

NTTA SYSTEM

FY2022 - FY2026

Five-Year Capital Plan



DNT Frontage Road
Placing concrete for bridge near Little Elm Creek

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READERS' ROADMAP

This Readers' Roadmap is a guide to help navigate through the North Texas Tollway Authority's FY2022 - FY2026 Five-Year Capital Plan. The roadmap is designed to give the NTTA Board of Directors, bondholders, elected officials, stakeholders, the public and staff a detailed look at expected capital spending. The FY2022 - FY2026 Five-Year Capital Plan is divided into five sections; footnotes and page references are used to direct the reader to other sections of the document for additional detail and explanation.

CAPITAL PLAN OVERVIEW

This section contains a map of NTTA roadways, an introduction and background for the Capital Plan, documents that feature the types of projects and funding, a long-term financial plan with expected revenues and expenses and a schedule showing expected costs by project type. The section also contains a graphic representation of the flow of funds and other informational graphs.

PROJECT SECTIONS

Projects are grouped into the categories below:

1. **Reserve Maintenance**
2. **Capital Improvement**

Each category section has the following documents:

1. **Project Description and Summary** – Major project description and summary include a map outlining the project area.
2. **Project Listing** – List of all projects showing the responsible department, project number and name, current year estimated costs and the budgeted amounts for the next five years.
3. **Project Detail Form** – The form shows the department that will manage the project, the project type, project partners, total project and prior years cost, a brief description and justification for the project, the budgeted amounts and operating budget impact. Projects that are budgeted on an annual basis are identified on the Total Project Cost area as Annual Budget.

APPENDICES

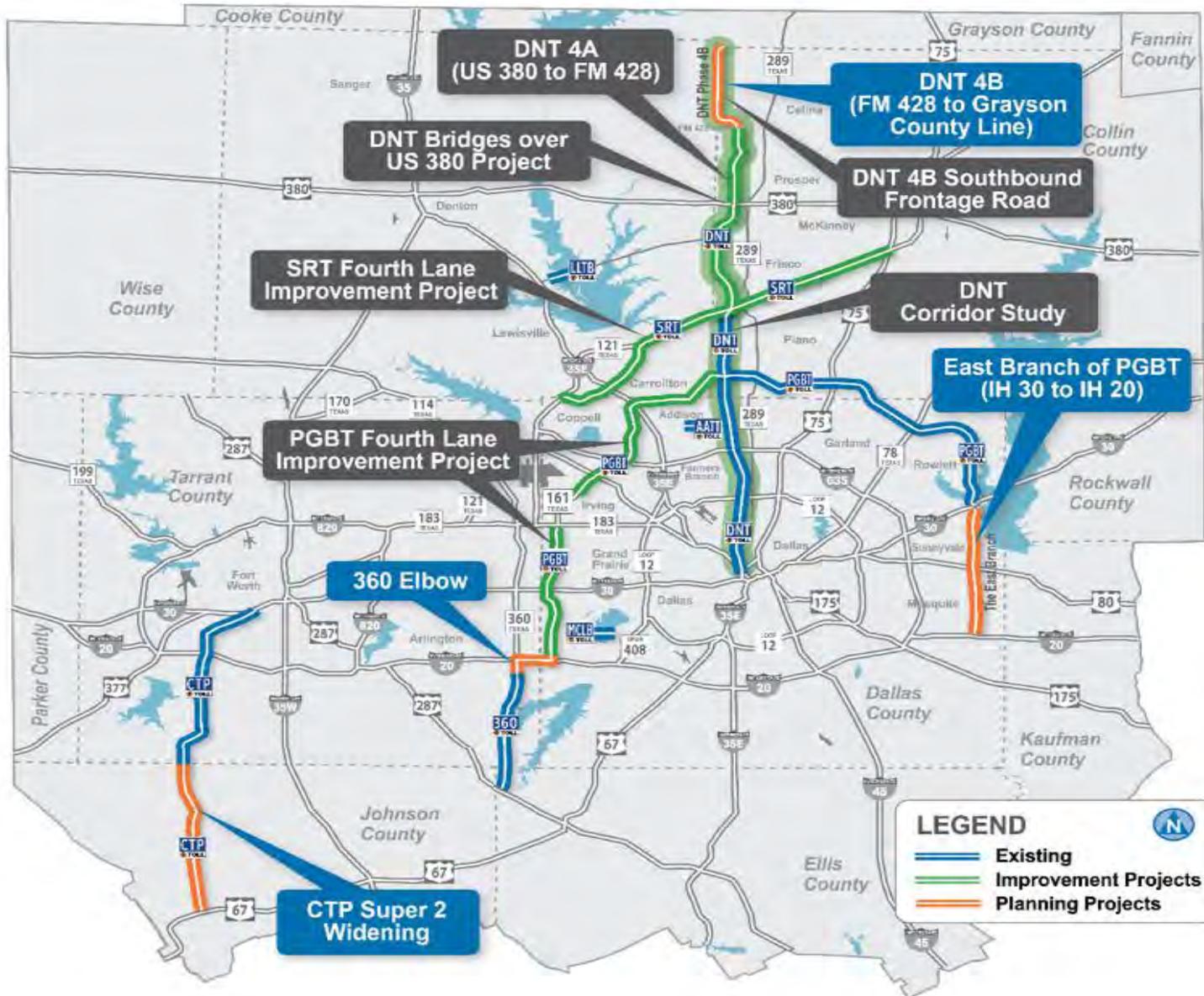
The last section contains an index that references each project name and associated page number. Also included is the Capital Plan process and documents describing the Capital Plan calendar, the major revenue sources, outstanding debt service and estimated operating expenditures.

CAPITAL PLAN OVERVIEW



DNT over US 380
Setting southbound main lane beams

Facility Map of the North Texas Region



Introduction and Overview

INTRODUCTION

The North Texas Tollway Authority's (NTTA or the Authority) Five-Year Capital Plan (NTTA Capital Plan) is developed to plan for the maintenance, renewal, improvement and/or replacement of capital assets. The NTTA System (System) facilities are the Dallas North Tollway (DNT), President George Bush Turnpike (PGBT), Sam Rayburn Tollway (SRT), Addison Airport Toll Tunnel (AATT), Lewisville Lake Toll Bridge (LLTB), Mountain Creek Lake Bridge (MCLB), 360 Tollway (360T) and Chisholm Trail Parkway (CTP).

The NTTA Capital Plan includes current year estimated expenditures approved through the annual budget process and estimates for the five subsequent years to be used for planning purposes only. The subsequent years are re-evaluated, updated and/or extended as part of the annual budget process. As a multi-year planning tool, the NTTA Capital Plan is comprised of projects continued from previous years and projects being initiated within the next five years.

The NTTA Capital Plan is adopted annually by the NTTA Board of Directors. The projects listed in the NTTA Capital Plan and projected expenditures do not constitute a firm commitment by the Authority to fund the project.

LONG-TERM FINANCIAL PLANS

Three major factors inform NTTA's long-term financial plans: traffic and revenue estimates provided by independent traffic and revenue engineers, estimated maintenance expenses provided by the independent general engineering consultant and system net debt service. Cost estimates are generated during the initial feasibility study phase and are updated as projects are developed.

The guiding principles used to update the NTTA Capital Plan are the Authority's goal to maintain a 1.50 times debt service coverage and the desire to pay for projects with available funds. Priority is given to projects associated with safety and revenue enhancement.

A. Revenue Fund

Estimated total revenue over the next five years is \$5.6 billion. Approximately \$5.3 billion or 94.2% of total revenue is based on projections provided by the traffic and revenue engineers (see Major Revenue Source, pages 130-133). Approximately \$0.3 billion or 5.8% of total revenue is estimated by the Authority and includes ZipCash late fees and estimated interest earnings on projected cash balances. Total revenue growth is projected to average 7.8% per year from FY2022 through FY2026. All NTTA revenues on deposit in the Revenue Fund must be distributed to the other funds in accordance with the Amended and Restated Trust Agreement with Supplements (Trust Agreement). (See Revenue Distribution, pages 131-133).

Introduction and Overview (continued)

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five-Year Totals FY2022 - FY2026
REVENUE FUND							
Estimated Beginning Available Cash Balance	-	-	-	-	-	-	-
INFLOWS							
Estimated Toll Revenues	\$ 813,901,219	\$ 910,127,400	\$ 994,356,600	\$ 1,060,613,200	\$ 1,115,259,500	\$ 1,173,169,200	\$ 5,253,525,900
Estimated Other Revenues	40,920,150	49,243,150	64,183,527	67,538,670	68,985,324	71,200,647	321,151,318
TOTAL INFLOWS	854,821,369	959,370,550	1,058,540,127	1,128,151,870	1,184,244,824	1,244,369,847	5,574,677,218
Estimated Ending Available Cash Balance	-	-	-	-	-	-	-
Total Revenues Available for Operations	\$ 854,821,369	\$ 959,370,550	\$ 1,058,540,127	\$ 1,128,151,870	\$ 1,184,244,824	\$ 1,244,369,847	\$ 5,574,677,218

B. Operation and Maintenance (O&M)

O&M expenses for the next five years are estimated at \$1.0 billion. These funds are required to run the day-to-day operations of the Authority.

According to the Trust Agreement, revenues must be transferred to the O&M Fund to cover expenses and maintain a reserve balance (see Revenue Distribution, page 131, and Cash Balances, page 126). A projected \$1.0 billion for O&M expense and reserve will be transferred from the Revenue Fund to the O&M Fund.

The estimated operating expenses for FY2022 are prepared by the individual departments and are expected to increase an average of 3.0% per year between FY2022 and FY2026. (See Appendix F page 135)

Introduction and Overview (continued)

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five-Year Totals FY2022 - FY2026
Total Revenues Available for Operations	\$ 854,821,369	\$ 959,370,550	\$ 1,058,540,127	\$ 1,128,151,870	\$ 1,184,244,824	\$ 1,244,369,847	\$ 5,574,677,218
OPERATION AND MAINTENANCE FUND							
Estimated Beginning Available Cash Balance	51,858,086	30,013,825	32,685,234	33,665,791	34,675,764	35,716,037	30,013,825
INFLOWS							
Transfer from Revenue Fund	158,238,690	198,782,810	202,975,301	209,064,560	215,336,497	221,796,592	1,047,955,760
Inter-Fund Transfers	-	-	-	-	-	-	-
TOTAL INFLOWS	158,238,690	198,782,810	202,975,301	209,064,560	215,336,497	221,796,592	1,047,955,760
OUTFLOWS							
Estimated Operating Expenses	(180,082,951)	(196,111,402)	(201,994,744)	(208,054,586)	(214,296,224)	(220,725,111)	(1,041,182,067)
TOTAL OUTFLOWS	(180,082,951)	(196,111,402)	(201,994,744)	(208,054,586)	(214,296,224)	(220,725,111)	(1,041,182,067)
Estimated Ending Available Cash Balance	30,013,825	32,685,234	33,665,791	34,675,764	35,716,037	36,787,518	36,787,518
Net Revenues Available for Debt Service	\$ 696,582,679	\$ 760,587,740	\$ 855,564,826	\$ 919,087,310	\$ 968,908,327	\$ 1,022,573,255	\$ 4,526,721,458

C. Debt Service Fund

In order to fund NTTA System expansions and capital improvements, NTTA has previously issued 1st and 2nd Tier debt. NTTA maintains Debt Service Funds to pay these debt obligations. Over the next five years, principal and interest requirements total \$3.4 billion. Payments for 1st and 2nd tier debt total \$3.3 billion which is funded from the Revenue Fund (see Revenue Distribution, page 133). Additionally, the System assisted with the financing of the construction of the CTP through subordinated debt and the construction of the PGBT through an ISTEAL loan. The subordinated debt payments total \$43.2 million and ISTEAL loan payments total \$76.6 million for the next five years. While the subordinated debt and ISTEAL loan represent a portion of the NTTA System's indebtedness, they are not funded from the Net Revenues Available for Debt Service Fund but instead from the Capital Improvement Fund

The Trust Agreement requires a 1st tier debt service coverage (net revenues divided by net debt service) of 1.35 times. The Board of Directors adopted a more aggressive target of 1.50 times. The debt service coverage ranges from a low of 1.97 in FY2022 to a high of 2.11 in FY2026. (See page 11)

Introduction and Overview (continued)

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five-Year Totals FY2022 - FY2026
Net Revenues Available for Debt Service	\$ 696,582,679	\$ 760,587,740	\$ 855,564,826	\$ 919,087,310	\$ 968,908,327	\$ 1,022,573,255	\$ 4,526,721,458
DEBT SERVICE FUNDS							
Estimated Beginning Available Cash Balance	-	-	-	-	-	-	-
INFLOWS							
Transfer from Capital Improvement Fund	21,226,759.47	23,955,023	23,953,728	23,958,839	23,963,948	23,962,929	119,794,467
Transfer from Revenue Fund	507,171,407	588,603,067	638,518,917	681,701,585	681,704,999	681,698,798	3,272,227,366
TOTAL INFLOWS	528,398,166	612,558,090	662,472,645	705,660,424	705,668,947	705,661,727	3,392,021,833
OUTFLOWS							
1st Tier Debt Service	(361,995,324)	(386,275,404)	(426,250,905)	(447,551,323)	(478,351,737)	(484,103,285)	(2,222,532,653)
2nd Tier Debt Service	(145,176,083)	(202,327,663)	(212,268,013)	(234,150,263)	(203,353,263)	(197,595,513)	(1,049,694,713)
3rd Tier Debt Service	-	-	-	-	-	-	-
Total Debt Service	(507,171,407)	(588,603,067)	(638,518,917)	(681,701,585)	(681,704,999)	(681,698,798)	(3,272,227,366)
Capital Improvement Fund - Subordinate Debt	(3,962,140)	(8,632,627)	(8,631,332)	(8,636,443)	(8,641,552)	(8,640,533)	(43,182,487)
Capital Improvement Fund - Commercial Paper	(1,055,443)	-	-	-	-	-	-
Capital Improvement Fund - Revolving Note	(886,780)	-	-	-	-	-	-
Capital Improvement Fund - ISTEAL Loan	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(76,611,980)
TOTAL OUTFLOWS	(528,398,166)	(612,558,090)	(662,472,645)	(705,660,424)	(705,668,947)	(705,661,727)	(3,392,021,833)
Estimated Ending Available Cash Balance	-	-	-	-	-	-	-
Net Revenues Available for Major Maintenance Projects	\$ 189,411,272	\$ 171,984,673	\$ 217,045,909	\$ 237,385,725	\$ 287,203,328	\$ 340,874,458	\$ 1,254,494,092
First Tier Debt Service Coverage	1.92	1.97	2.01	2.05	2.03	2.11	2.04
First & Second Tier Debt Service Coverage	1.37	1.29	1.34	1.35	1.42	1.50	1.38
All Debt Service Coverage	1.32	1.24	1.29	1.30	1.37	1.45	1.33
CIF Subordinated Debt Coverage	1.34	1.26	1.22	1.22	1.29	1.31	1.35

D. Reserve Maintenance Fund

This is the Authority's long-term plan for the renewal and replacement of capital assets. The Authority elected to use the Governmental Accounting Standards Board (GASB) 34 Modified Approach to account for the maintenance of infrastructure assets. As required by the Trust Agreement, an annual inspection of the Authority's roadways is conducted by the general engineering consultant. This inspection provides an assessment of conditions of all Authority infrastructure assets (roadways, bridges and facilities). The assessment of conditions is made by visual and mechanical tests designed to reveal any condition that would reduce user benefits below the set minimum level of service. The Authority's goal is to maintain the infrastructure assets at a rating of eight or better (1 to 10 scale).

Introduction and Overview (continued)

These condition levels were adopted by the Board of Directors Resolution No. 02-31 on June 19, 2002; and further clarified by Resolution No. 07-169 on December 19, 2007. The roads are maintained at the Authority's level in order to enhance the customers' driving experience.

The Reserve Maintenance Fund estimate for FY2022 through FY2026 is \$317.4 million, an average of \$63.5 million per year. This estimate is composed of \$297.1 million of project costs (see Reserve Maintenance Projects, pages 23-42) and \$20.4 million for professional fees and allocated overhead costs.

The Reserve Maintenance Fund is funded from the Revenue Fund. Similar to the O&M Fund, the Trust Agreement requires a transfer be made to cover maintenance expenditures and maintain a required fund balance of \$5.0 million (see Revenue Distribution, page 131, and Cash Balances, page 126).

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five-Year Totals FY2022 - FY2026
Net Revenues Available for Reserve Maintenance Projects	\$ 189,411,272	\$ 171,984,673	\$ 217,045,909	\$ 237,385,725	\$ 287,203,328	\$ 340,874,458	\$ 1,254,494,092
RESERVE MAINTENANCE FUND							
Estimated Beginning Available Cash Balance	56,279,961	33,872,275	-	-	-	-	33,872,275
INFLOWS							
Transfer from Revenue Fund	5,873,204	29,500,995	65,177,372	63,147,995	62,447,788	63,300,193	283,574,343
TOTAL INFLOWS	5,873,204	29,500,995	65,177,372	63,147,995	62,447,788	63,300,193	283,574,343
OUTFLOWS							
RMF Project Expenses	(26,907,082)	(59,922,461)	(61,436,554)	(58,913,668)	(58,062,776)	(58,756,962)	(297,092,421)
RMF Professional Fees and Other Expenses	(1,373,808)	(3,450,809)	(3,740,818)	(4,234,327)	(4,385,012)	(4,543,231)	(20,354,197)
RMF Salaries/Wages	-	-	-	-	-	-	-
TOTAL OUTFLOWS	(28,280,890)	(63,373,270)	(65,177,372)	(63,147,995)	(62,447,788)	(63,300,193)	(317,446,618)
Estimated Ending Available Cash Balance	33,872,275	-	-	-	-	-	-
RMF Reserve Account							
Estimated Ending Cash Balance/RMF Reserve	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Net Revenues Available for Capital Improvement Projects	\$ 183,538,068	\$ 142,483,678	\$ 151,868,537	\$ 174,237,730	\$ 224,755,540	\$ 277,574,265	\$ 970,919,749

Introduction and Overview (continued)

E. Capital Improvement Fund

The Capital Improvement Fund (CIF) accounts for the Authority's long-term expansions, improvements, reconstructions and replacements to the NTTA System. Over the next five years, capital improvement projects total \$1.3 billion, which is comprised of \$1.26 billion in project costs (see Capital Improvement Projects, pages 45-121) and \$8.1 million in professional fees. The projects listed for FY2022 to FY2026 have been approved by executive management through the capital plan process (see Capital Plan process, pages 126-128). Funds for the CIF flow from the Revenue Fund to the extent there are excess revenues (see Revenue Distribution, page 133). The estimated contribution to CIF over the next five years is \$1.0 billion. Additionally, the Authority may issue bonds or commercial paper to finance capital improvement projects in FY2026. The FY2022 – FY2026 Capital Plan contains \$43.2 million for subordinated debt and \$76.6 million for ISTEPA loan payments. The Authority's executive management anticipates establishing an \$87.5 million Rainy Day Fund by 2022. (see Cash Balance, pages 14 and 126).

Introduction and Overview (continued)

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five-Year Totals FY2022 - FY2026
Net Revenues Available for Capital Improvement Projects	\$ 183,538,068	\$ 142,483,678	\$ 151,868,537	\$ 174,237,730	\$ 224,755,540	\$ 277,574,265	\$ 970,919,749
CAPITAL IMPROVEMENT FUND							
Estimated Beginning CIF Cash Balance Available for Projects	688,414,272	505,860,293	471,763,224	404,823,769	293,949,539	195,708,429	505,860,293
INFLOWS							
Transfer from Revenue Fund	183,538,068	142,483,678	151,868,537	174,237,730	224,755,540	277,574,265	970,919,749
Commercial Paper/Revolving Note Issuance	-	-	-	-	-	-	-
Legal Settlement	-	-	-	-	-	-	-
Reimbursement from Prosper - US 380	-	8,000,000	-	-	-	-	8,000,000
Denton County ILA - DNT Phase 4B	14,057,605	9,442,395	-	-	-	-	9,442,395
Transfer from Construction Funds (Remaining Bond Proceeds)	-	-	-	-	-	-	-
Reimbursement from TxDOT - SH 360	-	-	-	-	-	-	-
Transfer from Rainy Day Fund	-	-	-	-	-	-	-
NET INFLOWS AVAILABLE FOR CIF EXPENSES	197,595,673	159,926,073	151,868,537	174,237,730	224,755,540	277,574,265	988,362,144
OUTFLOWS							
Commercial Paper/Revolving Note Payment	(100,000,000)	-	-	-	-	-	-
CIF Project Expenses	(145,790,164)	(155,733,898)	(193,520,044)	(259,318,902)	(297,698,481)	(350,689,450)	(1,256,960,775)
CIF Consulting/Professional Fees	(1,245,205)	(1,834,220)	(1,334,220)	(1,834,220)	(1,334,220)	(1,803,440)	(8,140,320)
CIF Salaries/Wages	-	-	-	-	-	-	-
Transfer to Debt Service Funds	(15,567,830)	-	-	-	-	-	-
Transfer to NTTA System Construction Funds	-	-	-	-	-	-	-
Transfer to CIF Bond Payment Account	(27,224,057)	(8,632,627)	(8,631,332)	(8,636,443)	(8,641,552)	(8,640,533)	(43,182,487)
Transfer to Debt Service Fund for ISTEPA Payment	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(76,611,980)
Transfer to CIF Rainy Day Fund Account	(75,000,000)	(12,500,000)	-	-	-	-	(12,500,000)
TOTAL OUTFLOWS	(380,149,652)	(194,023,141)	(218,807,992)	(285,111,961)	(322,996,649)	(376,455,819)	(1,397,395,562)
Estimated Ending CIF Cash Balance Available for Projects	505,860,293	471,763,224	404,823,769	293,949,539	195,708,429	96,826,874	96,826,874
CIF Bond Payment Account							
Estimated Beginning CIF Bond Payment Account Cash Balance	8,632,627	14,629,925	14,629,925	14,629,925	14,629,925	14,629,925	14,629,925
Transfers from CIF Cash Account	27,224,057	8,632,627	8,631,332	8,636,443	8,641,552	8,640,533	43,182,487
Transfer to Debt Service Fund for CIF Subordinated Debt Payment	(21,226,759)	(8,632,627)	(8,631,332)	(8,636,443)	(8,641,552)	(8,640,533)	(43,182,487)
Estimated Ending CIF Bond Payment Account Cash Balance	14,629,925	14,629,925	14,629,925	14,629,925	14,629,925	14,629,925	14,629,925
CIF Rainy Day Fund Account							
Estimated Beginning CIF Rainy Day Fund Account Cash Balance	-	75,000,000	87,500,000	87,500,000	87,500,000	87,500,000	75,000,000
Transfers from CIF Cash Account	75,000,000	12,500,000	-	-	-	-	12,500,000
Transfers to CIF Cash Account	-	-	-	-	-	-	-
Estimated Ending CIF Rainy Day Fund Account Cash Balance	75,000,000	87,500,000	87,500,000	87,500,000	87,500,000	87,500,000	87,500,000
Estimated Ending Total CIF Cash Balances	\$ 595,490,217	\$ 573,893,149	\$ 506,953,694	\$ 396,079,463	\$ 297,838,354	\$ 198,956,799	\$ 198,956,799

Project Types & Funding Sources

RESERVE MAINTENANCE PROJECTS

Projects included in this category are maintenance projects that do not recur on an annual or more frequent basis. These are projects required to maintain the system assets at an agency approved level; emergency repairs to maintain safety or prevent loss of revenue; and, for replacement or additional fleet and equipment. Additional projects include the replacement or purchase of additional computer equipment (including software) and replacement of All-Electronic and communication equipment. Funding for these projects comes from the remaining revenues available after Operation and Maintenance (O&M) costs and debt service obligations have been satisfied.

CAPITAL IMPROVEMENT PROJECTS

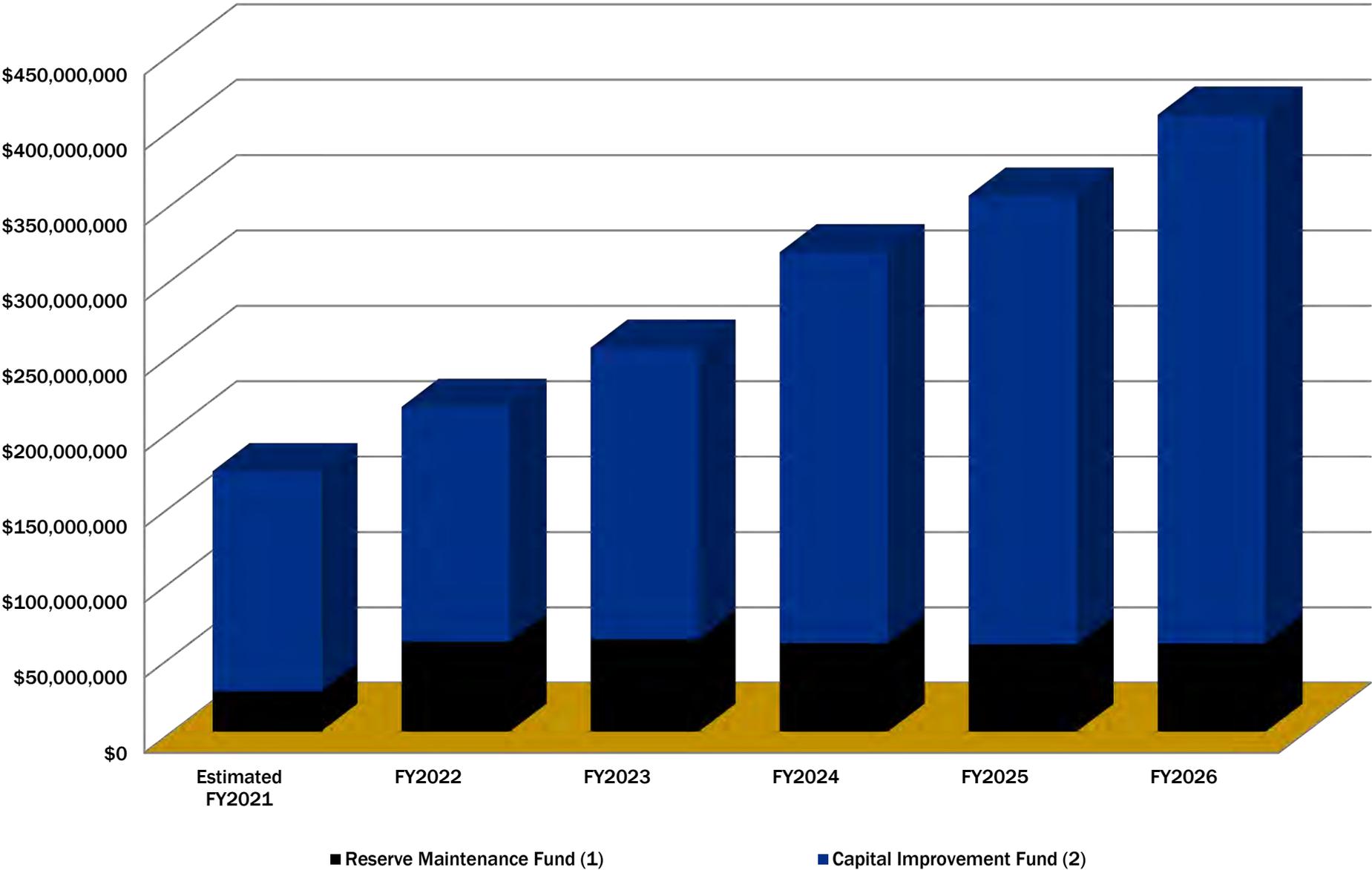
Projects included in this category are large, nonrecurring items that increase toll revenue; improve safety, increase capacity or efficiency of the system. These projects are new roadway construction, existing roadway expansions, improvements and/or reconstruction and major emergency repairs. In addition, projects with capital expenses unrelated to new road construction and/or maintenance are included here such as purchasing and implementing new systems, software and enhancements of existing system. Funding for these projects comes from the remaining annual revenues available after O&M costs, debt service and reserve maintenance costs have been satisfied. In some cases, the Authority may issue debt for capital improvement projects.

**FY2022 - FY2026 CAPITAL PLAN
SUMMARY PROJECT COSTS BY FUND**

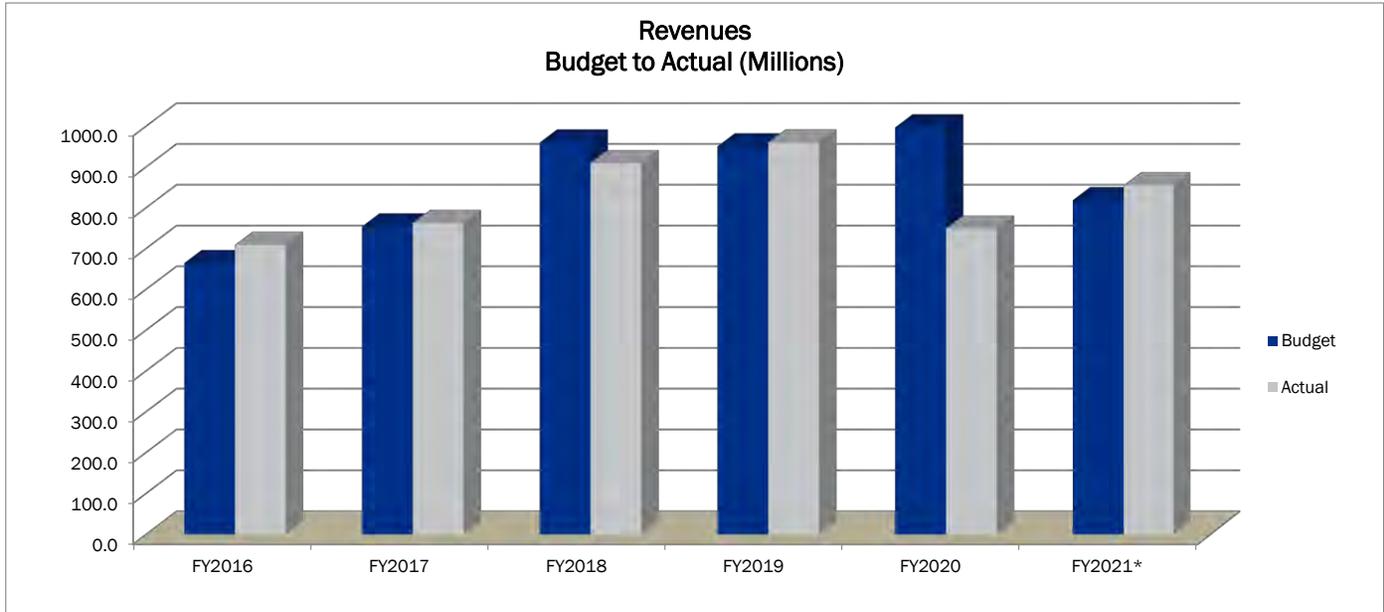
Project Type	Estimated FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five Year Total FY2022 - FY2026
Reserve Maintenance Fund (1)	\$26,907,082	\$59,922,461	\$61,436,554	\$58,913,668	\$58,062,776	\$58,756,962	\$297,092,421
Capital Improvement Fund (2)	146,072,424	155,733,898	193,520,044	259,318,902	297,698,481	350,689,450	1,256,960,775
Totals	\$172,979,506	\$215,656,359	\$254,956,598	\$318,232,570	\$355,761,257	\$409,446,412	\$1,554,053,196

Report contains only project costs.
 (1) List of projects see page 24-25.
 (2) List of projects see pages 54-56.

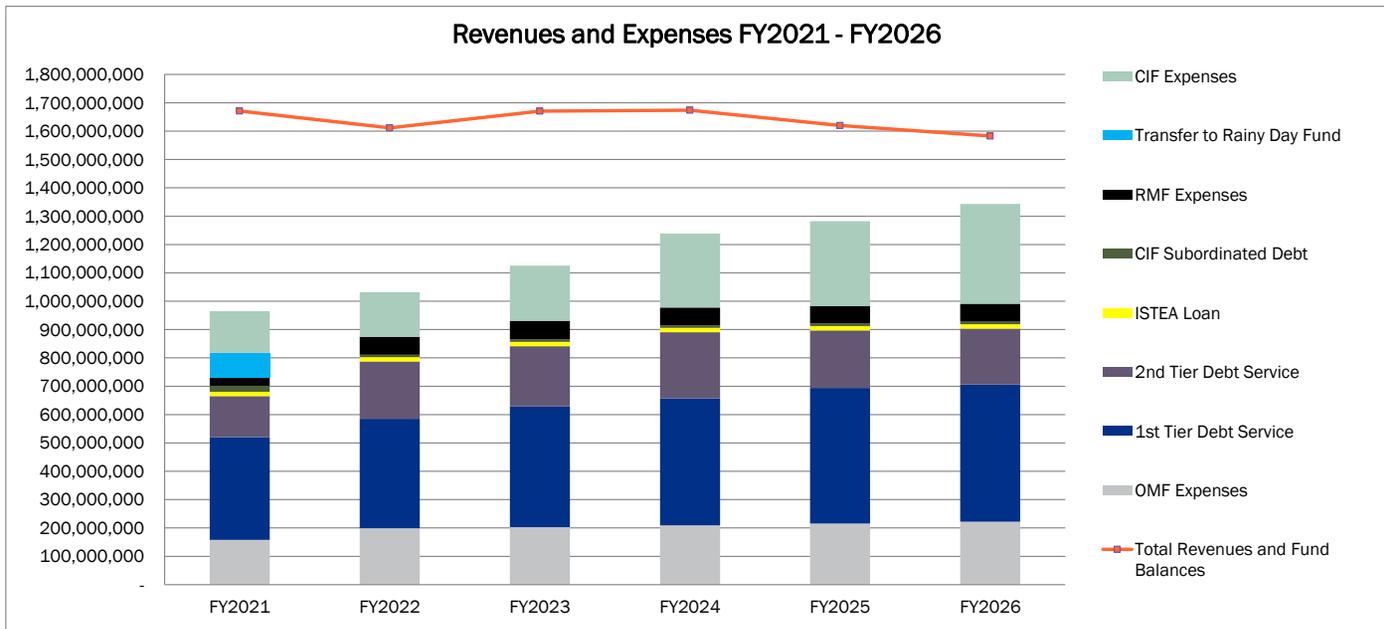
Capital Plan Costs by Fund



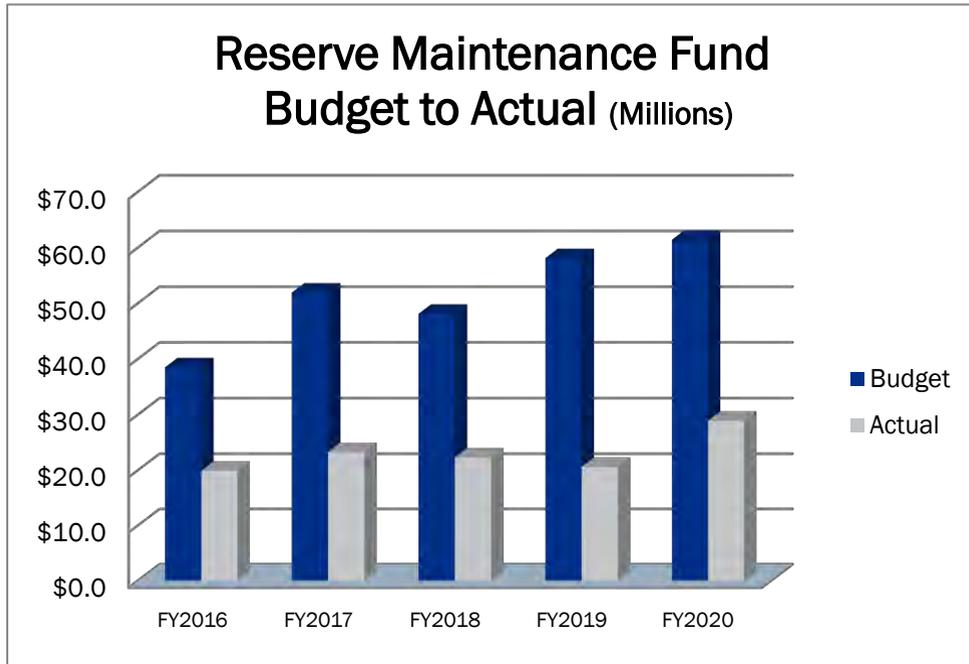
Informational Graphs



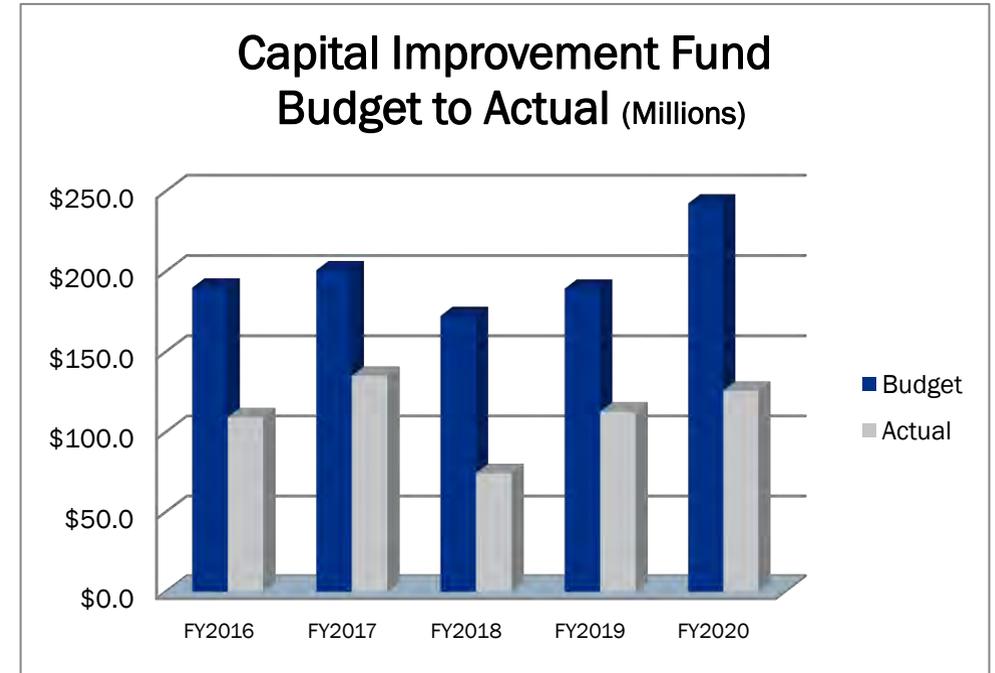
*Actual amount for FY2021 is based on estimates provided by CDM Smith, Inc.



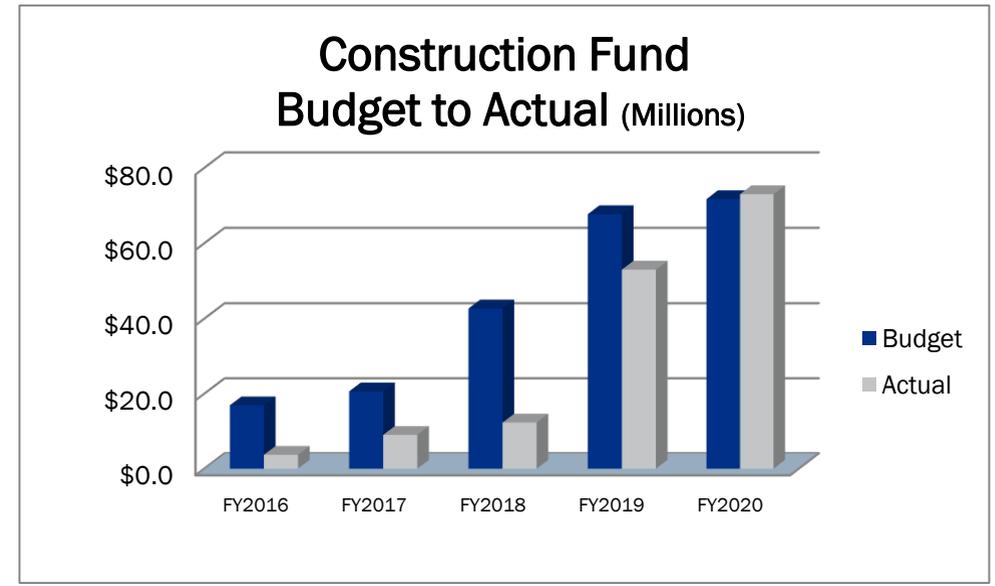
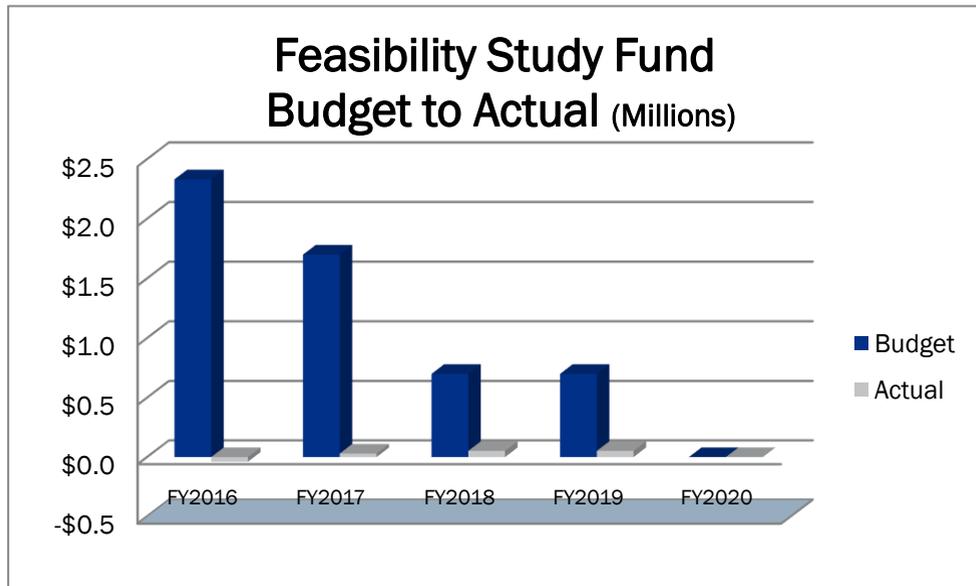
Historical Informational Graphs



RMF Projects re-evaluated and prioritized throughout the year

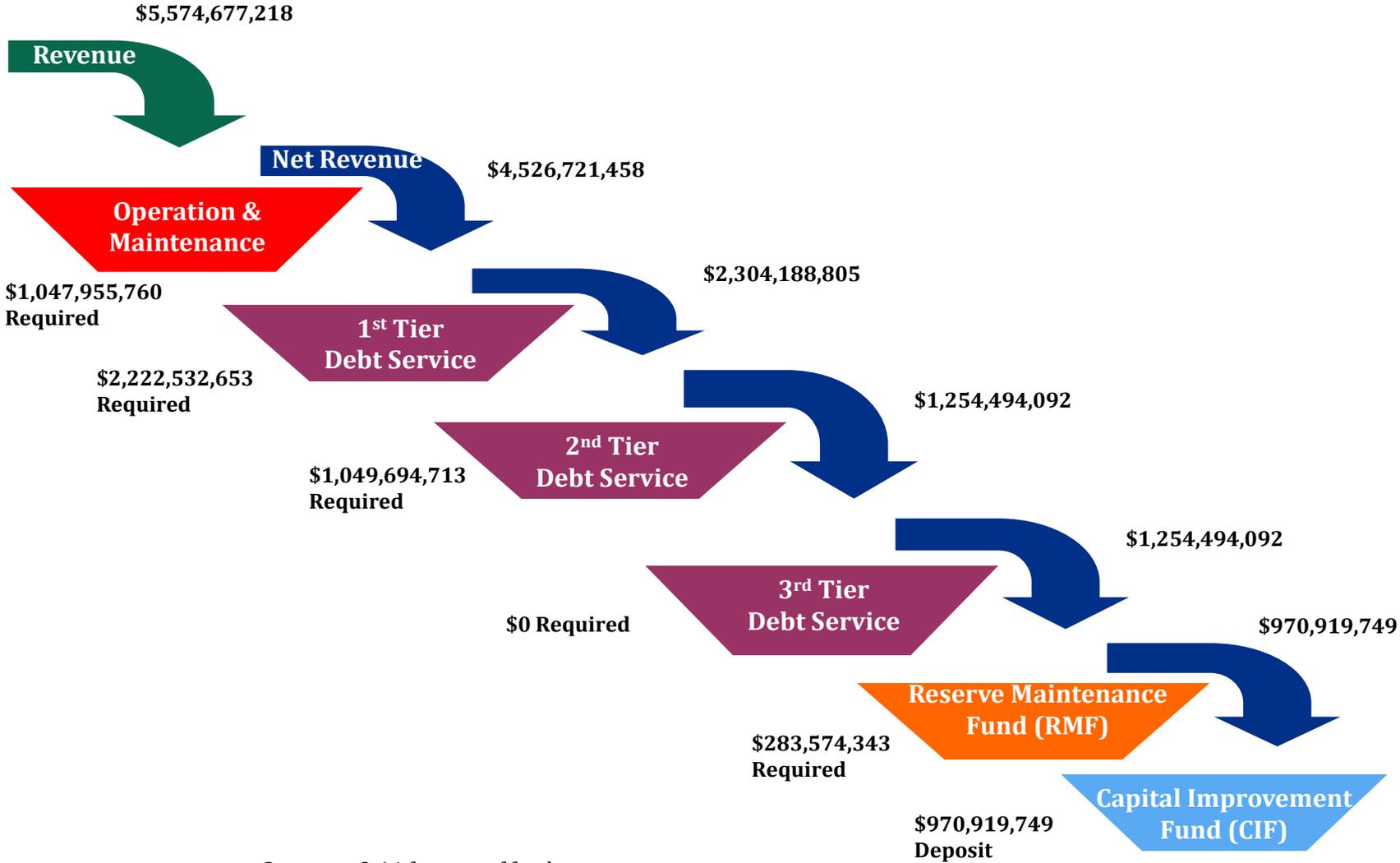


CIF Projects re-evaluated and prioritized throughout the year



All construction projects coming to completion

NTTA System Flow of Funds FY2022 - FY2026



See pages 8-14 for uses of funds.

RESERVE MAINTENANCE PROJECTS



DNT 4B Frontage Road
Drainage culvert installation

Reserve Maintenance Projects

Reserve maintenance projects include repairs and maintenance, painting, renewals, replacements, improvements and other projects necessary for the safe or efficient operation of NTTA toll roads or to prevent loss of revenues. These projects are not typically included as part of the normal, day-to-day operations, but should be viewed as part of the overall long-term maintenance of NTTA assets.

Projects include, but are not limited to the following:

ANNUAL ASSET CONDITION INSPECTION

An inspection of NTTA assets is performed annually to assist in identifying potential maintenance projects. This allows staff to properly allocate funds during the annual budgeting process. It also allows staff to plan for future major maintenance expenditures. The Capital Plan includes \$11.3 million for this category over the next five years.

SYSTEM-WIDE MAINTENANCE PROJECTS (ROADWAY, BRIDGES, BUILDINGS, WALLS AND OTHER ASSETS)

NTTA has chosen to maintain all of its long-term assets at an approved performance level. Each year after the annual asset condition inspection is completed by the general engineering consultant; individual projects are prioritized and then selected for inclusion into the following fiscal year budget. The Capital Plan includes \$203.3 million for this category over the next five years.

FLEET AND EQUIPMENT PURCHASES / ADDITIONAL & REPLACEMENTS

NTTA purchases additional fleet vehicles and equipment in proportion to any increases in lane miles. NTTA replaces fleet vehicles and equipment at specific intervals based on useful life and necessity. Once purchased, fleet vehicles and equipment used primarily for ongoing operations and maintenance. The Capital Plan includes \$18.1 million for this category over the next five years.

HARDWARE/SOFTWARE REPLACEMENTS AND UPGRADES

NTTA purchases and replaces hardware/software at specific intervals based on useful life and necessity. Once implemented, the hardware/software are primarily used for ongoing operations and maintenance. The Five-Year Capital Plan includes \$64.3 million for this category.



Reserve Maintenance Fund - (1201) - Project List FY2022 - FY2026 CAPITAL PLAN

Department	Project	Estimated FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five Year Total FY2022 - FY2026
Information Technology - (20111)	1000431 - IT Roadway Systems (1)	\$7,969,130	\$6,000,000	\$5,000,000	\$4,000,000	\$3,000,000	\$3,000,000	\$21,000,000
Information Technology - (20111)	1000825 - Server Hardware Upgrades and Replacements (2)	4,000,000	8,970,000	8,970,000	8,970,000	8,970,000	8,970,000	44,850,000
Information Technology - (20111)	1000826 - Computer Hardware Upgrades and Replacements (3)	495,000	1,676,500	1,676,500	1,676,500	1,676,500	1,676,500	8,382,500
Information Technology - (20111)	1000827 - Printer Hardware Upgrades and Replacements (4)	150,000	150,000	200,000	200,000	200,000	200,000	950,000
Information Technology - (20111)	1000828 - Network Equip. & Comm. Systems Replacement (5)	719,500	1,888,500	1,888,500	1,888,500	1,500,000	1,500,000	8,665,500
Information Technology - (20111)	1000829 - Software and Licensing (6)	210,000	298,000	298,000	298,000	298,000	298,000	1,490,000
	Information Technology - (20111) Total	13,543,630	18,983,000	18,033,000	17,033,000	15,644,500	15,644,500	85,338,000
Admin Infrastructure - (20221)	1000009 - Landscaping (7)	550,000	550,000	550,000	550,000	550,000	550,000	2,750,000
Admin Infrastructure - (20221)	1000026 - RMF - Fleet (8)	2,319,600	3,595,000	3,603,500	3,453,900	3,327,900	4,142,600	18,122,900
Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements (9)	3,045,000	3,225,000	5,100,000	2,735,000	3,175,000	2,365,000	16,600,000
	Admin Infrastructure - (20221) Total	5,914,600	7,370,000	9,253,500	6,738,900	7,052,900	7,057,600	37,472,900
Project Delivery - (20511)	1000011 - Restriping (10)	7,005,172	7,637,835	1,910,591	8,205,739	9,868,367	13,257,326	40,879,858
Project Delivery - (20511)	1000013 - Erosion Mitigation & Drainage Repairs (11)	630,000	9,301,000	8,518,500	1,725,000	1,050,000	710,000	21,304,500
Project Delivery - (20511)	1000018 - Pavement Repair and Rehab. (12)	12,605,000	4,906,100	9,010,600	14,734,560	17,518,590	10,000,000	56,169,850
Project Delivery - (20511)	1000020 - Signage (13)	3,813,208	3,289,700	7,886,600	5,036,800	2,117,750	1,472,133	19,802,983
Project Delivery - (20511)	1000028 - Systemwide Bridge Repair (14)	2,093,636	2,721,400	3,430,000	2,950,000	1,400,000	1,200,000	11,701,400
Project Delivery - (20511)	1000031 - Annual Inspection Program (15)	1,799,965	1,933,426	1,938,763	2,389,669	2,360,669	2,683,403	11,305,930
Project Delivery - (20511)	1000040 - Wall, Railings & Structural Steel Elements (16)	345,000	2,840,000	1,405,000	100,000	1,050,000	6,732,000	12,127,000
Project Delivery - (20511)	1000041 - Lighting Replacement or Repair (17)	75,000	940,000	50,000	0	0	0	990,000
	Project Delivery - (20511) Total	28,366,981	33,569,461	34,150,054	35,141,768	35,365,376	36,054,862	174,281,521
Totals		\$47,825,211	\$59,922,461	\$61,436,554	\$58,913,668	\$58,062,776	\$58,756,962	\$297,092,421

Department	Project	Estimated FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five Year Total FY2022 - FY2026
FY2021 Carryover Projects and Adjustments								
(1)Information Technology - (20111)	1000431 - IT Roadway Systems	(6,522,135)	0	0	0	0	0	0
(2)Information Technology - (20111)	1000825 - Server Hardware Upgrades and Replacements	2,939,868	0	0	0	0	0	0
(3)Information Technology - (20111)	1000826 - Computer Hardware Upgrades and Replacements	(481,695)	0	0	0	0	0	0
(4)Information Technology - (20111)	1000827 - Printer Hardware Upgrades and Replacements	(150,000)	0	0	0	0	0	0
(5)Information Technology - (20111)	1000828 - Network Equip. & Comm. Systems Replacement	(616,949)	0	0	0	0	0	0
(6)Information Technology - (20111)	1000829 - Software and Licensing	(202,506)	0	0	0	0	0	0
(7)Admin Infrastructure - (20221)	1000009 - Landscaping	(524,481)	0	0	0	0	0	0
(8)Admin Infrastructure - (20221)	1000026 - RMF - Fleet	600,000	0	0	0	0	0	0
(9)Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements	(2,502,061)	0	0	0	0	0	0
(10)Project Delivery - (20511)	1000011 - Restriping	(2,488,888)	0	0	0	0	0	0
(11)Project Delivery - (20511)	1000013 - Erosion Mitigation & Drainage Repairs	(425,435)	0	0	0	0	0	0
(12)Project Delivery - (20511)	1000018 - Pavement Repair and Rehab.	(5,989,443)	0	0	0	0	0	0
(13)Project Delivery - (20511)	1000020 - Signage	(1,966,489)	0	0	0	0	0	0
(14)Project Delivery - (20511)	1000028 - Systemwide Bridge Repair (Adjustment)	(1,307,801)	0	0	0	0	0	0
(15)Project Delivery - (20511)	1000031 - Annual Inspection Program	(1,020,502)	0	0	0	0	0	0
(16)Project Delivery - (20511)	1000040 - Wall, Railings & Structural Steel Elements	(184,611)	0	0	0	0	0	0
(17)Project Delivery - (20511)	1000041 - Lighting Replacement or Repair	(75,000)	0	0	0	0	0	0
Totals		(\$20,918,129)	\$0	\$0	\$0	\$0	\$0	\$0
Total FY2022 - FY2026 Reserve Maintenance Project Costs		\$26,907,082	\$59,922,461	\$61,436,554	\$58,913,668	\$58,062,776	\$58,756,962	\$297,092,421

Report contains only project costs.

Project Detail

Project Number:	1000431	Budget Year:	2022
Project Title:	IT Roadway Systems	Manager:	Information Technology
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: IT roadway systems parts and tools to maintain the system.

Justification: IT roadway systems must be maintained in proper working order to collect all toll data. The RMF budget has been increased to replace aging equipment after appropriate assessment in lieu of the lane technology replacement capital project.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 6,000,000
2023	5,000,000
2024	4,000,000
2025	3,000,000
2026	3,000,000
	\$ 21,000,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541401	Infrastructure	6,000,000
	Total Expenses:	\$ 6,000,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000825	Budget Year:	2022
Project Title:	Server Hardware Upgrades and Replacements	Manager:	Information Technology
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: NTTA servers and storage infrastructure are on a five year replacement schedule.

Justification: The infrastructure for the various NTTA systems must have current support and maintenance agreements.

Comments: N/A

Project Forecast
Year

	Total Budget
2022	\$ 8,970,000
2023	8,970,000
2024	8,970,000
2025	8,970,000
2026	8,970,000
	\$ 44,850,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	8,970,000
	Total Expenses:	\$ 8,970,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000826	Budget Year:	2022
Project Title:	Computer Hardware Upgrades and Replacements	Manager:	Information Technology
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Supplying or replacing workstations and laptops for staff members throughout the Authority.

Justification: Computers/Laptops have a usable lifespan of four years. An extended warranty program is used to ensure the resource is available through the usable time frame.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 1,676,500
2023	1,676,500
2024	1,676,500
2025	1,676,500
2026	1,676,500
	\$ 8,382,500

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	1,676,500
	Total Expenses:	\$ 1,676,500

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000827	Budget Year:	2022
Project Title:	Printer Hardware Upgrades and Replacements	Manager:	Information Technology
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Replacement of printers after useful life as expired. Average replacement cost for printers is \$3,500.

Justification: Printer's average warranty is four years. Replaced after warranty expires to ensure availability of critical resource.

Comments: N/A

Project Forecast
Year

	Total Budget
2022	\$ 150,000
2023	200,000
2024	200,000
2025	200,000
2026	200,000
	\$ 950,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	150,000
	Total Expenses:	\$ 150,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000828	Budget Year:	2022
Project Title:	Network Equip. & Comm. Systems Replacement	Manager:	Information Technology
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Non-recurring purchase of hardware associated with requirements identified by NTTA departments related to hardware obsolescence, wear and tear, etc.

Justification: Hardware obsolescence, wear and tear.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 1,888,500
2023	1,888,500
2024	1,888,500
2025	1,500,000
2026	1,500,000
	\$ 8,665,500

Project Details 2022

Account	Description	Total Amount
Expenses		
531106	Electronic Supplies	1,888,500
	Total Expenses:	\$ 1,888,500

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000829	Budget Year:	2022
Project Title:	Software and Licensing	Manager:	Information Technology
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Software and other services associated with requirements identified by NTTA departments.

Justification: Software required for increased headcount and to increase the efficiency of operations.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 298,000
2023	298,000
2024	298,000
2025	298,000
2026	298,000
	\$ 1,490,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	298,000
	Total Expenses:	\$ 298,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000009	Budget Year:	2022
Project Title:	Landscape	Manager:	Maintenance
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20200-Total Maintenance	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Revitalization/replacement of plants in landscape beds due to age or disease.

Justification: To maintain NTTA assets to the Board-approved level of quality. Projects must be performed at the "right time" to prevent higher cost of repairs at a later time.

Comments: N/A

Project Forecast
Year

	Total Budget
2022	\$ 550,000
2023	550,000
2024	550,000
2025	550,000
2026	550,000
	\$ 2,750,000

Project Details 2022

Account	Description	Total Amount
Expenses		
522202	Landscaping	550,000
	Total Expenses:	\$ 550,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000026	Budget Year:	2022
Project Title:	RMF - Fleet	Manager:	Maintenance
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20200-Total Maintenance	Total Project Cost:	Annual Budget
Project Type:	Fleet/Equipment	Prior Years Cost:	

Description: Purchase/replacement of trucks, fleet & equipment.

Justification: Replace equipment determined more costly to operate & maintain than new equipment or is unable to operate at a level effective enough to maintain NTTA's system to Board-approved performance level.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 3,595,000
2023	3,603,500
2024	3,453,900
2025	3,327,900
2026	4,142,600
	\$ 18,122,900

Project Details 2022

Account	Description	Total Amount
Expenses		
531611	Machinery	307,000
531621	Vehicles	3,288,000
	Total Expenses:	\$ 3,595,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000030	Budget Year:	2022
Project Title:	Facility Improvements	Manager:	Maintenance
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20200-Total Maintenance	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Building improvements, extensions, enlargements, additions, reconstruction and replacement. Projects include HVAC Replacements and AATT fan replacement.

Justification: To maintain NTTA assets to the Board-approved level of quality. Projects must be performed at the "right time" to prevent higher cost of repairs at a later time.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 3,225,000
2023	5,100,000
2024	2,735,000
2025	3,175,000
2026	2,365,000
	\$ 16,600,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541302	Building Improvements	3,225,000
	Total Expenses:	\$ 3,225,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000011	Budget Year:	2022
Project Title:	Restriping	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Major roadway re-striping projects. To address pavement markings, pavement markers, delineation and object markers that have met the end of their useful life.

Justification: To maintain visibility and reflectivity, especially during nighttime and inclement weather conditions to enhance traffic safety.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 7,637,835
2023	1,910,591
2024	8,205,739
2025	9,868,367
2026	13,257,326
	\$ 40,879,858

Project Details 2022

Account	Description	Total Amount
Expenses		
522204	Pavement Markings	7,637,835
	Total Expenses:	\$ 7,637,835

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000013	Budget Year:	2022
Project Title:	Erosion Mitigation & Drainage Repairs	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Major channel, ditch, or embankment erosion projects. To mitigate erosion along channels encroaching on bridge columns or outfall systems, stabilize embankments, add/repair/enlarge drainage structures to adequately convey water, or regrade ditches to re-establish proper flow.

Justification: To maintain NTTA assets at or above the Board-approved level of quality. Projects must be performed at the "right time" to prevent higher cost of repairs at a later time.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 9,301,000
2023	8,518,500
2024	1,725,000
2025	1,050,000
2026	710,000
	\$ 21,304,500

Project Details 2022

Account	Description	Total Amount
Expenses		
541401	Infrastructure Rdway/Hwy/Bridg	9,301,000
	Total Expenses:	\$ 9,301,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000018	Budget Year:	2022
Project Title:	Pavement Repair and Rehab	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Major roadway repair or rehabilitation projects. To address base failures, significant sub-grade movement, joint deterioration, unsealed joints and cracks, pavement surface deterioration of main lanes and shoulders & surface skid resistance.

Justification: To maintain NTTA assets at or above the Board-approved level of quality. Projects must be performed at the "right time" to prevent higher cost of repairs at a later time.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 4,906,100
2023	9,010,600
2024	14,734,560
2025	17,518,590
2026	10,000,000
	\$ 56,169,850

Project Details 2022

Account	Description	Total Amount
Expenses		
522205	Pavement & Shoulders	4,906,100
	Total Expenses:	\$ 4,906,100

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000020	Budget Year:	2022
Project Title:	Signage	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Major roadway sign replacement projects. To address large guide sign and roadside panels that have met the end of their useful life due to degradation of their retroreflectivity.

Justification: To maintain visibility and reflectivity to enhance traffic safety.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 3,289,700
2023	7,886,600
2024	5,036,800
2025	2,117,750
2026	1,472,133
	\$ 19,802,983

Project Details 2022

Account	Description	Total Amount
Expenses		
522203	Signing Expense	3,289,700
	Total Expenses:	\$ 3,289,700

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000028	Budget Year:	2022
Project Title:	System-Wide Bridge Repair	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Bridge repair projects include such items as approach slab settlement or buckling, abutment wall cracking, bent cap cracking, wearing of driving surface (skid resistance), and bridge deck deterioration.

Justification: To maintain NTTA assets at or above the Board-approved level of quality and ultimately for the safety of NTTA's customers. Projects must be performed at the "right time" to prevent further higher cost of repairs at a later time.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 2,721,400
2023	3,430,000
2024	2,950,000
2025	1,400,000
2026	1,200,000
	\$ 11,701,400

Project Details 2022

Account	Description	Total Amount
Expenses		
522206	Bridge Repairs	2,721,400
	Total Expenses:	\$ 2,721,400

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000031	Budget Year:	2022
Project Title:	Inspection Services	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Annual visual inspection of NTTA's assets such as pavement, bridges, tunnel walls, roadside appurtenances, buildings/facilities, etc.

Justification: To assess asset condition and to assist in identifying potential repair projects. Inspection process allows NTTA to maintain their assets at or above the Board-approved performance level.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 1,933,426
2023	1,938,763
2024	2,389,669
2025	2,360,669
2026	2,683,403
	\$ 11,305,930

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	1,933,426
	Total Expenses:	\$ 1,933,426

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000040	Budget Year:	2022
Project Title:	Walls, Railings and Steel Elements Repair	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Retaining, screen and sound walls; railings; and structural steel element surface finish improvements. Projects include items such as surface protection of various walls, railings and structural steel elements.

Justification: To maintain NTTA assets at or above the Board-approved level of quality. Projects must be performed at the "right time" to prevent higher cost of repairs at a later time.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 2,840,000
2023	1,405,000
2024	100,000
2025	1,050,000
2026	6,732,000
	\$ 12,127,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541401	Infrastructure Rdway/Hwy/Bridg	2,840,000
	Total Expenses:	\$ 2,840,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000041	Budget Year:	2022
Project Title:	Lighting Replacement or Repair	Manager:	Project Delivery
Fund:	RMF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Roadway illumination repair or replacement projects. To address lighting needs, replacement or upgrades due to improvements in technology.

Justification: To maintain or improve visibility to enhance traffic safety.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 940,000
2023	50,000
2024	-
2025	-
2026	-
	\$ 990,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	940,000
	Total Expenses:	\$ 940,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

CAPITAL IMPROVEMENT PROJECTS



DNT 4B Frontage Road
Bridge construction over creek

Capital Improvement Projects

Capital improvement projects may include repairs, resurfacing, additions, renewals, improvements, reconstruction and replacements, acquisition of right-of-way, engineering design and studies. Projects include but are not limited to the following:

DALLAS NORTH TOLLWAY FOURTH LANE (PGBT TO SRT)

NTTA added a fourth lane to the DNT in each direction between President George Bush Turnpike and the Sam Rayburn Tollway. Construction was completed in early FY2018. The FY2022–FY2026 Capital Plan includes \$0.3 million for minor close-out items. Total project costs are estimated at \$111.2 million.



Capital Improvement Projects (continued)

DALLAS NORTH TOLLWAY PHASE 4B

The Phase 4B extension is an approximate 8-mile section from FM 428 to Grayson County. The FY2022-FY2026 Capital Plan includes \$28.8 million for planning and design. Total project costs are estimated at \$500.0 million.

DALLAS NORTH TOLLWAY PHASE 4B (FRONTAGE ROAD)

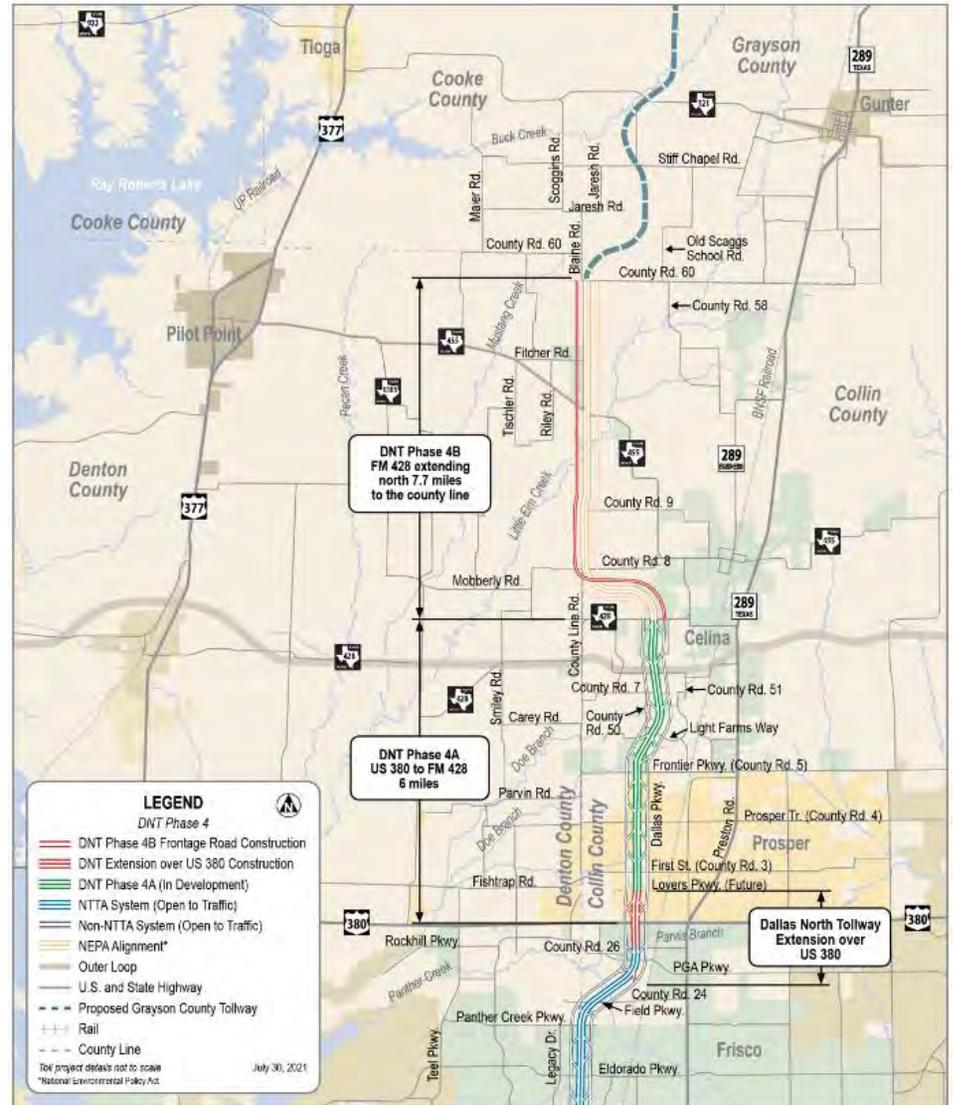
Phase 4B runs approximately 8-miles from FM 428 to the Denton/Grayson county line. Construction of Phase 4B frontage road from FM 428 to County Line Road is estimated at \$6.9 million in the FY2022 – FY2026 Capital Plan. The total frontage road cost of \$26.8 million will be reimbursed by Denton County through an Interlocal Agreement.

DALLAS NORTH TOLLWAY PHASE 4A

The Phase 4A extension is a 6-mile section from U.S. 380 to FM 428. The FY2022-FY2026 Capital Plan includes \$236.9 million for design and construction. Total project costs are estimated at \$350.0 million.

DALLAS NORTH TOLLWAY BRIDGES OVER U.S. 380

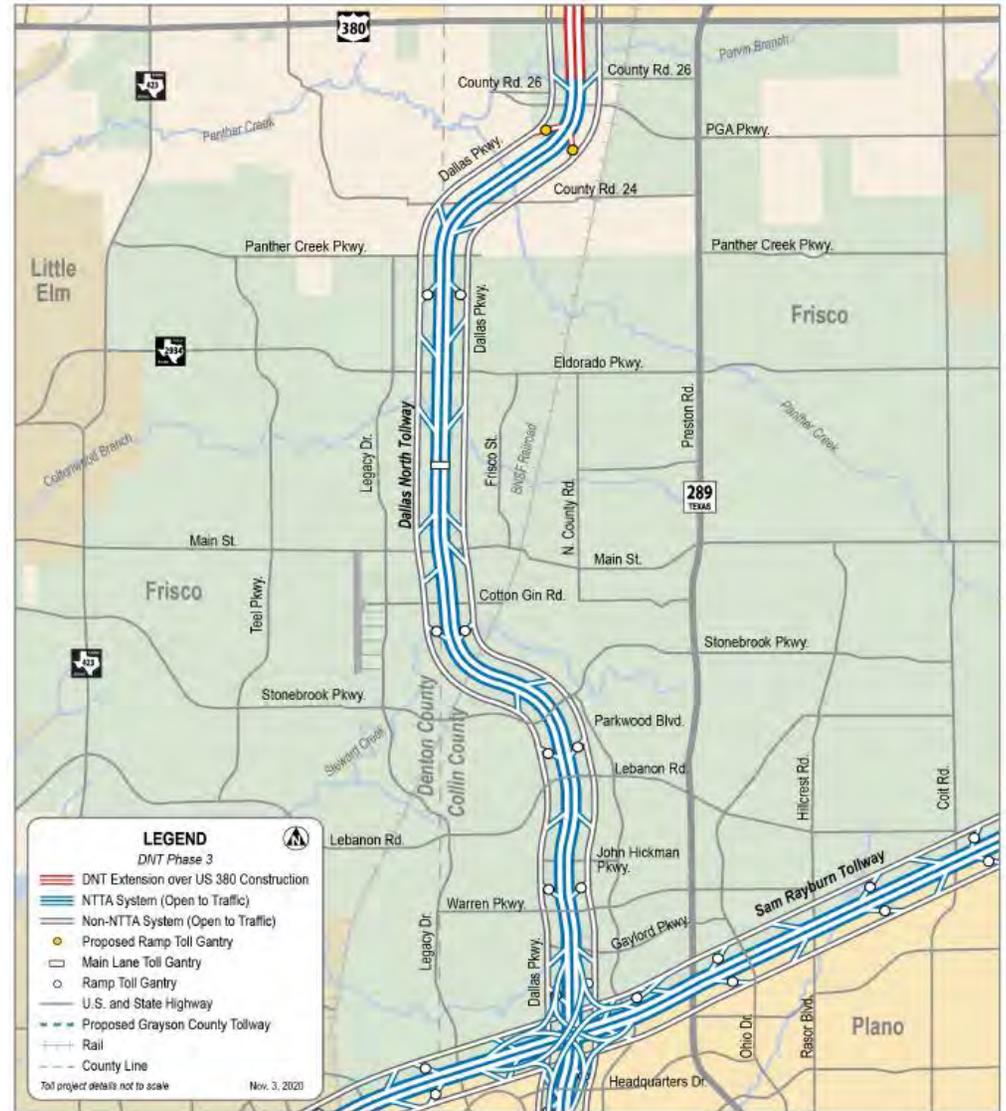
NTTA is extending the DNT north by constructing main lane bridges over U.S. 380. Construction began in FY2020 and is scheduled for completion in early FY2023. The FY2022-FY2026 Capital Plan includes the estimated project cost of \$12.9 million. Total project costs are estimated at \$90.3 million.



Capital Improvement Projects (continued)

DALLAS NORTH TOLLWAY WIDENING (SRT TO U.S. 380)

NTTA is planning to add an additional lane in each direction to DNT from SRT to U.S. 380. Design began in FY2021 and construction is anticipated to begin in FY2022 and is scheduled for completion in FY2025. The FY2022-FY2026 Capital Plan includes \$145.5 million for this project. Total project costs are estimated at \$157.3 million.



Capital Improvement Projects (continued)

PGBT/360 TOLLWAY CONNECTOR

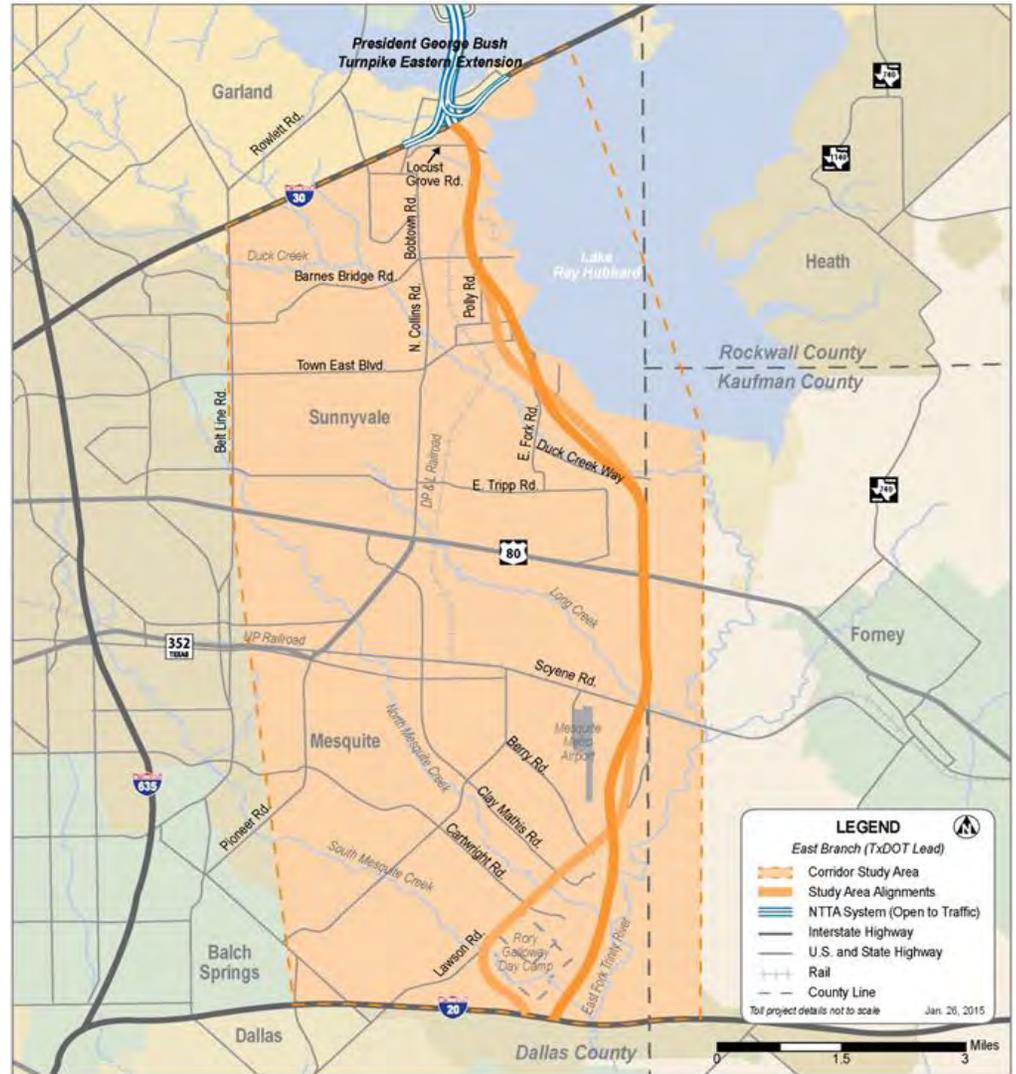
The proposed project connects PGBT from south of Mayfield Road to 360 Tollway at north of Camp Wisdom Road in southern Tarrant County. The FY2022-FY2026 Capital Plan includes \$113.0 million for project development. The total estimated project costs are \$363.3 million.



Capital Improvement Projects (continued)

PGBT EAST BRANCH

The proposed project would extend approximately 11.2-miles from I-30 to I-20. The corridor would connect the proposed Loop 9 in Dallas County to the President George Bush Turnpike Eastern Extension. The FY2022-FY2026 Capital Plan contains \$63.2 million for planning, design and right-of-way. The total estimated project costs are \$1.2 billion.



Capital Improvement Projects (continued)

CTP SOUTH 2-LANES

This project adds two southbound main lanes from south of FM 1187 to U.S. 67. The FY2022 – FY2026 Capital Plan includes \$78.4 million for planning, design and construction. Total estimated project costs are \$239.4 million.



Capital Improvement Projects (continued)

SAM RAYBURN TOLLWAY FOURTH LANE (WIDENING) PROJECT

The SRT improvements include constructing an additional lane in each direction, along the entire 26-miles, from west of Denton Tap Road to U.S. 75. Construction began in early FY2019; scheduled open to traffic in late FY2021. The FY2021 – FY2026 Capital Plan includes \$3.6 million for this project. The total project costs are estimated at \$191.5 million.



Capital Improvement Projects (continued)

EQUIPMENT/HARDWARE/SOFTWARE

As NTTA grows, it is important to upgrade infrastructure to maintain satisfactory services to internal and external customers. This includes upgrading equipment, hardware and software. Some of the major upgrades included in the FY2022 – FY2026 Capital Plan are as follows: lane system upgrade, back office system, infrastructure managed services, network, disaster recovery, enterprise storage, intelligent transportation systems and items related to information security and compliance. The FY2022 – FY2026 Capital Plan includes \$282.8 million for this category.

ROADWAYS

Various improvement projects are planned across the NTTA System including but not limited to repairs, resurfacing, reconstruction and replacements. The FY2022 – FY2026 Capital Plan includes \$128.1 million for this category.

RECONSTRUCTION/REPAIR OF RETAINING WALLS

Several retaining wall projects are being developed to address identified issues. The FY2022 – FY2026 Capital Plan includes \$63.6 million.

DNT CAPACITY IMPROVEMENTS STUDY

General engineering fees are being budgeted to identify possible capacity improvements on DNT. The FY2022 – FY2026 Capital Plan includes \$2.3 million for this project.

BUILDINGS

Buildings are being constructed, modified, improved or expanded as the NTTA System expands. Annual reviews are conducted to identify any required improvements. Over the next five years, the Capital Plan includes \$19.5 million for this category.



Capital Improvement Fund - (1501) - Project List FY2022 - FY2026 CAPITAL PLAN

Department	Project	Estimated FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five Year Total FY2022 - FY2026
Information Technology - (20111)	1000030 - Systemwide Facility Improvements (1)	\$ 100,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	200,000
Information Technology - (20111)	7000005 - Business Analytics (2)	560,000	845,000	745,000	320,000	80,000	2,350,000	4,340,000
Information Technology - (20111)	7000006 - PCI Compliance	3,541,000	3,300,000	2,500,000	2,500,000	1,500,000	4,500,000	14,300,000
Information Technology - (20111)	7000008 - Disaster Recovery	4,600,000	5,452,544	5,452,544	5,952,544	5,452,544	5,452,544	27,762,720
Information Technology - (20111)	7000011 - ITS Enhancements to Support TIM (3)	3,375,000	1,350,000	250,000	250,000	250,000	450,000	2,550,000
Information Technology - (20111)	7000016 - Data Storage for Images, Databases and Video	0	2,316,000	1,500,000	2,500,000	1,000,000	2,500,000	9,816,000
Information Technology - (20111)	7000017 - EPDS Enhancements (4)	650,000	0	0	200,000	0	200,000	400,000
Information Technology - (20111)	7000018 - Redesign of Internet (5)	300,000	650,000	350,000	350,000	350,000	350,000	2,050,000
Information Technology - (20111)	7000021 - PeopleSoft HR HCM Enhancements (6)	300,000	300,000	300,000	0	0	0	600,000
Information Technology - (20111)	7000022 - Digital Aerial Photography (7)	32,000	86,000	86,000	86,000	86,000	88,500	432,500
Information Technology - (20111)	7000024 - Toll Collection Sys Software Enhancements/Maint (8)	300,000	0	0	0	0	0	0
Information Technology - (20111)	7000033 - Microsoft Enterprise Agreement (9)	100,000	3,976,825	4,300,000	4,600,000	4,700,000	4,700,000	22,276,825
Information Technology - (20111)	7000034 - Oracle Unlimited License Agreement	2,586,000	0	0	0	0	0	0
Information Technology - (20111)	7000040 - Expand Virtualization (10)	400,000	2,004,913	1,815,110	1,627,714	1,692,823	2,000,000	9,140,560
Information Technology - (20111)	7000042 - Computer Hardware Upgrade (11)	1,800,000	2,800,000	1,000,000	2,000,000	2,000,000	2,000,000	9,800,000
Information Technology - (20111)	7000050 - GIS Enhancement (12)	500,000	455,000	450,000	355,000	330,000	330,000	1,920,000
Information Technology - (20111)	7000051 - Mobile App Enhancements (13)	200,000	0	0	0	0	0	0
Information Technology - (20111)	7000054 - Service Desk Software Enhancements	0	275,000	275,000	275,000	275,000	275,000	1,375,000
Information Technology - (20111)	7000056 - Toll Collection System Implementation (14)	10,417,992	1,736,332	0	0	0	0	1,736,332
Information Technology - (20111)	7000064 - Board Room Video/Presentation Enhancement (15)	100,000	100,000	100,000	100,000	100,000	100,000	500,000
Information Technology - (20111)	7000067 - DataLogger Auditing Tool for Lane Controllers (16)	260,000	0	0	0	0	0	0
Information Technology - (20111)	7000068 - National IOP (17)	1,100,000	1,000,000	1,000,000	1,000,000	650,000	650,000	4,300,000
Information Technology - (20111)	7000070 - Multi-Channel Communications - CSC (18)	1,000,000	600,000	600,000	1,700,000	4,400,000	1,000,000	8,300,000
Information Technology - (20111)	7000071 - LoneStar Module Expansion (19)	300,000	175,000	175,000	175,000	175,000	175,000	875,000
Information Technology - (20111)	7000081 - eProcurement Project Workflow Tracker (20)	500,000	0	0	0	0	0	0
Information Technology - (20111)	7000086 - NTTA Employee Portal (21)	100,000	100,000	200,000	0	0	0	300,000
Information Technology - (20111)	7000110 - Enterprise Content Management (22)	300,000	100,000	0	0	0	0	100,000
Information Technology - (20111)	7000112 - Contract Management System (23)	550,000	120,000	0	0	0	120,000	240,000
Information Technology - (20111)	7000113 - Reporting Tool for BDD (24)	420,000	0	50,000	0	0	0	50,000
Information Technology - (20111)	7000115 - C*Cure Facility Access System	0	0	500,000	0	0	0	500,000
Information Technology - (20111)	7000116 - Backup System	0	450,000	475,000	475,000	475,000	500,000	2,375,000
Information Technology - (20111)	7000117 - Lane System Upgrade (25)	750,000	2,000,000	1,300,000	5,000,000	2,000,000	1,200,000	11,500,000
Information Technology - (20111)	7000128 - CSC Queue Management and Appointment (27)	300,000	300,000	150,000	150,000	150,000	150,000	900,000
Information Technology - (20111)	7000130 - Enterprise System Monitoring	0	600,000	600,000	600,000	600,000	700,000	3,100,000
Information Technology - (20111)	7000134 - Back Office System (28)	8,200,000	10,670,053	10,760,472	10,852,718	10,946,829	11,546,829	54,776,901
Information Technology - (20111)	7000172 - Infrastructure Managed Services - Data Centers (29)	900,000	5,629,876	5,729,876	5,900,000	5,900,000	5,900,000	29,059,752
Information Technology - (20111)	7000173 - Cloud Expansion Project (30)	300,000	1,300,000	5,000,000	4,000,000	1,000,000	3,000,000	14,300,000
Information Technology - (20111)	7000174 - PeopleSoft Replacement Project	0	0	500,000	2,000,000	2,000,000	2,000,000	6,500,000
Information Technology - (20111)	7000175 - Increased Equinix Data Center Applications for Risk Mitigation (31)	350,000	1,500,000	400,000	400,000	800,000	800,000	3,900,000
Information Technology - (20111)	7000176 - CJIS Compliance	0	300,000	300,000	400,000	300,000	300,000	1,600,000
Information Technology - (20111)	7000177 - New Debt and Cash Management Software	0	100,000	200,000	0	0	0	300,000
Information Technology - (20111)	7000179 - Lockbox Replacement Assessment	0	500,000	500,000	0	0	0	1,000,000
Information Technology - (20111)	7000180 - CSC Print Vendor	0	300,000	2,500,000	0	0	0	2,800,000
Information Technology - (20111)	7000181 - Payment Processor Replacement	0	0	0	0	500,000	2,000,000	2,500,000
Information Technology - (20111)	7000183 - CSC Business Continuity	0	1,300,000	275,000	225,000	225,000	225,000	2,250,000
Information Technology - (20111)	7000184 - Planned Collection Initiatives (32)	400,000	4,600,000	6,400,000	2,600,000	1,400,000	1,400,000	16,400,000
Information Technology - (20111)	7000187 - Semafone (33)	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
Information Technology - (20111)	7000188 - Expand Parking Using TollTag	0	300,000	300,000	0	0	0	600,000
Information Technology - (20111)	7000190 - Next Gen Tags (34)	300,000	300,000	0	0	0	0	300,000
Information Technology - (20111)	7001252 - Windows Server Upgrade - New Operating System Versions (35)	600,000	800,000	800,000	700,000	500,000	500,000	3,300,000
Information Technology - (20111)	7001253 - Command Center Radio Upgrade (36)	475,000	250,000	0	0	0	250,000	500,000
Information Technology - (20111) Total		47,166,992	59,342,543	58,039,002	57,493,976	50,038,196	57,912,873	282,826,590

Department	Project	Estimated FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five Year Total FY2022 - FY2026
Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements (37)	2,400,000	4,850,000	4,510,000	3,720,000	3,300,000	3,125,000	19,505,000
	Admin Infrastructure - (20221) Total	2,400,000	4,850,000	4,510,000	3,720,000	3,300,000	3,125,000	19,505,000
Project Delivery - (20511)	1000010 - Median Replacement (38)	6,700,000	0	0	0	0	0	0
Project Delivery - (20511)	1000042 - General Engineering (39)	330,780	100,000	100,000	100,000	100,000	100,000	500,000
Project Delivery - (20511)	1000045 - Sand Stockpile	0	50,000	475,000	0	125,000	2,150,000	2,800,000
Project Delivery - (20511)	2000000 - PGBT EE (40)	103,215	0	0	0	0	0	0
Project Delivery - (20511)	2000002 - PGBT 4th Lane Widening (41)	30,682,864	3,233,000	0	0	0	0	3,233,000
Project Delivery - (20511)	2000005 - PGBT Continuous Illumination (42)	1,940,834	3,327,144	14,358,203	24,192,537	19,955,138	20,620,147	82,453,169
Project Delivery - (20511)	2100003 - DNT 4th Lane (PGBT to SRT) (43)	237,831	300,000	0	0	0	0	300,000
Project Delivery - (20511)	2100004 - DNT/PGBT IC & Ramp Mods	170,000	0	0	0	0	0	0
Project Delivery - (20511)	2100007 - DNT PH4A Bridges over U.S. 380 (44)	36,451,301	11,570,000	1,300,000	0	0	0	12,870,000
Project Delivery - (20511)	2100008 - DNT Phase 4B (Frontage Road) (45)	12,865,284	6,688,007	200,000	0	0	0	6,888,007
Project Delivery - (20511)	2100010 - DNT 4B (Segment 6) (46)	0	0	10,000	4,571,368	4,387,547	19,791,394	28,760,309
Project Delivery - (20511)	2100011 - DNT Widening (SRT to U.S. 380) (47)	4,952,846	20,293,313	57,225,341	46,212,342	20,474,837	1,327,000	145,532,833
Project Delivery - (20511)	2100012 - DNT Capacity Improvements Study	0	0	850,000	1,100,000	300,000	0	2,250,000
Project Delivery - (20511)	2100013 - DNT PH4A (Segment 5) (48)	818,214	17,034,253	11,967,156	40,349,789	89,838,196	77,663,812	236,853,206
Project Delivery - (20511)	2100310 - DNT South End Design Guidelines Implementation	0	0	0	0	0	2,286,877	2,286,877
Project Delivery - (20511)	2500003 - SRT Widening (49)	33,077,392	1,577,762	2,000,000	0	0	0	3,577,762
Project Delivery - (20511)	2500004 - SRT Continuous Illumination	0	688,808	2,361,403	11,252,551	14,089,823	11,627,265	40,019,850
Project Delivery - (20511)	3000000 - PGBT East Branch (50)	250,000	5,861,421	6,376,442	7,984,780	18,008,735	25,000,000	63,231,378
Project Delivery - (20511)	3900001 - PGBT/360 Tollway Connector (51)	250,000	2,894,849	6,371,350	18,973,052	34,721,387	50,000,000	112,960,638
Project Delivery - (20511)	7000072 - MSE Wall Stabilization and Maintenance Program (52)	9,969,686	5,615,000	3,000,000	16,900,000	21,700,000	16,400,000	63,615,000
Project Delivery - (20511)	7200001 - CTP South 2-lanes (54)	15,000	3,600,798	8,593,647	6,399,007	4,628,622	55,185,082	78,407,156
	Project Delivery - (20511) Total	138,815,247	82,834,355	115,188,542	178,035,426	228,329,285	282,151,577	886,539,185
Traffic & Incdnt Mgmt. - (20611)	7000000 - Systemwide Roadway Improvements (55)	2,600,000	8,707,000	15,782,500	20,069,500	16,031,000	7,700,000	68,290,000
	Traffic & Incdnt Mgmt. - (20611) Total	2,600,000	8,707,000	15,782,500	20,069,500	16,031,000	7,700,000	68,290,000
Totals		\$190,982,239	\$155,733,898	\$193,520,044	\$259,318,902	\$297,698,481	\$350,889,450	\$1,257,160,775

FY2021 Carryover Projects and Adjustments

(1)Information Technology - (20111)	1000030 - Systemwide Facility Improvements	(50,000)	0	0	0	0	0	0
(2)Information Technology - (20111)	7000005 - Business Analytics	(271,840)	0	0	0	0	0	0
(3)Information Technology - (20111)	7000011 - ITS Enhancements to Support TIM	(1,687,500)	0	0	0	0	0	0
(4)Information Technology - (20111)	7000017 - EPDS Enhancements	(325,000)	0	0	0	0	0	0
(5)Information Technology - (20111)	7000018 - Redesign of Internet	(150,000)	0	0	0	0	0	0
(6)Information Technology - (20111)	7000021 - PeopleSoft HR HCM Enhancements	(150,000)	0	0	0	0	0	0
(7)Information Technology - (20111)	7000022 - Digital Aerial Photography	(16,000)	0	0	0	0	0	0
(8)Information Technology - (20111)	7000024 - Toll Collection Sys Software Enhancements/Maint	(150,000)	0	0	0	0	0	0
(9)Information Technology - (20111)	7000033 - Microsoft Enterprise Agreement	(50,000)	0	0	0	0	0	0
(10)Information Technology - (20111)	7000040 - Expand Virtualization	1,324,033	0	0	0	0	0	0
(11)Information Technology - (20111)	7000042 - Computer Hardware Upgrade	(900,000)	0	0	0	0	0	0
(12)Information Technology - (20111)	7000050 - GIS Enhancement	(250,000)	0	0	0	0	0	0
(13)Information Technology - (20111)	7000051 - Mobile App Enhancements (Adjustment)	(100,000)	0	0	0	0	0	0
(14)Information Technology - (20111)	7000056 - Toll Collection System Implementation	(5,208,996)	0	0	0	0	0	0
(15)Information Technology - (20111)	7000064 - Board Room Video/Presentation Enhancement	(50,000)	0	0	0	0	0	0
(16)Information Technology - (20111)	7000067 - DataLogger Auditing Tool for Lane Controllers	(130,000)	0	0	0	0	0	0
(17)Information Technology - (20111)	7000068 - National IOP	(550,000)	0	0	0	0	0	0
(18)Information Technology - (20111)	7000070 - Multi-Channel Communications - CSC	(49,047)	0	0	0	0	0	0
(19)Information Technology - (20111)	7000071 - LoneStar Module Expansion	(150,000)	0	0	0	0	0	0
(20)Information Technology - (20111)	7000081 - eProcurement Project Workflow Tracker	(250,000)	0	0	0	0	0	0
(21)Information Technology - (20111)	7000086 - NTTA Employee Portal	(50,000)	0	0	0	0	0	0
(22)Information Technology - (20111)	7000110 - Enterprise Content Management	(150,000)	0	0	0	0	0	0

Department	Project	Estimated FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Five Year Total FY2022 - FY2026
(23)Information Technology - (20111)	7000112 - Contract Management System	(500,916)	0	0	0	0	0	0
(24)Information Technology - (20111)	7000113 - Reporting Tool for BDD	(210,000)	0	0	0	0	0	0
(25)Information Technology - (20111)	7000117 - Lane System Upgrade	(375,000)	0	0	0	0	0	0
(26)Information Technology - (20111)	7000119 - Computer Aided Dispatch	25,200	0	0	0	0	0	0
(27)Information Technology - (20111)	7000128 - CSC Queue Management and Appointment	(150,000)	0	0	0	0	0	0
(28)Information Technology - (20111)	7000134 - Back Office System	924,267	0	0	0	0	0	0
(29)Information Technology - (20111)	7000172 - Infrastructure Managed Services - Data Centers	(675,000)	0	0	0	0	0	0
(30)Information Technology - (20111)	7000173 - Cloud Expansion Project	(225,000)	0	0	0	0	0	0
(31)Information Technology - (20111)	7000175 - Increase Equinix Data Center Applications for risk Mitigation	(262,500)	0	0	0	0	0	0
(32)Information Technology - (20111)	7000184 - Planned Collection Initiatives	(300,000)	0	0	0	0	0	0
(33)Information Technology - (20111)	7000187 - Semaphore	(150,000)	0	0	0	0	0	0
(34)Information Technology - (20111)	7000190 - Next Gen Tags	(225,000)	0	0	0	0	0	0
(35)Information Technology - (20111)	7001252 - Windows Server Upgrade - New Operating System Versions	(450,000)	0	0	0	0	0	0
(36)Information Technology - (20111)	7001253 - Command Center Radio Upgrade	(356,250)	0	0	0	0	0	0
(37) Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements	(1,491,625)	0	0	0	0	0	0
(38)Project Delivery - (20511)	1000010 - DNT Median Replacement	(887,456)	0	0	0	0	0	0
(39)Project Delivery - (20511)	1000042 - General Engineering	(48,519)	0	0	0	0	0	0
(40)Project Delivery - (20511)	2000000 - PGBT EE	(58,419)	0	0	0	0	0	0
(41)Project Delivery - (20511)	2000002 - PGBT 4th Lane Widening	(3,268,537)	0	0	0	0	0	0
(42)Project Delivery - (20511)	2000005 - PGBT Continues Illumination	(970,417)	0	0	0	0	0	0
(43)Project Delivery - (20511)	2100003 - DNT 4th Lane (PGBT to SRT)	(39,828)	0	0	0	0	0	0
(44)Project Delivery - (20511)	2100007 - DNT PH4A Bridges over U.S. 380	(13,763,293)	0	0	0	0	0	0
(45)Project Delivery - (20511)	2100008 - DNT Phase 4B (Frontage Road)	(2,377,612)	0	0	0	0	0	0
(46)Project Delivery - (20511)	2100010 - DNT Phase 4B (Segment 6)	369	0	0	0	0	0	0
(47)Project Delivery - (20511)	2100011 - DNT Widening (SRT to U.S. 380)	(2,892,755)	0	0	0	0	0	0
(48)Project Delivery - (20511)	2100013 - DNT PH4A (Segment 5)	(136,954)	0	0	0	0	0	0
(49)Project Delivery - (20511)	2500003 - SRT Widening	(2,768,482)	0	0	0	0	0	0
(50)Project Delivery - (20511)	3000000 - PGBT East Branch	(125,000)	0	0	0	0	0	0
(51)Project Delivery - (20511)	3900001 - PGBT/360 Tollway Connector	(125,000)	0	0	0	0	0	0
(52)Project Delivery - (20511)	7000072 - MSE Wall Stabilization and Maintenance Program	(2,441,695)	0	0	0	0	0	0
(53)Project Delivery - (20511)	7200000 - CTP	87,457	0	0	0	0	0	0
(54)Project Delivery - (20511)	7200001 - CTP South 2-Lanes	(7,500)	0	0	0	0	0	0
(55)Traffic & Incdnt Mgmt - (20611)	7000000 - Systemwide Roadway Improvements (Adjustment)	(1,300,000)	0	0	0	0	0	0
Totals		(\$44,909,815)	\$0	\$0	\$0	\$0	\$0	\$0
Total FY2022 - FY2026 Capital Improvement Project Costs		\$146,072,424	\$155,733,898	\$193,520,044	\$259,318,902	\$297,698,481	\$350,889,450	\$1,257,160,775

Report contains only project costs.

Project Detail

Project Number:	7000005	Budget Year:	2022
Project Title:	Business Analytics	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Continue to build and scale the Business Analytics program as user adoption and business demands increase:
 2020 - Post-BOS BI Development, APS EOL Replacement Solution POCs
 2021 - Post-BOS BI Development, Purchase/Migrate to APS Replacement Platform
 2022 - Finalize 2021 APS EOL Replacement Migration
 2023-24 - NextGen BI - AI, Machine Learning, Streaming, and Predictive Analytics

Justification: Scaling the BI program enables NTTA to address industry challenges:
 1. Congestion Management
 2. Interoperability
 3. Public Awareness and Acceptance
 4. Connected/Automated Vehicles
 5. Managed Lanes
 6. Road Usage Charge
 7. NTTA Tolling Application Replacement

Comments: N/A

Project Forecast Year	Total Budget
2022	\$ 845,000
2023	745,000
2024	320,000
2025	80,000
2026	2,350,000
	\$ 4,340,000

Project Details 2022		
Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	150,000
531641	Computers	350,000
531651	Software	345,000
	Total Expenses:	\$ 845,000

Operating Budget Impact		
Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000006	Budget Year:	2022
Project Title:	PCI Compliance	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: NTTA is required to have adequate preventive and detective controls in place to satisfy compliance requirements in order to protect technology infrastructure and sensitive data by enhancing information security safeguards against evolving cyber threats. 24x7 Security monitoring and AllClearID post breach services costs are included.

Justification: In the interest of enhancing information security capabilities as well as to stay compliant with regulatory requirements, various preventive and detective control measures need to be in place.

Comments: N/A

Project Forecast
Year

		Total Budget
	2022	\$ 3,300,000
	2023	2,500,000
	2024	2,500,000
	2025	1,500,000
	2026	4,500,000
		\$ 14,300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	-
531641	Computers	1,300,000
531651	Software	2,000,000
	Total Expenses:	\$ 3,300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000008	Budget Year:	2022
Project Title:	Disaster Recovery	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Maintain and enhance the remote Disaster Recovery solution for NTTA data center.

Justification: Enhancement and the renewal of the existing DR solution to meet growth as well as to explore potential high availability solutions.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 5,452,544
2023	5,452,544
2024	5,952,544
2025	5,452,544
2026	5,452,544
	\$ 27,762,720

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	5,452,544
	Total Expenses:	\$ 5,452,544

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000011	Budget Year:	2022
Project Title:	Intelligent Transportation Systems enhancements to support Traffic and Incident Management	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Planning, design, construction and deployment of CCTV cameras, DMS signs and microwave vehicle detection systems placed at high impact locations along NTTA Roadways, and other intelligent transportation system related planned initiatives like Wrong Way Driver enhancements, replacement of Video Management System, enhancements for Lone Star Advanced Traffic Management System features.

Justification: ITS Retrofit and Enhancements will include CCTV cameras. The specific locations of these cameras will address existing CCTV coverage gaps and will be selected by the Traffic and Incident Management (TIM) department from locations recommended by the ITS group based on identified traffic and incident management requirements. TIM department also has several planned improvements to the ITS system like new video analytics system, new and improved DMS signs, enhancement of advance traffic management system etc. ITS utilizes advanced technologies to improve roadway efficiencies, safety and mobility by monitoring and managing traffic and roadway operations, detecting incidents and managing the response to those incidents. The information collected via roadside technologies is utilized to decrease emergency response time and improve roadway operations.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 1,350,000
2023	250,000
2024	250,000
2025	250,000
2026	450,000
	\$ 2,550,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	50,000
541403	Infrastructure - Other	1,300,000
	Total Expenses:	\$ 1,350,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000016	Budget Year:	2022
Project Title:	Data Storage for images, databases and video	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: NTTA systems use considerable storage to store images from the lanes to pursue transactions, databases for all applications, videos from the lanes etc.

Justification: Efficient storage and processing of data is essential to our business including pursuing ZipCash transaction, service our customers on our facilities, and running NTTA operations. These funds will be used to keep storage efficient and add storage as needed to support business growth as NTTA expand its facilities and processes transactions for other facilities in the region

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 2,316,000
2023	1,500,000
2024	2,500,000
2025	1,000,000
2026	2,500,000
	\$ 9,816,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	2,316,000
	Total Expenses:	\$ 2,316,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000017	Budget Year:	2022
Project Title:	EPDS Enhancements	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Continued enhancement, expansion and upgrade of Enterprise Project Delivery System (EPDS) in order to support the contract tracking and payment needs of organization.

Justification: Implement enhancements to enterprise project delivery system to add features like docuSign

Comments:

Project Forecast

Year	Total Budget
2022	-
2023	-
2024	200,000
2025	-
2026	200,000
	\$ 400,000

Project Details 2022

Account	Description	Total Amount
Expenses		
Total Expenses:		-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000018	Budget Year:	2022
Project Title:	Redesign of Internet	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Redesign of NTTA corporate website (NTTA.org) to make it modern and also integrated with customer portal so that our customers can login from the home page.

Justification: It will be important for the look and feel for both websites (Corporate website and customer website) to match and also integrated log in capability for the customer is desired by business.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 650,000
2023	350,000
2024	350,000
2025	350,000
2026	350,000
	\$ 2,050,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	300,000
531641	Computers	250,000
531651	Software	100,000
	Total Expenses:	\$ 650,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000021	Budget Year:	2022
Project Title:	PeopleSoft HR HCM Enhancement	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: PeopleSoft HR HCM Enhancements - including ACA, new GUI interface in HR. Also Includes Contingent Worker Project and succession planning.

Justification: Federal reporting and significant Oracle application releases and any new business functions as requested by HR

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 300,000
2023	300,000
2024	-
2025	-
2026	-
	\$ 600,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	300,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000022	Budget Year:	2022
Project Title:	Digital Aerial Photography	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: The funds will be used to provide high-resolution, aerial photography of our roadways and assets for Project Delivery and Maintenance vendors requesting imagery for their projects. The GIS team also uses it to update roadway assets.

Justification: Currently the images are updated every other year, but due to NTTA system expansion in all corridors, business needs for imagery has expanded to new images every year. Budget has been adjusted to reflect that need.

Comments: N/A

Project Forecast
Year

	Total Budget
2022	\$ 86,000
2023	86,000
2024	86,000
2025	86,000
2026	88,500
	\$ 432,500

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	86,000
	Total Expenses:	\$ 86,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000033	Budget Year:	2022
Project Title:	Microsoft Enterprise Agreement	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Annual cost of MicroSoft Enterprise Lic. agreement and the premier support.

Justification: NTTA has an enterprise agreement with Microsoft to use their products. This fund will be utilized to make the annual payments.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 3,976,825
2023	4,300,000
2024	4,600,000
2025	4,700,000
2026	4,700,000
	\$ 22,276,825

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	3,976,825
	Total Expenses:	\$ 3,976,825

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000040	Budget Year:	2022
Project Title:	Expand Virtualization	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Virtual desktops are used by almost all consultants and remote users. This is a way to allow secure access to NTTA environment from non NTTA locations. This fund will allow us to add additional virtual desktops and also virtual servers for any new applications that we add to our data center.

Justification: Virtualization has many benefits, including more efficiency. This allows us to utilize hardware to the fullest, easily procure new servers and desktops on the fly and create a more robust and mobile environment. In addition, virtualization aids to replicate systems efficiently thus provides safer way to recover systems during disaster recovery and also reduce our physical foot print so that we don't grow out of our current data center as business needs for processing increases.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 2,004,913
2023	1,815,110
2024	1,627,714
2025	1,692,823
2026	2,000,000
	\$ 9,140,560

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	2,004,913
	Total Expenses:	\$ 2,004,913

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000042	Budget Year:	2022
Project Title:	Computer Hardware Upgrade	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: This fund will be used to perform essential upgrades of various hardware in order to enhance capabilities within the data center.

Justification: It is critical to stay current with evolving technologies to enhance data center operations.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 2,800,000
2023	1,000,000
2024	2,000,000
2025	2,000,000
2026	2,000,000
	\$ 9,800,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	2,800,000
	Total Expenses:	\$ 2,800,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000050	Budget Year:	2022
Project Title:	GIS Enhancement	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Continue to build and scale GIS to meet business demands by adding the following technologies:

1. Field Collection
2. Asset Management: Asset Works/GIS Integration
3. Real-time Data for GIS
4. GIS Architecture Expansion
5. GIS Data Management
6. GIS 2.0

Justification:

1. Enhanced field data collection of roadway assets above and below ground.
2. Working with AssetWorks to fully integrate GIS & AssetWorks. POC to test City Works asset management functionality against our current Asset Works solution.
3. ESRI software enhancement to add real-time data feeds to our GIS solution, similar to PA Turnpike's accident response solution. (Integrating Waze, Traffic Sensor Data, etc)
4. Moving to an enterprise platform to add more functionality, support more users, and enhance end user experience.
5. POC of Safe Software's data integration platform (FME) for spatial data to better connect systems, transform data, and automate workflows.
6. Next Generation GIS - AI/Alexa & LiDAR/3D Modeling

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 455,000
2023	450,000
2024	355,000
2025	330,000
2026	330,000
	\$ 1,920,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	300,000
531641	Computers	55,000
531651	Software	100,000
	Total Expenses:	\$ 455,000

Operating Budget

Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000054	Budget Year:	2022
Project Title:	Service Desk Software Enhancements	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Enhancement of Service Desk software provides capabilities to streamline the support for the end users.

Justification: A fully functional Service Desk supporting system is essential as the end user technologies requirements are constantly evolving.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 275,000
2023	275,000
2024	275,000
2025	275,000
2026	275,000
	\$ 1,375,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521201	Consulting/Professional	275,000
	Total Expenses:	\$ 275,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000056	Budget Year:	2022
Project Title:	Toll Collection System Implementation	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	\$ 77,800,000
Project Type:	Technology	Prior Years Cost:	\$ 70,718,754

Description: The funds will be used to design and implement a new tolling system to replace existing back office toll system.

Justification: These funds accounts for remaining implementation costs that were originally budgeted and not used in 2020 but will be paid in 2021 as the project schedule moved from 2020 to 2021.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 1,736,332
2023	-
2024	-
2025	-
2026	-
	\$ 1,736,332

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	1,736,332
	Total Expenses:	\$ 1,736,332

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000064	Budget Year:	2022
Project Title:	Board Room Video/Presentation Enhancement	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: This fund will be used to enhance presentation or visual capabilities within the conference/board conference room.

Justification: It is important to upgrade technologies capabilities within the conference/board room areas.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 100,000
2023	100,000
2024	100,000
2025	100,000
2026	100,000
	\$ 500,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541403	Infrastructure - Other	100,000
	Total Expenses:	\$ 100,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000068	Budget Year:	2022
Project Title:	National IOP	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Funds will be used for developing HUB and NTTA back office to connect to South East, West and North East HUBs as we progress towards National Interoperability.

Justification: Allows for enhancements to the Central States HUB and to the back office system to enable to connect with additional HUBs and also testing with other agencies and creating any processes and reporting.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 1,000,000
2023	1,000,000
2024	1,000,000
2025	650,000
2026	650,000
	\$ 4,300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	1,000,000
	Total Expenses:	\$ 1,000,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000070	Budget Year:	2022
Project Title:	Multi-Channel Communications - CSC	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Add and enhance Call Center system functionality to meet CSC needs.

- Justification:**
- * Voice assessment
 - * Remote Call Centers
 - * MPLS Communication
 - * Tokenization
 - * IVR Script Improvements
 - * Workforce Management Improvements
 - * Quality Monitoring Improvements
 - * Multi-Channel Applications (twitter,facebook,web chat)
 - * Inbound Channel line increase
 - * Infrastructure
 - * Phones/Softphones
 - * Licensing
 - * Software Upgrades

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 600,000
2023	600,000
2024	1,700,000
2025	4,400,000
2026	1,000,000
	\$ 8,300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	600,000
	Total Expenses:	\$ 600,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000071	Budget Year:	2022
Project Title:	LoneStar Module Expansion	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Lonestar is the advanced traffic management system used by Traffic and Incident management team. These funds will be used to expand features and functionality of the LoneStar Modules to meet the business needs.

Justification: Modules include new functionality for Lane Closure and advanced Wrong Way Driver functionality etc. to support the needs for Traffic and Incident management team.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 175,000
2023	175,000
2024	175,000
2025	175,000
2026	175,000
	\$ 875,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	175,000
	Total Expenses:	\$ 175,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000086	Budget Year:	2022
Project Title:	NTTA Employee Portal	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Replace the legacy Intranet site with a new employee portal

Justification: Intranet Site is in need of several functional enhancements to allow for better collaboration between NTTA staff and various departments

Comments: N/A

Project Forecast

<u>Year</u>	<u>Total Budget</u>
2022	\$ 100,000
2023	200,000
2024	-
2025	-
2026	-
	<u>\$ 300,000</u>

Project Details 2022

<u>Account</u>	<u>Description</u>	<u>Total Amount</u>
Expenses		
521301	Consulting/Profess Serv Tech	100,000
	Total Expenses:	<u>\$ 100,000</u>

Operating Budget Impact

<u>Budget Year</u>	<u>Exp (Rev)</u>	<u>FTE Impact</u>
None	None	None

Project Detail

Project Number:	7000110	Budget Year:	2022
Project Title:	Enterprise Content Management	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Requests by the organization to deploy an Enterprise Content Management Tool.

Justification: 100K for Asset works this fund will be used for SaaS implementation of the product currently being used by Project Delivery Team

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 100,000
2023	-
2024	-
2025	-
2026	-
	\$ 100,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	100,000
	Total Expenses:	\$ 100,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000112	Budget Year:	2022
Project Title:	Contract Management System	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Funds will be used to implement a contract management system that replaces the current manual monitoring of contracts by procurement.

Justification: Current manual processes are cumbersome and not efficient. New system will automate the contract management workflow and allow for better tracking of all contracts.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 120,000
2023	-
2024	-
2025	-
2026	120,000
	\$ 240,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	120,000
	Total Expenses:	\$ 120,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000113	Budget Year:	2022
Project Title:	Reporting Tool for BDD	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Business Diversity Tracking is a replacement of the BD services provided by Early Morning Software.

Justification: Complete implementation of the Business Diversity Tracking system that started last year

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ -
2023	50,000
2024	-
2025	-
2026	-
	\$ 50,000

Project Details 2022

Account	Description	Total Amount
Expenses		
Total Expenses:		-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000115	Budget Year:	2022
Project Title:	C*Cure Facility Access System	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Upgrade of the technology for Facility Access system.

Justification: Facility access system managed secure access to all doors for NTTA facilities including walk-in customer service centers. This fund will be used to upgrade the technology.

Comments: N/A

Project Forecast

Year	Total Budget
2022	-
2023	500,000
2024	-
2025	-
2026	-
	\$ 500,000

Project Details 2022

Account	Description	Total Amount
Expenses		
Total Expenses:		-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000116	Budget Year:	2022
Project Title:	Backup System	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: This fund will be used to enhance capabilities for the backup system.

Justification: System Backups are critical to system recovery incase of failures. It is critical to stay current with evolving technologies to enhance backup operations and keep them efficient so that they do not impact the system uptime.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 450,000
2023	475,000
2024	475,000
2025	475,000
2026	500,000
	\$ 2,375,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	275,000
531641	Computers	75,000
531651	Software	100,000
	Total Expenses:	\$ 450,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000117	Budget Year:	2022
Project Title:	Lane System Assessment and Pilot projects with emerging technologies	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: This fund will be used to assess the condition of the aging lane equipment and conduct lane audits to determine the replacement need for the aging lane equipment. This fund will also be used to conduct pilot studies with new technologies like connected vehicles, in vehicle transponders etc that are becoming prevalent in the toll industry.

Justification: It is critical to stay current with evolving technologies to enhance roadway operations. It is also important to constantly assess lane system health to determine the best and optimal use for the CIF fund.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 2,000,000
2023	1,300,000
2024	5,000,000
2025	2,000,000
2026	1,200,000
	\$ 11,500,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	2,000,000
	Total Expenses:	\$ 2,000,000

Operating Budget Impact

Budget Year	Exp (Re) FTE Impact	
None	None	None

Project Detail

Project Number:	7000128	Budget Year:	2022
Project Title:	CSC Queue Mgmt and Appointments	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: The contracts for customer appointment and customer queuing at the stores will be re-procured and integrated with both new back office and new corporate website.

Justification: Contracts are expiring and up for re-procurement.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 300,000
2023	150,000
2024	150,000
2025	150,000
2026	150,000
	\$ 900,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	100,000
531641	Computers	100,000
531651	Software	100,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000130	Budget Year:	2022
Project Title:	Enterprise Systems Monitoring	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: This will allow us to monitor the availability and performance of systems more efficiently in order to meet the acceptable level of system up-time. This includes all data center computers and networking for Gleneagles, Equinix, and disaster recovery data centers.

Justification: This level of monitoring is critical to detect system faults and warnings to send to proper teams to take appropriate actions.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 600,000
2023	600,000
2024	600,000
2025	600,000
2026	700,000
	\$ 3,100,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	600,000
	Total Expenses:	\$ 600,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000134	Budget Year:	2022
Project Title:	Back Office System	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	\$ 77,800,000
Project Type:	Technology	Prior Years Cost:	\$ 8,476,013

Description: The funds will be used for enhancements to the back office toll system.

Justification: The estimate includes consulting/professional fees, hardware and software costs for BOS enhancements.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 10,670,053
2023	10,760,472
2024	10,852,718
2025	10,946,829
2026	11,546,829
	\$ 54,776,901

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	8,670,053
531651	Software	2,000,000
	Total Expenses:	\$ 10,670,053

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000172	Budget Year:	2022
Project Title:	Infrastructure Managed Services - Data Centers	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: IT Infrastructure Managed Services includes the implementation of systems and storage infrastructure along with monitoring of availability, performance, and security.

Justification: Stability, performance, and security of systems requires skilled engineers to implement and monitor critical infrastructure environments. At times NTTA procure 3rd party resources to achieve the objectives.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 5,629,876
2023	5,729,876
2024	5,900,000
2025	5,900,000
2026	5,900,000
	\$ 29,059,752

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	5,629,876
	Total Expenses:	\$ 5,629,876

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000173	Budget Year:	2022
Project Title:	Cloud Expansion Project	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: The purpose of this initiative is to do a complete data center cloud assessment and feasibility studies for data center hosting on premise and all NTTA applications.

Justification: This initiative will provide us valuable information regarding potential cost/other benefits to NTTA by moving data center and applications to the cloud.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 1,300,000
2023	5,000,000
2024	4,000,000
2025	1,000,000
2026	3,000,000
	\$ 14,300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	300,000
531651	Software	1,000,000
	Total Expenses:	\$ 1,300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000174	Budget Year:	2022
Project Title:	PeopleSoft Replacement Project	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: The purpose of this project is to replace the existing PeopleSoft application with an optimal solution that will satisfy business needs and provides HR and Finance functions with ease.

Justification: Explore new opportunities in the Accounting and HR application environments that can meet future NTTA business needs while providing a flexible enterprise solution.

Comments:

Project Forecast

Year	Total Budget
2022	\$ -
2023	500,000
2024	2,000,000
2025	2,000,000
2026	2,000,000
	\$ 6,500,000

Project Details 2022

Account	Description	Total Amount
Expenses		
Total Expenses:		-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000175	Budget Year:	2022
Project Title:	Increase Equinix Data Center Applications for Risk Mitigation	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: The purpose of this project is to implement site-to-site high availability or load sharing at Equinix data center for critical production environments, including storage, and share video with adjoining cities and counties.

Justification: While Disaster Recovery is in place, the failed over to DR site can take upto 24 hours. In an situation that has a temporary impact on data center, DR may not be the most optimal strategy, failover will provide a fall back for critical system or power failure at GE data center without any interruptions.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 1,500,000
2023	400,000
2024	400,000
2025	800,000
2026	800,000
	\$ 3,900,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	1,500,000
	Total Expenses:	\$ 1,500,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000176	Budget Year:	2022
Project Title:	CJIS Compliance	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: This funding will be utilized to procure services from CJIS compliant third-party service provider for the CAD environment to satisfy CJIS requirements.

Justification: Only CJIS certified staff can administer this environment thus requiring us to seek CJIS compliant providers. This environment must be compliant with CJIS requirements to pass the audit.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 300,000
2023	300,000
2024	400,000
2025	300,000
2026	300,000
	\$ 1,600,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	300,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000177	Budget Year:	2022
Project Title:	New Debt and Cash Management Software	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Re-procure Debt and Cash Management solution

Justification: Meet departmental needs for improved functionality and reporting of Cash and Debt Management. Initiative to support NTTA objective to remain a financially sound organization. Current software that is being used is outdated and does not have key functionalities.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 100,000
2023	200,000
2024	-
2025	-
2026	-
	\$ 300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	100,000
	Total Expenses:	\$ 100,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000179	Budget Year:	2022
Project Title:	Lockbox Replacement Assessment	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Re-procure Lockbox Vendor

Justification: Standard procurement process

Comments:

Project Forecast

Year	Total Budget
2022	\$ 500,000
2023	500,000
2024	-
2025	-
2026	-
	\$ 1,000,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	500,000
	Total Expenses:	\$ 500,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000180	Budget Year:	2022
Project Title:	CSC Print Vendor	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Re-procure Print Vendor

Justification: Standard procurement process

Comments:

Project Forecast

Year	Total Budget
2022	\$ 300,000
2023	2,500,000
2024	-
2025	-
2026	-
	\$ 2,800,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	300,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000181	Budget Year:	2022
Project Title:	Payment Processor Replacement	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Re-procure Payment processing Vendor

Justification: Standard procurement process

Comments:

Project Forecast

Year	Total Budget
2022	-
2023	-
2024	-
2025	500,000
2026	2,000,000
	\$ 2,500,000

Project Details 2022

Account	Description	Total Amount
Expenses		
Total Expenses:		-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000183	Budget Year:	2022
Project Title:	CSC Business Continuity	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: The purpose of this initiative is to explore business continuity opportunities including end user solutions for CSC.

Justification: Current on-perm operations lack adequate business continuity plan which will add more flexibility in providing customer support services.

Comments:

Project Forecast

Year	Total Budget
2022	1,300,000
2023	275,000
2024	225,000
2025	225,000
2026	225,000
	\$ 2,250,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	200,000
531641	Computers	500,000
531651	Software	600,000
	Total Expenses:	\$ 1,300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000184	Budget Year:	2022
Project Title:	Planned Collection Initiatives	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: New planned collection initiatives to include alternate payment channels, affidavit process, civil lawsuits, ZipCash service providers, credit reporting, Expand transaction processing for other agencies etc.

Justification: To strategically expand transaction processing beyond North Texas for better customer service and improve collection results that would meet/exceed current service level agreements.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 4,600,000
2023	6,400,000
2024	2,600,000
2025	1,400,000
2026	1,400,000
	\$ 16,400,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	4,500,000
531651	Software	100,000
	Total Expenses:	\$ 4,600,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000187	Budget Year:	2022
Project Title:	Semafone	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Semafone solution help protects customer credit card data and reduce systems that are in-scope for with Payment Card Industry (PCI) compliance. It protect credit card number received over the phone call with an agent or entered through the IVR from reaching the NTTA systems.

Justification: Semafone solution provides the following benefits:

1. Avoids credit cards flowing through our applications and databases
2. Reduce risk by not storing or having access to credit cards.
3. Reduce the number of in-scope systems for PCI

Comments:

Project Forecast

Year	Total Budget
2022	\$ 200,000
2023	200,000
2024	200,000
2025	200,000
2026	200,000
	\$ 1,000,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531651	Software	200,000
	Total Expenses:	\$ 200,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000188	Budget Year:	2022
Project Title:	Expand Parking Using TollTag	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Expand Parking in the region - event parking, state fair, Rangers, etc. using TollTag.

Justification: Initiative to support NTTA objective to be a customer-driven organization.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 300,000
2023	300,000
2024	-
2025	-
2026	-
	\$ 600,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521201	Consulting/Professional	300,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000190	Budget Year:	2022
Project Title:	Next Gen Tags	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	-

Description: Explore options for next generation TollTag.

Justification: Initiative to support NTTA objective to be a customer-driven organization, to remain a financially sound organization and help deliver transportation solutions.

Comments:

Project Forecast

Year	Total Budget
2022	\$ 300,000
2023	-
2024	-
2025	-
2026	-
	\$ 300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	300,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7001252	Budget Year:	2022
Project Title:	Windows Server Upgrade - New Operating System Versions	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: New computers and operating systems for planned projects.

Justification: It is critical to upgrade the computer hardware to achieve the performance and availability associated with the business needs and remain compliant with security.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 800,000
2023	800,000
2024	700,000
2025	500,000
2026	500,000
	\$ 3,300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	800,000
	Total Expenses:	\$ 800,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7001253	Budget Year:	2022
Project Title:	Command Center Radio Upgrade	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Enhance or add to the Radio Communications System used by the Safety Operations Center (SOC).

Justification:

- * Upgrade Cisco Instant Connect Dispatching Software
- * Upgrade Motorola Radio Dispatch Consoles
- * Software maintenance support

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 250,000
2023	-
2024	-
2025	-
2026	250,000
	\$ 500,000

Project Details 2022

Account	Description	Total Amount
Expenses		
531641	Computers	250,000
	Total Expenses:	\$ 250,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000030	Budget Year:	2022
Project Title:	Facility Improvements	Manager:	Maintenance
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20200-Total Maintenance	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Building improvements, extensions, enlargements, additions, reconstruction and replacement. Projects include HVAC Replacements and AATT fan replacement.

Justification: To maintain NTTA assets to the Board-approved level of quality. Projects must be performed at the "right time" to prevent higher cost of repairs at a later time.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 4,850,000
2023	4,510,000
2024	3,720,000
2025	3,300,000
2026	3,125,000
	\$ 19,505,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541302	Building Improvements	4,850,000
	Total Expenses:	\$ 4,850,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000042-CIF	Budget Year:	2022
Project Title:	General Engineering	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 150,056,102
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 487,015

Description: Professional services providing project management oversight for the planning and design of Capital Improvement projects.

Justification: To maintain NTTA assets to the Board-approved level of quality and ultimately the safety of NTTA customers.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 100,000
2023	100,000
2024	100,000
2025	100,000
2026	100,000
	\$ 500,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	100,000
	Total Expenses:	\$ 100,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000045	Budget Year:	2022
Project Title:	Sand Stockpile	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 90,176,938
Project Type:	Facilities/Roadway	Prior Years Cost:	-

Description: Construct or improve operational function of the Maintenance operation facilities, sand and salt stockpiles, and storage areas.

Justification: To provide or improve emergency response during inclement weather to maintain and enhance traffic safety.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 50,000
2023	475,000
2024	-
2025	125,000
2026	2,150,000
	\$ 2,800,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541401	Infrastructure Rdway/Hwy/Bridg	50,000
	Total Expenses:	\$ 50,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2000002	Budget Year:	2022
Project Title:	PGBT 4th Lane Widening	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 150,056,102
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 110,306,851

Description: Limits:
 Beltline to I-35E - 1 additional lane
 SH 183 to I -30 - 1 additional lane
 I-30 to I-20 - 2 additional lanes

Justification: Limits:
 N of Beltline to I-35E - Construction: mid 2019 - 2021
 I-20 to SH 183: Construction: 2019-2022

Comments: Estimate Level A: \$76,500,000

<u>Year</u>	<u>Total Budget</u>
2022	\$ 3,233,000
2023	-
2024	-
2025	-
2026	-
	<u>\$ 3,233,000</u>

Project Details 2022

<u>Account</u>	<u>Description</u>	<u>Total Amount</u>
Expenses		
521213	General Engineering	300,000
541401	Infrastructure Rdway/Hwy/Bridg	2,933,000
	Total Expenses:	<u>\$ 3,233,000</u>

Operating Budget Impact

<u>Budget Year</u>	<u>Exp (Rev)</u>	<u>FTE Impact</u>
None	None	None

Project Detail

Project Number:	2000005	Budget Year:	2022
Project Title:	PGBT Continuous Illumination	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 85,479,157
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 42,960

Description: Project to study, design and construct new continuous illumination along PGBT.

Justification: Schedule;
Design: Mid 2021-2023
Construction: 2023-2026

Comments: Estimate level E, \$85,479,157

Project Forecast

Year	Total Budget
2022	\$ 3,327,144
2023	14,358,203
2024	24,192,537
2025	19,955,138
2026	20,620,147
	\$ 82,453,169

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	3,327,144
	Total Expenses:	\$ 3,327,144

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100003	Budget Year:	2022
Project Title:	DNT 4th Lane (PGBT to SRT)	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 111,193,740
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 97,940,605

Description: Limits: DNT Improvements from Parker to SRT, adds an additional lane in each direction to DNT.

Justification: Landscape maintenance.

Comments: N/A

Project Forecast
Year

	Total Budget
2022	\$ 300,000
2023	-
2024	-
2025	-
2026	-
	\$ 300,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541401	Infrastructure Rdway/Hwy/Bridg	300,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100007	Budget Year:	2022
Project Title:	DNT PH4A Bridges over U.S. 380	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 90,282,242
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 52,903,990

Description: Limits: DNT overpass at US 380 with ramps from DNT to Northbound and Southbound service roads. Add toll gantries to the existing (closed) ramps to/from Panther Creek Parkway.

Justification:
 Schedule:
 Construction: 2019-2023

Comments: Estimate Level A, \$90,282,242

Project Forecast

Year	Total Budget
2022	\$ 11,570,000
2023	1,300,000
2024	-
2025	-
2026	-
	\$ 12,870,000

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	400,000
541401	Infrastructure	11,170,000
	Total Expenses:	\$ 11,570,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100008	Budget Year:	2022
Project Title:	DNT Phase 4B (Frontage Road)	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	Denton County
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 26,849,335
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 4,302,778

Description: Approx. 8 miles: 2 lane frontage road from FM 428 to N. of Denton County Line.

Justification: Design and Construction of DNT Phase 4B frontage road in Denton and Collin Counties. Costs are reimbursed by Denton County.
Schedule:

Construction: 2020-2022

Comments: Estimate level A, \$26,849,355

Project Forecast

Year	Total Budget
2022	\$ 6,688,007
2023	200,000
2024	-
2025	-
2026	-
	\$ 6,888,007

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	130,000
541401	Infrastructure	6,558,007
	Total Expenses:	\$ 6,688,007

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
2023	1,118,000	0.0

Project Detail

Project Number:	2100010	Budget Year:	2022
Project Title:	DNT 4B (Segment 6)	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 499,511,844
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 369

Description: Limits: FM 428 to Grayson County. Approximately 8 miles

Justification: Build mainlanes.
 Schedule:
 Planning: 2024-2025
 Design: Start 2026

Comments: Estimate Level E, \$499,511,844

Project Forecast

Year	Total Budget
2022	-
2023	10,000
2024	4,571,368
2025	4,387,547
2026	19,791,394
	\$ 28,760,309

Project Details 2022

Account	Description	Total Amount
Expenses		
Total Expenses:		-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100011	Budget Year:	2022
Project Title:	DNT Widening (SRT to U.S. 380)	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 157,329,639
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 3,692,400

Description: Limits: SRT to US 380. Adds an additional lane in each direction to DNT.

Justification: Schedule:
 Design- 2021-2022
 Construction- 2022-2025
 Landscape maintenance: 2026

Comments: Estimate Level E, \$157,329,639

Project Forecast

Year	Total Budget
2022	\$ 20,293,313
2023	57,225,341
2024	46,212,342
2025	20,474,837
2026	1,327,000
	\$ 145,532,833

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	2,579,099
531261	Utility Relocation Costs	285,775
541401	Infrastructure Rdway/Hwy/Bridg	17,428,439
	Total Expenses:	\$ 20,293,313

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100012	Budget Year:	2022
Project Title:	DNT Corridor Capacity Study	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 2,500,000
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 4,167

Description: General engineering cost to study possible improvements for the DNT from I-35E to Grayson County.

Justification: Study for safety, capacity and other operational enhancements.

Comments: N/A

Project Forecast

Year	Total Budget
2022	-
2023	850,000
2024	1,100,000
2025	300,000
2026	-
	\$ 2,250,000

Project Details 2022

Account	Description	Total Amount
Expenses		
Total Expenses:		-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100013	Budget Year:	2022
Project Title:	DNT Ph. 4A	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 349,316,639
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 1,794,196

Description: Limits: DNT from north of U.S. 380 to south of FM 428. Approximately 6 miles of mainlanes.

Justification: Build northbound and southbound mainlanes.
 Schedule:
 Planning: 2020-2021
 Design: 2022-2024
 Construction: 2024-2027

Comments: Estimate Level E, \$349,316,639

Project Forecast

Year	Total Budget
2022	\$ 17,034,253
2023	11,967,156
2024	40,349,789
2025	89,838,196
2026	77,663,812
	\$ 236,853,206

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	16,336,680
531261	Utility Relocation Costs	697,573
	Total Expenses:	\$ 17,034,253

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100310	Budget Year:	2022
Project Title:	DNT South End Design Guidelines Implementation	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 31,213,367
Project Type:	Facilities/Roadway	Prior Years Cost:	-

Description: Limits: North of I-35E to south of I-635.
Includes replacement of illumination, installation of bridge & ROW fencing, slope stabilization, landscape & irrigation improvements.

Justification: This project will start after the completion of the DNT Corridor Capacity study.

Comments: N/A

Project Forecast

Year	Total Budget
2022	-
2023	-
2024	-
2025	-
2026	2,286,877
	\$ 2,286,877

Project Details 2022

Account	Description	Total Amount
Expenses		
		-
		-
	Total Expenses:	-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2500003	Budget Year:	2022
Project Title:	SRT Widening	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 191,526,343
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 151,439,063

Description: Limits: Denton Tap Rd to US 75; adds an additional lane in each direction to SRT.

Justification: Schedule:
 Construction: 2019-2021
 Landscape maintenance: 2022-2023

Comments: Estimate Level A, \$191,526,343

Project Forecast

Year	Total Budget
2022	\$ 1,577,762
2023	2,000,000
2024	-
2025	-
2026	-
	\$ 3,577,762

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	200,000
541401	Infrastructure Rdway/Hwy/Bridg	1,377,762
	Total Expenses:	\$ 1,577,762

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2500004	Budget Year:	2022
Project Title:	SRT Continuous Illumination	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 41,956,834
Project Type:	Facilities/Roadway	Prior Years Cost:	-

Description: Project to study, design and construct continuous illumination along the Sam Rayburn Tollway.

Justification: Schedule:
 Design: Late 2022-2023
 Construction: 2024-2026

Comments: Estimate Level E, \$41,956,834

Project Forecast

Year	Total Budget
2022	\$ 688,808
2023	2,361,403
2024	11,252,551
2025	14,089,823
2026	11,627,265
	\$ 40,019,850

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	688,808
	Total Expenses:	\$ 688,808

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	3000000	Budget Year:	2022
Project Title:	PGBT East Branch	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 1,249,305,659
Project Type:	Facilities/Roadway	Prior Years Cost:	-

Description: Limits: I-30 to I-20 Approximately 11.2 miles

Justification: Schedule: Planning: 2022-2024
Design & ROW: Starting 2025

Comments: Estimate Level E, \$1,249,305,659

Project Forecast

Year	Total Budget
2022	\$ 5,861,421
2023	6,376,442
2024	7,984,780
2025	18,008,735
2026	25,000,000
	\$ 63,231,378

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	5,861,421
	Total Expenses:	\$ 5,861,421

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	3900001	Budget Year:	2022
Project Title:	PGBT/360 Tollway Connector	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 363,347,052
Project Type:	Facilities/Roadway	Prior Years Cost:	-

Description: Limits: Direct connector from PGBT to 360 Tollway along I-20

Justification: Provide direct access from PGBT to 360 Tollway.

Comments: Estimate level E, \$363,347,052

Project Forecast
Year

	Total Budget
2022	\$ 2,894,849
2023	6,371,350
2024	18,973,052
2025	34,721,387
2026	50,000,000
	\$ 112,960,638

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	2,894,849
	Total Expenses:	\$ 2,894,849

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000072	Budget Year:	2022
Project Title:	MSE Wall Program	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 98,400,396
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 46,178,664

Description: Retaining wall rehabilitation

Justification:

Comments:

Project Forecast

Year	Total Budget
2022	\$ 5,615,000
2023	3,000,000
2024	16,900,000
2025	21,700,000
2026	16,400,000
	\$ 63,615,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541401	Infrastructure Rdway/Hwy/Bridg	5,615,000
	Total Expenses:	\$ 5,615,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7200001	Budget Year:	2022
Project Title:	CTP South 2-lanes	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 239,405,563
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 129,033

Description: Limits: Southbound main-lanes from FM 1187 to U.S. 67.

Justification: Build 2 southbound main-lanes.
 Schedule:
 Planning: 2022-2023
 Design: 2023-2025
 Construction: 2026-2028

Comments: Estimate Level E, \$239,405,563

Project Forecast

Year	Total Budget
2022	\$ 3,600,798
2023	8,593,647
2024	6,399,007
2025	4,628,622
2026	55,185,082
	\$ 78,407,156

Project Details 2022

Account	Description	Total Amount
Expenses		
521213	General Engineering	3,600,798
	Total Expenses:	\$ 3,600,798

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000000	Budget Year:	2022
Project Title:	Systemwide Safety Improvements	Manager:	Traffic & Incident Management
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20610-Total Traffic and Incident Management	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Systemwide Safety Improvements are small projects, technology upgrades including upgrade of ATMs, tools, and equipment to improve the traffic flow and/or safety.

Justification: This budget provides funding to perform localized safety improvements and increased traffic flow.

Comments: N/A

Project Forecast

Year	Total Budget
2022	\$ 8,707,000
2023	15,782,500
2024	20,069,500
2025	16,031,000
2026	7,700,000
	\$ 68,290,000

Project Details 2022

Account	Description	Total Amount
Expenses		
541401	Infrastructure Rdway/Hwy/Bridg	8,707,000
	Total Expenses:	\$ 8,707,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None



SRT (East) Widening Improvement
Placing concrete for traffic rail

APPENDICES



DNT 4B Frontage Road
Placing concrete for creek tributary bridge

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Appendix B – Capital Plan Process

INTRODUCTION

The North Texas Tollway Authority's policy for the adoption of the Operating Budget (budget of current expenses, annual budget or Operation and Maintenance Fund) and payments into the Reserve Maintenance Fund for the subsequent fiscal year is outlined by the Amended and Restated Trust Agreement with Supplements.

In conjunction with development of the Operating Budget, staff prepares estimates of expenditures for the Reserve Maintenance Fund, Capital Improvement Fund, Construction Fund and Feasibility Study Fund, which is approved by the NTTA Board of Directors with a resolution.

CAPITAL PLAN PROCESS

Capital plan projects are classified into four categories: Reserve Maintenance Projects, Capital Improvement Projects, NTTA System Construction Projects and Feasibility Study Projects (see Project Type and Funding Source, page 15). Each year, individual departments use the a budget module to complete project forms for new projects or update the previous year projects for revised estimates and/or extend the year(s).

The requests are further classified by project type, purpose and priority. These classifications assist in the decision making process. The Treasury Management department creates project lists and summary reports for the four project categories. In addition, they update the long term financial plan schedules. The forms, lists, reports, and schedules are compiled to create the Five-Year Capital Plan Project Book, which is delivered to the executive management team for review and approval.

Any changes from the review and approval process are incorporated into the reports, and the Five-Year Capital Plan book is created. The Capital Plan is presented to the NTTA Board of Directors' Finance, Audit, and Administration Committee for review and recommendation. Upon the Committees' recommendation, the Capital Plan is presented to the full Board of Directors for adoption.

CASH BALANCES

The Trust Agreement requires that some funds maintain cash balances. These cash balances contain both cash on deposit and investments held in the fund as follows:

Operation and Maintenance Fund is required to maintain a cash balance equal to one-sixth (1/6) of the total operating budget amount for the current fiscal year, plus all prior accruals for insurance and other periodic or regularly recurring expenses.

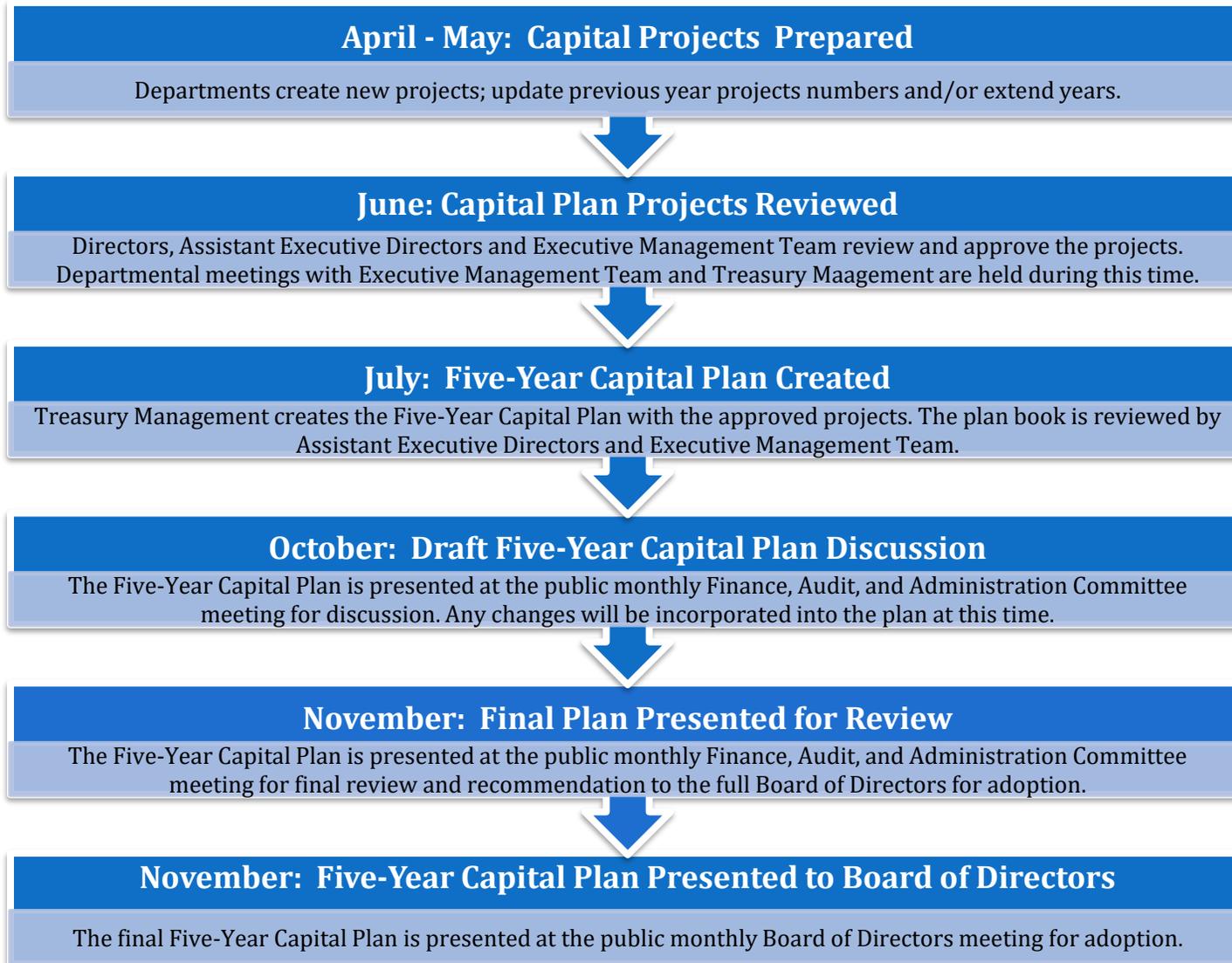
Appendix B – Capital Plan Process (continued)

Reserve Maintenance Fund is required to maintain a reserve balance of \$5.0 million.

Management determined it was prudent to retain funds within the Capital Improvement Fund as insurance against unanticipated needs. During FY2010, the Authority's Board of Directors approved a Rainy Day Fund in the amount of \$50.0 million as the reserve in the Capital Improvement Fund. In FY2018 an additional transfer of \$25.0 million was done to bring the reserve to a total of \$75.0 million. In 2022, the Authority's executive management anticipates a transfer of \$12.5 million to establish an \$87.5 million Rainy Day Fund. Use of this reserve requires specific action by the NTTA Board of Directors and is for unanticipated needs or to ensure that subordinate CIF debt payments are made.

Appendix B – Capital Plan Process

CAPITAL PLAN PROCESS FLOW



Appendix C - FY2022 Capital Plan Budget Calendar

Date	Event
April 15, 2021 (Thursday)	Executive Director's FY2022 Budget Meeting wth Assistant Executive Directors to discuss budget priorities and overall direction, including compensation and benefits
April 16, 2021 (Friday)	Budget Kickoff Meeting with Department Directors
June 11, 2021 (Friday)	Directors Approve Departmental Budgets, Decision Packages, and Capital Projects in Questica
June 18, 2021 (Friday)	Board Budget Workshop
June 18, 2021 (Friday)	AEDs Approve Departmental Budgets, Decision Packages, and Capital Projects in Questica
June 25, 2021 (Friday)	Executive Management Team Approves Departmental Budgets, Decision Packages, and Capital Projects
June 28 - July 16, 2021	Capital Plan book assembled by Treasury
August 27, 2021 (Friday)	Capital Plan book Review by Executive Management Team completed
September 17, 2021 (Friday)	Five-Year Capital Plan book delivered to Board Members
October 7, 2021 (Thursday)	Finance Audit and Administration Committee Five-Year Capital Plan First Review
September 30 - Oct. 22, 2021	Incorporate any updates to CP
November 4, 2021 (Thursday)	Finance Audit amnd Administration Committee Five-Year Capital Plan Second Review
November 17, 2021 (Wednesday)	Board Meeting Five-Year Capital Plan Approval
Assumes Thursday Committee Meetings and Wednesday Board Meetings Board events highlighted in blue	

Appendix D – Major Revenue Source

Toll revenue collected on the NTTA System is the Authority's major source of revenue. It accounts for an estimated \$910.1 million or 95.0% of the total estimated revenue in the FY2022 Operating Budget.

TOLL REVENUE

Chapter 366 of the Texas Transportation Code authorizes the NTTA to fix, revise, charge and collect tolls for the use of the NTTA System and provides that such tolls will be so fixed and adjusted as to provide funds sufficient with other revenues, if any, to pay the cost of maintaining, repairing and operating the NTTA System and the principal of and the interest on bonds issued in connection with the NTTA System as the same become due and payable, and to create reserves for such purposes. The Authority Act states that such tolls will not be subject to supervision or regulation by any agency of the State or any local governmental entity.

The Authority has adopted a toll rate schedule for the NTTA System in substantial conformity with the recommendations of NTTA's traffic and revenue engineers. The Authority covenants in the Trust Agreement that it will keep in effect a toll rate schedule that will raise and produce net revenues (total revenue less operating expenses) sufficient to satisfy its debt service requirements.

Independent traffic and revenue engineers, currently CDM Smith, provide the Authority's traffic and toll revenue estimates. CDM Smith conducted a toll sensitivity analysis of the NTTA System that shows the current and planned toll charges on the NTTA System are below the theoretical revenue maximization points. This demonstrates the potential, if needed, for revenue enhancement through toll increases above those assumed for forecasting purposes.

Appendix D – Major Revenue Source

The schedule below shows CDM Smith’s annual toll revenue estimates for the NTTA System for the next five years. Annual toll revenue growth is expected to average 6.1% per year between FY2022 and FY2026.

Roadway	Estimated NTTA System Annual Toll Revenue				
	FY2022	FY2023	FY2024	FY2025	FY2026
DNT	\$ 269,111,000	\$ 294,403,900	\$ 312,086,500	\$ 326,400,300	\$ 341,680,200
PGBT	277,728,300	308,137,200	328,697,000	345,278,400	362,785,200
AATT	1,228,900	1,379,600	1,502,900	1,567,600	1,630,600
MCLB	1,463,400	1,650,800	1,779,500	1,853,200	1,929,500
LLTB	9,480,500	10,185,200	10,824,500	11,324,500	11,848,300
SRT	205,505,900	216,525,100	228,714,500	239,883,600	251,701,800
360 Tollway	20,403,500	22,989,900	25,081,600	27,058,800	29,224,000
PGBT WE	63,785,500	72,910,500	81,213,900	86,594,700	92,057,800
CTP	61,420,400	66,174,400	70,712,800	75,298,400	80,311,800
System Totals	\$ 910,127,400	\$ 994,356,600	\$ 1,060,613,200	\$ 1,115,259,500	\$ 1,173,169,200

REVENUE DISTRIBUTION

The Authority covenants that all gross revenues (all tolls, other revenue, and income) arising or derived by the Authority from the operation and ownership of the Tollway (excepting investment income from all funds and accounts other than the Revenue Fund) will be collected by the Authority and deposited daily, as far as practicable, with the Trustee for the credit of the Revenue Fund. Notwithstanding the foregoing, tolls collected on behalf of TxDOT pursuant to a project agreement that provides for revenue sharing with TxDOT are required to be collected by the Authority and to be held and transferred to or upon the order of TxDOT as set forth in such project agreement. The Trustee is required to disburse amounts which are required to be on deposit in the various funds and accounts described below from the Revenue Fund on the required dates.

Under the Trust Agreement, the tolls and other revenues of the NTTA System on deposit in the Revenue Fund are applied in the following manner with each deposit being made as specified below in the sequence noted:

- 1) *First*, on or before the first day of each month, funds are deposited to the Operation and Maintenance Fund in an amount sufficient to make the balance of the Operation and Maintenance Fund equal to one-sixth (1/6) of the amount of the total Current Expenses in the current Annual Budget, plus all prior accruals for insurance and other periodic or regularly scheduled recurring expenses.

Appendix D – Major Revenue Source

- 2) Second, on or before the last Business Day preceding each interest payment date or principal (or sinking fund redemption) payment date for the First Tier Bonds (including First Tier Payment Obligations) or such other day as set forth in a Supplemental Agreement, funds are deposited to the applicable account in the First Tier Sinking Fund (or to a fund or account created to pay or repay amounts owed under a Credit Agreement entered into in connection with a series of First Tier Bonds in lieu of either of the foregoing) in the amounts due on any First Tier Bond (including First Tier Payment Obligations).
- 3) Third, on or before the first day of each month, funds are deposited to the credit of the First Tier Reserve Account (1) in the amount, if any, required to restore any deficiency in the First Tier Reserve Account due to a withdrawal or change in value of Authorized Investments in order to make the amount on deposit in the First Tier Debt Reserve Account equal to the First Tier Reserve Requirement, which restoration is intended to occur within 12 months of the occurrence of any such deficiency in 12 substantially equal monthly installments, and (2) in the amount set forth in a Supplemental Agreement if an amount different from the First Tier Reserve Requirement is required.
- 4) Fourth, on or before the last Business Day preceding each interest payment date or principal (or sinking fund redemption) payment date for the Second Tier Bonds (including Second Tier Payment Obligations) or such other day as set forth in a Supplemental Agreement, funds are deposited to the applicable account in the Second Tier Sinking Fund (or to a fund or account created to pay or repay amounts owed under a Credit Agreement entered into in connection with a series of Second Tier Bonds in lieu of either of the foregoing) in the amounts due on any Second Tier Bond (including Second Tier Payment Obligations).
- 5) Fifth, on or before the first day of each month, funds are deposited to the credit of the Second Tier Reserve Account or subaccount therein, if one is provided for in a Supplemental Agreement, in the amounts set forth in the Supplemental Agreement establishing the Second Tier Reserve Requirement or authorizing Additional Second Tier Bonds.
- 6) Sixth, on or before the last Business Day preceding each interest payment date or principal (or sinking fund redemption) payment date for the Third Tier Bonds (including Third Tier Payment Obligations) or such other day as set forth in a Supplemental Agreement, funds are deposited to the applicable account in the Third Tier Sinking Fund (or to a fund or account created to pay or repay amounts owed under a Credit Agreement entered into in connection with a series of Third Tier Bonds in lieu of either of the foregoing) in the amounts due on any Third Tier Bond (including Third Tier Payment Obligations).
- 7) Seventh, on or before the first day of each month, funds are deposited to the credit of the Third Tier Reserve Account or subaccount therein, if one is provided for in a Supplemental Agreement, in the amounts set forth in the Supplemental Agreement establishing the Third Tier Reserve Requirement or authorizing Additional Third Tier Bonds.

Appendix D – Major Revenue Source

- 8) Eighth, on or before the first day of each month, funds are required to be deposited in the Reserve Maintenance Fund in an amount equal to one-twelfth of the amount necessary in such fiscal year to accumulate in the Reserve Maintenance Fund an amount equal to the greater of (1) \$5 million, and (2) the amount as may be required in the then current Annual Budget to be deposited to the credit of the Reserve Maintenance Fund during the then current fiscal year; provided, however, that if the amount so deposited to the credit of the Reserve Maintenance Fund in any fiscal year is less than the budgeted amount, the requirement therefore will nevertheless be cumulative and the amount of any deficiency in any fiscal year is required to be added to the amount otherwise required to be deposited in each fiscal year thereafter until such time as such deficiency has been made up, unless such budget requirement has been modified by the Authority.
- 9) Ninth, at the end of each fiscal year any remaining funds on deposit in the Revenue Fund may be transferred to the Capital Improvement Fund.

Appendix E - Outstanding Debt Service

	A	B	D	E	F
FY Ending 12/31	First Tier Net Debt Service	Second Tier Net Debt Service	ISTEA Loan Debt Service	Subordinated Lien Bonds Debt Service	Total Net Debt Service
2021	361,995,324	145,176,083	15,322,396	3,962,140	526,455,942
2022	386,275,404	202,327,663	15,322,396	8,632,627	612,558,090
2023	426,250,905	212,268,013	15,322,396	8,631,332	662,472,645
2024	447,551,323	234,150,263	15,322,396	8,636,443	705,660,424
2025	478,351,737	203,353,263	15,322,396	8,641,552	705,668,947
2026	484,103,285	197,595,513	15,322,396	8,640,533	705,661,727
2027	487,428,003	194,273,013	15,322,396	8,642,541	705,665,952
2028	502,378,733	182,092,513	15,322,396	8,646,166	708,439,807
2029	480,949,660	238,244,513	-	-	719,194,172
2030	417,613,074	302,136,869	-	-	719,749,944
2031	413,765,447	305,989,763	-	-	719,755,210
2032	456,323,880	263,431,413	-	-	719,755,293
2033	471,381,943	248,371,713	-	-	719,753,655
2034	535,092,166	184,672,513	-	-	719,764,678
2035	558,711,881	161,049,463	-	-	719,761,344
2036	584,561,811	135,202,563	-	-	719,764,374
2037	634,475,397	85,292,370	-	-	719,767,768
2038	487,732,454	83,037,363	-	-	570,769,816
2039	488,669,644	82,100,413	-	-	570,770,057
2040	490,607,882	80,176,813	-	-	570,784,695
2041	492,647,852	64,553,463	-	-	557,201,315
2042	497,358,186	60,329,763	-	-	557,687,948
2043	206,023,145	48,346,513	-	-	254,369,657
2044	191,311,799	76,068,763	-	-	267,380,562
2045	149,275,354	118,147,863	-	-	267,423,216
2046	41,588,191	114,379,863	-	-	155,968,053
2047	-	115,371,563	-	-	115,371,563
2048	-	107,643,313	-	-	107,643,313
2049		6,610,802			6,610,802
Total	\$ 11,172,424,480	\$ 4,452,393,986	\$ 122,579,168	\$ 64,433,334	\$ 15,811,830,968

Appendix F - Estimated Operating Expenditures by Account

Description	Estimated FY2022 - FY2026					
	FY2021 Budget	FY2022	FY2023	FY2024	FY2025	FY2026
Salaries and Wages-Direct - (511101)	\$46,618,115	\$45,738,425	\$47,110,578	\$48,523,895	\$49,979,612	\$51,479,000
Salaries and Wage-Overtime - (511301)	811,849	764,676	787,617	811,245	835,583	860,650
Group Insurance - (512101)	9,494,855	9,769,173	10,062,248	10,364,116	10,675,039	10,995,290
Retirement Contributions - (512401)	6,020,586	7,642,821	7,872,106	8,108,269	8,351,517	8,602,062
Tuition Reimbursement - (512501)	11,770	11,770	12,123	12,487	12,861	13,247
Unemployment Insurance - (512601)	123,661	123,661	127,371	131,192	135,128	139,182
Regional Tolling Services	(21,608,319)	(25,163,275)	(25,918,173)	(26,695,718)	(27,496,590)	(28,321,488)
Worker's Comp Ins - (512701)	237,285	237,285	244,404	251,736	259,288	267,066
Meeting Expense - (521101)	91,272	95,402	98,264	101,212	104,248	107,376
Consulting/Professional - (521201)	12,621,373	15,060,177	15,511,983	15,977,342	16,456,662	16,950,362
Legal Fees - (521202)	1,738,181	1,738,181	1,790,326	1,844,036	1,899,357	1,956,338
Auditing Fees - (521203)	185,083	185,083	190,635	196,355	202,245	208,313
Trustee Fees - (521204)	280,031	280,031	288,432	297,085	305,997	315,177
Traffic Engineering Fees - (521207)	450,000	450,000	463,500	477,405	491,727	506,479
Police Services (DPS) - (521208)	11,257,880	10,691,041	11,011,772	11,342,125	11,682,389	12,032,861
Armored Car Services - (521209)	50,142	50,142	51,646	53,196	54,792	56,435
Outside Maintenance Services - (521212)	33,382,536	34,740,337	35,782,547	36,856,023	37,961,704	39,100,555
Landscaping - (522202)	41,500	61,500	63,345	65,245	67,203	69,219
Rentals - Land - (522301)	423,151	318,752	328,315	338,164	348,309	358,758
Rentals - Equipment - (522302)	81,622	162,754	167,637	172,666	177,846	183,181
Insurance Expense - Other - (523101)	2,896,957	3,977,708	4,097,039	4,219,950	4,346,549	4,476,945
Postage - (523201)	9,843,950	12,900,000	13,287,000	13,685,610	14,096,178	14,519,064
Telecommunications - (523202)	1,468,670	2,154,912	2,219,559	2,286,146	2,354,731	2,425,372
Public Information Fees - (523203)	13,369	13,369	13,770	14,183	14,609	15,047
Recruitment - (523301)	75,626	157,820	162,555	167,431	172,454	177,628
Magazine and Newspaper - (523302)	1,368,782	1,714,481	1,765,916	1,818,893	1,873,460	1,929,664
Television & Radio - (523303)	950,499	1,250,499	1,288,014	1,326,654	1,366,454	1,407,448
Promotional Expenses - (523304)	1,384,928	1,576,790	1,624,094	1,672,817	1,723,001	1,774,692
Employee Appreciation - (523305)	331	331	341	351	362	373
Printing and Photographic - (523401)	93,480	161,266	166,104	171,087	176,220	181,506
Maps & Pamphlets - (523402)	16,155	16,155	16,640	17,139	17,653	18,183
Travel - (523501)	68,554	110,868	114,194	117,620	121,149	124,783
Dues & Subscriptions - (523601)	282,134	303,003	312,093	321,456	331,100	341,033
Education and Training - (523701)	161,812	171,171	176,306	181,596	187,043	192,655
Licenses - (523801)	8,545	9,664	9,954	10,253	10,560	10,877
Temporary Contract Labor - (523851)	10,512,047	14,647,200	15,086,616	15,539,215	16,005,391	16,485,553
Liability Claims - (523902)	6,182	6,182	6,367	6,558	6,755	6,958
Office Supplies - (531101)	525,001	424,410	437,142	450,257	463,764	477,677
Other Materials and Supplies - (531102)	4,678,468	3,757,954	3,870,693	3,986,813	4,106,418	4,229,610
Mobile Equipment Expense - (531103)	812,200	1,125,022	1,158,773	1,193,536	1,229,342	1,266,222
Freight and Express - (531105)	5,454	12,169	12,534	12,910	13,298	13,697
Motor Fuel Expense - (531107)	1,811,678	1,223,000	1,259,690	1,297,481	1,336,405	1,376,497
Water - (531211)	883,696	883,696	910,207	937,513	965,638	994,608
Gas - (531221)	29,108	29,108	29,981	30,881	31,807	32,761
Electricity - (531231)	1,763,029	1,763,029	1,815,920	1,870,397	1,926,509	1,984,305
Books & Periodicals - (531401)	0	250	258	265	273	281
Inven for resale (toll tags) - (531501)	5,711,652	5,950,085	6,128,588	6,312,445	6,501,819	6,696,873
Small Tools and Shop Supplies - (531601)	177,968	181,234	186,671	192,271	198,039	203,980
Software (Under \$5,000) - (531651)	11,616,557	11,584,903	11,932,450	12,290,424	12,659,136	13,038,910
Uniforms - (531701)	291,061	299,356	308,337	317,587	327,114	336,928
Bank Charges - (573001)	513,269	555,226	571,882	589,039	606,710	624,911
Credit Card Fees - (573002)	23,372,922	26,192,602	26,978,380	27,787,731	28,621,363	29,480,004
Totals	183,656,659	196,111,402	201,994,744	208,054,586	214,296,224	220,725,111