MetroPlan Orlando

FREIGHT NETWORK DEVELOPMENT

JUNE 2016

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A REGIONAL TRANSPORTATION PARTNERSHIP

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INTRODUCTION

This technical report documents the data-driven process that was utilized to identify an existing freight network and future freight opportunities in the MetroPlan Orlando region. The results of these maps were subsequently used to facilitate the identification of gaps in data collection and strategies to plan, design, and operate the identified freight network.

This project represents a partnership between MetroPlan Orlando and local agencies in its member counties. The results are intended to support the development of a plan to optimize freight movement in the region while being sensitive to community impacts. This project supports MetroPlan Orlando's regional mobility goals and advances strategies that can help achieve them.

DATA SOURCES AND GROUPING

Several data sources were collected from MetroPlan Orlando, Orange County, Seminole County, Osceola County, the Florida Department of Transportation (FDOT), and local municipalities. A list of all sources reviewed can be found in Appendix A; however, the sources listed below in Table 1 were those that were ultimately used in the development of the map series and plan. Appendix A includes a more comprehensive list of data sources, including those that were reviewed but ultimately not used in the analysis.

Table 1. Data Sources

Source	Year	Agency	Use
SIS, SHS, and NHS	2014	FDOT TranStat Office	Identify existing truck network
Orange County Multimodal Corridor Plan	2014	Orange County	Plan consistency
MetroPlan Orlando Complete Streets Program	2015	MetroPlan Orlando	Plan consistency, identify multi-use corridor
Central Florida Regional Freight Mobility Study	2013	MetroPlan Orlando	Plan consistency, identify existing and future truck network
US DOT Primary Freight Network	2015	US DOT	Identify existing truck network
Heavy Truck Crashes	2009-2011	FDOT (provided by MetroPlan)	As a proxy for freight activity
Freight Corridors	2012	MetroPlan Orlando	Identify existing truck network
Truck AADT & Percentage	2014	FDOT TranStat Office	Identify existing truck demand
ATRI State-Level Industry Data	2010	FDOT	Identify existing truck trip end locations
InfoGroup USA Employment Data	2014	FDOT	Identify industrial land uses
Industrial and Commercial Real Estate Interview	2015/16	See *Interviews* section	Identify future areas likely to generate/attract truck traffic
Cities of Orange County Interview	2015/16	See *Interviews* section	Identify existing truck network and restricted roads
Shipping Industry Interviews	2015/16	See *Interviews* section	Identify existing and future truck network
2040 LRTP (OUATS)	2040	MetroPlan Orlando	Identify future network improvements
City of Orlando Zoning	2040	City of Orlando	Identify future land uses
Orange County Zoning	2030	Orange County	Identify future land uses
Seminole County Land Use	2015	Seminole County	Confirm existing land uses
Seminole County Future Land Use	2030	Seminole County	Identify future land uses
Osceola County Zoning	2015	Osceola County	Confirm existing land uses
Osceola County Future Land Use	2030	Osceola County	Identify future land uses

PROPOSED FREIGHT NETWORK

The proposed MetroPlan Orlando Freight Network is shown in Figure 1.

Figure 1: Sheet B1
Regional Freight Network
MetroPlan Orlando

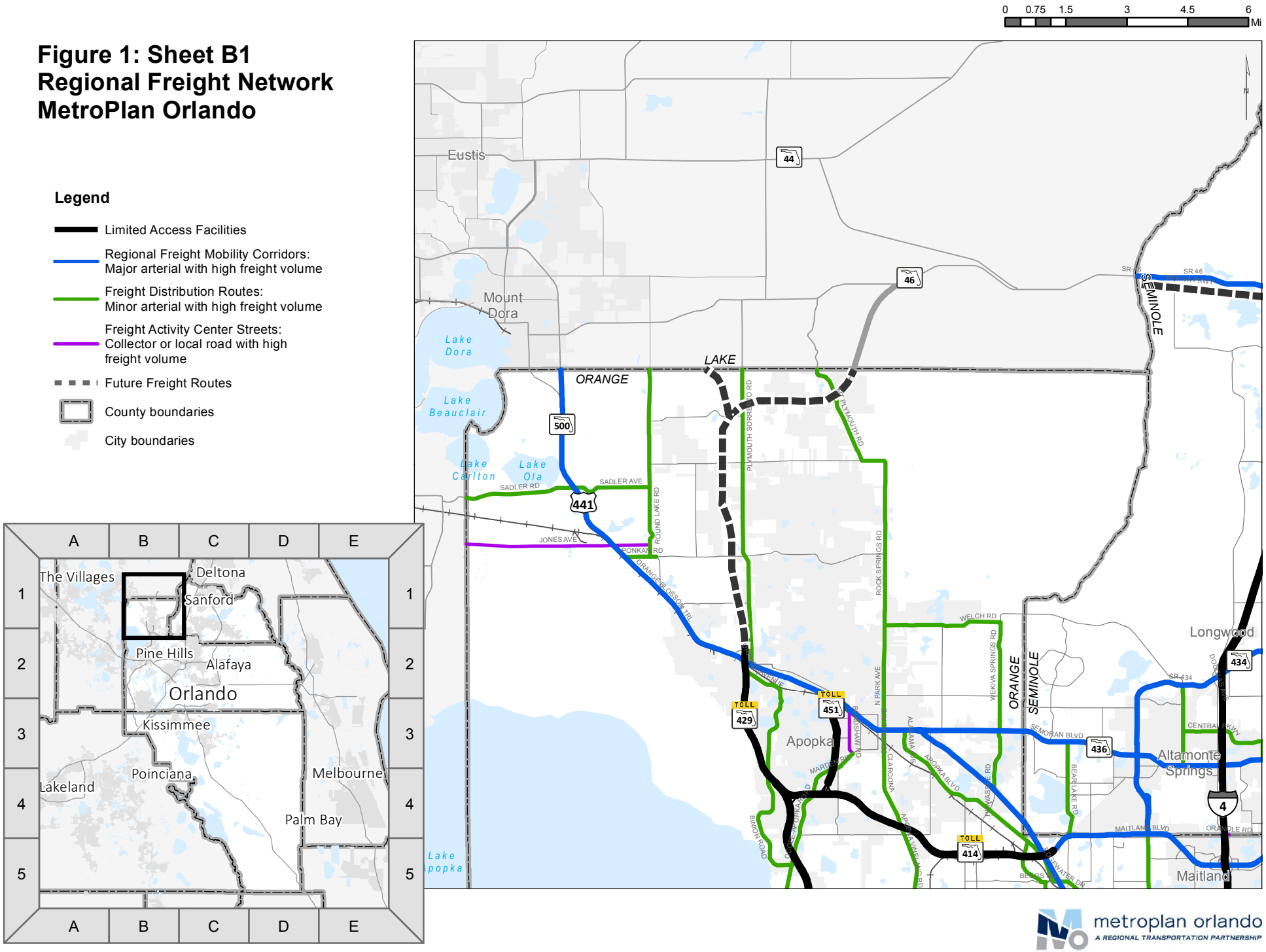

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Figure 1: Sheet C1
Regional Freight Network
MetroPlan Orlando

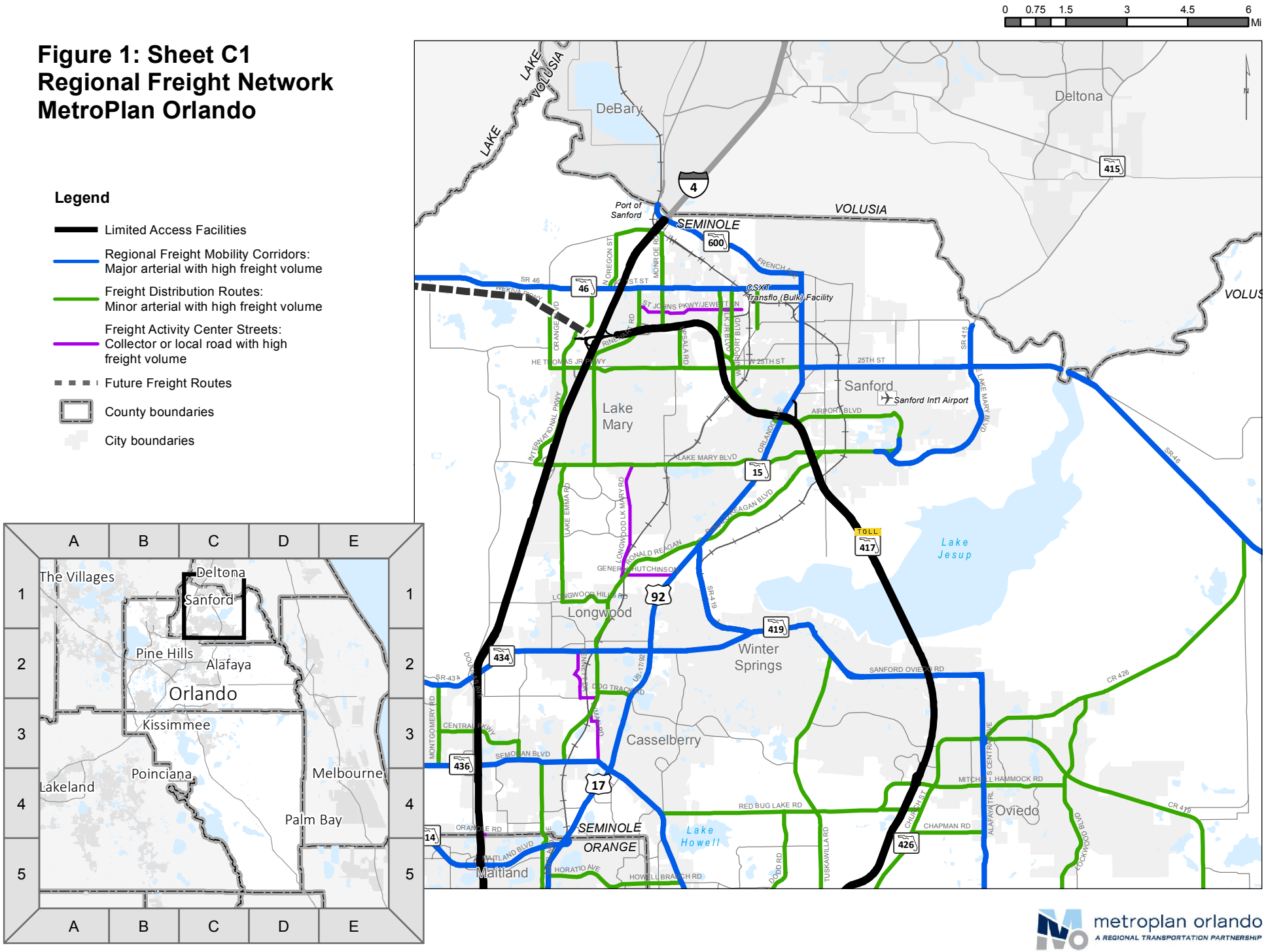

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Figure 1: Sheet D1
Regional Freight Network
MetroPlan Orlando

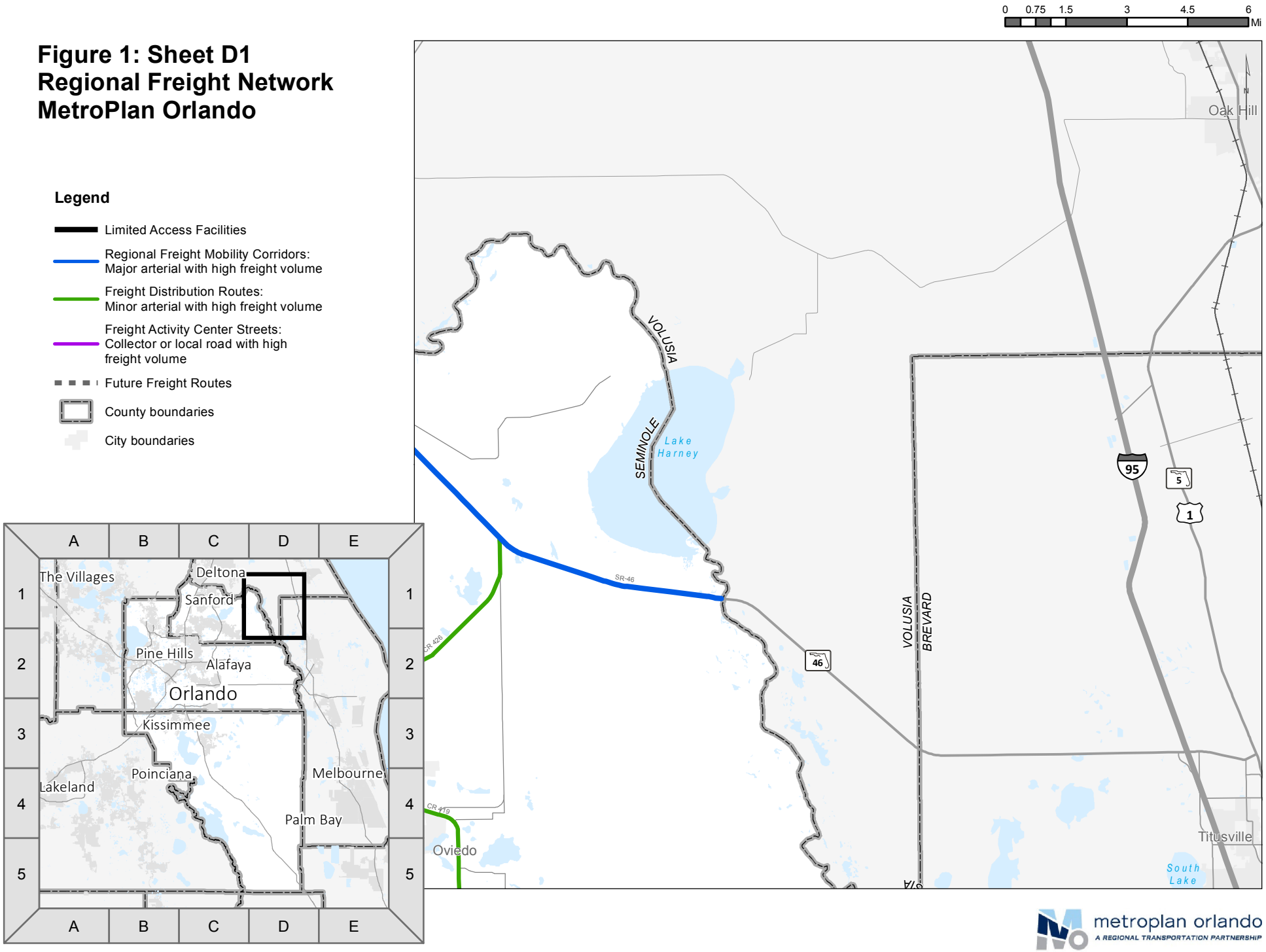
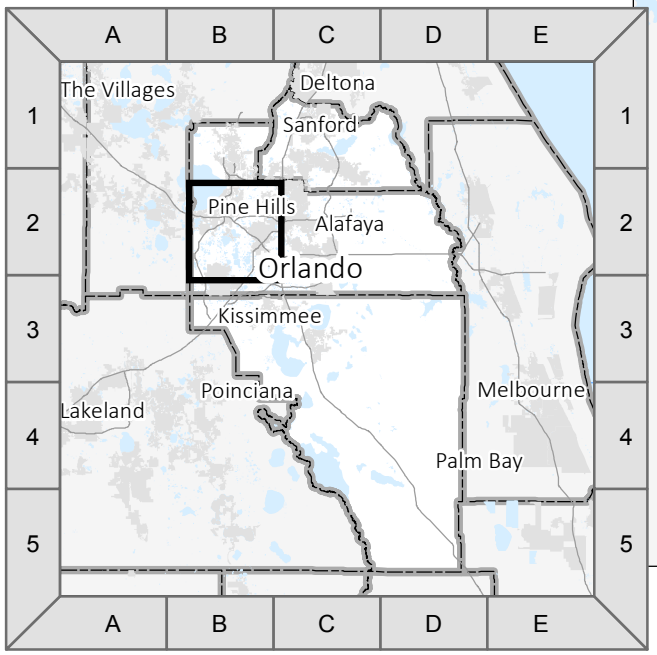


Figure 1: Sheet B2
Regional Freight Network
MetroPlan Orlando

Legend

- Limited Access Facilities
- Regional Freight Mobility Corridors: Major arterial with high freight volume
- Freight Distribution Routes: Minor arterial with high freight volume
- Freight Activity Center Streets: Collector or local road with high freight volume
- Future Freight Routes
- County boundaries
- City boundaries



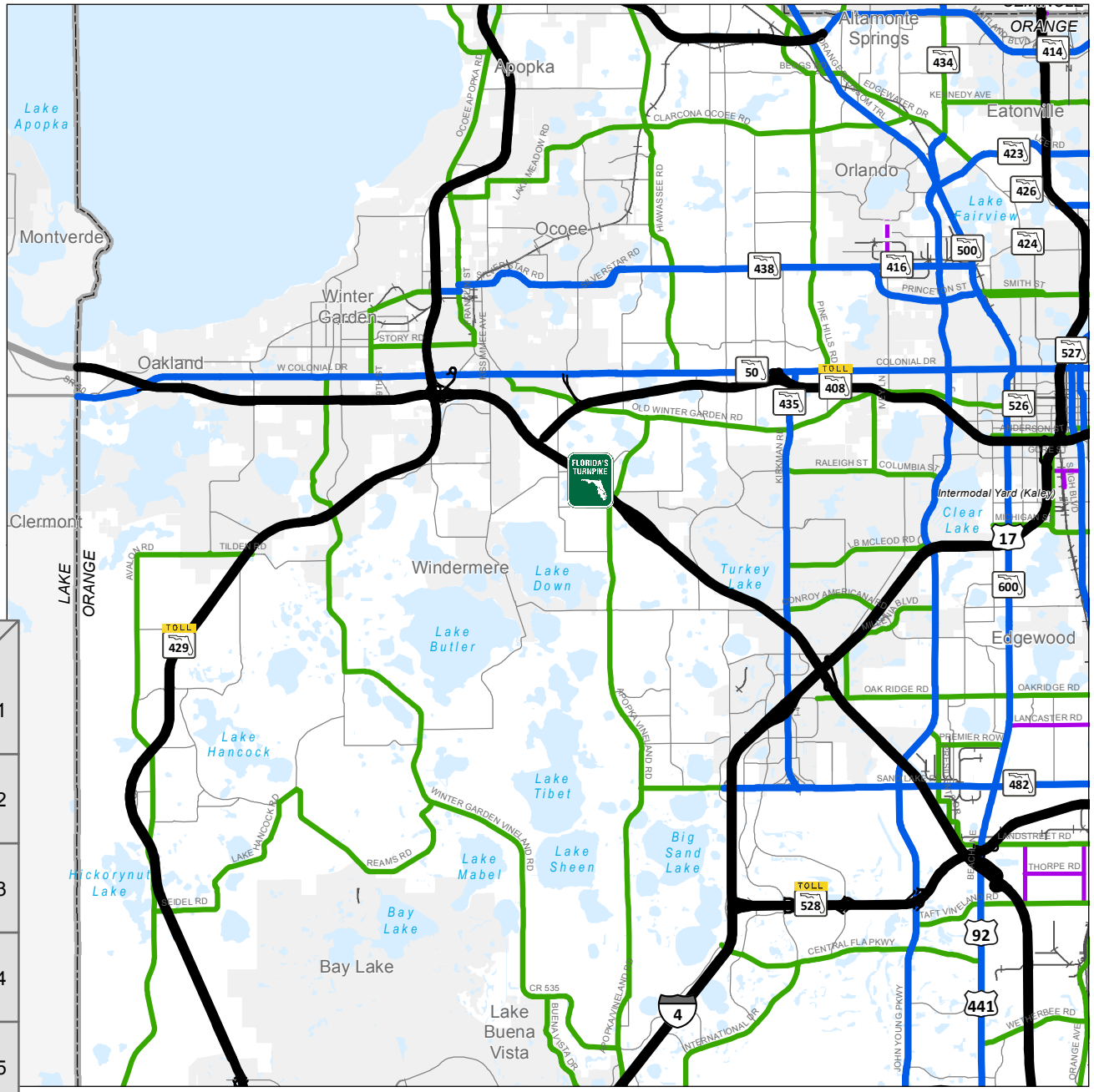


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Figure 1: Sheet C2
Regional Freight Network
MetroPlan Orlando

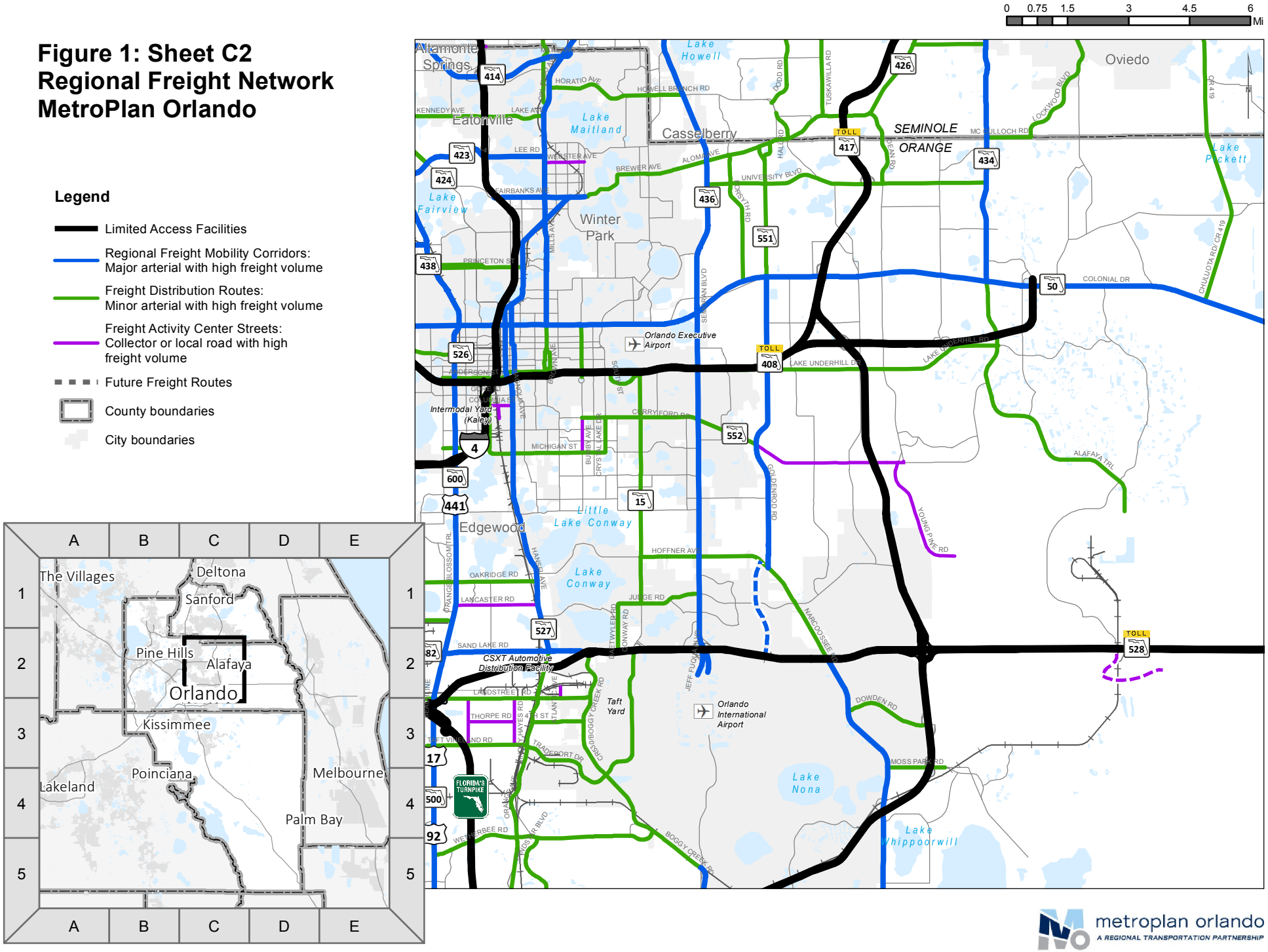

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Figure 1: Sheet D2
Regional Freight Network
MetroPlan Orlando

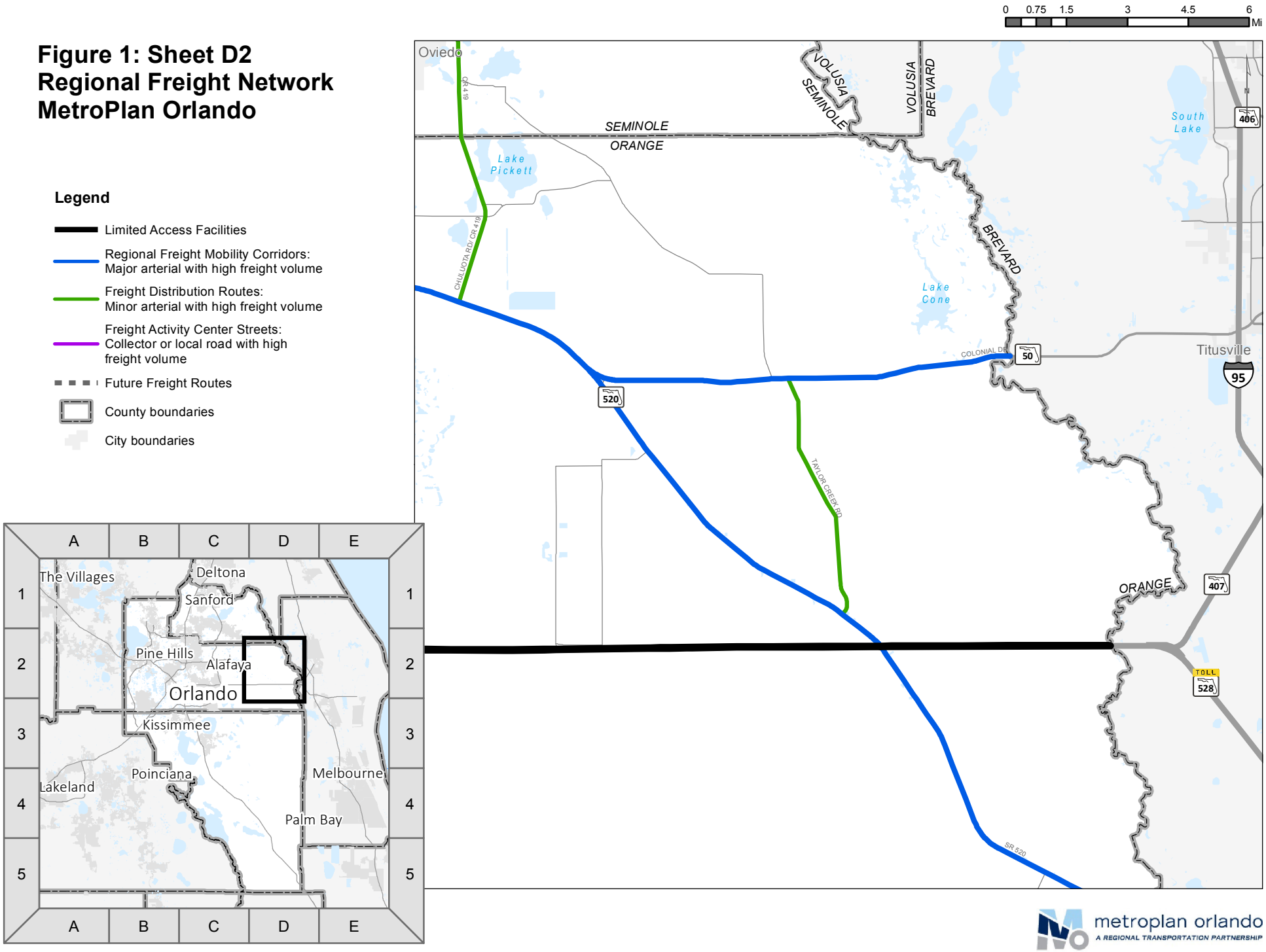

Figure 1: Sheet B3
Regional Freight Network
MetroPlan Orlando

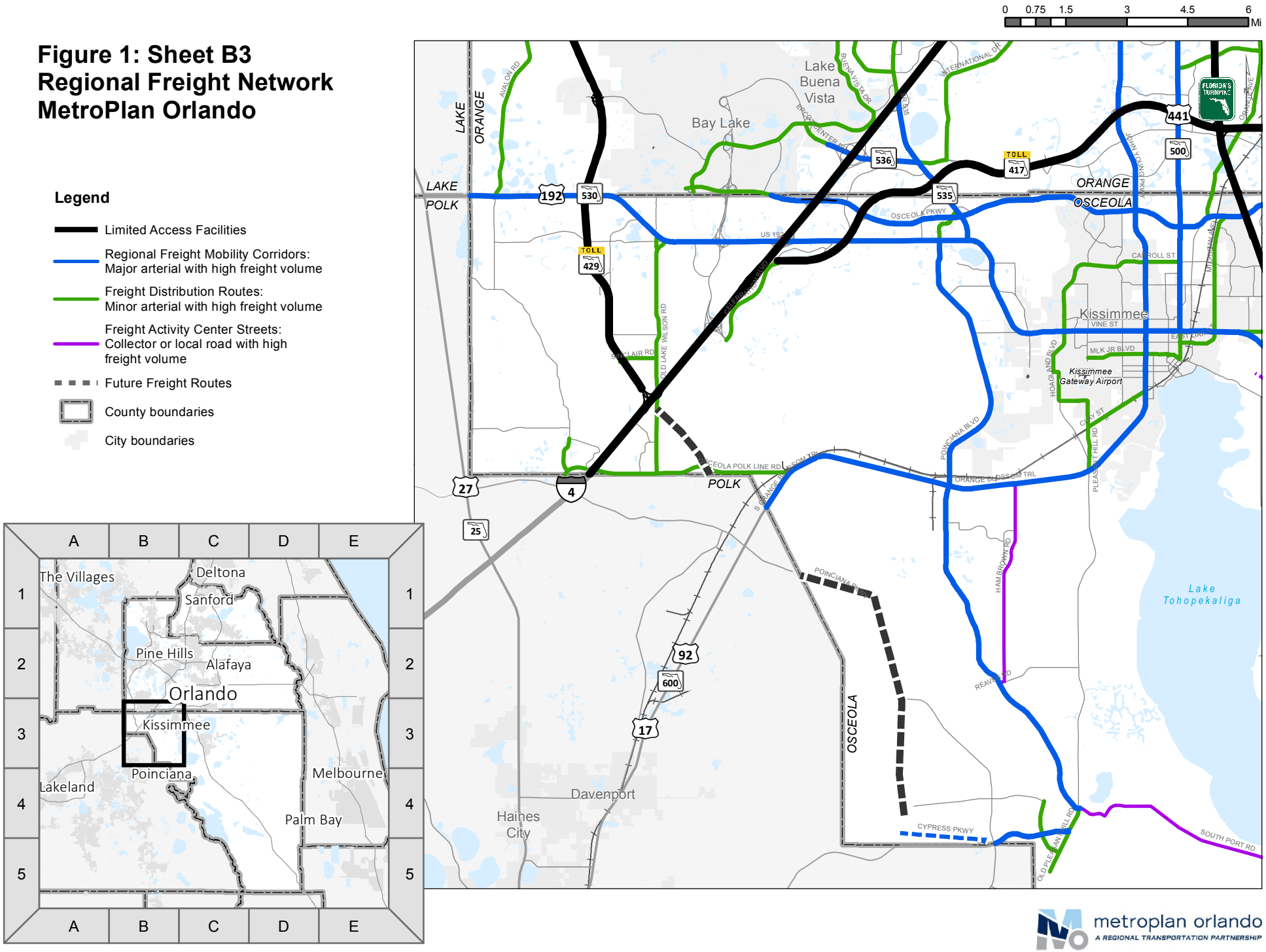

Figure 1: Sheet C3
Regional Freight Network
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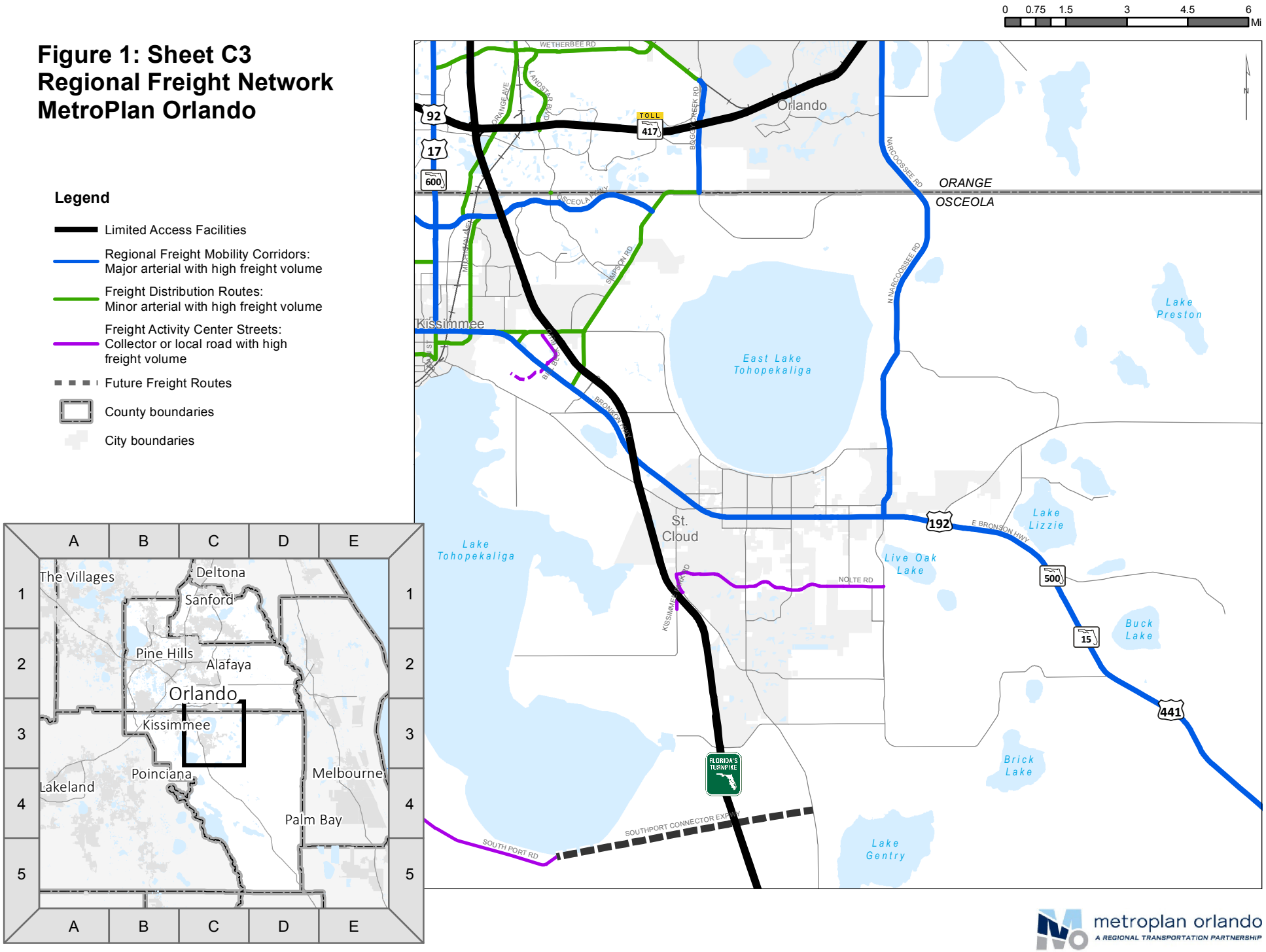

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Regional Freight Network
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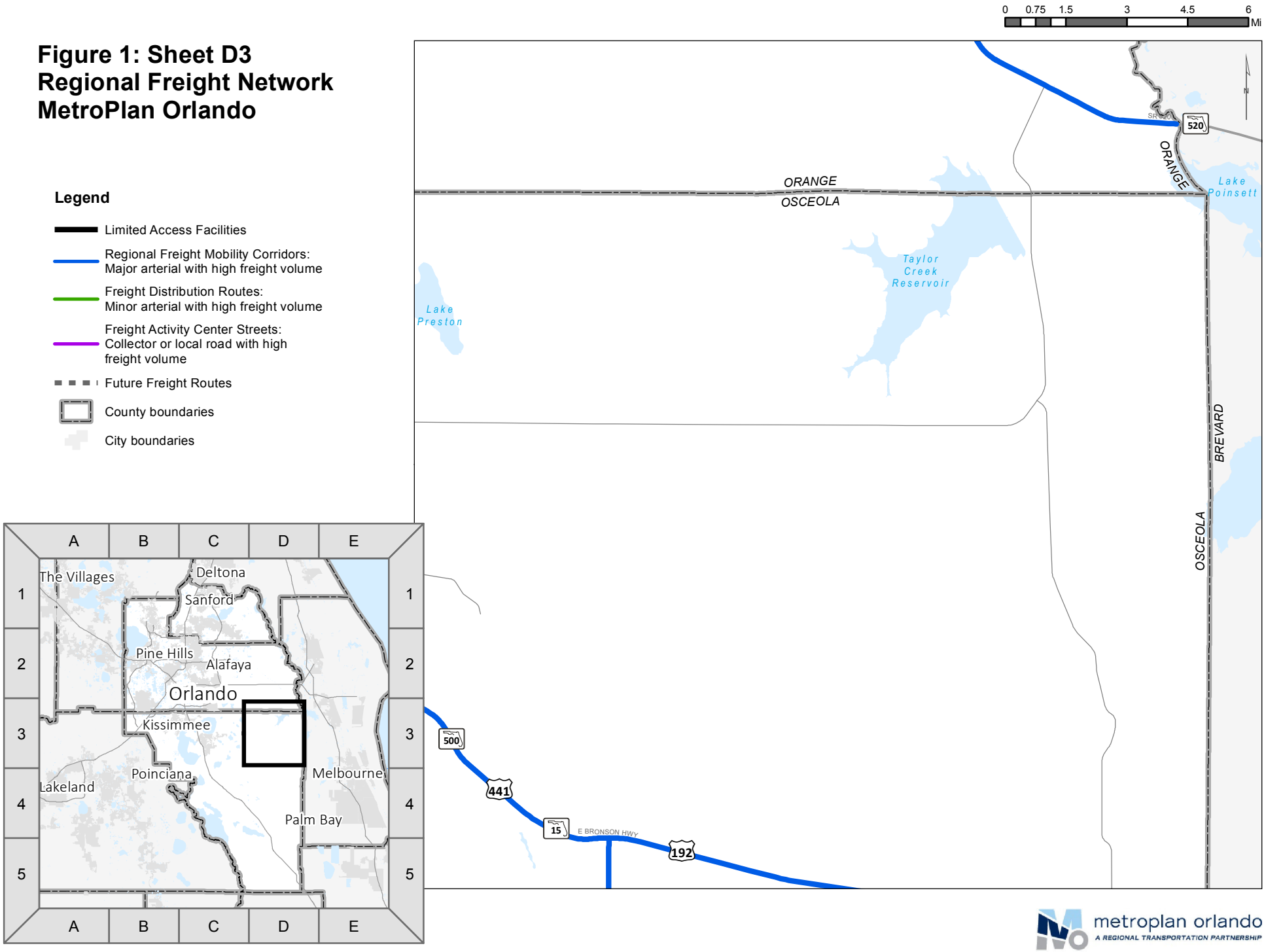

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Regional Freight Network
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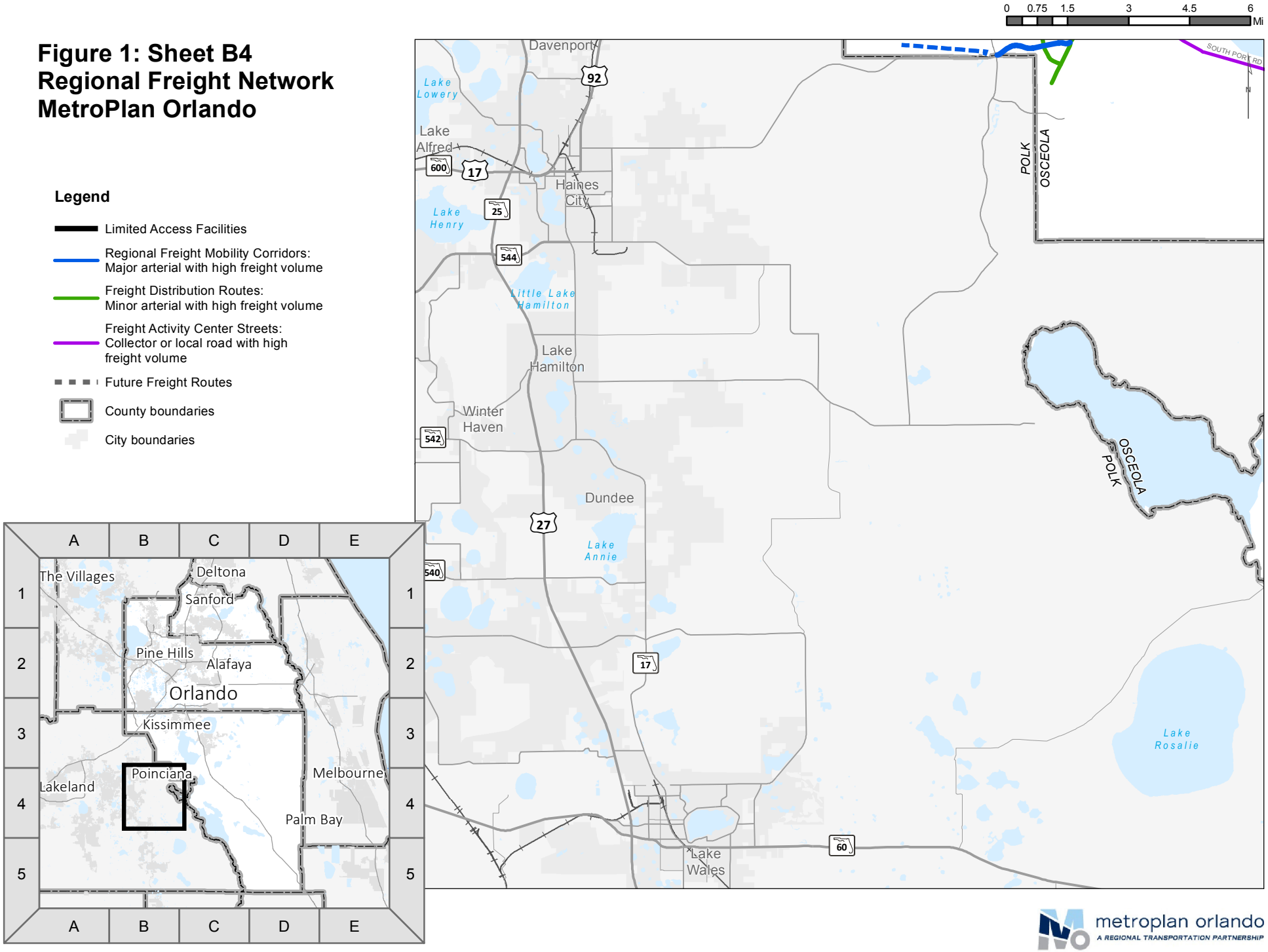

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Regional Freight Network
MetroPlan Orlando

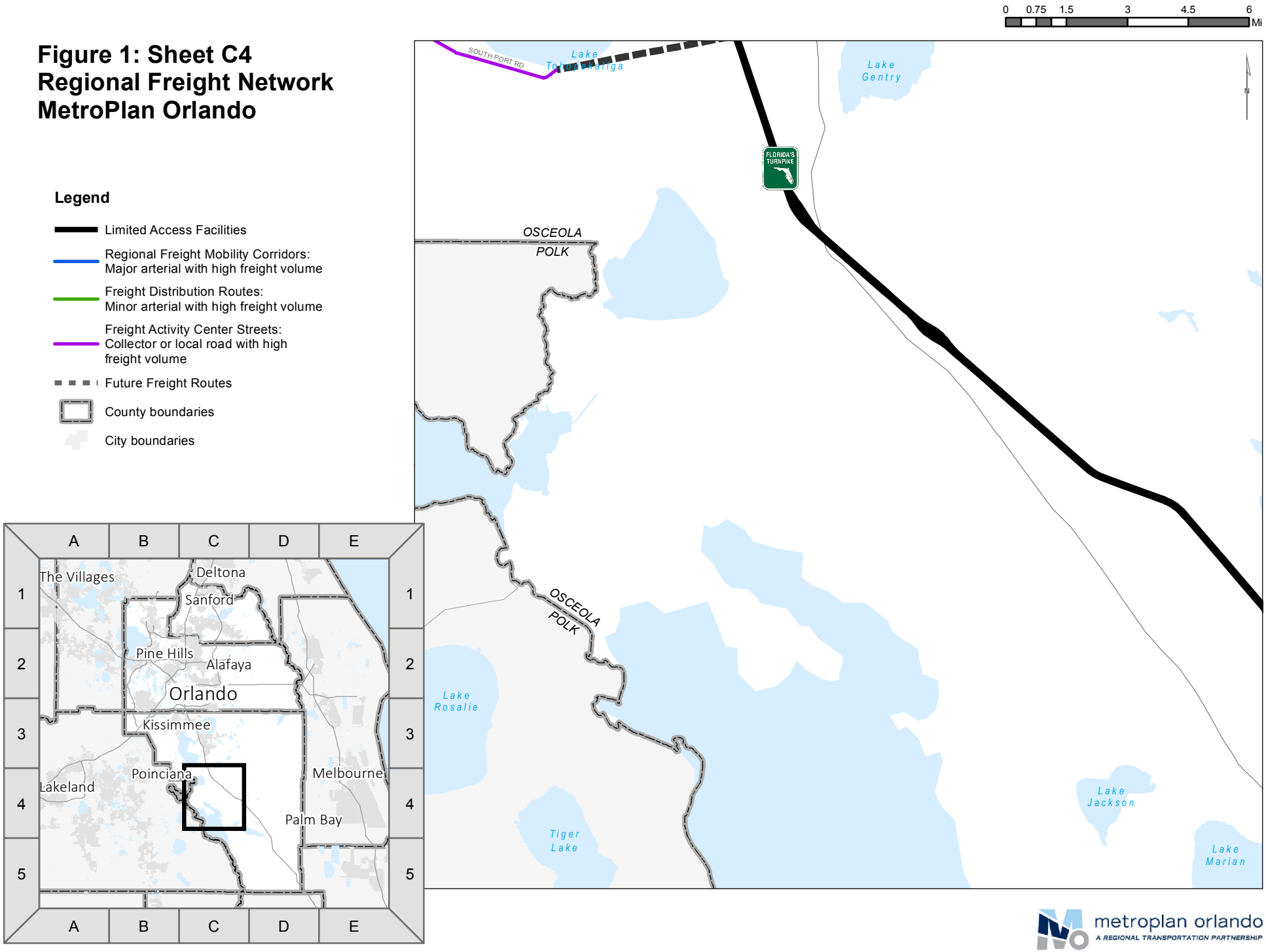

Figure 1: Sheet D4
Regional Freight Network
MetroPlan Orlando

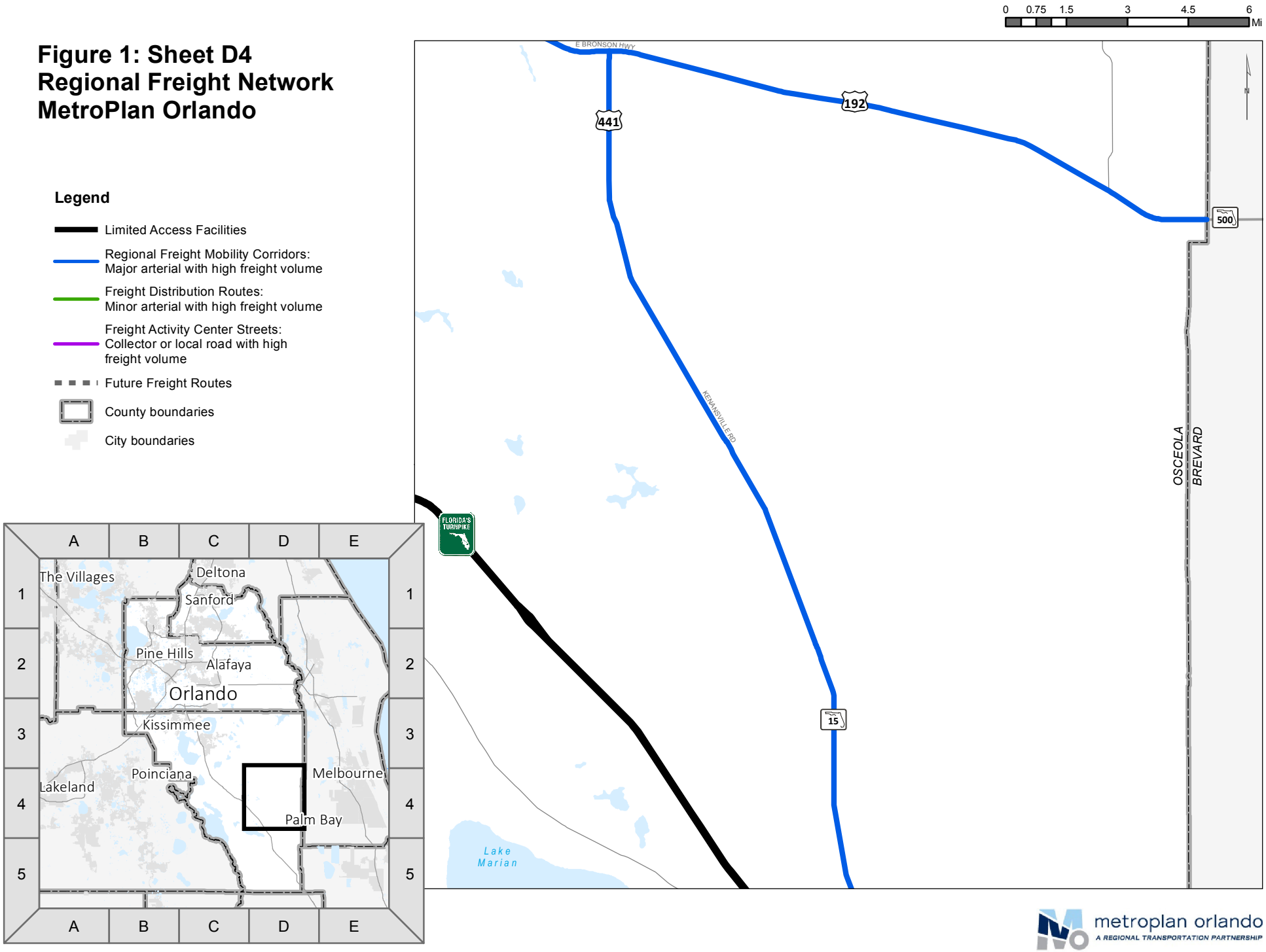

Figure 1: Sheet C5
Regional Freight Network
MetroPlan Orlando

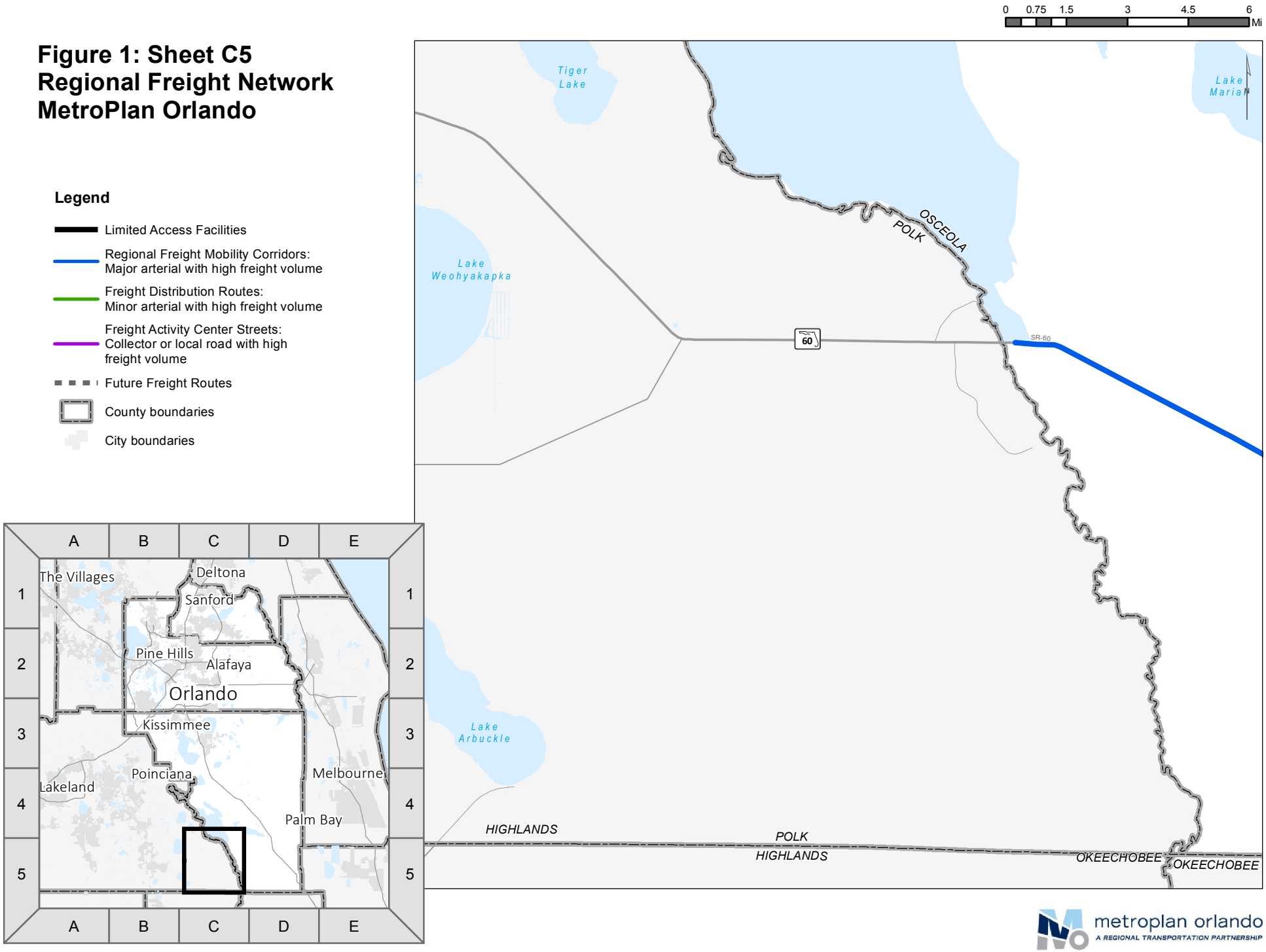

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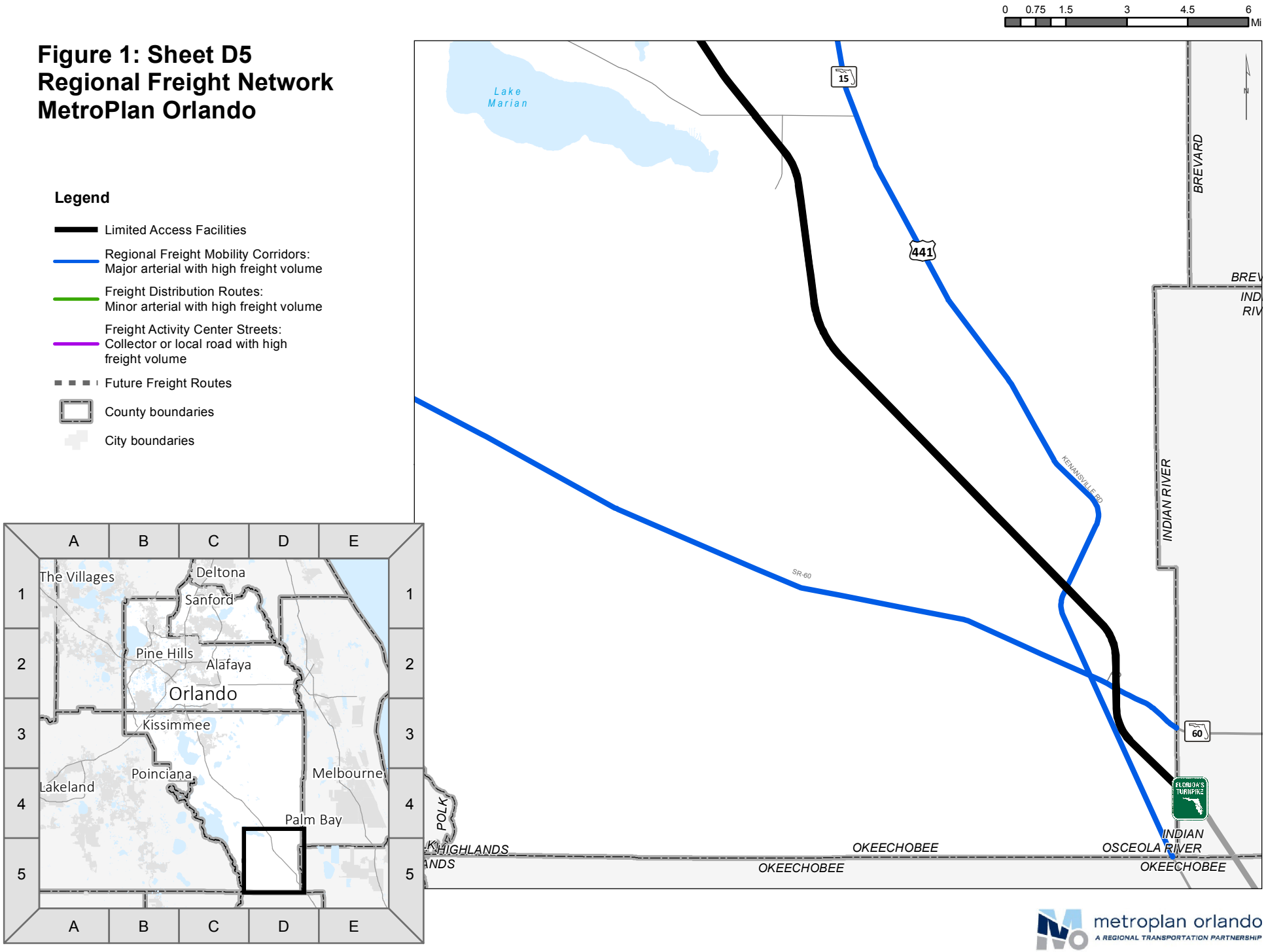
Figure 1: Sheet D5
Regional Freight Network
MetroPlan Orlando



FREIGHT NETWORK DEVELOPMENT

The following activities were performed in the network development process:

1. Planning Documents: Researching and assessing past planning documents that included network development activities within the MetroPlan Orlando region.
2. Networks: Identification of designated networks that are associated with freight activity.
3. Truck Average Annual Daily Traffic and Truck Volume Percentage: Evaluation of truck Annual Average Daily Traffic (AADT) and truck volume percentages to identify the varying levels of freight activity throughout the MetroPlan Orlando region by facility type.
4. Land Use: Evaluation of land use to identify existing and potential freight origins and destinations.

The following sections summarize the finding for the steps listed above.

Planning Documents

The following documents were reviewed to assess what freight facilities had already been identified through other planning efforts outside this study. Plans were reviewed for data, consistency, and themes.

Orange County Multimodal Corridor Plan

The Orange County Multimodal Corridor Plan focuses on Orange County's current and future multimodal system needs from transportation, land use, and capital planning perspectives. This Plan was reviewed to ensure consistency between the proposed freight network and the multimodal themes included in the Plan.

In addition to identifying major freight corridors, the Multimodal Corridor Plan identified non-limited access "Economy Corridors" that carry or are expected to carry freight traffic. These corridors include:

- County roads identified as popular routes by trucking companies and drivers,
- Roadways predominantly serving the Florida Turnpike/Orlando International Airport industrial cluster, and
- Sand Lake Road; included due to its proximity to the Turnpike/Airport industrial cluster and because it serves as a connection between three high-truck volume limited-access facilities (i.e., I-4, the Florida Turnpike, and SR 528).

To ensure consistency, the criteria and resulting corridors listed above were ultimately identified for the MetroPlan Orlando Freight Network. These corridors are highlighted in Figure C1 in Appendix C.

MetroPlan Orlando Complete Streets Program

The MetroPlan Orlando Complete Streets Program takes a proactive approach to developing a region-wide system of complete streets. Together with a Complete Streets Task Force, MetroPlan staff used a series of criteria to identify a set of corridors with the highest need and opportunity as a Complete Street. For the purposes of this project, the top ten percent of corridors by score, shown in Figure C1 Non-Limited Access Economy Corridors

Figure C2 in Appendix C,, were identified as potential complete streets and plotted against the proposed MetroPlan Orlando Freight Network. This exercise identifies proposed freight routes that may require high levels of access and mobility for all modes, including goods movement. A detailed list with limits

and jurisdiction is shown in Appendix D. Planning and design considerations must take into account that all modes of travel require a combination of access and mobility on these road segments.

Seminole County 17-92 Corridor Redevelopment Master Plan

US 17-92 serves as a major north to south thoroughfare in Seminole County. The US 17-92 corridor studied by the Redevelopment Master Plan is approximately 13 miles long, and spans from the historic Sanford downtown to the Fern Park area in southern unincorporated Seminole County.

The Master Plan recommends the establishment of activity nodes at key intersections where land values and economic potential is highest. These "catalyst" sites would have higher density, mixed-use centers that offer a diversity of housing, office and retail uses in an environment that accommodates walking and transit.

The US 17-92 corridor is included in the proposed MetroPlan Orlando Freight Network due to its importance for goods movement to industrial and big box retail land uses along the corridor. Potential freight projects on this corridor should consider the goals and objectives included in the Redevelopment Master Plan.

East Central Florida Corridor Task Force Final Report

The East Central Florida Corridor Task Force evaluated and developed consensus recommendations on future transportation corridors serving established and emerging economic activity centers in portions of Brevard, Orange, and Osceola counties. Nine transportation alternatives recommended for further study were reviewed for their applicability to the proposed MetroPlan Orlando Freight Network.

- Five of these alternatives primarily involve improvements to existing corridors, including all four existing crossings of the St. Johns River – SR 50, SR 528, SR 520, and US 192—as well as the Narcoossee Road/SR 417 corridor between Orange and Osceola counties to the east of the Orlando International Airport. These corridors are already designated in the MetroPlan Orlando Freight Network.
- The remaining four corridor alternatives are study areas for potential new corridors – two running east-west and two running north-south. These new corridors and their applicability to the MetroPlan Orlando Freight Network are summarized in the Future Facilities section.

Two key considerations were noted by the Task Force:

1. The opportunity to provide better connectivity from productive agricultural lands to processing facilities, transportation hubs, and external markets to help expand the size, diversity, and scale of the agricultural industry.
2. The potential impacts of new or enhanced transportation corridors on agricultural lands with important economic or environmental functions.

Planning efforts—including this MetroPlan Orlando Freight Network—need to balance the opportunities and impacts of freight transportation on these important and environmentally sensitive corridors.

Osceola County Comprehensive Plan - Transportation Element

The Transportation Element of the Osceola County Comprehensive Plan establishes a policy framework which is intended to clearly illustrate the location, timing and form of mobility improvements to the year 2040. This document was reviewed—along with its Transportation Map Series—for its applicability to the MetroPlan Orlando Freight Network. Although specifics on potential freight routes were not found in this document, it provides useful guidelines on desired street function and design in Osceola County. These considerations should be part of any freight-focused project in Osceola County.

Networks

The following networks were assessed for inclusion in the MetroPlan Orlando Freight Network.

Strategic Intermodal System

The primary goal of the Strategic Intermodal System (SIS) is to provide the highest degree of mobility for people and goods traveling through the State. All roadways included as part of the SIS, including connectors, are included as part of the proposed Existing MetroPlan Orlando Freight Network.

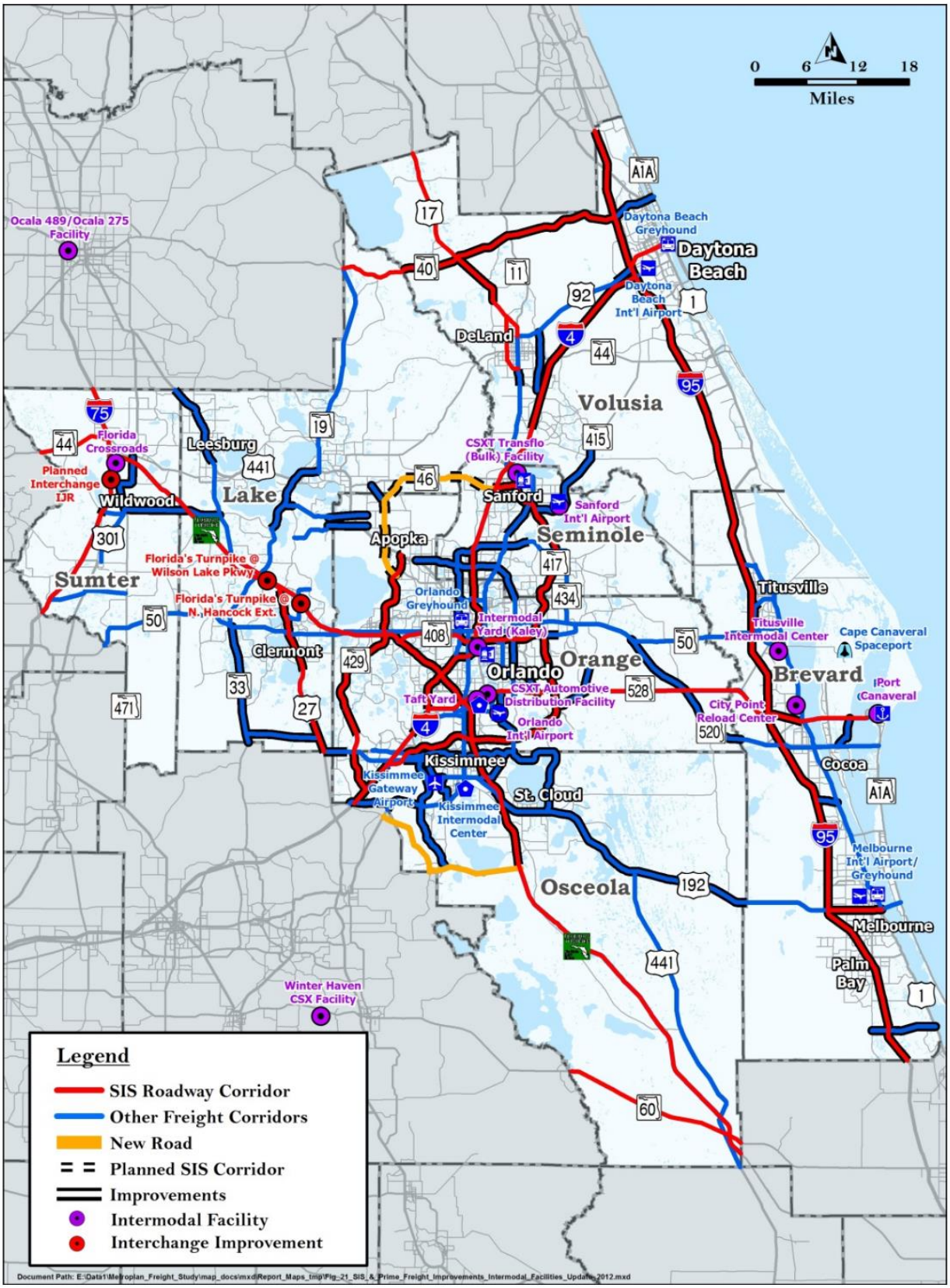
State Highway System and National Highway System

Most roadways that are part of the State Highway System (SHS) and National Highway System (NHS) are included as part of the proposed MetroPlan Orlando Freight Network. In some cases, SHS or NHS roadways were not included in the proposed MetroPlan Orlando Freight Network due to other considerations detailed in this section, such as land use or truck restrictions.

Central Florida Regional Freight Mobility Study - Primary Freight Network

The Central Florida Regional Freight Mobility Study's primary freight network is included in the proposed MetroPlan Orlando Freight Network. The network consists of highways that belong to the SIS and roadways that carry proportionately high volumes of daily truck traffic or serve as a strategic connection to the region's freight users. Therefore, this network consists of the portion of the region's highway network that is most critical to the safe and efficient movements of freight and goods (1). Figure 2 presents this network.

Figure 2: Central Florida Regional Freight Study's Priority Freight



Source: *Central Florida Regional Freight Mobility Study – Priority Freight Subsystem*, Cambridge Systematics (2014)

National Highway Freight Network

The Fixing America's Surface Transportation Act (FAST Act) repealed existing freight networks and established a National Highway Freight Network (NHFN) to strategically direct Federal resources and policies toward improved performance of highway portions of the U.S. freight transportation system. In addition to the Primary Highway Freight System (mostly Interstates, abbreviated as PHFS), the NHFN includes the following subsystems:

- **Critical Rural Freight Corridors (CRFCs):** These are public roads not in an urbanized area which provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities.
- **Critical Urban Freight Corridors (CUFCs):** These are public roads in urbanized areas which provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities.

States and in certain cases, Metropolitan Planning Organizations (MPOs), are responsible for designating public roads for the CRFCs and CUFCs in accordance with section 1116 of the FAST Act. State designation of the CRFCs is limited to a maximum of 150 centerline miles of highway or 20 percent of the PHFS centerline mileage in the State, whichever is greater. State and MPO designation of the CUFC is limited to a maximum of 75 miles of highway or 10 percent of the PHFS mileage in the State, whichever is greater. The FHWA Office of Freight Management and Operations will develop guidance to aid in the identification, designation, and certification of these corridors.

Table 2: Table of National Highway Freight Network Mileages by State

State	PHFS	Non-PHFS Interstate	CRFC	CUFC	NHFN Total*	% of PHFS in State to Total PHFS	CRFC Maximum Limit	CUFC Maximum Limit
Florida	1,600.69	54.63	**TBD**	**TBD**	1,655.31	3.86%	320.14	160.07

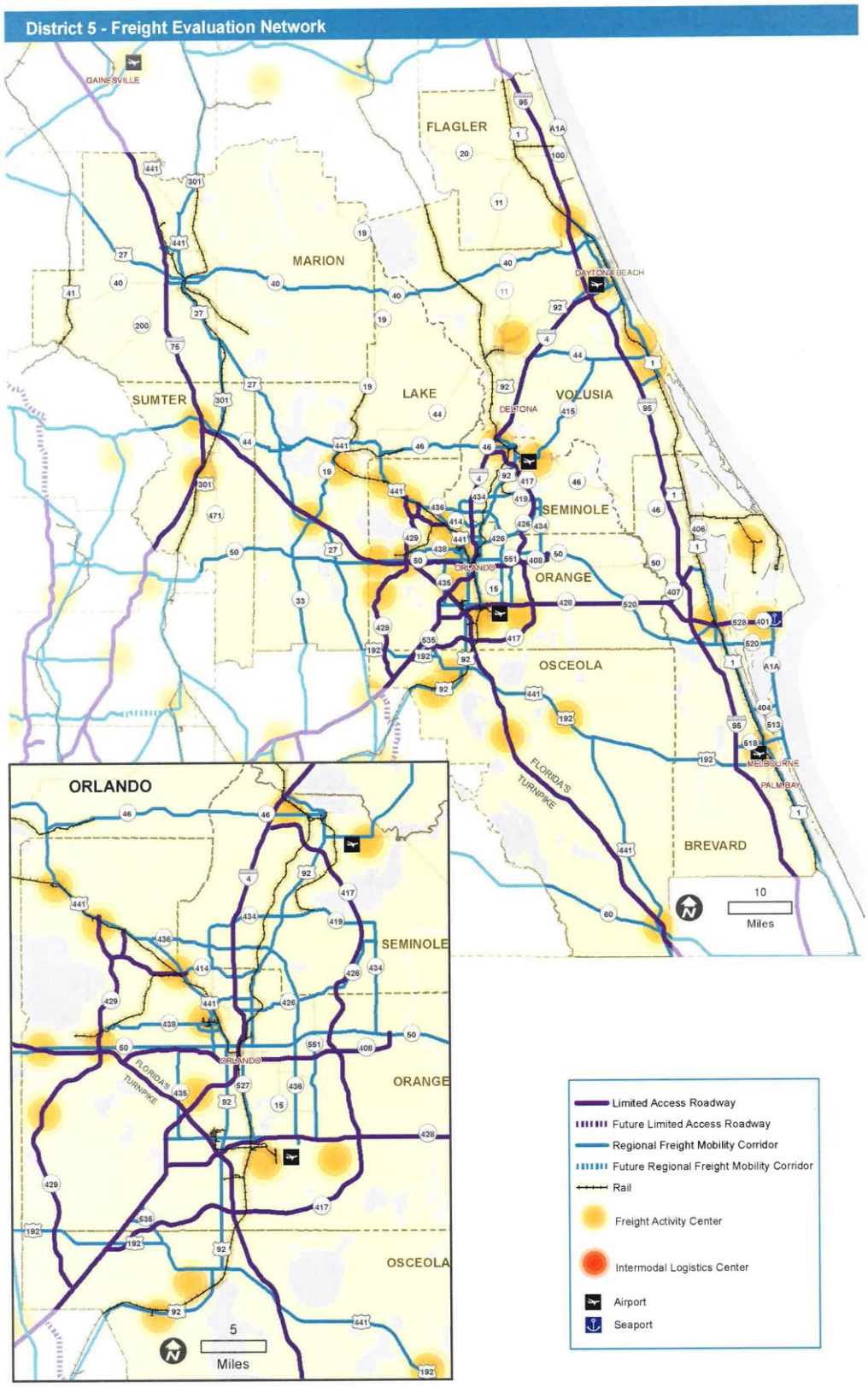
* Note: PHFS and the Non-PHFS Interstate mileage is based on the Freight Analysis Framework 4 network.
Source: FHWA (2016) | http://ops.fhwa.dot.gov/freight/infrastructure/nfn/maps/nhfn_mileage_states.htm (Accessed on June 29, 2016)

For purposes of the proposed MetroPlan Orlando Freight Network, the NHFN was reviewed to ensure that roadways on its PHFS are included as part of the proposed Freight Network.

FDOT District 5 Freight Evaluation Network

The FDOT District 5 Freight Evaluation Network, presented in Figure 3, identifies current and future freight mobility corridors in the nine-county region. The proposed MetroPlan Orlando Freight Network was reviewed for consistency with the District 5 Evaluation Network.

Figure 3: FDOT District 5 Freight Evaluation Network



Source: Florida Department of Transportation, District Five

2040 LRTP Freight Mobility Network

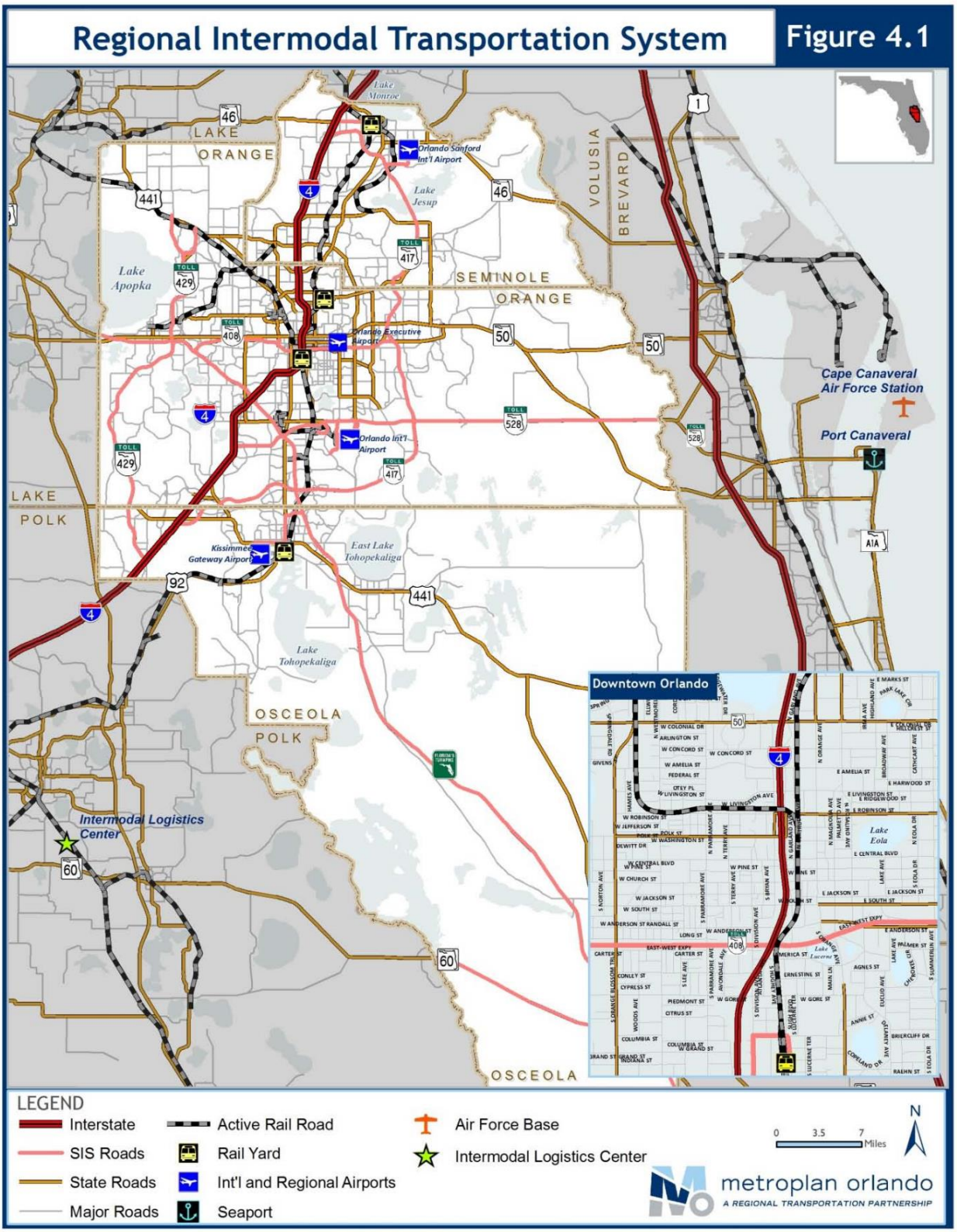
The MetroPlan Orlando Freight Mobility study presents regional solutions and recommendations for the MetroPlan Orlando region, including Orange County, Osceola County, and Seminole County. The recommendations from the mobility study include adding certain roadways to the freight sub-network in the near term. The roadways listed below are recommended for addition to the freight sub-network and are included in the proposed MetroPlan Orlando Freight Mobility network.

- Orange County
  - Taft Center – Atlantic Avenue, Orange Avenue, Landstreet Road, and Boggy Creek Road
  - Tradeport Drive
  - Taft-Vineland Road
  - SR 15 (Narcoossee Road, Hoffner Avenue, Conway Road)
- Osceola County
  - CR 531/CR 471 (Michigan Avenue)
- Seminole County
  - Airport Boulevard/Martin Luther King Jr. Boulevard
  - Jewett Lane
  - SR 46
  - Lake Mary Boulevard

In addition to the freight network additions, local planners also requested that MetroPlan Orlando consider land uses near the Orlando-Sanford International Airport in the development of future freight routes. A near-term improvement opportunity was identified to provide “limited designated routes for truck access due to residential development surrounding airport support areas.” The proposed MetroPlan Orlando Freight Network is sensitive to these land use considerations and only includes the roadways listed above in the vicinity of the Orlando Sanford International Airport.

Figure 4 presents the MetroPlan Orlando Freight Mobility network.

Figure 4: MetroPlan Orlando Freight Mobility Network



Source: 2040 LRTP, MetroPlan Orlando

Truck AADT and Truck Volume Percentage

Truck AADT and truck volume percentage were additional pieces of data assessed to help further identify potential non-limited access corridors for inclusion in the proposed MetroPlan Orlando Freight Network. There is no industry-defined standard process or guidance for identifying a freight network. For this exercise a method was developed to identify roads with both relatively high truck AADT and truck volume percentage relative to their peers.

To provide a relative comparison of truck AADT and truck percentage, roadways were separated by their functional classification as set by the FDOT. This allows for a like-for-like comparison between network elements; highways will be compared to highways, and local streets will be compared to local streets. The comparisons were done at the county level, with adjustments made at the county boundaries to maintain connectivity and continuity.

By using truck volume and percentage, network elements that are serving both a high number and proportion of trucks were identified. This avoids false identification of segments that may be skewed due to high volumes of total traffic or low volumes of passenger vehicles.

Methodology

Tiers of truck AADT and truck volume percentages were developed for roadway segments by functional classification. This information was used to identify roadway segments that had both a relatively high truck percentage and truck AADT relative to their peer roadways. The tiers developed are shown below in Table 3.

Table 3. Truck AADT and Percentage Tiers

Tier	Truck AADT	Truck Percentage
1	greater than 50% below functional class average	greater than 2.5% below functional class average
2	50% to 10% below functional class average	2.5% to 0.5% below functional class average
3	Within 10% of functional class average	Within 0.5% of functional class average
4	10% to 50% above functional class average	0.5% to 2.5% above functional class average
5	greater than 50% above functional class average	greater than 2.5% above functional class average

Once tiers were defined, three freight activity categories were developed based upon the tiers. These categories were then used to further identify and refine the proposed MetroPlan Orlando Freight Network:

- Category 1
  - Truck Percentage Tier 5 (Greater than 2.5% above Class Avg.) and
  - Truck AADT Tiers 3 through 5 (> -10% of Class Avg.)
- Category 2
  - Truck Percentage Tier 4 (0.5% to 2.5% above Class Avg.) and
  - Truck AADT Tiers 4 through 5 (10% or more above Class Avg.).
- Category 3
  - Truck Percentage Tier 3 (Within 0.5% of Class Avg.) and
  - Truck AADT Tier 5 (>50% above class Avg.)

Road segments identified in Category 1, 2, or 3 have been included in the MetroPlan Orlando Freight Network.

Land Use

The following land-use data was assessed to identify freight-related origins and destinations for consideration in the proposed MetroPlan Orlando Freight Network.

ATRI State-Level Industry Data

Aggregated American Transportation Research Institute (ATRI) data was used to identify truck trip origins and destinations within the MetroPlan Orlando region. This data was aggregated and analyzed as part of an FDOT Central Office study. ATRI's truck Geographical Position System (GPS) database contains GPS traces of a large number of trucks as they traveled the national highway system (2). The existing freight network was developed to include connectivity to the TAZs with freight trip ends.

InfoGroup USA

InfoGroup is a private data vendor which specializes in consumer and business data. FDOT purchased an InfoGroup dataset for the primary purpose of obtaining employment data by industry category and by place of employment.

The InfoGroup dataset includes employment data for industry categories that are coded by 6-digit Standard Industrial Classification (SIC) and 8-digit North American Industry Classification System (NAICS) codes. During data processing, the SIC codes were converted to two-digit SIC codes based on the major group. The 2-digit SIC codes, for the primary business activity, were used to aggregate location employment into the following industry categories:

- Industrial Employment (2-digit SIC Codes 01 to 39)
- Commercial Employment (2-digit SIC Codes 50 to 59)
- Service Employment (2-digit SIC Codes 40 to 49 and 60 to 99) *(3)*

This dataset, representing August 2014 conditions, was then used to compare the location of industrial businesses and employees with the proposed MetroPlan Orlando Freight Network. To perform this task, the InfoGroup USA field for number of industrial employees was plotted proportionally, with larger circles for locations with higher number of industrial employees. The industrial employment locations can be seen in Figure C3 of Appendix C.

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Coordination and Interviews

To aid in identifying the proposed MetroPlan Orlando Freight Network, interviews with key stakeholders were performed as part of the data collection process. Workshops with staff of cities within Orange County were held in January 2016. The intention of these workshops was to gather information at the local level about truck routes and demand in their area. These workshops provided agency representatives a collaborative environment to share local knowledge and experience.

Representatives from the following agencies participated:

- City of Winter Park
- Town of Windermere
- City of Apopka
- Reedy Creek Improvement District
- City of Edgewood and Police Department
- City of Winter Garden
- City of Orlando
- Orange County Public Works and Traffic Engineering
- City of Maitland
- Downtown (Orlando) Development Board

A telephone interview with Larry Kahn, an industrial and commercial real estate specialist, was conducted on February 1, 2016. Information gathered focused on future commercial, industrial, and warehouse developments that are likely to attract and generate truck traffic.

Finally, an interactive online map was setup for representatives from the shipping industry and other agencies to provide comments on known issues or future needs. Respondents to the online map were:

- Orange County Convention Center
- Greater Orlando Aviation Authority

Outside of Orange County, an informational letter was sent to representatives of Seminole County and Osceola County to raise awareness of the freight network development process. A coordination meeting with representatives of Seminole County and Osceola County was held on June 24, 2016 to review draft freight network routes. The following county staff were in attendance:

- Shad Smith (Seminole County)
- Bill Wharton (Seminole County)
- Mary Moskowitz (Osceola County)
- Joedel Zaballero (Osceola County)

Truck Crash Data

Heavy vehicle crash data (provided by MetroPlan Orlando) from 2009-2011 was used to identify road segments with truck demand that are not covered by other data sources or may not have relatively high truck demand. For example, truck volume or truck percentage may not be available for a particular road segment; however, crash data shows a number of truck crashes reported. This is an indication that trucks are using this route and should be considered as part of the freight network. Using crash data not only helps identify truck demand, but also helps identify road segments potentially in need of safety mitigations. Figure C7 of Appendix C presents the crash data in relation to the proposed MetroPlan Orlando Freight Network.

Truck Restrictions

Truck restrictions were found in the municipal codes of several MetroPlan Orlando municipalities. This was confirmed through the project's local agency workshops. Roads with restrictions were not included in the MetroPlan Orlando Freight Network.

City of Belle Isle (Orange County)

The City of Belle Isle, under Chapter 30 of their Code of Ordinances, prohibits heavy trucks on certain streets and restricts heavy vehicles on the Nela Avenue Bridge. A comprehensive list of the restrictions and prohibitions is shown in Appendix B.

It is worth noting that Nela Avenue between Orange Avenue and Conway Road, despite having truck restrictions, has relatively high truck demand when compared to its peer road segments.

City of Edgewood (Orange County)

The City of Edgewood, under Chapter 62 of their Code of Ordinances, prohibits trucks with a gross weight of 10,000 pounds or more on certain streets. A comprehensive list of the restrictions and prohibitions is shown in Appendix B.

City of Sanford (Seminole County)

The city manager and the chief of police, with the approval of the city commission, may designate truck routes within the city and erect signs giving notice thereof. Per Sec. 58-7 of the municipal code, all vehicular truck traffic is prohibited on Oak Avenue between 24th Street and 25th Street. This prohibition does not extend to delivery truck traffic necessary to service residences within such area. Oak Avenue is not included in the proposed MetroPlan Orlando Freight Network.

City of Longwood (Seminole County)

Sec. 86-4 of the City of Longwood municipal code forbids trucks with gross vehicle weight over 12,000 pounds from using the streets listed in Appendix B. None of these streets are included in the proposed MetroPlan Orlando Freight Network.

City of Casselberry (Seminole County)

There are established truck routes within the City of Casselberry for trucks with an outside origin and an outside destination. The City of Casselberry's ordinances state that all trucks entering the City for destination points outside the City shall operate only over the following designated routes:

1. State Road 436
2. State Road 434
3. U.S. Highway 17-92 (State Road 15-600)
4. Seminola Boulevard, between U.S. Highway 17-92 and Lake Drive
5. Lake Drive
6. Red Bug Lake Road
7. Lake Howell Road
8. Plumosa Avenue, between Anchor Road and Lyman Avenue
9. Lyman Road
10. Howell Branch Road
11. Button Road

Emergency, public service, and local delivery vehicles are exempted from these restrictions. The proposed MetroPlan Orlando Freight network is limited to roads that are part of the designated list.

City of Kissimmee (Osceola County)

City of Kissimmee staff—coordinating through Mary Moskowitz (Osceola County)—reported that three roadways have posted "No Thru" signs which limit trucks to those making local deliveries. These roadways are listed below.

1. Neptune Road/Broadway
2. Emmett Street
3. Mabbette Street

These streets are therefore not included in the proposed MetroPlan Orlando Freight Network. City of Kissimmee identified Martin Luther King, Jr. Boulevard as a potential route, with no restrictions and direct access to the Kissimmee Gateway Airport.

Freight Network Designations

The identified freight network elements were then classified into four corridor types based on functional classification: Limited Access Roadways, Regional Freight Mobility Corridors, Freight Distribution Routes, and Freight Activity Center Streets. For consistency with other freight planning documents in the State, the classification designations follow those in the Tampa Bay Regional Strategic Freight Plan.

Limited Access Roadways

Limited Access Roadways carry the greatest level of mobility, have the lowest level of access, and serve as primary trade corridors. The MetroPlan Orlando region is a confluence of several key regional limited access facilities. With the exception of SR 414 (John Land Apopka Expressway), all limited access facilities in the MetroPlan Orlando region are part of the SIS.

Providing safe, uninterrupted, high speed travel conditions for trucks is one of the primary objectives of Limited Access Roadways. Therefore, all limited access facilities and tolled roadways in the MetroPlan Orlando region are included as part of the proposed Freight Network. This includes the functional classes:

- Rural Principal Arterial – Interstates;
- Rural Principal Arterial – Expressway;
- Urban Principal Arterial – Interstate; and
- Urban Principal Arterial – Freeway/Expressway.

Regional Freight Mobility Corridors

Regional Freight Mobility Corridors connect limited access facilities to the freight activity centers. They primarily also serve interregional trips for long-haul truck trips. Secondarily, regional freight mobility corridors distribute freight to commercial, industrial, and other local destinations. Some of the regional freight mobility corridors are part of the SIS. Regional Freight Mobility Corridors include the following functional classes:

- Rural Principal Arterial – Other
- Urban Principal Arterial – Other

Freight Distribution Routes

Freight Distribution Routes primarily serve to distribute truck traffic to local delivery areas. Freight Distribution Routes include local roadways and possibly state roadways. Freight Distribution Routes minimize truck traffic on local roads while providing an adequate network to deliver goods. Freight Distribution Routes include the following functional classes:

- Rural Minor Arterial
- Rural Major Collector
- Urban Minor Arterial
- Urban Major Collector

Freight Activity Center Streets

Freight Activity Center Streets are local roads that connect freight activity centers to the remaining freight network. Freight Activity Center Streets can also provide internal circulation within freight activity centers. Freight Activity Center Streets are comprised of the following functional classes:

- Rural Minor Collector
- Rural Local
- Urban Minor Collector
- Urban Local

FUTURE FREIGHT NETWORK

The future road network from the Central Florida Regional Planning Model (CFRPM), along with existing and future land use data from InfoGroup USA, Orange County, Seminole County, Osceola County, and local cities, were used to identify roads to be included in the Future Freight Network. In addition to planned new roadways, new freight network roadways were added to provide connections to future industrial land uses. The roadways added as part of the future freight network are indicated on the MetroPlan Orlando Freight Network, Figure 1, using dashed lines.

Future Land Use

The projected 2040 future land use of the MetroPlan Orlando region were reviewed to inform edits to the proposed MetroPlan Orlando Freight Network. Industrial land uses, as well as planned developments for which land use is currently unknown, were isolated from the rest of the dataset. These potentially freight-intensive land uses were then overlaid on top of the proposed freight network to evaluate how well the network would serve future demand. The isolated data from the City of Orlando and Orange County zoning is shown in Figure C4 of

Future Network Improvements

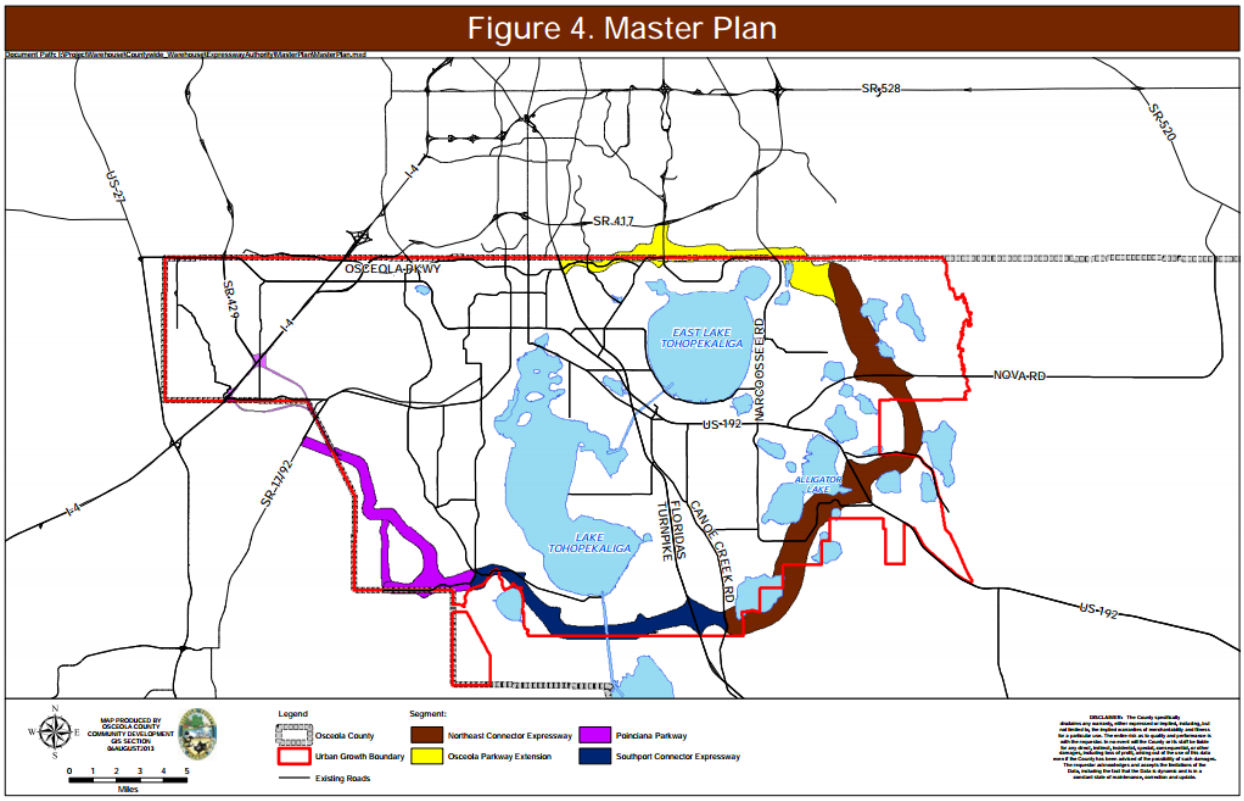
The MetroPlan Orlando GIS layer showing future widenings and new roadways—derived from the OUATS travel demand model—was used to visualize the proposed freight network in the context of the 2040 cost-feasible roadway network. These locations are shown in Figure C5 of Appendix C. Many of the new roadways are shown simply as links as their exact alignment has yet to be determined.

Future Facilities

Osceola County Expressway Master Plan

Osceola County and the Osceola County Expressway Authority (OCX) have endorsed the concept of a limited access expressway system serving Osceola County's urban growth area. As currently envisioned, the system would consist of the four facilities, as shown in Figure 5. Once completed, the system would provide a connection between I-4 to the west and SR 417 to the north.

Figure 5: Osceola County Expressway Master Plan Corridors



Source: Osceola County Expressway Authority OCX Master Plan 2040 (August 2013)

The OCX 2040 system is structured on a series of expressways that ring the interior of Osceola County's Urban Growth Boundary; connecting existing and emerging cities and centers.

- Poinciana Parkway (10 miles)
- Osceola Parkway Extension (9 miles)
- Southport Connector Expressway (13 miles)
- Northeast Connector Expressway (25 miles)

These future facilities were compared with the MetroPlan Orlando 2040 cost feasible network to determine which may be included in the proposed MetroPlan Orlando Freight Network. The only facility not included the cost feasible network is the Northeast Connector Expressway. Osceola Parkway is shown to be widened in the cost feasible network, but its future functional class is not defined. Poinciana Parkway and the Southport Connector Expressway were included as future limited access roads in the proposed MetroPlan Orlando Freight Network. Osceola Parkway is identified as a Regional Freight Mobility Corridor in the Existing version of the proposed MetroPlan Orlando Freight Network, and would be upgraded to a Limited Access Facility designation in the future if OCX's proposed conversion is constructed.

East Central Florida Corridor Task Force Final Report

The East Central Florida Corridor Task Force evaluated and developed consensus recommendations on future transportation corridors serving established and emerging economic activity centers in portions of Brevard, Orange, and Osceola counties. Among the recommendations of the Task Force were four new multimodal facilities for the region:

1. A new east-west corridor along the Orange County/Osceola County line. This corridor would form part of an alternative east-west connection from Interstate 4 to Interstate 95.
2. A new east-west corridor from the Orlando International Airport/Lake Nona area to central/southern Brevard County.
3. A new north-south corridor in eastern Orange and Osceola counties. This corridor would connect the future population centers on the North Ranch to other regional destinations and east-west corridors.
4. An extension of the OCX Northeast Connector Expressway to SR 528. It would connect the Northeast District to existing and emerging economic centers in Orange County within the current Orange County Urban Service Area.

These future facilities are contingent on the scale and phasing of development in the North Ranch Sector Plan Area in Osceola County. According to the Task Force, planning for these facilities must also consider potential impacts to watersheds, wetlands, protected species, conservation lands, and other environmental aspects present in eastern Orange and Osceola counties.

The recommendations of the Task Force are not included in the 2040 cost feasible network in MetroPlan Orlando's travel demand model. Combined with the uncertainty in timing for the construction of these new facilities, they were not included as part of the MetroPlan Orlando Freight Network.

EXISTING DATA COLLECTION GAPS

Traffic Data Collection

Development of the proposed Freight Network and identifying future needs highlighted gaps in available truck count data. Upon comparison of the existing and future needs networks, gaps were identified in the current data collection program by cross-referencing the routing map against available truck and heavy vehicle traffic data.

It is recommended that AADT and vehicle class counts on the following road segments be added to the annual data collection program:

- CR 545 (Avalon Rd) – between Osceola County and Seidel Rd
- Winter Garden Vineland Rd – between Daniels Rd and Florida's Turnpike
- CR 424 (Apopka Blvd / Alabama Ave) – between SR 414 and US 441 (Main St)
- International Dr. – between SR 536 and Central Florida Pkwy
- Moss Park Rd – between Savannah Pine and Lake Hart Dr.
- SR 15 (Narcoossee Rd) - between SR 417 and SR 528
- Dowden Rd – Between Narcoossee Rd and SR 417
- Alafaya Trail – between Stanton Power Plant and Innovation Way
- Wekiva Springs Road between SR 434 and Mt. Plymouth Road

The map used to cross-reference the proposed MetroPlan Orlando Freight Network with the available truck and heavy vehicle count data is included as Figure C6 of Appendix C.

Bridge Inventory

Bridge height information was not readily available outside of bridge structure reports. For the purposes of identifying locations with height restrictions, we recommend developing a GIS-based data set of bridge locations linked to roadway and milepost with their height restriction. Detailed bridge information being openly available does pose certain security risks. Therefore, we are only recommending that limited information be included in the attributes that allows for identification of the bridge and its clearance. Bridges with a clearance below a certain height could then be used to identify routes restrictive for truck traffic.

Weight Limit Inventory

Orange County provided a list of their weight limit signage. This list is intended to be updated by the maintenance team whenever a change is made to a posted sign. Upon a spot check using Google Street View, less than half of the signs selected for review could be located. Therefore, weight limits were not used to identify restrictive truck routes. Additionally, the existing format of the table limited the ability for integration into a mapping tool.

We recommend that the list be updated through field verification. Locations shown as having a sign where one does not exist should be verified against available roadway design plans. We recommend that the field-verified locations include a unique roadway identifier and mile post for ease of location and inclusion in GIS-based mapping efforts.

Sign inventories were not obtained from Seminole County or Osceola County.

STRATEGIES

The following paragraphs describe strategies that should be considered as part of future projects located on the freight network.

Design Strategies

The following roadway design strategies should be considered when designing the County's freight network. These strategies follow guidance from the FDOT District 7 Freight Roadway Design Considerations document.

Typical Section

The most important element of designing typical sections to accommodate heavy volumes of large trucks is lane width. Trucks are accommodated through wider travel lanes, curve widening, and medians to provide turn lanes at key driveways and intersections. Pedestrian and bicyclist mobility and safety are emphasized with appropriate separate facilities. Shared use path accommodations should be considered outside of the urban area.

Intersection Approaches

Frequent heavy truck volumes warrant longer storage lengths. Exclusive turn lanes and complementary exclusive signal phasing provide dedicated physical space and green time for turns, and allow trucks and other vehicles to proceed through the intersection without delays from stopped or slowing turning vehicles.

Right Turn Treatments

Consider using the appropriate heavy vehicle as the "control vehicle" in urban areas with significant truck traffic. Large vehicles require a larger turning radius. Middle-range and large curb return radius accommodate large vehicles using the intersection. Channelization of the right-turn is appropriate where pedestrian activity is low but occasional.

Left Turn / Median Nose Treatments

Full curb noses are most effective for pedestrian safety, but reduce the turning area for large vehicles and can easily be damaged if a truck's rear wheels mount the curb. Where pedestrian activity is high, a full pedestrian refuge should be provided. The nose should be shaped to accommodate regular large vehicles.

Pavement Bulb-Outs and U-Turns

Bulb-outs provide additional pavement beyond the striped vehicle lanes for large vehicles with a wide turning radius to complete a U-turn. Ideally, U-turns should be accommodated at intersections, considering building setbacks and available right of way.

Access Management & Truck Parking

Driveway access, loading/unloading zones and curbside parking regulations directly influence how easily and reliably trucks can access their destinations and ultimately deliver their goods. In a freight oriented area, such as a freight activity center, direct front access with wide aprons along with wide expanses of pavement to accommodate multiple loading bays are appropriate. In more diverse areas with a greater need for access for multiple modes, indirect rear access and on-site adequate parking space for deliveries are appropriate.

Traffic Control Devices

Traffic control devices, including road markings, signs, and traffic signals, are routinely used to communicate to road users who has priority. Keeping trucks moving at slow speeds without requiring full stops reduces fuel costs, operator time, and wear and tear. In a freight intensive area, such as a freight activity center, relying on less fully controlled intersections, to keep goods moving without requiring full stops is appropriate, for example with "yield" signs. Truck drivers can also benefit from roundabouts due to reduced delays, particularly where the cost of coming to, and accelerating from, a complete stop can be removed. Care must be taken to ensure the roundabout design accommodates large vehicles. In more diverse areas with a greater need to support multiple modes, managing interactions among trucks, passenger cars, bicyclists, and pedestrians, requires a higher level of traffic control, such as traffic signals.

Truck Signal Priority

Truck signal priority is used to improve the operations of heavy trucks passing through intersections controlled by traffic signals on higher-speed roads by adding vehicle detectors that respond only to trucks. The objective of truck signal priority is to reduce the number of stops for trucks. This is carried out by extending the green time when a truck is detected, thus preventing a truck from being at the front of a queue.

There are safety benefits from reducing the number of trucks stopping at the end of the green phase, including reduced red light running. Reducing the number of stops for trucks can also have a positive effect on emissions, noise, and pavement damage. Furthermore, truck signal priority may be used to encourage trucks to use specific routes. Truck signal priority can be integrated through other ITS components, such as vehicle tracking (AVL) systems.

Application

Limited access facilities and roadways that are part of the SHS and NHS are generally higher mobility roadways and currently follow planning and design standards that accommodate trucks. For the SHS and NHS roads that are part of the MetroPlan Orlando Freight Network, extra consideration to the strategies above should be given in future project planning and project development.

There are several roads that are not part of the SHS or NHS (i.e. County and City roads), which are part of the MetroPlan Orlando Freight Network and have roadway widening projects planned as part of the MetroPlan Orlando 2040 LRTP Cost Feasible Plan. These future projects are an excellent opportunity to incorporate the appropriate freight network strategies.

Appendix E shows which roadway segments have planned or programmed projects per applicable documents from MetroPlan Orlando and partner agencies, highlighting project opportunities for implementing freight-specific strategies on the identified MetroPlan Orlando Freight Network.

Context Considerations

While all complete streets should be designed to accommodate all uses, not all streets need to provide the same quality of service to all uses. It is possible for a roadway design to reflect more than one modal emphasis. For instance, a corridor may facilitate both goods movement and bicycle travel in an area that is both community oriented and serves moderate-to-high freight activity. This can be accommodated with moderately wide travel lanes to accommodate truck passing, and bike lanes and sidewalks with grassy buffers for bicyclist and pedestrian mobility.

The selection of a particular mode for emphasis does not suggest that other modes should not be fully and safely accommodated in the design. All arterial and collector roadways need to be designed to accommodate all modes. The level of emphasis of one mode over another can be managed through quality of service objectives. More discussion on balancing the needs of various users in a context-based complete streets approach will be found in the forthcoming MetroPlan Orlando Complete Streets Report.

REMARKS

Much of the data used in this analysis were based on annual estimated or calculated averages. Similarly, the reference planning documents are updated on a less-than-annual basis. Consequently, the impact of seasonal and daily fluctuations in truck traffic were ruled out and not considered in this plan. The analysis process used in this study has been reviewed, refined, and improved for application to the entire MetroPlan Orlando region.

CITED REFERENCES

1. MetroPlan Orlando, FDOT District 5. *Solutions and Recommendations: Central Florida Regional Freight and Goods Movement*. Prepared by Cambridge Systematics, Inc.; HDR Engineering, and Canin Associates. September 2013.
2. Tabatabaee, Frank. Using Truck Fleet Data in Combination and Other Data Sources for Freight Modeling and Planning. FDOT. Prepared by Univ. of South Florida and ATRI. July 2014.
3. Knoblauch, Mark. *Processing InfoGroup Data Summary Report September 2014*. Memorandum to: Frank Tabatabaee and Terry Corkery (FDOT, Systems Planning). Dated September 5, 2014.

APPENDIX A: DATA SOURCES CONSIDERED

Source	Owner	Analyzed	Notes
ATRI State-Level (FL) Industry Data	ATRI	Yes	
Historical truck crash data	FDOT	Yes	
SIS, SHS, and NHS	FDOT	Yes	
Regional Planning Models	FDOT D5	Yes	
Regional Freight Mobility Study	FDOT D5 Region	Yes	
InfoGroup USA Land Use data	InfoGroup	Yes	
MetroPlan Orlando -provided "truck data"	MetroPlan	Yes	
Heavy Truck Crashes 2009-2011	MetroPlan	Yes	
Freight Corridors	MetroPlan	Yes	
Truck AADT & Percentage – 2012	MetroPlan	Yes	
Annual Average Daily Traffic – 2012	MetroPlan	Yes	
Generalized Existing Land Use – 2012	MetroPlan	Yes	
MetroPlan Orlando Complete Streets	MetroPlan	Yes	
Future Year (2040) Heavy Truck AADT	MetroPlan	Yes	
Future Year (2040) Cost Feasible Network	MetroPlan	Yes	
Existing and Future land use (local zoning, future land use, InfoGroup USA	Orlando/ Orange County	Yes	
USDOT Primary Freight Network	USDOT	Yes	
Road classification from local plans	Various	Yes	
Regional and State freight models	Various	Yes	
Regional Transportation Plans	Various	Yes	
Bridge capacity	FDOT	No	There are too many bridges for FDOT to efficiently share the data. It is possible to look up specific questions if they arise.
Bridge/overpass clearances	FDOT	No	There are too many bridges for FDOT to efficiently share the data. It is possible to look up specific questions if they arise.
FDOT Generalized SVT	FDOT Central Office	No	Road capacity was not a factor in determining the Freight Network.
Road capacity from CFRPM	FDOT D5	No	Road capacity was not a factor in determining Freight Network.
Hazardous material restrictions	FLHSMV	No	According to FLHSMV, there are no hazardous material restrictions in Orange County.
Pavement Conditions 2012	MetroPlan	No	Pavement condition was not a factor in determining Freight Network
Maximum Speed Limits – 2012	MetroPlan	No	Speed limits were not a factor in determining Freight Network.
Number of Lanes – 2012	MetroPlan	No	Number of lanes was not a factor in determining Freight Networks.
Bridges – 2012	MetroPlan	No	There are too many bridges to efficiently review. It is possible to look up specific questions if they arise.
OC vehicle classification count data	Orange County	No	Orange County does not collect vehicle classification counts.
Weigh-in-motion data	Orange County	No	There are no stations in Orange County.

Source	Owner	Analyzed	Notes
OC traffic census	Orange County	No	Orange County traffic counts do not include vehicle classification counts.
OC Freight Routing Signage Inventory	Orange County	No	An inventory of weight restriction signs was provided by Orange County. The locations were not geocoded. After reviewing select locations for accuracy, it was determined that the inventory was out-of-date and therefore not a reliable data source.
OC Pavement Rating	Orange County	No	Pavement condition was not a factor in determining Freight Network
Seminole County Traffic Counts	Seminole County	No	Seminole County traffic counts do not include vehicle classification counts.
Seminole County Land Use	Seminole County	Yes	Confirm existing land uses
Seminole County Future Land Use	Seminole County	Yes	Identify future land uses
Osceola County Zoning	Osceola County	Yes	Confirm existing land uses
Osceola County Future Land Use	Osceola County	Yes	Identify future land uses

APPENDIX B: LOCAL FREIGHT RESTRICTIONS

City	County	Roadway	From	To	Jurisdiction	Gross Weight Limit	Restriction
Casselberry	Seminole	Any not in the designated list.	-	-	-	-	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Lemon Lane	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Hoffa Way	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Parson Brown Way	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Sandlewood Way	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Wildflower Way	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Devonshire Boulevard	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Slade Drive	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Rock Lake Road	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Sheridan Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only

City	County	Roadway	From	To	Jurisdiction	Gross Weight Limit	Restriction
Longwood	Seminole	Rangeline Road	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	East and West Church Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	South Milwee Street	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	East Warren Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	West Warren Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Georgia Avenue	N. County Road 427	N. Grant St.	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	East Orange Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	East Maine Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	East Marvin Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Wildmere Avenue	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only

City	County	Roadway	From	To	Jurisdiction	Gross Weight Limit	Restriction
Longwood	Seminole	Wayman Street	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Highland Street	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	South Grant Street	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	North Grant Street	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	North Oleander Street	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	North Wilma Street	-	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Longwood	Seminole	Raven Avenue	City limit	-	City	12,000 lb.	Emergency, public service, and local delivery vehicles only
Sanford	Seminole	Oak Avenue	24th Street	25th Street	City		Local Deliveries Only
Belle Isle	Orange	Nela Avenue / Seminole Drive*	Matchett Road	Daetwyler Drive	City & County**	10,000 lb.	Local Deliveries Only
Belle Isle	Orange	Warren Park Road	Daetwyler Drive	Seminole Drive	City	10,000 lb.	Local Deliveries Only
Belle Isle	Orange	Hoffner Ave	LaBelle Street (City Limit)	Conway Road (City Limit)	County	12,000 GVWR***	Local Deliveries Only
Belle Isle	Orange	Nela Avenue Bridge	-	-	City	10,000 lb.	Emergency, public service, and local delivery vehicles only

City	County	Roadway	From	To	Jurisdiction	Gross Weight Limit	Restriction
Edgewood	Orange	Holden Ave	Shore Rd (City Limit)	Orange Ave (City Limit)	County	10,000 lb.	Emergency, public service, and local delivery vehicles only
Edgewood	Orange	Gatlin Avenue	Orange Ave (City Limit)	Summerlin Ave (City Limit)	County	10,000 lb.	Emergency, public service, and local delivery vehicles only
Edgewood	Orange	Mary Jess Road	Chenault Ave (City Limit)	Orange Ave (City Limit)	City	10,000 lb.	Emergency, public service, and local delivery vehicles only
Kissimmee	Osceola	Neptune Road/Broadway	-	-	City	-	Emergency, public service, and local delivery vehicles only
Kissimmee	Osceola	Emmett Street	-	-	City	-	Emergency, public service, and local delivery vehicles only
Kissimmee	Osceola	Mabbette Street	-	-	City	-	Emergency, public service, and local delivery vehicles only

* Despite the current restriction, Nela Avenue between Orange Ave and Conway Road has a Truck AADT and Truck Percentage higher relative to its peer road segments.

** Orange County jurisdiction is the Seminole Drive portion between Nela Ave/Indian Dr. and Daetwyler Dr.

*** Gross Vehicle Weight Rating (GVWR) refers to the maximum operating weight of a vehicle as specified by the manufacturer.

APPENDIX C: COMPARATIVE MAPS

The following maps are included in the map package:

- Figure C1 Non-Limited Access Economy Corridors
- Figure C2 Potential Complete Streets
- Figure C3 2014 Industrial Land Use
- Figure C4 Future Land Use
- Figure C5 Future Roadway Capacity Improvements
- Figure C6 Traffic Data Collection Gaps
- Figure C7 Heavy Vehicle Crashes

Figure C1

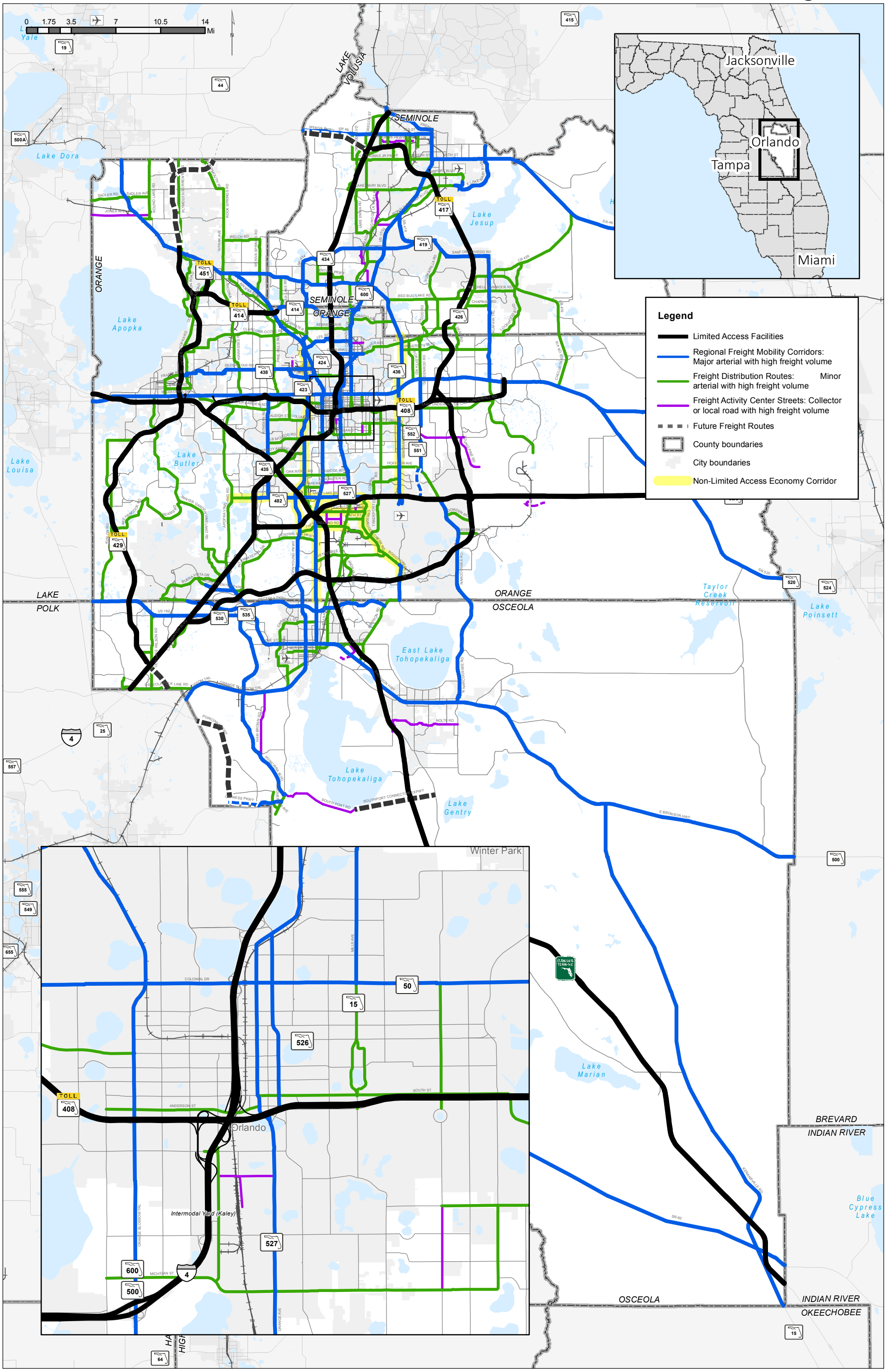


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Figure C2

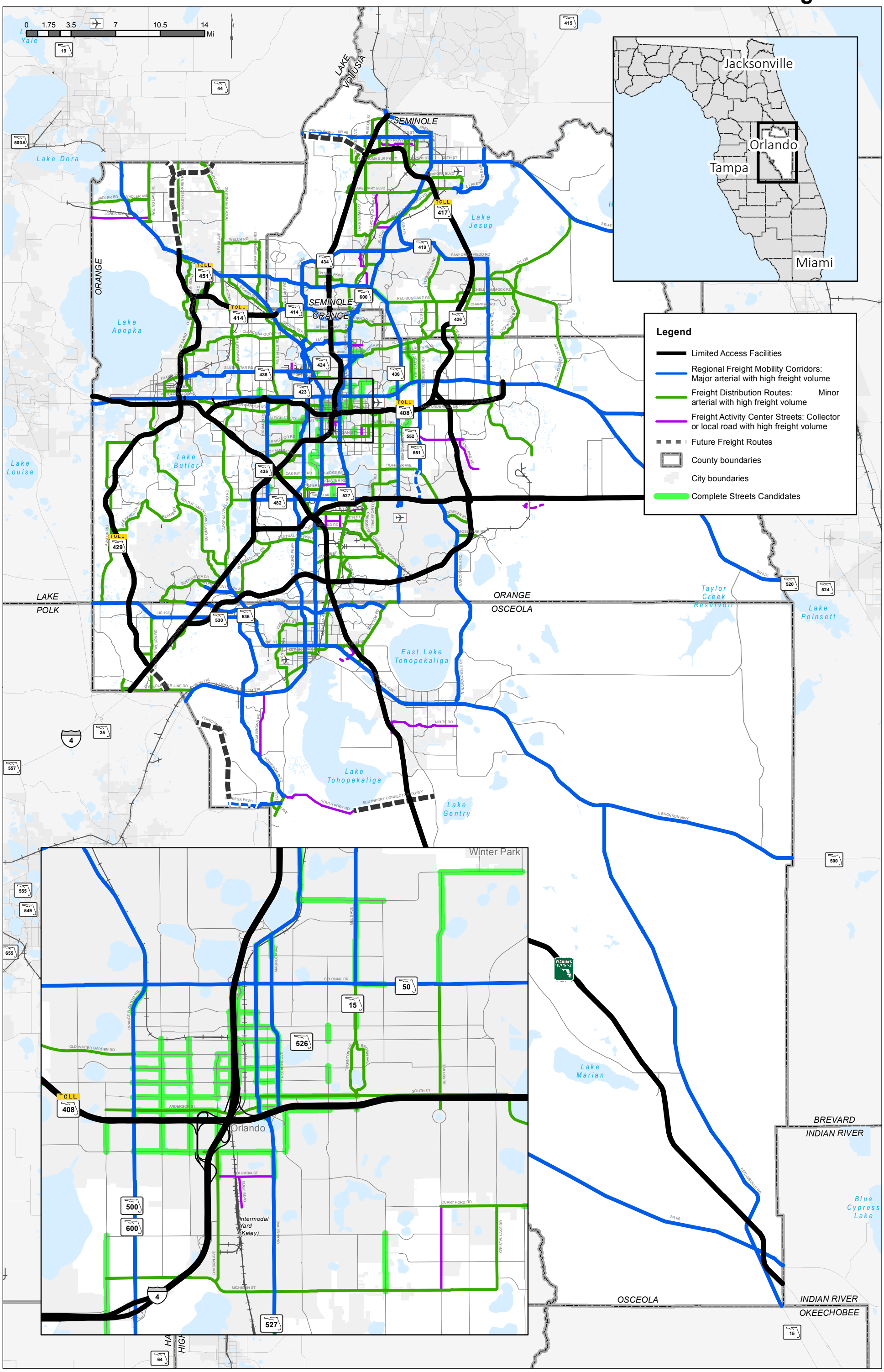
0 1.75 3.5 7 10.5 14 Mi
Jacksonville
Orlando
Tampa
Miami
Legend
Limited Access Facilities
Regional Freight Mobility Corridors: Major arterial with high freight volume
Freight Distribution Routes: Minor arterial with high freight volume
Freight Activity Center Streets: Collector or local road with high freight volume
Future Freight Routes
County boundaries
City boundaries
Complete Streets Candidates
SEMINOLE
ORANGE
LAKE
POLK
OSCEOLA
BREVARD
INDIAN RIVER
OKEECHOBEE
Lake Dora
Lake Apopka
Lake Louisa
Lake Butler
Lake Jesup
East Lake Tohopekaliga
Lake Tohopekaliga
Lake Gentry
Lake Marian
Taylor Creek Reservoir
Lake Poinsett
Blue Cypress Lake
Winter Park
Orlando
Intermodal Yard (Kaley)
LAKE VOLUSIA
SOUTH PORT RD
SOUTHPORT CONNECTOR PKWY
E BRONSON HWY
NOLTE RD
CURRY FORD RD
SR 520
SR-60
KENANSVILLE RD
COLONIAL DR
OLD WINTER GARDEN RD
SOUTH ST
ANDERSON ST
COLUMBIA ST
MICHIGAN ST

Figure C3

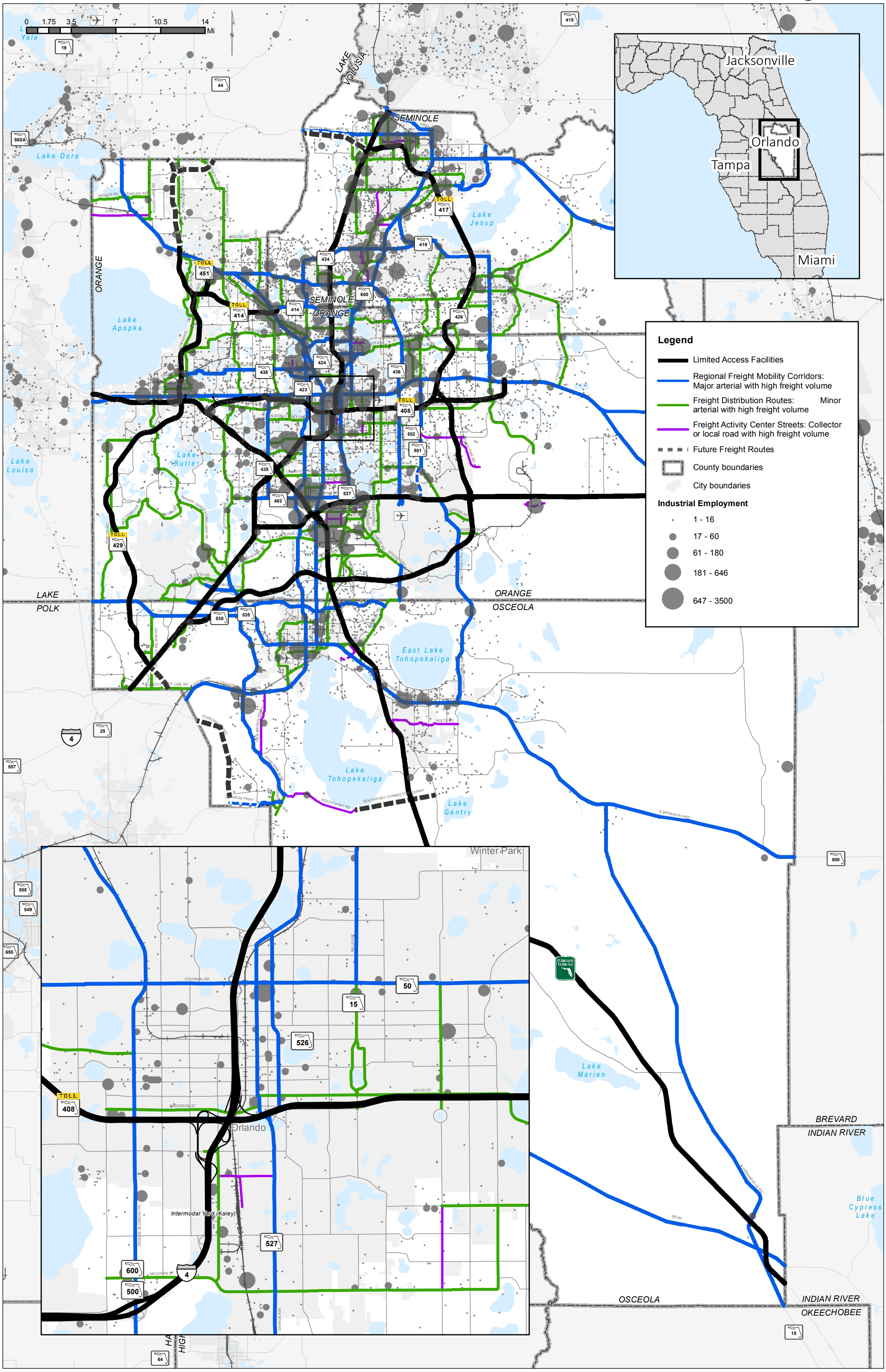

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Figure C4

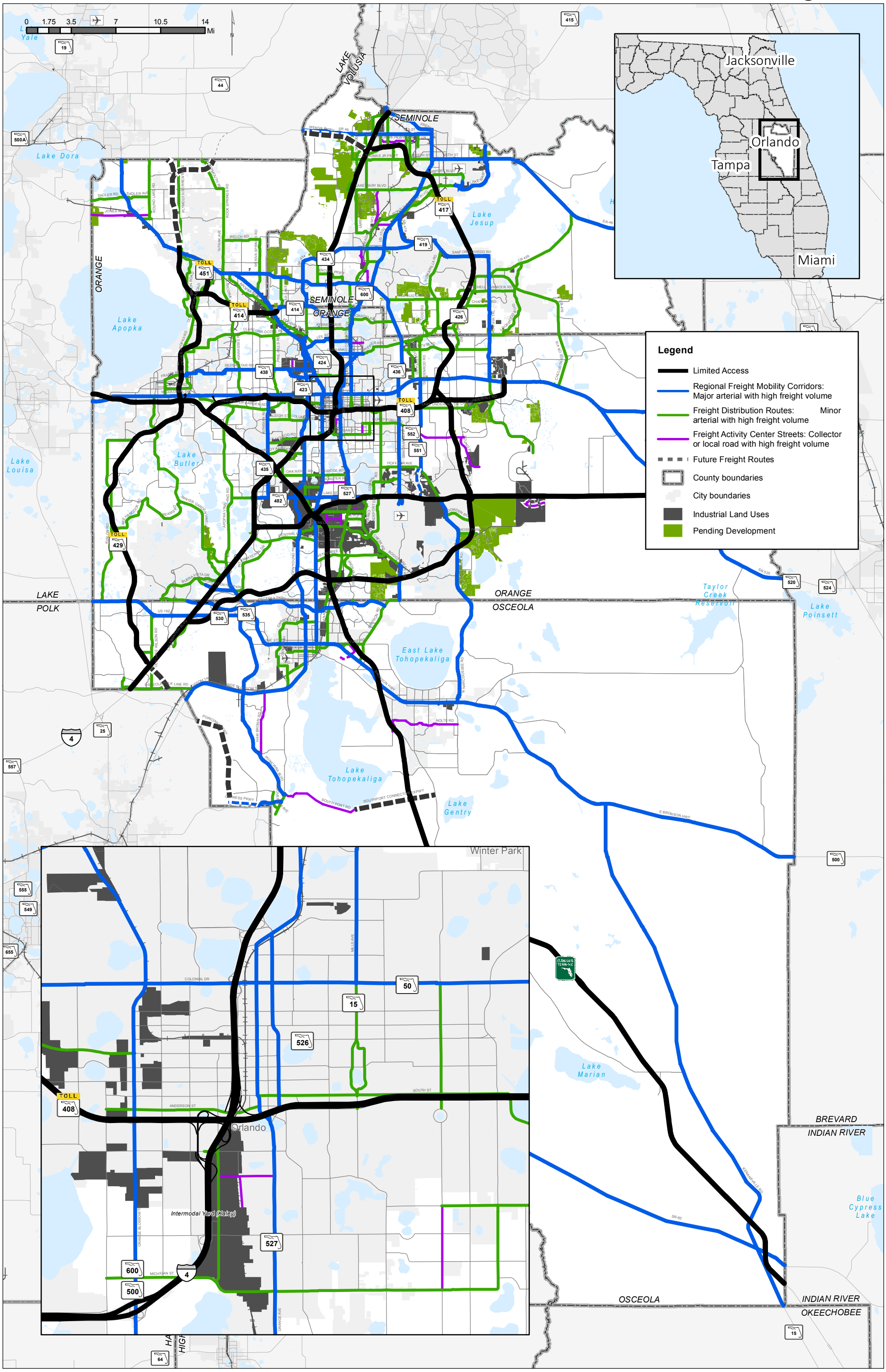

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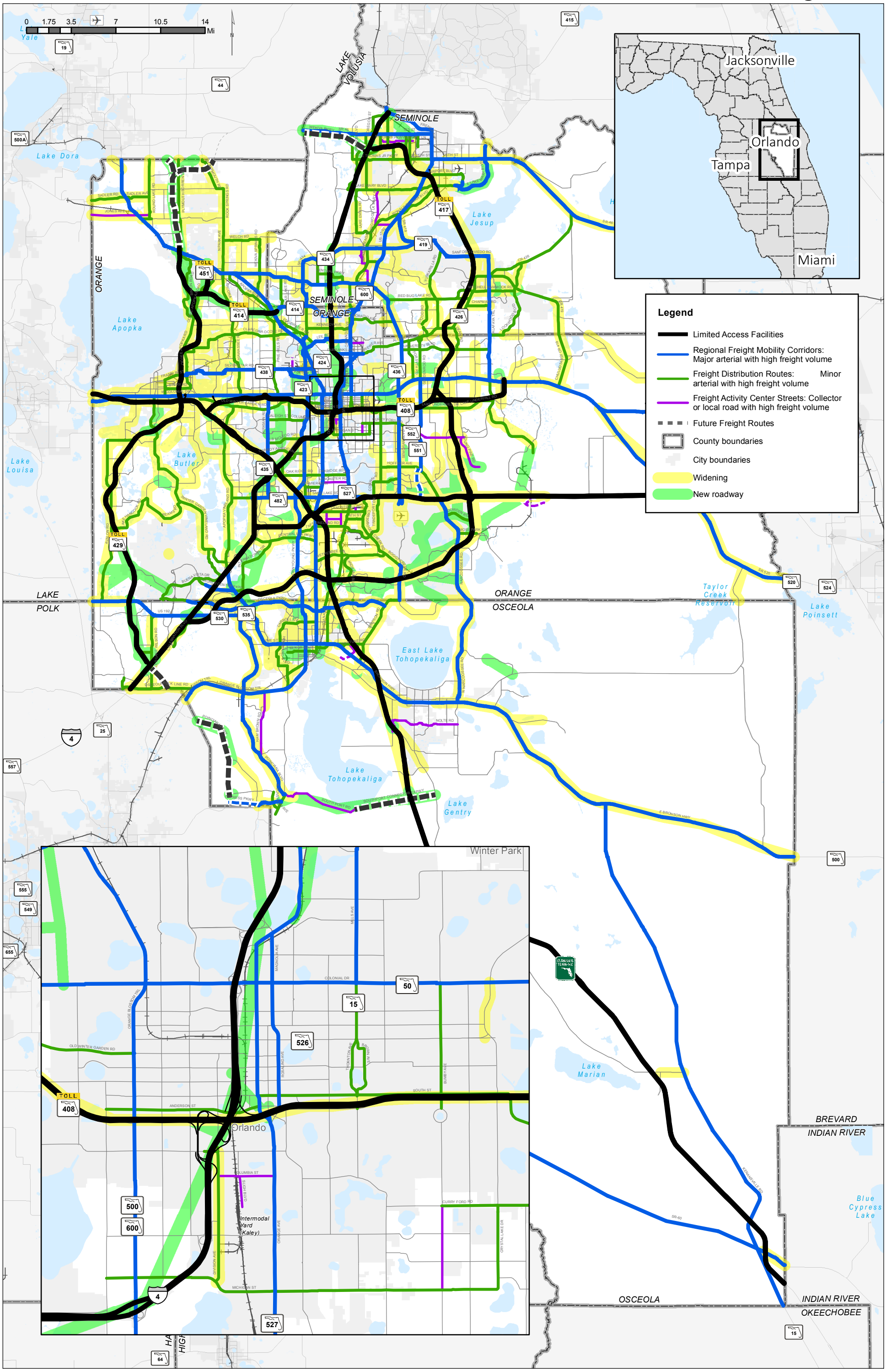
Figure C5



metroplan orlando
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Figure C6

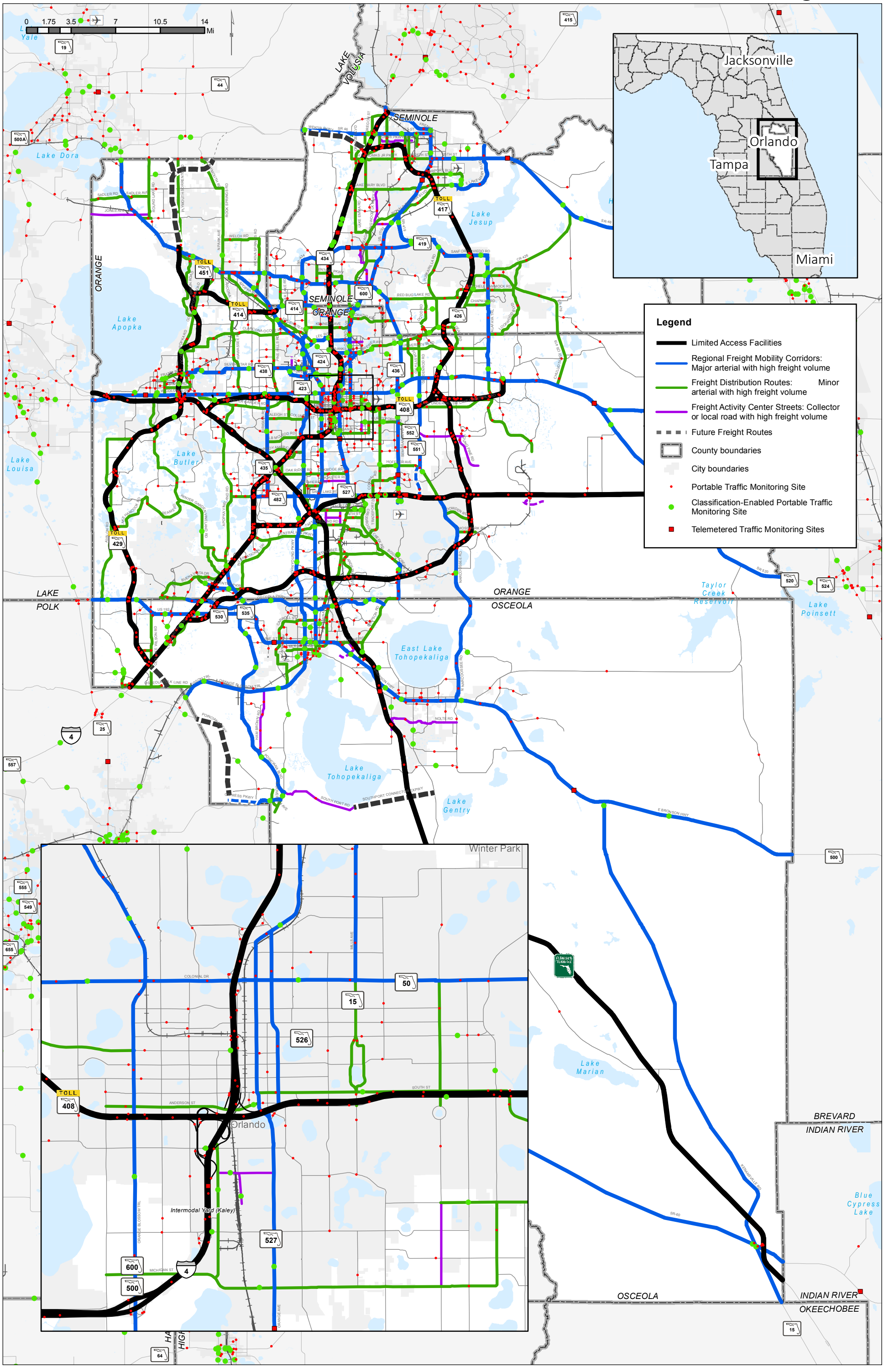

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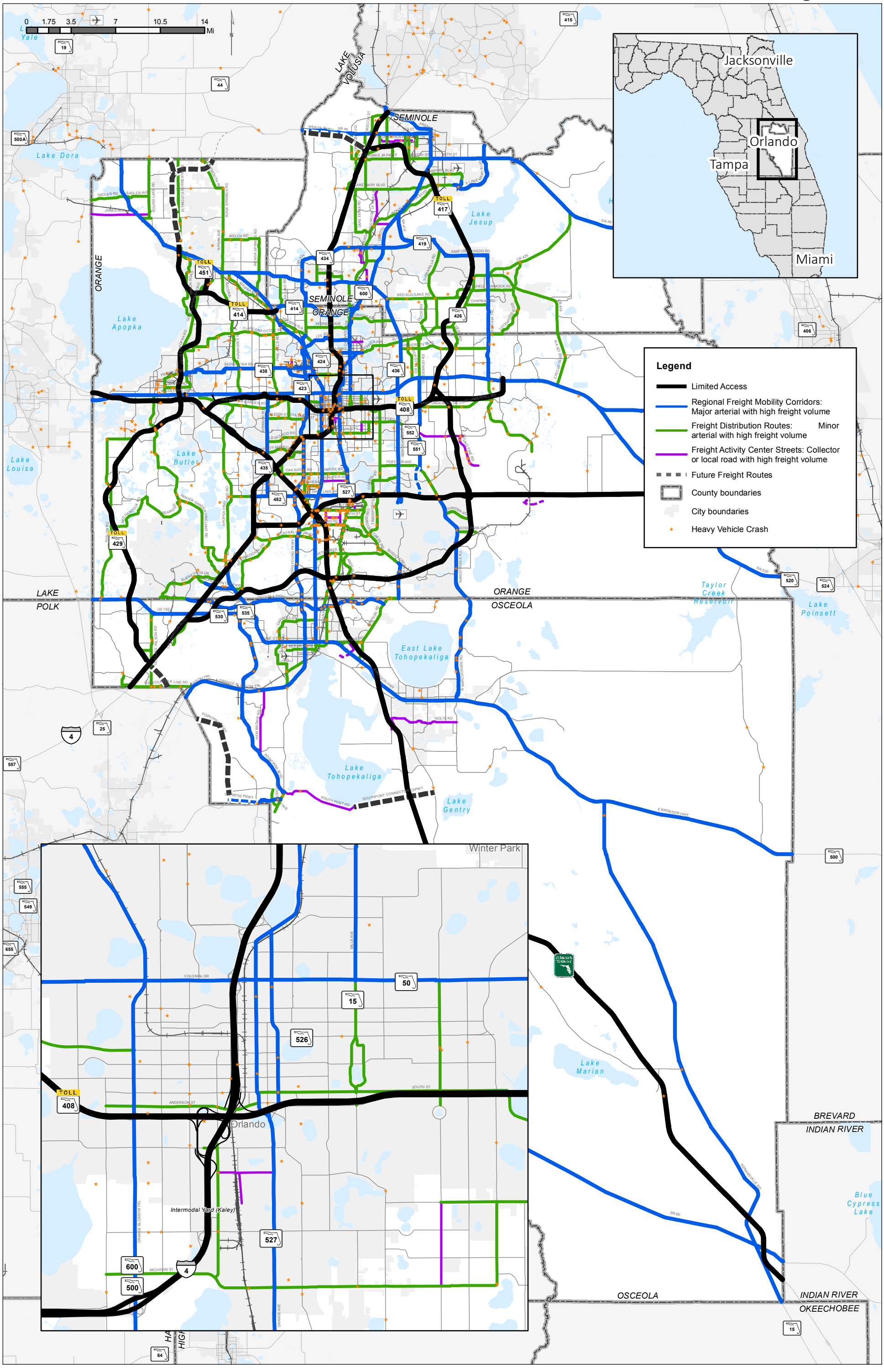
Figure C7



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APPENDIX D: POTENTIAL COMPLETE STREETS

OWNER	ROADWAY NAME	FROM	TO
ORLANDO	AMELIA ST	HUGHEY AVE	ORANGE AVE
FDOT	ANDERSON ST	DELANEY AVE	SUMMERLIN AVE
FDOT	ANDERSON ST	ORANGE AVE	MAGNOLIA AVE
FDOT	ANDERSON ST	ROSALIND AVE	SR 408
ORLANDO	ANDERSON STREET	ORANGE BLOSSOM TRL	DIVISION AVE
ORLANDO	BRUTON BLVD	VINELAND RD	COLUMBIA ST
ORLANDO	BUMBY AVE	COLONIAL DR	CORRINE DR
ORLANDO	CENTRAL BLVD	DIVISION AVE	N MAGNOLIA AVE
ORLANDO	CENTRAL BLVD	ORANGE BLOSSOM TRL	WESTMORELAND DR
ORLANDO	CHURCH ST	DIVISION AVE	HUGHEY AVE
ORLANDO	CHURCH ST	JOHN YOUNG PKWY	SR 408
ORLANDO	CHURCH ST	ORANGE AVE	N MAGNOLIA AVE
ORLANDO	CHURCH ST	ORANGE BLOSSOM TRL	PARRAMORE AVE
FDOT	COLONIAL DR	MILLS AVE	FERNCREEK AVE
ORLANDO	COLUMBIA ST	BRUTON BLVD	JOHN YOUNG PKWY
ORANGE CO.	COLUMBIA ST	RALEIGH ST	IVEY LN
ORANGE CO.	CONROY AMERICANA RD	TEXAS AVE	RIO GRANDE AVE
ORLANDO	CORRINE DR	BUMBY AVE	GENERAL REES AVE
ORANGE CO.	CURRY FORD RD	CONWAY GARDENS RD	CONWAY RD
ORLANDO	DELANEY AVE	GORE ST	ANDERSON ST
ORLANDO	DIVISION AVE	COLUMBIA ST	ANDERSON STREET
ORLANDO	DIVISION AVE	SOUTH ST	MILLS AVE
FDOT	FAIRBANKS AVE	DENNING AVE	PENNSYLVANIA AVE
ORLANDO	FERN CREEK AVE	MICHIGAN ST	KALEY ST
ORANGE CO.	FORSYTH RD	COLONIAL DR	ALOMA AVE
ORLANDO	GARLAND AVE	CHURCH ST	MILLS AVE
ORLANDO	GARLAND AVE	LIVINGSTON ST	COLONIAL DR
ORLANDO	GARLAND AVE	ROBINSON ST	WASHINGTON ST
ORANGE CO.	GORE ST	DIVISION AVE	MAGNOLIA AVE
ORANGE CO.	GORE ST	ORANGE BLOSSOM TRL	I-4
ORLANDO	GRAND NATIONAL DR	VANGUARD ST	INTERNATIONAL DR

OWNER	ROADWAY NAME	FROM	TO
ORANGE CO.	HOLDEN AVE	RIO GRANDE AVE	ORANGE BLOSSOM TRL
ORANGE CO.	HOLDEN AVE	TEXAS AVE	RIO GRANDE AVE
FDOT	HUGHEY AVE	HUGHEY AVE	GARLAND AVE
ORLANDO	HUGHEY AVE	AMELIA ST	SOUTH ST
ORLANDO	LIVINGSTON ST	GARLAND AVE	MAGNOLIA AVE
FDOT	MAGNOLIA AVE	COLUMBIA ST	GORE ST
FDOT	MAGNOLIA AVE	MARK ST	ORANGE AVE
FDOT	MAGNOLIA AVE	MILLS AVE	LAKE SUE AVE
FDOT	MAGNOLIA AVE	VIRGINIA DR	PRINCETON ST
FDOT	MILLS AVE	COLONIAL DR	VIRGINIA DR
FDOT	ROBINSON ST	DIVISION AVE	N MAGNOLIA AVE
FDOT	MILLS AVE	LIVINGSTON ST	AMELIA ST
FDOT	WASHINGTON ST	OLD WINTER GARDEN RD	PARRAMORE AVE
FDOT	MILLS AVE	WEBSTER AVE	LEE RD
WINTER PARK	MINNESOTA AVE	MILLS AVE	DENNING AVE
WINTER PARK	MORSE BLVD	DENNING AVE	PARK AVE
ORLANDO	ROSALIND AVE	ANDERSON ST	MAGNOLIA AVE
ORANGE CO.	OLD CHENEY HWY	COLONIAL DR	COLONIAL DRIVE
FDOT	ORANGE AVE	AMELIA ST	LIVINGSTON ST
FDOT	ORANGE AVE	GARLAND AVE	SR 50
FDOT	ORANGE AVE	SR 408	CHURCH ST
FDOT	ORANGE BLOSSOM TRL	AMELIA ST	W COLONIAL DR
FDOT	ORANGE BLOSSOM TRL	SR 408	ANDERSON STREET
ORLANDO	ORANGE CENTER BLVD	GOLDWYN AVE	SR 423
ORLANDO	PARRAMORE AVE	GORE ST	ROBINSON ST
ORANGE CO.	PINE HILLS RD	SR 408	W COLONIAL DR
ORANGE CO.	POWERS DR	SR 408	BALBOA DR
ORLANDO	RAPER DAIRY RD	SEMORAN BLVD	OXALIS DR
ORLANDO	RIO GRANDE AVE	GORE ST	SR 408
ORANGE CO.	RIO GRANDE AVE	OAK RIDGE RD	CONROY AMERICANA RD
ORANGE CO.	SILVERSTAR ROAD	ORANGE BLOSSOM TRL	RIO GRANDE AVE
ORANGE CO.	RIO GRANDE AVE	TEXAS AVE	KALEY AVE/21 ST

OWNER	ROADWAY NAME	FROM	TO
ORLANDO	SOUTH ST	DIVISION AVE	ORANGE BLOSSOM TRL
ORLANDO	SOUTH ST	HUGHET AVE	ORANGE AVE
ORLANDO	SUMMERLIN AVE	CHURCH ST	CENTRAL BLVD
ORLANDO	SUMMERLIN AVE	ROBINSON ST	LIVINGSTON ST
ORANGE CO.	TEXAS AVE	CONROY AMERICANA RD	HOLDEN AVE
ORLANDO/ ORANGE CO.	VIRGINIA DR	ORANGE AVE	FERNCREEK AVE
ORANGE CO.	W COLONIAL DR	HASTINGS ST	KIRKMAN RD
WINTER PARK	WEBSTER AVE	MILLS AVE	DENNING AVE
ORLANDO	WESTMORELAND DR	GORE ST	ROBINSON ST
ORANGE CO.	WINEGARD RD	SAND LAKE RD	LANCASTER RD
ORANGE CO.	WYMORE RD	LEE RD	KENNEDY BLVD

APPENDIX E: FREIGHT NETWORK PROJECT OPPORTUNITIES

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
75000001			UNIVERSITY BLVD	0.0	2.2	FDR										
75000002			WEKIVA SPRINGS RD	0.0	1.6	FDR	P		I	I						
75000005			PLYMOUTH SORRENTO RD	0.1	4.4	FDR		P								
75000006			ROUND LAKE RD	3.6	3.7	FDR	✓	P								
75000007			SADLER AVE	0.0	1.7	FDR	✓	I				✓				
75000009			LAKE MEADOW RD	0.0	3.4	FDR	✓	✓								
75000012			APOPKA VINELAND RD	0.0	7.8	FDR		✓								
75000013			SLIGH BLVD	0.0	0.3	FACS										
75000016			LANCASTER RD	0.0	1.8	FACS										
75000017			TAFT VINELAND RD	2.0	2.0	FDR	P	P		P		P		P		
75000018			SINDEY HAYES RD	0.0	1.0	FACS										
75000019			DIVISION AVE	0.0	1.2	FDR	P	P								P
75000024			APOPKA/VINELAND RD	0.0	0.6	FDR				I						
75000032			FORSYTH RD	0.0	2.8	FDR										P
75000034			UNIVERSITY BLVD	0.0	2.5	FDR				I						
75000037			ANDERSON ST	0.0	1.4	FDR				I						P
75000065			9TH ST	0.1	0.6	FDR		P								
75000068			H M BOWNESS RD	0.0	0.8	FDR	✓									
75000082			LAKE HANCOCK RD	0.0	3.9	FDR	P	I								
75000091			MERCY DR	2.1	2.4	FUTR		✓		I						
75000108			WEBSTER AVE	0.0	0.9	FACS										P
75000116			IVEY LN	1.2	1.3	FDR										
75000118			BRADSHAW RD	0.0	1.0	FACS		I		I						

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
75000120			WEKIVA SPRINGS RD	0.0	1.5	FDR	P									
75000125			APOPKA VINELAND RD	0.0	0.0	FDR	✓	P								
75000126			WELCH RD	0.0	2.6	FDR	✓									
75000134			TAYLOR CREEK RD	0.0	5.4	FDR										
75000139			CONROY AMERICANA RD	0.0	1.7	FDR		P								P
75000152			SAND LAKE RD	0.0	1.4	FDR		P		I	P					
75000156			OAK RIDGE RD	0.0	0.8	FDR										
75000157			PONKAN RD	0.0	0.6	FDR	✓									
75000182			COLUMBIA ST	0.0	0.5	FACS				I						
75000184			ROSALIND AVE	0.0	0.7	RFMC										P
75000192			COLUMBIA ST	1.3	1.7	FDR		P		I						P
75000196			MILLENIA BLVD	0.0	1.7	FDR										
75000197			MILLENIA BLVD	0.9	0.9	FDR										
75000216			PREMIER ROW	0.0	0.9	FDR										
75000225			WETHERBEE RD	0.6	2.8	FDR	✓									
75000231			ALAFAYA TRL	0.0	5.6	FDR	P	P		P						
75000260			CONWAY RD	0.0	0.0	FDR				I						
75000265			TRADEPORT DR	0.0	3.1	FDR	✓	P				✓				
75000266			TRADEPORT DR	0.0	2.1	FDR		I		I		✓				
75000267			LEE VISTA BLVD	0.0	0.8	FDR		I	I	I						
75000269			LANDSTAR BLVD	0.0	3.0	FDR	✓	P		I						
75000270			LANDSTAR BLVD	0.0	0.5	FDR	P									
75000274			WETHERBEE RD	0.0	2.2	FDR	P	P		P						
75000279			INTERNATIONAL DR	0.0	5.0	FDR		P		P						
75000288			MC CULLOCH RD	0.0	1.0	FDR	✓									
75000302			LANDSTREET RD	0.0	1.0	FDR				I	P	P			P	

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
75000304			LAKE UNDERHILL RD	0.0	2.6	FDR	P			I						
75000313	CR 435		APOPKA VINELAND RD	0.0	2.7	FDR	✓									
75000316			GOLDENROD RD	0.0	2.1	FUTR		P		P			✓			
75000319			TAFT VINELAND RD	0.0	1.2	FDR	✓			I	✓	✓		✓		
75000321			TILDEN RD	0.5	0.7	FDR	✓									
75000322			YOUNG PINE RD	1.6	1.7	FACS	✓	✓								
75000323			BUENA VISTA DR	3.1	3.2	FDR										
75000325			EPCOT CENTER DR	3.1	3.1	FDR										
75000369			PRESIDENTS DR	0.0	2.6	FDR		I								
75000370			PREMIER ROW	0.0	0.3	FDR		I								
75000380			AEROSPACE PKWY	0.0	0.7	FUTR		I		I				I		
75000414			DOWDEN RD	0.0	1.9	FDR	P									
75000435			OVERLAND RD	0.0	1.1	FDR	✓									
75000437			WETHERBEE RD	0.4	0.6	FDR										
75002000			BEACHLINE	4.6	30.3	LAF		P		✓	P	P	P			
75003000			SEMORAN BLVD	11.1	11.1	RFMC	P	✓		P	P	P	P			
75003001		SR 436	JEFF FUQUA BLVD	0.0	0.5	RFMC	✓	I				✓				
75003002		SR 436	JEFF FUQUA BLVD	0.0	0.5	RFMC	✓					✓				
75006000			FAIRBANKS AVE	0.0	1.6	RFMC				P						P
75008000		SR 408	SR 408	0.4	13.7	LAF	P			P		P	P		P	
75008160		SR 408	SR 408	0.0	6.2	LAF		✓		P		P	✓			
75008170			SR 408	1.4	1.4	LAF	P			P		P				
75010000			ORANGE BLOSSOM TRL	0.0	7.1	RFMC	P	P		P	P	P	P			P
75011000			MAITLAND BLVD	0.0	2.5	RFMC		✓		✓			P			
75011001			FOREST CITY RD	38.4	38.5	RFMC		P					P			
75011002			MAITLAND BLVD	36.0	36.2	RFMC							✓			

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
75012000			CURRY FORD RD	1.3	1.3	FDR		P		P						
75012500			CURRY FORD RD	0.5	1.0	FDR		P								P
75013000			MICHIGAN ST	0.0	3.6	FDR				I						
75016500			CRYSTAL LAKE DR	0.7	0.7	FDR										
75020000			ORANGE BLOSSOM TRL	7.6	14.8	RFMC	P	P	P	P			✓			
75021500			BUMBY AVE	1.0	1.3	FACS										
75021501			BUMBY AVE	0.9	1.6	FDR										
75030000			FAIRBANKS AVE	5.4	5.4	RFMC		P	I	P		✓	✓			P
75032500			CLARCONA OCOEE RD	0.0	2.9	FDR	P	P								
75032501			CLARCONA OCOEE RD	0.1	0.3	FDR			I							
75035000			KISSIMMEE VINELAND RD	0.0	0.0	FDR		P								
75035001			KISSIMMEE VINELAND RD	0.0	2.3	RFMC		✓		✓			P			
75037000			ALAFAYA TRL	3.1	3.1	RFMC		✓				✓	✓			
75039000		SR 536	WORLD CENTER PKWY	0.0	2.0	RFMC				✓						
75040000			ORANGE AVE	4.7	4.8	FDR		P	P	P			✓			P
75040001	CR 527		ORANGE AVE	5.4	5.5	FDR	P		I	I						
75040002	CR 527		ORANGE AVE	2.9	3.8	FDR										
75040102		SR 527	ORANGE AVE	0.0	0.5	RFMC										P
75050000		SR 50	W COLONIAL DR	0.5	2.5	RFMC		P I	P	P I		P	P			P
75060000		SR 50	COLONIAL DR	0.0	4.5	RFMC		P I	P	✓		✓	✓			P
75070000			N ROCK SPRINGS RD	2.5	2.6	FDR	✓									
75080000			E BOGGY CREEK RD	0.0	0.0	FDR	✓	P				P				P
75080102			MILLS AVE	0.0	0.7	FDR						✓				P
75080103			MILLS AVE	0.0	0.0	FDR						P				
75090000			FAIRBANKS AVE	0.0	0.0	FDR		P	P				P			
75100000	CR 419		CHULUOTA RD/ CR 419	0.0	3.7	FDR	✓	✓ I	I	I						

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
75110000	CR 545		AVALON RD	12.1	12.6	FDR	✓	✓								
75120000		SR 436	SEMORAN BLVD	0.3	0.3	RFMC						P	P			
75120001		SR 436	SEMORAN BLVD	0.2	0.2	RFMC						P				
75140000			SR 520	18.2	18.2	RFMC						✓	✓			
75170000	CR 448		SADLER RD	0.0	2.4	FDR	✓	✓				P				
75180000			FRANKLIN ST	0.0	0.0	FDR	P	P								
75190000			LEE RD	3.2	6.4	RFMC	P	P		✓		P	P			
75190001		SR 423	JOHN YOUNG PKWY	39.1	39.8	RFMC		✓				✓				
75190002			JOHN YOUNG PKWY	37.8	40.0	RFMC	✓	✓								
75190003	CR 423		JOHN YOUNG PKWY	2.7	4.3	RFMC	P	✓		I						
75190501			JOHN YOUNG PKWY	0.0	2.2	RFMC		P				P				
75200000			GOLDENROD RD	0.0	9.4	FDR		P		P			P			
75205000		SR 551	PALMETTO AVE	0.0	0.3	FDR										
75220000		SR 530	US 192	0.0	1.7	RFMC	P	P		✓		P				
75230000			FRANKLIN ST	7.1	7.1	RFMC		✓					✓			
75230500			OLD WINTER GARDEN RD	0.0	0.9	FDR	P									
75242000		SR 434	JOHN YOUNG PKWY	0.0	0.5	RFMC		✓				P				
75250000			SILVER STAR RD	3.0	3.1	RFMC		P		P			P			
75250001		SR 438	PRINCETON ST	0.1	0.1	FDR				P						
75250002		SR 438	SMITH ST	0.9	1.0	FDR										
75250003			SILVER STAR RD	0.0	0.0	RFMC										
75251000			ORANGE BLOSSOM TRL	2.2	2.2	RFMC				I			✓			
75260000		SR 434	FOREST CITY RD	6.9	7.0	FDR	P	P		P		P				
75270000			KIRKMAN RD	7.1	7.1	RFMC							P			
75280000			I-4	0.0	2.7	LAF		P	P	✓		P		✓	P	
75300000		SR 417	SR 417	0.1	1.4	LAF	P	P		✓		✓	✓			

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
75301000			SR 417	0.0	20.0	LAF		✓		✓		✓	✓		P	
75320000			SR 429	36.5	36.7	LAF	P	✓				✓				
75320100		SR 429	SR 429	0.0	1.4	LAF		P								
75340000			SR 429	6.6	6.6	LAF	P	P					✓			
75470000			TURNPIKE	0.0	7.8	LAF	P	P		✓		P				
75471000			BEACHLINE	8.2	8.2	LAF		✓		✓		✓			P	
75472000			SR 417	0.0	2.2	LAF				✓		P	P			
75473000		SR 429	SR 429	2.1	2.6	LAF		P				P				
75473800		SR 429	SR 429	0.0	5.3	LAF						✓	✓			
75474000		SR 408	SR 408	0.0	0.8	LAF	P					P				
75500000			APOPKA BLVD	9.8	9.8	FDR	P					P				
75503000			UNIVERSITY BLVD	0.0	2.6	FDR										
75505500			LB MCLEOD RD	0.0	2.5	FDR										
75506502			REAMS RD	1.7	1.9	FDR	P	P								
75509000			STORY RD	1.8	2.0	FDR	✓	P I								
75510500			LAKE UNDERHILL RD	1.1	1.5	FDR										
75510501			LAKE UNDERHILL DR	0.0	2.5	FDR	P	P								
75511000			JONES AVE	0.0	3.2	FACS	P	P				P				
75514000			OSCEOLA PKWY	0.0	1.8	FDR						✓				
75515000			JOHN YOUNG PKWY	0.0	5.0	RFMC		P			P					
75518000			ALAFAYA TRL	0.0	1.4	FDR										
75520000			OCOEE-APOPKA ROAD	0.0	2.5	FDR	✓	P								
75523000			CENTRAL FLA PKWY	0.0	4.6	FDR	✓	P				P				
75570000	CR 427		MAITLAND AVE	0.0	1.3	FDR	P									
75580000	CR 528		LANDSTREET RD	5.6	7.9	FDR	P				P	P				
75590000	CR 435		CLARCONA	7.9	8.0	FDR	✓	P								

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
75600000			HANSEL AVE	-	-	FDR	P	P		I						
75620000	CR 425		CURRY FORD RD	5.5	13.0	FACS		✓								
75630500			MOSS PARK RD	0.0	1.3	FDR										
75660500			BOGGY CREEK RD	1.0	2.5	FDR		✓	✓	P	P	✓			P	
75660501			CR530/BOGGY CREEK RD	0.0	4.2	FDR		P	✓	P	P	✓			P	
75660502			4TH ST	0.8	0.9	FDR	✓									
75680000			BUMBY AVE	0.0	0.5	FDR										
75690000	CR 431		PINE HILLS RD	0.0	1.8	FDR										
75690500			PINE HILLS RD	0.0	3.3	FDR	P									
75703000	CR 438A		KENNEDY AVE	0.0	0.0	FDR	✓	P	P	P						
75706000			HORATIO AVE	1.4	1.4	FDR										
75900003			THORPE RD	0.0	1.0	FACS		I	I	I						
77000003			PERSIMMON AVE	0.0	0.9	FDR										
77000004			INTERNATIONAL PKWY	0.0	2.3	FDR										
77000005	CR 4237		LAKE EMMA RD	2.2	3.0	FDR	P									
77000006			LONGWOOD LK MARY RD	0.0	0.0	FDR										
77000009			NORTH ST	2.7	3.0	FACS										
77000010	CR 4247		PALM SPRINGS RD	2.4	2.4	FDR										
77000021			CHAPMAN RD	1.3	1.5	FDR	✓									
77000032			LONGWOOD HILLS RD	1.8	2.3	FDR								I		
77000059			DODD RD	0.0	1.9	FDR	P									
77000064	CR 4143		MONTGOMERY RD	0.2	1.6	FDR										
77000077	CR 4242		DOG TRACK RD	0.7	0.7	FDR	✓									
77000085			CR 426	0.0	5.7	FDR	P									
77000100			RED BUG LAKE RD	0.0	1.5	FDR										
77000109			HOWELL BRANCH RD	0.0	0.6	FDR			I							

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
77000147	CR 4209		AIRPORT BLVD	0.0	2.5	FDR	✓									
77000210			E LAKE MARY BLVD	0.0	2.7	RFMC	P					P				
77000212			LYMAN RD	0.4	1.2	FACS				I						
77000216			GENERAL HUTCHINSON	1.0	1.0	FACS										
77000221			MITCHELL HAMMOCK RD	0.0	0.0	FDR	P		P							
77000222			CENTRAL PKWY	0.0	1.9	FDR										
77000225			MLK JR BLVD	0.8	1.3	FDR										
77000249			BENNETT DR	0.0	1.1	FACS										
77002000			MAITLAND BLVD	36.8	36.8	RFMC							✓			
77010000		SR 15	US 17/92	1.6	3.4	RFMC		P		✓ I		✓	✓			
77010101		SR 15	US 17/92	0.0	0.4	RFMC						✓				
77020000			ORANGE BLOSSOM TRL	0.0	0.0	RFMC			I							
77030000			SR 46	0.1	0.1	RFMC		P	P	✓			P	P		
77040000	CR 527		FAIRBANKS AVE	5.3	6.5	RFMC		✓		✓						
77040100		SR 46	SR 46	0.5	1.2	RFMC										
77060000	CR 426		CR 426	7.0	8.5	FDR	P	P	P	P			P			
77070000		SR 419	SANFORD OVIEDO RD	5.1	8.2	RFMC	P	P		P		P	P			
77070001		SR 419	SANFORD OVIEDO RD	0.0	0.1	RFMC						✓				
77070003		SR 419	SANFORD OVIEDO RD	0.4	0.5	RFMC						✓				
77070500			CR 419	0.0	7.0	FDR	P	P	P							
77080000		SR 436	SEMORAN BLVD	7.3	11.6	RFMC		P	P	✓		✓	✓			P
77120000		SR 434	SR 434	9.3	9.6	RFMC	P	✓	P	P		✓	✓			
77120001		SR 434	SR 434	0.0	1.8	RFMC	✓					✓		I		
77130500	CR 4281		TUSKAWILLA RD	3.3	5.6	FDR	P	P	I	I						
77160000			I-4	0.0	0.0	LAF		P	P	✓		P		P	P	
77161000		SR 415	SR 415	0.0	0.9	RFMC	✓	✓		✓		✓				

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
77170000		SR 434	ALAFAYA TRL	0.0	1.9	RFMC	P	P		P		P	P			
77250000			DEAN RD	0.0	0.6	FDR	✓	✓								
77470000			SR 417	0.0	0.0	LAF	✓	P		✓		P	P	P		
77501000			RED BUG LAKE RD	0.0	0.8	FDR		P								
77502000	CR 4220		LAKE MARY BLVD	4.9	5.8	FDR	P					P				
77502001			RED CLEVELAND BLVD	0.0	0.8	RFMC				I		P				
77505000			GREENWOOD BLVD	0.0	0.0	FDR	P	P	P	P						
77507000			HOWELL BRANCH RD	0.0	0.0	FACS	P									
77510000	CR 427		MAITLAND AVE	0.0	0.0	FDR	✓					P				
77520000	CR 425		W AIRPORT BLVD	1.3	3.5	FDR	✓									
77530000	CR 15		MONROE RD	4.9	7.7	FDR	P									
77540000	CR 431		ORANGE BLVD	0.0	1.3	FDR										
77540500			ORANGE BLVD	2.1	2.9	FDR										
77590000	CR 46A		MARKHAM RD	7.3	7.3	FDR	P	P	I	P						
77631500			BEAR LAKE RD	0.0	0.1	FDR										
92000032			SOUTH PORT RD	0.0	5.3	FACS	P	P								
92000038			BILL BECK BLVD	0.0	1.0	FACS		P I								
92000041			CELEBRATION BLVD	0.0	2.2	FDR						✓				
92000049			EAST OAK ST	0.0	0.9	FDR	P	✓								
92000050			CYPRESS PKWY	0.0	1.7	RFMC	P	✓								
92000054			HOAGLAND BLVD	0.0	1.2	FDR	P	✓		P		✓				
92000055			HOAGLAND BLVD	0.3	0.3	FDR	✓	P		✓						
92000060			MICHIGAN AVE	0.3	0.4	FDR	P	P I		I						
92000063			CHAMPIONS GATE BLVD	0.0	0.5	FDR		✓				✓				
92000069			MASTERS BLVD	0.0	0.8	FDR										
92000070			NOLTE RD	0.0	3.8	FACS										

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
92000076			POINCIANA BLVD	0.0	0.9	FDR						✓				
92000091			SINCLAIR RD	0.0	0.8	FDR	✓									
92000103			N DOVEPLUM AVE	2.9	4.2	FDR		P								
92000108			FORTUNE RD	0.0	0.3	FDR		✓								
92000119			MLK JR BLVD	0.0	1.3	FDR		P								
92010000			MAIN ST	11.1	11.8	FDR	P	✓	P	P		✓	✓			
92010100			S ORANGE BLOSSOM TRL	0.0	0.0	RFMC						P				
92020000	CR 527		ORANGE AVE	2.3	2.8	FDR	✓	✓	✓	✓		✓				
92030000		SR 500	BRONSON HWY	0.0	1.7	RFMC	P	P		P		P	P			
92040000		SR 535	VINELAND RD	0.0	1.1	RFMC	✓	✓	✓	✓			✓			
92050000	CR 15		N NARCOOSSEE RD	0.0	1.0	RFMC	✓	P				P				
92070000		SR 60	-	0.1	21.9	RFMC	P	P		P						
92090000		SR 530	VINE ST	12.1	15.4	RFMC	P			P		P	✓			
92130000		SR 400	I-4	0.0	7.9	LAF	✓	✓	✓	✓		✓		✓	✓	
92470000			TURNPIKE	0.0	0.0	LAF				P I		✓				
92471000			TURNPIKE	40.8	40.8	LAF		P		✓		✓				
92472000			SR 417	2.9	2.9	LAF				✓		P	P			
92473000		SR 429	SR 429	0.0	4.5	LAF	P	P				P				
92473800		SR 429	SR 429	0.0	4.5	LAF							✓			
92500000			OLD BOGGY CREEK RD	0.0	0.2	FDR	✓	✓ I	P I	I		✓				
92501000			MICHIGAN AVE	1.0	2.1	FDR	P	P								
92502001			CARROLL ST	0.0	0.0	FDR		✓		✓ I						
92512000			SIMPSON RD	1.2	1.3	FDR		✓	✓	✓ I						
92514000	CR 522		OSCEOLA PKWY	10.2	10.8	RFMC	P	✓		P		P				
92530000	CR 531A		CLAY ST	10.4	10.8	FDR	✓	P		P		P				
92530001			CLAY ST	0.0	0.0	FDR										

Roadway	County	State	Local Name	From MP	To MP	Desig.[1]	Travel Demand Model	2040 LRTP	Prioritized Project List	TIP	Multimodal Corridor Plan	CFL Regional Freight Mobility	Freight Eval. Network	FL Freight and Mobility Trade	National Hwy Freight Network	Complete Streets
92550000	CR 525		OLD CANOE CREEK RD	7.8	8.1	FACS	✓	✓	✓	✓						
92550002		SR 600	JOHN YOUNG PKWY	0.0	0.9	RFMC	P	P		P	✓					
92550004			KISSIMMEE PARK RD	0.2	0.2	FACS	P	✓								
92570000			OLD LAKE WILSON RD	0.0	0.0	FDR	P	P		P						
92570001			OLD LAKE WILSON RD	0.0	0.3	FDR										
92600000			HAM BROWN RD	0.0	0.0	FACS	P	✓		I						
92600001			REAVES RD	0.0	0.1	FACS		P I		P I						
92600002	CR 535		HAM BROWN RD	0.2	1.0	FACS										
92605000			POINCIANA BLVD	9.0	10.6	RFMC	P	P	I	P		✓				
92652000	CR 532		OSCEOLA POLK LINE RD	0.0	4.4	FDR	P	P		I		P				
-			WEKIVA PKWY			FUTR	✓	✓		✓		✓		✓		
-			POINCIANA PKWY			FUTR	✓	✓		✓		✓				
-			REALIGNED HOAGLAND BLVD			FUTR										
-			FL ADV MANUFACTURING DWY			FUTR										
-			BACHMAN RD			FUTR										
-			ST JOHNS PKWY			FUTR										
-			N OREGON CT			FUTR										

Desig. = Freight Network Designation, as follows:

- LAF = Limited Access Facilities
- RFMC = Regional Freight Mobility Corridors (major arterial with high freight volume)
- FDR = Freight Distribution Routes (minor arterial with high freight volume)
- FACS = Freight Activity Center Streets (collector or local road with high freight volume)
- FUTR = Future Freight Routes

P – Portion of Roadway Segment

I – Intersection and/or Interchange with Roadway Segment

✓ - Complete Roadway Segment

Sources Used in Appendix E Table

Title	Subtitle	Author	Date
Travel Demand Model	OUATS 2040	MetroPlan Orlando	February 2016
2040 Long Range Transportation Plan	Technical Report 3: Plan Development & Cost Feasible Projects, Final Adopted Plan	MetroPlan Orlando	January 2016
Prioritized Project List	Orlando Urban Area FY 2020/21 – 2039/40	MetroPlan Orlando	May 2015
Transportation Improvement Program (TIP)	FY 2015/16 - 2019/20	MetroPlan Orlando	February 2016
Multimodal Corridor Plan	Economy Corridors	Orange County	June 2014
Central Florida Regional Freight Mobility Study	Final Report	MetroPlan Orlando	October 2014
Freight Evaluation Network		FDOT District Five	Undated
Florida Freight and Mobility Trade Plan		FDOT Central Office	June 2013
National Highway Freight Network		FHWA	December 2015
Complete Streets	Suitability Analysis	MetroPlan Orlando	September 2015

APPENDIX F: PRIORITIZATION OF REGIONAL FREIGHT MOBILITY CORRIDORS

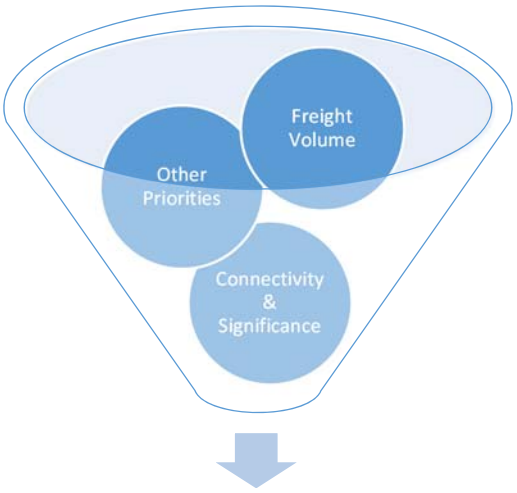
The existing and planned transportation system serving freight traffic in the MetroPlan Orlando area includes nearly 3,000 centerline miles of roadway. These roads range from interstate freeways to local streets. MetroPlan Orlando is committed to supporting and enhancing freight movement throughout Seminole, Orange, and Osceola Counties; but must focus its resources in the areas where freight mobility will be most critical. This prioritization plan assumes that analyzing the needs of limited access (freeway) facilities is done by the Florida Department of Transportation (FDOT), and that MetroPlan Orlando will work with local partners to provide input on prioritizing non-access limited roadways, including regional arterials that facilitate significant freight movement (referred to in this report as "Regional Freight Mobility Corridors").

The arterial network of Regional Freight Mobility Corridors consists of approximately 520 centerline miles of roadway. This appendix focuses on this arterial network and identifies the routes that currently serve the highest volume of freight traffic and roadway segments that serve important connectivity functions, even if their current freight volumes are smaller than in other prioritized segments. Another important consideration of the prioritization plan is the understanding that certain roadways support a relatively significant role in mobility for other modes (e.g., pedestrians, transit, etc.) through planning efforts conducted by MetroPlan Orlando and its partner agencies. As with the rest of the MetroPlan Orlando Freight Network, the objective is to provide quality freight access to commercial and industrial hubs while being sensitive to community impacts.

The prioritization process involved sorting the arterial freight routes by their existing volume of freight traffic. The highest volume segments were reviewed for conflicting priorities. High freight volume corridors that were also identified to have transit or non-motorized priorities were not included in the prioritized list, while alternate segments with lower conflicting demand were prioritized instead. The significance of the roadway for MetroPlan Orlando's communities was also evaluated. Corridors that simply pass through the three-county area (i.e., they do not connect MetroPlan Orlando communities) were not prioritized. Appendix Figure 1 illustrates this process.

The prioritized regional freight mobility corridors are listed in Appendix Table 1 and mapped in Figure F1.

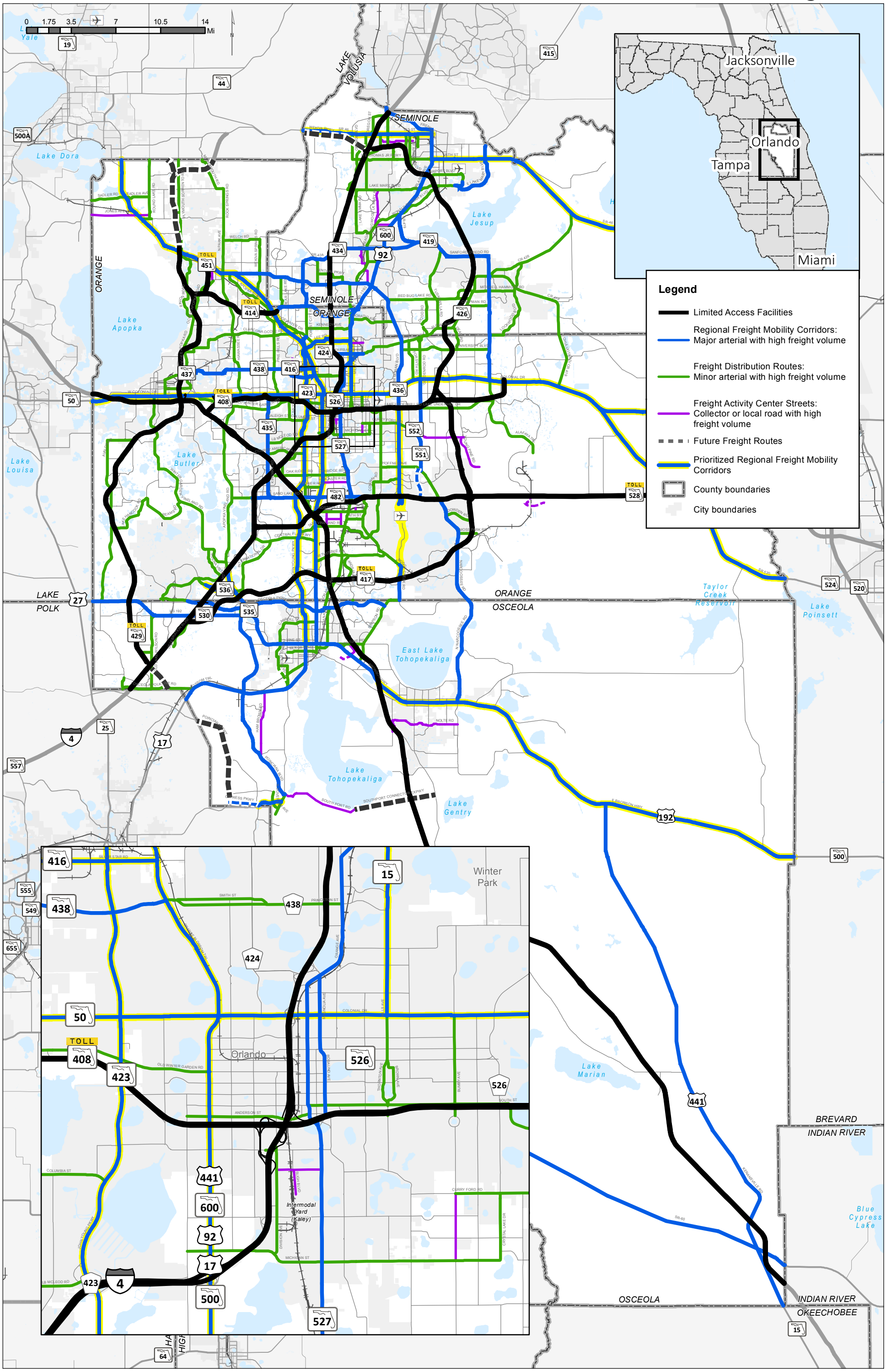
Appendix Figure 1: Prioritization Components



Appendix Table 1: Prioritized Regional Freight Mobility Corridors

Corridor	From	To	Daily Truck Volume	Notes
US 17-92	SR 423	SR 50	841	Alternative route to Orange Ave which serves more multimodal uses
SR 423/Lee Road	John Young Pkwy	US 17-92	2,900	
SR 423/John Young Parkway	Lee Rd	US 192	2,500 – 5,000	
Cypress Parkway	Pleasant Hill Rd	Polk County	4,800	An extension of this route is part of the future freight network.
US 441/Orange Blossom Trail	Lake County	SR 417	2,400 – 3,400	Could absorb additional freight traffic to off load SR 527 conflict corridor
US 192	Florida's Turnpike	Brevard County	3,200	
SR 416/Silver Star Road	SR 438	US 441	2,800	High freight volume connection to US 441
SR 436/Semoran Boulevard	OIA	SR 408	2,200	
Jeff Fuqua Road	SR 528	SR 417	N/D	Key connectivity north and south of the airport
SR 535/ Vineland Road	SR 417	I-4	2,200	Reduces VMT for EB I-4 access
SR 536/World Center Drive	SR 417	I-4	2,200	Theme park access route
SR 50/Colonial Drive	Lake County	Brevard County	1,400 – 2,100	Important east-west business access
SR 46	Lake County	US 17-92	1,900	High freight volume
SR 46	US 17-92	Volusia County	1,700	High freight volume

Figure F1


0 1.75 3.5 7 10.5 14 Mi
Jacksonville
Orlando
Tampa
Miami
Legend
Limited Access Facilities
Regional Freight Mobility Corridors: Major arterial with high freight volume
Freight Distribution Routes: Minor arterial with high freight volume
Freight Activity Center Streets: Collector or local road with high freight volume
Future Freight Routes
Prioritized Regional Freight Mobility Corridors
County boundaries
City boundaries
SEMINOLE
ORANGE
LAKE
POLK
OSCEOLA
BREVARD
INDIAN RIVER
OKEECHOBEE
Lake Dora
Lake Apopka
Lake Louisa
Lake Butler
Lake Jesup
East Lake Tohopekaliga
Lake Tohopekaliga
Lake Gentry
Lake Marian
Taylor Creek Reservoir
Lake Poinsett
Blue Cypress Lake
Winter Park
Orlando
Intermodal Yard (Kaley)