HILLSBOROUGH COUNTY MPO 2035 LONG RANGE TRANSPORTATION PLAN

FREIGHT MOBILITY TECHNICAL MEMORANDUM



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INTRODUCTION

Freight mobility is important to the economic vitality of Hillsborough County and a key factor in attracting new employers to the area. In addition, the importance of freight mobility has been recognized by the United States Congress, which included increased emphasis on freight planning within the last three transportation bills: the Intermodal Surface Transportation Efficiency Act (ISTEA); the Transportation Equity Act for the 21st Century (TEA-21); and the Safe, Accountable, Flexible, Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

The purpose of this Technical Memorandum is to ensure that freight mobility is integrated into the Hillsborough County Long Range Transportation Plan (LRTP) as it is updated and extended to the year 2035. This document addresses freight mobility needs and priorities that will facilitate the consideration, prioritization, and incorporation into the Plan as required by SAFETEA-LU and its predecessors. Included are tables of long-term capacity needs, short-term operational needs known as freight "Hot Spots," and freight-related issues and opportunities.

The technical memorandum is divided into four sections:

- Freight Mobility in Hillsborough County;
- Stakeholder Participation;
- Freight Systems Needs, Opportunities, and Priorities; and
- Design Standards, Performance Measures, and Project Selection.

Section 1.0 describes the freight transportation system in Hillsborough County including descriptions of the regional Freight Activity Centers (FACs) and Freight Corridors as designated by the Tampa Bay Regional Goods Movement Study¹, and the local truck route system. Also described are the major rail corridors within the county and their relationship to the FACs.

Section 2.0 discusses the importance of the freight corridors to local stakeholders as well as their needs, operational problem areas, and trends that affect their operations.

Section 3.0 provides tables of prioritized systems needs, freight operation "Hot Spots," and freight-related issues and opportunities. This section also recommends a funding box to be used to address the operational issues identified in the freight "Hot Spots" list.

Section 4.0 discusses design standards that should be implemented during improvements to all freight corridors and truck routes and recommendations, performance measures, and freight-related criteria that should be considered in the LRTP project prioritization and selection process.

Detailed descriptions of the FACs and the regional freight corridors are located in the appendices.



1.0 FREIGHT MOBILITY IN HILLSBOROUGH COUNTY

While freight generating activity is prevalent throughout the county, a large portion is concentrated in large and small industrial and mixed-use areas known as Regional Freight Activity Centers (FACs). FACs are the "economic engines" of the region. They are major contributors to the County's base employment and a key component of a regional economic development plans². Generally, they are also major generators of truck trip activity, including long-haul shipments to areas outside of the region. The industries located within a FAC typically have significant ties to areas outside of Hillsborough County and the Tampa Bay Region.

The purpose of defining FACs is to establish their role and place in a community's vision for economic growth. Growth in these areas should be compatible with the land use and growth vision for surrounding areas. Policies and strategies that preserve these areas and provide opportunities for industrial growth are major considerations of the study.

FACs exhibit one or more of the following land use characteristics:

- Major industrial areas including manufacturing, warehousing, and distribution centers;
- Intermodal transshipment locations including airports, seaports, and associated landside activities and rail intermodal facilities; and
- Incubators for future industrial growth.

Typically, FACs are located in the industrial core or near major intermodal transportation hubs such as ports, airports, and rail yards, or in outlying areas with industrial growth opportunities in close proximity to regional and strategic trade corridors. The FACs in Hillsborough County typically follow this pattern.

1.1 EXISTING AND EMERGING FACS

Existing and emerging FACs throughout Hillsborough County were defined by the following criteria:

- Large, contiguous industrial areas consisting of manufacturing, bulk processing, warehousing/distribution activities, or intermodal transshipment locations;
- Areas with sufficient capacity (open and developable industrial zoned land) for growth;
- Industrial areas that are consistent with the local comprehensive plan; and
- Areas that have an existing or emerging role in the regional economy.



Emerging FACs are those that are shifting from a local focus to a regional or national focus by attracting new businesses that reach beyond county borders. In some cases, these areas have relatively few businesses in place, but are designated for industrial growth with available vacant land to grow consistent with the local comprehensive plan.

The Tampa Bay Regional Goods Movement Study identified regional FACs within Hillsborough County. Aerial photography, field investigation, and discussions with intermodal operators were used to define boundaries, assess the types of industries located in the area, and determine whether the areas are consistent with the established criteria for regional FACs. The location of existing industrial employment and the industrial growth areas included in Developments of Regional Impact (DRIs) and the Future Land Use Element of the Comprehensive Plans were also considered. Based on the criteria, 11 FACs were identified within the county. They are listed and characterized in **Table 1-1** and shown on **Figure 1-1**. They are briefly described in this section. A detailed description of each of these FACs is located in Appendix A.

TABLE 1-1
EXISTING AND EMERGING FACs WITHIN HILLSBOROUGH COUNTY

	Intermodal	Mode	e of T	ransp	ort			Character	,
FAC	Facility	Truck	Rail	Ship	Air	Access ¹	Expanding	Redevelop	Constrained
Anderson Road/Tampa International Airport	X	Х	Х		Χ	G		Х	Х
Port Tampa		Х	Х	Х		F			X
Hooker's Point (Port of Tampa)	Х	Х	Х	Х		F	Х	Х	Х
Rockport/Port Sutton/Pendola Point (Port of Tampa)	X	Х	Х	Х		G			Х
Alafia River (Port of Tampa)		Χ	Х	Х		G			
Big Bend/Port Redwing (Port of Tampa)		Х	Х	Х		G	Х		
Southeast Tampa Industrial	Х	Χ	Х			G		Х	X
South I-75 Sabal Park Industrial Area		Х	Х			E	Х		
East Central Tampa Industrial Area		Х	Х			F		X	Х
Plant City Airport Industrial Area		Х			2	Р			Х
East Plant City Industrial Area		Χ	Х			G	Χ		

¹ Access: E= Excellent; G=Good; F=Fair; P=Poor

² No air cargo operations.



2035 Long Range Transportation Plan Freight Mobility Technical Memorandum

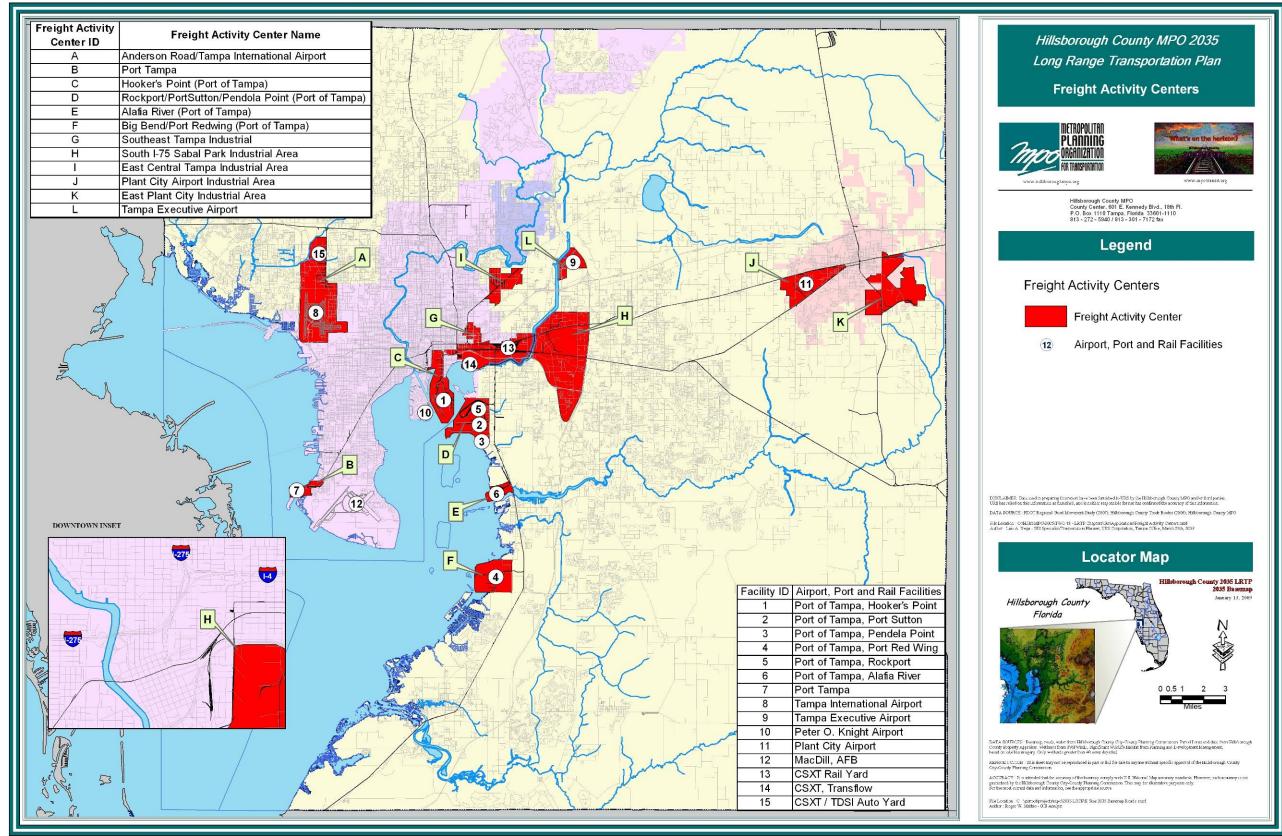


FIGURE 1-1
EXISTING AND EMERGING FACS
WITHIN HILLSBOROUGH COUNTY



1.1.1 Anderson Road/Tampa International Airport

The Anderson Road FAC is located in northwest Hillsborough County. It includes a large warehousing, distribution, and manufacturing district that extends along Anderson Road between Linebaugh Avenue and Hillsborough Avenue. It also includes Tampa International Airport (TIA) and a portion of Drew Park east to Manhattan Avenue on the southern part of the activity center and the general mixed-use area on the west side of the Veterans Expressway as well as CSX Transportation (CSXT)/Total Distribution Services, Inc. (TDSI) auto yard.

1.1.2 Port Tampa

Port Tampa is located on the southwest side of the Interbay Peninsula in Tampa. This industrial enclave is surrounded by single- and multi-family residential uses as well as wetlands and public recreation uses. Due to its location and surrounding residential neighborhoods, expansion of industrial uses in this area is constrained. The Port Tampa community is generally supportive of its industrial operations while proactively seeking methods to minimize the effects of significant truck traffic on their neighborhood. Port Tampa includes the Motiva petroleum terminal and a major aviation fuel terminal with pipelines to TIA, MacDill Air Force Base (AFB), and Orlando International Airport.

1.1.3 Hooker's Point (Port of Tampa)

Hooker's Point, a peninsula east of downtown Tampa, is a premier seaport. It is served by a significant CSXT railroad network that is primarily used for the bulk transfer of minerals, petroleum products, agricultural products, and scrap steel. The Tampa Port Authority (TPA) recently began receiving new automobiles produced in Mexico through Hooker's Point and added a small but expanding container operation.

1.1.4 Rockport/Port Sutton/Pendola Point (Port of Tampa)

Rockport, Port Sutton, and Pendola Point, located on the eastern shore of Tampa Bay west of US 41, contain private- and port-owned berths and landside facilities. This activity center also incorporates a large area of existing industrial uses and industrial designated land eastward to 66th Street south of Hartford Street and to 54th Street north of Hartford Street. It also includes industrial land north of Causeway Boulevard eastward to 54th Street.

1.1.5 Alafia River (Port of Tampa)

The Alafia River Terminal is located south of Pendola Point on the north side of the Alafia River west of US 41. East of US 41, the activity center extends to South Falkenburg Road north of Riverview Drive and south of Archie Creek. The primary industrial site is the Mosaic Fertilizer plant located along the Alafia River and the CSX East Yard located north of the plant and west of US 41.



1.1.6 Big Bend/Port Redwing (Port of Tampa)

Big Bend/Port Redwing is located on the east side of Tampa Bay along the US 41 corridor north of Apollo Beach. Most of this activity center is privately owned by Tampa Electric Company (TECO) and the Mosaic Company. Additionally, National Gypsum manufactures wallboard at a plant located on US 41 in front of the TECO power plant. Port Redwing is located on publicly-owned land and has approximately 175 undeveloped acres available for future development. The activity center extends east of US 41 to the CSXT railroad right-of-way and south to the northern boundary of the Apollo Beach residential community and includes general mixed-uses. Recently negotiated contracts will result in an expansion of this facility which is expected to import approximately 2 million tons of aggregate and 1 million tons of cement annually. There is also a 1.5 million square-foot warehouse/distribution facility planned for the northeast quadrant of US 41 and Big Bend Road.

1.1.7 Southeast Tampa Industrial Area

The Southeast Tampa Industrial Area is located along the Adamo Drive (SR 60) corridor between 24th Street and Orient Road. The CSXT Intermodal Yard north of SR 60 and the CSXT TRANSFLO terminal south of SR 60 at 30th Street are the primary freight generators in this area although there are numerous large warehouse/distribution facilities and manufacturing plants that also generate significant amounts of truck traffic. The CSXT Yeoman Yard is used to marshal large bulk trains destined mainly for the Port of Tampa. There is also a large CSXT engine repair facility at the yard.

1.1.8 South I-75 (Sabal Park Industrial Area)

The South I-75 Corridor (Sabal Park Industrial Area) is generally bound by Dr. Martin Luther King, Jr. Boulevard on the north, US 301 on the west, and I-75 on the east. It also includes several smaller industrial parks along the west side of US 301. The southern boundaries include the Lee Roy Selmon Crosstown Expressway and the area south of Progress Boulevard. The primary industrial site within this area is Sabal Park. Other industrial parks that fall within the area include Interstate Industrial Park, Tampa East Industrial Park, Silo Bend Industrial Park, Crescent Industrial Park, Interchange Center, Crosstown Center, and Parkway Center.

1.1.9 East Central Tampa Industrial Area

The East Central Tampa Industrial Area is located in the area generally bound by 50th Street on the west, Orient Road on the east, Hillsborough Avenue on the south, and Sligh Avenue on the north. The area is bisected by 56th Street, a major north-south commuter corridor that serves Temple Terrace, the University of South Florida, and Busch Gardens amusement park. The area contains a diverse mix of industrial/manufacturing uses as well as distribution facilities.

1.1.10 Plant City Airport Industrial Area

The Plant City Airport Industrial Area is bound by SR 574 to the north, the CSXT railroad line to the south, and Turkey Creek Road to the west. Plant City Airport and



Plant City Industrial Park are located within this FAC. The area consists of mainly small manufacturing companies and manufacturers of concrete and steel construction materials and products. LYKES has a large food processing facility located adjacent to Turkey Creek Road.

1.1.11 East Plant City Industrial Area

The East Plant City Industrial Area is located along the Park Road corridor and extends eastward along US 92 to County Line Road. Major industrial operations in the area include Albertson's, Sav-A-Lot, and Sweetbay grocery distribution centers; Starr Distribution (general cargo from CSX rail to truck); Walden Business Park; Gregg Business Center; and Plant City Commerce Park.

1.2 FREIGHT MOBILITY SYSTEM

The economic productivity in Hillsborough County is dependent on a transportation system that can move goods efficiently and safely. The port, airport, other regional FACs, and railroad network have been a cornerstone of local and regional economic prosperity. Growth of these economic generators will largely depend on the County's ability to improve and maintain efficient transportation connections within the county as well as links to regional and statewide corridors outside the County. Improving economic activity centers is

Providing a safe, well-planned, transportation system to efficiently move goods while preserving personal mobility is becoming an increasingly significant concern as our roads become more congested.

Tampa Bay Regional Goods Movement Study

an important factor in attracting new industry and associated jobs that will help stimulate the local economy.

The County's freight transportation system consists of publicly-owned highways and roads, privately-owned rail lines, privately-owned pipelines, and publicly-owned waterways. However, the key component of the system that serves as the foundation of effective and efficient goods movement is the freight roadway network.



1.2.1 Roads

Unlike the seaports, airports, and railroads, virtually every business and household in the County is dependent, to some extent, on the mobility of trucks for shipping and receiving goods. The first and last mile of every shipment is carried by truck.

The existing goods movement road system consists of three overlapping and interconnected layers. At the top is the Florida Strategic Intermodal System (SIS) which consists of roads that are part of the National Highway System (NHS) and include interstate freeways and tolled expressways. The next level is the regional freight corridors that include, in addition to the SIS facilities, other state and federal highways that support the regional movement of freight into and out of Hillsborough County. The final layer is the designated local Truck Routes. These are all state highways as well as local roads that connect to the SIS and regional freight corridors, provide access to local industrial and commercial activities, and restrict the movement of trucks to specific routes.

1.2.2 Rail

Hillsborough County relies on freight rail to transport many of the goods consumers and businesses use every day, while at the same time contributing to a reduction of congestion on our roads. For every rail car, approximately 3.5 truck trips are removed from the County's road system. The transportation of phosphate from the mines to the port by rail reduces the impact on our highways by nearly 850,000 truck trips annually.

A single Class I railroad, CSX, serves Hillsborough County. The rail system consists of main lines (see **Figure 1-2**), branch lines, and spurs, many of which provide access to the regional FACs. There are four main lines within Hillsborough County: Yeoman Subdivision (S line), Lakeland Subdivision (A Line), Brooksville Subdivision, and the Palmetto Subdivision as well as four minor lines. The S and the A lines provide connections outside the region. In addition, CSX operates several rail yards:

- North of SR 60 between 50th Street and Orient Road (Uceta, Yeoman, and Intermodal yards);
- West of US 41 and south of Causeway Boulevard (Rockport);
- North of the Alafia River and west of US 41 (East yard);
- At Anderson Road and Sligh Road (TDSI Auto yard);
- On 34th Street south of SR 60 (TRANSFLO Terminal); and
- North of downtown Plant City east of SR 39.



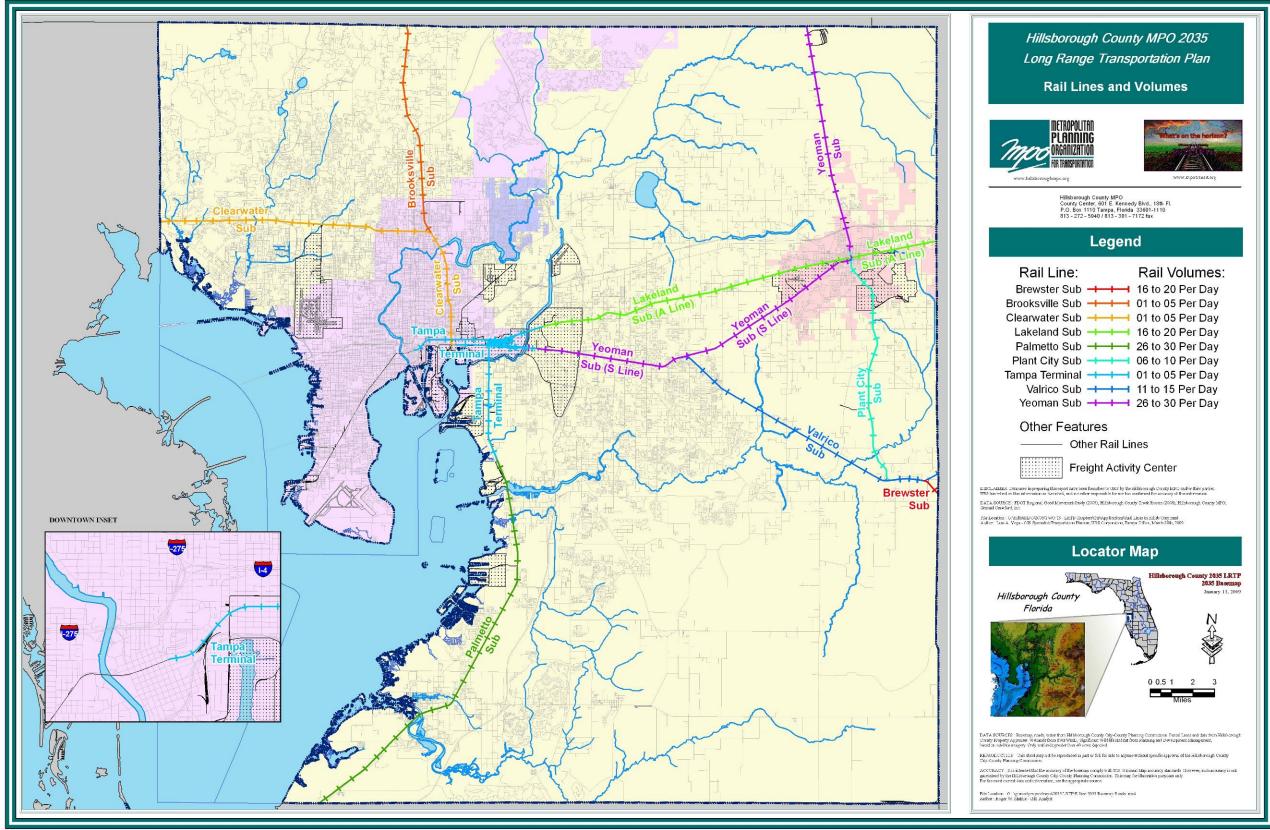


FIGURE 1-2 RAIL LINES AND VOLUMES



There are between 26 and 45 trains movements per day on the Lakeland (A-Line) and Yeoman Subdivision (S-Line) and an additional 25-30 trains per day on the Palmetto Subdivision. These trains interact with vehicle traffic at 24 major intersections and many more minor intersections throughout the County.

1.2.3 Waterways

Tampa was founded as a port city with excellent navigational channels to the Gulf of Mexico. Like the rail system, Hillsborough County relies on its deep water port and channels to import and export large quantities of goods.

The waterways consist of the main channel and branch channels that enter Tampa Bay and serve the various Port of Tampa facilities along the bay, including Hooker's Point, Rockport, Port Sutton/Pendola Point, and Port Redwing, as well as Port Tampa. The average channel depth is approximately 43 feet and can support container ships up to and including Panamax (4,000-8,000 containers). The Port of Tampa is the largest port in Florida in terms of total gross tonnage and is a major contributor to the County's economy. The Port is in the process of diversifying into the container market, which will have a pronounced impact on local and regional highways as containers are drayed to rail intermodal facilities and regional distribution centers inside and outside of Hillsborough County.

1.3 FREIGHT HIGHWAY AND ROAD SYSTEM

Trucks are an important means of sustaining the community by delivering products we purchase to stores; transporting raw materials and finished products for industries; hauling materials for the construction of roads, schools, businesses and homes; and other important functions. Trailers and containers are not simply boxes filled with goods that clog county roads but rather, represent many of the positive aspects of a thriving economy. Providing a safe, well-planned, surface transportation system to efficiently move goods while preserving personal mobility is becoming increasingly difficult as our roads become more congested.

The goods movement roadway system in Hillsborough County consists of three overlapping and interconnected layers.

- Florida SIS,
- Regional Goods Movement Corridors, and
- Designated Local Truck Routes.

Table 1-2 lists the goods movement roadway corridors, their limits, SIS designations, and the regional FACs they serve.



TABLE 1-2 **GOODS MOVEMENT ROADWAY CORRIDORS**

Corridor	From	То	SIS	FAC Served
I-75	Manatee County Line	Pasco County Line	Yes	Port of Tampa I-75/Sable Park
I-275	Pinellas County Line	Pasco County Line	Yes	Anderson Rd./TIA Industrial Port of Tampa
1-4	I-275	Polk County Line	Yes	 Port of Tampa East Central Tampa Industrial Southeast Tampa Industrial I-75/Sabal Park Industrial East Plant City Industrial
US 41	Bearss Ave./ Nebraska Ave.	Pasco County Line	No	None
US 41	1-4	Manatee County Line	No	 Rockport, Port Sutton, Pendola Point Alafia River Big Bend/Port Redwing I-75/Sable Park East Central Tampa Industrial
US 92	Pinellas County Line	Lee Roy Selmon Crosstown Expwy.	No	Port of Tampa
US 301	Manatee County Line	Pasco County Line	No	I-75/Sabal Park IndustrialSoutheast Tampa IndustrialEast Central Tampa Industrial
Memorial Hwy/ Veterans Expwy.	I-275	Pasco County Line	Yes	Anderson Rd./TIA Industrial
Gandy Blvd./Lee Roy Selmon Crosstown Expwy.	Gandy Bridge	I-75	Yes	 Port Tampa Port of Tampa Southeast Tampa Industrial I-75/Sabal Park Industrial
I-4/Lee Roy Selmon Crosstown Expwy. Connector	22nd St.	1-4	Yes	Port of Tampa
SR 60	20th St.	Polk County Line	Yes	 Port of Tampa Southeast Tampa Industrial and CSX Intermodal I-75/Sabal Park Industrial
SR 39 via Park Rd.	SR 60	Pasco County Line	No	East Plant City IndustrialMining Activity north of Plant City
SR 674	US 41	SR 39	No	Big Bend/Port Red Wing Hillsborough/Polk County mines
Causeway Blvd.	SR 60	US 301	Yes	Port of Tampa
CR 672	US 41	US 301	No	Big Bend/Port Redwing
Hillsborough Ave.	Pinellas County Line	I-4/US 301	No	Anderson Rd./TIA Industrial East Central Tampa Industrial
Branch Forbes Rd./ US 92/Turkey Creek Rd.	SR 574	I-4	No	Plant City Airport Industrial
Orient Rd.	SR 60	I-4	No	Southeast Tampa Industrial and CSX Intermodal



1.3.1 Strategic Intermodal System Highways

The first layer is the SIS corridors are part of the state highways system but consist of interstate highways, freeways and toll roads, and local connector roads that connect the SIS road network with designated SIS intermodal facilities such as the Port of Tampa (see **Figure 1-3**). The SIS roads in Hillsborough County are I-4, I-75, I-275, Lee Roy Selmon Crosstown Expressway, Veterans Expressway/Memorial Highway (SR 60), Dale Mabry Highway (SR 568 to Pasco County Line), and SR 60 (Polk County Line to 22nd Street). SIS connectors include Big Bend Road (I-75 to US 41), Causeway Boulevard (Crosstown Expressway to US 41), and Hillsborough Avenue (Veterans Expressway to Air Cargo Road).

1.3.2 Regional Goods Movement Corridors

The second layer includes the regional goods movement corridors designated as part to the Tampa Bay Regional Goods Movement Study. These are all part of the state highway system and are the primary routes used to move goods into and out of the County and the region. The purpose of designating these regional corridors is to influence regional economic development through the implementation of policies and actions that will improve and preserve freight mobility in the corridors. The regional goods movement corridors in Hillsborough County include the SIS highways as well as the Federal and state highways listed in Table 1-2 and shown on **Figure 1-4**. A detailed description of each of the corridors is located in Appendix B.

1.3.3 Local Truck Routes

The third layer consists of the designated local Truck Routes (see **Figure 1-5**). This is the primary network for moving goods within the County from distribution points to local commercial centers. Truck routes include designated County and local roads as well as the state highway system located within the county. They provide a grid of north-south and east-west roads chosen to reduce the impact of trucks on local neighborhoods. All trucks entering or departing Hillsborough County must do so on a designated truck route.



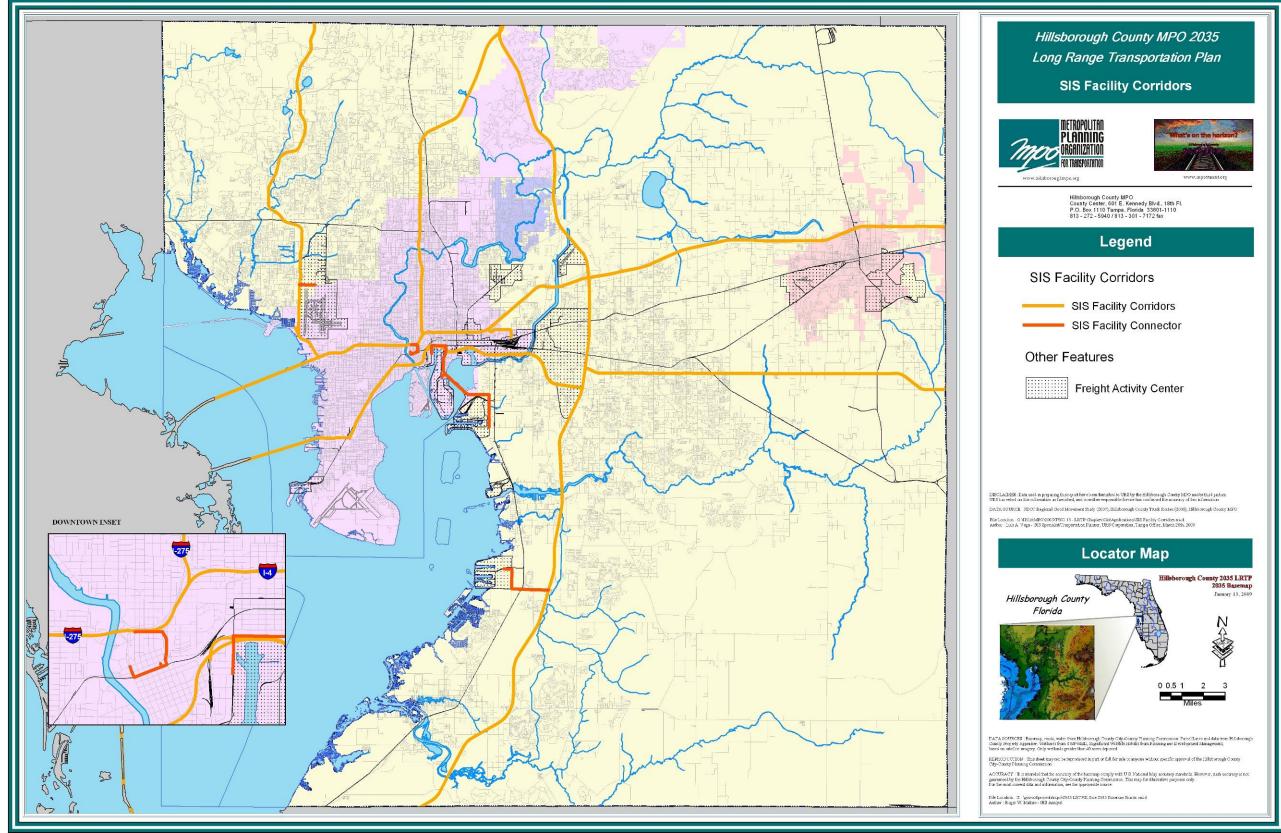


FIGURE 1-3
HILLSBOROUGH COUNTY SIS FACILITIES



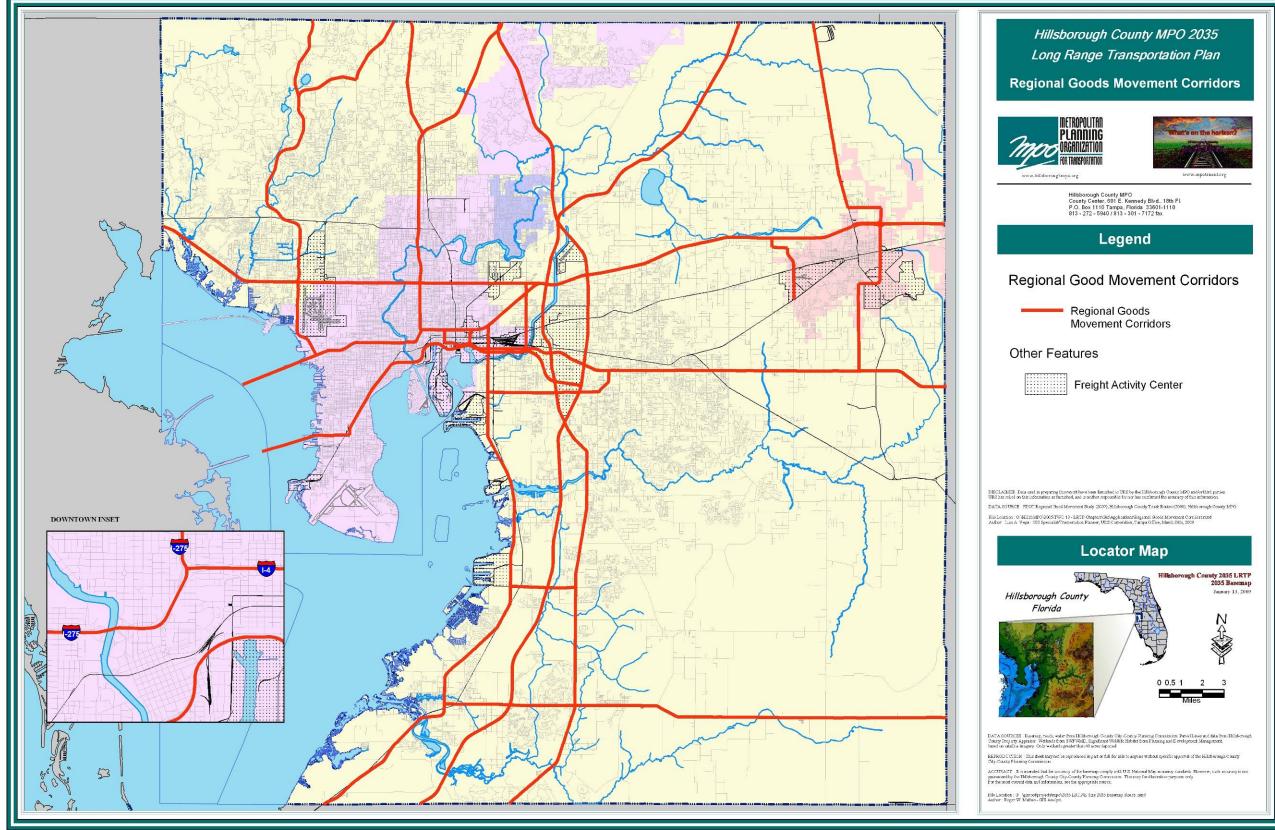


FIGURE 1-4 HILLSBOROUGH COUNTY REGIONAL GOODS MOVEMENT CORRIDORS



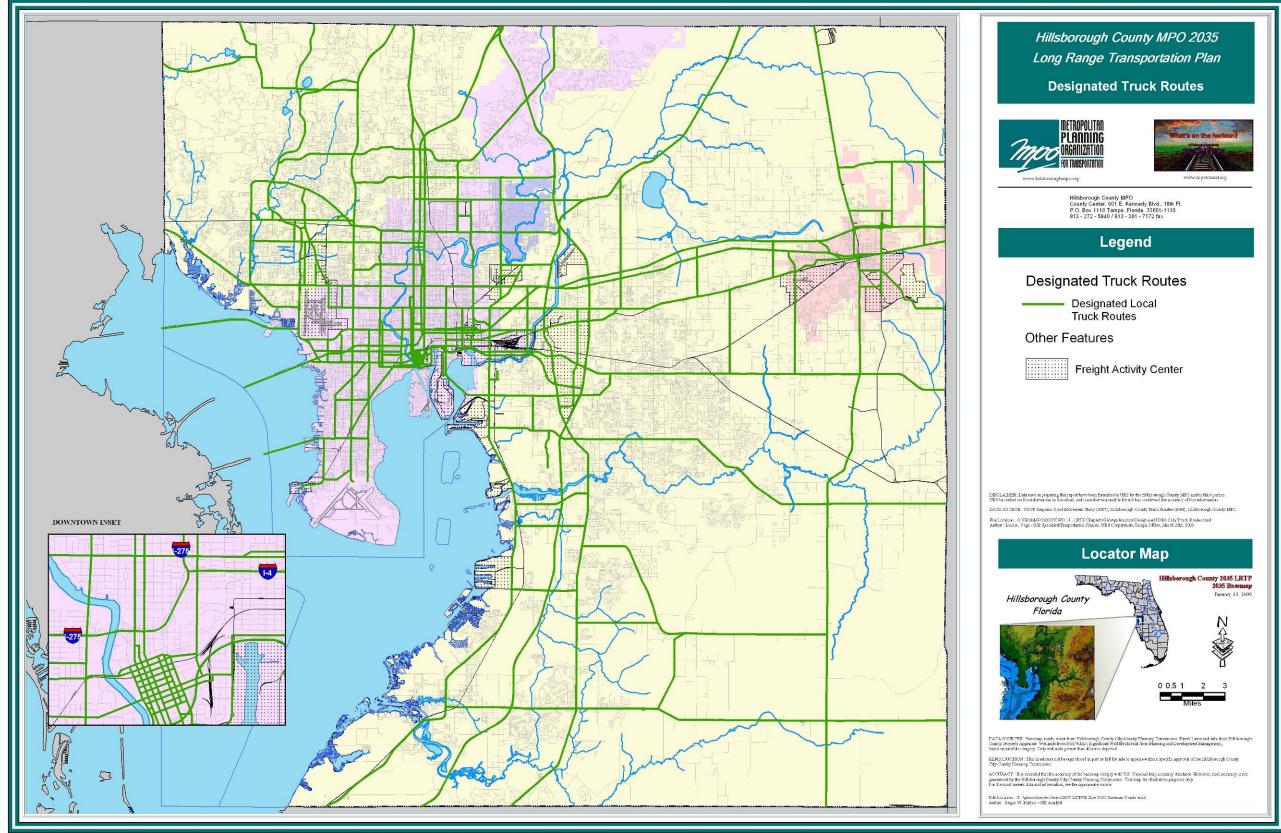


FIGURE 1-5
HILLSBOROUGH COUNTY TRUCK ROUTES



2.0 STAKEHOLDER PARTICIPATION

Seven freight stakeholders were interviewed between January 12, 2009 and January 20, 2009. They included two government authorities, a Class I railroad, and three local and national freight distributors:

- Director of Planning, Hillsborough County Aviation Authority (HCAA)
- Senior Director, Planning and Development, Tampa Port Authority (TPA)
- Transportation Manager, Albertson's
- Terminal Manager, Consolidated Truck Lines (CTL)
- Terminal Manager, ABF Freight Systems
- Manager, Industrial Development, CSXT

Questions were tailored to the type of stakeholder interviewed. The following section summarizes their views.

2.1 MOBILITY ISSUES AND NEEDS

The next sections of this document summarize the content and responses of the stakeholder interviews. Specifically the interview questions related to how the stakeholders considered the importance of the transportation system to their business or agency, the market trends affecting the business, emerging industry trends and specifics on the number of truck trips generated, and locations of operational problem areas or "Hot Spots."

2.1.1 Tampa International Airport (TIA)

HCAA, owner and operator of the TIA, does not have freight mobility issues at this time. They are in the process of developing a new air freight terminal area on land purchased in Drew Park. As part of this new development, Westshore Boulevard will be realigned and widened to a four-lane divided facility known as Air Cargo Road. The original design included a multi-use trail along the east side of the roadway. However, subsequent designs added a 4-foot shoulder and bike lanes in order to separate cyclists from pedestrians³. Other plans include the relocation of the Post Office from its current site along the George Bean Parkway to a new site off the realigned Westshore Boulevard. That will permit the intermodal transfer of mail directly between trucks and aircraft. The Airport Master Plan calls for a realigning of Hillsborough Avenue north of the existing right-of-way to make room for a new terminal to be constructed in the 20- to 30-year timeframe.



2.1.2 Port of Tampa

The capacity of the port is directly related to the velocity or throughput of inbound and outbound cargo and bulk materials. A major component of this throughput is the existing and future road capacity in the immediate vicinity of the port and the connecting roads to the major freight corridors. The key road corridors providing access to the port include:

- 22nd Street to I-4 and I-275
- 22nd Street/Lee Roy Selmon Expressway to I-75
- Causeway Boulevard/US 301 to I-75
- Madison Avenue/Progress Boulevard/US-301 to I-75
- US 41 (50th Street) to I-4
- US 41/Big Bend Road to I-75

These roads also carry a high percentage of commuter traffic during peak periods. Capacity improvements will be required on these corridors in order to expedite the increased number of trucks accessing the port facilities. These improvements must include geometry that accommodates efficient truck operations. These corridors also contain several railroad crossings that accommodate 25 to 35 trains per day resulting in long delays for both commuters and freight traffic. To improve the level of service on these corridors, the rail lines need to be grade separated from the roadway corridors. The following grade separations have been recommended in various port studies since the late 1990s and must be given serious consideration:

- SR 60 at the Palmetto Subdivision line (1/2 mile east of 50th Street),
- US 41 and the Rockport lead (south of Causeway Boulevard), and
- Causeway Boulevard and the Palmetto Subdivision mainline (east of 50th Street).

2.1.3 CSXT

CSXT stated that the road system, especially the roads in the immediate vicinity of their terminals and the terminals of their trucking partners, is very important. These partners include Starr Distribution in Plant City (US 92 and Park Road), Seaboard Trucking (Harney Avenue), Kinder-Morgan (north of SR 60 near 40th Street), and Americold (50th Street). In each case freight is brought in by rail and trucked out.

The intersection of Broadway Avenue and 62nd Street should be signalized. This is the access point to the CSX Intermodal terminal that generates between 500 and 600 total truck trips daily. Other needs include the improvement of Broadway Avenue and Columbus Drive from 50th Street to US 301 as well as the intersection of Broadway Avenue and 50th Street, which needs geometric modification to accommodate large truck turning movements.



Grade separations are needed at SR 60 at the Palmetto Subdivision line (1/2 mile east of 50th Street), US 41 and the Rockport lead (south of Causeway Boulevard), Causeway Boulevard and the Palmetto Subdivision mainline (east of 50th Street).

2.1.4 Trucking Stakeholders

Congestion is the main concern of all stakeholders interviewed. In particular, CTL, which makes 500 and 600 trips between the port facilities and the fertilizer processing plants in Polk County and Hillsborough Counties, respectively, was concerned about the corridors that connect to the Port of Tampa as well as congestion within Brandon on SR 60, the primary route between the two Counties. Additional lanes are needed between US 301 and the Port facilities including the Bloomingdale Avenue/Progress Boulevard/Madison Avenue corridor and Causeway Boulevard (currently under construction). Of particular concern is the restriction on Bloomingdale Avenue to empty backhauls only. This forces drivers to navigate the congestion on SR 60 when loaded. Congestion on US 41 due to train crossings is also an issue and they believe a grade separated crossing is needed. Intersection geometry, especially in the area near the terminal near 50th Street and Broadway Avenue is also an issue for the longer trucks.

ABF Freight Systems consist of two components: over-the-road (OTR) long distance trips and local delivery trips. The OTR trips are primarily made on the interstate systems and major Federal and state highways. The local trips (30 to 40 daily trips) are generally between the terminal and commercial/industrial pickup and drop off sites as well as residential neighborhoods. ABF transports everything except perishables. The local network is very important to their operations as time and fuel consumption erode their profits. Their main concern is the north-south movement along I-275 and I-75 during peak conditions especially along I-275 between the Howard Frankland Bridge and the I-4 interchange (currently under construction). Designated truck routes in Tampa have geometry issues due to narrow streets at many intersections, which is a problem for the larger trucks. Because ABF drivers are not on regular routes, it is not possible to pinpoint specific problem locations.

The Albertson's Distribution Center in Plant City serves the entire state of Florida. They normally send out about 48 loads a day and backhaul an additional 48 loads of products, from their suppliers, so trucks are normally full in both directions. They have only a few grocery stores in Hillsborough County, all of which are on designated truck routes except for the store at Bloomingdale Avenue and Lithia Pinecrest Road. Weight restrictions on south Lithia Pinecrest Road force them to use SR 60 and approach from the north. Widening Lithia Pinecrest to four lanes (a PD&E Study is currently underway) and lifting the weight restrictions would shorten their route to this store. They also make runs to Port Manatee to pick up produce from ships at the port. Northbound trucks often use SR 39 and widening of this facility north of I-4 in Plant City to the Pasco County Line should be considered. The terminal manger also expressed concern about the new IKEA store that will be opening at SR 60 and 22nd Street. Many trucks use this intersection to access the port and there is concern about the significant congestion that will be generated by this store. Due to the tolling on the Lee Roy Selmon Expressway,



many trucking firms use the surface streets to access the port including 21st and 22nd Streets in Ybor City.

2.2 FUTURE INDUSTRY CONDITIONS

2.2.1 Tampa International Airport

The economy will affect the amount of cargo processed in the near-term but air cargo is eventually expected to increase in the long-term. While TIA showed a small increase in overall cargo throughput in 2008 over 2007, there was a significant down turn in November and December due to local, national, and international economic conditions. The down turn should continue through 2009 and slowly rebound as the economy begins to recover. Overall, total air cargo including air mail has decreased since 1997 (a year which TIA processed a record 138,400 tons of cargo). The decline has been due to a significant decrease in mail tonnage which has declined from a high of 49,400 tons in 1996 to 6,599 tons in 2007. During 2008 air cargo processed at TIA totaled 105,426 tons, which was a 3.9 percent increase over 2007. Additionally, 7,724 tons of mail were processed in 2008 (17.04 percent increase over 2007).

The number of all cargo carriers has also declined at TIA with only three carriers remaining: Flight Express Services, Federal Express, and US Postal Service. Twelve passenger carriers also transport air cargo in the belly of their passenger aircraft. Although most cargo is "belly cargo" that is placed on scheduled airline flights, the amount of cargo-only flights is expected to increase in the future as the economy recovers.

New cargo facilities will be developed by TIA on property acquired from the Drew Park area under long-term lease agreements with the carriers. Cargo security screening and tracking systems impact freight processing time. The new facilities will allow trucks to deliver cargo on one side of a facility and have it transferred directly to the aircraft parked on the opposite side. The new facilities will consist of 112,000 square feet for mixed cargo operations. The new facilities will include the latest freight processing and screening equipment to expedite this transfer.

2.2.2 Port of Tampa

Recent economic conditions are expected to result in small declines in port activity. However, history has shown that in the long-term, port activity will continue to rise due to increases in global trade. Completion of the Panama Canal widening is not expected until 2012. Once complete, TPA expects a steady increase in container and general cargo activity. The potential opening of the Cuban market will increase port activity slightly but is not expected to have a major impact on the port. Additionally, phosphate exports are expected to decline slightly, but imports of aggregates and cements will offset some of this decrease.



In the next five years the TPA is planning to increase its container terminal capacity at Hooker's Point to approximately 497,000 twenty-foot equivalent units (TEUs)⁴ (or 248,500 40-foot containers)⁵. While the available capacity will increase, actual throughput will lag behind due to the current economy. The capacity represents the maximum throughput anticipated. Each container represents a truck trip for the port that will be accessing the local connector roads between the port and the regional highway system. Further expansion beyond five years will bring the container capacity up to 737,000 TEUs or 368,500 container truck trips. During the same period, TPA's break bulk general cargo operations are expected to generate an additional 32,400 to 53,900 annual truckloads. Note that these trips are outbound only and need to be doubled to account for in-bound empties and exports. Hooker's Point will continue to process bulk minerals and aggregates generating an additional 390,000 to 520,000 annual truck trips⁶.

New tenants at Port Red Wing are expected to generate between 180,000 and 200,000 total annual truck trips on US 41 in the near-term.

Table 2-1 shows the estimated number of trucks generated by the Port of Tampa based on 2007 port volume and the high and low volume projections for 2027.

TABLE 2-1
ESTIMATED PORT OF TAMPA TRUCKLOAD GENERATION

			2027 Forecast									
	20	07	Low High									
	Weight/	Trucks	Weight/	Trucks	Weight/	Trucks						
Commodity	TEUs	Generated	TEUs	Generated	TEUs	Generated						
Petroleum (Tons)	20,000,000	666,667	27,000,000	900,000	30,000,000	1,000,000						
Liquid Bulk (Tons)	9,500,000	316,667	11,000,000	366,667	13,000,000	433,333						
Dry Bulk (Tons)	5,000,000	66,667	9,000,000	120,000	16,000,000	213,333						
General Cargo (Tons)	1,000,000	50,000	1,300,000	43,333	2,100,000	70,000						
Containers (TEUs)	40,000	20,000	550,000	275,000	720,000	360,000						
Total	35,540,000	1,120,000	48,850,000	1,705,000	61,820,000	2,076,667						

Note: Dry bulk includes a 60/40 Rail/Truck split. One bulk truckload equal 30 tons. One general truckload equals 20 tons. One typical container truck is equivalent to two TEUs.

Source: Port of Tampa Master Plan (2008)

2.2.3 CSXT

Capacity is becoming a problem locally, especially on the Palmetto Subdivision where there is no passing siding. This causes trains to have to wait for long periods on a siding north of Plant City until trains from the south clear the line south of Causeway Boulevard.

The Intermodal Logistics Center (ILC) being planned by CSXT for Winter Haven in Polk County will generate significant numbers of additional trucks along SR 60 and I-4. Many of these trucks will use Hillsborough County roads to access Pasco, Pinellas, Manatee, and Sarasota Counties. CSXT is also working with the Port of Tampa regarding the potential for draying intermodal containers from ship to the ILC via train.



The issue in this scenario is the availability of long enough track to build the intermodal trains at the port. The auto terminal located at Anderson Road and Sligh Avenue will be moved to the new ILC and the property at Anderson Road will be sold. Each auto rail car will generate the equivalent of 2.5 trucks, many of which will use SR 60 to access Hillsborough County and neighboring counties.

CSX also expects business to increase at the Port Manatee as well as developing new customers at several locations along the Palmetto Subdivision. This will increase train traffic on the Palmetto Subdivision.

Although not an immediate concern, passenger rail in the Tampa Bay area would have a significant impact on freight rail operations by reducing the hours that freight trains could operate on CSX-owned rail lines without capacity improvements. Additionally, passenger rail will add to the number of trains at rail crossings in Tampa and eastern Hillsborough County affecting the through movement of trucks along key truck corridors.

2.2.4 Trucking Industry

The number of trucks is expected to double by 2035⁷. Even a small shift to intermodal rail transportation will not make an appreciable impact on the number of trucks using local highways because the first and last mile of every freight trip is made by a truck. As our population grows and spreads into the now rural areas of the County, new commercial sites will be developed to support the population and more trucks will be needed to deliver goods to these sites.

One notable trend is the shift to larger trailer units. Today many trucking companies have moved to the high-cube trailer unit. High-cube units are 53-feet-long and represent a geometric design challenge for access points and intersections, most of which were designed for much smaller trailer units of the past. These large trucks are used for local deliveries as well as for long hauls. As a result, many of the geometric consideration used in roadway design need to be re-evaluated in order to accommodate the size and numbers of trucks on our highways. Additionally, development requests for commercial and industrial sites need to be critically reviewed to ensure there is adequate room to safely maneuver these large trucks.

Truck delivery parking in urban core areas is also becoming more difficult. In many downtown areas deliveries require curbside parking for a few minutes to a few hours. During normal business hours, trucks must compete with autos for available on-street parking. However, at night, curbside parking is not normally a problem. It is essential that parking restrictions and permitted delivery hours be developed in conjunction with downtown stakeholders.

Adequate truck parking at truck stops and rest areas on major national truck routes is also becoming an issue as new laws restrict the number of hours that drivers may operate, along with the increased volume of truck traffic. Overnight truck parking facilities need to be expanded along the interstate system as well as near the port facilities to accommodate this trend.



3.0 FREIGHT SYSTEM NEEDS, OPPORTUNITIES, AND PRIORITIES

From a goods movement perspective the needs of truck drivers are significantly different than those of other operators. First, trucks require more "real estate" in which to operate than other vehicles. A typical tractor trailer combination vehicle takes the space of approximately 3.5 autos. Additionally loaded trucks take longer to reach travel speed and are directly affected by the number and phasing of traffic signals. Intersection geometry not designed for trucks not only makes it difficult for truck turning movements, but also results in increased delay in the corridor for both trucks and other vehicles, damaged infrastructure, and safety issues. This section describes short and long term needs as well as freight related issues and opportunities that should be considered as potential components of a long range regional plan or designated for further study. Short term needs are those that can be implemented easily and for a relatively low cost while long term needs generally include more costly improvements that require significant planning such as major capacity improvements.

3.1 PRIORITIZATION OF NEEDS

The candidate projects listed in the following sections are prioritized according to their impact on the local and regional Goods Movement System. Projects are prioritized according to the access provided to the port and other SIS facilities, the regional FAC, and the regional and major local distribution facilities that are not located within a FAC. Other prioritizing factors include the type of facility, the percent of truck use, the total truck annual average daily traffic (AADT), and location of Hot Spots. Hot Spots are locations on the transportation system that impede the flow of goods. Hot Spots are defined in detail in Section 3.2.

Because the importance of the Port of Tampa to the local, regional, and statewide economies, and the need to move freight and bulk commodities on and off the port, the links to the port facilities and to the strategic transportation corridors that serve the port received the highest score for access. The next highest score was given to the corridors and links to SIS freight facilities in Hillsborough County. Highways and roads providing access to the designated regional FACs received the third highest score due to the large numbers of trucks generated within these large industrial areas. Similarly, highways and road corridors were ranked based on their designation as an SIS Highway/connector, designated Regional Goods Movement Corridor, or designated Local Truck Route

Table 3-1 below defines the weighting system and prioritization factors used to evaluate overall freight system needs.



TABLE 3-1 FREIGHT NEEDS PRIORITIZATION AND SCORING METHODOLOGY

	Freigh	t Needs Prioritization Factors							
Access	Score	Comment							
Port/Airport	5	Includes all SIS, Regional, and Local Truck Routes that provide connection to the Port of Tampa or TIA. To receive the highest rating a road corridor must provide strategic access to the port or airport (freight) or provide a direct connection between the SIS or Regional Goods Movement Corridors and the port facilities or TIA air freight terminal.							
Intermodal Facility	4	Provides connection to designated intermodal facilities. Intermodal facilities are defined as either SIS designated facilities or facilities not part of the SIS but which provide for the intermodal transfer of goods. For example the CSX TDSI Auto Yard.							
Regional FACs/Mines	3	Provides connectivity between the Regional FACs and the SIS or Regional Goods Movement Corridors; or between the phosphate and aggregate mines and the port bulk loading/unloading terminals. Regional FACs are geographically defined in the Florida Department of Transportation (FDOT) District 7 Regional Goods Movement Study.							
Regional/Local Distribution Centers	local economy but are not located within one of the designated FACs for example the Rooms-To-Go Distribution Center at I-4 and CR 579.								
Commercial Activity Centers	1	Local direct connection to commercial centers. For example malls, large shopping centers, etc.							
Corridor	Score	Comment							
SIS	3	Corridor is listed in FDOT SIS Plan.							
Regional Freight Corridors	2	Corridor is listed in FDOT District 7 Regional Goods Movement Study.							
Local Truck Routes	1	Corridor is designated as Truck Route by Hillsborough County.							
Non-Truck Route	0								
Percent Trucks	Score	Comment							
>12%	5	Significant truck use							
10-12%	4	High truck use							
7-9%	3	Moderately high truck use							
3-7%	2	Moderate truck use							
<3% 1 Moderately low truck use									
AADTT Score Comment									
>15,000	5	Significant truck use							
10,001 - 15,000	4	High truck use							
6,001-10,000	3 2	Moderately high truck use Moderate truck use							
3,501-6,000 1,000-3,500	1	Moderately low truck use							
Hot Spot	Score	Comment							
Intersection	1	One point for each identified intersection hot spot							
		·							
Railroad Crossing 1 One point for each identified railroad crossing hot spot									



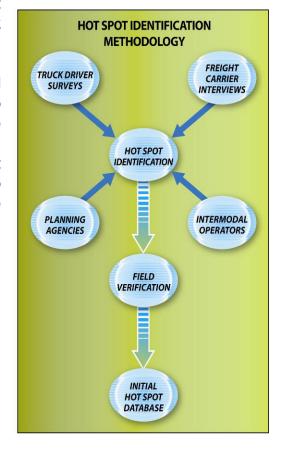
3.2 LOWER COST NEEDS

In order to provide a safe, well-planned freight transportation system, deficiencies in the system must be identified, evaluated, prioritized, and improved. The first step in this process is identifying problem locations.

In 2000 (updated in 2008) the Tampa Bay Regional Goods Movement Study identified a

number of locations that affected the efficient operation of trucks on regional and local truck corridors referred to as Freight Mobility Hot Spots. These locations on the transportation system impede the flow of goods by rail, truck, water, and air. The purpose of identifying these locations is to funding implement prioritize to appropriate transportation solutions in the near-term that will improve the mobility of goods in the region. Hot spots include the following types of impedances to freight mobility and many of these problems can be mitigated through low cost means in the short term:

- Severe traffic congestion;
- Inadequate traffic controls, including signs and signalization;
- Poor truck driver sight lines (poor visibility);
- Railroad crossings with significant train movements;
- Insufficient turning radii;
- Insufficient turning lane storage;
- Narrow receiving lanes for turning truck traffic;
- Lack of or inadequate acceleration and deceleration lanes for truck traffic;
- Road segments with merging and weaving problems;
- Poor pavement condition; and
- Poor or inadequate directional signage.





In 2000 there were over 100 sites identified by truck drivers in Hillsborough County during surveys conducted for the Goods Movement Study, but after further evaluation by the study team, the list was pared down to 52 locations. In late 2007 and early 2008 another survey was conducted and evaluators were sent to re-evaluate those locations identified in the earlier study as well as any new locations identified through truck driver interviews. The team found several locations where significant modification had been made that improved truck flow. However, 38 problem areas still remain and are shown on the map in **Figure 3-1** and listed in **Table 3-2**. Table 3-2 also includes a short description of the of the freight need/corrective action required to mitigate the Hot Spot.

3.3 LONG-TERM AND CAPACITY NEEDS

Figure 3-2 shows the SIS, regional and Local Truck Routes that are currently over capacity. Congestion in these segments has a significant detrimental effect on efficient trucking operations, contributes to increased vehicular emissions, and increases operating costs, which are eventually passed on to local consumers. These road segments are listed in **Table 3-3** and prioritized according to their impact on the access to the port and other SIS facilities, the regional FACs, and the regional and major local distribution facilities that are not located within a FAC. Other prioritizing factors include the type of facility, the percent of truck use, the total truck AADT, and location of Hot Spots. Table 3-1 describes the scoring system used to prioritize the list based on the impact to the overall freight system.

3.4 FREIGHT OPPORTUNITIES

The most recent Tampa Bay Regional Goods Movement Study team has developed issues and opportunities impacting freight operation in the region. **Table 3-4** shows those issues and opportunities applicable to Hillsborough County. The list is not restricted to highway operations but includes all components of the goods movement system from expanding the shipping channels to grade separations along key corridors leading to the Port of Tampa. The list is not project specific but rather provides current and future opportunities that should be considered in the development of a regional freight plan.



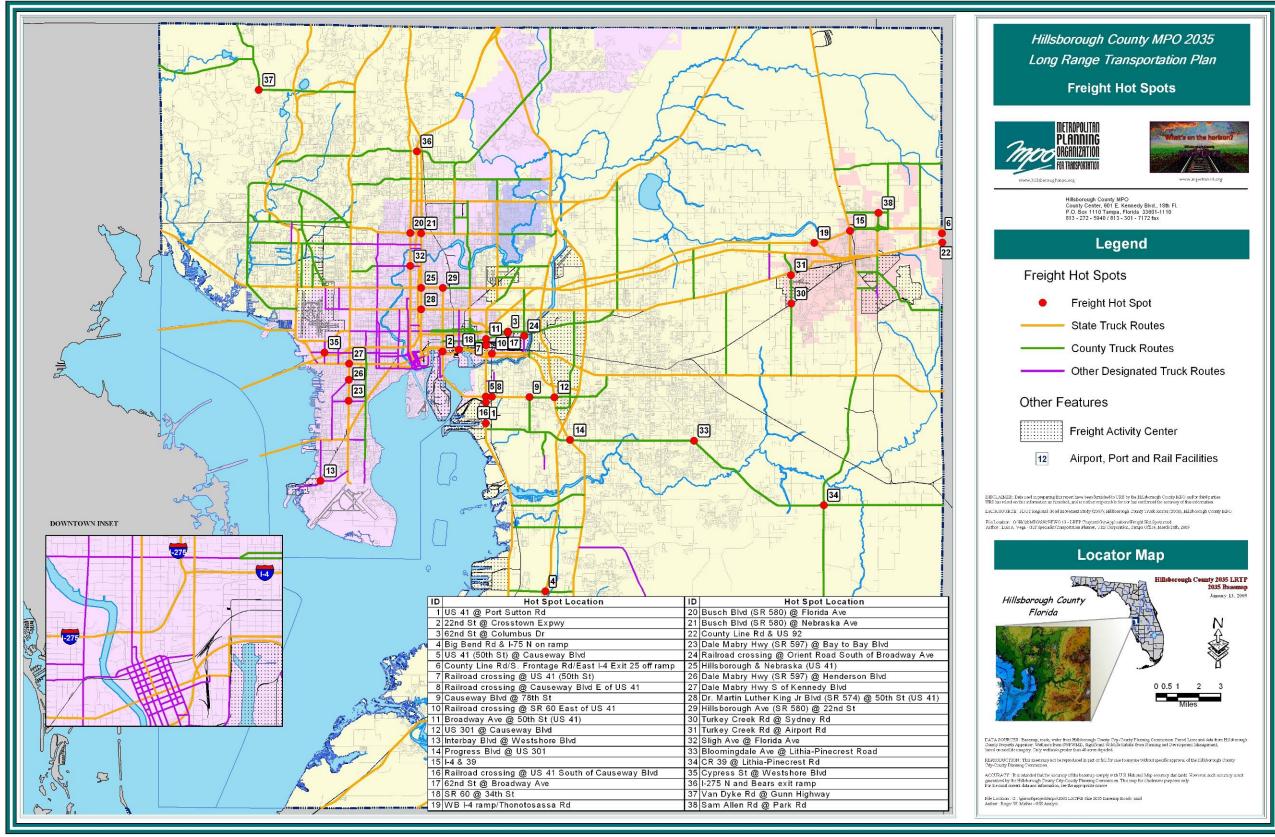


FIGURE 3-1
HILLSBOROUGH COUNTY FREIGHT HOT SPOTS



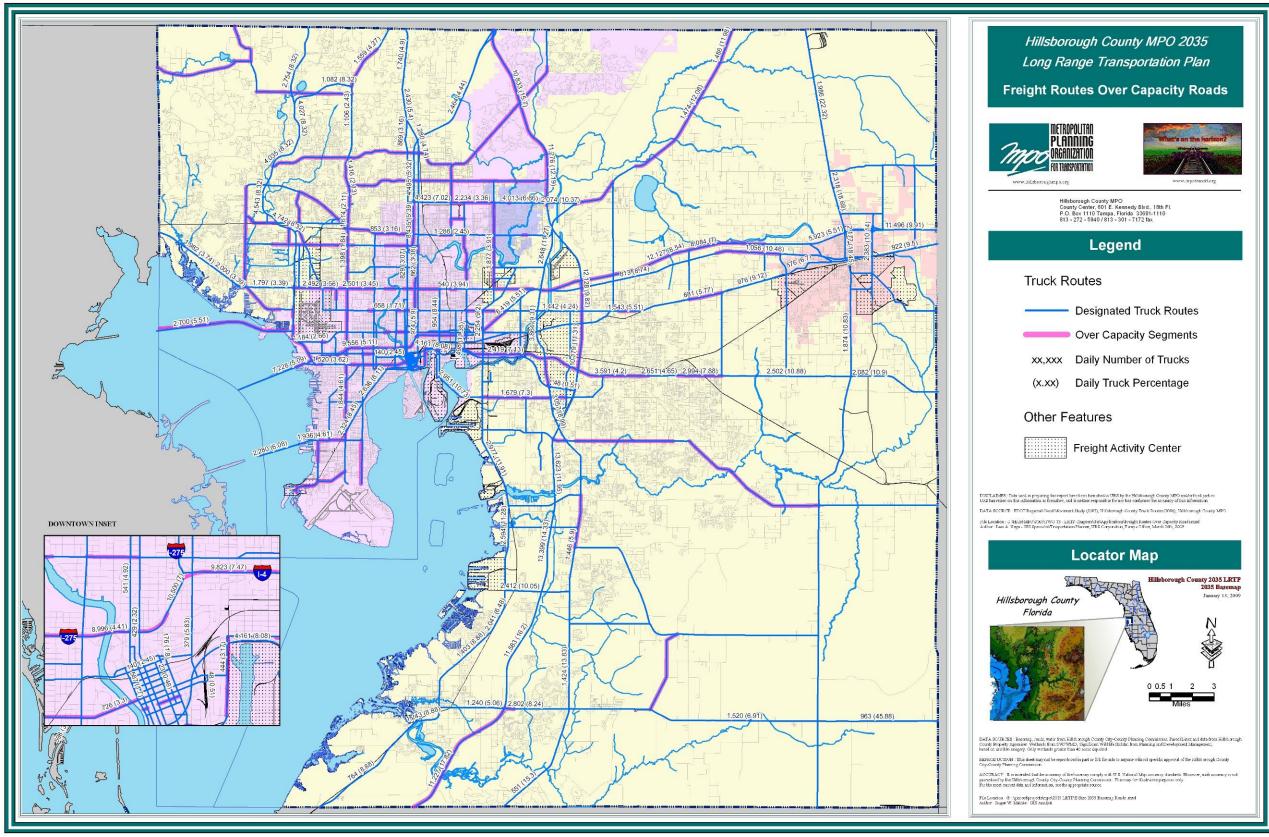


FIGURE 3-2 ABOVE-CAPACITY TRUCK ROUTES



2 221 con 3 621 4 Big		On Failed			Prioritization Scoring							
	Roadway Intersection	Roadway Segment	Freight Need	Cost	Access	Corridor	%Trucks	AADT	Safety	Total		
1	US 41 at Port Sutton Rd.	-	Adjust signals sufficiently to allow all trucks in the turning lane to complete the turn.	Low	5	2	4	2	1	14		
2	22nd St. at Crosstown Expwy. I-4/Crosstown connector will remove many trucks.		Evaluate all ramps with 22nd St. for traffic signals. The location of the new IKEA retail store will have a significant impact on traffic congestion in this area and have a significant negative impact on freight movements in the area.	Medium	5	3	2	2	1	13		
3	62nd St. at Columbus Dr.		Improve this intersection in conjunction with intersection improvements at 62nd St. and Broadway Ave The drainage needs to be improved.	Medium	5	3	3	1	1	13		
4	Big Bend Rd. and I-75 N On-Ramp		Signal warrant was completed and a new signal is expected to be implemented in the near term. Conduct post implementation evaluation to insure signal timing is sufficient for truck turning movements.	Low	3	3	4	1	1	12		
5	US 41 (50th St.) at Causeway Blvd.	US 41 (Causeway Blvd. to Madison Ave.)	The following design elements should be included: dual left-turn lanes from NB US 41 to WB Causeway Blvd.; extend turn lanes to allow more vehicles and prevent blocking of NB through lane; and consider grade separation that includes crossing of railroad tracks to the south. The County and FDOT should work together to have US 41 designated as a SIS connector facility.	Medium	3	2	4	2	1	12		
6	County Line Rd./S. Frontage Rd./East I-4 Exit 25 Off-Ramp		Conduct an intersection safety evaluation and signal warrant study for the installation of traffic signals at both I-4 ramps. Add a fence between the I-4 right-of-way and the Frontage Rd. to prevent trucks from using the right-of-way for U-turns. Prohibit parking on S. Frontage Rd. west of County Line Rd. Review signage locations for turns onto the Frontage Rd. and to I-4 ramps.	Medium	3	2	4	2	1	12		
9	Causeway Blvd. at 78th St.	Causeway Blvd. (US 41 to US 301)	Ensure that design includes adequate turn radii for semi-trailer trucks to avoid damage to curbs and sidewalks.	Medium	3	3	3	1	1	11		
11	Broadway Ave. at 50th St. (US 41)		Adjust signal timing to allow more trucks to negotiate turns; evaluate a complete intersection redesign that includes improving the turn radii on all corners and the lane widths on all approaches.	Medium	4	2	3	1	1	11		
12	US 301 at Causeway Blvd.	Causeway Blvd. (US 41 to US 301)	Add dedicated right-turn lane from NB US 301 to EB Causeway Blvd.; increase the length of NB left-turn lane to accommodate extra vehicles or consider adding second turn lane when Causeway Blvd. is widened; increase signal lengths for left turn from NB US 301 to WB Causeway Blvd. during peak traffic periods.	Medium	3	2	3	2	1	11		
13	Interbay Blvd. at Westshore Blvd.		Widen Westshore Blvd. south of intersection to create larger turning radius for northbound right turns. Shift both lanes of traffic to enable northbound truckers to make right turns. There appears to be right-of-way west of Westshore Blvd. to widen and shift lanes. Move stop bar at westbound Interbay Blvd. closer to intersection to enable drivers to get a better view of the intersection.	Medium	5	2	2	1	1	11		
14	Progress Blvd. at US 301		Adjust signal timing to allow longer green time for eastbound Progress Blvd. to northbound US 301.	Medium	5	2	2	1	1	11		
15	I-4 and SR 39		Return traffic signal to full operational control	Low	2	2	5	1	1	11		
17	62nd St at Broadway Ave		Traffic signal warrant study for traffic signal with left turn arrow at this intersection	Medium	5	1	3	1	1	11		
18	SR 60 at 34th St.	SR 60 (Channelside Dr. to 50th St.)	Change turning radius from southbound 34th St to westbound Adamo Dr. Repave from railroad tracks to intersection	Medium	3	2	3	1 1		10		
19	WB I-4 ramp and Thonotosassa Rd.		Traffic signal warrant study needed. Add a stop sign for vehicles turning left from NB Thonotosassa Rd. to WB entrance ramp. This will allow alternating left turns from the I-4 WB exit ramp and to the WB entrance ramp. Lengthen the left turn lane on NB Thonotosassa Rd. which currently only holds two vehicles. Costs for adding stop signs and lengthening the left turn lane are low. Complete interchange signalization would be medium to high.	Medium	0	3	5	0	1	9		





Man		On Failed				Pri	oritization S	coring		1
Map ID	Roadway Intersection	Roadway Segment	Freight Need	Cost	Access	Corridor	%Trucks	AADT	Safety	Total
20	Busch Blvd. (SR 580) at Florida Ave.		Right turns on EB Busch Blvd. to southbound Florida Ave. are very difficult for trucks - they get stuck on the tracks. Stop bars are not visible at some locations and must be re-painted. Motorists and truckers at these locations either stop on top of the railroad tracks or very close to them, ignoring the faint stop bar markings. A truck was observed waiting on the railroad tracks making a right turn from EB Busch Boulevard to SB to Florida Ave., ignoring the stop bars. Improve drainage on the northwest corner of the intersection. Trucks making right turns from SB Florida Ave. to WB Busch Blvd. splash water on pedestrians and the sidewalk. Place new signs such as Do Not Stop on Tracks (MUTCD) at locations impacted by the railroad crossing. Place the intersection as a top priority on FDOT's traffic signal system improvement program to study and improve signal timing.	Medium	1	2	3	2	1	9
21	Busch Blvd. (SR 580) at Nebraska Ave.		Improve the right-turn lane on EB Busch Blvd. to SB Nebraska Ave. A small median island with guardrail is located in this turn lane and is heavily damaged and needs to be replaced. Turning radius is difficult and needs to be improved. Stop bars are not visible at some locations and must be re-painted. Motorists and truckers at these locations either stop on top of the railroad tracks or very close to them, ignoring the faint stop bar markings. A truck was observed waiting on the railroad tracks making a right turn from WB Busch Blvd. to SB Nebraska Ave., ignoring the stop bars. Place new signs such as Do Not Stop on Tracks (MUTCD) at locations impacted by the railroad crossing. Place as a top priority on FDOT's traffic signal system improvement program to study and improve signal timing.	Medium	1	2	3	2	1	9
22	County Line Rd. and US 92		Coordinate with Polk County. Review signal cycles and adjust for the large number of trucks making SB to EB left turns.	Medium	3	2	3	0	1	9
23	Dale Mabry Hwy. (SR 597) @ Bay to Bay Blvd.		Consider installing permissive or protected left-turn signals for both legs on Bay to Bay Blvd.; conduct turning movement counts and traffic analysis to provide justification for signal change.	Low	3	2	2	1	1	9
25	Hillsborough Ave. and Nebraska Ave. (US 41)		Reevaluate after construction and verify if truck operations have improved. Check signal timing to ensure optimum flow.	Low	1	2	2	1	1	7
26	Dale Mabry Hwy. (SR 597) @ Henderson Blvd.		Increase radii - move curbing and create additional shoulder or turning aprons for all four corners of intersection	Low	1	2	2	1	1	7
27	Dale Mabry Hwy. south of Kennedy Blvd.		Replace all damaged light poles. Move them further back from the street as much as possible. Could make slight modification to curbing where feasible to increase Turn Radii.	Low	3	2	1	1	0	7
28	Dr. Martin Luther King, Jr. Blvd. (SR 574) at 50th St. (US 41)		Increase Turn Radii at the southeast corner and move the stop bar back to allow trucks room to turn.	Low	3	1	1	1	1	7
29	Hillsborough Ave. (SR 580) at 22nd St.		Move stop bars back on both EB and WB approaches on Hillsborough Ave. Replace damaged utility poles and move further back from roadway if possible. Improve Turn Radii by adding a paved shoulder/turning apron to the southwest and northeast corners of the intersection	Medium	1	2	1	0	1	5
30	Turkey Creek Rd. at Sydney Rd.		Consider adding left- and right-turn lanes and a traffic signal.	Medium	3	1			1	5
31	Turkey Creek Rd. at Airport Rd.		Re-mark pavement and consider adding a left-turn lane to SB Turkey Creek Rd.	Low	3	1			1	5





					Pri	oritization S	coring			
Map ID	Roadway Intersection	Roadway Segment	Freight Need	Cost	Access	Corridor	%Trucks	AADT	Safety	Total
32	Sligh Ave. at Florida Ave.		Consider moving stop bars further back at each leg of intersection.	Low	1	1	1	0	1	4
33	Bloomingdale Ave. at Lithia Pinecrest Rd.	Lithia Pinecrest Rd. (Bloomingdale Ave. to Lithia Ridge Blvd.)	Add "Do Not Block Intersection" signs on Lithia Pinecrest Rd. at Miller Rd. Adjust signal timing for both the Miller Rd. and Bloomingdale Ave. signals to allow gap for SB Miller Rd. left turns on Lithia Pinecrest Rd.	Low	1	1	1	0	1	4
34	CR 39 at Lithia Pinecrest Rd.		Modify Turn Radii and pave shoulder.		0	1	2	0	1	4
35	Cypress St. at Westshore Blvd.		pair damaged curbing. Determine whether any right-of-way is available to end Turn Radii while minimizing pedestrian crossing length.		1	1	1	0	1	4
36	I-275 N and Bearss Ave. exit ramp		Recommend a thorough investigation by traffic engineer including geometry and signal optimization. Consider reducing the width of the concrete median immediately opposite the right-turn lanes from the NB exit ramp. This will allow trucks to make wider right turn swings without running up the median or encroaching on the outside right turn lane. Include "Do Not Block Intersection" signs on the EB and WB left-turn lanes where they cross the NB and SB exit ramps left-turn lanes.	Medium	0	1	1	0	1	3
37	Van Dyke Rd. at Gunn Hwy.		Move stop bar back from intersection on Van Dyke Rd. to improve left turns for SB Gunn Hwy. Improve shoulder or added a turning apron for right turns from NB Gunn Hwy. to EB Van Dyke Rd. Improve shoulder or add turning apron for right turns from WB Van Dyke Rd. to NB Gunn Hwy.	Medium	1	1	0	0	1	3
38	Sam Allen Rd. at Park Rd.	Sam Allen Rd. (Alexander St. to Park Rd.)	Remark the pavement and add reflectors as a short-term improvement.	Low	0	1	1	0	1	3

The following grade separation locations, although "Hot Spots," cannot be developed in the short-term due to the potential high cost of the projects.

7	Railroad crossing at US 41 (50th St.) Railroad crossing at Causeway Blvd. east of US 41 Railroad crossing at SR 60 east of US 41 Railroad crossing at US 41 south of Causeway Blvd. Railroad crossing at US 41 south of Causeway Blvd. Railroad crossing at US 41 south of Causeway Blvd. Railroad crossing at US 41 south of Causeway Blvd. Railroad crossing at Orient Rd. south of Reconstruct Rd is wide.	Conduct a detailed sub area study from Columbus Dr. to SR 60 to recommend improvements to this congested industrial area. Hillsborough County in conjunction with FDOT should provide justification to add this corridor to the SIS as an important port to I-4 connector route. This will allow it to receive SIS funds for improvements. A combined grade separation should be considered over the A line and Broadway Ave.	ments to this congested industrial area. Hillsborough County in ion with FDOT should provide justification to add this corridor to the SIS portant port to I-4 connector route. This will allow it to receive SIS rimprovements. A combined grade separation should be considered A line and Broadway Ave.							
8			Keep as hot spot and reevaluate upon completion of road project. Both CSXT and TPA recommend a grade separation at this crossing.	High	5	2	3	1	1	12
10	Railroad crossing at SR 60 east of US 41		Due to the large number of slow moving trains crossing SR 60 and the high traffic volumes including the high numbers of trucks, consider grade separation. Recommended by both CSXT and TPA.	High	3	3	3	1	1	11
16		Blvd. to Madison	This crossing should be evaluated for a grade separation due to the number of daily trains and resulting delay caused to traffic on US 41 including a significant number of trucks.	High	3	2	4	1	1	11
24	Railroad crossing at Orient Rd. south of Broadway Ave.		Reconstruct crossing to make smoother. Consider a grade separation if Orient Rd. is widened to four lanes. Orient Rd. provides connectivity at both I-4 and SR 60.	High	4	2	2	0	1	9



								Addresses			P	Prioritizatio	on Scorin	q	
Segment	From	То	SIS	RGMC	Truck Route	Percent of Trucks	Truck AADT	Freight Hot Spot #s	Identified in Plan ¹	Access	Corridor			Hot Spot	Scoring Total
		Over-C	apacity I	Freight Co	rridor Segr	nents (Federal/	State Highv	vays)							
I-75	Manatee County	SR 674	Χ	X		17.82	11,227		2,3	3	3	5	4		15
I-4	US 301	McIntosh Rd.	Χ	X		8.54	12,127		1	5	3	3	4		15
I-275	Ashley Dr.	I-4 Interchange	Χ	Х		7.00	10,500		1	5	3	3	4		15
Causeway Blvd.*	US 41	US 301	Χ	Х	Χ	7.30	1,679	8, 9, 12	2,3,4	5	3	3	1	3	15
US 41	Causeway Blvd.	Madison Ave.		Х	Χ	11.91	2,972	5, 16		5	2	4	1	2	14
SR 60	Channelside Dr.	50th St.	Х	Х		8.08	4,161	18		5	3	3	2	1	14
I-75	SR 60	Dr. Martin Luther King, Jr. Blvd.	Х	Х		11.31	10,179		2,3	3	3	4	4		14
I-4	I-275 Interchange	Dr. Martin Luther King, Jr. Blvd.	Х	Х		7.47	9,823		3	5	3	3	3		14
I-4	McIntosh Rd.	Branch Forbes Rd.	Х	Х		7.00	8,084		1	5	3	3	3		14
SR 60	50th St.	US 301	Х	Х		7.13	2,491	10		5	3	3	1	1	13
I-75	Dr. Martin Luther King, Jr. Blvd.	1-4	Χ	Х		9.82	12,128		2,3	3	3	3	4		13
I-75	Fowler Ave.	Pasco County	Х	Х		12.19	11,278		2,3	1	3	5	4		13
I-275*	Howard Frankland Bridge	Ashley Dr.	Х	Х		5.11	9,556		2,3	5	3	2	3		13
US 301	Lee Roy Selmon Expwy.	SR 60		Х	Χ	9.30	3,864		2	5	2	3	2		12
SR 60	US 301	Falkenburg Rd.	Х	Х		7.13	2,491		2	5	3	3	1		12
SR 60	I-75	Lithia Pinecrest Rd.	Х	Х		4.20	3,591		3	5	3	2	2		12
SR 60	Valrico Rd.	Dover Rd.	Х	Х		7.88	2,994		2,3	5	3	3	1		12
US 301	Fowler Ave.	CR 579			Х	12.08	1,474			3	2	5	1		11
SR 60	Pinellas County	Kennedy Blvd.		Х		5.51	2,700		3	5	3	2	1		11
US 92	McIntosh Rd.	Thonotosassa Rd.		Х	Х	10.46	1,056		1	3	2	4	1		10
US 301	SR 60	Dr. Martin Luther King, Jr. Blvd.		Х	Х	9.30	3,864		1,3	3	2	3	2		10
US 301	Dr. Martin Luther King, Jr. Blvd.	1-4		Х	Х	9.30	3,864		2	3	2	3	2		10
Hillsborough Ave.	Anderson Rd.	Veterans Expwy.		Х	Х	3.56	2,492		3	5	2	2	1		10
Bearss Ave.	Nebraska Ave.	Florida Ave.		Х	Х	NA	NA			3	2	4	1		10
I-275	Dr. Martin Luther King, Jr. Blvd.	Busch Blvd.	Х	Х		5.39	8,435		2,3	1	3	2	3		9
US 301	Bloomingdale Ave.	Big Bend Rd.		Х	Х	5.90	1,446		2,3	3	2	2	1		8
US 301	I-4	Fowler Ave.		Х	Х	11.27	2,648		2,3	1	2	4	1		8
US 301	CR 579	Pasco County			Х	11.98	1,486			1	2	4	1		8
Hillsborough Ave.	Veterans Expwy.	Sheldon Rd.		Х	Х	3.38	1,792			3	2	2	1		8
SR 60 (Kennedy Blvd.)	Dale Mabry Hwy.	Channelside Dr.			Х	3.62	1,520			1	3	2	1		7
Dr. Martin Luther King, Jr. Blvd.	40 th St.	1-4			Х	3.38	1,002		2	3	1	2	1		7
Dale Mabry Hwy.	I-4	Hillsborough Ave.		Х	Х	1.84	1,398		1	3	2	1	1		7
Busch Blvd.	Armenia Ave.	Dale Mabry Hwy.			Х	3.16	853		2	3	1	2	1		7
US 92	US 301	CR 579		Х	Х	8.74	813		1	1	2	3	0		6
Fowler Ave.	30 th St.	56 th St.			Х	3.36	2,234		3	1	1	2	2		6
56 th St.	Hillsborough Ave.	Fowler Ave.			Х	3.91	1,877			3	1	1	1		6

^{*} Under construction.

TABLE 3-3 TRUCK ROUTES SEGMENTS REQUIRING CAPACITY IMPROVEMENTS



	_			Truck	Percent of	Truck	Addresses Freight Hot	Identified	Prioritization Scoring					
		_											Hot	Scoring
Segment Dr. Martin Luthar King	From	To SIS	RGMC	Route	Trucks	AADT	Spot #s	in Plan ¹	Access	Corridor	%Truck	AADT	Spot	Total
Dr. Martin Luther King, Jr. Blvd.	Lakewood Ave.	Parsons Ave.		X	5.51	1,543		3	1	1	2	1		5
Hillsborough Ave.	56th St.	US 301	Х	Х	1.21	1,142		1	1	1	2	1		5
Fletcher Ave.	Nebraska Ave.	Florida Ave.	Х	Х	NA	NA			1	1	2	1		5
Dr. Martin Luther King, Jr. Blvd.	Parsons Ave.	McIntosh Rd.		X	5.77	681		3	1	1	2	0		4
Dale Mabry Hwy.	Bearss Ave./Erlich Rd.	Van Dyke Rd.		Х	2.43	1,108		3	1	1	1	1		4
Dale Mabry Hwy.	Fletcher Ave.	Bearss Ave.		Х	2.13	1,416		3	1	1	1	1		4
Dale Mabry Hwy.	Hillsborough Ave.	Waters Ave.		Х	1.84	1,398		1	1	1	1	1		4
Dale Mabry Hwy.	Waters Ave.	Fletcher Ave.		Х	2.11	1,614		1	1	1	1	1		4
Dale Mabry Hwy.	Veterans Expwy.	Lutz-Lake Fern Rd.		Х	4.27	1,559		2	1	1	1	1		4
		Over-Ca _l	pacity Freig	ht Corridor	Segments (Co	unty Roads)			•		•		
Progress Blvd. Includes I-75 Overpass	78th St.	US 301	Х	Х	NA	NA		1	5	2	2	2		11
County Line Rd.	SR 60	Medulla Rd.	Х	Х	NA	NA		1	3	2	3	1		9
Forbes Rd.	I-4	Dr. Martin Luther King, Jr. Blvd.	Х	Х	NA	NA		1	3	2	2	1		8
Anderson Rd.	Waters Ave.	Gunn Hwy.		Х	8.32	4,742		1	1	1	3	2		7
Benjamin Rd.	Sligh Ave.	Waters Ave.		Х	NA	NA		1	3	1	2	1		7
Broadway Ave.	Falkenburg Rd.	Williams Rd.		Х	NA	NA		1	3	1	2	1		7
Bloomingdale Ave.	US 301	Lithia Pinecrest Rd		Х	NA	NA			3	1	1	1		6
Broadway Ave.	Williams Rd.	Lakewood Ave.		Х	NA	NA		1	3	1	1	1		6
Gibsonton Dr.	I-75	US 301		Х	NA	NA		1	3	1	1	1		6
Falkenburg Rd.	US 92	Dr. Martin Luther King, Jr. Blvd.		Х	NA	NA			1	1	2	1		5
Gunn Hwy.	Pasco County	S. Mobley Rd.		Х	NA	NA	37	1	1	1	1	1	1	5
McIntosh Rd.	US 92	I-4		Х	NA	NA			1	1	2	1		5
Memorial Hwy.	Veterans Expwy.	Hillsborough Ave.		Х	NA	NA			3	1	1	0		5
Armenia Ave.	Sligh Ave.	Busch Blvd.		Х	NA	NA		1	1	1	1	1		4
Bruce B. Downs Blvd.	Fletcher Ave.	Bearss Ave.		Х	NA	NA			1	1	1	1		4
Bruce B. Downs Blvd.	Bearss Ave.	I-75		Х	NA	NA		2,3	1	1	1	1		4
Bruce B. Downs Blvd.	I-75	Pebble Creek Blvd.		Х	NA	NA		2,3,4	1	1	1	1		4
CR 579	I-4	Dr. Martin Luther King, Jr. Blvd.		Х	NA	NA		2	1	1	1	1		4
CR 579	I-4	Sligh Ave.		Х	NA	NA		2	1	1	1	1		4
CR 579	Sligh Ave.	US 301		Х	NA	NA			1	1	1	1		4
Fletcher Ave.	30th St.	56th St.		Х	NA	NA		2	1	1	1	1		4
Fletcher Ave.	56th St.	I-75		Х	NA	NA		2	1	1	1	1		4
Fletcher Ave.	Bruce B Downs Blvd.	Florida Ave.		Х	NA	NA			1	1	1	1		4
Fletcher Ave.	Florida Ave.	Dale Mabry Hwy.		Х	NA	NA			1	1	1	1		4
Gunn Hwy.	Linebaugh Ave.	Anderson Rd.		Х	NA	NA			1	1	1	1		4
Linebaugh Ave.	Anderson Rd.	Sheldon Rd.		Х	NA	NA		1,4	1	1	1	1		4
78th St.	Causeway Blvd.	Madison Ave.		Х	NA	NA		2	1	1	1	0		3
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TABLE 3-3 (CONTINUED)
TRUCK ROUTES SEGMENTS
REQUIRING CAPACITY IMPROVEMENTS



Segment	From	То	SIS	RGMC	Truck Route	Percent of Trucks	Truck AADT	Addresses Freight Hot Spot #s	Identified in Plan ¹	Prioritization Scoring					
										Access	Corridor	%Truck	AADT	Hot Spot	Scoring Total
Non-Over-Capacity Segments With High Truck Use															
I-75	SR-674	Big Bend Rd.	X	X	, ,	10.20	11,583	4	2	5	3	4	4	1	17
SR-60	Dover Rd.	County Line Rd.	Х	Х		10.88	2,502		1	5	3	4	1		13
Veterans Expwy.	Memorial Hwy.	Suncoast Pkwy.	X			8.32	4,742		2	5	3	3	2		13
US 41	Madison Ave.	Riverview Dr.		Х	Х	11.28	2,594		2	5	2	4	1		12
US 41	Riverview Dr.	SR 674		Х	Х	8.88	1,403		1	5	2	4	1		12
US 301	SR 674	CR-672		Х	Х	13.83	1,424		2	3	2	5	1		11
SR-39	Sam Allen Rd.	CR 582		Х	Х	18.69	2318			2	2	5	1		10
SR-39	CR 582	Pasco County		Х	Х	22.32	1996			2	2	5	1		10
Progress Blvd.	82nd St.	US 301			Х	N/A	N/A		2	5	1	3	1		10
Anderson Rd.	Sligh Ave.	Waters Ave.			Х	8.32	4,742		4	3	1	3	2		9
Anderson Rd.	Hillsborough Ave.	Hoover Blvd.			Х	NA	NA		1	3	1	3	2		9
I-275	US 41	Pasco County	X	Х		4.44	2,464		2	3	3	2	1		9
US 92	Park Rd.	County Line Rd.		Х	Х	9.50	922		1,3	3	2	3	0		8
CR 39	Lithia Pinecrest Rd.	SR 60			Х	NA	NA	34		3	1	2	1	1	8
CR 672	CR 39	US 301			Х	NA	NA		1	3	1	3	1		8
Van Dyke Rd.	Tobacco Rd.	Dale Mabry Hwy.			Х	8.32	1,082		1	1	1	3	1		6
Gunn Hwy.	Pasco County	Mobley Rd.			Х	NA	NA	37		1	1	2	1	1	6
Orient Rd.	Broadway Ave.	Hillsborough Ave.			Х	N/A	N/A		1	2	1	1	1		6
Fowler Ave.	56th St.	I-75			Х	6.86	4,013			1	1	2	1		5
Sam Allen Rd.	Alexander St. Ext.	Park Rd.			Х	N/A	N/A	38	2,3	1	1	1	1	1	5
Lutz-Lake Fern Rd.	Suncoast Pkwy.	Dale Mabry Hwy.			Х	NA	NA		1	1	1	1	1		4
Park Rd.	I-4	Sam Allen Rd.			Х	N/A	N/A		3	1	1	1	0		3
Sligh Ave.	56ths St.	US 301			Х	N/A	N/A		1	1	1	1	0		3
			<u> </u>	Future P	lanned Nev	v Truck Routes			!		.				,
Crosstown Connector (New road)	Lee Roy Selmon Expwy	1-4	Х			N/A	N/A		2,3	5	3	4	3		15
Air Cargo Rd. (New road)	Hillsborough Ave	Tampa Bay Blvd			Х	N/A	N/A		2	5	1	4	1		11
SR 39 (New road)	I-4	Knights Griffin Rd			X	N/A	N/A		3	3	1	3	1		8

Note: Weighting of %Trucks and AADT on County roads without traffic counts are estimated based on similar type state highways. The Crosstown Connector and the NS Cargo Blvd. are expected to serve a high percentage of trucks with moderate to high truck counts.

Identified in Plan Notes: (1) 2025 Needs Plan; (2) 2025 Cost Affordable Plan; (3) FDOT 5-Year Work Program; (4) Hillsborough County CIP.

FDOT Regional Goods Movement Study Freight Network, URS Corporation; FDOT 5-Year Work Program; 2025 LRTP Appendix B Highway Projects; 2025 LRTP Appendix F Regional Projects; BOCC Staff Report--2008 Truck Route Plan Update, August 2008; Hillsborough County Truck Route AADT Map; and Hillsborough County Failed Roads Map (Figure 3-2).

TABLE 3-3 (CONTINUED)
TRUCK ROUTES SEGMENTS
REQUIRING CAPACITY IMPROVEMENTS

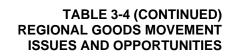


Location	Opportunity Type	Category	Description	Issue	Opportunity
I-4 Right-of-Way	Roadway Network Capacity and Connectivity	Corridor	FDOT and TBARTA are considering alternatives for personal mobility within the I-4 right-of-way. Managed lanes and rail are being considered. Either one of these could improve freight mobility within the corridor depending on the type of facility and connections that will be made.	Need for enhanced capacity in the I-4 corridor	Managed lanes/Rail lines within I-4 right-of-way.
County Line Rd. Polk/ Hillsborough County	Roadway Network Capacity and Connectivity	Facility	County Line Rd. is a viable link between SR 60 and I-4. However, the southern section is only one lane in each direction. The northern section, while having two lanes in each direction is highly congested, has low posted speeds and future truck volumes are expected to increase as Plant City develops an industrial area on the Hillsborough County side of the roadway.	Inadequate capacity on County Line Rd.	Widening of County Line Rd. would create a viable freight mobility link
Plant City junction	Rail Network Capacity and Connectivity	Corridor	The CSX A, S, and SV lines meet in downtown Plant City. Providing the ability to switch from the A line to the S line would create choice in which line to use for trips between Plant City and Tampa. Switching could occur east of the immediate and downtown.	Flexibility needed in freight trip scheduling	CSX A line/S line switch would maximize capacity for trips between Plant City and Tampa.
Port of Tampa Channel	Port Water Access	FAC	The depth of the shipping channel going to the Port of Tampa is currently limited. Other ports (Savannah, Charleston, Miami, et al) are post-Panamax ready or are preparing to accommodate these larger ships. Opportunity for the Port of Tampa to accommodate large vessels may be limited in light of these factors.	Limited shipping channel depth.	Expansion of shipping channel to allow the Port of Tampa to compete with other Florida and east coast ports for container business.
Port of Tampa	Port Land Side Access	System-wide	ZIM is currently the only cargo line that comes to the Port of Tampa. When other cargo lines port in Tampa, there will be an increase in freight activity in the Tampa market. This is an economic opportunity, but would result in an increase in truck traffic and rail activity that would impact the current capacity of the transportation system.	Will increase roadway, rail congestion.	Increased cargo vessel traffic would result in increased economic opportunity. Expand the rail and roads system links to accommodate increased port activity.
Inland port in Hillsborough County	Distribution and Logistics	Facility	A new inland port on I-75, with connections to rail and pipeline, would greatly reduce the need for truck access to the Port of Tampa. Location to be determined after detailed study.	Increasing truck congestion at the Port of Tampa.	Develop a new inland port on I-75
Port of Tampa	Economic Factors	FAC	There are cargo lines that currently stop in Houston and Mobile that could stop in Tampa in the future. This would increase container business at the Port of Tampa.	Underutilization of Port for container cargo	Potential capture of container traffic currently calling Houston and Mobile.
Port Tampa	Economic Factors	FAC	Port Tampa is physically separated from the rest of the port facilities. This area could potentially be redeveloped into other uses if the existing uses could be relocated to the east side of the bay. There are two issues associated with this concept. A major aviation fuel pipeline leading to TIA and a direct line to supply MacDill AFB with aviation fuel. Secondly, the cost to relocate the private facilities to other port locations will be costly and would have to be in place prior to any move, including new pipelines.	Port Tampa disconnected from the rest of port complex.	Redevelopment Potential. Removes significant numbers of trucks from South Tampa reducing congestion on local roads and relocates high volume truck business closer to the regional and SIS network.
Port of Tampa Hooker's Point	Port Land Side Access	FAC	Limited capacity for drayage to rail intermodal yard, single access point at Maritime Blvd. will limit truck throughput, market need (long-haul vs. short-haul). The TPA and CSXT need to develop Infrastructure to increase capacity of container operations including: an additional access point to increase throughput and capability for direct dockside ship to rail modal transfer of containers.	Limited drayage capacity to rail intermodal yard.	Add access point and direct ship-to-rail capability will reduce trucks draying containers to the CSX Intermodal yard.
Port of Tampa Hooker's Point	Economic Factors	FAC	Opportunity: Increase capacity to handle more automobile imports. Constrained by limited short-term storage and single point of access to Hooker's Point.	Limited short-term storage, single point- of-access.	Increased potential to handle more auto imports.
Rockport, Port Sutton, and Pendola Pointe	Roadway Network and Capacity	FAC	Opportunities: Improved traffic flow on US 41 and Causeway Blvd. by reducing rail/ highway conflicts; Create grade separations of US 41 and the Rockport rail crossing. Constraints: Cost, proximity of Causeway Blvd. intersection, increased commuter traffic on US 41 and Causeway Blvd. due to new residential development in south Hillsborough County.	Rail/Auto conflicts at crossings on US 41 and Causeway Blvd.	Grade separation = Reduced road/rail conflicts on US 41/Causeway Blvd.





Location	Opportunity Type	Category	Description	Issue	Opportunity
Rockport, Port Sutton, and Pendola Pointe	Rail Network Capacity and Connectivity	FAC	Opportunity: Reroute the phosphate trains to a southern approach to reduce impact to Causeway Blvd., US 41 at Rockport and SR 60 as well as to reduce the number of trains routed through the densely populated Brandon area. Challenges: Would require a new rail line from eastern Hillsborough County to the Palmetto Subdivision mainline. A relocated rail crossing would still require a grade separation at US 41 to get to the port. In addition grade separations would be required at US 301 and at I-75 (extremely expensive).	Rail/Auto conflicts source of increased congestion	Reroute phosphate trains to the south
Rockport, Port Sutton, and Pendola Pointe	Roadway Network and Capacity	FAC	Improve Madison Ave. and Progress Blvd. to four-lanes from US 41 to US 301 to include "truck-friendly" design features.	Madison Ave. and Progress Blvd. require improvement to accommodate truck traffic	"Truck-friendly" roadway design improvements
Southeast Tampa Industrial Area FAC	Roadway Network and Capacity	FAC	Improve traffic operations within this area. Consider grade separations over CSX mainline at SR 60. Build new wye connecting the A line and the S line west of 39th St. and cut the S line west of 50th St. This will leave only double track south of Broadway Ave., which could be considered for a grade separation. Improve the internal road network by enhancing Broadway Ave., Columbus Dr., and the intersections at both of these streets and 62nd St. Improve 62nd St. entrance to the intermodal yard if retained in this area.	Cost	Rail/roadway grade separations and realignments to improve traffic operations
I-4 - SR 60 Connector	Roadway Network Capacity and Connectivity	Corridor	Limited access facility connecting I-4 to SR 60 between McIntosh Rd. and Turkey Creek Rd. in eastern Hillsborough County that would greatly enhance freight mobility between Polk County, I-4, and the Port of Tampa.	Lack of connectivity between I-4 and SR 60	I-4 to SR 60 limited access connector
AZA Line alternative in south Hillsborough	Rail Network Capacity and Connectivity	Corridor	Establishing new rail in the SW line right-of-way that connects existing rail in Manatee County with the SZ line would be an alternative route to the AZA line. This investment would be warranted if there were a significant shift to rail freight for goods going to Southwest Florida, if the A and S lines connecting the Port of Tampa were limited by capacity, or if the A line, S line or AZA lines took on a public rail transit component.	Additional rail freight capacity needed	Alternative route to CSX - AZA line
Port Tampa	Port Water Access	FAC	There is the possibility that the fuel terminal at Port Tampa will be replaced by facilities at the Port of Tampa. Jet fuel is currently piped to TIA from Port Tampa. A new pipeline would need to be constructed between the Port of Tampa and TIA to make a new jet fuel terminal viable. Concepts for such a pipeline have been proposed in the past.	Future constraints on transporting fuel to TIA	Redevelopment of Port Tampa to residential/commercial resulting from relocation of current use to Port of Tampa
Port of Tampa	Distribution and Logistics	Systemwide	If the price of fuel rises considerably, there will be a move back to waterfront warehousing, distribution and manufacturing.	Future capacity needs at Port	Foster "Freight Village" Concept in light of higher fuel costs
Alafia, East Yard	Rail Network and Capacity	FAC	Reconfigure switching operations at the East Tampa Yard (Mosaic fertilizer plant) to prevent unnecessary impacts to US 41. Engineer override of gate activation when road will not be crossed. Constraints include the location of a massive gypsum stack that limits internal expansion.	Internal expansion constrained.	Reduced interruption of traffic on US 41
Port Redwing/Eastern port facilities	Economic factors	FAC	Develop Port Redwing or other vacant/expanded port facilities along US 41 into a state-of-the-art container facility. Relocate and consolidate CSXT rail operations from Anderson Rd., TRANSFLO, and Uceta to the Big Bend FAC. 1) Provide direct ship to rail container transloading to eliminate drayage impacts on road system. 2) Load and assemble container trains at the port or into the immediate vicinity. 3) Reorganize several CSX facilities into a single location. 4) Allow redevelopment of industrial uses in previously occupied rail facilities. 5) Move container operations, vehicle import operations out of Hooker's Point. Constraints: Cost of developing new container facility, cost of relocation CSXT facilities, potential community issues, encroachment of residential uses near the Port, potential environmental constraints, potential channel depth and width may restrict size of container vessels.	Cost, right-of-way, development compatibility	Redevelop Port Redwing into state-of-the-art container facility





Location	Opportunity Type	Category	Description	Issue	Opportunity
Port Redwing	Roadway Network and Capacity	FAC	Establish direct "trucks only" connector from I-75 to Port Redwing/US41 Gateway. Develop trucks only interchange north of Big Bend Rd. This will reduce the truck traffic on Big Bend Rd., a rapidly developing residential and commercial corridor, provide direct access to the port facilities west of US 41 and to potential dedicated truck lanes on I-75 (SIS) from the Manatee County line to SR 54 in Pasco County. Constraints include the cost, right-of-way acquisition, and compatibility with nearby development.	Direct access necessary for expansion to be viable	Exclusive truck connector from I-75 to Port Redwing
Southeast Tampa Industrial Area FAC	Rail Network and Capacity	FAC	Increase intermodal container/trailer capacity by either expanding the existing Uceta yard or relocating the yard to a larger property. Relocate the existing TRANSFLO facility from 39th St. to the new consolidated location if this option is developed. Constraints include relocation costs, right-of-way availability, and potential environmental impacts.	Cost, right-of-way, development compatibility	Increased intermodal capacity
East Central Tampa Industrial Area FAC	Roadway Network and Capacity	FAC	Redevelop functionally obsolete structures. Improve the congested internal circulation and off-road parking for tractor trailers. May be constrained by right-of-way due to location of buildings, lack of space for off-street parking of large trucks, and ingress/egress on 56th St.	Constrained right-of-way	Improvements to roadways, structures, and internal circulation
Plant City Airport Industrial	Roadway Network and Capacity	FAC	Improve access connectors (Turkey Creek Rd., US 92, and Forbes Rd.) to I-4 including additional storage lanes, improved signal timing that benefits truck movement, and truck-friendly intersection geometry.	As this FAC expands truck traffic accessing the area from I-4 will increase	Truck-friendly roadway improvements
East Plant City Industrial FAC	Economic factors	FAC	This area has been rezoned for industrial uses. Plant City estimates approximately 10,000,000 square feet at build out. Ensure that development plans include truck-friendly geometry on the internal road network and sufficient off-street parking for trucks. Improve access on both Park Rd. and US 92 as well east County Line Rd. Development industry could make beneficial use of the rail line in the area.	Area rezoned for industrial use = Redevelopment potential	Develop well planned Internal/External truck-friendly geometry, adequate offstreet truck parking. Include development of internal rail spurs.
Tampa Road Industrial Area FAC	Roadway Network and Capacity	FAC	Improve connectivity to the regional freight corridors. Location is constrained by having only one connector route, Hillsborough Ave. to the veterans and to I-275. Include a northern connector. Constrained by residential opposition (Westchase) in the past.	Residential Opposition (Westchase)	Implementation of northern connector route
Plant City Future ILC	Rail Network Capacity and Connectivity	Facility	Between the A line and the S line west of Alexander Rd. and east of Turkey Creek Rd. is an opportunity in the long-term future for a classification and intermodal yard. It would provide access to the A and S lines and be in close proximity to I-4 and SR 60.	Additional capacity needed for freight operations and logistics	Potential for redevelopment into a freight village

Source: Tampa Bay Regional Goods Movement Study (Draft Issues and Opportunities table, 2009).



3.5 RECOMMENDED SHORT-TERM FUNDING

The Tampa Bay Regional Goods Movement Study identified 38 significant freight Hot Spots in Hillsborough County. Generally these low to medium cost projects can pay large dividends in freight operations by reducing the number of stops trucks must make at intersections, eliminating structural hazards, improving access, and lowering overall operational costs.

In order to facilitate and help expedite improvements to these Hot Spots a funding box of \$2.5 million over five years is recommended for low to medium cost projects. Low cost projects are those that can be accomplished for under \$50,000. Medium cost projects are those with an estimated cost between \$50,000 and \$250,000.

Approximately \$250,000 in low cost projects could be accomplished through County and City operations and maintenance funding. This would leave approximately \$2.25 million in medium cost projects to be funded through the Freight Project Funding Box. It is also possible that some of the projects may be incorporated within larger projects such as capacity improvements or resurfacing projects. However, new Hot Spots may be identified in the future through planned freight stakeholder outreach programs.

Inducing implementing agencies to make low-cost improvements with Federal funding has proven challenging due to time-consuming Federal requirements governing right-of-way acquisition and environmental compliance. The MPO and its implementing agency partners should therefore strategically select Hot Spots to be improved with Federal funds to avoid these potential problems. More complex Hot Spot problems could be addressed with local funds, or perhaps bundled together and funded locally in return for another local need being prioritized for Federal funding.



4.0 DESIGN STANDARDS, PERFORMANCE MEASURES, AND PROJECT SELECTION CRITERIA

4.1 TRUCK-FRIENDLY DESIGN STANDARDS

Because of the importance of goods movement to the local economy, policies must be developed to ensure the efficient movement of freight over the designated network. In order to accommodate trucks, all designated truck routes should incorporate truck-friendly design standards whenever a designated truck route is improved. These standards include at a minimum:

- Travel lane width of ≥ 12 feet.
- Hard shoulders width of 10 feet.
- Corner turning radius sufficient to accommodate a WB-66 tractor trailer unit.
- Left-turn storage lanes of sufficient length to accommodate all turning vehicles without blocking through lanes.
- Median openings with left turn storage that will accommodate large trucks.
- Dedicated right-turn lanes and acceleration merge lanes at major intersections.
- Advanced signal timing that maximizes truck flow and minimizes the number of stops for trucks.
- Truck signage (similar to points of interest signage) to direct trucks to key port, intermodal, rail and distribution facilities via the most direct route, where appropriate.

To ensure that truck-friendly design standards are included on all truck routes, develop and formally adopt countywide standard truck route typical sections to be used on all future capacity improvements.



4.2 RECOMMENDED PERFORMANCE MEASURE CRITERIA

According to the Federal Highway Administration (FHWA), the number of trucks will double by 2035 and existing truck routes will not be able to handle the volume of both trucks and autos.

Unlike passenger vehicles which can be diverted to mass transit, trucks cannot be diverted off the highway very easily with the exception of inbound and outbound regional, state, and national cargo, which may be diverted to rail or possibly even to Short Sea Shipping (SSS).

Transportation costs are directly related to highway congestion and as congestion becomes more of an issue, the cost to transport goods will continue to increase. The Texas Transportation Institute (TTI) estimated that the cost of delay to the trucking industry amounted to \$32.15 per hour of delay in 2006. TTI also estimates the hours of delay for each of the large, medium, and small cities throughout the United States (including Tampa) in the Annual Urban Mobility Report⁸.

Good performance measures should be based on data that is easily obtained and The data must be quantifiable and measurable standards must be monitored. established. From a freight transportation perspective the key measures would include:

- Truck miles traveled (TMT) [AADT* Length* %Trucks]
- Average Travel Speed (Trucks) [Average Speed weighted by TMT]
- Percent of heavily congested travel (Trucks) [%VMT at LOS E or F* %trucks]
- Hours of Delay (Trucks) [Average Delay* %Trucks]
- Cost of Delay (Trucks) [Average Delay Trucks * Hourly Truck Delay Cost]

At a minimum, freight performance measures should be monitored for SIS corridors and regional Goods Movement Corridors that are not part of the SIS. In addition, selected heavily traveled County roads designated as truck routes should also be monitored (Example: Lithia Pinecrest Road, Gunn Highway, Bruce B. Downs Boulevard). Each system should be tracked separately on an annual basis.

In order to facilitate the measuring of performance of truck routes, a traffic classification count plan should be implemented on selected County truck routes that are not part of the state highway system.



4.3 ESTABLISH PROJECT PRIORITIES IN LRTP

The importance of freight operations in support of key economic generators should be considered and weighted appropriately for each roadway considered in the Needs Assessment and the Cost Affordable Plan. Simply giving a point for being a truck route is not appropriate because some routes have a greater impact than others on the local economy and their ability to garner Federal and state funding because they are part of the SIS. The following should be considered when giving weight to freight corridors:

- Access to key economic generators (Port/airport, regional FACs, major distribution facilities)
- Type of freight facility (SIS, Regional Goods Movement Corridor, Local Truck Route)
- Percent of truck use and or AADT
- Whether the corridor contains Hot Spots

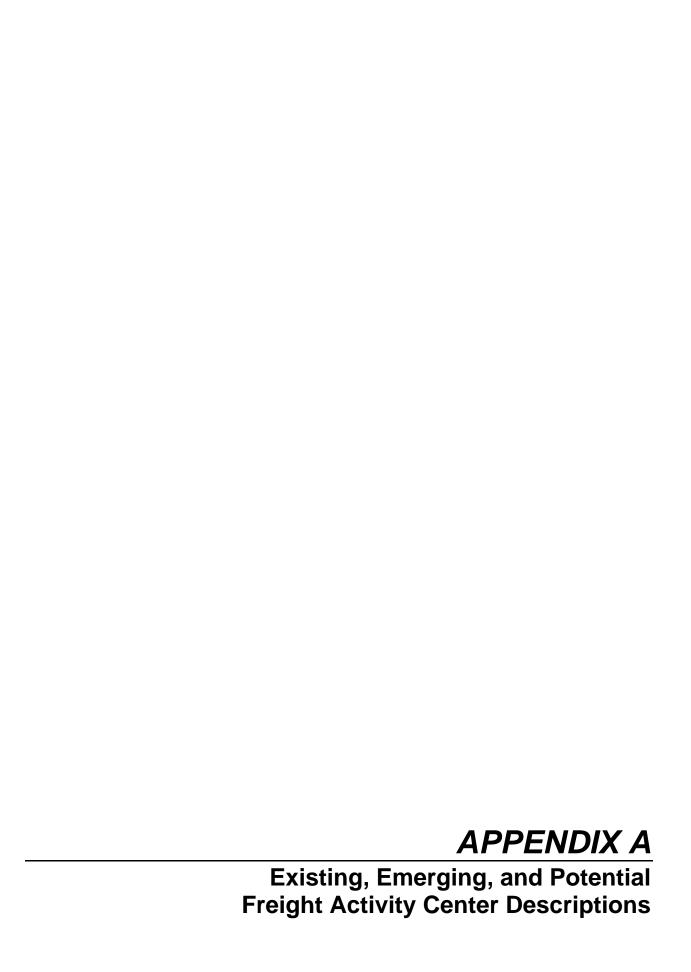
Tables 3-2 and 3-3 provide a ranking of hot spots and segments based on such prioritization factors.



5.0 REFERENCES

- 1 Florida Department of Transportation, District Seven (Ongoing).
- 2 The Tampa bay Partnership, Three-Year Strategic Plan 2009-2011. The Model for Prosperity. Also, the Tampa Bay Regional Planning Council (TBRPC) provides a Regional Comprehensive Economic Development Strategies (CEDS).
- 3 Because of the high number of large trucks that will be using this facility, there are safety issues with this concept. Truck/bicycle conflicts are much more hazardous than bicycle/pedestrian conflicts. Although not expressed as an issue by HCAA, the planned typical section should be reviewed from a safety perspective.
- 4 Port of Tampa Strategic Plan, 2008.
- 5 While port throughput is measured in TEUs, modern containers are typically forty-foot equivalent units (FEUs). These are what are typically seen on the highways and each FEU equates to a single truck trip.
- 6 Port of Tampa Strategic Plan, 2007.
- 7 This is the expected increase statewide in Florida based on the Freight Analysis Forecasts (FAF2). It is assumed this figure will also approximate the number of trucks on Hillsborough County roads in 2035.
- 8 Texas Transportation Institute (TTI), Texas A&M University, Annual Mobility Report, 2006. TTI estimates congestion for large, medium, and small cities on an annual basis. Data is two years earlier than current year.





HILLSBOROUGH COUNTY - FREIGHT ACTIVITY CENTER PROFILES – AS OF DECEMBER 2008

Hillsborough County is the industrial hub of the Tampa Bay Region. It will continue in this prominent role because of its vast seaport facilities that are currently undergoing modernization and expansion, its major railroad intermodal facilities, and an expanding air cargo operation at Tampa International Airport (TIA).

The Port of Tampa is Florida's largest seaport measured in bulk tonnage. Besides its primary emphasis on bulk transportation of phosphate and other minerals, it is expanding into broader freight shipping categories such as automobile transport and containerization as it looks toward expanding its market base in Central and South America.

Hillsborough County is also a major center for CSX Transportation (CSXT) railroad with regional bulk, container, and automobile intermodal facilities located throughout the area that serves central and southwest Florida communities. CSXT has the capacity to transfer up to 3,600 vehicles per day at its Anderson Road auto yards. Additionally, CSXT has a large intermodal bulk transfer terminal at Hooker's Point in the Port of Tampa and owns the Rockport Terminal at the port where phosphate is processed. CSXT also services the Port Sutton, Pendola Point, Alafia River, and Big Bend terminals within the port. The CSXT TRANSFLO bulk transfer terminal, the large intermodal container yard north of SR 60, and various industrial areas are centered east of the port.

The Freight Activity Centers (FACs) located in Hillsborough County are listed below. The key characteristics, existing and future land uses, access and freight activity, and other information about each activity center are provided in the following text.

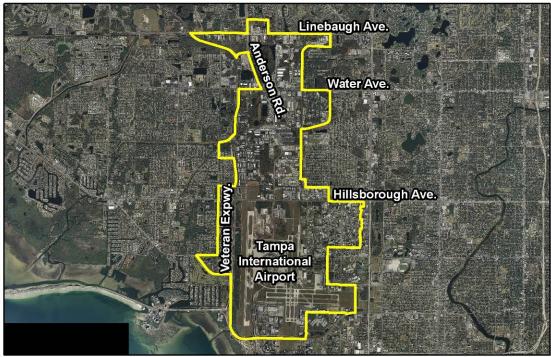
- Anderson Road/TIA
- Port Tampa
- Hooker's Point (Port of Tampa)
- Rockport/Port Sutton/Pendola Point (Port of Tampa)
- Alafia River (Port of Tampa)
- Big Bend/Port Redwing (Port of Tampa)
- Southeast Tampa Industrial Area (CSXT Intermodal Yard)
- South I-75 (Sabal Park Industrial Area)
- East Central Tampa Industrial Area
- Plant City Airport Industrial Area
- East Plant City Industrial Area

In addition to the FACs listed above, the region contains several large-scale phosphate and rock mining areas that generate significant truck and rail traffic between the mines, the Port of Tampa, and local processing plants. The locations of these mines are in eastern Hillsborough County from south of SR 60 to the Manatee County line and north of Plant City near the Pasco County line.

The Tampa Executive Airport is an area with potential to be a future FAC. There is no existing industrial or freight activity at this facility; however, this location could be an excellent intermodal transshipment site supporting nearby industrial operations because of its convenient location at the intersection of two of the Strategic Intermodal System (SIS) corridors and its ability to serve small as well as medium-sized jet cargo aircraft. There is also the potential to expand outside the airport along US 301 from I-4 to north of Sligh Avenue. This area is designated as general mixed-use on the *Hillsborough County Future Land Use Map*, which allows for industrial components.

ANDERSON ROAD/TAMPA INTERNATIONAL AIRPORT

The Anderson Road FAC is located in northwest Hillsborough County. It includes a large warehousing, distribution, and manufacturing district that extends along Anderson Road between Linebaugh Avenue and Hillsborough Avenue. It also includes TIA and a portion of Drew Park east to Manhattan Avenue on the southern part of the activity center and the general mixed-use area on the west side of the Veterans Expressway.



2008 Aerial Photo

LAND USE

Existing Land Use

The area contains several railroad spurs serving local industries including the CSXT/TDSI Auto Yard, a 100-acre facility extending along both sides of Sligh Avenue east of Anderson Road. Within the Auto Yard, a 75-acre north yard is used to unload new vehicles and has a 3,600 automobile capacity. (Note: CSXT plans to close the auto yard and transfer its functions to the planned new ILC in Polk County.)

Sunstate Business Center, at the northern end of the area, consists mainly of warehousing, distribution, and manufacturing activities. Home Depot operates a large break-bulk distribution center within the area that is served by CSXT rail. Other industrial parks located within this activity center include: Tampa West Industrial Park, Northport Business Center, Pioneer Industrial Park, Thompson Center, Woodland Corporate Business Park, Benjamin Center, Jet Port Corporate Business Park, and Airport Industrial Park.

In addition, there are several moving companies located within this activity center between Sligh Avenue and Hillsborough Avenue. These companies ship household items and provide temporary storage in company-owned warehouse facilities.

TIA is located at the southern portion of the activity center. The airport services 12 airlines including three air cargo carriers. Federal Express, Flight Express Services, and the United States Postal Service (USPS) are the only all freight carriers. Air freight is also carried on scheduled commercial flights.

Future Land Use

According to the *Hillsborough County Future Land Use Plan*, the area defined by Linebaugh Avenue on the north, Hillsborough Avenue on the south, the Veterans Expressway on the west, and Lois Avenue on the east, will remain designated as light industrial. South of this area, TIA is planning expansion into Drew Park, an area of mixed residential and light industrial land uses according to the *City of Tampa Future Land Use Plan*.

TRANSPORTATION

Access

The Veterans Expressway, Hillsborough Avenue, and Anderson Road serve this activity center. Hillsborough Avenue is the primary connecting route from the north side of the airport and the industrial activities along Anderson Road. Anderson Road also connects directly to the Veterans Expressway north of Waters Avenue. I-275 is accessed from the Veterans Expressway via Memorial Highway (SR 60) south of the airport. CSXT provides rail service to the Anderson Road yards and to the industrial area along Anderson Road via several sidings, off the Clearwater Subdivision Drew Spur, throughout the activity center.

Freight Activity

Approximately 2,300 heavy trucks per day use the western gateway along Hillsborough Avenue east of the Veterans Expressway and approximately 1,850 heavy trucks access the area from the east. In the north, approximately 1,000 heavy trucks per day use Waters Avenue west of Benjamin Road. Approximately 5,000 heavy trucks per day use SR 60 between I-275 and the Veterans Expressway. The total vehicle count on SR 60 in this area is approximately 143,000 vehicles per day - the busiest road segment in the region.

Lumber and other building products are distributed by truck from the Home Depot distribution center to Home Depot retail stores throughout the region. Other trucks transport bulk materials, canned and frozen food products, building materials, machine parts, personal household items, and general merchandise.

CSXT delivers over 223,000 automobiles annually to the intermodal auto yards located on Anderson Road and Sligh Avenue. Automobiles are delivered daily on 60-car unit trains. Automobile distribution generates approximately 100 truckloads (200 in/out trips) per day within the activity center.

TIA handled over 105,000 tons of air cargo and 7,700 tons of mail in 2008. TIA expects to grow its air cargo operations over the next 20 years.

PORT TAMPA

Port Tampa is located on the southwest side of the Interbay Peninsula in Port Tampa City. This industrial enclave is surrounded by single- and multi-family residential uses as well as wetlands and public recreation uses. Due to its location and surrounding residential neighborhoods, expansion of industrial uses in this area is constrained. The Port Tampa City community is generally supportive of its industrial operations while proactively seeking methods to minimize the effects of significant truck traffic on their neighborhood.



2008 Aerial Photo

LAND USE

Existing Land Use

The existing land use in this area is heavy industrial. Major industrial operations at Port Tampa include National Gypsum, Ashland Chemicals, Tampa Bulk Services, British Petroleum (BP), Chevron USA, the Hardaway Company (Standard Concrete Products), and Motiva Enterprises.

National Gypsum manufactures products for the building industry and generates over 150 trucks per day. Ashland Chemicals, Shell, BP, and Chevron import, store, and distribute petroleum products including gasoline to merchants in the Tampa Bay area and aviation fuel that is transported to TIA and MacDill Air Force Base (AFB) via pipeline. Standard Concrete Products, a division of the Hardaway Company, produces a variety of structural products including prestressed concrete pilings in all sizes. Port Tampa's water access facilitates delivery of large

structural products throughout the United States, Mexico, the Caribbean, and Central America. Motiva distributes Shell refinery products in the Tampa Bay Region.

Adjacent land uses include residential, including historic homes, MacDill AFB, sensitive environmental lands, and a public beach park.

Future Land Use

The City of Tampa Future Land Use Plan maintains the heavy industrial designation for this area. Currently this area is built-out and there is no room for external expansion. The area around Port Tampa is a mixture of recreational/open space, environmentally sensitive, and residential. Further north on Westshore Boulevard, former industrial land is being converted to mixed-use and new residential development is taking place. Other zoning changes from industrial to mixed-use are being proposed for the industrial areas north of MacDill AFB.

TRANSPORTATION

Access

Major roadway corridors serving Port Tampa are Dale Mabry Highway and the Lee Roy Selmon Crosstown Expressway. Connecting the industrial facilities within this activity center to these corridors are Interbay Boulevard, Gandy Boulevard, and Westshore Boulevard (south of Gandy Boulevard). Trucks using both Westshore Boulevard and Interbay Boulevard traverse developed residential neighborhoods contributing to traffic congestion and noise. Although local residents understand the need for trucks to use these corridors, they would like these issues mitigated. Rail access is provided by CSXT via the Port Tampa Spur. Approximately six trains per week serve businesses in Port Tampa and other areas along the corridor.

Freight Activity

Port Tampa experiences constant truck traffic due to the type of industry it serves. Because of the length of some of the structural concrete products produced by the Hardaway Company, most shipments are made at night, when traffic is at a minimum, in order to negotiate Interbay Boulevard and Dale Mabry Highway to I-275. Approximately 1,600 heavy truck trips are generated by Port Tampa industrial operations daily. Most of these trucks (54 percent) use Interbay Boulevard to connect to Dale Mabry Highway, which in turn, connects to the Lee Roy Selmon Crosstown Expressway and I-4. The remaining trucks use Westshore Boulevard to connect to Gandy Boulevard westbound to Pinellas County. In addition to construction materials and finished products, the majority of truck traffic is related to the transportation of petroleum products, chemicals, and bulk materials.

PORT OF TAMPA

The Port of Tampa, Florida's largest seaport and the nation's 12th largest port in terms of gross cargo weight, consists of several public and private dock facilities located on 2,600 acres on the northeast corner of Tampa Bay and extending south to Big Bend. Of this total, approximately 400 acres are available for development. The port is home to 58 cargo terminals of which 28 are privately-owned. The port invested heavily in expansion prior to 1999 and spent another \$100 million through 2002 on new construction and refurbishment projects. In addition, the port is in the process of expanding its container facilities, which will increase capacity from 30,000 twenty-foot equivalent units (TEUs) per year to over 400,000 TEUs per year.

The port is divided into the following four industrial areas, which are listed below and described on the following pages:

- Hooker's Point (including the Inner Harbor and Channel District areas)
- Rockport/Port Sutton/Pendola Point
- Alafia River
- Big Bend/Port Redwing

Fifty percent of all of Florida's waterborne cargo, or 45.3 million tons, passed through the Port of Tampa in 2007. Of this total, 34 million tons were imports and 11.3 million tons were exports. Nearly 10 million tons (90 percent) of exports are phosphate related. **Table 1** depicts the types of commodities that pass through the port.

TABLE 1
PORT OF TAMPA COMMODITIES

Exports	Imports
Phosphate	Petroleum Products
Phosphate Rock	Coal
Food Products	Phosphate
Steel	Chemicals
Scrap Metal	Aggregate Minerals
Other Chemicals	Steel
Paper	General Cargo
Coal	Food Products
Petroleum Products	Agricultural Products
Machinery	Paper
Vehicles	Machinery
Boats	Lumber
General and Containerized Cargo	Glass Products
Lumber	Vehicles

Cargo is transported to and from the port by approximately 11,200 heavy trucks and 850 rail cars per day. This total is expected to grow to over 17,000 trucks and 1,025 rail cars by 2010.

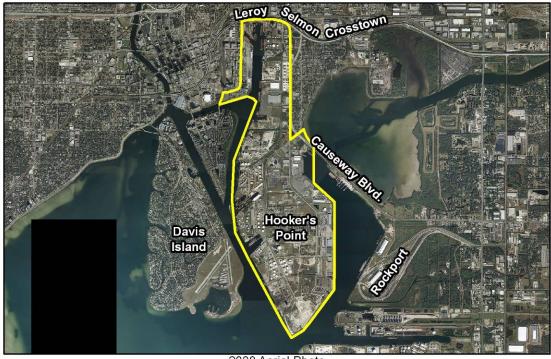
The port is served by an extensive railroad network owned and operated by CSXT, several pipelines used to transport ammonia and liquid petroleum products, and the key roadway corridors listed in **Table 2**.

TABLE 2
ROADWAY CORRIDORS THAT SERVE THE PORT OF TAMPA

North/South Corridors	East/West Corridors
I-75	I-4
I-275	SR 60 (Adamo Drive)
US 41 and US 301	Lee Roy Selmon Crosstown Expressway
21st and 22nd Streets North	Causeway Boulevard

HOOKER'S POINT (PORT OF TAMPA)

Hooker's Point, a peninsula east of downtown Tampa, is a premier seaport. It is served by a significant CSXT railroad network that is primarily used for the bulk transfer of minerals, petroleum products, agricultural products, and scrap steel. The Tampa Port Authority (TPA) recently began receiving new automobiles produced in Mexico through Hooker's Point and added a small but expanding container operation.



2008 Aerial Photo

Approximately 20 million tons of cargo was imported through Hooker's Point. Petroleum products are the primary imported commodity at Hooker's Point. The main commodity exported through Hooker's Point is phosphate chemical (1.02 million tons). Other commodities shipped through Hooker's Point include ammonia, sulphur and other minerals, cement, break bulk cargo, citrus, fresh and frozen foods, scrap metal, automobiles, and coal.

LAND USE

Existing Land Use

There is a wide variety of businesses located on TPA property at Hooker's Point. These include GATX Terminal Corporation (pipeline), Tampa Bay Shipbuilding and Repair (ship repair), Murphy Oil and Amilie Oil (petroleum product distribution), Americold Corporation and Harborside Refrigerated Services (refrigerated products), CF Industries (phosphate), the Mosaic Company (fertilizer), and the Intermodal/General Cargo Shipping Terminal.

Additionally, Hooker's Point is home to many privately-owned terminals including CITCO, HESS, BP/Amoco, and Marathon Ashland (petroleum distributors); Freeport Sulphur; Mariani Asphalt; Tampa Electric Company (TECO) (utility); International Ship Repair; and the City of Tampa wastewater treatment facility.

The southern half of Hooker's Point is surrounded on three sides by water. On the east side of 22nd Street, north of Causeway Boulevard's intersection with Maritime Boulevard, the predominant land use is medium-density residential and associated neighborhood commercial. Between 20th and 22nd Streets, the existing land use is a mixture of residential, commercial, and light industrial.

Future Land Use

There is sufficient available land on Hooker's Point to attract new tenants and to allow existing tenants to expand. The area surrounding this activity center will remain industrial according to the *City of Tampa Future Land Use Plan*. There are some residential uses remaining near the port area east of 22nd Street. They are separated from the industrial uses by a narrow band of transitional uses between 20th and 22nd Streets.

TRANSPORTATION

Access

The primary roadway corridors that provide access to Hooker's Point are I-4, I-75, SR 60, 21st Street/22nd Street, Causeway Boulevard, and the Lee Roy Selmon Crosstown Expressway.

The most direct route to I-4 is through Ybor City, a historic and entertainment district frequented by local residents and tourists. Additionally, CSXT provides rail access to the port from a spur that runs south of SR 60 and enters the port at 20th Street and Durham Street. Once inside Hooker's Point, the rail line splits to serve the east and west side of the port.

A recently completed transportation project was the expansion of 20th Street south of the Lee Roy Selmon Crosstown Expressway to the main port entrance at Maritime Boulevard from two lanes to a six-lane divided roadway. This new facility carries most of the trucks in this area, improves access to the petroleum terminals north of the main entrance, and removes heavy trucks from 22nd Street, which was closed at East Long Street.

A planned and partially funded project is the I-4/Crosstown Connector, which will provide direct freeway access from I-4 to the port via the Lee Roy Selmon Crosstown Expressway and the improved 20th Street. This project will provide truck-only ramps to the east-west Lee Roy Selmon Crosstown Expressway general use lanes as well as to the north-south I-4/Crosstown Connector lanes to I-4. Trucks will be separated from general traffic south of 6th Avenue.

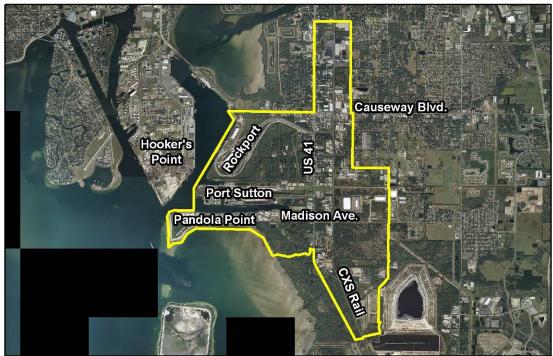
Freight Activity

Approximately 3,800 trucks per day currently serve businesses located at Hooker's Point. Half of these transport petroleum products. While the truck flow appears steady throughout the day, there is a slight peak between 9:15 a.m. and 10:15 a.m. The majority (55 percent) of these movements are to and from the east along Causeway Boulevard, accounting for 32 percent of the total daily traffic near the main port gate at Maritime Boulevard, west of Causeway Boulevard. Most of this activity involves transporting dry bulk minerals, liquid sulphur, and ammonia to and from the phosphate mines and fertilizer plants in eastern Hillsborough County and western Polk County; crushed rock; and petroleum products.

The remaining trucks serve the port area from the north via 21st and 22nd Streets, which include a new alignment that merges with the improved 20th Street. Primary cargo includes gasoline, chemicals, and general cargo/containers. Most of the cargo containers are drayed to the CSXT Uceta Yard (via SR 60, 50th Street, and Broadway Avenue) for loading onto rail cars or to the Rooms-To-Go Furniture Distribution Center located on I-4 east of I-75.

ROCKPORT/PORT SUTTON/PENDOLA POINT (PORT OF TAMPA)

Rockport, Port Sutton, and Pendola Point, located on the eastern shore of Tampa Bay west of US 41, contain private- and port-owned berths and landside facilities. This activity center also incorporates a large area of existing industrial uses and industrial designated land eastward to 66th Street south of Hartford Street and to 54th Street north of Hartford Street. It also includes industrial land north of Causeway Boulevard eastward to 54th Street.



2008 Aerial Photo

LAND USE

Existing Land Use

Rockport is a phosphate terminal owned by CSXT and served by rail.

Phosphate rock and phosphate chemicals are the primary cargo exported through Rockport. In 2000, this cargo accounted for approximately 12 percent of the total tonnage of cargo transported through the port annually.

Port Sutton is home to TECO's Gannon Station power plant, which imports approximately 2 million tons of coal annually for their operations.

The Steel Port of Florida, Inc., PASCO Terminals, and Holnam, Inc. operate terminals on land owned by the port at the tip of Port Sutton.

The southern portion of Port Sutton, known as Pendola Point, is owned by TPA with the exception of a small piece of land occupied by Pakhoed Dry Bulk Terminals. Businesses located at Pendola Point include Southdown, Inc., Vulcan/ICA, Drummond Company, Leigh Portland, Martin Gas Sales, Inc., Freeport Sulphur, Progress Environmental Labs, and Marathon Ashland Asphalt Terminal. Approximately 20 percent of the total import and export cargo tonnage is processed through Port Sutton/Pendola Point with the majority, 72 percent, imported.

Also included in this activity center, but not part of the port, is North Star Recycling (Cargill Steel), a major producer of recycled steel products. Adjacent to the port area, east of US 41, the land use is light industrial with some heavy industrial operations including steel processing. This use is compatible with the existing and future port activities.

Future Land Use

According to the *Hillsborough County Future Land Use Plan*, this area will remain heavy industrial west of US 41 and light industrial east of the road. There is an area designated as general mixed-use located north of Causeway Boulevard between US 41 and the CSXT railroad right-of-way north to south 12th Avenue. East of the area, the land use is designated as residential.

TRANSPORTATION

Access

The roadway corridors serving this activity center include US 41, US 301, I-75, Causeway Boulevard, and Madison Avenue/Progress Boulevard. A CSXT Tampa Terminal rail spur serves the Rockport Intermodal Phosphate Pier. In addition to the rail service to Rockport, CSXT serves terminals located at Port Sutton/Pendola Point.

Freight Activity

Approximately 1,700 truck movements per day are generated by Pendola Point, Port Sutton, and the industrial operations on the east side of US 41. Of these, 850 movements result from activity at Pendola Point. Shipments include dry bulk, sulphur, asphalt, petroleum products, steel, and cement. Rockport is serviced by CSXT with approximately 28 trains per day (in and out) transporting bulk phosphate to the port from mines in eastern Hillsborough and western Polk Counties. Train length is 65 bulk hopper cars but can be as long as 110 rail cars. Each rail car replaces 3.5 truckloads of bulk phosphate (saving approximately 7,000 truck trips per day, in and out of the port). The number of trains is planned to increase to 32 trains per day to serve future demand.

ALAFIA RIVER (PORT OF TAMPA)

The Alafia River Terminal is located south of Pendola Point on the north side of the Alafia River west of US 41. East of US 41, the activity center extends to South Falkenburg Road north of Riverview Drive and south of Archie Creek. Approximately 1.9 million tons of phosphate chemical fertilizer is exported and approximately 710,000 tons of sulfur is imported annually through this facility. Combined imports and exports account for approximately 5 percent of the port's total annual cargo tonnage.



2008 Aerial Photo

LAND USE

Existing Land Use

The existing land use is heavy industrial. The area contains the privately-owned Alafia River Terminal, home to the Mosaic Company fertilizer plant. Mosaic produces three types of phosphate product at this plant: diammonium phosphate (DAP), monoammonium phosphate (MAP), and granular triple super phosphate (GTSP). During the manufacturing process, enough heat is produced for the plant to generate its own electricity and supply TECO with its excess energy.

Contiguous to the individual port activity centers located on the east side of Tampa Bay is a large, mostly vacant tract of industrial land that is generally bounded by US 41 on the west, 78th Street on the east, Madison Avenue on the north, and Riverview Drive on the south. The area includes the Gardinier Disposal Site, which consists primarily of a large gypsum stack and

Reed's Minerals, located along a CSXT rail spur east of US 41 and south of Madison Avenue. The GAF Roofing product plant that produces roof shingles and other roofing products is also located east of US 41 and north of Madison Avenue.

The port area is fully compatible with the adjacent existing and planned land use east of US 41 with the exception of a small residential area located at the northeast corner of Riverview Drive and US 41.

Future Land Use

According to the *Hillsborough County Future Land Use Plan*, the area west of US 41 will remain heavy industrial and the area to the east will remain light industrial. There is a small section of residential designated uses on the east side of US 41 south of Riverview Drive extending to the Alafia River.

TRANSPORTATION

Access

The roadway corridors that provide access to this activity center are Gibsonton Road, Madison Avenue, and US 41. The Mosaic fertilizer plant is also served by CSXT rail at the East Tampa CXST Yard located west of US 41 on a spur from the Palmetto Subdivision main line.

Freight Activity

Approximately 104,000 rail cars per year (six trains per day of 25 to 65 cars) transport phosphate into the Mosaic fertilizer plant for processing. Finished product is shipped out on two to thre ships per week and approximately 10,000 rail cars annually (one train per day of 20 to 30 cars). Additionally, this facility generates approximately 350 truck trips per day (in and out). Reed's Minerals also generates approximately 75 to 100 truck movements per day transferring bulk raw minerals received by rail at its facility on Old US 41 to the GAF Roofing product plant north of Madison Avenue.

BIG BEND/PORT REDWING (PORT OF TAMPA)

Big Bend/Port Redwing is located on the east side of Tampa Bay along the US 41 corridor north of Apollo Beach. Most of this activity center is privately-owned by TECO and the Mosaic Company. Additionally, National Gypsum manufactures wallboard at a plant located on US 41 in front of the TECO power plant. Port Redwing is located on publicly-owned land and has approximately 175 undeveloped acres available for future development. The activity center extends east of US 41 to the CSXT railroad right-of-way and south to the northern boundary of the Apollo Beach residential community and includes general mixed-uses. The area immediately east of the CSXT right-of-way is general mixed-use. TPA recently negotiated a long-term lease with Andino Cements USA, which will import 2 million tons of aggregate and 1 million tons of cement.



2008 Aerial Photo

LAND USE

Existing Land Use

The existing land use at the Big Bend/Port Redwing FAC is predominately industrial. The TECO Big Bend power plant, the Mosaic fertilizer plant, and National Gypsum are the primary industrial uses in the area.

The west side of US 41 is part of the Port of Tampa and the land use is compatible with current and future industrial activity. South of the light industrial area is the residential waterfront

community of Apollo Beach, which has expanded nearly to the boundary of the industrial area. East of US 41, the CSXT railroad serves as a boundary between light industrial designated land and a new residential area that is under construction on the north side of Big Bend Road. The area north of Big Bend Road and west of I-75 includes Eisenhower Middle School and East Bay High School.

Future Land Use

The Hillsborough County Future Land Use Plan maintains the heavy industrial land use at Port Redwing and light industrial south of the port to Apollo Beach and across US 41 to the CSXT rail line. In addition to the existing industrial activity, there is a proposal to construct a solid sulphur processing plant at Big Bend that will be jointly-owned by the Mosaic Company and CF Phosphate. The plant will process the solid sulfur into liquid sulfuric acid for use in making fertilizer. Covington Park, a large new subdivision, is under construction as part of the South Bend Development of Regional Impact (DRI), approximately one mile east of US 41 at the intersection of Big Bend Road and I-75. A regional mall is also proposed to be located at the southwest corner of Big Bend Road and I-75, and a new neighborhood shopping center is proposed to be located at the southeast corner of Big Bend Road and US 41.

TRANSPORTATION

Access

The main roadway corridors providing access to this activity center are US 41, US 301, I-75, and Big Bend Road. Rail service is provided by a CSXT Palmetto Subdivision spur, which crosses US 41 north of Big Bend Road. The Covington Park development, Eisenhower Middle School, East Bay High School, and proposed retail development in the area will eventually result in increased traffic congestion in the area and contribute to truck delays.

Freight Activity

The TECO Big Bend power plant imports approximately 5.5 million tons of coal for its operations annually. The Mosaic Company is the largest phosphate producer in the United States. The Mosaic plant at Big Bend processes and exports nearly 6.3 million tons of phosphate and phosphate chemicals for domestic and overseas markets annually. Combined, the TECO and Mosaic industrial operations accounted for approximately 23 percent of the total annual port cargo tonnage. Also located in the Big Bend activity center is National Gypsum, which has the capability to produce wallboard product at a rate of 400 feet per minute at its plant adjacent to US 41 at Port Redwing. Bulk raw materials and finished wallboard are shipped to and from the plant by truck.

Approximately 1,100 heavy trucks per day (eastbound and westbound) use Big Bend Road to connect to I-75 and to the mines in southeast Hillsborough County. Approximately 400 of these trucks trips (in and out) served the TECO power plant and the Tampa Bay Water desalinization plant. Approximately 175 truck trips (in and out) are generated by the other industrial activity at Port Redwing. The number of truck trips is expected to increase significantly as aggregate and cement imports increase through this facility.

SOUTHEAST TAMPA INDUSTRIAL AREA

The Southeast Tampa Industrial Area is located along the SR 60 corridor between 24th Street and Orient Road. The CSXT Intermodal Yard north of SR 60 and the CSXT TRANSFLO terminal south of SR 60 at 30th Street are the primary freight generators in this area. although there are numerous large warehouse/distribution facilities and manufacturing plants that also generate significant amounts of truck traffic. The CSXT Yeoman Yard is used to marshal large bulk trains destined mainly for the Port of Tampa. There is also a large CSXT engine repair facility at the yard.



2008 Aerial Photo

LAND USE

Existing Land Use

The area is a mix of old and new facilities constrained by historic and residential areas and geographic features.

The CSXT intermodal facility is divided into two rail yards. At the north yard, over 85,000 piggyback trailers and containers are transferred between CSXT rail cars and trucks annually. This intermodal facility generates approximately 480 truck trips per day. The south yard is used for bulk transfer and to marshal phosphate and other product-specific trains.

The CSXT TRANSFLO Yard south of SR 60 is used for bulk transfer of chemicals, petroleum, and other bulk products from rail to truck. Over 4,500 trucks loads are generated from this

facility annually. CSXT also operates several warehousing operations within the Southeast Tampa Industrial Area including Americold Storage and Avon Distribution Systems.

In addition to the railroad operation, the area is fully developed. Manufacturing operations include plastics, steel fabrication, and dairy products. Many of the manufacturers receive parts and finished products. The main north-south corridor through the area is US 41 (50th Street), which provides access to several distribution companies as well as to a large UPS processing and distribution center.

There are two additional business/industrial parks located within the activity center: Tampa Park of Commerce, located south of SR 60 and west of US 41, and 5300 Adamo, located on the north side of SR 60 and west of US 41.

Future Land Use

According to the *City of Tampa Future Land Use Plan*, this area will remain heavy industrial. While there are several modern facilities within this activity center, there are some locations that are functionally and economically obsolete and prime sites for redevelopment.

TRANSPORTATION

Access

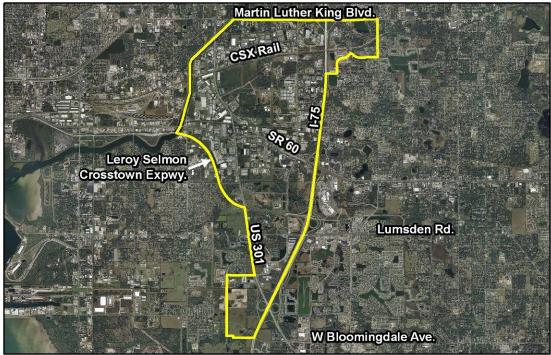
I-4, the Lee Roy Selmon Crosstown Expressway, and SR 60 are regional east-west corridors providing access to this activity center. North-south access to the activity center is provided via 40th Street, 50th Street (US 41), and Orient Road, all of which have interchanges on I-4.

Freight Activities

Freight activities include the drayage of containers and trailers between distribution facilities, the Port of Tampa, and the CSXT Intermodal Yard, which generates approximately 480 truck trips per day. Heavy truck counts on US 41, the main north-south corridor through the area, are approximately 1,200 in each direction. Additionally, 1,200 trucks use Columbus Drive and 600 trucks use Broadway Avenue daily. Between 1,800 and 2,600 trucks per day use SR 60 along the southern boundary. This FAC is, by far, the most congested area in the region with large volumes of truck traffic.

SOUTH I-75 (SABAL PARK INDUSTRIAL AREA)

The South I-75 Corridor (Sabal Park Industrial Area) is generally bound by Dr. Martin Luther King, Jr. Boulevard on the north, US 301 on the west, and I-75 on the east. It also includes several smaller industrial parks along the west side of US 301. The southern boundaries include the Lee Roy Selmon Crosstown Expressway and the area south of Progress Boulevard. The primary industrial site within this area is Sabal Park. Other industrial parks that fall within the area include Interstate Industrial Park, Tampa East Industrial Park, Silo Bend Industrial Park, Crescent Industrial Park, Interchange Center, Crosstown Center, and Parkway Center.



2008 Aerial Photo

LAND USE

Existing Land Use

The existing land use is a mixture of industrial, community mixed-use, and urban mixed-use including manufacturing, warehousing, business and office parks, a community college, commercial, and multi-family residential.

This area is primarily developed with large warehousing and distribution companies as well as specialized manufacturing. Hav-a-Tampa (cigar manufacturing), Coca Cola (bottling and distribution), Keebler's (baked goods distribution), Weyerhaeuser (lumber products distribution), Circuit City's regional distribution center, and Bright House's customer service mail distribution center are major industrial operations in this area.

Industrial activities within this area are expected to expand as many of the business/industrial parks listed above are in the beginning stages of development. For example, Sabal Park, one of the most established areas, is only one-third built-out.

The 260-acre, mixed-use, Crosstown Center is just starting to develop, as is the 240-acre Parkway Center in the southernmost portion of the activity center. Only the Tampa East Industrial Park and the area along US 301 between Sabal Park and the CSXT railroad line have reached capacity.

The industrial activity in the southern portion of this FAC is less intense than the Sabal Park Industrial Area, and there is ample vacant land for additional light industrial uses. At the extreme southern end of the area, Parkway Center is home to Graybar Corporation (electrical and communications equipment), Black & Decker (power tools and small appliances), Canariis Corporation (packaged pumping systems), and the Premier Beverage bottling and distribution plant. In addition, this area will contain a new high school, currently in construction.

Future Land Use

According to the *Hillsborough County* and *City of Tampa Future Land Use Plans*, this area includes a mixture of land uses. This mixture includes light industrial between Broadway Avenue and Palm River Road along US 301, general mixed-use and public between Falkenburg Road and I-75 north of SR 60, and general mixed-use between I-75 and US 301 south of SR 60.

TRANSPORTATION

Access

The main roadway corridors providing access to the area north of SR 60 include I-4, I-75, US 301, Falkenburg Road, and Dr. Martin Luther King, Jr. Boulevard. CSXT also provides rail service throughout the Sabal Park Industrial Area with several rail sidings off the CSX Lakeland Subdivision main line.

With a few exceptions, the internal roadway system in Sabal Park consists of narrow winding roads with tight turning radii. Because all of the major access routes are multi-lane divided facilities, congestion in the area is only prominent in the peak periods, especially at unsignalized intersections. Access to the areas south of SR 60 includes Falkenburg Road, the Lee Roy Selmon Crosstown Expressway, US 301, Palm River Road, and I-75. Most of the activity in this area has direct access to and from US 301.

Freight Activity

Approximately 1,430 heavy trucks per day travel on US 301 south of the I-4 interchange. The US 301 corridor serves as the central north-south truck route though the FAC from I-4 at the northern boundary to I-75 south of Brandon. A secondary north-south heavy truck route is Falkenburg Road, which connects the Parkway Center industrial area southwest of US 301 and I-75 to Dr. Martin Luther King, Jr. Boulevard in the north. Approximately 770 trucks per day use this roadway north of SR 60. The number of heavy trucks on SR 60 east of Falkenburg Road is approximately 2,400 and approximately 1,200 west of US 301. North-south truck traffic on I-75 is approximately 12,000 heavy trucks per day. Cargo transported from this activity center includes Coca Cola, cigars, food products, general merchandise, books and paper products, concrete and concrete products, appliances, electronics, tools, wood products, and more. Rail freight includes building products, bulk materials, and syrup.

EAST CENTRAL TAMPA INDUSTRIAL AREA

The East Central Tampa Industrial Area is located in the area generally bound by 50th Street on the west, Orient Road on the east, Hillsborough Avenue on the south, and Sligh Avenue on the north. The area is bisected by 56th Street, a major north-south commuter corridor that serves Temple Terrace, the University of South Florida, and Busch Gardens amusement park.



2008 Aerial Photo

LAND USE

Existing Land Use

This area consists of several large industrial operations that manufacture pre-stressed concrete construction products, wood trusses, and iron pipes. The area also includes distribution centers (Garnett Distributing, Budweiser, and Cott Beverages), warehouses, trucking firms (Seaboard, Laney & Duke Trucking, and Averitt Express), and a large recycling center (Waste Management).

Parke East, a 100-acre industrial area located north of Hillsborough Avenue between Harney Road and Orient Road near I-4, is the only business/industrial park located within the area. Major employers include Verizon, TECO, Peoples Gas, and U.S. Cigar.

The former East Lake Shopping Mall located at the southwest corner of Hillsborough Avenue and 56th Street has been successfully redeveloped into the Net Park office complex.

Also located within this FAC are two public high schools, King and Tampa Bay Technical, as well as commercial activity along Hillsborough Avenue that are generally non-compatible with the industrial uses.

Future Land Use

According to the *Hillsborough County Future Land Use Plan*, this area will remain a mixture of light and heavy industrial uses with some commercial, general mixed-use, and public uses. Residential and commercial uses bound the area on the north, south, and west and general mixed-use bounds the area on the east, north of Hillsborough Avenue. Redevelopment within this FAC is the best opportunity for industrial and economic growth.

TRANSPORTATION

Access

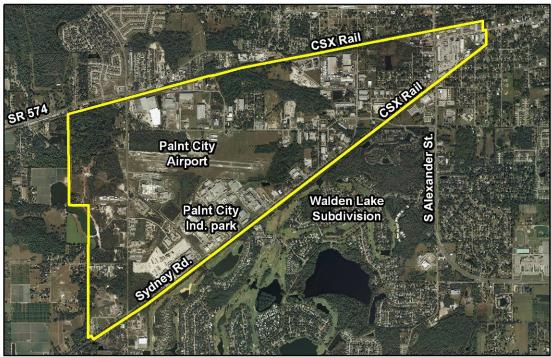
Roadway corridors serving the area include I-4, I-75, Harney Road, 56th Street, 50th Street, and Hillsborough Avenue. The activity center is also served by the CSXT NEVE Spur, which has several rail sidings used for intermodal transfers and shipping of manufactured products.

Freight Activity

Some of the primary commodities shipped in this area include cement and cement products, concrete and metal pipes, produce, beer and soft drinks, engineered wood trusses, and recycled materials. Truck traffic within this FAC is moderate. Approximately 1,100 heavy trucks on Orient Road, 700 on 56th Street, 200 along Harney Road, and 120 along Sligh Avenue.

PLANT CITY AIRPORT INDUSTRIAL AREA

The Plant City Airport Industrial Area is bound by SR 574 to the north, the CSXT railroad line to the south, and Turkey Creek Road to the west. Plant City Airport and Plant City Industrial Park are located within this FAC.



2008 Aerial Photo

LAND USE

Existing Land Use

The existing land use is a mixture of light and heavy industrial uses. External expansion of this FAC is constrained by surrounding residential and agricultural uses.

The Plant City Airport is a 190-acre facility within this activity center. Airport improvements include expanding the taxiways, run-up aprons, vehicle parking, and hangar facilities. The airport supports primarily business and recreational aircraft operations.

The Plant City Industrial Park is home to Del Monte Packaging (fruit and vegetable processing), Redman Homes (manufactured homes), Alcoa Extruded Products (aluminum building products), and Bulk Manufacturing (builds wet and dry bulk truck trailers) to name a few. Other industrial uses in this area include James Hardie Building Products, Southern Culvert, and American Cast Iron, which produce concrete and steel pipes and other concrete building products. Lykes Meat Products and several other food processing operations and Dart Containers, producers of

plastic and paper cups, are also located in the area. Together, these operations generate a significant amount of freight-related truck activity, most of which is directed to the I-4 corridor.

Future Land Use

The *Plant City Future Land Use Plan* maintains the light industrial uses in this area with the exception of a small area of residential and commercial uses along the west side of Alexander Street near the downtown area. Residential subdivisions are located on the north, south, and east; however, the area on the west side is mostly large parcel properties limited to one dwelling unit per acre in contrast to the higher density subdivisions to the north and south.

TRANSPORTATION

Access

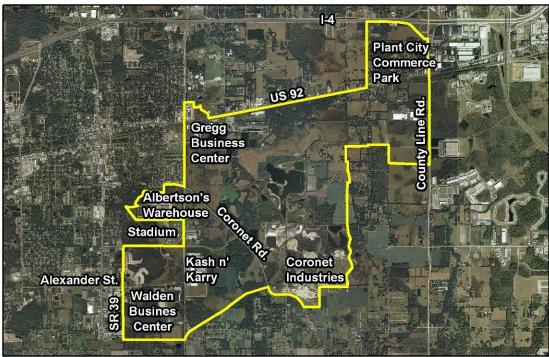
The primary roadway corridors serving the area include Sydney Road/Woodrow Wilson Street, Dr. Martin Luther King, Jr. Boulevard (SR 574), Sammonds Road, and Turkey Creek Road. The Plant City Airport Industrial Park is served by the CSXT Yeoman and Lakeland subdivisions, which have several rail sidings to businesses located in the area. The nearest SIS Corridor, I-4, is accessed via US 92 and Forbes Road.

Freight Activity

Approximately 920 heavy trucks per day use Alexander Street to connect to I-4 and SR 39. Westbound I-4 freight traffic primarily uses Forbes Road via Turkey Creek Road and US 92. Approximately 460 heavy trucks per day use Turkey Creek Road to access and depart FAC from the south. Freight activity includes the importing of parts and bulk materials by truck and rail used to produce finished products. Outbound freight includes aluminum building products, processed fruit and vegetable products, concrete and steel pipes, meat products, processed seafood, bulk tanker trailers, and finished mobile homes.

EAST PLANT CITY INDUSTRIAL AREA

The East Plant City Industrial Area is located along the Park Road corridor and extends eastward along US 92 to County Line Road. Major industrial operations in the area include Albertson's and Sweetbay distribution centers, Walden Business Park, Gregg Business Center, and Plant City Commerce Park. In 2008, Plant City extended industrial zoning to north of US 92 and approved a total of 10 million square feet of industrial use throughout this FAC.



2008 Aerial Photo

LAND USE

Existing Land Use

This area is currently in the early development stages with significant opportunity for growth. Included within the FAC are several large recreation facilities including the Plant City Stadium and former spring training complex, and a public golf course.

The Albertson's and Sweetbay distribution centers each generate over 100 heavy truck movements per day. CSR Rinker, located at US 92 and Park Road, produces rebar for the construction industry. Gregg Business Center, located in the northeast portion of the area, has three large tenants: 84 Lumber (building products), International Paper, which produces containers for the juice processing industry, and Starr Distribution, a large long-haul trucking firm.

Walden Business Park, in the southwest portion of the FAC, recently added several large distribution warehouses including Willamette Industries and International Foods Group that generate significant heavy truck traffic. Willamette Industries manufactures corrugated paper products. International Food Group supplies Wendy's, KFC, and Pizza Hut restaurants with food products. They also export food products to 120 countries through the Port of Tampa. Creative Games International produces scratch-off lottery tickets in a high security facility. A former AutoWay used car processing center was recently converted to a police and fire department maintenance facility.

Plant City Commerce Park is a new 560-acre industrial park located on County Line Road less than one-quarter mile south of I-4. Major employers include Sav-a-Lot (food store distribution center), Square D (safety switches), USW Logistics (distribution), ATCO Rubber Products, and Plastipak (bottles and containers). Together, these firms occupy over 600,000 square feet of industrial floor space.

Future Land Use

The *Plant City Future Land Use Plan* maintains the light industrial land use in this area with heavy industrial uses at the location of the former Coronet phosphate plant. The area around the Plant City Stadium will remain public/semi-public. A proposed new mixed-use development is initially planned to include 2.3 million square feet of industrial uses located south of the Plant City Commerce Park west of County Line Road. Recently, Plant City rezoned a portion of the Walden Business Park on the north side of Alexander Street for multi-family residential.

TRANSPORTATION

Access

Collectively, the industrial activities within the activity center generate significant heavy truck traffic. While much of this traffic uses Jim Johnson Road and Park Road to access I-4 north of the area, others use SR 39 to move goods to the south via SR 60 and I-75. US 92, the primary alternate route for I-4, is a two-lane facility with many private driveway access points as well as several unsignalized intersections. Additionally, US 92 serves as an east-west connector linking major FACs in Hillsborough and Polk Counties.

Freight Activity

There are over 2,300 heavy truck trips per day through the intersection of Park Road and US 92. At Park Road and James Redman Parkway (SR 39), the heavy truck traffic drops to 136 trips per day. The majority of these trips are a result of three major distribution warehouses located between these two intersections. Freight transported in this area includes food products, general merchandise, paper products, and fertilizer.

Approximately 350 heavy trucks travel on Alexander Street at James Redman Parkway. Many of these trucks serve the Walden Business Park and the Super Wal-Mart store located southeast of the intersection.



HILLSBOROUGH COUNTY FREIGHT MOBILITY CORRIDORS

The Regional Freight Mobility Corridors in Hillsborough County connect the freight activity centers (FACs) and with the Strategic Intermodal System (SIS). These corridors provide connectivity in both a north-south and east-west direction.

In addition, CSX Transportation (CSXT) operates an extensive network of rail corridors, known as subdivisions, in the Tampa Bay Region including seven located in Hillsborough County.

The following Regional Freight Mobility Corridors are located within Hillsborough County:

ROADWAY CORRIDORS

- I-75 (Manatee County Line to Pasco County Line)
- I-275 (Howard Frankland Bridge to I-75 Junction)
- I-4 (I-275 Junction to Polk County Line)
- US 301 Corridor (Hillsborough/Manatee County Line to I-4)
- US 41 (Manatee County Line to Hillsborough Avenue and Bearss Avenue to Pasco County Line)
- Lee Roy Selmon Crosstown Expressway and Gandy Boulevard
- SR 60 (19th Street to Polk County Line)
- SR 39/Park Road/Sam Allen Road Corridor
- Memorial Highway/Veterans Expressway/Suncoast Parkway
- Hillsborough Avenue (SR 600) (Racetrack Road to I-275 and 50th Street to US 301/I-4)
- I-4/Lee Roy Selmon Crosstown Expressway Connector (Planned)
- Orient Road (Hillsborough Avenue to SR 60)
- Causeway Boulevard (SR 676) (US 301 to the Port of Tampa)
- Big Bend Road (CR 672)
- CR 674 (Sun City Boulevard/College Avenue)
- US 92 (Park Road to Polk County Line)
- Madison Avenue (Progress Boulevard)
- Turkey Creek Road/US 92/Branch Forbes Road

RAIL CORRIDORS

- Lakeland Subdivision (Polk County Line to Tampa)
- Yeoman Subdivision (Pasco County Line to Tampa via Plant City)
- Brooksville Subdivision (Pasco County Line to Tampa via Sulphur Springs)
- Valrico Subdivision (Valrico to Polk County Line)
- Clearwater Subdivision (Tampa to St. Petersburg via Oldsmar and Clearwater)
 - Drew Spur

- Palmetto Subdivision (Tampa to Manatee County Line)
- Tampa Terminal
 - YN to East Tampa
 - Mango to Tampa and the Port Tampa Spur
 - YN to "Gary" and Hooker's Point Spur
 - NEVE Spur
 - Tampa Terminal Yards

I-75 CORRIDOR

Facility:

I-75 is a limited access freeway. The roadway is six lanes from the Manatee County line to the Fowler Avenue interchange. There are eight-lane sections between the Gibsonton and US 301 interchanges and the Dr. Martin Luther King, Jr. Boulevard and I-4 interchanges. The roadway is four-lane between Fowler Avenue and the Pasco County line.

Land Use:

The corridor is primarily rural in nature with the exception of the segment that passes through central and northern Hillsborough County, which includes low- to medium-density residential, high-density community mixed use, and heavy commercial as well as preservation land in the northern portion of the corridor. The Westfield Brandon Shopping Center and associated commercial parcels, is a regional shopping destination located at the SR 60 interchange. The area surrounding the Bruce B. Downs Boulevard (CR 581) interchange includes intensive office uses as well as commercial uses. This area is part of the I-75 business/industrial corridor. Vandenberg Airport is located on the west side of the corridor between I-4 and the Tampa Bypass Canal.

The generalized future land use map maintains these land uses. Agricultural and low-density residential uses dominate the corridor south of US 301 and north of Fowler Avenue along the east side of the corridor. The area in between is dominated by medium- to high-density mixed uses that may include apartments, office parks, public, commercial, and light industrial areas. The area on the east side of the corridor between Fowler Avenue and CR 581 is designated as preservation land.

Freight-Related Problems:

The four-lane segment from Fowler Avenue to the I-275 interchange at the Pasco County line experiences severe congestion during the morning and afternoon peak periods, particularly the northbound segment between Fletcher Avenue and CR 581. This is due to the large number of automobiles exiting the highway at CR 581 that back-up into the right through lane. In addition, some vehicles use the left through lane to bypass queuing right lane vehicles in order to cut in front of the queue at the exit ramp, thus causing further back-up in this roadway section.

As a result, the northbound truck traffic is impeded from Fletcher Avenue to CR 581. A freight mobility "Hot Spot" was also identified at the interchange with SR 60 due to congestion in the Westfield Brandon Shopping Center area. Although significant improvements have been made in this area, congestion remains a problem.

Planned Improvement:

Ramp improvements to correct the queuing problem at CR 581 were completed in 2008, and I-75 will be widened from four lanes to six lanes from Fowler Avenue to I-275 with right-of-way acquisition beginning in 2009 and construction scheduled for 2014.

Improvements at SR 60 have been made at the southbound and northbound exit ramps from I-75 as well as to the northbound entrance ramp from westbound SR 60 to northbound I-75. These improvements include signalized dual right and triple left turns at the end of the

southbound exit ramp. The new configuration controls the flow of traffic from the ramp to eastbound SR 60 and permits protected westbound weaving to the dual left-turn lanes at Falkenburg Road. On the east side of I-75, the configuration of the northbound exit ramp has been changed to three signal-controlled (no right on red) right-turn lanes and two left-turn lanes. The right-turn signals permit protected weaves to the dual left-turn lanes at northbound Regency Boulevard.

I-275 CORRIDOR

Facility:

I-275 is a limited-access freeway. It is primarily a six-lane highway throughout Hillsborough County with the exception of a four-lane segment from Bearss Avenue to the I-75 interchange in Hillsborough County and eight-lane sections between Ashley Street and Howard Avenue in Tampa. There is a major interchange located at the junction with I-4 just north of the downtown business district.

Land Use:

The corridor is urban in nature with medium-density residential along the corridor south of Bearss Avenue to north of the downtown interchange transitioning to high-density residential and regional mixed use to the Hillsborough River. Medium-density residential and urban mixed use dominate the remainder of the corridor transitioning to regional mixed use in the Westshore area.

The generalized future land use map remains unchanged in the corridor from current land uses.

Freight-Related Problems:

There is extreme congestion during the peak traffic periods, especially from the Howard Frankland Bridge to the I-4 interchange and from Busch Boulevard to Bearss Avenue in Hillsborough County. The interchange with I-4 was identified as a freight mobility "Hot Spot" in 2000 but improvements to the interchange have reduced congestion in the area.

Planned Improvement:

On-going widening between SR 60 (Memorial Highway) and the Hillsborough River was begun in 2007. Completion of this northbound project is scheduled for 2010. Future phases will begin in 2011 with outside general use lanes scheduled for completion in 2020. Express lanes will be added upon completion and changes to the I-275/I-4 interchange beginning in 2020.

I-4 CORRIDOR

Facility:

I-4 is a limited-access freeway. The roadway contains six lanes from the Polk County line to 50th Street. The remaining segment has been widened to six lanes into the downtown interchange with I-275.

Land Use:

The corridor is suburban east of 50th Street consisting of low-density residential and agricultural land uses. The remainder is urban consisting of medium-density residential and urban mixed uses. Also included in this area are the Florida State Fairgrounds on the south side of the corridor.

The generalized future land use map indicates the corridor will remain primarily residential with heavy commercial allocated near 50th Street and urban mixed use from Orient Road to CR 579. The remainder of the corridor east of Plant City is dominated by low-density residential and agricultural land uses. Within Plant City, the land use changes to low- to medium-density residential with commercial activity around Thonotosassa Road and SR 39. There is also a small area of commercial located at the intersection of Park Road as well as a small industrial area at the northeast corner of SR 39. From Plant City to the Polk County line, the area is predominantly agricultural with low-density residential.

Freight-Related Problems:

Congestion is significant on the segment west of I-75 during peak traffic periods. Completed improvements include widening the segment from 50th Street to the I-275 interchange. A freight mobility "Hot Spot" was identified at the 22nd Street on-ramp to westbound I-4. The primary issue identified was turning geometry. The second issue is impatient drivers that try to merge into the left-turn lane at the last possible moment to avoid the long delay at this intersection.

Corrective Actions Taken:

Construction has been completed on improvements to the I-275/I-4 interchange. Construction is also complete on widening the corridor from four to six lanes from 14th Street to 50th Street and the addition of ITS freeway management. Construction of the I-4/Crosstown Connector will also provide congestion relief. See detail in I-4/Lee Roy Selmon Crosstown Expressway Connector section. Upon completion of the Connector, most trucks will be removed from the 21st/22nd Street Corridor.

US 301 CORRIDOR

Facility:

This facility extends from I-4 south to the Manatee County line. Although the segment from I-4 to the Pasco County line is a truck route, it has not been designated as a regional goods movement corridor as most trucks use I-75 north of I-4. The segment from Gibsonton Drive to Palm River Road is six-lane divided with left-turn lanes at major intersections. The roadway narrows to four-lanes divided with turning lanes to approximately one mile north of I-4. South of Gibsonton Drive, the highway is a two-lane undivided facility. The southern portion is used by trucks carrying bulk minerals from the phosphate mines of southeastern Hillsborough County to the port facilities along the eastern shores of Tampa Bay as well as by agricultural-related freight activities. There is one interchange with I-75, which is located north of Bloomingdale Avenue in Riverview, and another interchange with I-4 between Orient Road and I-75.

Land Use:

There are several Developments of Regional Impact (DRIs) and other residential projects approved along the route that were previously undeveloped. However, development of three large-scale residential areas has begun on the east side of the two-lane segment between Big Bend Road and Gibsonton Drive/Boyette Road. These developments will add over 3,000 new housing units as well as supporting retail to this corridor. From Brandon northward to I-4, the land use is mixed urban residential, commercial, and industrial.

Industrial parks located along the corridor include Sabal Industrial Park, Interstate Corporate Park, Eastshore Business Center, Rivergate Business Complex, Center Point Business Park, Tampa East Business Park, Vantage Business Center, Silo Bend Business Park, Palm River Center Business Park, Tampa Triangle Business Park, and Tampa Crescent Business Park.

The generalized future land use map includes urban mixed use and general mixed use categories from I-4 south to Bloomingdale Avenue. Within this area is also light industrial uses extending from Broadway Avenue to Palm River Road. From Bloomingdale Avenue to Gibsonton Drive the corridor is general mixed use becoming low- to medium-density residential to south of Sun City Center. The remainder of the corridor to Manatee County will remain agriculture.

Freight-Related Problems:

The projected increase in the number of non-freight-related access points and growing congestion along the two-lane segment north of Sun City Center will create further problems for freight movement. There is peak hour congestion and delay between I-4 and Big Bend Road due to high volumes of non-freight-related automobile traffic and numerous traffic signals particularly at Dr. Martin Luther King, Jr. Boulevard, SR 60, the Lee Roy Selmon Crosstown Expressway, Causeway Boulevard, Bloomingdale Avenue, and Gibsonton Drive. Freight mobility "Hot Spots" were identified at intersections with Causeway Boulevard and with Progress Boulevard/Bloomingdale Avenue.

At Causeway Boulevard the problem is related to left turn signal timing. This left turn handles a high volume of truck traffic. However, the signal only allows two to three trucks to turn during each cycle. This results in left turning queue extending into the adjacent through lane, blocking traffic, and increasing congestion during peak hours. To avoid the long delays, trucks and cars

have been observed performing alternative maneuvers, such as, cutting through the gas station on the southeast corner in order to make the left turn onto westbound Causeway Boulevard from east of the intersection.

The problem at Bloomingdale Avenue is congestion-related. Improvements include triple left-turn lanes that have been extended to allow stacking more vehicles, as well as longer left turn signal timing for southbound US 301 to eastbound Bloomingdale Avenue.

Corrective Action Taken:

Expansion to six lanes is currently under construction from CR 672 to Gibsonton Drive. An expansion from CR 672 to SR 674 is also planned in the future. The intersection of Causeway Boulevard and US 301 will be improved as part of the Causeway Boulevard capacity improvement project.

US 41 CORRIDOR

The US 41 Corridor consists of two segments in Hillsborough County. The first segment is from the Manatee County line north to the Hillsborough Avenue (US 41)/I-275 Interchange. The second segment is from US 41 and Bearss Avenue north to the Pasco County line.

Facility:

US 41 is a four-lane highway from the Manatee County line to Pendola Point Road. From this point it transitions into a six-lane divided roadway to I-4 except for a short four-lane section where it crosses the Palm River south of the Lee Roy Selmon Crosstown Expressway. North of I-4, the roadway transitions from four lanes to two lanes on Melbourne Boulevard as the corridor shifts to 40th Street and continues north to Hillsborough Avenue. The corridor follows Hillsborough Avenue west to I-275. At this point the corridor overlaps the I-275 Corridor north to Bearss Avenue. Bearss Avenue is used to connect the corridor back from I-275 to US 41 (Nebraska Avenue) east of I-275. The corridor picks-up as four lanes from Bearss Avenue to the Pasco County line. Also located within the corridor is a CSXT north-south rail right-of-way with spurs to various port and industrial facilities along the route.

Land Use:

The portion of the corridor north of I-4 is urban in nature. The land use is primarily medium-density residential with strip commercial and office commercial along Hillsborough Avenue and on Nebraska Avenue between Fowler Avenue and Bearss Avenue. From I-4 to SR 60 is industrial, primarily warehousing, break-bulk distribution, manufacturing, and intermodal operations. The area contains several rail spurs that connect to the CSXT line serving the Port of Tampa area. From SR 60 south to Big Bend Road, US 41 remains a four-lane facility, but the land use includes residential and commercial on both sides to Causeway Boulevard. From Causeway Boulevard to the Alafia River, the existing land use is primarily heavy industrial on the west side, including port facilities, and mixed commercial/industrial on the east side. The corridor becomes increasingly rural south of the Alafia River except for the Big Bend industrial area and the Tampa Electric Company (TECO) power plant on the west side. While the east side is currently agriculture, several large residential developments have been approved for this area.

South of Big Bend Road is the waterfront community of Apollo Beach on the west side. The highway then passes through Ruskin with commercial and residential land uses on both sides. US 41 south of Ruskin is rural through the remainder of Hillsborough County.

The generalized future land use map shows that the southern portion of the corridor will remain heavy industrial from Broadway Avenue south to SR 60, between Causeway Boulevard and the Alafia River, and at Big Bend/Port Redwing. The remainder of the corridor is dominated by low-density residential and agricultural uses except for commercial and medium-density residential located in Ruskin and small pockets of commercial at Apollo Beach. The northern portion of the corridor from I-4 to Pasco County will remain the same.

Freight-Related Problems:

There are five at-grade railroad crossings along the corridor between Big Bend Road and Causeway Boulevard. Bulk cargo trains consisting of 20 to 100 cars interrupt the flow of traffic as many as 28 times per day at the Rockport Crossing causing long delays. Three additional railroad crossings cause delays along the corridor between SR 60 and Hillsborough Avenue. The crossings in the industrial area between SR 60 and Broadway Avenue are a particular

problem due to freight-related congestion in the area caused by heavy truck traffic entering and leaving the roadway and making left turns. Congestion along Hillsborough Avenue and Nebraska Avenue due to numerous traffic signals and non-freight-related traffic is also a problem.

The following freight mobility "Hot Spots" were identified along the US 41 corridor:

- Railroad crossing south of Causeway Boulevard,
- · Intersection with Causeway Boulevard,
- Intersection with Broadway Avenue,
- Railroad crossing north of SR 60,
- Intersection with Port Sutton Road,
- Intersection of Hillsborough Avenue and Nebraska Avenue, and
- Intersection of Dr. Martin Luther King, Jr. Boulevard and Nebraska Avenue.

Corrective Actions Taken:

The Florida Department of Transportation (FDOT) and CSXT have addressed the problem of long delays at the railroad crossing south of Causeway Boulevard. The manual switching of trains entering the Rockport Terminal has been converted to a radio controlled system reducing the delays for normal train crossings by six minutes for inbound trains. However, due to the number of rail cars on each train, delay continues to be a problem. The Tampa Port Authority's Master Plan has recommended a crossing grade separation at this crossing.

LEE ROY SELMON CROSSTOWN EXPRESSWAY (SR 618) AND GANDY BOULEVARD CORRIDOR

Facility:

This corridor extends from Gandy Bridge and Gandy Boulevard in the southwest to I-75 in the east. It is a limited-access four-lane toll facility. There are two toll plazas with the remaining collection facilities at the on- and off-ramps.

Currently, the Lee Roy Selmon Crosstown Expressway terminates at I-75. A two-lane reversible segment continues into Brandon changing to a divided four-lane boulevard with easy access to SR 60 via Lakewood Drive. The Lee Roy Selmon Crosstown Expressway west of 22nd Street is an elevated four-lane limited-access highway through the downtown area becoming at-grade west of the Willow Street Toll Plaza. There are exits leading to the St. Petersburg Times Forum Arena and the Channelside/Cruise Terminal District as well as the downtown business district. The expressway terminates on Gandy Boulevard, an at-grade four-lane divided urban roadway with left-turn lanes. This corridor is the most direct route from the central and southern Pinellas County FACs to the Port of Tampa. It is also the primary route for freight traffic from Port Tampa to the I-75 corridor. The Gandy Bridge consists of two parallel spans totaling four lanes that connect Tampa with Pinellas County, eventually connecting to I-275 and US 19.

Land Use:

The highway passes to the south side of the Southeast Tampa Industrial Activity Center with access to US 41, US 301, SR 60, and I-75. Land use through the downtown area is central business district, primarily office with supporting pockets of commercial, and industrial along the port. West of the Hillsborough River, land use changes to residential with some commercial interspersed. There is a small pocket of high-density, high-rise residential at Bay to Bay Boulevard. Gandy Boulevard is dominated by urban mixed use, primarily intensive commercial from the terminus of the Lee Roy Selmon Crosstown Expressway to the Gandy Bridge.

The generalized future land use map shows the land use described along this corridor does not change significantly from existing land uses.

Freight-Related Problems:

Toll plazas on the expressway cause delays at the 78th Street Plaza especially during the morning and afternoon peak periods as traffic merges from up to 10 toll plaza lanes down to two in a very short distance.

West of downtown, the primary cause of delay, if any, is congestion during the morning and evening peak periods and delays caused by a small toll collection facility immediately west of downtown. Gandy Boulevard is similar to SR 60 regarding impediments to smooth freight flow. They include numerous driveway access points and signalization timing at key intersections. There is also an at-grade guarded railroad crossing immediately after exiting the expressway at Gandy Boulevard. During peak periods, the Gandy Boulevard portion of the corridor is extremely congested.

Corrective Actions Taken:

Construction of the elevated reversible lanes from Brandon to the downtown business district was completed in 2007. The elevated segment provides three new lanes inbound in the morning and out bound in the afternoon and evening providing a total of five lanes in the peak direction. The new lanes include a bridge over I-75 that connects to the Brandon Parkway south of the Westfield Brandon Shopping Center on the east and a new gateway along Meridian Street in the Channelside District that connect to the major east-west streets in downtown Tampa on the west. Trucks are not permitted on the elevated reversible lanes. However, the elevated lanes reduce the congestion at the toll plaza and make it easier for trucks and other large vehicles to merge back into the two at-grade lanes.

The construction of the I-4 Connector will provide additional congestion relief and better access between I-4 and the Lee Roy Selmon Crosstown Expressway as well as the Port of Tampa.

SR 60 CORRIDOR

Facility:

The SR 60 freight corridor begins at 19th Street in Tampa and continues east to the Polk County line in the Tampa Bay Region eventually linking with the Florida Turnpike, I-95, and US 1. SR 60 is a major east-west connector to Florida's south central Atlantic Coast. The facility is four lanes from 19th Street to Falkenburg Road becoming eight lanes through the Brandon area to Kings Avenue.

From Kings Avenue to Bryan Road, in Brandon, the highway is six lanes with no right-of-way for expansion. From Bryan Road to Valrico Road, the highway returns to eight lanes transitioning to a rural four-lane divided highway that passes south of Plant City. The facility is a divided roadway with left- and right-turn lanes at major intersections from west of 34th Street to the Polk County line. A truck weigh station is located in the median immediately east of SR 39.

Land Use:

The highway passes to the south side of the Southeast Tampa Industrial FAC with access to US 41, US 301, the Lee Roy Selmon Crosstown Expressway, and I-75. In Brandon, the corridor is flanked by intense commercial development mostly in the form of large and small retail plazas, "big box" stores, and supermarkets. The Westfield Brandon Shopping Center is a regional destination with shopping plaza outparcels anchored by large national chain discount stores and restaurants. Within a one-mile radius of the I-75 interchange, there are over 35 full-service and fast food restaurants and 10 motels. Additionally, there are substantial residential areas nearby containing both single-family residences and apartment complexes. Currently, the built-up area extends to Dover Road. Beyond Dover Road, the land use changes to low-density residential and agricultural with commercial uses located at major intersections. The land south of the roadway east of Turkey Creek Road is designated as agricultural and mining.

The generalized future land use map remains consistent with the land use described above along this corridor. Dover Road continues to be the eastern boundary of the Urban Service Area essentially blocking large-scale residential development beyond this point. In the past, proposed amendments to the land use east of the Urban Service Area boundary to allow residential and commercial development beyond the current agricultural/rural density have been firmly resisted by both Hillsborough County and Plant City.

Freight-Related Problems:

Delays can be expected due to the extreme amount of congestion, numerous access driveways, and signalization timing at key intersections from 22nd Street to Kingsway Avenue. An at-grade railroad crossing 0.25 mile east of US 41 (50th Street) causes numerous delays of up to 15 minutes from each of the more than 32 trains that cross daily. The area from Falkenburg Road to Providence Road, which includes the entrance to the Westfield Brandon Shopping Center and the Regency Square Shopping Center as well as the interchange with I-75, is one of the most congested areas in Hillsborough County. Freight mobility "Hot Spots" were identified at the following locations within the corridor:

- Intersection with 19th Street,
- I-75 interchange ramps east to Grand Regency Parkway (entrances to the Westfield Brandon Shopping Center and Regency Square Shopping Plaza),
- Intersection with 34th Street, and
- Railroad crossing 0.25 mile east of US 41 (50th Street).

Corrective Actions Taken:

Improvements have been made at the southbound and northbound exit ramps from I-75 as well as to the northbound entrance ramp from westbound SR 60 to northbound I-75. These improvements include signalized dual right- and triple left-turns at the end of the southbound exit ramp, the new configuration controls the flow of traffic from the ramp to eastbound SR 60, and permits protected westbound weaving to the dual left-turn lanes at Falkenburg Road. On the east side of I-75, the configuration of the northbound exit ramp has been changed to three signal-controlled (no right on red) right-turn lanes and two left-turn lanes. The right-turn signals permit protected weaves to the dual left-turn lanes at northbound Regency Boulevard.

SR 39/PARK ROAD/SAM ALLEN ROAD CORRIDOR

Facility:

The SR 39/Park Road/Sam Allen Road corridor runs from south of the Pasco County line to SR 60. From Pasco County to Sam Allen Road, the corridor is a two-lane rural highway. At Sam Allen Road, north of I-4, the corridor turns east to bypass the center of Plant City. The corridor turns south at Park Road as a four-lane facility access to I-4 and the Plant City Industrial Area. The bypass corridor then turns west at Alexander Street, and reconnects to SR 39 on the south side of Plant City. From Alexander Street south to SR 60, SR 39 is a rural four-lane divided facility.

From the Pasco County line to Sam Allen Road the CSXT Yeoman Subdivision line runs parallel to the east side of the highway.

Land Use:

CF Industries operates a large phosphate mine on the east side of the corridor immediately south of the Pasco County line. Rail spurs provide service to the mine, a small steel fabrication plant, a liquid petroleum distributor, a fresh produce operation, and a cold storage intermodal facility. The alternate route, Park Road, also connects a sizable FAC on the east side of Plant City to I-4. The center consists of Walden Woods Business Park, Gregg Business Center, and two major supermarket distribution centers. Other land uses along Park Road include Plant City Stadium and associated ball fields, Marshall Middle School, two additional sports complexes, and Hillsborough Community College. From Alexander Street south, the land use is commercial with the most intense area located at the intersection of SR 39 and Alexander Street. A new Super Wal-Mart and Lowes Home Improvement Center have been built south of the Alexander Street intersection. South of Charlie Griffin Road the corridor is bounded by agricultural properties and low-density single-family residences.

From the Pasco County line to Sam Allen Road, the future land use is designated as low-density residential, agricultural rural, and agricultural estate except for the industrially zoned CF Phosphate mine on the east side of the corridor south of the Pasco County line.

The intersection at US 92 has commercial on the northwest corner and heavy industrial on the northeast corner, light industrial on the southeast corner, and a school on the southwest corner. From I-4 to US 92, the west side of the corridor is low- to medium-density residential, while the east side is major public and low- to medium-density residential. From Sam Allen Road to the interchange with I-4 to the land use bordering the corridor is designated commercial. The future land use along Sam Allen Road from SR 39 to Park Road is designated low-density residential.

The generalized future land use map reflects that on the northern and southern segments (north of US 92 and south of Trapnell Road) the landscape maintains the low-density residential designation. The center segment of the corridor passes through a light industrial area with some major public/semi-public facilities (Plant City Stadium) along Alexander Street and Park Road along with small pockets of medium-density residential.

Freight-Related Problems:

Congestion is minimal south of Plant City from SR 60 to Park Road, a four-lane divided facility, and north of Plant City from I-4 to Zephyrhills in southern Pasco County where it merges with US 301, a Statewide Strategic Trade Corridor. To avoid congestion, most trucks use either Alexander Street or Park Road to connect to a north-south four-lane divided facility that provides access to I-4. Trucks can reconnect to SR 39 via I-4 or continue up Park Road to Sam Allen Road. A petition has been filed to change the zoning from industrial to mixed use in the area along the east side of Park Road south of US 92 including the majority of the Gregg Business Center. A developer is proposing construction of several thousand residential units in this area, which will increase non-freight-related traffic along Park Road.

A freight mobility "Hot Spot" was identified at the intersection of Park Road and Sam Allen Road. Other potential "Hot Spots" are the intersections leading into the industrial area along SR 39 north of I-4. The primary problem is tight turning radii and narrow access roads guarded by railroad crossing gates in close proximity to the highway.

Corrective Actions Taken:

Park Road between I-4 and Sam Allen Road is scheduled to be widened from 2 to 4 lanes starting in 2010. Preliminary Engineering (PE) to add lanes and reconstruct the existing two lanes along Sam Allen Road has been completed. Right-of-way acquisition took place in Fiscal Year (FY) 2007 with construction scheduled to begin FY 2009.

MEMORIAL HIGHWAY/VETERANS EXPRESSWAY/SUNCOAST PARKWAY CORRIDOR

Facility:

This facility extends from the Pasco County line south to I-275. From Pasco County to north of Hillsborough Avenue, the corridor is a four-lane limited access toll road. South of Hillsborough Avenue to I-275 the facility includes six through lanes and three interchanges. The interchange at the Courtney Campbell Causeway is partially signalized with three northbound to westbound lanes turning left and three unsignalized northbound through lanes. This signal also controls the eastbound Courtney Campbell Causeway to northbound Memorial Highway movement. Southbound traffic is not signalized. There is an interchange leading into Tampa International Airport (TIA), as well as an interchange at I-275.

Land Use:

The corridor is primarily urban in character and is bordered by urban and suburban mixed uses, TIA, and a large industrial area in the south transitioning to low-density residential uses and open space in the north.

The generalized future land use indicates that the Memorial Highway segment is bounded by urban mixed and major public/semi-public uses in the form of the Westshore Business District and TIA. The Veterans Expressway segment begins at the junction with the Courtney Campbell Causeway dividing major public/semi-public on the east from urban mixed use on the west side north to Hillsborough Avenue. At this point, the corridor separates light industrial uses on the east from low-density residential and suburban mixed uses on the west to Waters Avenue. The corridor then bisects a small area of urban and general mixed uses before transitioning to suburban mixed use. At Hutchinson Road, land use becomes low-density residential to the Suncoast Parkway junction. The Suncoast Parkway segment is bounded by low-density residential to the Pasco County line.

Freight-Related Problems:

There is heavy congestion during the morning and evening peak periods, especially near the airport entrance. This area also has two locations requiring crossover movements on either side of the airport entrance. A freight mobility "Hot Spot" was identified at the Memorial Highway and Spruce Street interchange entrance to the TIA due to extreme congestion interfering with safe weaving movements for large trucks.

Corrective Actions Taken:

The portion of the corridor from I-275 to the Veterans Expressway is under construction as part of the LINKS project that includes new interchanges at Spruce Street and the Courtney Campbell Causeway. Completion is expected in early 2010.

HILLSBOROUGH AVENUE (SR 600) CORRIDOR

Facility:

Hillsborough Avenue is an urban four- to six-lane collector route. It connects the industrial area along the Hillsborough/Pinellas County line to the Veterans Expressway, I-275, and I-4 as well as to TIA.

Land Use:

The western third of the corridor is primarily marshland with some single-family residential developments and apartment complexes mixed in. Residential density increases approaching the Veterans Expressway becoming a mixture of high-density office, commercial, and industrial as it passes through the Anderson Road FAC north of TIA to Dale Mabry Highway. From Dale Mabry Highway east, the land use is primarily commercial with multi-family and single-family residential areas in close proximity. From 45th Street to I-4, the land use changes to industrial with some commercial uses in the mix.

The generalized future land use indicates light industrial and commercial uses from the Pinellas County line east for one mile. At this point, the land use changes to suburban mixed use to Sheldon Road transitioning through commercial, heavy commercial, and finally to urban mixed use at the Veterans Expressway. The land use changes to light industrial on the north side and major public/semi-public (TIA) on the south side along with transitional uses to Dale Mabry Highway. From this point to 50th Street, the corridor is primarily low-density residential (6 units/acre) and heavy commercial. Light industrial uses extend to Harney Road changing to commercial to Orient Road and finally to community mixed use the remainder of the corridor to I-4.

Freight-Related Problems:

Congestion during the peak commuter travel periods combined with numerous traffic signals are the primary causes of delay. The turning radii at some intersections are extremely tight and there is little available right-of-way to make significant changes. Freight mobility "Hot Spots" were identified at the intersections of Hillsborough Avenue and Nebraska Avenue, and Hillsborough Avenue and 22nd Street.

I-4/LEE ROY SELMON CROSSTOWN EXPRESSWAY CONNECTOR (PLANNED)

Facility:

The I-4/Crosstown Connector (the Connector) is being designed with exclusive truck ramps to accommodate heavy trucks to/from the Port of Tampa. Trucks traveling northbound from the Port on 20th/22nd Streets and accessing I-4 eastbound and westbound, will access the exclusive truck lane just south of the Lee Roy Selmon Crosstown Expressway. Trucks southbound to the Port from I-4 will enter the Connector on general use ramps and flyovers and will separate from the general travel lanes south of 7th Avenue continuing on a dedicated truck lane that merge with the new 20th/22nd Street alignment on the east side of the Port.

This project is in the design phase. Right-of-way has been acquired and \$293 million is planned for the 5-Year Work Program beginning in 2009 to complete this project.

Land Use:

Land use is primarily light and heavy industrial with some heavy commercial under this elevated facility.

The generalized future land use map does not change these designations.

Freight-Related Problems:

None. This short connector route will actually improve connectivity to the Port.

ORIENT ROAD CORRIDOR

Facility:

Orient Road is an urban two-lane connector street that links the East Central Tampa Industrial FAC with I-4 to the north and SR 60 to the south. There is a grade separation over the eastern end of the CSXT Yeoman Rail Yard.

Land Use:

Land use along this corridor is generally industrial with some residential areas and government/public facilities including the Florida State Fairgrounds and the Hillsborough County Jail complex.

The generalized future land use indicates the area south of Broadway Avenue will remain heavy industrial. North of Broadway Avenue, the land use changes to high-density residential (20 units/acre) to Dr. Martin Luther King, Jr. Boulevard with commercial and neighborhood mixed use lots on the corners of intersections. Northward to I-4, the land use changes to low-density residential (6 units/acre) and commercial.

Freight-Related Problems:

This road is narrow and heavily traveled by both automobiles and trucks. A freight mobility "Hot Spot" was identified at the railroad crossing located south of Broadway Avenue. Trains entering the Uceta Yard frequently block this crossing. A grade separation at the railroad crossing would permit CSXT to operate longer intermodal trains which are limited by the length of track in the Uceta Yard immediately west of this crossing.

CAUSEWAY BOULEVARD (SR 676) CORRIDOR

Facility:

The Causeway Boulevard corridor is heavily used to connect US 301 and the phosphate mining operations of southeastern Hillsborough County to the Hooker's Point terminals. The roadway is four lanes from the port to the US 41 intersection with a raised median from the east side of the bridge over McKay Bay to about half way to US 41 and then a continuous turning lane to US 41. East of US 41, the roadway becomes two lanes the remainder of the corridor to US 301.

Land Use:

The current land use along the corridor is low-density residential, commercial, and light industrial. From US 41 westward, the land use is light industrial and commercial.

There are no changes from the current uses in the generalized future land use. However, Hillsborough County is considering a zoning overlay district that will allow for more commercial and industrial uses along the corridor between US 301 and US 41 with restrictions.

Freight-Related Problems:

Approximately 3,300 heavy trucks per day use this 3.25-mile facility from US 301 to US 41 for access to the port. A CSXT railroad crossing east of US 41 causes major delays to smooth flow during each of the 32 daily train crossings by trains as long as 110 rail cars. Traffic backups east of the crossing result in blockages to all streets leading into the local neighborhoods causing general gridlock throughout the area. This rail crossing is a significant problem that has been identified in other reports and recommended for grade separation. The large number of street intersections and driveways to both homes and businesses on both sides of this section also impede the smooth flow of freight to the port and present a significant safety issue for trucks, automobiles, and pedestrians. Freight mobility "Hot Spots" identified within the corridor include intersections with US 41, US 301, and 78th Street as well as the railroad crossing located 0.25 mile east of US 41.

Corrective Actions Taken:

Widening of the section from US 41 east to US 301 to a four-lane divided facility is currently under construction which is expected to be completed in 2010. The project will include improvements to the intersections at both US 41 and US 301.

BIG BEND ROAD (CR 672) CORRIDOR

Facility:

This corridor extends from US 301 to US 41 a distance of 4 miles. The roadway is a four-lane divided facility with an interchange at I-75, 1.5 miles west of US 301. It is one of the primary connectors between the mines in the southeast portion of Hillsborough County and the I-75/US 41 corridors that service the port facilities along the US 41 corridor.

Land Use:

East of the US 301 intersection is the planned development of Summerfield Crossings with 1,300 residences currently and over 3,000 expected at build out. At the west end is the TECO Big Bend Power Plant and a desalination plant that came on-line in 2003.

Land use is rapidly becoming suburban in nature as new apartments and residential developments are being developed along the route in addition to the existing East Bay High School and Eisenhower Middle School on the north side west of I-75.

The generalized future land use designates this area as general mixed use. A large mixed use DRI, South Bend, is designated as urban mixed use and will include both single-family residences and apartments, a school, light industrial, and supporting commercial. Also planned for this area is a new regional shopping mall that is expected to equal or exceed the retail area of the Westfield Brandon Shopping Center located at SR 60 and I-75. A planned medium-sized industrial development on the north side adjacent to the CSXT railroad right-of-way has been approved for a 1.5 million square-foot distribution center. Construction of a residential development within the area is well underway. Together, these developments will add approximately 2,000 single-family units, over 1,500 apartments, and over 1.5 million square feet each of light industrial and supporting retail uses along this corridor. Approximately 2 miles south of the US 41 intersection is the large waterfront community of Apollo Beach with over 2,000 residential units. Harbor Bay with over 1,000 residential units and are planned and other recently approved residential communities will add to future congestion along this roadway corridor. Although these residential areas are not located in the corridor, residents of these large subdivisions use the corridor to access I-75.

Freight-Related Problems:

While congestion is not currently a significant problem, it will quickly become so within the next 10 years as the residential areas north and south of the corridor reach completion. A poorly timed traffic signal in front of the East Bay High School/Eisenhower Middle School complex west of the I-75 interchange as well as a signal at the I-75 off-ramp contribute to congestion in the area west of I-75. This is especially a problem during non-school hours. Signalization at the intersection with US 41 is also a problem.

A left turn arrow was recently added to the signals on westbound CR 672 for southbound left turns. There is a gated railroad crossing of the CSXT Palmetto Subdivision main line located approximately 0.75 mile east of the US 41 intersection. This crossing has a minimal effect on congestion in the area.

Corrective Action Taken:

Construction began in 2008 to increase the capacity of Big Bend Road from US 301 to US 41. As part of these improvements, new traffic signals have been installed at the I-75 northbound ramp which should allow for safer left turns onto and off I-75. The widening of US 301 from two to six lanes is currently underway and will include improvements at the intersection with Big Bend Road. In addition, the FDOT has started a PD&E Study of the widening of US 41, including improvements to the intersection with Big Bend Road.

SR 674 CORRIDOR

Facility:

This corridor extends 30 miles from the Polk County Line east to US 41 in Ruskin. The eastern 22 miles consist of a rural two-lane facility to the intersection of US 301. From US 301 to US 41, the facility changes to a suburban four-lane and six-lane divided highway. It connects the mines in southeastern Hillsborough County with the US 41 corridor that serves port facilities to the north and south.

Land Use:

From CR 579 west to Lake Drive, the roadway passes through the small, unincorporated rural community of Wimauma. Between US 301 and I-75, the highway bisects the sprawling retirement community of Sun City Center that currently has about half of the planned 18,000 residential units built along with supporting commercial activity. Immediately west of the I-75 interchange on the north side, the South Shore Corporate Park DRI extends northward to the Wolf Creek (3,000 planned residential units) DRI. Ruskin Elementary School is located on the southeast corner of the intersection with US 41.

The generalized future land use includes low-density residential from the I-75 interchange to the CSXT railroad crossing east of US 41 and medium-density residential from the railroad crossing to US 41. General mixed use is allowed in the area bordering the I-75 interchange and eastward on the north side of the corridor extending to West Del Webb Boulevard. Between this point and Balm-Wimauma Road, the land use is designated as low-density residential. Rural agricultural and mining dominate the remainder of the corridor to the Polk County line.

Freight-Related Problems:

There is a CSXT railroad crossing located approximately 0.75 mile east of US 41 and seven intersections with neighborhood streets on the north side between the railroad crossing and US 41. A significant transportation consideration is the large number of senior citizens that use the highway in Sun City Center, often driving golf carts across SR 674. Even with reduced speed limits, these vehicles may present hazards to heavy trucks. Newly imposed weight restrictions on Lithia Pinecrest Road will have an adverse effect on SR 674 by increasing the number of heavy trucks on this facility.

US 92 (PARK ROAD TO POLK COUNTY LINE)

Facility:

This short section of US 92 is a rural two-lane facility extending 3.5 miles from the intersection with Park Road in eastern Plant City to the Polk County line. The corridor is used primarily as an alternate parallel route to I-4 located approximately 1.5 miles to the north and connects to an area of Polk County heavily occupied by large distribution centers.

Land Use:

With the exception of the first mile east of Park Road, the route is mostly low-density rural residential with isolated commercial uses on the north side of the roadway. The south side is industrial to the Polk County line with a small pocket of low-density residential between Charles Taylor Road and Webb Road.

The generalized future land use includes residential north of the corridor and industrial uses to the south. However, recent land use changes have extended the industrial area north of the corridor to I-4. Plant City has approved over 10 million square feet of industrial uses between Park Road and County Line Road.

Freight-Related Problems:

This route becomes extremely congested when traffic incidents cause delay on I-4 to the north. It is a convenient bypass of areas to the east of Plant City. Private residential and commercial driveways on the north side of the roadway are a safety issue especially during inclement weather and fog conditions. Access to businesses on the south side of the roadway requires crossing a heavily used CSXT rail line that parallels the roadway.

Corrective Actions Taken:

New safety features were added to the railroad crossing at Park Road to prevent vehicles from circumventing the gate system immediately south of the US 92/Park Road intersection.

MADISON AVENUE/PROGRESS BOULEVARD

Facility:

This freight corridor connects US 41 and the Port of Tampa facilities with US 301 and I-75. This connector provides primary truck access to the port facilities of Pendola Point and Port Sutton. It is a more direct access route to I-75 than Causeway Boulevard. This facility is also the most direct link between the port facilities and the phosphate mines and processing facilities located in eastern Hillsborough County. The facility is a two-lane roadway from US 41 to 78th Street changing to four lanes through Progress Village returning to two lanes immediately east of Falkenburg Road. The regional corridor ends at US 301; however, the route continues east along Bloomingdale Avenue and eventually Lithia Pinecrest Road as a Hillsborough County truck route providing access to the phosphate mines in the eastern part of the county.

Land Use:

The land use is primarily industrial from US 41 to 66th Street. From this point to Falkenburg Road the use is residential and includes two parks, Simmons-Bower Park on the north side and Progress Village Park on the south side. From Falkenburg Road to US 301 the land use includes a mixture of residential and commercial. The areas north and south along Faulkenburg Road are developing rapidly into a mixture of residential, commercial and industrial uses.

The generalized future land use maintains these designations.

Freight-Related Problems:

Minor traffic congestion at the intersections of US 41, Falkenburg Road, and US 301 are the primary freight-related problems. The intersection with US 301 has heavy truck use coming from both US 301 and Progress Boulevard. Congestion is a particular problem during the morning and evening peak periods. The left-turn signal timing from eastbound Progress Boulevard to northbound US 301 is too short for the number of trucks making this movement.

TURKEY CREEK ROAD/US 92/BRANCH FORBES ROAD

Facility:

This corridor is used to connect the Plant City Airport FAC to I-4. Turkey Creek Road is a two-lane facility that extends from Sydney Road to US 92 (Hillsborough Avenue). The corridor extends westward along US 92 as a two-lane facility turning north on the Branch Forbes Road, also a two-lane facility, for less than one mile before reaching the I-4 interchange.

Land Use:

The existing land uses are industrial from Sydney Road to SR 574 (Dr. Martin Luther King, Jr. Boulevard), residential north to US 92 and a mixture of low density residential and commercial uses throughout the remainder of the corridor to I-4.

The generalized future land use maintains these designations.

Freight-Related Problems:

Congestion is a major problem throughout this short corridor, which is heavily used by large trucks. It becomes even more congested when US 92 becomes an alternative route for trucks between Tampa and Lakeland to avoid I-4 congestion. There are railroad crossings at Sydney Road and SR 574. The intersection geometry at US 92 requires trucks to make sharp left and right turns and the intersection at Branch Forbes Road is extremely tight with short turning radii on all corners.

RAIL CORRIDORS

LAKELAND SUBDIVISION

Facility:

The facility is an east-west single-track main line from the Polk County line through Plant City and Brandon generally paralleling US 92 on the south side and ending at Williams Road. Within Plant City, there are four spurs that serve businesses located within the East Plant City and Plant City Airport FACs. The Cherry Siding runs parallel to the main track from east of Alexander Street to east of Mile Post A864 near Turkey Creek Road. The corridor continues as a single-track into Brandon.

Land Use:

The route is bounded by US 92 and mostly low-density rural residential with isolated commercial uses on the north side. The south side is industrial from the Polk County line to Park Road with a small pocket of low-density residential between Charles Taylor Road and Webb Road. West of Park Road, the corridor passes through Plant City and a mixture of residential and commercial land uses to Alexander Street where it changes to industrial uses along the north side of the Plant City Airport. West of Turkey Creek Road, the corridor passes through low-density residential and agricultural lands to Valrico Road.

No change from the existing land uses is reflected on the generalized future land use map.

Train Use:

Between 15 and 20 trains per day use this facility in Hillsborough County. Total usage is approximately 330 to 600 trains per month including 48 AMTRAK passenger trains. The primary cargo is bulk-materials (phosphate) destined for the Port of Tampa and containers/trailers to and from the CSXT Intermodal Yard.

Freight-Related Problems:

Slow-moving trains simultaneously block several local streets within the center of Plant City including SR 39 (Collins Street), Park Road, and Alexander Street.

YEOMAN SUBDIVISION

Facility:

From the Pasco County Line south, the corridor runs as a single-track 12 miles into Plant City along SR 39. South of County Line Road, the CF Industries phosphate complex is served by an off-line looping yard with several parallel sidings and spurs used to load and marshal phosphate unit trains. Between Knights Griffin Road and I-4, there are four spurs serving industrial businesses and the Plant City Siding that runs parallel to the main track from north of Terrace Drive into the Plant City Yard. The line continues as a dual-track through Plant City with connecting tracks to the Lakeland Subdivision Main Line and the Plant City Subdivision before turning southwestward toward Valrico as a single-track. Between South Wheeler Street and Turkey Creek Road, there are eight spurs serving industrial businesses within the Plant City Airport FAC. The Valrico Siding runs parallel to the main track from west of St. Cloud Road to Valrico Road and forms a junction with the beginning point of the Valrico Subdivision. From the Valrico Junction to its terminus at "YN," west of the Tampa Bypass Canal.

Land Use:

From the Pasco County line south to Knights Griffin Road, the corridor parallels SR 39 through mostly agricultural land except for the CF Industries Plant City Phosphate Complex on the east side immediately south of County Line Road. South of this point to I-4, the corridor is bounded by a mixture of industrial and agricultural uses on the east side of the track and agricultural uses on the west side of SR 39. South of I-4 is the Plant City Yard located between Spencer Street and Calhoun Street. From this point, the corridor enters Plant City and is bounded by a variety of mixed uses including residential, commercial, and light industrial to Alexander Street where the corridor enters the Plant City Airport FAC, an industrial area.

After passing Turkey Creek Road, the corridor enters agricultural uses eastward into Valrico where the land use changes to low- to medium-density residential through Brandon to I-75.

The generalized future land use remains the same as the existing land use in this corridor. East of Brandon to the urban boundary (Dover Road) new development is taking place in the vicinity of the rail line.

Train Use:

Between 25 and 30 trains per day use this subdivision in Hillsborough County. Total usage is approximately 550 to 850 trains per month. The primary cargo is bulk materials (phosphate) destined for the Port of Tampa.

Freight-Related Problems:

Slow-moving trains simultaneously block several local streets in the center of Plant City including SR 39 (Collins Street) and US 92 (Baker Street/Reynolds Street).

BROOKSVILLE SUBDIVISION

Facility:

The Brooksville Subdivision begins south of the Broco Yard in north central Hernando County. The main line crosses into Hillsborough County at County Line Road on the west side of US 41 and continues south crossing US 41 to the east side between Crystal Lake Road and Debuel Road in the Lutz area. South of Fowler Avenue, it intersects with the Hillsboro Spur, an east-west spur track connecting to the Yeungling Brewery on 30th Street and the Hillsborough Yard between 30th Street and McKinley Drive. There is also a spur on the west side of the main line south of 131st Avenue that serves Robbins Manufacturing. The main line continues south to its terminus at the junction with the Clearwater Subdivision main line in Sulphur Springs at Busch Boulevard.

There are 12 gated at-grade crossings and 10 non-gated crossings located in Hillsborough County.

Land Use:

The existing land use is generally low-density residential and agricultural south to I-275. From this point, the land use changes to medium-density residential and commercial.

The generalized future land use maintains the residential designations along the line with small areas of commercial at major roadway intersections.

Train Use:

Between one and two trains per day use this facility to serve the CEMEX plant north of Brooksville in Hernando County. Another eight trains per month are used to move coal to Hernando County. Total train use is approximately 55 trains per month.

Freight-Related Problems:

The at-grade crossings on Dale Mabry Highway at the US 41 split result in occasional traffic delays on these heavily traveled corridors.

VALRICO SUBDIVISION

Facility:

The Valrico Subdivision begins at the junction with the Yeoman Subdivision in Valrico north of SR 60 and west of Miller Road and heads southeast approximately 15 miles into Polk County. From its beginning point to west of St. Cloud Road, a parallel siding rejoins the main line near Mile Post 1. The Durant Siding parallels the main track between Durant Road and Turkey Creek Road (between Mile Posts 5 and 6). South of Keysville Road, the subdivision forms a junction with the Plant City Subdivision at Welcome and continues as a dual-track to the north leg wye of the Brewster Subdivision, south of Edison Road. North of Edison Road, the main track enters the Edison Yard, a two-track siding. The main line departs Hillsborough County at County Line Road, prior to entering the IMC Agrico Plant and the Nichols Yard in Polk County.

There are nine gated and three non-gated at-grade crossings.

Land Use:

The land use is medium-density residential west of Dover Road becoming agricultural and rural residential east of Dover Road to the Polk County line.

There is no change reflected in the generalized future land use.

Train Use:

Approximately 16 trains per day use this facility in Hillsborough County. Total usage is approximately 350 to 450 trains per month. The primary cargo is bulk materials (phosphate) destined for the Port of Tampa.

Freight-Related Problems:

None.

CLEARWATER SUBDIVISION

Facility:

The Clearwater Subdivision begins at the Tampa Terminal Subdivision "A" Main Line east of 31st Street and south of 2nd Avenue in Ybor City and terminates in St. Petersburg in Pinellas County. The main line follows a northward heading as a single-track to Sulphur Springs in north central Tampa. There is a passing track north of East Caracas Avenue to south of Hanna Avenue. Also in this area are four spurs serving businesses in the East Tampa FAC. Another spur south of the Hillsborough River serves the Hillsborough River Water Treatment Plant. The Sulphur Springs Siding parallels the main line beginning north of East Waters Avenue and connects to the Brooksville Subdivision main line. From this point, the Clearwater main line turns to the east as a single-track and runs parallel to the south side of Busch Boulevard. The Drew Spur (discussed separately below) turns south from the main line to serve businesses in the Anderson Road FAC. The main line continues westbound as a single-track to the Pinellas County line north of SR 580 (Hillsborough Avenue) at Racetrack Road.

Land Use:

Land use south of Hillsborough Avenue is mostly a combination of transitional uses and medium-density residential. From Hillsborough Avenue to Sligh Avenue, the line passes through an area dominated by heavy commercial uses with a small area of light industrial near Waters Avenue. The land use changes back to medium-density residential and transitional uses in Sulfur Springs. Heavy commercial surrounds the area near I-275 returning to medium-density residential to east of Dale Mabry Highway where the land uses change to heavy commercial and mixed office. West of Dale Mabry Highway, the line passes through an area of light industrial to west of Anderson Road returning to mostly residential to the Pinellas County line.

The generalized future land use maintains the land uses described above.

Train Use:

Twenty-four trains per week use this facility in Hillsborough County. Of these, 10 trains per week serve customers located on the Drew Spur before continuing on to Pinellas County. The remaining 14 trains (2 per day) serve the TDSI Auto Yard on Anderson Road. With the development of the CSX Intermodal Logistics Center (ILC) in Polk County, CSXT plans to close the auto yard, which will significantly reduce the number of trains on this corridor.

Freight-Related Problems:

None.

DREW SPUR (CLEARWATER SUBDIVISION)

Facility:

The Drew Spur is a southbound extension off the Clearwater Subdivision main line east of Anderson Road. The Waters Avenue team track runs parallel to the main spur north of Waters Avenue and serves a spur to the Home Depot Distribution center. South of Sweetwater Creek, a north and south wye enters the CSXT TDSI Auto Yard, which contains 10 tracks with a series of auto racks for loading and unloading automobiles. Eight additional spurs serve businesses within the Anderson Road FAC between Sligh Avenue and Hillsborough Avenue. The Sligh Siding runs parallel to the main spur from south of Sligh Avenue to north of the crossing of Anderson Road.

Land Use:

This spur is surrounded entirely by industrial land uses. The generalized future land use reflects no change to current land use.

Train Use:

Twenty-four trains per week use this facility in Hillsborough County. Of these, 10 trains per week serve customers located on the Drew Spur before continuing on to Pinellas County. The remaining 14 trains (two per day) serve the TDSI Auto Yard. Total train use is approximately 80 to 100 trains per month. CSXT plans to close the auto yard and transfer its functions to the ILC being developed in Polk County.

Freight-Related Problems:

None.

PALMETTO SUBDIVISION

Facility:

The Palmetto Subdivision begins at the CSXT East Tampa Yard and runs south to Manatee County. The East Tampa Yard, which lies on the west side of US 41 north of the Alafia River, consists of nine parallel tracks and leads into the Cargill Fertilizer Plant and port facility. The East Tampa Siding runs parallel to the Palmetto main line east of the East Tampa Yard. The single-track line crosses the Alafia River on a drawbridge continuing south approximately three miles to the Big Bend Spur, which crosses US 41 at a gated at-grade crossing and separates into three branches with additional sidings serving Mosaic Phosphates, National Gypsum Company, and the TECO Big Bend Power Station. The line continues south to Ruskin as a single-track that crosses US 41 south of College Avenue, where the Ruskin Siding parallels the main track to north of 10th Street Southwest. The track crosses the Little Manatee River on a drawbridge and continues southbound to the Manatee County line as a single-track.

There are 12 gated at-grade crossing and 17 non-gated crossings. The US 41 crossing in Ruskin is grade separated. There are two drawbridges, one over the Alafia River and one over the Little Manatee River.

Land Use:

North of the Alafia River, the land use is light and heavy industrial. South of the Alafia River, the land use changes to suburban mixed use and agricultural except for the area around the Big Bend/Port Red Wing area, which is light industrial. From Big Bend to Ruskin, the land use is predominantly suburban mixed use and medium-density residential to the Little Manatee River. South of the river, the land use changes to agricultural and low-density residential.

The generalized future land use map includes industrial designations north of the Alafia River. From south of the Alafia River to Ruskin, the future designations are residential and general mixed use. The area around Ruskin is designated residential to south of the Little Manatee River changing to agricultural south to the Manatee County line.

Train Use:

Between eight and 10 trains per day use this facility in Hillsborough County south of the Rockport Spur continuing on from the Tampa Terminal Subdivision to Manatee County. Total usage is approximately 180 trains per month. The primary cargo is bulk materials (coal, phosphate) destined for the Port of Tampa (Big Bend Power Plant and IMC Agrico), oranges, and general cargo destined for Port Manatee and Bradenton in Manatee County.

Freight-Related Problems:

The two at-grade crossings at SR 60 and Causeway Boulevard result in significant delay to trucks and other vehicles. Due to the high Annual Average Daily Traffic (AADT) on SR 60 and the number, length, and speed of trains at the SR 60 crossing, a grade separation is recommended.

TAMPA TERMINAL

The Tampa Terminal consists of four lines and three yards. The lines include: YN to East Tampa; Mango to Tampa and the Port of Tampa Spur; YN to the "Gary" and the Hookers Point Spur; and the NEVE Spur. The yards include: Uceta/Intermodal Terminal, Coach, and Yeoman, all of which use co-located between 50th Street and Orient Road, north of SR 60.

YN TO EAST TAMPA

Facility:

This facility consists of a single-track beginning at YN continuing west through the Yeoman Yard then turning south and terminating at the Palmetto Subdivision at the East Tampa Yard. A spur runs north from south of 16th Street, serving Georgia Pacific, terminating at Palm River Road. The Sutton Siding parallels the main track from south of Causeway Boulevard returning to the main track north of Madison Avenue. From the siding, a north leg and south leg wye connects to the CSXT Rockport Yard and runs to main spurs leading into various port facilities at Port Sutton and Pendola Point. South of Hartford Street, an eastbound spur splits into six sidings serving Nitram, Inc. South of the end of the Sutton Siding, a spur serves the GAF Roofing Materials plant. South of Madison Avenue, five spurs serve industrial businesses before terminating at the East Tampa Yard.

Land Use:

The land use consists of light and heavy industrial uses. There are no changes to this designation in the generalized future land use.

Train Use:

Approximately 32 trains per day use this facility in Hillsborough County. Total usage is approximately 700 to 900 trains per month between the YN Junction and the East Tampa Yard. The primary cargo is bulk-materials (phosphate, coal) destined for the Port of Tampa (Rockport and Mosaic Fertilizer), oranges, and general cargo destined for Port Manatee and Bradenton in Manatee County.

Freight-Related Problems:

The primary problem is at-grade crossings at Causeway Boulevard, US 41 (south of Causeway Boulevard), and US 41 north of the East Tampa Yard. Long trains and switching operations cause long delays on the roadways. Due to the high AADT, the high number of trucks that use US 41, and the number, length, and speed of trains at these crossing, grade separations should be considered.

MANGO TO TAMPA AND THE PORT TAMPA SPUR

Facility:

This facility begins east of Williams Road in Mango. The main line is a single-track that proceeds west through the Uceta Yard and the downtown area of the City of Tampa on Polk Street to the Hillsborough River. A spur serves the Tampa Union Station (AMTRAK) and terminates at the Con-Agra Flour Mill, south of Twiggs Street between Meridian Avenue and Nebraska Avenue. The line crosses the Hillsborough River via a drawbridge and turns southwest at North Boulevard and parallels the Lee Roy Selmon Crosstown Expressway through South Tampa to Gandy Boulevard and continues southwest to its terminus in Port Tampa at the tip of the Peninsula. North of Oklahoma Avenue, the Rattlesnake Spur serves a petroleum terminal and a newspaper printing company. After crossing Westshore Boulevard, the main line enters the Port Tampa Yard.

The Mango Siding parallels the main track beginning west of Highview Drive in Brandon and returns to the main track west of Williams Road. There are five spurs off the main track and a third passing siding located between I-75 and Orient Road that serve 12 businesses in the South I-75/Sabal Park Industrial FAC. There are six sidings located between North Boulevard and Gandy Boulevard that serve various distribution warehouses.

There are 20 gated at-grade crossings. There are nine non-gated crossing located within the Tampa central business district. Each of the crossings is controlled by roadway traffic signals and flashing lights. Other non-gated crossings contain flashers and cross-bucks. Train speed will not exceed 20 miles per hour on this line.

Land Use:

From Williams Road to I-75, the corridor passes through low- to medium-density residential consisting of single-family homes and apartments.

The area west of I-75 is industrial, and part of the South I-75/Sabal Park and Southeast Tampa Industrial FACs includes the CSXT Intermodal Terminal and Uceta and Yeoman Rail Yards. From the Uceta Yard to Nebraska Avenue, the land use along the corridor is industrial and commercial. The line then passes through an area of central business district to the Hillsborough River changing to medium- and high-density residential to Port Tampa with medium commercial located at Gandy Boulevard and heavy industrial in Port Tampa.

The generalized future land use maintains the industrial and general mixed use from Downtown Tampa to Mango. South of Downtown, the future land use remains residential with some commercial mixed in to Port of Tampa, which is industrial.

Train Use:

Between 15 and 20 trains per day use this facility in Hillsborough County between Mango and the Uceta Yard. Total usage is approximately 330 to 600 trains per month including 48 AMTRAK passenger trains. The primary cargo is bulk-materials (phosphate) destined for the Port of Tampa and containers/trailers to and from the CSXT Intermodal Yard. From the Uceta Yard to Port Tampa, the usage is approximately 24 to 30 freight trains per month and 48 monthly AMTRAK passenger trains which terminate at Union Station.

Freight-Related Problems: None.	
NOTE.	

YN TO "GARY" AND HOOKER'S POINT SPUR

Facility:

Beginning at YN east of the Yeoman Yard, a single-track main line proceeds westward before turning south and crossing SR 60 west of 30th Street. South of SR 60, a spur serves the CSXT BIDS (TRANSFLO) Terminal located west of 34th Street. This intermodal facility consists of 11 sidings and handles a wide variety of liquid, gas, and dry bulk transfers. The main line enters the Port of Tampa Hooker's Point facility to the west of 20th Street. A siding located at the north of the port serves the Cargill Grain Division Terminal elevator and docks. Inside Hooker's Point, the East Branch Line serves the east side of the port while the main line serves the west side. Proceeding south, the main line passes through the CSXT Hooker's Point Yard and CSXT McCoskey Yard with sidings to the AR Reef Terminal, Petro Packagers, City of Tampa Wastewater, GATX Terminal, and CF Industries Anhydrous Ammonia Terminal. The East Branch Line serves Tampa Stevedore docks, CF Industries Tampa Phosphate warehouse and docks, Winner Metals, and other docks on the east side of the port.

There are eight gated at-grade crossings on and off the port. Most crossings in the port are controlled by flashers or cross-bucks. Train speed in the port is restricted to 10 miles per hour.

Land Use:

The land use is dominated by heavy and light industrial the entire route. No change is shown in the generalized future land use.

Train Use:

One train per day.

Freight-Related Problems:

Congestion within the port is a problem. An at-grade crossings at SR 60 is also a problem due to long delays experienced by both trucks and other vehicles.

NEVE Spur

Facility:

Beginning at the main line from the Uceta Yard, the NEVE Spur proceeds north from the "A" Main Line east of 36th Street. It begins turning northeast after crossing Dr. Martin Luther King, Jr. Boulevard. The line crosses Hillsborough Avenue to the west of 56th Street and 56th Street south of Henry Avenue. It then crosses Hanna Avenue before terminating south of Sligh Avenue. Between the A Line main track and 21st Avenue, there are six sidings serving businesses located in the Southeast Tampa Industrial FAC. There are three sidings located between 39th Street and 40th Street but only one business is served from these sidings.

Prior to crossing Hillsborough Avenue, there are three sidings serving four businesses. From a parallel siding located on the west side of the main spur beginning south of Hillsborough Avenue to west of 56th Street, there are two spurs with a total of 23 sidings that serve industrial uses located within the East Tampa Industrial FAC. A second parallel siding on the east side of the main spur from east of 56th Street to north of Hanna Avenue includes three spurs and a total of five sidings serving the same industrial area. The line terminates in the Vulcan ICA Sligh Avenue Rail Yard.

There are 11 gated at-grade crossings and 18 non-gated crossings. The line has grade separated crossing at I-4 and Hillsborough Avenue.

Land Use:

Land use is dominated by light and heavy industrial areas between the Uceta Yard and Dr. Martin Luther King, Jr. Boulevard and from south of Hillsborough Avenue to the end-of-line south of Sligh Avenue. Between these two large industrial areas is a small area of medium-density residential with supporting light commercial uses mixed in.

The generalized future land use maintains the designations described above.

Train Use:

Between three and six trains per day use this facility.

Freight-Related Problems:

The primary freight problem is truck congestion in the industrial areas combined with numerous non-gated road crossings.

TAMPA TERMINAL YARDS UCETA/CSXT INTERMODAL, COACH, AND YEOMAN YARDS

This major rail complex is a combination three rail yards contained in a single location bounded by Orient Road on the east, 50th Street on the west, SR 60 on the south, and approximately 8th Avenue on the north. The A Main Line serves the Uceta, Coach and Yeoman Yards with connections to the Lakeland Subdivision via Mango, Port Tampa through downtown Tampa, and the NEVE Spur (serves the East Tampa FAC). The S Line serves the Yeoman Yard and connects to the East Tampa Subdivision, the Hooker's Point Spur, and the Clearwater Subdivision to St. Petersburg in Pinellas County. The Engine House Track, Transfer Track, and Cross-Yard Track are used to connect the three facilities.

UCETA YARD/CSXT INTERMODAL

This facility consists of 18 terminal sidings and six parallel sidings on a freight lead track that passes through the yard reconnecting to the A Main Line west of 34th Street.

The intermodal container facility consists of two sidings located parallel to the A Main Line. Each siding has ramps of various loading capacities between 18 and 54 piggyback containers and trailers. Access to this facility is through a gateway located off 62nd Street, which connects to I-4, SR 60, and the Lee Roy Selmon Crosstown Expressway (all SIS corridors) via Broadway Avenue or Columbus Drive and 50th Street.

COACH YARD

This facility is the CSXT Maintenance Yard. It consists of the RIP Lead and three sidings and the Coach Lead and eight sidings, the Back Shop Lead and five shop sidings as well as the engine house, and the Engine Service Lead with three parallel sidings.

YEOMAN YARD

This facility consists of three parallel lead tracks with 30 parallel sidings, a by-pass track, and connection track to the A Main Line. This yard is used to assemble and marshal unit trains. Additional sidings off the Bypass Main Line serve various businesses located on the south side of the yard along SR 60and Tampa Bay Steel Corporation located south of 6th Street. A branch with three sidings serves the Americold intermodal cold storage facility located east of 50th Street south of Uceta Road.

Land Use:

Industrial. No change is reflected on the generalized land use map.

Train Use:

All trains entering the Tampa Terminal pass though, begin, or terminate at one of these collocated yards.

Freight-Related Problems:

The primary problem is the capacity of the Uceta/CSXT Intermodal Yard. This facility is limited by the length of the loading ramp facilities and sidings and cannot be expanded in its present location.