

Chapter 6:

Needs Plan



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INTRODUCTION

This chapter discusses the development of the 2035 Long Range Transportation Needs Plan and the transportation improvements included in the Needs Plan. The Needs Plan was later used to develop the Cost Affordable Plan. This plan represents the needed multimodal transportation improvements in Pasco County without regard to costs; however, if additional revenues become available, the Cost Affordable Plan can be amended to include additional projects from the Needs Plan. It is also important to note that the Needs Plan is a constrained Needs Plan, meaning that the projects identified are not strictly based on travel demand, but consider physical, environmental, and political constraints.

As mentioned above, the Needs Plan is a multimodal transportation. Within the chapter, the Needs Plan improvements are organized by:

- Highway Needs
- Transit Needs
- Pedestrian, Bicycle, and Multi-Use Trail Needs

HIGHWAY NEEDS PLAN

The 2035 Roadway Needs Plan consists of \$20.553 billion of roadway expansion, grade separation, and mobility improvements. The improvements associated with this plan are displayed on Map 6-1. Table 6-1 displays the breakdown between the needs that are funded in the Cost Affordable Plan and the unfunded needs. Approximately \$6.4 billion of the projects in the Needs Plan are funded, and \$14.152 billion are unfunded.

Highlights of the proposed highway improvements are as follows:

- Expand SR 54/SR 56 to 8 lanes from US 19 to the Suncoast Parkway, 10 lanes from the Suncoast Parkway to east of I-75 at SR 581, and 8 lanes on SR 56 from SR 581 to US 301. (Note: Actual demand in this corridor exceeds 10 lanes of capacity).
- Potentially build managed lanes in the SR 54/56 corridor from US 19 to US 301.

- Build several new or upgraded interchanges on I-75, SR 54, SR 56, Suncoast Parkway, US 19, and US 41.
- Improve I-75 to include 14 lanes on I-75 from the Hillsborough County Line to CR 54, 10 lanes from CR 54 to SR 52, and 8 lanes from SR 52 to the Hernando County Line.
- Improve the Suncoast Parkway throughout the county to 6 lanes.
- Modify US 19 throughout Pasco County to include enhanced median channelization and continuous right-turn lanes.
- Improve SR 52 to a 6-lane divided roadway from the Suncoast to I-75.
- Add 6 lanes to portions of CR 1 (Little Road).
- Develop Tower Road as a 4-lane divided roadway from Gunn Highway to US 41, including a new bridge over the Suncoast Parkway.
- Improve County Line Road (Pasco/Hernando) to 6 lanes divided from East Road to the Suncoast Parkway.
- Build Overpass Road as a 6-lane roadway from I-75 to US 301 including a new interchange at I-75.
- Build 4 lanes on CR 579 (Morris Bridge Road/Eiland Road/Handcart) from SR 56 to SR 52.
- Add significant developer-funded major roadways in the south central areas of Pasco County.

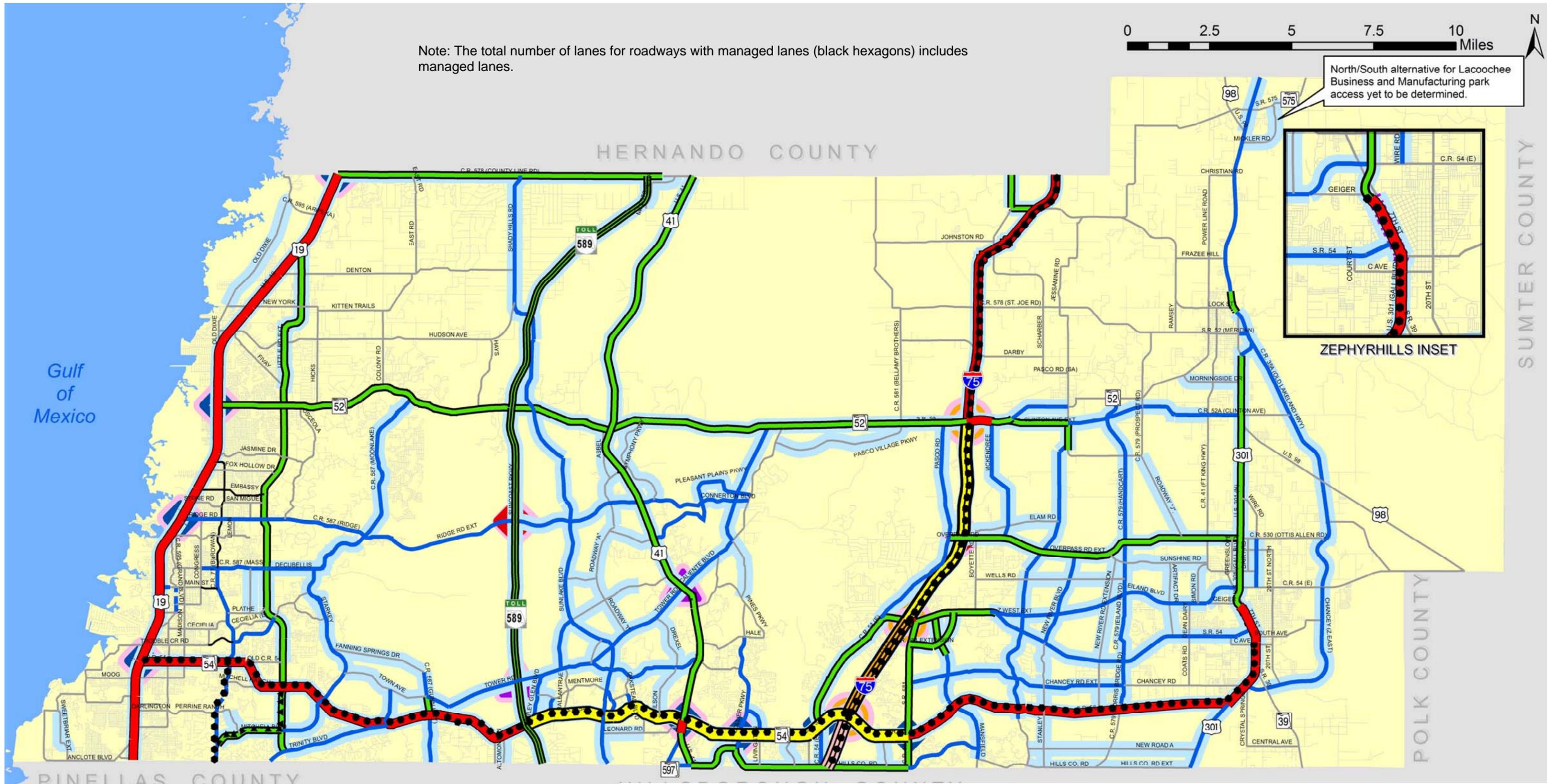
Please see the Chapter 6 Appendix and Technical Support Appendix for more information on funded projects in the Needs as well as unfunded projects.



Note: The total number of lanes for roadways with managed lanes (black hexagons) includes managed lanes.



North/South alternative for Lacoochee Business and Manufacturing park access yet to be determined.



- Roadways with Managed Lanes
- ▲▲▲▲ Alternative Route for Managed Lanes
- Light Blue Line New or Improved Roadways
- Pink Area Interchange/Overpass Improvements (2026-2035)
- Red Diamond Interchange
- Purple Triangle Overpass
- Blue Diamond Grade Separated Intersection
- Orange Circle Interchange Reconstruction

ROAD TYPE	NUMBER OF LANES							
	2	3	4	6	8	10	12	14
One-Way	---	---						
Undivided	---		----	-----				
Divided	---		----	-----	-----	-----	-----	-----
Freeway			----	-----	-----	-----	-----	-----

Map 6-1: Pasco County 2035 LRTP - 2035 Needs Plan Number of Lanes and Road Improvements

The map displays the needed number of lanes based on traffic projections. The blue highlights indicated roadway improvements from 2015 to 2035.



Table 6-1: Highway Needs Costs 2015-2035

	Present Day Costs				Year of Expenditure Costs			
	PD&E/PE Costs	Right of Way Cost	Construction Cost	Total Costs	PD&E/PE Costs	Right of Way Cost	Construction Cost	Total Costs
Funded Needs	\$119,829,855	\$555,563,525	\$2,207,808,301	\$2,883,201,681	\$266,022,279	\$1,233,351,025	\$4,901,334,429	\$6,400,707,733
Unfunded Needs	\$542,176,627	\$2,343,135,427	\$3,489,595,217	\$6,374,907,271	\$1,203,632,112	\$5,201,760,648	\$7,746,901,382	\$14,152,294,142
Total Needs Costs	\$662,006,482	\$2,898,698,952	\$5,697,403,518	\$9,258,108,953	\$1,469,654,391	\$6,435,111,674	\$12,648,235,811	\$20,553,001,875

NEEDS PLAN DEVELOPMENT

Base Year Database Development

The initial step included the development of a base transportation network that represents the Existing + Committed improvements identified in Chapter 7. Several meetings were conducted with the Metropolitan Planning Organization (MPO) staff to review the existing network and to gain input on project in the five year work program in order to develop a database that represents the Existing + Committed (2014) network.

Existing transportation demand models were utilized through a series of coordination meetings with the Tampa Bay Regional Transportation Analysis (TRT) group.

Needs Demand

The next step involved reviewing existing Needs Plan demand models through the TRT process and identifying deficient roadways using the forecast socioeconomic data for 2035. This evaluation produced a forecast of the performance of the road system if no additional improvements were put into place.

Several transportation demand model alternatives were run to identify the performance of the 2035 network. Results were reviewed on the different alternatives run based on the various roadway networks identified and the associated socioeconomic data being used as previously discussed. Roadway

improvements were selected to address performance issues identified by the model without taking revenues into consideration.

Also, several public workshops were conducted to display different alternatives of the Needs Plan to gain feedback on the number of lanes being displayed on the 2035 Long Range Transportation Need Plan, as well as whether or not priorities were addressed.

Summary information on the performance of the final Needs Plan can be found in the Performance Evaluation (Chapter 8). In addition, further information on the different Needs alternatives analyzed can be found in the Technical Support Appendix.

Needs Plan to the Cost Affordable Plan

A series of meetings with MPO staff were held to discuss County project priorities as well as roadways with known congestion issues. Projects were selected using:

- Projects recently dropped from the 5-year work program
- Projects already identified in the County’s 15-year work program
- Roadways in the long-term concurrency network (roadways with high levels of congestion when forecasting traffic)
- Improvements from the 2025 Long Range Transportation Plan
- Support of other strategic initiatives
- Consideration of the project prioritization criteria



TRANSIT NEEDS PLAN

This section summarizes the 2035 Public Transportation Needs Plan for Pasco County. The planned public transportation improvements included in existing transit services and facilities (2009) are illustrated in Map 6-2, while proposed changes to transit services and facilities for the 2035 Needs Plan are illustrated in Maps 6-3 and 6-4. In addition, a summary of the transit project costs are provided in Table 6-2 and Figures 6-1 and 6-2. The public transportation needs plan identifies significant need for transit services including a local supporting network, bus rapid transit along SR 54, and a rail service along SR 581. These needs were identified through the following methods.:

- Services identified as part of the analysis from the 2008 Transit Development Plan Update
- TBARTA Master Plan
- Public involvement
- Projected population and employment growth from the socio-economic data forecasts
- Other transit demand tools such as the transit orientation index, density threshold assessment, and major trip generators and attractors

The existing transit services and proposed transit improvement programs are provided below and are consistent with the regional connectivity reflected in the Tampa Bay Area Regional Transportation Authority (TBARTA) Regional Master Plan, adopted May 2009.

Please refer to the Technical Appendix for individual route maps.

Existing Services

1. Fixed-route service – The existing fixed bus routes should continue to operate, including Routes 14, 18, 19, 21, 23, 25, 30, 31, and 33. Operating costs for this service will total approximately \$131.7 million and capital/infrastructure costs

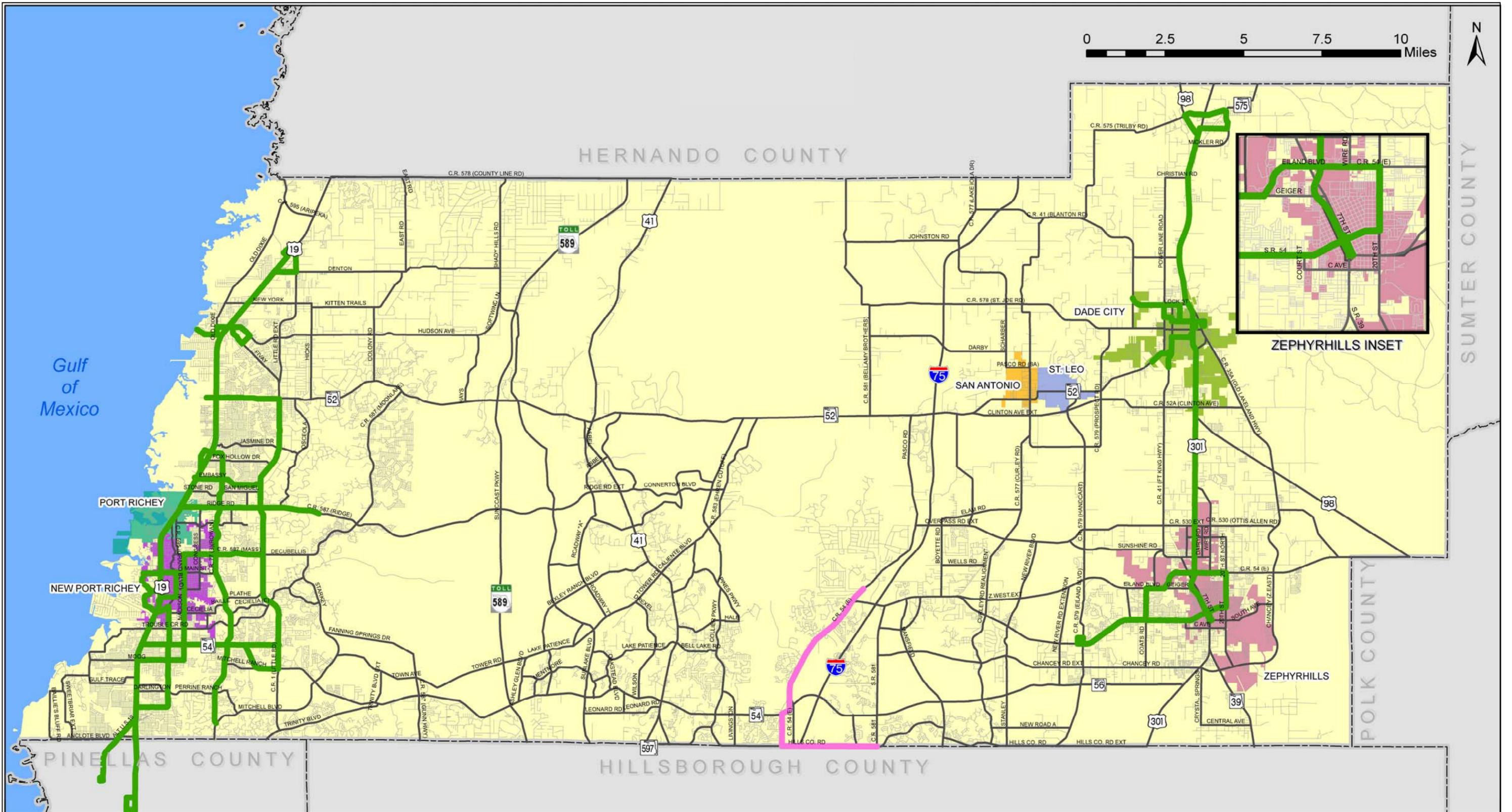
will total approximately \$16.3 million from 2015 to 2035 (Technical Appendix Map 6-2-4).

2. Paratransit service – The existing paratransit service (both the directly-operated and purchased transportation) should be maintained, thereby continuing to serve the need of the transportation disadvantaged (TD) residents of Pasco County. Operating costs for this service will total approximately \$72.4 million, and capital/infrastructure costs will total approximately \$1.1 million from 2015 to 2035 (Technical Appendix Map 6-2-5).

New Local Services

1. Moon Lake Road Route – Implementation of new local bus service that allows for connection to the West Pasco County bus system. This route is to be implemented by 2021. Operating costs for this service will total approximately \$4.4 million and capital/infrastructure costs will total approximately \$1.0 million from 2015 to 2035 (Technical Appendix Map 6-2-6).
2. Cross-County Connector – Implementation of new local bus service along SR 54 from US 19 to US 301 by 2021. Operating costs for this service will total approximately \$31.6 million and capital/infrastructure costs will total approximately \$2.1 million from 2015 to 2035 (Technical Appendix Map 6-2-7).
3. Moon Lake to Suncoast Connector – Implementation of new local bus service along SR 52 and Moon Lake Road from Little Road to Ridge Road at Kitty Hawk Drive by 2021. Operating costs for this service will total approximately \$2.5 million and capital/infrastructure costs will total approximately \$1.0 million from 2015 to 2035 (Technical Appendix Map 6-2-8).





Map 6-2: Pasco County 2035 L RTP
Existing Public Transportation Routes

Existing Bus Routes

- Existing Local Pasco Bus Routes (PCPT)
- Local Bus by Hillsborough Area Transit Authority (HART)



4. Ridge Road to Suncoast Connector – Implementation of new local bus service that connects Moon Lake Road to the Suncoast Parkway via Ridge Road by 2021. Operating costs for this service will total approximately \$4.9 million and capital/infrastructure costs will total approximately \$1.0 million from 2015 to 2035 (Technical Appendix Map 6-2-9).
5. Express Bus Service on US 19 - from Pasco County to SR 52 by 2024. Operating costs for this service will total approximately \$3.5 million and capital/infrastructure costs will total approximately \$4.4 million from 2015 to 2035 (Technical Appendix Map 6-2-10).
6. Land O’ Lakes Circulator – Implementation of circulator service in Land O’ Lakes by 2024. Operating costs for this service will total approximately \$5.3 million and capital/infrastructure costs will total approximately \$1.1 million from 2015 to 2035 (Technical Appendix Map 6-2-11).
7. Zephyrhills to Wesley Chapel Route – Implementation of local service to provide a connection between Zephyrhills and Wesley Chapel by 2024. Operating costs for this service will total approximately \$3.4 million and capital/infrastructure costs will total approximately \$1.1 million from 2015 to 2035 (Technical Appendix Map 6-2-12).
8. Wesley Chapel Flex Route – Implement along CR 54 from CR 581 to Fox Ridge Boulevard by 2024. Operating costs for this service will total approximately \$0.6 million and capital/infrastructure costs will total approximately \$1.1 million from 2015 to 2035 (Technical Appendix Map 6-2-13).
9. Implement later evening service on all existing routes by 2024. Operating costs for this service will total approximately \$11.1 million from 2015 to 2035 (Technical Appendix Map 6-2-14).

10. Bruce B. Downs Local Route –Implementation of local service from the Hillsborough County Line to SR 54. This route is to be implemented by 2024 and will compliment the short distance rail along Bruce B. Downs Boulevard planned for 2028. Operating costs for this service will total approximately \$1.9 million and capital/infrastructure costs will total approximately \$1.1 million from 2015 to 2035 (Technical Appendix Map 6-2-15).
11. Implementation of new local service on SR 52 from just west of Pasco Road to Dade City by 2024. Operating costs for this service will total approximately \$6.0 million and capital/infrastructure costs will total approximately \$2.2 million from 2015 to 2035 (Technical Appendix Map 6-2-16).
12. Implementation of express bus service connecting to Hillsborough County via I-75 from SR 52 by 2028. Operating costs for this service will total approximately \$3.0 million and capital/infrastructure costs will total approximately \$1.1 million from 2015 to 2035 (Technical Appendix Map 6-2-17).
13. Implementation of increased frequency on existing routes (except US 19) – Under this service improvement, all existing routes would be improved to 30-minute headways by 2026. Operating costs for this service will total approximately \$45.7 million and capital/infrastructure costs will total approximately \$10.8 million from 2015 to 2035 (Technical Appendix Map 6-2-18).
14. Implementation of increased frequency on US 19 – Demand for increased transit service on US 19 requires improving headways from 30 minutes to 15 minutes by 2026. Operating costs for this service will total approximately \$14.1 million and capital/infrastructure costs will total approximately \$4.5 million from 2015 to 2035 (Technical Appendix Map 6-2-19).





15. Implementation of express bus service connecting to Pinellas County from Little Road at SR 54 by 2026. Operating costs for this service will total approximately \$0.7 million and capital/infrastructure costs will total approximately \$0.5 million from 2015 to 2035 (Technical Appendix Map 6-2-20).

16. Implementation of additional service on Sundays on existing routes – This change to service coverage is to be implemented by 2027. Operating costs for this service will total approximately \$9.3 million from 2015 to 2035 (Technical Appendix Map 6-2-21).

17. Implementation of a new local bus route in the Hudson area. This route is to be implemented in 2027. Operating costs for this service will total approximately \$5.6 million and capital/infrastructure costs will total approximately \$0.5 million from 2015 to 2035 (Technical Appendix Map 6-2-22).

18. Implementation of new local bus service in the Hudson area. This route is to be implemented by 2027. Operating costs for this service will total approximately \$5.0 million and capital/infrastructure costs will total approximately \$0.5 million from 2015 to 2035 (Technical Appendix Map 6-2-23).

Regional Connectors

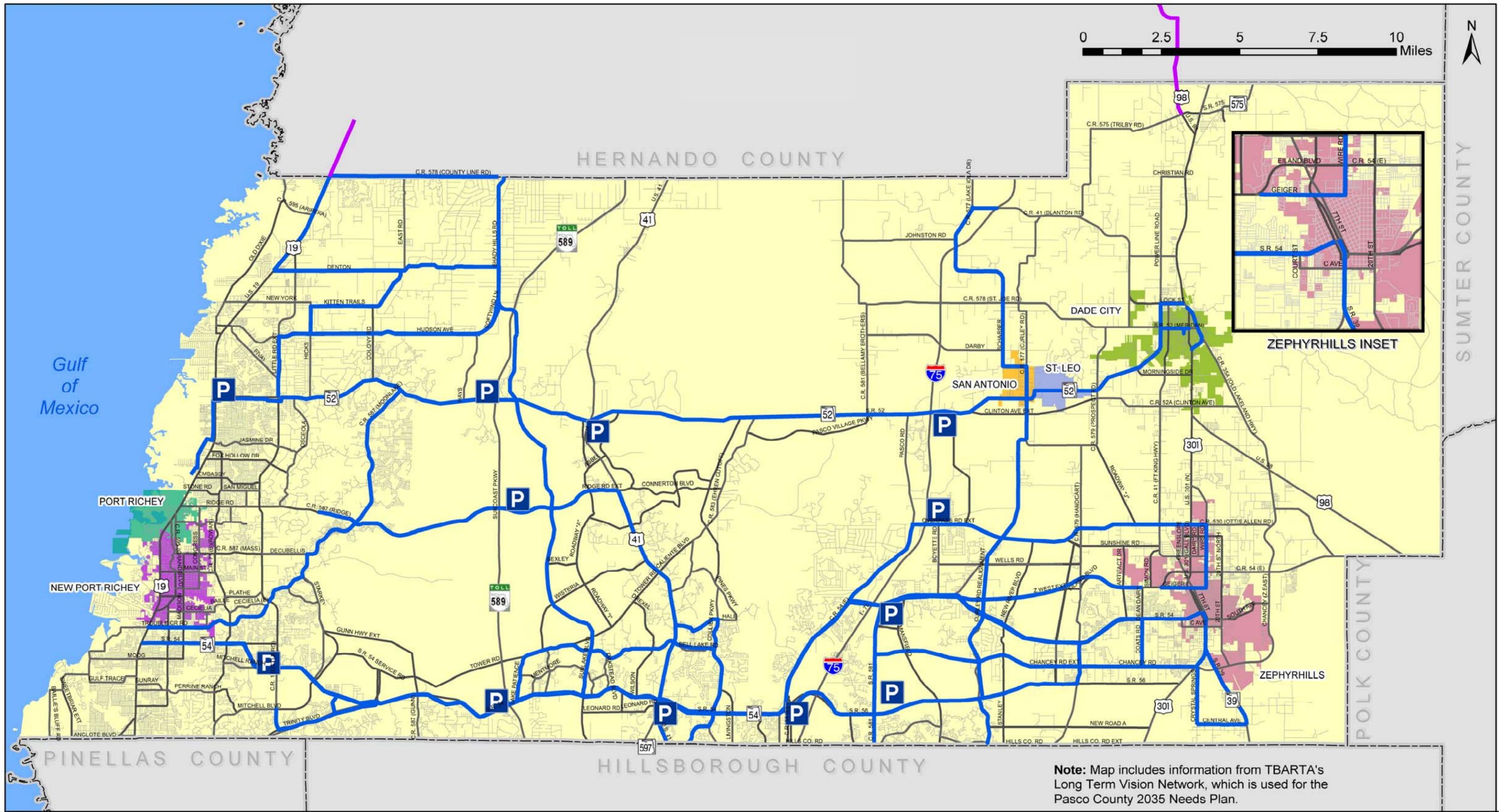
1. The SR 54/SR 56 corridor from US 19 to US 301 is currently being evaluated through a conceptual analysis by FDOT District 7. The preliminary vision for the corridor is to provide premium transit service potentially either with managed lanes and/or a mixed traffic operation with enhanced bus with transit signal priority. Basic service is planned to start in 2018 with improvements to the service within the corridor continuing through 2030. Operating

costs for this service will total approximately \$57.6 million and capital/infrastructure costs will total approximately \$24.9 million from 2015 to 2035 (Technical Appendix Map 6-2-24).

Tampa Bay Area Regional Transportation Authority (TBARTA)

The services provided below are related to services found in the adopted TBARTA Regional Master Plan.

1. Construct and implement frequent short distance light rail along the CR 581 corridor from Hillsborough County Line to SR 54 in 2028. This will connect to the rail line in Hillsborough County that would eventually connect to the University of South Florida campus and Downtown Tampa (currently being evaluated through an alternatives analysis study and included in the 2035 Hillsborough County Long Range Transportation Plan). Operating costs for this service will total approximately \$153.8 million and capital/infrastructure costs will total approximately \$349.0 million from 2015 to 2035 (Technical Appendix Map 6-2-25).
2. Implementation of express bus service connecting to Hillsborough County via the Suncoast Parkway from SR 52 by 2023. Operating costs for this service will total approximately \$10.4 million and capital/infrastructure costs will total approximately \$8.1 million from 2015 to 2035 (Technical Appendix Map 6-2-26).
3. Implementation of express bus service along I-75 from the Hillsborough County Line to CR 54 by 2028. Operating costs for this service will total approximately \$6.1 million and capital/infrastructure costs will total approximately \$2.2 million from 2015 to 2035 (Technical Appendix Map 6-2-27).



Note: Map includes information from TBARTA's Long Term Vision Network, which is used for the Pasco County 2035 Needs Plan.

**Map 6-3: Pasco County 2035 L RTP
2035 Needs Plan - Local Transit Routes Needs**

Local Bus Route Needs

- Proposed Local Bus Routes
- Bus Connections Proposed by Hernando County
- P Future Park-n-Ride Locations
- Major Roadways without Transit Service





Map 6-4: Pasco County 2035 L RTP
2035 Needs Plan - Premium Transit Routes Needs

Note: All TBARTA Facilities based on Adopted Master Plan



- Implementation of express bus service along I-75 from CR 54 to SR 52 by 2028. Operating costs for this service will total approximately \$7.8 million and capital/infrastructure costs will total approximately \$2.8 million from 2015 to 2035 (Technical Appendix Map 6-2-28).

Capital and Infrastructure

- Construct signs, shelters, and transfer facilities to accommodate new local routes in Pasco County.
- Construct 12 new park-and-ride facilities to support the planned new local and premium transit services.

Table 6-2 provides a breakdown of the 2035 Needs Plan transit capital and operating costs.

Figure 6-1 provides the breakdown of the transit capital/infrastructure and fleet purchase costs for the 2035 Pasco County Transit Needs Plan. The total cost in the plan will be approximately \$446.6 million through 2035. Of the total capital cost, existing services account for \$17.6 million, new local services are \$50.0 million, and premium services will cost \$379.0 million.

Figure 6-2 provides the breakdown of transit operating costs for the 2035 Pasco County Transit Needs Plan. The total cost in the plan will be approximately \$598.6 million through 2035. Of the total operating cost, existing services account for \$204.1 million, new local services are \$169.2 million and premium services will be \$225.3 million.

Table 6-2: 2015-2035 Pasco County Public Transportation Needs Plan Capital/Infrastructure and Fleet Purchase Costs

Year	Capital	Operating	Total
2015	\$0	\$7,521,853	\$7,521,853
2016-2020	\$20,480,222	\$40,461,943	\$60,942,165
2021-2025	\$23,990,620	\$82,618,509	\$106,609,129
2026-2030	\$367,276,298	\$198,881,551	\$566,157,849
2031-235	\$34,835,062	\$269,091,970	\$303,927,032
Total	\$446,582,202	\$598,575,826	\$1,045,158,028

Source Appendix 6, Table A6-1

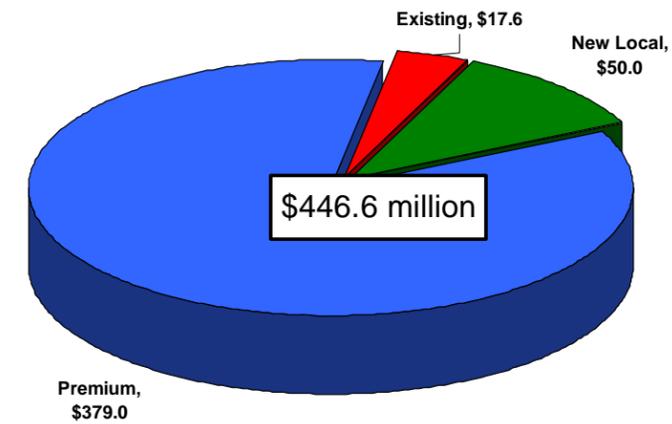


Figure 6-1: 2015-2035 Pasco County Public Transportation Needs Plan Capital/Infrastructure and Fleet Purchase Costs (in millions)

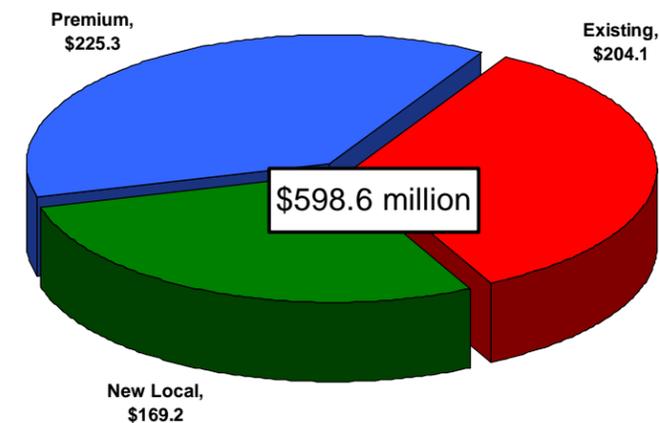


Figure 6-2: 2015-2035 Pasco County Public Transportation Needs Plan Operating Costs (in millions)



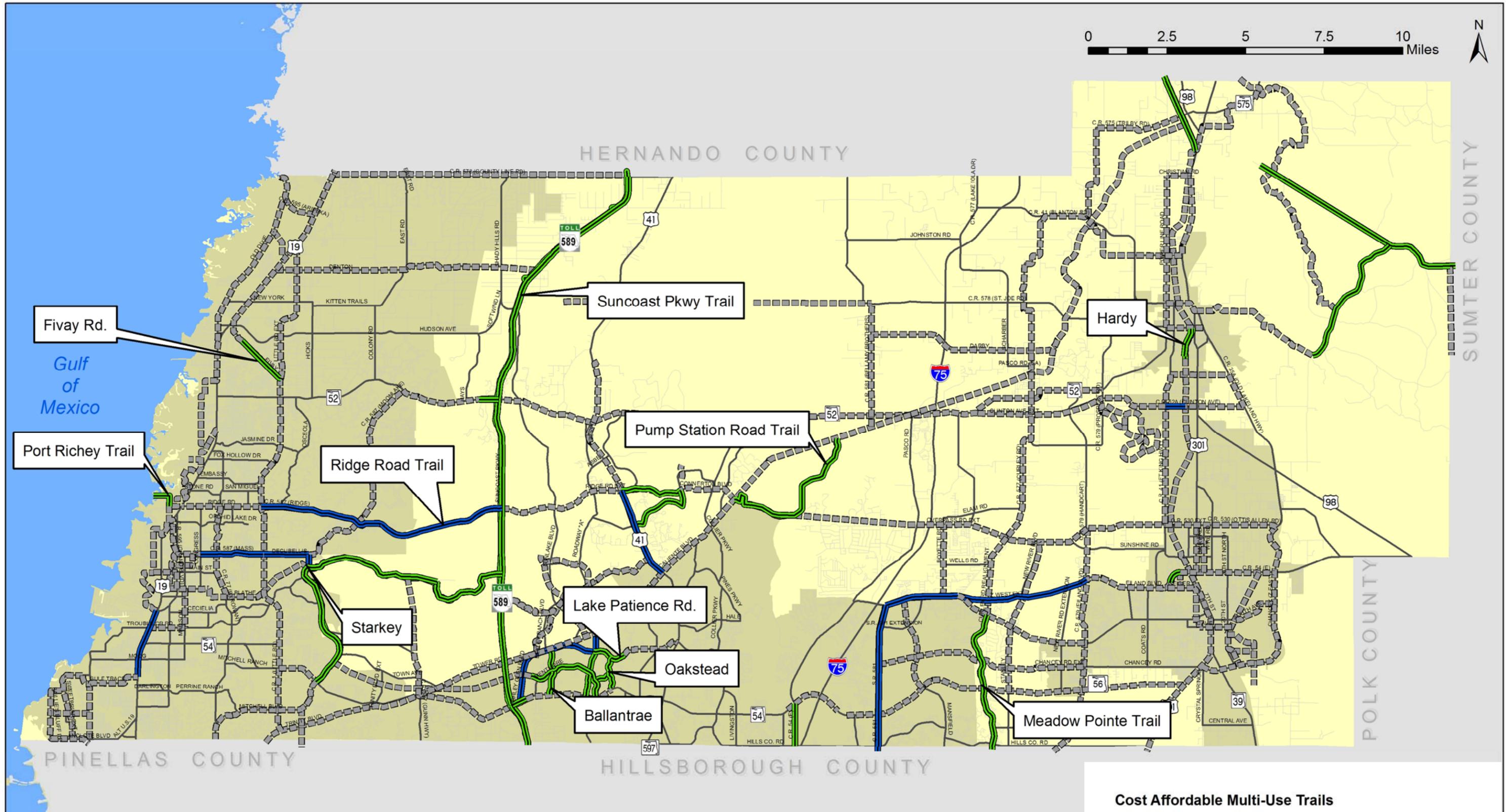


MULTI-USE TRAIL, PEDESTRIAN, AND BICYCLE PROJECTS

Proposed pedestrian, bicycle, and multi-use trail improvements for the 2035 Cost Affordable Plan are illustrated in Maps 6-5, 6-6, and 6-7.

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

- The expansion of the bicycle network includes all roadways being improved on the highway needs plan, as these roadway improvements would include paved shoulders. The intent is to put bicycle facilities in place concurrent with roadway improvements.
- Expansion of the sidewalk network associated with new roadway construction or roadway improvements constructed within the urbanized area. Building sidewalks in the urbanized area ensures that the largest number of 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. The trails are a result of the prior Long Range Transportation Plan, the Pasco County trails master plan, as well as the Regional Multi-use trails map.

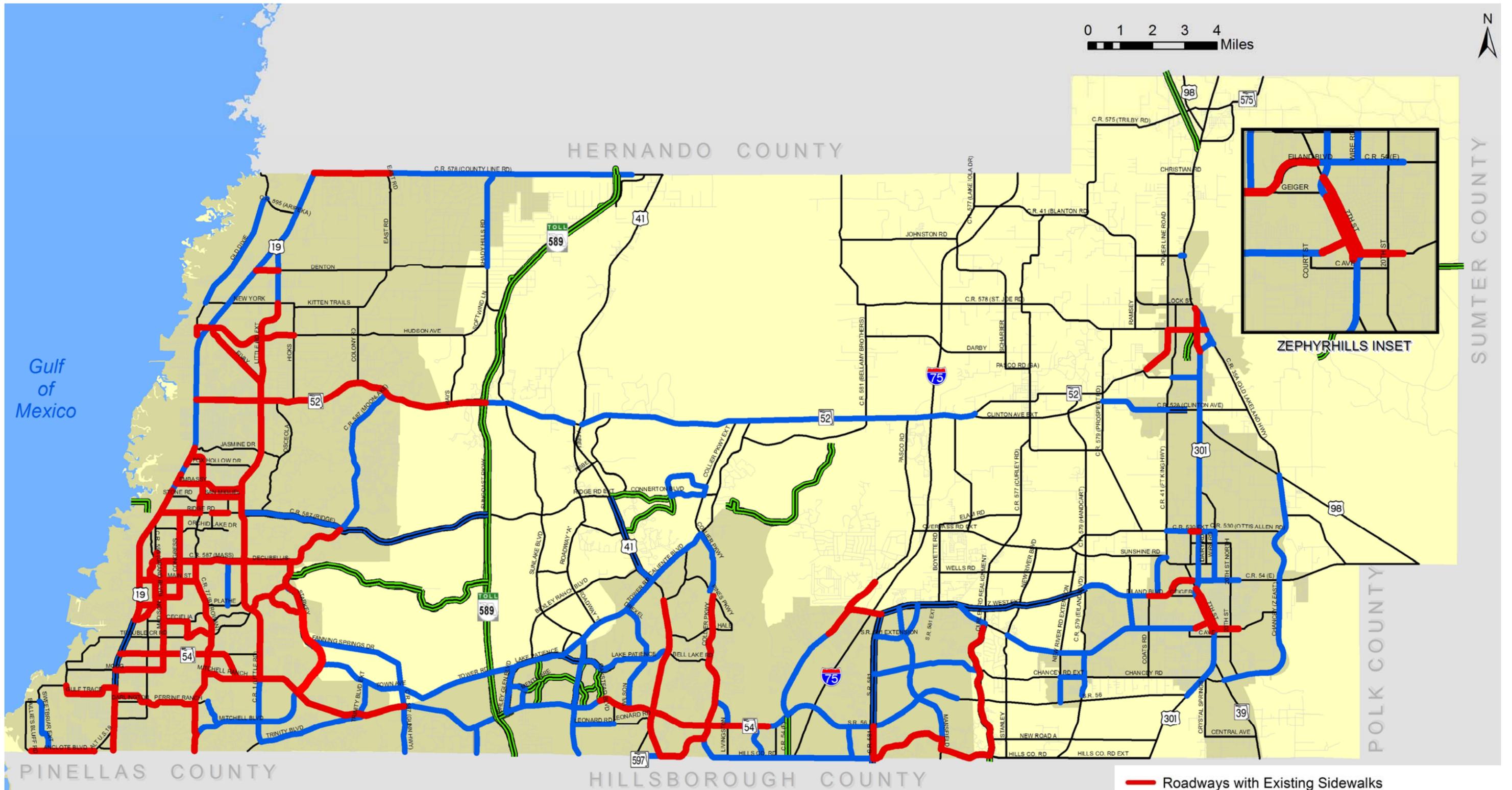


Map 6-5: Pasco County 2035 L RTP - 2035 Needs Plan Multi-Use Trail Facilities

Cost Affordable Multi-Use Trails

- Existing Multi-Use Trails
- Committed Multi-Use Trails by 2014
- - - Conceptual Trails
- Urbanized Areas



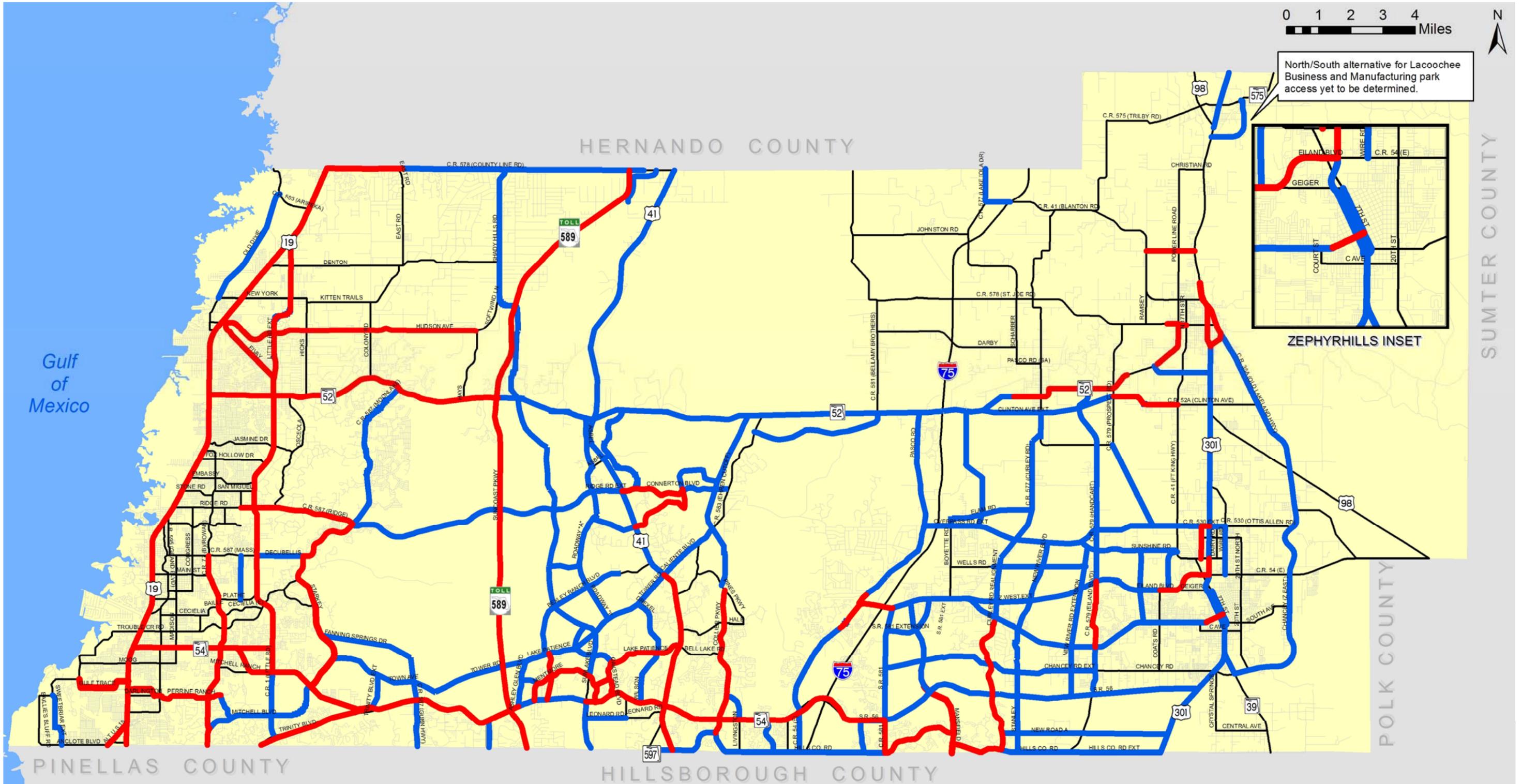


Map 6-6: Pasco County 2035 LRTP - 2035 Needs Plan Pedestrian Facilities

Pedestrian Facilities in blue indicate future improvements.

- Roadways with Existing Sidewalks
- Roadways to be improved with Pedestrian Facilities
- Existing Multi-Use Trails
- Committed Multi-Use Trails by 2014
- Other Roadways without Pedestrian Facilities
- Urbanized Areas





Map 6-7: Pasco County 2035 LRTP - 2035 Needs Plan Bicycle Facilities

- Roadways with Existing (2009) Bicycle Accommodations
- Roadways to be Improved (2010-2035) with Bicycle Accommodations (Paved Shoulder, Bike Lane, etc.)
- Other Roadways

