metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

2050 Metropolitan Transportation Plan

Chapter 13 | Multimodal Needs Assessment

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WHAT IS IN THIS DOCUMENT?

This chapter outlines MetroPlan Orlando's multimodal transportation needs assessment, including how project needs were identified, reviewed, and ultimately incorporated into the overall transportation needs list for the region. This chapter also describes the collaborative effort with partner agencies to identify and review projects for feasibility, elaborate on project descriptions, and identify consolidation opportunities focused on project feasibility.

Legal Information

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13.1 Introduction

MetroPlan Orlando is responsible for preparing a list of transportation needs across the region that support the growth of both people and goods beyond 2050. These needs can include active transportation projects, transportation technology projects, safety projects, transit projects, and roadway capacity projects. For instance, a shared-use trail may start as a listed need in the 2050 Metropolitan Transportation Plan (MTP). Once it's included in the cost feasible plan, eligible for funding. Once a project is eligible for funding that can unlock the next steps for the shared-use trail: planning, design, and construction. A listed need here is the first step in improving the transportation network for our current and future generations to use in years to come.

MetroPlan Orlando coordinated extensively with the local agencies throughout the region to gather a full list of needs. Feedback from the local agencies drove the needs development process. This collaboration included multiple in-person and virtual meetings with each agency. Feedback was requested for needs across the network, including on the State Highway System, along Off-System roads, and on local roads to promote planning consistency. This effort culminated in a project list of over **2,900** unique transportation needs within the MetroPlan Orlando region. The projects directly align with local government and transportation operating partners' respective comprehensive plans and other transportation planning efforts.

The MetroPlan Orlando region continues to be one of the fastest growing regions in the United States. With the extensive growth in the area, it was of the utmost importance to continue coordinating with local partners and cooperating on projects that increase connectivity, community links, and ultimately achieve transportation goals throughout the region.

Figure 13-1 through Figure-13-4 showcase the needs maps within the MetroPlan Orlando region and for each County (Orange, Osceola, Seminole). For additional ease of accessibility to this information, please visit the visualization dashboard for the 2050 MTP: https://metroplanorlando.gov/maps-tools/

100+ Local Agency Meetings Held

2,900+ Needs Identified

25+ Agencies Participated

13 Needs Categories

Figure 13-1 | MetroPlan Orlando Regional Needs Map

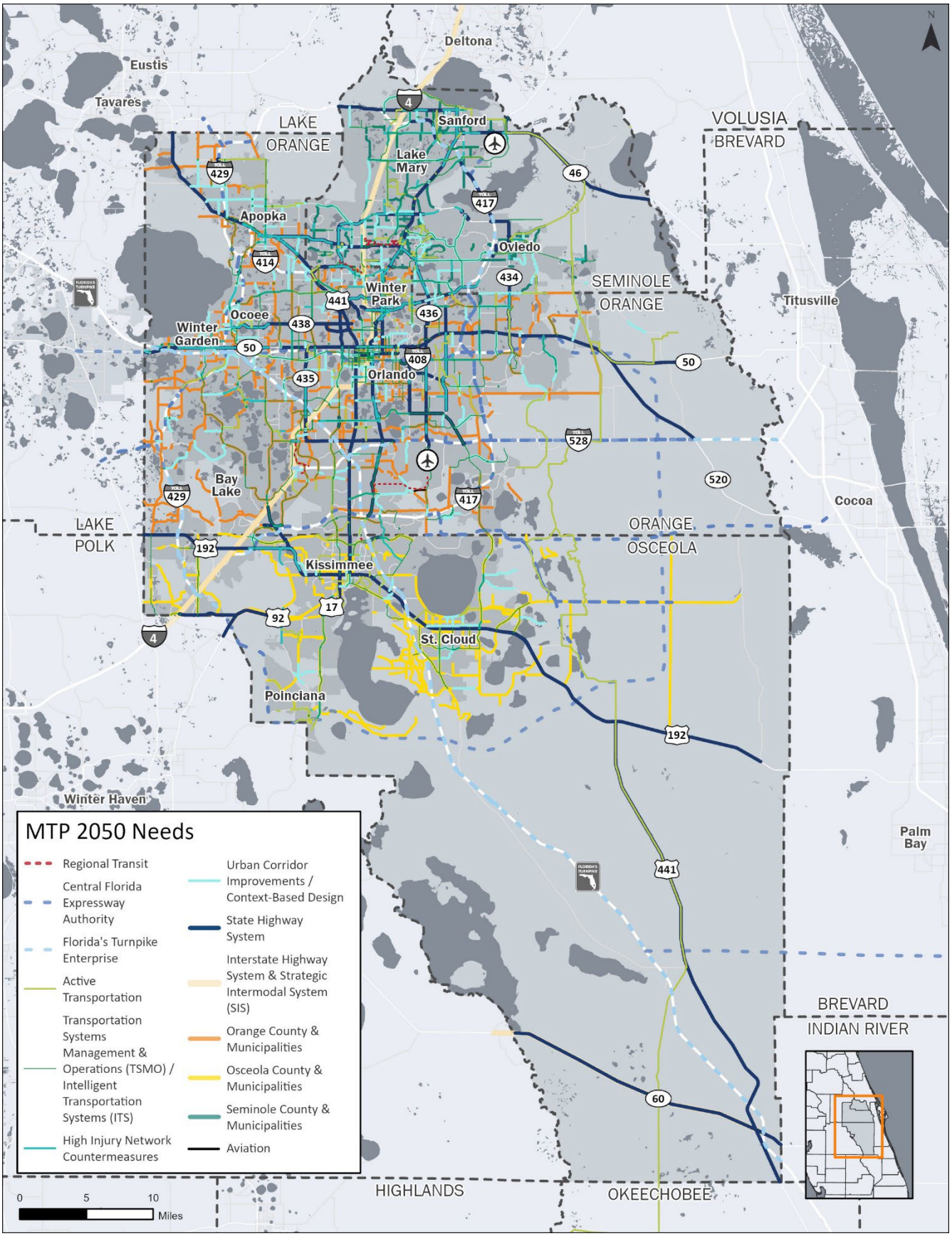


Figure 13-2 | Orange County Needs Map

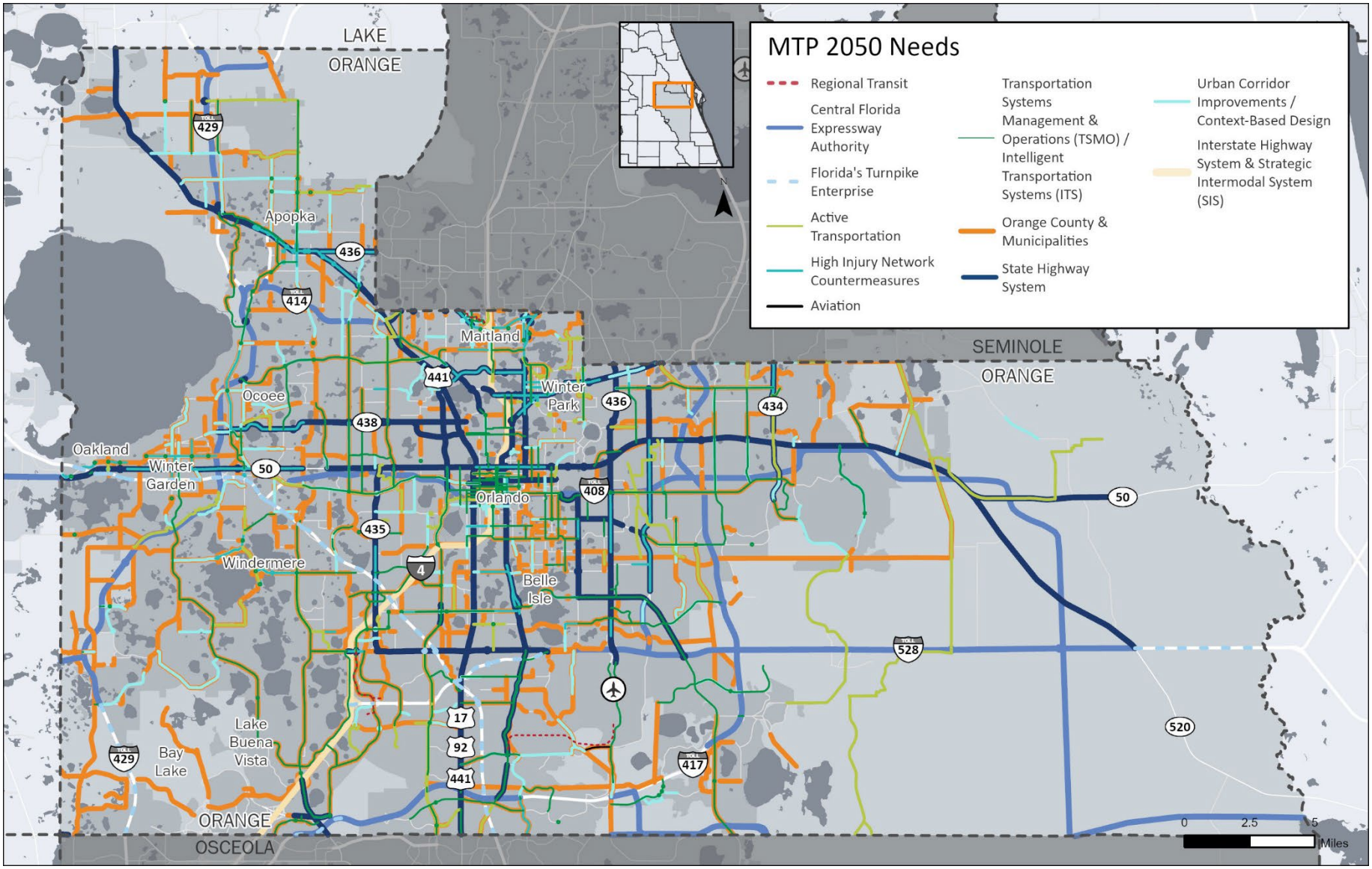


Figure 13-3 | Osceola County Needs Map

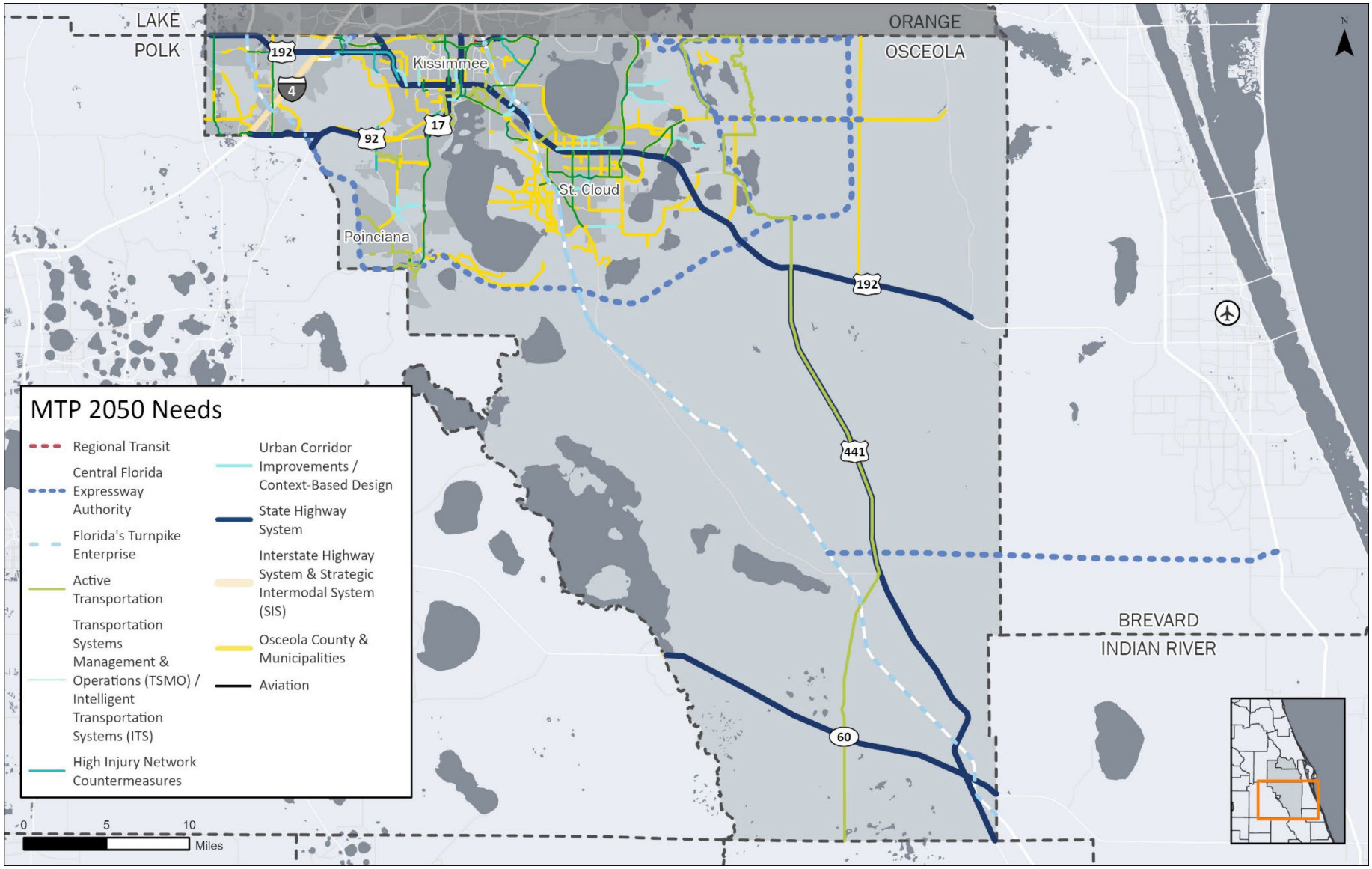
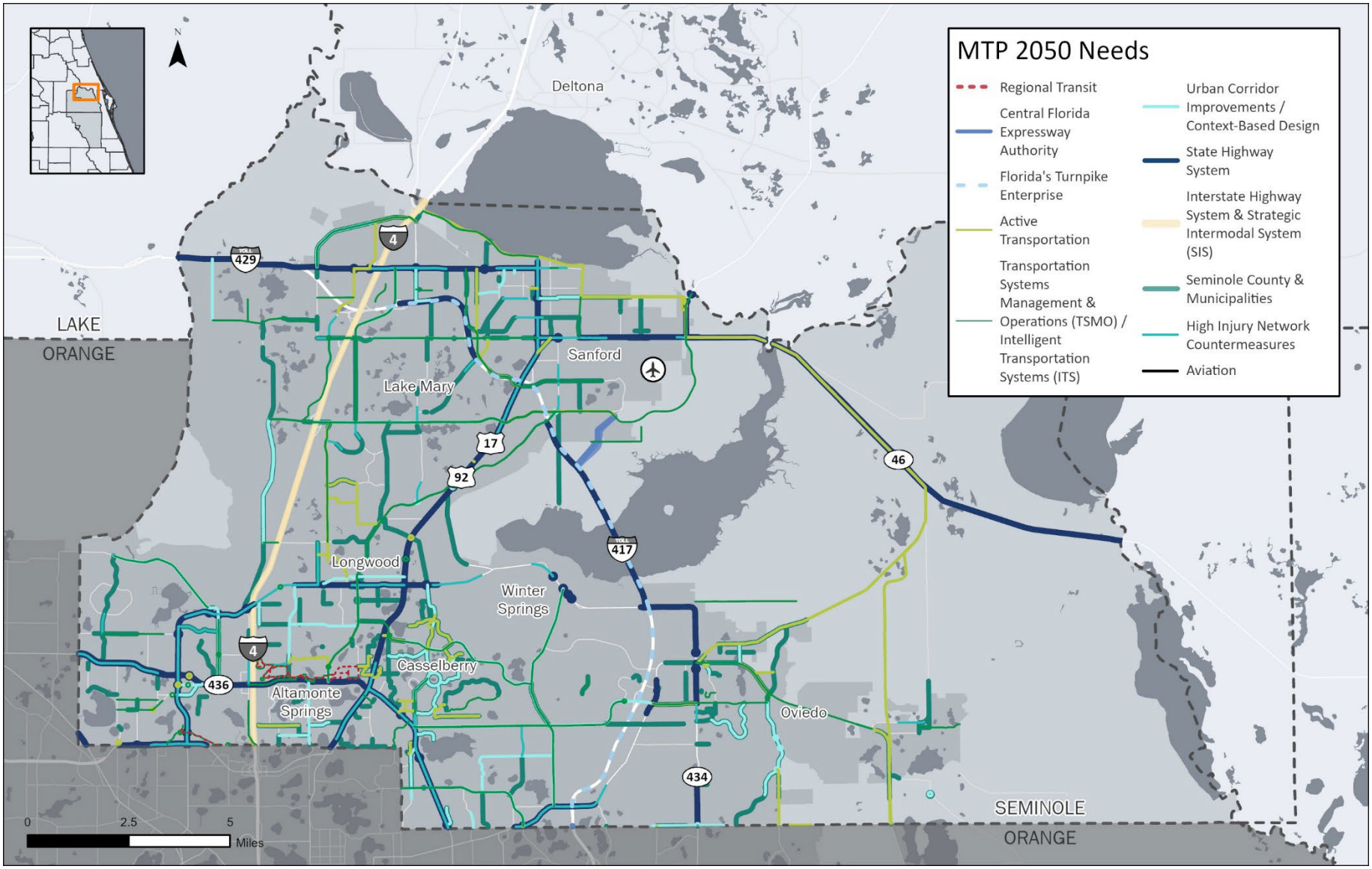


Figure-13-4 | Seminole County Needs Map



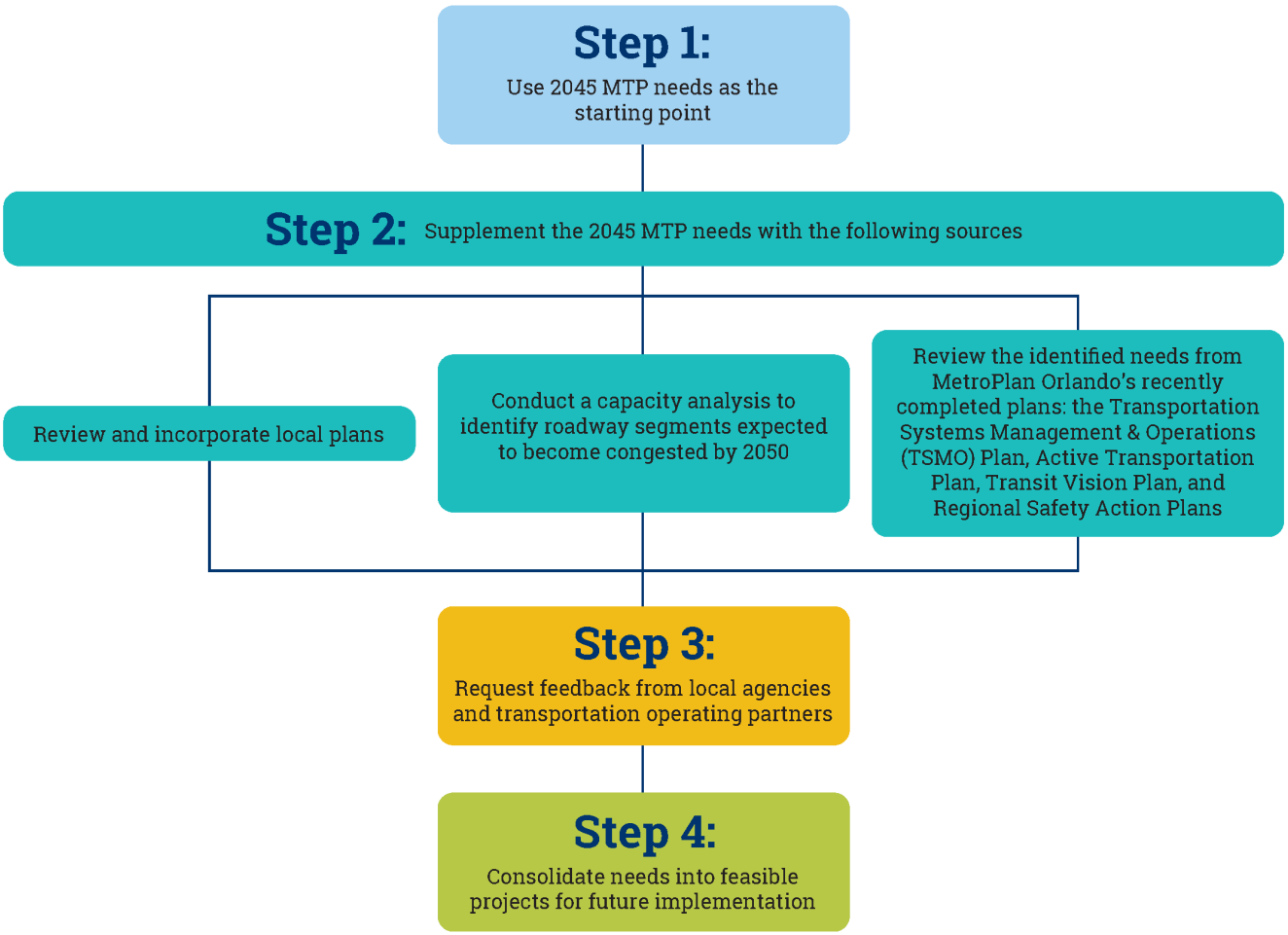
13.2 Needs Assessment Process

MetroPlan Orlando has evolved the needs assessment process over time. This needs assessment followed the workflow shown in Figure-13-5 using an implementation focused approach. The outcome emphasized not only the identified needs, but also the implementation feasibility for these projects. The needs were rooted in data, but were also refined and validated by the local agencies whom will ultimately lead the planning, design, and implementation of each project.

This Needs Assessment placed high emphasis on detailed project descriptions to more confidently assign cost estimates to each need. With rising transportation costs, this was particularly important to the preparation of a realistic cost feasible plan (see Chapter 19). The needs assessment also requested qualitative feedback on how each agency prioritized each of their needs; the agency priority level became a factor in prioritization to supplement the wealth of data-driven metrics used to prioritize the transportation projects (see Chapter 16).

Finally, the 2050 assessment deployed a corridor-based needs consolidation effort. Individual needs were evaluated along each unique roadway by project type and grouped together into a single project, where feasible. The consolidated needs provide more robust project cost estimates and fewer independent design and construction phases spanning multiple years. Overall, this process is meant to streamline implementation.

Figure-13-5 | Needs Assessment Process



13.2.1 IDENTIFICATION AND ORGANIZATION

The initial needs were identified using the 2045 MTP. These needs were supplemented with additional sources to reflect new plans and analyses completed since the 2045 MTP update. Additional sources included partner agency comprehensive and multimodal plans, 2050 traffic projections to identify newly capacity constrained areas, and all of MetroPlan Orlando's recently completed modal master plans. MetroPlan Orlando's separate modal evaluations for transit, safety, active transportation, TSMO, and roadway can be found in the following MTP chapters:

- **Chapter 8** – Transit
- **Chapter 9** – Safety
- **Chapter 10** – Active Transportation
- **Chapter 11** – TSMO
- **Chapter 12** – Traffic Forecasting/Road Needs

Given the extensive network within the region, the needs assessment identification process was organized by roadway system to facilitate a manageable data set. The needs review was divided into the four sections organized by roadway network:

- **SHS (On-System) Needs:** State roadways eligible for federal aid
- **Off-System Needs:** Non-state roadways eligible for federal aid
- **Local Transportation Needs & Opportunities:** Non-state roadways that are not included on the federal aid network; typically not functionally classified. These needs are documented for planning consistency.
- **Transportation Operating Partner Needs Identification** (LYNX, SunRail, FTE, CFX, etc.)

MetroPlan Orlando then organized the needs into categories, such as roadway system or project type. The project needs categories are shown in Table 13-1.

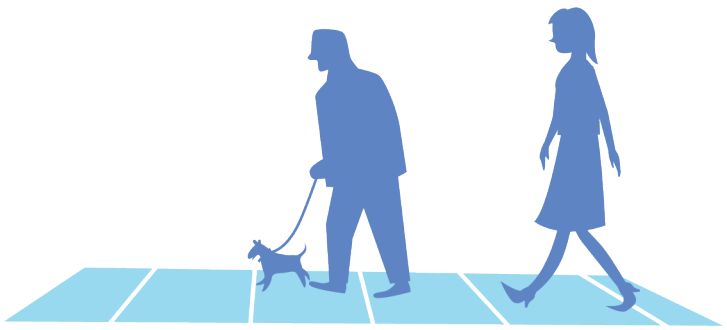


Table 13.2-1 | Needs Categories and Descriptions

Needs Categories	Description
Active Transportation	Includes active transportation projects located off of the state highway system
Aviation	Includes surface-transportation projects that support aviation activity
Central Florida Expressway Authority	Includes projects to be implemented by the Central Florida Expressway Authority
Florida's Turnpike Enterprise	Includes projects to be implemented by the Florida's Turnpike Enterprise
High Injury Network (HIN) Countermeasures	Includes High Injury Network Countermeasure projects to improve safety, based on the projects identified in the Regional, County, and Local Safety Action Plans
Interstate Highway System & Strategic Intermodal System (SIS)	Includes projects located on the National Highway System, Interstates, and the Strategic Intermodal System
Orange County & Municipalities	Includes projects to be implemented by Orange County or one of the County's Municipalities
Osceola County & Municipalities	Includes projects to be implemented by Osceola County or one of the County's Municipalities
Seminole County & Municipalities	Includes projects to be implemented by Seminole County or one of the County's Municipalities
Regional Transit	Includes regional transit projects to support capital, operations, and maintenance improvements to the public transportation system
State Highway System	Includes projects located on the State Highway System
Transportation Systems Management & Operations (TSMO) / Intelligent Transportation Systems (ITS)	Includes TSMO and ITS projects located off of the state highway system
Urban Corridor Improvements / Context-based Projects	Includes urban corridor improvement / context-based projects located off of the state highway system

Note: See the 2050 MTP Cost Feasible Plan (Chapter 19) for additional information about the transportation improvement projects.

13.3 Engagement Approach

Several engagement and coordination meetings were facilitated following the same roadway network breakdown described in the needs assessment process. There was also a meeting series to review the consolidated needs lists.

- **Meeting Series 1:** On-system needs
- **Meeting Series 2:** Off-system needs
- **Meeting Series 3:** Consolidation (on-system and off-system)
- **Meeting Series 4:** Planning consistency & transportation operating partner needs

MetroPlan Orlando worked with over 25 local partners and held over 100 virtual or in-person meetings between all of the meeting series to customize, curate, and confirm each of the transportation project needs included within the needs assessment. The feedback and input from local agencies was predominantly centered around customizing project needs with the following information:

- Updating project descriptions to include additional details about the improvements needed, with a focus on project feasibility
- Estimating a project's level of complexity for implementation purposes
- Incorporating the maintaining agency's notes on high, medium, or low priorities based upon the listed needs
- Incorporating updates from recent jurisdictional transfers

The partner agencies who participated in the engagement process were:

- Central Florida Expressway Authority (CFX)
- Central Florida Tourism Oversight District (CFTOD)
- City of Altamonte Springs
- City of Apopka
- City of Belle Isle
- City of Casselberry
- City of Edgewood
- City of Eatonville
- City of Kissimmee
- City of Lake Mary
- City of Longwood
- City of Maitland
- City of Oakland
- City of Ocoee
- City of Orlando
- City of Oviedo
- City of Sanford
- City of St. Cloud
- City of Windermere
- City of Winter Garden
- City of Winter Park
- City of Winter Springs
- Florida Department of Transportation (FDOT) District 5
- Florida's Turnpike Enterprise (FTE)
- Greater Orlando Aviation Authority (GOAA)
- Kissimmee Gateway Airport
- LYNX
- Orange County
- Osceola County
- Seminole County
- Sanford Orlando International Airport
- SunRail

13.4 Multimodal Needs Consolidation

Once all of the project needs were identified and confirmed with the local government agencies and transportation operating partners, a final step was taken to consolidate overlapping project needs. If two or more needs were identified for a single location, then those two separate, distinct needs were reviewed to see if they could feasibly be consolidated into a single project. This consolidation process was focused on improving the feasibility of future project implementation by reducing the number of times a corridor may be under construction and reducing project costs by bundling improvements together.

13.4.1 GUIDING PRINCIPLES

Consolidating discrete transportation needs into single, comprehensive transportation projects was an iterative process driven by several different factors, including:

- Type of Transportation Need
- Estimated Cost
- Estimated Project Timeline
- Jurisdictional Priority Level
- Transportation Facility's Maintaining Agency
- Local Agency Feedback

Consolidating transportation needs into single projects is intended to develop efficiencies and cost savings if/when the project moves forward, so care was taken during the review process to carefully consider these factors. Generally, projects with similar transportation needs types, timelines, jurisdictional priority levels, and the same maintaining agency were considered for consolidation. Extra focus was paid to estimated project costs, since the final consolidated project still needed to be small enough to be both physically and fiscally feasible (additional information about project cost estimation is included in Chapter 19). Any significantly large or cost intense projects were also reviewed and split into multiple segments at logical break points for future implementation.

After developing candidate projects for consolidation or splitting into segments, these opportunities were discussed with and reviewed by the local government agencies and transportation operating partners. Only those approved through this review process were incorporated into the needs list. Any consolidation or segmentation opportunities that were not supported by the local agencies were left as separate, individual transportation projects for consideration on the needs list.

13.5 Multimodal Needs Results

Consensus was built around the resulting transportation needs, which are summarized in the tables and figures below. Table 13-2 shows the total number of projects identified by needs list. Figure 13-6 highlights these same needs based on miles of project identified, with the exception of Regional Transit and Aviation. Figure 13-7 shows only off-system needs eligible for MetroPlan Orlando funding, organized by Needs Category as a percentage of the project cost estimate.

Table 13-2 | Identified Needs by Number of Projects

Needs Categories	Number of Projects
Active Transportation	300
Aviation	10
Central Florida Expressway Authority (CFX)	192
Florida's Turnpike Enterprise (FTE)	40
HIN Countermeasures	239
Interstate Highway System & Strategic Intermodal System	38
Orange County & Municipalities	440
Osceola County & Municipalities	231
Seminole County & Municipalities	127
Regional Transit	257
State Highway System	437
Transportation Systems Management & Operations (TSMO) / Intelligent Transportation Systems (ITS)	348
Urban Corridor Improvements / Context-based design Projects	257

Figure 13-6 | Identified Needs by Centerline Miles

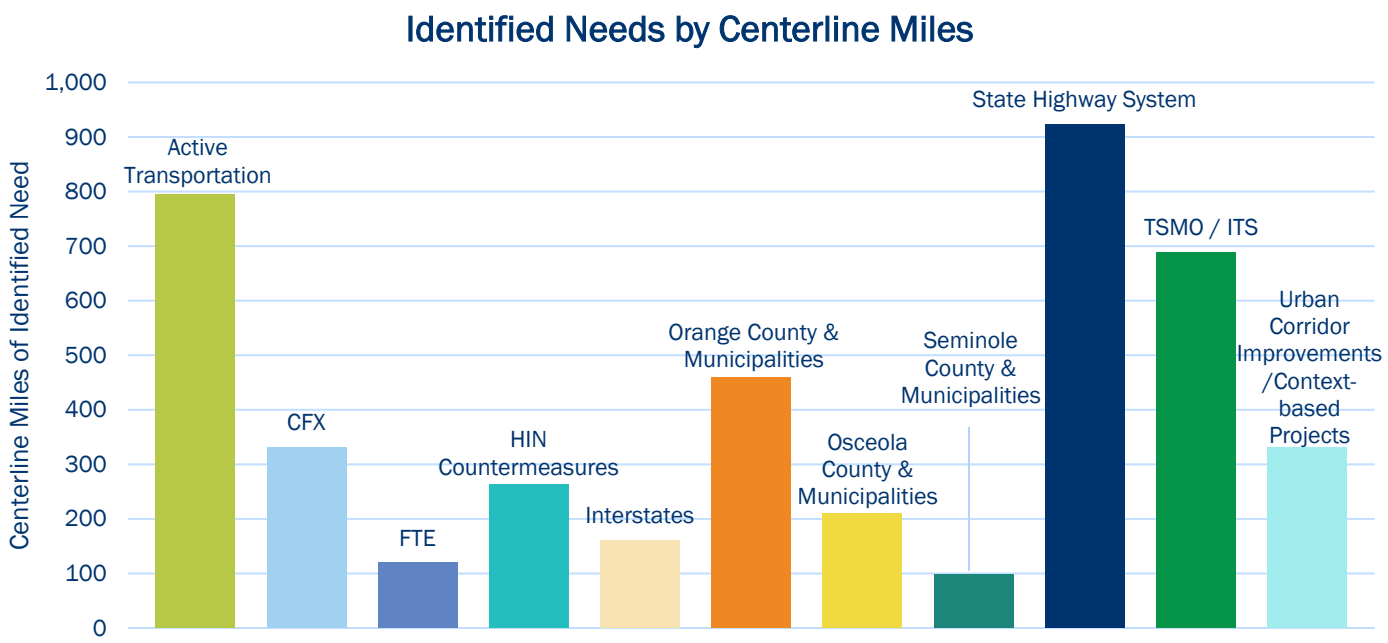
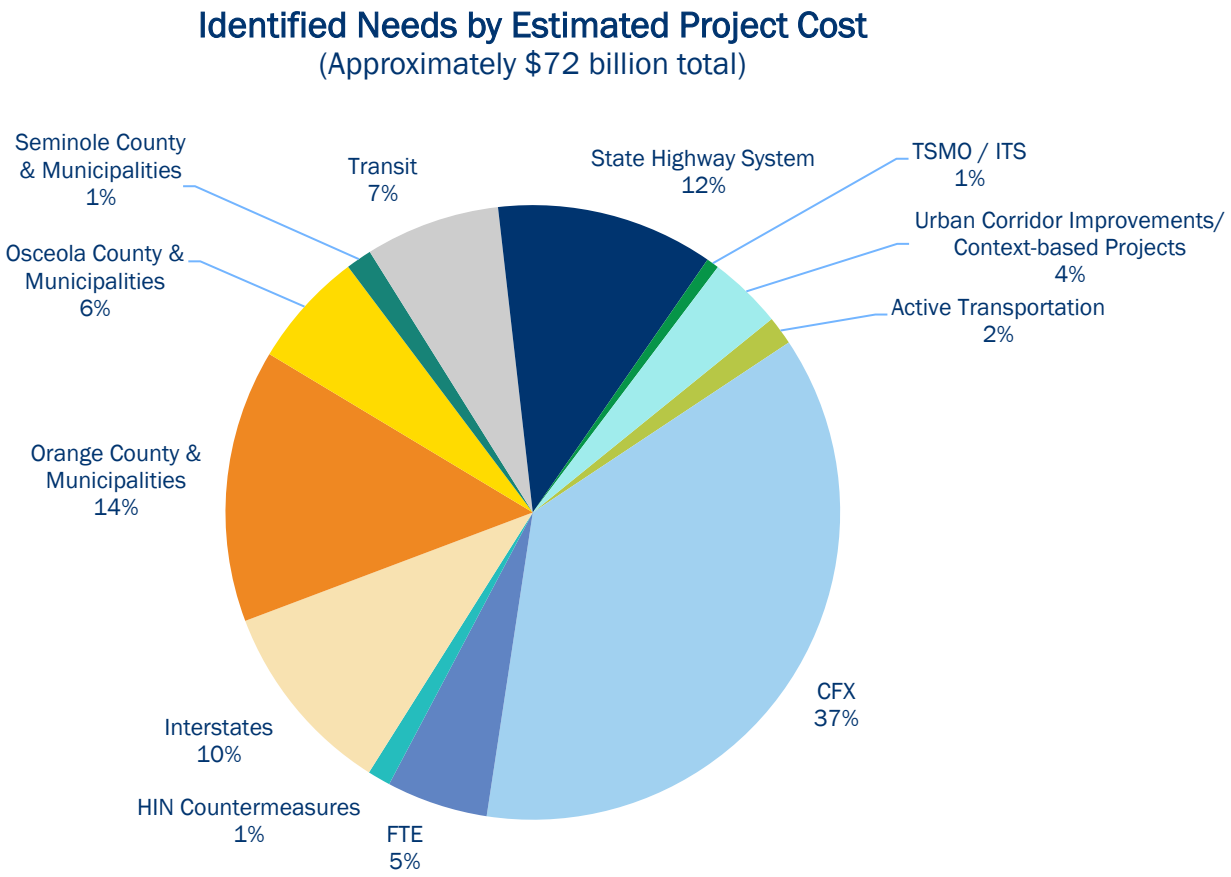


Figure 13-7 | Identified Needs by Estimated Project Cost



Note: Needs in figure are not fiscally constrained. This figure shows the estimated project cost of all identified needs including both funded and unfunded needs.

13.6 Next Steps

The transportation project needs developed throughout the needs assessment process, spanning Chapters 8 through 12, are both comprehensive, forward-thinking, and fine-tuned to address both regional and local needs. The needs assessment sets the stage for streamlined project implementation for the next twenty years of transportation investment in the MetroPlan Orlando region. The next step for the more than 2,900 projects identified throughout this process is prioritization (Chapter 16), project cost estimation (Chapter 19), and ultimately determining which of these projects may be cost feasible for implementation (Chapter 19).

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MetroPlanOrlando.gov
250 S. Orange Ave., Suite 200
Orlando, FL 32801

MTP@MetroPlanOrlando.gov

(407) 481-5672