

DELAWARE STATEWIDE

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

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING

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

- BR 1-032 on N203 Foulk Road over South Branch Naamans Creek-- This project involves the replacement of the existing pre-stressed concrete beams with new pre-stressed concrete box beams. Additional work includes rehabilitation of the existing abutments, minor reconstruction of the approach roadway, and placement of riprap in the stream to prevent scour. The work will be performed in phases while maintaining traffic on Foulk Road.
- BR 1-065 on Parkside Boulevard over Perkins Run
- BR 1-097 on N243 Old Kennett Pike Road over Waterway
- Old Kennett Road Retaining Walls
- BR 1-111 & BR 1-599 on N253 Benge Road over Red Clay Creek and Mill Race—Work on Br 1-111 includes replacing the existing concrete deck with a new concrete deck and barriers, minor repairs of the substructure, and minor approach roadway work. Rehabilitation work on Br 1-599 includes pouring a concrete slab through the bottom of the existing structure and placing rip-rap at the inlet and outlet. Minor roadway work will be performed on the approach roadways.
- BR 1-148A&B on N330 Greenbank Road over Red Clay Creek-- The work includes replacing the existing concrete deck with a new concrete deck and barriers, minor repairs of the substructure, cleaning and painting the existing steel members, and minor approach roadway work for Bridge 1-148A. Additional work includes lining Bridge 1-148B with a pipe liner. The work will be performed under a full road closure with detour for vehicles. Pedestrian access will be maintained during construction.
- BR 1-159 on James Street over Christina River--This project involves the replacement of the existing superstructure with new steel beams and a concrete deck. Substructure repairs will also be made to extend the life of the bridge.
- BR 1-180 on Grant Avenue over Mill Creek--Project will consist of the replacement of the existing 3 deteriorating corrugated metal pipe arches with a concrete rigid frame or a concrete beam bridge. Other construction will include rip rap placement, roadway replacement at the location of the bridge and mill and overlay of the approaches. There is a possibility of the need for utility relocation at this site.
- BR 1-191 on N318 Milltown Road over Mill Creek--Perform rehab work on Bridge 1-191 to improve the existing condition. Rehab work includes a full deck replacement; Replace the joints; Upgrade the pedestrian rail to current design standards; Repair spalls where needed; Paint beams and seal abutments and piers; Replace bearings; minor riprap placement. Construct sidewalk and reconstruct roadway at the bridge approaches.
- BR 1-227 on N013 Paper Mill Road over Middle Run Tributary--This project involves the rehabilitation of a large corrugated metal pipe arch with a centrifugally cast concrete pipe arch. A separate box culvert will be constructed to connect the adjacent bike trail in the parks on each side of the road. The approach roadways, guardrail, and drainage will be reconstructed as needed and riprap will be placed in the stream for scour protection. The work will be performed in a manner which minimizes impacts to traffic as much as possible.
- BR 1-238 on Elizabeth Court over Tributary to White Clay Creek--This project involves lining the existing corrugated metal pipe arches with a centrifugally cast concrete liner. Additional work includes the placement of riprap in the stream to prevent scour. Vehicular and pedestrian traffic will be maintained during construction.

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

- BR 1-239 on N352 Red Mill Road over Tributary to White Clay Creek--This project involves lining the existing corrugated metal pipe arches with a centrifugally cast concrete liner. Additional work includes the placement of riprap in the stream to prevent scour. Vehicular and pedestrian traffic will be maintained during construction.
- BR 1-251 on N355 Harmony Road over White Clay Creek--The work includes replacing the existing concrete deck with a new concrete deck and barriers, minor repairs of the substructure, and minor approach roadway work. The work will be performed under a full road closure with detour for vehicles.
- BR 1-254 on N350 Old Newark Road over Cool Run--This project involves the replacement of the existing corrugated metal pipes with a precast concrete frame. Additional work includes minor reconstruction of the approach roadway, installation of guardrail as needed, placement of riprap in the stream to prevent scour, and drainage improvements. The work will be performed under a full road closure with detour. A temporary pedestrian bypass will be provided during construction.
- BR 1-291 on Songsmith Dr. over Tributary to Smalley's Pond--This project involves the replacement of three existing corrugated metal pipe arches with two precast concrete pipes. Additional work includes minor reconstruction of the approach roadway and sidewalk, and placement of riprap in the stream to prevent scour. The work will be performed under a full road closure with detour.
- BR 1-294 on N346 Walther Road over Tributary to Christina River--This work involves the replacement of the two (2) existing corrugated metal pipes with a precast concrete box culvert. Additional work includes the placement of riprap in the stream for scour protection, installation of guardrail as needed, and reconstruction of the approach roadway as necessary. Work will be performed under a full road closure with detour for vehicular traffic while pedestrian traffic will be maintained.
- BR 1-295 on Providence Drive over Tributary to Christina River--This project involves the replacement of two large corrugated metal pipe arches with reinforced concrete pipes. The approach roadways will be reconstructed as needed and riprap will be placed in the stream for scour protection. The work will be performed under a full road closure with a detour.
- BR 1-308 on N378 Clark's Corner Road over Dragon Run--This project involves replacing the existing concrete box beam superstructure with concrete box beams with a concrete deck. Additional work includes placing riprap in the stream for scour protection, installation of guardrail, and reconstruction of the approach roadway as needed.
- BR 1-362 on SR 72 Library Avenue over Tributary to White Clay Creek
- BR 1-393 on SR299 Main Street over Appoquinimink River-- This project involves the placement of scour countermeasures in the river to protect the bridge foundations from scour.
- Structure Maintenance, BR 1-400 on Shallcross Lake Road
- BR 1-406 on N430 Brick Mill Road over Dove Nest Branch
- BR 1-421 on Maryland Line Road Over Tributary to Sassafras River--Work includes the replacement of the existing corrugated metal pipe with a reinforced concrete pipe. Additional work includes the placement of riprap in the stream for scour protection, and the reconstruction of the approaches as necessary. Work will be performed under full road closure with detour.
- BR 1-438 on N463 Blackbird Station Road over Blackbird Creek-- This project involves the replacement of the existing two corrugated metal pipe arches with either a single-span structure consisting of precast pre-stressed concrete voided slab beams on a stub abutment. Additional work includes the placement of riprap for scour protection, the reconstruction of the approach roadway as needed, and the installation of guardrail.
- BR 1-484 on Harvey Straughn Road over Tributary to Cypress Branch--Replacement of metal pipe arches with precast concrete pipes.
- BR 1-488N&S on N001 US13 over Blackbird Creek--This project involves the replacement of the existing Bridge 1 -488S, which is a concrete arch, with pre-stressed, precast concrete box beams and composite concrete deck on stub abutments. Additional work includes raising the roadway profile of US13 southbound by reconstructing the roadway approaches, installing guardrail, and placing riprap in the stream for scour protection for both Bridges 1-488N&S.

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

- BR 1-501, 1-501A & 1-501B SR 141 Viaduct over SR4—Bridge 1-501, located in Newport Delaware, carries SR 141 (Newport Viaduct) over SR 4, Amtrak Northeast Corridor, Christina River, various local roads and facilities such as parking lots, skating park etc. Bridges 1-501A and 1-501B are access ramps to the bridge in and out of Newport. Bridge 1-501 and its ramps consist of 19 spans and is approximately 2000 feet long. These bridges are comprised of steel tub girders and reinforced concrete deck supported by reinforced concrete abutments and piers. This project involves fatigue retrofitting of the steel tub girder webs near interior cross frame stiffeners and rehabilitation of the cracked and deteriorated reinforced concrete abutments, piers, deck, approach slabs, parapets, bearings, drainage inlets, etc. The proposed rehabilitation will be under staged construction to ensure access throughout the project.
- BR 1-501 on SR141 Newport Viaduct over Christina River, Foundation Repairs-- This project involves the rehabilitation of BR 1-501 substructure at Piers 2 and 3 which are located in the Christiana River. This work includes performing repairs and strengthening the existing pier caps and installing additional foundation support elements. In addition, the entire line of expansion bearing on piers 6, 14, and 15 will be replaced.
- BR 1-543 on N213 Carr Road over Shellpot Creek--This project involves the replacement of the existing superstructure consisting of steel beams with a hotmix overlay on stone abutments. The proposed superstructure will consist of steel beams with a concrete deck and utilize the same stone facade as is presently there. Additional stone facade barriers atop new moment slabs will be constructed. Portions of the existing abutments, wingwalls, and columns will be reconstructed utilizing the same stone facade. The existing abutments below the limits of reconstruction will be pointed and parged. Additional work includes, but is not limited to, minor reconstruction of the approach roadway and replacement of guardrail. The work will be performed under a full road closure with detour.
- BR 1-567A on N501 Hay Road over Shellpot Creek, City of Wilmington--This project involves the replacement of the existing single-lane structurally deficient and functionally obsolete multi-span concrete girder bridge on timber piles. The proposed bridge will provide for two-way traffic and will be a two-span concrete girder bridge on piles. Additional work will include the removal of the adjacent abandoned steel truss bridge, placement of riprap for scour protection, reconstruction of the approach roadway, and installation of guardrail.
- BR 1-577 on N050 Northeast Boulevard over Brandywine River--This project involves jacking the superstructure to repair or replace floor beams and bearings, replacing the joints, repairing spalls where needed, replacing concrete tee beams on the approach spans, spot painting beams, sealing abutments and piers, and repairing various concrete elements throughout the superstructure and substructure. Additional work includes the addition of a second turn lane from 12th Street to Northeast Boulevard as an advance traffic mitigation project for the I-95 Rehabilitation Project. Traffic will be partially maintained during construction.
- BR 1-601 and BR 1-604 on SR 141 over SR2 Kirkwood Highway and On-Ramp
- BR 1-634 on SR100 DuPont Road over East Penn Railroad--This project involves the replacement of the concrete deck with a new concrete deck and barriers, cleaning and greasing of the bearings, cleaning and painting of steel members, repair of cracks and spalls in the concrete piers and abutments, and the construction of in-fill walls in the piers to provide needed structural capacity. Additional work includes minor approach roadway reconstruction and the construction of sidewalk to provide better pedestrian access in accordance with the Department's Complete Streets policy.
- BR 1-651 on Newport Road over CSX Railroad--This project involves raising the existing bridge 6" to provide required vertical clearance over the CSX railroad. The project involves strengthening end diaphragms for jacking, jacking the bridge, reconstructing beam pedestals and bearings, reconstructing the backwalls, reinstalling joint seals, and reconstructing the approaches to meet the raised bridge elevation.
- BR 1-680 on SR 141 Basin Road over US 13--This project involves the replacement of the existing concrete deck with a pre-cast concrete deck. The sidewalk on the SB side will be removed to allow the sidewalk on the NB side to be widened. Existing vertical clearance will be increased a few inches by jacking the bridge up. The project will be done under a full road closure with detours for vehicles and pedestrians. The project will be constructed in the summer due to the close proximity of William Penn High School and George Reed Middle School.

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

- BR 1-684 on N028 South Heald Street over Norfolk Southern Railroad--Replace the existing bridge with a new steel girder bridge with concrete deck and stub abutments with MSE Walls. Additional work includes reconstructing the approach roadway. Work will be performed with a full road closure under a detour.
- BR 1-686 on N029 South Walnut Street over Norfolk Southern Railroad--BR 1-686 was constructed in 1938 and carries South Walnut Street (US 13BR) over the NSRR. Repairs will include replacing the deck joints and bearings, repairs to portions of the deck, sidewalk, bridge rail, and columns, and placing a concrete overlay.
- BR 1-714 on N347 Chapman Road over I-95--This project involves the replacement of Bridge 1-714 with a new structure or structures adjacent to the existing bridge. The existing bridge will be removed once traffic has been shifted onto the new structure(s).
- BR 1-717 on I-95 NB over SR1--This project involves the rehabilitation of Bridge 1-717. The scope of work includes replacement of the existing concrete deck and barriers with new precast concrete deck and precast barriers.
- BR 1-759 on I-95 over Brandywine River--This bridge is included in the Wilmington Viaduct project. Bridge construction will be part of I-95, from I-495 to north of Brandywine.
- BR 1-813 on I-495 over Christina River, Emergency Repairs, Phase 2--This project involves the permanent repairs to Bridge 1-813 on I-495 over Christina River after the temporary emergency repairs are complete. This work includes the removal of 2 pairs of hammerhead piers and replacement with new reinforced concrete piers. The existing superstructure will be reused and set on the new piers.
- BR 1-814 on N009 12th Street over Norfolk Southern Railroad--This project involves performing rehab work on Bridge 1-814 to improve the existing condition. Rehab work includes jacking the superstructure to replace the existing bearings and pedestals, replacing the joints, repairing spalls where needed, painting beams, and sealing abutments and piers. The substructure work will be done while the bridge is open to traffic. The superstructure work will be performed in phased construction.
- Bridge Replacements on SR9, BR 1-302 over Tom Creek and BR 1-304 over Gambles Gut-- This work involves the replacement of the two (2) existing corrugated metal pipes with precast concrete box culverts at two locations on SR9. Additional work includes the placement of riprap in the stream for scour protection, installation of guardrail as needed, and reconstruction of the approach roadway as necessary. Work will be performed under a full road closure with detour for vehicular traffic while pedestrian traffic will be maintained.
- Cantilever and Overhead Sign Structures-- This project involves the removal and replacement of cantilever and overhead sign structures
- Interstate Bridge Maintenance, South (Advertisement & Construction)-- Periodic maintenance of bridges to increase the useful life of the infrastructure.
- Tweeds Mill Parking Structure Repairs—This project involves performing structural repairs of the parking garage. The work includes patching concrete spalls in the parking decks, repairing and replacing joint seals, placing a waterproofing membrane on the top parking deck, replacing the staircase canopy, replacing the concrete entrance approach slab, and miscellaneous repairs throughout the structure. The parking garage was constructed through a public-private partnership agreement between the Hockessin Athletic Club and the Department of Transportation to provide parking for both the club members and visitors to the adjacent public park as well as to correct a drainage issue in the area. The Department is responsible for structural maintenance of the structure. Structural repairs of the parking garage are necessary to maintain and extend the life of the structure. There are many spalls and delaminations in the concrete that need to be repaired and many of the joint seals need to be replaced.

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Bridge Painting Program	C	18,000.0	600.0	2,400.0	-	600.0	2,400.0	-	600.0	2,400.0	-	600.0	2,400.0	-	12,000.0	6,000.0
BRIDGES	PD	365.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	31,428.3	2,984.9	3,046.4	-	1,289.7	1,910.9	-	568.0	632.0	-	52.0	208.0	-	10,691.8	160.0
	ROW	1,905.1	274.4	172.8	-	245.7	124.8	-	34.0	36.0	-	9.0	36.0	-	932.7	30.0
	CE	15,365.4	612.3	1,925.2	20.0	237.2	776.8	-	116.0	464.0	-	80.0	320.0	-	4,551.4	-
	C	197,903.2	8,242.4	33,275.7	353.2	11,264.1	30,465.2	-	10,594.4	23,897.4	-	2,263.2	7,052.8	-	127,408.4	11,050.0
	Traffic	742.7	4.8	19.2	-	-	-	-	-	-	-	-	-	-	24.0	-
	Utilities	992.4	82.9	216.5	3.4	10.0	40.0	-	16.0	64.0	-	16.0	64.0	-	512.8	-
	Maintenance	40.0	20.0	-	-	-	-	-	-	-	-	-	-	-	20.0	-
	Audit	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Environmental	58.0	2.0	8.0	-	1.0	4.0	-	1.0	4.0	-	3.0	12.0	-	35.0	-
	Program Funding	109,087.5	629.7	994.0	-	994.6	3,892.4	-	3,952.6	8,850.6	-	12,649.0	26,595.9	-	58,558.9	88,070.0
	Contingency	19,149.5	1,756.7	1,342.7	41.4	10.0	887.3	-	10.0	40.0	-	27.8	111.3	-	4,227.2	-
	Rail Road	930.0	49.0	196.1	-	-	-	-	-	-	-	-	-	-	245.1	-
Total		396,067.1	15,259.1	43,596.6	418.0	14,652.3	40,501.4	0.0	15,892.0	36,388.0	0.0	15,700.0	36,800.0	0.0	219,207.3	105,310.0

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

Project Title (\$s x 1000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 22-23
NEW CASTLE COUNTY															
BR 1-032 on N203 Foulk Road over South Branch Naamans Creek	PE	21.0													
	ROW	16.9													
	CE	166.3													
	C	1,303.6													
	Utilities	8.9													
	Contingency	174.7													
BR 1-065 on Parkside Boulevard over Perkins Run	PE	50.0	25.0			25.0									
	ROW	25.0				25.0									
	C	600.0							600.0						
BR 1-097 on N243 Old Kennett Pike Road over Waterway	PE	50.0	25.0			25.0									
	ROW	16.5				16.5									
	C	340.0							68.0	272.0					
Old Kennett Road Retaining Walls	PE	150.0	50.0			80.0			20.0						
	ROW	20.0							20.0						
	C	500.0										500.0			
BR 1-111 & BR 1-599 on N253 Benge Road over Red Clay Creek and Mill Race	PE	30.0	21.1												
	ROW	2.5	2.5												
	C	1,000.0	200.0	800.0											
BR 1-148A&B on N330 Greenbank Road over Red Clay Creek	PE	50.0	40.0												
	ROW	22.0	8.0												
	C	900.0				180.0	720.0								
	Rail Road	321.3													
BR 1-159 on James Street over Christina River	PE	2,240.0	12.0	48.0											
	ROW	236.5													
	CE	20.2													
	C	3,500.0				700.0	2,800.0								
	Traffic														
	Utilities														
BR 1-180 on Grant Avenue over Mill Creek	PE	50.0	30.0			20.0									
	ROW	20.0				20.0									
	C	420.0							420.0						
BR 1-191 on N318 Milltown Road over Mill Creek	PE	17.5													
	ROW														
	CE	97.4													
	C	885.9													
	Traffic	42.9													
	Contingency	193.5													

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

Project Title (\$s x 1000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 22-23
BR 1-227 on N013 Paper Mill Road over Middle Run Tributary	PE	150.0	25.9	103.6											
	ROW	10.0				2.0	8.0								
	C	1,000.0				200.0	800.0								
BR 1-238 on Elizabeth Court over Tributary to White Clay Creek	ROW	30.0													
	CE	26.0	26.0												
	C	400.0	400.0												
BR 1-239 on N352 Red Mill Road over Tributary to White Clay Creek	PE	58.7													
	ROW	20.0													
	C	600.0	120.0	480.0											
BR 1-251 on N355 Harmony Road over White Clay Creek	PE	200.0	150.0												
	ROW														
	C	3,000.0				600.0	2,400.0								
BR 1-254 on N350 Old Newark Road over Cool Run	PE	50.0													
	ROW	25.0													
	CE	248.0	32.9	131.5											
	C	947.3	117.3	469.2											
	Contingency	78.9	15.8	63.1											
BR 1-291 on Songsmith Dr. over Tributary to Smalley's Pond	PE	16.6													
	ROW	49.0													
	CE	147.9													
	C	670.9													
	Utilities	6.5													
BR 1-294 on N346 Walther Road over Tributary to Christina River	Contingency	117.4													
	PE	50.0	28.0												
	ROW	10.0	10.0												
	C	750.0				150.0	600.0								
BR 1-295 on Providence Drive Over Tributary To Christina River	PE	40.0													
	ROW	27.5	27.5												
	C	451.5				451.5									
BR 1-308 on N378 Clark's Corner Road over Dragon Run	PE	30.0													
	ROW	10.0	7.2												
	C	830.0	166.0	664.0											
	Utilities	15.0	3.0	12.0											
BR 1-362 on SR 72 Library Avenue over Tributary to White Clay Creek	PE	20.0	20.0												
	ROW	10.0				10.0									
	C	300.0							60.0	240.0					

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

Project Title (\$s x 1000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 22-23
BR 1-393 on SR299 Main Street over Appoquinimink River	PE	275.6													
	ROW	28.0													
	CE	111.0													
	C	747.4													
	Contingency	37.4													
Structure Maintenance, BR 1-400 on Shallcross Lake Road	PE	100.0	80.0			20.0									
	ROW	15.0	10.0			5.0									
	C	400.0				400.0									
BR 1-406 on N430 Brick Mill Road over Dove Nest Branch	PE	72.0	72.0												
BR 1-421 on Maryland Line Road Over Tributary to Sassafras River	PE	90.0	40.0												
	ROW	20.0	20.0												
	C	300.0				300.0									
BR 1-438 on N463 Blackbird Station Road over Blackbird Creek	PE	47.3													
	ROW	35.0													
	CE	172.2	29.6	118.5											
	C	1,235.0	195.2	780.6											
	Traffic	1.0	0.2	0.8											
	Utilities	20.0	4.0	16.0											
	Contingency	127.5	25.5	102.0											
BR 1-484 on Harvey Straughn Road over Tributary to Cypress Branch	PE	115.0	80.0			35.0									
	ROW	16.5				16.5									
	C	400.0							400.0						
BR 1-488N&S on N001 US13 over Blackbird Creek	PE	181.8	13.0	52.0		9.0	36.0								
	ROW	30.0				6.0	24.0								
	C	4,000.0							800.0	3,200.0					
BR 1-501, 1-501A & 1-501B SR 141 Viaduct over SR4	PE	1,550.0													
	CE	4,206.8													
	C	14,775.8													
	Traffic	575.9													
	Utilities	5.6													
	Contingency	4,815.6													
BR 1-501 on SR141 Newport Viaduct over Christina River, Foundation Repairs	PE	844.5	68.9	275.6											
	ROW														
	C	5,000.0	200.0	800.0		800.0	3,200.0								
BR 1-543 on N213 Carr Road over Shellpot Creek	PE	37.0													
	ROW	5.0													
	CE	139.4													
	C	810.0	0.0	0.0											
	Utilities	86.8	17.4	69.5											
	Contingency	61.5	16.5	65.9											

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

Project Title (\$s x 1000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 22-23
BR 1-567A on N501 Hay Road over Shellpot Creek, City of Wilmington	PE	505.0													
	ROW	30.0													
	CE	303.5		80.0	20.0										
	C	1,992.9		1,412.8	353.2										
	Contingency	206.9		165.5	41.4										
BR 1-577 on N050 Northeast Boulevard over Brandywine River	PE	860.0		160.0											
	ROW	25.0	5.0	20.0											
	C	4,000.0				500.0	2,000.0		300.0	1,200.0					
BR 1-601 and BR 1-604 on SR 141 over SR2 Kirkwood Highway and On-Ramp	PE	500.0	40.0	160.0		60.0	240.0								
	C	2,000.0							400.0	1,600.0					
BR 1-634 on SR100 DuPont Road over East Penn Railroad	PE	785.0													
	ROW	50.0	10.0												
	C	5,000.0	1,000.0	4,000.0											
	Rail Road	220.0													
BR 1-651 on Newport Road over CSX Railroad	CE	57.5													
	C	499.7													
	Contingency	78.3													
	Rail Road	110.0													
BR 1-680 on SR 141 Basin Road over US 13	CE	696.1	120.1	480.3											
	C	15,555.6	3,101.1	12,404.4											
	Traffic	22.3	4.5	17.9											
	Utilities	35.0	6.3	25.3	3.4										
	Contingency	1,031.9	206.4	825.5											
BR 1-684 on N028 South Heald Street over Norfolk Southern Railroad	PE	1,500.0	90.0	360.0		90.0	360.0		74.0	316.0		26.0	104.0		80.0
	ROW	30.0										6.0	24.0		
	C	6,300.0													6,300.0
BR 1-686 on N029 South Walnut Street over Norfolk Southern Railroad	PD	190.0													
	PE	1,500.0	90.0	360.0		90.0	360.0		74.0	316.0		26.0	104.0		80.0
	ROW	30.0													30.0
	C	9,500.0													4,750.0
BR 1-714 on N347 Chapman Road over I-95	PE	1,700.0	185.8	743.2		60.0	240.0								
	ROW	50.0				10.0	40.0								
	C	15,000.0							1,500.0	6,000.0		1,500.0	6,000.0		
BR 1-717 on I-95 NB over SR1	PE	680.0													
	CE	765.0													
	C	4,740.8													
	Contingency	359.1		6.0											
BR 1-759 on I-95 over Brandywine River	PE	2,435.9		539.2			550.0								

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

Project Title (\$s x 1000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 22-23
BR 1-813 on I-495 over Christina River, Emergency Repairs, Phase 2	PD	5.0													
	PE	1,092.0													
	ROW	50.0	4.7	42.3											
	CE	835.3													
	C	7,500.0													
	Traffic	100.0													
	Audit	100.0													
	Contingency	3,884.2													
	Rail Road	33.6													
Structure Maintenance, BR 1-813 on I-495 over Christina River	PE	50.0	50.0												
	C	500.0				100.0	400.0								
BR 1-814 on N009 12th Street over Norfolk Southern Railroad	PE	10.0													
	C	2,500.0	500.0	2,000.0											
	Rail Road	245.1	49.0	196.1											
Bridge Replacements on SR9, BR 1-302 over Tom Creek and BR 1-304 over Gambles Gut	PE	55.0	55.0												
	ROW	20.0	10.0			10.0									
	C	1,200.0				240.0	960.0								
Cantilever and Overhead Sign Structures, Open End, FY16-18	PE	200.0													
	CE	1,242.7		500.0											
	C	7,060.6		3,475.0			1,054.9								
	Utilities	50.0		25.0											
	Contingency	847.3					847.3								
Interstate Bridge Maintenance, South (Advertisement & Construction)	PE	23.1													
	CE	1,341.9													
	C	5,735.6													
	Contingency	4,213.8													
Overhead Sign Structures, I-495	PE	510.0													
	C	2,000.0													
	CE	188.9	50.0												
	C	744.9													
	Contingency	305.2	150.0												
Tweeds Mill Parking Structure Repairs Total		1,619.0	200.0												
New Castle Total		189,812.4	8,163.2	33,050.8	418.0	5,256.5	17,640.2		4,736.0	13,144.0		2,058.0	6,232.0		11,240.0
STATEWIDE															
Design-Build Statewide Pipe Replacements (Statewide FLEX)	ROW	150.0	9.0	36.0		9.0	36.0		9.0	36.0		3.0	12.0		
	CE	765.0	25.0	100.0		46.4	185.6		41.4	165.6		28.6	114.4		
	C	3,643.6	160.5	641.8		258.4	1,033.6		156.2	624.8		123.9	495.8		
	Utilities	250.0	8.0	32.0		10.0	40.0		16.0	64.0		16.0	64.0		
	Contingency	239.1				10.0	40.0		10.0	40.0		27.8	111.3		
	Environmental	25.0				1.0	4.0		1.0	4.0		3.0	12.0		
Design-Build Statewide Pipe Replacements (Rural < 5K)	CE	1,376.0	61.6	246.4		83.6	334.4		74.6	298.4		51.4	205.6		
	C	8,311.1	376.2	1,504.6		628.6	2,514.5		518.2	2,072.6		139.3	557.0		

BRIDGE PRESERVATION PROGRAM & BRIDGE PAINTING (CONTINUED)

Project Title (\$s x 1000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 22-23
Bridge Design Training Program	PE	1,590.0	30.0												
Statewide Movable Bridge Preventative Maintenance	PE	325.0	200.0												
USGS StreamStats Update	PE	665.0	200.0			265.0			200.0						
H&H Analyses for Scour Critical Bridges	PE	665.0	200.0			200.0			200.0						
Bridge Preservation Program	Program Funding	109,087.5	629.7	994.0		994.6	3,892.4		3,952.6	8,850.6		12,649.0	26,595.9		88,070.0
Statewide Total		127,092.2	1,900.0	3,554.9		2,506.6	8,080.6		5,179.0	12,156.0		13,042.0	28,168.0		88,070.0
Grand Total		378,067.1	14,659.1	41,196.6	418.0	14,052.3	38,101.4		15,292.0	33,988.0		15,100.0	34,400.0		99,310.0

Bridge Painting Program - Z001 - National Highway Performance Program (NHPP), Z240 - Surface Transportation Block Grant Program – FAST

Design-Build Statewide Pipe Replacements - Z240 - Surface Transportation Block Grant Program – FAST

Bridge Preservation Program - Z001 - National Highway Performance Program (NHPP), Z233 - STBG Program Off-System Bridge, Z240,Z231,Z230,Z232 - Surface Transportation Block Grant Program - FAST

COMMUNITY TRANSPORTATION FUND

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Community Transportation Program	Program Funding	119,100.0	17,680.0	-	-	17,680.0	-	-	17,680.0	-	-	17,680.0	-	-	70,720.0	35,360.0
Total		119,100.0	17,680.0	-	-	17,680.0	-	-	17,680.0	-	-	17,680.0	-	-	70,720.0	35,360.0

DAM PRESERVATION PROGRAM

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

JUSTIFICATION: Protects communities and infrastructure.

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

*Before**After*

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
DAMS	PE	2,130.1	235.0	160.0	-	-	-	-	-	-	-	-	-	-	395.0	-
	CE	742.7	60.0	-	-	-	-	-	-	-	-	-	-	-	60.0	-
	C	5,710.0	436.3	-	-	302.0	1,208.0	-	-	-	-	-	-	-	1,946.3	-
	Program	13,750.0	1,450.8	-	-	1,450.0	-	550.0	2,700.0	-	-	2,700.0	-	-	8,850.8	5,400.0
	Contingency	417.9	417.9	-	-	-	-	-	-	-	-	-	-	-	417.9	-
Total		22,750.7	2,600.0	160.0	-	1,752.0	1,208.0	550.0	2,700.0	-	-	2,700.0	-	-	11,670.0	5,400.0

EQUIPMENT

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

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

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



Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Heavy Equipment Program	Program	76,388.0	12,504.2	-	-	12,500.0	-	-	12,500.0	-	-	11,500.0	-	-	49,004.2	20,000.0
Total		76,388.0	12,504.2	-	-	12,500.0	-	-	12,500.0	-	-	11,500.0	-	-	49,004.2	20,000.0

MATERIALS AND MINOR CONTRACTS

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

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Materials and Minor Contracts	Program	52,929.0	12,358.0	510.0	-	11,000.0	1,290.0	-	11,000.0	2,000.0	-	8,000.0	-	-	46,157.9	16,000.0
Total		52,929.0	12,358.0	510.0	-	11,000.0	1,290.0	-	11,000.0	2,000.0	-	8,000.0	-	-	46,157.9	16,000.0

MUNICIPAL STREET AID

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

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

County: Statewide

Municipality:

Funding Program: Grants and Allocations – Municipal Street Aid

Functional Category: Preservation

Year Initiated: FY 1996

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Municipal Street Aid	Program	30,000.0	5,000.0	-	-	5,000.0	-	-	5,000.0	-	-	5,000.0	-	-	20,000.0	10,000.0
Total		30,000.0	5,000.0	-	-	5,000.0	-	-	5,000.0	-	-	5,000.0	-	-	20,000.0	10,000.0

PAVING AND REHABILITATION PROGRAM

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Paving and Rehabilitation	Program	596,000.0	59,200.0	19,800.0		54,200.0	20,800.0		55,200.0	18,600.0		55,200.0	14,800.0		297,800.0	160,000.0
Total		596,000.0	59,200.0	19,800.0		54,200.0	20,800.0		55,200.0	18,600.0		55,200.0	14,800.0		297,800.0	160,000.0

Z001 - National Highway Performance Program (Nhpp)

Z240,Z231,Z232,Z230 - Surface Transportation Block Grant Program - Fast

RAIL PRESERVATION

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Rail Preservation	C	3,800.0	300.0	-	-	300.0	-	-	300.0	-	-	300.0	-	-	1,200.0	600.0
Total		3,800.0	300.0	-	-	300.0	-	-	300.0	-	-	300.0	-	-	1,200.0	600.0

SLOPE STABILIZATION

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

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

County: New Castle
Investment Area: Core
Municipality:
Funding Program: Road System
Functional Category: Preservation
Year Initiated: FY 2017 (previously in New Castle County element of the TIP)



Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Slope Stabilization Program	Program	18,000.0	2,500.0	-	-	2,500.0	-	-	5,000.0	-	-	3,000.0	-	-	13,000.0	5,000.0
Total		18,000.0	2,500.0	-	-	2,500.0	-	-	5,000.0	-	-	3,000.0	-	-	13,000.0	5,000.0

TRANSIT FACILITIES, DELAWARE STATEWIDE

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

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

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



Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Bus Stop Improvement Program	Program Funding	6140.0	750.0	-	-	750.0	-	-	750.0	-	-	750.0	-	-	3000.0	1500.0
CAD/AVL Modem Upgrade	PD	825.0	350.1	-	-	100.0	-	-	-	-	-	-	-	-	450.1	-
CAD/AVL System and Trapeze Upgrade	PD	1150.0	475.0	-	-	475.0	-	-	200.0	-	-	-	-	-	1150.0	-
Call Center Recorder and Upgrade	PD	60.0	0.7	-	-	-	-	-	-	-	-	-	-	-	0.7	-
Training Room Upgrades	C	50.0	-	-	-	50.0	-	-	-	-	-	-	-	-	50.0	-
Fuel Management Software System	C	1285.0	1285.0	-	-	-	-	-	-	-	-	-	-	-	1285.0	-
Statewide Transit Safety and Security Improvements FY15 - FY17	Procurement	3625.0	500.0	-	-	500.0	-	-	500.0	-	-	500.0	-	-	2000.0	1000.0
Transit Facility Minor Capital Projects FY16 - FY18	PE	640.0	103.2	-	-	100.0	-	-	100.0	-	-	100.0	-	-	403.2	200.0
	C	4605.0	704.6	-	-	600.0	-	-	600.0	-	-	600.0	-	-	2504.6	1200.0
Transit Systems Equipment (FY16-18)	PD	336.4	186.9	-	-	40.0	-	-	40.0	-	-	40.0	-	-	306.9	80.0
DTC Yard Management System & Equipment	PD	1100.0	500.0	-	-	300.0	-	-	300.0	-	-	-	-	-	1100.0	-
Propane Fueling Stations	C	340.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inventory Bar coding	C	160.0	80.6	-	-	-	-	-	-	-	-	-	-	-	80.6	-
Snow Blowers - Statewide	PE	100.0	-	-	-	100.0	-	-	-	-	-	-	-	-	100.0	-
	C	500.0	-	-	-	500.0	-	-	-	-	-	-	-	-	500.0	-
Park & Ride Hub Restrooms	PE	100.0	26.0	-	-	40.0	-	-	-	-	-	-	-	-	66.0	-
	C	440.0	240.0	-	-	200.0	-	-	-	-	-	-	-	-	440.0	-
DTC Automated Timesheet and Absence Tracking	PD	120.0	120.0	-	-	-	-	-	-	-	-	-	-	-	120.0	-
Traveler Information Signage	C	200.0	200.0	-	-	-	-	-	-	-	-	-	-	-	200.0	-
Control Center Dispatch Statewide	C	340.0	75.4	-	-	-	-	-	-	-	-	-	-	-	75.4	-
Total		22,116.4	5,597.5	-	-	3,755.0	-	-	2,490.0	-	-	1,990.0	-	-	13,832.5	3,980.0

TRANSPORTATION FACILITIES

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

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

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

North District – Bear Facility



Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Transportation Facilities - Administration	Program Funding	17,063.0	2,250.0	-	-	2,250.0	-	-	2,250.0	-	-	2,250.0	-	-	9,000.0	4,500.0
Transportation Facilities - Operations	Program Funding	44,468.7	12,162.8	-	-	9,000.0	-	-	8,000.0	-	-	7,000.0	-	-	36,162.8	10,000.0
Total		61,531.7	14,412.8	0.0	0.0	11,250.0	0.0	0.0	10,250.0	0.0	0.0	9,250.0	0.0	0.0	45,162.8	14,500.0

TRANSIT VEHICLE REPLACEMENT AND REFURBISHMENT, STATEWIDE

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
CAD/AVL	Procurement	9,835.5	359.0	1,436.0	-	-	-	-	-	-	-	-	-	-	1,795.0	-
Fare Collection Improvements	PD	3,250.0	1,628.6	-	-	1,000.0	-	-	500.0	-	-	-	-	-	3,128.6	-
Maintenance Equipment and Tools (Transit) Program	Procurement	1,287.9	210.0	-	-	182.0	-	-	184.0	-	-	162.0	-	-	738.0	278.0
New Freedom Program Statewide 50/50	Planning	4,069.3	-	259.3	240.0	-	240.0	240.0	-	240.0	240.0	-	240.0	240.0	1,939.3	960.0
Radio Replacment (Hand Held)	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taxi Pilot Equipment Start-up	Procurement	280.0	280.0	-	-	-	-	-	-	-	-	-	-	-	280.0	-
Transit Vehicle Replacement 5310 Program - Statewide	Procurement	9,366.4	809.9	687.4	-	741.7	587.9	-	741.7	587.9	-	741.7	587.9	-	5,486.1	2,659.2
Paratransit Replacement Buses FY15 (26)	Procurement	2,921.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paratransit Replacement Buses FY17 (77)	Procurement	8,388.4	434.5	405.6	-	-	-	-	-	-	-	-	-	-	840.1	-
Paratransit Replacement Buses FY18 (55)	Procurement	5,665.0	2,781.0	2,884.0	-	-	-	-	-	-	-	-	-	-	5,665.0	-
Transit Vehicle Replacement Support Vehicles Statewide FY16	Procurement	725.3	136.7	-	-	-	-	-	-	-	-	-	-	-	136.7	-
Transit Vehicle Replacement Support Vehicles Statewide FY18	Procurement	202.9	202.9	-	-	-	-	-	-	-	-	-	-	-	202.9	-
Total		45,992.1	6,842.6	5,672.3	240.0	1,923.7	827.9	240.0	1,425.7	827.9	240.0	903.7	827.9	240.0	20,211.7	3,897.2

CAD/AVL - 5311 - Rural Transit Assistance Program (5311(b)(3))/Formula Grants for Other than Urbanized Areas (5311)

Job Access Reverse Commute (JARC) Program - 5307 - Urbanized Area Formula Grant Program, 5311 - Rural Transit Assistance Program (5311(b)(3))/Formula Grants for Other than Urbanized Areas (5311)

New Freedom Program Statewide 50/50 - 5310 - Elderly and Disabled Formula Program

Transit Vehicle Replacement 5310 Program – Statewide - 5310 - Elderly and Disabled Formula Program

AERONAUTICS, STATEWIDE

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

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

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



Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Aeronautics Planning	Program Funding	1,612.0	16.5	148.5	-	16.5	148.5	-	21.0	189.0	-	21.0	189.0	-	750.0	420.0
Aeronautics Program Development	Program Funding	8,923.4	625.0	-	-	280.0	-	-	280.0	-	-	280.0	-	-	1,465.0	560.0
Total		10,535.4	641.5	148.5	-	296.5	148.5	-	301.0	189.0	-	301.0	189.0	-	2,215.0	980.0

Aeronautics Planning - FAA4,FAA3 - Federal Aviation Administration Funds

BICYCLE, PEDESTRIAN AND OTHER IMPROVEMENTS

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

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

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



Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Bicycle, Pedestrian and other Improvements	C	18,736.0	2,250.7	7,595.7	-	1,358.8	5,435.2	-	1,420.0	5,720.0	-	1,440.0	5,760.0	-	30,980.4	8,000.0
Total		18,736.0	2,250.7	7,595.7	-	1,358.8	5,435.2	-	1,420.0	5,720.0	-	1,440.0	5,760.0	-	30,980.4	8,000.0

Z400 - Congestion Mitigation And Air Quality Improvement Program (CMAQ)

BRIDGE MANAGEMENT PROGRAM

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

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Bridge Inspection Program	PE	25,200.0	785.6	3,901.7	-	1,110.0	3,659.9	-	1,102.9	3,476.4	-	1,066.4	3,330.4	-	18,433.3	8,997.0
Bridge Management	Program Funding	33,640.0	4,012.5	2,966.4	-	3,914.9	1,259.5	-	4,874.0	1,096.0	-	4,939.0	1,681.0	-	24,743.3	12,820.0
Total		58,840.0	4,798.1	6,868.1	0.0	5,024.9	4,919.4	0.0	5,976.9	4,572.4	0.0	6,005.4	5,011.4	0.0	43,176.6	21,817.0

Bridge Inspection Program - Z001 - National Highway Performance Program (NHPP), Z233 - STBG Program Off-System Bridge, Z240 - Surface Transportation Block Grant Program – FAST
 Bridge Management - Z001 - National Highway Performance Program (NHPP), Z233 - STBG Program Off-System Bridge, Z240 - Surface Transportation Block Grant Program – FAST

CORRIDOR CAPACITY PRESERVATION

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

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Corridor Capacity Preservation	ROW	18,000.0	1,000.0	-	-	-1,000.0	-	-	-1,000.0	-	-	-1,000.0	-	-	-4,000.0	2,000.0
Total		18,000.0	1,000.0	-	-	-1,000.0	-	-	-1,000.0	-	-	-1,000.0	-	-	-4,000.0	2,000.0

INTERSECTION IMPROVEMENTS

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Intersection Improvements	Program	37,125.0	3,572.5	3,570.6	600.0	3,500.0	2,500.0	600.0	3,500.0	2,500.0	600.0	3,500.0	2,500.0	600.0	27,543.1	13,200.0
Total		37,125.0	3,572.5	3,570.6	600.0	3,500.0	2,500.0	600.0	3,500.0	2,500.0	600.0	3,500.0	2,500.0	600.0	27,543.1	13,200.0

Z240 - Surface Transportation Block Grant Program - FAST

RAIL CROSSING SAFETY

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Rail Crossing Safety	PD	711.0	9.0	81.0	-	9.0	81.0	-	9.0	81.0	-	9.0	81.0	-	360.0	180.0
	C	11,387.1	294.2	2,897.2	-	202.7	1,824.7	-	202.7	1,824.7	-	202.7	1,824.7	-	9,273.9	4,055.0
Statewide Railroad Rideability Program	C	400.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Utilities	5,500.0	100.0	-	-	100.0	-	-	100.0	-	-	100.0	-	-	400.0	200.0
Total		17,998.1	403.2	2,978.2	-	311.7	1,905.7	-	311.7	1,905.7	-	311.7	1,905.7	-	10,033.9	4,435.0

Rail Crossing Safety - ZS50,ZS40,LS5E - Elimination Of Hazards At Railway-Highway Crossings

RECREATIONAL TRAILS**DESCRIPTION:** Provides funding for Recreational Trails throughout Delaware.**JUSTIFICATION:** Develop recreational trails for transportation and recreation.

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



Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Recreational Trails	Program	11,682.4	-	1,601.3	250.0	-	1,000.0	250.0	-	1,000.0	250.0	-	905.7	226.4	5,483.4	2,264.2
Total		11,682.4	-	1,601.3	250.0	-	1,000.0	250.0	-	1,000.0	250.0	-	905.7	226.4	5,483.4	2,264.2

M940,Z940 - Recreational Trails Program (RTP)

SAFETY IMPROVEMENTS**DESCRIPTION:** Project includes:

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Hazard Elimination Program	Program Funding	19,722.6	398.4	3,835.4	-	244.4	2,200.0	-	244.4	2,200.0	-	244.4	2,200.0	-	11,567.1	4,888.9
High Risk Rural Roads Program	Program Funding	1,656.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Safety Program 80/20	C	9,750.0	-	-	-	450.0	1,800.0	-	500.0	2,000.0	-	500.0	2,000.0	-	7,250.0	5,000.0
Future Safety Program 90/10	ROW	888.9	-	-	-	88.9	800.0	-	-	-	-	-	-	-	888.9	-
	C	13,144.4	-	-	-	344.4	3,100.0	-	394.4	3,550.0	-	283.3	2,550.0	-	10,222.2	5,666.7
Section 154 Penalty Transfer (Sanction) Program	Program Funding	18,560.7	-	3,530.2	-	-	2,420.2	-	-	2,420.2	-	-	2,420.2	-	10,790.8	4,840.4
Total		63,723.1	398.4	7,365.6	0.0	1,127.7	10,320.2	0.0	1,138.8	10,170.2	0.0	1,027.7	9,170.2	0.0	40,719.0	20,396.0

Hazard Elimination Program - ZS30 - Highway Safety Improvement Program (HSIP)

High Risk Rural Roads Program - LS2E - Highway Safety Improvement Program (HSIP)

Future Safety Program 80/20 - ZS30 - Highway Safety Improvement Program (HSIP)

Future Safety Program 90/10- ZS30 - Highway Safety Improvement Program (HSIP)

Section 154 Penalty Transfer (Sanction) Program - ZS31 - Section 154 Penalties - Use for HSIP Activities

SIGNAGE AND PAVEMENT MARKINGS

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Signage and Pavement Markings	Program	30,458.0	4,700.0	1,812.5	-	4,700.0	1,282.5	-	4,700.0	1,282.5	-	4,700.0	1,282.5	-	24,460.1	11,965.0
Total		30,458.0	4,700.0	1,812.5	-	4,700.0	1,282.5	-	4,700.0	1,282.5	-	4,700.0	1,282.5	-	24,460.1	11,965.0

Z240 - Surface Transportation Block Grant Program - FAST

TECHNOLOGY

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

Project includes funds for:

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Disadvantaged Business Enterprise Supportive Services Program	Program Funding	1,309.7	-	125.0	-	-	125.0	-	-	125.0	-	-	125.0	-	500.0	250.0
DMV Mainframe Modernization Project FY2013	IT Development	19,000.0	4,900.0	-	-	1,000.0	-	-	-	-	-	-	-	-	5,900.0	-
Enterprise Document Management	Program Funding	2,492.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mileage Based User Fee	PD Procurement	290.0 2,110.0	- -	- 895.0	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- 895.0	- -
Information Technology Initiatives Program	Program Funding	60,600.0	14,000.0	-	-	12,800.0	-	-	13,000.0	-	-	13,500.0	-	-	53,300.0	27,800.0
On the Job Training / Supportive Services	Program Funding	821.5	-	100.0	-	-	100.0	-	-	100.0	-	-	100.0	-	400.0	200.0
Summer Transportation Institute Program	Program Funding	544.3	13.8	55.0	-	13.8	55.0	-	13.8	55.0	-	13.8	55.0	-	275.0	137.5
DMV Toll Equipment Upgrade	Program Funding	10,658.6	1,598.8	-	-	4,343.7	-	-	4,716.1	-	-	-	-	-	10,658.6	-
Total		97,827.0	20,512.6	1,175.0	0.0	18,157.5	280.0	0.0	17,729.9	280.0	0.0	13,513.8	280.0	0.0	71,928.6	28,387.5

Disadvantaged Business Enterprise Supportive Services Program - Z480 - Disadvantaged Business Enterprise Training (FAST)

On the Job Training / Supportive Services - M24E - Surface Transportation Program MAP-21 (STP), Z240 - Surface Transportation Block Grant Program - FAST

Summer Transportation Institute Program - M4SE - National Summer Transportation Institute Program (NSTI), Z49S - NSTI Program

TRAFFIC CALMING PROGRAM

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

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



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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	2018-2021 TOTAL	FY 22-23 TOTAL
Traffic Calming	Program	3,050.5	150.0	-	-	-150.0	-	-	-150.0	-	-	-150.0	-	-	600.0	300.0
Total		3,050.5	150.0	-	-	-150.0	-	-	-150.0	-	-	-150.0	-	-	600.0	300.0

TRANSPORTATION ALTERNATIVES PROGRAM - DELAWARE

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

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Transportation Alternatives Program (FHWA)	Program Funding	39,490.1	1,133.8	4,287.1	-	1,873.4	7,463.6	-	1,295.8	4,683.2	-	1,032.8	3,931.2	-	25,700.9	9,928.0
Transportation Alternatives Program (FTA)	Program Funding	-	40.0	160.0	-	40.0	160.0	-	40.0	160.0	-	40.0	160.0	-	800.0	400.0
Safe Routes to School	Program Funding	4,182.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		43,672.2	1,173.8	4,447.1	0.0	1,913.4	7,623.6	0.0	1,335.8	4,843.2	0.0	1,072.8	4,091.2	0.0	26,500.9	10,328.0

TAP - 5307 - Urbanized Area Formula Grant Program, Z302,Z303,Z300,Z301 - Transportation Alternative Program
 SRTS - LU2E - Safe Routes to School

TRANSPORTATION MANAGEMENT IMPROVEMENTS

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

- Safer Travel – New traffic control systems can reduce the number of vehicle stops, minimize changes in vehicle speeds, and improve traffic flow - all of which help reduce the number of accidents.
- Less Traffic Congestion – DelTrac reduces traffic jams and travel time by continuously monitoring current conditions and automatically adjusting traffic signals, freeway ramp access, lane use, and transit schedules in response to real-time demand. Less traffic congestion results in safer, less stressful driving conditions.
- Better Travel Information – At home, en route, or at work, travelers will have access to real-time, accurate information about transit, train, and flight schedules, roadway conditions, and other travel information via radio, kiosks, cable TV, internet access, and variable message signs on the bus or highway.
- Improved Multi-modal Coordination – With the help of better travel information, travelers can make better decisions as to mode choice. For example, if a traveler is aware that his or her regular route to work is congested, he or she may opt for taking transit that particular day. Schedule and fare information provided in real-time makes train and bus transfers more convenient. Transportation managers benefit as well, as they can maximize the system's efficiency by coordinating their activities across travel modes. For example, through the automatic vehicle locator system on buses, the TMC can provide buses traveling behind schedule with longer "green time" at signalized intersections to help them get back on schedule.
- Quicker Emergency Response – With monitoring equipment, the TMC may detect, verify, and respond more quickly to incidents on the state's transportation system. Together with its emergency response partners (i.e. Department of Public Safety, Volunteer Firemen's Association, and Department of Natural Resources and Environmental Control), the TMC can act to ensure that incidents are cleared more quickly, reducing congestion and increasing safety. In the future, travelers in need of aid can benefit from communication and information technology which, among other things, can automatically send "mayday signals" to dispatch centers so trained emergency staff may locate an incident more quickly. Cellular call-in programs such as #77 and motorist call boxes are also used to facilitate emergency responses.
- Improved Efficiency – DelTrac technology allows DelDOT to make more efficient use of its existing resources by automating functions, sharing real-time information, and improving safety. It also helps private companies through improved freight delivery. Consumers save money through more efficient travel.
- Variable Message and Speed Limit Signs: To promote safe driving conditions, the department will install variable message boards and variable speed signs on limited-access and heavily traveled roads (I-95, I-295, I-495 and SR 1) throughout the state. These signs will help notify motorists in the event of unsafe driving conditions as a result of excessive traffic, or on Ozone Action Days when speed limits will be reduced, as necessary, to improve air quality. A prototype has been operational along southbound SR 1 near Smyrna since July 2002.

TRANSPORTATION MANAGEMENT IMPROVEMENTS (Continued)

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Traffic Signal Revolving Fund Program	Traffic	1,544.4	125.0	-	-	125.0	-	-	125.0	-	-	125.0	-	-	500.0	250.0
MUTCD Compliance Program	Traffic	24,000.0	400.0	3,681.7	-	400.0	1,600.0	-	400.0	1,600.0	-	400.0	1,600.0	-	10,081.7	4,000.0
Rideshare Program / Trip Mitigation	Program Funding	3,660.0	-	421.4	90.0	-	360.0	90.0	-	360.0	90.0	-	384.0	96.0	1,891.4	960.0
Transportation Management Improvements	Program Funding	52,760.0	1,975.0	5,900.0	-	1,975.0	5,900.0	-	1,975.0	5,900.0	-	1,975.0	5,900.0	-	31,500.0	15,750.0
Total		81,964.4	2,500.0	10,003.1	90.0	2,500.0	7,860.0	90.0	2,500.0	7,860.0	90.0	2,500.0	7,884.0	96.0	43,973.1	20,960.0

MUTCD Compliance Program - Z001 - National Highway Performance Program (NHPP)

Rideshare Program / Trip Mitigation - Z400,M40E - Congestion Mitigation And Air Quality Improvement Program (CMAQ)

Transportation Management Improvements - Z240 - Surface Transportation Block Grant Program – FAST, Z400 - Congestion Mitigation and Air Quality Improvement Program (CMAQ)

ENGINEERING AND CONTINGENCIES

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Engineering and Contingency	Program Funding	205,855.0	31,000.0	-	-	29,845.0	-	-	29,845.0	-	-	29,845.0	-	-	120,535.0	59,690.0
Environmental Improvements	Planning	4,718.5	560.0	18.0	-	545.0	18.0	-	545.0	18.0	-	545.0	18.0	-	2,267.0	1,126.0
Education and Training	Audit	1,600.0	-	302.7	-	-	200.0	-	-	200.0	-	-	200.0	-	902.7	400.0
Total		212,173.5	31,560.0	320.7	0.0	30,390.0	218.0	0.0	30,390.0	218.0	0.0	30,390.0	218.0	0.0	123,704.7	61,216.0

Environmental Improvements - Z240 - Surface Transportation Block Grant Program - FAST

Education and Training - M439 - Training and Education, Z240 - Surface Transportation Block Grant Program - FAST

PLANNING

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

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

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

Project Title (\$s x 1,000)	Phase	Current Estimate	FY18 State	FY18 Fed	FY18 Other	FY19 State	FY19 Fed	FY19 Other	FY20 State	FY20 Fed	FY20 Other	FY21 State	FY21 Fed	FY21 Other	FY 2018-2021 TOTAL	FY 22-23 TOTAL
Scenic Byways	Program Funding	1,918.8	127.2	445.0	-	-	-	-	-	-	-	-	-	-	572.2	-
Industrial Streets	Program Funding	500.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal Land Access Program	Program Funding	180.0	6.0	24.0	-	6.0	24.0	-	6.0	24.0	-	6.0	24.0	-	120.0	60.0
Local Transportation Assistance Program	Program Funding	2,641.3	150.0	150.0	-	150.0	150.0	-	150.0	150.0	-	150.0	150.0	-	1,200.0	600.0
Metropolitan Planning Organization / FHWA/FTA	Program Funding	20,482.2	570.2	2,280.7	-	473.0	1,892.1	-	592.0	2,367.8	-	592.0	2,367.8	-	11,135.5	5,919.5
Pedestrian ADA Accessibility	Program Funding	18,000.0	3,701.0	-	-	3,040.0	-	-	3,000.0	-	-	3,000.0	-	-	12,741.0	6,000.0
Planning Program Development	Program Funding	14,780.0	2,000.0	-	-	2,000.0	-	-	2,000.0	-	-	2,000.0	-	-	8,000.0	4,000.0
Rural Technical Assistance Program	Program Funding	625.6	19.5	128.3	-	-	87.7	-	-	87.7	-	-	87.7	-	410.8	175.3
Statewide Planning & Research Program / FHWA	Program Funding	26,070.4	876.2	3,504.8	-	896.0	3,583.9	-	896.0	3,583.9	-	917.4	3,669.7	-	17,928.0	9,174.4
Statewide Planning & Research Program / FTA	Planning	994.4	28.1	112.4	-	28.1	112.4	-	28.1	112.4	-	28.1	112.4	-	561.9	281.0
Truck Weigh Enforcement	Program Funding	3,160.0	645.0	-	-	645.0	-	-	645.0	-	-	645.0	-	-	2,580.0	1,290.0
University Research Program	Program Funding	2,000.0	250.0	-	-	250.0	-	-	250.0	-	-	250.0	-	-	1,000.0	500.0
Total		91,352.7	8,373.2	6,645.2	0.0	7,488.1	5,850.1	0.0	7,567.1	6,325.8	0.0	7,588.5	6,411.6	0.0	56,249.4	28,000.2

Federal Land Access Program - TBD1 - Funds to be determined

Local Transportation Assistance Program - M438 - Local Technical Assistance Program (LTAP) MAP-21, Z438 - Training and Education (FAST Act)

Metropolitan Planning Organization / FHWA - M45E,Z450 - Metropolitan Planning Funds

Metropolitan Planning Organization / FTA - M77D - FTA to FHWA Sec 5303 Metro Planning

Rural Technical Assistance Program - 5311 - Rural Transit Assistance Program (5311(b)(3))/Formula Grants for Other than Urbanized Areas (5311)

Statewide Planning & Research Program/ FHWA - Z560,Z550 - State Planning And Research (SPR)

Statewide Planning & Research Program / FTA- M77F - FTA to FHWA Sec 5304 Statewide & Non-Metro Planning