

CHAPTER 6

Defining the 2040 Needs Plan

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The Needs Assessment identified projects to support the ultimate vision of mobility to meet the demand for the MPO’s planning area for the year 2040, without regard for cost and available funding. Specifically, this assessment focused on the major transportation facilities, including roadways, bicycle and pedestrian facilities, and public transit services. Improvements were identified to resolve the deficiencies through the year 2040.

To identify projects for the 2040 Needs Assessment, an extensive process was conducted to identify projects that are needed in the future. First, the needs identified in previous plans, including the 2035 LRTP and current TDP, were utilized as a base. Project needs were then identified based on where roads are expected to be over capacity through a technical analysis of the transportation network using the FDOT District One Regional Planning Model.

A collaborative effort was used to identify additional improvements for roads, transit, and bicycle and pedestrian facilities to support specific agency projects or policies. Coordination efforts included meetings with local agencies and jurisdictions, including Charlotte County and City of Punta Gorda, as well as DeSoto County; working with stakeholders, including the MPO Board; and working with the public. Projects received through this process were included in the list of needs.

The public involvement process during the Needs Assessment is described in Chapter 4. Appendix E includes the Needs Plan project lists.

Identifying Deficiencies

Prior to developing the list of projects needed to ensure mobility in the future, the problem areas must be identified to understand where deficiencies are likely to occur in the future. For this effort, the 2040 Needs Assessment

analyzed the E+C Network in Charlotte County. The E+C Network is defined as all existing facilities and services plus all capacity improvements committed to be funded for construction by the end of fiscal year 2019. This represents the transportation supply in Charlotte County if no improvements are made beyond what is currently committed in the current Five Year Work Program.

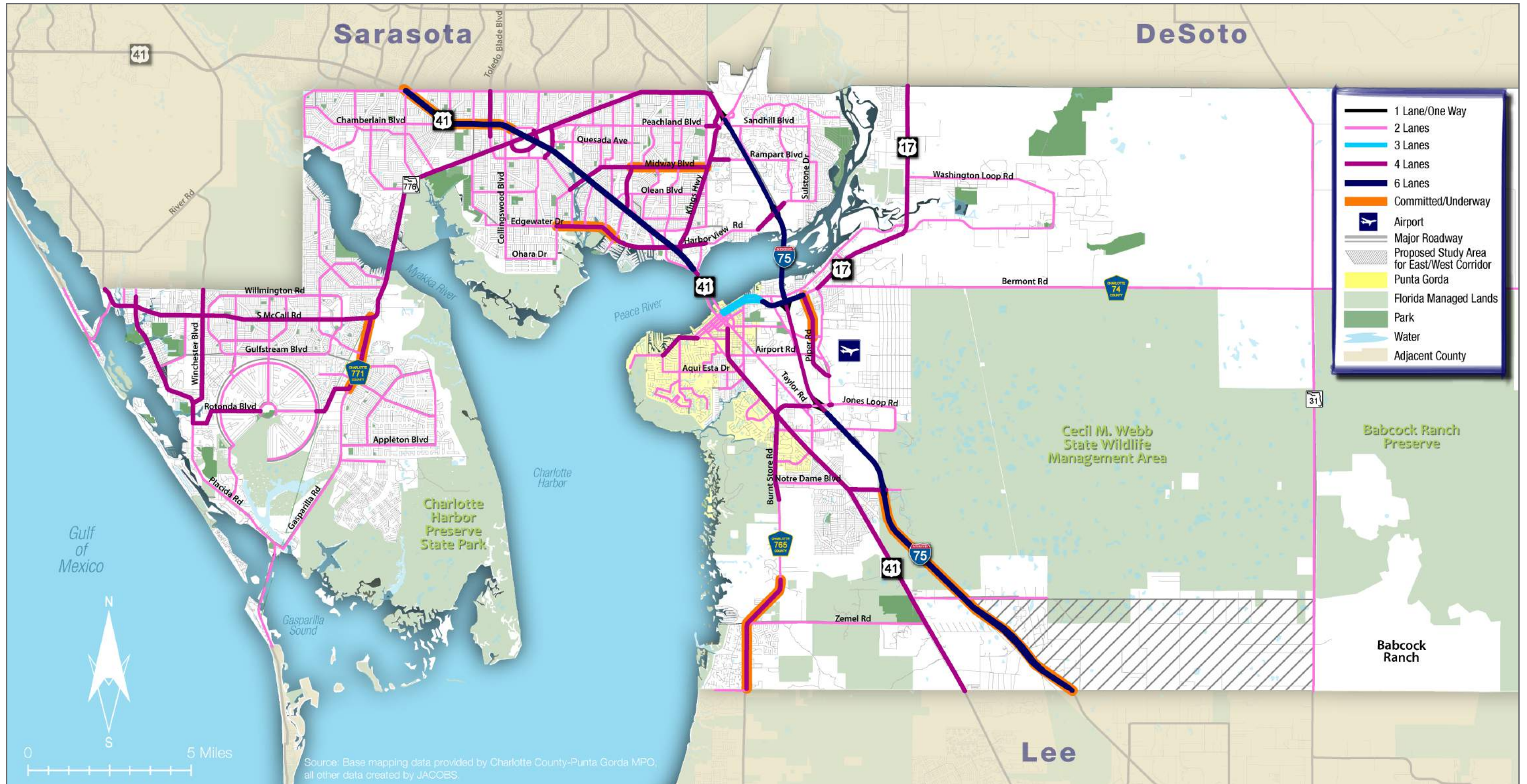
Subsequently, the transportation network supply is compared to the demand forecasted by the expected residents and workers to predict how they will travel in the future. The forecasted demand on the transportation system was based on trip estimates associated with future growth in population and employment using the FDOT District One Regional Planning Model. The outcome was an inventory of transportation facilities where the projected volumes exceed the available capacity, or are over capacity, thereby creating a transportation need.

Figure 6-1 shows the existing major road network with committed highway improvements for 2015-2019. Figure 6-2 shows the level of service for the major roads in 2040 with no additional improvements made; the roads in red are anticipated to be deficient in 2040.



US 41 in Punta Gorda

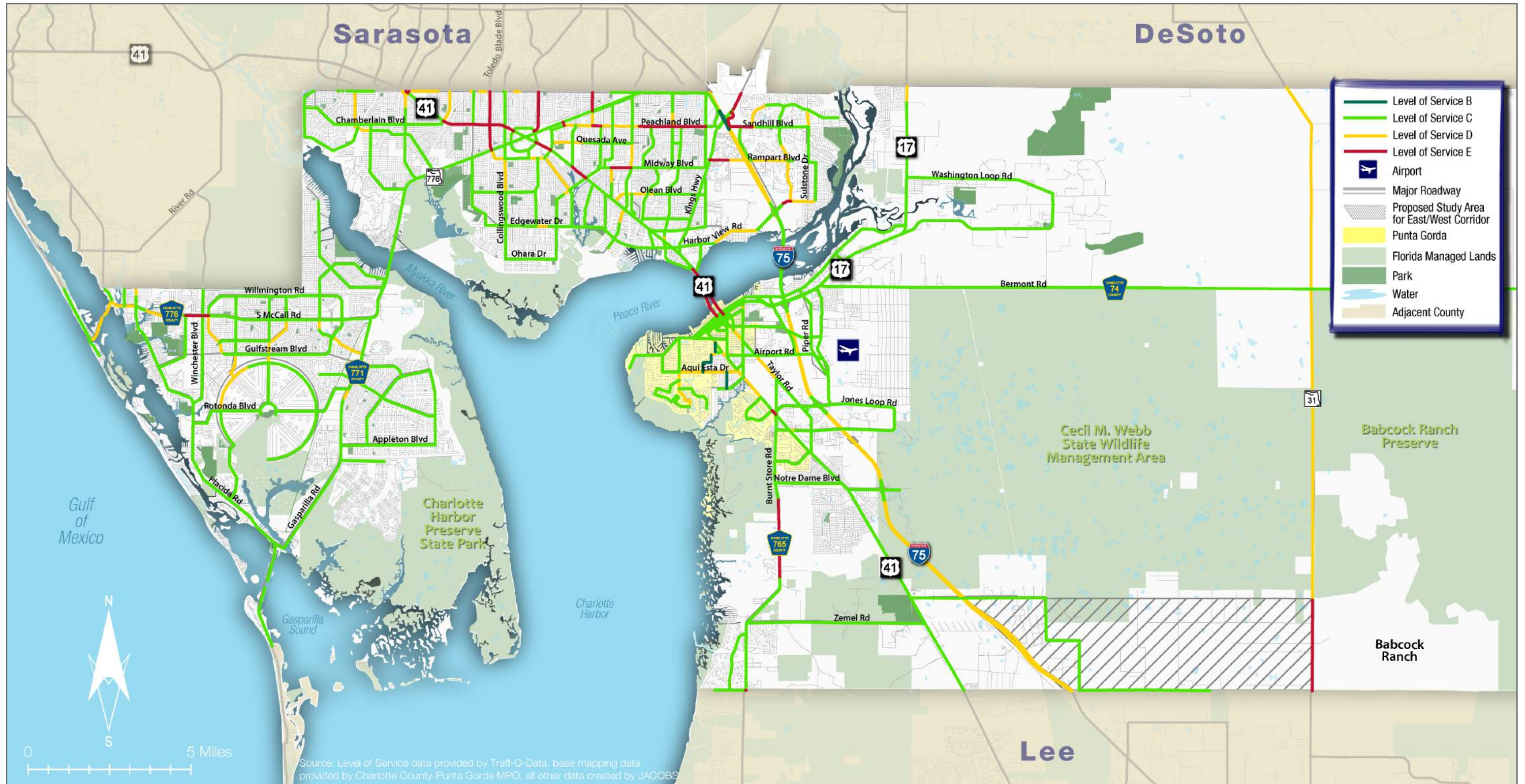
Figure 6-1: Existing + Committed Road Network



Source: Base mapping data provided by Charlotte County-Punta Gorda MPO, all other data created by JACOBS.

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Figure 6-2: Level of Service in 2040 with Existing + Committed Road Network



Source: Level of Service data provided by Traff-O-Data, base mapping data provided by Charlotte County-Punta Gorda MPO, all other data created by JACOBS

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Constrained Roads

Typically, roadway deficiencies can be addressed by providing additional roadway capacity. However, in some cases, identified deficiencies could not be addressed through capacity improvements because a roadway was designated as constrained because it is unable to be widened due to available right-of-way or policies in place. When the traffic levels forecasted on a constrained roadway exceed capacity, other solutions such as improving parallel facilities were considered.

Road/Highway Projects

The Needs Plan consists of \$1.6 billion (PDC) or \$3.1 billion (YOE) in roadway expansion and mobility improvements. Approximately \$496.1 million (PDC) or \$758.9 million (YOE) of the roadway projects are included in the Cost Feasible Plan, leaving \$1.1 billion (PDC) or \$2.4 billion (YOE) unfunded. **Table 6-1** presents the total cost of road project needs funded in the Cost Feasible Plan as well as the unfunded needs. **Figure 6-3** maps the Needs Plan road projects. The corresponding numbers for the projects are provided in the road project list in **Appendix E**.

Table 6-1: Highway Needs Costs (2019-2040)

	(in millions)	
	Present Day Costs	Year of Expenditure Costs
Needs Plan	\$1,569.2	\$3,106.1
Cost Feasible Plan	\$496.1	\$758.9
Unfunded Needs	\$1,073.0	\$2,347.1

Highlights of the proposed Needs Plan highway improvements are as follows:

- Widen I-75 to six lanes in central Charlotte County
- New interchange at Oil Well Road or Cook Brown Road
- Widen US 41 bridge over Peace River to six lanes



Veterans Boulevard at Kings Highway

- Extend Burnt Store Road from Taylor Road to Florida Street
- Widen SR 776 to six lanes from Crestview Drive in West County to Murdock Circle in Mid County
- Widen Airport Road to four lanes from US 41 to Piper Road

Transit Projects

Charlotte County currently operates Dial-A-Ride transit service, but does not operate fixed or flexible transit routes. The transit projects included in the Needs Assessment were identified using the current TDP (adopted in 2014) as a base. The following outlines the process taken during development of the TDP. A demand and mobility needs assessment was conducted as part of the TDP using the following three assessment techniques:

- **Discretionary Market Assessment**

The discretionary market was analyzed to assess demand for transit services for the next 10 years. The discretionary market and traditional market are the two predominant rider markets for bus service. The assessment uses population and employment densities to identify the areas that are supportive of various levels of transit investments.

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- **Traditional Market Assessment**

The traditional transit market assessment includes an evaluation of population segments that historically have had a higher propensity to use transit and are dependent on public transit for their transportation needs.

- **Dial-A-Ride Demand Analysis**

An analysis was conducted to evaluate the origin and destinations of existing Dial-A-Ride users in Charlotte County. This assessment was conducted to identify activity centers and clusters of riders that may be conducive to supporting other forms of transit services in an efficient manner. The resulting analysis was summarized to assist in identifying potential demand and need for services.

When combined with the baseline conditions assessment, performance reviews, and public involvement feedback and the review of relevant plans and studies, the demand assessment yields the building blocks for evaluating the transit needs for the next 10 years.

A set of potential transit improvements was developed and evaluated as a key part of the TDP planning process. The alternatives represent the transit needs without consideration of funding constraints. After the identified service improvements were prioritized using an evaluation process, the prioritized list of potential improvements was used to develop the implementation and financial plans.

As Charlotte County continues to grow, and if demand for transit follows that same growth, the prioritized transit needs will assist Charlotte County in selecting and implementing service as funding becomes available.

One of the strategies for serving Charlotte County is Flex Route transit to maintain transit services to most of the areas currently served by Dial-A-Ride as well as to establish a feeder service for the previously-mentioned



Fixed Route transit services. Flex Route service would be provided in areas where demand exists but Fixed Route transit is not proposed, including most of the areas currently served by Dial-A-Ride service. Flex Route service is a hybrid service that combines the predictability of Fixed Route bus service with the flexibility of demand response service. This service generally operates in suburban areas where the street and pedestrian networks are not conducive to Fixed Route bus service.

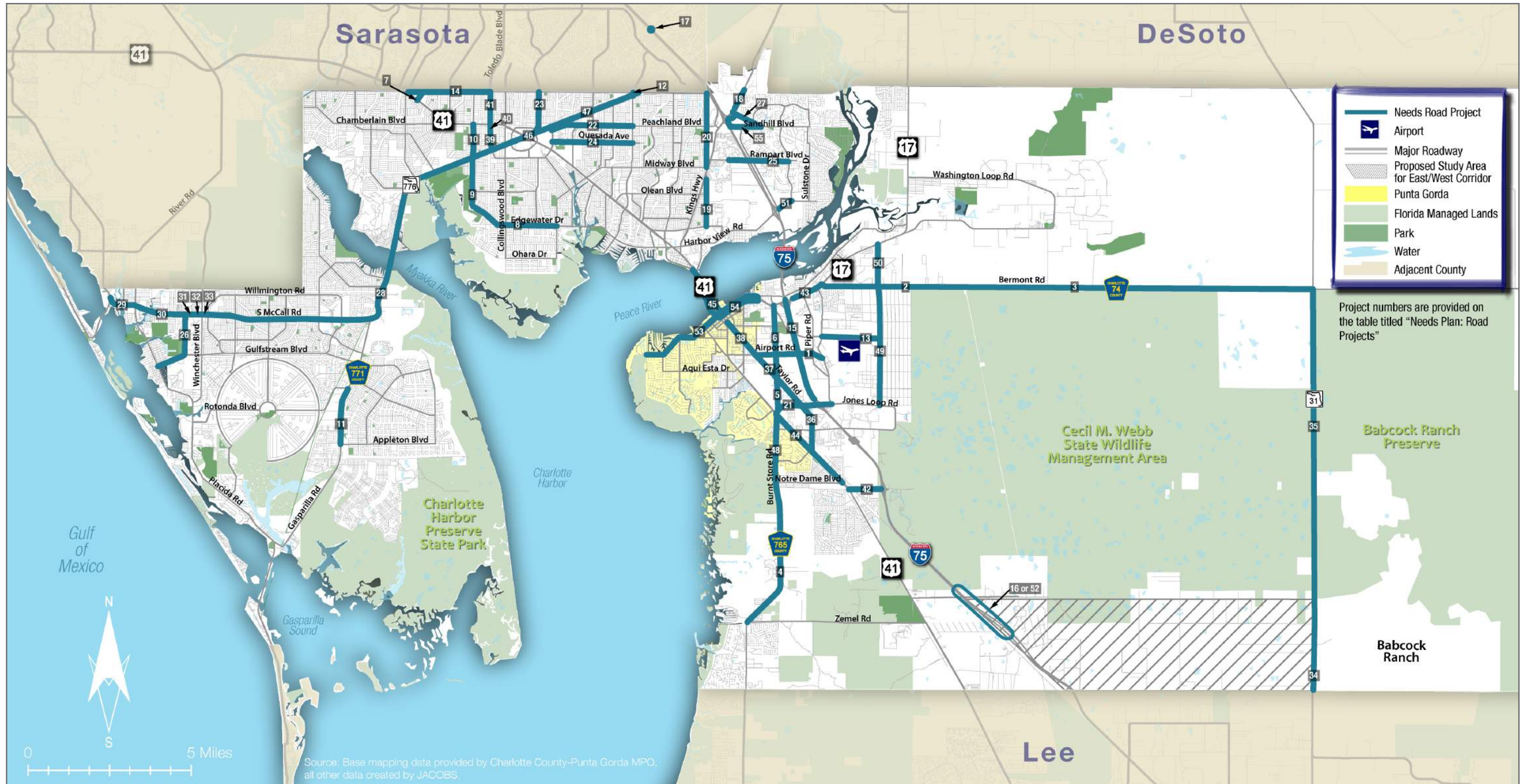
The Needs Plan includes four fixed transit routes with hourly service, four flexible service zones, and continued Dial-A-Ride service. The total cost of the Needs Plan transit operations and maintenance is projected to be \$49.7 million (YOE) and capital is projected to be \$76.9 million (YOE). The following projects were included:

- **Route A: North Port – Punta Gorda Connector**

Bus route serving the US 41 corridor, connecting North Port in Sarasota and the Port Charlotte area; proposed as a local service with frequent stops, the route would serve two key transfer points, including the areas near Port Charlotte Town Center in Murdock and Promenades Mall in the Parkside Community Redevelopment Area (CRA) on US 41; in North Port, the route would connect with SCAT Routes 9, 20, and 29, connecting the entire SCAT route network to riders from and to Charlotte County

Figure 6-3: Needs Plan Road Projects

Project numbers listed in Appendix E



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- **Route B: Englewood Beach Hopper**

Connects Englewood Beach to Port Charlotte in addition to providing service to Englewood Community Hospital (located to the north in Sarasota County), the Murdock area, and the Parkside CRA area

- **Route C: Lake Suzy – Punta Gorda Connector**

Connects Punta Gorda and Punta Gorda Airport to the central and east Port Charlotte while also serving the area just south of Lake Suzy in DeSoto County; route would connect with Flex Route service; route would start in the area near WalMart on Kings Highway and connect to Bayfront Hospital area in Punta Gorda; route would provide service within Punta Gorda, alternating between the west and east sides of US 41 (serving both the Punta Gorda Public Library and the Punta Gorda Airport sides of US 41 on alternating trip.); route would connect with the Englewood Beach Hopper and the North Port–Punta Gorda Connector at the potential transfer location at Promenades Mall at Parkside

- **Route D: North Port – Fort Myers Connector**

Regional express bus service from North Port in Sarasota County to Merchants Crossing Plaza just north of Pine Island Road in North Fort Myers, connecting with Sarasota County Area Transit (SCAT) and Lee County Transit (LeeTran) in Sarasota and Lee County, respectively

- **Flex Zone 1 – Englewood**

- **Flex Zone 2 – Port Charlotte West**

- **Flex Zone 3 – Port Charlotte East**

- **Flex Zone 4 – Punta Gorda**

Additional proposed capital and infrastructure costs would include signs, shelters, and transfer facilities to accommodate the new routes in Charlotte County. **Figure 6-4** shows the Needs Plan transit projects.

Bicycle, Pedestrian, and Multi-Use Trail Facility Projects

The Needs Plan bicycle, pedestrian, and multi-use trail facility projects were identified for roads that do not have existing facilities, or have gaps or missing links in the facilities currently provided. **Figure 6-5** shows the Needs Plan bicycle, pedestrian, and multi-use trail projects. The corresponding numbers for the projects are provided in the bicycle, pedestrian, and multi-use trail facility project list in **Appendix E**.

Highlights of the proposed multi-use trail, pedestrian, and bicycle improvement program include the following:

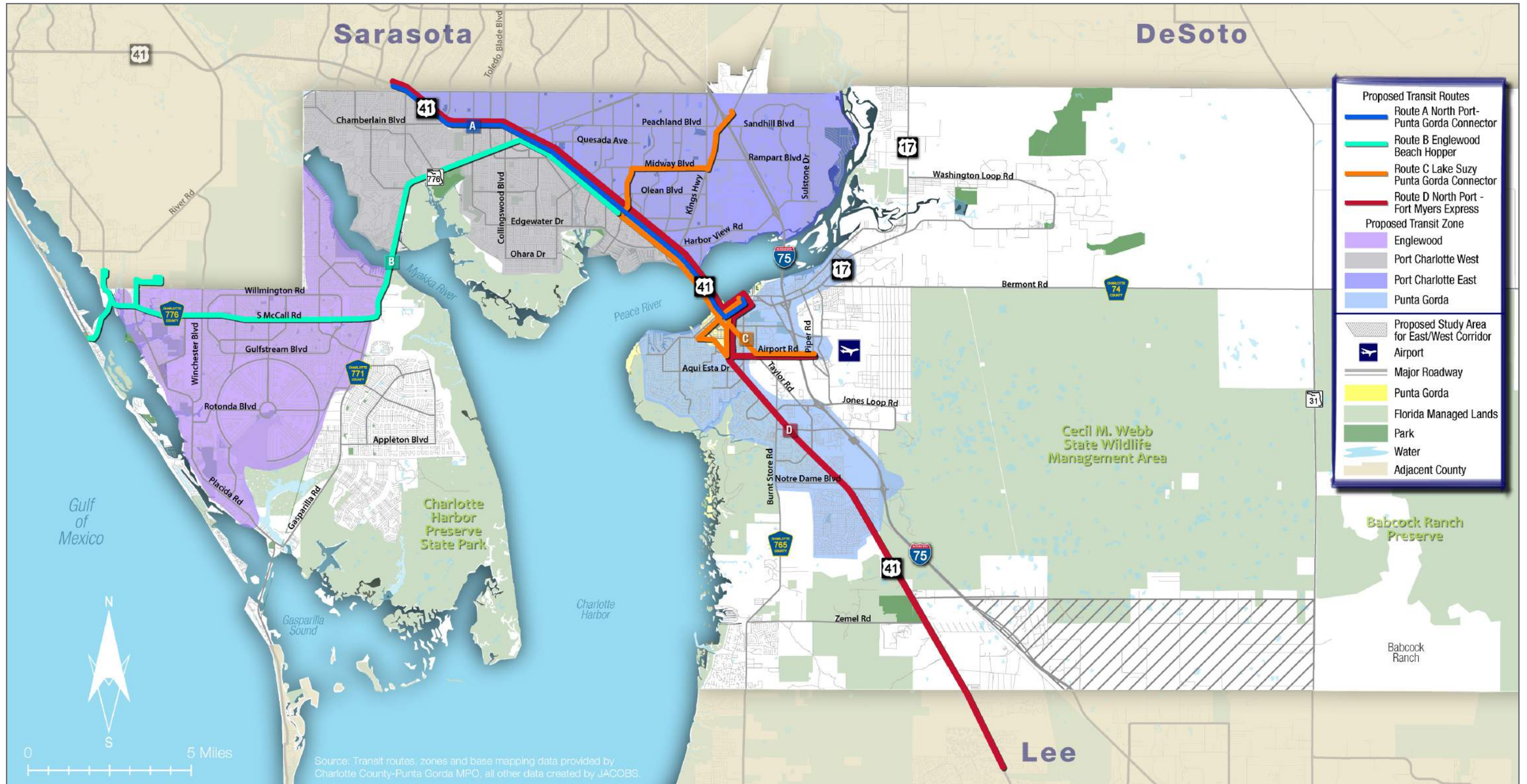
- Expansion of the bicycle network, including all roads being improved on the highway needs plan (except I-75), as road improvements would include paved shoulders with the intent to put bicycle facilities in place concurrently
- Expansion of the sidewalk network associated with new roadway construction or road improvements constructed; building sidewalks in the urbanized area ensures that more county residents have access to sidewalk facilities and it promotes safety and transit usage
- Expansion of the conceptual multi-use trails; trails could be selected as revenues become available.



Downtown Punta Gorda

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Figure 6-4: Needs Plan Transit Projects

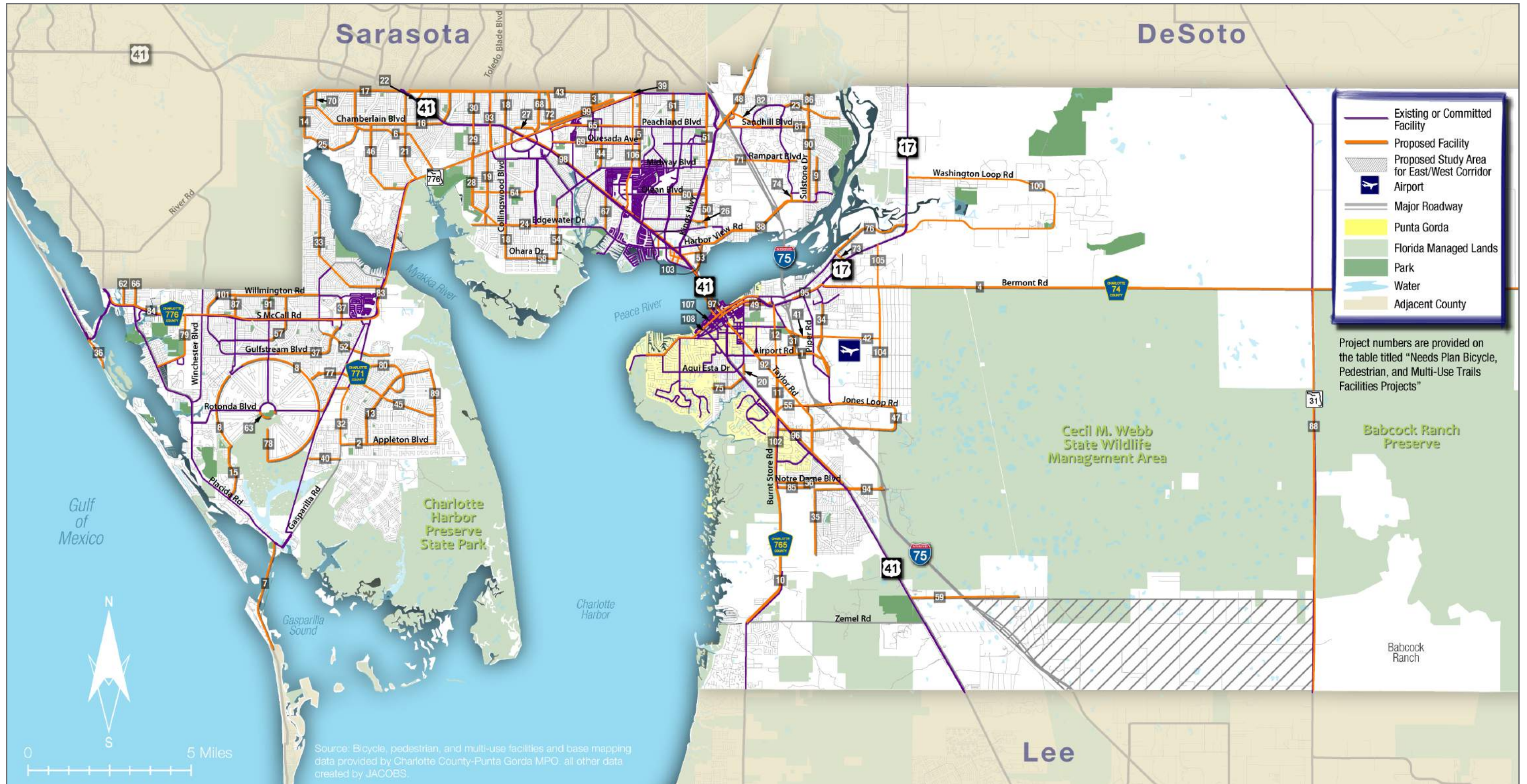


Source: Transit routes, zones and base mapping data provided by Charlotte County-Punta Gorda MPO, all other data created by JACOBS.

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Figure 6-5: Needs Plan Bicycle, Pedestrian, and Multi-Use Trail Facilities

Project numbers listed in Appendix E



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