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:

MEMORANDUM

John Sisson, Chair

Delaware Transit Corporation Chief Executive Officer

Robert J. Alt

Mayor of Elkton

Jennifer Cohan

Delaware Dept. of Transportation

Secretary

Connie C. Holland

Delaware Office of State Planning Coordination, Director

Alan McCarthy Cecil County Executive

Matthew Meyer

New Castle County Executive

Heather Murphy

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

Michael S. Purzycki Mayor of Wilmington

Michael Spencer Mayor of Newport

WILMAPCO Executive Director

Tigist Zegeye

To: Members of WILMAPCO's Air Quality Subcommittee (AQS)

From: Bill Swiatek, Principal Planner

Date: April 6, 2018

Re: Air Quality Subcommittee

Date: Thursday, April 12, 2018

Time: 10:00 a.m. **Place:** WILMAPCO

REMOTE ACCESS

Via Phone: USA Toll-Free 888-557-8511,

Access Code: 5660767#

Via WebEx meeting: wilmapco.webex.com/join/selcock, Meeting Number: 888-557-8511, Access code: 5660767#

AGENDA

- 1. Acceptance of the notes from the December 21 meeting
- **2. Draft AQ Project Scoring FY 2020 TIP New/Revised Projects** *B. Swiatek* The AQS will review draft scores for Air Quality in the overall project prioritization process for several new and revised projects.
- 3. Draft 2050 RTP Project List H. Dunigan

The AQS will review an early draft project list for the upcoming 2050 RTP.

4. FY 2020 CMAQ Project Prioritization – B. Swiatek

The AQS will review the draft CMAQ project prioritization for the FY 2020 TIP.

5. Draft Maryland CMAQ Performance Measurement – C. Turner

The AQS will review MDOT's proposed CMAQ On-Road Mobile Source emissions targets for performance measurement.

6. Other



TECHNICAL ADVISORY COMMITTEE (TAC) & AIR QUALITY SUBCOMMITTEE (AQS) MEETING December 21, 2017

A joint meeting of the Technical Advisory Committee (TAC) and the Air Quality Subcommittee (AQS) was held on Thursday, December 21, 2017, at WILMAPCO, 850 Library Avenue, Suite 100, Newark, DE 19711.

1. CALL TO ORDER: Ms. Kaminsky, TAC chairperson, brought the TAC meeting to order at 10:05 a.m.

2. TAC Members present:

Ian Beam, Maryland Department of Transportation

Alex Brun, Maryland Department of the Environment (via conference call)

David Dahlstrom, Maryland Department of Planning Coordination

Stacey Dahlstrom, New Castle County Dept. of Land Use

Lauren DeVore, Delaware Department of Natural Resources and Environmental Control

Anthony DiGiacomo, Cecil County Land Use and Development Services

Mike Fortner, City of Newark

Gwinneth Kaminsky, City of Wilmington Department of Planning and Urban Design

Brian Mitchell, City of Wilmington Department of Public Works

David Schlie, Maryland State Highway Administration

Cathy Smith, Delaware Transit Corporation

Timothy Snow, Delaware Department of Transportation

TAC Ex-Officio Members present:

Lindsay Donnellon, U.S. Federal Highway Administration

TAC Members absent:

Delaware Economic Development Office Delaware Office of State Planning Coordination Delaware River and Bay Authority Maryland Transit Administration Town of Elkton

TAC Ex-Officio Members absent:

Amtrak

Diamond State Port Corporation

U.S. Environmental Protection Agency

U.S. Federal Transit Administration

AQS Members Present

Kevin Black, Federal Highway Administration (via conference call)

Alex Brun, Maryland Department of the Environment (via conference call)

Lauren DeVore. DNREC

Anthony DiGiacomo, Cecil County Office of Planning & Zoning

Lindsay Donnellon, U.S. Federal Highway Administration

Valerie Gray, Delaware Department of Natural Resources and Environmental Control

Ujival Shukla, MDOT (via conference call)

Catherine Smith, Delaware Transit Corporation

Timothy Snow, Delaware Department of Transportation

Guests and Invitees:

None

Staff:

Dan Blevins, Principal Planner
Janet Butler, Administrative Assistant
Heather Dunigan, Principal Planner
Sharen Elcock, Executive Assistant
Jacob Guise, Intern
Dave Gula, Principal Planner
Randi Novakoff, Outreach Manager
Bill Swiatek, Principal Planner
Jacob Thompson, Transportation Planner
Tigist Zegeye, Executive Director

Minutes prepared by: Janet Butler

3. MINUTES

ACTION: On motion by Mr. Dahlstrom and seconded by Mr. Fortner, the TAC approved the

November 16, 2017 minutes.

Motion passed. (12-21-17 - 01)

The Air Quality Subcommittee (AQS) Meeting Notes dated November 9, 2017, were approved by consensus.

4. SUBCOMMITTEE UPDATES:

a. Delaware Freight Executive Committee

Mr. Blevins said the Delaware Winter Freight meeting held on December 4, 2017, in Dover was a subset of the Freight Summit held on December 5, 2017. The meeting featured updates from Delaware and Maryland regarding general freight activities. The subcommittee developed an approved plan for the Federal Highway Administration (FHWA) certified freight plans in time for the December 2017 deadline. Presentations by the University of Delaware included connected and automated freight vehicles. Featured speakers were from the Delmarva Central and Delaware Coastal airports, and Delaware Express. The next Freight Executive Committee meeting will be held on January 3, 2018.

b. Nonmotorized Transportation Working Group (NMTWG)

Ms. Dunigan said the NMTWG met on December 5, 2017. Mr. Paul Moser, DelDOT, provided an update on the Delaware Statewide Bicycle Plan including a discussion of draft recommendations. The focus of the discussion was on the project prioritization process. Mr. Thompson gave an update on the Elkton Pedestrian Plan including results of public outreach. Mr. Swiatek discussed the bicycle and pedestrian performance measures in the draft WILMAPCO Regional Progress Report. Ms. Dunigan provided an update on the analysis of existing conditions for the New Castle County Bicycle Plan and future outreach. NMTWG has received GIS information from our transportation partners. Some public outreach will be done jointly with Delaware Greenways, and WILMAPCO will reach out to municipalities to seek additional participation.

5. PUBLIC COMMENT PERIOD:

None.

ACTION ITEMS:

6. To Recommend Amending the WILMAPCO FY 2018 Unified Planning Work Program (UPWP)

Ms. Zegeye said the FY 2018 UPWP submissions from New Castle County included:

- The City of New Castle Comprehensive Plan Update (\$10,500) staff had a follow-up discussion with the City of New Castle to better understand the project need, WILMAPCO's role, and the funding arrangement with KCI. The City of New Castle will get back to WILMAPCO with a scope of work and funding match for the proposed task. Staff also recommends a full Comprehensive Plan update.
- 2. The City of Wilmington 12th Street Connector Alignment (\$100,000) staff proposes to include this project in the UPWP and will develop a scope of work with the City of Wilmington staff.
- 3. Safety and Capacity Improvements for the Five-Point Intersection (\$75,000) staff proposes to include this project in the UPWP and will develop a scope of work with the City of Wilmington staff.
- Seventh Street Peninsula Roadway Improvements/Development Study (\$75,000) staff
 proposes to include this project in the UPWP and will develop a scope of work with the City
 of Wilmington staff.
- 5. Delaware Transit Corporation (DTC) submitted the Newark-Area Transportation Needs Data Collection and Analysis (\$60,000) staff proposes to include this project in the UPWP and will develop a scope of work with DTC staff.
- 6. Concord Pike/US 202 Corridor Master Plan (\$300,000) staff proposes to include this project in the UPWP and will develop a scope of work with New Castle County staff.
- 7. Southern New Castle County Infrastructure Master Plan Update (\$150,000) staff proposes to include this project in the UPWP and will develop a scope of work with New Castle County staff.

The total amount of the new projects is \$770,500; the 80% Federal UPWP funds requested is \$616,400; and the 20% cash match needed is \$154,100.

Ms. Zegeye said Cecil County's FY 2018 UPWP submissions include:

- MD 273 Fair Hill Pedestrian Underpass Feasibility Study (\$25,000) WILMAPCO staff believes this is primarily a recreational project and suggests working with Maryland Department of Natural Resources to identify funding. MDOT SHA concurs that the pedestrian tunnel is primarily a recreational project.
- 2. Muddy Lane Multi-modal Plan (\$50,000) WILMAPCO staff communicated with SHA regarding their discussions with Cecil County and the Town of Elkton. Staff gathered existing traffic counts and crash data, and suggested working with SHA, Elkton, and Cecil County on a safety audit along the corridor. MDOT SHA was not aware of a desire for a complete street project. There is a current project for a roundabout, which is nearing completion and will improve safety and mobility.
- 3. MD 273 Park-and-Ride Feasibility Study (\$25,000) Staff suggests that this analysis might be included in the upcoming Cecil County Transit Development Plan. MDOT SHA stated that the current park-and-ride lots in Cecil County are underutilized and MDOT SHA's present focus is on transit served park-and-rides that are at or near capacity.
- 4. MD 213/US 40 Intersection Redesign Study (\$200,000) MDOT SHA has been developing a conceptual design for this intersection. This task is part of the Route 40 Development

- Program, where transportation and land use changes are monitored on an ongoing basis. In addition, design/preliminary engineering does not qualify for program funding.
- Railroad Grade Crossing Safety Study (\$50,000) From previous year's notes as well as recent discussion, MDOT SHA had suggested that this project could be done through the SHA Office of Traffic and Safety Traffic Development and Support Division. MDOT SHA suggests that Cecil County contact them directly.

Mr. Dahlstrom said the City of New Castle letter mentioned a \$32,000 plan and asked if that funding is just for the transportation part of the plan. Ms. Zegeye replied that funding is for public outreach and some technical support for the transportation portion of the plan. The \$32,000 is already committed to KCI consultants. Mr. Dahlstrom asked since Ms. Zegeye recommended working on a full comprehensive plan would this amount be \$32,000. Ms. Zegeye replied no. She added anything more than \$50,000 would have to go out for a competitive bid.

ACTION: On motion by Ms. Smith and seconded by Mr. Fortner, the TAC recommended amending the WILMAPCO FY 2018 UPWP.

Motion passed. (12-21-17 - 02)

7. To Recommend Amending the WILMAPCO FY 2018-2021 Transportation Improvement Program (TIP), Cecil County Element

Ms. Dunigan said this TIP Cecil County Element amendment was requested by the Maryland Department of Transportation (MDOT) for an increase in funding for the Areawide Congestion Management project in the total amount of \$4.7 million.

ACTION: On motion by Mr. Dahlstrom and seconded by Mr. DiGiacomo the TAC recommended amending the WILMAPCO FY 2018-2021 TIP, Cecil County Element.

Motion passed. (12-21-17 - 03)

8. To Recommend release of the Draft FY 2019-2022 Transportation Improvement Program (TIP) for Public Comment

Ms. Dunigan said the FY 2019-2022 TIP Quick Guide included in the TAC packet shows the TIP changes. The public review period will run from January 22 to February 28, 2018, and the joint Public Workshop with DelDOT will be held at the Newark Free Library on February 26, 2018. There was a 6% funding increase as compared to the TIP amended in September 2017. The total TIP amount is proposed to be \$2.2 million.

The four new TIP projects proposed include: 1) Expand the I-295 northbound from SR141-US 13; 2) Improve Otts Chapel Road/Welsh Track Church Road Intersection; 3) Relocate Shallcross Lake Road between Graylag Road and Boyds Corner Road; and 4) Improve multimodal travel on SR 9 from Landers Lane-A Street.

Inside the TIP Quick Guide is a map showing the changes in the TIP. Minor bridge and safety projects were grouped together and are no longer mapped. The back of the guide shows 50% are state funding sources, 46% are federal funding sources and 4% are other. Projects in Cecil County total 4%; New Castle County total 38%; and Delaware Statewide total 58%. Regarding projects by mode, 50% are road; 24% are multimodal; 10% are transit; 2% are bike/walk; and 14% are other. Regarding projects by category, 51% are preservation; 27% are management; 14% are expansion; and 8% are other.

Ms. Dunigan reviewed the TIP spreadsheet, pointing out the new projects and funding changes. In addition, she also reviewed the Air Quality Model in-service years. She noted that the I-295 project is modeled in 2040 but may need to be modeled for 2030 once construction timing is determined. Mr. Swiatek added that the Garasches Lane project could trigger a conformity determination; however, as it stands, staff believes that our current Air Quality Conformity Analysis can still be used.

ACTION: On motion by Mr. Dahlstrom and seconded by Mr. Beam the TAC recommended release of the Draft FY 2019-2022 TIP.

Motion passed. (12-21-17 - 04)

9. To Recommend Adoption of WILMAPCO Safety Performance Measures for Cecil County and New Castle County

Mr. Blevins said the Maryland and Delaware Statewide Safety Measures were included in the TAC packet along with two resolutions. The WILMAPCO Safety Performance Measures are part of the National Transportation Performance Measures, which are also part of the FAST Act. Staff is proposing to use these measures to stay within federal compliance.

ACTION: On motion by Mr. DiGiacomo and seconded by Ms. Smith, the TAC recommended approval of the WILMAPCO Safety Performance Measures for Cecil County and New Castle County.

Motion passed. (12-21-17 - 05)

10. To Recommend Endorsing the 2017 Regional Progress Report

Mr. Swiatek said the draft 2017 Regional Progress Report was included in the TAC packet. The Progress Report sets the stage for the Regional Transportation Plan. Some recent updates to the document include making the graphics more readable and text sizes larger. On page 11, you can see the overall results from the report. Each action is assessed using quantitative and qualitative data, with red, yellow, and green light indicators. Twenty-one per cent received a red light, which indicates poor progress; twenty-nine percent received a yellow light, which indicates some progress; and fifty percent received a green light, which indicates very good progress.

Some of the key areas of success are WILMAPCO's sub-regional planning and implementation, the Congestion Management System (CMS) process, Social Justice efforts, and promoting active transportation. Some areas of concern are continued growth along the I-95 corridor, growth in single-occupancy vehicle trips/Vehicle Miles Traveled (VMT); using the prioritization process in selecting projects for funding in the TIP; providing affordable transportation choices; and reducing the increase in pedestrian and vehicle crashes.

The Nonmotorized Transportation Working Group (NMWG) did not have any concerns regarding the 2017 Regional Progress Report. Mr. Swiatek thanked members of the TAC, especially Mr. Dahlstrom, for edits. Mr. Swiatek added WILMAPCO staff recommended endorsement of the 2017 Regional Progress Report.

ACTION: On motion by Mr. Dahlstrom and seconded by Mr. DiGiacomo, the TAC recommended endorsing the 2017 Regional Progress Report.

Motion passed. (12-21-17 - 06)

PRESENTATION/DISCUSSION ITEMS:

11. 2050 Regional Transportation Plan Air Quality Conformity Schedule

Mr. Swiatek distributed the 2050 Regional Transportation Plan Air Quality Conformity Schedule (Attachment A). As a result of the Environmental Protection Agency (EPA) not making final designations for the for the 2015 Ozone Standard, we have been able to relax the upcoming conformity schedule. It appears that the 2050 RTP will act as the primary trigger for a new conformity determination. According to the proposed schedule, we will have until the end of summer and fall to conduct the conformity analysis. AQS will finalize the project list in August 2018; then look for the results in October 2018, and a joint RTP Update and AQS Conformity Analysis Public Comment Period will run from January 14-March 6, 2019. Finally, the AQS, TAC (February 2019) and Council (March 2019) would recommend adoption followed by submission to the federal agencies.

12. Public Opinion Survey

Ms. Novakoff distributed the 2018 Public Opinion Survey (Attachment B). The last major update of the Public Opinion Survey was completed in 2006. The survey subcommittee met in August 2017, which included five TAC members, two PAC members and two staff members. Sample surveys were reviewed and survey goals were developed.

The National Research Center (NRC) is helping to develop the new combined survey script for Cecil and New Castle Counties. NRC has kept many existing questions, but removed redundant questions, revised demographic quotas, removed or revised questions with high "other" responses, and revised questions for more specific understanding.

The changes to the question on page 2, includes that modes are asked about individually, more modes are added to the frequency of mode use (page 3), such as taxi, shared vehicle, and Amtrak, paratransit (#11-15). There are new-open ended questions on mobility follow-up for those not walking, biking, or using transit (page 4, #18); and a new question is on how often is there a lack of transportation that prevents activities (page 5, #24). Regarding funding priorities, on Page 6, a new question asks to support or not support various funding mechanisms (#26-34).

Regarding criticality of issues (pages 7-9), new issues include adapt to Sea Level Rise (SLR), #41; develop infrastructure to support Automated Vehicles (AV), #42; support low-polluting vehicles, #43; ensure access to transit, #44; reduce health impacts of pollution, #45; and connect to neighborhoods #46.

On page 11, regarding the planning process, new questions include I am aware of how transportation projects are selected (agree, disagree), #59; I am aware that WILMAPCO, DelDOT, and MDOT have Regional Transportation Plans (RTPs), #60; and I am familiar with the Transportation Improvement Program (TIP), #61.

Regarding the new demographics on page 14, questions include number of bicycles in your household, #76; difficulty walking or climbing stairs, #81; interest in receiving a copy of survey results via email, #82; and web address provided for those wanting more information (page 16).

The Public Survey timeline includes staff review, initial goals discussion, and TAC subcommittee selection (July 2017). TAC subcommittee selection (August 2017); Subcommittee reviews sample questions and drafts script (September 2017). Subcommittee review (November 2017); PAC/TAC review (December 2017); Council review (January 2018); and Final script (January 2018). PAC/TAC approval (February/March 2017); Council Approval (March 2017);

Public Opinion Survey calls (May-July 2018); Draft report (August 2017); and Final Report (September 2018).

Mr. Dahlstrom asked when you ask if you are a resident, is there a provision for seasonal households. Ms. Novakoff replied that the committee could consider that provision.

Ms. Gray said she feels that an 87- question survey is too long. Ms. Novakoff said it is currently a 22-minute survey, and we are trying to get it down to a 17-minute survey. Ms. Novakoff said we continue to streamline the questions during the revision process. Ms. Dahlstrom asked if there were alternative surveys considered besides by telephone. Ms. Novakoff replied that staff had looked into that. Mr. Swiatek added telephone is the most comprehensive method we have found.

Mr. Shelton asked if there was any bias regarding surveying different people. Ms. Novakoff said we conduct 600 surveys and get a statistically valid survey. Ms. Dunigan added regarding DNREC's Statewide Comprehensive Recreation Plan telephone survey that they conduct public outreach ahead of time and announce that the survey is coming. They also conduct an online web survey, which may garner different results.

Mr. Dahlstrom asked about the following questions on Page 7:

- ➤ Question #33: Do you support or do not support increasing fares on public transit. He suggested that the question say what the fares are for.
- ➤ Question #34: What about including the private sector in financing transportation. Typically, this means a private company renovates, builds, operates, maintains, manages or finances a project. Would you support or not support this. He asked is there a list of private sector projects you could add. Ms. Novakoff responded that would probably add too much time to the length of the survey.
- Question #35: Are there other things that the state should do to close the funding gap for transportation. He asked why the specific state is not included in this question. Ms. Novakoff replied we ask for the zip codes in the beginning of the survey, which lets us know what state it is.

INFORMATION ITEMS:

13. Staff Report

Ms. Heather Dunigan reported on the following plans and events:

- The Wilmington Initiatives (WI) projects that were suggested for the UPWP include:
- 1) Twelfth Street Connector; 2) Five-Points Intersection; and 3) Seventh Street Peninsula projects. Staff is working on Requests for Proposals (RFPs) for these projects.
- Staff has been working with City of Wilmington on the Shipley Street Corridor improvements project. Staff has also attended the Wilmington Comprehensive Plan public meetings.
- The Route 202 Master Plan is being amended to the UPWP subject to Council approval, and staff is working on an RFP for it.
- The Delaware APA Conference in Rehoboth will be held in October 2018. There is a call for presentations on the APA website.
- The Route 9 Corridor Master Plan Monitoring Committee Meeting was held on December 7, 2017. The next meeting will be held on January 23, 2018.
- The Elkton Pedestrian Plan Steering Committee meeting was held on December 6, 2017.
 A public meeting will be held on January 17, 2018, along with a presentation to the Elkton Mayor and commissioners.

- On November 27, 2017, staff participated in the Resilient and Sustainable Community Summit in Dover.
- The Delmarva Freight Summit was held on December 5, 2017, at the Duncan Center in Dover.
- On December 5, 2017, the I-95/896 Public Workshop was held.
- On December 6, 2017, staff participated in Stubbs Literacy Night and read a story to the children about pedestrian safety.

OTHER BUSINESS

Ms. Catherine Smith said Delaware Transit Corporation (DTC) just completed the December service changes. She added some changes were well received and others caused controversy. The service changes spanned 66 pages. She said Community Conversations would be held that will be in preparation for the May 20, 2018 service changes. She added DTC needs to develop a separate App than the DelDOT App. Feedback results also included that bus stops are spread out too much. Mr. Dahlstrom, Vice Chair, introduced his wife, Stacey Dahlstrom, who is representing the New Castle County Department of Land Use at the TAC and AQS meeting today.

ADJOURNMENT

The meeting adjourned at 11:05 a.m., which was followed by the TAC and AQS Holiday Lunch and networking.

Attachments (2)

WILMAPCO's 2050 Regional Transportation Plan and FY 2020 Transportation Improvement Program Air Quality Timeline

DRAFT

	Aug '18	Sep '18	Aug '18 Sep '18 Oct '18 Nov '18 Dec '18 Jan '19 Feb '19 Mar '19	Nov '18	Dec '18	Jan '19	Feb '19	Mar '19
Finalize regionally significant project list	6							
Run conformity analysis	Aug	August 10 - October 10	er 10					
Conformity results due for review			1					
Conformity results approved by AQS, draft document reviewed				5				
Conformity document approved by the AQS and released for comment					20			
Official RTP public comment period						Janu	January 14 - March 6	ch 6
Our Town public comment period							٠.	
AQS recommends adoption (contingent)							4	
TAC recommends adoption (contingent)							21	
Council adoption								14
Submission to federal agencies								18

11

FY 2020 TIP (funded and unfunded) Air Quality (AQ) Prioritization

New/Revised Projects

I-295 Northbound: SR 141 - US 13

Draft Revised AQ Score: -3 (was 0)

Project modeled for the addition of third lane with a 2040 in-service date. No current description in the TIP for the northbound project. PE in 23, 24.

US 40/SR 7 Grade Separated Intersection

Draft Revised AQ Score: -3 (was 0)

DelDOT to pursue a grade separated intersection here based on April 2018 meeting. It was previously unknown what the improvements would be here. Project is not in the TIP but may warrant future modeling.

North Claymont Area Master Plan - US 13: I-495 - PA Line

Draft AQ Score: 1

Evaluate and reconfigure Philadelphia Pike between the I-495 interchange and Pennsylvania line as recommended in the North Claymont Area Master Plan. Project elements might include access management (e.g., new signals at the spine road intersection; improvements to signal spacing by converting Alcott Avenue to right-in, right-out), reduced corner radii and improve crossings at the Philadelphia Pike/Naamans Road intersection, improved I-495 ramp terminal for crossing by people walking and riding bicycles (e.g., tighten radii and signalize northbound off ramp right turn), and corridor-wide improvements walking and bicycling facilities including the East Coast Greenway, transit access, and on-street parking where appropriate.

Project not in the TIP but will be added to 2050 RTP.

Glasgow Ave Study Improvements

Draft AQ Score: 1

Complete Streets improvements, including a complete sidewalk/sidepath network, buffered bike lanes, and pedestrian-scale lighting. Roundabouts at Paxson Drive and Old County Road.

Project not in the TIP but will be added to 2050 RTP.

FY 2020 TIP (funded and unfunded) Air Quality (AQ) Prioritization New/Revised Projects

PREVIOUSLY REVIEWED – MARCH 2018

SR 9, New Castle Avenue, Landers Lane to A Street

Final AQ Score: +1

This project will help implement the key projects recommended in the Route 9 Corridor Transportation and Land Use Master Plan. Major proposed work includes placing both Route 9 and Memorial Drive on road diets, with saved lane space used to improve pedestrian and bicycle and bus facilities and provide extra green space. Some intersections will be rebuilt to enhance safety and maintain vehicular traffic flow. Proposals include the construction of roundabouts at Terminal Avenue, Memorial Drive, and Cherry Lane, and the reconstruction of Rogers Road/SR 9 intersection and the Stamm Boulevard/SR 9 intersections. A center-lane multiuse pathway is proposed for Route 9 as it passes overtop the I-295 Expressway, to be accessed by the two proposed roundabouts at Memorial Drive and Cherry Lane.

Meanwhile, an internal pedestrian/bicycle path system is proposed to knit together the now largely disconnected suburban neighborhoods along the corridor. Other efforts involve better managing truck traffic in the corridor via the provision of an overnight parking facility at the Port of Wilmington and more comprehensive truck signage to discourage illegal truck movements. Further initial study is needed for some proposals in the Master Plan. These include the recommended future extensions of Garasches Lane to Terminal Avenue, Pigeon Point Road to south of I-295, and the road diet preferred for the stretch of Route 9 around Stamm Boulevard.

This project will work to reduce vehicle crashes, the severity of crashes, make it easier and safer to cross Route 9 and Memorial Drive on foot or bicycle, better connect existing and planned neighborhoods and amenities, and support the freer movement of freight while, simultaneously, properly spacing it from residential uses. \$1.2 million total PE in 2023 and 2024. Funding is a placeholder for projects coming out of the Route 9 Master Plan.

Otts Chapel Road and Welsh Track Road Intersection Improvements

Final AQ Score: 0

Based on a traffic operational analysis performed by TMC, inefficiencies were identified. Adding turn lanes, (sidewalks only if already in area) to improve operations are reduce delay at the intersection. Bike amenities in accordance with CS policy. \$25,000 PE in 2023. \$150,000 C identified but not spent the CTP.

New/Revised Projects

Shallcross Lake Road Relocated, Graylag Road to Boyds Corner Road

Final AQ Score: 0

This project will relocate Shallcross Lake Road between Graylag Road and Boyds Corner Road. The proposed alignment will shift the Shallcross Lake Road and Boyds Corner Road intersection east to align with Milford Drive (Grand View Farm).

The realignment was proposed in DelDOT's Southern New Castle County Improvements program. \$1.5 million in C in FY 2019. Possibly all developer funded.



AQ OVERALL PRIORITIZATION SYSTEM

Project expected to moderately or significantly improve air quality. Project types include:

- a. fixed-route bus and train service expansions
- b. public transit technology improvements
- c. major non-recreational nonmotorized system expansion (not tied to a roadway project which would increase vehicle capacity)
- d. diesel engine replacements
- e. alternative fueling stations
- f. park-and-ride lot expansions
- g. carpooling schemes

Project expected to slightly improve air quality. Project types include:

- a. fixed-route bus and train service replacements
- b. minor non-recreational nonmotorized system expansions (not tied to a roadway project which would increase vehicle capacity)
- c. major non-recreational nonmotorized system maintenance (not tied to a roadway project which would increase vehicle capacity)

Project not expected to impact air quality. Project types include:

- a. roadway projects which do not add capacity
- b. park-and-ride lot maintenance
- c. rail preservation
 - d. paratransit expansion and maintenance
 - e. recreational nonmotorized system expansion/maintenance
 - f. minor non-recreational nonmotorized system maintenance (not tied to a roadway project which would increase vehicle capacity)

Project expected to slightly worsen air quality. Project types include:

a. roadway projects which add capacity but are non-regionally significant, including those with a non-recreational nonmotorized system expansion component

Project expected to moderately or significantly worsen air quality. Project types include:

a. roadway projects which add capacity and are regionally significant, including those with a non-recreational nonmotorized system expansion component

Regionally Significant¹

"The transportation plan must ... describe any proposed regionally significant additions or modifications to the transportation (highway and transit) system that are expected to be operational in each horizon year. Regionally significant projects must also be identified in sufficient detail to analyze their emissions impacts.

Regionally significant is defined in the transportation conformity rule as:

Regionally significant project means a transportation project (other than an exempt project in accordance with 40 CFR §§93.126, 93.127) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc. or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guide-way transit facilities that offer an alternative to regional highway travel.

Projects that are regionally significant, regardless of funding source, must be included in the regional emissions analysis. The determination of other regionally significant projects for the purposes of regional emissions analysis may vary in accordance with the interagency consultation procedures included in 40 CFR §93.105(c)(1)(ii) as amended by 62 FR 43805, Aug. 15, 1997 of the transportation conformity rule. Regionally significant additions or modifications to the transportation system must be identified and described in the following level of detail:

- Highway network additions or modifications must identify intersections with existing regionally significant facilities,
- The effect of such additions or modifications on route options between transportation analysis zones must be defined,
- Additions or modifications to highway segments must identify the design concept and scope sufficiently to model travel time under various traffic volumes, consistent with MPO modeling methods,
- Transit facilities, equipment and services proposed for the future must be defined in terms and design concept and scope and operating policies sufficient to model transit ridership, and
- Additions or modifications to the transportation network must be sufficiently described to show a reasonable relationship between forecasted land use and the future transportation system.

In addition, the plan must discuss other future transportation policies, requirements, services, and activities, including intermodal activities (e.g. access improvements to ports, airports, major transfer hubs between truck and rail terminals, etc.)."

¹ U.S. Department of Transportation, Transportation Conformity Reference Guide, May 2000, Publication # FHWA-EP-00-014, pg. C-1-3.

			DRAFT	Impro	ve Quality	of Life		Efficient	ly Transpo	rt People			Sustainable		2017	2017	2018	2018	_
1	Construction FY in 2019-2022 TIP	AQ Model Year	PROJECT	Air Quality	Environmental Justice	Safety	CMS Corridor	CMS ADT	CMS Transit	Transportation Justice	Pedestrian Priority	Freight	Economic Development	Funding Match	Technical Score	Council Rank for FY 2019	Technical Score	Council Rank for FY 2020	Notes for FY 2020-23 TIP prioritization
2			PROJECTS IN FY 2018-2021 TIP													_			
3			Arterial																
4	21-22		SR 2, Kirkwood Highway and Red Mill Rd. Intersection	0	0	4	2	2	3	0	3	2	3	0	19	1	19		
5	21-22		Churchmans: SR 273/Chapman Rd.	0	0	4	2	2	2	0	3	2	3	0	18	2	18		
6	PE		Churchmans: SR4/Harmony Rd.	0	0	4	2	2	3	0	1	3	3	0	18	2	18		
7	OY		Wilmington Traffic Calming: 4th St: Walnut - I-95	1	3	2	2	0	2	0	3	2	3	0	18	2	18		
8	19-20		Wilmington Traffic Calming: King/Orange: MLK Blvd. to 13th	1	3	2	2	0	2	0	3	2	3	0	18	2	18		
9	22-24		Wilmington Traffic Calming: Walnut: 3rd - 13th St	0	3	1	2	2	2	0	3	2	3	0	18	2	18		
10	PE		Churchmans: SR4/SR7 Stanton Split	0	0	3	2	3	2	0	1	2	3	0	16	3	16		
11	OY		SR 9: Landers Ln - A St	1	1	2	0	0	0	3	3	2	3	0	15		15		Added to FY 19 TIP
12	19-21	2030	SR 2 Elkton Rd: Maryland State Line - Casho Mill Rd.	-3	0	4	2	2	1	0	1	3	3	0	13	4	13		
13	23-24	2030	US 40: US 40/SR 896 Grade Separated Intersection	-3	0	4	2	2	1	0	1	3	3	0	13	4	13		
14	21-24	2030	US 40: US 40, Salem Church Rd to Walther Rd	-3	1	4	2	2	1	0	0	2	3	0	12	5	12		
15	22-24	2030	SR 4, Christina Parkway: SR 2 - SR 896	-3	0	4	2	2	0	0	1	2	3	0	11	6	11		
16	20-22	2030	SR299: SR 1 - Catherine Street	-3	0	3	1	0	2	0	3	2	3	0	11	6	11		
17	PE		SR 9, River Rd. Area, Dobbinsville	0	0	0	0	0	0	3	1	0	3	0	7	8	7		
18	PE		US 13: Duck Creek - SR 1	1	0	0	0	0	0	1	0	0	1	0	3	9	3		
19	23-24		SR 896/Bethel Church Rd Interchange	-3	0	1	0	0	0	0	0	0	0	0	-2	10	-2		
20			Collectors												_	10	_		
21	20-21		Garasches Lane, Phase 1	1	1	0	0	0	0	0	3	0	3	0	8	1	8		Title change
22	PE		Old Capitol Trail: Newport Rd to Stanton Rd	1	1	0	0	0	0	1	1	0	3	0	7	2	7		
23	PE		Otts Chapel Rd / Welsh Track Rd Intersection	0	0	3	0	0	0	0	0	0	0	0	3	_	3		Added to FY 2019 TIP, not in RTP
24	20		Possum Park Rd. at Old Possum Park Rd.	0	0	0	0	0	0	0	0	0	1	0	1	3	1		, , , , , , , , , , , , , , , , , , , ,
25			Expressways			Ů								Ů	_	3	-		
	PE	2040	I-295 Northbound: SR 141 - US 13	-3	0	3	2	4	0	0	0	4	3	0			13		Added to FY 2019 TIP, 2030 in-service
26 27	PE		SR 1 Widening, SR 273 - Roth BR	-3	0	4	2	4	3	0	0	2	3	0	15	2	15		7. daed to 1 1 2025 111 / 2000 111 Sel 1100
	23-24		I-95: SR 896 Interchange	-3	0	3	2	4	2	0	0	3	3	0	14	3	14		
28 29	19-21		Road A /SR 7	-3	0	2	2	2	2	0	0	0	3	0	ρ.	۵	ρ		
30			Local											Ŭ	- 0	4	3		
	22-24		Southern New Castle County: Boyd's Corner Rd.: Cedar Ln - US 13	-1	0	3	0	0	0	0	0	0	1	3	6	1	6		
31	19	+	Southern New Castle County: Shallcross Lake Rd Relocated	0	0	0	0	0	0	0	0	0	1	4	5	1	5		Added to FY 2019 TIP
32	22-23	+	Southern New Castle County: Shallcross take Nu Neiocateu Southern New Castle County: Cedar Lane Rd.: Marl Pit - Boyd's Corner	0	0	0	0	0	0	0	0	0	1	3	٥	2	<u>ح</u>		7.4400 (011 2015 111
33	22-23		Southern New Castle County: Cedar Lane Nd.: Main Fit - Boyd's Corner Southern New Castle County: Lorewood Grove Rd.: N412A - SR 1	-1	0	0	0	0	0	0	0	0	1	2	3	2	2		
34	PE	+	Denny/Lexington Parkway Intersection	0	0	0	0	0	0	0	1	0	1	0	2	2	2		
35	FE		Pedestrian/Bicycle	U	U	U	U	U	U	U	1	U	1	U		3	2		
36	20-24		US 13: Christina River Bridge - US 40 Pedestrian Safety Improvements	3	1	4	2	3	3	0	3	4	3	0	26	1	26		
37			SR 48: N. DuPont Rd - SR 141 Pedestrian Safety Improvements	1	3	3	1	2	1	1	1	2	3	0	18	2	18		
38	PAR funding		· · ·	1	0	2	2	2	1	0	3	2	3	0	16	2	16		
39	W/ Pave/F	NEIIdD	Delaware Avenue Separated Bicycle Facility Transit	1	U				1	U	3		3	U	Τρ	3	Τp		
40	19			2	2	2	2	2	2	0	2	2	2	2	24	1	24		
41	13	+	Wilmington Transit Center Transit Vehicle Replacement and Refurbishment, New Castle County	3	3	2	2	2	3	3	3	2	3	0	24	1	24		
42			i ransit venicle replacement and refurbishment, new castle county	1	3				3	3	0	0	5	U	19	2	19		

	DRAFT		Impro	ve Quality	of Life		Efficientl	y Transpo	rt People			t Sustainabl		2017	2017	2018	2018	_	
1	Construction FY in 2019-2022 TIP	AQ Model Year	PROJECT	Air Quality	Environmental Justice	Safety	CMS Corridor	CMS ADT	CMS Transit	Transportation Justice	Pedestrian Priority	Freight	Economic Development	Funding Match	Technical Score	Council Rank for FY 2019	Technical Score	Council Rank for FY 2020	Notes for FY 2020-23 TIP prioritization
43	PE		Rail Improvements: Fairplay Station Parking	3	0	3	2	2	3	0	0	0	3	0	16	3	16		
44			Transit Vehicle Expansion, NCC	3	1	2	1	2	1	3	0	0	3	0	16	3	16		
45	19-20		Middletown Park and Rides	3	0	3	1	0	0	0	0	2	3	0	12	5	12		
46	20-21		New Castle County Transit Center	3	0	0	0	0	0	0	0	0	3	0	6	6	6		
47			Rideshare Program, statewide	3	0	0	0	0	0	0	0	0	3	0	6	6	6		
48			NOT IN FY 2018-2021 TIP																
49			Arterial																
50			Churchmans: SR2/Harmony Rd.	0	0	3	2	2	3	0	1	2	3	0	16	1	16		
51			SR 896: US 40 - I-95, third lane	-3	0	4	2	3	1	0	3	3	3	0	16	1	16		Consider for 2050 RTP contrained list
52			SR 2: S. Union Street Streetscape	0	0	0	2	2	3	1	3	0	3	0	14	3	14		
53			US 13: SR 71, Tybouts Corner - US 40	-3	0	3	2	4	2	0	1	2	3	0	14	3	14		
54			Churchmans: Churchmans Rd. Extension	-3	0	4	2	2	2	0	1	2	3	0	13	4	13		
55			Wilmington Initiatives: Market St: 11th St 16th St.	0	3	0	2	2	0	0	3	0	3	0	13	4	13		
56			US 40: SR 896-Salem Church Rd, Widening	-3	-1	4	2	3	2	0	0	2	3	0	12	5	12		
57			US 40/SR 7 Grade Separated Intersection	-3	0	4	2	2	1	0	1	2	3	0	15	2	12		Renamed from US 40/SR 7 intersection
58			City of New Castle: SR 9	-1	0	2	1	0	2	0	3	0	3	0	10	6	10		nenamed nem es 16,511 / micessession
		2040	Tyler McConnell Bridge, SR141: Montchanin Rd Alapocas Rd.	-3	0	3	1	2	0	0	0	2	3	0	0	9	20		
59		2040	North Claymont Area Master Plan - US 13: I-495 - PA Line	1	0	0	0	0	0	0	1	2	3	0	7	0	7		All NCAMP recommendations to be added to 2050
60			US 40: Eden Square Connector	-1	0	4	0	0	0	0	1	0	3	0	7	0	7		All No twi Teconinendations to be added to 2000
61		-	City of New Castle Intersections	0	0	0	0	0	0	0	3	0	3	0	6	10	6		
62		-	US 13, Odessa Transportation Plan Implementation	1	0	0	0	0	0	0	1	0	3	0	5	11	5		
63		-	Newtown Road: SR896 - SR 72	-3	0	0	0	0	0	0	1	0	3	0	1	12	1		
64			Collectors	,	U	U	U	U	U	U		0	3	U	1	12	1		
65			Wilmington Traffic Calming: 12th St. Connector	-1	3	0	0	0	0	0	3	0	3	0	Q	1	Q		
66			Glasgow Ave Study Improvements	1	0			0	0	0	1	0	3	0	о г		- C		All Glasgow Ave recommendations to be added to
67			Expressways	1	U	U	U	U	U	U	1	U	3	U	3		3		All diasgow Ave recommendations to be added to
68		2030	US 301: Spur	-3	0	3	1	2	0	0	0	3	0	0	6	2	6		
69		2030	Local	-5	U	3	1		U	U	U	J	0	U	U	2	U		
70			Wilmington Initiatives: Shipley Street	1	3	0	2	0	0	0	3	0	3	0	12	1	12		
71			Wilmington Initiatives: Tatnall St. Connector	-1	0	0	2	0	0	0	3	0	3	0	7	2	7		
72			Southbridge Street Network / Garasches Lane Phase 2	-1	1	0	0	0	0	0	3	0	3	0	6	2	6		Renamed
73			Westown: SR 71/St Annes Church Rd.	-1	0	0	0	0	0	0	0	0	3	4	6	2	6		Renamed
74			Westown: Wiggins Mill Rd: Green Giant Rd St Annes Church Rd.	-1	0	0	0	0	0	0	0	0	1	4	4	J	4		
75			Pedestrian/Bicycle	-1	U	U		U	U	U	U	U	1	4	4	4	4		
76			Wilmington Initiatives: Bicycle Improvements	1	3	2	2	2	3	3	3	0	3	0	22	1	22		
77			Bicycle, Pedestrian: Marsh Rd.	1	0	3	0	0	0	0	3	0	3	0	10	2	10		
78			DuPont Road Pedestrian Facilities	3	3	0	0	0	0	0	1	0	3	0	10	2	10		
79		-	Wilmington Initiatives: Water Street Walkway	1	0	0	2	0	0	0	3	0	3	0	10	2	10		
80		-	Churchmans: Red Mill Rd. Sidewalks, Ruther Dr - SR 2	1	0	0	1	2	0	0	1	0	3	0	9	3	9		
81		-	US 40: Newtown Trail & Pedestrian Improvements	1	0	0	0	0	0	0	1	3	3	0	8	4	8		
82		+	Bicycle, Pedestrian: Foulk Rd.	1	0	1	0	0	0	0	1	0	3	0	8	4	8		
83			Dicycle, redestrian. Founk na.	1 1	U	Т.	U	U	U	U	1	U	3	U	6	5	6		

			DRAFT	Impro	ve Quality	of Life		Efficientl	y Transpo	rt People			t Sustainab		2017	2017	2018	2018	
1	Construction FY in 2019-2022 TIP	AQ Model Year	PROJECT	Air Quality	Environmental Justice	Safety	CMS Corridor	CMS ADT	CMS Transit	Transportation Justice	Pedestrian Priority	Freight	Economic Development	Funding Match	Technical Score	Council Rank for FY 2019	Technical Score	Council Rank for FY 2020	Notes for FY 2020-23 TIP prioritization
84			Grubb Road Pedestrian Improvements: Foulk Rd Naamans Rd.	1	0	0	0	0	0	1	1	0	3	0	6	5	6		
85			SR 3, Marsh Rd/Washington Street Ext. and SR 3 Pedestrian Improvements	1	0	0	0	0	0	0	1	0	3	0	5	6	5		
86			Transit																
87			Transit bus stop improvements - NCC	3	3	2	0	0	0	3	3	2	3	0	19	1	19		
88			Transit Vehicle Expansion: SR 141	3	1	3	1	2	0	3	0	2	3	0	18	2	18		
89			US 40: Transit improvements	1	3	4	1	2	2	0	1	0	3	0	17	3	17		
90			Boyds Corner Park and Ride Expansion	3	0	0	1	2	0	0	0	0	1	0	7	4	7		
91			Transit Vehicle Expansion: Paratransit	0	0	0	0	0	0	3	0	0	3	0	6	5	6		
92			Rail preservation: NCC Historic Red Clay	0	0	0	0	0	0	0	0	0	1	0	1	6	1		
93																			
96 97 98 99 100	Source:		Air Quality: review by Air Quality Subcommittee Environmental Justice: 2013 Environmental Justice & Title VI Plan Safety: DelDOT crash data, 2013-2015 CMS: 2017 Congestion Management System Summary	Freight	t: WILN	IAPCO	Regiona ent: De	Access al Freigh laware (ince	t and G	Goods N	1oveme	nt Ana	lysis ies and	Spendi	ng Map				
101			REMOVED FROM LIST: UNDER CONSTRUCTION BY FY 2020																
102	19		Wilmington Initiatives: Walnut St, Front St - 3rd St	0	3	1	2	2	2	0	3	2	3	0	18	2			Construction in 2018
103	18-19		US 40: US 40/SR 7 (pedestrian improvements)	1	0	4	2	2	1	0	1	2	3	0	16	3			Grouped with HSIP
104	19-20		US 40: US 40/SR 72 Intersection, including Del Laws Rd.	-1	0	4	2	2	1	0	1	1	3	0	13	4			Under construction
105	18-21		I-95 & SR 141 Interchange - Jay Dr	-1	0	3	0	0	0	0	0	4	3	0	9	7			Construction
106	20-21	2030	SR 72: SR 71 - McCoy Rd	-3	0	2	0	0	0	0	0	2	1	1	3	9			Utilities construction
107	18-20		I-295 Westbound: US 13 - I-95	0	0	3	2	4	0	0	0	4	3	0	16	1			Construction
								_					_						construction
108	18-19		Southern New Castle County: Cedar Lane Rd. at Marl Pit Rd	0	0	0	0	0	0	0	0	0	1	3	4	2			Construction
	18-19 18-21		Southern New Castle County: Cedar Lane Rd. at Marl Pit Rd Claymont Regional Transportation Center	0	0	0	0	0	0	3	3	2	3	3	4 14	4			
108			·	_	_	_	_	-				_			4 14 9	2 4 7			Construction
108 109			Claymont Regional Transportation Center	3	0	0	0	0	0	3	3	2	3	0	4 14 9	2 4 7			Construction Construction
108 109 110			Claymont Regional Transportation Center	3	0	0	0	0	0	3	3	2	3	0	4 14 9	4			Construction Construction
108 109 110 111			Claymont Regional Transportation Center SR 141: US 13 - Commons Blvd.	3	0	0	0	0	0	3	3	2	3	0	4 14 9	2 4 7			Construction Construction
108 109 110 111 112			Claymont Regional Transportation Center SR 141: US 13 - Commons Blvd. SUGGESTED PROJECTS TO REMOVE FROM LIST	3 0	0	0 3	0 0	0	0	3 1	3	2	3	0	4 14 9 8 7	2 4 7			Construction Construction

NEW PROJECTS FOR 2050 RTP DRAFT

		NEW PROJECTS FOR 2050 RTP					DRAFT
Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area	Notes - 2050 RTP
	NCC	Construct North Claymont Spine Road connecting Naamans Road and Philadelphia Pike (include access management at north/south end, and Alcott connector)	North Claymont Area Master Plan (2017)	Multimodal	Expansion	Core	New - score
	NCC	Diverging Diamond Interchange (DDI) at I-95 and Naamans Road	North Claymont Area Master Plan (2017)	Multimodal	Expansion	Core	New
	NCC	Improve I-95 interchange (widen SB off-ramp, signalizing ramp right turn, tighten NB off-ramp radius)	North Claymont Area Master Plan (2017)	Multimodal	Management	Core	New - score
	NCC	Philadelphia Pike/Naamans Road intersection - Reduce corner radii and improve crossings	North Claymont Area Master Plan (2017)	Multimodal	Management	Core	New - score
	NCC	I-495 ramp improvements - ped / bike access and add NB ramp lanes	North Claymont Area Master Plan (2017)	Multimodal	Management	Core	New - score
	NCC	Ridge Road - change free right turn from Naamans Road to a yield, and improving EB Ridge Road lane merge approaching Analine Village using signs and payement markings	North Claymont Area Master Plan (2017)	Multimodal	Management	Core	New - score
	NCC	Society Drive - all way stop or a roundabout at the Northtowne Plaza driveway/bus stop crossing	North Claymont Area Master Plan (2017)	Multimodal	Management	Core	New - score
	NCC	East Coast Greenway alignment	North Claymont Area Master Plan (2017)	Bike/Ped	Expansion	Core	New
	NCC	Naamans Road shared use pathway	North Claymont Area Master Plan (2017)	Bike/Ped	Management	Core	New - score
	NCC	Improve pedestrian bridge and connector trail over I-495 pedestrian bridge	North Claymont Area Master Plan (2017)	Bike/Ped	Management	Core	New - score
	NCC	Install a new I-495 pedestrian bridge next to Philadelphia Pike.	North Claymont Area Master Plan (2017)	Bike/Ped	Management	Core	New - score
	NCC	Install street lighting, especially in neighborhoods and along Hickman Road.	North Claymont Area Master Plan (2017)	Multimodal	Management	Core	New
	NCC	Sidewalk upgrades: Hickman Rd (access to Tri-State Mall), Analine Village path from Parkway Ave to Woodfield Dr, Darley Rd	North Claymont Area Master Plan (2017)	Bike/Ped	Management	Core	New - score
	NCC	Enhance bus service to station and Tri-State Mall site	North Claymont Area Master Plan (2017)	Transit	Management	Core	New
	NCC	Continue connection to SEPTA bus services	North Claymont Area Master Plan (2017)	Transit	Management	Core	New
	NCC	Build industrial access road to future industry east of Northeast Corridor rail with new bridge over Naamans Creek	North Claymont Area Master Plan (2017)	Road	Expansion	Core	New
	NCC	Explore access to future residential/marina east of Northeast Corridor rail through adjacent Linde property	North Claymont Area Master Plan (2017)	Multimodal	Expansion	Core	New
_	NCC NCC	Neighborhood connections pathway network (multiple projects) Garasches Ln to Terminal Ave Extension Concept Study Pigeon Point Rd Extension w/new I-295 interchange Concept Study	Route 9 Master Plan (2017) Route 9 Master Plan (2017) Route 9 Master Plan (2017)	Bike/ped Study Study	Expansion Expansion Expansion	Core Center/Core Core	New Various: TAP, CTP, County, local New WILMAPCO (UPWP) New WILMAPCO (UPWP)

NCC	Comprehensive truck signage	Route 9 Master Plan (2017)	Trucks	Management	Core	New	СТР
NCC	Illegal truck movement outreach and enforcement	Route 9 Master Plan (2017)	Trucks	Management	Core	New	County, local, police
NCC	Inventory of diesel activity at Port of Wilmington	Route 9 Master Plan (2017)	Trucks	Management	Core	New	COMPLETED BY DNREC/SWPN in 2017
NCC	Overnight electrified parking for port-related trucks	Route 9 Master Plan (2017)	Trucks	Management	Core	New	Private, Port of Wilmington, CTP
NCC	Terminal Avenue at SR 9 Roundabout	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	SR 9 Road Diet/Streetscape: Rogers Rd to Terminal Ave	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	Rogers Rd at SR 9 Intersection Rebuild	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	SR 9 Road Diet/Streetscape: Lambson Ln to Rogers Rd	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	Memorial Drive at SR 9 Roundabout	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	SR 9 Road Diet/Streetcape: Memorial Dr to Lambson Ln	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	Memorial Drive Road Diet: Interim Build	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP - repaving project
NCC	Karyln Drive at Memorial Drive Intersection Rebuild	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	Memorial Drive Road Diet: Full Build	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	Multiuse Center Lane Pathway: I-295 at SR 9	Route 9 Master Plan (2017)	Bike/ped	Management	Core	New	CTP; dependent on Cherry Land and Memorial Drive rou
NCC	Cherry Ln at SR 9 Roundabout	Route 9 Master Plan (2017)	Multimodal	Management	Core	New	CTP
NCC	Stamm Blvd at SR 9 Intersection Rebuild	Route 9 Master Plan (2017)	Study/Multim	od Management	Core	New	WILMAPCO (UPWP); CTP for implementation
NCC	SR 9 Road Diet/Streetscape: Buttonwood Ave to Cherry Ln	Route 9 Master Plan (2017)	Study/Multim	od Management	Core	New	WILMAPCO (UPWP); CTP for implementation
NCC	Harvey Road and Sconset Road Pedestrian Improvements	Ardentown Paths Plan (2017)	Bike/Ped	Management	Core	New	SRTS funded
NCC	Harvey Road Traffic Calming (through the Ardens)	Ardentown Paths Plan (2017)	Multimodal	Management	Core	New	
NCC	New Sweden Road Extension (South Wilmington)	None: Wetland Park Enhanced Concept	Multimodal	Expansion	Center	New	
NCC	Governor Printz Boulevard Road Diet	New Castle County	Multimodal	Management	Core	New Castle Cou	nty request
NCC	Philadelphia Pike: Naamans Rd - PA Line	North Claymont Area Master Plan	Multimodal	Management	Core	New Castle Cou	nty request
NCC	Airport Rd: Commons Blvd – I-95	New Castle County	Multimodal	Management	Core	New Castle Cou	nty request
NCC	Commons Blvd Pathway	New Castle County	Bike/Ped	Management	Core	New Castle Cou	nty request
NCC	Augustine Cutoff Pathway	New Castle County	Bike/Ped	Management	Core	New Castle Cou	nty request
NCC	Glasgow Pathway	New Castle County	Bike/Ped	Management	Core	New Castle Cou	nty request
NCC	Buck Rd Sidewalk	New Castle County	Bike/Ped	Management	Core	New Castle Cou	nty request
NCC	Glasgow Ave: Complete Streets improvements, including a complete sidewalk/sidepath network, buffered bike lanes, and pedestrian-scale lighting	Glasgow Avenue Study (2017)	Bike/Ped	Management	Core	New	
NCC	Glasgow Ave: Roundabout at Paxson Drive	Glasgow Avenue Study (2017)	Multimodal	Safety	Core	New	
NCC	Glasgow Ave: Roundabout at Old County Road	Glasgow Avenue Study (2017)	Multimodal	Safety	Core	New	

Listing of Financially Reasonable Projects Under \$15 Million

Map ID	County	Project Name	Description	Mode	Category	Investment Area	Technical Score	Year of Expenditure Cost x \$1,000	In Service Year
1	NCC	Grubb Road, SR 261: Foulk Rd. to Naamans Rd.	Construct new sidewalk	Bike/ped	Management	Core	4	\$643	2019
2	NCC	I-495 at Philadelphia Pike	Improve/reconfigure intersection to improve safety	Road	Management	Core	n/a	\$368	2017
3	NCC	Claymont Sidewalks - Myrtle Avenue	Construct new sidewalk between US 13 and train station	Bike/ped	Management	Core	6	\$1,514	2017
4	NCC	Claymont Sidewalks - Manor Avenue	Construct new sidewalk between US 13 and train station	Bike/ped	Management	Core	5	\$1,147	2018
5	NCC	I-95, Carr Road and Marsh Road Interchange Improvements	Improve/reconfigure interchange to improve safety	Multimodal	Management	Core	n/a	\$5,350	2018
6	NCC	King & Orange Streets, MLK Blvd. to 13th St.	Improve streetscape and transit facilities, i.e. bus shelters, lighting, and pedestrian upgrades	Multimodal	Management	Center	16	\$8,478	2021
7	NCC	4th St., Walnut St. to I-95	Construct bus shelters, improve striping, crosswalks, sidewalks and signals	Multimodal	Management	Center	19	\$3,650	2020
8	NCC	Garasches Lane	Improve access between the Southbridge neighborhood and the Wilmington Riverfront	Multimodal	Management	Center	6	\$1,838	2021
9	NCC	SR 2, South Union St: Railroad Bridge to Sycamore St.	Roadway reconstruction, pedestrian safety, drainage improvements	Multimodal	Management	Center	11	\$1,917	2015
10	NCC	US 13, US 40 to Memorial Drive	Improve pedestrian safety and access	Bike/ped	Management	Core	19	\$8,857	2021
11	NCC	I-295, Westbound from I-95 to US 13	Improve roadway, operational safety improvements	Road	Expansion	Core	16	\$8,382	2017
12	NCC	City of New Castle Intersections (SR9/3rd and SR9/6th & SR9/ Delaware St)	Reconfigure intersections to pedestrian access and reduce cut through traffic	Multimodal	Management	Core	5	\$3,764	2021
13	NCC	SR 9, River Rd. Area, Dobbinsville (viaduct)	Reconfigure/ raise roadway to prevent flooding	Road	Management	Core	3	\$14,157	2021
14	NCC	SR 41 / Faulkland Rd. Intersection (Highway Safety Improvement Program)	Reconfigure interchange, safety improvements	Road	Management	Core	n/a	\$702	2019
15	NCC	SR 41 / Hercules Rd. Intersection (Highway Safety Improvement Program)	Improve/reconfigure intersection, improve pedestrian access	Other	Management	Community	n/a	\$3,287	2016
16	NCC	Mill Creek Road and Stoney Batter Road Intersection (Highway Safety Improvement Program)	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	n/a	\$3,748	2016
17	NCC	SR 2, Kirkwood Hwy: Pike Creek Rd to Woodmill Dr	Reconfigure intersection, safety improvements	Road	Management	Core	n/a	\$3,715	2018
18	NCC	Possum Park Rd and Old Possum Park Rd Intersection Improvements	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	1	\$2,198	2017
19	NCC	SR 2 / Red Mill Rd. Intersection Improvements	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	12	\$7,178	2020

Listing of Financially Reasonable Projects Under \$15 Million

Map ID	County	Project Name	Description	Mode	Category	Investment Area	Technical Score	Year of Expenditure Cost x \$1,000	In Service Year
20	NCC	SR 273 / Red Mill Rd. Connector Intersection (Highway Safety Improvement Program)	Improve/reconfigure intersection	Road	Management	Core	n/a	\$2,398	2019
21	NCC	Churchmans Road, Christiana Hospital to SR 1	Improve roadway, operational safety improvements	Road	Management	Core	n/a	\$1,861	2016
22	NCC	SR 273 / Harmony Rd. Intersection Improvements (Highway Safety Improvement Program)	Improve/reconfigure intersection	Multimodal	Management	Core	n/a	\$4,811	2020
23	NCC	Road A / SR 7 Improvements	Expand and reconfigure roadway	Road	Expansion	Core	6	\$14,353	2018
24	NCC	Cavaliers Mitigation	Construct berms and vegetative walls	Multimodal	Management	Core	5	\$1,600	2015
25	NCC	Christiana Mall Park and Ride	Relocate existing park and ride transit center	Transit	Management	Core	6	\$5,343	2018
26	NCC	SR 273 / Appleby Rd and Airport Rd Intersections	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	n/a	\$9,056	2018
27	NCC	SR 4, SR 2 to SR 896 (westbound)	Eliminate bottleneck, improve non-motorized access	Road	Expansion	Center	10	\$54,028	2030
28	NCC	SR 896 and Old Chestnut Rd. Intersection (Highway Safety Improvement Program)	Improve/reconfigure intersection, improve pedestrian access	Other	Management	Center	n/a	\$1,455	2015
29	NCC	SR 72 and Old Baltimore Pike Intersection	Reconfigure interchange, safety improvements	Road	Management	Core	n/a	\$1,018	2017
30	NCC	Old Baltimore Pike and Salem Church Rd Intersection	Improve/reconfigure intersection	Road	Management	Core	n/a	\$2,642	2018
31	NCC	US 40 / SR 7 Intersection	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	n/a	\$848	2016
32	NCC	US 40, Eden Square Connector	Construct new roadway, improve non-motorized access	Multimodal	Expansion	Core	5	\$7,024	2030
33	NCC	SR 71, Old Porter Rd. to SR 7 (Highway Safety Improvement Program)	Improve/reconfigure intersection, improve pedestrian access	Other	Management	Core	n/a	\$2,687	2017
34	NCC	US 40 / Glasgow Avenue Intersection	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	n/a	\$339	2016
35	NCC	SR 896 at N54 & N396 Intersection, Including Howell School Road to SR 71	Realign roadway, improve safety, traffic operations, and non- motorized access	Multimodal	Management	Community/ Rural	5	\$11,877	2017
36	NCC	C & D Branch Canal Trail and C&D Canal Trail to MD line	Enhance regional trail system	Bike/ped	Management	Rural	1	\$194	2016
37	СС	C & D Canal Trail	Enhance regional trail system	Bike/ped	Management	Rural	1	\$2,142	2016
38	NCC	N412, Lorewood Grove Road, Rd 412A to SR 1	Improve roadway, operational safety improvements, improve non-motorized access	Road	Management	Developing/ Rural	4	\$11,786	2019
39	NCC	Jamison Corner Rd: Relocated to Boyds Corner Rd	Improve/reconfigure roadway	Multimodal	Management	Developing	7	\$10,065	2017

Listing of Financially Reasonable Projects Under \$15 Million

Map ID	County	Project Name	Description	Mode	Category	Investment Area	Technical Score	Year of Expenditure Cost x \$1,000	In Service Year
40	NCC	Cedar Lane: Marl Pit Rd. to Boyds Corner Rd.	Improve roadway, operational safety improvements, construct roundabout at Cedar & Marl Pit Rds.	Road	Management	Developing	5	\$14,614	2021
41	NCC	Boyds Corner Park and Ride	Expand existing park and ride transit center	Transit	Management	Rural	5	\$411	2016
42	NCC	SR 299, SR 1 to Catherine Street	Expand roadway, improve pedestrian access	Road	Expansion	Core	5	\$9,944	2019
43	NCC	Wiggins Mill Road	Improve roadway, improve non-motorized access	Multimodal	Management	Core, Rural	5	\$4,178	2030
44	NCC	US 13: Duck Creek to SR 1	Roadway access improvements, improve non-motorized access	Multimodal	Management	Rural	2	\$10,755	2021
45	СС	Elkton Bus Service Circulator	Community bus service expansion	Transit	Expansion	Center	11	\$75	2020

Listing of Financially Reasonable Projects Above \$15 Million

Map ID	County	Project Name	Description	Mode	Category	Investment Area	Technical Score	Year of Expenditure Cost x \$1,000	In Service Year
46	NCC	Claymont Train Station	Commuter rail capacity improvements	Transit	Management	Core	10	\$39,055	2020
47	NCC	Tyler McConnell Bridge, SR 141, Montchannin Road to Alapocas Road	Major roadway and bridge expansion, congestion reduction, safety improvements	Multimodal	Expansion	Rural	8	\$17,759	2030
48	NCC	Wilmington Transit Hub (Project Location Unknown)	Transit center expansion improvements	Transit	Expansion	Center	18	\$15,791	2021
49	NCC	Walnut St., Front St. to 13th St. with sweep removal	Improve roadway, operational safety improvements	Multimodal	Management	Center	18	\$15,184	2021
50	NCC	Christina River Bridge	Major bridge construction, congestion reduction, safety improvements	Multimodal	Expansion	Core	13	\$62,599	2019
51	NCC	NCC Industrial Track Greenway, Phase III	Expand regional trail system	Bike/ped	Expansion	Center/ Core	10	\$14,967	2018
52	NCC	SR 141 & I-95: Commons Blvd	Reconfigure interchange, safety improvements	Road	Management	Core	14	\$35,088	2021
53	NCC	SR 141 & I-95 Interchange: Ramps G & F Improvements	Reconfigure interchange, safety improvements	Road	Management	Core	14	\$39,651	2018
54	NCC	Fairplay Train Station - Parking	Commuter rail station parking improvements	Transit	Management	Core	12	\$18,033	2021
55	NCC	SR 273 / Chapman Rd Intersection Improvements	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	n/a	\$18,410	2021
56	NCC	Newark Regional Transportation Center, Phase I	Commuter rail capacity improvements	Transit	Management	Center	11	\$38,789	2017
57	NCC	Newark Regional Transportation Center, Phase II	Commuter rail capacity improvements	Transit	Management	Center	11	\$65,945	2025
58	NCC	SR 2, Elkton Road: MD Line to Casho Mill Rd	Roadway reconstruction, intersection improvements	Multimodal	Expansion	Center	8	\$27,204	2021
59	NCC	SR 4, SR 2 to SR 896 (eastbound)	Eliminate bottleneck, improve non-motorized access	Road	Expansion	Center	10	\$25,233	2020
60	NCC	I-95 and SR 896 Interchange	Improve/reconfigure interchange	Road	Expansion	Core	18	\$96,216	2025
61	NCC	US 40 and SR 896 Interchange	Construct grade separated intersection, safety improvements	Road	Expansion	Core	15	\$60,533	2022
62	NCC	US 40 / SR 72 Wrangle Hill Road	Improve/reconfigure intersection, improve pedestrian access	Multimodal	Management	Core	9	\$22,512	2018
63	NCC	US 40: Salem Church Rd to Walther Road	Improve roadway, improve non-motorized access	Multimodal	Expansion	Core	13	\$26,003	2023
64	NCC	SR 1: Tybouts Corner to SR 273	Reconstruct roadway	Road	Expansion	Core	9	\$123,052	2020
65	NCC	SR 1: Tybouts Corner to Roth Bridge	Expand and reconstruct roadway	Road	Expansion	Community	9	\$162,085	2030
66	NCC	SR 72, McCoy Road to SR 71	Expand roadway, improve non-motorized access	Multimodal	Expansion	Community	2	\$22,977	2019

Listing of Financially Reasonable Projects Above \$15 Million

Map ID	County	Project Name	Description	Mode	Category	Investment Area	Technical Score	Year of Expenditure Cost x \$1,000	In Service Year
67	NCC	SR 896 at Bethel Church Rd Interchange	Construct grade separated intersection, safety improvements	Road	Expansion	Rural	0	\$34,609	2022
68	NCC	US 301: Spur	Major roadway expansion, congestion reduction, safety improvements	Road	Expansion	Rural	4	\$163,886	2030
69	NCC	US 301: MD State Line to SR 1 (Mainline)	Major roadway expansion, congestion reduction, safety improvements	Road	Expansion	Developing/ Rural	4	\$554,387	2019
70	NCC	Boyds Corner Rd: Cedar Lane to US 13	Expand roadway, improve non-motorized access	Multimodal	Expansion	Developing	5	\$22,992	2021
71	CC	I-95: Susquehanna River to DE Line	Major roadway and bridge expansion, congestion reduction, safety improvements	Road	Expansion	Core	3	\$1,346,247	2040
72	CC	MD 272: US 40 to Lums Rd.	Major roadway improvements, congestion reduction, safety improvements	Multimodal	Expansion	Core	1	\$77,003	2040
73	CC	MD 222, Perryville/ Bainbridge Rd: US 40 to MD 276	Roadway reconstruction	Road	Expansion	Center/ Core	1	\$183,887	2040
74	СС	I-95 and MD 222 Interchange	Improve/reconfigure interchange	Road	Expansion	Core	8	\$413,205	2040
75	CC	Susquehanna River Rail Bridge Preliminary Engineering	Reconstruct bridge, improve non-motorized access	Multimodal	Management	Core	4	\$22,098	2020
76	СС	MARC Maintenance Facility	New rail maintenance facility	Transit	Expansion	Core	3	\$26,766	2020
77	CC	Maryland Commuter Rail: Perryville to Elkton (MARC extension)	Expand commuter rail capacity	Transit	Expansion	Core/ Center/ Rural	8	\$38,450	2029
78	CC	MD 272 Bridge over Amtrak	Major roadway and bridge improvements, congestion reduction, safety improvements	Multimodal	Management	Center/ Core	5	\$15,638	2016
79	CC	MD 213 / US 40 Intersection Improvements (PD only)	Project Development Only - improve/ reconfigure intersection	Road	Management	Center	13	\$76,306	2016

Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area
1	NCC	Rockland Rd and Montchanin Court Guardrail	Other Intersection / Road Improvements	Road	Management	Rural
2	NCC	Convert 1500 block of King St to two- way street	2010 Downtown Circulation Study	Road	Management	Center
3	NCC	Two-way traffic on 8th St between King & Walnut Sts	2010 Downtown Circulation Study	Road	Management	Center
4	NCC	Add Southbound lanes on Market St. between 2nd St and MLK Blvd.	2010 Downtown Circulation Study	Road	Management	Center
5	NCC	Maryland Ave. and Monroe Street	Wilmington Initiatives	Road	Management	Center
6	NCC	South Wilmington Route Signage	2009 South Wilmington Signage Study	Road	Management	Center
7	NCC	Port of Wilmington Truck Staging Area (site location undetermined)	2013 Port of Wilmington Truck Parking Study	Road	Management	Core
8	NCC	US 13/ SR 141 Interchange	Other Intersection / Road Improvements	Road	Management	Core
9	NCC	I-295 Improvements, Eastbound at SR 141	Other Intersection / Road Improvements	Road	Expansion	Core
10	NCC	I-95 & SR 141 Interchange	I-95 MD Line to I-295 Program	Road	Management	Core
11	NCC	Old Capitol Trail/ Newport Rd. Roundabout	2014 Marshallton Circulation Study	Road	Management	Core
12	NCC	Old Capitol Trail/ Stanton Rd. Roundabout	2014 Marshallton Circulation Study	Road	Management	Core
13	NCC	Valley Rd/Little Baltimore Rd/North Star Rd Intersection	Other Intersection / Road Improvements	Road	Management	Community
14	NCC	Center Boulevard extended to Churchmans Rd	Other Intersection / Road Improvements	Road	Expansion	Core
15	NCC	Eagle Run Rd to Continental Drive Connector	1997 Churchmans Crossing Plan	Road	Expansion	Core
16	NCC	SR 273: I-95 to SR 1	Other Intersection / Road Improvements	Road	Management	Core
17	NCC	I-95: MD Line to SR 1	I-95 MD Line to I-295 Program	Road	Expansion	Core
18	NCC	I-95/ Chapman Road ramp	1997 Churchmans Crossing Plan	Road	Management	Core
19	NCC	I-95/DE 72 partial interchange - northbound entrance, southbound exit only	US 301	Road	Expansion	Core
20	NCC	SR 1 NB Ramp to US 40	US 40 Plan	Road	Management	Core
21	NCC	Denny Rd/ Lexington Parkway Intersection	Other Intersection / Road Improvements	Road	Management	Community
22	NCC	Howell School Road: SR 71 - RC Peoples Boulevard	Other Intersection / Road Improvements	Road	Management	Community/ Rural
23	NCC	Ratledge Rd.	Southern New Castle County	Road	Management	Developing
24	CC	US 301: Kent County line to Delaware State line, Access control improvements	Other Intersection / Road Improvements	Road	Management	Rural
25	CC	MD 213: Frenchtown Road to US 40	Other Intersection / Road Improvements	Road	Management	Center
26	CC	I-95 Corridor Access and Interchange Improvements	Other Intersection / Road Improvements	Road	Expansion	Core
27	NCC	Newport Rail Station	2013 Newport Train Station Feasibility Study	Transit	Expansion	Core
28	NCC	Rail - Newark to Elkton (SEPTA extension)	2003 Track A Feasibility Study	Transit	Expansion	Center
29	CC	Elkton Train Station	2011 Elkton TOD Plan	Transit	Expansion	Center
30	CC	North East Transit Hub/ Train Station	2014 North East TOD Plan	Transit	Expansion	Center
31	CC	Perryville Train Station Parking Improvements	2012 Perryville TOD Plan	Transit	Management	Center
32	CC	Port Deposit Shared Ride Service	2013 Port Deposit Transit Feasibility Study	Transit	Management	Core

Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area
33	NCC	ECGW - NCC (grouped for mapping purposes)	Other Bike/Ped	Bike/ped	Expansion	Core/ Center
34	NCC	Foulk Road Sidewalks	Other Bike/Ped	Bike/Ped	Management	Core
35	NCC	Christina River Greenway	2006 New Castle County Greenway Plan	Bike/ped	Expansion	Core
36	NCC	Terminal Avenue/ SR 9 Pedestrian Improvements	2013 Port of Wilmington Truck Parking Study	Bike/Ped	Management	Core
37	NCC	Marshallton Pedestrian Improvements	2014 Marshallton Circulation Study	Bike/Ped	Management	Core
38	NCC	Mill Creek/Hockessin Greenway	2006 New Castle County Greenway Plan	Bike/ped	Expansion	Core/ Community
39	NCC	BR 234 Pedestrian Improvements	1997 Churchmans Crossing Plan	Bike/ped	Management	Core
40	NCC	Pike Creek Road Sidewalks	Other Bike/Ped	Bike/Ped	Management	Core
41	NCC	Newark Bicycle Plan Improvements	2014 Newark Bicycle Plan	Bike/Ped	Management	Center
42	NCC	Old Baltimore Pike: SR 72 to SR 273, Sidepath	US 40 Plan	Bike/ped	Management	Core
43	NCC	Cooch's Bridge/Old Baltimore Pike Greenway	2006 New Castle County Greenway Plan	Bike/ped	Expansion	Core
44	NCC	SR 896 Corridor Pathway (formerly Iron Hill Bikeway)	2006 New Castle County Greenway Plan	Bike/ped	Expansion	Core
45	NCC	DE 896: Old Baltimore Pike to Porter Road, Sidepaths	US 40 Plan	Bike/ped	Management	Core
46	NCC	US 40: MD State Line to SR 896, Sidepaths	US 40 Plan	Bike/ped	Management	Core
47	NCC	US 40: Newtown Trail & Pedestrian Improvements	US 40 Plan	Bike/ped	Expansion	Core
48	NCC	US 40: SR 1 to US 13, Sidepaths	US 40 Plan	Bike/ped	Management	Core
49	NCC	US 13: US 40 to Tybouts Corner, Sidepaths	US 40 Plan	Bike/ped	Management	Core
50	NCC	SR 72: US 40 to SR 71, Sidewalks	US 40 Plan	Bike/ped	Management	Core/ Community
51	NCC	Del Laws Road, Sidewalks	US 40 Plan	Bike/ped	Management	Core
52	CC	ECGW - CC (grouped for mapping purposes)	Other Bike/Ped	Bike/ped	Expansion	Center/ Core/ Community
53	CC	North East TOD Pedestrian Improvements	2014 North East TOD Plan	Bike/Ped	Management	Center
54	CC	Perryville Bicycle and Pedestrian Improvements	2012 Perryville Greenway Plan	Bike/Ped	Expansion	Center/ Core
55	CC	Susquehanna River Pedestrian/Bicycle Crossing	Other Bike/Ped	Bike/ped	Expansion	Center/Core
56	CC	Lower Susquehanna Heritage Greenway	Other Bike/Ped	Bike/ped	Expansion	Rural
57	NCC	US 13, Philadelphia Pike, Claymont Transportation Plan Implementation (Phase II)	Other Intersection / Road Improvements	Multimodal	Management	Core
58	NCC	Wilmington Traffic Calming; 12th St. Connector	Wilmington Initiatives Plan	Multimodal	Management	Center
59	NCC	King/MLK Sweep Improvement	Wilmington Initiatives Plan	Multimodal	Management	Center
60	NCC	Market Street: 11th to 16th Sts.	Wilmington Initiatives Plan	Multimodal	Management	Center
61	NCC	Shipley Street Enhancements: 12th Street to MLK Blvd.	Wilmington Initiatives Plan	Multimodal	Management	Center
62	NCC	Water St. West: Shipley Street to West Street	Wilmington Initiatives Plan	Multimodal	Management	Center
63	NCC	Tatnall St. Connector	Wilmington Initiatives Plan	Multimodal	Management	Center
64	NCC	Water St. East Extended (French St. to Front St.)	Wilmington Initiatives Plan	Multimodal	Expansion	Center
65	NCC	S. Walnut Street Bridge Area	Wilmington Initiatives Plan	Multimodal	Management	Center

Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area
66	NCC	Southbridge Streetscape Improvements (Future Phases)	2008 Southbridge Circulation Study	Multimodal	Management	Center
67	NCC	SR 9, New Castle Ave - 3rd St to Heald St, Pavement Reconstuction	Other Intersection / Road Improvements	Multimodal	Management	Center/ Core
68	NCC	SR 52 and Snuff Mill Rd, Twadell Mill Rd, Center Meeting Rd Intersections	2002 Centerville Village Plan	Multimodal	Management	Rural
69	NCC	Churchmans Crossing Sidewalks & Bus Stop Improvements	1997 Churchmans Crossing Plan	Multimodal	Management	Core
70	NCC	SR 4 / SR 7 (JP Morgan) Intersection Improvements	1997 Churchmans Crossing Plan	Multimodal	Management	Core
71	NCC	SR 4, Ogletown Stanton Road/ SR 7, Christiana Stanton Road Phase 1, Stanton Split	1997 Churchmans Crossing Plan	Multimodal	Management	Core
72	NCC	Churchmans Road Extended, SR 2 to SR 4	1997 Churchmans Crossing Plan	Multimodal	Expansion	Core
73	NCC	SR 4, Churchmans Road Intersection Improvements	1997 Churchmans Crossing Plan	Multimodal	Management	Core
74	NCC	SR 4, Harmony Road Intersection Improvements	1997 Churchmans Crossing Plan	Multimodal	Management	Core
75	NCC	SR 2, Kirkwood Hwy / Harmony Rd.	1997 Churchmans Crossing Plan	Multimodal	Management	Core
76	NCC	Newark Transportation Plan Implementation	2011 Newark Transportation Plan	Multimodal	Management	Center
77	NCC	DE 896: Old Baltimore Pike and I-95, widen to 6 lanes	US 301	Multimodal	Expansion	Core
78	NCC	Local Glasgow Circulator Roads - to include sidewalks and bicycle accommodations	US 40 Plan	Multimodal	Management	Core
79	NCC	Salem Church Rd: I-95 to US 40, Sidewalks	US 40 Plan	Multimodal	Management	Core
80	NCC	Reybold Road: SR 72 to Salem Church Rd	US 40 Plan	Multimodal	Management	Core
81	NCC	SR 72: Reybold to US 40	US 40 Plan	Multimodal	Management	Core
82	NCC	Salem Church Road/US 40/Porter Road Intersection	US 40 Plan	Multimodal	Management	Core
83	NCC	DE 1 southbound ramp/US 40 Intersection	US 40 Plan	Multimodal	Management	Core
84	NCC	US 40/ SR 7 Interchange	US 40 Plan	Multimodal	Management	Core
85	NCC	DE 7: US 40 to DE 71	US 40 Plan	Multimodal	Management	Core
86	NCC	US 40: Salem Church Rd to Walther Rd	US 40 Plan	Multimodal	Expansion	Core
87	NCC	Church Road: Wynnfield to SR 71	US 40 Plan	Multimodal	Management	Core
88	NCC	Old Porter Road: Porter Road to SR 71	US 40 Plan	Multimodal	Management	Core/ Community
89	NCC	Scotland Drive/US 40, Intersection	US 40 Plan	Multimodal	Management	Core
90	NCC	US 40 Overpass of Norfolk Southern RR	US 40 Plan	Multimodal	Management	Core
91	NCC	US 40, SR 72 to Salem Church Rd	US 40 Plan	Multimodal	Management	Core
92	NCC	US 40: SR 896 to SR72	US 40 Plan	Multimodal	Management	Core
93	NCC	US 40/ Glasgow Avenue Intersection	US 40 Plan	Multimodal	Management	Core
94	NCC	US 40 & Pleasant Valley Road Intersection	US 40 Plan	Multimodal	Management	Core
95	NCC	SR 896: C & D Canal to US 40, Widening to 6 lanes	US 301	Multimodal	Expansion	Core/ Rural/ Community
96	NCC	US 40/ US 13 Interchange	US 40 Plan	Multimodal	Management	Core

Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area
97	NCC	Route 9; Reconstruct Ferry Cutoff as 4 lanes	1999 City of New Castle Transportation Plan	Multimodal	Expansion	Core
98	NCC	US 13: US 40 to Wilmington	Other Intersection / Road Improvements	Multimodal	Expansion	Core
99	NCC	Delaware City Plan Implementation	2009 Delaware City Transportation Plan	Multimodal	Preservation	Community/ Rural
100	NCC	US 13: Odessa Transportation Plan Implementation	Other Intersection / Road Improvements	Multimodal	Management	Core
101	CC	MD 213 / MD 282 Intersection	Other Intersection / Road Improvements	Multimodal	Management	Core
102	CC	Chesapeake City Parking Plan Implementation	2009 Chesapeake City Parking Plan	Multimodal	Management	Core
103	CC	MD 213, Singerly Rd: North of Providence Rd. to MD 273, 2 lane reconstruction	Other Intersection / Road Improvements	Multimodal	Management	Rural
104	CC	MD 213, Bridge St.: US 40 to MD 279, Multi-lane urban reconstruction	Other Intersection / Road Improvements	Multimodal	Management	Center
105	CC	Elkton Downtown Connector Streets & Streetscaping	2011 Elkton TOD Plan	Multimodal	Expansion	Center
106	CC	US 40 Corridor and Intersection Improvements	US 40 Plan - Cecil County	Multimodal	Management	Core/ Center
107	CC	Rolling Mill Rd. Bridge (2-lanes with sidewalks)	2014 North East TOD Plan	Multimodal	Management	Center
108	CC	MD 272/ North Main St. Intersection Improvements	2014 North East TOD Plan	Multimodal	Management	Center
109	CC	MD 7, Philadelphia RdCecil Ave: East limits of Charlestown to MD 272, 2 lane reconstruction	Other Intersection / Road Improvements	Multimodal	Management	Core/ Center
110	CC	Perryville Connector Streets	2012 Perryville TOD Plan	Multimodal	Expansion	Center
111	CC	MD 275, Perrylawn Drive: MD 222 to MD 276 (divided highway reconstruct)	Other Intersection / Road Improvements	Multimodal	Management	Core/ Center
112	CC	MD 222, Bainbridge Rd: MD 275 to Bainbridge entrance, 2 lane reconstruction	Other Intersection / Road Improvements	Multimodal	Management	Core
113	CC	MD 273, Telegraph Rd: East Limits of Rising Sun to Sylmar Rd, 2 lane reconstruction	Other Intersection / Road Improvements	Multimodal	Management	Community
Proje	cts Grou	ped from Map ID # 40 - East Coast	Greenway - NCC			
N/A	NCC	East Coast Greenway: Churchmans Crossing - Newark	East Coast Greenway	Bike/Ped	Expansion	Core/ Center
N/A	NCC	East Coast Greenway: New Castle - Churchmans Crossing	East Coast Greenway	Bike/Ped	Expansion	Core/ Center
N/A	NCC	East Coast Greenway: PA line to Cauffiel	East Coast Greenway	Bike/Ped	Expansion	Core/ Center
Proje	cts Grou	ped from Map ID #91 - Newark Trans	sportation Plan			
N/A	NCC	Cleveland Ave at N. College	2011 Newark Transportation Plan	Multimodal	Management	Center
N/A	NCC	Delaware Ave Cycletrack	2011 Newark Transportation Plan	Bike/Ped	Expansion	Center
N/A	NCC	Delaware Avenue Extension to Marrows Rd	2011 Newark Transportation Plan	Multimodal	Expansion	Center
N/A	NCC	Library Ave Pedestrian Improvements	2011 Newark Transportation Plan	Bike/Ped	Management	Center
N/A	NCC	Main Street Pedestrian Improvements	2011 Newark Transportation Plan	Bike/Ped	Management	Center
N/A	NCC	N. Chapel St. Underpass at Cleveland Ave	2011 Newark Transportation Plan	Multimodal	Management	Center
N/A	NCC	Newark Bicycle Signal Detection	2011 Newark Transportation Plan	Bike/Ped	Management	Center
N/A	NCC	Newark Bike Lanes	2011 Newark Transportation Plan	Bike/Ped	Management	Center

Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area
N/A	NCC	Newark Car-sharing Expansion	2011 Newark Transportation Plan	Bike/Ped	Expansion	Center
N/A	NCC	Newark Downtown Parking Improvements	2011 Newark Transportation Plan	Road	Management	Center
N/A	NCC	Newark Mid-block Pedestrian Crossing Improvements	2011 Newark Transportation Plan	Bike/Ped	Management	Center
N/A	NCC	Newark Pedestrian Improvements	2011 Newark Transportation Plan	Bike/Ped	Management	Center
N/A	NCC	Newark Sharrows	2011 Newark Transportation Plan	Bike/Ped	Management	Center
N/A	NCC	Newark Transit Amenities and Service Modification	2011 Newark Transportation Plan	Transit	Management	Center
N/A	NCC	S. College Ave Gateway	2011 Newark Transportation Plan	Multimodal	Management	Center
N/A	NCC	Signal Coordination - Library Ave	2011 Newark Transportation Plan	Road	Management	Center
N/A	NCC	Signal Coordination - S. College Ave	2011 Newark Transportation Plan	Road	Management	Center
N/A	NCC	SR 273/ Marrows Road Aligment Update	2011 Newark Transportation Plan	Road	Management	Center
N/A	NCC	West Park Place Traffic Calming	2011 Newark Transportation Plan	Multimodal	Management	Center
N/A	NCC	Wyoming Rd and Marrows Road Access Management	2011 Newark Transportation Plan	Multimodal	Management	Center
Proje	cts Not I	Mapped				
N/A	NCC	TJ Fixed-route Bus Improvements	2007 WILMAPCO TJ Report	Transit	Expansion	Center/ Core
N/A	СС	TJ Fixed-route Bus Improvements	2007 WILMAPCO TJ Report	Transit	Expansion	Center/ Core
N/A	NCC	TJ Walkability Improvements (Adams Four)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Bayard Square)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Browntown)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Cool Springs - East)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Cool Springs - West)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Cranston Heights)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Eastlake - North)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Eastlake - South)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Eastside)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Happy Valley)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Naamans Road)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (New Castle)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Prices Run - East)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Prices Run - West)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (Richardson Park)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	CC	TJ Walkability Improvements (South Elkton)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	TJ Walkability Improvements (South Newark)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center

Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area
N/A	NCC	TJ Walkability Improvements (Trolley Square)	2007 WILMAPCO TJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Fixed-route Bus Improvements	2009 WILMAPCO EJ Report	Bike/Ped	Expansion	Center/ Core
N/A	NCC	EJ Walkability Improvements (Adams Four)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Alban Park)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Chestnut Run)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Downtown)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Fourth and Union)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Hedgeville)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Hilltop - Central)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Hilltop - North)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Hilltop - South)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Hilltop - West)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Melrose Place)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Prices Run)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Silverbrook Gardens)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Southbridge - East)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Southbridge - West)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (St. Paul's)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (West Center City - North)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (West Center City - South)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Center
N/A	NCC	EJ Walkability Improvements (Wilton)	2009 WILMAPCO EJ Report	Bike/Ped	Management	Core
N/A	CC	Cecil County Bicycle Plan Implementation	2012 Cecil County Bicycle Master Plan	Bike/Ped	Expansion	Community/ Core/ Center
N/A	NCC	Walkable Community Workshop - US 40/SR 72 Report	2012 Walkable Community Workshop	Bike/Ped	Management	Core
N/A	СС	Walkable Community Workshop- Chesapeake City	2012 Walkable Community Workshop	Bike/Ped	Management	Core
N/A	NCC	Walkable Community Workshop-City of New Castle	2005 Walkable Community Workshop	Bike/Ped	Management	Core
N/A	NCC	Walkable Community Workshop- Edgemoor Gardens	2005 Walkable Community Workshop	Bike/Ped	Management	Core
N/A	NCC	Walkable Community Workshop- Garfield Park	2012 Walkable Community Workshop	Bike/Ped	Management	Core
N/A	NCC	Walkable Community Workshop- Jewish Family Services	2009 Walkable Community Workshop	Bike/Ped	Management	Core

Map ID	County	Project Name	Source Plan	Mode	Category	Investment Area	
N/A	NCC	Walkable Community Workshop- Westside Wilmington	2014 Walkable Community Workshop	Bike/Ped	Management	Center	
N/A	NCC	Wilmington Bicycle Plan Implementation	2008 Wilmington Bicycle Plan	Bike/Ped	Expansion	Center	
N/A	NCC	Delaware Scenic Byways	Corridor Management Plans	Bike/Ped	Management	Center/ Core	
N/A	NCC/ CC	Top Pedestrian Priority Segments	2012 Top Pedestrian Priority Segments Analysis	Bike/Ped	Management	Center/ Core	
N/A	NCC	Delaware Transit Corp Business Plan Implementation	Transit	Transit	Management	Center/ Core/ Community	
N/A	СС	Park-and-Ride Lot, Rt 273, Cecil County	Transit	Transit	Management	Rural	
N/A	СС	Transit Improvement - Cecil County	Transit	Transit	Management	Center/ Core	
N/A	NCC	Transit Improvement - New Castle County	Transit	Transit	Management	Center/ Core	
N/A	NCC/ CC	EJ Walkability and Transit Improvements	2013 WILMAPCO EJ Report	Transit, Bike/Ped	Management	Center/ Core	

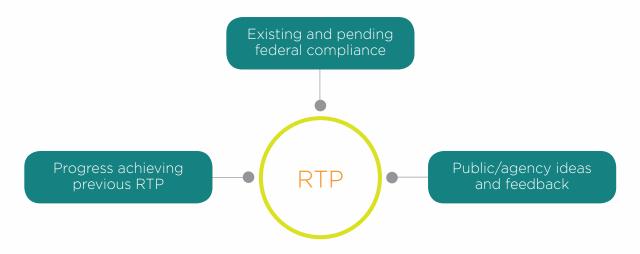
RTP DEVELOPMENT

The contents of the present Plan were informed by many factors, agencies, and individuals. Chief among these was ensuring its compliance with current federal transportation requirements. This includes having a financially reasonable and air quality-conforming project list. An effort was also made to prepare for pending performance measure requirements. While we did not set performance targets, performance measures were identified for each RTP action in coordination with the Maryland and Delaware DOTs.

Our progress in achieving previous RTP actions (documented in the 2014 Regional Progress Report,

which is available in the appendix) was another major influence. Objectives and actions were revised, added, or removed, based on our performance.

Finally, feedback from our member agencies, local governments, civic representatives, and the general public informed the Plan. A public opinion survey (available in the appendix) of 600 residents across our region was conducted to better understand transportation needs. Representatives from WILMAPCO also gathered feedback on draft versions of the RTP through an "Our Town" open house event held on September 3, 2014, and presentations given to dozens of civic and local government groups.



Draft - 3.20.18

CMAQ SCORING Qualitative Index*

Current Total FY19-22 TIP Estimate \$

		ESI			Estimate 3					
ID	Rank	Project	Notes	x1000	Highest Ranking Project Type	VMT (Cost	Life	Total	
1	1	GENERAL: Heavy Equipment Program (only diesel retrofits/replacements)		\$76,388	2. Engine Replacements					
2	1	GENERAL: Transit Vehicle Replacement (diesel retrofits/replacements)	Fixed-route only	\$52,135	2. Engine Replacements					
3	2	NCC Transit Center Park and Ride	Not replacement of existing.	\$4,750	3. Park and ride	6	0	6	12	
4	3	Middletown Park and Ride		\$3,500	3. Park and ride	3	0	6	9	
5	4	Transit Vehicle Expansion, NCC	Fixed-route only	\$2,216	4. Transit expansion	6	0	3	9	
6	4	Rail: Newark Regional Transit Center		\$73,089	4. Transit expansion	3	0	6	9	
7	5	GENERAL: Transportation Management Improvements (expansion)		\$52,760	5. Incident Management					
8	6	New Castle Industrial Track: S of Christina River - Riverwalk		\$24,085	7. Bike/ped	6	0	6	12	
9	7	Wilmington Traffic Calming: Walnut: MLK Blvd. to 13th		\$12,705	7. Bike/ped	3	0	6	9	
10	7	SR 2 (Elkton Rd): MD Line to Casho Mill Rd.		\$37,754	7. Bike/ped	3	0	6	9	
11	7	Old Capitol Trail: Newport Road to Stanton Road (multimodal)		\$5,350	7. Bike/ped	3	0	6	9	
12	7	Wilmington Traffic Calming: 4th St: Walnut - I-95		\$3,000	7. Bike/ped	3	0	6	9	
13	7	US 13: Duck Creek - SR 1		\$8,500	7. Bike/ped	3	0	6	9	
14	7	US 40: US 40/SR 7		\$2,736	7. Bike/ped	3	0	6	9	
15	7	Wilmington Traffic Calming: King/Orange: MLK Blvd. to 13th		\$6,250	7. Bike/ped	3	0	6	9	
16	7	US 13: Memorial Drive - US 40 Pedestrian Safety Improvements		\$28,000	7. Bike/ped	3	0	6	9	
17	7	Myrtle & Manor Avenue Sidewalk Improvements		\$2,715	7. Bike/ped	3	0	6	9	
18	7	Garasches Lane		\$6,002	7. Bike/ped	3	0	6	9	
19	7	GENERAL: Bicycle, Pedestrian, and Other Improvements (non-recreational or	nly)	\$18,736	7. Bike/ped					
20	7	SR 9, New Castle Ave., Landers Ln. to A St.	new	\$17,700	7. Bike/ped	3	0	6	9	
21	8	Rideshare Program, statewide		\$3,660	12. Ridesharing	3	0	6	9	
22	9	US 40: US 40/SR 72 Intersection		\$23,222	13. Intersection improvements	3	0	6	9	

CMAQ Project Prioritization Process - Methodology

- 1. Rank projects by type, based on FHWA cost-effectiveness data. Priority by type is: 1. Idle reduction, 2. Heavy vehicle engine replacements (diesel), 3. Park and ride, 4. Transit service expansion, 5. Incident management, 6. Extreme temperature cold start technology, 7. Bicycle and pedestrian, 8. Intermodal freight, 9. Transit amenity improvements, 10. Employee transit benefits, 11. Car sharing, 12. Ridesharing, 13. Intersection improvements, 14. Roundabouts, 15. Bike sharing, 16. Subsidized transit fares, and 17. Electric charging stations
- 2. Within project types, sort by quantitative emission benefits for diesel projects and qualitative benefits for others. Quantitative benefits can be determined from EPA calculators. An index determining the qualitative benefit follows.

*Qualitative Index

Reduce VMT - negligible (0); moderate (3); significant (6) Cost - >2 million (0); \$500,000 - \$2 million (3); <\$500,000 (6) Life expectancy - <5 years (0); 5-10 years (3); >10 years (6)