

# UNIVERSITY DRIVE MOBILITY IMPROVEMENTS PLANNING STUDY

## 4.10 Financial Plan Deliverable #84

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Prepared for:

broward **MPO**  
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## Table of Contents

1. Introduction .....	2
2. Capital Plan .....	5
3. Operating Plan .....	9
4. Cash flow Analysis.....	13
Appendix A – Summary of Inflation Forecasts .....	16
Appendix B – References .....	17

## List of Figures

Figure 1: Map of Study Area .....	4
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## List of Tables

Table 1: Capital Revenues, 2010-2040 (YoE\$, Million) .....	6
Table 2: Capital Costs, 2010-2040 (YoE\$, Million) .....	8
Table 3: Operating Revenues, 2010-2040 (YoE\$, Million) .....	10
Table 4: Operating Costs, 2010-2040 (YoE\$, Million) .....	12
Table 5: Cash Flow Summary, 2010-2040 (YoE\$, Million).....	14

## 1. INTRODUCTION

The University Drive Mobility Improvements Planning Study (the “Study”) is one of several transportation planning studies conducted by the Broward Metropolitan Planning Organization (MPO) to improve mobility while promoting economic vitality and enhancing quality of life in Broward County.

This document presents the proposed financial plan to build and operate the various transit elements proposed by the Study and is intended to be part of an ongoing collaboration with local public and community stakeholders to ensure the financial sustainability of transit in the face of economic uncertainty and decreasing federal funds.

The financial plan has been developed in accordance with Federal Transit Administration (FTA)’s *Guidance for Transit Financial Plans*. It documents the recent financial history of the transit agency involved in the Study, describes their current financial health, presents the projected costs and revenues over a 25-year horizon and demonstrates the reasonableness of key assumptions underlying these projections. The financial analysis is extended to FY 2040 to line up with the horizon year of the current Long Range Transportation Plan.

Section 2 describes the capital plan, including the cost estimate for the LPA. Section 3 provides details on the operating plan. Section 4 summarizes the combined cash flow (Capital and Operating Plans). Supplemental tables supporting the analysis are included in Appendix A at the end of the document. All references used during the course of the analysis are provided in Appendix B.

### 1.1 Description of the Project Sponsor and Funding Partners

**Broward County Transit (BCT)** provides public transportation services in Broward County, covering an area of 410 square miles with a total active fleet of 285 fixed-route buses, 28 express buses, 77 community buses and 218 paratransit vehicles in contracted service.<sup>1</sup> BCT also provides links to the transit systems in Miami-Dade and Palm Beach counties and to Tri-Rail commuter rail service. Fixed-route bus services include 42 weekday routes, 30 Saturday routes and 28 Sunday routes, and connect to four transfer terminals in downtown Fort Lauderdale, Plantation, Lauderhill and Pompano Beach. In addition to regular fixed-route bus services, BCT operates limited stop and express service, coordinates Community Bus service and provides paratransit service (TOPS). Limited stop service, operated as the Breeze routes, stops along the route only at major intersections. Express bus service travels along the major interstate highways to downtown Fort Lauderdale and Miami on weekdays during morning and afternoon peak travel hours only.

BCT operates as a department of Broward County government. As such, it is governed by the Broward County Board of Commissioners (BCC), which serves as the transit agency’s oversight board. The BCC consists of nine elected Commissioners (one per district). According to the 2012 National Transit Database (NTD), BCT has a total of 957 employees.

A range of funding sources support BCT’s operations and capital investments. Operations are primarily funded by passenger fares, state operating assistance, County general funds, a portion of local option gas tax revenues and transportation concurrency funds. BCT’s capital program is funded

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<sup>1</sup> As of November 2013.

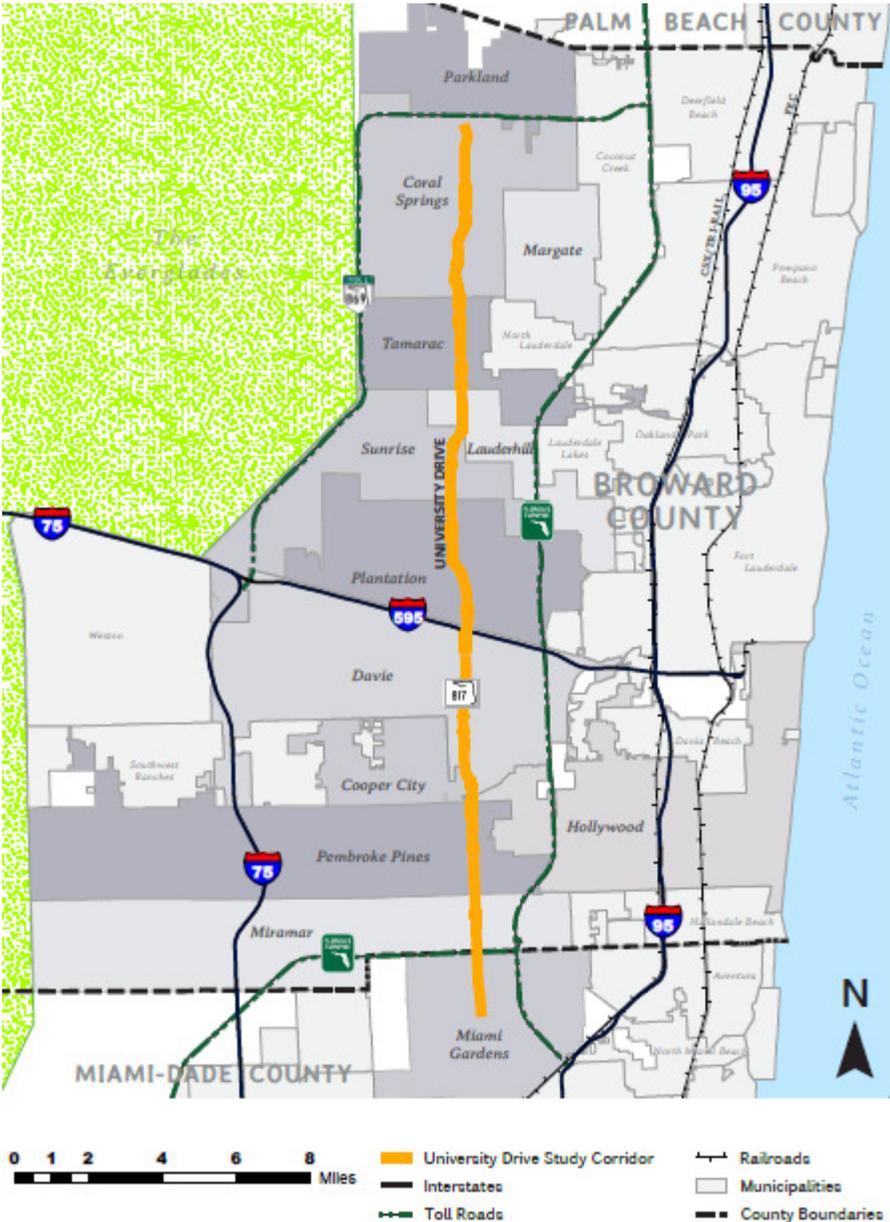
largely from state and federal grants (e.g., FTA Section 5307) as well as from transportation concurrency funds.

## 1.2 Description of the Project

The University Drive Corridor is one of the most heavily traveled roadways in Broward County, moving tens of thousands of people a day. It was identified in Broward MPO's 2035 Long Range Transportation Plan as a premium transit corridor and, in November 2011, the Broward MPO received a grant from the Federal Transit Administration (FTA) to explore alternatives.

The University Drive Corridor has six travel lanes, three in each direction, and is more than 20-miles long. The study area begins at Westview Drive in Broward County and ends just south of Miramar Parkway (at NW 215th Street) in Miami-Dade County. The study area is served by a system of north-south and east-west collectors, state roads, two toll roads and several local roads providing access to a number of commercial and industrial areas, as well as community facilities. It contains 13 percent of Broward County's population and 14 percent of its employment, making it a major contributor to the county economy. A map of the study area is shown below.

Figure 1: Map of Study Area



Source: Broward MPO

The University Drive Mobility Improvements Planning Study explores a number of transportation improvement options for all users of the road, both in the short and long terms, based on the known challenges of heavy traffic congestion, limited convenient transit options, and a lack of continuous sidewalks and bicycle facilities. Investment in transit improvements along the corridor is envisioned to improve multi-modal mobility and livability of the corridor.

A two-tiered screening process was used to identify the alternatives that perform best. The following nine (9) transit alternatives were advanced to Tier II:

- Silver Alternative (No-Build)
- Orange Alternative (Pedestrian Safety and CMS Strategies)
- Yellow Alternative (Bike/Pedestrian and CMS strategies)
- Green Alternative (Future Baseline Transit)
- Blue Alternative (Enhanced Bus Operating in Mixed Traffic)
- Red Alternative (Enhanced Bus Operating in Outside Curb Lane as BAT Lane - From Oakland Park Boulevard to Griffin Road)
- Indigo Alternative (Bus Rapid Transit (BRT) Operating in Mixed Traffic)
- Magenta Alternative (Bus Rapid Transit (BRT) Operating in Outside Curb Lane as BAT Lane - From Westview Drive to Griffin Road)
- Violet Alternative (Bus Rapid Transit (BRT) Operating in Outside Curb Lane as BAT Lane - From Westview to Griffin Road)

At the conclusion of the Tier II analysis, the Blue Alternative was recommended as the Locally Preferred Alternative (LPA). The recommendation was approved by the Broward MPO Board in September 2014. Only the LPA is considered in the financial plan.

## 2. CAPITAL PLAN

This section describes the implementation of the LPA through FY 2040. Section 2.1 describes capital sources of funds, while Section 2.2 describes capital uses of funds.

Note that projections for the existing system reflect BCT's Transit Development Plan Status Quo scenario.<sup>2</sup> It should also be noted that all dollar figures in this section are presented in year-of-expenditure dollars (YoE\$), unless stated otherwise. Additionally, all figures are presented on the basis of the BCT fiscal year (FY), which runs from October 1<sup>st</sup> through September 30<sup>th</sup>.

### 2.1 Capital Revenues

Table 1 on the following page presents BCT's capital revenues over the period FY 2010 to FY 2040. In FY 2014, capital revenues amounted to \$26.4 million, including \$23.4 million in Federal funds (FTA's Section 5307) and \$3 million from the Transit Concurrency Fund. Annual proceeds from the Transit Concurrency Fund are assumed to remain at the same level through FY 2040, while Federal funds are projected to grow at a 1 percent rate over the forecast period.<sup>3</sup>

<sup>2</sup> Broward County Transit. Transit Development Plan, Annual Update: 2015 – 2024. September 2014.

<sup>3</sup> For a complete description of the different funding sources and financing mechanisms available to transit capital projects, see: HDR, Inc. University Drive Improvements Planning Study: Initial Assessment of Funding and Financing Opportunities. July 3, 2013.

**Table 1: Capital Revenues, 2010-2040 (YoE\$, Million)**

Fiscal Year >>>	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024	Forecast 2025
<b>Capital Revenues (YoE\$, million)</b>																
Non-federal funds (Concurrency Fund)	\$4.8	\$9.2	\$11.5	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0
Federal funds (Section 5307)	\$21.0	\$29.5	\$16.3	\$23.4	\$23.4	\$25.0	\$25.3	\$25.5	\$25.8	\$26.0	\$26.3	\$26.5	\$26.8	\$27.1	\$27.3	\$27.6
<b>Total capital revenues</b>	<b>\$25.8</b>	<b>\$38.7</b>	<b>\$27.8</b>	<b>\$26.4</b>	<b>\$26.4</b>	<b>\$28.0</b>	<b>\$28.3</b>	<b>\$28.5</b>	<b>\$28.8</b>	<b>\$29.0</b>	<b>\$29.3</b>	<b>\$29.5</b>	<b>\$29.8</b>	<b>\$30.1</b>	<b>\$30.3</b>	<b>\$30.6</b>
FTA and FDOT grants carryover	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$70.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

Fiscal Year >>>	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034	Forecast 2035	Forecast 2036	Forecast 2037	Forecast 2038	Forecast 2039	Forecast 2040
<b>Capital Revenues (YoE\$, million)</b>															
Non-federal funds (Concurrency Fund)	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0
Federal funds (Section 5307)	\$27.9	\$28.2	\$28.5	\$28.7	\$29.0	\$29.3	\$29.6	\$29.9	\$30.2	\$30.5	\$30.8	\$31.1	\$31.4	\$31.7	\$32.1
<b>Total capital revenues</b>	<b>\$30.9</b>	<b>\$31.2</b>	<b>\$31.5</b>	<b>\$31.7</b>	<b>\$32.0</b>	<b>\$32.3</b>	<b>\$32.6</b>	<b>\$32.9</b>	<b>\$33.2</b>	<b>\$33.5</b>	<b>\$33.8</b>	<b>\$34.1</b>	<b>\$34.4</b>	<b>\$34.7</b>	<b>\$35.1</b>
FTA and FDOT grants carryover	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

## 2.2 Capital Costs

Annual capital expenditures from FY 2010 to FY 2040 are presented in Table 2 on the following page. In FY 2014, capital expenditures amounted to \$26.4 million. They are expected to more than triple in FY 2015 through FY 2017 as a result of large fixed-route vehicle replacement expenditures and infrastructure investments. The cost of the LPA is estimated at \$78.1 million (or \$55.8 million in constant 2014 dollars), spread over five years (FY 2026 – FY 2030). Annual capital expenditures are assumed to be \$44.7 million from FY 2031 to FY 2040.

**Table 2: Capital Costs, 2010-2040 (YoE\$, Million)**

Fiscal Year >>>	Actual	Actual	Actual	Actual	Actual	Budget	Forecast									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Capital Expenditures (YoE\$, million)</b>																
Existing system	\$25.8	\$38.7	\$27.8	\$26.4	\$26.4	\$98.2	\$82.7	\$99.3	\$42.4	\$58.8	\$45.5	\$39.3	\$40.9	\$42.7	\$55.0	\$44.7
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total capital expenditures</b>	<b>\$25.8</b>	<b>\$38.7</b>	<b>\$27.8</b>	<b>\$26.4</b>	<b>\$26.4</b>	<b>\$98.2</b>	<b>\$82.7</b>	<b>\$99.3</b>	<b>\$42.4</b>	<b>\$58.8</b>	<b>\$45.5</b>	<b>\$39.3</b>	<b>\$40.9</b>	<b>\$42.7</b>	<b>\$55.0</b>	<b>\$44.7</b>
<b>Debt service costs</b>	<b>\$0.0</b>															
Fiscal Year >>>	Forecast															
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
<b>Capital Expenditures (YoE\$, million)</b>																
Existing system	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7
LPA	\$14.9	\$15.2	\$15.6	\$16.0	\$16.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total capital expenditures</b>	<b>\$59.6</b>	<b>\$59.9</b>	<b>\$60.3</b>	<b>\$60.7</b>	<b>\$61.0</b>	<b>\$44.7</b>										
<b>Debt service costs</b>	<b>\$0.0</b>															

### 3. OPERATING PLAN

This section describes BCT's uses and sources of funds for operations and describes how BCT could fund the operating and maintenance costs associated with the LPA and existing services. Section 3.1 describes operating sources of funds and section 3.2 describes operating uses of funds.

#### 3.1 Operating Revenues

Table 3 on page 10 summarizes the sources of funding for operating expenditures at the Federal, state, and local levels for FY 2010 through 2040.

In FY 2014, fare revenues generated \$34.3 million and the farebox recovery ratio was nearly 29 percent. Since FY 2011, fare revenues have represented about a quarter of BCT's operating funds. Once the LPA is implemented, their share is expected to increase to about a third under the current plan. Fare revenue projections associated with the LPA are based on regular fares of \$1.75 on Route 2 and \$2.35 on Route 102. Those fares are assumed to remain constant throughout the forecast period.

The two other main sources of operating revenues are the General Fund and the Local Option Gas Tax. Together, they have accounted for more than half of all operating funds for the past ten years. Their combined share is expected to remain above 50 percent in the foreseeable future.

Operating revenues are expected to increase by just 0.81 percent per year, on average, over the forecast period (FY 2016 – FY 2040).

**Table 3: Operating Revenues, 2010-2040 (YoE\$, Million)**

Fiscal Year >>>	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024	Forecast 2025
<b>O&amp;M Revenues (YoE\$, million)</b>																
Existing system	\$27.8	\$31.9	\$34.3	\$34.5	\$34.3	\$34.6	\$34.9	\$35.2	\$35.6	\$35.9	\$36.2	\$36.6	\$36.9	\$37.3	\$37.6	\$38.0
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
The Wave	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.8	\$0.8	\$0.8	\$0.8	\$0.9	\$0.9	\$0.9	\$1.0	\$1.0
<b>Total fare revenues</b>	<b>\$27.8</b>	<b>\$31.9</b>	<b>\$34.3</b>	<b>\$34.5</b>	<b>\$34.3</b>	<b>\$34.6</b>	<b>\$34.9</b>	<b>\$36.0</b>	<b>\$36.4</b>	<b>\$36.7</b>	<b>\$37.1</b>	<b>\$37.5</b>	<b>\$37.8</b>	<b>\$38.2</b>	<b>\$38.6</b>	<b>\$39.0</b>
General fund	\$29.6	\$20.0	\$21.7	\$18.9	\$21.2	\$24.3	\$25.3	\$26.3	\$27.4	\$28.5	\$29.6	\$30.8	\$32.0	\$33.3	\$34.6	\$36.0
Transit grant fund	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Local option gas tax	\$48.7	\$55.2	\$55.7	\$55.7	\$54.0	\$57.0	\$55.9	\$54.7	\$53.6	\$52.6	\$51.5	\$50.5	\$49.5	\$48.5	\$47.5	\$46.6
Transit concurrency fees	\$0.4	\$0.6	\$0.6	\$0.6	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Aviation operations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Interest earnings	-\$0.1	-\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Applied fund balance	\$6.7	\$7.9	\$9.8	\$16.6	\$9.6	\$7.7	\$6.5	\$6.4	\$5.6	\$4.3	\$2.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Federal grants	\$1.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
State grants	\$11.3	\$11.5	\$11.4	\$12.7	\$13.0	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9
Miscellaneous revenues	\$1.2	\$1.0	\$1.1	\$0.9	\$0.8	\$0.8	\$0.8	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$1.0	\$1.0
5% contingency adjustment	\$0.0	\$0.0	\$0.0	\$0.0	-\$1.8	-\$1.8	-\$1.8	-\$1.8	-\$1.9	-\$1.9	-\$1.9	-\$1.9	-\$1.9	-\$2.0	-\$2.0	-\$2.0
<b>Total other revenues</b>	<b>\$99.6</b>	<b>\$96.1</b>	<b>\$100.4</b>	<b>\$105.6</b>	<b>\$97.5</b>	<b>\$101.0</b>	<b>\$99.6</b>	<b>\$99.4</b>	<b>\$98.5</b>	<b>\$97.2</b>	<b>\$95.2</b>	<b>\$93.2</b>	<b>\$93.4</b>	<b>\$93.7</b>	<b>\$94.1</b>	<b>\$94.5</b>
<b>Total O&amp;M revenues</b>	<b>\$127.4</b>	<b>\$128.0</b>	<b>\$134.7</b>	<b>\$140.0</b>	<b>\$131.7</b>	<b>\$135.6</b>	<b>\$134.6</b>	<b>\$135.4</b>	<b>\$134.9</b>	<b>\$134.0</b>	<b>\$132.2</b>	<b>\$130.7</b>	<b>\$131.2</b>	<b>\$131.9</b>	<b>\$132.6</b>	<b>\$133.4</b>
Annual % change	-6.1%	0.4%	5.3%	3.9%	-5.9%	2.9%	-0.8%	0.7%	-0.4%	-0.7%	-1.3%	-1.2%	0.4%	0.5%	0.6%	0.6%

Fiscal Year >>>	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034	Forecast 2035	Forecast 2036	Forecast 2037	Forecast 2038	Forecast 2039	Forecast 2040
<b>O&amp;M Revenues (YoE\$, million)</b>															
Existing system	\$38.3	\$38.7	\$39.1	\$39.4	\$39.8	\$40.2	\$40.5	\$40.9	\$41.3	\$41.7	\$42.1	\$42.5	\$42.9	\$43.3	\$43.7
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.9	\$6.9	\$7.0	\$7.1	\$7.1	\$7.2	\$7.3	\$7.3	\$7.4	\$7.5
The Wave	\$1.0	\$1.0	\$1.1	\$1.1	\$1.1	\$1.2	\$1.2	\$1.2	\$1.3	\$1.3	\$1.4	\$1.4	\$1.4	\$1.5	\$1.5
<b>Total fare revenues</b>	<b>\$39.3</b>	<b>\$39.7</b>	<b>\$40.1</b>	<b>\$40.5</b>	<b>\$40.9</b>	<b>\$48.2</b>	<b>\$48.7</b>	<b>\$49.2</b>	<b>\$49.7</b>	<b>\$50.1</b>	<b>\$50.6</b>	<b>\$51.1</b>	<b>\$51.7</b>	<b>\$52.2</b>	<b>\$52.7</b>
General fund	\$37.5	\$39.0	\$40.5	\$42.1	\$43.8	\$45.6	\$47.4	\$49.3	\$51.3	\$53.3	\$55.5	\$57.7	\$60.0	\$62.4	\$64.9
Transit grant fund	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Local option gas tax	\$45.6	\$44.7	\$43.8	\$43.0	\$42.1	\$41.3	\$40.4	\$39.6	\$38.8	\$38.1	\$37.3	\$36.5	\$35.8	\$35.1	\$34.4
Transit concurrency fees	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Aviation operations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Interest earnings	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Applied fund balance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Federal grants	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
State grants	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9	\$12.9
Miscellaneous revenues	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.2	\$1.2	\$1.2	\$1.2
5% contingency adjustment	-\$2.0	-\$2.0	-\$2.1	-\$2.1	-\$2.1	-\$2.5	-\$2.5	-\$2.5	-\$2.5	-\$2.6	-\$2.6	-\$2.6	-\$2.6	-\$2.7	-\$2.7
<b>Total other revenues</b>	<b>\$95.0</b>	<b>\$95.6</b>	<b>\$96.2</b>	<b>\$97.0</b>	<b>\$97.8</b>	<b>\$98.4</b>	<b>\$99.3</b>	<b>\$100.4</b>	<b>\$101.6</b>	<b>\$102.9</b>	<b>\$104.2</b>	<b>\$105.7</b>	<b>\$107.2</b>	<b>\$108.9</b>	<b>\$110.7</b>
<b>Total O&amp;M revenues</b>	<b>\$134.3</b>	<b>\$135.3</b>	<b>\$136.4</b>	<b>\$137.5</b>	<b>\$138.7</b>	<b>\$146.6</b>	<b>\$148.0</b>	<b>\$149.6</b>	<b>\$151.2</b>	<b>\$153.0</b>	<b>\$154.9</b>	<b>\$156.8</b>	<b>\$158.9</b>	<b>\$161.1</b>	<b>\$163.4</b>
Annual % change	0.7%	0.7%	0.8%	0.8%	0.9%	5.7%	1.0%	1.1%	1.1%	1.2%	1.2%	1.3%	1.3%	1.4%	1.4%

### 3.2 Operating and Maintenance Costs

A summary of operating and maintenance (O&M) expenditures by mode, over the period FY 2010 to FY 2040, is provided in Table 4 on page 12. Historical estimates through FY 2012 are as reported to NTD.

The Great Recession and the ensuing financial difficulties experienced by the State of Florida led BCT management to take decisive steps to balance its budget. As a result, O&M expenditures decreased four consecutive years in a row, from \$131.5 million in FY 2008 to \$115.2 million in FY 2012. In FY 2014, they amounted to \$120.0 million.

O&M expenditures are expected to increase by 7.1 percent in FY 2016 with in preparation for the opening of The Wave. Likewise, an 11 percent jump is expected in FY 2031, when the LPA is implemented. Apart from these two years, O&M expenditures are forecast to increase by 3.3 percent annually, on average. Note that an annual inflation rate of 2.4 percent is assumed after FY 2018, based on U.S. CPI projections from the Congressional Budget Office (CBO).<sup>4</sup>

<sup>4</sup> Congressional Budget Office. The Budget and Economic Outlook: 2014 to 2024. February 2014.

**Table 4: Operating Costs, 2010-2040 (YoE\$, Million)**

Fiscal Year >>>	Actual	Actual	Actual	Actual	Actual	Budget	Forecast									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>O&amp;M Expenses (YoE\$, million)</b>																
Existing system	\$119.5	\$116.8	\$115.2	\$121.1	\$120.0	\$125.2	\$129.0	\$132.9	\$137.3	\$141.9	\$146.7	\$151.7	\$156.8	\$162.1	\$167.5	\$173.1
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
The Wave	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.5	\$2.6	\$2.7	\$2.7	\$2.8	\$2.9	\$3.0	\$3.1	\$3.2	\$3.3
IT improvements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.5	\$2.6	\$2.7	\$2.7	\$2.8	\$2.9	\$3.0	\$3.1	\$3.2	\$3.3
<b>Total O&amp;M expenses</b>	<b>\$119.5</b>	<b>\$116.8</b>	<b>\$115.2</b>	<b>\$121.1</b>	<b>\$120.0</b>	<b>\$125.2</b>	<b>\$134.0</b>	<b>\$138.1</b>	<b>\$142.6</b>	<b>\$147.4</b>	<b>\$152.4</b>	<b>\$157.5</b>	<b>\$162.8</b>	<b>\$168.2</b>	<b>\$173.9</b>	<b>\$179.7</b>
Fiscal Year >>>	Forecast															
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
<b>O&amp;M Expenses (YoE\$, million)</b>																
Existing system	\$179.0	\$185.0	\$191.2	\$197.6	\$204.3	\$211.1	\$218.2	\$225.6	\$233.1	\$241.0	\$249.1	\$257.4	\$266.1	\$275.0	\$284.3	
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$16.9	\$17.5	\$18.1	\$18.7	\$19.3	\$20.0	\$20.7	\$21.4	\$22.1	\$22.8	
The Wave	\$3.4	\$3.5	\$3.6	\$3.7	\$3.8	\$3.9	\$4.0	\$4.1	\$4.3	\$4.4	\$4.5	\$4.7	\$4.8	\$4.9	\$5.1	
IT improvements	\$3.4	\$3.5	\$3.6	\$3.7	\$3.8	\$3.9	\$4.0	\$4.2	\$4.3	\$4.4	\$4.5	\$4.7	\$4.8	\$5.0	\$5.1	
<b>Total O&amp;M expenses</b>	<b>\$185.7</b>	<b>\$191.9</b>	<b>\$198.3</b>	<b>\$205.0</b>	<b>\$211.8</b>	<b>\$235.9</b>	<b>\$243.8</b>	<b>\$251.9</b>	<b>\$260.4</b>	<b>\$269.1</b>	<b>\$278.1</b>	<b>\$287.4</b>	<b>\$297.0</b>	<b>\$307.0</b>	<b>\$317.3</b>	

## 4. CASH FLOW ANALYSIS

This section summarizes all the sources and uses of funds over the period FY 2010 – FY 2040, including the LPA. Table 5 on the following page combines the capital and operating plans.

### 4.1 Cash Flow Projection

BCT's O&M expenses for FY 2016 through FY 2040 are estimated at \$5.3 billion, while O&M revenues are projected at \$3.6 billion. The difference is expected to be covered, in part, by an additional transfer from the County's General Fund. BCT's Capital Program (including the proposed University Drive LPA) is estimated at \$1.3 billion over the FY 2016 through FY 2040 period; the LPA share of capital expenditures is estimated at \$78.1 million. Capital funding includes through Federal, state, and local funds for a total of \$788.1 million. Combining the operating and capital plans shows a shortfall starting in FY 2017 and growing over time.

Table 5: Cash Flow Summary, 2010-2040 (YoE\$, Million)

Fiscal Year >>>	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024	Forecast 2025
<b>O&amp;M Revenues (YoE\$, million)</b>																
LPA fare revenues	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total fare revenues</b>	\$27.8	\$31.9	\$34.3	\$34.5	\$34.3	\$34.6	\$34.9	\$36.0	\$36.4	\$36.7	\$37.1	\$37.5	\$37.8	\$38.2	\$38.6	\$39.0
<b>Total other revenues</b>	\$99.6	\$96.1	\$100.4	\$105.6	\$97.5	\$101.0	\$99.6	\$99.4	\$98.5	\$97.2	\$95.2	\$93.2	\$93.4	\$93.7	\$94.1	\$94.5
<b>Total O&amp;M revenues</b>	\$127.4	\$128.0	\$134.7	\$140.0	\$131.7	\$135.6	\$134.6	\$135.4	\$134.9	\$134.0	\$132.2	\$130.7	\$131.2	\$131.9	\$132.6	\$133.4
<b>O&amp;M Expenses (YoE\$, million)</b>																
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total O&amp;M expenses</b>	\$119.5	\$116.8	\$115.2	\$121.1	\$120.0	\$125.2	\$134.0	\$138.1	\$142.6	\$147.4	\$152.4	\$157.5	\$162.8	\$168.2	\$173.9	\$179.7
Balance from operations	\$7.9	\$11.2	\$19.5	\$18.9	\$11.8	\$10.4	\$0.6	-\$2.7	-\$7.7	-\$13.4	-\$20.1	-\$26.9	-\$31.6	-\$36.4	-\$41.2	-\$46.3
<b>Capital Revenues (YoE\$, million)</b>																
Non-federal funds	\$4.8	\$9.2	\$11.5	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0
Federal funds	\$21.0	\$29.5	\$16.3	\$23.4	\$23.4	\$25.0	\$25.3	\$25.5	\$25.8	\$26.0	\$26.3	\$26.5	\$26.8	\$27.1	\$27.3	\$27.6
<b>Total capital revenues</b>	\$25.8	\$38.7	\$27.8	\$26.4	\$26.4	\$28.0	\$28.3	\$28.5	\$28.8	\$29.0	\$29.3	\$29.5	\$29.8	\$30.1	\$30.3	\$30.6
FTA and FDOT grants carryover	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$70.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Capital Expenditures (YoE\$, million)</b>																
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total capital expenditures</b>	\$25.8	\$38.7	\$27.8	\$26.4	\$26.4	\$98.2	\$82.7	\$99.3	\$42.4	\$58.8	\$45.5	\$39.3	\$40.9	\$42.7	\$55.0	\$44.7
<b>Debt service costs</b>	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Balance from capital	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-\$54.5	-\$125.3	-\$138.9	-\$168.6	-\$184.9	-\$194.6	-\$205.7	-\$218.3	-\$243.0	-\$257.1
<b>Cash Balance</b>																
Beginning cash balance	\$19.0	\$26.9	\$38.1	\$57.6	\$76.5	\$88.3	\$98.7	\$44.8	-\$83.1	-\$229.7	-\$411.8	-\$616.8	-\$838.3	-\$1,075.6	-\$1,330.2	-\$1,614.5
Balance from operations	\$7.9	\$11.2	\$19.5	\$18.9	\$11.8	\$10.4	\$0.6	-\$2.7	-\$7.7	-\$13.4	-\$20.1	-\$26.9	-\$31.6	-\$36.4	-\$41.2	-\$46.3
Balance from capital	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-\$54.5	-\$125.3	-\$138.9	-\$168.6	-\$184.9	-\$194.6	-\$205.7	-\$218.3	-\$243.0	-\$257.1
<b>Closing cash balance</b>	\$26.9	\$38.1	\$57.6	\$76.5	\$88.3	\$98.7	\$44.8	-\$83.1	-\$229.7	-\$411.8	-\$616.8	-\$838.3	-\$1,075.6	-\$1,330.2	-\$1,614.5	-\$1,917.8

**Table 1 (Cont.): Cash Flow Summary, 2010-2040 (YoE\$, Million)**

Fiscal Year >>>	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034	Forecast 2035	Forecast 2036	Forecast 2037	Forecast 2038	Forecast 2039	Forecast 2040
<b>O&amp;M Revenues (YoE\$, million)</b>															
LPA fare revenues	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.9	\$6.9	\$7.0	\$7.1	\$7.1	\$7.2	\$7.3	\$7.3	\$7.4	\$7.5
<b>Total fare revenues</b>	\$39.3	\$39.7	\$40.1	\$40.5	\$40.9	\$48.2	\$48.7	\$49.2	\$49.7	\$50.1	\$50.6	\$51.1	\$51.7	\$52.2	\$52.7
<b>Total other revenues</b>	\$95.0	\$95.6	\$96.2	\$97.0	\$97.8	\$98.4	\$99.3	\$100.4	\$101.6	\$102.9	\$104.2	\$105.7	\$107.2	\$108.9	\$110.7
<b>Total O&amp;M revenues</b>	\$134.3	\$135.3	\$136.4	\$137.5	\$138.7	\$146.6	\$148.0	\$149.6	\$151.2	\$153.0	\$154.9	\$156.8	\$158.9	\$161.1	\$163.4
<b>O&amp;M Expenses (YoE\$, million)</b>															
LPA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$16.9	\$17.5	\$18.1	\$18.7	\$19.3	\$20.0	\$20.7	\$21.4	\$22.1	\$22.8
<b>Total O&amp;M expenses</b>	\$185.7	\$191.9	\$198.3	\$205.0	\$211.8	\$235.9	\$243.8	\$251.9	\$260.4	\$269.1	\$278.1	\$287.4	\$297.0	\$307.0	\$317.3
Balance from operations	-\$51.4	-\$56.6	-\$62.0	-\$67.5	-\$73.1	-\$89.3	-\$95.8	-\$102.4	-\$109.1	-\$116.1	-\$123.2	-\$130.6	-\$138.1	-\$145.9	-\$153.9
<b>Capital Revenues (YoE\$, million)</b>															
Non-federal funds	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0
Federal funds	\$27.9	\$28.2	\$28.5	\$28.7	\$29.0	\$29.3	\$29.6	\$29.9	\$30.2	\$30.5	\$30.8	\$31.1	\$31.4	\$31.7	\$32.1
<b>Total capital revenues</b>	\$30.9	\$31.2	\$31.5	\$31.7	\$32.0	\$32.3	\$32.6	\$32.9	\$33.2	\$33.5	\$33.8	\$34.1	\$34.4	\$34.7	\$35.1
FTA and FDOT grants carryover	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Capital Expenditures (YoE\$, million)</b>															
LPA	\$14.9	\$15.2	\$15.6	\$16.0	\$16.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total capital expenditures</b>	\$59.6	\$59.9	\$60.3	\$60.7	\$61.0	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7	\$44.7
<b>Debt service costs</b>	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Balance from capital	-\$285.7	-\$314.5	-\$343.3	-\$372.3	-\$401.3	-\$413.6	-\$425.7	-\$437.5	-\$449.0	-\$460.1	-\$471.0	-\$481.6	-\$491.8	-\$501.8	-\$511.4
<b>Cash Balance</b>															
Beginning cash balance	-\$1,917.8	-\$2,254.9	-\$2,626.0	-\$3,031.3	-\$3,471.1	-\$3,945.5	-\$4,448.4	-\$4,969.9	-\$5,509.8	-\$6,067.9	-\$6,644.1	-\$7,238.4	-\$7,850.6	-\$8,480.5	-\$9,128.2
Balance from operations	-\$51.4	-\$56.6	-\$62.0	-\$67.5	-\$73.1	-\$89.3	-\$95.8	-\$102.4	-\$109.1	-\$116.1	-\$123.2	-\$130.6	-\$138.1	-\$145.9	-\$153.9
Balance from capital	-\$285.7	-\$314.5	-\$343.3	-\$372.3	-\$401.3	-\$413.6	-\$425.7	-\$437.5	-\$449.0	-\$460.1	-\$471.0	-\$481.6	-\$491.8	-\$501.8	-\$511.4
<b>Closing cash balance</b>	-\$2,254.9	-\$2,626.0	-\$3,031.3	-\$3,471.1	-\$3,945.5	-\$4,448.4	-\$4,969.9	-\$5,509.8	-\$6,067.9	-\$6,644.1	-\$7,238.4	-\$7,850.6	-\$8,480.5	-\$9,128.2	-\$9,793.5

## APPENDIX A – SUMMARY OF INFLATION FORECASTS

Fiscal Year >>>	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024	Forecast 2025
<b>U.S. CPI-U</b>																
Index	216.8	221.1	227.6	231.4	231.4	239.1	244.1	249.3	255.1	261.2	267.6	274.1	280.7	287.4	294.3	301.3
Annual % change	1.0%	2.0%	2.9%	1.7%	0.0%	3.4%	2.1%	2.1%	2.3%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
Annual growth factor	1.010	1.020	1.029	1.017	1.000	1.034	1.021	1.021	1.023	1.024	1.024	1.024	1.024	1.024	1.024	1.024
Escalation factor from 2014	0.937	0.955	0.984	1.000	1.000	1.034	1.055	1.077	1.102	1.129	1.156	1.184	1.213	1.242	1.272	1.302
Escalation factor from 2013	0.937	0.955	0.984	1.000	1.000	1.034	1.055	1.077	1.102	1.129	1.156	1.184	1.213	1.242	1.272	1.302
Escalation factor from 2012	0.953	0.971	1.000	1.017	1.017	1.051	1.073	1.095	1.121	1.148	1.176	1.204	1.233	1.263	1.293	1.324
<b>FDOT Construction Cost Inflation Factors</b>																
Annual % change	N/A	N/A	N/A	N/A	N/A	N/A	2.70%	2.50%	2.50%	2.50%	2.50%	2.60%	2.70%	2.80%	2.90%	3.0%
Annual growth factor	1.010	1.020	1.029	1.017	1.000	1.034	1.027	1.025	1.025	1.025	1.025	1.026	1.027	1.028	1.029	1.030
Escalation factor from 2014	0.937	0.955	0.984	1.000	1.000	1.034	1.061	1.088	1.115	1.143	1.172	1.202	1.235	1.269	1.306	1.345
Escalation factor from 2013	0.937	0.955	0.984	1.000	1.000	1.034	1.061	1.088	1.115	1.143	1.172	1.202	1.235	1.269	1.306	1.345
Escalation factor from 2012	0.953	0.971	1.000	1.017	1.017	1.051	1.079	1.106	1.134	1.162	1.191	1.222	1.255	1.290	1.328	1.368
Fiscal Year >>>	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034	Forecast 2035	Forecast 2036	Forecast 2037	Forecast 2038	Forecast 2039	Forecast 2040	
<b>U.S. CPI-U</b>																
Index	308.6	316.0	323.5	331.3	339.3	347.4	355.7	364.3	373.0	382.0	391.1	400.5	410.1	420.0	430.1	
Annual % change	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	
Annual growth factor	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	
Escalation factor from 2014	1.334	1.366	1.398	1.432	1.466	1.502	1.538	1.574	1.612	1.651	1.691	1.731	1.773	1.815	1.859	
Escalation factor from 2013	1.334	1.366	1.398	1.432	1.466	1.502	1.538	1.574	1.612	1.651	1.691	1.731	1.773	1.815	1.859	
Escalation factor from 2012	1.356	1.388	1.422	1.456	1.491	1.527	1.563	1.601	1.639	1.679	1.719	1.760	1.802	1.846	1.890	
<b>FDOT Construction Cost Inflation Factors</b>																
Annual % change	N/A															
Annual growth factor	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	
Escalation factor from 2014	1.377	1.410	1.444	1.479	1.514	1.551	1.588	1.626	1.665	1.705	1.746	1.788	1.831	1.875	1.920	
Escalation factor from 2013	1.377	1.410	1.444	1.479	1.514	1.551	1.588	1.626	1.665	1.705	1.746	1.788	1.831	1.875	1.920	
Escalation factor from 2012	1.400	1.434	1.468	1.504	1.540	1.577	1.615	1.653	1.693	1.734	1.775	1.818	1.861	1.906	1.952	

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