



NTTA SYSTEM
FY2020 - FY2024
FIVE-YEAR CAPITAL PLAN

DALLAS NORTH TOLLWAY

Maintenance landscape crew installing new plant material on DNT on the DNT/Panther Creek intersection



TABLE OF CONTENTS

PAGE

PAGE

READERS ROADMAP.....4

CAPITAL PLAN OVERVIEW

Map of NTTA Roadways.....	7
Introduction and Overview.....	8
Project Types and Funding Sources.....	16
Summary of Project Costs by Funds.....	17
Informational Graphs.....	19
Flow of Funds.....	21

RESERVE MAINTENANCE PROJECTS

Project Description Summary.....	25
Project Listing.....	26
Project Detail.....	28

CAPITAL IMPROVEMENT PROJECTS

Project Description Summary.....	49
Project Listing.....	57
Project Detail.....	59

CONSTRUCTION PROJECTS

Project Description Summary.....	119
Project Listing.....	123
Project Detail.....	124

APPENDICES SECTION

A – Index of Projects.....	131
B – Capital Plan Process.....	132
C – Capital Plan Calendar.....	135
D – Major Revenue Source.....	136
E – Outstanding Debt Service.....	140
F – Estimated Operating Expenditures.....	141

READERS' ROADMAP

This Readers' Roadmap is a guide to help navigate through the North Texas Tollway Authority's FY2020 - FY2024 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 FY2020 - FY2024 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**
3. **Construction**

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.

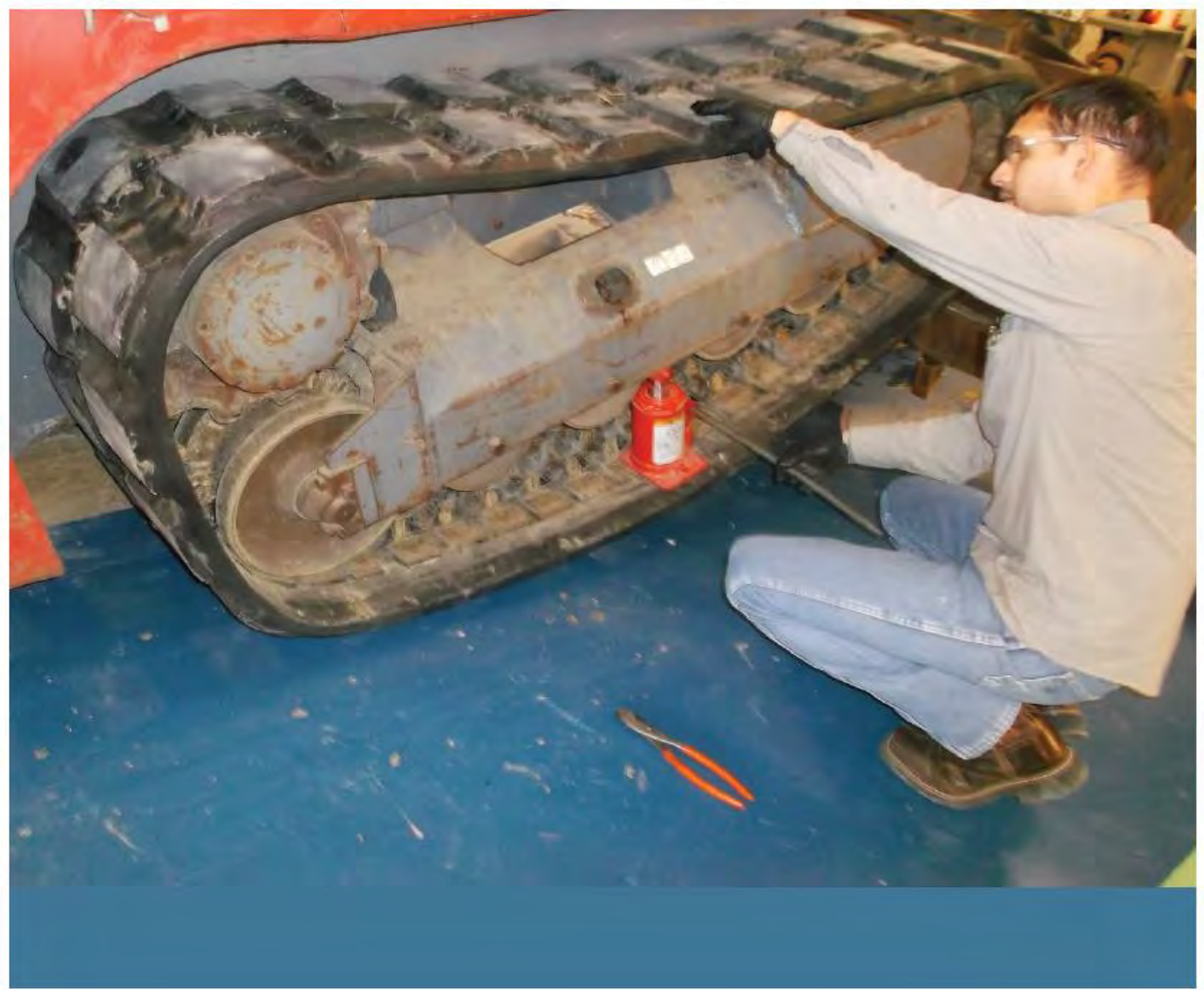
APPENDICES

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.

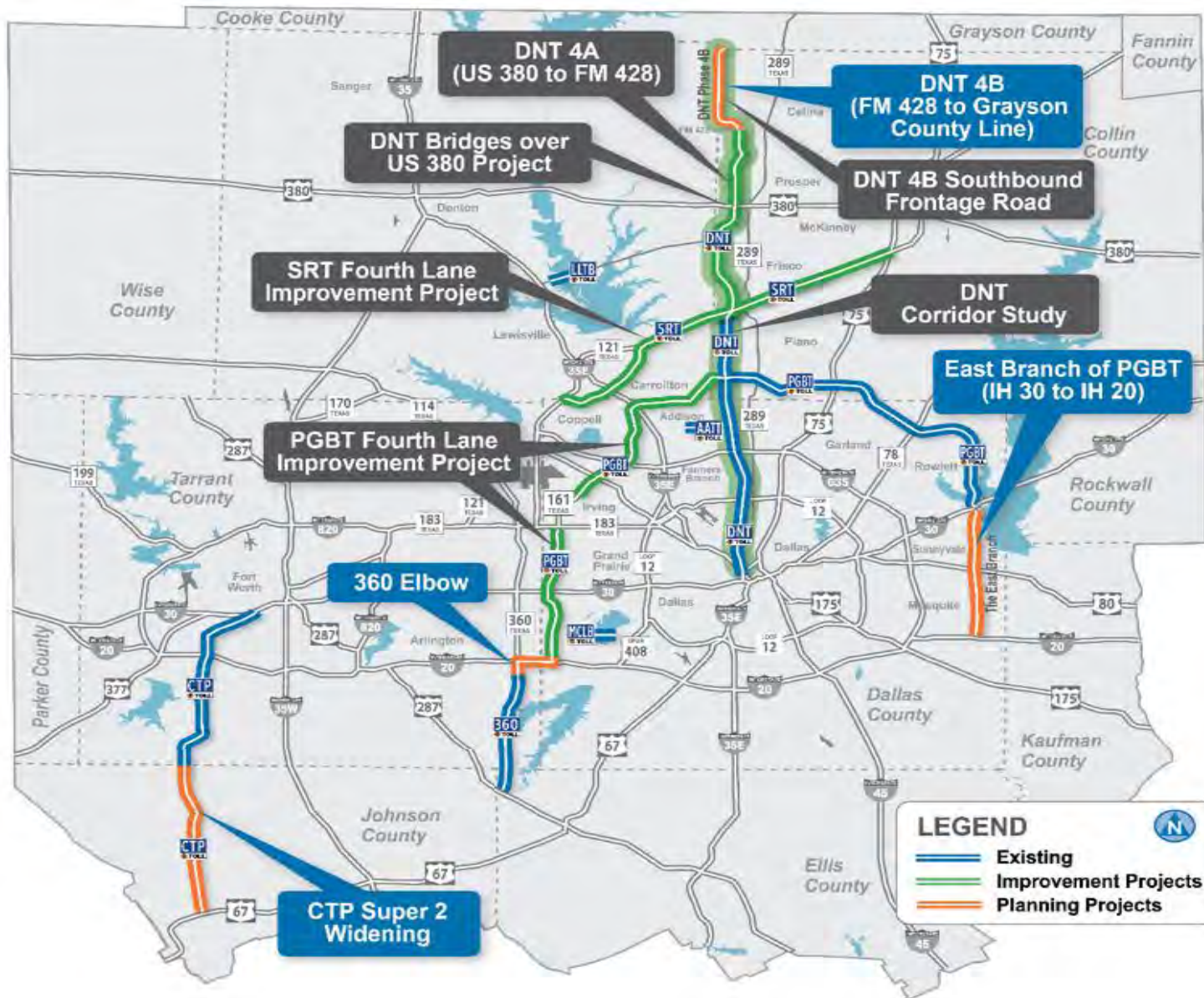
CAPITAL PLAN OVERVIEW

FRISCO
OPERATIONS
CENTER

Maintenance
Department team
member replacing
rubber track on a
skid loader



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) and Chisholm Trail Parkway (CTP).

Early in FY2018, NTTA took ownership of State Highway 360, also referred to in this document as 360 Tollway (360T), per an agreement with the Texas Department of Transportation (TxDOT). It is a stand-alone project and not part of the System.

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 \$5.5 billion. Approximately \$5.1 billion or 92.7% of total revenue is based on projections provided by the traffic and revenue engineers (see Major Revenue Source, pages 140-143). Approximately \$0.4 billion or 7.3% 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 4.8% per year from FY2020 through FY2024. 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 141-143).

Introduction and Overview (continued)

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five-Year Totals FY2020 - FY2024
REVENUE FUND							
Estimated Beginning Available Cash Balance	-	-	-	-	-	-	-
INFLOWS							
Estimated Toll Revenues	\$ 888,945,000	\$ 928,342,600	\$ 971,161,200	\$ 1,027,216,300	\$ 1,078,521,700	\$ 1,130,572,800	\$ 5,135,814,600
Estimated Other Revenues	70,802,800	68,435,000	69,974,592	72,713,101	74,949,510	77,645,045	363,717,248
TOTAL INFLOWS	959,747,800	996,777,600	1,041,135,792	1,099,929,401	1,153,471,210	1,208,217,845	5,499,531,848
Estimated Ending Available Cash Balance	-	-	-	-	-	-	-
Total Revenues Available for Operations	\$ 959,747,800	\$ 996,777,600	\$ 1,041,135,792	\$ 1,099,929,401	\$ 1,153,471,210	\$ 1,208,217,845	\$ 5,499,531,848

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 141, and Cash Balances, page 136). A projected \$994.7 million for O&M expense and reserve will be transferred from the Revenue Fund to the O&M Fund. An additional, \$47.3 million for salaries and benefits is transferred from various other funds (Capital Improvement, Construction, and Reserve Maintenance Funds).

The estimated operating expenses for FY2020 are prepared by the individual departments and compared to the general engineering consultant estimates. The operating expenses are expected to increase an average of 3.0% per year between FY2020 and FY2024. (See Appendix F page 145)

Introduction and Overview (continued)

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five-Year Totals FY2020 - FY2024
Total Revenues Available for Operations	\$ 959,747,800	\$ 996,777,600	\$ 1,041,135,792	\$ 1,099,929,401	\$ 1,153,471,210	\$ 1,208,217,845	\$ 5,499,531,848
OPERATION AND MAINTENANCE FUND							
Estimated Beginning Available Cash Balance	51,708,111	32,580,000	32,580,000	33,557,400	34,564,122	35,601,046	32,580,000
INFLOWS							
Transfer from Revenue Fund	149,070,449	186,580,000	193,154,800	198,949,444	204,917,927	211,065,465	994,667,636
Inter-Fund Transfers	8,608,000	8,900,000	9,167,000	9,442,010	9,725,270	10,017,028	47,251,310
TOTAL INFLOWS	157,678,449	195,480,000	202,321,800	208,391,454	214,643,198	221,082,494	1,041,918,945
OUTFLOWS							
Estimated Operating Expenses	(176,806,560)	(195,480,000)	(201,344,400)	(207,384,732)	(213,606,274)	(220,014,462)	(1,037,829,868)
TOTAL OUTFLOWS	(176,806,560)	(195,480,000)	(201,344,400)	(207,384,732)	(213,606,274)	(220,014,462)	(1,037,829,868)
Estimated Ending Available Cash Balance	32,580,000	32,580,000	33,557,400	34,564,122	35,601,046	36,669,077	36,669,077
Net Revenues Available for Debt Service	\$ 810,677,351	\$ 810,197,600	\$ 847,980,992	\$ 900,979,957	\$ 948,553,283	\$ 997,152,380	\$ 4,504,864,212

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 \$3.3 billion. Payments for 1st and 2nd tier debt total \$3.1 billion which is funded from the Revenue Fund (see Revenue Distribution, page 141). 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 \$124.7 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 1.89 in FY2021 to a high of 2.19 in FY2024. (See page 11)

Introduction and Overview (continued)

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five-Year Totals FY2020 - FY2024
Net Revenues Available for Debt Service	\$ 810,677,351	\$ 810,197,600	\$ 847,980,992	\$ 900,979,957	\$ 948,553,283	\$ 997,152,380	\$ 4,504,864,212
DEBT SERVICE FUNDS							
Estimated Beginning Available Cash Balance	-	-	-	-	-	-	-
INFLOWS							
Transfer from Capital Improvement Fund	20,699,499	23,771,895	53,246,114	53,185,176	47,361,117	23,796,133	201,360,435
Transfer from Revenue Fund	518,497,277	552,438,230	582,002,480	626,117,180	642,962,530	652,846,280	3,056,366,700
TOTAL INFLOWS	539,196,776	576,210,125	635,248,594	679,302,356	690,323,647	676,642,413	3,257,727,135
OUTFLOWS							
1st Tier Debt Service	(401,035,961)	(423,557,067)	(448,564,567)	(442,512,967)	(455,267,967)	(455,566,967)	(2,225,469,535)
2nd Tier Debt Service	(117,461,316)	(128,881,163)	(133,437,913)	(183,604,213)	(187,694,563)	(197,279,313)	(830,897,165)
3rd Tier Debt Service	-	-	-	-	-	-	-
Total Debt Service	(518,497,277)	(552,438,230)	(582,002,480)	(626,117,180)	(642,962,530)	(652,846,280)	(3,056,366,700)
Capital Improvement Fund - Subordinate Debt	(8,449,499)	(8,449,499)	(37,923,718)	(37,862,780)	(32,038,721)	(8,473,737)	(124,748,455)
Capital Improvement Fund - ISTEAL Loan	(12,250,000)	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(76,611,980)
TOTAL OUTFLOWS	(539,196,776)	(576,210,125)	(635,248,594)	(679,302,356)	(690,323,647)	(676,642,413)	(3,257,727,135)
Estimated Ending Available Cash Balance	-	-	-	-	-	-	-
Net Revenues Available for Major Maintenance Projects	\$ 292,180,074	\$ 257,759,370	\$ 265,978,512	\$ 274,862,777	\$ 305,590,753	\$ 344,306,100	\$ 1,448,497,512
First Tier Debt Service Coverage	2.02	1.91	1.89	2.04	2.08	2.19	2.02
First & Second Tier Debt Service Coverage	1.56	1.47	1.46	1.44	1.48	1.53	1.47
All Debt Service Coverage	1.50	1.41	1.33	1.33	1.37	1.47	1.38
CIF Subordinated Debt Coverage	1.43	1.38	1.24	1.26	1.31	1.39	1.39

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 FY2020 through FY2024 is \$280.8 million, an average of \$56.2 million per year. This estimate is composed of \$248.2 million of project costs (see Reserve Maintenance Projects, pages 25-47) and \$32.6 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 141, and Cash Balances, page 136).

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five-Year Totals FY2020 - FY2024
Net Revenues Available for Reserve Maintenance Projects	\$ 292,180,074	\$ 257,759,370	\$ 265,978,512	\$ 274,862,777	\$ 305,590,753	\$ 344,306,100	\$ 1,448,497,512
RESERVE MAINTENANCE FUND							
Estimated Beginning Available Cash Balance	44,244,755	40,052,104	-	-	-	-	40,052,104
INFLOWS							
Transfer from Revenue Fund	38,053,253	24,563,777	61,575,992	51,194,831	48,558,578	54,870,600	240,763,779
TOTAL INFLOWS	38,053,253	24,563,777	61,575,992	51,194,831	48,558,578	54,870,600	240,763,779
OUTFLOWS							
RMF Project Expenses	(36,508,023)	(58,637,145)	(55,381,414)	(44,767,446)	(41,840,331)	(47,549,346)	(248,175,682)
RMF Professional Fees and Other Expenses	(2,607,681)	(2,754,630)	(2,873,749)	(3,006,931)	(3,195,179)	(3,692,495)	(15,522,984)
RMF Salaries/Wages	(3,130,200)	(3,224,106)	(3,320,829)	(3,420,454)	(3,523,068)	(3,628,760)	(17,117,217)
TOTAL OUTFLOWS	(42,245,904)	(64,615,881)	(61,575,992)	(51,194,831)	(48,558,578)	(54,870,600)	(280,815,883)
Estimated Ending Available Cash Balance	40,052,104	-	-	-	-	-	-
							-
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	\$ 254,126,821	\$ 233,195,593	\$ 204,402,520	\$ 223,667,946	\$ 257,032,175	\$ 289,435,499	\$ 1,207,733,733

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 \$1.2 billion, which is comprised of \$1.18 billion in project costs (see Capital Improvement Projects, pages 51-119) and \$35.4 million in professional fees and allocated overhead costs. The projects listed for FY2020 to FY2024 have been approved by executive management through the capital plan process (see Capital Plan process, pages 136-138). Funds for the CIF flow from the Revenue Fund to the extent there are excess revenues (see Revenue Distribution, page 141). The estimated contribution to CIF over the next five years is \$1.2 billion. Additionally, the Authority may issue bonds or commercial paper to finance capital improvement projects. The FY2020 – FY2024 Capital Plan contains \$95.3 million for subordinated debt and \$73.5 million for ISTEA loan payments. The Authority's executive management established a \$75.0 million CIF reserve fund, which is currently fully funded (see Cash Balance, pages 14 and 136).

In accordance with Transportation Code Chapter 366, enacted in FY1997 by the 75nd Texas Legislature, the Authority may designate an amount from a surplus fund (currently the Capital Improvement Fund) established for a turnpike project for feasibility studies associated with the extension, expansion or refinancing of Authority projects. The Capital Improvement Fund budget has a designated \$3.3 million over the next five years for feasibility studies if required.

Introduction and Overview (continued)

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five-Year Totals FY2020 - FY2024
Net Revenues Available for Capital Improvement Projects	\$ 254,126,821	\$ 233,195,593	\$ 204,402,520	\$ 223,667,946	\$ 257,032,175	\$ 289,435,499	\$ 1,207,733,733
CAPITAL IMPROVEMENT FUND							
Estimated Beginning CIF Cash Balance Available for Projects	406,475,362	463,098,176	414,011,228	330,368,559	303,984,610	250,968,701	463,098,176
INFLOWS							
Transfer from Revenue Fund	254,126,821	233,195,593	204,402,520	223,667,946	257,032,175	289,435,499	1,207,733,733
Commercial Paper Issuance	-	-	-	-	-	-	-
Legal Settlementmt	-	27,000,000	-	-	-	-	27,000,000
Reimbursement from Prosper - US 380	-	-	-	8,000,000	-	-	8,000,000
Reimbursement from TxDOT - SH 360	2,330,000	-	-	-	-	-	-
NET INFLOWS AVAILABLE FOR CIF EXPENSES	256,456,821	260,195,593	204,402,520	231,667,946	257,032,175	289,435,499	1,242,733,733
OUTFLOWS							
Commercial Paper Payment	-	-	-	-	-	-	-
CIF Project Expenses	(137,518,479)	(236,981,207)	(182,551,579)	(221,156,449)	(276,780,432)	(264,122,629)	(1,181,592,296)
CIF Professional/LOC Fees	(2,350,000)	(2,133,660)	(2,433,660)	(2,133,660)	(2,433,660)	(2,883,660)	(12,018,300)
CIF Salaries/Wages	(4,273,800)	(4,402,014)	(4,534,074)	(4,670,097)	(4,810,200)	(4,954,500)	(23,370,884)
Feasibility Study Fund/Revolving Account	(650,000)	(650,000)	(650,000)	(650,000)	(650,000)	(650,000)	(3,250,000)
Transfer to NTTA System Construction Funds	-	(15,002,880)	(50,514,759)	(5,645,555)	(1,589,142)	-	(72,752,336)
Transfer to CIF Bond Payment Account	(42,791,728)	(37,862,780)	(32,038,721)	(8,473,737)	(8,462,255)	(8,456,425)	(95,293,918)
Transfer to Debt Service Fund for ISTEPA Payment	(12,250,000)	(12,250,000)	(15,322,396)	(15,322,396)	(15,322,396)	(15,322,396)	(73,539,584)
TOTAL OUTFLOWS	(199,834,007)	(309,282,541)	(288,045,189)	(258,051,894)	(310,048,085)	(296,389,610)	(1,461,817,318)
Estimated Ending CIF Cash Balance Available for Projects	463,098,176	414,011,228	330,368,559	303,984,610	250,968,701	244,014,590	244,014,590
							-
CIF Bond Payment Account							
Estimated Beginning CIF Bond Payment Account Cash Balance	12,030,988	46,373,217	75,786,498	69,901,501	40,512,458	16,935,992	46,373,217
Transfers from CIF Cash Account	42,791,728	37,862,780	32,038,721	8,473,737	8,462,255	8,456,425	95,293,918
Transfer to Debt Service Fund for CIF Subordinated Debt Payment	(8,449,499)	(8,449,499)	(37,923,718)	(37,862,780)	(32,038,721)	(8,473,737)	(124,748,455)
Estimated Ending CIF Bond Payment Account Cash Balance	46,373,217	75,786,498	69,901,501	40,512,458	16,935,992	16,918,680	16,918,680
							-
CIF Rainy Day Fund Account							
Estimated Beginning CIF Rainy Day Fund Account Cash Balance	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000
Transfers from CIF Cash Account	-	-	-	-	-	-	-
Estimated Ending CIF Rainy Day Fund Account Cash Balance	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000
Estimated Ending Total CIF Cash Balances	\$ 584,471,393	\$ 564,797,726	\$ 475,270,060	\$ 419,497,068	\$ 342,904,693	\$ 335,933,270	\$ 335,933,270

Introduction and Overview (continued)

F. Construction Fund

The funds required to construct or acquire toll projects for the Authority are contained in the Construction Fund. The projects in this fund are typically funded with bond proceeds or reimbursement agreements. The FY2020 - FY2024 costs are funded with bond proceeds of \$44.8 million and transfers from the Capital Improvement Fund of \$72.8 million; in addition, \$29.4 million for the DNT 4B frontage roads will be fully reimbursed by Denton County. Over the next five years, construction projects total \$147.0 million, which is comprised of \$142.4 million in construction costs and \$4.6 million in allocated overhead costs and professional fees (see NTTA System Construction Projects, pages 123-131). The budget mainly contains \$110.3 million for the widening of the Sam Rayburn Tollway.

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five-Year Totals FY2020 - FY2024
CONSTRUCTION FUNDS - NTTA SYSTEM							
Estimated Beginning Available Cash Balance	\$ 97,922,187	\$ 44,837,823	\$ -	\$ -	\$ -	\$ -	\$ 44,837,823
INFLOWS							
Reimbursement Agreements:							-
Denton County ILA - DNT Phase 4B	10,025,340	15,857,910	9,524,448	3,988,739	-	-	29,371,097
Transfer from Capital Improvement Fund		15,002,880	50,514,759	5,645,555	1,589,142	-	72,752,336
TOTAL INFLOWS	10,025,340	30,860,790	60,039,207	9,634,294	1,589,142	-	102,123,433
OUTFLOWS							
Transfer to Capital Improvement Fund							
Professional Fees, Legal Fees	(121,780)	(121,780)	(121,780)	(119,780)	(119,780)	-	(483,120)
Construction Fund Salaries and Wages	(1,203,700)	(1,239,811)	(1,277,005)	(1,015,316)	(545,775)	-	(4,077,907)
CTP Expenses	(856,000)	(860,000)	-	-	-	-	(860,000)
SRT Expenses	(50,902,884)	(55,751,112)	(49,115,974)	(4,510,459)	(923,587)	-	(110,301,132)
PGBT EE Expenses	-	(1,868,000)	-	-	-	-	(1,868,000)
DNT Phase 4B Southbound Frontage Road Expenses	(10,025,340)	(15,857,910)	(9,524,448)	(3,988,739)	-	-	(29,371,097)
TOTAL OUTFLOWS	(63,109,704)	(75,698,613)	(60,039,207)	(9,634,294)	(1,589,142)	-	(146,961,256)
Estimated Ending Available Cash Balance	\$ 44,837,823.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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. 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 that fall into this category include existing roadway expansions, improvements and/or reconstruction. In addition, projects with capital expenses unrelated to new road construction and/or maintenance are included here. 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.

CONSTRUCTION PROJECTS

Projects that fall into this category include NTTA System roadways that are currently under construction and projects that will be funded with bond proceeds. In most cases, funding for these projects already exists and come primarily from the sale of revenue bonds; however, other funding sources such as loans, grants, reimbursements and equity contributions are also considered.

FEASIBILITY STUDY PROJECTS

Projects that fall into this category include potential roadways that are undergoing analysis to determine feasibility. Funding for these projects comes primarily from the Capital Improvement Fund; however, other funding sources such as loans, grants, reimbursements and equity contributions may be considered.

FY2020 - FY2024 CAPITAL PLAN SUMMARY PROJECT COSTS BY FUND

Project Type	Estimated FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five Year Total FY2020 - FY2024
Reserve Maintenance Fund (1)	\$36,508,023	\$58,637,145	\$55,381,414	\$44,767,446	\$41,840,331	\$47,549,346	\$248,175,682
Capital Improvement Fund (2)	137,518,479	236,981,207	182,551,579	221,156,449	276,780,432	264,122,629	1,181,592,296
Construction Funds (3)	61,784,224	74,337,022	58,640,422	8,499,198	923,587	0	142,400,229
Totals	\$235,810,726	\$369,955,374	\$296,573,415	\$274,423,093	\$319,544,350	\$311,671,975	\$1,572,168,207

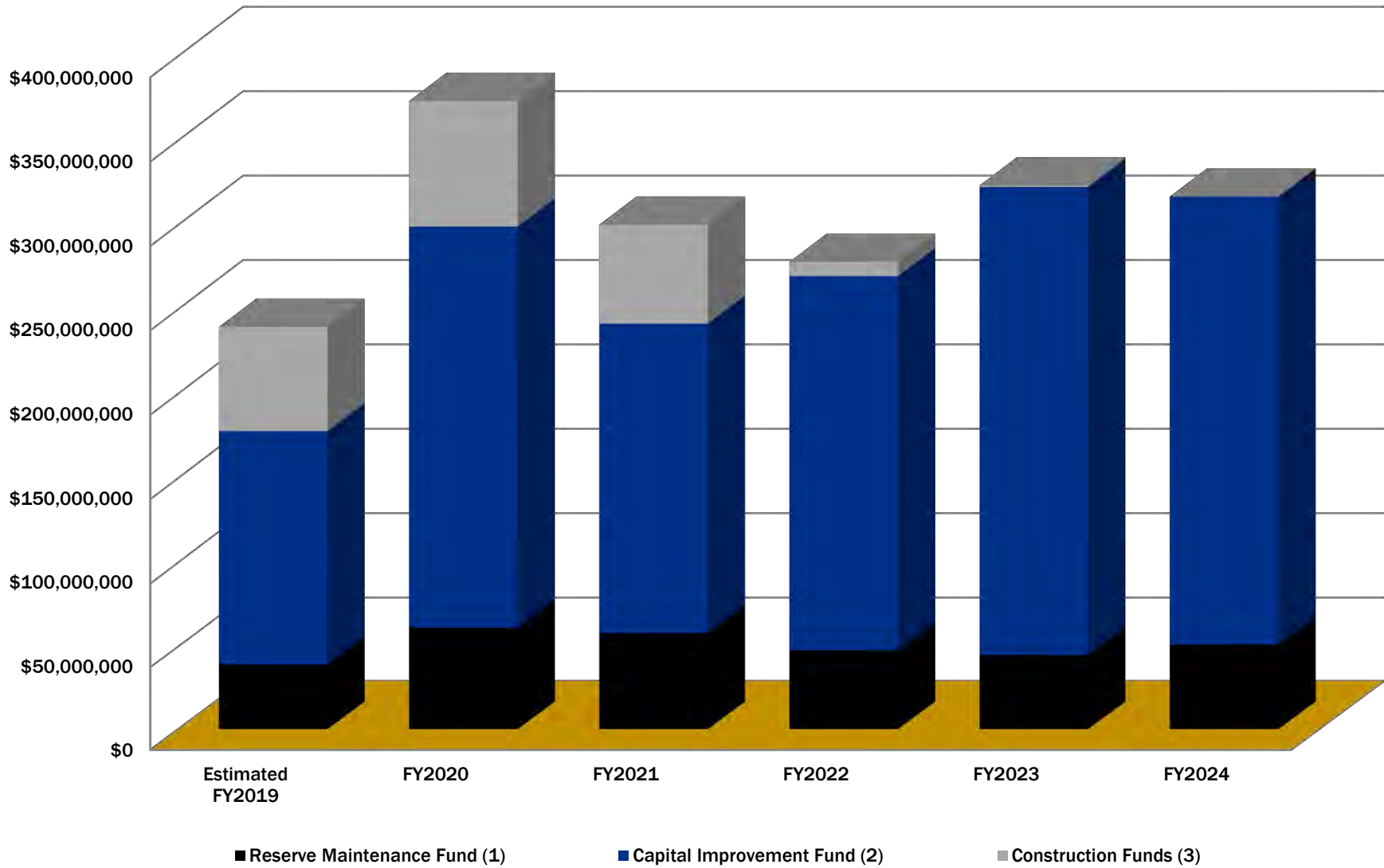
Report contains only project costs.

(1) List of projects see page 26-27.

(2) List of projects see pages 59-60.

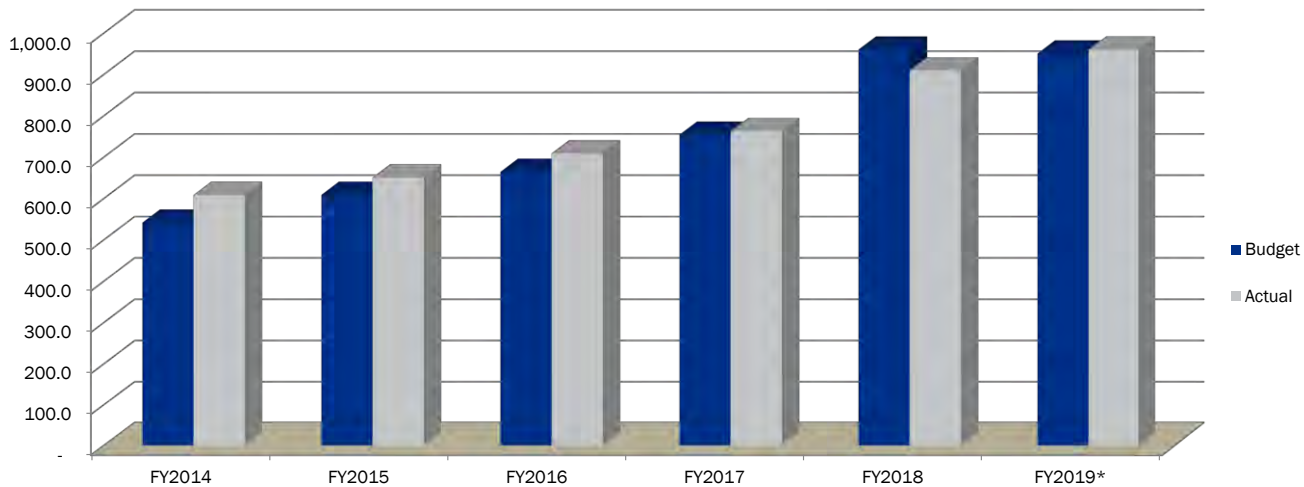
(3) List of projects see page 127.

Capital Plan Costs by Fund



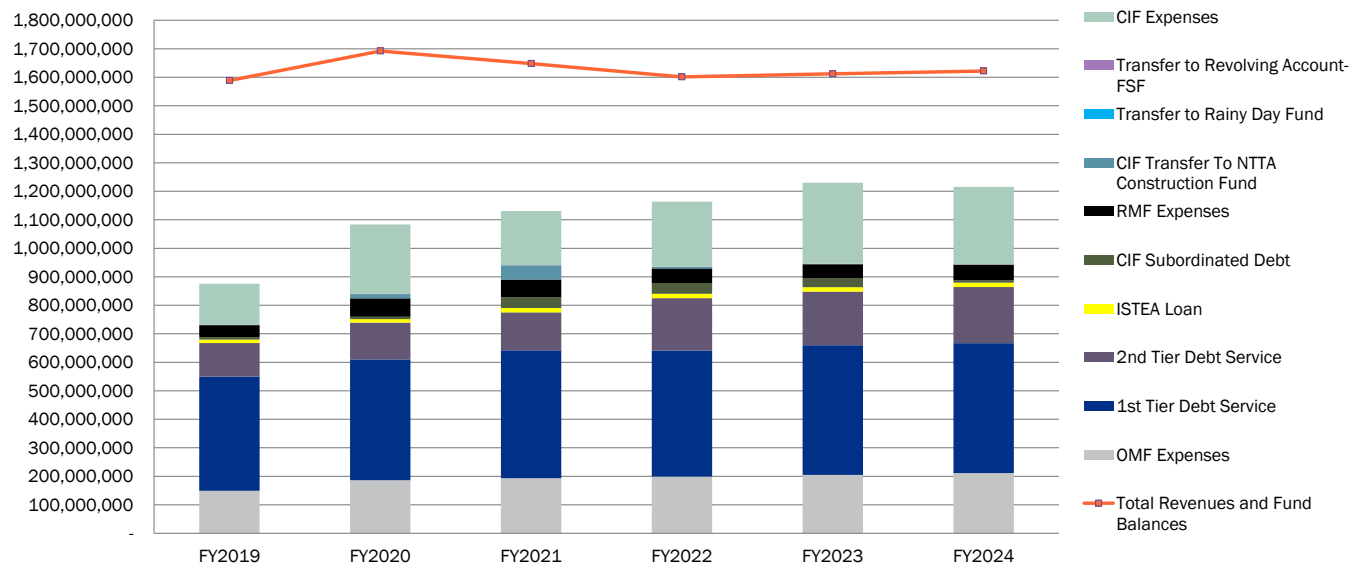
Informational Graphs

**Revenues
Budget to Actual (Millions)**



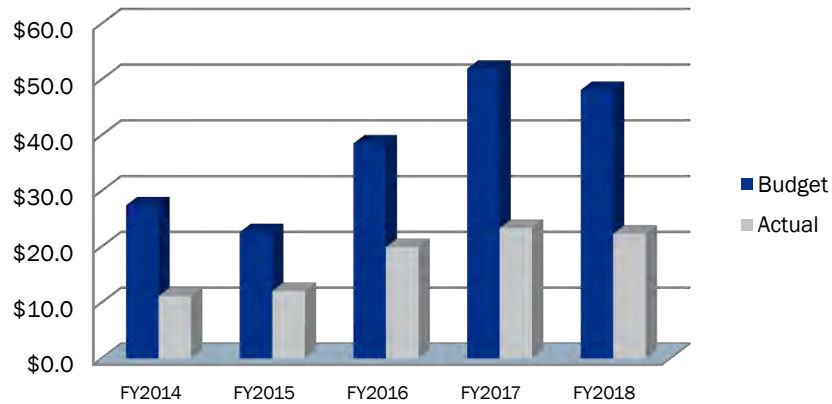
*Actual amount for FY2019 is based on estimates provided by CDM Smith, Inc.

Revenues and Expenses FY2019 - FY2024



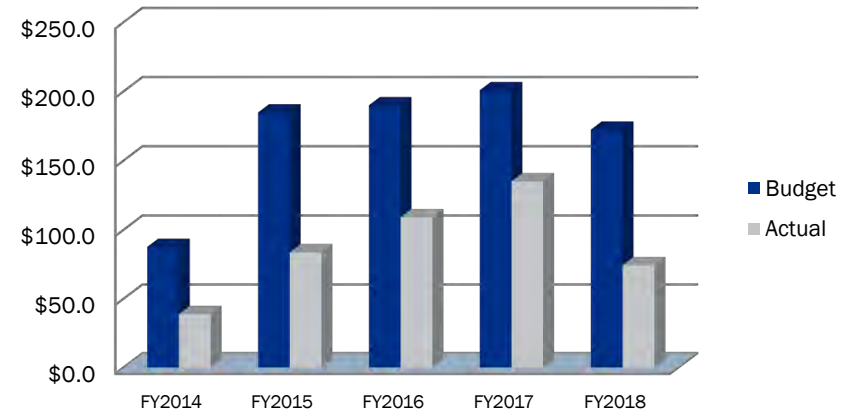
Historical Informational Graphs

**Reserve Maintenance Fund
Budget to Actual (Millions)**



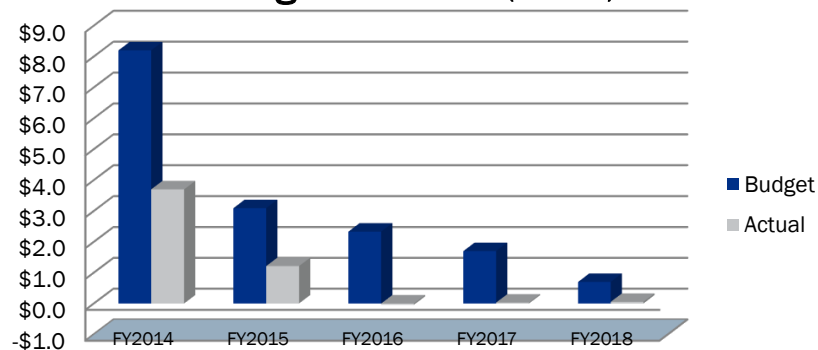
RMF Projects re-evaluated and prioritized throughout the year

**Capital Improvement Fund
Budget to Actual (Millions)**

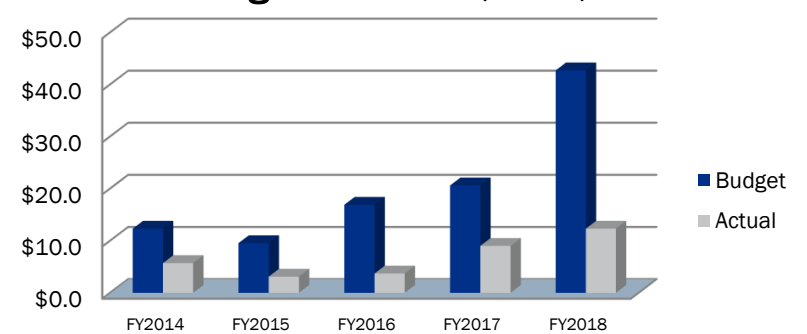


CIF Projects re-evaluated and prioritized throughout the year

**Feasibility Study Fund
Budget to Actual (Millions)**

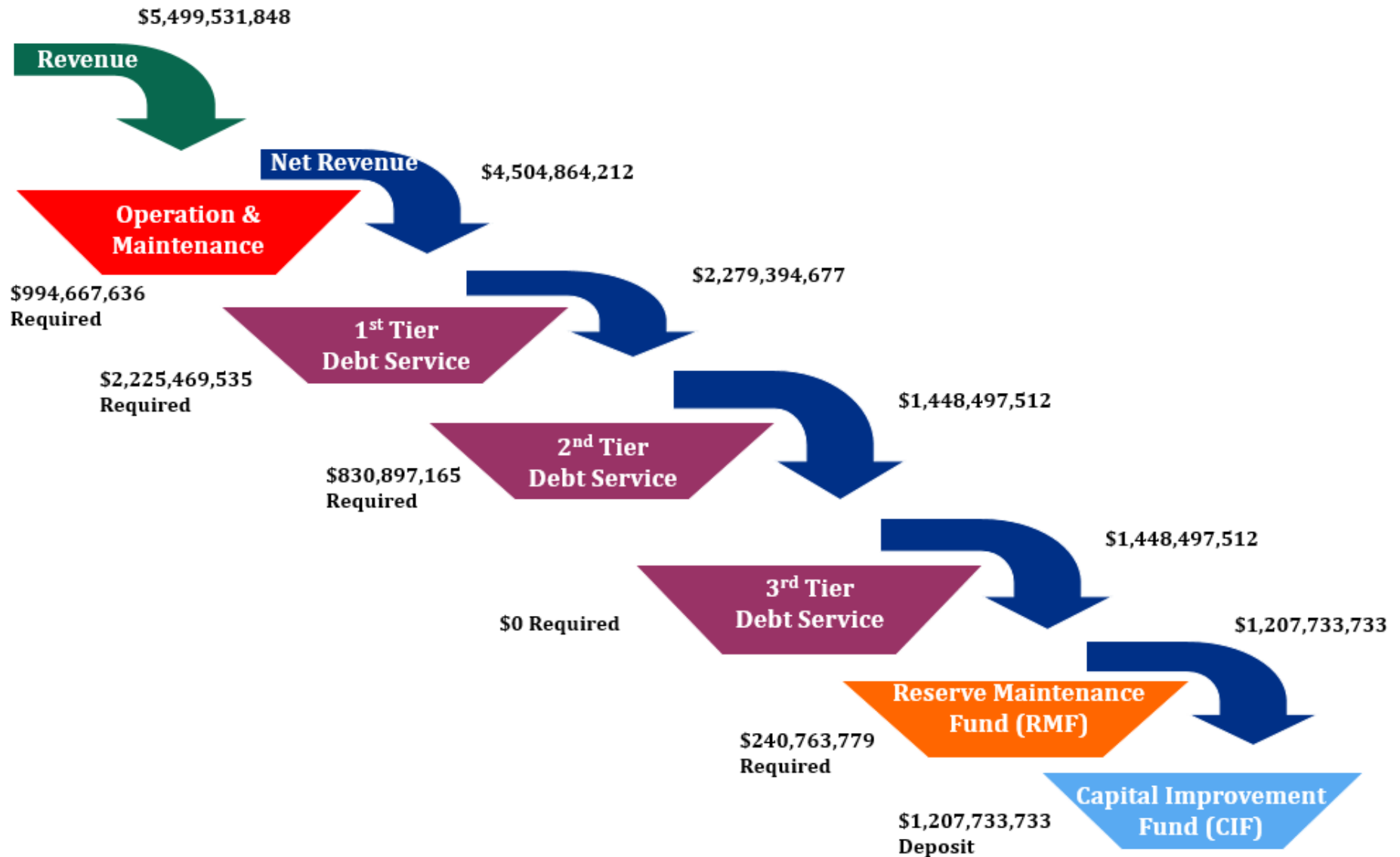


**Construction Fund
Budget to Actual (Millions)**



All construction projects coming to completion

NTTA System Flow of Funds FY2020 - FY2024



See pages 8-16 for uses of funds.

MCLB IMPROVEMENTS

Installing new
toll gantry for the
Mountain Creek
Lake Bridge



RESERVE MAINTENANCE PROJECTS

DALLAS
NORTH
TOLLWAY

Maintenance
crew applying brine
to the DNT



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 \$8.7 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 \$215.4 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 are primarily used for ongoing operations and maintenance. The Capital Plan includes \$13.2 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 \$26.0 million for this category.



Reserve Maintenance Fund - (1201) - Project List FY2020 - FY2024 CAPITAL PLAN

Department	Project	Estimated FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five Year Total FY2020 - FY2024
Information Technology - (20111)	1000431 - IT Roadway Systems	\$5,771,724	\$5,365,000	\$7,969,130	\$4,561,410	\$2,100,000	\$2,100,000	\$22,095,540
Information Technology - (20111)	1000825 - Server Hardware Upgrades and Replacements (1)	8,420,000	8,420,000	4,000,000	1,000,000	2,000,000	500,000	15,920,000
Information Technology - (20111)	1000826 - Computer Hardware Upgrades and Replacements (2)	1,283,000	1,676,500	495,000	495,000	495,000	495,000	3,656,500
Information Technology - (20111)	1000827 - Printer Hardware Upgrades and Replacements	100,000	150,000	150,000	150,000	200,000	200,000	850,000
Information Technology - (20111)	1000828 - Network Equip. & Comm. Systems Replacement (3)	2,169,500	2,088,500	719,500	719,500	719,500	500,000	4,747,000
Information Technology - (20111)	1000829 - Software and Licensing (4)	210,000	212,000	210,000	210,000	210,000		842,000
	Information Technology - (20111) Total	17,954,224	17,912,000	13,543,630	7,135,910	5,724,500	3,795,000	48,111,040
Admin Infrastructure - (20221)	1000009 - Landscaping	570,000	570,000	550,000	550,000	560,000	550,000	2,780,000
Admin Infrastructure - (20221)	1000026 - RMF - Fleet (5)	3,256,492	3,576,440	2,319,600	2,466,560	2,340,000	2,450,000	13,152,600
Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements (6)	2,880,000	2,952,000	1,845,000	1,495,000	1,005,000	1,185,000	8,482,000
	Admin Infrastructure - (20221) Total	6,706,492	7,098,440	4,714,600	4,511,560	3,905,000	4,185,000	24,414,600
Project Delivery - (20511)	1000011 - Restriping	1,270,500	5,690,800	5,099,150	14,564,000	4,236,800	11,253,200	40,843,950
Project Delivery - (20511)	1000012 - Drainage Repair	50,000	70,000	375,000	0	30,000	187,500	662,500
Project Delivery - (20511)	1000013 - Erosion Mitigation (7)	3,517,500	2,015,000	7,825,000	2,600,000	1,900,000	675,000	15,015,000
Project Delivery - (20511)	1000018 - Pavement Repair and Rehab. (8)	7,544,999	8,494,100	9,566,300	3,689,600	17,737,700	12,904,800	52,392,500
Project Delivery - (20511)	1000020 - Signage (9)	1,316,000	5,661,100	6,136,050	5,693,450	1,367,880	6,054,700	24,913,180
Project Delivery - (20511)	1000028 - Systemwide Bridge Repair (10)	4,170,000	2,735,000	1,650,000	1,185,000	1,375,000	1,575,000	8,520,000
Project Delivery - (20511)	1000031 - Annual Inspection Program	1,603,832	1,755,705	1,891,684	1,545,426	1,619,630	1,910,669	8,723,114
Project Delivery - (20511)	1000033 - Storm Sewer Repair	500,000	405,000	405,000	405,000	405,000	405,000	2,025,000
Project Delivery - (20511)	1000040 - Wall, Railings & Structural Steel Elements (11)	10,884,916	6,800,000	4,175,000	3,437,500	3,538,821	4,603,477	22,554,798
	Project Delivery - (20511) Total	30,857,747	33,626,705	37,123,184	33,119,976	32,210,831	39,569,346	175,650,042
Totals		\$55,518,463	\$58,637,145	\$55,381,414	\$44,767,446	\$41,840,331	\$47,549,346	\$248,175,682

Department	Project	Estimated FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five Year Total FY2020 - FY2024
FY2019 Carryover Projects and Adjustments								
(1)Information Technology - (20111)	1000825 - Server Hardware Upgrades and Replacements	(3,420,000)	0	0	0	0	0	0
(2)Information Technology - (20111)	1000826 - Computer Hardware Upgrades and Replacements	(711,500)	0	0	0	0	0	0
(3)Information Technology - (20111)	1000828 - Network Equip. & Comm. Systems Replacement	(1,319,000)	0	0	0	0	0	0
(4)Information Technology - (20111)	1000829 - Software and Licensing	(2,000)	0	0	0	0	0	0
(5)Admin Infrastructure - (20221)	1000026 - RMF - Fleet	(823,147)	0	0	0	0	0	0
(6)Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements	(400,000)	0	0	0	0	0	0
(7)Project Delivery - (20511)	1000013 - Erosion Mitigation	(1,095,000)	0	0	0	0	0	0
(8)Project Delivery - (20511)	1000018 - Pavement Repair and Rehab.	(2,415,000)	0	0	0	0	0	0
(9)Project Delivery - (20511)	1000020 - Signage	(1,316,000)	0	0	0	0	0	0
(10)Project Delivery - (20511)	1000028 - Systemwide Bridge Repair (Adjustment)	(708,793)	0	0	0	0	0	0
(11)Project Delivery - (20511)	1000040 - Wall, Railings & Structural Steel Elements	(6,800,000)	0	0	0	0	0	0
Totals		(\$19,010,440)	\$0	\$0	\$0	\$0	\$0	\$0
Total FY2020 - FY2024 Reserve Maintenance Project Costs		\$36,508,023	\$58,637,145	\$55,381,414	\$44,767,446	\$41,840,331	\$47,549,346	\$248,175,682

Report contains only project costs.

Project Detail

Project Number:	1000431	Budget Year:	2020
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 systems.

Justification: IT roadway systems must be maintained in proper working order to collect all toll data.

Comments: N/A

**Project Forecast
Year**

Total Budget

2020	\$ 5,365,000
2021	7,969,130
2022	4,561,410
2023	2,100,000
2024	2,100,000
	\$ 22,095,540

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	5,365,000
	Total Expenses:	\$ 5,365,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000825	Budget Year:	2020
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

2020	\$ 8,420,000
2021	4,000,000
2022	1,000,000
2023	2,000,000
2024	500,000
	\$ 15,920,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531641	Computers	8,420,000
	Total Expenses:	\$ 8,420,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000826	Budget Year:	2020
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
	2020	\$ 1,676,500
	2021	495,000
	2022	495,000
	2023	495,000
	2024	495,000
		\$ 3,656,500

Project Details 2020

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:	2020
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. One quarter of inventory is 40 printers.

Comments: N/A

**Project Forecast
Year**

Total Budget

2020	\$	150,000
2021		150,000
2022		150,000
2023		200,000
2024		200,000
	\$	850,000

Project Details 2020

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:	2020
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 staff growth, hardware obsolescence, etc.

Justification: Increase in employee headcount or to increase efficiencies require the acquisition of hardware.

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 2,088,500
2021	719,500
2022	719,500
2023	719,500
2024	500,000
	\$ 4,747,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531106	Electronic Supplies	2,088,500
	Total Expenses:	\$ 2,088,500

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000829	Budget Year:	2020
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
2020	\$ 212,000
2021	210,000
2022	210,000
2023	210,000
2024	-
	\$ 842,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	212,000
	Total Expenses:	\$ 212,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000009	Budget Year:	2020
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 of plants in landscape beds due to age or disease, replacement of Autumn Sage and Texas Sage and Abelia beds.

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

2020	\$	570,000
2021		550,000
2022		550,000
2023		560,000
2024		550,000
	\$	2,780,000

Project Details 2020

Account	Description	Total Amount
Expenses		
522202	Landscaping	570,000
	Total Expenses:	\$ 570,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000026	Budget Year:	2020
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:	Facilities/Roadway	Prior Years Cost:	

Description: Purchase 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 at or above Board-approved performance level.

Comments: N/A

Project Forecast
Year

Total Budget

2020	\$ 3,576,440
2021	2,319,600
2022	2,466,560
2023	2,340,000
2024	2,450,000
	\$ 13,152,600

Project Details 2020

Account	Description	Total Amount
Expenses		
531611	Machinery	794,000
531621	Vehicles	2,782,440
	Total Expenses:	\$ 3,576,440

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000030	Budget Year:	2020
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 repairs or component/equipment replacements. Projects include roof repairs, HVAC equipment repairs, security systems and structural repairs.

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
2020	\$ 2,952,000
2021	1,845,000
2022	1,495,000
2023	1,005,000
2024	1,185,000
	\$ 8,482,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541302	Building Improvements	2,952,000
	Total Expenses:	\$ 2,952,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000011	Budget Year:	2020
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: Replacement of lane markers on the roadways.

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

2020	\$ 5,690,800
2021	5,099,150
2022	14,564,000
2023	4,236,800
2024	11,253,200
	\$ 40,843,950

Project Details 2020

Account	Description	Total Amount
Expenses		
522204	Pavement Markings	5,690,800
	Total Expenses:	\$ 5,690,800

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000012	Budget Year:	2020
Project Title:	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: The repair or improvement of the drainage systems.

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

2020	\$ 70,000
2021	375,000
2022	-
2023	30,000
2024	187,500
	<u>\$ 662,500</u>

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	70,000
	Total Expenses:	<u>\$ 70,000</u>

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000013	Budget Year:	2020
Project Title:	Erosion Mitigation	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: To repair or prevent erosion issues on the roadways and bridges.

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

2020	\$ 2,015,000
2021	7,825,000
2022	2,600,000
2023	1,900,000
2024	675,000
	\$ 15,015,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	2,015,000
	Total Expenses:	\$ 2,015,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000018	Budget Year:	2020
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 replacement projects. To address base failures, significant sub-grade movement, erosion, or settlement at pavement edges & 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
2020	\$ 8,494,100
2021	9,566,300
2022	3,689,600
2023	17,737,700
2024	12,904,800
	\$ 52,392,500

Project Details 2020

Account	Description	Total Amount
Expenses		
522205	Pavement & Shoulders	8,494,100
	Total Expenses:	\$ 8,494,100

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000020	Budget Year:	2020
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: Repair or replacement of signs on the roadways and bridges.

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

	2020	\$	5,661,100
	2021		6,136,050
	2022		5,693,450
	2023		1,367,880
	2024		6,054,700
		\$	24,913,180

Project Details 2020

Account	Description	Total Amount
Expenses		
522203	Signing Expense	5,661,100
	Total Expenses:	\$ 5,661,100

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000028	Budget Year:	2020
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 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 higher cost of repairs at a later time.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 2,735,000
2021	1,650,000
2022	1,185,000
2023	1,375,000
2024	1,575,000
	\$ 8,520,000

Project Details 2020

Account	Description	Total Amount
Expenses		
522206	Bridge Repairs	2,735,000
	Total Expenses:	\$ 2,735,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000031	Budget Year:	2020
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 including pavement, bridges, 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

2020	\$	1,755,705
2021		1,891,684
2022		1,545,426
2023		1,619,630
2024		1,910,669
	\$	8,723,114

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	1,755,705
	Total Expenses:	\$ 1,755,705

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000033	Budget Year:	2020
Project Title:	Storm Sewer 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: Storm sewer cleaning, repair and inspection.

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

2020	\$	405,000
2021		405,000
2022		405,000
2023		405,000
2024		405,000
	\$	2,025,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	405,000
	Total Expenses:	\$ 405,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000040	Budget Year:	2020
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, and ultimately for the safety of NTTA customers,. 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
2020	\$ 6,800,000
2021	4,175,000
2022	3,437,500
2023	3,538,821
2024	4,603,477
	\$ 22,554,798

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	6,800,000
	Total Expenses:	\$ 6,800,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

PGBT
WIDENING
PROJECT:

Reinforcing steel in
place for concrete
on westbound near
Dickerson Pkwy.



CAPITAL IMPROVEMENT PROJECTS

PGBT
WIDENING
PROJECT:

Applying paving
fabric to newly
milled eastbound
lanes near
Marsh Ln.



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 FY2020–FY2024 Capital Plan includes \$0.6 million for minor close-out items. Total project costs are estimated at \$111.2 million.

DALLAS NORTH TOLLWAY/PRESIDENT GEORGE BUSH TURNPIKE INTERCHANGE IMPROVEMENTS

The DNT/ PGBT interchange improvement project increased capacity and improved the flow of traffic on the northern direct connectors and through the interchange. Construction was completed in early FY2018. The FY2020–FY2024 Capital Plan includes \$0.4 million for minor close-out items. Total project costs are estimated at \$99.1 million.



Capital Improvement Projects (continued)

DALLAS NORTH TOLLWAY PHASE 4B

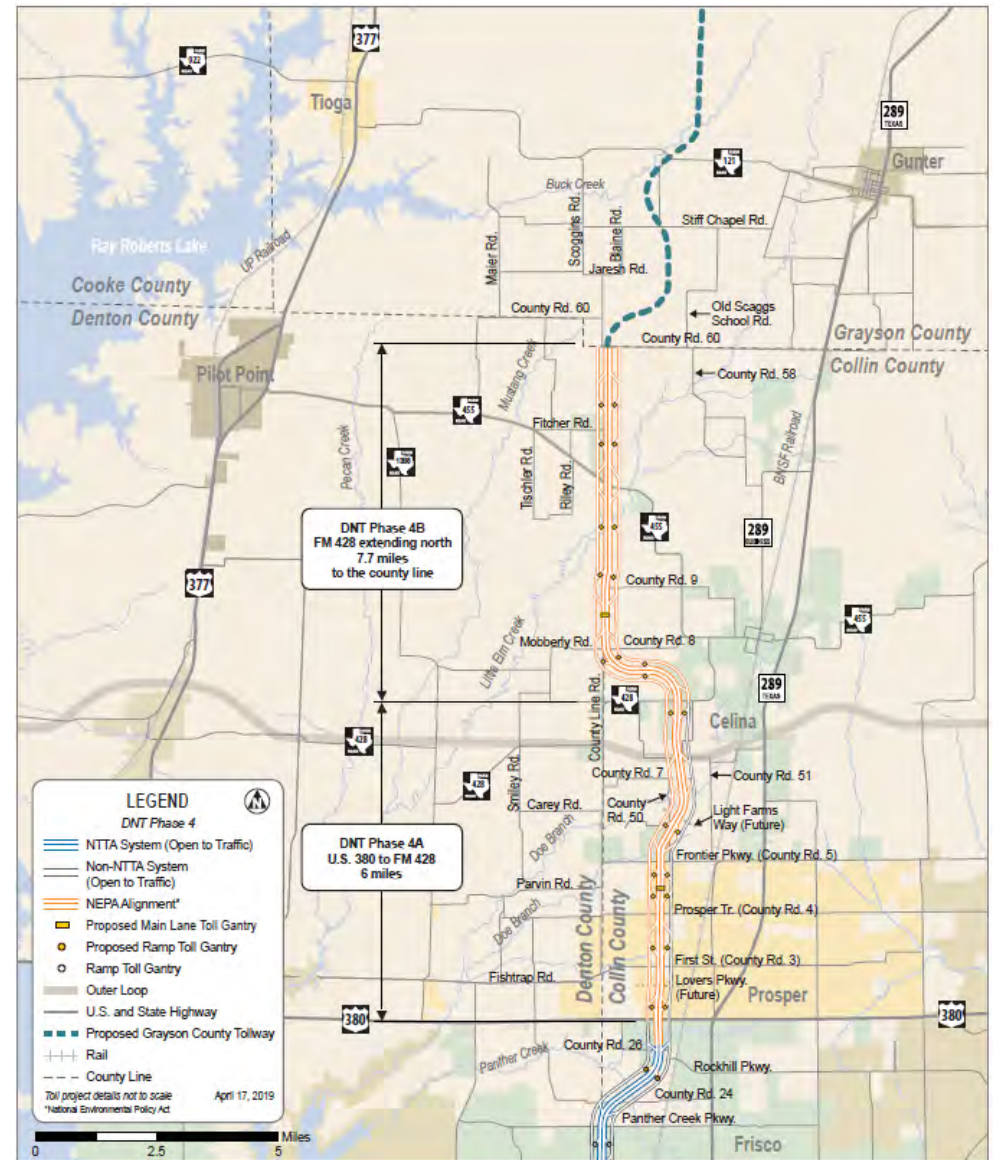
The Phase 4B extension is a 7.7-mile section from FM 428 to Grayson County. The FY2020-FY2024 Capital Plan includes \$55.0 million for planning from FY2020-FY2022 and design from FY2022-FY2024. Total project costs are estimated at \$500.0 million.

DALLAS NORTH TOLLWAY PHASE 4A

The Phase 4A extension is a 6-mile section from U.S. 380 to FM 428. The FY2020-FY2024 Capital Plan includes \$204.8 million for planning in FY2020, design from FY2020-FY2022 and construction from FY2023-FY2025 of 8-main lanes. Total project costs are estimated at \$350.0 million.

DALLAS NORTH TOLLWAY BRIDGES OVER U.S. 380

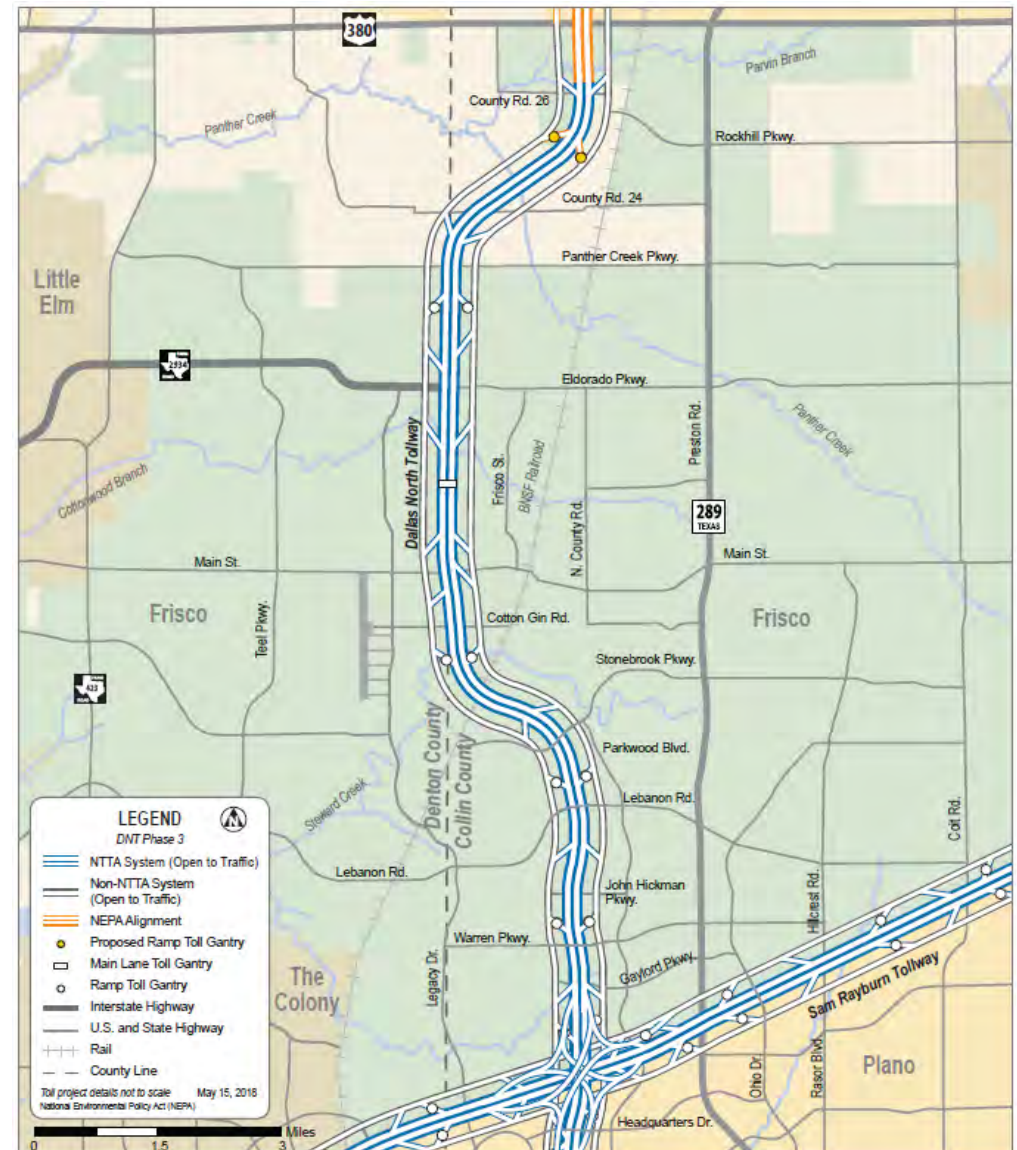
NTTA is planning to extend the DNT north by constructing main lane bridges over U.S. 380. Construction is anticipated to begin in FY2020 and is scheduled for completion in FY2022. The FY2020-FY2024 Capital Plan includes the estimated project cost of \$132.6 million. Total project costs are estimated at \$138.1 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. Environmental and schematic work scheduled to begin in FY2019 and design in FY2020. Construction is anticipated to begin in FY2022 and is scheduled for completion in FY2024. The FY2020-FY2024 Capital Plan includes \$99.2 million for this project. Total project costs are estimated at \$100.0 million.



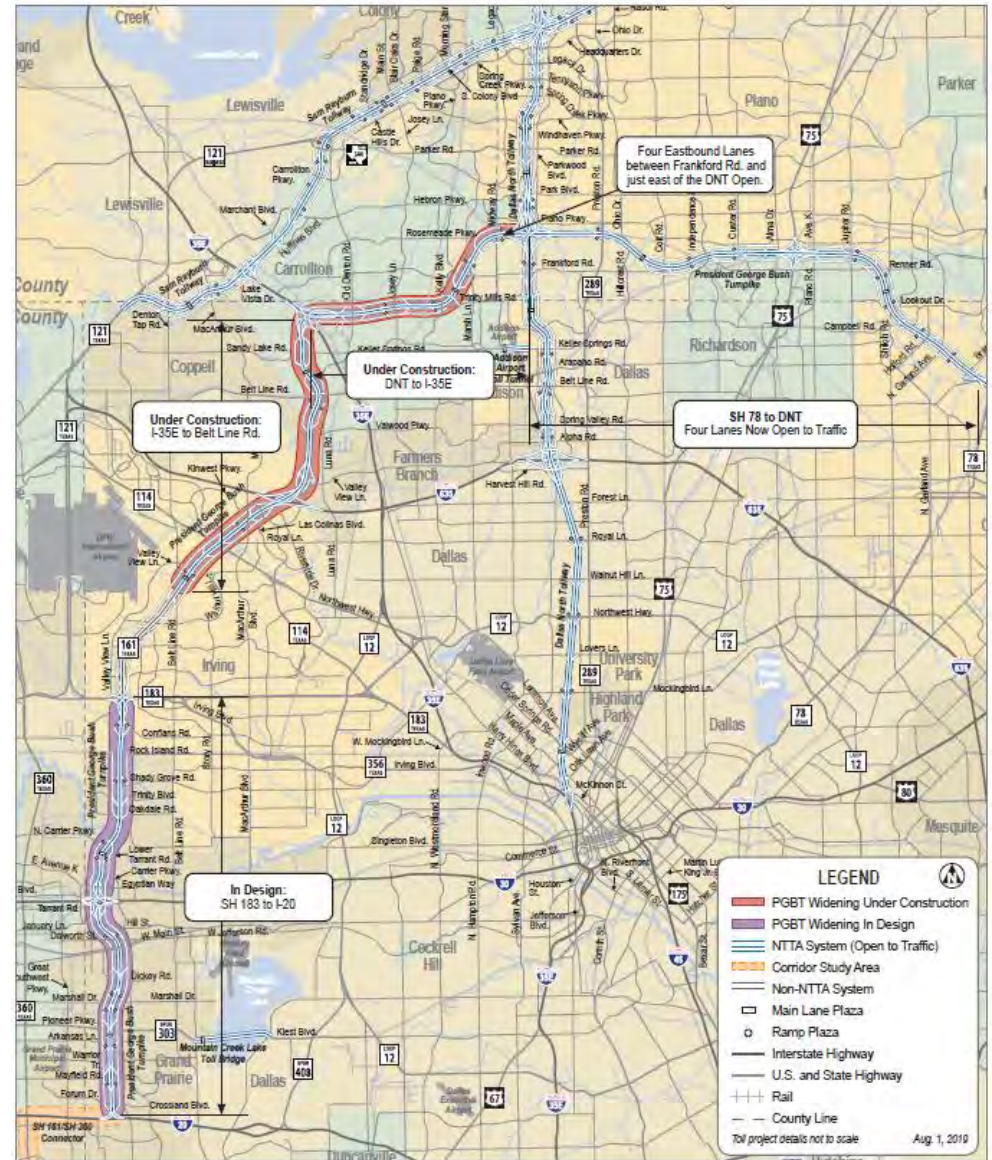
Capital Improvement Projects (continued)

PRESIDENT GEORGE BUSH TURNPIKE WIDENING PROJECT BETWEEN I-20 AND SH 78

NTTA is adding a fourth lane in each direction between I-20 and SH 78. Construction is underway and is anticipated to be complete by FY2022.

- Phase 1 [from U.S. 75 and DNT]; construction began May 2015 and opened to traffic November 2016.
- Phase 2 [from SH 78 to U.S. 75]; construction began in mid-2017; completed October 2018.
- Phase 3 [from DNT to I-35E]; construction begin July FY2017 and anticipated to be completed by late FY2019.
- Phase 4 [from I-35E to north of Belt Line Road (Irving)]; construction begin in mid-2019
- Phase 5 [from SH 183 to I-20]; construction anticipated to begin late 2019.

The FY2020–FY2024 Capital Plan includes \$64.7 million for this project. Total project costs are estimated at \$150.1 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 FY2020-FY2024 Capital Plan includes \$57.0 million for planning and design of this project. The total estimated project costs are \$363.0 million.



Capital Improvement Projects (continued)

PGBT EAST BRANCH

The proposed project would extend approximately 11-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. TxDOT is the lead agency for this proposed project through the environmental process. The FY2020-FY2024 Capital Plan contains \$45.3 million for design and right-of-way responsibilities.



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 FY2020 – FY2024 Capital Plan includes \$26.0 million for planning and design. Total estimated project costs are \$240.0 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 FY2020 – FY2024 Capital Plan are as follows: network, disaster recovery, enterprise storage, toll collection system replacement, intelligent transportation systems and items related to information security and compliance. The FY2020 – FY2024 Capital Plan includes \$210.5 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 FY2020 – FY2024 Capital Plan includes \$202.2 million for this category.

RECONSTRUCTION/REPAIR OF RETAINING WALLS

Several retaining wall projects are being developed to address identified issues. The FY2020 – FY2024 Capital Plan includes \$74.7 million for this project. Through a legal settlement NTTA was reimbursed \$11.9 million in FY2016 an additional reimbursement of an estimated \$27.0 million is scheduled for FY2020.

DNT CAPACITY IMPROVEMENTS STUDY

General engineering fees are being budgeted to identify possible capacity improvements on DNT. The FY2020 – FY2024 Capital Plan includes \$2.0 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 \$11.0 million for this category.



Capital Improvement Fund - (1501) - Project List FY2020 - FY2024 CAPITAL PLAN

Department	Project	Estimated FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five Year Total FY2020 - FY2024
Information Technology - (20111)	1000030 - Systemwide Facility Improvements	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	500,000
Information Technology - (20111)	7000005 - Business Analytics (1)	700,000	800,000	400,000	100,000	50,000	50,000	1,400,000
Information Technology - (20111)	7000006 - PCI Compliance	5,559,000	4,600,000	2,200,000	2,300,000	2,500,000	2,500,000	14,100,000
Information Technology - (20111)	7000008 - Disaster Recovery (2)	6,430,000	6,430,000	4,600,000	3,600,000	1,600,000	2,000,000	18,230,000
Information Technology - (20111)	7000011 - Intelligent Transportation Systems Retrofit (3)	3,325,000	3,375,000	1,400,000	900,000	825,000	825,000	7,325,000
Information Technology - (20111)	7000016 - Data Storage	0	3,466,700	0	0	0	0	3,466,700
Information Technology - (20111)	7000017 - EPDS Enhancements	810,000	650,000	200,000	0	0	200,000	1,050,000
Information Technology - (20111)	7000018 - Redesign of Internet and Intranet (4)	120,000	300,000	100,000	0	0	0	400,000
Information Technology - (20111)	7000021 - PeopleSoft HR HCM Enhancements	1,000,000	1,000,000	300,000	300,000	300,000	300,000	2,200,000
Information Technology - (20111)	7000022 - Digital Aerial Photography (5)	48,200	65,000	48,200	0	48,200	0	161,400
Information Technology - (20111)	7000024 - Toll Collection Sys Software Enhancements/Maint	4,800,000	4,800,000	2,000,000	0	0	0	6,800,000
Information Technology - (20111)	7000033 - Microsoft Enterprise Agreement	400,000	100,000	100,000	100,000	100,000	100,000	500,000
Information Technology - (20111)	7000034 - Oracle Unlimited License Agreement	886,801	4,522,000	2,586,000	0	0	0	7,108,000
Information Technology - (20111)	7000040 - Virtualization/Hardware Reduction (6)	1,450,000	1,450,000	400,000	400,000	400,000	400,000	3,050,000
Information Technology - (20111)	7000042 - Computer Hardware Upgrade	325,000	1,800,000	0	0	0	0	1,800,000
Information Technology - (20111)	7000047 - Toll Enforcement Remedies	250,000	0	0	0	0	0	0
Information Technology - (20111)	7000050 - GIS Enhancement (7)	200,000	500,000	150,000	100,000	50,000	50,000	850,000
Information Technology - (20111)	7000051 - Mobile App Enhancements (8)	500,000	100,000	200,000	100,000	100,000	100,000	600,000
Information Technology - (20111)	7000054 - Service Desk Software Enhancements (9)	500,000	500,000	0	0	0	0	500,000
Information Technology - (20111)	7000056 - Toll Collection System Implementation (10)	34,800,002	35,187,334	0	0	0	0	35,187,334
Information Technology - (20111)	7000058 - Infrastructure Professional Service	900,000	900,000	0	0	0	0	900,000
Information Technology - (20111)	7000064 - Board Room Video/Presentation Enhancement	100,000	100,000	100,000	100,000	100,000	0	400,000
Information Technology - (20111)	7000067 - DataLogger (11)	260,000	260,000	0	0	0	0	260,000
Information Technology - (20111)	7000068 - National IOP	1,200,000	1,100,000	1,200,000	200,000	200,000	200,000	2,900,000
Information Technology - (20111)	7000070 - Multi-Channel Communications - CSC	2,700,000	1,000,000	2,500,000	1,700,000	0	0	5,200,000
Information Technology - (20111)	7000071 - LoneStar Module Expansion (12)	135,000	135,000	300,000	0	0	0	435,000
Information Technology - (20111)	7000076 - Hyperion Upgrade/Forecasting Tool	200,000	0	0	0	0	0	0
Information Technology - (20111)	7000081 - eProcurement Project Workflow Tracker (13)	500,000	500,000	0	0	0	0	500,000
Information Technology - (20111)	7000086 - NTTA Employee Portal	300,000	0	100,000	0	0	0	100,000
Information Technology - (20111)	7000106 - Succession Planning	100,000	0	0	0	0	0	0
Information Technology - (20111)	7000107 - Managed Print	490,000	0	0	0	0	0	0
Information Technology - (20111)	7000110 - Enterprise Content Management (14)	1,300,000	1,300,000	300,000	0	0	300,000	1,900,000
Information Technology - (20111)	7000111 - GIS Fiber Migration	285,000	0	0	0	0	0	0
Information Technology - (20111)	7000112 - Contract Management System (15)	550,000	550,000	0	0	0	0	550,000
Information Technology - (20111)	7000113 - Reporting Tool for BDD (16)	300,000	420,000	0	0	0	0	420,000
Information Technology - (20111)	7000115 - C*Cure/ServiceNow Integration	30,000	500,000	0	0	0	0	500,000
Information Technology - (20111)	7000116 - Backup System	900,000	0	0	0	0	0	0
Information Technology - (20111)	7000117 - Lane System Upgrade	750,000	750,000	750,000	25,500,000	25,500,000	25,500,000	78,000,000
Information Technology - (20111)	7000128 - CSC Queue Management and Appointment	0	300,000	0	0	0	0	300,000
Information Technology - (20111)	7000129 - Risk Management Information System	0	200,000	0	0	0	0	200,000
Information Technology - (20111)	7000130 - Enterprise System Monitoring	0	600,000	0	0	0	0	600,000
Information Technology - (20111)	7000134 - Back Office System	0	0	2,300,000	2,300,000	2,300,000	2,300,000	9,200,000
Information Technology - (20111)	7001252 - Windows Server Upgrade	2,000,000	600,000	300,000	300,000	300,000	300,000	1,800,000
Information Technology - (20111)	7001253 - Command Center Radio Upgrade	650,000	0	475,000	650,000	0	0	1,125,000
Information Technology - (20111) Total		75,854,003	78,961,034	23,109,200	38,750,000	34,473,200	35,225,000	210,518,434
Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements (17)	3,660,000	5,135,000	1,670,000	1,525,000	1,490,000	1,175,000	10,995,000
Admin Infrastructure - (20221) Total		3,660,000	5,135,000	1,670,000	1,525,000	1,490,000	1,175,000	10,995,000

Department	Project	Estimated FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five Year Total FY2020 - FY2024
Project Delivery - (20511)	1000010 - Median Replacement	1,500,000	12,021,000	5,466,000	0	0	0	17,487,000
Project Delivery - (20511)	1000041 - Lighting Replacement or Repair	900,000	240,000	765,000	895,000	0	0	1,900,000
Project Delivery - (20511)	1000042 - General Engineering	728,000	728,000	728,000	753,500	753,500	753,500	3,716,500
Project Delivery - (20511)	1000044 - Fence Replacement	0	50,000	525,000	0	0	0	575,000
Project Delivery - (20511)	1000045 - Sand Stockpile	250,000	225,000	1,225,000	0	0	0	1,450,000
Project Delivery - (20511)	2000002 - PGBT 4th Lane Widening (18)	35,245,622	38,271,718	23,191,617	3,209,027	0	0	64,672,362
Project Delivery - (20511)	2000005 - PGBT Continuous Illumination	4,440,564	4,887,465	23,304,750	24,988,895	23,370,580	9,184,684	85,736,374
Project Delivery - (20511)	2100003 - DNT 4th Lane (PGBT to SRT)	825,000	428,000	235,000	0	0	0	663,000
Project Delivery - (20511)	2100004 - DNT/PGBT IC & Ramp Mods	210,000	200,000	170,000	0	0	0	370,000
Project Delivery - (20511)	2100007 - DNT PH4A Bridges over U.S. 380 (19)	16,018,907	42,574,794	43,421,124	33,666,460	12,528,295	360,583	132,551,256
Project Delivery - (20511)	2100010 - DNT PH4B (Segment 6)	0	1,200,000	1,400,000	14,901,394	18,771,930	18,771,930	55,045,254
Project Delivery - (20511)	2100011 - DNT Widening (SRT to U.S. 380) (20)	2,312,749	6,525,174	11,811,012	27,153,838	31,158,762	22,592,016	99,240,802
Project Delivery - (20511)	2100012 - DNT Capacity Improvements Study	500,000	1,000,000	1,000,000	0	0	0	2,000,000
Project Delivery - (20511)	2100013 - DNT PH4A (Segment 5)	1,000,000	7,000,000	10,000,000	14,000,000	80,000,000	93,842,333	204,842,333
Project Delivery - (20511)	2100310 - DNT South End Design Guidelines Implementation	2,828,000	4,709,022	7,326,285	15,662,059	122,559	565,442	28,385,367
Project Delivery - (20511)	2500004 - SRT Continuous Illumination	0	400,000	2,153,591	7,751,276	14,361,606	11,152,141	35,818,614
Project Delivery - (20511)	2900000 - 360 Tollway	10,000	0	0	0	0	0	0
Project Delivery - (20511)	3000000 - PGBT East Branch	0	0	1,250,000	10,000,000	17,000,000	17,000,000	45,250,000
Project Delivery - (20511)	3900001 - PGBT/360 Tollway Connector	1,000,000	1,000,000	2,000,000	2,000,000	18,500,000	33,500,000	57,000,000
Project Delivery - (20511)	7000072 - MSE Wall Stabilization and Maintenance Program	29,300,000	25,500,000	11,700,000	12,500,000	12,500,000	12,500,000	74,700,000
Project Delivery - (20511)	7200001 - CTP South 2-lanes	0	2,000,000	7,000,000	8,000,000	8,000,000	1,000,000	26,000,000
	Project Delivery - (20511) Total	97,068,842	148,960,173	154,672,379	175,481,449	237,067,232	221,222,629	937,403,862
Traffic & Incdnt Mgmt. - (20611)	7000000 - Systemwide Roadway Improvements (21)	2,725,000	3,925,000	3,100,000	5,400,000	3,750,000	6,500,000	22,675,000
	Traffic & Incdnt Mgmt. - (20611) Total	2,725,000	3,925,000	3,100,000	5,400,000	3,750,000	6,500,000	22,675,000
Totals		\$179,307,845	\$236,981,207	\$182,551,579	\$221,156,449	\$276,780,432	\$264,122,629	\$1,181,592,296
FY2019 Carryover Projects and Adjustments								
(1)Information Technology - (20111)	7000005 - Business Analytics	(650,000)	0	0	0	0	0	0
(2)Information Technology - (20111)	7000008 - Disaster Recovery	(1,930,000)	0	0	0	0	0	0
(3)Information Technology - (20111)	7000011 - Intelligent Transportation Systems Retrofit	(1,475,000)	0	0	0	0	0	0
(4)Information Technology - (20111)	7000018 - Redesign of Internet and Intranet	(120,000)	0	0	0	0	0	0
(5)Information Technology - (20111)	7000022 - Digital Aerial Photography	(48,200)	0	0	0	0	0	0
(6)Information Technology - (20111)	7000040 - Virtualization/Hardware Reduction	(1,050,000)	0	0	0	0	0	0
(7)Information Technology - (20111)	7000050 - GIS Enhancement	(200,000)	0	0	0	0	0	0
(8)Information Technology - (20111)	7000051 - Mobile App Enhancements (Adjustment)	(400,000)	0	0	0	0	0	0
(9)Information Technology - (20111)	7000054 - Service Desk Software Enhancements	(500,000)	0	0	0	0	0	0
(10)Information Technology - (20111)	7000056 - Toll Collection System Implementation	(11,587,332)	0	0	0	0	0	0
(11)Information Technology - (20111)	7000067 - DataLogger	(260,000)	0	0	0	0	0	0
(12)Information Technology - (20111)	7000071 - LoneStar Module Expansion	(135,000)	0	0	0	0	0	0
(13)Information Technology - (20111)	7000081 - eProcurement Project Workflow Tracker	(500,000)	0	0	0	0	0	0
(14)Information Technology - (20111)	7000110 - Enterprise Content Management	(400,000)	0	0	0	0	0	0
(15)Information Technology - (20111)	7000112 - Contract Management System	(250,000)	0	0	0	0	0	0
(16)Information Technology - (20111)	7000113 - Reporting Tool for BDD	(300,000)	0	0	0	0	0	0
(17)Admin Infrastructure - (20221)	1000030 - Systemwide Facility Improvements	(2,750,000)	0	0	0	0	0	0
(18)Project Delivery - (20511)	2000002 - PGBT 4th Lane Widening	(6,621,699)	0	0	0	0	0	0
(19)Project Delivery - (20511)	2100007 - DNT PH4A Bridges over U.S. 380	(10,426,077)	0	0	0	0	0	0
(20)Project Delivery - (20511)	2100011 - DNT Widening (SRT to U.S. 380)	(1,811,058)	0	0	0	0	0	0
(21)Traffic & Incdnt Mgmt. - (20611)	7000000 - Systemwide Roadway Improvements (Adjustment)	(375,000)	0	0	0	0	0	0
Totals		(\$41,789,366)	\$0	\$0	\$0	\$0	\$0	\$0
Total FY2020 - FY2024 Capital Improvement Project Costs		\$137,518,479	\$236,981,207	\$182,551,579	\$221,156,449	\$276,780,432	\$264,122,629	\$1,181,592,296

Report contains only project costs.

Project Detail

Project Number:	7000005	Budget Year:	2020
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
2020	\$ 800,000
2021	400,000
2022	100,000
2023	50,000
2024	50,000
	\$ 1,400,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	650,000
531641	Computers	150,000
	Total Expenses:	\$ 800,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000006	Budget Year:	2020
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
2020	\$ 4,600,000
2021	2,200,000
2022	2,300,000
2023	2,500,000
2024	2,500,000
	\$ 14,100,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	1,759,000
531641	Computers	841,000
531651	Software	2,000,000
	Total Expenses:	\$ 4,600,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000008	Budget Year:	2020
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
2020	\$ 6,430,000
2021	4,600,000
2022	3,600,000
2023	1,600,000
2024	2,000,000
	\$ 18,230,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	1,930,000
531641	Computers	4,000,000
531651	Software	500,000
	Total Expenses:	\$ 6,430,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000011	Budget Year:	2020
Project Title:	Intelligent Transportation Systems	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 approx. thirty CCTV camera, eight DMS and 125 microwave vehicle detection systems placed at high impact locations along the Dallas North Tollway and President George Bush Turnpike.

Justification: ITS Retrofit and Enhancements will include CCTV camera locations placed at high impact locations along the Dallas North Tollway and President George Bush Turnpike. The specific locations of these cameras will address existing CCTV coverage gaps and will be selected by the System and Incident Management department from locations recommended by the ITS group based on identified traffic and incident management requirements. 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
2020	\$ 3,375,000
2021	1,400,000
2022	900,000
2023	825,000
2024	825,000
	\$ 7,325,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	425,000
531651	Software	750,000
541403	Infrastructure - Other	2,200,000
	Total Expenses:	\$ 3,375,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000016	Budget Year:	2020
Project Title:	Data Storage	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: Reporting has become more critical than ever before to the NTTA as we more aggressively monitor and manage revenue and expenses, and as we enter into Tolling Service Agreements. Additional storage is required to support the data growth.

Justification: Efficient storage and processing of customer data is essential to our business.

Comments: N/A

Project Forecast Year

Total Budget

2020	\$	3,466,700
2021		-
2022		-
2023		-
2024		-
	\$	3,466,700

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	3,466,700
	Total Expenses:	\$ 3,466,700

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000017	Budget Year:	2020
Project Title:	EPDS Enhancements	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20111-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: Complete the functional deployment of Proliance (EPDS) 5.6 as well as the full deployment of new SharePoint environment.

Comments:

Project Forecast

Year	Total Budget
2020	\$ 650,000
2021	200,000
2022	-
2023	-
2024	200,000
	\$ 1,050,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	500,000
531651	Software	150,000
	Total Expenses:	\$ 650,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000018	Budget Year:	2020
Project Title:	Redesign of Internet and Intranet	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

2020	\$	300,000
2021		100,000
2022		-
2023		-
2024		-
	\$	400,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	180,000
531651	Software	120,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000021	Budget Year:	2020
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
2020	\$ 1,000,000
2021	300,000
2022	300,000
2023	300,000
2024	300,000
	\$ 2,200,000

Project Details 2020

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:	7000022	Budget Year:	2020
Project Title:	Digital Aerial Photography	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	TSA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: Provide high-resolution, aerial photography of our roadways and assets as enhanced map layers for GIS applications:
 2020 - Migrate from NCTCOG's biennial purchase of 6" digital color orthographic aerial photography to Near Map Imagery Services' solution.
 2021-24 - Budget for Near Map continuance.

Justification: Near Map Imagery provides enhanced and more frequent imagery updates of roadways and assets for GIS applications, like Lane Miles. This is a better service model than the current biennial updates from NCTCOG, especially given the roadway updates outlined in our 5 year capital plan.

Comments: N/A

**Project Forecast
Year**

	Total Budget
2020	\$ 65,000
2021	48,200
2022	-
2023	48,200
2024	-
	\$ 161,400

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	65,000
	Total Expenses:	\$ 65,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000024	Budget Year:	2020
Project Title:	Toll Collection Sys Software Enhancements/Maint	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: RITE System Enhancements

Justification: Accounts for any Legislative changes, DCB integration, and any other projects that are added to the RITE scope to enable transition to the new BOS

Comments: N/A

Project Forecast		Total Budget
Year		
2020		\$ 4,800,000
2021		2,000,000
2022		-
2023		-
2024		-
		<u>\$ 6,800,000</u>

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	4,800,000
Total Expenses:		<u>\$ 4,800,000</u>

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000033	Budget Year:	2020
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 signed a three year 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
2020	\$ 100,000
2021	100,000
2022	100,000
2023	100,000
2024	100,000
	\$ 500,000

Project Details 2020

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:	7000034	Budget Year:	2020
Project Title:	Oracle Unlimited License 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: Oracle product annual support and new ULA payments

Justification: We have to make payments for Oracle Software ULA and the annual software support.

Comments: N/A

**Project Forecast
Year**

	Total Budget
2020	\$ 4,522,000
2021	2,586,000
2022	-
2023	-
2024	-
	\$ 7,108,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	4,522,000
	Total Expenses:	\$ 4,522,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000040	Budget Year:	2020
Project Title:	Virtualization/Hardware Reduction	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: Solution enterprise virtualization. This will allow us to start creating virtual desktop and virtual servers more efficiently. In addition, virtualization aids to replicate systems efficiently thus provides safer way to recover systems during disaster recovery.

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

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 1,450,000
2021	400,000
2022	400,000
2023	400,000
2024	400,000
	\$ 3,050,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	1,450,000
	Total Expenses:	\$ 1,450,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000042	Budget Year:	2020
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
2020	\$ 1,800,000
2021	-
2022	-
2023	-
2024	-
	\$ 1,800,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531641	Computers	1,800,000
	Total Expenses:	\$ 1,800,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000050	Budget Year:	2020
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		Total Budget
Year		
2020	\$	500,000
2021		150,000
2022		100,000
2023		50,000
2024		50,000
	\$	850,000

Project Details 2020		
Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	100,000
531651	Software	400,000
	Total Expenses:	\$ 500,000

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

Project Detail

Project Number:	7000051	Budget Year:	2020
Project Title:	Mobile App 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: Current TollMate app will be replaced by a integrated T-BOS app. This budget allows to add integration with the future vision of the app to allow for traffic and incident alerts

Justification: TIM department views the mobile app to extend from customer portal to add functionality that is also oriented towards road usage experience for example traffic and incident alerts, wrong-way driver alerts etc.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 100,000
2021	200,000
2022	100,000
2023	100,000
2024	100,000
	\$ 600,000

Project Details 2020

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:	7000054	Budget Year:	2020
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
2020	\$ 500,000
2021	-
2022	-
2023	-
2024	-
	\$ 500,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	500,000
	Total Expenses:	\$ 500,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000056	Budget Year:	2020
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:	\$ 33,155,153

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

Justification: The estimate includes costs for BOS implementation vendor, Vendor PMO, Vendor QM, Hardware and software (tokenization, licenses etc.) costs involved with implementing the new back office.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 35,187,334
2021	-
2022	-
2023	-
2024	-
	\$ 35,187,334

Project Details 2020

Account	Description	Total Amount
Expenses		
521201	Consulting/Professional	2,950,000
521301	Consulting/Profess Serv Tech	2,333,334
531641	Computers	12,350,000
531651	Software	17,554,000
	Total Expenses:	\$ 35,187,334

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000058	Budget Year:	2020
Project Title:	Infrastructure Professional Service	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 is essential to utilize outside experts to validate strategy, planning as well as to utilize them for certain complex solution development while employees has have opportunity to learn while working with experts.

Justification: Procure experts to implement new technologies as well as to train NTTA IT staff to administer new technologies.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 900,000
2021	-
2022	-
2023	-
2024	-
	\$ 900,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521201	Consulting/Professional	900,000
	Total Expenses:	\$ 900,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000064	Budget Year:	2020
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
2020	\$ 100,000
2021	100,000
2022	100,000
2023	100,000
2024	-
	\$ 400,000

Project Details 2020

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:	7000067	Budget Year:	2020
Project Title:	DataLogger	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: Data Logger auditing tool.

Justification: Data loggers will be installed at all Mainline Gantries. These serve as an auditing tool for Roadway Systems. The data logger ties into our system and uses a video feed showing real-time images of all vehicles traveling through the toll zone.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 260,000
2021	-
2022	-
2023	-
2024	-
	\$ 260,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	35,000
531651	Software	225,000
	Total Expenses:	\$ 260,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000068	Budget Year:	2020
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
2020	\$ 1,100,000
2021	1,200,000
2022	200,000
2023	200,000
2024	200,000
	\$ 2,900,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	1,100,000
	Total Expenses:	\$ 1,100,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000070	Budget Year:	2020
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
2020	\$ 1,000,000
2021	2,500,000
2022	1,700,000
2023	-
2024	-
	\$ 5,200,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	500,000
531641	Computers	250,000
531651	Software	250,000
	Total Expenses:	\$ 1,000,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000071	Budget Year:	2020
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: Expand functionality of the LoneStar Modules for the SIM department.

Justification: Modules include new functionality for LaneClosure and advanced Wrong Way Driver functionality for the TIM team in SIM.

Comments: N/A

**Project Forecast
Year**

Total Budget

	2020	\$	135,000
	2021		300,000
	2022		-
	2023		-
	2024		-
		\$	435,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	135,000
	Total Expenses:	\$ 135,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000081	Budget Year:	2020
Project Title:	eProcurement Project Workflow Tracker	Manager:	Information Technology
Fund:	CIF Project	Project Partner:	N/A
Department:	TSA-20110-Total Information Technology	Total Project Cost:	Annual Budget
Project Type:	Technology	Prior Years Cost:	

Description: This project allows for making the PO process efficient and integrated with contract management application.

Justification: Requested by procurement department to reduce paperwork and multiple rounds of signatures to make the procurement process efficient.

Comments: N/A

**Project Forecast
Year**

Total Budget

	2020	\$	500,000
	2021		-
	2022		-
	2023		-
	2024		-
		\$	500,000

Project Details 2020

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

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000086	Budget Year:	2020
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.

Comments: N/A

Project Forecast		Total Budget
Year		
	2020	-
	2021	100,000
	2022	-
	2023	-
	2024	-
		\$ 100,000

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

Project Detail

Project Number:	7000110	Budget Year:	2020
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: Operational efficiency will be realized within numerous departments in NTTA. Requested by the organization.

Comments: N/A

**Project Forecast
Year**

Total Budget

	2020	\$	1,300,000
	2021		300,000
	2022		-
	2023		-
	2024		300,000
		\$	1,900,000

Project Details 2020

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

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000112	Budget Year:	2020
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
2020	\$ 550,000
2021	-
2022	-
2023	-
2024	-
	\$ 550,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	400,000
531651	Software	150,000
	Total Expenses:	\$ 550,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000113	Budget Year:	2020
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: The EMS contract is at the end of its full term and is also the end of the DIR contract. The business customer decided to select a new system that meets their business requirements.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 420,000
2021	-
2022	-
2023	-
2024	-
	\$ 420,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	360,000
531651	Software	60,000
	Total Expenses:	\$ 420,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000115	Budget Year:	2020
Project Title:	C*Cure/ServiceNow Integration	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 current contract is expiring in 2020 and will be re-procured. Business has also requested integration of ServiceNow with new application to streamline on-boarding and off-boarding of employees.

Justification: Streamline employee & consultant on-boarding and off-boarding process for Service Desk. Re-procurement as the contract is ending

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 500,000
2021	-
2022	-
2023	-
2024	-
	\$ 500,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	20,000
531651	Software	480,000
	Total Expenses:	\$ 500,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000117	Budget Year:	2020
Project Title:	Lane System 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 upgrade and replace lane systems at the roadway.

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

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 750,000
2021	750,000
2022	25,500,000
2023	25,500,000
2024	25,500,000
	\$ 78,000,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	750,000
	Total Expenses:	\$ 750,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000128	Budget Year:	2020
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
2020	\$ 300,000
2021	-
2022	-
2023	-
2024	-
	\$ 300,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	300,000
	Total Expenses:	\$ 300,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000129	Budget Year:	2020
Project Title:	Risk Mgmt Information 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: RMIS is used to track insurance claims for NTTA assets that are damaged by Toll Customers. The assets considered in this application are roadway crash barriers, signs and etc. Risk Management software will be re-procured and implemented in 2020.

Justification: Re-procurement as current contract will expire in 2020

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 200,000
2021	-
2022	-
2023	-
2024	-
	\$ 200,000

Project Details 2020

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:	7000130	Budget Year:	2020
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.

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
	2020	\$	600,000
	2021		-
	2022		-
	2023		-
	2024		-
		\$	600,000

Project Details 2020

Account	Description	Total Amount
Expenses		
531651	Software	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:	2020
Project Title:	Back Office 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: 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: N/A

Project Forecast Year

	Total Budget
2020	-
2021	2,300,000
2022	2,300,000
2023	2,300,000
2024	2,300,000
	\$ 9,200,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	-
531641	Computers	-
531651	Software	-
	Total Expenses:	-

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7001252	Budget Year:	2020
Project Title:	Windows Server 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: IT dept upgrade 20% of the server hardware each year to meet the 5 yr server life cycle management of the hardware.

Justification: It is critical to upgrade the server hardware to achieve the performance and availability associated with the business needs.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 600,000
2021	300,000
2022	300,000
2023	300,000
2024	300,000
	\$ 1,800,000

Project Details 2020

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:	7001253	Budget Year:	2020
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
2020	-
2021	475,000
2022	650,000
2023	-
2024	-
	\$ 1,125,000

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

Project Detail

Project Number:	1000030	Budget Year:	2020
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 repairs or component/equipment replacements. Projects include roof repairs, HVAC equipment repairs, security systems and structural repairs.

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: Project contains \$500,000 for facilities security systems budgeted in the IT department.

Project Forecast Year

Total Budget

2020	\$ 5,235,000
2021	1,770,000
2022	1,625,000
2023	1,590,000
2024	1,275,000
	\$ 11,495,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521301	Consulting/Profess Serv Tech	100,000
531106	Electronic Supplies	220,000
541302	Building Improvements	4,915,000
	Total Expenses:	\$ 5,235,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000010	Budget Year:	2020
Project Title:	Median Replacement	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 29,308,168
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 11,821,168
Start Date:	Jan 1, 2017		

Description: Replacement of the median barriers.

Justification: Median barriers must be maintained for traffic safety.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 12,021,000
2021	5,466,000
2022	-
2023	-
2024	-
	\$ 17,487,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	12,021,000
	Total Expenses:	\$ 12,021,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000041	Budget Year:	2020
Project Title:	Lighting Replacement or Repair	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Lighting replacement or repair on roadways, bridges and facilities.

Justification: Lighting must be maintained for safety and security purposes.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 240,000
2021	765,000
2022	895,000
2023	-
2024	-
	\$ 1,900,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	240,000
	Total Expenses:	\$ 240,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000044	Budget Year:	2020
Project Title:	Fence Replacement or Repair	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Repair or replacement of fences on roadway and facilities.

Justification: Fences need to be maintained for safety and security purposes.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 50,000
2021	525,000
2022	-
2023	-
2024	-
	\$ 575,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541403	Infrastructure - Other	50,000
	Total Expenses:	\$ 50,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	1000045	Budget Year:	2020
Project Title:	Sand Stockpile	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Sand stockpiles constructed on the roadways.

Justification: Facilities needed to store snow and ice removal materials.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 225,000
2021	1,225,000
2022	-
2023	-
2024	-
	\$ 1,450,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	225,000
	Total Expenses:	\$ 225,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2000002	Budget Year:	2020
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:	\$ 77,282,841

Description: Limits:
I-35E to DNT - 1 additional lane
US 75 to SH78 - 1 additional lane
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:
I-35E to DNT: Construction: 2017 to 2019; OTT - 2019
US 75 to SH 78: Construction: 2017 - 2018; OTT - 2018
N. of Beltline to I-35E: Construction: mid 2019 - 2021; OTT 2021
I-20 to SH 183: Construction: 2019-2022; OTT: 2022

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 38,271,718
2021	23,191,617
2022	3,209,027
2023	-
2024	-
	\$ 64,672,362

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	1,197,449
541401	Infrastructure	37,074,269
	Total Expenses:	\$ 38,271,718

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
2021	1,438,000	0.0
2022	3,676,000	0.0

Project Detail

Project Number:	2000005	Budget Year:	2020
Project Title:	PGBT Continuous Illumination	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:	\$ 4,440,564

Description: Engineering cost to study, design and construct continuous illumination along PGBT.

Justification: Schedule;
Design: 2019-2021
Construction: 2021-2024
Closeout: 2024

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 4,887,465
2021	23,304,750
2022	24,988,895
2023	23,370,580
2024	9,184,684
	\$ 85,736,374

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	4,887,465
Expenses		
	Total Expenses:	\$ 4,887,465

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100003	Budget Year:	2020
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:	\$ 99,867,710

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

Justification: Landscape maintenance will continue through 2021.

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 428,000
2021	235,000
2022	-
2023	-
2024	-
	\$ 663,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	150,000
541401	Infrastructure	278,000
	Total Expenses:	\$ 428,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100004	Budget Year:	2020
Project Title:	DNT/PGBT IC & Ramp Mods	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 99,133,813
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 77,655,900

Description: Limits: DNT/PGBT Interchange
Reconfigure existing direct connector ramps north of DNT/PGBT interchange.

Justification: Landscape Maintenance to complete in 2021

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 200,000
2021	170,000
2022	-
2023	-
2024	-
	\$ 370,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	150,000
541401	Infrastructure	50,000
	Total Expenses:	\$ 200,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100007	Budget Year:	2020
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:	\$ 138,098,290
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 5,547,034

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: Needed to alleviate congestion at DNT/US 380 intersection.
Schedule:
Design: 2018-2019
Construction: 2019-2022
OTT: 2022

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 42,574,794
2021	43,421,124
2022	33,666,460
2023	12,528,295
2024	360,583
	\$ 132,551,256

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	3,461,215
541401	Infrastructure	39,113,579
	Total Expenses:	\$ 42,574,794

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100010	Budget Year:	2020
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:	\$ 500,000,000
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Limits: FM 428 to Grayson County. Approximately 6.8 miles.

Justification: Build mainlanes.
Schedule:
Planning: 2020-2022
Design: 2022-2025

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 1,200,000
2021	1,400,000
2022	14,901,394
2023	18,771,930
2024	18,771,930
	\$ 55,045,254

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	1,200,000
	Total Expenses:	\$ 1,200,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100011	Budget Year:	2020
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:	\$ 100,000,000
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 2,348,252

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

Justification: Schedule:
 Environmental & Schematic- 2019
 Design- 2020-2021
 Construction- 2021-2024
 OTT- 2024

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 6,525,174
2021	11,811,012
2022	27,153,838
2023	31,158,762
2024	22,592,016
	\$ 99,240,802

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	6,525,174
	Total Expenses:	\$ 6,525,174

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100012	Budget Year:	2020
Project Title:	DNT Capacity Improvements 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:	-

Description: General engineering cost to study possible capacity 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
2020	\$ 1,000,000
2021	1,000,000
2022	-
2023	-
2024	-
	\$ 2,000,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	1,000,000
	Total Expenses:	\$ 1,000,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100013	Budget Year:	2020
Project Title:	DNT PH4A (Segment 5)	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 350,000,000
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 1,000,000

Description: Limits: DNT from north of U.S. 380 to south of FM 428. Approximately 5.6 miles of 6 mainlanes.

Justification: Build northbound and southbound mainlanes.
Schedule:
Planning: 2019-2020
Design: 2020-2022
Construction: 2023-2025
OTT: 2026

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 7,000,000
2021	10,000,000
2022	14,000,000
2023	80,000,000
2024	93,842,333
	\$ 204,842,333

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	7,000,000
	Total Expenses:	\$ 7,000,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100310	Budget Year:	2020
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:	\$ 2,828,000

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 segment of DNT requires improvements that comply with the board adopted NTTA Design Guidelines promoting corridor consistency.
Schedule:
Design: 2018-2021
Construction: 2019-2022

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 4,709,022
2021	7,326,285
2022	15,662,059
2023	122,559
2024	565,442
	\$ 28,385,367

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	1,209,022
541401	Infrastructure	3,500,000
	Total Expenses:	\$ 4,709,022

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2500004	Budget Year:	2020
Project Title:	SRT Continuous Illumination	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 36,519,898
Project Type:	Facilities/Roadway	Prior Years Cost:	-

Description: Engineering cost to study, design and construct continuous illumination along the Sam Rayburn Tollway

Justification: Schedule;
Design: Late 2020-2022
Construction: Mid 2022-2025

Comments: N/A

Project Forecast Year

Total Budget

	2020	\$	400,000
	2021		2,153,591
	2022		7,751,276
	2023		14,361,606
	2024		11,152,141
		\$	35,818,614

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	400,000
	Total Expenses:	\$ 400,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	3000000	Budget Year:	2020
Project Title:	PGBT East Branch	Manager:	Project Delivery
Fund:	CIF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

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

Justification: Schedule: Planning by TxDOT thru mid 2022.
Design & ROW late 2021-2026

Comments: TxDOT is lead agency on the environmental and advanced planning on this project. The Record of Decision (ROD) for Environmental Impact Statement is expected at the end of 2022.

Project Forecast

Year	Total Budget
2020	-
2021	1,250,000
2022	10,000,000
2023	17,000,000
2024	17,000,000
	\$ 45,250,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	3900001	Budget Year:	2020
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:	\$ 363,000,000
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 1,000,000

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

Justification: Provide direct access from PGBT to 360 Tollway.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 1,000,000
2021	2,000,000
2022	2,000,000
2023	18,500,000
2024	33,500,000
	\$ 57,000,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	1,000,000
	Total Expenses:	\$ 1,000,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000072	Budget Year:	2020
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:	\$ 23,700,396

Description: Retaining and screening walls repair, replacement and stabilization.

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

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 25,500,000
2021	11,700,000
2022	12,500,000
2023	12,500,000
2024	12,500,000
	\$ 74,700,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	25,500,000
	Total Expenses:	\$ 25,500,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7200001	Budget Year:	2020
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:	\$ 240,000,000
Project Type:	Facilities/Roadway	Prior Years Cost:	

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

Justification: Build 2 southbound main-lanes.
Schedule:
Planning: 2020-2021
Design: 2022-2025

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 2,000,000
2021	7,000,000
2022	8,000,000
2023	8,000,000
2024	1,000,000
	\$ 26,000,000

Project Details 2020

Account	Description	Total Amount
Expenses		
521213	General Engineering	2,000,000
	Total Expenses:	\$ 2,000,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	7000000	Budget Year:	2020
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: Traffic engineering professional services, systemwide traffic safety and flow improvements, traffic sensors (MVD) deployment and roadway NTTA radio channel.

Justification: Projects to increase safety and efficiencies for roadway crews and customers; improve the flow of traffic during incidents and construction.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 3,925,000
2021	3,100,000
2022	5,400,000
2023	3,750,000
2024	6,500,000
	\$ 22,675,000

Project Details 2020

Account	Description	Total Amount
Expenses		
541401	Infrastructure	3,925,000
	Total Expenses:	\$ 3,925,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

CONSTRUCTION PROJECTS

SAM RAYBURN TOLLWAY

NTTA maintenance
crew working on
erosion repair
at Alma Rd.

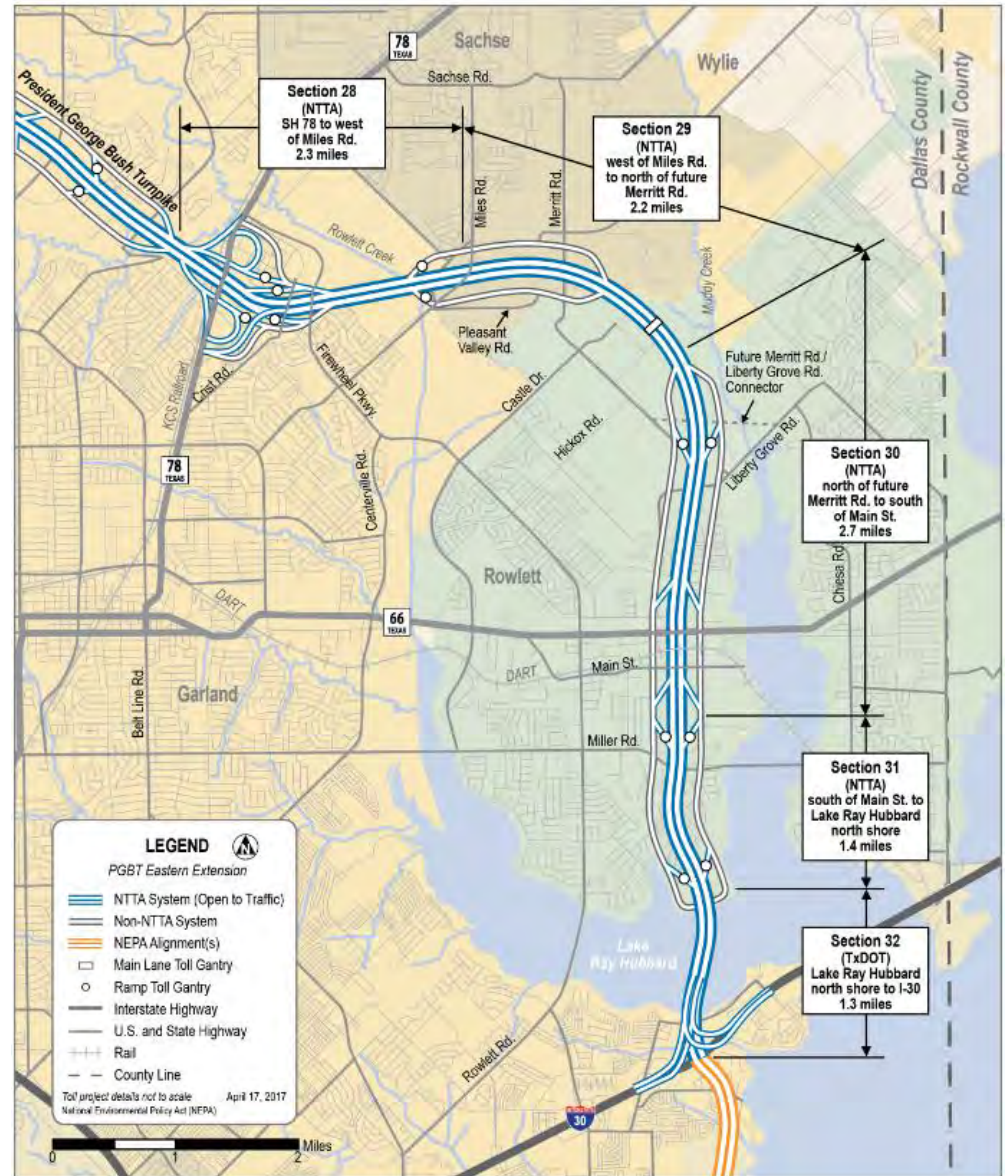


Construction Projects

These projects are currently under construction or being planned for construction using NTTA System bond proceeds and are considered part of the NTTA System, as defined in the Trust Agreement. Upon completion, the projects will share their operation and maintenance costs with the System.

PRESIDENT GEORGE BUSH TURNPIKE EASTERN EXTENSION

The Eastern Extension is a portion of the outer loop around Dallas and its suburbs that connects I-30 to the existing PGBT. The project was completed in late FY2012 with only minor cost in FY2020 of \$1.9 million for right-of-way obligations.



Construction Projects (continued)

SAM RAYBURN TOLLWAY FOURTH LANE (WIDENING) PROJECT

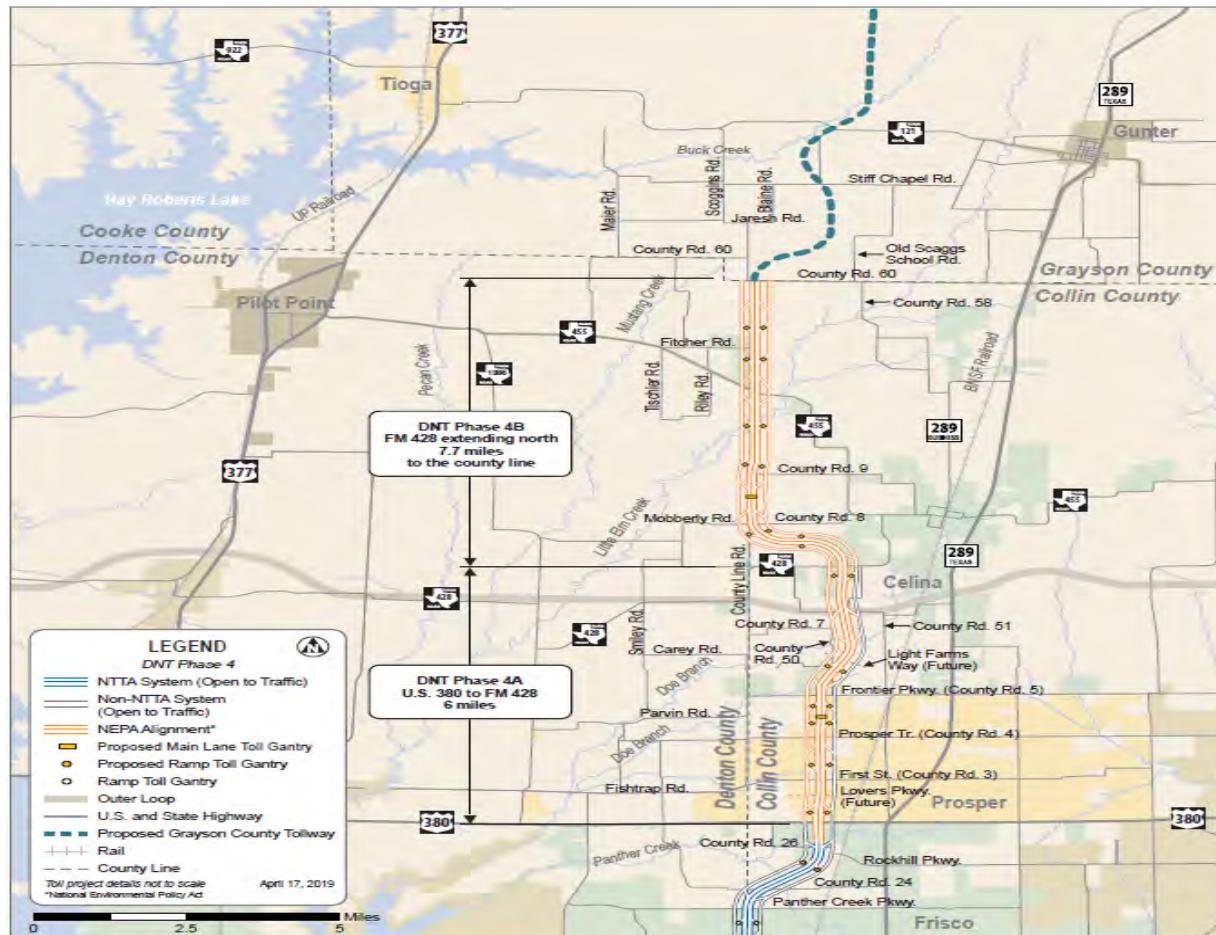
The SRT is an approximately 26-mile long tollway. The first segment of the toll road opened to traffic in FY2008 and the last segment opened in November 2011. Improvements to the project include constructing an additional lane in each direction, in the center median, along the entire 26-miles, from west of Denton Tap Road to U.S. 75. Ramp improvements will also be made between the Dallas North Tollway (DNT) and Preston Road. Construction begin in early FY2019; scheduled open to traffic in late FY2021. The FY2020 – FY2024 Capital Plan includes \$110.3 million for this project. The total project construction costs are estimated at \$191.5 million.



Construction Projects (continued)

DALLAS NORTH TOLLWAY PHASE 4B (SOUTHBOUND FRONTAGE ROAD)

Phase 4B runs 7.7-miles from FM 428 to the Denton/Grayson county line. Construction of Phase 4B southbound frontage road from FM 428 to County Line Road is estimated at \$29.4 million in the FY2020 – FY2024 Capital Plan. The total frontage road cost of \$32.5 million will be reimbursed by Denton County through an Interlocal Agreement.





Construction Fund - (3700) - Project List FY2020 - FY2024 CAPITAL PLAN

Department	Project	Estimated FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Five Year Total FY2020 - FY2024
Project Delivery - (20511)	2000000 - PGBTEE (1)	\$1,868,450	\$1,868,000	\$0	\$0	\$0	\$0	\$1,868,000
Project Delivery - (20511)	2100008 - DNT PH4B (Southbound Frontage Road) (2)	9,955,027	15,857,910	9,524,448	3,988,739	0	0	29,371,097
Project Delivery - (20511)	2500003 - SRT Widening (3)	54,885,603	55,751,112	49,115,974	4,510,459	923,587	0	110,301,132
Project Delivery - (20511)	7200000 - CTP	856,000	860,000	0	0	0	0	860,000
	Project Delivery - (20511) Total	67,565,080	74,337,022	58,640,422	8,499,198	923,587	0	142,400,229
Totals		\$67,565,080	\$74,337,022	\$58,640,422	\$8,499,198	\$923,587	\$0	\$142,400,229

FY2019 Carryover Projects and Adjustments

(1)Project Delivery - (20511)	2000000 - PGBTEE	(1,868,450)	0	0	0	0	0	0
(2)Project Delivery - (20511)	2100008 - DNT PH4B (Southbound Frontage Road) (Adjustment)	70,313	0	0	0	0	0	0
(3)Project Delivery - (20511)	2500003 - SRT Widening (Adjustment)	(3,982,719)	0	0	0	0	0	0
Totals		(\$5,780,856)	\$0	\$0	\$0	\$0	\$0	\$0
Total FY2020 - FY2024 Construction Project Costs		\$61,784,224	\$74,337,022	\$58,640,422	\$8,499,198	\$923,587	\$0	\$142,400,229

Report contains only project costs.

Project Detail

Project Number:	2000000	Budget Year:	2020
Project Title:	PGBT EE	Manager:	Project Delivery
Fund:	CF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Limits: SH 78 to IH-30
Approx. 9.9 miles. Six mainlanes and intermittent 3 lane frontage roads.

Justification: Right-of-way transfers with corridor Cities and TxDOT per Project Agreements. GEC bond reporting. Completion of LOMR with FEMA and city of Rowlett.

Comments: N/A

Project Forecast Year

	Total Budget
2020	\$ 1,868,000
2021	-
2022	-
2023	-
2024	-
	\$ 1,868,000

Project Details 2020

Account	Description	Total Amount
Expenses		
173003	Right of Way	1,688,000
173005	Administration	180,000
	Total Expenses:	\$ 1,868,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

Project Detail

Project Number:	2100008	Budget Year:	2020
Project Title:	DNT Phase 4B (Frontage Road)	Manager:	Project Delivery
Fund:	CF Project	Project Partner:	Denton County
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 32,500,000
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 3,128,903

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 Colin Counties. Costs are reimbursed by Denton County.
Schedule:
Design: 2016-2019
Construction: 2020-2022
OTT; 2022

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 15,857,910
2021	9,524,448
2022	3,988,739
2023	-
2024	-
	\$ 29,371,097

Project Details 2020

Account	Description	Total Amount
Expenses		
173003	Right of Way	100,000
173005	Administration	525,041
176001	Construction	15,232,869
	Total Expenses:	\$ 15,857,910

Operating Budget Impact

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

Project Detail

Project Number:	2500003	Budget Year:	2020
Project Title:	SRT Widening	Manager:	Project Delivery
Fund:	CF Project	Project Partner:	N/A
Department:	NTTA-20510-Total Project Delivery	Total Project Cost:	\$ 191,526,430
Project Type:	Facilities/Roadway	Prior Years Cost:	\$ 68,682,282

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

Justification: Schedule:
Design: 2017-2018
Construction: 2019-2021
OTT: 2021

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 55,751,112
2021	49,115,974
2022	4,510,459
2023	923,587
2024	-
	\$ 110,301,132

Project Details 2020

Account	Description	Total Amount
Expenses		
173005	Administration	2,096,572
176001	Construction	53,654,540
	Total Expenses:	\$ 55,751,112

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
2021	4,156,000	0.0

Project Detail

Project Number:	7200000	Budget Year:	2020
Project Title:	CTP	Manager:	
Fund:	CF Project	Project Partner:	
Department:	Capital Projects	Total Project Cost:	Annual Budget
Project Type:	Facilities/Roadway	Prior Years Cost:	

Description: Approx 27.7 miles - IH-30 to US 67, IH-30 to Altamesa - Six mainlanes.
 Altamesa Blvd to FM1187 - Four mainlanes.
 FM 1187 to US 67 - Two mainlanes

Justification: This plan assumes:
 ROW acquisition, design and construction of cul-de-sacs on Old Granbury Rd. per agreement with Tarrant County, GEC Trust reporting.

Comments: N/A

Project Forecast

Year	Total Budget
2020	\$ 860,000
2021	-
2022	-
2023	-
2024	-
	\$ 860,000

Project Details 2020

Account	Description	Total Amount
Expenses		
173003	Right of Way	500,000
173005	Administration	360,000
	Total Expenses:	\$ 860,000

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
None	None	None

PGBT
WIDENING
PROJECT:

Finishing concrete
for future westbound
fourth lane near
Dickerson Pkwy.



APPENDICES

SRT
FOURTH
LANE
PROJECT:

Placing reinforced
concrete pipe for
stormwater along
the frontage
road



Appendix A - Index of Detail Pages

Project Name	Page #	Project Name	Page #
Back Office System	93	Mobile App Enhancements	74
Board Room Video/Presentation Enhancement	78	Multi-Channel Communications - CSC	81
Business Analytics	59	National IOP	80
C*Cure/ServiceNow Integration	88	Network Equipment & Communication Systems Replacement	32
Chisholm Trail Parkway Construction	127	NTTA Employee Portal	84
Chisholm Trail Parkway South 2-Lanes	115	Oracle Unlimited License Agreement	70
Command Center Radio Upgrade	95	Pavement Repair and Rehab	40
Computer Hardware CIF Upgrades & Replacements	72	PeopleSoft HCM Enhancement	66
Computer Hardware RMF Upgrades & Replacements	30	PGBT Continuous Illumination Study/Construction	102
Contract Management System	86	PGBT East Branch	112
CSC Queue Mgmt and Appointments	90	PGBT EE	124
Data Storage	63	PGBT 4th Lane Widening	101
DataLogger	79	PGBT/360 Tollway Connector	113
Digital Aerial Photography	67	Printer Hardware Upgrades & Replacements	31
Disaster Recovery	61	Reporting Tool for BDD	87
DNT 4th Lane (PGBT to SRT)	103	Restriping	37
DNT Bridges over U.S. 380	105	Risk Mgmt Information System	91
DNT Capacity Improvements Study	108	Sam Rayburn Tollway (SRT) Widening	126
DNT Phase 4A	109	Sand Stockpile	100
DNT Phase 4B (Segment 6))	106	Security Enhancement/PCI Compliance	60
DNT Phase 4B (Southbound Frontage Road)	125	Server Hardware Upgrades & Replacements	29
DNT South End Design Guidelines Implementation	110	Service Desk Software Enhancements	75
DNT Widening (SRT to U.S. 380)	107	Signage	41
DNT/PGBT IC & Ramp Mods	104	Software & Licensing	33
Drainage Repairs	38	SRT Continuous Illumination Study	111
Enterprise Content Management System	85	Storm Sewer Repair	44
Enterprise Project Delivery System (EPDS) Enhancements	64	Systemwide CIF Projects - Buildings	96
Enterprise Systems Monitoring	92	Systemwide CIF Projects - Walls	114
eProcurement	83	Systemwide RMF - Annual Inspection	43
Erosion Mitigation	39	Systemwide RMF - Fleet	35
Fence Replacement or Repair	89	Systemwide RMF Projects - Bridges	42
GIS Enhancements	73	Systemwide RMF Projects - Buildings	36
Infrastructure Professional Services	77	Systemwide RMF Projects - Landscape	34
Internet/Intranet Redesign	65	Systemwide RMF Projects - IT Roadway	28
ITS Enhancements	62	Systemwide RMF Projects - Walls	45
Lane System Upgrade	89	Systemwide Safety Improvements - CIF	116
Lighting Replacement or Repair	98	Toll Collection System Implementation	76
LoneStar Module Expansion	82	Toll Collection System Software Enhancements & Maintenance	68
Median Replacement	97	Virtualization	71
Microsoft Enterprise Agreement	69	Windows Server Upgrade	94

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 17). 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.

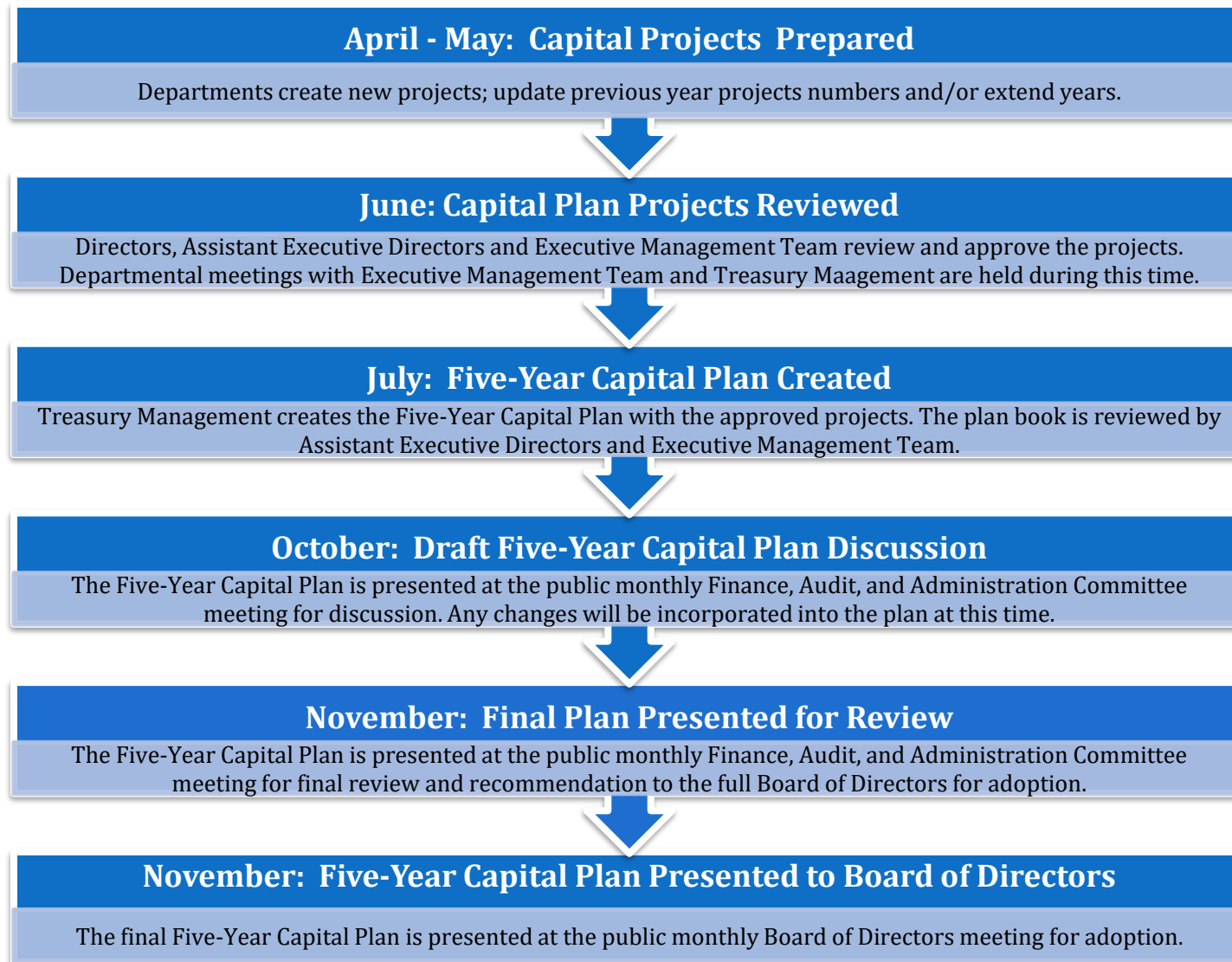
Appendix B – Capital Plan Process (continued)

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. 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 - FY2020 Capital Plan Budget Calendar

Date	Event
April 2, 2019 (Tuesday)	Executive Director's FY2020 Budget Meeting with Assistant Executive Directors to discuss budget priorities and overall direction, including compensation and benefits
April 3, 2019 (Wednesday)	Budget Kickoff Meeting with Department Directors
April 3 - May 31, 2019	Preparers enter Capital Projects into budget module and promote them for Directors approval
June 6, 2019 (Thursday)	Board Budget Workshop
June 7, 2019 (Friday)	Directors approve Capital Projects
June 21, 2019 (Friday)	AEDs approve Capital Projects
July 28, 2019 (Friday)	Executive Management Team approves Capital Projects
July 1 - July 19, 2019	Capital Plan book assembled by Treasury Management
August 30, 2019 (Friday)	Capital Plan book Review by Executive Management Team completed
September 19, 2019 (Thursday)	Five-Year Capital Plan book delivered to Board Members
October 3, 2019 (Thursday)	Finance, Audit, and Administration Committee Five-Year Capital Plan First Review
October 3 - Oct. 25, 2018	Incorporate any updates to Capital Plan
November 7, 2019 (Thursday)	Finance, Audit, and Administration Committee Five-Year Capital Plan Second Review
November 20, 2019 (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 \$928.3 million or 93.1% of the total estimated revenue in the FY2020 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.

The Authority's traffic and toll revenue estimates are provided by independent traffic and revenue engineers, currently CDM Smith. 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 4.8% per year between FY2020 and FY2024.

Roadway	Estimated NTTA System Annual Toll Revenue				
	FY2020	FY2021	FY2022	FY2023	FY2024
DNT	\$ 290,647,700	\$ 298,955,300	\$ 314,056,500	\$ 327,496,100	\$ 341,720,900
PGBT	248,784,600	304,287,100	319,808,900	334,671,300	350,443,800
AATT	1,276,700	1,398,700	1,458,000	1,516,800	1,578,200
MCLB	1,567,600	1,768,500	1,845,100	1,913,500	1,992,100
LLTB	9,938,800	9,999,300	10,450,900	10,931,900	11,442,100
SRT	208,252,900	218,516,700	231,043,300	243,266,200	254,863,800
PGBT WE	106,759,400	71,568,700	79,587,700	85,220,500	90,049,500
CTP	61,114,900	64,666,900	68,965,900	73,505,400	78,482,400
System Totals	\$ 928,342,600	\$ 971,161,200	\$ 1,027,216,300	\$ 1,078,521,700	\$ 1,130,572,800

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	C	D	E	F
FY Ending 12/31	First Tier Net Debt Service	Second Tier Net Debt Service	Third Tier Net Debt Service	ISTEA Loan Debt Service	Subordinated Lien Bonds Debt Service	Total Net Debt Service
2020	423,557,067	128,881,163	-	15,322,396	8,449,499	576,210,125
2021	448,564,567	133,437,913	-	15,322,396	37,923,718	635,248,594
2022	442,512,967	183,604,213	-	15,322,396	37,862,780	679,302,356
2023	455,267,967	187,694,563	-	15,322,396	32,038,721	690,323,647
2024	455,566,967	197,279,313	-	15,322,396	8,473,737	676,642,413
2025	486,364,217	166,479,313	-	15,322,396	8,462,255	676,628,181
2026	492,124,967	160,719,813	-	15,322,396	8,456,425	676,623,601
2027	488,366,917	164,509,063	-	15,322,396	8,449,977	676,648,353
2028	500,514,905	152,325,563	-	15,322,396	8,436,921	676,599,785
2029	475,520,655	208,475,313	-	-	8,426,128	692,422,096
2030	411,625,155	272,372,919	-	-	8,416,185	692,414,259
2031	407,775,655	276,220,063	-	-	-	683,995,718
2032	450,331,655	233,664,313	-	-	-	683,995,968
2033	465,391,005	218,604,813	-	-	-	683,995,818
2034	529,093,955	154,904,613	-	-	-	683,998,568
2035	552,714,105	131,285,563	-	-	-	683,999,668
2036	578,557,955	105,438,663	-	-	-	683,996,618
2037	628,471,105	55,525,870	-	-	-	683,996,975
2038	481,724,855	53,272,063	-	-	-	534,996,918
2039	482,661,805	52,336,313	-	-	-	534,998,118
2040	484,589,346	50,410,313	-	-	-	534,999,659
2041	486,622,779	48,372,563	-	-	-	534,995,342
2042	490,848,169	44,150,063	-	-	-	534,998,232
2043	199,427,658	32,163,813	-	-	-	231,591,471
2044	184,690,480	59,889,313	-	-	-	244,579,793
2045	142,624,790	101,968,063	-	-	-	244,592,853
2046	9,151,468	98,196,563	-	-	-	107,348,031
2047	-	99,192,063	-	-	-	99,192,063
2048	-	77,020,914	-	-	-	77,020,914
Total	\$ 11,654,663,136	\$ 3,848,395,091	\$ -	\$ 137,901,564	\$ 175,396,346	\$ 15,816,356,137

Appendix F - Estimated Operating Expenditures by Account

Description	FY2019 Budget	Estimated FY2020 - FY2024				
		FY2020	FY2021	FY2022	FY2023	FY2024
Salaries and Wages-Direct - (511101)	\$43,024,410	\$44,484,612	\$45,819,150	\$47,193,724	\$48,609,536	\$50,067,822
Salaries and Wages-Internship - (511202)	175,315	205,199	211,355	217,696	224,226	230,953
Salaries and Wage-Overtime - (511301)	821,176	846,276	871,664	897,814	924,749	952,491
Group Insurance - (512101)	8,754,657	9,296,084	9,574,967	9,862,216	10,158,082	10,462,824
Retirement Contributions - (512401)	5,435,206	5,749,498	5,921,982	6,099,642	6,282,631	6,471,110
Retirement Contr.-Internship - (512402)	22,230	26,614	27,412	28,234	29,081	29,954
Tuition Reimbursement - (512501)	31,575	31,575	32,522	33,498	34,503	35,538
Unemployment Insurance - (512601)	227,386	127,386	131,208	135,144	139,198	143,374
OPEB Annual Req'd Contribution - (512601)	3,100,000	3,100,000	3,193,000	3,288,790	3,387,454	3,489,077
Worker's Comp Ins - (512701)	327,941	277,761	286,094	294,677	303,517	312,622
Meeting Expense - (521101)	127,201	132,150	136,115	140,198	144,404	148,736
Consulting/Professional - (521201)	13,195,504	11,164,992	11,499,942	11,844,940	12,200,288	12,566,297
Legal Fees - (521202)	2,086,669	2,086,669	2,149,269	2,213,747	2,280,160	2,348,564
Auditing Fees - (521203)	206,029	206,029	212,210	218,576	225,133	231,887
Trustee Fees - (521204)	345,899	295,899	304,776	313,919	323,337	333,037
Traffic Engineering Fees - (521207)	688,199	588,199	605,845	624,020	642,741	662,023
Police Services (DPS) - (521208)	8,985,742	11,505,625	11,850,794	12,206,318	12,572,507	12,949,682
Armored Car Services - (521209)	59,627	54,627	56,266	57,954	59,692	61,483
Outside Maintenance Services - (521212)	21,758,982	29,685,518	30,576,084	31,493,366	32,438,167	33,411,312
Landscaping - (522202)	61,500	61,500	63,345	65,245	67,203	69,219
Rentals - Land - (522301)	423,151	423,151	435,846	448,921	462,389	476,260
Rentals - Equipment - (522302)	146,172	146,172	150,557	155,074	159,726	164,518
Insurance Expense - Other - (523101)	2,349,211	2,471,370	2,545,511	2,621,876	2,700,533	2,781,549
Postage - (523201)	10,668,292	8,580,260	8,837,668	9,102,798	9,375,882	9,657,158
Telecommunications - (523202)	1,364,758	1,302,721	1,341,803	1,382,057	1,423,518	1,466,224
Public Information Fees - (523203)	29,958	26,000	26,780	27,583	28,411	29,263
Recruitment - (523301)	157,820	157,820	162,555	167,431	172,454	177,628
Magazine and Newspaper - (523302)	1,426,601	1,426,601	1,469,399	1,513,481	1,558,885	1,605,652
Television & Radio - (523303)	1,019,697	1,019,697	1,050,288	1,081,797	1,114,250	1,147,678
Promotional Expenses - (523304)	1,177,440	1,480,799	1,525,223	1,570,980	1,618,109	1,666,652
Employee Appreciation - (523305)	1,752	1,752	1,805	1,859	1,914	1,972
Printing and Photographic - (523401)	13,299	130,278	134,186	138,212	142,358	146,629
Maps & Pamphlets - (523402)	91,960	46,960	48,369	49,820	51,314	52,854
Travel - (523501)	328,708	246,737	254,139	261,763	269,616	277,705
Dues & Subscriptions - (523601)	346,102	355,576	366,243	377,231	388,547	400,204
Education and Training - (523701)	452,183	373,530	384,736	396,278	408,166	420,411
Licenses - (523801)	29,502	29,502	30,387	31,299	32,238	33,205
Temporary Contract Labor - (523851)	12,267,764	11,839,775	12,194,968	12,560,817	12,937,642	13,325,771
Liability Claims - (523902)	6,182	6,182	6,367	6,558	6,755	6,958
Office Supplies - (531101)	468,385	656,287	675,976	696,255	717,143	738,657
Other Materials and Supplies - (531102)	3,173,777	2,292,277	2,361,045	2,431,877	2,504,833	2,579,978
Mobile Equipment Expense - (531103)	1,059,425	909,425	936,708	964,809	993,753	1,023,566
Freight and Express - (531105)	6,711	7,112	7,325	7,545	7,771	8,005
Motor Fuel Expense - (531107)	1,023,309	1,023,309	1,054,008	1,085,629	1,118,197	1,151,743
Water - (531211)	722,590	850,000	875,500	901,765	928,818	956,682
Gas - (531221)	70,600	50,600	52,118	53,682	55,292	56,951
Electricity - (531231)	2,164,256	1,906,846	1,964,051	2,022,973	2,083,662	2,146,172
Books & Periodicals - (531401)	1,600	1,600	1,648	1,697	1,748	1,801
Inven for resale(toll tags) - (531501)	10,567,552	9,491,582	9,776,329	10,069,619	10,371,708	10,682,859
Small Tools and Shop Supplies - (531601)	290,685	288,685	297,346	306,266	315,454	324,918
Software (Under \$5,000) - (531651)	10,994,874	8,218,337	8,464,887	8,718,834	8,980,399	9,249,811
Uniforms - (531701)	316,523	324,860	334,606	344,644	354,983	365,633
Bank Charges - (573001)	201,355	472,649	486,828	501,433	516,476	531,971
Credit Card Fees - (573002)	19,982,558	18,995,336	19,565,196	20,152,152	20,756,718	21,379,418
Totals	192,780,000	195,480,000	201,344,400	207,384,732	213,606,274	220,014,462