

**DOVER/KENT COUNTY
METROPOLITAN PLANNING ORGANIZATION**

**TRANSPORTATION IMPROVEMENT PROGRAM
FISCAL YEARS 2020-2023**

Adopted: May 1, 2019

Prepared by the
Dover/Kent County Metropolitan Planning Organization Council

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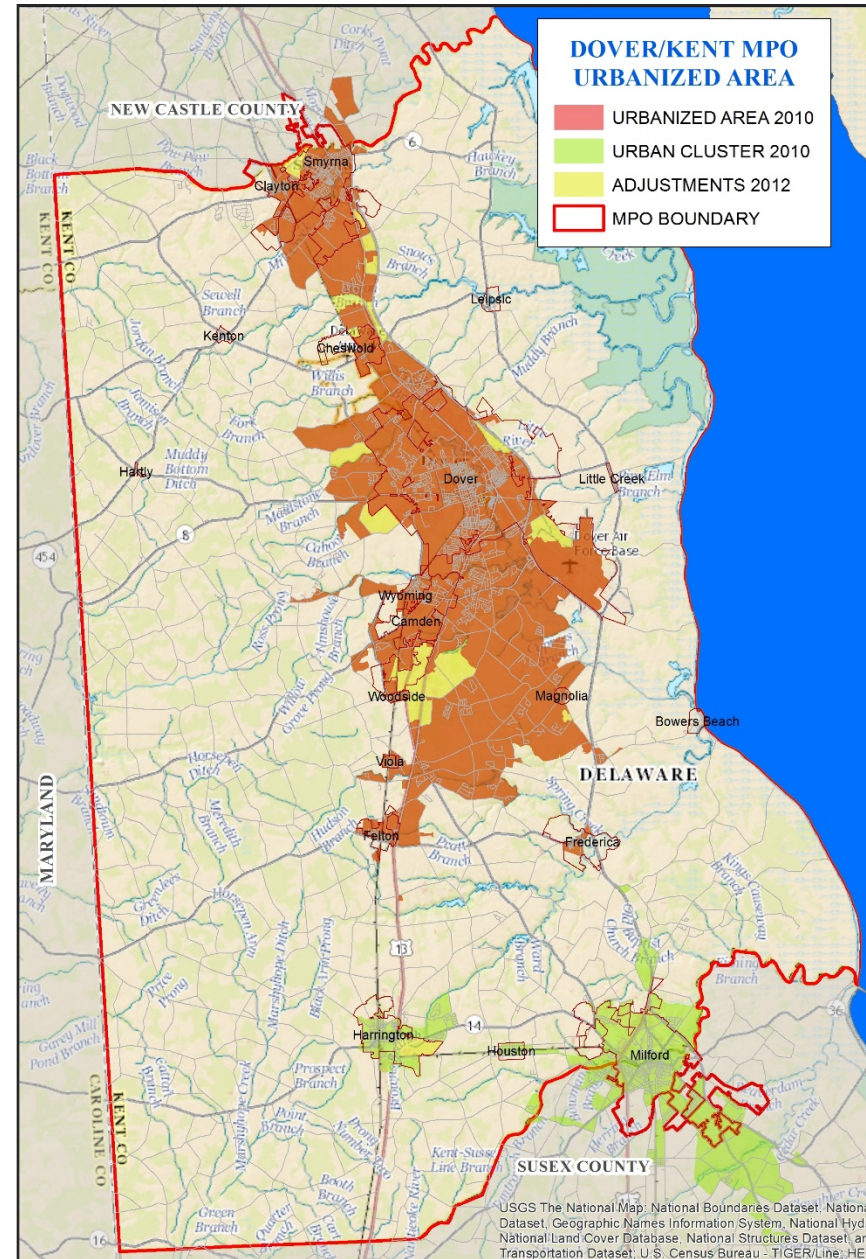
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Background

The Dover/Kent County Metropolitan Planning Organization (Dover/Kent County MPO) is the transportation planning organization for the Dover, Delaware urbanized area. The Dover/Kent County MPO was established in 1992 under the mandates of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, which continued the requirement that a metropolitan planning process be established in urbanized areas with a population greater than 50,000. The Dover urbanized area exceeded that threshold by the 1990 U.S. Census of Population, with a figure of 50,757. The MPO subsequently officially expanded the area of responsibility to Kent County and its municipalities including the portions of Milford and Smyrna in the neighboring counties. In 2010, the urbanized area population was determined to be 110,769 persons, a 75% increase from the 2000 population of 65,044. The population of Kent County grew from 126,697 in 2000 to 162,310 persons in the 2010 decennial census, a 28% increase. The 2017 Kent county population census, the last estimated, was estimated to be 176,824 persons, representing a 8.9% increase since 2010. The Delaware Population Consortium projection for 2050, the longest projected, is 215,279 persons.

Transportation funding was reauthorized as Moving Ahead for Progress in the 21st century (MAP-21) in FFY2012 and FFY2013 and enjoyed continuing resolutions through 12/4/2015. That is when the newest multi-year authorization, Fixing America's Surface Transportation (FAST) Act, was signed. A provision in MAP-21 was to create a monitoring system for the efficacy of the federal funding, collectively called Performance Measures. These are now required of the MPO and all DOT's. These are discussed toward the end of this narrative on page 12.

The Transportation Improvement Program (TIP) is one of the products that the federal legislation has continually required a



metropolitan planning organization to prepare at least every four years. The purpose of the TIP is to disclose transportation projects for which federal funding will be sought over a four year period. The TIP should reflect the region's priorities, represent a consensus among state and local officials, show a direct relationship to the regional transportation plan, be financially constrained, and conform with federal air quality regulations as they relate to transportation. Finally, the TIP must be subjected to thorough public review during development and prior to adoption. The Dover/Kent County MPO produces TIPs more frequently to reflect the nature of Delaware's budgeting and legislative process.

The FY 2020-2023 TIP differs little from the preceding (FY 2019-2022) TIP. The preceding TIP was the first to summarize the budgets and locations of "state of good repair" activities. The previous amended TIP was prepared from the FY 2019-2024 Capital Transportation Program (CTP) and influenced by the MPO's 2040 Metropolitan Transportation Plan (MTP) adopted January 4, 2017. This document was prepared with the benefit of a draft FY 2020-2025 CTP. The CTP again combined the bridge projects and reported them as a category of improvements, The smaller safety projects were categorized as well. This document, specifically Appendix A, presents these categories as a summary allocation and lists the component projects. The safety projects were indicated in the TIP as Highway Safety Improvement Projects (HSIP) or Hazard Elimination Program (HEP). The larger, more involved and costly of these projects will still be reported individually but the smaller projects will be part of a summary budget with a project listing in the future.

In 2015, the MPO began an update process to identify appropriate projects to recommend for funding in future CTP's. The MPO established a Working Group to develop criteria and a scoring rubric to identify the most important projects to prioritize. The working group chose to accept the software and technical assistance provided by DelDOT with Decisions Lens[®]. The Working Group developed the inputs into the prioritization model and have identified which criteria is most important to weight the project scores. The rubric they developed went through a few minimal changes and was used to prioritize projects in the 2017 Metropolitan Transportation Plan (MTP). The model has been used since to prioritize study requests from MPO partners and constituents.

Public input was solicited from residents of the county, as well as from the Public Advisory Committee (PAC) meetings held primarily at the Town of Camden Town Hall meeting room and a periodic bus tour. The MPO will repeat the bus tours as new significant projects are added to the CTP/TIP. Beginning in 2014, the MPO prepared a virtual tour of the highway projects that are funded during the TIP period. This virtual tour has offered a mechanism for constituents to view a summary of the projects included in the TIP in years the bus tour isn't necessary. The virtual tours, along with an introduction and conclusion, have been included on the MPO's website at <http://doverkentmpo.delaware.gov/projects/video-trail/>. Staff determined there aren't sufficient new projects to repeat the bus tour in 2020 but will update the virtual tour with the new projects added.

The funds anticipated to be used for the Kent County projects (not the greater MPO area) in the TIP during FY 2018 - FY 2021 are shown below.

	<u>Total Amount</u>	<u>Federal Share</u>
FY 2020	\$26,239,137	\$ 9,928,596
FY 2021	\$30,171,627	\$18,900,541
FY 2022	\$24,712,300	\$17,737,700
FY 2023	\$39,894,700	\$30 ,495,720

In addition to this funding for new projects, DelDOT maintains and operates the transportation system under statewide categories such as bridge inspection, pavement rehabilitation, roadway signage, intersection improvements, bicycle and pedestrian improvements and statewide transit services and equipment. The actual amount of funds to be spent from these statewide categories in the MPO's region cannot always be determined since projects are selected based on statewide needs. A small percentage of costs for Statewide Projects within the MPO's region are federally funded. This MPO TIP will be submitted to DelDOT as the region's input for the FY 2020-FY 2023 Statewide Transportation Improvement Program (STIP).

Regional Goals

Kent County has a diverse economy and population. The City of Dover is a strong metropolitan hub situated in the center of the county in a growth corridor that extends from Smyrna to the north and Milford and Harrington to the south. Inside the functional growth corridor and actual Kent County Growth Zone are the largest employers, including Dover Air Force Base, the State of Delaware, Kraft General Foods USA, BayHealth Medical Center, the Eagle Group, General Metalcraft Inc., Proctor and Gamble, Inc., and ILC Dover, Inc. The regional warehouse of Wal-Mart, located in Smyrna, has also been playing a greater role in the economic integrity of the area, as will the proposed apron for private jets, large and small, at the Dover Air Force Base and the nearby commercial/industrial area that is part of the Kent County 2018 comprehensive plan. Outside of the growth corridor, the County's economy is predominantly agricultural, including a well-established but dwindling Amish community. The presence of three four-year colleges, one two-year college and their satellite locations enhances the region's ability to attract and maintain a diverse community.

On January 4, 2017, the MPO adopted its new 2040 Metropolitan Transportation Plan (MTP), the MPO's long-range transportation plan (LRTP). The MTP, which has greater than a 20-year planning horizon, assesses the region's short-term improvement needs, projects future needs, projects the funds available, and identified goals and objectives to meet those needs. The MTP was financially reasonable and resulted in a positive impact on the region's air quality. The regional planning process was coordinated with DelDOT's statewide planning process, the Office of State Planning Coordination's State Strategies for Policies and Spending, Kent County's Comprehensive Plan, and the Comprehensive Plans of all municipalities and other plans in the region.

The MTP provides a framework to guide all future transportation planning and programming activities. The following goals are identified for Kent County:

- **Move People Safely and Efficiently**
- **Strengthen Communities**
- **Promote Economic Development**

A hierarchy of fundamental strategies supports these goals and further guides transportation planning and programming decisions:

- **Maintain existing infrastructure**
- **Shorten project delivery**
- **Improve accessibility for all users**
- **Maximize transit ridership**
- **Minimize average delay times**
- **Enhance human health**
- **Preserve Natural Resources/Enhance community resources**
- **Maintain effective transportation networks**
- **Ensure economic development is considered in project prioritization**
- **Evaluate the transportation needs of designated and proposed economic growth areas**

Projects in the FY2020-2023 TIP were drawn from the 2040 MTP. The MTP will be updated in January 2021 and the MPO will be putting it together beginning in 2020.

The Prioritization Process

In the most recent long range plan, the MPO, led by the Technical Advisory Committee, maintained the status quo for the project prioritization completed for the Metropolitan Transportation Plan. Delaware is in a unique position, as the state maintains over 90% of the roads on the state. There has been a renewed attempt to create a planning process where the TIP is produced by the MPO or projects are at least recommended to the DOT that become a portion of the CTP. This attempt follows that of the Department of Transportation's critical analysis that changed their project ranking process and results and changed the Projects List significantly for FY 2015 and continued into this FY2020-FY2023 TIP. The MPO and the Department are finding their way through the dual challenges of funding the most important projects while attempting to meet a budget. This TIP implements a new approach by the Department to developing the CTP while the MPO attempts to build a process built upon the same prioritizing software using a new set of criteria defined with our partners. They are System Operating Effectiveness, Safety, Environmental Impact/Stewardship, Revenue Generation/Economic Development/Jobs and Commerce, Supports Freight Movement, Multi-Modal Feasibility/Access, Impact on the Public/Social Disruption and Economic Justice, Community Priorities, and The State Strategies for Policies and Spending.

The previous method of scoring project prioritization was based on the 10 factors described in Table 1 with a less mathematical system of 'weighting' project scores. An original attempt to realign the scoring of projects for prioritization was made by adding two additional factors; support for the community's comprehensive plan and support for the regional growth management plans. The attempt became an interim one as it was determined that the MPO should consider implementing a wholesale change in how projects are viewed. In fact, the prospective changed from one of nominated project analysis and scoring to one of problem analysis and scoring. Rather than asking communities to nominate presumed solutions, the MPO asked them to nominate problems that they experience in the transportation system of their community. The problems will be prioritized using the approach developed by the Working Group. The project prioritization of all MTP projects using the process was sufficient to maintain for the length of the MTP. There was no attempt made to reclassify projects for consideration in the TIP. The prioritized list developed for the Long Range Plan continues to be the list presented to DelDOT for the new CTP.

The same model and software are being used to prioritize planning study requests from the MPO partners when they are submitted.

Table 1. Factors, Definitions and Weights for TIP Project Scoring

Previous Factors	Weight	Current Factors: Weights based upon the votes of the whole working group.	Relative Weight
Safety	0.20	Safety	11.9%
Support for Comprehensive/ Community Plans	0.20	System Operating Effectiveness	9.2%
Environmental Justice	0.10	Environmental Impact/Stewardship	10.0%
Transit	0.05	Revenue Generation/Economic Development/Jobs and Commerce	10.0%
Pedestrian/Bicycle Travel	0.05	Supports Freight Movement	6.1%
Environmental Impacts	0.03	Multi-Modal Feasibility/Access	14.6%
Economic Impacts	0.05	Impact on the Public/Social Disruption and Economic Justice	10.5%
System Continuity	0.10	Community Priorities	11.9%
Sustainability	0.02	The State Strategies for Policies and Spending	15.7%
Consistency with the Long-Range Transportation Plan	0.20		
Total	1.00		100%

Public Participation

Public review is an integral aspect of the TIP process. Public participation was solicited through PAC, TAC and Council meetings and with a virtual tour online. As a year-round alternative, the MPO is producing an interactive map that shows all projects from the TIP as well as various other plans and programs the MPO is producing or tracking.

The MPO will offer the opportunity for public comment when released to the PAC and TAC during their public meetings in April, to be finished before the next Council meeting of May 1, 2019. News releases and advisories publicizing all related meetings with an opportunity to comment are posted on the MPO's website and sent to members of each MPO committee, print and electronic media outlets, each of the libraries in Kent County, state legislators representing Kent County and contiguous areas, Kent County Levy Court, mayors of Kent County municipalities, and Dover City Council. Copies of the draft TIP will be made available to anyone who asks. The draft document is to be posted on the MPO's website. If amendments are required when the CTP is finalized by the State Legislature on June 30, a separate public comment period will be offered.

To comply with the requirements of Title VI, with reference to the FY 2020-2023 TIP. when a proposed project is located in an Environmental Justice (EJ) neighborhood, special measures are taken to reach out to those who would be affected.

Air Quality Conformity

Overview

Kent County is part of the Philadelphia-Wilmington-Trenton non-attainment area, though it was not cited as a non-attainment county. As the federally-designated Metropolitan Planning Organization for Kent County, Delaware, the MPO is responsible for assessing air quality impacts of this TIP. The Southcoast Air Quality Management Area vs EPA lawsuit resulted in our MPO area not being in conformity for ozone. The MPO will be responsible for a conformity analysis for this and future TIP's. The MPO obtained a conformity analysis as the TIP was being developed and comment periods were run concurrently. The analysis showed that we are and will be within the air quality budgets established by Delaware's Division of Natural Resources and Environmental Control (DNREC). Therefore the activities and projects of the TIP will not create additional negative air quality impacts. The FY 2020-2023 TIP complies with the requirements of the 1990 Clean Air Act and subsequent amendments (CAA).

The FY 2020-2023 TIP

The projects in the FY 2020-2023 TIP are represented in the 2040 MTP. The projects in the TIP are only a small portion of those in the MTP. There have been changes to the project list and scope of the projects. Any regionally significant projects were included in the 2019 Conformity Analysis. The modeling process completed for the FY2020-2023 TIP was an accurate analysis of air quality impacts. The results of the modeling process undertaken at this time can be found with the FY2020-2023 TIP on the MPO website at <http://doverkentmpo.delaware.gov/programs/>.

Determination

The Dover/Kent County MPO FY2020-2023 Transportation Improvement Program conforms to the State Implementation Plan (SIP).

Program Categories and Project List

This FY 2020-2023 TIP mirrors DelDOT's FY 2020-2025 Draft CTP developed before the State budget is to be adopted at the end of June, 2019. The projects and funded amounts included in this FY 2020-2023 TIP reflect the amounts proposed to be allocated in the FY 2020-2025 CTP for years FY2020 through 2023. The Fiscal Constraint documentation was prepared using the Kent County and statewide budgets provided by the State Department of Transportation. Projects are divided according to the portion of the transportation system in which each is allocated – Road System: Expressways, Arterials, Collectors, Locals, Bridges and Transit Facilities and Transit Vehicles.

Table 2 on the following pages, lists Statewide projects and programs for which funding is being requested for fiscal years 2020, 2021, 2022, and 2023. These are predominantly funding programs that include projects in all three Delaware counties. More information about process and previous CTP's is located at http://deldot.gov/information/pubs_forms/CTP/index.shtml.

Appendix A lists the projects in the MPO's planning area for which funding is being requested for fiscal years 2020, 2021, 2022, and 2023. The majority of the projects in this TIP are Road System projects. The appendix provides a project description, location map and, if available, pictures of each project. Funding, both authorizations and expense are listed in thousands of dollars for each project in each year of the TIP.

Appendix C is the TIP Financial Plan and evidence of Fiscal Constraint.

Appendix D lists projects which have been submitted to the TIP through the MTP, but have not been funded. Once a project is submitted to the TIP, it is kept on the prioritized list until it is funded or the MPO decides to remove it. In the past, the MPO included an Annual Listing of Obligated Projects as Appendix E. The document is required to be made available 90 days after the end of the fiscal year, September 30. If the schedule for the TIP development changes and the periods align, the MPO will consider renewing this appendix.

Appendix E is the list of projects and their phase funded in the CTP for Kent County (E-A) and for Statewide projects (E-B).

Appendix F is the most recent list of Traffic Analysis Zones (TAZ) population and households projected by the Dover/Kent County MPO, based on County projections data from the Delaware Population Consortium. The Consortium is supported by the University of Delaware Center for Applied Demography and Survey Research (CADSR).

Appendix G is a new Appendix that, for now, is a resource for the performance measurement targets the MPO will use to assess and direct the program. Future versions of this appendix will compare the progress made by the MPO in meeting these targets.

Appendix H is the 2019 Conformity Analysis attached by reference and offered for public scrutiny at the same time as the FY2020-2023 TIP.

Table 2: FY 2019-2022 Identified Statewide Projects (x \$000)

PROJECT (x000)	FY 2019 TOTAL	FY 2020 TOTAL	FY 2021 TOTAL	FY 2022 TOTAL	2019-2022 TOTAL
ROAD SYSTEMS					
BRIDGES	87,192.9	59,414.2	64,285.6	64,410.0	275,302.7
Bridge Management	6,337.5	7,846.5	7,446.8	6,881.8	28,512.6
Bridge Inspection	4,726.5	4,371.8	4,328.8	4,618.2	27,503.6
Bridge Painting	6,341.9	3,000.0	3,000.0	3,500.0	15,841.9
Bridges	69,787.0	44,195.9	49,500.0	49,410.0	212,892.9
DAMS	5,314.6	2,730.0	2,800.0	2,700.0	13,544.6
TRANSPORTATION ALTERNATIVES PROGRAM SUMMARY					
Transportation Alternatives Program (FHWA)	6,238.6	4,964.0	4,964.0	4,964.0	21,130.6
Transportation Alternatives Program (FTA)	200.0	200.0	200.0	200.0	800.0
BICYCLE, PEDESTRIAN AND OTHER IMPROVEMENTS					
	7,150.0	11,100.0	4,000.0	4,000.0	26,250.0
ENGINEERING & CONTINGENCY					
	30,805.0	30,890.0	30,745.0	30,745.0	123,185.0
ENVIRONMENTAL IMPROVEMENTS					
	563.0	563.0	563.0	563.0	2,252.0
INTERSECTION IMPROVEMENTS					
	7,850.0	7,800.0	7,850.0	7,600.0	30,770.0
RECREATIONAL TRAILS					
	1,132.1	1,132.1	1,132.1	1,132.1	4,528.4
MATERIALS & MINOR CONTRACTS					
	11,000.0	8,000.0	8,000.0	8,000.0	35,000.0
CORRIDOR CAPACITY PRESERVATION					
	1,000.0	1,000.0	1,000.0	1,000.0	4,000.0

PROJECT (x000)	FY 2019 TOTAL	FY 2020 TOTAL	FY 2021 TOTAL	FY 2022 TOTAL	2019-2022 TOTAL
PAVING & REHABILITATION	73,800.0	75,000.0	80,000.0	80,000.0	310,000.0
SLOPE STABILIZATION PROGRAM	5,000.0	2,500.0	3,250.0	2,500.0	13,250.0
SAFE ROUTES TO SCHOOL	0.0	0.0	0.0	0.0	0.0
SCENIC BYWAYS	278.0	0.0	0.0	0.0	278.0
SIGNAGE & PAVEMENT MARKINGS	6,512.5	6,714.5	6,714.5	6,714.5	26,656.0
RAIL CROSSING SAFETY	1,581.1	1,660.9	1,361.1	1,361.1	5,693.3
RIDE ABILITY	100.0	100.0	100.0	100.0	400.0
SAFETY	13,146.4	11,447.7	10,186.6	10,186.6	44,967.3
HAZARD ELIMINATION PROGRAM	1,944.4	2,444.4	2,444.4	2,444.4	9,277.6
HIGH RISK RURAL ROADS PROGRAM	1,000.0	0.0	0.0	0.0	1,000.0
SECTION 154 PENALTY TRANSFER PROGRAM	5,868.7	2,408.9	2,408.9	2,408.9	
SAFETY PROGRAM 80/20	2,500.0	2,500.0	2,500.0	2,500.0	10,000.0
SAFETY PROGRAM 90/10	1,833.3	637.5	2,833.3	2,833.3	
TRAFFIC CALMING	200.0	150.0	200.0	200.0	750.0
STATEWIDE INDUSTRIAL STREETS	0.0	0.0	0.0	0.0	0.0
PEDESTRIAN ADA ACCESSIBILITY	3,000.0	3,040.0	3,000.0	3,000.0	12,040.0
SUPPORT					
AERONAUTICS PLANNING	210.0	210.0	210.0	210.0	840.0
AERONAUTICS PROGRAM DEV	280.0	280.0	280.0	280.0	1,120.0

PROJECT (x000)	FY 2019 TOTAL	FY 2020 TOTAL	FY 2021 TOTAL	FY 2022 TOTAL	2019-2022 TOTAL
EDUCATION AND TRAINING	200.0	200.0	200.0	200.0	800.0
HEAVY EQUIPMENT PROGRAM	12,500.0	11,500.0	10,000.0	10,000.0	44,000.0
PLANNING	10,900.2	10,900.2	10,900.2	10,900.2	43,600.8
Federal Land Access Program	30.0	30.0	30.0	30.0	120.0
Local Transportation Assistance Program (TAP)	300.0	300.0	300.0	300.0	1,200.0
MPO/FHWA/FTA	2,964.2	2,964.2	2,964.2	2,964.2	11,856.8
Planning PD	2,000.0	2,000.0	2,000.0	2,000.0	8,000.0
Rural TAP	87.7	87.7	87.7	87.7	350.8
Statewide Planning & Research/FHWA	4,208.6	4,208.6	4,208.6	4,208.6	16,834.4
Statewide Planning & Research/FTA	143.4	143.4	143.4	143.4	573.6
Truck Weight Enforcement	645.0	645.0	645.0	645.0	2,580.0
University Research	250.0	250.0	250.0	250.0	1,000.0
TECHNOLOGY	18,113.4	14,713.4	14,013.4	14,213.4	61,053.6
DBE	44.6	44.6	44.6	44.6	178.4
Milage-Based User Fee Phase 2	0.0	0.0	0.0	0.0	0.0
IT Initiatives	13,000.0	13,500.0	13,800.0	14,000.0	54,300.0
DMV System Upgrade	4,900.0	1,000.0	0.0	0.0	5,900.0
OJT/ Support Services	100.0	100.0	100.0	100.0	400.0
Summer Transportation Institute	68.8	68.8	68.8	68.8	275.2
TRANSPORTATION FACILITIES	26,316.3	14,250.0	9,250.0	8,250.0	58,066.3
DMV Toll Equipment Upgrade	9,716.1	0.0	0.0	0.0	9,716.1

PROJECT (x000)	FY 2019 TOTAL	FY 2020 TOTAL	FY 2021 TOTAL	FY 2022 TOTAL	2019-2022 TOTAL
Transportation Facilities - Administration	2,600.0	2,250.0	2,250.0	2,250.0	9,350.0
Transportation Facilities - Operations	14,000.0	12,000.0	7,000.0	6,000.0	39,000.0
TRANSPORTATION MANAGEMENT IMPROVEMENTS	11,885.0	8,505.0	8,505.0	8,505.0	37,400.0
MUTCD Compliance	5,410.0	2,000.0	2,000.0	2,000.0	11,410.0
Traffic Signal Revolving Fund	125.0	125.0	125.0	125.0	500.0
Rideshare Trip Mitigation	450.0	480.0	480.0	480.0	1,440.0
Transportation Management Improvement	5,900.0	5,900.0	5,900.0	5,900.0	23,600.0
TRANSIT					
TRANSIT FACILITIES	2,309.1	1,990.0	1,990.0	1,990.0	8,279.1
RAIL	300.0	300.0	300.0	300.0	1,200.0
TRANSIT VEHICLES	5,048.3	3,329.7	3,200.8	3,323.0	14,901.8
GRANTS AND ALLOCATIONS					
MUNICIPAL STREET AID	6,000.0	6,000.0	6,000.0	6,000.0	24,000.0
CTF SUBDIVISION PAVING PILOT	2,237.2	0.0	0.0	0.0	2,237.2
COMMUNITY TRANSPORTATION	17,680.0	17,680.0	17,680.0	17,680.0	70,720.0
TOTALS	382,374.2	309,046.2	312,599.8	310,956.5	1,314,976.7