

Meeting Packet

April 9, 2015

- Air quality overall technical scoring criteria page 2
- Air quality overall technical scores page 3
 - Informational: full listing of project descriptions (see FY 2016 TIP): http://www.wilmapco.org/tip/
 - Informational: full overall project prioritization process:
 http://www.wilmapco.org/Priority/Prioritization2008.pdf
- o CMAQ prioritization technical scores page 6
- o Project descriptions (FY 2016 TIP excerpt) page 7

Air Quality Subcommittee September 2014

WILMAPCO Prioritization Process

Air Quality Scoring Criteria

Project expected to improve air quality by:

- Reducing emissions
- Reducing VMT
- Not adding capacity
- Increasing access to non-automotive modes

Current Scoring

- 3 Project expected to substantially improve air quality (all four bullets apply)
- 1 Project expected to slightly improve air quality (two or more bullets apply)
- **0** No expected air quality impact (does not add capacity)
- -3 Negative air quality impact expected

DRAFT PROJECT LIST 3/31/2015 DRAFT

FY 2017-20 Transportation Improvement Program Project Prioritization, sorted by category

| 2 | | 0 111 5115 | |
|----|--|-----------------|---|
| 3 | | Quality of Life | notes for EV 2017 20 TIDiititi |
| 3 | | > | notes for FY 2017-20 TIP prioritization |
| | | Air Quality | |
| | | ð | |
| | PROJECT | Air | |
| 4 | PROJECTS IN FY 2016-2019 TIP | | |
| 5 | Arterial | | |
| 6 | Wilmington Traffic Calming: Walnut: MLK Blvd. to 16th (include sweep removal | 0 | Include sweep removal and extend to Front |
| 7 | US 40: US 40/SR 896 Grade Separated Intersection | 0 | |
| 8 | SR 2, Kirkwood Highway and Red Mill Rd. Intersection | 0 | HSIP program |
| 9 | SR 2 Elkton Rd: Maryland State Line - Casho Mill Rd. | 1 | |
| 10 | SR 4, Christina Parkway: SR 2 - SR 896 | 0 | |
| 11 | US 40: US 40/SR 72 Intersection, including Del Laws Rd. | 1 | |
| 12 | SR299: SR 1 - Catherine Street | 0 | |
| 13 | US 13, Philadelphia Pike, Claymont Renaissance Plan Implementation | 1 | |
| 14 | Collectors | | |
| 15 | Wilmington Riverfront: Christina River Bridge | 0 | Construction funds needed |
| 16 | Garasches Lane | 1 | Construction funds needed |
| 17 | SR 72: SR 71 - McCoy Rd | 0 | |
| | Expressways | | |
| | I-295 Westbound: US 13 - I-95 | 0 | |
| 20 | l 295 Improvements: Bridges | θ | REMOVE - Under construction |
| 21 | I-95 & SR 141 Interchange | 0 | |
| 22 | SR 1: Roth Bridge to SR 273 | -3 | |
| 23 | Road A /SR 7 | -3 | |
| | US 301: MD Line - SR 1, and Spur | -3 | |
| | Local | | |
| 26 | Southern New Castle County: Jamison Corner Rd. Relocated at Boyd's Corner | 1 | |
| 27 | Westown: Wiggins Mill Rd: Green Giant Rd St Annes Church Rd. | 0 | |
| 28 | Southern New Castle County: Boyd's Corner Rd.: Cedar Ln - US 13 | 0 | |
| 29 | Pedestrian/Bicycle | | |
| | Wilmington Initiatives: Bicycle Improvements | 1 | TAP program |
| 31 | Bicycle, pedestrian and other improvements, statewide | 1 | |
| 32 | New Castle Industrial Track: s. of Christina River - Riverwalk | 3 | |
| 33 | Myrtle Avenue Sidewalk Improvements | 1 | |
| | Manor Avenue Sidewalk Improvements | 0 | |
| 35 | Transit | | |
| | Transit Vehicle Replacement and Refurbishment, New Castle County | 1 | |
| 37 | Transit Vehicle Expansion: SR 141 | 3 | |
| 38 | Transit Vehicle Expansion, NCC | 3 | |
| 39 | Rail: Newark Regional Transit Center (Newark Train Station) | 1 | |

DRAFT PROJECT LIST 3/31/2015 DRAFT

FY 2017-20 Transportation Improvement Program Project Prioritization, sorted by category

| 2 | | Quality of Life | |
|----------|--|-----------------|---|
| 3 | PROJECT | Air Quality | notes for FY 2017-20 TIP prioritization |
| 40 | Rail Improvements: Fairplay Station Parking | 0 | |
| 41 | Claymont Train Station | 1 | |
| 42 | Christiana Mall Park and Ride | 1 | |
| 43 | Transit Vehicle Expansion: Paratransit | 0 | |
| 44 | Rideshare Program, statewide | 1 | |
| 45 | NOT IN FY 2016-2019 TIP | | |
| 46 | Arterial | | |
| 47 | Churchmans: SR4/SR7 JP Morgan | 0 | |
| 48 | US 13: SR 71, Tybouts Corner - US 40 | 0 | |
| 49 | Churchmans: Churchmans Rd. Extension | 0 | |
| 50 | US 40: SR 1 - SR 72, Widening | 0 | US 40 priority project |
| | Churchmans: SR4/Harmony Rd. | 0 | |
| 52 | SR 2: S. Union Street Streetscape | 0 | |
| 53 | Wilmington Initiatives: Market St: 11th St 16th St. | 1 | |
| 54 | Churchmans: SR 273/Chapman Rd. | 0 | Churchmans Crossing priority project |
| 55 | SR 141: US 13 - Burnside Blvd. | 0 | |
| 56 | Churchmans: SR2/Harmony Rd. | 0 | |
| 57 | Tyler McConnell Bridge, SR141: Montchanin Rd Alapocas Rd. | 0 | unfunded in FY 2016 TIP |
| 58 | City of New Castle: SR 9 | 0 | |
| 59 | City of New Castle Intersections | 0 | unfunded in FY 2016 TIP |
| 60 | US 40: Eden Square Connector | 0 | |
| 61 | US 13, Odessa Transportation Plan Implementation | 1 | |
| 62 | Newtown Road: SR896 - SR 72 | 0 | |
| 63 | SR 9, River Rd. Area, Dobbinsville | 0 | |
| 64 | US 13: Duck Creek - SR 1 | 1 | unfunded in FY 2016 TIP |
| 65 | SR 7, Limestone Rd: N. of Valley Rd PA Line, Dualization | -3 | |
| 66 | Collectors | | of addition EV 204 C TIP |
| 67 | Wilmington Traffic Calming: 4th St: Walnut - I-95 | 1 | unfunded in FY 2016 TIP |
| 68 | Wilmington Traffic Calming: King/Orange: MLK Blvd. to 13th | 1 | Priority Wilmington Initiatives |
| 69 70 | Wilmington Traffic Calming: 12th St. Connector | 0 | |
| | Brackenville Road Slope Stabilization | 0 | unformate delic EV 2016 TIS |
| 71 | Possum Park Rd. at Old Possum Park Rd. | 0 | unfunded in FY 2016 TIP |
| 72 73 | Expressways | | lo · · · |
| 73 | I-95: SR 896 Interchange | 0 | Priority expressway |
| | I:95: Riverfront Interchange | 0 | |
| 76 | Local Wilmington Initiatives: Shipley Street | 1 | |
| , 0 | Wilmington Initiatives: Shipley Street | 1 | |

DRAFT PROJECT LIST 3/31/2015 DRAFT

FY 2017-20 Transportation Improvement Program Project Prioritization, sorted by category

| 2 | | Quality of Life | |
|-----|--|-----------------|---|
| 3 | | Quality of Life | notes for FY 2017-20 TIP prioritization |
| | | \$ | notes for 11 2017 20 111 prioritization |
| | | Iali | |
| | 222 | Air Quality | |
| | PROJECT | | |
| 77 | Wilmington Initiatives: Tatnall St. Connector | 0 | |
| 78 | Wilmington Riverfront: West St. Connector Extension | 0 | |
| 79 | Southern New Castle County: Cedar Lane Rd.: Marl Pit - Boyd's Corner | 1 | unfunded in FY 2016 TIP |
| 80 | Reybold Road Extended: SR 72 - Salem Church Rd. | 0 | |
| 81 | Southern New Castle County: Lorewood Grove Rd.: N412A - SR 1 | 1 | unfunded in FY 2016 TIP |
| 82 | Mill Creek Rd. and McKennan's Church Rd. Intersection | 0 | |
| 83 | Other | | |
| 84 | Aeronautics, New Castle County Airport Terminal Improvements | 0 | unfunded in FY 2016 TIP |
| 85 | Pedestrian/Bicycle | | |
| 86 | Wilmington Initiatives: Bicycle Improvements | 1 | |
| 87 | US 13: Memorial Drive - US 40 Pedestrian Safety Improvements | 3 | Priority pedestrian |
| 88 | US 40 Plan: US 40 Sidepaths (SR 72-SR 1, SR 896-SR 72) | 3 | Include with US 40 project, line 62 |
| 89 | US 40: Salem Church Rd - SR 1 Sidepath | 1 | |
| 90 | SR 48: N. DuPont Rd - SR 141 Pedestrian Safety Improvements | 1 | |
| 91 | US 40: SR 72 - Salem Church Sidepath | 1 | |
| 92 | US 301 Multiuse Pathway | 3 | |
| 93 | Wilmington Initiatives: Water Street Walkway | 1 | |
| 94 | DuPont Road Pedestrian Facilities | 3 | |
| 95 | US 40: Newtown Trail & Pedestrian Improvements | 1 | |
| 96 | Churchmans: Red Mill Rd. Sidewalks | 1 | |
| 97 | Bicycle, Pedestrian: Foulk Rd. | 1 | |
| 98 | Grubb Road Pedestrian Improvements: Foulk Rd Naamans Rd. | 1 | unfunded in FY 2016 TIP |
| 99 | Bicycle, Pedestrian: Marsh Rd. | 1 | |
| 100 | SR 3, Marsh Rd/Washington Street Ext. and SR 3 Pedestrian Improvements | 1 | |
| 101 | Transit | | |
| 102 | Wilmington DART Bus Hub | 1 | unfunded in FY 2016 TIP |
| 103 | Transit bus stop improvements - NCC | 3 | |
| 104 | Rail: Middletown to Newark Passenger Rail | 3 | |
| 105 | Statewide CAD/AVL | 3 | |
| 106 | US 40: Transit improvements | 1 | |
| 107 | Boyds Corner Park and Ride Expansion | 1 | Unfunded in FY 2016 TIP |
| 108 | Rail preservation: NCC Historic Red Clay | 0 | |

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

DRAFT

Air Quality Subcommittee, April 2015

Qualitative Index*

| ID | Project | Packet Page | TIP Page | Notes | ı | FY16-19 TIP | Project Type | VMT | Cost | Life | Total |
|----|---|-------------|----------|--------------------|----|-------------|--------------|-----|------|------|-------|
| 1 | Transit Vehicle Expansion, NCC | 22 | 2-84 | Fixed-route only | \$ | 4,804,000 | Transit | 6 | 0 | 3 | 9 |
| 2 | Rail: Newark Regional Transit Center | 20 | 2-79 | | \$ | 4,516,000 | Transit | 3 | 0 | 6 | 9 |
| 3 | Transit Vehicle Replacement and Refurbishment | 9 | 2-44 | Fixed-route only | \$ | 10,245,300 | Transit | 0 | 0 | 3 | 3 |
| 4 | Rideshare Program, statewide | 8 | 1-25 | | \$ | 1,920,000 | Shared Ride | 3 | 6 | 6 | 15 |
| 5 | Christiana Mall Park and Ride | 15 | 2-66 | | \$ | 850,000 | Shared Ride | 3 | 0 | 6 | 9 |
| 6 | Wilmington Traffic Calming: Walnut: MLK Blvd. to 16th | 18 | 2-70 | | \$ | 1,000,000 | Traffic Flow | 3 | 0 | 6 | 9 |
| 7 | US 40: US 40/SR 72 Intersection (multimodal) | 16 | 2-68 | | \$ | 18,830,000 | Traffic Flow | 3 | 0 | 6 | 9 |
| 8 | SR 2 (Elkton Rd): MD Line to Casho Mill Rd. (multimodal) | 14 | 2-63 | | \$ | 50,500 | Traffic Flow | 3 | 0 | 6 | 9 |
| 9 | New Castle Industrial Track: S of Christina River - Riverwalk | 19 | 2-76 | | \$ | 12,700,000 | Ped/Bike | 6 | 6 | 6 | 18 |
| 10 | Myrtle Avenue Sidewalk Improvements | 11 | 2-49 | | \$ | 1,400,000 | Ped/Bike | 3 | 3 | 6 | 12 |
| 11 | Garasches Lane | 12 | 2-52 | total cost unknown | \$ | 100,000 | Ped/Bike | 3 | 0 | 6 | 9 |
| 12 | Manor Avenue Sidewalk Improvements | 11 | 2-49 | | \$ | 1,020,000 | Ped/Bike | 0 | 3 | 6 | 9 |

UNFUNDED

| | | | | | | | | Qualita | tive Inc | lex* | |
|---|-----|--|----|----------|-------|-------------|--------------|---------|----------|--------|------|
| _ | ID | Project | | TIP Page | Notes | FY16-19 TIP | Project Type | VMT | Cost | Life 1 | otal |
| | U-1 | Wilmington DART Bus Hub | | | | | Transit | 0 | 0 | 6 | 6 |
| | U-2 | Boyds Corner Park and Ride Expansion | 15 | 2-66 | | | Shared Ride | 3 | 6 | 6 | 15 |
| | U-3 | Rail Improvements: Fairplay Station Parking | | | | | Shared Ride | 3 | 0 | 6 | 9 |
| | U-4 | US 13, Duck Creek to SR 1 | | | | | Traffic Flow | 3 | 3 | 6 | 12 |
| | U-5 | Wilmington Traffic Calming: 4th St: Walnut to I-95 | 18 | 2-70 | | | Traffic Flow | 3 | 0 | 6 | 9 |
| | U-6 | Grubb Road Ped. Improvements: Foulk Rd. to Naamans Rd. | 13 | 2-53 | | | Ped/Bike | 3 | 6 | 6 | 15 |

Interim CMAQ Project Priortization Process - Methodology

- 1. Rank projects by type, based on emissions reporting within FHWA's National CMAQ database and federal guidance. Priority by type is: 1. Diesel Retrofits and Replacements, 2. Transit, 3. Shared Ride, 4. I/M and other TCMS, 5. Traffic Flow, 6. Pedestrian/Bicycle
- 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)

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

| SEGMENT | PHASE | FUNDING | CURRENT | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2016-19 | FY 2020-21 |
|--|----------|---------------------|------------------------|--------------------------------|--------------------------------|------------------------|------------|-------------|-------------|
| | | | 7/14-6/15 | 7/15-6/16 | 7/16-6/17 | 7/17-6/18 | 7/18-6/19 | TOTAL | TOTAL |
| Transportation Management Improvements | С | ST FHWA | \$ 100.0 \$ 5,000.0 | \$ 1,000.0 \$ 4,000.0 | \$ 1,000.0 \$ 5,900.0 | | | , | |
| Traffic Signal Fund/Relamping | C | ST | | \$ 125.0 | \$ 125.0 | \$ 125.0 | \$ 125.0 | \$ 500.0 | \$ 250.0 |
| MUTCD Compliance | | ST FHWA | \$ 800.0 | \$ 5,000.0 | \$ 6,000.0 | \$ 400.0 \$ 1,600.0 | · | - | · |
| Rideshare | Planning | ST FHWA OTHER | \$ 360.0 \$ 90.0 | \$ 30.0 \$ 360.0 \$ 90.0 | \$ 30.0 \$ 360.0 \$ 90.0 | | \$ 360.0 | \$ 1,440.0 | \$ 720.0 |
| TOTAL | | | \$ 6,350.0 | \$ 10,605.0 | \$ 13,505.0 | \$ 9,505.0 | \$ 9,505.0 | \$ 43,120.0 | \$ 19,010.0 |



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





TRANSIT VEHICLE REPLACEMENT AND REFURBISHMENT- NCC (Continued)

| PROJECT | PHASE | FUNDING | CURRENT | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2016-19 | FY 2020-21 |
|--|-------|---------------------|---------------------------|-------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| | | | 7/14-6/15 | 7/15-6/16 | 7/16-6/17 | 7/17-6/18 | 7/18-6/19 | TOTAL | TOTAL |
| 29' Trolley Replica (1)(2) | PRO | 80% FTA | | | | | | \$ 0.0 | |
| 40' Heavy Duty Hybrid Low Floor Buses | PRO | 80% FTA | | | | | | \$ 0.0 | |
| 40' Heavy Duty Low Floor Buses (31,32) | PRO | ST FTA | \$ 2,597.9 \$ 10,391.4 | | | | | \$ 0.0 \$ 0.0 | |
| 40' Hybrid Buses | PRO | 80% FTA | | | | | | \$ 0.0 | |
| 30' Low Floor Buses | PRO | 80% FTA | \$ 868.4 | | | | \$ 4,397.3 | \$ 4,397.3 | |
| 40' Low Floor Buses | | 80% FTA 100% FTA | | | \$ 921.3 \$ 921.3 | \$ 474.5 | \$ 3,420.1 | \$ 4,815.9 \$ 921.3 | |
| Paratransit buses (34,47,35,27,45,71,41) | PRO | ST FTA | \$ 5.9 \$ 672.6 | | \$ 1,010.1 \$ 4,040.5 | \$ 638.3 \$ 2,553.3 | \$ 974.0 \$ 3,896.1 | \$ 3,825.8 \$ 15,303.3 | \$ 1,581.2 \$ 5,446.3 |
| 45' Over the Road | PRO | 80% FTA | | | \$ 1,456.7 | | \$ 1,545.2 | \$ 3,001.9 | |
| Support Vehicles | PRO | 100% ST | | \$ 87.8 | \$ 105.4 | \$ 111.5 | 260.4 | \$ 565.1 | \$ 100.0 |
| Unicity Bus | PRO | 100% ST | | | \$ 110.8 | | | \$ 110.8 | \$ 114.1 |
| Preventive Maintenance | PRO | Other FTA | \$ 6,500.0 | \$ 6,500.0 | \$ 1,300.0 \$ 5,200.0 | \$ 1,300.0 \$ 5,200.0 | \$ 1,300.0 \$ 5,200.0 | \$ 3,900.0 \$ 22,100.0 | \$ 2,600.0 \$ 10,400.0 |
| | TOTAL | | \$ 21,036.2 | \$ 12,604.6 | \$ 15,066.1 | \$ 10,277.6 | \$ 20,993.1 | \$ 58,941.4 | \$ 49,932.8 |

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 | PHASE | FUNDING | CURRENT | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2016-19 | FY 2020-21 |
|-----------------------|----------------|----------------------------------|-----------|-----------|------------|------------|-----------|------------------------|------------|
| | | | 7/14-6/15 | 7/15-6/16 | 7/16-6/17 | 7/17-6/18 | 7/18-6/19 | TOTAL | TOTAL |
| Myrtle Ave. Sidewalks | PE ROW C | 80% FHWA 80% FHWA 80% FHWA | \$ 150.0 | \$ 400.0 | \$ 1,000.0 | | | \$ 400.0 \$ 1,000.0 | |
| Manor Ave. Sidewalks | PE ROW C | 80% FHWA 80% FHWA 80% FHWA | \$ 25.0 | | \$ 20.0 | \$ 1,000.0 | | \$ 20.0 \$ 1,000.0 | |
| | TOTAL | | \$ 175.0 | \$ 400.0 | \$ 1,020.0 | \$ 1,000.0 | \$ 0.0 | \$ 2,420.0 | \$0.0 |

GARASCHES LANE STUDY

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











| PHASE | FUNDING | CURRENT 7/14-6/15 | FY 2016 7/15-6/16 | FY 2017 7/16-6/17 | FY 2018 7/17-6/18 | FY 2019 7/18-6/19 | FY 2016-19 TOTAL | FY 2020-21 TOTAL |
|-----------------|----------|-------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|
| | | //14-0/13 | //13-0/10 | //10-0/1/ | //1/-0/18 | //10-0/19 | IUIAL | IUIAL |
| PD PE ROW | 80% FHWA | \$ 100.0 | | | | | | |
| TOTAL | | \$ 100.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 |

All \$ *X* 1,000

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

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





| PHASE | FUNDING | CURRENT | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2016-19 | FY 2020-21 |
|----------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|
| | | 7/14-6/15 | 7/15-6/16 | 7/16-6/17 | 7/17-6/18 | 7/18-6/19 | TOTAL | TOTAL |
| PE ROW C | 100% ST 100% ST 100% ST | | | | | | | |
| TOTAL | | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 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.

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.

New Castle **County: Investment Area:** Center **Municipality:** Newark

Funding Program: Road System – Arterials **Functional Category:** Management/ Expansion

Year Initiated: FY 2004











| PROJECT | PHASE | FUNDING | CURRENT 7/14-6/15 | FY 2016 7/15-6/16 | FY 2017 7/16-6/17 | FY 2018 7/17-6/18 | FY 2019 7/18-6/19 | FY 2016-19 TOTAL | FY 2020-21 TOTAL |
|---|----------------|-----------------------------------|-------------------|----------------------|----------------------|----------------------|----------------------|--------------------------------------|---------------------|
| SR 2: MD line to Casho Mill Rd Expansion | PE ROW C | 100% FHWA 80% FHWA 80% FHWA | \$ 250.0 | \$ 250.0 | \$ 500.0 | \$ 500.0 | \$ 6,000.0 | \$ 250.0 \$ 1,000.0 \$ 6,000.0 | |
| SR 2: Casho Mill Rd. to Delaware Ave. | ROW C | OTHER FHWA | \$ 50.5 | | | | | | |
| | TOTAL | | \$ 300.5 | \$ 250.0 | \$ 500.0 | \$ 500.0 | \$ 6,000.0 | \$ 7,250.0 | \$ 19,000.0 |

TRANSIT FACILITIES, NEW CASTLE COUNTY

DESCRIPTION: Projects include relocation of the Christiana Mall Park & Ride and expansion of the Boyds Corner Park & Ride. The Christiana Mall project will entail the development, design and construction of a new park & ride and transit facility around the Road A/Centre Boulevard location. The facility will provide for pedestrians and vehicles as well as buses and other needs for a park & ride transit center. At Boyds Corner, the current 120-space Park & Ride will be expanded to 190-spaces to meet the demands of planned residential development.

JUSTIFICATION: These 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 | PHASE | FUNDING | CURRENT | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2016-19 | FY 2020-21 |
|-----------------------------|----------|-----------------------|-----------|-----------|-----------|-----------|-----------|----------------------|------------|
| | | | 7/14-6/15 | 7/15-6/16 | 7/16-6/17 | 7/17-6/18 | 7/18-6/19 | TOTAL | TOTAL |
| Christiana Mall Park & Ride | PD PE | 80% FHWA 100% FHWA | | \$ 100.0 | \$ 150.0 | \$ 600.0 | | \$ 100.0 \$ 750.0 | |
| Boyds Corner Park & Ride | ROW C | 100% ST 100% ST | | | | | | | |
| | TOTAL | | \$ 0.0 | \$ 100.0 | \$ 150.0 | \$ 600.0 | \$ 0.0 | \$ 850.0 | \$ 0.0 |

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.

Intersection Improvements:

US 40, Pulaski Highway/SR 72, Wrangle Hill Road (Includes Del Laws Road Intersection) – 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 project consists of grade separating the intersection of US 40 and SR 896, taking SR 896 over US 40. The existing entrance to the Bristol Place development will be closed as part of the project due to its proximity to the interchange. It currently has access via George Williams Way.

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.

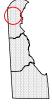
County: New Castle

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 | PHASE | FUNDING | CURRENT 7/14-6/15 | FY 2016 7/15-6/16 | FY 2017 7/16-6/17 | FY 2018 7/17-6/18 | FY 2019 7/18-6/19 | FY 2016-19 TOTAL | FY 2020-21 TOTAL |
|--|----------------|-----------------------------------|------------------------|----------------------|----------------------|----------------------|----------------------|--------------------------------------|---------------------|
| US 40 Intermodal Study | PD | 100% ST | \$ 20.0 | | | | | | |
| US 40 and SR 72 | PE ROW C | 80% FHWA 100% FHWA 80% FHWA | \$ 253.4 \$ 1,200.0 | • | | | \$ 1,500.0 | \$ 30.0 \$ 5,800.0 \$ 13,000.0 | |
| US 40 and SR 896 Grade Separated Intersection | PE ROW | 80% FHWA 80% FHWA | | \$ 1,000.0 | \$ 1,500.0 | \$ 1,500.0 | \$ 500.0 | \$ 4,000.0 \$ 500.0 | |
| | TOTAL | | \$ 1,473.4 | \$ 6,030.0 | \$ 2,700.0 | \$ 9,000.0 | \$ 2,000.0 | \$ 23,330.0 | \$ 1,500.0 |

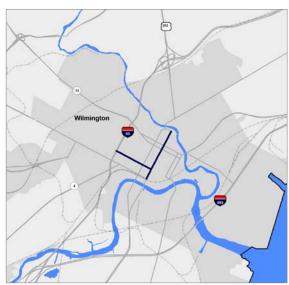
ALL \$ X 1,000

WILMINGTON INITIATIVES

DESCRIPTION:

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.

Walnut Street, MLK to 16th Street - Walnut Street is a major in-bound route to the Central Business District. This project will provide a new roadway pavement surface, with new striping and pavement markings for clearer lane assignments to facilitate smoother traffic movement. The streetscape improvements include new sidewalks and decorative crosswalks/new lighting poles and street trees. New state-of-the-art decorative traffic signals will also be erected. These streets are the major transit corridors within Wilmington's Central Business District. It is the project's goal to improve the transit riders' 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.



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











| PROJECT | PHASE | FUNDING | CURRENT 7/14-6/15 | FY 2016 7/15-6/16 | FY 2017 7/16-6/17 | FY 2018 7/17-6/18 | FY 2019 7/18-6/19 | FY 2016-19 TOTAL | FY 2020-21 TOTAL |
|---|-------|----------|-------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|
| Walnut St., MLK to 16 th St. | PE | 80% FHWA | | | | | \$ 1,000.0 | \$ 1,000.0 | |
| | TOTAL | | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 0.0 | \$ 1,000.0 | \$ 1,000.0 | \$ 0.0 |

ALL \$ *X* 1,000

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 CastleInvestment Area:Core/CenterMunicipality:Wilmington

Funding Program: Road System – Local

Functional Category: Expansion **Year Initiated:** FY 2010









| SEGMENT | PHASE | FUNDING | CURRENT 7/14-6/15 | FY 2016 7/15-6/16 | FY 2017 7/16-6/17 | FY 2018 7/17-6/18 | FY 2019 7/18-6/19 | FY 2016-19 TOTAL | FY 2020-21 TOTAL |
|---------|----------------|----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------------------------|---------------------|
| Phase 3 | PE ROW C | 80% FHWA 80% FHWA 80% FHWA | \$ 400.0 \$ 205.5 | \$ 50.0 | | | | \$ 600.0 \$ 100.0 \$ 12,000.0 | |
| | TOTAL | | \$ 605.5 | \$ 650.0 | \$ 6,050.0 | \$ 6,000.0 | \$ 0.0 | \$ 12,700.0 | \$ 0.0 |

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: Extension of additional trains between Newark and Wilmington are restricted by a chokepoint south of Wilmington's Biden Station that has only two tracks; most of the NEC in Delaware has three tracks. This also impacts the service reliability and on-time performance of intercity trains. The following infrastructure improvements will remedy the situation and provide unrestricted three-track service between Wilmington and Newark:

- Rehabilitate the Mill Creek bridge span and install scour protection at the four adjacent bridges;
- Install 1.5 miles of new Track 3 and modify tracks in the vicinity of Mill Creek Bridge;
- Install new crossovers at Ragan and Brandy Interlockings;
- Replace existing thru girder bridge at Orange Street in Wilmington; and,
- Realign Track 2 near Orange Street to increase design speed

Newark Regional Transportation Center: The planning and final design for an enhanced and improved passenger rail station in Newark just west 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. Project will be built by two design-bid-build contracts under seperate contract numbers. The overall improvements in this location are envisioned to be the first phase of additional potential improvements to the new station. Potential future phases would provide additional improvements to further enhance and expand passenger rail service, including MARC Service and downstate rail.

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.

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.

RAIL IMPROVEMENTS: NEW CASTLE COUNTY (Continued)

County: New Castle Investment Area: Center, Core

Municipality: Newark, Wilmington

Funding Program: Transit - Rail
Functional Category: Expansion
Year Initiated: FY 2005









| PROJECT | PHASE | FUNDING | CURRENT 7/14-6/15 | FY 2016 7/15-6/16 | FY 2017 7/16-6/17 | FY 2018 7/17-6/18 | FY 2019 7/18-6/19 | FY 2016-19 TOTAL | FY 2020-21 TOTAL |
|--|----------|--------------------------------|--|--------------------------|--------------------------|----------------------|----------------------|--------------------------|---------------------|
| Fairplay Station Elevator | С | 80% FTA | \$ 320.0 | \$ 880.0 | | | | \$ 880.0 | |
| Third Track Expansion | С | ST FTA | \$ 1,859.1 \$ 7,000.4 | \$ 1,574.9 \$ 6,299.6 | \$ 1,025.7 \$ 4,102.8 | | | \$2,600.6 \$ 10,402.4 | |
| NEC: Yard to Ragan | PE C | 80% FTA 80% FTA | \$ 167.1 \$ 9,695.8 | | | | | | |
| Shipley Street Bridge | С | ST OTHER | \$ 6,000.0 | \$ 629.5 \$ 1,000.0 | | | | \$ 629.5 \$ 1,000.0 | |
| Newark Regional Transportation Center Design | PD/PE | 80% FTA | \$ 185.0 | | | | | | |
| Newark Regional Transportation Center Parking Lot & Access Rd | ROW C | 80% FTA ST FHWA OTHER | \$ 281.0 \$ 1,848.0 \$ 1,952.0 \$ 250.0 | | | | | | |
| | TOTAL | | \$ 29,558.4 | \$ 10,384.0 | \$ 5,128.5 | \$ 0.0 | \$ 0.0 | \$ 15,512.5 | \$ 0.0 |

ALL \$ X 1,000

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 | PHASE | FUNDING | CURRENT | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2016-19 | FY 2020-21 |
|------------------------------------|-------|-----------|----------------------|----------------------|-----------|------------|------------|---------------------------------------|------------|
| | | | 7/14-6/15 | 7/15-6/16 | 7/16-6/17 | 7/17-6/18 | 7/18-6/19 | TOTAL | TOTAL |
| Paratransit buses | PRO | FTA ST | | \$ 408.0 \$ 102.0 | • | | | · · · · · · · · · · · · · · · · · · · | |
| 45' OTR Bus (2) US 301 Intercounty | PRO | 100% FTA | | \$ 1,466.9 | | | | \$ 1,466.9 | |
| 40' Low Floor Buses | PRO | FTA ST | \$ 735.6 \$ 184.0 | | | | | | |
| 45' Low Floor – 301 MIS | PRO | 80% FTA | | | | \$ 1,554.2 | | \$ 1,554.2 | |
| 45' OTR (2) SR 141 Crosstown | PRO | 100% FTA | | | | \$ 1,002.7 | | \$ 1,002.7 | |
| | TOTAL | | \$ 919.6 | \$ 1,976.9 | \$ 919.3 | \$ 3,774.3 | \$ 1,253.9 | \$ 7,924.4 | \$ 2,621.7 |