

- Analysis of access and connectivity to regional destinations and other potential connections, such as schools, parks, transit, community amenities, and other locations that offer educational, historical, and natural history opportunities;
- Development of a preliminary trails and greenways network; and
- Public involvement activities for citizens to review existing and planned facilities, provide input and suggestions on the proposed network, and review the proposed regional network.

The Plan was further refined based upon community and stakeholder input. This input was obtained through the coordination with existing trail users, groups and agencies, through surveys, and a public workshop held on January 19, 2011 and a preliminary prioritization list developed for more in-depth future assessments. A second public workshop was held on February 16, 2011 to review, obtain comments for further refinement, and finalizing the network and projects. Finally, the Trails Master Plan was presented to and adopted by the CRTPA Board at their meeting on March 21, 2011. Once adopted, the identified trail projects were incorporated into the overall RMP Cost Feasible Plan.

IV. Financial Analysis

“Improvement usually means doing something that we have never done before”

-Shigeo Shingo

The financial resources element is a critical part of the development of the CRTPA 2035 Regional Mobility Plan. The CRTPA Financial Resources document, found in [Appendix H](#), provides the financial information necessary to develop an affordable list of projects from the Needs Plan and ultimately, a list of cost feasible projects for inclusion in the 2035 Cost Feasible Plan. The document contains an analysis of the existing and potential revenue sources for transportation, as well as the projection of these resources to the Year 2035. These projections are based on expected growth and inflation through the horizon year of 2035.

The document provides the financial information needed to develop the Cost Feasible Plan that includes projects identified in five year cost bands, including Year 2016-2020, 2021- 2025, 2026-2030 and 2031-2035. The Cost Feasible Plan serves as an implementation guide for local policy and decision makers. The Transportation Improvement Program (TIP) incorporates the projects for the first five years of the planning period (2011-2015) and was considered fixed in the development of the Cost Feasible Plan. Also included in the financial resources document is a summary of each traditional and non-traditional revenue sources.

Revenues

Federal and state revenue sources traditionally make up the largest share of transportation funding for projects. The Florida Department of Transportation (FDOT) provided much of the information. In addition to FDOT, the [Local Government Financial Information Handbook, August 2009](#), published by the Florida Department of Revenue and [Florida’s Transportation Tax Sources, A Primer, January 2010](#), published by FDOT, are the primary sources of information.

In compliance with federal regulations and requirements, the revenue estimates for the Cost Feasible Plan were stratified into cost bands and inflated by Year of Expenditure. The inflation factors for each of these cost bands were provided by FDOT. As noted above, the Transportation Improvement Program (TIP) includes the years 2011 – 2015 and the funding for those projects is considered committed. The cost bands, or project tiers outside of the TIP years are as follows:

- Tier 1: 2016 – 2020
- Tier 2: 2021 – 2025
- Tier 3: 2026 – 2030
- Tier 4: 2031 - 2035

The revenue projections were developed with guidance from FDOT, along with the information received regarding federal and state funding. In addition, other potential funding sources for transportation projects such as local funds and any state and local funds dedicated to specific programs, such as the Strategic Intermodal System, maintenance, local paving and Blueprint 2000 were included. In order to ensure that all local revenue and funding sources were incorporated, coordination with all local government budget offices within the region was also included.

The RMP, unlike a traditional long range plan, also incorporates transit projects, therefore, intensive coordination with the StarMetro budget office was also included. The table below identifies the total revenues available for each cost band, or tier, as well as the funding identified for transit and non-transit projects. The revenue estimates include only those federal, state and local funds that are identified for non-dedicated transportation funds.

Tier 1 Revenues	\$ 114,383,606	Tier 2 Revenues	\$109,410,378	Tier 3 Revenues	\$ 100,752,907	Tier 4 Revenues	\$ 95,929,628
Transit	\$ 53,590,576	Transit	\$ 45,190,576	Transit	\$ 32,590,576	Transit	\$ 24,190,576
Non-Transit	\$ 60,793,030	Non-Transit	\$ 64,219,802	Non-Transit	\$ 68,162,331	Non-Transit	\$ 71,739,052

Project Costs

Costs were developed for each project identified for the Needs Plan. These costs were based on the FDOT District 3 Quarterly Construction Cost information revised in October 2009. There were several assumptions made in the development of these costs that were applied to all projects. These assumptions include the following:

- All roadway projects include sidewalks on both sides of the facility
- No Right of Way costs for sidewalk construction
- Rural Bicycle Project Right of Way Assumptions
 - 18' ROW for shared use path
 - ROW costs for Rural Open at \$2.00/sq ft
 - ROW costs for Rural Residential/Mixed at \$10.00/sq ft.

Table 3, found on the following page, depicts the cost estimation template utilized for projects, other than sidewalks and bicycle facilities.

Once project costs were developed, the costs were escalated to Year of Expenditure by cost band, or tier, utilizing the inflation factors provided by FDOT. The total project costs by tier are shown below.

Tier 1 Cost	\$ 79,284,841	Tier 2 Cost	\$ 69,856,640	Tier 3 Cost	\$ 71,552,249	Tier 4 Cost	\$ 70,647,987
Transit	\$ 18,245,156	Transit	\$ 5,194,700	Transit	\$ 2,952,472	Transit	\$ -
Non-Transit	\$ 61,039,685	Non-Transit	\$ 64,661,940	Non-Transit	\$ 68,599,777	Non-Transit	\$ 70,647,987

Table 3. Project Cost Estimation Tool

Construction Costs						
Per Lane-Mile Components	Unit Cost/Ln Mile (ft)	Mi/ft/num	Add Lanes	Lane-Miles		Cost
Freeway widen 4 to 6 lanes no major interchange or structure improvements	\$2,500,000		2	0		\$0
Freeway widen 4 to 6 lanes improve interchanges and widen structures	\$8,000,000		2	0		\$0
New diamond interchange or rural trumpet	\$5,400,000		4	0		\$0
New Partial Coverleaf - 2 loop ramps - mainline over crossroad	\$11,000,000		4	0		\$0
Rural New Location - 2 lane	\$1,300,000		2	0		\$0
Rural New Location - 4 lane	\$1,450,000		4	0		\$0
Rural New Location - 6 lane	\$1,150,000		6	0		\$0
Rural Widening - 2 to 4 lanes	\$1,025,000		4	0		\$0
Rural Widening - 4 to 6 lanes	\$700,000		6	0		\$0
Rural Widening - 6 to 8 lanes	\$560,000		8	0		\$0
Rural Resurface - 2 lane	\$275,000		2	0		\$0
Rural Resurface - 4 lanes	\$300,000		4	0		\$0
Rural Resurface - 6 lanes	\$285,000		6	0		\$0
Rural New 300' Left Turn lane	\$3,923,000		1	0.0000		\$0
Rural New 300' Right Turn lane	\$3,780,000		1	0.0000		\$0
Urban New Location - 2 lane	\$2,250,000		2	0		\$0
Urban New Location - 4 lane	\$2,060,000		4	0		\$0
Urban New Location - 6 lane	\$1,650,000		6	0		\$0
Urban Widening - 2 to 4 lanes	\$1,300,000		4	0		\$0
Urban Widening - 4 to 6 lanes	\$860,000		6	0		\$0
Urban Widening - 6 to 8 lanes	\$775,000		8	0		\$0
Urban Resurface - 4 lanes	\$300,000		4	0		\$0
Urban Resurface - 6 lanes	\$240,000		6	0		\$0
Urban New 300' Left Turn lane	\$5,250,000		1	0.0000		\$0
Urban New 300' Right Turn lane	\$4,500,000		1	0.0000		\$0
Frontage or backage roads - new 1 lane	\$800,000		1	0		\$0
Frontage or backage roads - new 2 lane	\$800,000		2	0		\$0
					Subtotal	\$0
Additional Per Mile Components	Unit Cost/Mile	Miles	Length in Ft.	Width		Cost
Add Grass or raised Median	\$800,000					\$0
Add Flush Median	\$350,000					\$0
New or widened bridge (\$160/sq.ft.)	\$170					\$0
Bike/Ped Facility (5' paved sh. both sides)	\$160,000					\$0
Bike/Ped Multi-use trail (12' one side)	\$375,000					\$0
Sidewalks (length is total)	\$150,000					\$0
					Subtotal	\$0
Individual Components	Unit Cost - Each	Quantity				Cost
Diamond Interchange	\$22,000,000					\$0
Grade Separation	\$2,500,000					\$0
Arterial-Arterial Intersection realign	\$1,800,000					\$0
Arterial-Collector/Local Inter. Realign	\$1,100,000					\$0
Collector-Local Intersection realign	\$650,000					\$0
Traffic Signalization / Upgrade	\$250,000					\$0
					Subtotal	\$0
					Total Construction Cost	\$0
Right-of-Way Costs						
Area Type	Unit Cost/sq ft	Miles	ROW Width	Sq Ft ROW		Cost
Urban Open Land	\$8.00			0		\$0
Urban Residential or Mixed	\$20.00			0		\$0
Urban Commercial or structures affected	\$30.00			0		\$0
Suburban Open Land	\$4.00			0		\$0
Suburban Residential or Mixed	\$12.00			0		\$0
Suburban Commercial or structures affected	\$20.00			0		\$0
Rural Open	\$2.00			0		\$0
Rural Residential or Mixed	\$10.00			0		\$0
Rural Commercial or Structures Affected	\$15.00			0		\$0
					Total Right-of-Way Cost	\$0
PD&E and Design Costs						
PD&E = % of construction cost	20%				Total PD&E and Design Cost	\$0
CE&I and Contingency Costs						
CE&I + Contingency = % of all costs	15%				Total CE&I & Contingency Cost	\$0
					Total (PD&E+ROW+CST)	\$0