# CHAPTER 5

**Costs and Revenues** 

# **CHAPTER 5: Costs and Revenues**

# **Unit Cost Assumptions**

Planning-level cost estimates for the 2040 LRTP were developed for each mode, including roadway, bicycle, pedestrian, and transit using the 2015 LRE Costing Tool provided by FDOT District One. The cost assumptions and resulting cost estimates were used in the development of the 2040 LRTP Needs Plan and Cost Feasible Plan.

#### Roadway

Roadway construction unit costs were derived from the standard roadway typical sections and utilized on a per centerline mile basis as provided by FDOT District One. The roadway construction unit costs are summarized in **Table 5-1**. Unit costs are presented as present day costs (PDC). Cost estimates for the Project Development and Environmental (PD&E) and Preliminary Engineering (PE)

**Table 5-1: Roadway Construction Unit Costs** 

Area Type	Project Type	Project Description	Unit Cost	Unit of Measure
Rural	New Construction	2-Lane Undivided Roadway with 5' Outside Shoulder Paved	\$4,660,101	per Centerline Mile
Rural	New Construction	4-Lane Roadway with 5' Outside Shoulder Paved	\$7,200,898	per Centerline Mile
Rural	New Construction	6-Lane Roadway with 5' Outside Shoulder Paved	\$9,069,427	per Centerline Mile
Rural	Widening	2-Lane Roadway to 4 Lanes with 5' Outside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$4,974,074	per Centerline Mile
Rural	Widening	4-Lane Roadway to 6 Lanes with 5' Outside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$5,456,689	per Centerline Mile
Urban	New Construction	2-Lane Undivided Roadway with 6' Sidewalk, 4' Bike Lane and Curb & Gutter	\$6,278,054	per Centerline Mile
Urban	New Construction	4-Lane Roadway (45mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$8,793,913	per Centerline Mile
Urban	New Construction	4-Lane Roadway (55mph Design Speed) with 5' Sidewalk, 6.5' Bike Lane, and Curb & Gutter with 4' Inside Shoulder Paved	\$10,155,379	per Centerline Mile
Urban	Widening	2-Lane Roadway to 4 Lanes (45mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	\$5,936,228	per Centerline Mile
Urban	Widening	2-Lane Roadway to 4 Lanes (55mph Design Speed) with 5' Sidewalk, 6.5' Bike Lane, and Curb & Gutter with 4' Inside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$6,392,739	per Centerline Mile
Urban	Widening	4-Lane Roadway to 6 Lanes (45 mph Design speed) with 5' Sidewalk, 4' Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	\$6,539,832	per Centerline Mile
Urban	Widening	4-Lane Roadway to 6 Lanes (50mph Design Speed) with 5' Sidewalk, 6.5' Bike Lane, and Curb & Gutter with 4' Inside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$6,985,687	per Centerline Mile
Urban	Interchange	Compressed Diamond Interchange - Mainline over Crossroad	\$44,768,983	per Interchange

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phases were calculated based on a percentage of overall construction cost at five and 15 percent, respectively.

In addition to construction, PD&E, and PE costs, right-of-way costs were also considered in the overall project cost estimates. Right-of-way costs were presented as a range from high to low on a per acre basis for each area type (urban, suburban, and rural). These unit costs were also provided by FDOT District One. **Table 5-2** summarizes the range of right-of-way unit costs used for the development of the 2040 LRTP.

#### **Transit**

Transit unit costs were derived from the 2015 LRE Costing Tool provided by the FDOT District One as well as the FY 2015-2024 Charlotte County TDP "Charlotte Rides". The transit unit costs are summarized in **Table 5-3**.

## Bicycle and Pedestrian

Bicycle and pedestrian unit costs were derived from the 2015 LRE Costing Tool provided by the FDOT District One. The unit costs are summarized in **Table 5-4**.

Area Type	High	Medium	Low	
Urban	\$1,960,200	\$1,306,800	\$653,400	
Suburban	\$522,720	\$479,160	\$435,600	
Rural	\$217,800	\$141,570	\$65,340	

**Table 5-2: Right-of-Way Unit Costs** 

<b>Table</b>	5-3:	<b>Transit</b>	Unit	Costs
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Mode	Project Type	Project Description	Unit Cost	Unit of Measure
Bus	Station/Facility	At Grade Bus Station	\$2,500,000	per Station
Bus	Station/Facility	Local Bus Stops - Shelters & Amenities	\$30,000	per Facility
Park & Ride	Station/Facility	Park & Ride - At Grade	\$2,500,000	per Facility
Bus	Fleet Purchase	Small Cutaway Bus w/Wheelchair Lift	\$60,000	per Bus
Bus	Fleet Purchase	31' and 34' Medium Duty 26,500 - 34,000 GVW	\$180,000	Per Bus
Bus	0&M	Existing Bus Route	\$58	per Revenue Hour
Bus	0&M	New Bus Route	\$62	per Revenue Hour

**Table 5-4: Bicycle and Pedestrian Construction Unit Costs** 

Area Type	Project Type	Project Description	Unit Cost	Unit of Measure
Urban	Bicycle and Pedestrian Facilities	Shared Use Path (10' Width)	\$280,733	per Mile

#### **Inflation Factors**

All project cost estimates in the 2040 LRTP were provided in PDC and year-of-expenditure (YOE) dollars using inflation factors provided by FDOT District One. The inflation factors used in this analysis are shown in **Table** 5-5. All revenues discussed here are presented as PDC.

**Table 5-5: Inflation Factors** 

Area	Per Year Inflation Factors				
Туре	2014-2018	2019-2023	2023-2040		
Urban	3.00%	3.00%	5.00%		
Suburban	3.00%	3.00%	5.00%		
Rural	3.00%	3.00%	3.00%		

# **Revenue Projections**

This section presents the CC-PG MPO's forecast of reasonably available funding from traditional Federal, State, and local revenue sources to support transportation investments through 2040. Included in this section are descriptions of sources of revenue for funding transportation improvements. It also describes the methodology used to forecast future revenue and provides future revenue estimates from each source. Appendix D includes the Revenue Projection Technical Memorandum.

# Federal and State - Highway Funding

Highway program funding includes revenues dedicated to the expansion or improvement of highways. Federal and state funds are available from a number of different programs that serve to fund improvements for roadways.



The following describe the highway programs, how the funds can be used, and estimated funds available to Charlotte County over the course of the planning window. The estimated total funding available from federal and state sources for highway projects between FY 2021-2040 is \$737 million.

#### SIS Highways Construction and Right-of-Way

Funds from this program can be used for construction, improvements, and right-of-way acquisitions on Strategic Intermodal System (SIS) highways (i.e., interstates, toll roads, and facilities designed to serve interstate and regional commerce, including SIS connectors). Total SIS Highways Construction and right-of-way funds available to Charlotte County FY 2021-2040 are expected to be approximately \$76.5 million.

#### Other Arterials Construction and Right-of-Way

This funding program provides funds for construction, improvements, and associated right-of-way on State Highway System roadways not designated as part of the SIS. This program also includes funding for the Economic Development Program, the County Incentive Grant Program, the Small County Road Assistance Program, and the Small County Outreach Program. Total program funding expected to be available for Charlotte County FY 2021-2040 is approximately \$246 million.

#### <u>Districtwide Highway Operations and Maintenance Funds</u>

Funds from this program support activities that maintain or improve conditions on highways once constructed. The funds can be used for routine maintenance of facilities, traffic engineering analyses to find solutions to traffic problems with no major structural alterations, administration and collection of tolls on bonded road projects, and enforcement of laws and FDOT rules regulating weight, size, safety, and registration requirements of commercial vehicles. Total program funding available to Charlotte County FY 2021-2040, is expected to be approximately \$414.6 million.

**Figure 5-1** illustrates FDOT's funding estimates of approximately \$737 million from federal and state programs for the SIS, Other Arterials (including PE funds), and State Highway System operations and maintenance (0&M) over the 2021-2040 period.

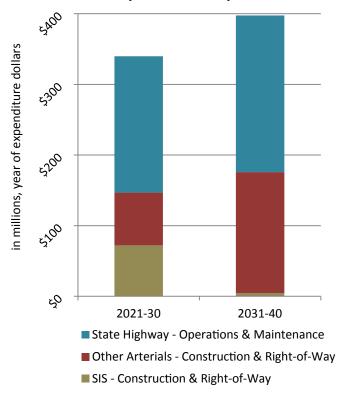
## Metropolitan and Regional Programs

A number of funding programs are managed at the MPO level. Funding from Metropolitan and Regional funding programs available to Charlotte County is estimated at \$6.45 million over 20 years (2021-2040). Figure 5-2 illustrates funding from these programs as estimated in FDOT's 2040 Revenue Forecast for Charlotte County.

#### <u>Transportation Alternatives Funds</u>

Funds from Transportation Alternatives (TA) program are used to assist MPOs in the development of their plans.

Figure 5-1: Federal and State Highway Funding (FY 2021-2040)



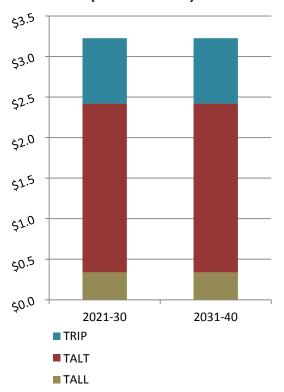
Source: FDOT Revenue Estimates for Charlotte County, 20212040

The TA program is broken up into three parts: TALU, which is dedicated to areas that have a population greater 200,000; TALL, for areas with a population between 5,000 and less than 200,000; and TALT, which can be used anywhere in the state. The resulting program funding amounts estimated to be available from TALL are \$0.7 million between FY 2021-2040. TALT funds are estimated to be \$4.2 million.

## <u>Transportation Regional Incentive Program Funds</u>

After funds are allocated to the Small County Outreach Program and the New Starts Program, 25 percent of the remaining revenues from the Documentary Stamps Tax are allocated annually to Transportation Regional Incentive Program (TRIP) for regional transportation projects. Total funding from the TRIP program for Charlotte County is approximately \$1.6 million between FY 2021-2040.

Figure 5-2: Metropolitan and Regional Programs (FY 2021-2040)



Source: FDOT Revenue Estimates for Charlotte County, 2021-2040



# Transit – Federal and State Programs

Transit funding includes funding from FTA and other Federal funds and state operating and capital grants (excluding FTA Major Capital Investment Funding and State New Starts Programs). Transit funding is estimated to be \$106.8 million over 20 years (2021-2040); this includes FDOT State Transit Funds (\$75.3 million) and FTA Formula Funds (\$31.5 million).

#### **FDOT and State Transit**

FDOT and the Commission for the Transportation Disadvantaged (CTD) provide technical and operating/capital assistance to transit, paratransit, and ridesharing systems. For Charlotte County this includes funding allocations to Charlotte County Dial-A-Ride and Sunshine Ride services. FY 2021-2040, the program funding available to Charlotte County is estimated to be \$75.3 million.

#### **FTA Formula Funds**

Federal Formula funds for transit are granted to urbanized areas to fund public transportation capital, planning, job access, and reverse commuting projects, as well as operating and maintenance expenses. Between FY 2021-2040, total program funding available to Charlotte County from FTA Formula Funds is estimated to be \$31.5 million.

#### State Collected Fuel Taxes for Local Governments

The Constitutional, County, and Municipal Fuel taxes are imposed by the state and distributed to the local municipalities. Revenues from these sources are estimated



to be \$80.4 million over the FY 2021-2040 period. Fifteen percent (\$12 million) of this will be set aside to fund the resurfacing and maintenance projects within the county.

# Local and Local Option Funding Sources

Local jurisdictions have the power to levy certain taxes. Included in these categories of taxes are sales taxes and fuel excise taxes. These local revenue sources are summarized below.

## **Local Option Gas Taxes**

County governments in Florida are authorized to levy up to 12 cents per gallon of fuel through three local option gas taxes (LOGT) for transportation needs: the Ninth-Cent Gas Tax (1 cent per gallon of gasoline and diesel), the First LOGT (up to 6 cents per gallon of gasoline and diesel), and the Second LOGT (up to 5 cents per gallon of gasoline). Charlotte County has adopted all three taxes and imposes them at their maximum rate. Revenues from all three local option fuel taxes are forecast at \$256.8 million over 20 years (2021-2040).

#### **Local Government Infrastructure Sales Tax**

Florida law currently authorizes eight separate local discretionary sales surtaxes, known as local option sales taxes, as potential revenue sources for county governments. Charlotte County currently levies the maximum 1 percent of the Local Government Infrastructure Surtax allowed. Over 20 years (FY2021-2040), the Surtax is forecast to generate \$90.9 million for local transportation projects.



#### **Impact Fees**

Impact fees in Charlotte County require developers to pay the county, municipality, special districts, and school districts for the cost of additional infrastructure resulting from new development. Revenues from transportation impact fees collected by Charlotte County and the City of Punta Gorda are forecast at \$20.5 million over the FY 2021-2040 period.

## **Transit Funding**

The following are estimates of future locally sourced revenues that support capital improvements and operating needs of transit in Charlotte County. The county operates two transit services in the county: Dial-A-Ride and Sunshine Ride.

#### Dial-A -Ride

The Dial-A-Ride program is a curb-to-curb bus service available to the general public for a small fee. The system is funded through a mix of federal and state grants (described in a previous section), passenger fares, local contributions (from ad valorem taxes and general fund transfers), and other local sources such as ad revenue. Over a 20-year period (FY 2021-2040), total revenues from these sources are estimated to be \$18.4 million.

#### **Sunshine Ride**

The Sunshine Ride program is a door-to-door transportation service for those unable to provide or purchase their own transportation due to disability, age, income, or rural residents. Funding for the Sunshine Ride transit service



comes from grants awarded by the Federal government and the state (described in a previous section), various local government sources (such as Ad Valorem taxes and general fund transfers), and farebox collections. Over a 20-year period, total revenues from these sources are estimated to be \$15.6 million.

# Summary of Available Funding

**Table 5-6** summarizes total transportation-related revenues anticipated to be available 2021 through 2040. According to these estimates, approximately \$1.3 billion is expected to be available for transportation needs between FY 2021 and FY 2040. **Figure 5-3** shows the breakdown of revenues between 2021 and 2040.

Table 5-6: Total Transportation-related Revenues for Charlotte County, 2021-2040

Funding Categories	FY 2021- 2025	FY 2026- 2030	FY 2031- 2040	FY 2021- 2040
Federal and State - Capacity	\$110.4	\$36.4	\$175.9	\$322.7
State - 0&M Preservation, Congestion Management, and Safety	\$92.1	\$100.9	\$221.7	\$414.6
Metro/Regional	\$1.6	\$1.6	\$3.2	\$6.5
State - Fuel Tax to Local Transportation Programs	\$15.2	\$16.4	\$36.7	\$68.3
State - Fuel Tax to Local Resurfacing and Maintenance	\$2.7	\$2.9	\$6.5	\$12.1
Transit (Federal and State)	\$23.9	\$25.8	\$57.0	\$106.8
Transit (Local and Other)	\$6.8	\$7.8	\$19.4	\$34.0
Local - Local Transportation Programs	\$70.2	\$77.6	\$181.9	\$329.7
Local - Administration of Local Transportation Programs	\$8.6	\$9.3	\$20.7	\$38.5
Total	\$331.5	\$278.6	\$723.0	\$1,333.1

Figure 5-3: Charlotte County Transportation Revenues Breakdown (2021-2040)

