# HILLSBOROUGH COUNTY METROPOLITAN PLANNING ORGANIZATION

2035 Long Range Transportation Plan

# Needs Assessment Segment Summary: Downtown Tampa to University of South Florida

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## 1.0 INTRODUCTION

The Hillsborough County Metropolitan Planning Organization (MPO) is updating the Long Range Transportation Plan (LRTP) for 2035. This update will include a Problem Statement/Needs Assessment for nine potential rapid transit corridors in Hillsborough County. The nine corridors are:

- Downtown Tampa to University of South Florida
- University of South Florida to Wesley Chapel
- Downtown Tampa to Tampa International Airport
- Tampa International Airport to Carrollwood
- Busch Boulevard/Linebaugh Avenue Corridor West
- Busch Boulevard/Linebaugh Avenue Corridor East
- Brandon to Downtown Tampa
- West Shore to Pinellas County
- Downtown Tampa to South Tampa

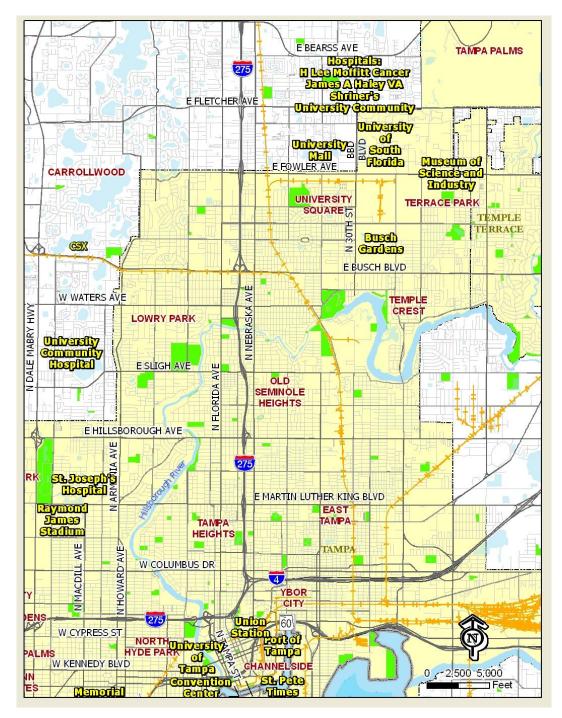
The "Problem Statements" for these corridors will document current and future transportation system issues in each corridor, within the LRTP's time horizon, providing information for future decision-making and conception of alternative solutions.

## 2.0 STUDY AREA DESCRIPTION

The Downtown Tampa to University of South Florida (USF) corridor is approximately 13 miles long (See Figure 1). Throughout the Tampa Bay region, central Hillsborough County exhibits the most congestion and opportunity for transit development. The study corridor is generally bounded by E. Bearss Avenue on the north, N. 40<sup>th</sup> Street on the east, Downtown Tampa on the south, and N. Florida Avenue to the west. The study area includes generators such as Downtown Tampa, the USF area, Ybor City, and surrounding areas of development. Major north-south roadways include N. Florida Avenue, I-275, N. Nebraska Avenue, N. 22<sup>nd</sup> Street, N. 30<sup>th</sup> Street, and N. 40<sup>th</sup> Street. Major east-west roadways include E. Fletcher Avenue, E. Fowler Avenue, Busch Boulevard, E. Hillsborough Avenue, I-4, and State Road (SR) 60.

The study corridor is traversed by a number of major and minor streets and highways built and maintained by a variety of state and local government transportation agencies. These include the Florida Department of Transportation (FDOT) District Seven, Hillsborough County, the Tampa-Hillsborough Expressway Authority, and the City of Tampa. The primary roadway system serving the study area is a mix of limited access freeways, toll roads, divided and undivided arterial streets, and major collectors. These travel patterns, focused on major centers of commercial activity, generate substantial transportation demand within the study area, especially during peak hours.

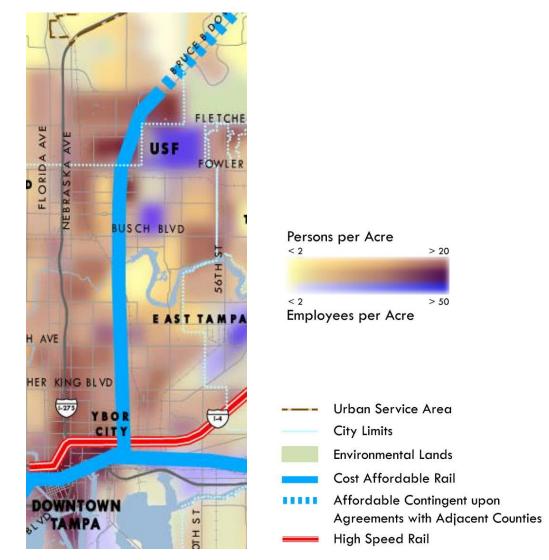
#### Figure 1 Study Area



Because several significant roadways have been identified as "constrained" due to neighborhood, policy, right-of-way, and environmental constraints, flexibility in developing transit service expansions like bus lanes or station area infrastructure is limited. Other existing rights-of-way, such as existing rail rights-of-way, must be considered to facilitate premium transit opportunities that are precluded by roadway constraints.

Residential land use within the study area is mainly characterized by single- and multi-family homes, with higher densities surrounding USF. There is also an extensive amount of light commercial development, scattered heavy commercial development, and public use, especially in the Downtown Tampa area and along Florida and Nebraska Avenues. More heavy commercial land use exists along the USF area. Tourist attractions in the study area include Busch Gardens and the Museum of Science and Industry. The corridor passes through or near several historic districts, including Seminole Heights and Ybor City. The City of Tampa has designated many of the communities in the corridor as a Community Reinvestment Area, meaning each will emphasize transit-oriented, mixed-use land uses as they develop.

MPO projections indicate that Hillsborough County's population and employment will increase by the year 2035 to 1.7 million persons and 1.2 million jobs respectively. The future landscape and concentration of the county's population and employment for the corridor in 2035 is shown in Figure 2.



## Figure 2. 2035 Long Range Transportation Plan (Excerpt) Affordable Rail with Future Density of Population and Employment

## 3.0 THE TRANSPORTATION PROBLEM

## 3.1 Travel Patterns

#### 3.1.1 Select Link Analysis

An analysis of travel patterns was completed on chosen roadway segments in the corridor, using the Tampa Bay Regional Planning Model (TBRPM) Version 7 for a select link analysis. The select link analysis depicts trip patterns for vehicles using a particular 'link' in the roadway network to visualize the amount of traffic on the link, as well as where the trips' general origin and destination. The select link analyses for the chosen links in the corridor are summarized.

#### N. 30th Street: Just north of Busch Boulevard

This link represents the northbound direction on N. 30th Street. With an estimated traffic volume of 6,042, a large portion of the traffic originates from the New Tampa area via Bruce B. Downs Boulevard southbound, the Citrus Park area via Busch Boulevard eastbound, and from Downtown Tampa via I-275. A small portion of this traffic comes from Brandon, Temple Terrace, St. Petersburg, and Pasco County. Figure 3 depicts the results of the select link analysis.

#### I-275: Between Busch Boulevard and Fowler Avenue

Most commuters travelling across and between Hillsborough County, Pinellas County (Clearwater and St. Petersburg) and Pasco County (Wesley Chapel) use the links for I-275, primarily a north-south linkage. The traffic is generally destined to the University of South Florida, Downtown Tampa, and the West Shore areas. Large traffic volumes travelling this link are local commuters who live in Hillsborough County. A smaller share of traffic includes regional commuters from Pinellas County (St. Petersburg and Clearwater) travelling to the University of South Florida area and those travelling between Hillsborough County and Pasco County. Travel patterns show heavy traffic volumes along I-275 between Downtown Tampa to E. Bearss Avenue and continuing towards Wesley Chapel Boulevard. Approximately half of the trips on this link are associated with the I-275/I-75 apex corridor, while the other half is associated with other areas. Figure 4 depicts the results of the select link analysis for I-275 northbound. Figure 5 depicts the results of the select link analysis for I-275 southbound.

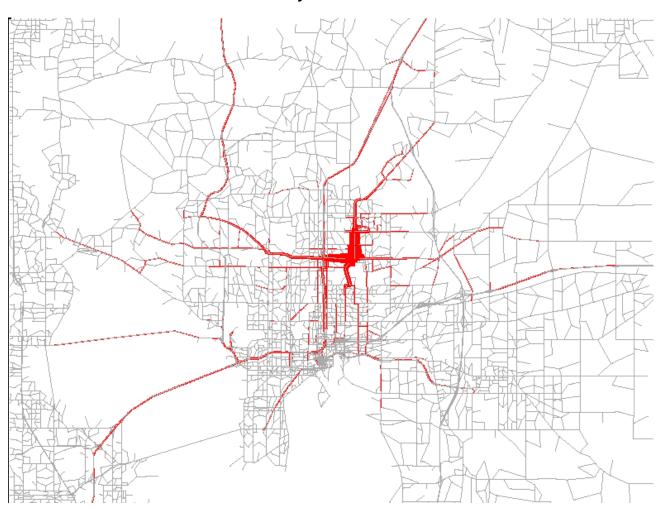


Figure 3 Select Link Analysis – N. 30<sup>th</sup> Street

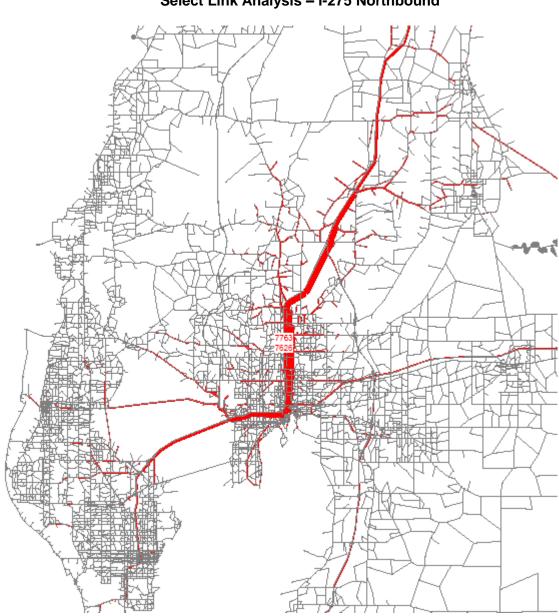


Figure 4 Select Link Analysis – I-275 Northbound

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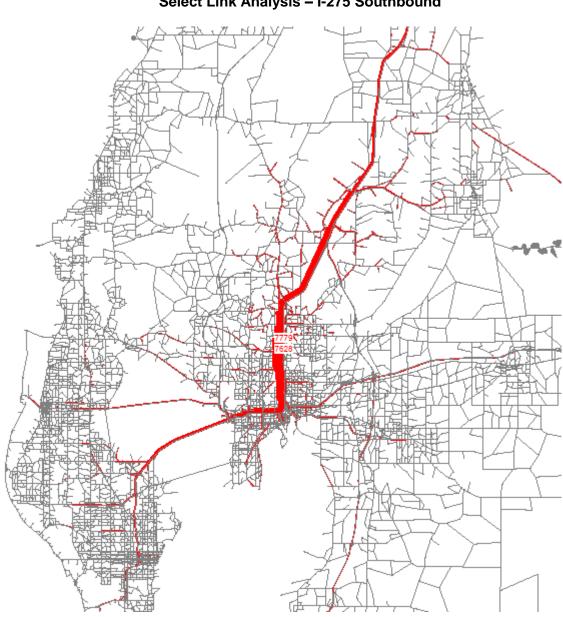


Figure 5 Select Link Analysis – I-275 Southbound

#### 3.1.2 Travel Demand

Travel patterns are measured as person trip flows between origin and destination points (O/D). These points are generally transportation analysis zones (TAZ) or predefined districts, which are modeled using a variety of supporting data.

An analysis of travel demand conducted for the Tampa Bay Area Regional Transportation Authority's (TBARTA) Master Plan looked at person trip flows between "super districts" (large land areas) in 2035 and 2050. The analysis showed that in 2035, 414,466 trips were destined for the Downtown Tampa Central Business District (CBD), while another 1.4 million trips were forecasted for the Northwest Hillsborough County region, which includes USF. These trips account for over 17 percent of the total 2035 trips for the seven-county TBARTA region. The regional importance of the two districts within the study corridor is evident in that over 60 percent of the trips to the districts are from other regional districts.

The corridor between Downtown Tampa and USF attracts a large number of trips. Density analysis within the study corridor and attractions, show both home-based work trips and total trips within the study area. Based on the production and attraction densities, trips generally flow to Downtown Tampa, USF, and northern areas of Tampa.

TBARTA's analysis also forecast future ridership demand for a proposed regional network of rail and bus services. Figure 6 depicts strong demand in 2035 for transit service in this corridor, with regional connections. Sections of this corridor are among the highest in the eight-county regional network, in terms of demand for transit service.

#### 3.1.3 Travel Markets

The following areas have been identified as critical travel markets for the corridor in response to the existing and future travel patterns, land use patterns, and demographic trends. Due to high levels of traffic and a strong capacity for future growth, the following areas are likely to benefit from fixed-guideway transit facilities in this corridor.

- Downtown Tampa is a CBD located just east of the Tampa Peninsula. Downtown Tampa has an array of local attractions, including the St. Pete Times Forum, the Florida Aquarium, the Tampa Convention Center, Tampa General Hospital (a regional hospital), the Tampa History Center, the Tampa Museum of Art, the Channelside District; the Tampa Bay Performing Arts Center, and several local parks, recreational facilities, and hotels. The daily traffic coming into and out of the area generates congestion during peak hours of traffic.
- The University of South Florida, located on almost 2,000 acres of land in North Tampa bordered by Fowler Avenue in the south, Fletcher Avenue in the north, Bruce B. Downs Boulevard to the west, and 50th Street to the east, is a major attraction for students and employment, and is prone to congestion and increased travel times. Heavy commercial land use lines Fowler Avenue, Bruce B. Downs Boulevard, Fletcher Avenue, and surrounding streets, while higher-density residential uses comprise the remaining areas. The area's wide streets, long crosswalks, sprawled development, and heavy traffic flow create a non-pedestrian friendly environment.

• University Area Community Plan includes designation of an Urban Infill and Redevelopment Area. The geographic limits of this area are defined as the area bounded by I-275 to the west, Skipper Road to the north, Bruce B. Downs to the east, and Fowler Avenue to the south. Within this area, economic development; job creation; housing; transportation; crime prevention; neighborhood revitalization and preservation; and land use incentives will be promoted. As such, this area has been recognized as a significant area for redevelopment and many city and county efforts are focused on this area.



Figure 6 TBARTA Ridership Demand for Rail and Bus Service 2035 – Hillsborough County

FILLSBOROUGH Carrollwood Oldsmar Tampa CBD Transfer Point Westshore Transfer Point Temple Terrace 4 Mid-Term Supporting Network Plant City Local Bus 5-30 Minute Servi Tampa Nestsh Local Bus 60 Minute Service Express Bus/Limited Stop Bus Rapid Transit Water Transit TOLL Major Roads 618) 275 Brandon State and Federal Lands Water Management District La Water Carillon

Needs Assessment Segment Summary Downtown Tampa to USF

- *Tampa General Hospital* is one of the largest hospitals in the state of Florida with 988 beds and over 6,000 employees. Tampa General serves patients from a dozen surrounding communities, attracting thousands of employees, patients, and visitors 24 hours a day.
- University of South Florida area medical facilities include four major hospitals within the Tampa Bay region: the University Community Hospital, the H. Lee Moffitt Cancer Center, the Shriner's Hospital for Children, and the Veteran's Administration Hospital. These facilities draw thousands of employees, patients, and visitors daily. The facilities provide 24-hour service and also include medical clinics for the under privileged. Additionally, numerous medical, and medical related facilities exist in this area due to the presence of the four major hospitals.
- Northern Residential Areas, including the Belmont area, Jackson Heights, Old Seminole Heights, College Hills, Live Oaks Square, Woodland Terrace, Sulfur Springs, North Tampa, East Tampa, University Heights, and other residential areas are located between the USF campus and Downtown Tampa. These neighborhoods lie between Nebraska Avenue and N. 40th Avenue. There is also heavy commercial and industrial development and public properties in between these areas. Arterial roads within these neighborhoods experience heavy traffic because they are located in proximity to both I-4 and I-275. The mix of commercial and residential land uses causes large amounts of commuter traffic in the morning, and the commercial attractions also generate traffic throughout the day. Industrial land use presents opportunities for locating a transit maintenance facility. This area also includes neighborhoods that have higher degrees population that are transit dependent. These populations include the elderly, those under 16, and households without vehicles. Lack of transit facilities in these areas place the residents at a disadvantage in reaching their necessary destinations.
- *Ybor City,* a Cultural and Entertainment District located mainly along 7th Avenue just to the Northeast of Downtown Tampa, is a mixed-use area with access to both the Streetcar, connecting to Downtown Tampa, and several Hillsborough Area Regional Transit (HART) bus routes. Ybor City's one- and two-lane streets are lined with small shops, restaurants, office buildings, and a Hillsborough Community College campus. Ybor City experiences heavy peak hour traffic during weekday peak hours, and, because of its other recreational attractions, generates substantial amounts of traffic on its small streets on weekends.
- *Busch Gardens* is a theme/amusement park located on Busch Boulevard between 30<sup>th</sup> Street and 40<sup>th</sup> Street. It attracts both local residents and out-of-town visitors, creating travel delays during peak and off-peak hours.
- *City of Temple Terrace* is adjacent to the northeast corner of the study corridor. The City is a center of pedestrian and bicycle activity. A number of the alternate mode trips are destined to the study corridor, specifically the USF area's schools, medical facilities, places of employment, and shopping.
- Community Redevelopment Areas (CRAs) have been designated by the City of Tampa (some already discussed in this list) as targets for redevelopment and urban infill projects within the county. These areas include Tampa's Central Business

District, Tampa Heights, the Channel District, East Tampa, Central Park, and Ybor City.

 Regional Areas, including other areas of central, eastern and southern Hillsborough County, Polk County, and central and eastern Pasco County, also generate trips that use the corridor in reaching regional destinations of employment, regional shopping, and Tampa International Airport (TPA).

### 3.2 Traffic Congestion

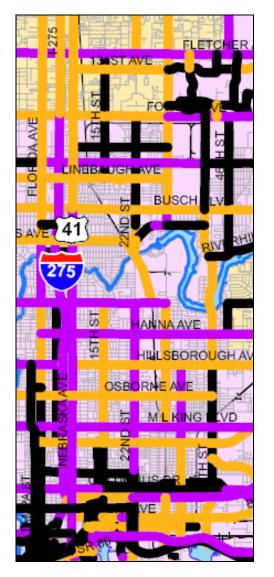
Congestion can be measured using a volume to capacity (v/c) ratio, a method used to determine how many cars are actually using the road, compared to the road's intended capacity. A summary of 2035 v/c ratios at roadway links within the study area is provided in Table 1. By 2035 these roadways will all carry more vehicles than their intended design capacity (i.e. v/c ratios greater than 1.0), as shown in Figure 7. By 2035, most roads within the study area are projected to exhibit a v/c ratio higher than 1, and a high number of roads will display ratios greater than 1.25.

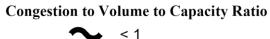
Roadway	2006 V/C	2035 V/C	% Increase
7th Avenue @ Nebraska Avenue	1.43	1.6	11.9%
Interstate 4 @ Interstate 275	2.34	2.81	20.1%
Nebraska Avenue @ Martin Luther King, Jr. Boulevard	0.4	1.39	247.5%
Hillsborough Avenue @ Interstate 275	1.46	2.31	58.2%
Sligh Ave @ Interstate 275	1.07	1.59	48.6%
Busch Boulevard @ Interstate 275	1.41	1.79	27.0%
Nebraska Avenue @ Sligh Avenue	0.7	1.66	137.1%
Fowler Avenue @ Interstate 275	2.11	2.46	16.6%
Bruce B. Downs Boulevard @ Fletcher Avenue	1.33	2.03	52.6%
Fletcher Avenue @ Bruce B. Downs Boulevard	1.76	2.31	31.3%
Interstate 4 @ 50th Street	0.87	1.49	71.3%
Average V/C Ratio	1.29	1.85	68.5%

Table 1 Volume to Capacity Ratios

In addition, a few of the major roadways in the corridor cannot be widened further due to a variety of constraints. For 2035, most of the main north-south and east-west roadways are classified as constrained, deficient, or both. These roadways have experienced a shift of over 65 percent in volume to capacity, illustrating the travel demand growth within the study area. Increased travel demand and decreased road capacity will lead to high levels of congestion. With roadways overburdened by large volumes of vehicles and little opportunity to expand their capacity, transportation options must be expanded in order to accommodate future populations of commuters and residents.

Figure 7 2035 Congestion with Existing and Committed Improvements







## 3.3 Travel Times

As part of the 2035 Long Range Transportation Plan, the MPO analyzed and compared travel times in this corridor for current bus service (based on HART schedules), potential rail transit, and 2035 driving time at an average daily congested speed. Rail was assumed to travel in separate right-of-way, such as the existing freight rail corridor in the vicinity of 30<sup>th</sup> Street, while auto and bus were assumed to use parallel roadways. Endpoints were USF near the University Community Hospital and a station on Franklin Street in Downtown Tampa.

Downtown Tampa to USF

By Rail	28 minutes	
By Auto, 2035	31 minutes	11% faster by rail
Current Bus Service	45 minutes	61% faster by rail

Driving times are at average daily congested speed between Downtown Tampa and USF, forecast for 2035 using Tampa Bay Regional Planning Model Cost-Affordable Network. Current bus service is based on published HART bus schedules and Google Transit. Times are between the closest major bus stops, and may be an average of the travel time in each direction. Rail travel times are based on analyses prepared for TBARTA Master Plan, provided courtesy of TBARTA and FDOT.

#### 3.4 Safety & Security

Between 1995 and 2007, Hillsborough County had a higher crash rate (per million vehicle miles traveled (VMT)) and injury rate (per VMT) than the state of Florida.

The study corridor possesses over 13 of the top 50 crash intersections and nine of the top 50 crash segments within the county (See Figure 8).

Within the study corridor, crash rates for bicycles and pedestrians also trend higher compared to the county (See Figure 9).

The Safety Technical Memo prepared for the MPO's LRTP offers a variety of recommendations to improve the safety of the most dangerous intersections and roadway segments in the county. Recommendations address many major issues common among all intersections and segments, including red light running, speeding and aggressive driving, bicycle and pedestrian safety, sight distance, roadway geometry, and incidence management, among others.

The Tampa Bay Regional Planning Council completed the "Tampa Bay Region Hurricane Evacuation Study" in 2006. When estimating evacuation clearance times, roadway segments with the highest volume ratios were considered as a "critical link" in the roadway system. These segments are not only carrying evacuees, but also the emergency responders and non-evacuees. While congestion would be widespread throughout the area during an evacuation, the study lists several locations where congestion would control the overall traffic flow for the area. In the study corridor, the I-275/I-4 interchange is classified as a "critical link."

There are several evacuation routes within the corridor: east west routes are I-4, Fletcher Avenue, East Busch Boulevard, Hillsborough Avenue, and north south routes are I-275 and Nebraska Avenue.

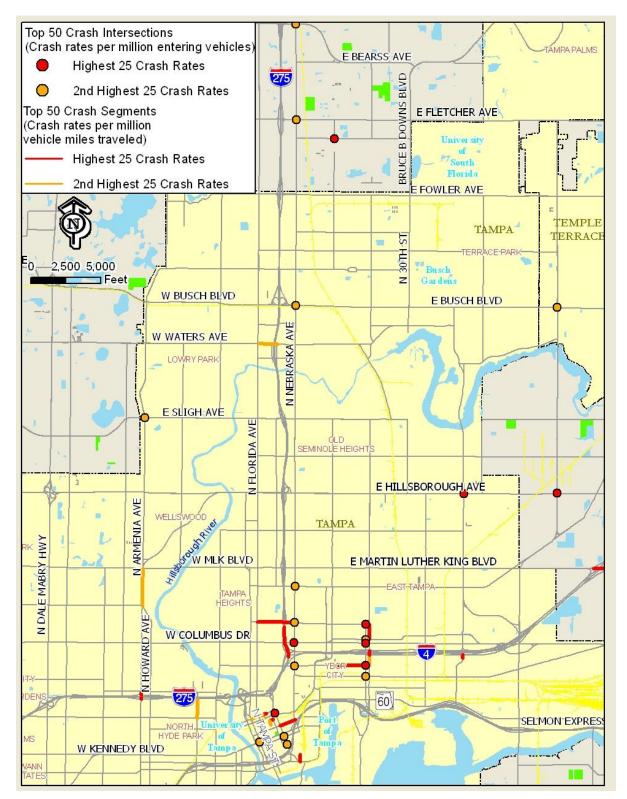


Figure 8 Top 50 Crash Locations – Intersections and Segments

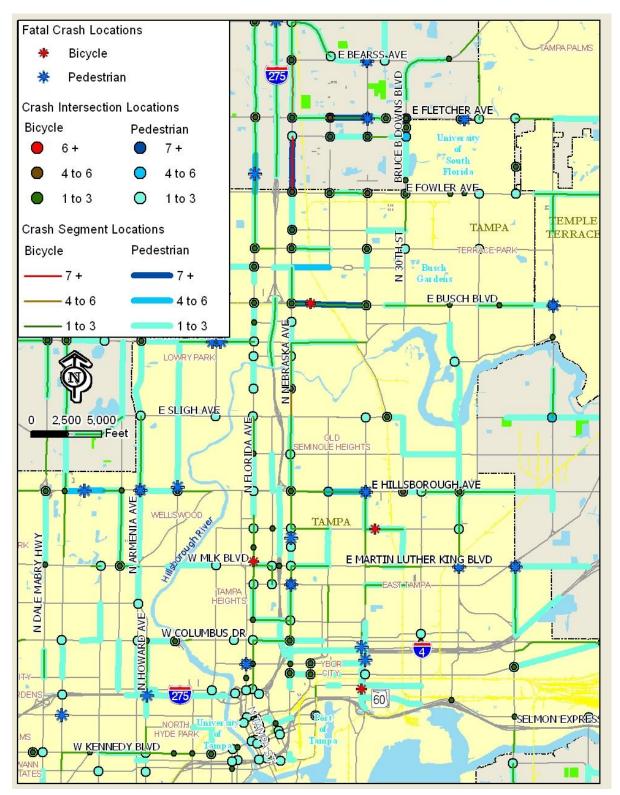


Figure 9 Crash Locations – Pedestrian and Bicycle

### 3.5 Modal Interrelationships

#### 3.5.1 Hillsborough Area Regional Transit Authority

The corridor today is served by many major bus routes within the study area. Many of them are top passengers-per-revenue hour routes. These routes are included in the 37 routes – 27 local routes and 10 express routes – that are destined to, or travel within the study corridor. Table 2 highlights HART ridership comparisons between fiscal year 2006 and year-to-date 2009.

HART is currently evaluating this corridor as part of its Alternatives Analysis process with the Federal Transit Administration's New Starts program. The Alternatives Analysis is a planning study to identify and evaluate alternative transit modes and potential alignments for a major transit investment to improve mobility.

HART Service: Complete FY	2006	2007	2008	2009*	% Increase
Weekday Average Ridership	35,959	37,311	39,974	39,777	10.6%
Weekday Average Express Bus Ridership	758	937	1,071	936	23.5%
Saturday Ridership	16,979	17,856	19,019	18,951	11.6%
Sunday Ridership	8,495	9,656	10,715	10,261	20.8%
Total	62,191	65,760	70,779	69,925	12.4%

#### Table 2 HART Ridership Trends

\*Year-to-Date Ridership April 2009

As part of the LRTP update, the MPO evaluated transit level of service (TLOS) for all roads where public bus service is operated in Hillsborough County. TLOS reflects transit service levels (bus frequency and daily hours of service) and transit accessibility (spatial coverage and transit versus auto travel time).

Many parts of the corridor are considered to be a transit supportive density today, at 4.5 households or 4 jobs per acre, as shown in Figure 10.

Alhough some service is provided to the transit supportive areas, many of the major roadways in the corridor exhibit low levels of service. Areas with basic service (averaging wait times greater than 30 minutes) or peak-hour focused service include:

- Fletcher Avenue
- Fowler Avenue
- Busch Boulevard
- Waters Avenue

- Parts of Sligh Avenue
- I-275
- East-west routes in Downtown Tampa

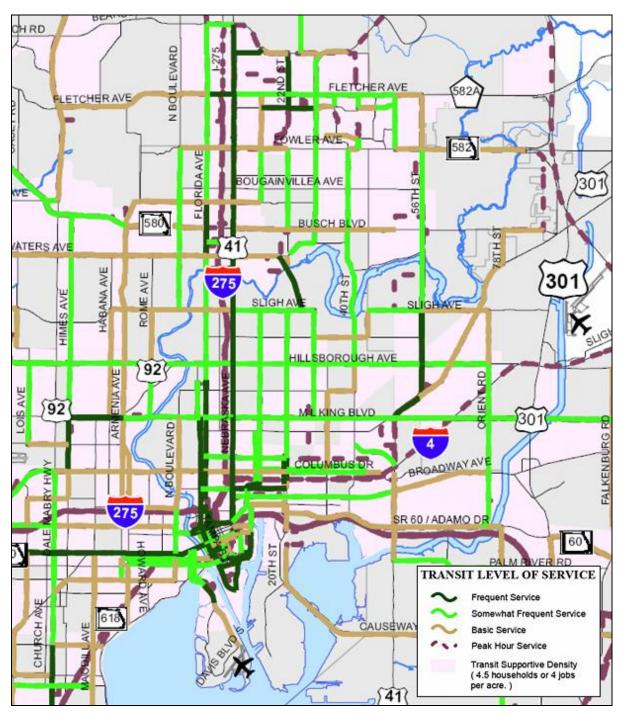


Figure 10 Existing Local Transit Level of Service – Corridor Area

#### 3.5.2 Streetcar

Tampa's Tampa Electric Company (TECO) Streetcar Service, which is at the southern end of the study corridor area, runs from Dick Greco Plaza Transportation Center in Downtown Tampa to Centennial Park Station in Ybor City, with headways ranging from 15 to 30 minutes. The Streetcar stops at the Tampa Convention Center, the St. Pete Times Forum, Channelside Bay Plaza, the Florida Aquarium, the Tampa Port Authority, the University of South Florida (USF) Downtown Campus, and Ybor City. Weekday service does not begin until 11:00 AM. Due to its limited schedule, the Streetcar cannot be regarded as a major commuter line, but provides circulation among some major destinations in the downtown area. HART recently began construction of a 1/3-mile extension of the Streetcar along Franklin Street to Whiting Street and the Fort Brooke parking garage. The extension has an anticipated operating date of December 2010.

### 3.5.3 Tampa Bay Area Regional Transportation Authority

TBARTA has developed a Regional Transportation Master Plan for the greater Tampa Bay region – from Citrus County to Sarasota County – for the Mid-Term (2035) and Long-Term (2050).

The TBARTA Master Plan's Mid-Term Vision proposes a short-distance rail link in this corridor. Via this segment, travelers would have the ability to continue on rail to Pinellas County to the west, northern Hillsborough and Pasco Counties to the north, and eastern Hillsborough and Polk Counties to the east. Other transit mode connections – express bus, long distance rail –are possible at various planned stations. The plan also calls for increased local transit service to feed the rail segment.

The TBARTA board recently adopted the Group 1 priority list of projects. It is anticipated that this corridor will receive priority status due to the potential for high ridership.

#### 3.5.4 Florida Strategic Intermodal System

In 2003, the Florida Governor and Legislature created the Strategic Intermodal System (SIS) to efficiently serve the mobility of Florida, and to help Florida become an economic leader, enhance economic prosperity and competitiveness, enrich the quality of life, and reflect environmental stewardship. The SIS is made up of state/regional significant facilities (roadways, ports, rail, waterways) and services that move both people and goods and integrates facilities, services, and modes into a comprehensive system.

The study corridor contains elements identified in the SIS including I-275, Port of Tampa, Greyhound Intercity Bus Terminal,Selmon Expressway, Union Station, and the existing rail lines. These facilities receive priority status for limited state transportation funds due to their regional and national importance.

#### 3.5.5 Florida High Speed Rail Authority

The Florida High Speed Rail Authority has submitted an application to the federal government for funding to construct a high speed rail line between Tampa and Orlando.

The current alignment starts at the Tampa Station, located at the old Tampa City jail site (Scott Street and Morgan Street) in Downtown Tampa, and runs parallel to I-275, then turns onto the median of I-4 between 15<sup>th</sup> and 21<sup>st</sup> Streets. The site for the Tampa Station has been acquired by FDOT for development of one of two major intermodal transit centers in Tampa Bay. That will provide connections between transit modes – high speed rail, light rail, bus, streetcar, and any other future planned modes – as well as have facilities for taxis, parking, access to interstate, pedestrians, and bicyclists.

The alignment and Tampa station both fall within the Downtown Tampa to USF corridor.

#### 3.5.6 Tampa Port Authority

The Tampa Port Authority owns 2,500 acres of land that make up the Port of Tampa, which is an important job center. The port contains facilities on both Old Tampa and Hillsborough Bays. The port serves both cargo and passenger activities. This industrial enclave is surrounded by single- and multi-family residential uses as well as wetlands and public recreation uses. The community around the Port of Tampa is generally supportive of its industrial operations while proactively seeking methods to minimize the effects of significant truck traffic on their neighborhood. The Port of Tampa includes the Motiva petroleum terminal and a major aviation fuel terminal with pipelines to the Tampa International Airport, MacDill Air Force Base, and Orlando International Airport. Intermodal connections with the Port of Tampa would serve employees and cruise passengers.

In early 2010, the FDOT will begin construction of a new connector interchange between I-4 and the Selmon Expressway. The project is an elevated design to improve access between I-4 and the Selmon Expressway with a set of ramps to improve truck access to the Port of Tampa. Construction is anticipated to be completed in late 2014.

### 3.6 Economic Development

Transit-oriented development (TOD) around stations served by high-capacity transit can generate significant economic return in terms of development and increased tax revenue. Examples include:

- Dallas Area Rapid Transit (DART) light rail:
  - \$4.26 billion in total projects attributable to DART presence
  - \$127 million in state and local tax revenue once all projects around stations are completed
- Santa Clara Valley Transportation Authority (VTA) light rail:
  - \$4 per square foot increase in land values surrounding stations (23 percent)
  - \$25 per square foot increase in land values surrounding CalTrain commuter rail stop (125 percent above mean property value)
- Portland Streetcar:
  - \$2.28 billion of investment within two blocks of streetcar alignment
- METRO Light Rail, Phoenix:
  - \$3.5 billion in private investment around light rail

- HealthLine BRT, Cleveland:
  - \$4.3 billion in current and anticipated development along route
- Other studies have shown that along a new rail line:
  - housing values can increase 17 percent
  - o commercial values can increase 30 percent
  - o ad-valorem revenues can increase 10 to 191 percent

The Hillsborough County City-County Planning Commission's 2025 land use map includes:

- The USF area an assortment of land use designations, including public (the university), heavy and light industrial (1.5 Floor Area Ratio (FAR)), low-density residential (0.35 to 0.6 FAR), community commercial (2.0 FAR), and regional mixed use (Busch Gardens).
- Light industrial is located south of Rogers Park.
- Large collection of community commercial (2.0 FAR) is along Hillsborough Avenue.
- Downtown Tampa is classified as central business district (CBD) surrounded by regional mixed use (3.5 FAR).
- Ybor City is a blend of community commercial and mixed use (up to 3.25 FAR).
- All other areas are low-density residential.
- The County Comprehensive Plan includes an urban designation with up to a 3.25 FAR along Fowler Avenue.

The MPO had an assessment of TOD real estate development potential conducted in support of the LRTP and the Hillsborough County City-County Planning Commission's preparation of TOD-supportive comprehensive plan amendments. This assessment forecasted development potential within a one-half mile radius around select station areas for 2035, two of which are included in this corridor: Tampa CBD and USF. The study found that the Downtown Tampa to USF corridor features some of the best land use for station area development in the region, particularly near the Tampa CBD and Ybor City, Hillsborough Avenue, and the USF area. The study found the potential for:

- USF Station Area:
  - 1,700 to 1,800 multi-family dwelling units
  - 100,000 to 200,000 square feet of office space.
  - o 50,000 to 75,000 square feet of retail
  - High potential for research and development office space
- Tampa Downtown Station Area:
  - o 16,000 new residents and 5,800 to 6,000 multi-family units
  - o 28,000 new jobs and 2.6 to 3.0 million square feet of office space
  - 350 additional hotel rooms

## 3.7 Potential Effects on Natural and Socio-Cultural Resources

The construction of a passenger rail facility serving this corridor was evaluated for potential effects on natural and socio-cultural resources, using the State of Florida's Efficient Transportation Decision-Making (ETDM) Process. Through this process, agency representatives serving on an Environmental Technical Advisory Team (ETAT) reviewed a

summary of the proposed project, and identified avoidance and minimization issues. The ETAT members consist of representatives from agencies which have statutory responsibility for issuing permits or conducting consultation under NEPA, and representatives of participating Native American tribes. The issues identified by the ETAT will be explored further through environmental impact studies and alternatives analyses.

This review process evaluates twenty resources and issue areas and identifies a degree of effect (DOE) that construction of a passenger rail facility may have on each. The DOE levels are characterized in the following table.

Degree of Effect	Possible effects that the transportation action has on environmental and community resources
Enhanced Degree of Effect	Project concept has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement. b) Project concept has positive effect on community. Affected community supports the proposed project.
Minimum Degree of Effect	Project concept has little adverse effect on ETAT resources. Low cost options are available to address concerns. Permit issuance or consultation involves routine interaction with the agency. b) Project concept has minimum adverse effect on elements of the affected community. There is minimum community concern about the planned project. Little or no mitigation is needed.
Moderate Degree of Effect	Natural or cultural resources are affected by the proposed project, but avoidance and minimization measures are available and can be addressed during project development with a moderate amount of agency involvement and moderate cost impact. b) Project concept has adverse effect on some elements of the affected community. There is moderate community concern about the planned project. Public involvement is needed to seek alternatives more acceptable to the community. Moderate community involvement is required during project development. Some mitigation or minimization is needed to gain support from the community.
Substantial Degree of Effect	The project concept has substantial adverse effects, but ETAT understands the project need and is able to seek avoidance, minimization or mitigation measures during project development. Substantial interaction is required during project development and permitting. b) Project concept has substantial adverse effects on the affected community and faces substantial community opposition. Intensive community interaction with focused public involvement is required during project development. Project will need substantial mitigation to gain public acceptance.
Potential Dispute	Project concept may be contrary to a state or federal resource agency's program, plan or initiative. Project concept may have significant environmental cost. Reasons for indicating a potential dispute are contained in Agency Operating Agreements. Project concept may not be permittable. Reference Section 4.6, Process to Resolve Potential Dispute. b) Project concept is not in compliance with approved Local Government Comprehensive Plans, or may involve significant adverse effects on adjacent community.

For the Downtown Tampa to University of South Florida Corridor, the potential effects were considered substantial in the categories of **Contaminated Sites**, **Water Quality & Quantity**, and **Historic & Archaeological Sites**. A full report summarizing the ETAT's comments is

available through the Hillsborough MPO or as ETDM #12716. A summary of the ETAT's recommendations for Degree of Effect in all categories is provided below.

Affected Resource	Degree of Effect (DOE)
Air Quality	Enhanced
Coastal and Marine	Moderate
Contaminated Sites	Substantial
Farmlands	None
Floodplains	Moderate
Infrastructure	Moderate
Navigation	Minimal
Special Designations	Moderate
Water Quality and Quantity	Substantial
Wetlands	Moderate
Wildlife and Habitat	Minimal
Historic and Archaeological Sites	Substantial
Recreation Areas	Minimal
Section 4(f)	Moderate
Aesthetics	Minimal
Economic	Enhanced
Land Use	Moderate
Mobility	Minimal
Relocation	Minimal
Social	Minimal
Secondary & Cumulative Effects	Moderate