

Chapter 10: Cost Affordable Plan

The cost to implement all the transportation improvements needed by 2035 far exceeds the anticipated revenues. As a result, these needs must be prioritized with only the best performing projects receiving funding. The resulting set of projects is known as the “Cost Affordable Plan.”

The 2035 Cost Affordable Plan guides the funding and phasing of high-priority transportation projects in Hillsborough County. It allocates funds that are reasonably expected to be available beyond the five-year work programs of FDOT and the local governments, in five year increments, through the year 2035. Projects that are selected for funding are implemented by FDOT, local governments and transportation agencies as they update their work programs every year.

The Cost Affordable Plan recommends projects for the major transportation network and is meant to accommodate future travel demand, address environmental requirements, and connect the County to the larger West Central Florida region.



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- Benefits of the Cost Affordable Plan 10-17



Components of the Cost Affordable Plan

The 2035 Cost Affordable Plan reflects a shift from the previous LRTP with significant funding for a greatly enhanced transit system. These expanded transit services are designed to provide varied transportation choices to residents, businesses and visitors. The Cost Affordable Plan transit projects include recommendations of rail corridors, long-distance or commuter bus projects, local bus projects (expanded service, new express bus service, circulators, and BRT service), carpool matching and vanpool programs and transportation disadvantaged programs (paratransit). The Plan includes a total of **\$5.84 billion** in transit capital improvements through the year 2035. **Map 10.1** and **Appendix D** detail the improved transit system included in the Cost Affordable Plan.

The Cost Affordable Plan commits substantial resources to provide a multi-modal transportation system that supports non-motorized travelers in Hillsborough County. The Plan includes adding new bicycle lanes, restriping roadways, creating safer crosswalks, and filling sidewalk gaps on the major road network. The Plan also recognizes the health and quality of life benefits of building new and extending existing multi-use trails, which have proven to attract significant numbers of bicyclists, hikers, in-line skaters and others seeking year-round outdoor recreation. Bicycle and pedestrian improvements are targeted to serve areas that people have shown they want to bike and walk, provided they could do so safely. These areas have the highest latent demand, taking into account where people live, shop, go to work or school. Because every transit trip begins and ends with a walk or a bike trip, the cost affordable bicycle and pedestrian improvements also focus on transit routes. Finally, the Cost Affordable Plan invests in those roads with a high bicycle and pedestrian accident rates by providing better signage, marked crosswalks, lighting and other safety features. **Map 10.2** and **Appendix E** highlight the bicycle and multi-use trail improvements, and **Map 10.3** and **Appendix F** show the pedestrian improvements within the Cost Affordable Plan. All major road projects are assumed to include pedestrian and bicycle facilities.

Roadway capacity improvements are also a major component of the Cost Affordable Plan. These improvements increase capacity by either construction of new roads or widening of existing facilities. Enhancements to existing roads such as bicycle, pedestrian features, and safety, intersection and aesthetic improvements are also included where roads cannot be expanded. The Plan includes a total of **\$5.87 billion** in roadway capacity improvements (including Intelligent Transportation Systems and bridge maintenance) through the year 2035. **Map 10.4** and **Appendix C** show the roadway capacity improvements within the Cost Affordable Plan. ITS, such as signal system improvements, are assumed to be included in all major road projects and bus rapid transit corridors, and are illustrated in **Map 10.5** and listed in **Appendix C**. The Cost Affordable Plan also includes the specific ITS projects described in **Table 10.1**.

Hillsborough County MPO 2035
Long Range Transportation Plan
Map 10-1
2035 Cost Affordable Transit System



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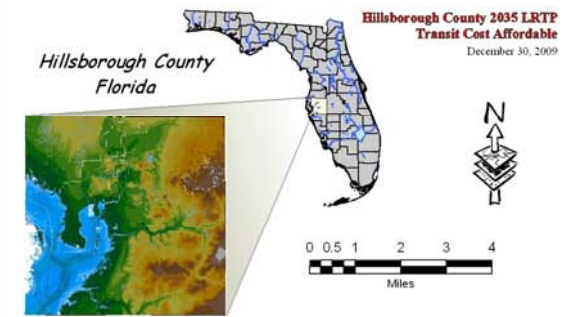
TRANSIT ROUTES

- Bus Rapid Transit
- Local Routes
- Express Routes
- Regional Bus
- Affordable Rail
- Circulator Routes
- PSTA Express
- High Speed Rail
- TECO Line Streetcar
- Flex Route Service Areas
- Affordable Rail
- * Contingent on Agreements with Adjacent Counties

ADOPTED
December 9, 2009

- Urban Service Area
- Hillsborough County
- Pinellas County
- Tampa
- Plant City
- Temple Terrace
- Water and Bay
- Streams/Rivers
- County Boundary
- Major Roads
- Airports
- Airfields

Locator Map



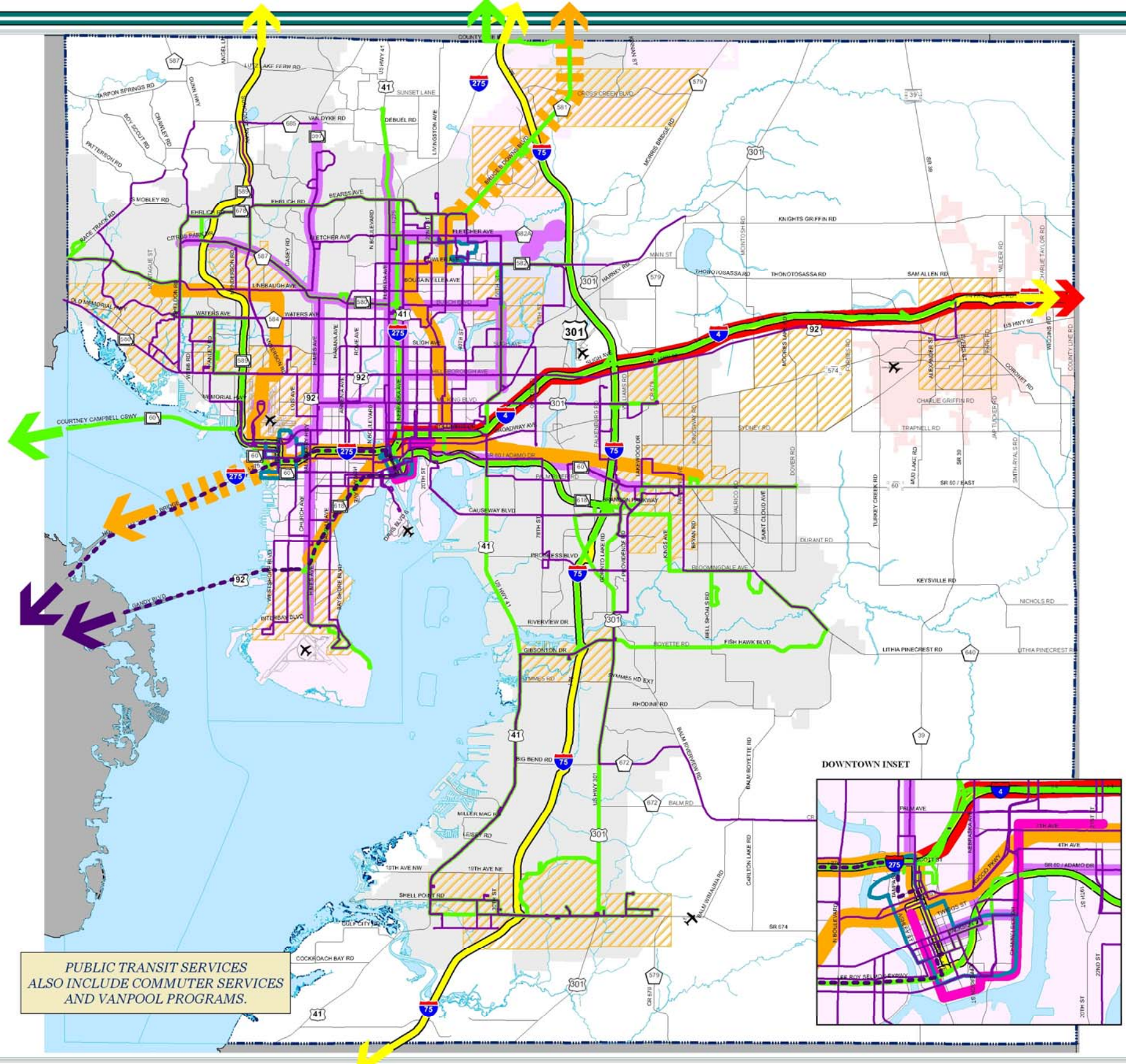
DATA SOURCES: Base map, roads, water from Hillsborough County City-County Planning Commission. Parcel Lines and data from Hillsborough County Property Appraiser. Wetlands from SWFWMD, Significant Wildlife Habitat from Planning and Development Management, based on satellite imagery. Only wetlands greater than 40 acres depicted.

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For additional maps, data and information, see the appropriate source.

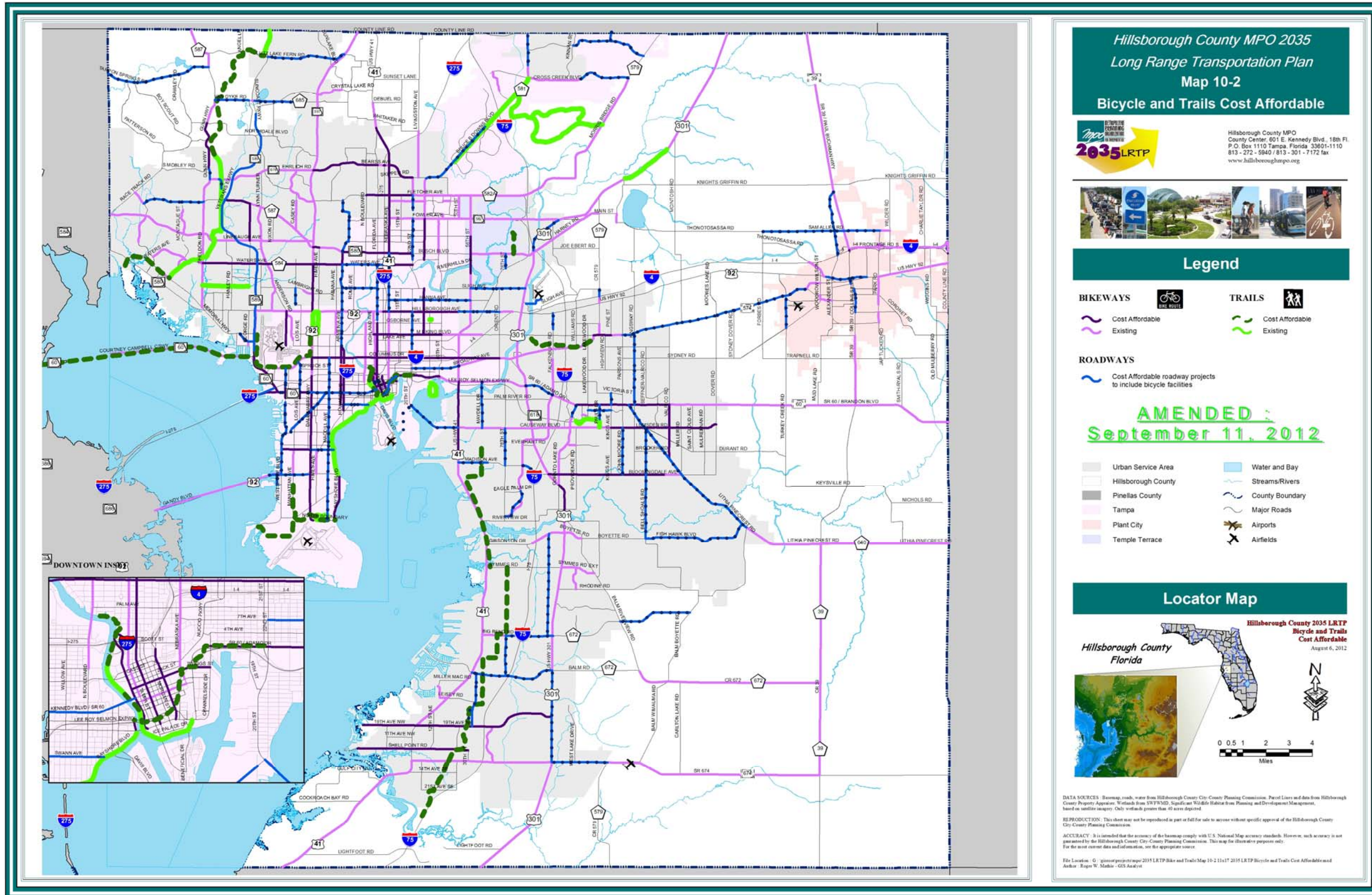
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Author: Roger W. Maden - GIS Analyst



PUBLIC TRANSIT SERVICES
ALSO INCLUDE COMMUTER SERVICES
AND VANPOOL PROGRAMS.

Map 10.1:
Cost Affordable Transit System

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AMENDED 9-11-2012

Map 10-2:
Bicycle and Trails Cost Affordable

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Hillsborough County MPO 2035
 Long Range Transportation Plan
 Map 10-3
 Pedestrian - Sidewalks Cost Affordable



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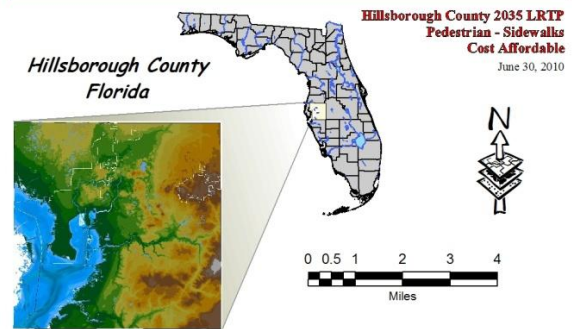
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- SIDEWALKS**
 - Cost Affordable
 - ROADWAYS**
 - Cost Affordable roadway projects to include pedestrian facilities
 - CORRIDORS**
 - Cost Affordable
- * Sidewalk on at least one side of major road

**AMENDED :
 August 3, 2010**

- Urban Service Area
- Hillsborough County
- Pinellas County
- Tampa
- Plant City
- Temple Terrace
- Water and Bay
- Streams/Rivers
- County Boundary
- Major Roads
- Airports
- Airfields

Locator Map

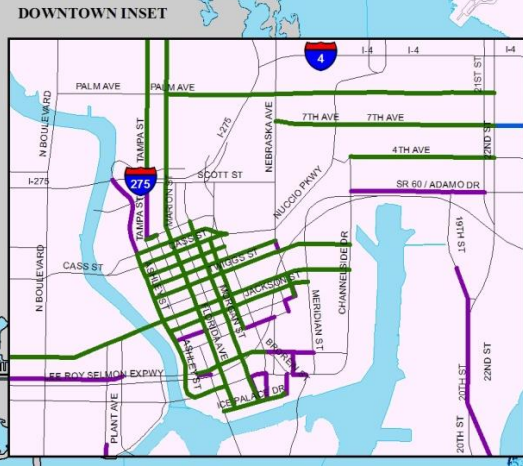
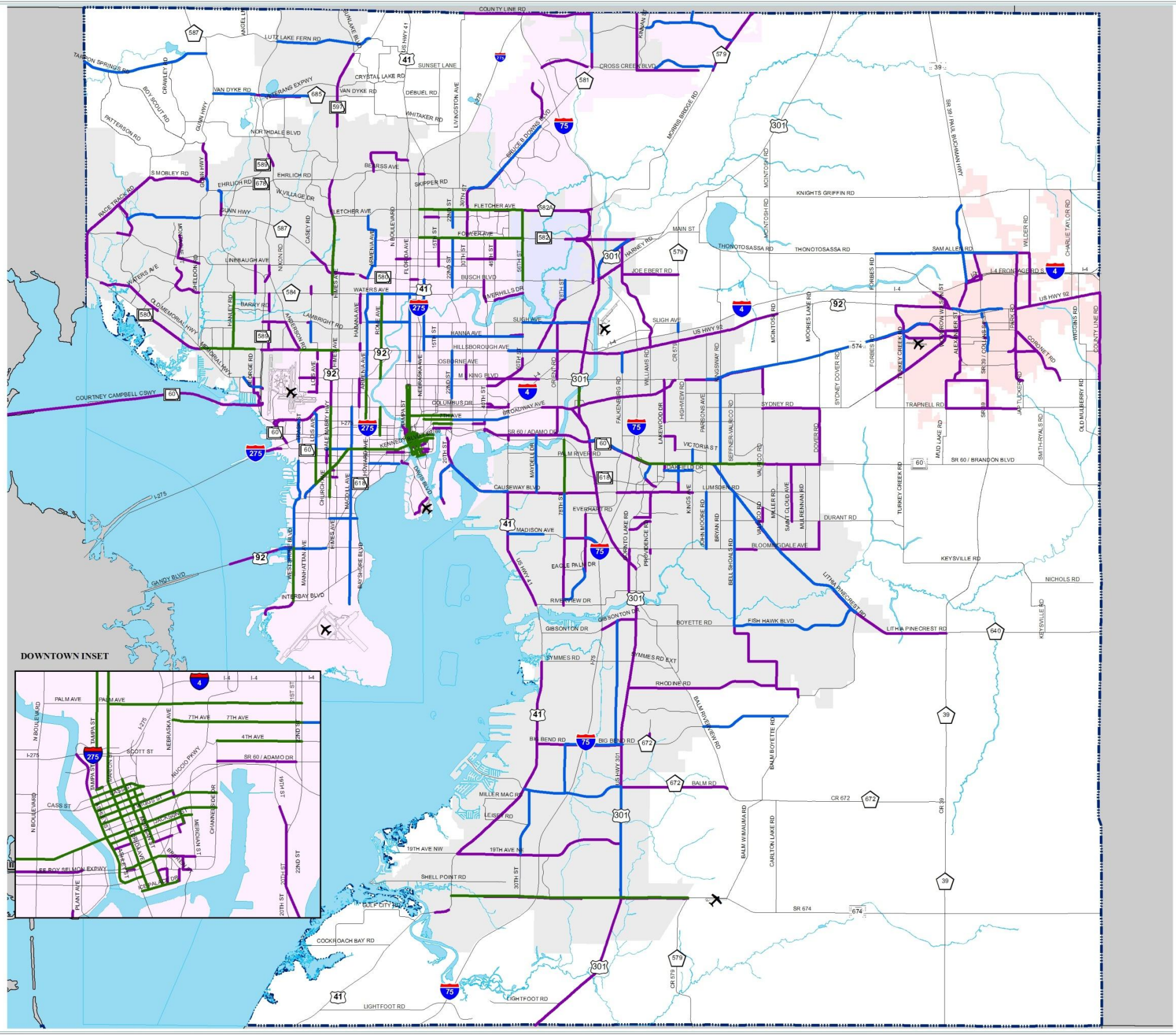


DATA SOURCES: Basemap, roads, water from Hillsborough County City-County Planning Commission. Parcel Lines and data from Hillsborough County Property Appraiser. Wetlands from SWFWMD. Significant Wildlife Habitat from Planning and Development Management, based on satellite imagery. Only wetlands greater than 40 acres depicted.

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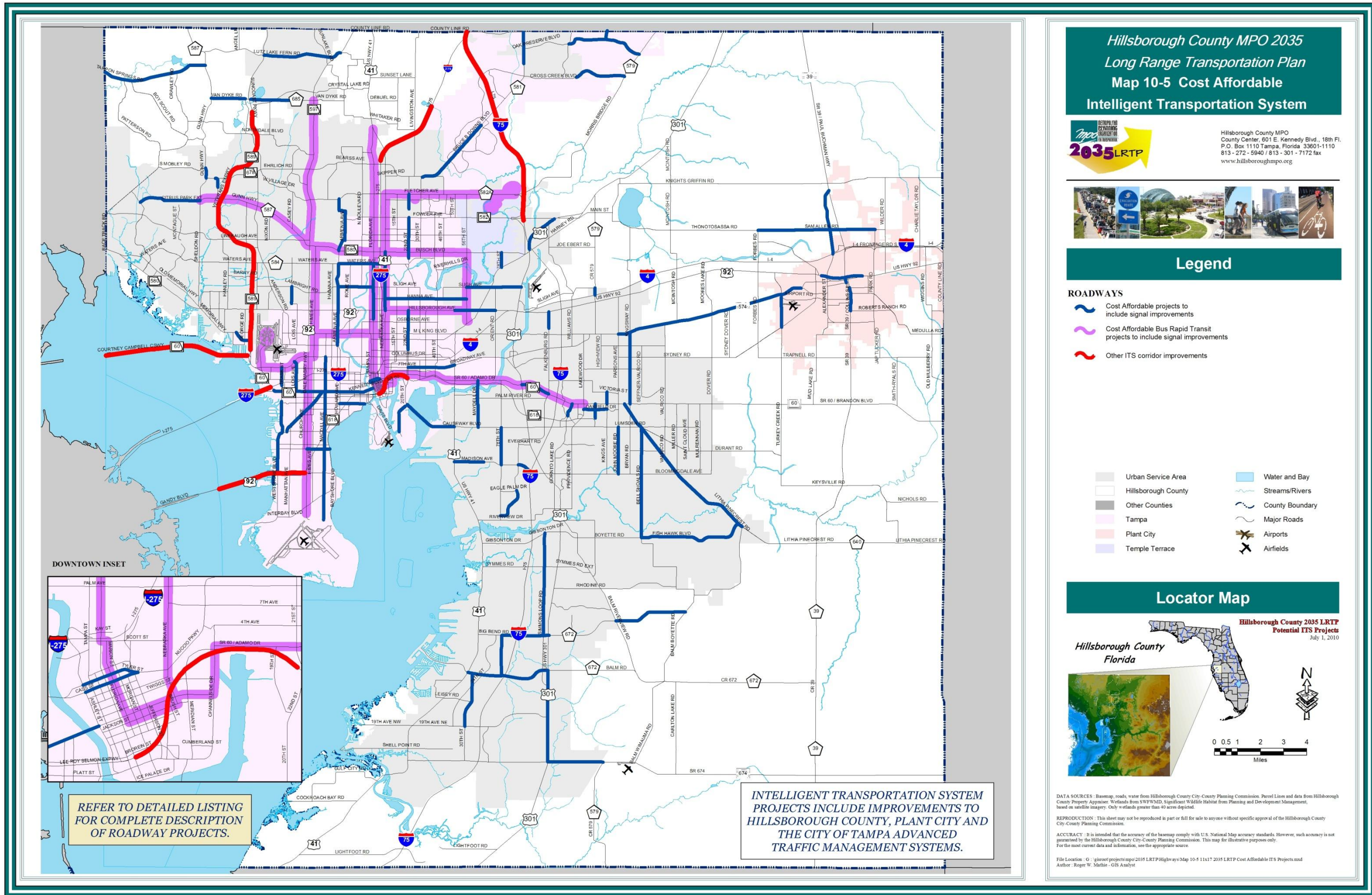
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File Location: G:\gisroot\projects\mpo\2035 LRTP\Pedestrian\Map 10-3 11x17 2035 LRTP Pedestrian - Sidewalks Cost Affordable.mxd
 Author: Roger W. Mathis - GIS Analyst



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Hillsborough County MPO 2035
Long Range Transportation Plan
Map 10-5 Cost Affordable
Intelligent Transportation System



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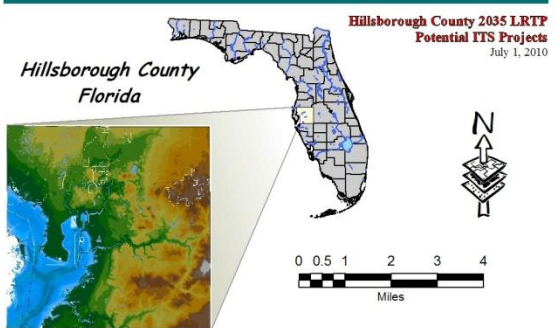


Legend

- ROADWAYS**
- Cost Affordable projects to include signal improvements
 - Cost Affordable Bus Rapid Transit projects to include signal improvements
 - Other ITS corridor improvements

- Urban Service Area
- Hillsborough County
- Other Counties
- Tampa
- Plant City
- Temple Terrace
- Water and Bay
- Streams/Rivers
- County Boundary
- Major Roads
- Airports
- Airfields

Locator Map



REFER TO DETAILED LISTING FOR COMPLETE DESCRIPTION OF ROADWAY PROJECTS.

INTELLIGENT TRANSPORTATION SYSTEM PROJECTS INCLUDE IMPROVEMENTS TO HILLSBOROUGH COUNTY, PLANT CITY AND THE CITY OF TAMPA ADVANCED TRAFFIC MANAGEMENT SYSTEMS.

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File Location - G:\gisc\projects\mpo\2035 L RTP\Highways\Map 10-5 11x17 2035 L RTP Cost Affordable ITS Projects.mxd
Author - Roger W. Matflee - GIS Analyst

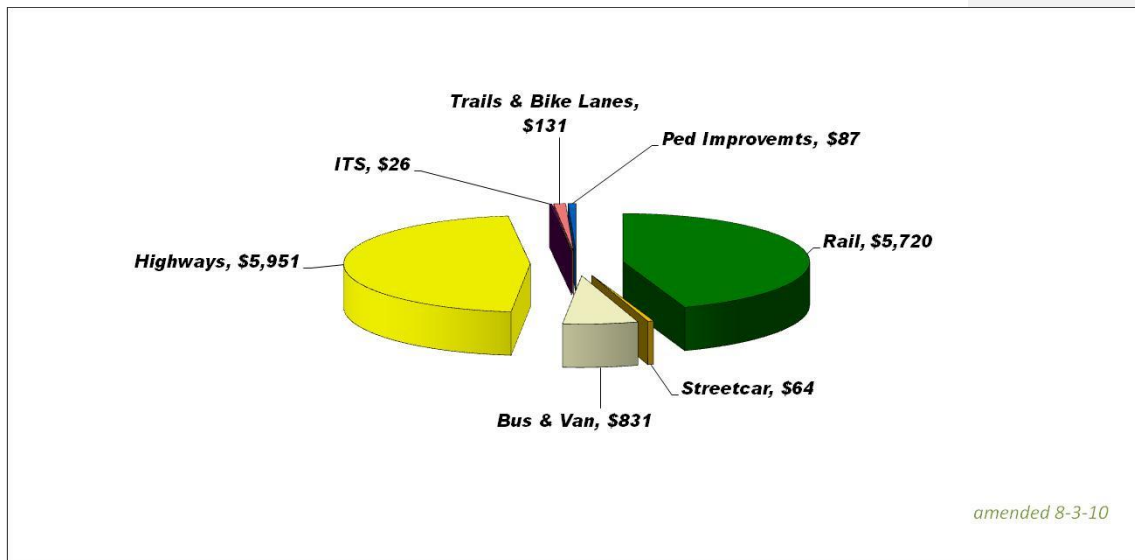
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Table 10.1: Intelligent Transportation System Projects

Jurisdiction	Project Description
Plant City	Traffic Adaptive and Incident Management System: including adaptive control system, dynamic message, trailblazing and blank-out signs to improve flow when traffic is diverted from I-4.
Hillsborough County	Advanced Traffic Management System: including in-pavement sensor assemblies, traffic signal re-timing, central adaptive firmware (County-wide) and local adaptive firmware (per intersection).
FDOT	Tampa Bay SunGuide Freeway Management System: Courtney Campbell Causeway from Pinellas County to Veteran’s Expressway, including dynamic message signs, closed-circuit TV, detectors and communications equipment.
FDOT	Tampa Bay SunGuide Freeway Management System: Gandy Boulevard from Pinellas County to Selmon Crosstown Expressway, including dynamic message signs, closed-circuit TV, detectors and communications equipment.

The combined cost for a balanced and diverse transportation Cost Affordable Plan through the year 2035 is approximately **\$11.9 billion** in year-of-expenditure (YOE) capital funding. **Figure 10.1** shows how the capital funding is divided by type of improvement.

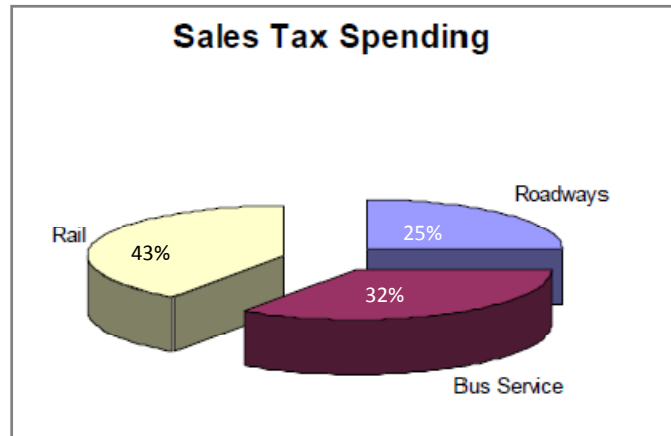
Figure 10.1: Cost Affordable Plan Improvements by Type Capital Projects (in YOE \$M) Total: \$11.9 B





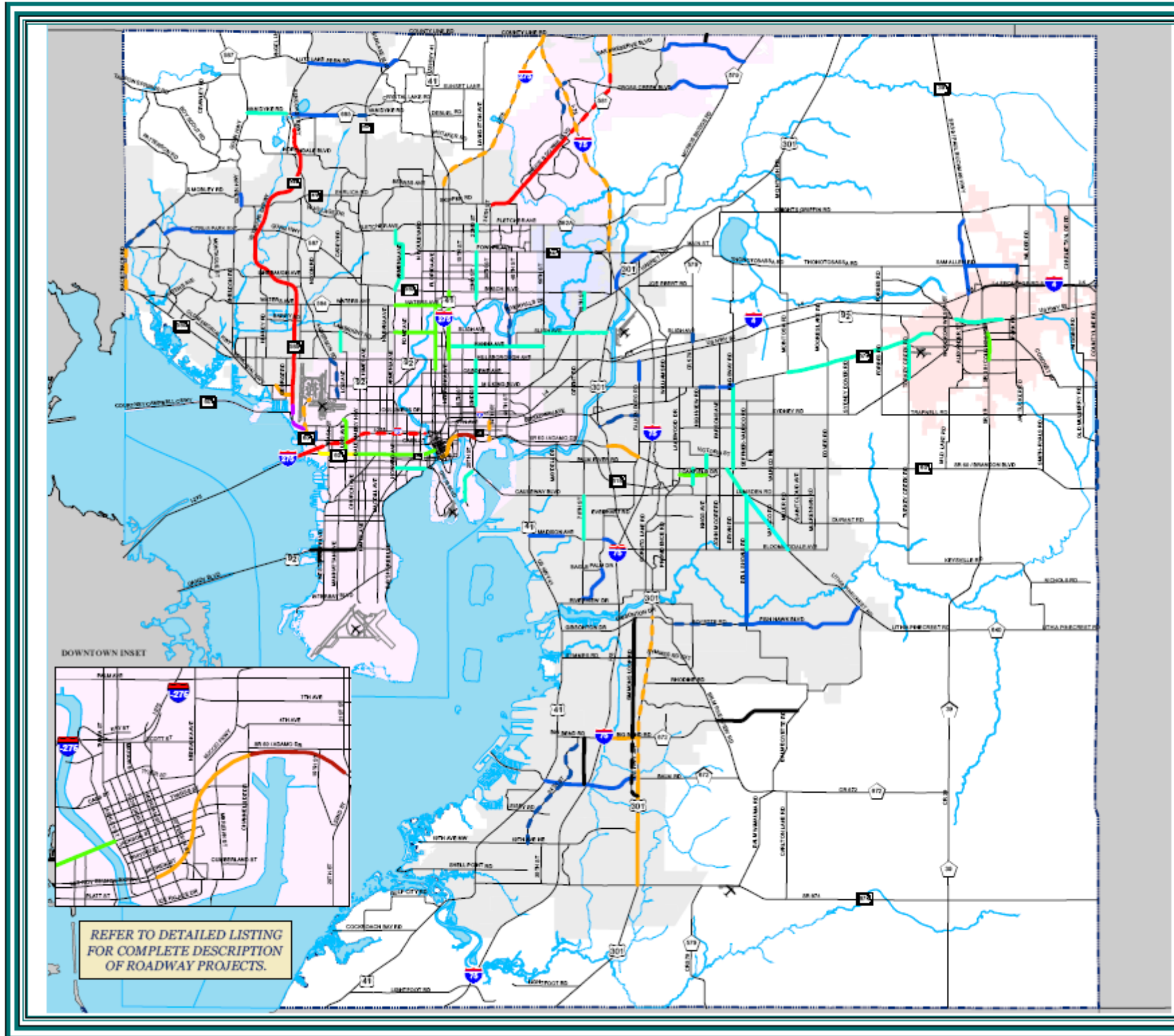
As discussed in Chapter 9, a proposed new local sales tax is one of the funding sources for this multi-modal plan. As recommended by the Hillsborough County Transportation Task Force, the new sales tax would provide additional funds for road capacity, and make new funds available to construct and operate rail and to expand bus services. **Figure 10.2** shows the proposed allocation of sales tax funding.

Figure 10.2



2025 Interim Plan

A shorter range or interim plan for the year 2025 is also part of the overall 2035 Plan. The process used to develop the Interim Plan was consistent with that used to develop the 2035 Cost Affordable Plan. Projects were ranked relative to each other using the prioritization methodology. The highest priority projects were grouped in the 2025 Interim Plan based on projections of available funding. **Map 10.6** illustrates the cost affordable roadway capacity improvements planned for 2025.



**Hillsborough County MPO 2035
Long Range Transportation Plan
Map 10-6
2025 Highway Interim**



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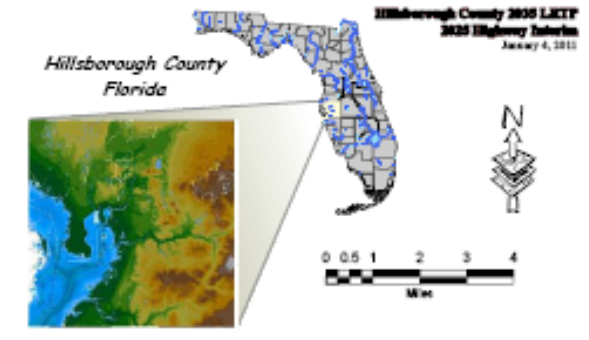
LANEAGE

	2 Lanes - Planned Projects (after 2014)		2 Lanes Enhanced - Planned Projects (after 2014)
	2 Lanes - Committed Projects (by 2014)		2 Lanes Enhanced - Committed Projects (by 2014)
	4 Lanes - Planned Projects (after 2014)		3 Lanes Enhanced - Planned Projects (after 2014)
	4 Lanes - Committed Projects (by 2014)		4 Lanes Enhanced - Planned Project (after 2014)
	6 Lanes - Planned Projects (after 2014)		6 Lanes Enhanced - Planned Projects (after 2014)
	6 Lanes - Committed Projects (by 2014)		6 Lanes Enhanced - Committed Projects (by 2014)
	8 Lanes - Planned Projects (after 2014)		
	8 Lanes - Committed Projects (by 2014)		
	10 Lanes - Planned Projects (after 2014)		
	10 Lanes - Committed Projects (by 2014)		
	12 Lanes - Planned Projects (after 2014)		

**AMENDED:
January 4, 2011**

	Urban Service Area		Water and Bay
	Hillsborough County		Streams/Rivers
	Pinellas County		County Boundary
	Tampa		Major Roads
	Plant City		Airports
	Tampa Terrace		Airfields

Locator Map



DATA SOURCE: Planning data from Hillsborough County City-County Planning Commission; Parcel Lines and lots from Hillsborough County Property Appraiser; Water from USGS; Major Roads from Florida Department of Transportation; Airports from FAA; Airfields from FAA; County Boundary from Florida Department of Transportation; Major Roads from Florida Department of Transportation; Airports from FAA; Airfields from FAA.

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Author: Roger W. Miller - GIS Analyst

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Benefits of the Cost Affordable Plan

The mix of transportation improvements in the Cost Affordable Plan is designed to support economic vitality and preserve quality of life while sustaining the environment. This section documents the benefits of the Cost Affordable Plan, in comparison to future conditions if these improvements are not made (“Existing plus Committed” (E+C) or “No-Build” conditions). The comparison demonstrates that without further improvements beyond those that are currently committed in the funded work programs of FDOT and the local governments, the transportation system will experience degradation in travel time, air quality, safety, user costs, energy consumption, and travel congestion.

Strengthened Economy

Increases in traffic congestion create delay for commuters and for businesspeople, for over-the-road shipping as well as local delivery of goods. Estimates of the time value of traffic delay reach into the billions of dollars, representing a significant additional cost of doing business in our community. The Cost Affordable Plan adds travel lanes to some of the County’s most congested roads. It also provides for rapid transit as an alternative means to travel between some of the largest activity centers.

A direct economic effect of the Cost Affordable Plan is business-related cost savings resulting from shorter “on-the-clock” trips that contend with less congestion. The savings gradually escalate over time, with annual business-related benefits of the Cost Affordable Plan “with sales tax” scenario approximately 40% higher than the “without sales tax” scenario in 2035. Economic and employment benefits as a result of implementing the transportation Cost Affordable Plan are highlighted in **Table 10.2**. Transportation projects result in less congestion than there would have been otherwise. This means less fuel consumption and less wear and tear on vehicles. It also means that trucks and cars spend less time in traffic. Fuel, maintenance, and time spent in traffic all cost money. The user benefits are the cost savings resulting from a transportation project -- money not spent on fuel; money not spent on vehicle maintenance; and time not wasted sitting in traffic. **Figure 10.3** shows the growth in annual user benefits over time of the Cost Affordable Plan with and without a sales tax increase.

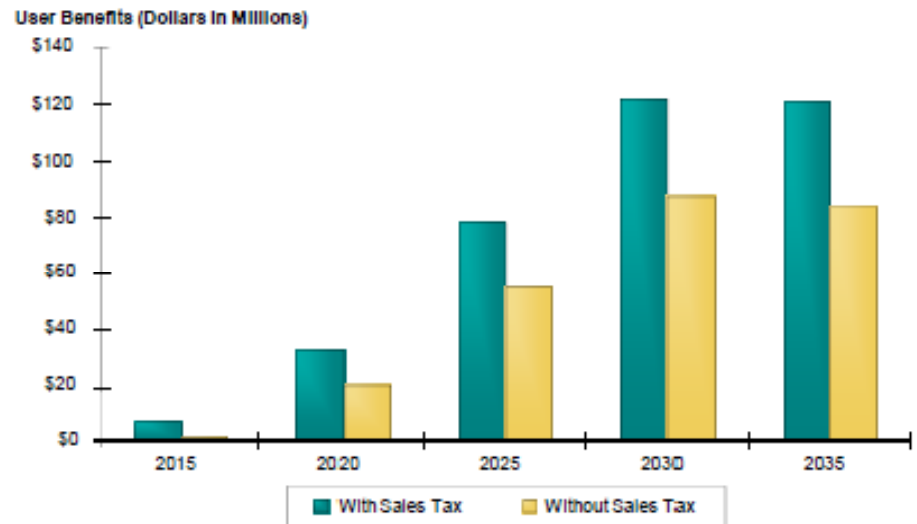
Table 10.2: Economic Benefits of Cost Affordable Plan

Economic Impact of Cost Affordable Plan	Cost Affordable (Without Sales Tax)	Cost Affordable (With Sales Tax)
Employment (Jobs)	1,466	2,102
Gross Product (in millions of 2008 dollars)	\$223.2	\$319.5
Real Personal Income (in millions of 2008 dollars)	\$238.4	\$342.7

Source: Economic Benefits Analysis Technical Memorandum



*Figure 10.3: Annual User Benefits (Truck + Business Auto)
Comparing “With Sales Tax” and “Without Sales Tax”
Scenarios*



Source: Highway Economics Requirements System (HERS)

Transportation also affects household budgets. According to the Center for Housing Policy, households in our region spend \$10,600 per year (or 33% of a working family’s income) on transportation, which is among the highest in the country. The study found that communities with more transportation choices available tend to have lower household expenditures on transportation. In 2003, the combined share of household expenditures spent on transportation and housing for Tampa was 57.7%, the highest of the 28 Metropolitan Statistical Areas in Florida.ⁱ

The gap between what is affordable without the sales tax vs. with the sales tax is due to the fact that Hillsborough County’s transportation infrastructure in future years would handle considerably more people and workers and is better able to accommodate growth with relatively lower levels of congestion.

Table 10.3 highlights the Cost Affordable Plan’s ability to balance a predominantly roadway focused transportation network with increased transit improvements, resulting in a reduction in overall vehicle hours of delay (VHD) on major corridors as compared to the E+C network.

Table 10.3: Where Do Affordable Improvements Impact Congestion The Most?

<i>Major Regional Corridors</i>	“E+C” Network		Cost Affordable (With Sales Tax)		Difference (“No Build” vs. Cost Affordable w/ Sales Tax)	
	<i>Daily VHD</i>	<i>Daily VHD per mile</i>	<i>Daily VHD</i>	<i>Daily VHD per mile</i>	<i>Total Change in VHD per mile</i>	<i>Percent Change in VHD per mile</i>
US 301 from Manatee Co Line to Big Bend Rd	40,203	3,496	3,911	340	-3,156	-90%
US 301 from Fowler Ave to Pasco Co Line	71,913	6,538	8,795	800	-5,738	-88%
N Suncoast Expwy	187,911	3,400	38,933	721	-2,759	-79%
US 41 from Manatee Co Line to Big Bend Rd	11,736	838	4,131	295	-543	-65%
Bearss Ave/Bruce B Downs Blvd from 30 th St to Cross Creek Blvd	77,934	11,990	37,973	5,842	-6,148	-51%
US 92/Gandy Blvd from Pinellas/Hillsborough Co Line to Dale Mabry Hwy	8,997	1,000	5,064	563	-437	-44%
Branch Forbes Rd from SR574 to Thonotosassa Rd	796	265	515	172	-94	-35%
I-4 from I-275 to I-75	35,676	4,460	23,206	2,901	-1,559	-35%
Gunn Hwy from Dale Mabry Hwy to Veterans Expwy	11,052	2,456	7,360	1,636	-820	-33%
Westshore Blvd from Kennedy Blvd to Spruce St/Boy Scout Blvd	955	955	662	662	-293	-31%
US 301 from I-4 to Fowler Ave	5,280	1,123	3,671	781	-342	-30%
Fowler Ave from I-275 to I-75	36,002	5,143	25,711	3,673	-1,470	-29%
CR 39 from SR 674 to SR 60	6,818	413	4,979	302	-111	-27%
US 92/SR 574/MLK Jr. Blvd from I-4 to I-75	14,299	4,085	10,615	3,033	-1,053	-26%
Selmon Crosstown Expwy from Willow Ave to I-75	34,472	3,447	26,635	2,564	-884	-26%
Bearss/Bruce B Downs Blvd from Florida Ave to 30 th St	10,377	4,324	7,837	3,265	-1,058	-24%

VHD = Vehicle hours of delay.

Table 10.3: Where Do Affordable Improvements Impact Congestion The Most?

<i>Major Regional Corridors</i>	"E+C" Network		Cost Affordable (With Sales Tax)		Difference ("No Build" vs. Cost Affordable w/ Sales Tax)	
	<i>Daily VHD</i>	<i>Daily VHD per mile</i>	<i>Daily VHD</i>	<i>Daily VHD per mile</i>	<i>Total Change in VHD per mile</i>	<i>Percent Change in VHD per mile</i>
US 301 from Big Bend Rd to Leroy Selmon Expwy/SR 618	37,380	3,398	28,507	2,592	-807	-24%
Kennedy Blvd from I-275 to Dale Mabry Hwy S	5,757	2,741	4,429	2,109	-632	-23%
US 92/SR 574/MLK Jr. Blvd from I-275 to I-4	6,895	1,642	5,368	1,278	-364	-22%
Westshore Blvd from Gandy Blvd to Kennedy Blvd	5,058	1,405	3,984	1,107	-298	-21%
Gunn Hwy from Veterans Expwy to Hillsborough/Pasco Co Line	34,154	3,971	27,143	3,156	-815	-21%
SR 580/Hillsborough Ave from Pinellas/Hillsborough Co Line to Memorial Hwy	16,332	3,403	13,228	2,756	-647	-19%
I-75 from Manatee Co Line to Big Bend Rd	21,981	1,832	17,913	1,493	-339	-19%
I-75 from I-4 to I-275	56,846	4,441	47,054	3,676	-765	-17%
I-4 from I-75 to Polk County Line	79,478	4,415	67,042	3,725	-691	-16%
US 301 from Leroy Selmon Crosstown Expwy / SR 618 to I-4	12,830	2,851	10,850	2,411	-440	-15%
SR 60 / Courtney Campbell Causeway from Pinellas / Hillsborough Co Line to Eisenhower Blvd	21,114	3,248	18,134	2,790	-458	-14%
Gibson Rd from US 41 to I-75	57	27	49	23	-4	-14%
Boy Scout Blvd / Spruce St from Memorial Highway to Dale Mabry Hwy	6,525	2,610	5,629	2,252	-358	-14%
SR 580 / Hillsborough Ave from Memorial Hwy to Dale Mabry Hwy	21,150	4,230	18,334	3,667	-563	-13%

VHD = Vehicle hours of delay.

Table 10.3: Where Do Affordable Improvements Impact Congestion The Most?

<i>Major Regional Corridors</i>	"E+C" Network		Cost Affordable (With Sales Tax)		Difference ("No Build" vs. Cost Affordable w/ Sales Tax)	
	<i>Daily VHD</i>	<i>Daily VHD per mile</i>	<i>Daily VHD</i>	<i>Daily VHD per mile</i>	<i>Total Change in VHD per mile</i>	<i>Percent Change in VHD per mile</i>
Sheldon Rd from Hillsborough Ave to Ehrlich Rd	6,103	1,052	5,291	912	-140	-13%
US 92 / SR 574 / MLK Jr Blvd from I-75 to Alexander St	18,620	1,552	16,150	1,346	-206	-13%
SR 60 from I-75 to Turkey Creek Rd	31,827	3,183	27,701	2,770	-413	-13%
SR 60 / Adamo Dr from Channelside Dr to 50th St	6,159	2,053	5,435	1,812	-241	-12%
US 41 from Big Bend Rd to Selmon Crosstown Expwy	48,464	4,846	43,343	4,334	-512	-11%
SR 60 / Kennedy Blvd / Memorial Hwy from Westshore Blvd to Courtney Campbell Causeway	5,450	2,180	4,890	1,956	-224	-10%
Veterans Expwy from Hillsborough Ave to Dale Mabry Hwy N	20,534	1,556	18,533	1,404	-152	-10%
I-75 from Big Bend Rd to Selmon Crosstown Expwy / SR 618	35,239	3,524	32,621	3,262	-262	-7%
Brandon Pkwy from I-75 to CR 676 / Lumsden Rd	2,371	988	2,271	946	-42	-4%
Dale Mabry Hwy / US 92 from Kennedy Blvd to Hillsborough Ave	6,400	1,778	6,144	1,707	-71	-4%
SR 574 / MLK Jr Blvd from Dale Mabry Hwy to I-275	7,759	2,586	7,605	2,535	-51	-2%

VHD = Vehicle hours of delay.



Better Air Quality and Reduced Greenhouse Gas Emissions

The MPO plays an important role in addressing the issue of air quality and GHG reductions within the County by specifically developing strategies to reduce emissions from transportation sources. Florida law now encourages MPOs to consider strategies to integrate land use and transportation planning to reduce GHG emissions; as a result the MPO is doing so as part of its Cost Affordable Plan. **Table 10.4** highlights a few of the air quality improvements and reduction in greenhouse gas emissions the Cost Affordable Plan provides as compared to the No-Build network.

Table 10.4: Air Quality and Greenhouse Gas Benefits of Cost Affordable Plan

Transportation Network Scenario	GHG from Roadways (metric tons CO₂e*)	GHG Emissions from Transit (metric tons CO₂e*)	Total GHG Emissions (metric tons CO₂e*)
Existing Network	16,501	96	16,597
“No-Build” Network	25,790	72	25,862
<i>Percent Difference (Existing vs. “No-Build”)</i>	<i>56% Increase</i>	<i>25% Decrease</i>	<i>56% Increase</i>
Cost Affordable Network	23,326	220	23,546
<i>Percent Difference (“No-Build” vs. Cost Affordable)</i>	<i>10% Decrease</i>	<i>305% Increase</i>	<i>9% Decrease</i>

* A metric ton of carbon dioxide emissions is equivalent to 1,000 kilograms or 2,204.62 pounds.

Better Managed Growth

In Hillsborough County, the number of vehicle miles traveled is expected to grow 84% between 2006 and 2035. This increase in number of miles driven can be attributed to an increased number of households that own two or more automobiles with two or more individuals in the work force. Recent trends also highlight how the relationship between where people live, work, and shop have changed resulting in increased distances between each activity.

While growth in the County and the region is expected to continue, strategic land-use and transportation patterns can have an impact on managing County growth. **Table 10.5** compares a County resident’s average travel time and distance to places of employment between the Cost Affordable Plan and the E+C network. This table also outlines the level of transportation infrastructure investment within the urban service area and the increase in the number of trips outside of the urban service area. As compared to the E+C network, the Cost Affordable Plan shows nominal growth in trips and infrastructure outside of the urban service area while reducing the County’s average travel time and distance. This is a result of deliberate land-use and transportation recommendations that focus growth and investment within the urban service area, preserving existing infrastructure investments and protecting rural and environmentally sensitive lands elsewhere in the County.

Table 10.5: Cost Affordable Plan's Ability to Manage Growth

Measure of Effectiveness	"E+C" Network	Cost Affordable (Without Sales Tax)	Cost Affordable (With Sales Tax)	Difference (Without vs. With Sales Tax)
Residents' Average Travel Time to Work (Minutes)	26.3	25.5	24.8	3% Decrease
Residents' Average Travel Distance to Work (Miles)	7.43	7.5	7.44	1% Decrease
Highway Miles Outside of Urban Service Areas (Miles)	285	286	317	10% Increase
Number of Trips Destined for Locations Outside of Urban Service Areas (No. Trips)	232,980	232,920	233,095	>1% Increase

The Cost Affordable Plan also ensures that the use of federal funds for transportation does not have a disproportionate negative impact on minority or other communities protected by Title VI of the Civil Rights Act. Table 10.6 illustrates some of the benefits of affordable improvements for these communities.

Table 10.6: Cost Affordable Plan's Ability to Manage Growth, Infrastructure Support for Title VI Protected Communities

Measure of Effectiveness	"E+C" Network	Cost Affordable (Without Sales Tax)	Cost Affordable (With Sales Tax)	Difference (Without vs. With Sales Tax)
Highway Miles within Economically Disadvantaged Neighborhoods (Miles)	1,472	1,502	1,524	1% Increase
Bus Route Miles within Economically Disadvantaged Neighborhoods (Miles)	698	770	1,073	40% Increase
Economically Disadvantaged Resident's Average Travel Time to Places of Employment (Minutes)	17.90	18.21	17.89	2% Decrease
Percent of Economically Disadvantaged Residents with a ¼ Mile of Frequent Transit Service	57.8%	59.8%	72.0%	12.2% Increase



More Convenient and Accessible Transit

The Cost Affordable Plan makes every effort to provide a balanced and diverse multi-modal transportation system that provides choices that reflect the way we want to live and travel. The Hillsborough County MPO's current adopted Transportation Improvement Program (TIP) focuses 83% of available funds on roadway capacity. The Cost Affordable Plan identifies new funds to add an expanded public transit system into the mix. **Table 10.7** summarizes the future ridership, as compared to the not expanding the transit system (the No-Build Network).

**Table 10.7: Transit Service Benefits of Cost Affordable Plan
Forecast Daily Transit Riders by Service Type**

Measure of Effectiveness	"E+C" Network	Cost Affordable (Without Sales Tax)	Cost Affordable (With Sales Tax)	Difference (Without vs. With Sales Tax)
Local Bus	40,684	38,190	48,198	26% Increase
Express/Commuter Bus	836	6,292	12,261	95% Decrease
Short-Distance Rail	631	776	24,514	3,159% Increase
Total	42,151	42,258	84,973	201% Increase

As a result of this increased investment in transit options and the level of service provided, there are significant increases in the number of County residents who are in close proximity to frequent transit service. **Table 10.8**, **Map 10.7**, and **Figure 10.4** highlight these changes in service coverage.

**Table 10.8: Transit Service Benefits of Cost Affordable Plan
Percent of Population in Proximity to Transit Services**

Measure of Effectiveness	"E+C" Network	Cost Affordable (Without Sales Tax)	Cost Affordable (With Sales Tax)	Difference (Without vs. With Sales Tax)
Within 1/3 Mile of Transit Service Arriving Every 15 Minutes or Sooner	7.5%	13.7%	37.7%	24% Increase
Within 1 Mile of Transit Service Arriving Every 15 Minutes or Sooner	17.0%	31.4%	61.1%	29.7% Increase
Within 1/3 Mile of Transit Service Arriving Every 30 Minutes or Sooner	32.7%	35.1%	48.3%	13.2% Increase
Within 1 Mile of Transit Service Arriving Every 30 Minutes or Sooner	59.3%	62.4%	81.1%	18.7% Increase
Within 3 Miles of a Park and Ride Lot	74.5%	85.4%	93.7%	8.3% Increase
Within ¼ Mile of a Local Bus Route (for ADA accessibility)	60.0%	63.4%	78.3%	14.9% Increase

Hillsborough County MPO 2035
Long Range Transportation Plan
Map 10-7 2035 Cost Affordable
Transit Level of Service



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P.O. Box 1110 Tampa, Florida 33601-1110
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www.hillsboroughmopo.org



Legend

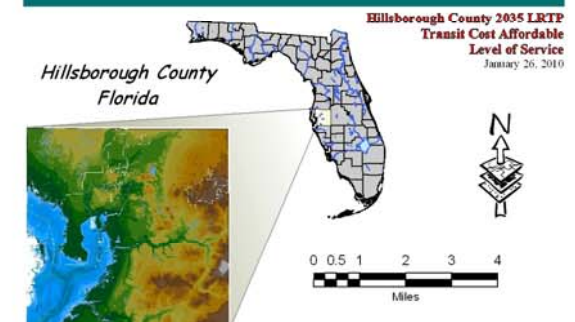
TRANSIT LEVEL OF SERVICE

- Frequent Service
- Somewhat Frequent Service
- Basic Service
- Peak Hour Service
- Flex Route Service Areas
- Transit Supportive Density (4.5 households or 4 jobs per acre.)
- Quarter Mile Service Area
- Quarter Mile Service Area

ADOPTED :
December 9, 2009

- Urban Service Area
- Hillsborough County
- Pinellas County
- Tampa
- Plant City
- Temple Terrace
- Water and Bay
- Streams/Rivers
- County Boundary
- Major Roads
- Airports
- Airfields

Locator Map

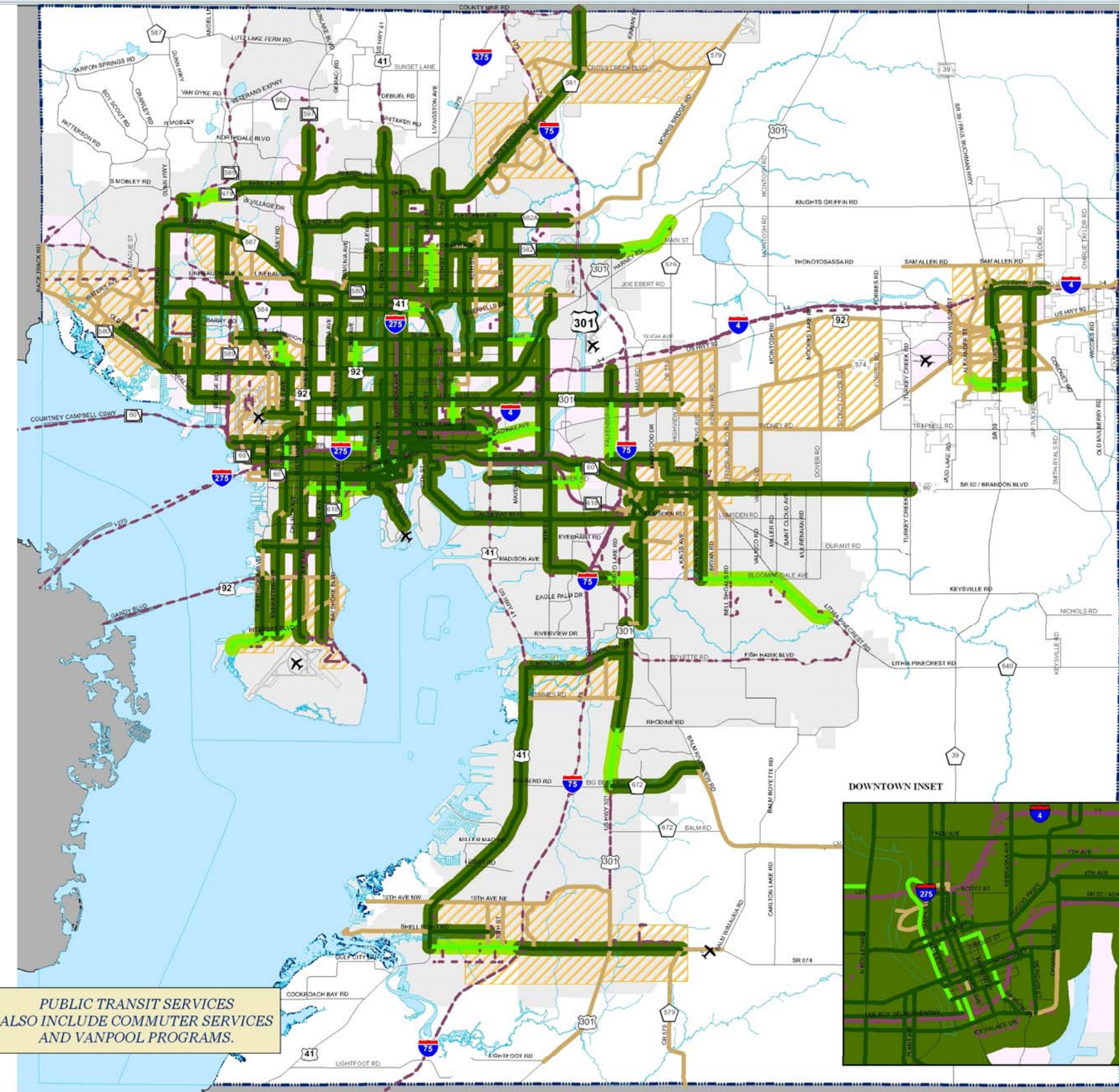


DATA SOURCES: Base map, roads, water from Hillsborough County City-County Planning Commission; Parcel Lines and data from Hillsborough County Property Appraiser; Wetlands from DWFWD; Significant Wildlife Habitat from Planning and Development Management, based on satellite imagery. Only wetlands greater than 40 acres depicted.

REPRODUCTION: This sheet may not be reproduced in part or full for sale to anyone without specific approval of the Hillsborough County City-County Planning Commission.

ACCURACY: It is intended that the accuracy of the base map comply with U.S. National Map accuracy standards. However, such accuracy is not guaranteed by the Hillsborough County City-County Planning Commission. This map is for illustrative purposes only. For the most current data and information, see the appropriate source.

File Location: O:\gis\m\proj\2035 LRTP\TransitLevelofService\Map 10-7 2035 LRTP Transit Cost Affordable Level of Service.mxd
Author: Roger W. Mathew - GIS Analyst



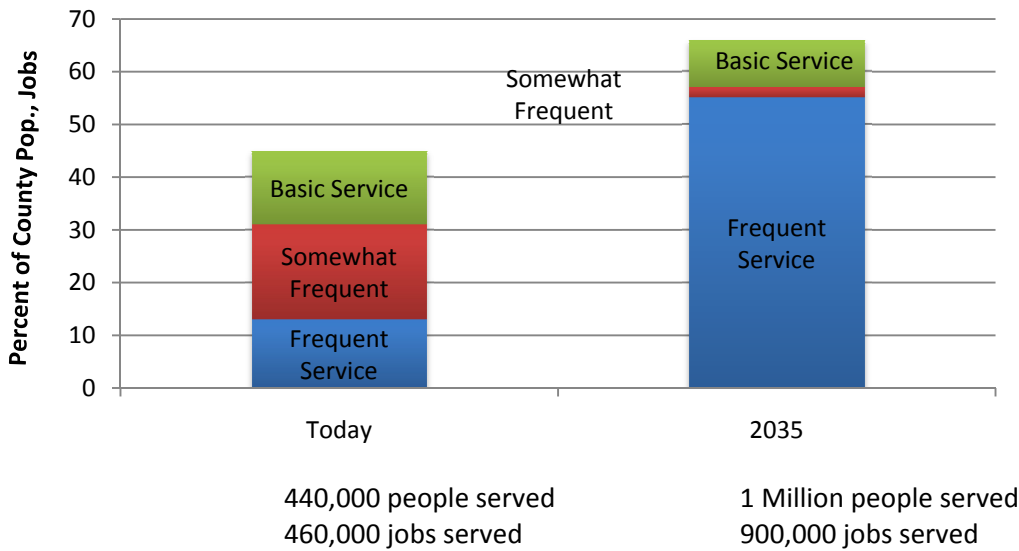
PUBLIC TRANSIT SERVICES
ALSO INCLUDE COMMUTER SERVICES
AND VANPOOL PROGRAMS.



Map 10.7:
2035 Cost Affordable Transit Level of Service

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Figure 10.4: Percent of Residents and Jobs within in ¼ Mile of Transit Service

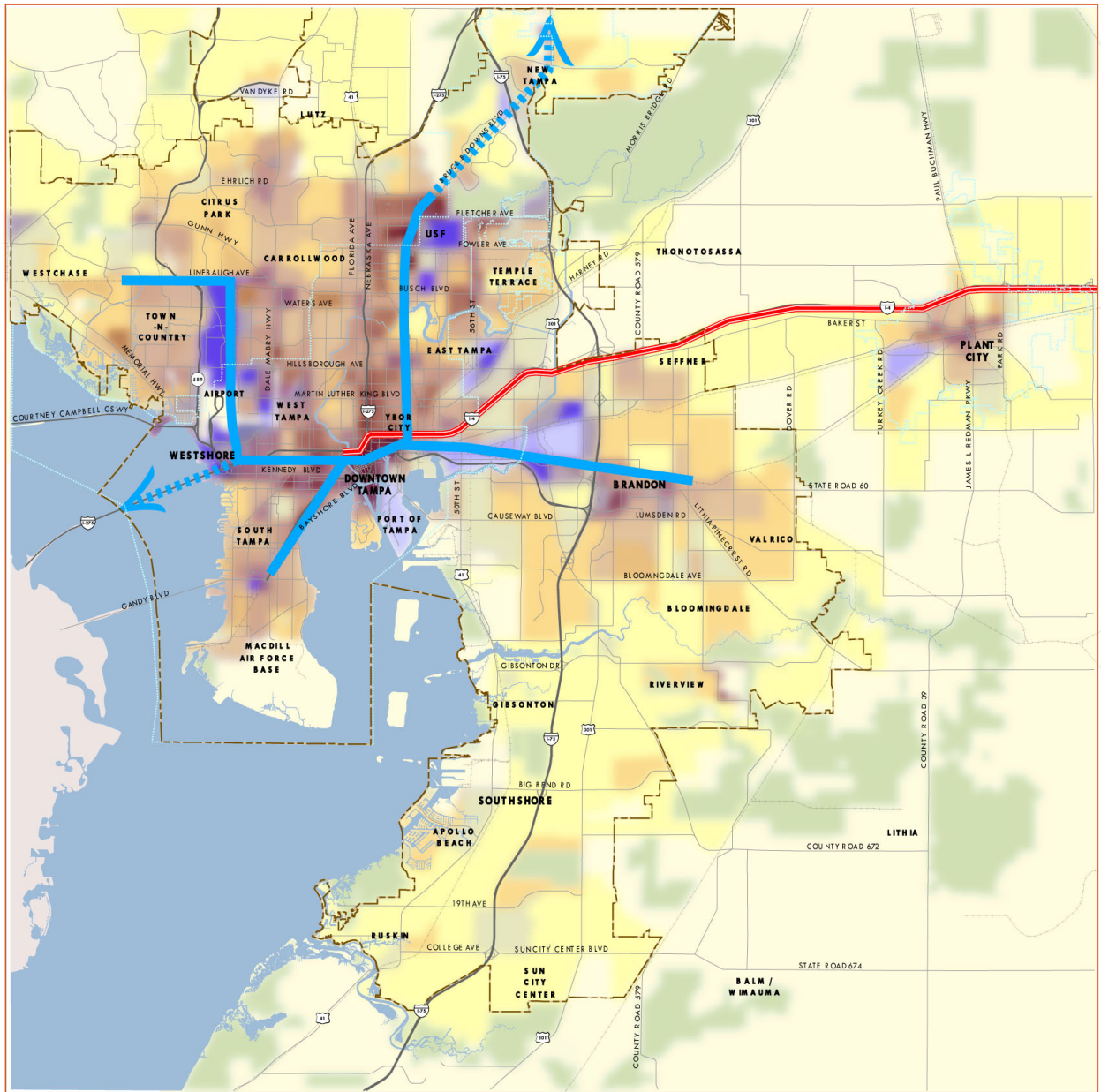


Map 10.8 further illustrates the Cost Affordable Plan’s emphasis on rail transit investment and how well it serves the densely populated areas of the County.

How Does the 2035 Plan Help Achieve the Goals & Objectives?

At the outset of the long range planning process, the MPO established a set of goals and objectives for the 2035 Plan. These were translated into quantifiable performance measures capable of being forecast by the Tampa Bay Regional Planning Model. Using these performance measures, Table 10-9 shows how the Plan performs when compared to the “no build” network and the 2006 baseline conditions.

Map 10.8: Jobs and Population Density in Proximity to Cost Affordable Rail Transit Investments



- Urban Service Area
- City Limits
- Environmental Lands
- Cost Affordable Rail
- Affordable Contingent upon Agreements with Adjacent Counties
- High Speed Rail

0 1 2 4 Miles



Source: Hillsborough County City-County Planning Commission: 2035 Long Range Transportation Plan Socioeconomic Projections, November, 2008

Table 10.9: How the Plan Performs County-Wide

Performance Measures	2006 Conditions	"No Build" Network	Cost Affordable (With Sales Tax)
Source: TBRPM Alternative Number	Year_2006_Base	Year_2013_EC	CAA21
Improving Safety			
Predicted # of Daily:			
-Accidents	120	205	202
-Injuries	77	131	129
-Fatalities	0.46	0.80	0.79
Lane Miles of Evacuation Routes	1,922	2,089	2,211
Relieving Traffic Congestion			
Overall Volume / Capacity (V/C) - Unweighted	0.63	1.08	1.02
% Vehicle Miles of Travel on Links with V/C of:			
-0.00 to 0.90	53.0%	16.7%	20.3%
-0.91 to 1.00	13.8%	6.1%	6.3%
-1.01 to 1.20	20.4%	12.9%	13.2%
-1.21 to 1.50	10.1%	23.8%	28.5%
-Greater than 1.50	2.8%	40.6%	31.8%
Total Vehicle Hours of Delay	355,637	2,166,080	1,629,232
Supporting Public Transit, Biking & Walking			
Total Transit Route Miles			
-Total Bus	1,370	1,254	1,935
-Total Rail	2	3	59
Daily Transit Vehicle Hours	2,754	3,102	7,860
Daily Transit Ridership			
-Local Bus Boardings	28,684	57,008	87,291
-Express Bus Boardings	435	898	26,085
-Rail Boardings	296	1,230	47,096
Transit Mode Share within Hillsborough County	0.5%		1.2%
Transit Mode Share from USF to Downtown Tampa	9.2%	7.95%	12.3%
Transit Mode Share from Westshore to Downtown Tampa	11.39%	13.43%	11.96%
% of Population within 1/3 mile of Transit Service with < or = 15 Minute Frequency (TLOS B or better)	6.0%	7.5%	37.7%
< or = 30 Minute Frequency (TLOS D or better)	28.5%	32.7%	48.3%
% of Jobs within 1/3 mile of Transit Service with TLOS B or better	7%	15.5%	17.3%
TLOS D or better	2.5%	6.3%	8.7%
% of Population & Jobs within 1/3 mile of Transit Service with (2009)			
TLOS B or better	13%	23%	55%
TLOS D or better	31%	39%	57%
TOTAL % with Transit Service	45%	53%	66%

Table 10.9: How the Plan Performs County-Wide

Performance Measures	2006 Conditions	"No Build" Network	Cost Affordable (With Sales Tax)
Major Roads with Sidewalk (miles)		324.03	558.32
Major Roads with Bikeways (miles)		368.52	600.64
Promoting Regional Connections & Mobility			
Vehicle Hrs of Delay on Regional Corridors in Hills. Co.	203,628	1,124,676	870,756
Average Trip Length by Trip Purpose (Minutes)			
-Home Based Work	21.33	26.25	24.87
-Home Based Other	17.45	24.78	22.55
Average Trip Length by Trip Purpose (Miles)			
-Home Based Work	7.86	7.40	7.34
-Home Based Other	6.02	6.58	6.41
-Non Home Based	6.66	6.58	6.52
Preserving Natural Environment			
Predicted Daily Fuel Consumption (gal per day)	1,940,038	3,469,002	3,435,150
Improving Mobility for Disabled and Elderly			
% of Population within 3/4 mile ADA Service Area	57.8%	60.0%	77.4%
Preserving and Maximizing Use of Existing System			
Total Centerline Miles	1,331	1,367	1,405
Total Lane Miles	4,169	4,428	4,656
% Lanes Miles Added to Existing System	-	6.2%	11.7%
% Freeway Lane Miles added to Existing System	-	3.7%	8.3%
Slowing Urban Sprawl			
Trip Ends Outside Urban Service Area	181,394	233,194	232,820
Lane Miles Outside Urban Service Area	267	285	317
Fostering Economic Benefits			
User Costs (\$ per day)	12,710,377	22,727,564	22,505,776
Avg. Transit Mode Share to Major Activity Centers	0.3%	0.2%	0.5%
Avg. Congested Auto Speed to Major Activity Centers	21.66	14.04	18.24
Average V/C ratio, weighted by Truck Usage (Truck VMT)	0.92	1.45	1.38

REFERENCES

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- ⁱ A Heavy Load: The Combined Housing and Transportation Burdens of the Working Families, Center for Housing Policy, October 2006, page 3.

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