I-75 SKETCH INTERSTATE PLAN TECHNICAL MEMORANDUM

FREIGHT MOBILITY

November, 2010

Florida Department of Transportation
Systems Planning

Purpose

The Florida Department of Transportation's Central Office, in coordination with the District Offices, has prepared a Sketch Interstate Plan for the I-75 corridor from the Florida-Georgia border south through Sumter County, Florida. **Exhibit 1** displays the I-75 Sketch Plan study area. The major purpose of this Sketch Interstate Plan is to improve the mobility of users of I-75 by examining the existing interstate system, with respect to planned improvements, and reveal general problem areas and trends that will be examined in more detail in a later phase. The preparation of a Sketch Plan is an integral part of the long range planning process for the development of the Strategic Intermodal System (SIS). As part of the Sketch Plan process, the Project Team, which included Department Staff and their consultant, developed multiple reports to analyze different concepts encompassing the following focus areas:

- Safety
- Traffic
- Freight Mobility
- Environmental Analysis
- Planned Improvements and Conceptual Mobility Opportunities

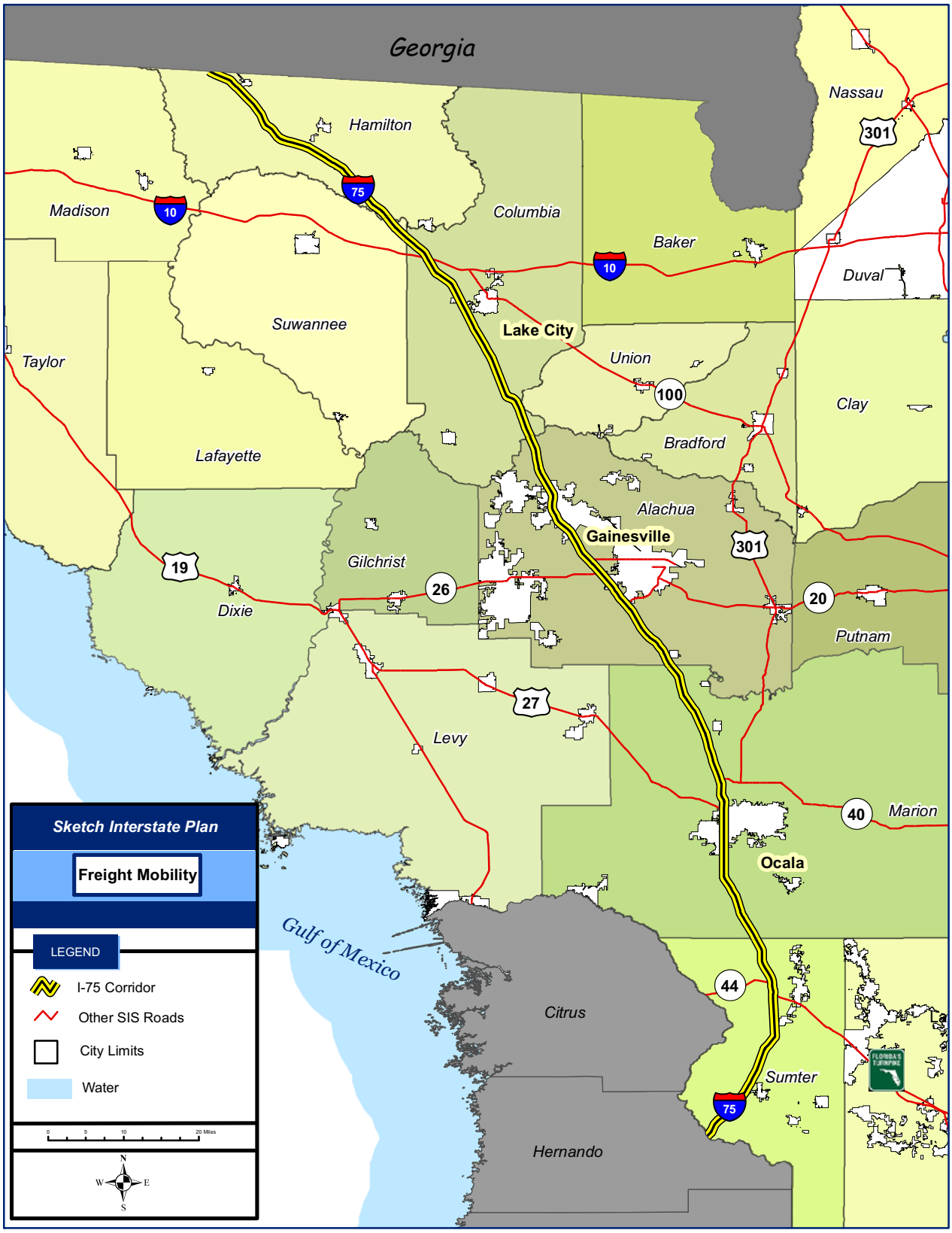
The purpose of this Freight Mobility report is to establish trends in existing and future year 2035 trucking patterns and movements along the I-75 corridor. This has been completed by reviewing existing industrial and trucking patterns, and analyzing existing and future commodity flow data. A goal of the Sketch Plan is to enhance intermodal transfer and support regional, interstate, and international commerce by providing future trends which support policy decision making. This report consists of two sections; industrial and trucking pattern characteristics along the corridor including traffic and results from future commodity flow data analysis.

Section 1: Industry and Trucking Patterns

The Project Team and Department staff reviewed existing industry and trucking patterns along the Sketch Plan corridor. This included reviewing and cataloguing intermodal locations and freight oriented industries (FOIs) through Info USA 2007. In addition to analyzing the intermodal nature and FOIs along the corridor, a trucking pattern analysis was also performed. This analysis provided existing truck patterns and volumes along both I-75 and major cross streets and included a truck traffic forecast. Attached are two technical documents providing additional support to the spatial analysis.

Section 2: Freight and Commodity Flow Characteristics

The Project Team and Department staff analyzed existing and future commodity flow data provided through the Federal Highway Administration's (FHWA) Freight Analysis Framework (FAF). The FAF estimates commodity flows and related freight transportation activity over the national highway network, waterways, and rail system among states, sub-state regions, and major international gateways.



I-75 Sketch Interstate Plan

Exhibit 1: Study Area

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Section 1: Industry and Trucking Patterns

The following analysis represents an overview of the corridor's industrial patterns and intermodal characteristics. The Project Team further determined the need to supplement the spatial data analysis with actual truck traffic counts. Traffic data was retrieved from the Florida Traffic Information (FTI) CD, Florida Turnpike model and planning weigh stations. Attached with this report are two technical documents outlining results from the traffic data, which each provide further detail on existing and future traffic characteristics.

Intermodal Locations

In addition to highway capacity improvements to a roadway network, decisions regarding the intermodal nature of the facility are needed. **Table 1** below contains intermodal facility information which includes trucks as a mode type for the Sketch Plan corridor. For the purposes of this study, only the locations within the counties of our corridor were selected. Given the rural characteristics of this region of Florida, there are a limited number of intermodal locations which include truck modes.

Table 1: Intermodal Name and Location

NAME	TYPE	MODE TYPE	LOCATION
SOUTHERN RELOAD	RAIL	RAIL & TRUCK	COLUMBIA
USPS-P AND DC-P AND DF-GAINESVILLE-FL	TRUCK	TRUCK & TRUCK	ALACHUA
CSX YARD	RAIL	TRUCK & RAIL	ALACHUA
CSXT	RAIL	TRUCK & RAIL	ALACHUA
GAINESVILLE REGIONAL AIRPORT	AIR	AIR & TRUCK	ALACHUA
CSXT	RAIL	RAIL & TRUCK	COLUMBIA
YELLOW-OCALA-FL TERMINAL	TRUCK	RAIL & TRUCK	MARION
OCALA INTERNATIONAL AIRPORT	AIR	AIR & TRUCK	MARION
CSXT	RAIL	RAIL & TRUCK	MARION

Exhibit 2 displays SIS hubs, which include intermodal facilities, airports, and surrounding rail network, which consists of the CSX and Norfolk Southern lines. An extensive rail network covers the region. However, it can be seen that there are no parallel rail facilities that extend the length of the entire corridor as with I-10 and I-95. Multiple rail lines currently parallel sections of the facility consisting primarily of CSX to the south and Norfolk Southern at the northern limits of I-75. Rail lines generally travel to Jacksonville in order to transfer. However, a proposed new transfer station in Polk County may strengthen the rail demand in the region. I-75 would become the primary transportation route of freight inbound/outbound from the new transfer station.

I-75 Sketch Interstate Plan

Exhibit 2: SIS Hubs

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Industrial Patterns

Freight mobility is a key focus of the Sketch Plan and industrial patterns are indicative of mobility needs. Along the I-75 corridor, there are a limited number of intermodal facilities and no seaports. However, given the rural characteristics of the region, I-75 plays an important role as a connector. Industrial patterns along the interstate have been reviewed and catalogued to determine the local role provided by I-75.

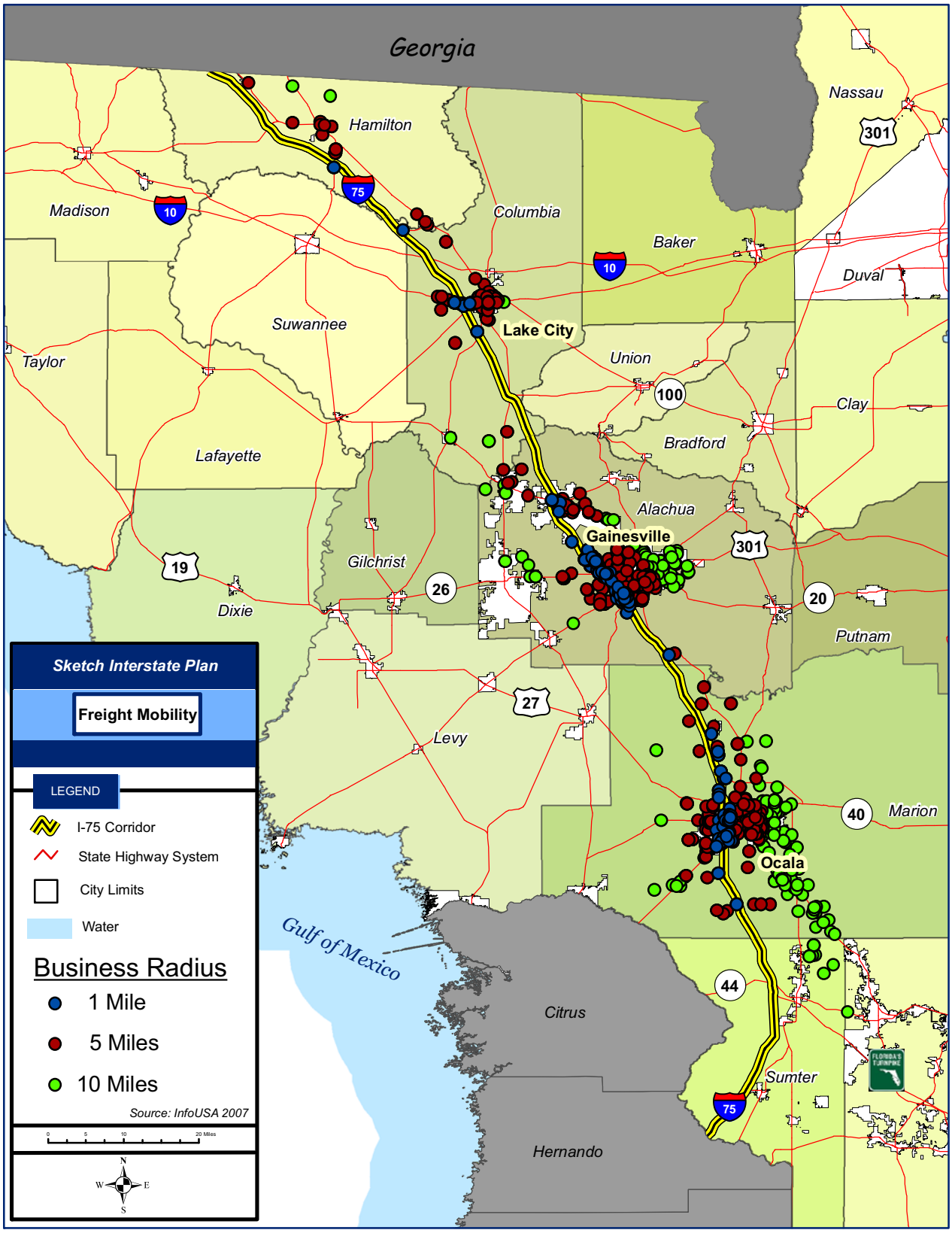
In order to determine existing industrial patterns, consumer and business data was gathered from InfoUSA for the year 2007. InfoUSA is a provider of comprehensive economic databases, which include detailed consumer and business information. Utilizing InfoUSA, "high square footage" categories, structures greater than 40,000 square feet, were extracted. This category was selected because the output represents the most comprehensive results for FOIs including: wholesale trade, retail trade, transportation and warehousing. The criteria best characterizes the business operations, which use trucks for freight and goods movement throughout the corridor. **Table 2** below represents statistical results from the data. **Exhibit 3** displays the region's business patterns with one mile, five mile, and 10 mile radii.

Table 2: Pattern of High Square Footage Businesses

FDOT District	Within 1 Mile	Between 1 and 5 Miles	Between 5 and 10 Miles	Total
District Two	107	264	121	492
District Five	69	180	136	385

*"Total" number of businesses operating within 10 miles of I-75.

Results show that the density of large businesses is higher near the interstate with a steady reduction in density as the radius increases. Between five and ten miles of the interstate within District Two, there are only 121 high square footage businesses, nearly the same amount that operate within a one mile radius. These results from InfoUSA confirm that the location patterns of large businesses are directly impacted by the proximity to major access routes such as I-75. Further insight into freight traffic patterns is needed to determine if FOIs use I-75 for long haul shipment needs.



I-75 Sketch Interstate Plan

Exhibit 3: Business Location Patterns

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Trucking Patterns

No southern city can match Jacksonville's combination of road, sea, rail, and air services. Its location has allowed it to become Florida's primary transportation center and the International hub of the southeast. If people or goods were to travel from Gainesville, Ocala, or Wildwood to Jacksonville, the most direct route is the state highway system, specifically, US 301. US 301 is a primary route for goods movement northbound and southbound outside of interstates I-75 and I-95 in north and central Florida. Truck volumes exceed 30 percent of total traffic and daily truck volumes range from 3,000 to over 7,000. This pattern of high truck traffic is portrayed in **Exhibits 4**. Truck traffic is displayed in terms of annual average daily traffic (AADT) and is displayed on the exhibit as varying line colors. The northwest flow of traffic (northbound) along I-75 prohibits direct travel to Jacksonville, and vice versa.

Table 3 compares travel times and distances to Jacksonville, Florida from three locations along the I-75 Sketch Plan corridor. The results indicate that it is unpractical from a time and distance perspective to utilize I-75 to I-10 as a route to Jacksonville.

Table 3: Time and Distance Comparison

Travel Times and Distance to Jacksonville, FL from Given Location				
	Interstate 75		State Highway*	
Location from/to Jacksonville	Distance	Time	Distance	Time
Gainesville	120	1 h 56 m	72	1 h 36 m
Ocala	154	2 h 22 m	101	2 h 2 m
Wildwood**	178	2 h 43 m	130	2 h 32 m
Average of Three Locations	151	2 h 20 m	101	2 h 3 m
Additional Time to Jacksonville	**50**	**17 m**		

Note: distance in miles, time in (h) hours and (m) minutes
*Primary roadway US 301
**I-75 to Ocala
Source: Microsoft Streets & Trips

I-75 provides a direct route from Tampa to Atlanta and direct access to I-10, which provides access to and from western destinations. Relatively few major freight destinations lie within the I-75 corridor, which is indicative of high through movement by trucks. Improvement needs must take this type of long haul demand into account. Furthermore, it is not practical to use I-75 for intrastate travel to and from Jacksonville, which is Florida's premier freight origin and destination center for all modes. US 301 plays a key role in terms of mobility throughout the region linking much of Florida with Jacksonville.

Jacksonville is an example of a primary shipping hub with centralized air, sea, rail, and truck destinations. Trucking companies analyze routes and find the most efficient travel paths possible, whether it is interstate travel or use of state roads. Travel data shows that I-75 more efficiently serves interstate freight demand and not intrastate shipping needs. US 301 and I-95 provide a more efficient means of accessing Jacksonville's transportation hubs. In order to more accurately evaluate freight demand along I-75, regional commodity flow data will be further reviewed.

I-75 Sketch Interstate Plan

Exhibit 4: SIS Truck AADT

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Section 2: Commodity Flow Analysis

The Federal Highway Administration (FHWA), in cooperation with other U.S. Departments of Transportation modal administrations having freight responsibilities, developed the first Freight Analysis Framework (FAF) commodity-based freight flow origin-destination (O-D) data. The O-D data includes coverage of the geospatial center of each United States county as a potential freight origin and terminus in 2002. The FAF estimates commodity flows and related freight transportation activity over the national highway network, waterways, and rail system among states, sub-state regions, and major international gateways.

The FAF provides basic information on the flow of commodities among regions and along major intercity transportation links. This information is essential for understanding key trends and issues such as:

- growth in freight transportation activity throughout the United States, and the pressures created by that growth on the Nation's transportation systems;
- patterns of merchandise trade with domestic partners and the economic growth potential associated with that trade;
- volumes of traffic passing through a location between distant origins and destinations, indicating the effects of external traffic on local transportation facilities and the importance of local facilities supporting commodity flow to distant places;
- markets served by different modes of transportation and intermodal combinations;
- efficiency and productivity of logistical systems supporting the Nation's economy; and
- likely impacts of transportation policies on efficiency, economic productivity, and safety.

The commodity flow data utilized in the I-75 Sketch Interstate Plan was derived from a variety of data sources: the FAF, Transearch 2003, and the second generation of the Federal Highway Administration's (FHWA) FAF^2 freight projections. The FAF^2 commodity flow data is benchmarked to 2002 and is forecasted to 2035. The FAF data includes truck, rail, water and air modes for domestic trade.

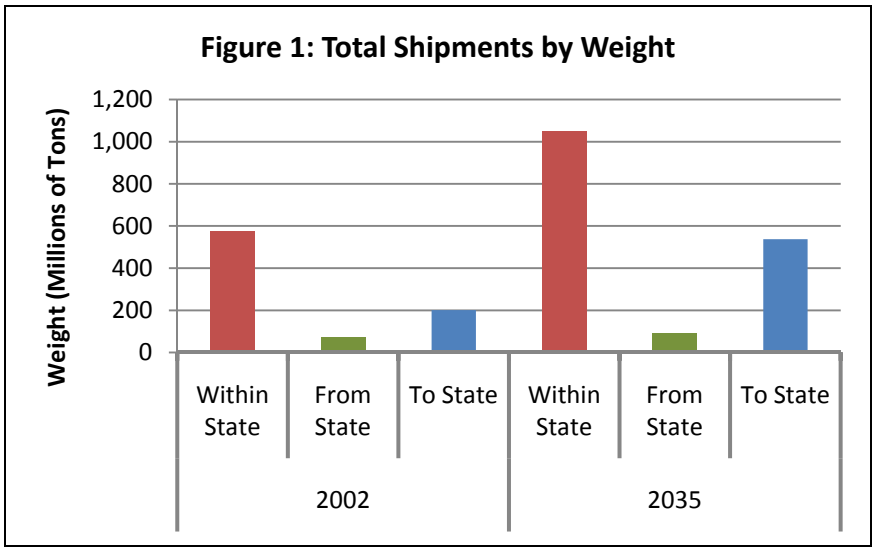
The following tables and figures summarize data from the new and improved version of the Freight Analysis Framework (FAF2.2). FAF2.2 integrates data from several sources to estimate commodity flows and related freight transportation activity among major metropolitan areas, states, regions, and international gateways. **Table 4** depicts the generalized results for freight shipped to, from, and within the state of Florida by modal split.

Table 4: Shipments by Weight: 2002 and 2035 (Millions of Tons)

	2002						2035					
	Within State		From State		To State		Within State		From State		To State	
Mode	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	575.2	100	74.1	100	201.5	100	1,048.5	100	93.5	100	537.5	100
Truck	487	85	50.3	68	85.4	42	927.6	88	67.4	72	300	56
Rail	60.4	11	16.9	23	36.8	18	55.7	5	14.2	15	113.1	21
Water	<0.1	<1	0.6	<1	36.5	18	<0.1	<1	0.4	<1	18.1	3
Air, Air & Truck	<0.1	<1	0.2	<1	0.4	<1	<0.1	<1	0.4	<1	1.3	<1
Truck & Rail	<0.1	<1	0.2	<1	0.9	<1	0.2	<1	0.2	<1	3.2	<1
Other Intermodal	0.4	<1	0.8	1	5.1	3	0.9	0	1.1	1	17.1	3
Pipeline & Unknown	27.3	5	5.1	7	36.5	18	64	6	9.8	10	84.6	16

Source: FHWA FAF2

The vast majority of shipments are moved by only two modes, truck and rail. However, given the relative abundance of seaports in Florida, tonnage shipped ***to*** the state through cargo vessels makes up approximately 18 percent of the total weight. Other modes constitute less than one percent of total tonnage. Total shipments by tonnage ***within*** and ***to*** the state are projected to double by 2035 while total weight shipped ***from*** the state is projected to increase by much less. **Figure 1** graphically compares the total shipments by weight ***to***, ***from***, and ***within*** the state by all modes.



Results in shipment patterns are indicative of Florida's economy, which relies heavily on tourism and less on manufacturing. However, the substantial increase in shipments ***to*** the state would indicate trading partners relying heavily on seaports within Florida to ship their goods overseas. Section 1 indicated the rural nature of the I-75 Sketch Plan corridor and relatively few major freight hubs. It has been determined that freight shipped ***within*** the state is better served by alternative routes and freight shipped ***to*** and ***from*** outside the state is better served by I-75.

Figure 2 below displays the differences and trends in predicted tonnage moved by truck and rail modes. Shipment mode by truck is the dominant form of transportation ***within*** the state and tonnage is projected to nearly double by 2035. Shipment tonnage ***to*** the state by truck is projected to more than triple by 2035. However, yearly rail shipments by tonnage ***within*** the state are projected to reduce from approximately 60 million tons in 2002 to 55 million tons by 2035.

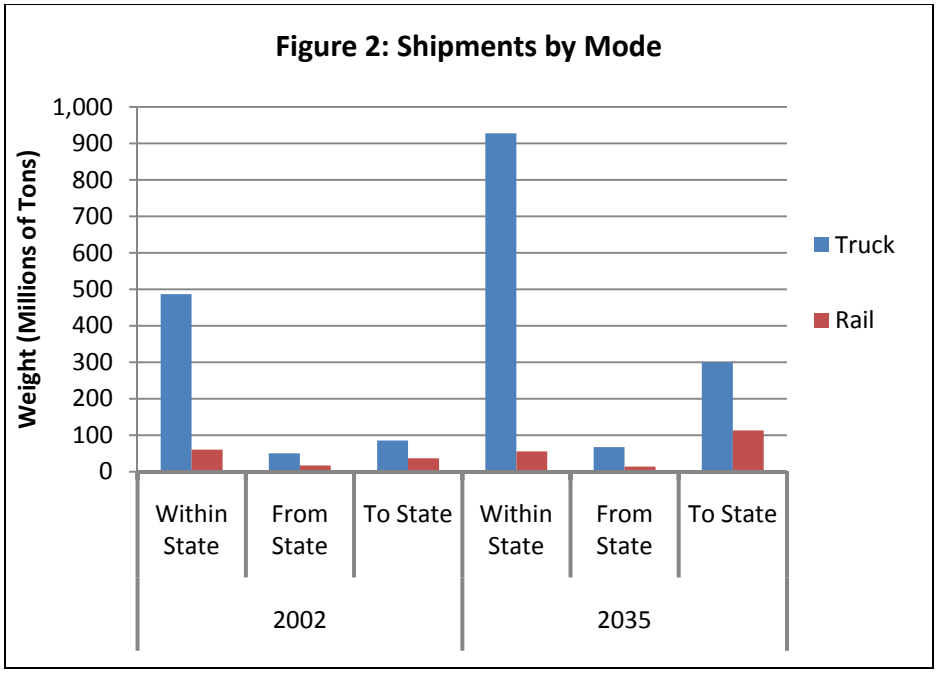
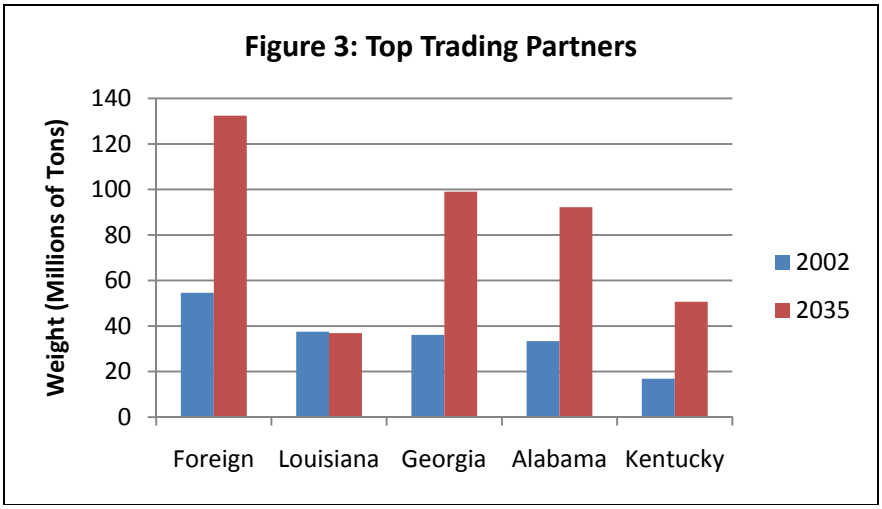


Table 5 below and **Figure 3** on the following page portray the top five trading partners for 2002 and 2035. Freight traffic passing through a location between origins and destinations indicates the effects of external traffic on local transportation facilities and the importance of local facilities supporting commodity flow to distant places. Adjacent trading partners exert heavy strain on the transportation network, which links them. Florida has three interstates that enter/exit the state which include I-10, I-75, and I-95. Results below show commodity transfer with trading partners (in millions of tons) and include all modes of travel.

Table 5: Top Trading Partners

2002	Tons (Millions)		2035	Tons (Millions)	
	Number	Percent		Number	Percent
Total	275.6	100	**Total**	631.1	100
Foreign	54.6	20	Foreign	132.4	21
LA	37.5	14	GA	99	16
GA	36.1	13	AL	92.2	15
AL	33.4	12	KY	50.7	8
KY	16.9	6	LA	36.9	6

Source: FHWA FAF2



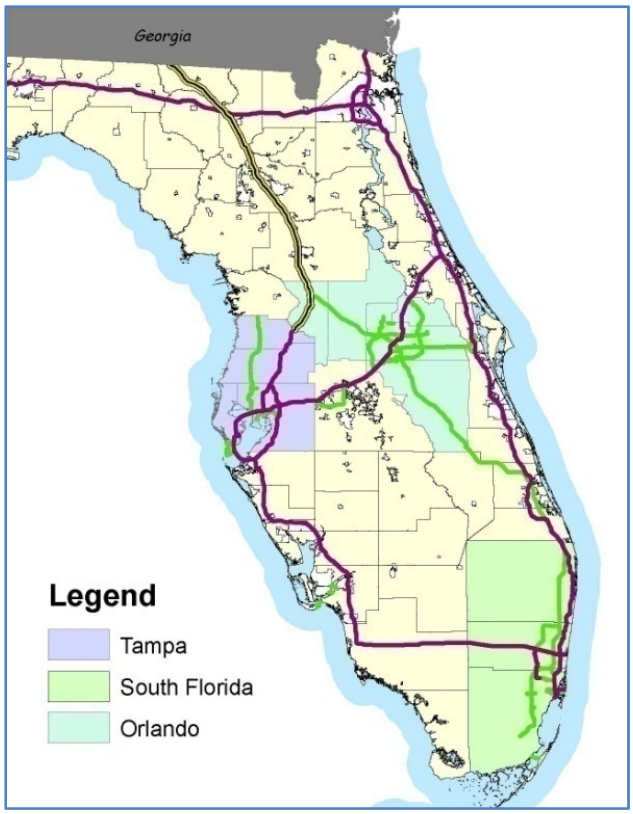
Results show that the trading partners do not change over the forecast period, only the tonnage transported. Louisiana is projected to slip from Florida's primary domestic trading partner in 2002 to fifth by 2035 and the only partner to show a reduction in tonnage. Georgia is projected to be Florida's top trading partner outside of foreign shipment and increases its total trading tonnage by approximately 175 percent by 2035. With Georgia increasing shipments to Florida, the demand on I-75 will also increase substantially as the state relies heavily on Florida's seaports and the efficiency of moving goods by truck over rail for such short distances.

Statewide commodity flow data has provided patterns of merchandise trade with domestic partners and insight into existing and future modal splits. Further analysis using FAF Commodity O-D Database estimates will offer additional insight into Florida specific regions and clearly reflect the markets that I-75 serves.

Commodity Flow to FAF Regions

The FAF Commodity O-D Database estimates tonnage and value of goods shipped by type of commodity and mode of transportation among and within 114 areas, as well as to and from 7 international trading regions, plus 17 additional international gateways. The 2002 estimate is based primarily on the Commodity Flow Survey and other components of the Economic Census.

Florida has five designated FAF regions: Tampa, Orlando, Miami (referenced as South Florida), Jacksonville and all remaining areas. FAF regions generally contain major intermodal facilities, industrial/manufacturing centers, or high population and employment, which require their specific FAF region designation. Each of the FAF regions is composed of multiple counties, typically centered on major cities. The remaining counties are grouped together as one additional FAF region.



The three FAF regions analyzed were Tampa, Orlando, and South Florida. The counties within each FAF region are listed below:

- Tampa
  - Hernando
  - Hillsborough
  - Pasco
  - Pinellas
- Orlando
  - Lake
  - Orange
  - Osceola
  - Seminole
  - Sumter
- South Florida
  - Miami-Dade
  - Broward
  - Palm Beach

For the purposes of this section, all other modes have been removed and only tonnage shipped by trucks has been analyzed. This method provides the most accurate forecast demand on the interstate network. Forecasts are included for 2010 and 2035. The figure above depicts the three designated FAF regions, known as the "I-75 FAF regions," for commodity movement. Jacksonville is not included because Section 1 determined that commodity flow in and out of that FAF region is not tied directly to I-75. Only truck loads south of Ocala, which can intercept US 301, may contain goods to or from Jacksonville.

Table 6 below depicts the total annual tonnage ***to*** and ***from*** all FAF regions outside of Florida trading with the I-75 FAF regions within Florida for years 2010 and 2035. The percentage increase from 2010 through 2035 is included for origin, destination, and total (combines both origin and destination).

Table 6: Total Annual Tonnage

Destination			
FAF Region	**2010**	**2035**	**Percent Increase**
Tampa	13,475,241	35,462,310	163%
South Florida	16,484,331	44,858,125	172%
Orlando	14,621,713	43,584,593	198%
Origin			
FAF Region	**2010**	**2035**	**Percent Increase**
Tampa	5,421,158	8,542,096	58%
South Florida	7,412,204	9,939,367	34%
Orlando	2,768,385	3,259,918	18%
Total			
FAF Region	**2010**	**2035**	**Percent Increase**
Tampa	18,896,399	44,004,406	133%
South Florida	23,896,535	54,797,492	129%
Orlando	17,390,098	46,844,511	169%

Increases in tonnage both ***to*** and ***from*** all I-75 FAF regions occur through 2035. However, the percentage increase in freight tonnage shipped ***to*** each FAF region is significantly greater than freight originating within the regions. This increase implies the increased use of statewide ports by trading partners, specifically Georgia. **Table 5**, which projected the shift in trading partners, forecasted Georgia to be Florida's top domestic trading partner by tonnage in 2035. I-75 provides direct access between Atlanta the I-75 FAF regions, which utilize the interstate to move freight. Results further strengthen the projections for significantly increased demand on I-75 by 2035.

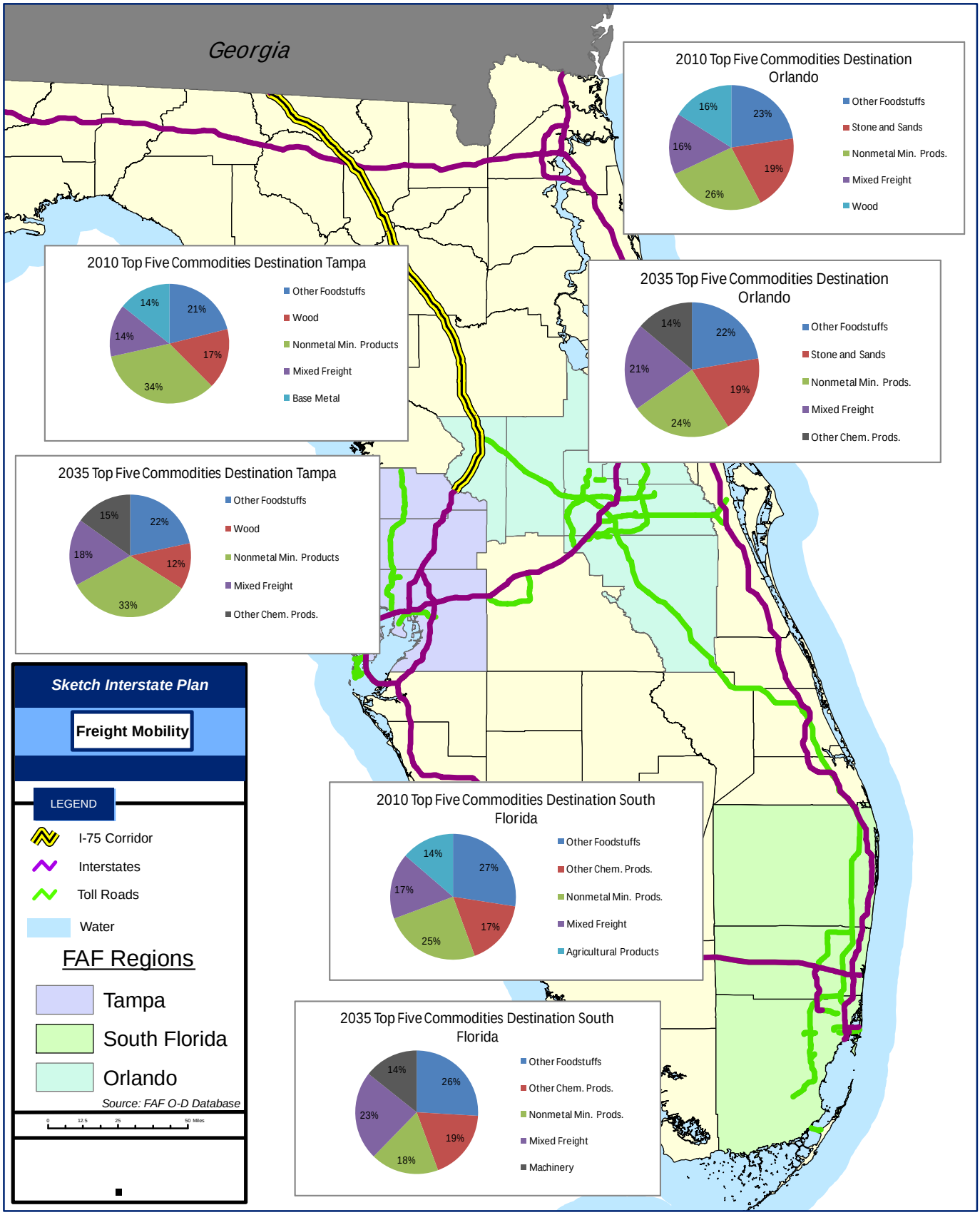
Table 7 below forecasts the top five commodities by weight shipped ***to*** the I-75 FAF regions for years 2010 and 2035**. Exhibit 5** following provides a visual which graphically compares the data provided below.

Table 7: Top Five Commodities Shipped To Each FAF Region

	Destination Tampa			
	2010 Tonnage		2035 Tonnage	
	2,009,163	Nonmetal Mineral Products	5,288,600	Nonmetal Mineral Products
	1,243,182	Other Foodstuffs	3,462,070	Other Foodstuffs
	969,758	Wood	2,837,662	Mixed Freight
	842,123	Base Metal	2,423,890	Other Chemical Prods.
	836,666	Mixed Freight	1,973,219	Wood
Total	**5,900,890**		**15,985,442**	
	Destination South Florida			
	2010 Tonnage		2035 Tonnage	
	1,610,137	Nonmetal Mineral Products	3,464,569	Nonmetal Mineral Products
	1,769,216	Other Foodstuffs	5,019,649	Other Foodstuffs
	1,091,798	Other Chemical Products	4,537,274	Mixed Freight
	1,092,611	Mixed Freight	2,764,484	Machinery
	882,214	Agricultural Products	3,574,793	Other Chemical Products
Total	**6,445,975**		**19,360,769**	
	Destination Orlando			
	2010 Tonnage		2035 Tonnage	
	1,658,092	Nonmetal Mineral Products	4,619,242	Nonmetal Mineral Products
	1,457,809	Other Foodstuffs	4,261,809	Other Foodstuffs
	1,259,293	Stone and Sands	4,002,809	Mixed Freight
	1,034,403	Wood	2,641,153	Other Chemical Products
	1,022,506	Mixed Freight	3,557,578	Stone and Sands
Total	**6,432,103**		**19,082,590**	

Total tonnage for the top five commodities inbound for each region can be seen growing by approximately 200 percent by 2035. The data shows that nonmetal mineral products and other foodstuffs, which capture the majority of tonnage, will maintain that standing through 2035. Freight traffic passing through I-75 between distant origins and destinations indicate the future effects of external traffic on local transportation facilities. The approximate 200 percent increase in tonnage far exceeds the forecasted growth in truck traffic **(see attached *Truck Traffic Development* document).** Results stress the importance I-75 has not only to local economic vitality but also to its reliance upon from distant trading partners.

Table 7 provided the magnitude of change between two years of projected commodity flow data. **Exhibit 5** provides a visual aid when comparing the top commodities from region to region. Because top commodities differ by destination, colors may not match between regions, only within regions.



I-75 Sketch Interstate Plan

Exhibit 5: Commodity Destination

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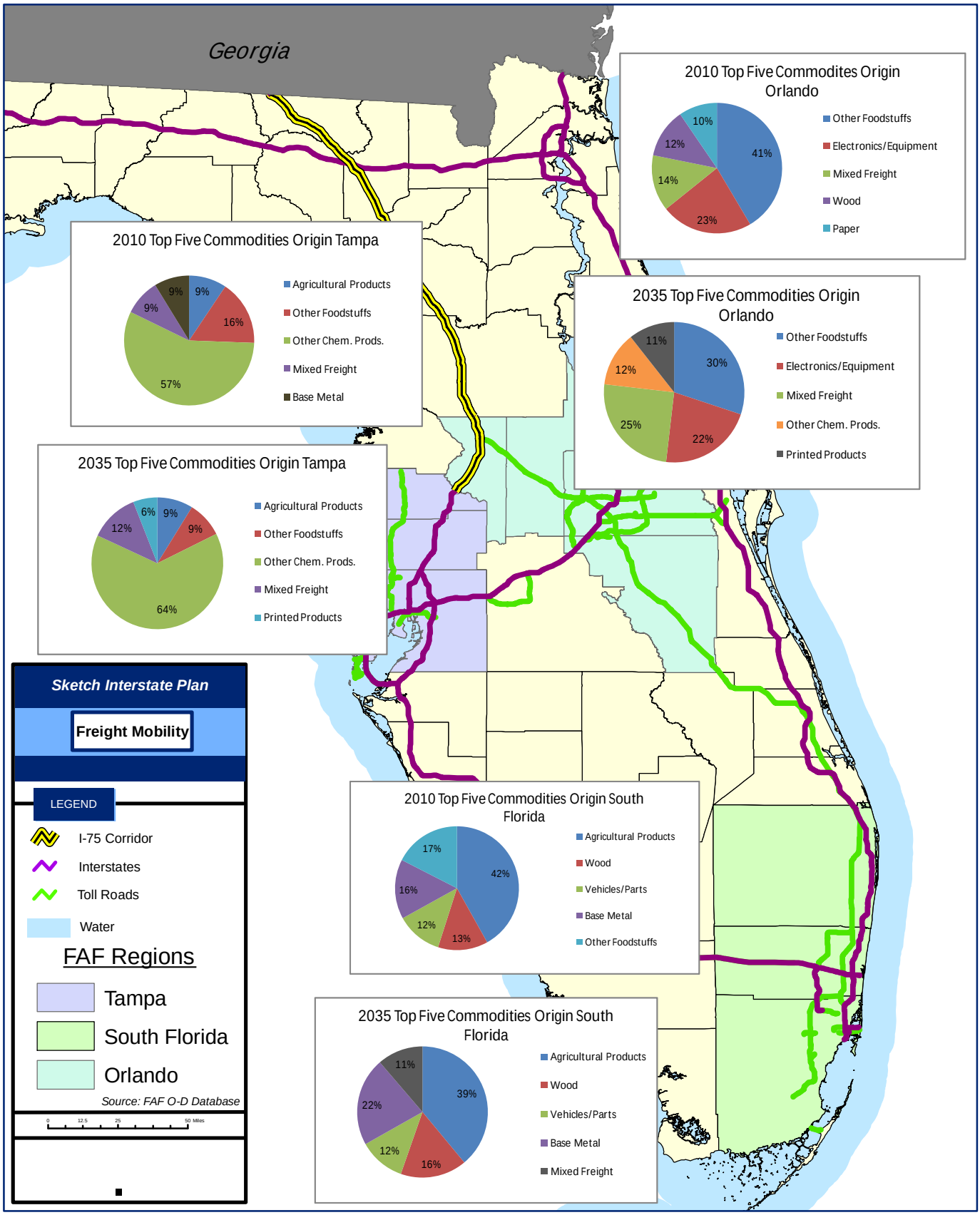
Table 8 below forecasts the top five commodities by weight shipped ***from*** the I-75 FAF regions for years 2010 and 2035**. Exhibit 6** on the following page provides a visual, which graphically compares the data provided below.

Table 8: Top Five Commodities Shipped From Each FAF Region

	Origin Tampa			
	2010 Tonnage		2035 Tonnage	
	1,953,711	Other Chemical Products	4,194,015	Other Chemical Products
	323,423	Agricultural Products	573,726	Agricultural Products
	558,714	Other Foodstuffs	789,979	Mixed Freight
	301,120	Base Metal	389,011	Printed Products
	311,740	Mixed Freight	577,134	Other Foodstuffs
Total	**3,448,707**		**6,523,865**	
	Origin South Florida			
	2010 Tonnage		2035 Tonnage	
	533,179	Vehicles/Parts	687,279	Vehicles/Parts
	1,858,483	Agricultural Products	2,335,330	Agricultural Products
	578,616	Wood	1,312,096	Base Metal
	775,260	Other Foodstuffs	674,722	Mixed Freight
	690,416	Base Metal	978,701	Wood
Total	**4,435,955**		**5,988,128**	
	Origin Orlando			
	2010 Tonnage		2035 Tonnage	
	219,406	Mixed Freight	496,162	Mixed Freight
	652,738	Other Foodstuffs	597,976	Other Foodstuffs
	358,139	Electronics/Equipment	249,954	Other Chem. Prods.
	150,272	Paper	210,526	Printed Products
	192,998	Wood	431,862	Electronics/Equipment
Total	**1,573,553**		**1,986,480**	

Outbound commodity tonnage is significantly less than inbound tonnage destined for the I-75 FAF regions, and is projected to increase at a lower rate. Total tonnage originating ***from*** Tampa can be seen growing by nearly 100 percent by 2035; however, freight originating ***from*** South Florida and Orlando are only projected to grow by approximately 30 percent by 2035. These growth rates can be compared to the projected inbound tonnage growth of 200 percent for all I-75 FAF regions.

Tampa is projected to become the top trader by tonnage of goods originating ***from*** the three FAF regions. As indicated previously, much of Tampa's growth can be attributed to the projected increase in tonnage traded between Florida and Georgia. **Exhibit 6** provides a visual aid when comparing the top commodities from region to region. Because top commodities differ by destination, colors may not match between regions, only within regions.



I-75 Sketch Interstate Plan

Exhibit 6: Commodity Origin

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Freight Mobility Trends and Implications

The purpose of this Freight Mobility report was to establish trends in existing and future trucking patterns and movements along the I-75 corridor. This has been completed by reviewing existing industrial and trucking patterns, and analyzing existing and future commodity flow data. Additional technical reports addressing existing and forecasted truck traffic and existing weight flows have also been provided.

Along the I-75 corridor, there are a limited number of intermodal facilities and no seaports. However, given the rural characteristics of the region, I-75 plays an important role as a connector. The results from InfoUSA confirm that the location patterns of large businesses are directly impacted by the proximity to major access routes such as I-75. Travel data showed that I-75 more efficiently serves interstate freight demand and not intrastate shipping needs.

The FAF estimates commodity flows and related freight transportation activity over the national highway network, waterways, and rail system among states, sub-state regions, and major international gateways. It should be noted that as it currently exists, FAF hinders users who want to apply acceptable network assignments to quantify the freight demand on each highway transportation supply link, which means that many key issues cannot be addressed fully. These key issues include highway capacity need assessments, freight bottleneck assessment, and freight diversion due to "what if" policy decisions on the network supply and improvements, among others. However, since the vast majority of commodities shipped by trucks are routed through the interstate system, origin and destination data may still be used to make broad inferences.

Section 1

- No parallel rail facilities exist that extend the length of the entire corridor as with I-10 and I-95.
- It is unpractical from a time and distance perspective to utilize I-75 to I-10 as a route to Jacksonville from in state locations.
- Travel data shows that I-75 more efficiently serves interstate freight demand and not intrastate shipping needs.

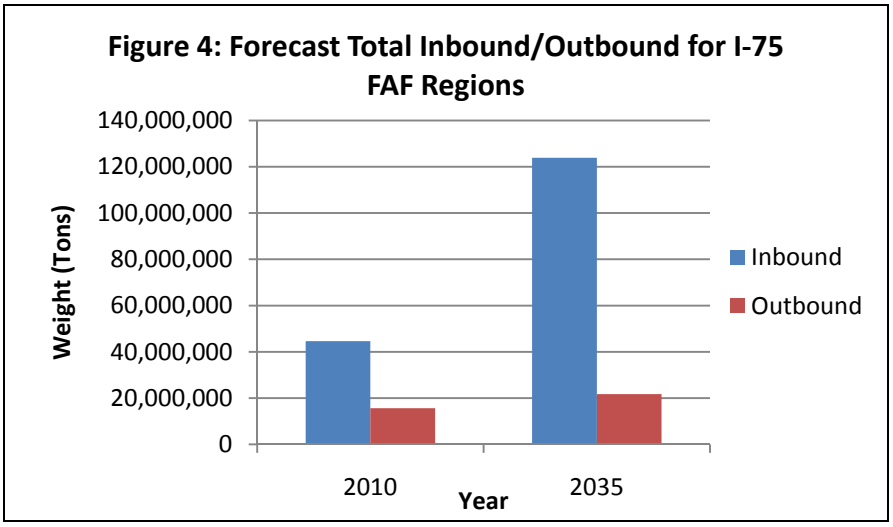
Section 2

- Georgia is projected to be Florida's top trading partner outside of foreign shipment and increases its total trading tonnage by approximately 175 percent by 2035.
- Total tonnage for the top five commodities inbound for each region can be seen growing by approximately 200 percent by 2035.
- Total tonnage originating ***from*** Tampa can be seen growing by nearly 100 percent by 2035.

Attachments

- Truck volumes are projected to grow within a range of 66 percent to over 90 percent with volumes ranging from 14,500 to over 27,000 by 2035.
- Disparities determined between directional truck volumes in terms of weight. Southbound truck volumes are predominantly loaded trucks while northbound consists of both loaded and unloaded.

Figure 4 below depicts the total inbound and outbound movements for the I-75 FAF regions for years 2010 and 2035. Due to the rural nature of the region and importance I-75 serves as a connector, through movements are considered substantial. Inbound tonnage is projected to increase 178 percent by 2035.



Given the projected growth conditions provided through a multitude of sources used in this analysis, the I-75 Sketch Plan corridor is facing many challenges. It should be noted future truck traffic is an object derived from forecasted general traffic conditions. True demand on I-75 may be much higher when commodity flow characteristics are factored in. Commodity flows are forecasted to increase at a percentage substantially higher than general traffic is projected to increase, which indicates future truck demand may be underestimated.

Internal commodity movements are forecasted to increase 100 percent by 2035, a much higher percentage growth rate compared to the 2035 truck forecast determined by the *Truck Traffic Development* document. It has been determined internal commodity movements have less impact on I-75, however, results provide general statewide trends projected by 2035. This projected growth in commodity movement may lead to spillover effects on US 301 and influence I-75.

Table 9 below provides the existing forecasted Truck AADT from the *Truck Traffic Development* document. According to the projected growth rates, I-75 is facing truck volumes in the range of 15,000 to nearly 30,000 trucks per day. These volumes are a product of general traffic conditions. If commodity characteristics are factored in, true demand is underestimated and volumes may be significantly higher.

Table 9: Truck AADT

Location on I-75	*2008 Count*	*2035 Model*
Georgia State Line	11,436	20,600
South of I-10	11,138	18,800
Alachua/Marion County Line	13,274	25,700
Williams Road, Marion County	15,277	27,400
South of Turnpike	9,857	17,800
Bushnell, Sumter County	8,729	14,500

Conclusion

The Freight Mobility report provided detailed information on the flow of commodities among regions and along major intrastate and interstate transportation links. This information is essential for understanding key trends and issues. A primary function of the completed I-75 Sketch Plan is to protect the very nature of the interstate facility, which is to provide for long distance, high speed and high volume movement of people and goods. The Freight Mobility report has provided insight into further areas of study including:

- Truck volumes and freight tonnage are projected to significantly increase by 2035. Disparities between each may result in truck volumes and demand being underestimated. From a capacity and design perspective, forecasted truck volumes and future commodity flow may not be sustainable under existing I-75 lane configurations and pavement design.

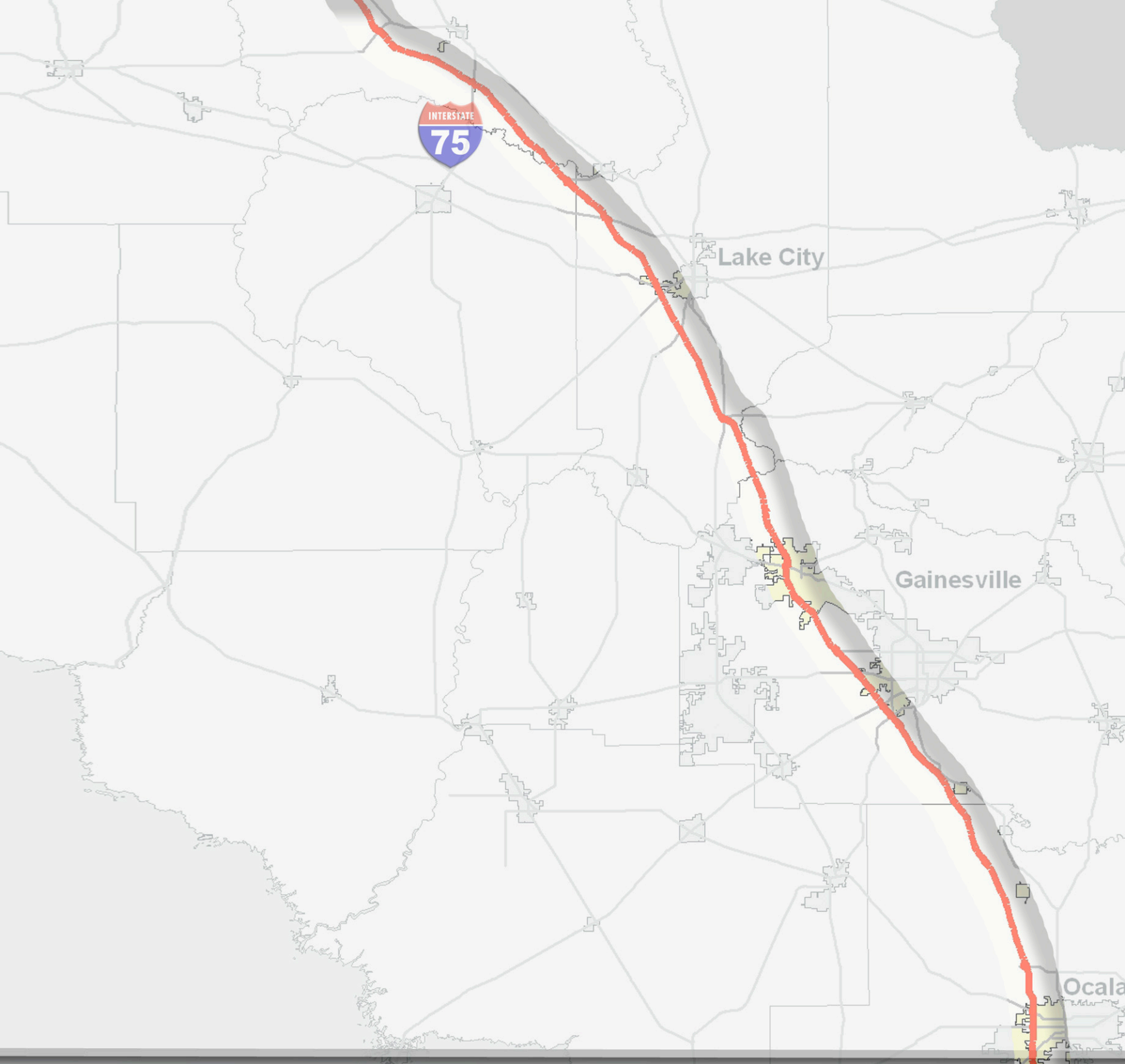
- Truck spillover effects may be compounded as networks become increasingly clogged to meet demand. Specifically, further study on US 301 would provide its role as a regional connection serving major modal destinations. US 301 moves as much truck volume as I-10 and may more efficiently serve regional commerce by transitioning it to a higher access control facility.

- Further study on cross streets such as a comprehensive county road review would indicate trucking patterns off system. This would more accurately strengthen the connect or disconnect between regional shipping patterns and the importance of local facilities supporting commodity flow to distant places.

- Federal Policies and initiatives are moving away from truck and focusing on alternative methods to meet demand and air quality standards such as freight rail movement.

- CSX has taken freight mobility initiatives such as selling rail lines. The rail company has recently sold its A Line and will be moving the majority of its freight to their S Line. The S Line parallels US 301, which is a major truck route. The primary regional transfer station is to be located in Polk County. This further strengthens the diversion occurring between truck and rail. From FDOT's perspective, further insight may facilitate better integration between Truck/Freight Rail to reduce impacts to the state and interstate highway system.

Understanding trucking patterns and commodity flow is vital to the enhancement of intermodal transfer and to the support of regional, interstate, and international commerce. Tonnage traffic passing along I-75 between distant origins and destinations indicates the future effects of external demand on local transportation facilities. Florida is served by an extensive highway, rail, air, and water transportation system. Vital commerce and passenger mobility within, to, and from the state of Florida depends upon the continued efficient operation of this network. The Department of Transportation is continually analyzing and developing transportation initiatives to help shape the multimodal network necessary for the efficient movement of both freight and people.



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