20	HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END	CO	100	9/8	9/10	277,778	277,778
T201404003	M240	FY15 TRAFFIC INTERSECTION IMPROVEMENTS PROGRAM	TRAFFIC	106	6/24	6/25	1,000,000	1,000,000
T201406101	M230	PAVEMENT & REHABILITATION, NORTH I, 2014	ADVERTISE	84	12/17	12/17	3,820,141	3,820,141
T201406101	M230	PAVEMENT & REHABILITATION, NORTH I, 2014	AWARD	84	3/12	3/13	443,210	443,210
T201406101	M230	PAVEMENT & REHABILITATION, NORTH I, 2014	CONT INCREASE	84	5/28	6/2	159,480	159,480
T201406101	M230	PAVEMENT & REHABILITATION, NORTH I, 2014	TRAFFIC INCREASE	84	7/10	7/10	995	995
T201406102	M230	PAVEMENT & REHABILITATION, NORTH II, 2014	ADVETISE	84	12/17	12/17	1,705,470	1,705,470
T201406102	M230	PAVEMENT & REHABILITATION, NORTH II, 2014	AWARD	84	3/12	3/13	(11,428)	(11,428)
T201406102	M230	PAVEMENT & REHABILITATION, NORTH II, 2014	CE INCREASE	84	5/7	5/9	90,000	90,000
T201406102	M230	PAVEMENT & REHABILITATION, NORTH II, 2014	CE INCREASE	84	6/17	6/18	53,000	53,000
T201407004	M001	CRITICAL CANTILEVER SIGN STRUCTURES, FY15	PE	76	3/24	3/27	120,000	120,000
T201407004	M001	CRITICAL CANTILEVER SIGN STRUCTURES, FY15	PE	76	4/7	4/8	8,645	8,645
T201407004	M001	CRITICAL CANTILEVER SIGN STRUCTURES, FY15	PE	76	6/6	6/6	7,355	7,355
T201407005	M001	OVERHEAD SIGN STRUCTURES, I-495	PE	76	3/24	3/27	400,000	400,000

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201407101	L24E	BR 1-238 ON ELIZABETH COURT AND BR 1-239 ON N352 RED MILL ROAD OVER TRIBUTARY WHITE CLAY CREEK	PE	381	6/3	6/5	30,000	30,000
T201407102	M240	BR 1-227 ON N013 PAPER MILL ROAD OVER MIDDLE RUN TRIBUTARY	PE	377	11/22	11/25	28,000	28,000
T201407103	L110	BR 1-291 ON SONGSMITH DRIVER OVER TRIBUTARY TO SMALLEY'S POND	PE	387	3/19	3/19	29,040	29,040
T201407104	M233	BR 1-438 ON N463 BLACKBIRD STATION ROAD AND BLACKBIRD CREEK	PE	393	5/16	5/23	47,300	47,300
T201407105	L1CE	BR 1-680 ON SR141 BASIN ROAD OVER US 13	PE	411	11/20	11/20	924,000	924,000
T201407105	M001	BR 1-680 ON SR141 BASIN ROAD OVER US 13	PE INCREASE	411	9/12	9/12	436,000	436,000
T201407107	ER90	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	PE/ROW/CE/T/PD	LETTER 6/6/14	6/10	6/10	2,000,000	2,000,000
T201407107	ER90	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	CONVERT		8/13	8/14	24,520,000	24,520,000
T201407107	ER90	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	CONVERT		8/26	8/28	1,500,000	1,500,000
T201407107	ER90	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	TRAFFIC		8/27	8/28	172,158	172,158
T201407402	M233	BR 1-191 ON N318 MILLTOWN ROAD OVER MILL CREEK	PE	375	12/24	12/30	12,600	12,600
T201407402	M233	BR 1-191 ON N318 MILLTOWN ROAD OVER MILL CREEK	PE INCREASE	375	4/15	4/15	1,400	1,400
T201407403	H100	BR 1-577 ON N050 NORTHEAST BLVD OVER BRANDYWINE RIVER	PE	405	6/10	6/10	510,000	510,000
T201407701	M001	STRUCTURE MAINTENANCE, NORTH DISTRICT, OPEN END, FY15-FY17	ADVERTISE	STIP MOD	4/1	4/2	900,000	900,000
T201407701	M001	STRUCTURE MAINTENANCE, NORTH DISTRICT, OPEN END, FY15-FY17	AWARD	427	6/5	6/5	(81,000)	(81,000)
T201409001	M001	LIGHTING REPLACEMENT, INTERSTATE, OPEN END, FY14-FY17	PE	STIP MOD	1/28	1/30	125,000	125,000
T201409001	M001	LIGHTING REPLACEMENT, INTERSTATE, OPEN END, FY14-FY17	ADVERTISE	239	6/24	6/24	1,875,000	1,875,000
T201450301	M400	PARATRANSIT REPLACEMENT BUSES FY14 (69)	PRO	780	11/22	11/25	761,000	761,000
T201460002	H480	DBE/SS PROGRAM ACTIVITIES FFY2014 (2)	TRAINING	STIP MOD	4/30	5/1	147,935	147,935
T201460002	L48E	DBE/SS PROGRAM ACTIVITIES FFY2014 (2)	TRAINING	STIP MOD	4/30	5/1	37,065	37,065
T201460002	L48E	DBE/SS PROGRAM ACTIVITIES FFY2014 (2)	TRAINING	STIP AMEN	8/21	8/21	267,313	267,313
T201463601	M49S	SUMMER TRANSPORTATION INSTITUTE 2014	TRAINING	163	5/27	5/28	55,000	55,000

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201463701	L490	OJT/SS PROGRAM ACTIVITIES FFY2014	TRAINING	161	9/18	9/18	(4,582)	(4,582)
T201463701	L49E	OJT/SS PROGRAM ACTIVITIES FFY2014	TRAINING	161	9/18	9/18	(4,999)	(4,999)
T201463701	M490	OJT/SS PROGRAM ACTIVITIES FFY2014	TRAINING	161	9/18	9/18	(26,319)	(26,319)
T201463701	H490	OJT/SS PROGRAM ACTIVITIES FFY2014	TRAINING	161	9/18	9/18	(141)	(141)
T201463701	Q490	OJT/SS PROGRAM ACTIVITIES FFY2014	TRAINING	161	9/18	9/18	(366)	(366)
T201463702	H490	OJT/SS PROGRAM ACTIVITIES FFY2014 (2)	TRAINING	STIP MOD	4/30	5/1	29,147	29,147
T201463702	H49E	OJT/SS PROGRAM ACTIVITIES FFY2014 (2)	TRAINING	STIP MOD	4/30	5/1	118,853	118,853
T201463702	L49E	OJT/SS PROGRAM ACTIVITIES FFY2014 (2)	TRAINING	STIP AMEN	8/21	8/21	37,104	37,104
T201463702	M490	OJT/SS PROGRAM ACTIVITIES FFY2014 (2)	TRAINING	STIP AMEN	8/21	8/21	36,407	36,407
T201466001	L550	SPR PLANNING PROGRAM 2014	PLANNING	STIP MOD	12/31	1/3	39,965	39,965
T201466001	L550	SPR PLANNING PROGRAM 2014	PLANNING	144	1/10	1/13	(39,965)	(39,965)
T201466001	77FE	SPR PLANNING PROGRAM 2014	PLANNING	144	1/10	1/13	39,965	39,965
T201466001	L550	SPR PLANNING PROGRAM 2014	PLANNING	STIP MOD	3/20	3/20	776,000	776,000
T201466001	L550	SPR PLANNING PROGRAM 2014	PLANNING	STIP MOD	5/12	5/13	16,000	16,000
T201466001	L550	SPR PLANNING PROGRAM 2014	RELEASE	144	6/23	6/24	(8,000)	(8,000)
T201466002	L550	SPR RESEARCH PROGRAM 2014	PLANNING	144	6/25	6/26	8,000	8,000
T201467001	L450	WILMAPCO UPWP 2014	PLANNING	132	1/31	1/31	136,860	136,860
T201467001	L45E	WILMAPCO UPWP 2014	PLANNING	132	1/31	1/31	300,516	300,516
T201469001	LU20	SAFE ROUTES TO SCHOOL, MAPLE LANE, ELBERT-PALMER, AND ST MARY MAGDALEN SCHOOLS	PE INCREASE	104	11/4	11/6	51	51
T201469001	LU20	SAFE ROUTES TO SCHOOL, MAPLE LANE, ELBERT-PALMER, AND ST MARY MAGDALEN SCHOOLS	ADVERTISE	109	7/22	7/25	372,744	372,744
T201469001	HU20	SAFE ROUTES TO SCHOOL, MAPLE LANE, ELBERT-PALMER, AND ST MARY MAGDALEN SCHOOLS	ADVERTISE	109	7/22	7/25	39,824	39,824
T201469009	LU3E	SAFE ROUTES TO SCHOOL LANCASHIRE ELEMENTARY SCHOOL, PLANNING ONLY	PLANNING	109	12/31	12/31	25,000	25,000
T201487702	MS31	TURNED DOWN GUARDRAIL REMOVAL, NORTH, OPEN END, FY15-17	PE	STIP AMEND	8/26	8/28	75,000	75,000
T201487702	MS31	TURNED DOWN GUARDRAIL REMOVAL, NORTH, OPEN END, FY15-17	ADVERTISE	STIP AMEND	9/17	9/18	625,000	625,000
T201487703	MS31	TURNED DOWN GUARDRAIL REMOVAL, CANAL, OPEN END, FY15-17	PE	STIP AMEND	8/26	8/28	75,000	75,000
T201487703	MS31	TURNED DOWN GUARDRAIL REMOVAL, CANAL, OPEN END, FY15-17	ADVERTISE	STIP AMEND	9/19	9/22	723,474	723,474
T201500101	LZ1E	FY2015 HIGHWAY SAFETY IMPROVEMENT PROGRAM	TRAFFIC	97	6/23	6/24	1,069,104	1,069,104

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201500102	LS4E	FY2015 HIGHWAY-RAIL GRADE CROSSING PROGRAM-STUDIES	TRAFFIC	93	6/19	6/23	101,613	101,613
T201501001	MS31	FY2014 SECTION 154 PENALTY TRANSFER (SANCTION) PROGRAM	TRAFFIC	STIP MOD	9/2	9/16	1,180,874	1,180,874
T201500508	MS50	PIGEON POINT ROAD (N-377) RAILROAD CROSSING SAFETY IMPROVEMENTS	PE/RR	STIP MOD	9/22	9/23	109,254	109,254
T201500508	LS5E	PIGEON POINT ROAD (N-377) RAILROAD CROSSING SAFETY IMPROVEMENTS	PE/RR	STIP MOD	9/22	9/23	161,746	161,746
T201500513	LS4E	RAILROAD PRELIMINARY ENGINEERING SERVICES	PE	STIP MOD	9/22	9/23	50,000	50,000
T201500513	LS5E	RAILROAD PRELIMINARY ENGINEERING SERVICES	PE	STIP MOD	9/22	9/23	50,000	50,000
T201502501	L97E	ROUTE 9 SCENIC OVERLOOKS	PLANNING	STIP AMEND	9/19	9/22	840,500	840,500
T201504701	M400	FY 15 DELTRAC STATEWIDE PROJECTS	TRAFFIC	180	8/20	9/2	3,000,000	3,000,000
T201504702	L24E	FY 15 DELTRAC SIGNAL INITIATIVES	TRAFFIC	180	8/27	9/2	130,000	130,000
T201504703	L24E	FY 15 DELTRAC PROJECTS STATE-WIDE SUPPORT	TR	180	9/8	9/10	410,935	410,935
T201504703	M240	FY 15 DELTRAC PROJECTS STATE-WIDE SUPPORT	TR	180	9/8	9/10	230,061	230,061
T201504703	L24R	FY 15 DELTRAC PROJECTS STATE-WIDE SUPPORT	TR	180	9/8	9/10	48,702	48,702
T201504703	L240	FY 15 DELTRAC PROJECTS STATE-WIDE SUPPORT	TR	180	9/8	9/10	1,180,301	1,180,301
T201507001	M001	BRIDGE INSPECTION FY15	PE	72	6/24	6/24	1,723,850	1,723,850
T201507001	Q100	BRIDGE INSPECTION FY15	PE	72	6/24	6/24	243,075	243,075
T201507101	ER90	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS, PHASE 2	CONVERT		8/13	8/14	3,150,000	3,150,000
T201530001	L94E	RECREATIONAL TRAILS FY15 WORK PLAN	OTHER	67	9/25	9/25	845,513	845,513
T201560001	L48E	DBE/SS PROGRAM ACTIVITIES FFY 2015	TRAINING	153	9/15	9/16	56,732	56,732
T201560001	M480	DBE/SS PROGRAM ACTIVITIES FFY 2015	TRAINING	153	9/15	9/16	566	566
T201560001	M480	DBE/SS PROGRAM ACTIVITIES FFY2015	TRAINING	153	9/19	9/19	45,797	45,797
T201561002	LZ2E	FHWA FMIS UPGRADE	OTHER	ADMIN	9/12	9/16	200,000	200,000
T201563701	H490	OJT/SS PROGRAM ACTIVITIES FFY2015	TRAINING	161	9/19	9/19	141	141
T201563701	L490	OJT/SS PROGRAM ACTIVITIES FFY2015	TRAINING	161	9/19	9/19	4,582	4,582
T201563701	L49E	OJT/SS PROGRAM ACTIVITIES FFY2015	TRAINING	161	9/19	9/19	4,999	4,999
T201563701	M490	OJT/SS PROGRAM ACTIVITIES FFY2015	TRAINING	161	9/19	9/19	27,425	27,425
T201563701	Q490	OJT/SS PROGRAM ACTIVITIES FFY2015	TRAINING	161	9/19	9/19	366	366
T201566001	L55E	SPR PLANNING PROGRAM FY2015	PLANNING	144	7/18	7/18	3,744	3,744
T201566001	M550	SPR PLANNING PROGRAM FY2015	PLANNING	144	7/18	7/18	1,488,589	1,488,589
T201566002	M560	SPR RESEARCH PROGRAM FY2015	PLANNING	144	9/19	9/22	310,644	310,644
T201567001	77FE	WILMAPCO UPWP FY2015	PROGRAM	132	7/17	7/18	292,188	292,188

Financial Plan and WILMAPCO Annual Listing of Obligated Projects

STATE PROJECT NUMBER	APPORT CODE	PROJECT TITLE	REASON	STIP	SUBMIT DATE	AUTH DATE	FED $ AUTH	FUNDS OBLIGATED TO DATE
T201567001	L45E	WILMAPCO UPWP FY2015	PROGRAM	132	7/17	7/18	157,024	157,024
T201567001	L45R	WILMAPCO UPWP FY2015	PROGRAM	132	7/17	7/18	12,990	12,990
T201567001	M450	WILMAPCO UPWP FY2015	PROGRAM	132	7/17	7/18	1,148,878	1,148,878
T201568002	L560	LTAP FY2015	PLANNING	130	9/19	9/22	142,030	142,030
T201568002	M560	LTAP FY2015	PLANNING	130	9/19	9/22	52,960	52,960
T201568002	M438	LTAP FY2015	PLANNING	130	9/19	9/22	140,000	140,000
T201569001	LU20	SAFE ROUTES TO SCHOOL, HARLAN, HANBY AND LANCASHIRE SCHOOL	PE	109	7/21	7/21	125,000	125,000

167,611,552.41	FY2014 OBLIGATIONAL AUTHORITY
0.00	FY2014 SPECIAL LIMITATION EARMARK OBLIGATIONAL AUTHORITY
331,649,503.00	FY2014 ORIGINAL PLANNED OBLIGATIONS
0.00	FY2014 BALANCE OF PLANNED OBLIGATIONS
167,611,552.42	FY2014 OBLIGATIONS TO DATE
(0.01)	FY2014 BALANCE OF OBLIGATIONAL AUTHORITY

ADVANCED CONSTRUCTION PROJECTS REMAINING

Red = issue

Tan = New AC

T201407107	M001	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS	AC BALANCE			8,153,066.00	
T201507101	M001	BR 1-813 ON I-495 OVER CHRISTINA RIVER, EMERGENCY REPAIRS, PHASE 2	AC BALANCE			4,365,000.00	
T201109301	L240	STATEWIDE TRAFFIC SIGNAL RELAMPING	AC BALANCE			1,000,000.00	START
T201303401	M001	INTERSTATE MAINTENANCE DRAINAGE REPAIR, FY14-FY16, OPEN-END	AC BALANCE			820,321.81	START
T201303401	M001	INTERSTATE MAINTENANCE DRAINAGE REPAIR, FY14-FY16, OPEN-END	**CONVERT**			-	
T201409001	M001	INTERSTATE OPEN END LIGHTING	AC BALANCE			1,000,000.00	
	M001	INTERSTATE ROADWAY OPEN END DRAINAGE	AC BALANCE			1,000,000.00	
	L23E	SR 2, SOUTH UNION STREET FROM RAILROAD BRIDGE TO SYCAMORE STREET, WILMINGTON	AC BALANCE			-	START
	L23E	SR 2, SOUTH UNION STREET FROM RAILROAD BRIDGE TO SYCAMORE STREET, WILMINGTON	**CONVERT**			2,677,221.94	
	M230	CHRISTINA RIVER BRIDGE AND APPROACHES	AC BALANCE			19,520,000.00	NEW
	M230	CHRISTINA RIVER BRIDGE AND APPROACHES	**CONVERT**			-	
T200510602	L05E	I- 95/US202 INTERCHANGE	AC BALANCE			9,620,371.39	START
T200510602	L05E	I- 95/US202 INTERCHANGE	**CONVERT**			2,473,590.35	
	M001	I-95 AND SR141 RAMPS G & F IMPROVEMENTS	AC BALANCE	**ADD 2/16/14**		23,589,226.07	
	L05E	I-95 AND SR141 RAMPS G & F IMPROVEMENTS	**CONVERT**			-	
	L010	NORTH DISTRICT STRUCTURAL MAINTENANCE	AC BALANCE			-	
	L010	NORTH DISTRICT STRUCTURAL MAINTENANCE	**CONVERT**				
T200769001	LU20	SAFE ROUTES TO SCHOOL INFRASTRUCTURE, NEW CASTLE COUNTY	AC BALANCE			10,000.00	START
T200769003	LU20	SAFE ROUTES TO SCHOOL INFRASTRUCTURE, SUSSEX COUNTY	AC BALANCE			15,000.00	START

T201069002		LU10	SAFE ROUTES TO SCHOOL, EDUCATION AND ENFORCEMENT 2010, STATEWIDE	AC BALANCE			22,186.00	START
T201069003		LU30	SAFE ROUTES TO SCHOOL, PLANNING AND PROGRAM MANAGEMENT 2010, STATEWIDE	AC BALANCE			44,372.00	START
T201004701		L240	FY10 DELTRAC PROJECTS STATE-WIDE SUPPORT	AC BALANCE			400,000.00	START
T200966001		L550	2009 STATEWIDE PLANNING AND TRAFFIC PROGRAM	AC BALANCE			430,000.00	START
T201266002		L56E	SPR RESEARCH PROGRAM 2012	AC BALANCE			37,403.50	START
T201101001		LS30	2011 HIGHWAY SAFETY IMPROVEMENT PROGRAM-STUDIES	AC BALANCE			202,500.00	START
T201030001		L94E	RECREATIONAL TRAILS FY10-11 WORK PLAN	AC BALANCE			420,400.00	START
T201350302		Q400	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	AC BALANCE			-	START
T201350302		Q400	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	CONVERT			1,042,488.58	
T201350302		L400	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	AC BALANCE			-	START
T201350302		L400	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	CONVERT			1,107,931.91	
T201350302		L40E	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	AC BALANCE			-	START
T201350302		L40E	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	CONVERT			3,880,546.26	
T201350302		M400	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	AC BALANCE			-	START
T201350302		M400	TRANSIT VEHICLE REPLECEMENT 40' HEAVY DUTY LOW BUSES NCC FY14-15	CONVERT			6,276,933.25	
T200650304	A999105	L240	(58) 40' AND (10) 30' BUSES FY08/FY09 SPEND	AC BALANCE			4,612,600.00	START
T200504104		L05E	BOYDS CORNER INTERSECTION IMPROVEMENTS	AC BALANCE			0.00	START
T201011303		L05E	US 301, GARVEE DEBT SERVICE	AC BALANCE			115,328,837.50	START
T201011303		M001	US 301, GARVEE DEBT SERVICE	CONVERT			-	
		L05E	SR1/I-95 INTERCHANGE	AC BALANCE	ADDED 10/2/13		-	START
		L05E	SR1/I-95 INTERCHANGE	CONVERT			1,993,839.62	

T200800901	MS30	US 9 (HSIP) CONS	AC BALANCE		-	START
T200800901	MS30	US 9 (HSIP) CONS	**CONVERT**		-	
T201268001	L56E	LOCAL TRANSPORTATION ASSISTANCE PROGRAM 2012	AC BALANCE		202,684.00	START
T201468001	M560	LOCAL TRANSPORTATION ASSISTANCE PROGRAM 2014	AC BALANCE		45,777.19	START
T201206105	M230	PAVEMENT & REHABILITATION, NORTH V, 2012	AC BALANCE		1,371,892.44	
	M439	EDUCATION AND TRAINING	AC BALANCE		200,000.00	
T201407701	M001	STRUCTURE MAINTENANCE, NORTH DISTRICT, OPEN END, FY15-FY17	AC BALANCE		1,636,228.13	
T201409001	M001	LIGHTING REPLACEMENT, INTERSTATE, OPEN END, FY14-FY17	AC BALANCE		822,850.00	
T201404003	M240	FY15 TRAFFIC INTERSECTION IMPROVEMENTS PROGRAM	AC BALANCE		1,000,000.00	
			CURRENT AC BALANCE		212,786,851.99	
			PLAN END OF YEAR AC BALANCE		193,334,300.08	

DelDOT Federal Funding Codes

CODE	FUND NAME
33E0	AREAS <5000
0100	CONSOLIDATED PRIMARY
0420	INTERSTATE 56
800	PLANNING & RESEARCH 1 1/2% HPR
810	METRO PLAN/RD&TT
860	METRO PLAN/RD&TT
1140	BRIDGE R/R ON/OFF
1170	BRIDGE R/R OFF
1180	BRIDGE R/R ON
1390	RAIL HIGHWAY CROSS
1410	HAZARD ELIMINATION
2120	MOTOR CARRIER SAFETY GRANT
2160	FMCSA_CDL IMPROV GRANTS
3150	NATIONAL HIGHWAY
3170	RESTORATION
3200	CONGEST MITIGATION
3260	ITS
3730	NITTEC RESEARCH & TECH
3840	NATIONAL REC TRAILS
3900	IVHS
3910	IVHS ACTIVITIES
4380	LOCAL TECH ASSIST PGRM
04M0	INTERSTATE MAINT
04M0	RURAL SECONDARY
09J0	ER 2004 HURRICANES ADDL FUND
09S0	ER 2004 HURRICANES INFRA
09V0	EMERGENCY FED AIDE
09X0	EMERGENCY FED AIDE
12C0	MINORITY BUSINESS
21C0	CDL
2A20	FMCSA SAFETY GRANTS
33A0	OPT SAFETY
33B0	TRANS ENHANCEMENTS
33C0	URBAN 200,000+
33D0	STATE FLEXIBILITY
33M0	PROTECT DEVICES
33N0	ELIM OF HAZARDS
33P0	HAZARD ELIMINATION

CODE	FUND NAME
37A0	LTAP
37P0	LTAP
38B0	NATIONAL REC TRAILS - ADMIN
3AA0	URBAN - 200,000
438E	LTAP S-LU EXT
56C0	SURFACE TRANS PRIORITIES
5G20	BRIDGE RESEARCH & DEPLOY
5G20	FMCSA BEP0-DL & SSN VERIFY
77FE	FTA CONSOLID PLAN TRF TO FHWA
92C0	TRANS/COM SYS PILOT PRG
9BA0	COVERED BRIDGES (100%)
C200	ARRA AREA WITH POP<200K
C220	ARRA TRANSPORTATION ENHANCEMENTS
C230	ARRA URBANIZED AREAS >200K
C240	ARRA AVAIL FOR ALL AREA (FLEX
C242	ARRA UPWARD ADJUSTMENT
C243	ARRA AVAIL FOR ALL AREA (FLEX
C250	ARRA RURAL POP <5K
D010	DELAWARE MEMORIAL
F13E	PUBLIC LANDS HWY S-LU EXT
H010	INTERSTATE MAINT
H020	INTERSTATE MAINT DISC
H030	REDISTRIBE OF AUTH
H050	NATIONAL HIGHWAY
H060	BRIDGE DISCRETIONARY
H070	BRIDGE DISCRETIONARY
H080	OP MOT VEH/INTOX
H100	BRIDGE R/R ON
H110	BRIDGE R/R OFF
H120	BRIDGE R/R ON/OFF
H170	SEC 115 UNOBL. BALANCE
H1C0	HWY BR PROG 85% ON/OFF
H200	URBAN - 200,000
H210	OPT SAFETY
H220	TRANS ENHANCEMENTS
H230	URBAN 200,000+
H240	STATE FLEXIBILITY
H250	AREAS <5000

CODE	FUND NAME
H260	PROTECT DEVICES
H270	ELIM OF HAZARDS
H280	HAZARD ELIMINATION
H400	CONGEST MITIGATION
H450	PLANNING
H490	SUPPORTIVE SERVICES
H550	SPR - PLANNING
H560	SPR - RESEARCH
H660	GRANTS SUP PLAN HWY STP SEC 117
H760	MINIMUM GUAR - SPEC
H770	MINIMUM GUAR - EXEMPT
H780	MINIMUM GUAR - LIMIT
H890	LTAP
H940	NATIONAL REC TRAILS
H960	HIGHWAY USE TX EVASION
H970	SCENIC BYWAYS
HT80	ITS DEPLOYMENT - METL *
HU10	SAFE RTS TO SCHOOL PROG
HU20	SAFE RTS TO SCHOOL INFR
HU30	SAFE RTS TO SCHOOL EITHER
HX20	TECH DEPLOY PRG-INNOV BR
HX80	SURF TRAN RSCH-STRUCTURES
HY10	HIGH PRIORITY - SEC 1702
HY20	HIGH PRIORITY - SEC 117
L00E	EXT ALLOC PGM
L010	INTERSTATE MAINT
L01E	INTERSTATE MAINT S-LU EXT
L01R	INTERSTATE MAINT RE
L020	IM DISCRETIONARY
L030	REDISTIB CERTAIN AUTHOR
L03E	REDISTIB CERTAIN AUTHOR
L050	NATIONAL HIGHWAY
L05E	NHS NATIONAL HIGHWAY S-LU EXT
L05R	NATIONAL HIGHWAY RE
L10R	BRIDGE 65% ON
L110	BRIDGE 15% OFF
L11E	BRIDGE PROG 15% OFF S-LU EXT
L11R	BRIDGE 15% OFF RE

CODE	FUND NAME
L12R	BRIDGE R/R 20% ON/OFF RE
L1C0	HWY BR PROG 85% ON/OFF
L1CE	BRIDGE 85% ON/OFF S-LU EXT
L1CR	BRIDGE 85% ON/OFF S-LU RE
L200	URBAN - 200,000
L20E	STP <200,000 S-LU EXT
L20R	URBAN - 200,000 RE
L21R	OPT SAFETY RE
L220	TRANS ENHANCEMENTS
L22E	STP ENHANCEMENT S-LU EXT
L22R	TRANS ENHANCEMENTS RE
L230	URBAN 200,000+
L23E	STP URBANIZED AREAS S-LU EXT
L23R	URBAN 200,000+ RE
L240	STATE FLEXIBILITY
L24E	SURFACE TRANS FLEX S-LU EXT
L24R	STATE FLEXIBILITY RE
L250	AREAS <5000
L25E	STP <5K POPULATION S-LU EXT
L25R	AREAS <5000 RE
L26R	RAIL/HWY PROTECT DEVICES RE
L27R	RAIL/HWY CROSS HAZA ELIM RE
L28R	HAZARD ELIMINATION RE
L400	CONGEST MITIGATION
L40E	CONGESTION MITIGATION S-LU EXT
L40R	CONGEST MITIGATION RE
L450	METRO PLANNING
L45E	1.25% S-LU EXT
L45R	METRO PLANNING 1.25% RE
L48E	MIN BUSINESS ENTERPRISE
L490	SUPPORTIVE SERVICES
L49E	SUPPORTIVE SERVICES
L550	SPR - PLANNING
L55E	2% S-LU EXT
L560	SPR - RESEARCH
L56E	25% PL S-LU EXT
L680	TRAN COMM SYS PRES
L940	NATIONAL REC TRAILS
L94E	RECREATIONAL TRAILS S-LU EXT
L94R	NATIONAL REC TRAILS RE
L970	NATIONAL SCENIC BYWAYS
L97E	NATIONAL SCENIC BYWAYS

CODE	FUND NAME
LHIP	HIGWAY INFRASTRUCTURE
LS20	HSIP HIGH RISK RURAL ROAD
LS2E	HSIP HIGH RISK RU RD S-LU EXT
LS2R	HSIP HIGH RISK RURAL ROAD RE
LS30	HSIP
LS3E	HIGHWAY SFE S-LU EXT
LS40	RAIL/HWY CROSS HAZA ELIM
LS4E	RL HWY CROSS HAZ ELIM S-LU EXT
LS4R	RAIL/HWY CROSS HAZA ELIM RE
LS50	RAIL/HWY PROTECT DEVICES
LS5E	RL HWY PROTECT DEV S-LU EXT
LU10	SAFE RTS TO SCHOOL PROG
LU1E	SAFE ROUTES TO SCHOOL S-LU EXT
LU1R	SAFE RTS TO SCHOOL RE
LU20	SAFE RTS TO SCHOOL INFR
LU2E	SAFE ROUTES TO SCHOOL S-LU EXT
LU2R	SAFE RTS TO SCHOOL RE
LU30	SAFE RTS TO SCHOOL EITHER
LU3E	SAFE ROUTES TO SCHOOL S-LU EXT
LU3R	SAFE RTS TO SCHOOL EITHER RE
LY10	HIGH PRIORITY - SEC 1702
LY20	HIGH PRIORITY - SEC 117
LY30	TRANSPORTATION IMP PROJ
LY60	2006 SURFACE TRANS. PROJ
LY90	XXXXX
LZ10	EQUITY BONUS EXEMPT LIM
LZ1E	EQ BONUS EXEMPT LIM S-LU EXT
LZ1R	EQUITY BONUS RESTORED
LZ20	EQUITY BONUS LIMITATION
LZ2E	EB S-LU EXT
M001	NATIONAL HIGHWAY PERF PROGRAM
M002	NATIONAL HIGHWAY PERF EXEMPT
M003	PROJECTS TO REDUCE PM 2.5 EMI
M030	REDISTIB CERTAIN AUTHOR
M230	STP-URBANIZED >200K MAP-21
M231	STP-AREAS WITH POP OVER 5K to 200K
M232	STP <5K POPULATION -MAP-21
M233	STP OFF - SYSTEM BRIDGE
M240	SURFACE TRANS FLEX- MAP-21
M300	TRANSP ALTERNATIVES PROG FLEX
M301	TAP - URBANIZED AREAS POP > 200K
M302	TAP - AREAS POP 5K - 200K

CODE	FUND NAME
M303	TAP - AREAS POP 5K AND UNDER
M400	CONGEST MITIGATION MAP-21
M438	TRAINING AND EDUCATION-MAP-21
M439	TRAINING AND EDUCATION
M450	METROPOLITAN PLANNING MAP-21
M490	LONG TERM PAVEMENT PERFORMANCE
M49S	SAFE RTS TO SCHOOL PROG
M550	STATEWIDE PLANNING MAP-21
M560	RESEARCH DEVT AND TECH TRANS
M940	RECREATIONAL TRAILS MAP-21
M941	RETURN 1% RTP ADMIN MAP-21
MS30	HWY SAFETY PROG
MS31	SEC 154 PENALTIES-FOR HSIP
MS40	RAIL HWY CROSSING HAZARD ELIM
MS50	RAIL HWY PROTECT DEV MAP-21
NEO0	NEW ENTRANTS SAFETY AUDITS
Q010	INTERSTATE MAINT
Q020	IM DISCRETIONARY
Q030	REDISTRIBE OF AUTH
Q040	SEAT BELT SAFETY
Q050	NATIONAL HIGHWAY
Q060	BRIDGE DISCRETIONARY
Q100	BRIDGE R/R ON
Q110	BRIDGE R/R OFF
Q120	BRIDGE R/R ON/OFF
Q200	URBAN - 200,000
Q210	OPT SAFETY
Q220	TRANS ENHANCEMENTS
Q230	URBAN 200,000+
Q240	STATE FLEXIBILITY
Q250	AREAS <5000
Q260	PROTECT DEVICES
Q270	ELIM OF HAZARDS
Q280	HAZARD ELIMINATION
Q400	CONGEST MITIGATION
Q450	PLANNING
Q480	MIN BUSINESS ENTERPRISE
Q490	SUPPORTIVE SERVICES
Q490	SUPPORTIVE SERVICES
Q550	SPR - PLANNING
Q560	SPR - RESEARCH
Q670	TRANS RESEARCH PLAN

CODE	FUND NAME
Q680	TRAN COMM SYS PRES ST TEA21
Q760	MINIMUM GUAR - SPEC
Q770	MINIMUM GUAR - EXEMPT
Q780	MINIMUM GUAR - LIMIT
Q890	LTAP
Q920	HIGH PRIORITY PROJECTS
Q940	NATIONAL REC TRAILS
Q960	MOTOR FUEL TAX COMPL
Q970	SCENIC BYWAYS
QR60	SFC TRANS RESEARCH
QT20	ITS STDS RESCH OP TEST
QT30	STP-1/4 OF 1% HWY USE TAX EVAS
QT80	ITS DEPLOYMENT - METL *
QT90	INNOVATIVE BRIDGE
QX20	TECH DEPLOY PRG-INNOV BR
QX50	LITHIUM FIELD TREATMENT
W360	URBAN SYSTEMS

APPENDIX E

TIP Development and Amendment Process

WILMAPCO TIP Development Process

FY 2017-2020 TIP

(Italic font refers to current FY2016-19 TIP)

2015

January
- Request for FY 2017-20 TIP submissions sent out (including submission for the FY 2016 UPWP)
- Meet with local government to get project submissions

February
- Joint WILMAPCO/DelDOT public meeting to get feedback on submissions (2/23)

March
- Deadline for project submissions, including DelDOT Pipeline (3/12)

April
- NMTWG reviews bicycle and pedestrian submissions and technical scores for FY 2017-20 TIP (4/7)
- CMS reviews submissions and congestion criteria technical scores for FY 2017-20 TIP
- AQ reviews submissions and air quality technical scores for FY 2017-20 TIP (4/9)
- TAC reviews submissions and technical scores for FY 2017-20 TIP (4/16)

May
- Council approves prioritized project list for inclusion in DelDOT FY 2017-22 CTP (5/14)

July
- *DelDOT provides proposed amendments to FY 2016-19 TIP based on state funding in the Delaware FY 2016 Bond Bill*
- *Council releases amendments to FY 2016-19 TIP for public comment period. Federally-funded and regionally significant amendments must reflect WILMAPCO priorities. (7/9)*

August
- *Joint WILMAPCO/DelDOT public meeting to seek comments on proposed FY 2016-19 TIP amendments as needed*
- *PAC (8/17) /TAC (8/20) take action on amendments to FY 2016-19 TIP as needed*

September
- *Council amends FY 2016-19 TIP as needed (9/10)*

October
- DelDOT provides WILMAPCO with its submission to the FY 2017 Delaware Budget Office, incorporating WILMAPCO priorities, for discussion with TAC/AQS/Council

December
- DelDOT supplies WILMAPCO with revised project funding and descriptions 1st week for the FY 2017-20 TIP
- PAC (12/14)/TAC (12/17)/AQ (12/17) review draft FY 2017-20 TIP
- Air Quality Conformity Determination completed

2016

January
- FY 2017-20 TIP released for 30-day public comment (including local government/public outreach)

February
- Joint WILMAPCO/DelDOT workshop on draft FY 2017-20 TIP (2/24)
- Revise FY 2017-20 TIP based on public comments
- PAC (2/22)/TAC (2/18) adoption of FY 2017-20 TIP

March
- Council adoption of FY 2017-20 TIP (3/10)

WILMAPCO

Partners with you in transportation planning

TRANSPORTATION IMPROVEMENT PROGRAM SUBMISSION/AMENDMENT FORM

This form must be completed and all questions must be answered in order to process this request.

Date of Submission/Amendment: _____

Sponsoring Agency: _____

Project Name: _____

Project Category: _____

Project Description: _____

_____

_____

_____

_____

Project Justification: _____

_____

_____

_____

_____

Funding: Federal_____State_____Local_____Total_____

Funding	Phase	Current	FY 20__	FY 20__	FY 20__	FY 20__	Total
Total							

All $s x 1,000

1. Does this project require a new conformity determination? _____
(Section 51.400)(C2) "A TIP amendment requires a new conformity determination for the entire TIP before the amendment is approved by the MPO, unless it merely adds or deletes exempt projects listed in (Section 51.460)."

2. Is this project regionally significant?_____
(Section 450.324)(f)(3) "The TIP shall include…all regionally significant transportation projects for which an FHWA or the FTA approval is required whether or not the projects are to be funded with title 23, U.S.C., or Federal Transit Act funds, e.g., addition of an interchange to the Interstate System with State, local, and/or private funds, demonstration projects not funded under title 23, U.S.C., or the Federal Transit Act, etc."

3. Has this project had the opportunity for public comment? _____
(Section 450.326) "… Public involvement procedures consistent with Section 450.316 (b)(1) shall be utilized in amending the TIP, except that these procedures are not required for TIP amendments that only involve projects of the type covered in Section 450.324 (I)."

4. Has this project been found to be financially constrained? _____
(Section 450.324)(e) "The TIP shall be financially constrained by year and include a financial plan that demonstrates which projects can be implemented using current revenue sources (while the existing transportation system is being adequately operated and maintained. The financial plan shall be developed by the MPO in cooperation with the State and transit operator…"

   Please indicate funding sources by agency: _____
   _____
   _____

5. Is this project consistent with the WILMAPCO Metropolitan Transportation Plan? _____
(Section 450.324)(f)(2) "The TIP shall include…only projects that are consistent with the transportation plan."

   If not, is there a resolution to amend the Metropolitan Transportation Plan? _____

6. Does the project promote economic development initiatives such as adding or improving access to brownfield locations or to an existing or planned site used for employment, tourism, manufacturing, commercial or industrial purposes, or addresses a problem, topic or issue identified through regional economic development planning? _____
   _____
   _____

7. Please provide any additional pertinent information below:
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

WILMAPCO

Transportation Improvement Program Submission/Amendment

Description of Public Participation

Project Name: _____

Which techniques were used to seek public comment (please use additional pages if needed).

_____ Public workshops/meetings

Number of public workshops/meetings: _____

Format: _____

Location(s): _____

Number of attendees: _____

Main issue raised: _____

Consensus of meeting: _____

Overall, the public support for the project was (check one):

_____ Strong support, few concerns

_____ Some support, but some concerns raised

_____ Mixed, equal support and opposition

_____ Some opposition, many concerns raised

_____ Strong opposition, major problems identified

Unresolved issues identified: _____

_____ Citizen Advisory/Steering Committee

_____ Survey

Number surveyed: _____

Results: _____

_____ Elected officials briefings

_____ Project web site

_____ Other _____

How was the public notified about the project?

_____ Web page

_____ Legal notice

_____ Videos

_____ Radio/television

_____ Other _____

_____ Publications

Distribution: _____

_____ Newsletter/brochure

_____ Flyers

How has the project changed as a result of public comments?

_____

_____

_____

_____

Comment further on the quantity and quality of the public participation:

_____

_____

_____

_____

Transportation Improvement Program Submission

Description: Please describe the transportation problem you would like to have fixed (continue on the back, if necessary).

Frequency of Occurrence: Please identify how often the problem occurs.

Solution: Do you have a suggestion on how to resolve the problem?

What would your solution improve?

Congestion ❑ Safety ❑ Convenience ❑ Appearance ❑ Other ❑ _____

E-5

Location: Identify the town, community or area(s) where the problem occurs. Then provide the exact location using cross streets or other landmarks or attach a map.

Contact Information: In case we require more information to help identify or solve the problem, we ask that you please provide us with contact information.

Name_____

Organization (if applicable) _____

Mailing Address _____

Phone Number _____

Email_____

Thank you for your submission. Send this form to:

WILMAPCO
850 Library Ave.
Suite 100
Newark, DE 19711

Phone (302) 737-6205 (Cecil County- 888-808-7088)
Fax (302) 737-9584
Email WILMAPCO@WILMAPCO.org
Website www.wilmapco.org

WILMAPCO

APPENDIX F

WILMAPCO Prioritization and Project Submissions

WILMAPCO

PROJECT PRIORITIZATION PROCESS

WILMAPCO has created a Prioritization process to evaluate transportation projects using measurable criteria based on the goals of our long-range plan. It provides a quantitative method to compare projects proposed for our Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP).

STEP 1: Apply screening criteria

Is project consistent with the Regional Transportation Plan and local, county and state transportation plans and land use plans?
If not, project should not be ranked or plan amendments should be made prior to ranking.

STEP 2: Staff calculates technical score

- Using available technical data, WILMAPCO Staff calculates a technical score for each project based on the goals and objectives of the Regional Transportation Plan.
- Each goal has a similar point value, with the maximum for each project of 33 points.

STEP 3: WILMAPCO's Technical Advisory Committee (TAC) reviews technical scoring for accuracy and proposes ranking considering:

WILMAPCO's Technical Advisory Committee (TAC) reviews technical scoring for accuracy and proposes ranking considering:

- Technical score developed by staff
- Urgency of project
- Cost effectiveness/ life cycle costs
- Private/local funding match provided
- Project recommended in adopted transportation plan
- Submitting agency rankings by ensuring that top local priorities receive higher WILMAPCO ranking than lower local priorities
- Other issues not included in ranking
- Additional "special considerations" to break ties and serve as a reality check

STEP 4: WILMAPCO Council ranks submissions

Council ranks submissions considering:

- Technical score developed by staff and reviewed by TAC
- TAC proposed ranking
- Urgency of project
- Cost effectiveness/ life cycle costs
- Private/local funding match provided
- Project recommended in adopted transportation plan
- Submitting agency rankings by ensuring that top local priorities receive higher WILMAPCO ranking than lower local priorities
- Other issues not included in ranking
- Additional "special considerations" to break ties and serve as a reality check

Goal 1: Improve Quality of Life ***(Max. 10 points)***

- Protect the public health, safety and welfare
- Preserve our natural, historic and cultural resources
- Support existing municipalities and communities
- Provide transportation opportunity and choice

Criteria:

- **Air Quality** – Project expected to improve air quality by:
  - reducing emissions
  - reducing VMT (Vehicle Miles Traveled)
  - not adding capacity
  - increasing access to non-auto modes

  3 Project expected to substantially improve air quality (all four bullets apply)
  1 Project expected to slightly improve air quality (2-3 bullets)
  0 No expected air quality impact (does not add capacity)
  -3 Negative air quality impact expected

- **Environmental Justice**– Project enhances environment in locations with a high percentage of low-income and/or minority residents. Supportive projects reduce risk of accidents, and/or enhance neighborhoods. Negative impacts include increased accident risk for vehicular and/or non-motorized traffic, displacement of homes or businesses, and/or increased traffic through neighborhoods.

  3 Project supports environmental justice in area with high low-income or minority population
  1 Project supports environmental justice in area with above average low-income or minority population
  0 Project does not impact environmental justice
  -1 Project negatively impacts area with above average low-income or minority population
  -3 Project negatively impacts area with high low-income or minority population

- **Safety –** An "aggregate" scoring system combines the absolute number of accidents and the rate at which accidents occur per 1 million miles of VMT to be used. Scoring is based on a 4-point maximum scale with 4 being the highest priority and zero being the lowest. Points are assigned based on the following:

  Crash rate per 1 million miles VMT (past 5 years)
  2 Greater than 3 times the County average
  1 2 to 3 times County average
  0 At or below the County average

  +

  Total number of crashes (past 5 years)
  2 200+ accidents s
  1 100-200 accidents
  0 Less than 100 accidents

Goal 2: Efficiently Transport People ***(Max. 12 points)***

- Improve transportation system performance
- Promote accessibility, mobility and transportation alternatives

Criteria:

- **Congestion Management System** – Corridor improvement recommended in CMS or location with Level of Service (LOS) E or F

If recommended in CMS or LOS E/F*:

2 Project within a CMS corridor identified by the CMS Subcommittee
1 Road segment with LOS E or F but outside of identified CMS corridors

*** If project meets the above CMS criteria, then the following two criteria will be calculated in addition to the points awarded above.**

+ Average Annual Daily Traffic (AADT)

4 Greater than 60,000 AADT
3 40,000 – 60,000 AADT
2 20,000 – 40,000 AADT
0 Less than 20,000 AADT

+ Transit Usage

Transit Load Factor by segment based on the average # of riders vs. # of available seats.

3 Greater than 35% capacity
2 25 – 35% capacity
1 15 – 25% capacity
0 Less than 15% capacity

F-3

- **Transportation Justice** – **Use percentage of zero-car households, elderly & persons with disabilities instead of low-income/minority (thresholds as determined by EJ report, Phase II), identify projects that support non-motorized or transit alternatives.**

3 Supportive project within an area of high concentrations of mobility-constrained populations
1 Supportive project within an area of moderate concentrations of mobility-constrained populations
0 Does not improve mobility or ease access to transportation choices

GOAL 3: Support Economic Activity and Growth (Max 11 pts.)

- Ensure a predictable public investment program to guide private sector investment decisions
- Plan and invest to promote the attractiveness of the region

Criteria:

- **Freight – Scores using the** three-tiered scoring defined in the *WILMAPCO Freight & Goods Movement Analysis.* Bottlenecks are identified using high truck trip generating traffic zones, areas of high truck crash frequencies and travel time delays which hamper the efficient movement of truck traffic which can effect economic growth and competitiveness.

  4 "Significant Bottleneck" – Refers to segments with multiple failing criteria, and generally includes roadways which carry the highest traffic volumes and experience heaviest congestion.
  3 "Moderate Bottleneck" – Refers to segments that are experiencing some failing, or nearly failing, criteria. There is more variation in scoring across the criteria, with some criteria demonstrating failure and others at more modest levels.
  2 "Minor Bottleneck" – Refers to segments that experience one or more criteria that are near failing. While most have only a few criteria showing near failure, others are at acceptable levels.
  0 All other road segments

- **Support of Economic Development Initiatives –** Projects that support economic development initiatives. Those include adding or improving access to brownfield locations; an existing or planned site used for employment, tourism, manufacturing, commercial or industrial purposes; or addresses an issue identified through regional economic development planning.

  - For New Castle County, use DE Office of State Planning Policies and Spending map. Areas are defined as follows:
    - Investment Level 1: Dense areas within municipalities, urban places, high density areas and areas with infrastructure and services (i.e. sewer, water, transit, etc...).
    - Investment Level 2: Less developed municipal areas or fast-growing areas. Also identifies areas in which full services are expected or planned.

  - For Cecil County, use the State Priority Funding Areas and County Certified Areas

    3 Project located in Delaware Investment Level 1 area or Maryland Priority Funding Area
    1 Project located in Delaware Investment Level 2 area or Cecil County Certified Area
    0 Project not located in either of the above areas

- **Private or local funding contribution –** Local and/or private commitment demonstrated by funding contribution

  4 Greater than 80% through private/local funds
  3 60-80% funded through private/local funds
  2 40-60% funded through private/local funds
  1 20-40% funded through private/local funds
  0 Less than 20% through private/local fund

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
web site: www.wilmapco.org

WILMAPCO Council:

Connie C. Holland, Acting Chair
Delaware Office of State Planning Coordination, Director

Jennifer L. Cohan
Delaware Dept. of Transportation Secretary

Thomas P. Gordon
New Castle County County Executive

Donald A. Halligan
Maryland Dept. of Transportation Director, Office of Planning and Capital Programming

Bill Miners
Chesapeake City Councilman

Tari Moore
Cecil County Executive

John Sisson
Delaware Transit Corporation Chief Executive Officer

Michael Spencer
Mayor of Town of Newport

Dennis P. Williams
Mayor of Wilmington

WILMAPCO Executive Director
Tigist Zegeye

May 15, 2015

Hon. Jennifer L. Cohen, Secretary
Delaware Department of Transportation
800 Bay Road
P.O. Box 778
Dover, DE 19903

RE: Prioritization for the FY 2017-2020 Transportation Improvement Program

Dear Ms. Cohen:

I am writing to submit priority projects as voted on by WILMAPCO Council at their May 14 meeting, through the process described in the MOA between WILMAPCO and DelDOT.

For the FY 2017-2020 Transportation Improvement Program (TIP) and the New Castle County element of the Delaware CTP, the priority is to:

1. Adequately fund preservation and safety projects.

2. Complete projects in the approved FY 2016-2019 TIP. If projects must be deferred, use project priority to guide which projects would be delayed, setting priority based upon technical scores. A prioritized project list is enclosed.

3. Complete projects in constrained RTP project list according to the identified in-service dates, setting priority based upon technical scores. The prioritized list of projects not in the TIP list is enclosed.

4. Use prioritized list of projects not in the TIP to identify other regional priorities if funding levels allow for additional projects, setting priority based upon technical scores.

In selecting CMAQ-funded projects, we recommend drawing from the enclosed list of CMAQ eligible projects identified by the WILMAPCO Air Quality Subcommittee. Also enclosed are project recommendations from the WILMAPCO Nonmotorized Transportation Working Group.

Once DelDOT has prioritized projects statewide, we look forward to hearing the status of our submissions. If you have any questions, please call 302-737-6205 to speak to me (ext. 114) or Heather Dunigan (ext. 118).

Sincerely,

Tigist Zegeye
Executive Director

Enclosures (3)

Cc: WILMAPCO Council
Drew Boyce, DelDOT
Bill Geronimo, DelDOT
Bruce Allen, DelDOT
Earle Timpson, DelDOT
Mark Tudor, DelDOT
Heather Dunigan, WILMAPCO

FY 2017-2020 Transportation Improvement Program Project Prioritization, sorted by category and score

Adopted May 14, 2015

		Technical Score Criteria[1]											
		Quality of Life			Transport People				Support Economic Activity & Growth			FY17	FY17
	PROJECT	Air Quality	Environmental Justice	Safety	CMS Corridor	CMS ADT	CMS Transit	Transportation Justice (2014)	Freight	Economic Development	Funding Match	**Technical Score**	**COUNCIL RANK**
1	PROJECTS IN FY 2016-2019 TIP												
2	Arterial												
3	US 40: US 40/SR 896 Grade Separated Intersection	0	0	4	2	2	1	0	3	3	0	**15**	**1**
4	Wilmington Sweep Removal	0	3	0	2	2	2	0	2	3	0	**14**	**2**
5	Wilmington Traffic Calming: Walnut: MLK Blvd. to 16th	0	3	0	2	2	2	0	2	3	0	**14**	**2**
6	SR 2, Kirkwood Highway and Red Mill Rd. Intersection	0	0	1	1	2	3	0	2	3	0	**12**	**3**
7	SR 2 Elkton Rd: Maryland State Line - Casho Mill Rd.	1	0	0	2	2	1	0	3	3	0	**12**	**3**
8	SR299: SR 1 - Catherine Street	0	0	2	1	0	2	0	2	3	0	**10**	**4**
9	SR 4, Christina Parkway: SR 2 - SR 896	0	0	0	2	2	0	0	2	3	0	**9**	**5**
10	US 40: US 40/SR 72 Intersection, including Del Laws Rd.	1	0	0	1	2	1	0	1	3	0	**9**	**5**
11	US 13, Philadelphia Pike, Claymont Renaissance Plan Implementation	1	0	1	0	0	0	1	0	3	0	**6**	**6**
12	SR 72: SR 71 - McCoy Rd	0	0	0	1	0	0	0	2	1	1	**5**	**7**
13	Collectors												
14	Wilmington Riverfront: Christina River Bridge	0	1	1	1	4	2	0	2	3	0	**14**	**1**
15	Garasches Lane	1	1	0	0	0	0	0	0	3	0	**5**	**2**
16	Expressways												
17	I-295 Westbound: US 13 - I-95	0	0	2	2	4	0	0	4	3	0	**15**	**1**
18	SR SR 1/SR72 Diverging Diamond Interchange	0	0	1	1	4	3	0	2	3	0	**14**	**2**
19	I-95 & SR 141 Interchange - Commons Blvd	0	0	2	1	2	1	0	4	3	0	**13**	**3**
20	SR 1 NB: US 40 to SR 273 - Auxiliary lane	-3	0	1	2	4	3	0	2	3	0	**12**	**4**
21	I-95 & SR 141 Interchange - Ramps	0	0	2	0	0	0	0	4	3	0	**9**	**5**
22	Road A /SR 7	-3	0	1	2	2	2	0	0	3	0	**7**	**6**
23	US 301: MD Line - SR 1	-3	0	1	1	2	0	0	3	1	0	**5**	**7**
24	US 301: Spur	-3	0	1	1	2	0	0	3	0	0	**4**	**8**
25	Local												
26	Southern New Castle County: Jamison Corner Rd. Relocated at Boyd's Corner	1	0	2	0	0	0	0	0	1	3	**7**	**1**
27	Westown: Wiggins Mill Rd: Green Giant Rd. - St Annes Church Rd.	0	0	0	0	0	0	0	0	1	4	**5**	**2**
28	Southern New Castle County: Boyd's Corner Rd.: Cedar Ln - US 13	0	0	0	0	0	0	0	0	1	3	**4**	**3**

Adopted May 14, 2015

		Technical Score Criteria[1]											
		Quality of Life			Transport People				Support Economic Activity & Growth			FY17	FY17
	PROJECT	Air Quality	Environmental Justice	Safety	CMS Corridor	CMS ADT	CMS Transit	Transportation Justice (2014)	Freight	Economic Development	Funding Match	**Technical Score**	**COUNCIL RANK**
29	Pedestrian/Bicycle												
30	Wilmington Bike Facility Improvements (8th&9th Sts., West&Market Sts.)	1	3	2	2	2	3	3	0	3	0	**19**	**1**
31	Bicycle, pedestrian and other improvements, statewide	1	3	1	0	0	0	3	0	3	0	**11**	**2**
32	New Castle Industrial Track: s. of Christina River - Riverwalk	3	0	1	0	0	0	0	3	3	0	**10**	**3**
33	Myrtle Avenue Sidewalk Improvements	1	0	1	0	0	0	0	0	3	0	**5**	**4**
34	Manor Avenue Sidewalk Improvements	0	0	1	0	0	0	0	0	3	0	**4**	**5**
35	Transit												
36	Transit Vehicle Replacement and Refurbishment, New Castle County	1	3	1	2	2	3	3	0	3	0	**18**	**1**
37	Christiana Mall Park and Ride	1	0	0	0	0	0	0	0	3	0	**4**	**2**
38	Claymont Train Station	1	0	0	0	0	0	3	2	3	0	**9**	**3**
39	Rail: Newark Regional Transit Center (Newark Train Station)	1	0	0	1	2	2	3	3	3	0	**15**	**4**
40	Transit Vehicle Expansion, NCC	3	1	1	1	2	1	3	0	3	0	**15**	**5**
41	Rideshare Program, statewide	1	0	0	0	0	0	0	0	3	0	**4**	**6**
42	Rail Improvements: Fairplay Station Parking	0	0	2	2	2	3	0	0	3	0	**12**	**7**
43	Transit Vehicle Expansion: SR 141	3	1	1	1	2	0	3	2	3	0	**16**	**8**
44	Transit Vehicle Expansion: Paratransit	0	0	0	0	0	0	3	0	3	0	**6**	**9**
45	NOT IN FY 2016-2019 TIP												
46	Arterial												
47	US 13: SR 71, Tybouts Corner - US 40	0	0	2	2	4	2	0	2	3	0	**15**	**1**
48	Churchmans: SR4/Harmony Rd.	0	0	2	2	2	3	0	3	3	0	**15**	**1**
49	Churchmans: SR4/SR7 JP Morgan	0	0	2	2	3	2	0	2	3	0	**14**	**2**
50	Churchmans: Churchmans Rd. Extension	0	0	2	2	2	2	0	2	3	0	**13**	**3**
51	Churchmans: SR2/Harmony Rd.	0	0	1	2	2	3	0	2	3	0	**13**	**3**
52	US 40: SR 1 - SR 72, Widening	0	-1	2	1	3	2	0	2	3	0	**12**	**4**
53	SR 2: S. Union Street Streetscape	0	0	0	2	2	3	1	0	3	0	**11**	**5**
54	Wilmington Initiatives: Market St: 11th St. - 16th St.	1	3	0	2	2	0	0	0	3	0	**11**	**5**
55	Churchmans: SR 273/Chapman Rd.	0	0	0	2	2	2	0	2	3	0	**11**	**5**
56	SR 141: US 13 - Burnside Blvd.	0	0	2	0	0	0	1	2	3	0	**8**	**6**

Adopted May 14, 2015

	PROJECT	Technical Score Criteria[1]										FY17	FY17
		Quality of Life			Transport People				Support Economic Activity & Growth				
		Air Quality	Environmental Justice	Safety	CMS Corridor	CMS ADT	CMS Transit	Transportation Justice (2014)	Freight	Economic Development	Funding Match	**Technical Score**	**COUNCIL RANK**
57	Tyler McConnell Bridge, SR141: Montchanin Rd. - Alapocas Rd.	0	0	0	1	2	0	0	2	3	0	**8**	**6**
58	City of New Castle: SR 9	0	0	0	1	0	2	0	0	3	0	**6**	**7**
59	SR 9, River Rd. Area, Dobbinsville	0	0	0	0	0	0	3	0	3	0	**6**	**7**
60	US 40: Eden Square Connector	0	0	2	0	0	0	0	0	3	0	**5**	**8**
61	US 13, Odessa Transportation Plan Implementation	1	0	0	0	0	0	0	0	3	0	**4**	**9**
62	City of New Castle Intersections	0	0	0	0	0	0	0	0	3	0	**3**	**10**
63	Newtown Road: SR896 - SR 72	0	0	0	0	0	0	0	0	3	0	**3**	**10**
64	US 13: Duck Creek - SR 1	1	0	0	0	0	0	1	0	1	0	**3**	**10**
65	Collectors												
66	Wilmington Traffic Calming: 4th St: Walnut - I-95	1	3	4	2	0	2	0	2	3	0	**17**	**1**
67	Wilmington Traffic Calming: King/Orange: MLK Blvd. to 13th	1	3	0	2	0	2	0	2	3	0	**13**	**2**
68	Wilmington Traffic Calming: 12th St. Connector	0	3	0	0	0	0	0	0	3	0	**6**	**3**
69	Brackenville Road Slope Stabilization	0	0	2	0	0	0	0	0	1	0	**3**	**4**
70	Possum Park Rd. at Old Possum Park Rd.	0	0	0	0	0	0	0	0	1	0	**1**	**5**
71	Expressways												
72	I-95: SR 896 Interchange	0	0	2	2	4	2	0	3	3	0	**16**	**1**
73	I:95: Riverfront Interchange	0	-3	2	1	4	3	0	3	3	0	**13**	**2**
74	Local												
75	Wilmington Initiatives: Shipley Street	1	3	0	2	0	0	0	0	3	0	**9**	**1**
76	Wilmington Initiatives: Tatnall St. Connector	0	0	0	2	0	0	0	0	3	0	**5**	**2**
77	Wilmington Riverfront: West St. Connector Extension	0	0	0	2	0	0	0	0	3	0	**5**	**2**
78	Southern New Castle County: Cedar Lane Rd.: Marl Pit - Boyd's Corner	1	0	0	0	0	0	0	0	1	3	**5**	**2**
79	Reybold Road Extended: SR 72 - Salem Church Rd.	0	0	0	1	0	0	0	0	3	0	**4**	**3**
80	Southern New Castle County: Lorewood Grove Rd.: N412A - SR 1	1	0	0	0	0	0	0	0	1	2	**4**	**3**
81	Mill Creek Rd. and McKennan's Church Rd. Intersection	0	0	0	0	0	0	1	0	3	0	**4**	**3**
82	Other												
83	Aeronautics, New Castle County Airport Terminal Improvements	0	0	2	0	0	0	0	0	1	0	**3**	**1**
84	Pedestrian/Bicycle												

Adopted May 14, 2015

		Technical Score Criteria[1]											
		Quality of Life			Transport People				Support Economic Activity & Growth			FY17	FY17
	PROJECT	Air Quality	Environmental Justice	Safety	CMS Corridor	CMS ADT	CMS Transit	Transportation Justice (2014)	Freight	Economic Development	Funding Match	**Technical Score**	**COUNCIL RANK**
85	US 13: Memorial Drive - US 40 Pedestrian Safety Improvements	3	1	2	2	3	3	0	4	3	0	**21**	**1**
86	Wilmington Initiatives: Bicycle Improvements	1	3	2	2	2	3	3	0	3	0	**19**	**2**
87	US 40 Plan: US 40 Sidepaths (SR 72-SR 1, SR 896-SR 72)	3	1	2	1	3	2	0	2	3	0	**17**	**3**
88	US 40: Salem Church Rd - SR 1 Sidepath	1	1	2	1	3	3	0	3	3	0	**17**	**3**
89	SR 48: N. DuPont Rd - SR 141 Pedestrian Safety Improvements	1	3	1	1	2	1	1	2	3	0	**15**	**4**
90	US 40: SR 72 - Salem Church Sidepath	1	1	2	1	2	1	0	2	3	0	**13**	**5**
91	Delaware Avenue Cycletrack	1	0	2	2	2	1	0	2	3	0	**13**	**5**
92	DuPont Road Pedestrian Facilities	3	3	0	0	0	0	0	0	3	0	**9**	**6**
93	US 40: Newtown Trail & Pedestrian Improvements	1	0	0	0	0	0	0	3	3	0	**7**	**7**
94	Churchmans: Red Mill Rd. Sidewalks	1	0	0	1	2	0	0	0	3	0	**7**	**7**
95	Wilmington Initiatives: Water Street Walkway	1	0	0	2	0	0	0	0	3	0	**6**	**8**
96	Bicycle, Pedestrian: Foulk Rd.	1	0	1	0	0	0	0	0	3	0	**5**	**9**
97	Grubb Road Pedestrian Improvements: Foulk Rd. - Naamans Rd.	1	0	0	0	0	0	1	0	3	0	**5**	**9**
98	Bicycle, Pedestrian: Marsh Rd.	1	0	0	0	0	0	0	0	3	0	**4**	**10**
99	SR 3, Marsh Rd/Washington Street Ext. and SR 3 Pedestrian Improvements	1	0	0	0	0	0	0	0	3	0	**4**	**10**
100	Transit												
101	Wilmington DART Bus Hub	1	3	2	2	2	2	0	2	3	2	**19**	**1**
102	Transit bus stop improvements - NCC	3	3	1	0	0	0	3	2	3	0	**15**	**2**
103	Statewide CAD/AVL - Real time transit info via smart phone	3	3	0	0	0	0	3	0	3	0	**12**	**3**
104	US 40: Transit improvements	1	3	0	1	2	2	0	0	3	0	**12**	**3**
105	Boyds Corner Park and Ride Expansion	1	0	0	1	2	0	0	0	1	0	**5**	**4**
106	Rail preservation: NCC Historic Red Clay	0	0	0	0	0	0	0	0	1	0	**1**	**5**

1. Technical Score Sources:

Air Quality: review by Air Quality Subcommittee
Environmental Justice: 2013 Environmental Justice & Title VI Plan
Safety: DelDOT crash data, 2004-8
CMS: 2012 Congestion Management System Summary
Transportation Justice: 2014 Accessibility and Mobility Report
Freight: 2007 WILMAPCO Regional Freight and Goods Movement Analysis
Economic Development: Delaware Office of State Planning Policies and Spending Map
Funding Match: DelDOT finance

APPENDIX G

Public Comments

Comment	Response
Regarding the proposed MARC Maintenance Facility in Perryville, MD, would like to see provisions for a loop rail turnaround ocated around the perimeter of the maintenance facility, to be included in the NEPA evaluation to permit a direct connection between the NS Port Road rail line to the NB CSX freight rail, via the turnaround. Through reciprocal switching (and minor track clearance projects in Chambersburg, PA), CSX would then be able to move doublestack freight to points west of Hagerstown, MD to the DE/PA state line without going through the Baltimore Tunnel while only adding approx 10 linehaul miles to the journey. Also through reciprocal switching, NS could then use the CSX rail through Cecil, New Castle, and Delaware counties to bypass the NEC during the hours of 6am to 10pm, enhancing access to the Port of Philadelphia and northern Delaware. This connection could remove passenger/freight rail conflicts on the NEC through Cecil, New Castle, and Delaware counties. This could also permit doublestack operations between the Boxwood Road facility and points west of Chicago for two Class I railroads from enhancing overall intermodal freight access to the area.	The proposed MARC Maintenance Facility site abuts the NEC only. It does not abut either the NS Port Road or the CSX main line. Establishing rail links from the proposed MARC Maintenance Facility to the NS Port Road and the CSX main line could happen only at monumental economic, environmental, and social cost. Even if the MARC Maintenance Facility site did provide access to both the NEC and the NS Port Road, our understanding is that the Port Road, itself, is not double-stack capable. What's more, there's already a connection between the NEC and the NS Port Road, in Perryville. We still do not have Amtrak's final plan for the NEC, which could, ultimately, free up capacity for freight movements – though not alleviate the double-stack limitations. In the past, CSX has leased time on its main line in our region to Conrail, CP Rail, and NS. Ergo, physical linkages (such as the line through Canby Park connecting the CSX Wilsmere yard to the Amtrak West yard) already exist. It is unclear if the "Boxwood Road facility" references the defunct Fisker/GM assembly plant or the CSX Wilsmere yard facility. Shifting traffic to the CSX main line could possibly necessiate that facility's being converted to a double-track facility – again at significant economic, environmental, and social cost (the Deer Park – DE 2/273/896 – intersection would need to be re-evaluated, for example).
The TIP info session at the Newark Library was quite informative, substantially because the visual aids provided quick summary info and the nearby staff folks from both (Wilmapco and DelDOT) enabled questioners to get either on-the-spot knowledgable responses of referrals to further info sources. Well-conceived and well-executed approach. .	Thank you for your feedback
All of us are aware that we have long been in a tight money situation and that no changes are on the horizon. That SHOULD be accompanied by a POSITIVE effort to get the biggest possible bang for each buck spent, particularly government bucks. Yet there is a conspicuous absence of anything resembling cost/benefit analysis in any of the proposed project displays. This is despite the inclusion of a related consideration -- cost effectiveness/life cycle costs -- in Step 4 of Wilmapco's "Project Prioritization Process" brochure (as amended 7/10/2008). A case-in-point demonstrating the importance of cost/benefit analysis came up at the Wilmapco PAC seance on 2/29/2016, in Dan Blevins' SR 141 presentation.	Conducting a full cost/benefit analysis for the TIP is beyond the scope of what WILMAPCO can do with our available staff resources. We do use available resources to collect and analyze data in efficient ways, such as the Bluetooth data collection mentioned.

Comment	Response
The presentation offered before-and-after trip duration data that enabled a showing by simple arithmetic that merely by dynamic adjustment of signal timing, trip durations were reduced by ROM 15%. By questions aimed a extracting info about how much this improvement cost -- evidently insufficiently important to have included in the presentation itself -- I found that the capital cost of equipment permanently installed along 141 was only ROM $3000/mile. Out of a desire to avoid taking more time on a point already demonstrated, I didn't pursue operating costs. . That $3000/mile capital cost needs to be compared with a representation of the public cost and the government cost -- which are obviously separate -- of NOT achieving the ROM 15% reduction in travel time that results from NOT installing the needed electronics. Indeed that should have been the highlight of the presentation. That's especially important since numerous developers would quite likely pounce on funding such installations on the premise that comparable improvements on comparable roads throughout the county would enable additional development not now possible at anywhere close to the trivial cost of the electronics.	
Two bridges were mentioned at the PAC meeting, at least one of which was highlighted at the TIP gathering last week. One was the two lane bridge across the river to the Wilmington Riverfront. The other was a separate pedestrian/bicycle bridge elsewhere. I have no idea how far apart these two bridges are. On the premise that they may well be not far apart, I wonder what a cost/benefit evaluation would show about one alternative with two separate bridges and a second alternative with one bridge serving pedestrians, bicycles and motor vehicles. After all, we accommodate bicycles and motor vehicles on many major road segments. Even though bicyclists might prefer life in their own universe, some of the rest of us might find the cost to be onerous.	The two projects are a vehicle, pedestrian and bike bridge and the Christina River pedestrian and bicycle bridge. The pedestrian and bicycle project will complete the final mile in a 9-mile facility connecting New Castle to Wilmington off road. The Feasibility Study for the project explored several alignments, including use of the Christina River roadway bridge. The two bridges are approximately 1.26 miles apart. http://www.deldot.gov/information/projects/trails/newcastleindustrialtrack/pdf/IndustrialTrackPhas%203-feasibilityStudy.pdf. While less expensive to build, we did not favor this alternative because of safety and usability concerns. After crossing using the roadway bridge, the route would then need to connect south along US 13, crossing numerous commercial and industrial driveways. We felt that this poor user experience would likely significantly reduce the future use of the route and result in pedestrian crashes.

Comments thru 8/29/2016

Name	Carl Marsini
Email	carlmarsini@yahoo.com
Address	120 St. Moritz Dr., Wilmington, DE. 19807
Comment	Two major roads that I drive on daily basis that are awful: 141 N/S between the Tyler McConnell Bridge and Ferris; and Rt. 7 between Stanton Middle School and Border Cafe.

Name	Robert Krajeski
Email	rkrajeski@live.com
Address	121 Victoria Falls Lane
Comment	There is no plans to provide a traffic light synchronization program. California and Texas have active programs to provide light synchronization. Delaware does not have a plan. I would like Wilmapco a plan to provide traffic light synchronization. The benefits to the community are extensive -- reduce driving time, cost saving, and reduce the requirement for red light cameras.

Name	Tom Keene
Email	tckeene@gmail.com
Address	2508 Redstart Ct, Wilm DE 19805
Comment	Chambers Rock Rd bridge is terrible. It is one lane and there is a blind spot on both sides so it creates a deadlock because people don't stop back far enough to see the other side. If you can't replace the bridge with dual lane and bike path, at least straighten out the S curve that creates the problem. It gets lots of traffic and needs attention.

From: West Side Grows <westsidegrows@gmail.com>
Sent: Tuesday, September 6, 2016 10:02 PM
To: Daniel Blevins
Cc: Sarah Lester
Subject: Public Comment on TIP Funding from West Side Grows Together Coalition

To Whom It May Concern:

West Side Grows Together, a coalition of 27 civic associations, community organizations, churches, and businesses in Wilmington's West Side would like to urge WILMAPCO to prioritize projects on N. Union St. and Fourth St. in future TIP funding, as well as other important commercial corridors in Wilmington's neighborhoods, because it is critical that transportation dollars be invested in the City of Wilmington, Wilmington's largest city and densest community.

The West Side Revitalization Plan, developed in 2012 with the involvement of more than 650 residents and other stakeholders, identified infrastructure improvements to Fourth St. and Union St. as a critical step to make these important commercial corridors and gateways to Wilmington's downtown more pedestrian friendly and attractive to support multi-modal transportation in a community where many people do not have cars, promote neighborhood vitality and support business growth.

Since then, the West Side Community has actively worked with WILMAPCO and the City of Wilmington to advance investment in improvements to these streets, including holding Walkable Communities Workshops for both N. Union St. and W. Fourth St. In addition, for the past three years, the West Side community has collaborated with the City of Wilmington and DELDOT to showcase the potential to transform N. Union St. into a walkable, vibrant neighborhood commercial district through a Better Block event held each August.

Just last month, over 1,000 community members visited the 500 & 600 blocks of Union Street during Better Block on August 1st – 3rd. Volunteers, business owners, and generous sponsors worked together to fill one lane of the three lane state highway with: a temporary bike lane, outdoor dining, a crosswalk, games, live artists, a parklet, street yoga, live music, and more!

The event received attention from The News Journal, ABC6 News, and Town Square Delaware. 4youth Productions photographed the event and sold their signature artwork to passersby. Starfish Casters coordinated a community mural and video that is coming soon. To view more photos from the event, visit our storify page and the Facebook event page.

Feedback from the event has been positive and there is a desire to sustain these improvements beyond the three day event in August. After surveying the participating businesses, one business owner reported a doubling of sales for those three days in comparison to the previous week; another noticed that new customers took menus and purchased their food; an additional business loved networking with the community about her new business; and lastly one business owner expressed how happy they were to see children playing outside their store.

West Side Grows Together is eager to work with the City of Wilmington, WILMAPCO, and DELDOT to make many of these transportation and streetscape enhancements permanent. **Almost 500 people have signed an online petition to make these changes permanent.** These improvements are part of the larger Union Street and 4th Street strategies to attract new businesses and customers, strengthen existing businesses, ensure safe and clean corridors, and support vibrant, accessible destinations on the West Side.

We'd like to urge WILMPACO to work with DELDOT, the City of Wilmington, West Side Grows, and other partners to add improvements to Fourth St. and N. Union St. to the TIP priority list to support major infrastructure improvements to Union St. and Fourth St. to make these corridors safe, attractive and pedestrian friendly places that will support small business development and contribute to the vitality of our community.

Sincerely,
Christian Willauer
Director, Cornerstone West CDC
(302) 658-4171 ext. 179

From: Sarah Lester <westsidegrows.business@gmail.com>
Sent: Tuesday, September 6, 2016 6:27 PM
To: Daniel Blevins
Subject: TIP public comment

Hello there,

As someone who works in the field of community economic development in Wilmington and is an aspiring resident of the West Side, I would love to see more transportation improvements in the city as part of the TIP. Wilmington has the largest population of any city in the state and would benefit significantly from the economic impact that transportation and streetscape improvements can bring.

Our Better Block Union Street project demonstrated how a bike lane and the elimination of one lane on Union Street calmed traffic and increased the walkability, bikeability, and economic activity in the area. Better Block was inspired by WILMAPCO's Walkable Community Workshops on 4th Street and Union Street and led to our submission of TAP applications for both streets. I believe these projects and many others like it need additional funding and prioritization through the larger TIP funding pool.

I hope that there will be more projects in Wilmington, and specifically on the West Side of Wilmington, in future iterations of the TIP. Thank you for all of your efforts to improve transportation throughout the state!

Sincerely,
Sarah Lester
Economic Development, Cornerstone West CDC
(302) 658-4171 ext. 184

For Presentation at the Hearing held by the Council on Transportation and the Department of Transportation-31 August, 2016 at the Newark Public Library.

Good Afternoon and Good Evening to the members present of the Council on Transportation and the Department of Transportation:

I'm Charlie Weymouth, Architect and Planner, living in Delaware for over sixty five years, and with an independent Delaware practice for over forty six years.

Proposed Del Dot projects clearly are to attend local, parochial, politically controlled, self interest. Pleas from this Architect since 1992 in regard to overall and specific Transportation needs with given prioritization and assignment of specific fiscal responsibility, have received no earlier response from the various governing bodies. Very clearly, the following must occur:

- **Del Dot and the State must concentrate beyond just the local and private road systems, and focus on rail, air, and water borne trade and commerce (for this latter, i.e. the multiple Port location opportunities as offered by private, "open shop", sponsors.)**
- **Directly adjacent retail/commercial access to our interstate roads must be denied with the offered County $400mil. underwriting for Port expansion transferred to correcting the present interstate road system.**
- **Require of local governance to provide funds necessary to accommodate the apparent future inevitability of sprawling, residential growth, and such at a substantially higher density. A first priority must be to establish and optimize a viable economy, thence an accommodating residential increase. Infrastructure costs to the new growth must be substantially carried by the developer.**
- **Abandon Del Dot's discretionary grants to non essential Planning entities such as WILMAPCO, the latter, in some manner having drifted from Regional Planning (of**

only two adjacent Counties) into localized street scapes, etc.

Ladies and Gentlemen of The Council on Transportation and the Department of Transportation, major re adjustment of priorities must now occur or brace for Court intercession.

Thank You.

CHARLIE WEYMOUTH, AIA
Te: 302-658-8760

Bob McGurk
bobmcgurk@gmail.com
357 Marldale Drive, Middletown, DE 19709

Regarding the proposed MARC Maintenance Facility in Perryville, MD:

We would like to see provisions for a loop rail turnaround facility (approx 7,200 LF), located around the perimeter of the maintenance facility, to be included in the NEPA evaluation to permit a direct connection between the NS Port Road rail line to the NB CSX freight rail, via the turnaround.

Through reciprocal switching (and minor track clearance projects in Chambersburg, PA), CSX would then be able to move doublestack freight to points west of Hagerstown, MD to the DE/PA state line without going through the Baltimore Tunnel while only adding approx 10 linehaul miles to the journey.

Also through reciprocal switching, NS could then use the CSX rail through Cecil, New Castle, and Delaware counties to bypass the NEC during the hours of 6am to 10pm, enhancing access to the Port of Philadelphia and northern Delaware.

This connection could remove passenger/freight rail conflicts on the NEC through Cecil, New Castle, and Delaware counties.

This could also permit doublestack operations between the Boxwood Road facility and points west of Chicago for two Class I railroads from enhancing overall intermodal freight access to the area.

Regards,

Bob McGurk, P.E

From: Heather Dunigan
Sent: Friday, January 29, 2016 2:31 PM
To: 'yale45w@yahoo.com'
Cc: Dave Gula; Daniel Blevins
Subject: RE: Christina River Bridge

Dear Mr. Thoms,

Thank you for your feedback about the Christina River Bridge project. Unfortunately, the bridge only clears about 12-16 feet above high tide, so the Kalmar Nyckel will not pass it. In designing the bridge, planners did consider the needs of the Kalmar Nyckel but opted for the lower clearance because just upstream there is a Norfolk Southern freight train swingbridge that has been locked in position for train crossings for many years, and it cannot possibly allow more than 10 feet, if even that. The Kalmar has not passed that bridge ever, so the new bridge will not create a new obstacle. An analysis of navigational impacts may be found at https://www.deldot.gov/information/projects/crb/pdf/ea/10_appendix_a.pdf. This project has been presented at several public workshops, dating back to 2011. The approved FY 2016-19 Transportation Improvement Program includes construction funding beginning in FY 2016.

We will share your comment with DelDOT and the entire WILMAPCO Council for their consideration at their March 10 meeting. Please let me know if you have additional questions or comments.

Thanks,
Heather Dunigan

-----Original Message-----
From: Lloyd Thoms [mailto:yale45w@yahoo.com]
Sent: Friday, January 29, 2016 9:24 AM
To: Daniel Blevins
Subject: Christina River Bridge

The proposed bridge should allow access for the Kalmar Nyckel.
Lloyd Thoms
Wilmington, Delaware

From: VSinger01@aol.com [mailto:VSinger01@aol.com]
Sent: Tuesday, March 01, 2016 2:21 PM
To: Daniel Blevins
Cc: vsinger01@aol.com
Subject: TIP comments

Comment Sheet
Transportation Improvement Program
.
1. Which proposed project(s) do you like the best?
2. Do you have comments or suggestions about any proposed projects?
3. What other projects should we consider in the future?
4. Other comments:
.
ITEM ONE: The TIP info session at the Newark Library was quite informative, substantially because the visual aids provided quick summary info and the nearby staff folks from both (Wilmapco and DelDOT) enabled questioners to get either on-the-spot knowledgeable responses of referrals to further info sources. Well-conceived and well-executed approach.
.
ITEM TWO: All of us are aware that we have long been in a tight money situation and that no changes are on the horizon. That SHOULD be accompanied by a POSITIVE effort to get the biggest possible bang for each buck spent, particularly government bucks. Yet there is a conspicuous absence of anything resembling cost/benefit analysis in any of the proposed project displays. This is despite the inclusion of a related consideration -- cost effectiveness/life cycle costs -- in Step 4 of Wilmapco's "Project Prioritization Process" brochure (as amended 7/10/2008)
.
ITEM THREE: A case-in-point demonstrating the importance of cost/benefit analysis came up at the Wilmapco PAC seance on 2/29/2016, in Dan Blevins' SR 141 presentation. The presentation offered before-and-after trip duration data that enabled a showing by simple arithmetic that merely by dynamic adjustment of signal timing, trip durations were reduced by ROM 15%. By questions aimed at extracting info about how much this improvement cost -- evidently insufficiently important to have included in the presentation itself -- I found that the capital cost of equipment permanently installed along 141 was only ROM $3000/mile. Out of a desire to avoid taking more time on a point already demonstrated, I didn't pursue operating costs.
.
That $3000/mile capital cost needs to be compared with a representation of the public cost and the government cost -- which are obviously separate -- of NOT achieving the ROM 15% reduction in travel time that results from NOT installing the needed electronics. Indeed that should have been the highlight of the presentation. That's especially important since numerous developers would quite likely pounce on funding such installations on the premise that comparable improvements on comparable roads throughout the county would enable additional development not now possible at anywhere close to the trivial cost of the electronics.
.
ITEM FOUR: Two bridges were mentioned at the PAC meeting, at least one of which was highlighted at the TIP gathering last week. One was the two lane bridge across the river to the Wilmington Riverfront. The other was a separate pedestrian/bicycle bridge elsewhere. I have no idea how far apart these two bridges are. On the premise that they may well be not far apart, I wonder what a cost/benefit evaluation would show about one alternative with two separate

bridges and a second alternative with one bridge serving pedestrians, bicycles and motor vehicles. After all, we accommodate bicycles and motor vehicles on many major road segments. Even though bicyclists might prefer life in their own universe, some of the rest of us might find the cost to be onerous.

.

Vic Singer 1219 Stinsford Rd. Newark DE 19713-3360
302 366 8768 vsinger01@aol.com .

Comment Sheet

WILMAPCO

Transportation Improvement Program

Welcome to the Wilmington Area Planning Council's public meeting on the Transportation Improvement Program. Your comments will be an important source of information for WILMAPCO to consider when identifying priority projects.

1. Which proposed project(s) do you like the best?

I like the projects that include improvements to pedestrian and bicycle infrastructure. Delaware has a high rate of pedestrian-involved traffic accidents and this situation needs to change. Similarly, while major improvements have been realized, bicycles are too often relegated to shoulders/sidewalks filled with debris and glass.

2. Do you have comments or suggestions about any proposed projects? Please explain.

The "Industrial Track Greenway" is an excellent idea and more of these projects should be implemented. The mass transit improvements are also highly appreciated.

3. What other projects should we consider in the future?

Delaware desperately needs improvements in bicycle infrastructure. Ideally, projects that establish safe and separate bicycle pathways are implemented in the future. The focus in bicycle infrastructure should shift to adequate infrastructure for commuting, including infrastructure that is specially dedicated to bicycles.

G - 12

4. Other comments (Please continue on back if needed):

I'd like to see more attention being paid to bicycle paths for commuting rather than the current focus on trails.

Also, shoulders now designated as bicycle paths are often not cleaned nearly as rigorously as regular roads resulting in large amounts of glass and debris on shoulders/bike paths.

5. How did you hear about this meeting? (check all that apply)

☐ Workshop flyer ☐ Read in newspaper ☒ Read in WILMAPCO enews/newsletter ☐ Heard on radio
☐ WILMAPCO website ☐ Facebook ☐ Other_____

Contact Information

Name: Jon Taminian Street Address: 22 Kings Circle
City: Newark State: DE ZIP Code: 19702
Phone Number: 302 332 3146 E-mail: jtam@udel.edu

Thank you for your participation!

Please turn in before you leave or fax to 302-737-9584, mail to WILMAPCO, Suite 100, 850 Library Avenue, Newark, DE 19711 or comment at our web site at www.wilmapco.org. Call 302-737-6205 if you have any questions.

2-6 2-56 2-70
1-14 ~~2-38~~ (2-57) (2-77
1-19 (2-41) WILMAPCO
(2-43) (2-58)
(2-52) (2-62)
(2-53) (2-64)

Comment Sheet

Transportation Improvement Program

Welcome to the Wilmington Area Planning Council's public meeting on the Transportation Improvement Program. Your comments will be an important source of information for WILMAPCO to consider when identifying priority projects.

1. Which proposed project(s) do you like the best?

(1) GARASCHES LANE (p. 2-41)
(2) NEW CASTLE COUNTY INDUSTRIAL TRACK GREENWAY
(3) US 13: DUCK CREEK TO SR1
(4) US 13: US 40-MEMORIAL DRIVE PEDESTRIAN IMPROVEMENTS

2. Do you have comments or suggestions about any proposed projects? Please explain.

Place more emphasis, priority, and importance on bike transportation. In order to achieve this, fully functional (well-paved, painted, well-lit, and large enough) bike lanes, not just improvements to existing bike lanes. The plan reads as though bike lanes are an afterthought, leaving those who bike feeling like second-class citizens. If you build it, they will ride.

3. What other projects should we consider in the future?

Research how the city of Groningen in the Netherlands was able to make their city center completely car-free and how quality of life has improved since the 1970s there.

G - 13

4. Other comments (Please continue on back if needed):

Prioritize modes of transportation that help reduce the emissions that impact other things like flood zones. ~~Have~~ Instead of fixing things once they're broken (flooded), work to prevent these types of issues since Delaware is so water-heavy.

THANK YOU! :)

5. How did you hear about this meeting? (check all that apply)

☒ Workshop flyer ☐ Read in newspaper ☐ Read in WILMAPCO enews/newsletter ☐ Heard on radio
☐ WILMAPCO website ☐ Facebook ☒ Other Community Announcements - Nicole Byers Lt. Gov's office

Contact Information

Name: LAURA ADARVE Street Address: 22A KINGS CIR.
City: NEWARK State: DE ZIP Code: 19702
Phone Number: 305 283 9063 E-mail: LADARVE@UDEL.EDU

Thank you for your participation!

Please turn in before you leave or fax to 302-737-9584, mail to WILMAPCO, Suite 100, 850 Library Avenue, Newark, DE 19711 or comment at our web site at www.wilmapco.org. Call 302-737-6205 if you have any questions.

Comment Sheet

WILMAPCO

Transportation Improvement Program

Welcome to the Wilmington Area Planning Council's public meeting on the Transportation Improvement Program. Your comments will be an important source of information for WILMAPCO to consider when identifying priority projects.

1. Which proposed project(s) do you like the best?

2. Do you have comments or suggestions about any proposed projects? Please explain.

Widening of Frazer Rd (Bear Area) to handle increase of traffic due to new neighborhoods along this corridor.

3. What other projects should we consider in the future?

G - 14

4. Other comments (Please continue on back if needed):

5. How did you hear about this meeting? (check all that apply)

☐ Workshop flyer ☐ Read in newspaper ☐ Read in WILMAPCO enews/newsletter ☐ Heard on radio
☐ WILMAPCO website ☐ Facebook ☐ Other I work at the library

Contact Information

Name: Spencer Saints Street Address:

City: State: ZIP Code:

Phone Number: E-mail: spencersaints@gmail.com

Thank you for your participation!

Please turn in before you leave or fax to 302-737-9584, mail to WILMAPCO, Suite 100, 850 Library Avenue, Newark, DE 19711 or comment at our web site at www.wilmapco.org. Call 302-737-6205 if you have any questions.

TRANSPORTATION PUBLIC WORKSHOP

Photo Credit: DART First State

Share your ideas for transportation

Learn how billions of your tax dollars are proposed to be spent to improve walking, bicycling, driving, and riding public transit.

WILMAPCO and DelDOT invite you to review the Transportation Improvement Program (TIP), listing the road, bus, rail, bicycle and pedestrian projects proposed for funding in New Castle County, DE and Cecil County, MD. Call 302-737-6205 or email wilmapco@wilmapco.org with comments or questions. Information may also be viewed and commented on at **WWW.WILMAPCO.ORG/TIP** from January 19 to March 2, 2016.

Wednesday, February 24, 2016

Stop by anytime between 4 - 7 pm

Newark Free Library

750 Library Ave, Newark, DE 19711

DelDOT

WILMAPCO

WILMAPCO TIP QUICK GUIDE

The TIP is prepared by WILMAPCO in cooperation with the public and local transportation and land use agencies.
Broad input is crucial because the TIP identifies regional priorities for how our federal, state and local transportation funding is spent.

How is the TIP Funded?

All federally funded projects must be included in the TIP and most federal funds require matching funds. Much of this revenue is from user fees such as the gas tax. State and local matches are also supplemented by borrowing, state and local taxes, and private funding.

$866 million Delaware/Maryland
40%

Delaware/Maryland funds from fuel taxes, tolls, motor vehicle and other fees, & bonds

$1,125 million federal
51%

Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)

$201 million other
9%

Other funding comes from local funds, developer contributions, toll bonds, and grants

Where are the projects?

While projects are located throughout the region, Transportation Investment Areas define appropriate projects based on location, and direct the greatest resources toward serving the most population. WILMAPCO uses a prioritization process to identify benefits by location.

Cecil County 5%

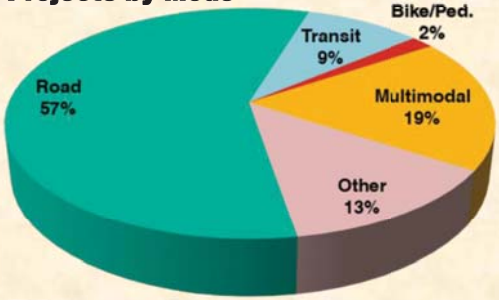
New Castle County
48%

Delaware Statewide
47%

The TIP document is grouped by Cecil County, New Castle County, and Delaware Statewide. Delaware Statewide contains funding for all counties in Delaware and projects do not specify amounts for New Castle County, for example Engineering and Contingency

What Types of Projects are in the TIP?

Projects by Mode



Road—Exclusively for roads and highways

Transit—Bus, passenger rail or paratransit

Bicycle/pedestrian—Walking and cycling transportation

Multimodal—Serves cars, transit, freight, walking and bicycles in a balanced way

Other—Includes aeronautics, port, contingency funds, environmental, equipment, planning, etc.

Projects by Category

Preservation—Maintain an existing facility or service

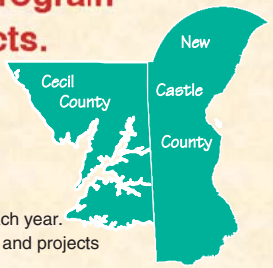
Management—Enhance existing facility or service to sustain an acceptable level of service

Expansion—New/expanded services and infrastructure

Other—Engineering & contingency, education & training,

HAVE A SAY IN HOW YOUR TRANSPORTATION DOLLAR$ ARE SPENT

WILMAPCO's Transportation Improvement Program (TIP) funds the region's transportation projects.



The TIP represents the first 4 years of your region's long-range plan, and prioritizes and documents planned projects including roads, buses, rail, bicycle and pedestrian improvements.

How can you participate?

- Stay informed—sign up for our monthly e-news and quarterly newsletter by visiting www.wilmapco.org or calling 302.737.6205
- Attend public meetings or invite us to speak to your group. Two TIP workshops are held each year. In addition, WILMAPCO, DelDOT and MDOT host many public events on individual plans and projects
- Call us or E-mail comments to wilmapco@wilmapco.org

WHAT'S NEW: Draft TIP is available for comment from January 19—March 2, 2016

- **NEXT PUBLIC WORKSHOP: FEBRUARY 24, 2016**
  Visit between 4—7 p.m., Newark Free Library, 750 Library Ave, Newark, DE 19711
- Contains $2.18 billion in road, transit, rail, multimodal & bicycle/pedestrian projects
- Contains 3 percent more funding than the TIP approved in September 2015, with no new projects
- Projects removed due to no funding or changed scope:
  - Boyds Corner Park and Ride
  - Bridges on Pyles Ford Road, Oak Ridge Road, and Old Corbitt Road
  - SR 896 and Bethel Church Rd Interchange
  - Transit (Paratransit) Vehicle Expansion, NCC
  - Westown, Wiggins Mill Road
- The following projects are now complete:
  - Bridges on Wedgewood Road, Chesapeake City Road, Augustine Cutoff, and I-495 and Wilmington drawbridges
  - US 13 over the New Castle-Wilmington Industrial Track Greenway, including pedestrian/bike route
  - Cavaliers Mitigation
  - C&D Canal Trail-branch canal to Chesapeake City
  - Elkton Road: Casho Mill Rd to Delaware Ave
  - Glenville Wetland Bank & Subdivision Improvements
  - Mid County Department of Motor Vehicles
  - N412A: Hyetts Corner Rd to Lorewood Grove Rd
  - Pomeroy Trail
  - Road A and Centre Blvd: Fashion Center Entrance
  - S Union Street: Railroad Bridge to Sycamore St
  - Talley Rd: East Coast Greenway/Northern DE Greenway
  - Washington Street, New Castle

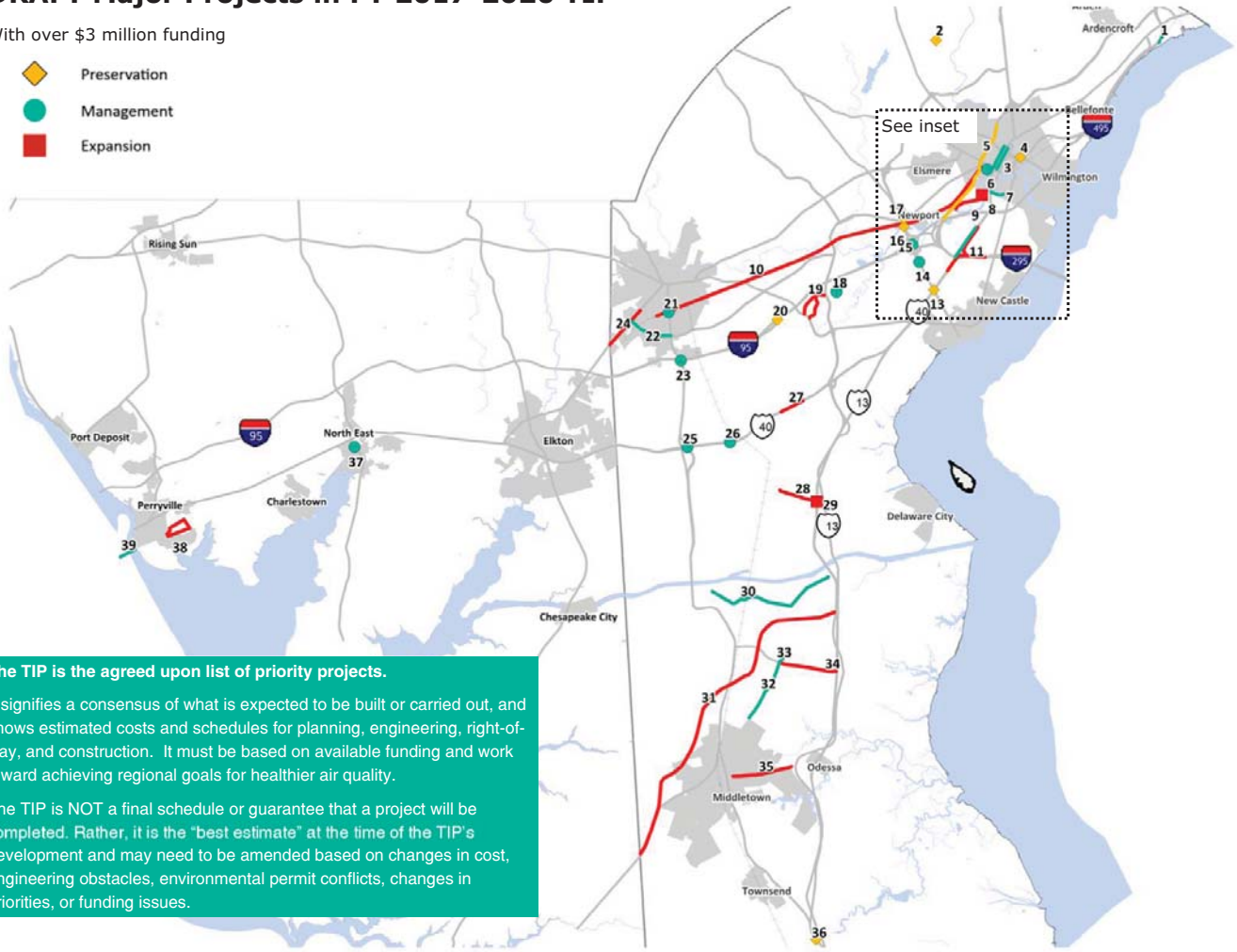
WILMAPCO
WILMINGTON AREA PLANNING COUNCIL
850 Library Avenue, Newark, DE
302-737-6205 ⊙ wilmapco@wilmapco.org
WWW.WILMAPCO.ORG/TIP

SEE INSIDE FOR PROJECT MAP

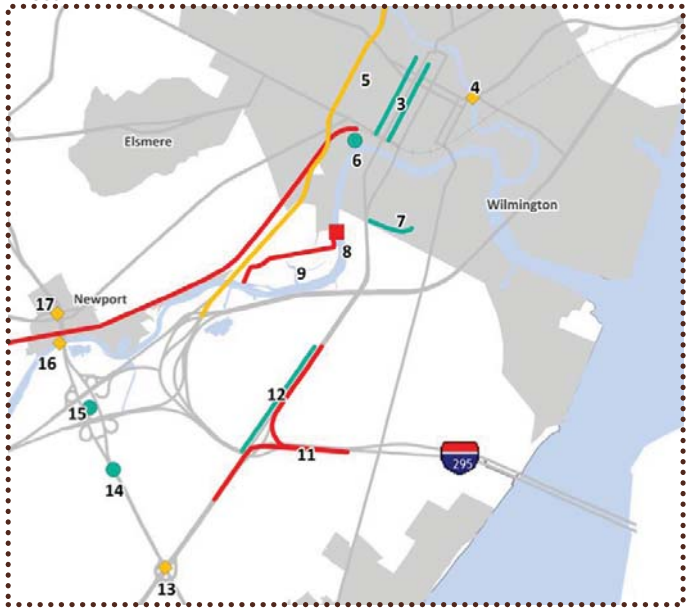
DRAFT Major Projects in FY 2017-2020 TIP

With over $3 million funding

- Preservation
- Management
- Expansion



Inset



The TIP is the agreed upon list of priority projects.

It signifies a consensus of what is expected to be built or carried out, and shows estimated costs and schedules for planning, engineering, right-of-way, and construction. It must be based on available funding and work toward achieving regional goals for healthier air quality.

The TIP is NOT a final schedule or guarantee that a project will be completed. Rather, it is the "best estimate" at the time of the TIP's development and may need to be amended based on changes in cost, engineering obstacles, environmental permit conflicts, changes in priorities, or funding issues.

Example Projects (areawide projects, not mapped)

- Paving, Rehabilitation, Signage, and Pavement Markings
- Safety
- Transit Operating and Capital Funds
- Bridge Preservation
- Bicycle and Pedestrian Improvements and Recreational Trails Program
- Municipal Street Aid and Community Transportation Funds
- Intersection Improvements

Visit www.wilmapco.org/tip or call 302-737-6205 to learn more about these and other projects. In the TIP document, you can read a full description for each project and funding for each year and phase.

ID	Project
1	Claymont Train Station
2	BR 634 on SR 100 over Delaware Valley Railroad
3	King & Orange Streets, MLK Blvd. to 13th St.
4	BR 577 on Northeast Blvd over Brandywine River
5	I-95 Rehab from I-495 to N of Brandywine River
6	Wilmington Transit
7	Garasches Lane
8	Christina River Bridge
9	NCC Industrial Track Greenway, Phase III
10	Third Rail Track Expansion, Newark to Wilmington
11	I-295 Improvements, Westbound: I-295 to US 13
12	US 13, US 40 to Memorial Drive, Pedestrian Improvements
13	BR 680 on SR 141 over US 13
14	SR 141 and Commons Blvd Intersection
15	SR 141/I-95 Interchange
16	BR 159 on James Street over Christina River
17	BR 501 on SR 141 over SR 4
18	Christiana Mall Park and Ride
19	Road A/SR 7
20	BR 714 on Chapman Road over I-95
21	Newark Train Station
22	SR 4 from SR 2 to SR 896
23	I-95 & SR 896 Interchange Improvements
24	SR 2, Elkton Road: MD Line to Casho Mill Rd
25	US 40 / SR 896 Interchange
26	US 40 / SR 72 Interchange
27	US 40: Salem Church Rd to Walther Rd
28	SR 72: McCoy Road to SR 71
29	SR 72/SR 1 Diverging Diamond Interchange
30	N412, Lorewood Grove Road, Rd 412A to SR 1
31	US 301: Maryland Line to SR 1
32	Cedar Lane, Roadway Improvements
33	Jamison Corner Rd: Relocated to Boyds Corner Rd
34	Boyds Corner Rd: Cedar Lane to US 13
35	SR 299: SR 1 to Catherine Street
36	BR 488 on US 13SB, South of Odessa
37	MD 272 Bridge over Amtrak
38	MARC Maintenance Facility
39	Susquehanna River Rail Bridge Replacement

APPENDIX H

INDEX

Absence Management	1	-	10
Aeronautics Planning	1	-	13
Aeronautics Program Development	1	-	13
AREAWIDE BRIDGE REPLACEMENT AND REHABILITATION	3	-	1
AREAWIDE CONGESTION MANAGEMENT	3	-	10
AREAWIDE ENVIRONMENTAL PROJECTS	3	-	2
AREAWIDE RESURFACING AND REHABILITATION	3	-	3
AREAWIDE SAFETY AND SPOT IMPROVEMENTS	3	-	4
AREAWIDE URBAN STREET RECONSTRUCTION	3	-	5
Beech St Facility Renovations	2	-	39
Beech St Generator	2	-	39
Beech St Maintenance Building	2	-	39
Bicycle, Pedestrian and other Improvements	1	-	14
BR 1-148A&B on N330 Greenbank Rd over Red Clay Creek	2	-	3
BR 1-159 on James St over Christina River	2	-	4
BR 1-191 on N318 Milltown Rd over Mill Creek	2	-	5
BR 1-227 on N013 Paper Mill Rd over Middle Run Tributary	2	-	6
BR 1-238 on Elizabeth Court over Tributary to White Clay Creek	2	-	7
BR 1-239 on N352 Red Mill Rd over Tributary to White Clay Creek	2	-	8
BR 1-251 on N355 Harmony Rd over White Clay Creek	2	-	9
BR 1-254 on N350 Old Newark Rd over Cool Run	2	-	10
BR 1-291 on Songsmith Dr. over Tributary to Smalley's Pond	2	-	11
BR 1-294 on N346 Walther Rd over Tributary to Christina River	2	-	12
BR 1-308 on N378 Clark's Corner Rd over Dragon Run	2	-	14
BR 1-393 on SR299 Main St over Appoquinimink River	2	-	15
BR 1-438 on N463 Blackbird Station Rd over Blackbird Creek	2	-	16
BR 1-488S on N001 US13 over Blackbird Creek	2	-	17
BR 1-501 on N006 Newport Viaduct over Christina River Piers 2 and 3	2	-	18
BR 1-501, 1-501A & 1-501B SR 141 Viaduct over SR4	2	-	18
BR 1-543 on N213 Carr Rd over Shellpot Creek	2	-	19
BR 1-567A on N501 Hay Rd over Shellpot Creek, City of Wilmington	2	-	20

BR 1-577 on N050 Northeast Boulevard over Brandywine River	2	-	21
BR 1-634 on SR100 DuPont Rd over East Penn RR	2	-	22
BR 1-651 on Newport Rd over CSX Railroad	2	-	23
BR 1-680 on SR 141 Basin Rd over US 13	2	-	24
BR 1-684 on N028 South Heald St over Norfolk Southern Railroad	2	-	25
BR 1-686 on N029 South Walnut St over Norfolk Southern Railroad	2	-	26
BR 1-714 on N347 Chapman Rd over I-95	2	-	27
BR 1-717 on I-95 NB over SR1	2	-	28
BR 1-759 on I-95 over Brandywine River	2	-	29
BR 1-813 on I-495 over Christina River, Emergency Repairs, Phase 2	2	-	30
BR 1-814 on N009 12th St over Norfolk Southern RR	2	-	31
Bridge Management	1	-	15
Bridge Design Training Program	1	-	15
Bridge Inspection Program	1	-	15
Bridge Painting Program	1	-	2
Bridge Painting, New Castle County, 2015	2	-	32
Bridge Painting, New Castle County, 2016	2	-	32
Bridge Preservation Program	1	-	2
Bridge Replacements on SR9, BR 1-302 over Tom Creek and BR 1-304 over Gambles Gut	2	-	13
Bus Shelter Glass Replacement - FTA State of Good Repair Grant	1	-	10
Bus Stop ADA Accessibility - FTA State of Good Repair Grant	1	-	10
Bus Stop Improvement Program	1	-	10
CAD/AVL	1	-	10
CAD/AVL Modem Upgrade	1	-	10
CAD/AVL System and Trapeze Upgrade	1	-	10
Call Center Recorder and Upgrade	1	-	10
Cantilever and Overhead Sign Structures, Open End, FY16-18	2	-	32
Cecil County Bridge CE-0042, Mechanics Valley Rd over CSX Railroad	3	-	6
CECIL cOUNTY tRANPORTATION ALTERNATIVE/ Transportation Enhancement pROJECTS	3	-	11
Cedar Lane Rd and Marl Pit Rd Intersection Improvements	2	-	53
Chesapeake and Delaware Canal Trail, Maryland	3	-	12

Christina Crescent Elevators	2	-	58
Christina River Bridge	2	-	68
Christina River Bridge Approaches	2	-	68
Churchman's Crossing Fairplay Station Elevator	2	-	75
Churchman's Crossing Fairplay Station Parking Expansion	2	-	75
City of Wilmington Bus Stop Beautification	2	-	58
Claymont Station	2	-	44
Community Transportation Program	1	-	3
Control Center Dispatch Statewide	1	-	10
Corridor Capacity Preservation	1	-	16
Dam Preservation Program	1	-	4
DART 1 Roof Replacement	2	-	39
DART I Bus Vacuum	2	-	39
DART Parking Lot 4 Paving	2	-	39
Design-Build Statewide Pipe Replacements	1	-	2
Disadvantaged Business Enterprise	1	-	22
D-Marc Beech St	2	-	39
DMV Mainframe Modernization Project FY2013	1	-	22
DMV Toll Equipment Upgrade	1	-	22
Education and Training	1	-	27
Elkton Rd, MD Line to Casho Mill Rd	2	-	55
Engineering and Contingencies	1	-	27
Enterprise Document Management	1	-	22
Environmental Improvements	1	-	27
Fare Collection Improvements	1	-	12
Federal Land Access Program	1	-	28
FTA State of Good Repair Grant	2	-	39
Fuel Management Software System	1	-	10
Garasches Lane, Wilmington	2	-	45
Glenville Subdivision Improvements	2	-	33
Hazard Elimination Program	1	-	20
Heavy Equipment Program	1	-	5
HEP NCC, SR 273 and Red Mill Rd Connector Intersection	2	-	48

HEP NCC, SR 72 and Old Baltimore Pike Intersection Improvements	2	-	49
HEP NCC, SR2, Wollaston Rd to Milltown Rd	2	-	49
HEP NCC, SR41 and Faulkland Rd Intersection	2	-	49
HEP NCC, US 40 at Glasgow Ave	2	-	49
High Risk Rural Rds Program	1	-	20
Highway Safety Improvement Program, New Castle County	2	-	47
HSIP NCC, Churchmans Rd WB, Christiana Hospital to SR 1	2	-	49
HSIP NCC, I-95, N213 Carr Rd & N3, Marsh Rd Interchange	2	-	49
HSIP NCC, N282, Mill Creek Rd and Stoney Batter Rd Intersection	2	-	49
HSIP NCC, N54, Howell School Rd, SR 896 to SR 71	2	-	50
HSIP NCC, Old Baltimore Pike and Salem Church Rd	2	-	50
HSIP NCC, SR 273 and Harmony Rd Intersection Improvement	2	-	50
HSIP NCC, SR 273, Appleby Rd to Airport Rd	2	-	50
HSIP NCC, SR 41 and Hercules Rd Intersection Improvements	2	-	50
HSIP NCC, SR 71, Old Porter Rd to SR 7	2	-	50
I-295 Improvements, Westbound from I-295 to US 13	2	-	34
I-95 & US 202 Interchange	2	-	72
I-95 and SR141 Interchange, Ramps G & F Improvements	2	-	54
I-95 and SR896 Interchange	2	-	71
I-95 Crossover Relocation	2	-	35
I-95/I-295/I-495 Interstate High Mast Lighting Improvements	2	-	35
Industrial Streets	1	-	28
Industrial Track Greenway Phase III	2	-	73
Information Technology Initiatives Program	1	-	22
Intersection Improvements	1	-	17
Interstate Bridge Maintenance, South (Advertisement & Construction)	2	-	32
Interstate Maintenance Drainage Repair, FY14-FY16, Open-End	2	-	35
Inventory Bar coding	1	-	10
Jamison Corner Rd Relocated at Boyds Corner Rd	2	-	53
Job Access Reverse Commute (JARC) Program	1	-	12
Justison Landing	2	-	68
Lighting Replacement, Interstate, Open End, FY15-FY16	2	-	35
Little Baltimore Rd Drainage Improvements	2	-	64

Local Transportation Assistance Program	1	-	28
Maintenance Equipment and Tools (Transit) Program	1	-	12
Manor Ave Sidewalk Improvements	2	-	43
MARC MAINTENANCE FACILITY	3	-	7
Materials and Minor Contracts	1	-	6
MD 222 Bridge Over Rock RUn	3	-	8
MD 272 Bridge Over Amtrak	3	-	13
Metropolitan Planning Organization / FHWA	1	-	28
Metropolitan Planning Organization / FTA	1	-	28
Municipal St Aid	1	-	7
MUTCD Compliance Program	1	-	26
Myrtle Ave Sidewalk Improvements	2	-	43
N15, Boyds Corner Rd, Cedar Lane Rd to US 13	2	-	53
N412, Lorewood Grove Rd, Rd 412A to SR 1	2	-	53
N427, Cedar Lane Rd, Marl Pit Rd, to Boyds Corner Rd	2	-	53
NCC Transit Center (Christiana Mall Park and Ride)	2	-	57
New Freedom Program Statewide 50/50	1	-	12
Newark Regional Transportation Center	2	-	75
Northeast Corridor Allocation Policy	2	-	75
Northeast Corridor Improvements Yard to Ragan, Civil, Structural	2	-	75
On the Job Training / Supportive Services	1	-	22
Overhead Sign Structures, I-495	2	-	35
Paratransit Replacement Buses FY15 (11)	1	-	12
Park & Ride Hub Restroom Installation	1	-	10
Paving and Rehabilitation	1	-	8
Pedestrian ADA Accessibility	1	-	28
Planning Program Development	1	-	28
Possum Park Rd and Old Possum Park Rd Intersection Improvements	2	-	51
Preventive Maintenance - New Castle County	2	-	40
Propane Fueling Stations	1	-	10
Radio Replacement (Hand Held)	1	-	12
Rail Crossing Safety	1	-	18

Rail Preservation	1	-	9
Rd A / SR7 Improvements	2	-	71
Recreational Trails	1	-	19
Rehabilitation of I-95 from I-495 to North of Brandywine River Bridge	2	-	37
Rideshare Program / Trip Mitigation	1	-	26
Riverfront Deck Repairs	2	-	68
Riverfront Initiatives Development	2	-	68
Riverfront Rail Relocation and Parking Improvements	2	-	68
Rural Technical Assistance Program	1	-	28
Safe Routes to School	1	-	24
Safety Program 80/20	1	-	20
Safety Program 90/10	1	-	20
SB I-495 Lane Extension at I-95	2	-	71
Scenic Byways	1	-	28
Section 154 Penalty Transfer (Sanction) Program	1	-	20
SEPTA New Payment Technology (NPT)	2	-	75
Shipley St Bridge Rehabilitation	2	-	75
Signage and Pavement Markings	1	-	21
Slope Stabilization, Mill Creek Rd: Stella Rd - Nathalie Dr	2	-	36
SMALL URBAN TRANSIT SYSTEM – Capital and OPERATING ASSISTANCE	3	-	9
Snow Blowers - Statewide	1	-	10
SR 1 / I-95 Interchange	2	-	71
SR 1 Median Barrier Replacement	2	-	77
SR 1 Northbound Auxiliary Lane, US 40 to SR 273	2	-	77
SR 1 Widening	2	-	76
SR 1 Widening, SR273 to the Roth Bridge	2	-	77
SR 2 / Red Mill Rd Intersection Improvements	2	-	48
SR 273 / Chapman Rd Intersection Improvements	2	-	50
SR 299: SR 1 to Catherine St	2	-	78
SR 4, Christina Parkway from SR 2, Elkton Rd to SR 896, South College	2	-	56
SR 7, Newtown Rd to SR 273	2	-	79
SR 72, Advanced Utility Relocation from McCoy Rd to SR71	2	-	80

SR 72, McCoy Rd to SR 71	2	-	80
SR 72/SR 1 Diverging Diamond Interchange	2	-	77
SR 72: MCCOY ROAD TO SR 71	2	-	80
SR 9, River Rd Area Improvements, Flood Remediation	2	-	42
SR141 Improvements, I-95 Interchange to Jay Dr	2	-	54
SR299, SR 1 to Catherine St	2	-	78
Statewide Dam H&H Analyses, FY15	1	-	4
Statewide Dam H&H Analyses, FY16	1	-	4
Statewide Planning & Research Program / FHWA	1	-	28
Statewide Planning & Research Program / FTA	1	-	28
Statewide Railroad Rideability Program	1	-	18
Statewide Transit Safety and Security Improvements	1	-	10
Structure Maintenance, North District, Open End, FY15-FY17	2	-	32
Summer Transportation Institute Program	1	-	22
SUSQUEHANNA RIVER RAIL BRIDGE	3	-	14
Taxi Pilot Equipment Start-up	1	-	12
Third Track Amtrak Phase	2	-	75
Traffic Calming	1	-	23
Traffic Signal Revolving Fund Program	1	-	26
Transit Facility Minor Capital Projects	1	-	10
Transit Systems Equipment	1	-	10
Transit Vehicle Expansion , New Castle County	2	-	81
Transit Vehicle Replacement 5310 Program - Statewide	1	-	12
Transit Vehicle Replacement, New Castle County	2	-	40
Transit Vehicles - Support Vehicles - Statewide	1	-	12
Transportation Management Improvements	1	-	26
Transportation Alternatives Program (FHWA)	1	-	24
Transportation Alternatives Program (FTA)	1	-	24
Transportation Facilities - Administration	1	-	11
Transportation Facilities - Operations	1	-	11
Traveler Information Signage	1	-	10
Truck Weigh Enforcement	1	-	28
Tweeds Mill Parking Structure Repairs	2	-	41

University Research Program	1	-	28
US 13, Duck Creek to SR 1	2	-	59
US 301, Maryland State Line to SR 1	2	-	83
US 40 & SR 896 Grade Separated Intersection	2	-	63
US 40 / SR 72 Intersection Improvements	2	-	63
US 40 and SR7 Intersection Improvements	2	-	63
US 40, Salem Church Rd to Walther Rd	2	-	63
US13, US40 to Memorial Dr Pedestrian Improvements	2	-	60
Walnut St, Front St to 4th St, Wilmington	2	-	66
Wilm Admin Site Asbestos Remediation & Demo	2	-	39
Wilmington Administration Center Rehabilitation -	2	-	39
Wilmington Initiatives, 4th St, Walnut St to I-95	2	-	66
Wilmington Initiatives, King and Orange Sts, MLK Boulevard to 13th St	2	-	66
Wilmington Initiatives, Walnut St, MLK to 13th St	2	-	66
Wilmington Operations Center Bus Wash	2	-	39
Wilmington Signal Improvements Project, Phase 2	2	-	69
Wilmington Transit Moving Forward (PORTER SITE)	2	-	58
Wilmington UST Replacement - FTA State of Good Repair Grant	2	-	39
Yard Management System & Equipment	1	-	10