CONNECTING THE **BLOCKS**

CITY OF FORT LAUDERDALE

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EXECUTIVE SUMMARY

"OUR GOAL IS TO BECOME A FULLY CONNECTED CITY OF TOMORROW—A CITY THAT IS ANCHORED BY MOBILITY AND WALKABILITY; A CITY THAT IS PEDESTRIAN FRIENDLY; A CITY THAT DEPENDS LESS ON VEHICLES AND RELIES MORE ON ALTERNATIVE MODES OF TRANSPORTATION."

— City of Fort Lauderdale, 2013 "Game Plan"

"EVERY TRANSPORTATION AGENCY … HAS THE RESPONSIBILITY TO IMPROVE CONDITIONS AND OPPORTUNITIES FOR WALKING AND BICYCLING AND TO INTEGRATE WALKING AND BICYCLING INTO THEIR TRANSPORTATION SYSTEMS. BECAUSE OF THE NUMEROUS INDIVIDUAL AND COMMUNITY BENEFITS THAT WALKING AND BICYCLING PROVIDE—INCLUDING HEALTH, SAFETY, ENVIRONMENTAL, TRANSPORTATION, AND QUALITY OF LIFE—TRANSPORTATION AGENCIES ARE ENCOURAGED TO GO BEYOND MINIMUM STANDARDS TO PROVIDE SAFE AND CONVENIENT FACILITIES FOR THESE MODES."

—United States Department of Transportation, Policy on Bicycle and Pedestrian Accommodation, March 2010

The goal of the City of Fort Lauderdale to become more multimodal and connected is part of a larger vision that seeks to enhance the livability of the city while continuing to foster economic growth. This is a vision that looks beyond change and points towards transformation.

To make this vision a reality, the City of Fort Lauderdale has developed the Connecting the Blocks Program (CTB). CTB provides a plan—a pathway—to move from where we are today to that "City of Tomorrow."

Fort Lauderdale is fortunate to have a strong network of east-west and north-south arterial roadways, which is supplemented by a fine grid of local streets, dependency on a single mode of transportation has its costs. Specifically, the continued growth of traffic has tested the capacity of much of the roadway network, particular during peak commuting times. In environmental terms, congestion equates to higher levels of pollution and greater energy consumption, and it can also impact the desirability of shopping areas and businesses as destinations. To achieve a truly connected community, the City will need to consider both the infrastructure needed to make the connections happen as well as the barriers that need to be overcome to get there.

This CTB includes a detailed list of needed pedestrian, bicycle and transit infrastructure improvements accompanied by planning-level cost estimates and a recommended prioritization methodology.

MOBILITY PROJECT NEEDS

Fort Lauderdale's vision for multimodal connectivity provides the foundation for identifying specific actions that can be taken to improve multimodal connectivity. When these infrastructure improvements are completed, the hope is that people will be walking in the business districts where there is less congestion, bicyclists will be traveling across the city for work and pleasure, and people will get out of their automobiles and choose to travel by other modes. Clearly, individual attitudes play a role in making this transformation happen; however, having the infrastructure and systems in place to encourage and support these choices makes a significant difference.

In CTB, needed multimodal mobility infrastructure projects have been objectively identified through the application of Complete Streets standards. The focus of these standards is connectivity and quality, and they are organized around a new, City-specific Complete Streets typology that builds on and is consistent with the Broward Complete Streets Guidelines. The Complete Streets standards address the following transportation system elements:

- Speeds
- Through lanes
- Sidewalks
- Sidewalk buffers
- Shade (e.g., trees and awnings)
- Pedestrian-oriented lighting
- Pedestrian crossings
- Bicycle lanes
- Bicycle lane buffers
- Sharrows – Shared Lanes
- On-street parking
- Medians

(Transit route connectivity standards were not included because the City is better positioned to address access to transit than transit routing.)

Application of the multimodal standards and Complete Streets typology led to the identification of 126 multimodal projects and preparation of planning-level cost estimates for each. Of these projects, 115 are street segments targeted for a varying degree of pedestrian and bicycle improvements with the remainder being Citywide projects. Collectively, these improvements would bring 609 miles of roadway corridors up to CTB standards (i.e., Complete Streets standards).

NEXT STEPS

The next steps for the City of Fort Lauderdale in implementing CTB are the following:

1. Making the case for CTB to the development community, public, Broward County, Florida Department of Transportation, Broward Metropolitan Planning Organization, and South Florida Regional Transportation Authority
2. Amending the City's Comprehensive Plan, Code of Ordinances, Unified Land Development Regulations and the Development Review Committee's process to incorporate CTB
3. Update the plan on an annual basis with a major update every five years to coincide with the Broward Metropolitan Planning Organization's Long Range Transportation Planning process

INTRODUCTION

THE CONTEXT

The City of Fort Lauderdale is the heart of activity and the seat of government in Broward County, Florida. Additionally, it is one of the major cities in the greater Southeast Florida region that consists of Miami-Dade, Broward, and Palm Beach Counties. With a population of almost 170,000 in an area of about 33 square miles, the city has a keen interest in moving people efficiently.

The automobile-oriented transportation pattern in Fort Lauderdale is a product of a dispersed development pattern. As in many places in the United States, development up until this point has consisted primarily of strip malls, office parks, and separated residential land uses. In some parts of the city, large blocks render it difficult to walk to destinations because they require significant out-of-direction travel. Parking lots and garages are plentiful, and parking prices are relatively inexpensive, which entrenches the pattern of auto dependence. Congestion is rampant, and the majority of residential areas do not lie within walking distance of necessities such as grocery stores or luxuries such as dining, retail shopping, and entertainment uses.

In recognition of the quality of life, economic development, and environmental benefits of a transportation system that is oriented toward Complete Streets and multimodal travel, the City of Fort Lauderdale has developed a citywide Connecting the Blocks Program (CTB). Instead of widening roadways and focusing on automobile throughput, CTB aims to move people, in whatever form that may take.

This new program allows the City to create, prioritize, and fund transportation projects in a consistent manner using all available funding sources. These sources include Florida Department of Transportation (FDOT), Broward County, and Broward Metropolitan Planning Organization (MPO) funds; grant opportunities; developer contributions; the City's Community Investment Program (CIP); and other transportation funds that become available. CTB builds on the Citywide Multimodal Connectivity Map initiative and relies on input from related public involvement activities.

CTB is a detailed list of pedestrian, bicycle, transit, and other multimodal infrastructure improvements (i.e., "Complete Streets" improvements) was developed for inclusion in the City's Community Investment Plan, for use as a basis for grant applications, and for use as a basis for transportation mitigation associated with proposed land development projects. This list includes multimodal transportation improvements ("mobility projects") and is accompanied by planning-level cost estimates and a recommended prioritization methodology.

REVIEW OF EXISTING PLANS AND STUDIES

In order to fully understand the policies and issues currently affecting the City of Fort Lauderdale, a review of existing plans and policies currently affecting transportation in the city was conducted. Reviews of future development plans, such as community redevelopment agency (CRA) plans, are discussed later in this report. Following are brief descriptions of existing transportation studies that pertain to the study area.

DOWNTOWN FORT LAUDERDALE WALKABILITY STUDY

City of Fort Lauderdale
February 2013

This study resulted in short-, mid-, and long-range improvements to increase walkability in downtown Fort Lauderdale.

COMPLETE STREETS MANUAL

City of Fort Lauderdale
October 2013

This manual contains the City of Fort Lauderdale's Complete Streets Policy and design guidelines for the implementation of Complete Streets in the city.

BROWARD COUNTY TRANSIT (BCT) COMPREHENSIVE OPERATIONS ANALYSIS

Broward County Transit
April 2010

The purpose of the Comprehensive Operations Analysis (COA) is to review, analyze, and recommend improvements to Broward County transit service. It reviews a system ride check, passenger surveys, and performance analysis of all BCT network, community, and Breeze routes during March and April of 2009.

TRANSPORTATION ELEMENT - FORT LAUDERDALE COMPREHENSIVE PLAN

City of Fort Lauderdale
2008

The goal of the Transportation Element is emphasize multimodal transportation systems in the city and reduce the need for single-occupant vehicle trips in the city. The Element seeks to coordinate the city transportation system seamlessly with the regional transportation system and integrate the transportation system with local land use and development patterns.

TRANSPORTATION ELEMENT - BROWARD COUNTY COMPREHENSIVE PLAN

Broward County Urban Planning and Redevelopment Department
December 2006

The goal of the Transportation Element is to maintain and, where feasible, improve Broward County's multimodal transportation system in a manner that provides for safety, convenience, and efficiency; that coordinates and balances the transportation system with the orderly growth, development, and sustainability of the environment; that is coordinated with other transportation plans and programs; that economically addresses the transportation needs of the present and future populations; and that provides for the protection of the existing and the future transportation system.

2035 BROWARD COUNTY LONG RANGE TRANSPORTATION PLAN (LRTP)

Broward MPO
December 2009

The Broward MPO 2035 LRTP identifies projects within the county required to meet future demand and address transportation deficiencies through transit. It presents a cost-feasible plan for the evaluated scenarios. The 2040 LRTP is currently under development.

UNDERSTANDING THE CONTEXT (CONTINUED)

BROWARD COUNTY TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Broward MPO
July 2012

The TIP provides a staged, multi-year, multimodal program of transportation projects that are consistent with the 2035 LRTP. It contains countywide transportation-related projects funded for implementation through 2015.

BROWARD MPO CONGESTION MANAGEMENT PLAN

Broward MPO
February 2011

The Congestion Management Plan provides for the safe and effective management and operation of new and existing roadway facilities using demand reduction and operational management strategies.

BROWARD MPO LIVABILITY PLANNING STUDIES

Broward MPO
Various dates

Livability Planning Studies focus on issues that affect how people live, work, and play in various sub-areas of the county. As part of a continuing, coordinated, and comprehensive planning process, the Broward MPO has been working with local stakeholders to conduct Livability Planning Studies that result in multidisciplinary recommendations to improve quality of life related to transportation improvements; land use designations; rezoning and design guidelines; business retention, expansion and attraction; and affordable and attainable housing.

BROWARD COUNTY TRANSIT DEVELOPMENT PLAN (TDP)

Broward County Transit
September 2008

The Broward County TDP examines county demographics, economic states, existing transit service and corresponding service performance to identify transit needs and opportunities as well as existing funding sources. The TDP is currently undergoing a major update.

2035 REGIONAL TRANSPORTATION PLAN

Broward MPO, Miami-Dade MPO, and Palm Beach MPO
April 2010

The Regional LRTP provides for coordination between Broward, Miami-Dade, and Palm Beach County LRTPs with regard to goals and objectives, public involvement, the regional transportation network, modeling, needs plans, finance plans, cost-feasible plans, and quality of service assessments. The 2040 Regional LRTP is currently under development.

SOUTH FLORIDA REGIONAL FREIGHT PLAN

Broward MPO, Miami-Dade MPO, Palm Beach MPO, and FDOT
July 2010

The purposes of the South Florida Regional Freight Plan (SFRFP) are to (1) develop a formalized regional freight planning and implementation strategy that is inclusive of individual planning efforts that have been conducted within the area and (2) prioritize critical freight transportation projects for the Southeast Florida region.

BROWARD BOULEVARD STUDIES

FDOT
September 2006

These studies include the Broward Boulevard Corridor Transit Master Plan, aimed to identify and evaluate near-term and longer-term transit improvements along the corridor, and the Broward Boulevard Corridor Study, produced to set the stage for a community that considers land use, mobility, and community design as an integral part of transit decision-making.

CENTRAL BROWARD EAST-WEST TRANSIT STUDY

FDOT
March 2005

The Central Broward East-West Transit Study was conducted by FDOT for the Central Broward East-West corridor. The study identified a Locally Preferred Alternative (LPA) for premium transit service in central Broward County.

SOUTH FLORIDA EAST COAST CORRIDOR (SFECC) TRANSIT ANALYSIS

FDOT and FTA
August 2010

This report documents the development and analysis of alternatives for implementing reliable, high-quality transit in the 85-mile Florida East Coast (FEC) corridor located in Southeast Florida. The purpose of the project is to increase transit options for travel in southeast Florida, support the Eastward Ho! Initiative of the counties in the region, encourage redevelopment and economic growth in the coastal cities, and supplement the existing highway network.

REGIONAL PUBLIC INVOLVEMENT PLAN

Southeast Florida Transportation Council (SEFTC)
May 2008

The Regional Public Involvement Plan (RPIP) ensures that the transportation planning process meets federal, state, and local government requirements in the tri-county area. It is an integral process in which partners strive to involve all persons in communities being affected, positively or negatively, by a future project.

REGIONAL TRANSIT SYSTEM MASTER PLAN (RTSMP)

SEFTC
Ongoing

To more effectively deliver premium transit service on a regional basis, a Regional Transit Master Plan will be developed to support the 2040 Regional LRTP update efforts. The task will offer (1) potential solutions within the region that provide additional transportation choices and (2) the development of a shared transit vision so that limited financial resources can be expended efficiently.

2060 SOUTHEAST FLORIDA REGIONAL PLAN FOR SUSTAINABLE DEVELOPMENT PROJECT

Southeast Florida Regional Planning Council (SFRPC)
August 2010

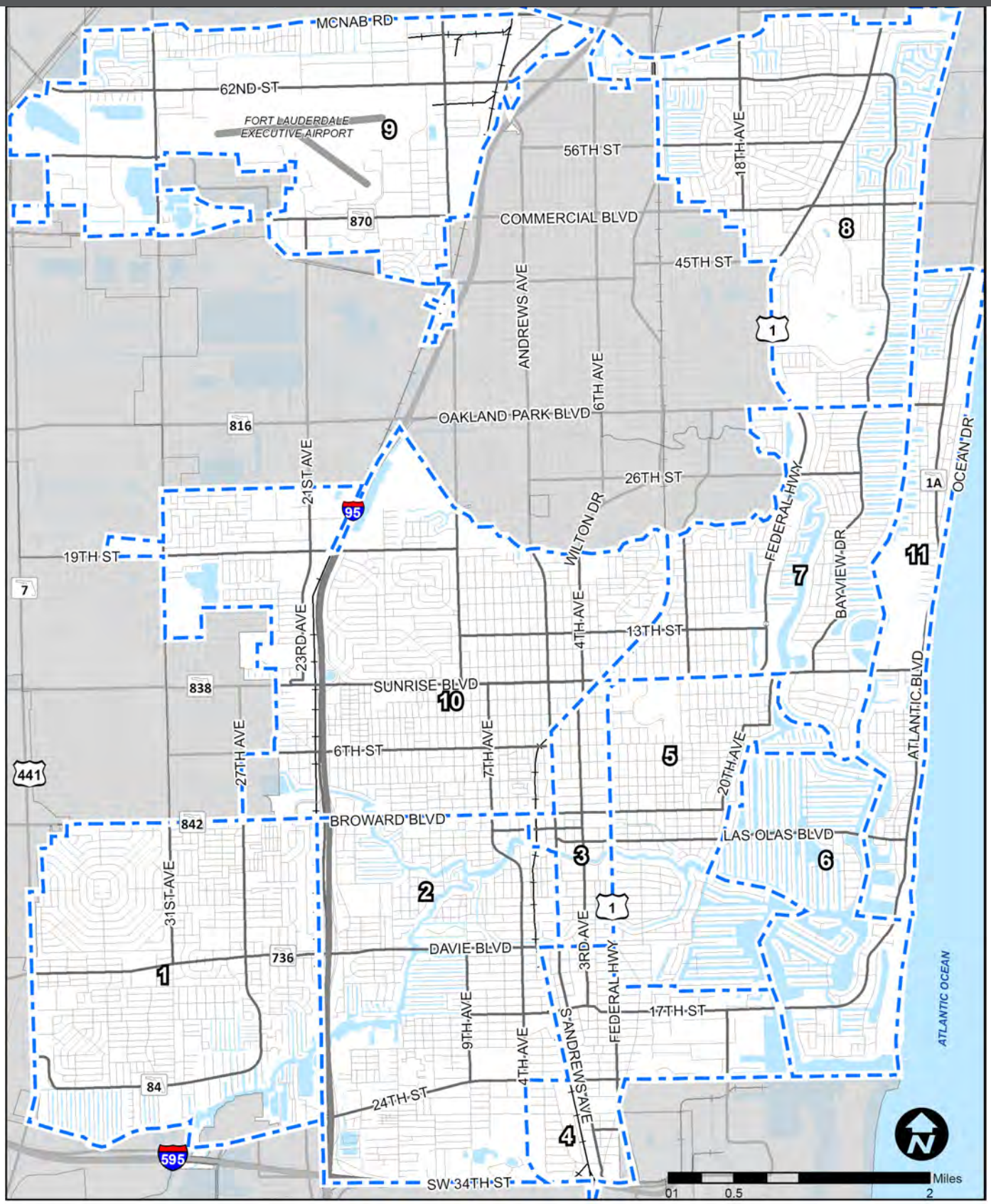
The Sustainable Development Project is a comprehensive effort to develop a regional plan that spans the existing jurisdictions of the regional planning councils, state agency sub-districts, MPOs, special districts, counties, and municipalities, as well as a diverse mix of business, social, and ethnic organizations.

THE STUDY AREA

MULTIMODAL DISTRICTS

In order to better assess the multimodal needs of the city, it has been broken up into 11 Multimodal Connectivity Districts (MCDs). The MCD boundaries shown in FIGURE 1 were drawn with the intent to define sub-areas of Fort Lauderdale in which deficiencies in mobility and connectivity may be identified for a given development project or initiative, and in which these deficiencies may be more effectively addressed than if they were otherwise addressed at the citywide level. The 11 MCDs were drawn with regard to established neighborhood associations and were grouped in accordance with geographic and civil infrastructure barriers, such as highways and waterways. The intent within each of the MCDs is to facilitate the application of locally relevant measures and solutions for improving multimodal connectivity and transportation choice. The MCDs also assist in meeting dual rational nexus requirements.

FIGURE 1. MULTIMODAL CONNECTIVITY DISTRICTS



Multimodal Connectivity District

1. Lauderdale West
2. River Communities
3. Greater Downtown
4. South Commerce Center
5. Victoria Park
6. Intracoastal
7. Coral Ridge South
8. Coral Ridge North
9. Lauderdale North
10. Middle River
11. Beaches

UNDERSTANDING THE CONTEXT (CONTINUED)

WHO LIVES THERE?

Population Per Acre

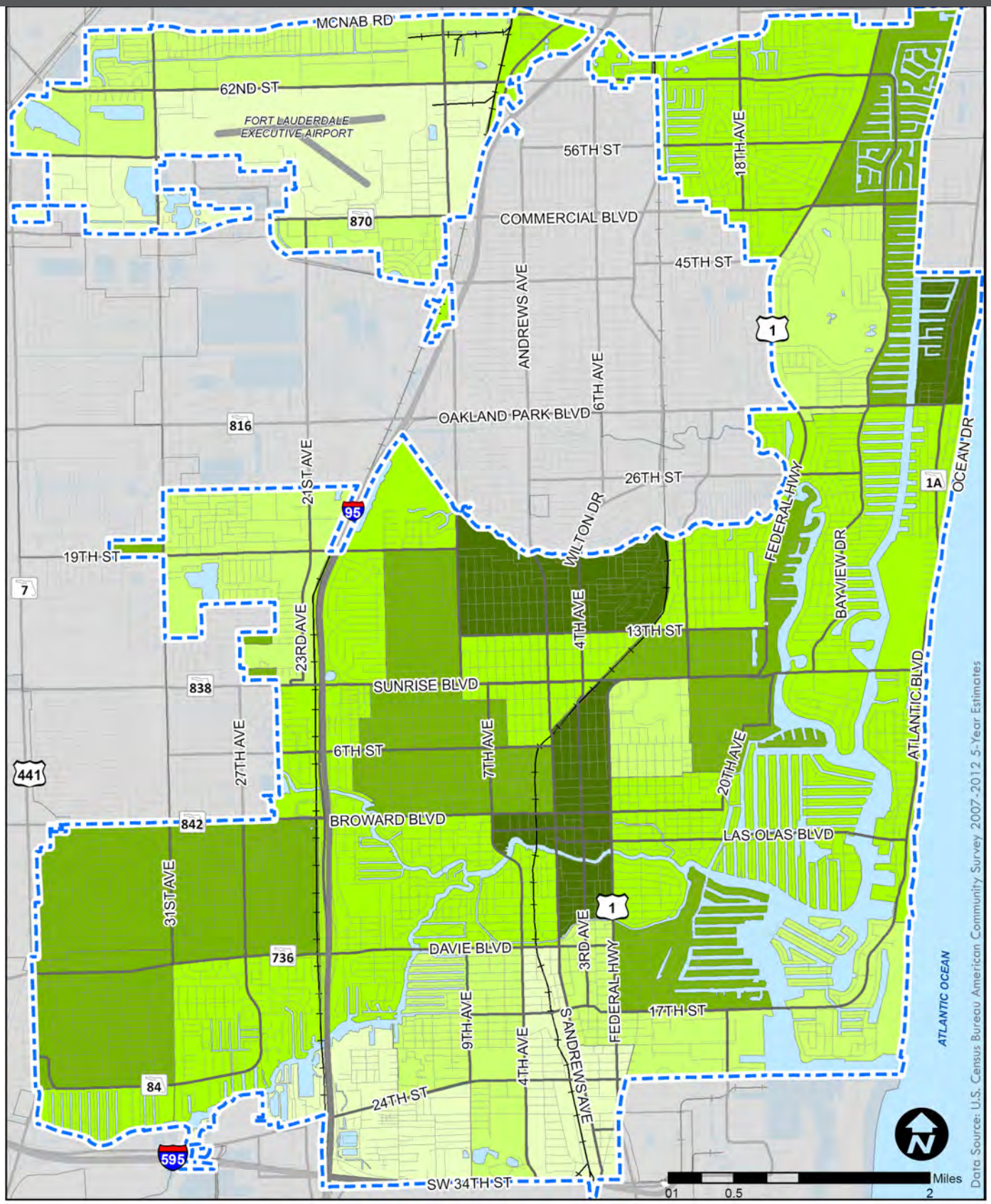
Population density is a key predictor of an area's ability to support investments in different types and levels of transit service. Representative densities to support various transit services are shown in TABLE 1. Comparison of TABLE 1 to FIGURE 2 shows that three areas of Fort Lauderdale have the densities to support enhanced bus and rail transit services. These three areas are downtown Fort Lauderdale, where many multi-family units exist or are under construction; a Census Tract directly north of downtown, where there are multi-family residential structures and closely spaced single-family homes; and the Census Tract to the northeast on the beach, where many people age 65 and older live in high-rise condominiums. (Subsequent maps will provide more information about land use and demographic patterns in the city.)

It is important to note that the areas around the Executive Airport and near Port Everglades and Fort Lauderdale—Hollywood International Airport (FLL) have very low residential densities. That being said, these areas have higher employment densities, which will be discussed later, and therefore may still be supportive of multimodal transportation investments.

TABLE 1. PEOPLE PER ACRE

PLACE TYPE	TRANSIT MODE	STATION AREA GROSS RESIDENTIAL DENSITY (UNITS/ACRE)	STATION AREA GROSS EMPLOYMENT DENSITY (JOBS/ACRE)
REGIONAL CENTER	Heavy Rail	55-75	200-250
	Commuter/Light Rail	35-55	100-200
	Bus Rapid Transit/Bus	20-35	50-125
COMMUNITY CENTER	Heavy Rail	35-65	65-90
	Commuter/Light Rail	25-35	45-65
	Bus Rapid Transit/Bus	10-20	20-45
NEIGHBORHOOD CENTER	Heavy Rail	12-15	20-30
	Commuter/Light Rail	9-12	15-20
	Bus Rapid Transit/Bus	7-9	10-15

Source: *A Framework for Transit-Oriented Development in Florida.* Florida Department of Transportation and Florida Department of Community Affairs., March 2011


MCNAB RD
62ND ST
FORT LAUDERDALE EXECUTIVE AIRPORT
56TH ST
18TH AVE
870
COMMERCIAL BLVD
45TH ST
ANDREWS AVE
6TH AVE
1
816
OAKLAND PARK BLVD
21ST AVE
26TH ST
95
WILTON DR
FEDERAL HWY
1A
OCEAN DR
19TH ST
7
23RD AVE
4TH AVE
13TH ST
BAYVIEW DR
838
SUNRISE BLVD
ATLANTIC BLVD
27TH AVE
7TH AVE
6TH ST
20TH AVE
441
842
BROWARD BLVD
LAS OLAS BLVD
31ST AVE
1
3RD AVE
736
DAVIE BLVD
FEDERAL HWY
17TH ST
9TH AVE
4TH AVE
S ANDREWS AVE
84
24TH ST
595
SW 34TH ST
ATLANTIC OCEAN
N
Miles
0 0.5 2
Data Source: U.S. Census Bureau American Community Survey 2007-2012 5-Year Estimates
< 3
3 - 7
>7 - 10
> 10 - 12
>12
City Boundary

UNDERSTANDING THE CONTEXT (CONTINUED)

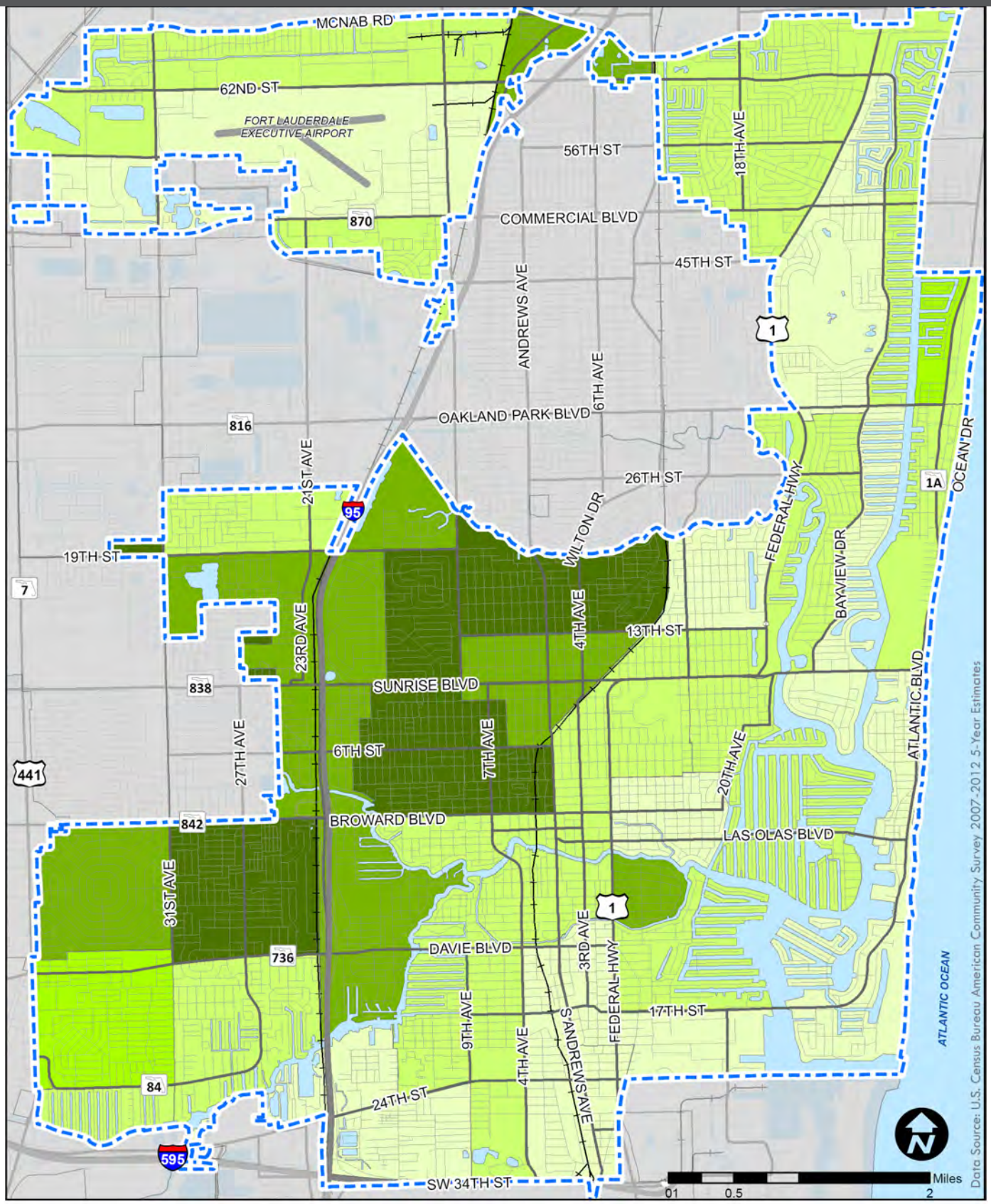
18 and Under Population per Acre

FIGURE 3 shows that there is a concentration of youth population (18 and under) in the western part of the city, where the density approaches and exceeds three people aged 18 or under per acre. As shown in subsequent sections of this report, these areas also contain lower-income populations. Eighteen and under populations typically need increased multimodal transportation choices because they may not have a driver's license or access to a vehicle and, thus, may be otherwise unable to make trips for work, school, or other activities. There is also evidence that the millennial generation is increasingly choosing to drive less than previous generations and are, accordingly, demanding non-automobile transportation alternatives.[1]

Note that FIGURE 3, along with any other map in this report that represents a per-acre population by Census Tract, reflects the average population per acre within each Census Tract; actual population per acre may vary within each Census Tract.

1 "Millennials Lead the Trend to Less Driving, But What Happens As They Get Older?" The Atlantic Cities, May 14, 2013. http://www.theatlanticcities.com/commute/2013/05/planning-our-transportation-future-millennials-mind/5575/

FIGURE 3. POPULATION THAT IS 18 AND UNDER PER ACRE



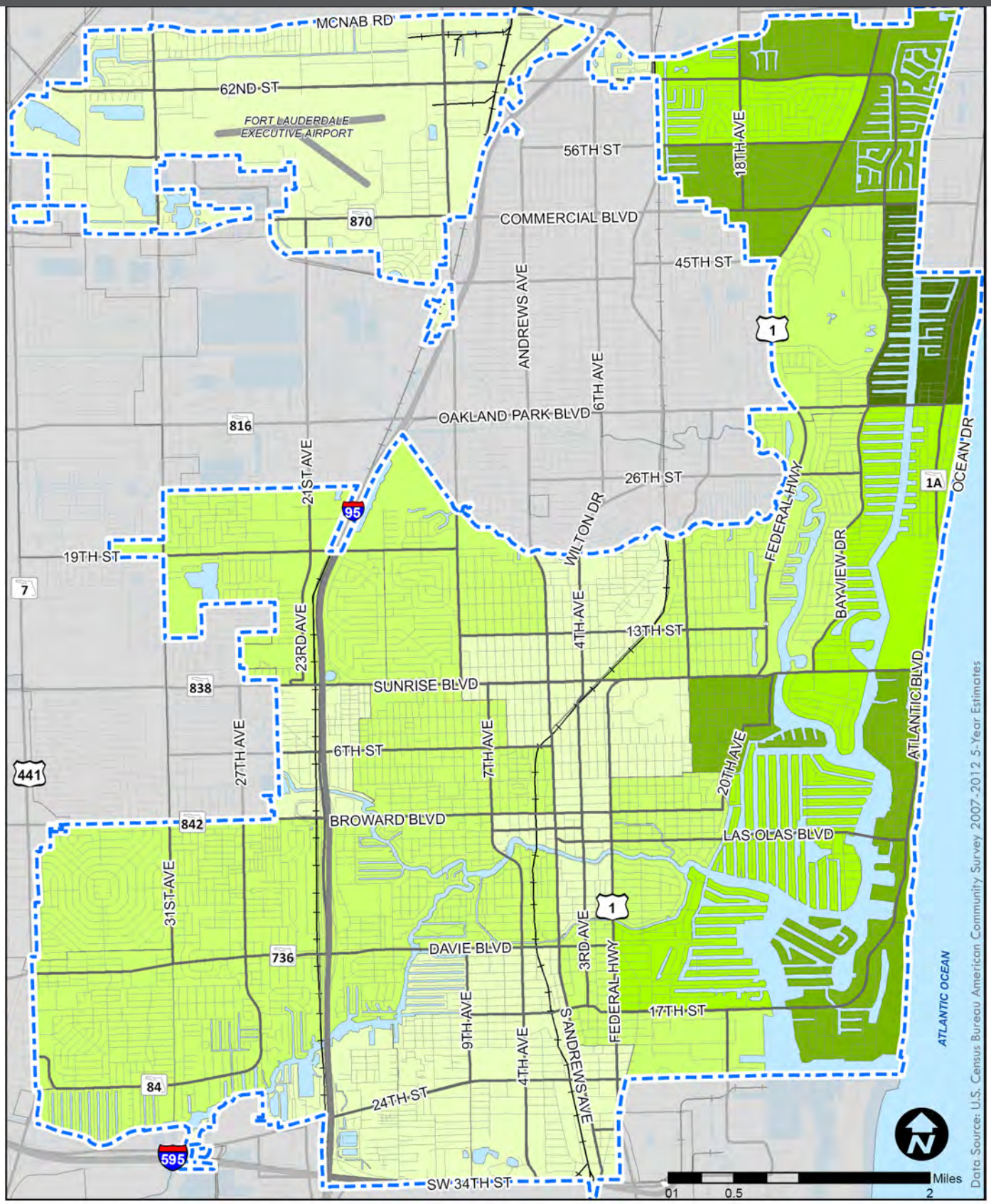
UNDERSTANDING THE CONTEXT (CONTINUED)

65 and Older Population per Acre

In contrast to the distribution of the youth population, the elderly population of the city is concentrated to the east, near the ocean, where the population density approaches or exceeds 3 people aged 65 or older per acre. This is shown in FIGURE 4. This population may consist mainly of retirees and "snow birds" (who spend the winter months in Southeast Florida but also reside elsewhere). As will be discussed later in this chapter, these areas also coincide with some of the higher-income areas in the city.

It is important that 65 and older populations have access to multimodal transportation alternatives because older residents are increasingly less likely to drive.

FIGURE 4. POPULATION THAT IS 65 AND OLDER PER ACRE



UNDERSTANDING THE CONTEXT (CONTINUED)

HOW DO THEY LIVE?

Existing Land Use

FIGURE 5 depicts land uses along the riverfront in downtown Fort Lauderdale.

FIGURE 5. DOWNTOWN RIVERFRONT DEVELOPMENT

The existing land use pattern in the city is typical of many American cities in that it is mostly suburban in character and mostly auto-oriented. This is not the case in the downtown core, which is a dense hub of business, office, and institutional uses as well as a key transportation node, but significant portions of the city are developed with sizable single-family residential neighborhoods.

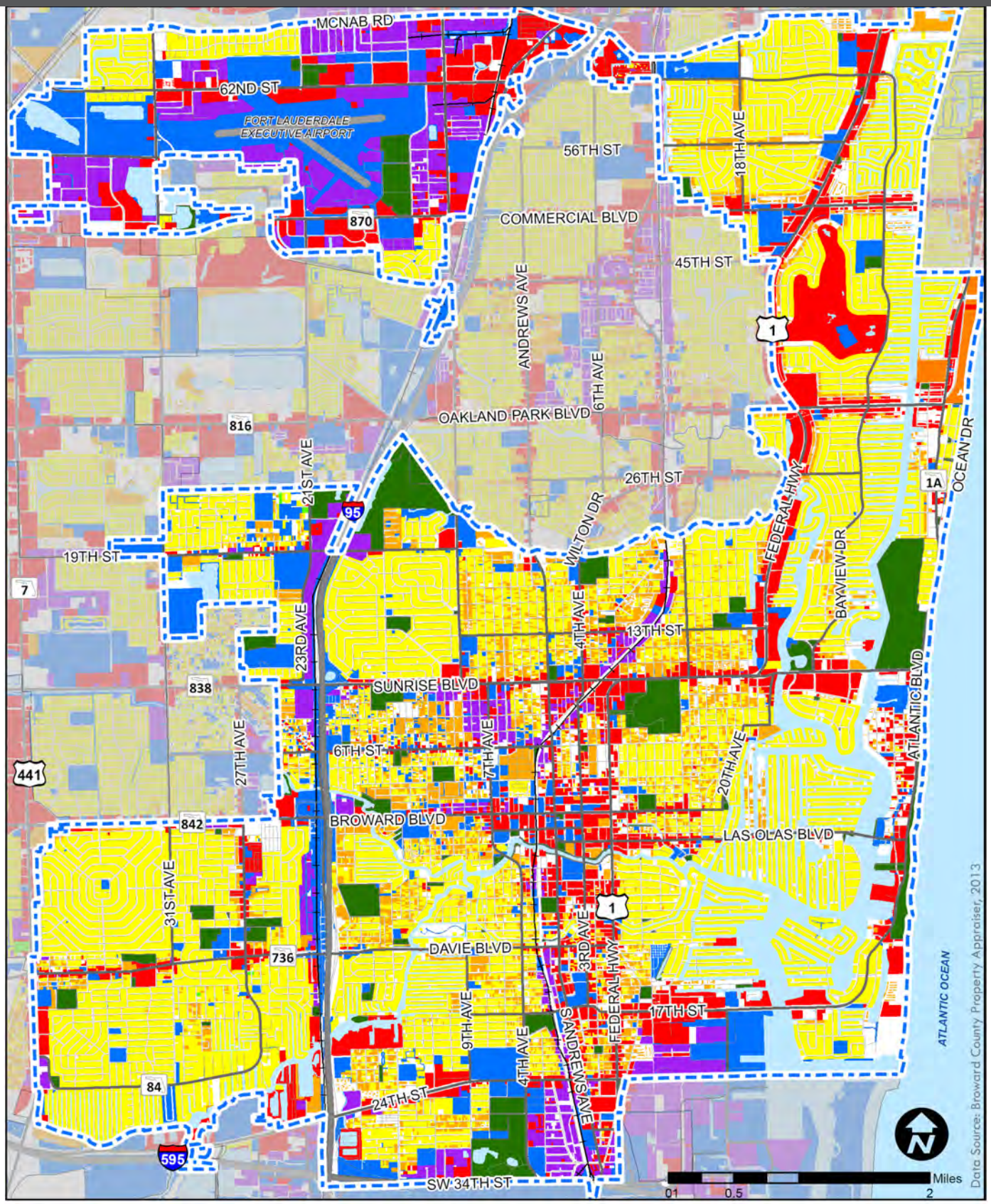
As can be seen in FIGURE 6, the land area in the city is generally built out, so there are more opportunities for infill development than greenfield development. The commercial land uses are mainly confined to the major corridors such as Broward Boulevard, US 1/Federal Highway, Cypress Creek Road, Sunrise Boulevard, Oakland Park Boulevard, Andrews Avenue, and SR A1A. The northwest and southeast corners of the city are both in close proximity to airports, and both areas are defined by industrial and commercial uses (as is the Port Everglades area in the southeast corner of the city).

Residential areas are evenly dispersed throughout the city, typically buffered from major roads by commercial uses. While it may not be apparent from FIGURE 6, much of that commercial development is in the form of strip malls that require people to drive from place to place as opposed to walking or taking transit. Although there are some parks along the beach, the beach is largely developed with commercial and residential uses.

Regarding natural resources, the city celebrates its waterways and the beach as major natural resources. Areas along waterways and the beach are mostly built out, but the City has been able to conserve a series of parks, including one along the beach.

Subsequent maps display individual land uses to better show the patterns of land use in the city.

FIGURE 6. EXISTING LAND USE



Parks
Commercial
Industrial
Institutional
Single Family Residential
Multi-Family Residential
City Boundary

UNDERSTANDING THE CONTEXT (CONTINUED)

Residential Land Use

An illustrative single-family home in Fort Lauderdale is depicted in FIGURE 7. An illustrative multi-family structure in Fort Lauderdale is depicted in FIGURE 8.

FIGURE 7. SINGLE-FAMILY HOME

FIGURE 8. MULTI-FAMILY RESIDENCES

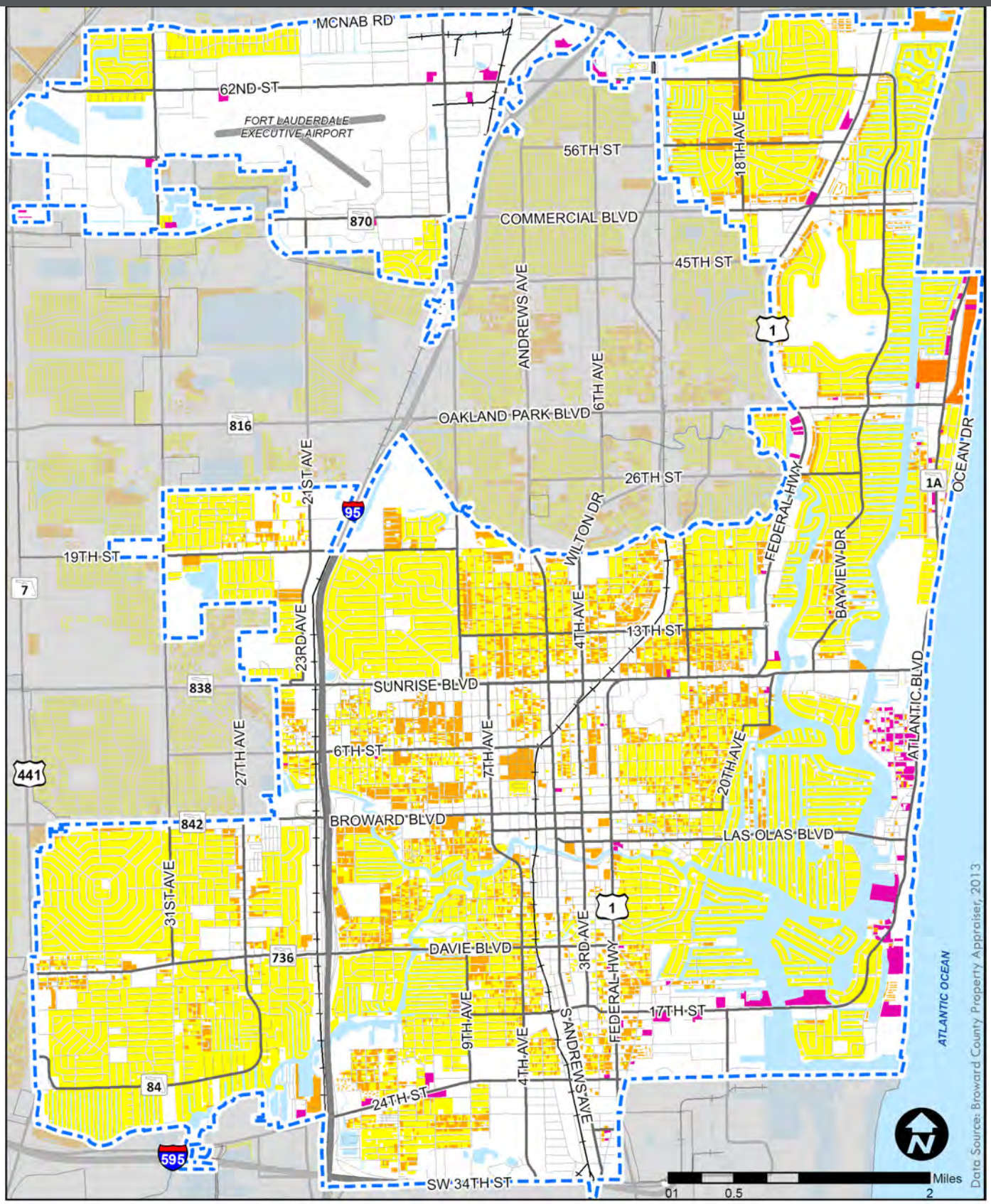
The residential land use in the city largely comprises single-family, low-density residential uses arranged in neighborhoods that lie behind a buffer of commercial uses that front the major arterials. This pattern is shown in FIGURE 9. Many of the homes are older homes that have either been renovated or left alone, although there is some new construction on individual lots. Residential uses are not typically intermixed with job opportunities, and most residents commute via driving.

In some of the neighborhoods close to the center of the city, infill development has begun to occur, spurring the creation of new multi-family units. Two areas with higher concentrations of multi-family uses include downtown and the beachfront area to the north (which also happens to have the highest concentration of people older than 65 in the city).

Another important component of the city's residential land use is the plentiful hotels and motels. While hotels and motels are not traditionally considered a residential use, Fort Lauderdale is a major tourism destination, and many of the hotels are often full. This adds a significant population to the city that must be considered in land use and transportation plans.

Research such as that underlying FDOT's *A Framework for Transit-Oriented Development in Florida* (2011) indicates that residents of higher-density properties (e.g., multi-family structures and hotels) are more likely to use transit for commuting and other trip purposes. Visitors from cities or countries where transit use is more common may have a higher propensity to use transit, too, which would further increase demand for transit and supporting pedestrian and bicycle infrastructure in the city.

FIGURE 9. RESIDENTIAL LAND USE



Single Family Residential
Multi-Family Residential
Hotel / Motel
City Boundary

UNDERSTANDING THE CONTEXT (CONTINUED)

Employment-Related Land Use

As stated before, the commercial land uses in the city are largely concentrated in the major arterial corridors. This pattern is depicted in FIGURE 10. This pattern has arisen due to the auto-centric nature of development in Fort Lauderdale, and such a pattern is common throughout much of Southeast Florida and the United States in general. Much of this commercial use has developed in the form of strip malls with large parking lots separating the buildings from the roads, which discourages multimodal transportation.

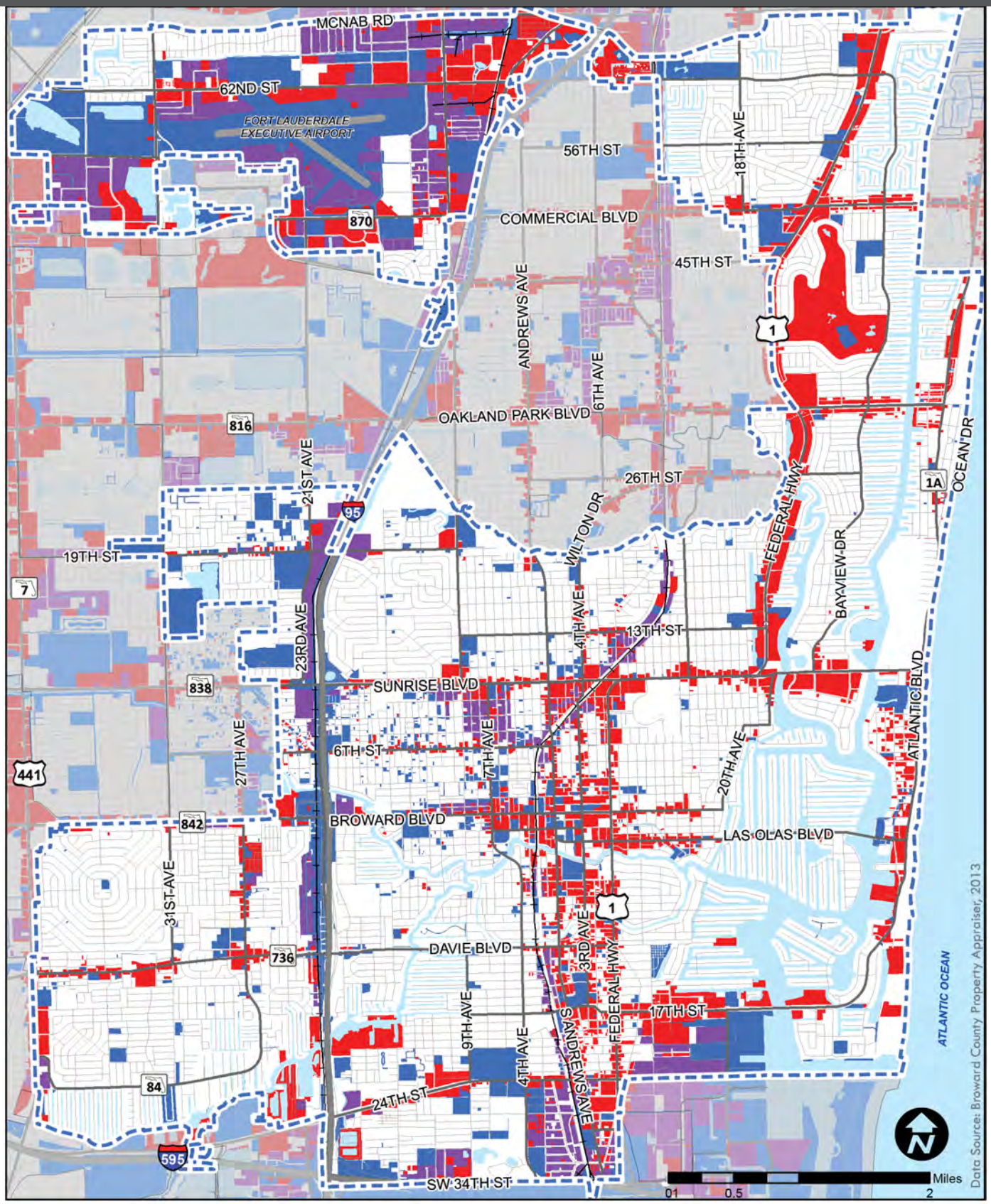
The main exceptions to the corridor commercial land use pattern are the large employment hubs in downtown Fort Lauderdale and the Cypress Creek area west of I-95. The level of activity in these hubs and the high demand for travel to, from, and within these hubs calls for significant multimodal investment.

Institutional uses front many of the major corridors as well. Institutional uses include governmental centers, educational facilities, cultural and historical resources, airports, and other public uses.

Industrial uses are largely concentrated along the FEC rail line and I-95 due to the infrastructure and connectivity that railroads and major highways provide for freight and other related activities. Industrial uses are also concentrated in the northwest corner of the city near the Executive Airport due to similar infrastructure needs. The industrial uses are primarily light industrial uses such as warehouses.

There should be high-quality multimodal access to commercial, industrial, and institutional uses insofar as they act as employment centers. Creating greater accessibility to these areas for residents who may not have access to a car allows such residents to expand their market for potential employment. Regarding retail uses, enhanced multimodal access is imperative to expand the consumer base in addition to expanding the employment base.

FIGURE 10. LAND USE RELATED TO EMPLOYMENT



UNDERSTANDING THE CONTEXT (CONTINUED)

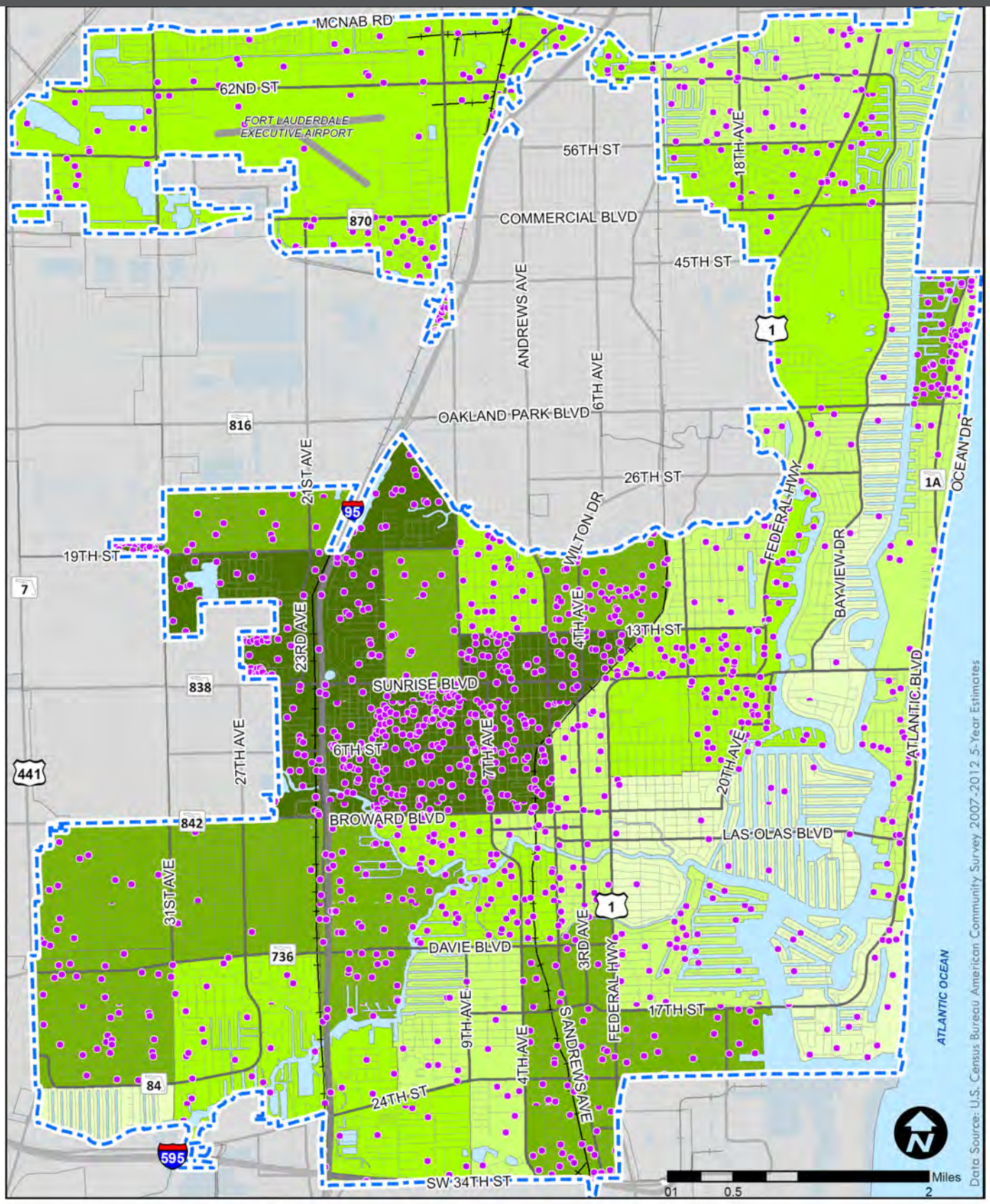
Income and Car Ownership

Household income and car ownership are important indicators of supportiveness for a multimodal transportation system. Typically, lower-income areas are more likely to use alternative forms of transportation as they may have limited access to a car. (Accordingly, investments in alternative forms of transportation help residents of such areas reach expanded job opportunities and other destinations.) This is apparent in Fort Lauderdale, as FIGURE 11 shows that the areas with median household incomes under $30,000 (and even under $45,000) are the ones with the highest concentrations of zero-car households as well. Such areas include portions of the Progresso Village, Dorsey- Riverbend, Durrs, Lauderdale Manors, Home Beautiful Park, South Middle River, and Middle River Terrace neighborhoods.

However, it is informative to consider another area of the city. The Census Tracts to the northeast on the beach, with the highest concentration of residents age 65 and older, have a higher number of zero-car household and higher incomes. The high percentage of zero-car households in those Census Tracts appears to be reflective of older residents who do not drive due to age-related reasons rather than due to income limits. Nevertheless, investments in pedestrian and bicycle connectivity would benefit these zero-car households, too.

The data in FIGURE 11 are from the American Community Survey and reflect Census Tracts. Therefore, each individual dot on the map in FIGURE 11 is not an exact location of a zero-car household. Rather, the dots represent general concentrations of zero-car households in each Census Tract.

FIGURE 11. INCOME AND CAR OWNERSHIP



Median Household Income by Census Tract

- < $30,000
- >$30,000 - $45,000
- >$45,000 - $60,000
- >$60,000 - $75,000
- >$75,000
- 5 Zero Car Households
- City Boundary

UNDERSTANDING THE CONTEXT (CONTINUED)

WHERE ARE THEY GOING?

Area Employment Profile

FIGURE 12 illustrates downtown office buildings. As can be seen in FIGURE 13, the major employment centers in Fort Lauderdale are the downtown and several areas in the northwest part of the city.

FIGURE 12. DOWNTOWN OFFICE BUILDINGS

Downtown Fort Lauderdale

Downtown Fort Lauderdale is designated as the Downtown Regional Activity Center (D-RAC) future land use district and is home to two courthouses, numerous office buildings, the main County library, the Broward Central Terminal, and Fort Lauderdale City Hall. University campuses within the downtown area include Florida Atlantic University, Broward College, and Florida International University.

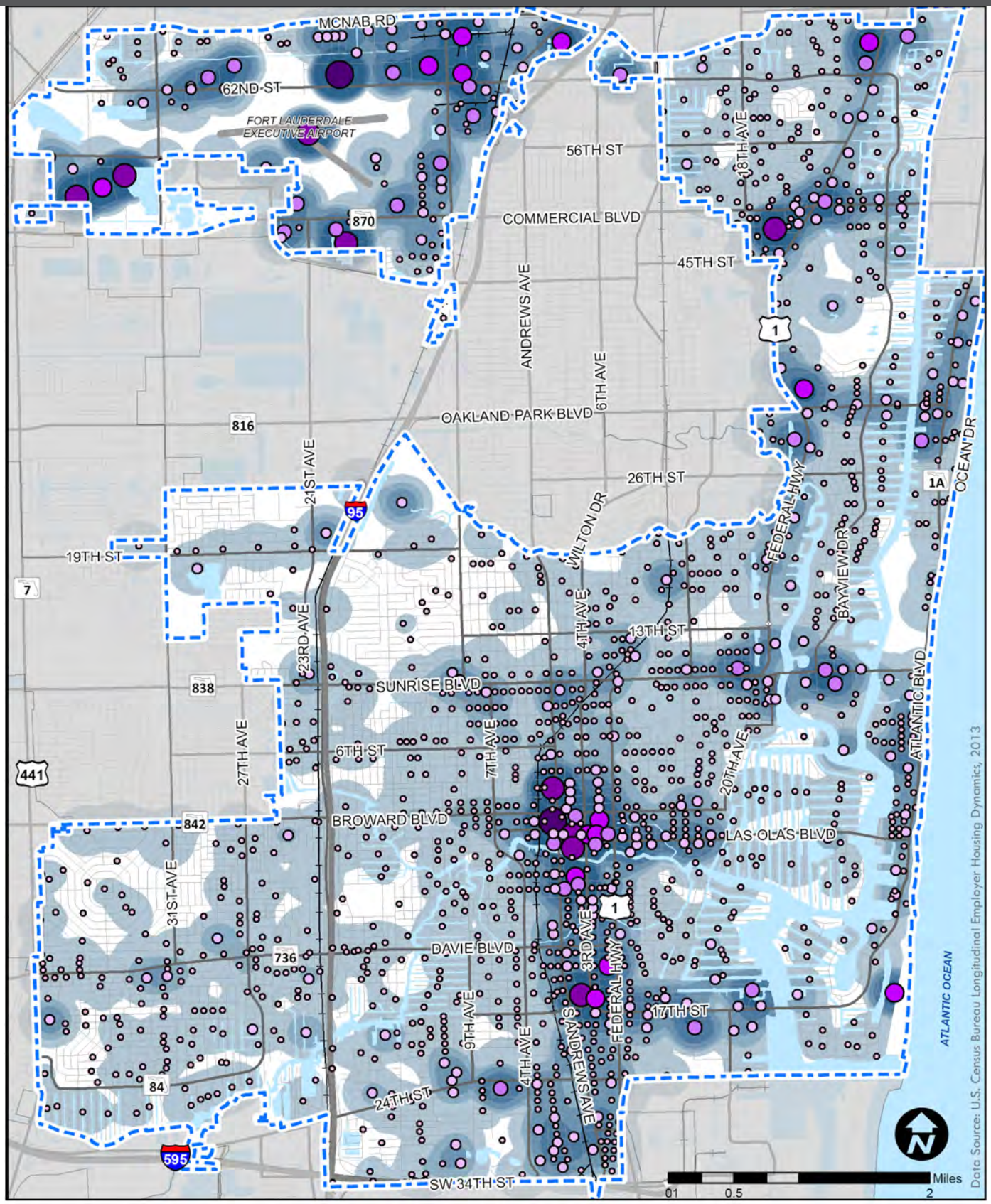
The downtown contains several cultural and entertainment venues, including the Broward Center for the Performing Arts, the Josephine S. Leiser Opera Center, and other popular music venues. Parks within the area, including Stranahan Park, Bubier Park, Esplanade Park (Discovery Park), and Riverwalk Park, additionally host seasonal events open to the public.

Outside of Downtown Fort Lauderdale

Much of Fort Lauderdale outside of the downtown is organized around residential neighborhoods with commercial development lining major corridors. The Future Land Use Map (FLUM) designates employment centers in adjacent to the Fort Lauderdale Executive Airport, and in Harbordale in the south part of Fort Lauderdale as well.

Activity centers within Fort Lauderdale outside of the downtown include the Northwest Regional Activity Center (NW-RAC) surrounding Sistrunk Boulevard, the Central Beach Regional Activity Center (C-RAC) along Atlantic Boulevard, and the South Regional Activity Center (S-RAC) at the Broward Health Medical Center.

FIGURE 13. WHERE CORRIDOR AREA RESIDENTS WORK



Jobs Per Square Mile
- < 100
- 100 - 1,999
- 2,000 - 3,999
- 4,000 - 7,999
- 8,000 - 16,000
- >16,000

Jobs Per Census Block
- 1 - 100
- >100 - 500
- > 500 - 1,000
- >1,000 - 2,000
- >2,000 - 4,000
- >4,000

City Boundary

UNDERSTANDING THE CONTEXT (CONTINUED)

Schools

There are a number of educational institutions within the City of Fort Lauderdale. Grade schools within Fort Lauderdale include 17 elementary schools, four middle schools, three high schools, and five educational centers; these schools are shown in FIGURE 14.

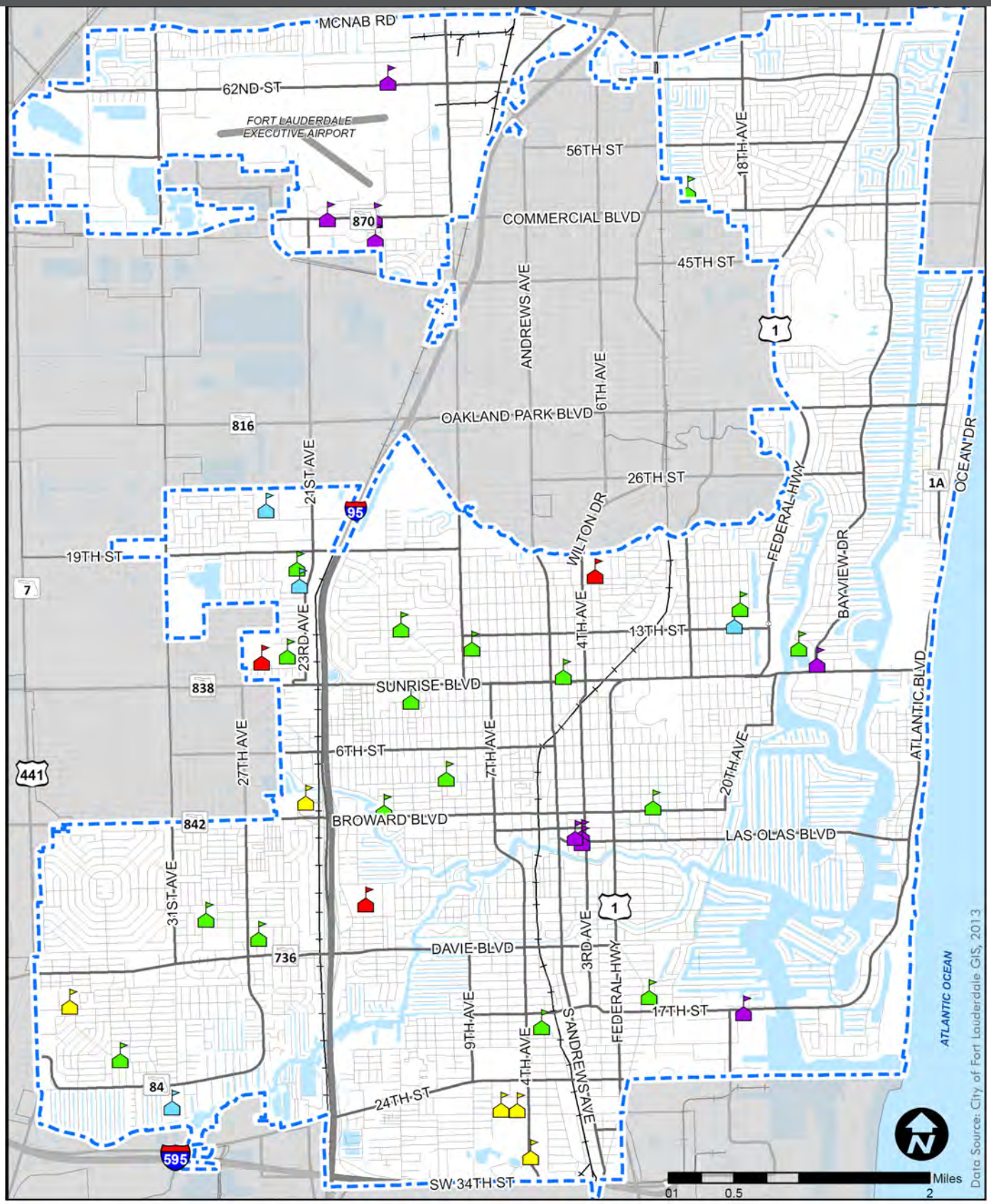
Concerning post-graduate educational institutions, Barry University, City College, Florida Atlantic University, and Keiser College have campuses near the Fort Lauderdale Executive Airport. Additionally, Fort Lauderdale College and The Art Institute of Fort Lauderdale are within the city limits to the east. As noted earlier, downtown Fort Lauderdale includes Florida Atlantic University, Broward College, and Florida International University.

There are also several private and charter schools in the city. While a complete listing of these schools is unavailable, they include St. Thomas Aquinas High School, Pinecrest School, and Cardinal Gibbons High School.

Schools act as employers and as key trip attractors for many ages, particularly those who are too young to drive. Improved multimodal connectivity contributes to safer travel between residences and educational opportunities and to increased physical activity for youths. It may also result in fewer parents driving their children to school, which can reduce traffic congestion and emissions.

The County school bus system services all of the grade schools.

FIGURE 14. SCHOOL LOCATIONS



HOW ARE THEY GETTING THERE?

Alternative Commuting Patterns

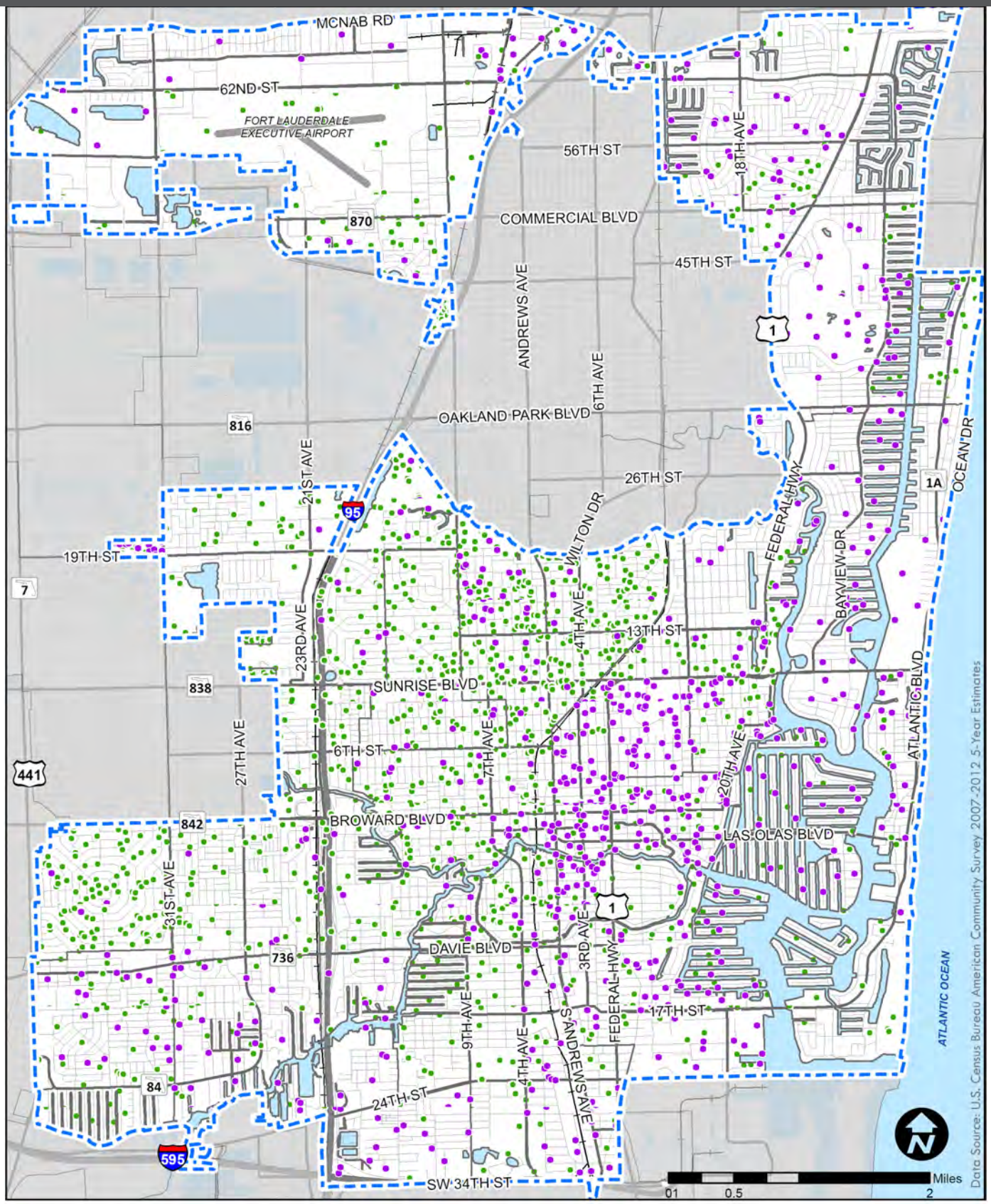
As can be seen in FIGURE 15, Fort Lauderdale has significant concentrations of people commuting to work without a car. In the lower-income areas to the northwest of downtown, there are a number of people taking transit to work. The same is true in the relatively lower-income area located in the southwest corner of the city. It is also clear that there are quite a number of people walking to work in the city. Many of these people are walking from the Census Tracts that include downtown and higher-density areas that are close to employment centers.

The areas with people walking to work and taking transit to work both correlate highly with the zero-car households and proximity to downtown Fort Lauderdale. However, they are still separated. The FEC railroad tracks separate the people taking transit to work on the northwest from those walking to work on the southeast.

As stated before, it is important to remember that each point in FIGURE 15 represents one person in a Census Tract who either walks or takes transit to work as opposed to a specific origin or destination point. That being said, the Census Tract boundaries support the statements made above.

Regardless of whether people are taking transit or walking to work, FIGURE 15 shows that there is a desire for multimodal transportation in the city, as people are already using alternative forms of transportation even though there is room for improvement in the infrastructure and the built environment. (Public involvement activities conducted during the development of the Multimodal Connectivity Map reiterate this desire.) Enhancing multimodal connections will increase multimodal travel and, in turn, reduce the number of vehicles on the streets.

FIGURE 15. ALTERNATIVE COMMUTING PATTERNS



1 Person Walking to Work
1 Person Taking Transit to Work
City Boundary

UNDERSTANDING THE CONTEXT (CONTINUED)

Transit

Fort Lauderdale's public transit systems include bus, rail, taxi, private shuttle, and water taxi. These services are shown in FIGURE 16. Among these services, the city is served by three distinct fixed-route bus systems with different operating characteristics and objectives. Tri-Rail commuter service has two stations along the CSX tracks in Fort Lauderdale on its route from Mangonia Park to the Miami Airport. There is one Amtrak station on the CSX Rail line at Broward Boulevard and one Greyhound station in downtown.

Bus Routes

The traditional fixed-route public bus service in Fort Lauderdale is operated by BCT, which has 21 routes in the city. As seen in TABLE 2, BCT provides a large amount of bus service in downtown, which is served by fifteen routes. The geographic extents of the routes can be seen in FIGURE 16. While bus route coverage extends through much of Fort Lauderdale, and service on all routes begins before the weekday a.m. peak hour, all routes have headways of fifteen minutes or longer, even during peak periods. BCT provides less service late at night, as only one route operates past midnight (i.e., until 12:35 a.m.) in the city.

TABLE 2. BROWARD COUNTY TRANSIT ROUTES

ROUTE NUMBER	NEIGHBORHOOD	FREQUENCY (MINUTES) AM PEAK	MID-DAY	PM PEAK	SERVICE START	SERVICE END	SERVICE SPAN (HR:MIN)
1	**Downtown**	15	15	15	5:00 a.m.	11:59 p.m.	18:59
4	**Airport**	45	45	45	5:30 a.m.	10:30 p.m.	17:00
6	**Downtown**	30	30	30	5:15 a.m.	10:15 p.m.	17:00
9	**Downtown**	45	45	45	5:30 a.m.	10:15 p.m.	16:45
10	**Downtown**	30	30	30	5:30 a.m.	11:30 p.m.	18:00
11	**Downtown**	25	30	30	5:00 a.m.	10:30 p.m.	17:30
14	**Downtown**	20	30	20	5:00 a.m.	11:00 p.m.	18:00
15	**Airport**	60	--	60	6:00 a.m.	7:00 p.m.	13:00
16	**Airport**	30	60	30	6:00 a.m.	8:50 p.m.	14:50
18	**Lauderdale Lakes**	15	15	15	4:45 a.m.	12:35 a.m.	19:50
20	**Downtown**	45	45	45	6:00 a.m.	9:50 p.m.	15:50
22	**Downtown**	15	15	15	5:00 a.m.	11:25 p.m.	18:25
30	**Downtown**	20	20	30	5:30 a.m.	10:00 p.m.	16:30
31	**Downtown**	20	30	20	5:30 a.m.	10:15 p.m.	16:45
36	**Fort Lauderdale Beach**	20	20	20	5:10 a.m.	11:45 p.m.	18:35
40	**Downtown**	20	20	20	5:30 a.m.	10:30 p.m.	17:00
50	**Downtown**	20	30	20	5:30 a.m.	10:15 p.m.	16:45
56	**Lauderhill**	45	45	45	6:30 a.m.	6:30 p.m.	12:00
60	**Downtown**	20	30	20	5:30 a.m.	10:15 p.m.	16:45
81	**Downtown**	20	30	20	5:10 a.m.	10:50 p.m.	17:40
595	**Downtown**	30	--	30	6:00 a.m.	6:00 p.m.	12:00

Within the City of Fort Lauderdale, the Sun Trolley is a circulator bus service administered by the Downtown Fort Lauderdale Transportation Management Association (DFLTMA). The Sun Trolley system consists of seven routes. These routes are described in TABLE 3. They do not have set stops, and riders can flag buses down anywhere along a route. The frequency of Sun Trolley buses is 15-20 minutes. The Sun Trolley routes, which are less geographically extensive than the BCT fixed routes, are also visible in FIGURE 16.

BCT coordinates Community Bus Service through interlocal agreements and provides capital or operating assistance in eighteen Broward County municipalities. Community Bus Service is designed to connect residential neighborhoods to the longer, more direct fixed routes of BCT's main system.

TABLE 3. SUN TROLLEY ROUTES

ROUTE NAME	OPERATING HOURS	OPERATING DAYS
Downtown Link	7:30 a.m. to 5:30 p.m.	Monday — Friday
Galt Link	8:30 a.m. to 4:30 p.m.	Monday, Wednesday, Friday, Saturday, and Sunday
Tri-Rail Northwest Community Link	6:30 a.m. to 7:20 p.m.	Monday — Friday
Las Olas Link	9:30 a.m. to 6:30 p.m.	Friday through Monday
Beach Link	9:30 a.m. to 6:30 p.m.	All week
Neighborhood Link	8:15 a.m. to 2:30 p.m.	Monday — Friday
Airport Link	9:00 a.m. to 5:00 p.m.	Saturday and Sunday

UNDERSTANDING THE CONTEXT (CONTINUED)

Paratransit
BCT's paratransit service (called TOPS) shares the same operating hours as BCT's fixed-route service. TOPS operates on a reservations system open to eligible riders in accordance with the Americans with Disabilities Act (ADA), with half-hour pickup windows and curb-to-curb service. Reservations must be made by calling a day in advance of travel. Accessing the paratransit system for the cost of $3.50 per trip allows TOPS users to have free access to BCT's fixed-route bus service.

Passenger Rail
Fort Lauderdale has passenger rail service provided by Amtrak and Tri-Rail. The Tri-Rail stations are located at Broward Boulevard and I-95 and at Cypress Creek Road and I-95. (These locations are both Gateway Hubs, as is downtown Fort Lauderdale.) The Amtrak station is located at Broward Boulevard and I-95.

Tri-Rail runs from Mangonia Park to Miami Inernational Airport, with weekday service in Fort Lauderdale running from 5:00 a.m. to 10:30 p.m. Weekday headways range from 20 to 60 minutes, with the shortest headways concentrated during the morning and afternoon peak hours. Weekend service spans 6:00 a.m. to 10:00 p.m., with hourly service in each direction. According to the SFRTA Fiscal Year 2012-2021 TDP update, Tri-Rail ridership grew from 2010 to 2011, and monthly ridership ranges from 10,000 to 14,000 with peak ridership occurring from February to May.

Tri-Rail operates three shuttle routes that bring passengers from its Broward Boulevard station to destinations in Downtown Fort Lauderdale or to the Broward General Medical Center. Shuttle service is most frequent during the weekday morning and afternoon peak hours, when headways range from 15 to 25 minutes; the typical mid-day headway is one hour. BCT Routes 9, 22, and 81 and the 595 Express also stop adjacent to the Tri-Rail Station at Broward Boulevard, as does the 95 Express.

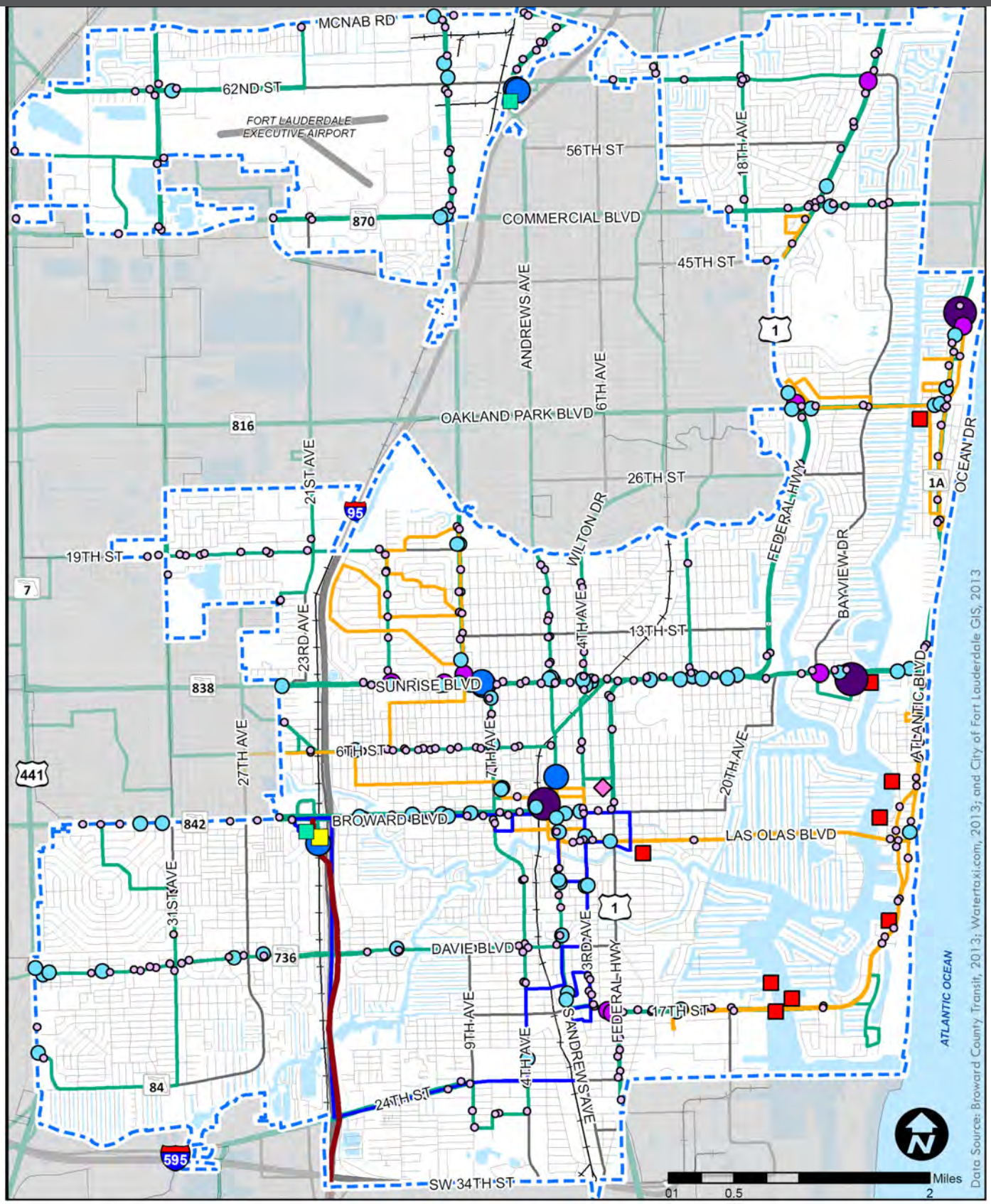
Amtrak's Fort Lauderdale station is on the Silver Service Palmetto route, which has major stops in New York City, Washington, D.C., Charleston, Savannah, Jacksonville, Orlando, Tampa, and Miami. The Fort Lauderdale Amtrak station has, according to its website, an ADA-accessible platform, restrooms, and a ticket office.

Taxis and Private Shuttles
Several taxi services and shuttle companies serve the Fort Lauderdale area, providing transportation within and out of the city. Taxi services frequent the downtown and beach areas and are available during seasonal city festivals. Shuttle services provide transportation to FLL and Port Everglades. No existing data source is available that quantifies taxi and shuttle supply and demand.

Water Taxi
The Fort Lauderdale Water Taxi system runs from roughly NE 32nd Avenue and Oakland Park Boulevard to Esplanade Park on New River. There is also a separate route that extends from SE 17th Street to Hollywood, Florida. Water Taxi service operates on a day-pass fare system; the day pass costs $20.00 for adults, with discounted passes available in the evening and for special rider populations. Winter service hours begin at 9:30 a.m. and end at 10:00 p.m., with roughly 75 minutes between service at most stops.

While four of the stops are near downtown Fort Lauderdale, the fare system, cost, and hours suggest that the Water Taxi is best suited for the needs of visitors, as opposed to Fort Lauderdale commuters. The service's website says that it "can accommodate some persons with handicaps [but] because of the nature of our smaller vessels, tides, and fixed docks, not all vessels are fully accessible at all locations." Calling in advance is recommended for riders with a disability to assure appropriate accommodations.

FIGURE 16. EXISTING TRANSIT INFRASTRUCTURE



Existing Transit Infrastructure

- BCT Routes
- Sun Trolley Route
- I-95 Express Route
- Tri-Rail Shuttle Route
- Tri-Rail Station
- Water Taxi Stop
- Amtrak Station
- Greyhound Terminal
- City Boundary

BCT Daily Boardings + Alightings

- 26 - 100
- 101 - 200
- 201 - 300
- 301 - 500
- >500

UNDERSTANDING THE CONTEXT (CONTINUED)

Bicycle Facilities and Bicycle Parking

A pilot implementation of a painted bicycle lane in Fort Lauderdale is shown in FIGURE 17. Bicycle parking is depicted in FIGURE 18.

FIGURE 17. PAINTED BICYCLE LANE

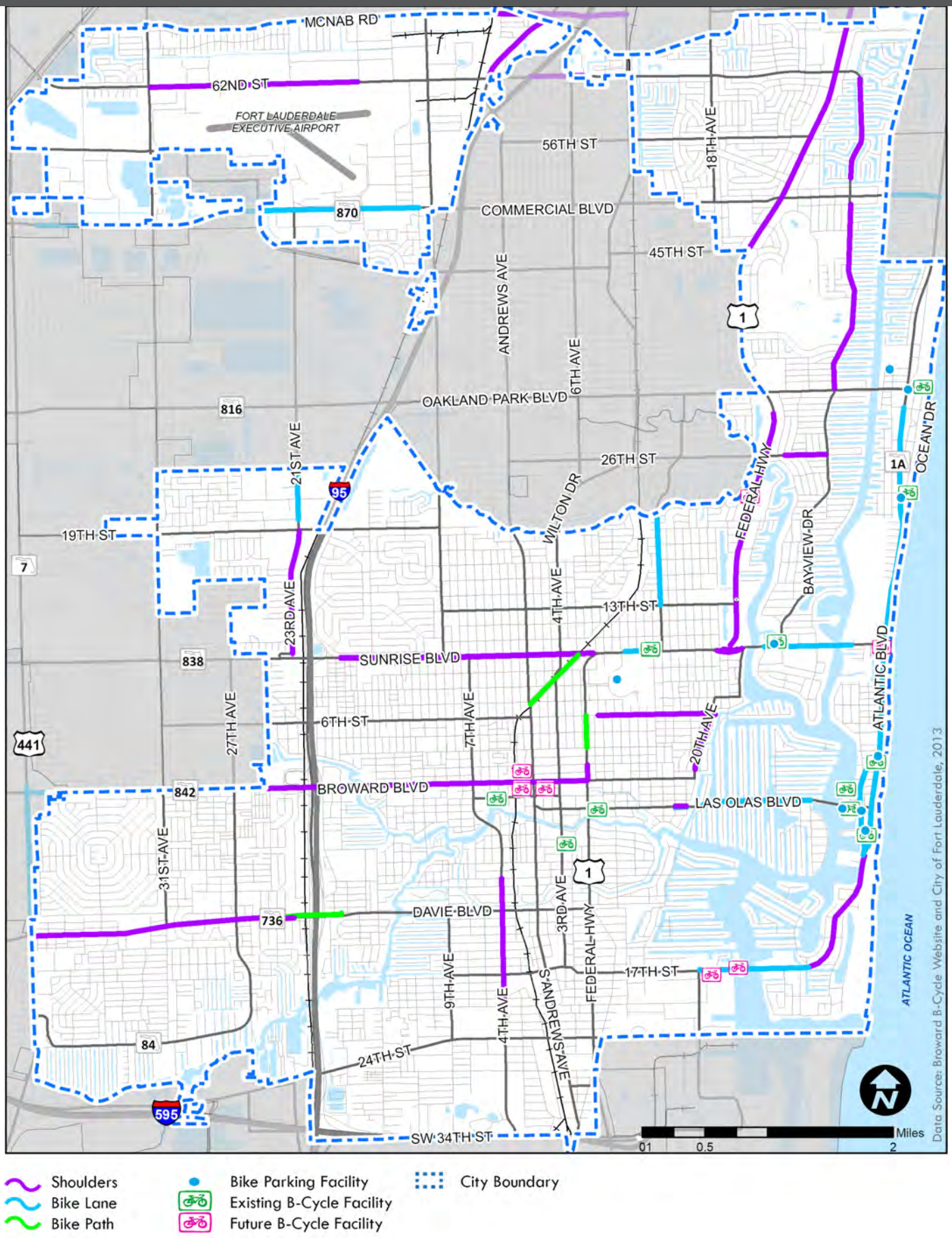
FIGURE 18. B-CYCLE STATION

As seen in the bicycle facilities and bicycle parking map in FIGURE 19, Fort Lauderdale's collector and arterial roadway network has a limited amount of bicycle facilities, and these facilities are often non-intersecting. The areas of the city nearest the beach and the Intracoastal Waterway generally have the highest concentration of bicycle facilities, although they run north-south in parallel, necessitating use of streets such as Sunrise Boulevard to move from one to the other. In general, there are few continuous north/south bicycle facilities west of US 1, and there is a need for more east-west bicycle facilities (including a bicycle facility connection between the downtown and the beach).

Fort Lauderdale is served by B-Cycle, a bicycle-sharing program that exists in several cities nationwide. It is a membership-based service that allows members to buy an annual membership or pay a fee to pick up a bicycle at any B-Cycle station and drop it off later at any other B-Cycle station. The service is expanding, as can be seen in FIGURE 19. Inside Fort Lauderdale, it is largely confined to greater downtown and the beaches at this time.

In addition to the services provided by B-Cycle, the city also has installed several public bicycle racks. These facilities, shown in FIGURE 19, are necessary to the success of CTB as they help to make biking a more convenient transportation option.

FIGURE 19. BICYCLE FACILITIES AND BICYCLE PARKING



UNDERSTANDING THE CONTEXT (CONTINUED)

Roadway System

The roadway system in Fort Lauderdale consists of limited-access highways, major corridors (arterials and collectors), and local roads. The following sections describe the roads in each of these categories. FIGURE 20 depicts major roadways in the city by FDOT functional class.

Limited-Access Highways

The existing limited-access highway network within the City of Fort Lauderdale includes I-95 and I-595, both of which are segments of the Interstate system and the National Highway System (NHS). Characteristics of these roadways are summarized in TABLE 4.

I-95 is a five-lane (directional) north-south principal arterial in the center of Fort Lauderdale but narrows to four directional lanes to the north and south of the city center. I-95 is an Access Class 1 limited-access highway with an average annual daily traffic volume (AADT) of nearly 300,000 through the city and a truck AADT of approximately 20,000.

I-595 is a three-lane (directional) east-west principal arterial in the study area. This Access Class 1 limited-access highway has an AADT of approximately 100,000 and a truck AADT of approximately 22,000. I-595 provides access to Port Everglades, FLL, and I-75.

Major Corridors

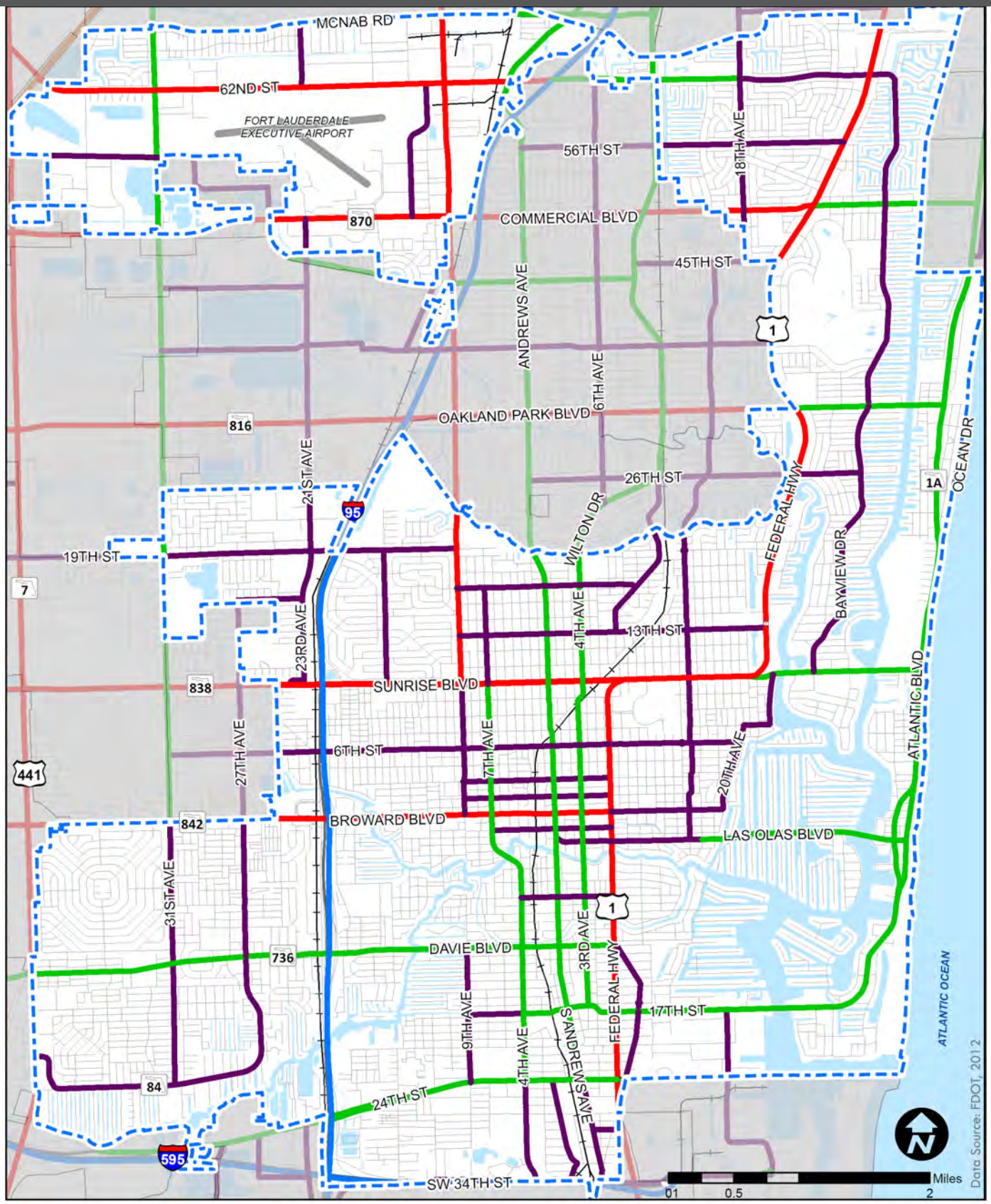
Major east-west corridors within the city include Cypress Creek Road/NW 62nd Street, Commercial Boulevard, and Oakland Park Boulevard to the north as well as Sunrise Boulevard and Broward Boulevard through the heart of Fort Lauderdale. Davie Boulevard and SR 84 traverse the south portion of the city as minor arterials. East of US 1, major east-west corridors provide access to the beach. These include Commercial Boulevard, Oakland Park Boulevard, Sunrise Boulevard, Las Olas Boulevard, and SE 17th Street. Fort Lauderdale's major east-west corridors are summarized in TABLE 5.

Major north-south corridors within the city include US 441/SR 7, NW 31st Avenue, Powerline Road, Andrews Avenue, NE 3rd/4th Avenue, and US 1. Along the beach, SR A1A provides north-south access for the length of the island. Fort Lauderdale's major north-south corridors are summarized in TABLE 6.

Local Roads

Fort Lauderdale's local streets have the highest connectivity in the downtown area, as shown in FIGURE 20. Despite geographical features like the New River that inhibit neighborhood connectivity, the city's grid-like street pattern allows contiguous, linear local road access to collector and arterial facilities. Connectivity is more limited to the north and west of the downtown, with areas characterized by curvilinear street patterns, loop roads, and modified cul-de-sac street networks that inhibit through movements. I-95 additionally acts as a barrier to east-west connectivity, as few local roads connect across I-95. Available data are insufficient to assess local roadway volumes or level of service (LOS).

FIGURE 20. FUNCTIONAL CLASS (FDOT)



UNDERSTANDING THE CONTEXT (CONTINUED)

TABLE 4. LIMITED-ACCESS HIGHWAYS IN FORT LAUDERDALE

CORRIDOR	FUNCTIONAL CLASS	DIRECTIONAL LANES
I-95	Principal Arterial	4-5
I-595	Principal Arterial	3

Source: FDOT, 2012

TABLE 5. MAJOR EAST-WEST CORRIDORS (NON-INTERSTATES)

CORRIDOR	FUNCTIONAL CLASS	DIRECTIONAL LANES
Cypress Creek Road/NW 62nd Street*	Minor Arterial	2-4
Commercial Boulevard*	Principal Arterial	3
Oakland Park Boulevard	Minor Arterial	3
Sunrise Boulevard*	Principal Arterial	3
Broward Boulevard*	Principal Arterial	3
Las Olas Boulevard	Minor Arterial	1-2
Davie Boulevard*	Minor Arterial	2
SE 17th Street	Minor Arterial	2-3
SR 84*	Minor Arterial	3-4

Source: FDOT, 2012

*This information applies to segments located west of US 1.

TABLE 6. MAJOR NORTH-SOUTH CORRIDORS (NON-INTERSTATES)

CORRIDOR	FUNCTIONAL CLASS	DIRECTIONAL LANES
US 441/SR 7	Minor Arterial	3
NW 31st Avenue	Minor Arterial	3
Powerline Road	Principal Arterial	2-3
NE 3rd/4th Avenue	Minor Arterial	2
Andrews Avenue	Minor Arterial	2
US 1/Federal Highway	Principal Arterial	2-3
SR A1A	Minor Arterial	2-3

Source: FDOT, 2012

Connectivity

A properly organized multimodal street network promotes continuous, "connected" systems for pedestrians, bicyclists, transit users, and drivers. Transit stations and stops should be located within walking distance of activity centers, and access routes for pedestrians and bicycles to transit should be as direct as possible, promoting both pedestrian and bicycle connectivity [Florida Department of Transportation, 2003]. The various MCDs within the city have different degrees of connectivity. Overall, automobile connectivity in the study area is relatively high due to the extensive roadway network in most places. Transit, bicycle, and pedestrian connectivity is more limited once the constrained nature of transit routes and the appropriateness of pedestrian and bike connections are taken into account.

A modified version of the methodology described in Chapter Five of FDOT's Multimodal Transportation Districts and Area-wide Quality of Service Handbook was used to assess objectively the connectivity of the MCDs within the city. This methodology uses the number of polygons—formed by the links in the transportation network—per square mile as a general metric for a given area's connectivity. If the transportation network forms more than 50 polygons within the area (i.e., more than 50 polygons per square mile), it is considered to have "good" connectivity.

For the purposes of developing CTB, the number of polygons created by the transportation networks for pedestrians, bicyclists, and transit were counted for each MCD. This number was then normalized to yield an average score of polygons per square mile as an indication of each MCD's connectivity. For each mode, only the links for that mode's travel were used to divide the district into polygons. That is, if two perpendicular transit routes were the only transit routes in an MCD, that MCD would be said to have four polygons for the purposes of its transit connectivity score.

While this methodology is useful as a general descriptor, some shortcomings should be noted. MCDs with a large park, golf course, airport, or other undivided open space will have a reduced score, even if the rest of the MCD has a much more complete transportation grid. Additionally, major features such as waterways, Interstates, or railroad tracks may cause significant disconnection not reflected in the metric.

UNDERSTANDING THE CONTEXT (CONTINUED)

Pedestrian Connectivity

In the absence of a rigorous audit of sidewalks and pedestrian paths, the street network that excludes Interstates and other roadways that specifically restrict pedestrian access (but includes arterials, collectors, and local streets) serves as a proxy for the pedestrian network. Some portions of this street network may have sidewalks that have short gaps, are in poor repair, are inaccessible, or are insufficiently buffered from high traffic speeds and volumes, so the pedestrian connectivity scores in TABLE 7 may over-estimate existing pedestrian connectivity somewhat.

TABLE 7 shows that most MCDs in the city have pedestrian connectivity scores that are greater than or equal to a target of 50 based on current development patterns. (The shaded cells in TABLE 7 are those wherein the pedestrian connectivity score is greater than or equal to 50.) This is a testament to the quality of the existing grid street network in the city.

TABLE 7. PEDESTRIAN CONNECTIVITY

MCD #	MCD NAME	TOTAL PEDESTRIAN NETWORK POLYGONS	PEDESTRIAN CONNECTIVITY SCORE*	MCD AREA (SQUARE MILES)
1	**Lauderdale West**	326	71.10	4.58
2	**River Communities**	166	50.23	3.30
3	**Greater Downtown**	88	106.49	0.83
4	**South Commerce Center**	195	68.62	2.84
5	**Victoria Park**	193	88.15	2.19
6	**Intracoastal**	48	20.39	2.35
7	**Coral Ridge South**	189	67.99	2.78
8	**Coral Ridge North**	209	48.76	4.29
9	**Lauderdale North**	128	25.62	5.00
10	**Middle River**	472	76.70	6.15
11	**Beaches**	97	53.69	1.81

*A score of 50 or greater is considered indicative of "good" connectivity according to FDOT's Multimodal Transportation Districts and Area-wide Quality of Service Handbook.

Bicycle Connectivity

In order to assess bicycle connectivity, which is reported in TABLE 8, several data sources were considered. After cross-referencing with aerial photography, the interactive bicycle suitability map from Bike Broward was selected as the most accurate depiction of the existing bicycle network. It is technically possible for bicyclists to travel on most streets in the city, but the streets have varying degrees of suitability for bicyclists based on their vehicular volume, the speed of traffic with which bicyclists must interact, and cross section characteristics (i.e., available space).

For the purposes of defining the bicycle transportation network for connectivity purposes, only arterials and collectors that have a bicycle facility and links that have "least" or "low to moderate" interaction with traffic have been counted. Bike Broward indexed the following types of facilities on its bicycle suitability map: multi-purpose path, marked bike lane, wide curb lane, paved shoulder, and 3' wide undesignated lane. This estimation of bicycle connectivity is very conservative because the data do not assess local streets' bicycle suitability; accordingly, TABLE 8 shows that no MCDs meet a target connectivity score of 10 (which was reduced from a target of 50 to reflect exclusion of local streets). However, this evaluation of collector and arterial level roadways is informative in that most bicycling for transportation, such as to work or for shopping or other uses, would necessitate some collector or arterial level travel. The connectivity assessment for pedestrians presented earlier serves as a surrogate for bicycle connectivity on local streets.

TABLE 8. BICYCLE CONNECTIVITY (ARTERIALS AND COLLECTORS)

MCD #	MCD NAME	TOTAL BICYCLE NETWORK POLYGONS	BICYCLE CONNECTIVITY SCORE*	MCD AREA (SQUARE MILES)
1	**Lauderdale West**	5	1.09	4.58
2	**River Communities**	1	0.30	3.30
3	**Greater Downtown**	3	3.63	0.83
4	**South Commerce Center**	1	0.35	2.84
5	**Victoria Park**	1	0.46	2.19
6	**Intracoastal**	2	0.85	2.35
7	**Coral Ridge South**	6	2.16	2.78
8	**Coral Ridge North**	3	0.70	4.29
9	**Lauderdale North**	1	0.20	5.00
10	**Middle River**	1	0.16	6.15
11	**Beaches**	4	2.21	1.81

*A score of 10 or greater is assumed to be indicative of "good" bicycle connectivity on the arterial and collector system.

UNDERSTANDING THE CONTEXT (CONTINUED)

Transit Connectivity

The transit routes shown in FIGURE 16 comprise BCT bus routes, Sun Trolley routes, Water Taxi stops and passenger rail stops. The BCT and Sun Trolley routes were used to assess the degree of transit connectivity in each MCD. The results of this assessment are contained in TABLE 9.

It is not desirable to have transit service on every street in the city—such a transit network would not be cost-effective—so a target connectivity score of 50 is excessive. A target score of 25 would approximate the level of transit connectivity currently available in downtown Fort Lauderdale, so the shaded cells in TABLE 9 are those wherein the transit connectivity score is greater than or equal to 25. The difference between the 50 target and the 25 target is made up for by the pedestrian network; thus, improving pedestrian access to transit by investing in pedestrian connectivity is important for supporting a high level of transit connectivity.

TABLE 9. TRANSIT CONNECTIVITY

MCD #	MCD NAME	TOTAL TRANSIT NETWORK POLYGONS	TRANSIT CONNECTIVITY SCORE*	MCD AREA (SQUARE MILES)
1	**Lauderdale West**	8	1.74	4.58
2	**River Communities**	10	3.03	3.30
3	**Greater Downtown**	21	25.41	0.83
4	**South Commerce Center**	10	3.52	2.84
5	**Victoria Park**	2	0.91	2.19
6	**Intracoastal**	5	2.12	2.35
7	**Coral Ridge South**	6	2.16	2.78
8	**Coral Ridge North**	12	2.80	4.29
9	**Lauderdale North**	15	3.00	5.00
10	**Middle River**	32	5.20	6.15
11	**Beaches**	22	12.18	1.81

*A score of 25 or greater is assumed to be indicative of "good" transit connectivity.

WHAT DOES THE FUTURE LOOK LIKE?

Future Land Use

The future land use map in FIGURE 21 looks very similar to the existing land use map in FIGURE 6. While the City has several plans regarding the future development patterns of the city, including encouraging certain areas to develop to a higher density and in a more concentrated pattern that is supportive of multimodal transportation, the future land use map does not currently represent that pattern.

In FIGURE 21, commercial and industrial uses are largely still located along corridors. Residential uses tend to be found behind a buffer of commercial development. The area to the south near FLL changes from industrial uses to mostly institutional uses.

Redevelopment Plans

NORTHEAST COMMUNITY REDEVELOPMENT AREA

This area has had some major improvements. The Northwest/Progresso/Flagler Heights Implementation Plan presents an urban design and implementation plan guiding potential streetscapes and redevelopment. As part of this plan, the CRA is acquiring parcels to transform Sistrunk Boulevard into a mixed-use commercial corridor. Additionally, planned redevelopment has already begun to occur in Flagler Heights.

Source: City of Fort Lauderdale, 2008

DOWNTOWN MASTER PLAN

The plan creates a framework to activate streets and improve connectivity to create a vibrant. mixed-use downtown using a combination of land use, transportation, environmental, and design improvements. Historical character is to be maintained while fostering and promoting new development.

Source: City of Fort Lauderdale, 2007

NORTH US 1 URBAN DESIGN PLAN

US1 is in transition from a commercial-oriented, high-speed arterial to a mixed-use urban roadway. The plan is meant to ensure that development along US 1 is coherent. Residential character is to be upheld while economic viability of the corridor is sustained. Improvements are intended to transform the corridor into a pedestrian friendly, mixed-use environment with a mix of regional and local destinations.

Source: City of Fort Lauderdale, 2008

CENTRAL BEACH MASTER PLAN

As stated previously, Fort Lauderdale has a major natural asset: its location on the Atlantic Ocean. This has defined its identity for many years. The Master Plan aims to ensure cohesive development to capitalize on that asset along the Central Beach area by helping to create a coherent identity while preserving historically significant features. Additionally, the plan aims to create greater multimodal connectivity between the Central Beach and the mainland of Fort Lauderdale.

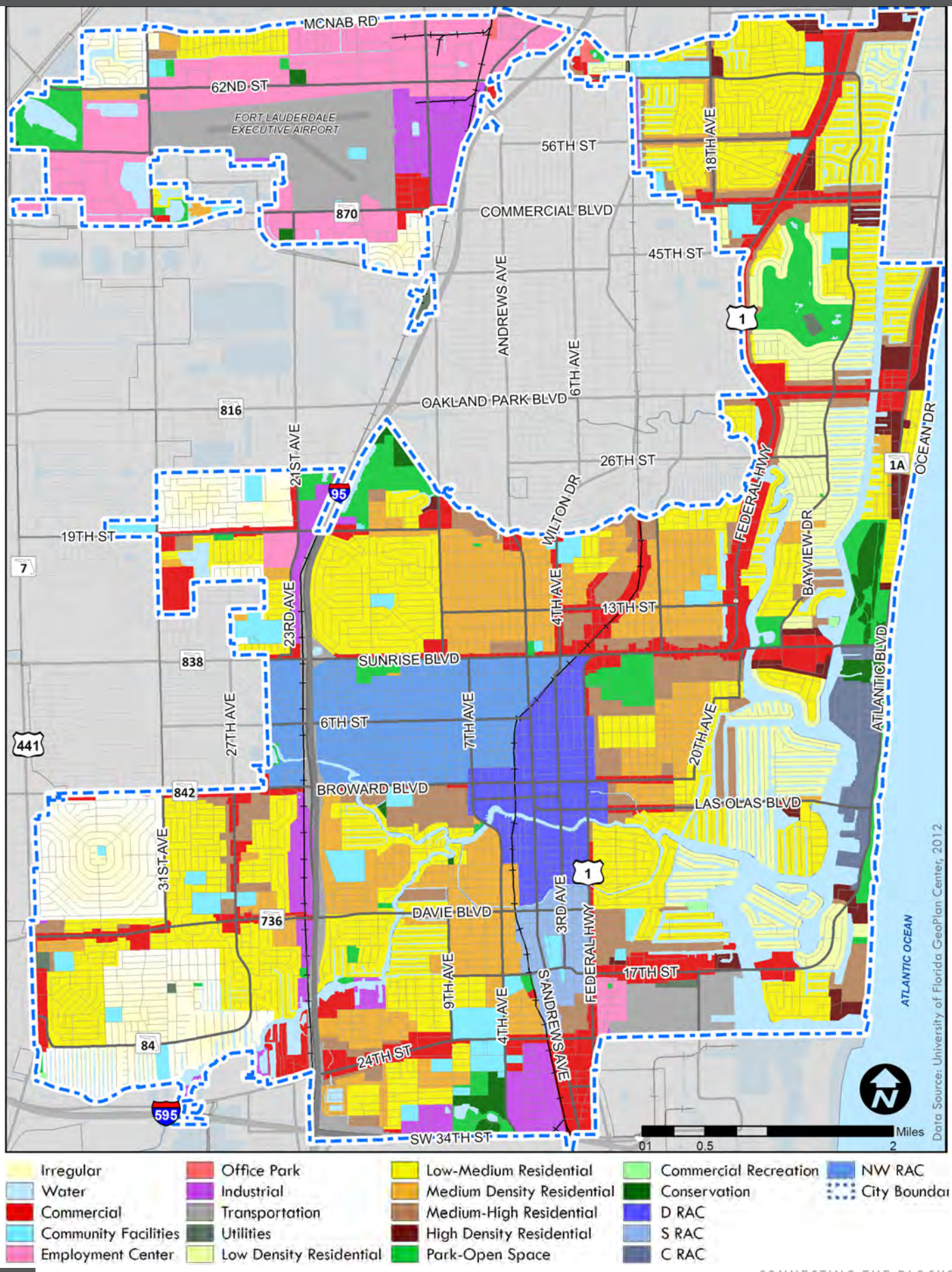
Source: City of Fort Lauderdale, 2009

SOUTH ANDREWS AVENUE MASTER PLAN

South Andrews Avenue presents a critical connection between downtown and the airport. The master plan presents a framework to transform South Andrews Avenue from an under-utilized corridor into a dense and vibrant urban area that will serve both local and regional needs. The main components of the master plan use the existing street grid as a basis for recommended multimodal, land use, and economic improvements to create a highly livable area.

Source: City of Fort Lauderdale, 2003

FIGURE 21. FUTURE LAND USE



UNDERSTANDING THE CONTEXT (CONTINUED)

Future Roadway Improvements

In accordance with the 2035 LRTP (which is currently being updated for 2040), cost-feasible roadway projects located within the city of Fort Lauderdale consist of the SR A1A lane reduction and the I-95 Managed Lanes. TABLE 10 provides more information about these projects.

Unfunded projects in the 2035 LRTP include a county-wide traffic signal system and an Intelligent Transportation Systems (ITS) upgrade to support bus rapid transit (BRT) implementation.

TABLE 10. 2035 LRTP COST FEASIBLE ROADWAY PROJECTS WITHIN FORT LAUDERDALE

PROJECT	SR A1A	I-95 MANAGED LANES
From	Oakland Park Boulevard	I-595
To	Flamingo Drive	Palm Beach County line
Length (Miles)	1.1	15
Description	Reduce from six lanes to four lanes	Implement four managed lanes
Total Project Cost*	$12,300,000	$670,000,000
Construction Year	2016-2020	2021-2025

*2009 dollars

UNDERSTANDING THE CONTEXT (CONTINUED)

Future Transit Improvements

The 2035 LRTP defines two types of premium transit service—Premium High Capacity Transit and Premium Rapid Bus Transit—for which funding allocation is to be priority. Premium High Capacity Transit encompasses those transit services in which 50 percent or more of the alignment is a fixed guideway. This includes light rail transit (LRT), streetcars, people movers, BRT, and commuter rail projects. Premium Rapid Bus Transit encompasses those transit services that operate in mixed traffic (or are less than 50 percent fixed guideway) and have budgetary needs typically less than $50 million. Premium Rapid Bus Transit projects, such as Transit Signal Priority (TSP) implementation, enhance the supporting bus network and provide connections to Premium High Capacity Transit.

Four cost-feasible Premium High Capacity Transit projects within the City of Fort Lauderdale are identified in the 2035 LRTP. Tri-Rail service improvements and Premium Rapid Bus Transit along US 1 are also identified in the 2035 LRTP. Cost-feasible transit projects from the 2035 LRTP are described in TABLE 11.

In addition to the cost-feasible transit projects, the 2035 LRTP identified four unfunded transit projects within the City of Fort Lauderdale, including The Wave Streetcar discussed in the following section. TABLE 12 summarizes the pertinent illustrative projects included in the 2035 LRTP.

TABLE 11. 2035 LRTP COST FEASIBLE TRANSIT PROJECTS WITHIN FORT LAUDERDALE

CORRIDOR	TRANSIT MODE	PEAK/OFF-PEAK HEADWAY (MINUTES)	CAPITAL COST*
SR 7/US 441	Premium High Capacity	5/7.5	$442,910,400
Oakland Park Boulevard	Premium High Capacity	5/7.5	$271,040,000
Sunrise Boulevard	Premium High Capacity	5/7.5	$209,622,000
Broward Boulevard	Premium High Capacity	5/7.5	$77,568,550
US 1	Premium Rapid Bus	10/15	$18,760,000
Tri-Rail	Commuter Rail	20/60	N/A
Tri-Rail/I-95 Corridor	All Tri-Rail Shuttles	20/60	N/A

*2009 dollars

TABLE 12. 2035 LRTP UNFUNDED TRANSIT PROJECTS WITHIN FORT LAUDERDALE

CORRIDOR	TRANSIT MODE	PEAK/OFF-PEAK HEADWAY (MINUTES)	CAPITAL COST*
Central Broward East-West Transit	Premium High Capacity	5/7.5	$902,988,269
South Florida East Coast Corridor (FEC)	Commuter Rail	15/30	$1,098,240,000
Peoplemover - SunPort (Airport/Seaport)	Automated Peoplemover (Premium High Capacity)	N/A	$806,284,000
City of Fort Lauderdale Downtown	Premium Rapid Bus	10/15	$18,760,000

*2009 dollars

Not included in the 2035 LRTP are two additional transit projects: All Aboard Florida and the Tri-Rail Coastal Link. Both of these are passenger rail projects along the FEC Railway.

THE WAVE STREETCAR

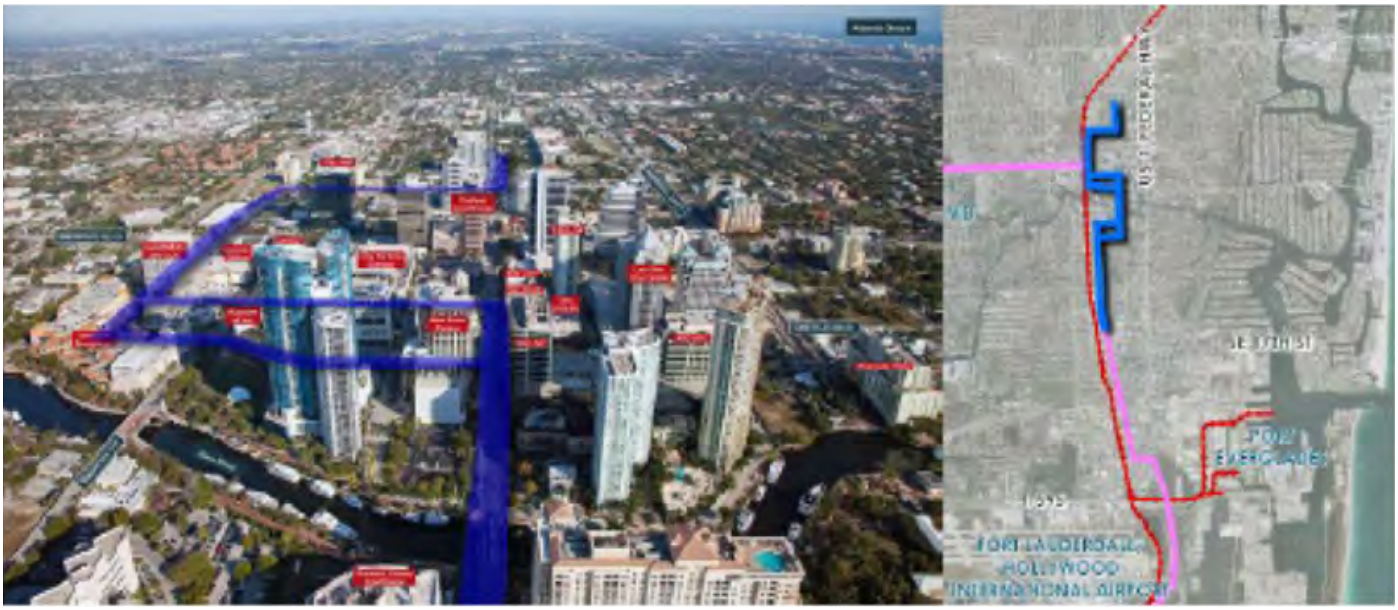
The Wave is a 2.7-mile streetcar system that will serve as a local circulator in downtown Fort Lauderdale. The circulator is proposed to run along Andrews Avenue from SE 17th Street north to NE 6th Street and then cross east to SE 3rd Avenue for a stretch of six blocks across the New River. This route is shown in FIGURE 22. Streetscape improvements around the stations, including crosswalks, shade trees, lighting, and improved sidewalks, are expected to be components of a transit-oriented development (TOD) ordinance under development by the City of Fort Lauderdale.

On June 22, 2012, The Wave Streetcar project was awarded an $18 million federal grant for project development. The project is also benefiting from land donations from the City of Fort Lauderdale. Additional funding sources include State mass transit funds and a special assessment district, as well as innovative sources such as advertising and sponsorship opportunities.

In addition to the Federal Transit Administration (FTA), the Wave is supported by many partners. These partners are the City of Fort Lauderdale, South Florida Regional Transportation Authority (SFRTA), Fort Lauderdale's Downtown Development Authority (DDA), the Broward MPO, Broward County, Broward County Transit (BCT), and FDOT.

Procurement and construction are scheduled for 2015, and opening is scheduled for December 2017.

FIGURE 22. THE WAVE ALIGNMENT



Source: Fort Lauderdale Downtown Development Authority, 2013

UNDERSTANDING THE CONTEXT (CONTINUED)

Future Bicycle Improvements

The 2035 LRTP identifies 333 cost-feasible bicycle projects, including 485.4 miles of facility creation or improvement, at an estimated cost of $113 million in 2009 dollars. Projects were ranked in terms of priority, based on their proximity to a school, whether they provide connectivity to a transit system, whether they are near a "Mobility Hub," and whether they are integrated with existing greenways.

According to the 2035 LRTP's Exhibit 70, it appears that all or part of 28 projects ranked 1 or 2 are within the City. Given the large number of bicycle projects, only projects ranked 1 or 2 are included in TABLE 13; these projects are of higher priority and are designated to receive funding earlier than the lower-ranked projects. The projects in TABLE 13 are 42.1 miles in total length and have an estimated total cost of $9,792,405.

Future Pedestrian Improvements

The 2035 LRTP identifies 428 cost-feasible pedestrian projects, including 314 miles of walkway creation or improvement and 251 miles of greenway at a total estimated cost of $364 million in 2009 dollars. In a similar manner to bicycle projects, pedestrian projects were ranked in terms of priority, based on their proximity to a school, whether they provide connectivity to a transit system, whether they are near a "Mobility Hub," and whether they are integrated with existing greenways.

From the information available in 2035 LRTP Exhibit 69, it appears that all or part of 21 projects ranked 1 are within the City. Given the large number of pedestrian projects, only projects ranked 1 are included in TABLE 14. These top-ranked projects are of higher priority and are designated to receive funding earlier than the lower-ranked projects. They represent what have been deemed as the most critical gaps in the current pedestrian network. The projects in TABLE 14 are 10.7 miles in total length and have an estimated total cost of $3,901,707.

SUMMARY

This chapter summarizes currently available data about the multimodal transportation system in the City of Fort Lauderdale. Ensuing chapters define standards and targets for assessing the quality of the multimodal transportation system and identify needed multimodal mobility improvements.

TABLE 13. 2035 LRTP 1 AND 2 RANKED BICYCLE FACILITY IMPROVEMENT PROJECTS

PROJECT LOCATION	LENGTH (MILES)	RANK	CAPITAL COST*
Cypress Road between Atlantic Boulevard and McNab Road	1.4	1	$328,014
S 2nd Street between SW 7th Avenue and SE 3rd Avenue	0.6	1	$143,775
SE 3rd Avenue between Las Olas Boulevard SE and 17th Street	1.3	1	$291,543
NW 15th Street between Powerline Road and Dixie Highway	2.0	2	$456,046
Hammondville Road NW between 26th Avenue and Dixie Highway	2.2	2	$516,400
NW 62nd Street between Dixie Highway and US 1/Federal Highway	1.5	2	$347,786
NE 56th Street between Andrews Avenue and Dixie Highway	0.9	2	$213,590
Dixie Highway between Commercial Boulevard and Oakland Park Boulevard	1.6	2	$369,978
NE 6th Avenue between NE 61st Court and Prospect Road	1.5	2	$351,451
Dixie Highway between Oakland Park Boulevard and NE 13th Street	1.8	2	$421,899
Federal Highway/US 1 between Sunrise Boulevard and Broward Boulevard	1.1	2	$246,241
Broward Boulevard between US 1/Federal Highway and Victoria Park Road	0.8	2	$179,028
SE 17th Street Between US 1/Federal Highway and SE 23rd Avenue	1.4	2	$320,893
Andrews Avenue between SE 5th Street and Davie Boulevard	0.6	2	$139,875
Andrews Avenue between Davie Boulevard and Eller Drive	1.7	2	$402,223
SW 4th Avenue between SW 23rd Street and Perimeter Road	0.8	2	$194,064
SR 84 between I-95 and Federal Highway/US 1	2.0	2	$474,967
SW 40th Avenue between Griffin Road and Stirling Road	1.1	2	$258,269
Stirling Road from Just west of Florida's Turnpike to Ravenswood Road	2.9	2	$678,547
NE 4th Avenue between NE 20th Street and Sunrise Boulevard	1.1	2	$254,880
NW 31st Avenue between Commercial Boulevard and Oakland Park Boulevard	1.4	2	$328,661
SR 7 between Sunrise Boulevard and NW 3rd Street	0.8	2	$195,575
NW 31st Avenue between Oakland Park Boulevard and Sunrise Boulevard	2.0	2	$463,296
NW 31st Avenue between Sunrise Boulevard and Broward Boulevard	1.0	2	$237,960
Sistrunk Boulevard between NW 27th Avenue and NE 3rd Avenue	2.3	2	$539,409
NW 5th Street between University Drive and Sunrise Boulevard	1.8	2	$408,079
Riverland Road between SR 7 and SW 13th Street	2.5	2	$573,910
NW 15th Street between Powerline Road/Hammondville Road and Dixie Highway	2.0	2	$456,046

*2009 dollars

UNDERSTANDING THE CONTEXT (CONTINUED)

TABLE 14. 2035 LRTP 1 RANKED PEDESTRIAN FACILITY IMPROVEMENT PROJECTS

PROJECT LOCATION	LENGTH (MILES)	RANK	CAPITAL COST*
S Miami Road between SE 17th Street and Andrews Avenue	1.1	1	$383,102
N Dixie Highway between McNab Road/SW 15th Street and NE 51st Street	1.4	1	$511,884
N Dixie Highway between NE 10th Street and Atlantic Boulevard	0.7	1	$240,296
W Atlantic Boulevard between I-95 and Dixie Highway	0.6	1	$229,830
Southside of Basin/NW 39th Street between NW 39th Avenue and NW 31st Avenue	0.9	1	$326,403
NW 33rd Avenue/NW 16th Street between NW 16th Street and NW 31st Avenue	0.8	1	$296,710
W Sunrise Boulevard between SR 7/US 441and NW 34th Avenue	0.6	1	$221,410
Peters Road/SW 42nd Avenue between SW 12th Street and SW 42nd Avenue	0.5	1	$191,049
NE 4th Street between NW 1st Avenue and NE 12th Avenue	0.6	1	$229,093
E Sheridan Street between US 1/Federal Highway and East of SE 3rd Avenue	0.3	1	$104,043
SW 4th Avenue between SR 84 and Park Lane	0.5	1	$173,442
SW 2nd Avenue between SW 17th Street and the South End of SW 2nd Avenue	0.1	1	$49,023
Progresso Drive/NE 3rd Avenue between NE 9th Street and Flagler Drive	0.1	1	$26,007
N Dixie Highway between NE 38th Street and NE 26th Street	0.4	1	$158,944
NE 14th Way/NE 13th Avenue between NE 53rd Street and Commercial Boulevard	0.4	1	$145,571
NW 36th Street between NW 43rd Avenue and SR 7/US 441	0.2	1	$68,762
N SR 7 between NW 8th Place and NW 3rd Street	0.7	1	$251,577
S Andrews Avenue between Las Olas Boulevard and New River Drive	0.1	1	$41,532
NE 6th Street between Just west of Flagler Avenue and NE 3rd Avenue	0.2	1	$77,312
NE 4th Avenue between NE 2nd Street and Atlantic Boulevard	0.1	1	$44,247
NE 4th Street between Flagler Avenue and NE 5th Avenue	0.4	1	$131,470
SR 7 between Sunrise Boulevard and NW 3rd Street	0.8	2	$195,575
NW 31st Avenue between Oakland Park Boulevard and Sunrise Boulevard	2.0	2	$463,296
NW 31st Avenue between Sunrise Boulevard and Broward Boulevard	1.0	2	$237,960
Sistrunk Boulevard between NW 27th Avenue and NE 3rd Avenue	2.3	2	$539,409
NW 5th Street between University Drive and Sunrise Boulevard	1.8	2	$408,079
Riverland Road between SR 7 and SW 13th Street	2.5	2	$573,910
NW 15th Street between Powerline Road/Hammondville Road and Dixie Highway	2.0	2	$456,046

*2009 dollars

COMPLETE STREETS STANDARDS

In CTB, needed multimodal mobility projects are objectively identified through the application of standards that represent the desired multimodal transportation system. The focus of the standards described in this section are connectivity and quality. The standards are applied with respect to a new, city-specific Complete Streets typology.

CONNECTIVITY AND QUALITY

Quality is a key element in improving multimodal connectivity. Investing in the quality of a pedestrian connection increases the pedestrian catchment area, may be more feasible than constructing new connections, and is needed citywide (even in areas where otherwise adequate sidewalks already exist). Elements of quality include awnings, pedestrian-scale lighting, pavers, street trees, benches, small pedestrian plazas, public art, and enhanced pedestrian crossings; these features make multimodal travel more comfortable and more convenient and positively affect perceptions of safety and security. Existing pedestrian-oriented lighting in Fort Lauderdale is shown in FIGURE 23.

FIGURE 23. PEDESTRIAN-ORIENTED LIGHTING

Pedestrian system quality, in turn, impacts access to transit. One-fourth mile is the industry rule-of-thumb for the average distance pedestrians will walk to access bus service. According to TABLE 15, that rule-of-thumb reflects a pedestrian connection that is "attractive but not weather-protected." If the pedestrian connection includes street trees, awnings, pedestrian shelters, and/or covered sidewalks, the average walk distance doubles according to TABLE 15. Thus, investments in quality improve pedestrian access and promote pedestrian travel.

TABLE 15. MAXIMUM WALKING DISTANCES

PEDESTRIAN ENVIRONMENT	WALK TIME (MINUTES)	WALK DISTANCE (FEET)
In a highly attractive, completely weather-protected and artificially climatized environment	20	5,000
In a highly attractive environment in which sidewalks are protected from sunshine and rain	10	2,500
In an attractive but not weather-protected area during periods of inclement weather	5	1,250
In an unattractive environment (parking lot, garage, traffic-congested streets)	2	600

Source: Gruen, Victor. The Heart of Our Cities. Simon and Schuster, New York City, NY, 1964.

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

The quality approach applies to bicycle travel, although data analogous to that in TABLE 15 are not available. Characteristics of interest are bicycle route connections to major attractors/generators/bicycle stations, location and design of bicycle parking, presence of covered bicycle parking, presence of bicycle-oriented wayfinding, and degree of bicyclist interaction with automobile traffic.

The quality approach applies directly to transit as well (i.e., beyond improving access to transit through investments in pedestrian system quality). Transit quality takes the following into consideration:

- Stop amenities (e.g., enhanced shelters, real-time information, and public art)
- Frequency of service
- Service span
- Vehicle amenities (e.g., Wi-Fi, Transit TV, on-board announcements)
- Transit/auto travel time ratio and reliability (both of which could be improved through transit preferential treatments and dwell time improvements)

STREETS TYPOLOGY

The Complete Streets typology described in this report is summarized in TABLE 16. It has been adapted from the Broward Complete Streets Guidelines in order to ensure compatibility of CTB with the Guidelines. The City's multimodal standards are tied to the City's Complete Streets typology; they build on the County's guidelines and tailor them for local application.

To address the unique context of Fort Lauderdale, the three classifications into which the Broward Complete Streets Guidelines categorizes streets have been further refined based on the desired surrounding urban form. This consideration of form takes for granted that mixing of land uses is a given throughout the city (although the relative proportions of residential and non-residential use in a given area will vary). Inspiration for the refined typology comes from sources such as San Francisco's Better Streets and the case studies described in the previous chapter.

The following sub-sections describe each classification in the typology in detail.

TABLE 16. CTB COMPLETE STREETS TYPOLOGY

SPECIAL	BOULEVARDS	AVENUES	STREETS
Beachside Thoroughfares arterials and collectors near beaches; high levels of multimodal travel and a tourism focus	**Center City Boulevards** arterials in central business districts (CBDs) and possibly major employment centers	**Center City Avenues"** collectors in CBDs and possibly major employment centers	**Center City Streets** local streets in CBDs and possibly major employment centers
Industrial Thoroughfares collectors and streets surrounded primarily by industrial uses; truck routes	**Commercial Boulevards** arterials in medium density or transitional areas that are significantly non-residential or mixed-use	**Commercial Avenues** some arterials and collectors in medium density or transitional areas that are significantly non-residential or mixed-use	**Commercial Streets** local streets in medium density or transitional areas that are significantly non-residential or mixed-use
	Residential Boulevards arterials in areas that are significantly residential but may have pockets of non-residential uses	**Residential Avenues** some arterials and collectors in areas that are significantly residential but have lower volumes of traffic	**Residential Streets** local streets in areas that are significantly residential

Boulevards

As stated in the Broward Complete Streets Guidelines, "a boulevard is a walkable, divided arterial street designed for high vehicular capacity and moderate speed, traversing an urbanized area." Boulevards are primary transit routes, serve as primary goods movement routes, and should support non-vehicular travel by providing both sidewalks and bicycle lanes. They typically include other features such as landscaped medians and potentially bus lanes or side access lanes. Most importantly, Boulevards act as main thoroughfares that connect urban centers to one another and support constant medium- to high-volumes of traffic and moderate speeds.

Center City Boulevards

Center City Boulevards consist of the portions of Boulevards that run through the highest-density mixed-use centers in the city. High-rise development may be located along or proximate to Center City Boulevards. Traffic may flow faster than desired for ideal pedestrian and bicycling conditions, and traffic volumes are high throughout the day, but there is a substantial focus on pedestrians, bicycles, and transit because of the walkable form of the surrounding environment. Center City Boulevards serve as primary transit routes and may feature dedicated right-of-way for transit. They also may serve as hurricane evacuation routes and may facilitate the movement of large trucks. Center City Boulevards should have bicycle lanes that are a minimum of 5 feet in width and which may or may not be separated from automobile traffic by a buffer. Sidewalks should be wide to provide for significant pedestrian volumes. There are several characteristics of Center City Boulevards:

- Premium transit facilities, including bus shelters, support multimodal transportation and reduce the use of the single-occupant vehicle.
- Traffic speeds and volumes may warrant improvements to make streets more supportive of multimodal transportation.
- Right-of-way is dedicated to bicycle traffic.
- Significant attention is paid to the pedestrian realm, which includes wide sidewalks, landscape buffers, street furniture, street trees, pedestrian/bicycle-oriented wayfinding, and pedestrian shelters (e.g., awnings and covered walkways) or trees.
- Limited setbacks and active ground floor uses ensure vibrancy.
- Special treatments that may be appropriate:
  - Mid-block crossings
  - Pedestrian refuges
  - Highly visible crosswalks
  - Bus-only lanes, Business Access and Transit (BAT) lanes, TSP, or other transit-supportive roadway strategies
  - Bulb-outs for transit
  - On-street parking for access to businesses
  - Pedestrian scramble phases at intersections with high volumes of pedestrian traffic

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Commercial Boulevards

Commercial Boulevards are thoroughfares that run throughout the city and connect activity centers to each other. Traffic may flow faster than desired for ideal pedestrian and bicycling conditions, and traffic volumes are high throughout the day. Surrounding land uses include retail, commercial, and some higher-density residential; these uses may be more dispersed outside of activity centers. Commercial Boulevards act as primary transit routes and primary routes for goods movement. They may also serve emergency response and hurricane evacuation functions. They should include wide sidewalks and bicycle lanes that are a minimum of 5 feet in width and which may or may not be buffered from automobile traffic. Because Commercial Boulevards are main thoroughfares in the city, it is imperative to consider connectivity between them to ensure that there is a dense network of supporting avenues and streets to allow for the dispersal of traffic. There are several characteristics of Commercial Boulevards:

- Proposed developments should be carefully considered to ensure that they are supportive of the future goals of the City, including but not limited to targeted development in identified nodes and a land use pattern that is supportive of multimodal transportation.
- Transit amenities should be of the highest quality to support multimodal transportation and reduce the use of the single-occupant vehicle.
- Right-of-way is dedicated to bicycle traffic.
- Traffic speeds and volumes may warrant pedestrian improvements to make streets more supportive of multimodal transportation.
- Special treatments that may be appropriate:
  - Mid-block crossings
  - Pedestrian refuges
  - Highly visible crosswalks
  - Bulb-outs for transit
  - Bus-only lanes, BAT lanes, TSP, or other transit-supportive roadway strategies

Residential Boulevard

Residential Boulevards are high-volume thoroughfares that connect activity centers via areas that are primarily residential. Residential Boulevards are not common in the city. They serve primary transit routes but are not desirable as primary routes for goods movement. They should include wide sidewalks and bicycle lanes that are a minimum of 5 feet in width. There are several characteristics of Residential Boulevards:

- Transit amenities should be of high quality to support multimodal transportation and reduce the use of the single-occupant vehicle.
- Right-of-way is dedicated to bicycle traffic.
- Traffic speeds and volumes may warrant pedestrian improvements to make streets more supportive of multimodal transportation. Sidewalk buffers that allow for shade and pedestrian-scale lighting are desirable.
- Special treatments that may be appropriate:
  - Mid-block crossings
  - Pedestrian refuges
  - Highly visible crosswalks
  - Bulb-outs for transit

Avenues

As stated in the Broward Complete Streets Guidelines, Avenues are "walkable streets of moderate to high vehicular capacity and low to moderate speed acting as a short-distance connector between urban centers and serving as access to abutting land." They may have a landscaped median or a two-way-left-turn lane and serve as primary bicycle and pedestrian routes as well as local transit routes. Most importantly, Avenues act as local connectors with slower speeds and lower volumes than Boulevards but still provide essential linkages within the city.

Center City Avenues

Center City Avenues traverse higher-density mixed-use and commercial areas. Traffic moves relatively slowly, and walking and biking are not only supported but encouraged. Center City Avenues serve as primary pedestrian and bicycle routes and may also serve as local transit routes; therefore, they should be equipped with wide sidewalks to support pedestrian activity as well as bicycle lanes or multi-use paths. The surrounding built environment consists of mid- to high-rise buildings that support a variety of functions, are closely spaced, have minimal setbacks, and contain active uses on the ground floor. Management of parking and loading facilities on these avenues is critical, as these uses typically are imperative to the vitality of businesses but may conflict with pedestrian and bicycle uses. There are several characteristics of Center City Avenues:

- Premium transit facilities, including bus shelters, support multimodal transportation and reduce the use of the single-occupant vehicle.
- Right-of-way is dedicated to bicycle traffic.
- Significant attention is paid to the pedestrian realm, which includes wide sidewalks, landscape buffers, street furniture, street trees, pedestrian/bicycle-oriented wayfinding, and pedestrian shelters (e.g., awnings and covered walkways) or trees.
- Limited setbacks and active ground floor uses ensure vibrancy.
- There are high levels of pedestrian activity.
- On-street parking should be included for access to businesses and to act as a buffer between pedestrians and the street.
- Land use should be critically considered to ensure vibrancy and support multimodal transportation.
- Special treatments that may be appropriate:
  - Highly visible crosswalks (potentially raised crosswalks)
  - Sidewalk planters
  - Pedestrian-scale lighting
  - Special paving in pedestrian areas
  - Street trees
  - Street furniture
  - Bus-only lanes, BAT lanes, TSP, or other transit-supportive roadway strategies
  - Transit bulb-outs
  - Pedestrian scramble phases at intersections with high volumes of pedestrian traffic

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Commercial Avenues

Commercial Avenues tend to have faster moving traffic than other Avenues and act to connect one development node to another. They are secondary to Commercial Boulevards and serve a more local population. The surrounding land uses are lower in density and may have larger setbacks than would be found in activity centers but might be transitioning to higher densities. Therefore, different parts of the same Commercial Avenue may have a different mix of uses and a different type of urban form. Transit runs along these avenues and generally aims to support access to the land uses along the corridor.

Commercial Avenues are well poised to support some of the most vibrant street life in the city in certain areas. In these areas, Commercial Avenues are still used for through traffic but significant attention is paid to beautification and the pedestrian realm. These Avenues are lively and exciting places where residents can go shopping, meet with friends, and play at any time of the day. They contain street trees and furniture. They are fronted by residential and commercial uses that have little to no setbacks, with more residential uses behind. The uses on these Commercial Avenues typically consist of restaurants, bars, shops, small offices, and multi-family homes. On-street parking is present to support businesses; structured parking may be needed as well. Although consistently high in volume, traffic moves slowly, and bicycles are able to comfortably share the road. The built environment consists of low- to mid-rise buildings closely spaced with decorative elements. Management of parking and loading facilities on these streets is critical, as these activities are important to the vitality of businesses but can conflict with pedestrian and bicycle activity. There are several characteristics of Commercial Avenues:

- Lower density uses and low- to mid-rise buildings line the Commercial Avenue in some places; high-density mixes of uses line it in others.
- A variety of dense commercial uses (as well as some mixed uses) including restaurants, bars, retail, and office are supported.
- Right-of-way is dedicated to bicycle traffic.
- Significant attention is paid to the pedestrian realm and beautification. The pedestrian realm includes wide sidewalks, landscape buffers, street furniture, traffic calming, the introduction of small-scale public spaces, pedestrian-scale lighting, signage, decorative elements, pedestrian/bicycle oriented wayfinding, and pedestrian shelters (e.g., awnings and covered walkways) or trees.
- Limited setbacks and active ground floor uses ensure vibrancy in areas designated to support high levels of activity.
- On-street parking should be included for access to business and for buffering pedestrians from the street.
- Land use should be critically considered to ensure vibrancy and support multimodal transportation.
- The Commercial Avenue should be easily adaptable to accommodate special events, with alternate routes for traffic.
- Proposed developments should be carefully considered to ensure that they are supportive of the future goals of the City, including but not limited to targeted development in identified nodes and a land use pattern that is supportive of multimodal transportation.
- Special treatments that may be appropriate:
  - Pedestrian refuge islands
  - Highly visible crosswalks
  - On-street parking
  - Pedestrian-scale lighting
  - Traffic circles
  - “Pocket parks”
  - Shared public space
  - Special paving
  - Tree grates
  - Mid-block crossings
  - Pedestrian refuge islands
  - Pedestrian scramble phases at intersections with high volumes of pedestrian traffic
  - Bus-only lanes, BAT lanes, TSP, or other transit-supportive roadway strategies
  - Transit bulb-outs
  - Sidewalk planters
  - Street furniture

Residential Avenues

Residential Avenues are smaller in scale than Commercial Avenues, with slower moving traffic, but may serve as alternative routes to connect neighborhoods. Residential Avenues typically contain signalized intersections where they cross Boulevards. Surrounding land uses are generally residential, with some neighborhood-serving commercial. Residential Avenues primarily carry local traffic. Residential Avenues serve as primary pedestrian and bicycle routes and may also serve as local transit routes for neighborhoods. They should have sidewalks and bicycle lanes. Regarding the built environment, the Residential Avenue is lined with closely spaced single- and multi-family homes of varying ages. Sidewalks are continuous, and homes are set back from the road with landscaped yards. There are several characteristics of Residential Avenues:

- Traffic speeds and volumes may warrant pedestrian improvements to make streets more supportive of multimodal transportation.
- Right-of-way is dedicated to bicycle traffic.
- Significant attention should be paid to the pedestrian realm, which includes well-maintained sidewalks, landscape buffers, and pedestrian shelters (e.g., awnings and covered walkways) or trees.
- Potential traffic calming measures can support bicycle and pedestrian safety.
- Special treatments that may be appropriate:
  - Pedestrian refuge islands
  - Mid-block crossings
  - Highly visible crosswalks
  - On-street parking for residents
  - Pedestrian-scale lighting

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Streets

As stated in the Broward Complete Streets Guidelines, Streets are "local, walkable, multi-movement facilities suitable for all urbanized transect zones and all frontages and uses." Speeds should not exceed 25 miles per hour. Streets support a mix of uses, including residential, commercial, and recreational uses, and the built environment spans urban to rural areas. Most importantly, Streets are meant to support abutting property and local traffic and are highly supportive of pedestrians, bicycles, and cars.

Center City Streets

Center City Streets provide a fine-grained network to facilitate easy pedestrian access through the high-density areas of Fort Lauderdale. Speeds should not exceed 25 miles per hour. Center City Streets are important for ground floor access to buildings, and they are made to handle high levels of pedestrian activity with wide sidewalks and pedestrian amenities. There should be on-street parking to support local businesses. Because of low automobile speeds, bicycles may share the road with vehicular traffic; sharrows may be appropriate to designate the proper use of the road. The land uses served by Center City Streets include high- and mid-rise office, retail, and residential, and the development of active uses should be encouraged on ground floors in order to enhance the pedestrian environment and vitality of the area. Buildings should have minimal setbacks. There are several characteristics of Center City Streets:

- Land use should be critically considered to ensure vibrancy and support multimodal transportation.
- Shared or dedicated right-of-way accommodates bicycle traffic.
- Significant attention is paid to the pedestrian realm, which includes wide sidewalks, landscape buffers, street furniture, street trees, pedestrian/bicycle-oriented wayfinding, and pedestrian shelters (e.g., awnings and covered walkways) or trees.
- There should be little to no setbacks, and active ground floor uses should be provided to ensure vibrancy.
- High levels of pedestrian activity exist.
- On-street parking should be included for access to business and for buffering pedestrians from the street.
- Access needs for local businesses are important considerations.
- Special treatments that may be appropriate:
  - Mid-block crossings
  - Pedestrian refuges
  - On-street parking for access to business
  - Highly visible crosswalks
  - Sidewalk planters
  - Pedestrian-scale lighting
  - Bus-only lanes, BAT lanes, TSP, or other transit-supportive roadway strategies
  - Special paving in pedestrian areas
  - Street trees
  - Street furniture
  - Sharrows
  - Pedestrian scramble phases at intersections with high volumes of pedestrian traffic

Commercial Streets

Commercial Streets are streets where land uses transition from downtown environments to neighborhood environments. They connect closely spaced activity nodes, yet speeds should not exceed 25 miles per hour. They are essential for pedestrian and bicycle transportation. The built environment surrounding Commercial Streets includes many types of land uses, such as low- to mid-rise buildings, parks and open spaces, mixed-use developments, and others. Bicycle lanes may be appropriate, although bicycles and vehicular traffic may also share the road depending on the context. Commercial Streets tend to serve the uses directly adjacent to them. Setbacks should be minimal. There are several characteristics of Commercial Streets:

- There are medium volumes and speeds of traffic, which may necessitate pedestrian safety improvements.
- Shared or dedicated right-of-way accommodates bicycle traffic.
- There is a medium volume of pedestrian activity.
- On-street parking is provided.
- There are frequent curb cuts for business access.
- Special treatments that may be appropriate:
  - Mid-block crossings
  - Pedestrian refuges
  - Highly visible crosswalks
  - Bulb-outs for transit
  - Bus-only lanes, BAT lanes, or other transit-supportive roadway strategies
  - Street trees
  - Pedestrian-scale lighting

Residential Streets

Residential Streets are quiet neighborhood streets with low traffic volumes and speeds. They have the lowest activity level of any type of street but alleys and play an important role in the desirability of a neighborhood. They should feel safe, comfortable, and cared for. They are fronted by low- to medium-density single- and multi-family homes that are closely spaced and vary in age range and style. They serve as important local bicycle and pedestrian connections; however, all users may share the street space due to low levels of vehicular traffic and low vehicular speeds. Proper signage may be necessary depending on the context. There are several characteristics of Neighborhood Streets:

- There are frequent residential driveway cuts.
- Streetscaping can be used to instill pride in residents and encourage them to participate in community stewardship activities.
- Streets are well-connected in a grid pattern and fronted by single- and multi-family homes to create a quiet, traffic-protected area.
- Automobiles are permitted, but the feeling throughout is pedestrian-friendly.
- Through traffic may or may not be permitted, but traffic volume is low regardless.
- Traffic speeds should be kept low due to the character of the neighborhood. Traffic calming may be necessary.
- Special treatments that may be appropriate:
  - Pedestrian refuge islands
  - Highly visible crosswalks
  - On-street parking for residents
  - Pedestrian-scale lighting
  - Traffic circles
  - Sidewalk or median pocket parks
  - Shared public way
  - Sharrows

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Special Designations

Certain street types exist only in specific areas in Fort Lauderdale. These street types deserve their own Complete Streets classifications because they have unique needs that cannot be represented by the other classifications.

Beachside Thoroughfares

Beachside Thoroughfare applies to roads adjacent to or near the beach. These roads have very high levels of every mode of travel. They support festivals, parades, and high levels of tourists throughout the year. The built environment includes a vibrant mixture of low- to high-rise residential, hotels, restaurants, retail, bars, and cafes. Pedestrians tend to cross at all points of the road, so traffic calming and other pedestrian safety measures are essential. Beachside Thoroughfares are fronted by wide sidewalks that facilitate many types of activity, such as sightseeing, bicycling, and exercising. There are several characteristics of Beachside Thoroughfares:

- There are high volumes of pedestrian, vehicular, and bicycle traffic as well as transit.
- High levels of tourists may necessitate the use of special signage.
- Premium transit facilities, including bus shelters, support multimodal transportation and reduce the use of the single-occupant vehicle.
- Shared or dedicated right-of-way accommodates bicycle traffic.
- Traffic volumes may warrant improvements to make streets more supportive of multi-modal transportation.
- Significant attention is paid to the pedestrian realm, which includes wide sidewalks, landscape buffers, street furniture, street trees, pedestrian/bicycle-oriented wayfinding, and pedestrian shelters such as trees, awnings, covered walkways, and/or other specially designed shelters.
- Potential traffic calming measures can support bicycle and pedestrian safety.
- Limited setbacks and active ground floor uses ensure vibrancy.
- Special treatments that may be appropriate:
  - Pedestrian refuge islands
  - Highly visible crosswalks
  - On-street parking
  - Structured parking
  - Pedestrian-scale lighting
  - Traffic circles
  - Sidewalk or median pocket parks
  - Shared public way
  - Special paving
  - Tree grates
  - Mid-block crossings
  - Pedestrian refuge islands
  - Pedestrian scramble phases at intersections with high volumes of pedestrian traffic
  - Bus-only lanes, BAT lanes, TSP, or other transit-supportive roadway strategies
  - Transit bulb-outs
  - Sidewalk planters
  - Street furniture

Industrial Thoroughfare

Industrial Avenues are mainly defined by surrounding land uses such as large-scale production, distribution, and repair facilities and are highly concentrated along the FEC railroad and around Port Everglades. They have less active street frontage and focus less on the pedestrian environment due to the presence of large driveways, loading docks, and other automobile- and truck-serving facilities necessary to support industrial operations. They are wider roads that can accommodate large trucks, and are unlikely to include many pedestrian or transit amenities; however, these amenities have the potential to be an asset to these streets in several ways:

- Transit linkages provide necessary transportation access and options for both transit-dependent and choice riders.
- Adequate pedestrian facilities encourage workers to choose transportation modes other than the single-occupant vehicle.

There are several characteristics of Industrial Avenues:

- Consideration must be given to the access needs for local businesses, including loading activities and heavy trucks.
- There is a need for improvements to the pedestrian network to ensure pedestrian safety even where there is relatively low pedestrian activity.
- Special treatments that may be appropriate:
- Bulb-outs
- On-street parking
- Street trees and well-kept sidewalks

COMPLETE STREETS NETWORK

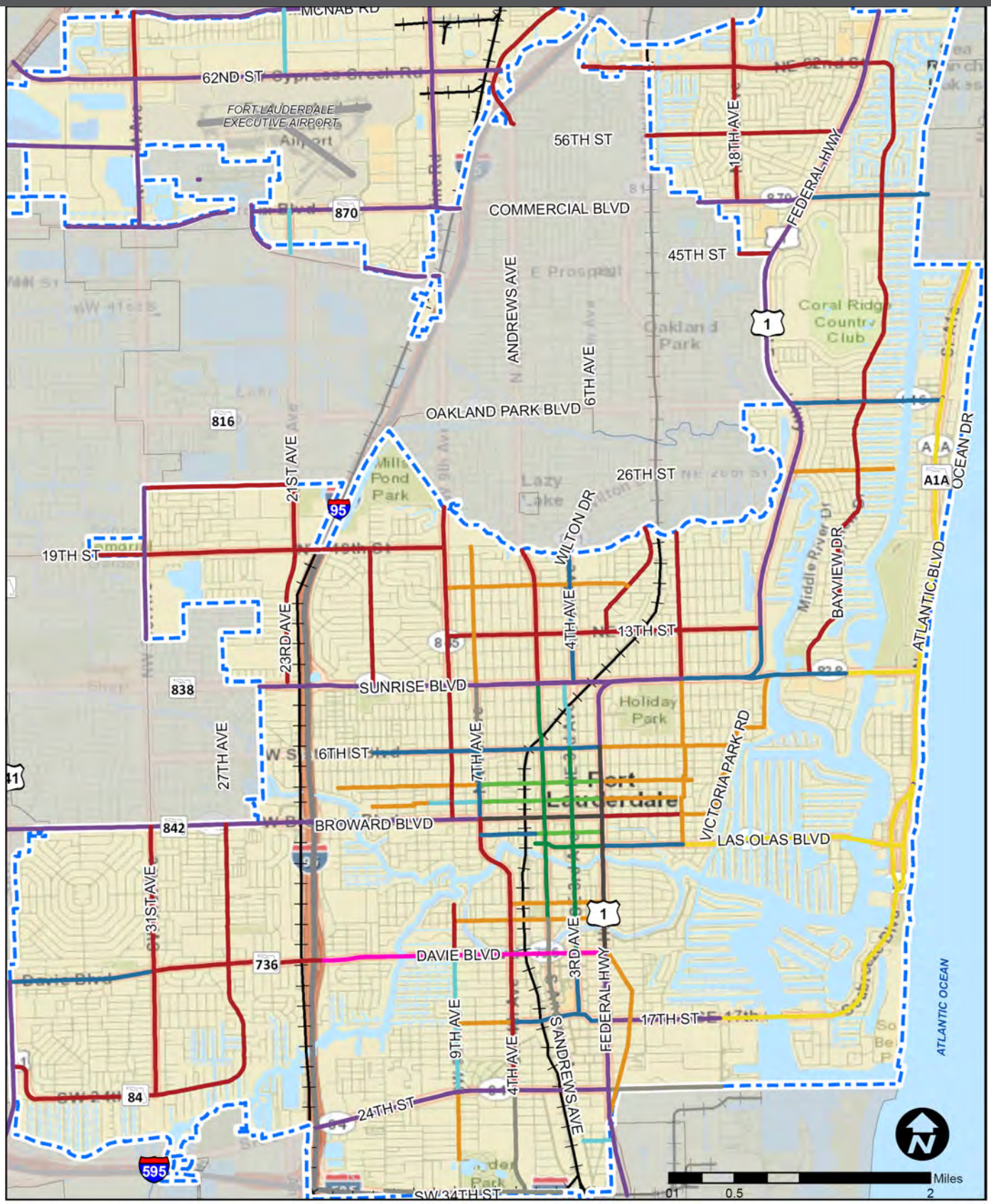
The application of the above-described typology to the city transportation network results in the Complete Streets network depicted in FIGURE 24.

LEVEL OF SERVICE STANDARDS

Historically, LOS standards for transportation systems have focused on automobile capacity and automobile speeds. Resources such as the Highway Capacity Manual have set a precedent for assigning letters grades from A to F to represent levels of service, and this concept has been adopted into many local government and agency practices. Newer resources—and newer editions of the Highway Capacity Manual—have proposed A to F thresholds for pedestrian, bicycle, and transit systems but adoption by local governments and agencies is far less widespread in part because the alternative mode focus is still an emerging practice. Some local governments in Florida have developed alternative standards to measure the adequacy of their pedestrian, bicycle, and transit systems. The benefits of the alternative standards are that they reflect exactly what is important to the local government, they can be readily evaluated (e.g., without extensive data collection or expensive software), and the Florida Statutes currently allow them to be applied on all roadways. These benefits are highly desirable for CTB as well.

A key tenet of CTB's approach to multi-modal LOS standards is the recognition that CTB is focused on creating multimodal capacity first and increasing multimodal capacity second. This means that CTB's multimodal LOS standards assume that the demand for multimodal travel is not likely to exceed multimodal capacity in the near and mid-term.

FIGURE 24. COMPLETE STREETS NETWORK



- Center City Boulevard
- Commercial Boulevard
- Residential Boulevard
- Center City Avenue
- Commercial Avenue
- Residential Avenue
- Center City Street
- Commercial Street
- Residential Street
- Beachfront Thoroughfare
- Industrial Thoroughfare
- Neighborhood Street (either residential or commercial)

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Proposed multimodal LOS standards for CTB are described in the following sub-sections. These standards are either/or (or "pass/fail") standards rather than letter grade-based standards. That is, a given segment of the multimodal system either meets a target or it does not. More LOS standards are proposed for the pedestrian system than for the bicycle and transit systems because the pedestrian system provides essential support for all other modes—and especially for transit. The proposed multimodal LOS standards have been adapted from the *Broward Complete Streets Guidelines* in order to maintain compatibility with the Guidelines.

There are no proposed automobile LOS standards for CTB. This is because CTB gives non-automobile modes higher investment priority.

General LOS Standards

General standards pertaining to the roadway as a whole and all of its users are provided in TABLE 17. The general standards are focused on maximizing safety and accommodating non-auto modes. Maximum number of through lanes and through lane width impact crossing distances for pedestrians and bicyclists (and transit users traveling to or from a transit stop). They also influence vehicle speeds and the amount of right-of-way available for non-auto modes.

TABLE 17. MULTIMODAL STANDARDS: GENERAL

COMPLETE STREETS CLASSIFICATION	MAXIMUM NUMBER OF THROUGH LANES	THROUGH LANE WIDTH [1]	MAXIMUM SPEED [2]	SCALE OF DESIGN
Center City Boulevard	6	10′-11′	35	Passenger Car
Commercial Boulevard	6	10′-11′	35	Passenger Car
Residential Boulevard	6	10′-11′	30	Passenger Car
Center City Avenue	4	9′-11′	30	Passenger Car
Commercial Avenue	4	9′-11′	30	Passenger Car
Residential Avenue	4	9′-11′	30	Passenger Car
Center City Street	2	9′-11′	25	Passenger Car
Commercial Street	2	9′-11′	25	Passenger Car
Residential Street	2	9′-11′	25	Passenger Car
Beachside Thoroughfare	4	9′-11′	25	Passenger Car
Industrial Thoroughfare	2	11′-12′	35	Interstate Semitrailer

[1] In addition to curb and gutter width; highly desirable to have at least one through lane in each direction ≥ 11' wide to accommodate transit and truck traffic

[2] 85th percentile speed target; can be exceeded under certain conditions if City permits

Note: These are preferred standards. It may be desirable to exceed these standards in some cases.

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Pedestrian LOS Standards

At this point in the transformation of the city into a multimodal transportation exemplar for Florida, providing infrastructure and connectivity to promote pedestrian travel is key. (In the future, accommodating increased pedestrian demand might become the focus.) Users of every other mode are pedestrians at some point. Transit use, in particular, is sensitive to walk access; high-quality pedestrian routes can increase the catchment area for a transit route. Thus, the multimodal LOS standards for the city's pedestrian system encourage creation of new and/or enhanced infrastructure and increased pedestrian connectivity. The standards are provided in TABLE 18.

Two aspects of pedestrian connectivity are captured in the pedestrian LOS standards. The first aspect is the connectivity between pedestrian routes (i.e., along roadways). The second aspect is maintaining pedestrian connectivity at roadway crossings (i.e., across roadways). If viable opportunities to cross streets are not provided where pedestrian routes intersect the street network, pedestrian travel is deterred because crossings are not convenient and/or are not perceived to be safe and pedestrian exposure to auto traffic is increased.

Accordingly, TABLE 18 associates a maximum distance between pedestrian crossings with the classifications in the Complete Streets typology. TABLE 18 assumes that any roadway with four or more travel lanes requires designated pedestrian crossing opportunities and site-specific infrastructure to support the crossing. (Road-ways with three or fewer travel lanes are assumed to be narrow enough to appropriately minimize pedestrian exposure to auto traffic.) Such infrastructure could include pedestrian countdown signals, in-pavement crosswalk lighting, HAWK signals, or other treatments. The appropriateness of a specific treatment is to be determined on a site-specific basis through detailed study and evaluation.

Other standards in TABLE 18 focus on quality. These are the sidewalk buffer, shade, and pedestrian-scale lighting standards. These pedestrian quality standards coincidentally support transit use, as high-quality pedestrian access to transit promotes transit usage and sidewalk buffers allow space for improved transit stops.

Bicycle LOS Standards

The bicycle standards in TABLE 19 consist of a connectivity standard (provision of a bicycle lane or sharrows) and a quality standard (bicycle lane buffers).

It is assumed that bicyclists will cross roadways as vehicles do (e.g., during a green phase at a traffic signal) or as pedestrians do. The appropriateness of any specific crossing treatment for bicycles is to be determined on a site-specific basis through detailed study and evaluation.

TABLE 18. MULTIMODAL STANDARDS: PEDESTRIAN SPACE

COMPLETE STREETS CLASSIFICATION	SIDEWALK WIDTH (FEET) [1]	BUFFER WIDTH BETWEEN STREET AND SIDEWALK (FEET) [2]	LEVEL OF SHADE [3]	MAXIMUM DISTANCE BETWEEN PEDESTRIAN CROSSINGS	PEDESTRIAN-SCALE LIGHTING
Center City Boulevard	8′	4′-6′	Medium	660′	Present
Commercial Boulevard	6′	4′-6′	Medium	1,320′	Present
Residential Boulevard	5′	4′-6′	Medium	1,320′	Present
Center City Avenue	8′	4′-6′	Medium	660′	Present
Commercial Avenue	6′	4′-6′	Medium	1,320′	Present
Residential Avenue	6′	4′-6′	Medium	1,320′	Present
Center City Street	8′	0′-4′	Medium	660′	Present
Commercial Street	5′	0′-4′	Medium	1,320′	Present
Residential Street	5′	0′-4′	Medium	1,320′	Present
Beachside Thoroughfare	8′	0′-4′	Medium	1,320′	Present
Industrial Thoroughfare	5′	4′	Medium	1,320′	Present

[1] Both sides of street [2] May contain street trees [3] Can include trees and awnings

Note: These are preferred standards. It may be desirable to exceed these standards in some cases.

TABLE 19. MULTIMODAL STANDARDS: BICYCLE SPACE

COMPLETE STREETS CLASSIFICATION	BICYCLE LANE WIDTH (FEET) [1]	BICYCLE LANE BUFFER WIDTH (FEET)	PAINTED BICYCLE LANE AT CONFLICT POINTS
Center City Boulevard	5′	2-5′	Desired
Commercial Boulevard	5′	2-5′	Desired
Residential Boulevard	5′	0-5′	Desired
Center City Avenue	5′	0-5′	Desired
Commercial Avenue	5′	0-5′	Desired
Residential Avenue	5′	0-5′	Desired
Center City Street	5′ or Sharrows	0-5′	Desired
Commercial Street	5′ or Sharrows	0-5′	Desired
Residential Street	None	0-5′	N/A
Beachside Thoroughfare	5′	0-5′	Desired
Industrial Thoroughfare	5′	0-5′	Desired

[1] Can be 4 feet wide if buffered; in addition to curb and gutter width

Notes: These are preferred standards. It may be desirable to exceed these standards in some cases. A proximate multi-use path may replace on-street bicycle lanes.

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Transit LOS Standards

The City of Fort Lauderdale does not operate BCT, which provides most of the public transit service in the city, so the City has relatively limited opportunity to influence transit alignment decision-making to the degree that the City could affect a significant improvement in transit system connectivity. The City can influence access to transit, however, by creating investments in pedestrian and bicycle system connectivity and quality (per TABLE 18 and TABLE 19) and by improving the quality of transit stops.

Other LOS Standards

TABLE 20 provides standards for on-street parking and medians. CTB does not require these elements; the standards are simply preferred dimensions should site conditions require on-street parking and/or medians and right-of-way allow it. Given that many corridors in the city have limited right-of-way, trade-offs between multimodal facilities, medians, and on-street parking will be common.

TABLE 20. MULTIMODAL STANDARDS: ON-STREET PARKING AND MEDIANS

COMPLETE STREETS CLASSIFICATION	PARKING DOOR ZONE WIDTH (FEET) [1]	PARKING SPACE WIDTH (FEET) [2]	MEDIAN WIDTH (FEET) [3]	TWO-WAY LEFT TURN LANE WIDTH (FEET)	PEDESTRIAN REFUGE WIDTH (FEET) [4]
Center City Boulevard	0′- 5′	7′	0′-14′	0-10′	0-10′
Commercial Boulevard	0′- 5′	7′	0′-14′	0-10′	0-10′
Residential Boulevard	0′- 5′	7′	0′-14′	0-10′	0-10′
Center City Avenue	0′- 5′	7′	0′-14′	0-10′	0-10′
Commercial Avenue	0′- 5′	7′	0′-14′	0-10′	0-10′
Residential Avenue	0′- 4′	7′	0′-14′	0-10′	0-10′
Center City Street	0′- 4′	7′	0′-14′	N/A	0′
Commercial Street	0′- 4′	7′	0′-14′	N/A	0′
Residential Street	0′- 4′	7′	0′-14′	N/A	0′
Beachside Thoroughfare	0′- 4′	7′	0′-14′	0-10′	0′
Industrial Thoroughfare	N/A	N/A	0′-14′	0-10′	0′

[1] In addition to bicycle space

[2] In addition to curb and gutter width

[3] Includes gutter pan width; based on 2013 Florida Greenbook Table 19-3; width varies based on need to accommodate pedestrian refuges, landscaping, lighting, and left turn lanes while minimizing pedestrian crossing distance

[4] Includes border striping

Notes: These are preferred standards. It may be desirable to exceed these standards in some cases.

IDENTIFICATION OF MULTI-MODAL NEEDS

Appendix B contains a comprehensive list of mobility projects needed citywide to meet the multimodal LOS standards presented earlier in this chapter. The needed mobility projects were identified by classifying streets according to the Complete Streets typology and evaluating whether or not each street meets the standards required for its classification. Project prioritization and cost estimates are discussed in the remainder of this chapter.

PRIORITIZATION OF MULTI-MODAL NEEDS

The prioritization methodology recommended for application to the projects listed in Appendix B is intended to be as similar as possible to existing, vetted prioritization processes. Recognizing that Complete Streets is a new focus for the City and the MPO, however, the recommended methodology includes departures from existing processes. This section discusses the existing processes and the recommended process.

Existing Prioritization Methodologies

BROWARD MPO 2035 LRTP PROJECT PRIORITIZATION METHODOLOGY

The Broward MPO's 2035 LRTP project prioritization methodology includes evaluation criteria and measures for premium transit projects, Mobility Hubs, bicycle and pedestrian/sidewalk projects, and roadway projects. Up to three points can be awarded for each criterion. The full Broward MPO methodology is provided in Appendix C.

The MPO project type most relevant to CTB development is bicycle and pedestrian/sidewalk projects. The associated MPO measures do not completely address the needs of CTB, however, so supplemental evaluation criteria and measures are needed to fully account for Complete Streets values and the City's goals.

CITY CAPITAL IMPROVEMENT PLAN PRIORITIZATION METHODOLOGY

The City's FY 2013 Adopted Community Investment Plan (CIP) includes the following prioritization criteria:

- Basic Program Attributes
- Meets federal, state, or legal requirement
- Project feasibility
- Costs and sources of funds
- Relevant performance measures
- Project consistency with existing plans
- Impact on Strategic Goals/Cylinders of Excellence (from the City's 2035 Vision)
- Infrastructure: Improves traffic, mobility, connectivity, pedestrian safety, and cyclist safety
- Public Places/Infrastructure: Environmental benefits
- Neighborhood Enhancement: Extent of benefit
- Business Development: Promotes or accelerates sustainable economic development
- Public Safety: Meets life, safety, and health requirements

Each criterion receives a weight from 1 to 5 from the Mayor and the City Commissioners, to be applied to all projects proposed for inclusion in the CIP. Up to two points can be awarded by the Project Review Committee for each criterion for each proposed project. More information is provided in Appendix B.

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

All of the prioritization criteria are relevant to CTB development, with the Infrastructure goal being one of the most pertinent. The financial focus of some of the criteria reflect the requirement that all projects included in the CIP must be projects that the City can implement with available resources. Projects not included in the CIP will require new funding sources or external funding sources; the MPO is potentially such a funding source.

Recommended Prioritization Methodology

The 2035 LRTP prioritization methodology does not include Complete Streets concepts to a degree that is adequate for CTB based on the City's 2035 Vision and newly adopted Complete Streets ordinance. (Although the 2040 LRTP update will include prioritization criteria that emphasize Complete Streets concepts, the 2040 methodology is not yet available.) Nevertheless, inclusion and priority in the LRTP are highly desirable goals for CTB mobility projects, so a composite prioritization methodology has been developed for CTB to merge the most relevant elements of the LRTP methodology and the CIP methodology. In this methodology, the values of the City's 2035 Vision and the CIP are reflected in the prioritization criteria in the form of Benefit Categories. The Benefit Categories are the following:

- Safety
- Travel Choices
- Sustainability
- Connectivity
- Health Benefits
- Quality of Life
- Economic Benefit

Possible benefits of CTB investments have been identified for each Benefit Category, as shown in Appendix C. The benefits (which serve the purpose of prioritization criteria) are weighted to reflect their relative importance. Also weighted are additional criteria that speak to project feasibility.

Each project in Appendix B can be scored and ranked based on TABLE 21. The maximum possible score is 100 based on the weights in this table. The mobility projects that score the highest will earn the top rankings.

TABLE 21. PRIORITIZATION CRITERIA, WEIGHTS, AND THRESHOLDS

	WEIGHT	BENEFIT CATEGORIES	DESCRIPTION	THRESHOLDS	POINTS
PROJECT BENEFITS					
Anticipated improvement in pedestrian/bicyclist safety	2	Safety	Project type typically improves pedestrian and bicyclist safety.	Minimal Moderate Substantial	0 1 2
Anticipated safety benefit to segment with history of fatal or severe injury pedestrian and bicycle crashes	2	Safety	Based on most recent crash maps for City of Fort Lauderdale.	Minimal Moderate Substantial	0 1 2
Support of regional transit services and/or premium transit services	3	Travel Choices, Sustainability	Planned premium transit services shown in the LRTP are in the corridor.	Minimal Moderate Substantial	0 1 2
Enhancement of transit stops	1	Travel Choices, Sustainability	Project creates space for enhanced transit stops (e.g., sidewalk buffer)	Minimal Moderate Substantial	0 1 2
Closure of sidewalk network gaps	5	Connectivity, Safety, Travel Choices, Health Benefits	New sidewalks constructed to close gaps and make new connections.	Minimal Moderate Substantial	0 1 2
Closure of bicycle network gaps	5	Connectivity, Safety, Travel Choices, Health Benefits	New bicycle facilities constructed to close gaps and make new connections.	Minimal Moderate Substantial	0 1 2
Improvement of street crossings for non-automobile modes	3	Connectivity, Safety, Travel Choices, Health Benefits	Project enhances street crossings.	Minimal Moderate Substantial	0 1 2
Support of active transportation	5	Quality of Life, Sustainability, Economic Benefit	Project improves areas with high Active Transportation Demand Scores	Minimal Moderate Substantial	0 1 2
Improvement of multimodal system quality	4	Quality of Life, Travel Choices, Economic Benefit	Project adds pedestrian-scale lighting, shade, buffers, and other quality elements	Minimal Moderate Substantial	0 1 2
Incorporation of sustainability elements to adapt to climate change	4	Sustainability, Safety, Connectivity	Project adds stormwater management, shade, LED lighting, and drought resistant features.	Minimal Moderate Substantial	0 1 2
PROJECT FEASIBILITY					
Opportunity to qualify for federal or other funding	1	N/A	Corridor study and/or livability study involving multiple jurisdictions and/or agencies	Minimal Moderate Substantial	0 1 2
Freedom from obstacles to implementation	5	N/A	Timeline, agency approvals, need for land acquisition, contract capacity, etc.	Minimal Moderate Substantial	0 1 2
Community support	5	N/A	Consistency with the Multimodal Connectivity Map	Minimal Moderate Substantial	0 1 2

NEEDS ASSESSMENT METHODOLOGY (CONTINUED)

Details of the Project Benefits criteria in TABLE 21 and the proposed scoring procedure are as follows:

- **Anticipated improvement in pedestrian/bicyclist safety.** Crossing enhancements score a 1. Projects that reduce crossing distance score a 2. Projects that separate bicyclists from automobiles score a 2. (The Highway Safety Manual (HSM) indicates that these project types tend to improve pedestrian/bicyclist safety.)
- **Anticipated improvement to segment with history of fatal or severe injury pedestrian/bicycle crashes.** This applies only to segments with a history of fatal or severe injury pedestrian/bicycle crashes. Projects that create separation between pedestrians and automobiles or between bicyclists and automobiles score a 2. Other project types that the HSM indicates tend to improve pedestrian/bicyclist safety score a 1.
- **Support of regional and premium transit services.** Projects that create new regional and premium transit services score a 2. Projects that enhance existing regional and premium transit services score a 1. This also applies to pedestrian/bicycle projects that are within 1/4 mile of The Wave and Tri-Rail. Projects that create pedestrian/bicycle connections to The Wave and Tri-Rail score a 2. Projects that enhance existing pedestrian/bicycle connections to The Wave and Tri-Rail score a 1.
- **Enhances transit stops.** Projects that add a sidewalk buffer score a 1. Projects that add bus stop amenities score a 2.
- **Closure of sidewalk network gaps.** Projects that complete existing sidewalks score a 1. Projects that construct more extensive, new sidewalks score a 2.
- **Closure of bicycle network gaps.** Projects that complete existing bicycle facilities score a 1. Projects that construct more extensive, new bicycle lanes score a 2. Projects that add sharrows score a 1.
- **Improves street crossings for non-automobile modes.** Projects that include 1-2 crossing enhancements score a 1. Projects that include 3 or more crossing enhancements score a 2.
- **Supports active transportation.** Projects that serve Census tracts ranked in the top 1-10 for Active Transportation Demand score a 2. Projects in the top 10-20 score a 1.2. (Active Transportation Demand Score is an index developed by the City of Portland, Oregon, for use in prioritizing multimodal projects. It accounts for population density, business density, percent of population less than 17 years old, percent of population greater than or equal to 65 years old, percent of population that is non-white, percent of households below the poverty line, and percent of households with no access to an automobile. These demographic characteristics are traditionally tied to propensity to travel by non-automobile modes.
- **Improves multimodal system quality.** Projects that add 3-4 of sidewalk buffers, bicycle lane buffers, pedestrian-scale lighting, and shade score a 2. Projects that add 1-2 of those elements score a 1.
- **Incorporation of sustainability elements to adapt to climate change.** Projects that add 3-4 of stormwater management, shade, LED lighting, and drought resistant features score a 2. Projects that add 1-2 of those elements score a 1.

Details of the Project Feasibility criteria in TABLE 21 and the proposed scoring procedure are as follows:

- **Opportunity to qualify for federal or other funding.** Projects score a 1 if they are located in a major corridor, are located in corridors that affect multiple jurisdictions, or are livability projects. Projects score a 2 if they are consistent with projects identified in the CIP, Transportation Improvement Program (TIP), or LRTP.
- **Freedom from implementation obstacles.** Projects on State and County roads score a 1. Projects on City roads score a 2.
- **Community support.** Projects consistent with the previously supported neighborhood plans. (which were created with public input) score a 1. Projects consistent with the City Commission approved Neighborhood or Master Plans score a 2.

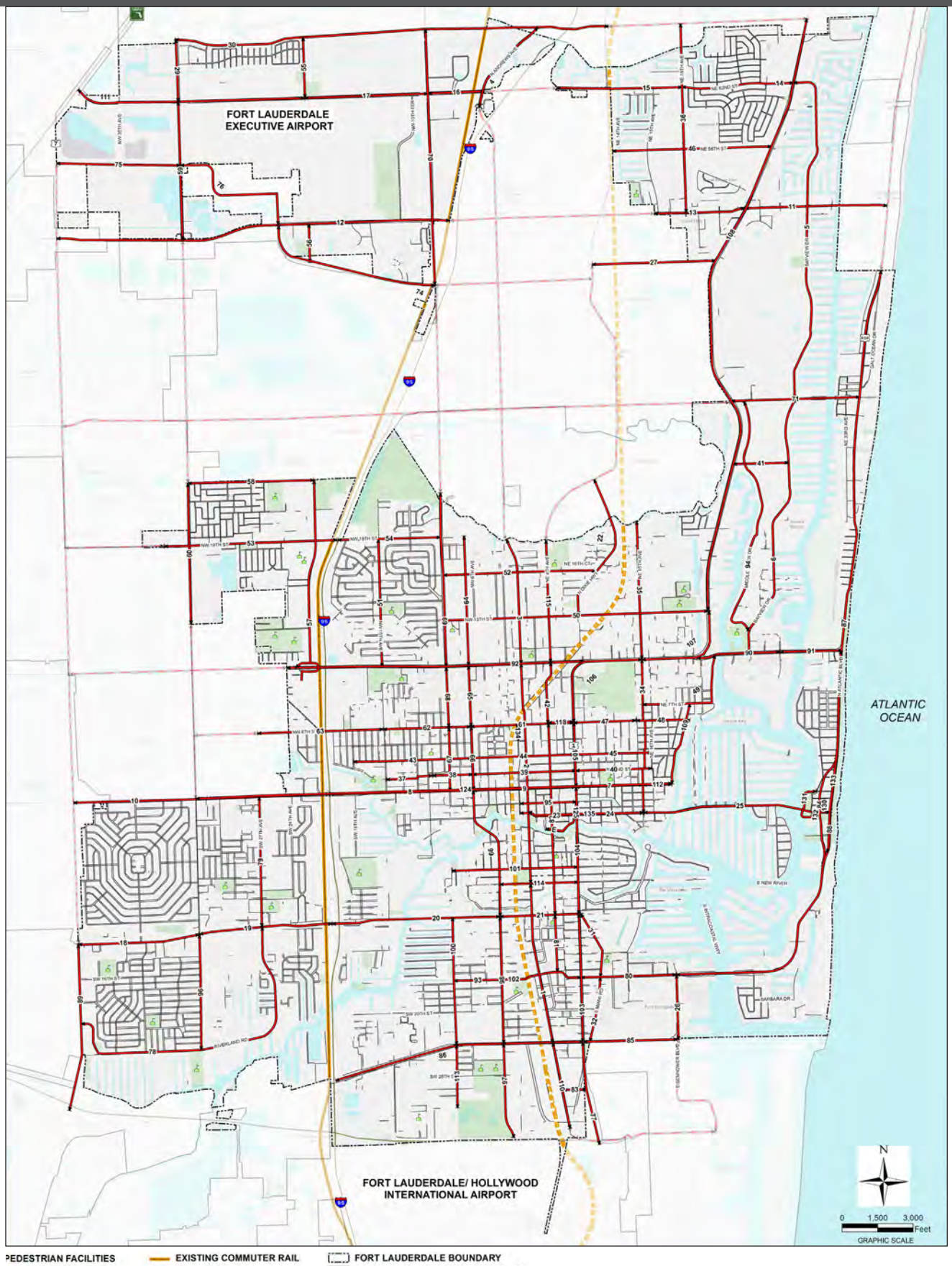
Data needed to apply the recommended prioritization methodology can be found in Appendix C.

COST ESTIMATES

Appendix B includes planning-level cost estimates for each mobility project. The cost estimates include contingency factors to represent uncertainties in design and implementation as well as escalation factors to represent inflation over a 10-year period. The escalation factor is 2% per year based on Consumer Price Index trends. Appendix C includes cost estimate calculation details.

It must be emphasized that these cost estimates are planning-level cost estimates, and the mobility projects are conceptual. Site-specific evaluations must be conducted to finalize project elements and details.

APPENDIX A: MAPS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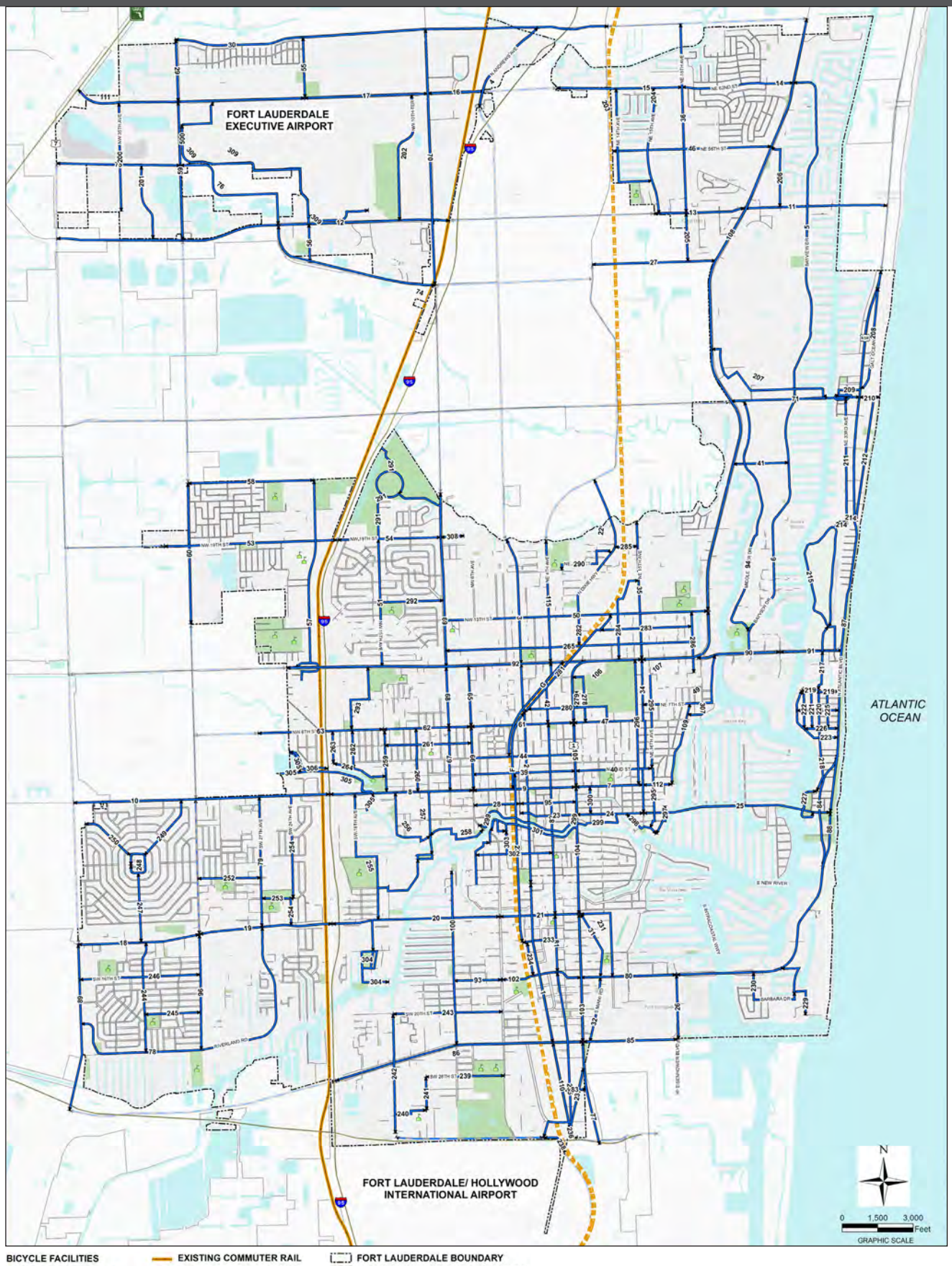
ATLANTIC
OCEAN
FORT LAUDERDALE/ HOLLYWOOD
INTERNATIONAL AIRPORT
N
0 1,500 3,000
Feet
GRAPHIC SCALE
PEDESTRIAN FACILITIES
INSIDE CITY LIMITS
OUTSIDE CITY LIMITS
SIDEWALK PRESENT
EXISTING COMMUTER RAIL
FEC
PARK LOCATIONS
SCHOOL
FORT LAUDERDALE BOUNDARY
BROWARD COUNTY CITY BOUNDARY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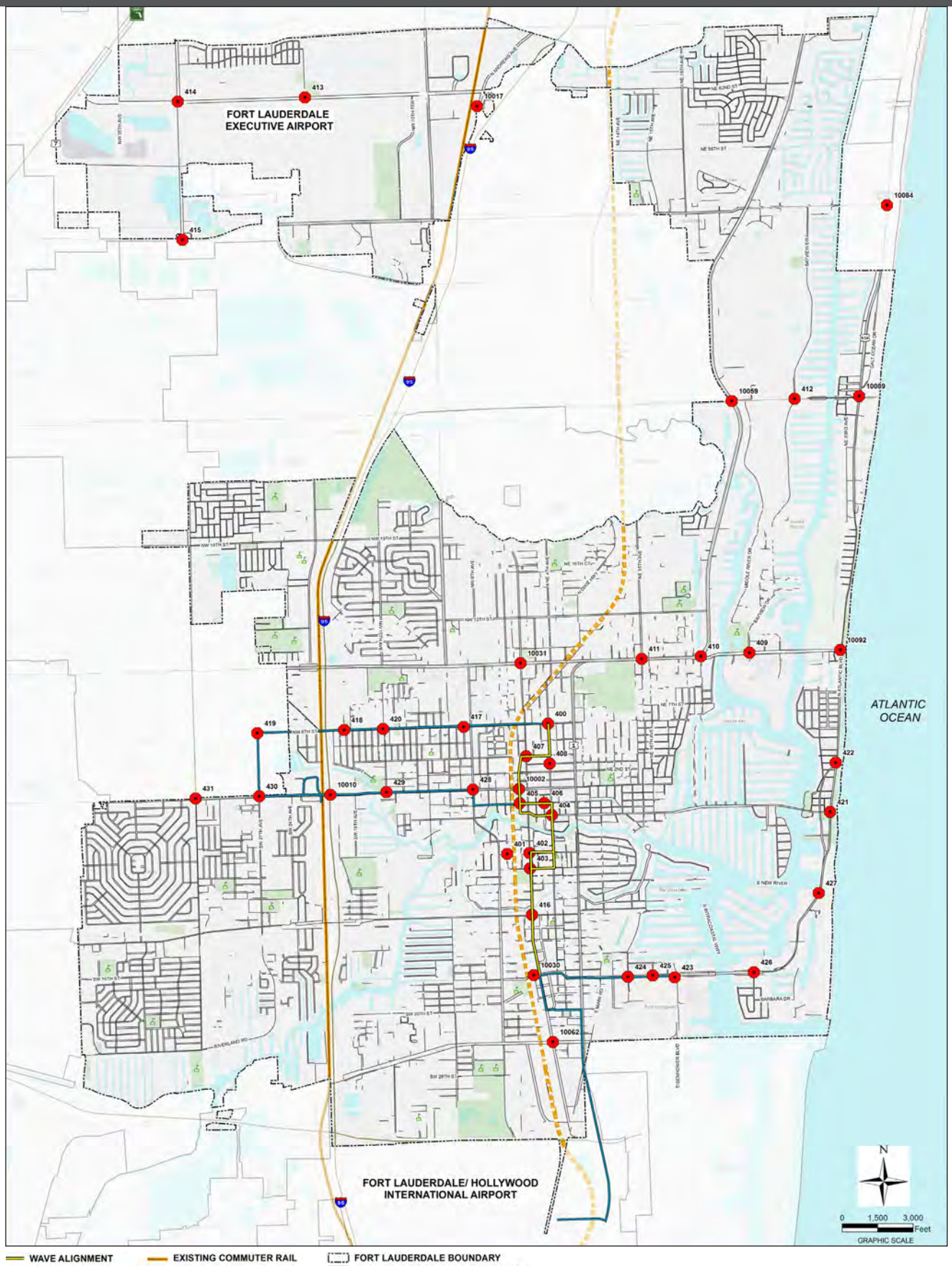
FORT LAUDERDALE/ HOLLYWOOD
INTERNATIONAL AIRPORT
ATLANTIC
OCEAN
N
0 1,500 3,000
Feet
GRAPHIC SCALE
BICYCLE FACILITIES
INSIDE CITY LIMITS
OUTSIDE CITY LIMITS
SIDEWALK PRESENT
EXISTING COMMUTER RAIL
FEC
PARK LOCATIONS
SCHOOL
FORT LAUDERDALE BOUNDARY
BROWARD COUNTY CITY BOUNDARY


FORT LAUDERDALE
EXECUTIVE AIRPORT
FORT LAUDERDALE/ HOLLYWOOD
INTERNATIONAL AIRPORT
ATLANTIC
OCEAN
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10084
10059
412
10089
10031
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409
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427
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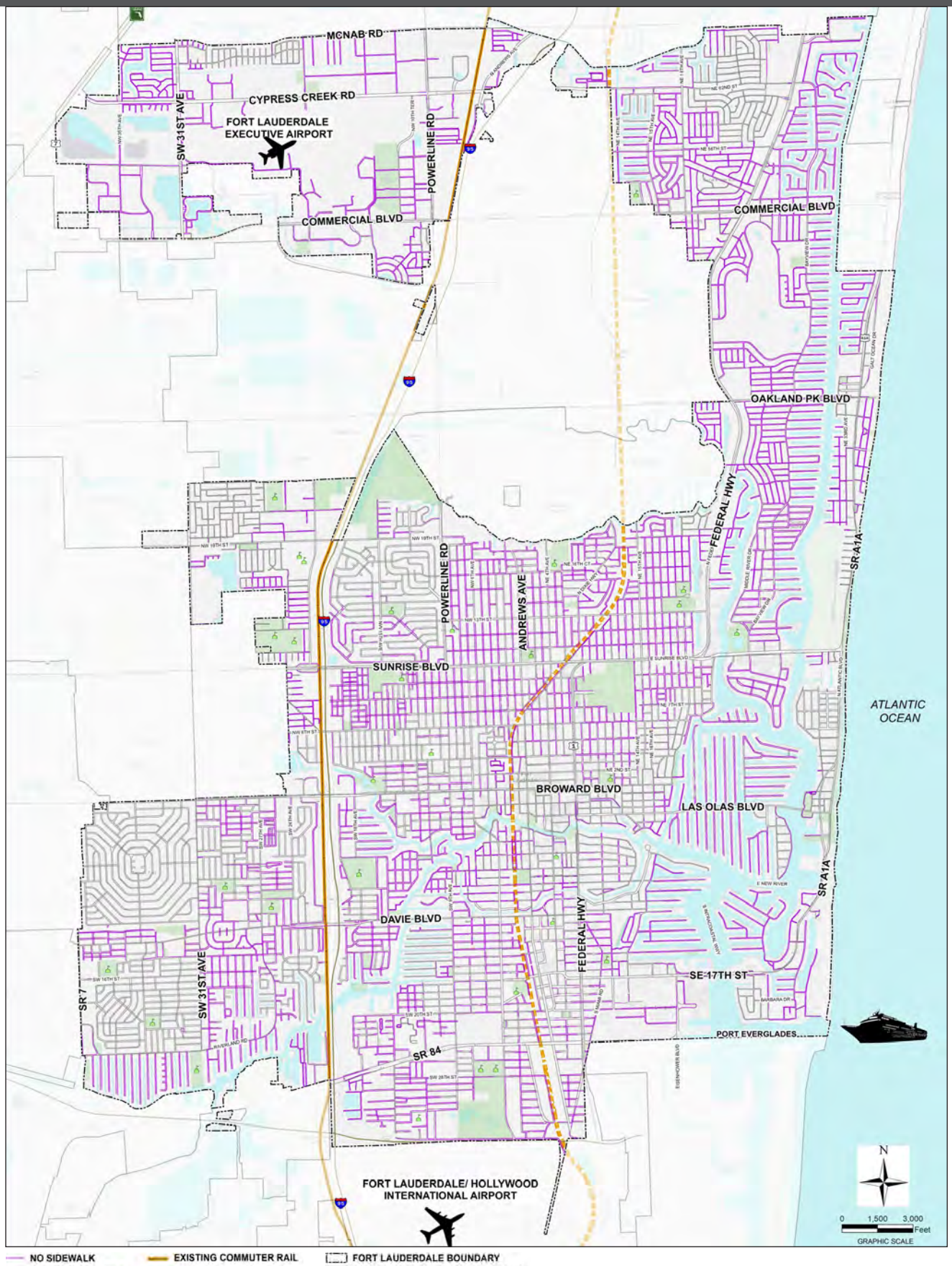
10030
424
425
423
426
10062
N
0
1,500
3,000
Feet
GRAPHIC SCALE
WAVE ALIGNMENT
HUBS
WAVE EXPANSION
SIDEWALK PRESENT
EXISTING COMMUTER RAIL
FEC
PARK LOCATIONS
SCHOOL
FORT LAUDERDALE BOUNDARY
BROWARD COUNTY CITY BOUNDARY


MCNAB RD
CYPRESS CREEK RD
FORT LAUDERDALE EXECUTIVE AIRPORT
SW 31ST AVE
POWERLINE RD
COMMERCIAL BLVD
COMMERCIAL BLVD
OAKLAND PK BLVD
FEDERAL HWY
SR A1A
POWERLINE RD
ANDREWS AVE
SUNRISE BLVD
ATLANTIC OCEAN
BROWARD BLVD
LAS OLAS BLVD
SR A1A
DAVIE BLVD
FEDERAL HWY
SE 17TH ST
SR 7
SW 31ST AVE
PORT EVERGLADES
SR 84
FORT LAUDERDALE/ HOLLYWOOD INTERNATIONAL AIRPORT
N
0 1,500 3,000
Feet
GRAPHIC SCALE
NO SIDEWALK
EXISTING SIDEWALK
EXISTING COMMUTER RAIL
FEC
PARK LOCATIONS
SCHOOL
FORT LAUDERDALE BOUNDARY
BROWARD COUNTY CITY BOUNDARY

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
110	**ANDREWS AVE**	Pedestrian	ADD BUFFER TO SIDEWALK. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SR 84/SW 24TH ST	US1/SE 6TH AVE	0.7	$877,000
110	**ANDREWS AVE**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	SR 84/SW 24TH ST	US1/SE 6TH AVE	0.7	$390,000
1	**ANDREWS AVE**	Pedestrian	ADD BUFFER TO SIDEWALK. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SE/SW 9TH ST	SR 84/SW 24TH ST	1.3	$1,562,000
1	**ANDREWS AVE**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	SE/SW 9TH ST	SR 84/SW 24TH ST	1.3	$741,000
2	**ANDREWS AVE**	Pedestrian	ADD BUFFER TO SIDEWALK. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SUNRISE BLVD	SE/SW 9TH ST	1.8	$2,057,000
2	**ANDREWS AVE**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	SUNRISE BLVD	SE/SW 9TH ST	1.8	$1,026,000
3	**ANDREWS AVE**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	NW 19TH ST	SUNRISE BLVD	1.0	$756,000
3	**ANDREWS AVE**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	NW 19TH ST	SUNRISE BLVD	1.0	$144,000
4	**ANDREWS AVE**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO ADD SIDEWALK BUFFER. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	MCNAB ROAD	NE 60th ST	0.8	$1,836,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
4	**ANDREWS AVE**	Bicycle	NARROW AUTO LANES AND IMPLEMENT LANE/ROAD DIET TO CONVERT BIKE SHOULDERS TO BIKE LANES AND CONTINUE SOUTH.	MCNAB ROAD	NE 60th ST	0.8	$648,000
6	**BAYVIEW DR**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING.	OAKLAND PARK BLVD/ SR 816	SUNRISE BLVD/SR 838	2.2	$1,017,000
6	**BAYVIEW DR**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	OAKLAND PARK BLVD/ SR 816	SUNRISE BLVD/SR 838	2.2	$108,000
5	**BAYVIEW DR**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	US 1/SR 5	OAKLAND PARK BLVD/ SR 816	2.7	$1,287,000
5	**BAYVIEW DR**	Bicycle	EXTEND BIKE SHOULDERS TO US 1. ENHANCED BIKE ACCOMMODATIONS AS APPROPRIATE	US 1/SR 5	OAKLAND PARK BLVD/ SR 816	2.7	$108,000
112	**BROWARD BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHARROWS AND SHARED LANE SIGNAGE.	NE/SE 15TH AVE	VICTORIA PARK RD	0.2	$117,000
112	**BROWARD BLVD**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	NE/SE 15TH AVE	VICTORIA PARK RD	0.2	$228,000
7	**BROWARD BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ENHANCE PEDESTRIAN CROSSING.	SR-5/US-1	NE/SE 15TH AVE	0.5	$342,000
7	**BROWARD BLVD**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	SR-5/US-1	NE/SE 15TH AVE	0.5	$20,000
9	**BROWARD BLVD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 7TH AVE	SR 5/US 1	0.8	$638,550
9	**BROWARD BLVD**	Bicycle	CONVERT BIKE SHOULDERS TO BIKE LANES AS PART OF ROAD DIET.	NW 7TH AVE	SR 5/US 1	0.8	$522,450

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
8	**BROWARD BLVD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	I-95	NW 7TH AVE	1.2	$990,450
8	**BROWARD BLVD**	Bicycle	CONVERT BIKE SHOULDERS TO BIKE LANES AS PART OF ROAD LANE/DIET.	I-95	NW 7TH AVE	1.2	$692,550
10	**BROWARD BLVD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SR 7/US 441	I-95	2.1	$778,050
10	**BROWARD BLVD**	Bicycle	ADD BIKE LANES AS PART OF LANE/ROAD DIET.	SR 7/US 441	I-95	2.1	$400,950
11	**COMMERCIAL BLVD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	US 1/SR 5/ FEDERAL HWY	SR A1A/ OCEAN DR	1.1	$1,164,150
11	**COMMERCIAL BLVD**	Bicycle	EXTEND BIKE LANES AS PART OF LANE/ROAD DIET. ADD SHARROWS AND SHARED-LANE SIGNAGE ON BRIDGE.	US 1/SR 5/ FEDERAL HWY	SR A1A/ OCEAN DR	1.1	$721,850
13	**COMMERCIAL BLVD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. FILL SIDEWALK GAP.	NE 15TH TER	US 1/SR 5/ FEDERAL HWY	0.7	$423,100
13	**COMMERCIAL BLVD**	Bicycle	ADD BIKE LANES AS PART OF LANE/ROAD DIET.	NE 15TH TER	US 1/SR 5/ FEDERAL HWY	0.7	$315,900

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
12	**COMMERCIAL BLVD**	Pedestrian	RECONSTRUCT SIDEWALKS WITH SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SR 7	I-95	3.0	$3,429,000
12	**COMMERCIAL BLVD**	Bicycle	NARROW MEDIAN (ELIMINATING ONE LEFT TURN LANE WHERE DUAL LEFTS EXIST) AND AUTO LANES TO CREATE BUFFERED BIKE LANES WHERE BIKE LANES DO NOT EXIST. NARROW AUTO LANES TO CREATE BUFFERS FOR EXISTING BIKE LANES.	SR 7	I-95	3.0	$3,213,000
140	**CORDOVA RD**	Pedestrian	PEDESTRIAN ENHANCEMENTS, CROSSWALKS, MEDIANS, SIDEWALK BUFFERS, LIGHTING	SE 17TH ST	SE 15TH ST	0.2	$117,000
140	**CORDOVA RD**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	SE 17TH ST	SE 15TH ST	0.2	$63,360
14	**CYPRESS CREEK RD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. EXTEND SIDEWALKS TO US 1.	NE 18TH AVE	US 1/SR 5	0.9	$478,000
14	**CYPRESS CREEK RD**	Bicycle	ADD BIKE LANES.	NE 18TH AVE	US 1/SR 5	0.9	$508,000
15	**CYPRESS CREEK RD**	Pedestrian	COMPLETE SIDEWALKS ON BOTH SIDES. ADD SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	NE 6TH AVE	NE 18TH AVE	0.8	$1,153,800
15	**CYPRESS CREEK RD**	Bicycle	ADD BIKE LANES.	NE 6TH AVE	NE 18TH AVE	0.8	$826,200

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
16	**CYPRESS CREEK RD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	SR 845/ POWER-LINE RD	ANDREWS AVE	0.4	$564,300
16	**CYPRESS CREEK RD**	Bicycle	ADD BIKE LANES AS PART OF LANE/ROAD DIET.	SR 845/ POWER-LINE RD	ANDREWS AVE	0.4	$461,700
17	**CYPRESS CREEK RD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	NW 21ST AVE	SR 845/ POWER-LINE RD	1.0	$901,350
17	**CYPRESS CREEK RD**	Bicycle	ADD BIKE LANES AS PART OF LANE/ROAD DIET.	NW 21ST AVE	SR 845/ POWER-LINE RD	1.0	$619,650
111	**CYPRESS CREEK RD**	Pedestrian	COMPLETE SIDEWALKS ON BOTH SIDES. IMPLEMENT A LANE/ ROAD DIET TO ADD SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	TURNPIKE	NW 21ST AVE	1.8	$1,743,300
111	**CYPRESS CREEK RD**	Bicycle	ADD BIKE LANES AS PART OF LANE/ROAD DIET.	TURNPIKE	NW 21ST AVE	1.8	$1,190,700
21	**DAVIE BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	SW 4TH AVE	US 1/SR 5/ FEDERAL HWY	0.6	$403,000
21	**DAVIE BLVD**	Bicycle	ELIMINATE CENTER LEFT TURN LANE AND RE-STRIPE WITH BIKE LANES.	SW 4TH AVE	US 1/SR 5/ FEDERAL HWY	0.6	$346,000
20	**DAVIE BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSING. UTILIZE THE EXISTING PATH ACROSS I95 AS MULTIMODAL PATH CONNECTION	I-95	SW 4TH AVE	1.3	$995,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
20	**DAVIE BLVD**	Bicycle	ELIMINATE CENTER LEFT TURN LANE AND RE-STRIPE WITH BIKE LANES. ADD SHARROWS AND SHARED-LANE SIGNAGE ON RIVER BRIDGE AND APPROACHES. UTILIZE THE EXISTING PATH ACROSS I95 AS MULTIMODAL PATH CONNECTION	I-95	SW 4TH AVE	1.3	$376,000
19	**DAVIE BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS. UTILIZE THE EXISTING PATH ACROSS I95 AS MULTIMODAL PATH CONNECTION	SW 31ST AVE	I-95	1.1	$778,000
19	**DAVIE BLVD**	Bicycle	NARROW AUTO LANES TO TRANSFORM BIKE SHOULDERS INTO BIKE LANES. UTILIZE THE EXISTING PATH ACROSS I95 AS MULTIMODAL PATH CONNECTION	SW 31ST AVE	I-95	1.1	$393,000
18	**DAVIE BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	US 441/SR 7	SW 31ST AVE	1.0	$787,000
18	**DAVIE BLVD**	Bicycle	NARROW AUTO LANES TO TRANSFORM BIKE SHOULDERS INTO BIKE LANES.	US 441/SR 7	SW 31ST AVE	1.0	$551,000
22	**DIXIE HWY**	Pedestrian	ADD SIDEWALKS WITH BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	NE 20TH DR	NE 13TH ST	0.9	$1,154,000
22	**DIXIE HWY**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO CREATE BIKE LANES.	NE 20TH DR	NE 13TH ST	0.9	$618,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
25	**E LAS OLAS BLVD**	Pedestrian	LANE/ROAD DIET TO EXTEND SIDEWALK BUFFERS AND SLOW AUTOS EAST OF GORDON RD TO INTERCOASTAL. INSTALL GATEWAY TREATMENT NEAR GORDON RD TO SIGNIFY CHANGE IN ROADWAY CHARACTER AND SLOW AUTOS. ENHANCE PEDESTRIAN CROSSINGS.	SE 15TH AVE	SR A1A NB	1.5	$835,000
25	**E LAS OLAS BLVD**	Bicycle	ADD SHARROWS AND SHARED-LANE SIGNAGE ON BRIDGES. REPLACE ON-STREET PARKING AND TURN LANES WITH BIKE LANES BETWEEN SE 15TH AVE AND SE 16TH AVE. NARROW NORTH SIDEWALK BETWEEN SE 16TH AVE AND SE 17TH AVE TO TRANSFORM EXISTING BIKE SHOULDER TO BIKE LANE	SE 15TH AVE	SR A1A NB	1.5	$121,000
24	**E LAS OLAS BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. WIDEN SIDEWALKS AND BUFFERS. ENHANCE PEDESTRIAN CROSSINGS.	US 1/SR 5/ FEDERAL HWY	SE 15TH AVE	0.5	$419,400
24	**E LAS OLAS BLVD**	Bicycle	CREATE BIKE ACCOMMODATIONS. WIDEN SIDEWALKS. NARROW AUTO LANES OVER BRIDGE AND WHERE THERE IS NO ON-STREET PARKING.	US 1/SR 5/ FEDERAL HWY	SE 15TH AVE	0.5	$432,600
23	**E LAS OLAS BLVD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING.	SW 1ST AVE	US 1/SR 5/ FEDERAL HWY	0.3	$216,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
23	**E LAS OLAS BLVD**	Bicycle	REMOVE MEDIAN AND TURN LANES EAST OF ANDREWS AVE TO CREATE BIKE LANES. BETWEEN SE 1ST AVE AND SE 2ND AVE, NARROW SIDEWALK AND SIDEWALK BUFFERS TO CREATE BIKE LANE.	SW 1ST AVE	US 1/SR 5/ FEDERAL HWY	0.3	$432,000
26	**EISENHOWER BLVD**	Pedestrian	PORT BYPASS ROAD TO BE DESIGNED AS COMMERCIAL AVENUE WITH SIDEWALKS ON 2 SIDES, PEDESTRIAN ORIENTED LIGHTING, AND SHADE. PORT TO PROVIDE MULTIMODAL CONNECTIVITY SOUTH OF SPANGLER RD.	ELLER DR	SE 17TH ST	2.4	$1,939,000
26	**EISENHOWER BLVD**	Bicycle	PORT BYPASS RD TO BE DESIGNED AS COMMERCIAL AVENUE WITH 5' BIKE LANES. PORT TO PROVIDE MULTIMODAL CONNECTIVITY SOUTH OF SPANGLER RD.	ELLER DR	SE 17TH ST	2.4	$1,939,000
27	**FLORANADA RD**	Pedestrian	ADD SIDEWALKS ON 2 SIDES. ADD SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	US 1/SR 5	OLD DIXIE HWY/SR 811	1.0	$1,010,000
27	**FLORANADA RD**	Bicycle	NARROW AUTO LANES AND ADD BIKE LANES. ADD SHARROWS AND SHARED-LANE SIGNAGE ON BRIDGE.	US 1/SR 5	OLD DIXIE HWY/SR 811	1.0	$515,000
28	**HIMMARSHEE ST**	Bicycle	REMOVE TURN LANES AND NARROW AUTO AND PARKING LANES WEST OF RAILROAD TO CREATE BIKE LANES. (SECTION TO CONSIST OF 2 AUTO LANES, 2 PARKING LANES, AND 2 BIKE LANES)	BRICKELL AVE	SW 7TH AVE	0.4	$371,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
30	**MCNAB RD**	Pedestrian	EAST OF POWERLINE RD: NARROW AUTO LANES AND IMPLEMENT A ROAD DIET TO CREATE A 5-LANE SECTION. ADD PEDESTRIAN-ORIENTED LIGHTING AND SHADE. WEST OF POWERLINE RD: COMPLETE SIDEWALKS WITH BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING AND SHADE. ENHANCE PEDESTRIAN CROSSINGS.	NE 69TH ST	NW 31ST AVE	2.5	$2,852,600
30	**MCNAB RD**	Bicycle	EAST OF POWERLINE RD: CONVERT BIKE SHOULDERS TO BIKE LANES AS PART OF LANE/ROAD DIET. WEST OF POWERLINE RD: NARROW AUTO LANES AND ADD BIKE LANES.	NE 69TH ST	NW 31ST AVE	2.5	$2,039,400
31	**MIAMI RD**	Pedestrian	ADD SIDEWALKS ON 2 SIDES. ADD SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	SE 12TH ST	SE 17TH ST	0.5	$365,000
31	**MIAMI RD**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	SE 12TH ST	SE 17TH ST	0.5	$285,000
32	**MIAMI RD**	Pedestrian	ADD SIDEWALKS ON 2 SIDES. ADD SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	SE 17TH ST	SE 24TH ST/ SR 84	0.5	$353,000
32	**MIAMI RD**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	SE 17TH ST	SE 24TH ST/ SR 84	0.5	$285,000
94	**MIDDLE RIVER DR**	Pedestrian	ADD SIDEWALKS ON MISSING SIDE AND OTHER ACCOMMODATIONS AS NEEDED	BAYVIEW DR	OAKLAND PARK BLVD/ SR 816	2.0	$580,000
94	**MIDDLE RIVER DR**	Bicycle	BIKE ACCOMMODATIONS AS APPROPRIATE	BAYVIEW DR	OAKLAND PARK BLVD/ SR 816	2.0	$215,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
40	**NE 2ND ST**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING WEST OF 14TH AVE	NE 16TH AVE	US 1/SR 5/ FEDERAL HW	0.6	$354,000
40	**NE 2ND ST**	Bicycle	NARROW AUTO LANES AND WIDEN PAVEMENT TO CREATE BIKE LANES BETWEEN US 1 AND NE 14TH AVE. CREATE PATH WITH LIGHTING AND SHADE BETWEEN 14TH AVE AND NE 15TH AVE. EXTEND LIGHTED AND SHADED PATH TO NE 16TH AVE ON SOUTH SIDE OF NE 2ND ST IN SIDEWALK BUFFER. SIGN AND STRIPE PATH CROSSING ON NE 15TH AVE	NE 16TH AVE	US 1/SR 5/ FEDERAL HW	0.6	$401,000
42	**NE 3RD/4TH AVE**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	SR 838/ SUNRISE BLVD	NE 6TH ST/ SISTRUNK BLVD	0.5	$508,400
42	**NE 3RD/4TH AVE**	Bicycle	NARROW AUTO LANES TO CREATE BIKE LANE	SR 838/ SUNRISE BLVD	NE 6TH ST/ SISTRUNK BLVD	0.5	$273,600
45	**NE 4TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NE 16TH AVE	US 1/SR 5/ FEDERAL HWY	0.6	$570,000
115	**NE 4TH AVE**	Pedestrian	COMPLETE SIDEWALK BUFFERS ON BOTH SIDES. ADD PEDESTRIAN ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSING	NE 19TH ST	SUNRISE BLVD	1.0	$682,400
115	**NE 4TH AVE**	Bicycle	NARROW AUTO LANES AND REMOVE MEDIAN/ CENTER TURN LANE TO CREATE BIKE LANES.	NE 19TH ST	SUNRISE BLVD	1.0	$1,133,600
47	**NE 6TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING.	NE 14TH AVE	US 1/SR 5/ FEDERAL HWY	0.5	$423,250

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
47	**NE 6TH ST**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO TRANSFORM BIKE SHOULDERS TO 5' BIKE LANES	NE 14TH AVE	US1/SR 5/ FEDERAL HWY	0.5	$231,750
48	**NE 6TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING.	VICTORIA TER	NE 14TH AVE	0.4	$247,000
49	**NE 7TH ST/NE 20TH AVE**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING.	SUNRISE BLVD	VICTORIA PARK RD	0.9	$261,000
49	**NE 7TH ST/NE 20TH AVE**	Bicycle	ADD SHARROWS AND SHARED LANE SIGNAGE	SUNRISE BLVD	VICTORIA PARK RD	0.9	$21,000
50	**NE/NW 13TH STREET**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO WIDEN SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE 2 PEDESTRIAN CROSSINGS.	US 1/FEDERAL HWY	NW 9TH AVE/ POWER-LINE RD	2.1	$1,792,350
50	**NE/NW 13TH STREET**	Bicycle	ADD BIKE LANES AS PART OF LANE/ROAD DIET.	US 1/FEDERAL HWY	NW 9TH AVE/ POWER-LINE RD	2.1	$1,348,650
34	**NE 15TH AVE**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING.	SUNRISE BLVD	LAS OLAS BLVD	1.3	$1,071,000
34	**NE 15TH AVE**	Bicycle	NORTH OF NE 9TH ST RESTRIPE TO CREATE BIKE LANES. CREATE MEDIAN BREAK AT BROWARD BLVD FOR PED AND BIKE ONLY. ADD SHARROWS AND SHARED LANE SIGNAGE SOUTH OF BROWARD BLVD	SUNRISE BLVD	LAS OLAS BLVD	1.3	$618,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
35	**NE 15TH AVE**	Pedestrian	NARROW AUTO LANES AND MEDIAN NORTH OF NE 13TH ST TO CREATE SIDEWALK BUFFERS. ADD SIDEWALK BUFFERS SOUTH OF NE 13TH ST AS PART OF ROAD DIET. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	NE 19TH ST	SUNRISE BLVD	1.0	$1,726,150
35	**NE 15TH AVE**	Bicycle	EXTEND BIKE LANES SOUTH OF NE 13TH ST AS PART OF MEDIAN NARROWING AND LANE/ROAD DIET	NE 19TH ST	SUNRISE BLVD	1.0	$230,850
36	**NE 18TH AVE**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	MCNAB ROAD	COMMERCIAL BLVD	1.3	$1,485,000
36	**NE 18TH AVE**	Bicycle	ADD BIKE LANES AS PART OF LANE/ROAD DIET.	MCNAB ROAD	COMMERCIAL BLVD	1.3	$1,215,000
41	**NE 26TH ST**	Pedestrian	ADD SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	BAYVIEW DR	US 1/SR 5/ FEDERAL HWY	0.5	$290,000
41	**NE 26TH ST**	Bicycle	EXTEND BIKE SHOULDERS FROM NE 26TH ST TO US 1	BAYVIEW DR	US 1/SR 5/ FEDERAL HWY	0.5	$76,000
46	**NE 56TH ST**	Pedestrian	COMPLETE SIDEWALKS WITH BUFFERS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	US 1/SR 5/ FEDERAL HWY	DIXIE HWY	1.3	$1,159,050
46	**NE 56TH ST**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO CREATE BIKE LANES. ADD SHARROWS AND SHARED LANE SIGNAGE ON BRIDGE	US 1/SR 5/ FEDERAL HWY	DIXIE HWY	0.3	$717,950

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
37	**NW 2ND ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 11TH AVE	NW 15TH AVE	0.4	$299,000
38	**NW 2ND ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 7TH AVE/ AVE OF THE ARTS	NW 11TH AVE	0.4	$299,000
39	**NW/NE 2ND ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. NARROW AUTO LANES TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING.	US 1/SR 5/ FEDERAL HWY	NW 7TH AVE/ AVE OF THE ARTS	0.8	$613,300
39	**NW/NE 2ND ST**	Bicycle	ADD SHARROWS AND SHARED LANE SIGNAGE AS PART OF A LANE/ROAD DIET. ADD PARKING WHERE APPROPRIATE	US 1/SR 5/ FEDERAL HWY	NW 7TH AVE/ AVE OF THE ARTS	0.8	$483,700
43	**NW 4TH ST**	Pedestrian	CONTINUE PEDESTRIAN-ORIENTED LIGHTING WEST OF NW 12TH AVE.	NW 7TH AVE	NW 18TH AVE	1.0	$243,000
44	**NW/NE 4TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN ORIENTED LIGHTING, ADD SHADE	US 1/SR 5/ FEDERAL HWY	NW 7TH AVE	0.8	$642,000
44	**NW/NE 4TH ST**	Bicycle	ADD SHARROWS AND SHARED LANE SIGNAGE. ADD ON-STREET PARKING WHERE APPROPRIATE.	US 1/SR 5/ FEDERAL HWY	NW 7TH AVE	0.8	$31,000
118	**NE 6TH ST**	Pedestrian	COMPLETE PEDESTRIAN CONNECTIONS INCLUDING CROSSWALKS	NE 3RD AVE	US 1/SR 5/ FEDERAL HWY	0.2	$214,000
61	**NE/NW 6TH ST**	Pedestrian	WEST OF ANDREWS AVE, FILL SIDEWALK GAPS.	NW 7TH AVE/ AVE OF THE ARTS	US 1/SR 5/ FEDERAL HWY	0.8	$91,200
61	**NE/NW 6TH ST**	Roadway	WEST OF ANDREWS AVE, IMPLEMENT LANE/ ROAD DIET TO CREATE ON-STREET PARKING AND CURB EXTENSIONS.	NW 7TH AVE/ AVE OF THE ARTS	US 1/SR 5/ FEDERAL HWY	0.8	$516,800

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
61	**NE/NW 6TH ST**	Bicycle	BETWEEN US 1 AND ANDREWS AVE, ADD SHARROWS AND SHARED-LANE SIGNAGE. WEST OF ANDREWS AVE, IMPLEMENT LANE/ ROAD DIET TO CREATE ON-STREET PARKING AND ADD SHARROWS AND SHARED-LANE SIGNAGE TO REMAINING THROUGH LANE.	NW 7TH AVE/ AVE OF THE ARTS	US 1/SR 5/ FEDERAL HWY	0.8	$31,000
62	**NW 6TH ST**	Pedestrian	ADD LANDSCAPED MEDIAN WEST OF NW 10TH AVE.	NW 15TH AVE	NW 7TH AVE/ AVE OF THE ARTS	0.7	$99,150
62	**NW 6TH ST**	Bicycle	EAST OF NW 9TH AVE, IMPLEMENT LANE/ROAD DIET TO ADD SHARROWS AND SHARED-LANE SIGNAGE TO REMAINING THROUGH LANE. WEST OF NW 9TH AVE, ADD SHARROWS AND SHARED-LANE SIGNAGE.	NW 15TH AVE	NW 7TH AVE/ AVE OF THE ARTS	0.7	$94,500
62	**NW 6TH ST**	Roadway	EAST OF NW 9TH AVE, IMPLEMENT LANE/ ROAD DIET TO CREATE ON-STREET PARKING AND ADD SHARROWS AND SHARED-LANE SIGNAGE TO REMAINING THROUGH LANE.	NW 15TH AVE	NW 7TH AVE/ AVE OF THE ARTS	0.7	$179,350
63	**NW 6TH ST**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING AND SHADE WEST OF NW 24TH AVE.	NW 27TH AVE	NW 15TH AVE	1.0	$424,250
63	**NW 6TH ST**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO ADD SHARROWS AND SHARED-LANE SIGNAGE.	NW 27TH AVE	NW 15TH AVE	1.0	$200,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
63	**NW 6TH ST**	Roadway	IMPLEMENT LANE/ ROAD DIET TO CREATE ON-STREET PARKING AND CURB EXTENSIONS WEST OF I-95.	NW 27TH AVE	NW 15TH AVE	1.0	$556,750
66	**NW 7TH AVE**	Pedestrian	IMPLEMENT ROAD DIET TO CREATE SPACE FOR WIDER SIDEWALK BUFFERS AND BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 6TH ST/ SISTRUNK BLVD	BROWARD BLVD	0.5	$386,100
66	**NW 7TH AVE**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO CREATE BIKE LANES.	NW 6TH ST/ SISTRUNK BLVD	BROWARD BLVD	0.5	$315,900
65	**NW 7TH AVE**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SPACE FOR WIDER SIDEWALK BUFFERS AND BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	SUNRISE BLVD/SR 838	NW 6TH ST/ SISTRUNK BLVD	0.5	$371,250
65	**NW 7TH AVE**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO CREATE 5′ BIKE LANES.	SUNRISE BLVD/SR 838	NW 6TH ST/ SISTRUNK BLVD	0.5	$303,750
64	**NW 7TH AVE**	Pedestrian	ADD SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 19TH ST	SUNRISE BLVD/SR 838	1.0	$680,000
67	**NW 9TH AVE**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. COMPLETE SIDEWALKS WITH BUFFERS ON BOTH SIDES.	NW 6TH ST	BROWARD BLVD	1.0	$334,400
67	**NW 9TH AVE**	Bicycle	STRIPE 11′ AUTO LANES AND WIDEN PAVED AREA AS NEEDED TO CREATE BIKE LANES.	NW 6TH ST	BROWARD BLVD	0.5	$273,600
68	**NW 9TH AVE**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. COMPLETE SIDEWALKS WITH BUFFERS ON BOTH SIDES.	SUNRISE BLVD	NW 6TH ST	0.5	$334,400

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
68	**NW 9TH AVE**	Bicycle	STRIPE 11' AUTO LANES AND WIDEN PAVED AREA AS NEEDED TO CREATE BIKE LANES.	SUNRISE BLVD	NW 6TH ST	0.5	$273,600
69	**NW 9TH AVE/ POWERLINE RD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS AND SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	NW 23RD ST	SUNRISE BLVD	1.4	$1,312,650
69	**NW 9TH AVE/ POWERLINE RD**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO CREATE BIKE LANES.	NW 23RD ST	SUNRISE BLVD	1.4	$838,350
70	**NW 9TH AVE/ POWER-LINE RD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS AND SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	MCNAB ROAD	PROSPECT RD	2.0	$1,876,950
70	**NW 9TH AVE/ POWER-LINE RD**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO CREATE BUFFERED BIKE LANES.	MCNAB ROAD	PROSPECT RD	2.0	$1,300,050
51	**NW 15TH AVE**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 19TH ST	SR 838/ SUNRISE BLVD	1.0	$733,700
51	**NW 15TH AVE**	Bicycle	NARROW AUTO LANES AND SIDEWALK BUFFERS TO CREATE BIKE LANES.	NW 19TH ST	SR 838/ SUNRISE BLVD	1.0	$600,300
52	**NW 16TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING, ADD SHADE.	DIXIE HWY	NW 9TH AVE	1.2	$812,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
53	**NW 19TH ST**	Pedestrian	CREATE SIDEWALK BUFFERS ON 2 SIDES BY NARROWING AUTO LANES AND IMPLEMENTING A LANE/ROAD DIET TO CREATE A 3-LANE SECTION. CREATE SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SR 9/I-95	NW 33RD AVE	1.4	$1,854,000
53	**NW 19TH ST**	Bicycle	CREATE BIKE LANES THROUGH LANE DIET AND A ROAD DIET TO CREATE A 3-LANE SECTION.	SR 9/I-95	NW 33RD AVE	1.4	$1,517,000
54	**NW 19TH ST**	Pedestrian	CREATE SIDEWALK BUFFERS ON 2 SIDES BY LANE DIET AND IMPLEMENTING A ROAD DIET TO CREATE A 3-LANE SECTION. CREATE SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 9TH AVE/ POWER-LINE RD	SR 9/I-95	0.8	$767,700
54	**NW 19TH ST**	Bicycle	CREATE BIKE LANES BY LANE DIET AND IMPLEMENTING A ROAD DIET TO CREATE A 3-LANE SECTION.	NW 9TH AVE/ POWER-LINE RD	SR 9/I-95	0.8	$510,300
56	**NW 21ST AVE**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	COMMERCIAL BLVD	PROSPECT RD	0.3	$205,700

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
56	**NW 21ST AVE**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO CREATE BIKE LANES. COORDINATE WITH COUNTY REGARDING OPPORTUNITY TO CREATE MULTI-USE TRAIL BETWEEN OAKLAND PARK BLVD AND COMMERCIAL BLVD.	COMMERCIAL BLVD	PROSPECT RD	0.3	$168,300
55	**NW 21ST AVE**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	W MCNAB RD	W CYPRESS CREEK RD	0.5	$428,750
55	**NW 21ST AVE**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO CREATE BIKE LANES OR TWO-WAY BIKE PATH.	W MCNAB RD	W CYPRESS CREEK RD	0.5	$263,250
57	**NW 23RD AVE/ NW 21ST AVE**	Pedestrian	RECONSTRUCT/WIDEN SIDEWALKS TO CREATE SIDEWALK BUFFERS. ADD PED-ORIENTED LIGHTING. ADD SHADE.	NW 26TH ST	SUNRISE BLVD/SR 838	1.9	$1,663,000
57	**NW 23RD AVE/ NW 21ST AVE**	Bicycle	SOUTH OF NW 20TH ST NARROW AUTO LANES TO TRANSFORM BIKE SHOULDERS INTO BIKE LANES.	NW 26TH ST	SUNRISE BLVD/SR 838	1.9	$680,000
58	**NW 26TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 21ST AVE	NW 31ST AVE/ MLK JR AVE	1.0	$682,000
58	**NW 26TH ST**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO CREATE BIKE LANES.	NW 21ST AVE	NW 31ST AVE/ MLK JR AVE	1.0	$558,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
29	**NW 31ST AVE/ LYONS RD**	Pedestrian	CREATE SIDEWALK BUFFERS ON 2 SIDES BY NARROWING LANES AND IMPLEMENTING A LANE/ROAD DIET TO CREATE A 5-LANE SECTION. CREATE SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	MCNAB RD	CYPRESS CREEK RD/ NW 62ND ST	0.5	$386,100
29	**NW 31ST AVE/ LYONS RD**	Bicycle	CREATE BIKE LANES THROUGH USE OF A LANE DIET AND IMPLEMENTING A ROAD DIET TO CREATE A 5-LANE SECTION.	MCNAB RD	CYPRESS CREEK RD/ NW 62ND ST	0.5	$315,900
59	**NW 31ST AVE**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES, CREATE SIDEWALK BUFFERS ON 2 SIDES BY IMPLEMENTING A LANE/ROAD DIET TO CREATE A 5-LANE SECTION. CREATE SPACE FOR BUS STOP PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS. SIDEWALK IMPROVEMENTS AT NW 24TH ST	CYPRESS CREEK RD/ NW 62ND ST	COMMERCIAL BLVD	1.1	$1,077,450
59	**NW 31ST AVE**	Bicycle	CREATE BUFFERED BIKE LANES BY NARROWING AUTO LANES AND IMPLEMENTING A LANE/ROAD DIET TO CREATE A 5-LANE SECTION.	CYPRESS CREEK RD/ NW 62ND ST	COMMERCIAL BLVD	1.1	$692,550
60	**NW 31ST AVE**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT A LANE/ROAD DIET TO CREATE A 5-LANE SECTION. CREATE SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 13TH ST	NW 26TH ST	1.1	$1,559,250

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
60	**NW 31ST AVE**	Bicycle	NARROW AUTO LANES AND IMPLEMENT A LANE/ROAD DIET TO CREATE A 5-LANE SECTION. CREATE SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 13TH ST	NW 26TH ST	1.1	$1,275,750
71	**OAKLAND PARK BLVD**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE 5 LANE SECTION WITH SIDEWALKS AND BUFFERS ALONG STREET AND SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SR A1A/ OCEAN BLVD	US 1/SR 5	1.0	$931,050
71	**OAKLAND PARK BLVD**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO CREATE BIKE LANES. ADD SHARROWS AND SHARED-LANE SIGNS ON BRIDGE AND EAST TO A1A	SR A1A/ OCEAN BLVD	US 1/SR 5	1.0	$659,950
74	**PROSPECT RD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. COMPLETE SIDEWALKS WITH BUFFERS ON BOTH SIDES. ENHANCE PEDESTRIAN CROSSINGS.	COMMERCIAL BLVD/SR 870	POWERLINE RD/SR 845	1.5	$1,695,550
74	**PROSPECT RD**	Bicycle	NARROW AUTO LANES. INCREASE PAVED WIDTH, REMOVE TURN LANES TO CREATE BUFFERED BIKE LANES.	COMMERCIAL BLVD/SR 870	POWERLINE RD/SR 845	1.5	$835,450
76	**PROSPECT RD**	Pedestrian	COMPLETE SIDEWALKS WITH BUFFERS AND SPACE FOR BUS SHELTER PADS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	NW 31ST AVE	COMMERCIAL BLVD/SR 870	1.2	$1,267,350

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
76	**PROSPECT RD**	Bicycle	INCREASE PAVED WIDTH TO CREATE BUFFERED BIKE LANES.	NW 31ST AVE	COMMERCIAL BLVD/SR 870	1.2	$853,650
75	**PROSPECT RD**	Pedestrian	COMPLETE SIDEWALKS WITH BUFFERS AND SPACE FOR BUS SHELTER PADS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	SR 7/US 441	NW 31ST AVE	1.0	$1,284,550
75	**PROSPECT RD**	Bicycle	NARROW AUTO LANES, INCREASE PAVED WIDTH, AND REMOVE TURN LANES TO CREATE BUFFERED BIKE LANES.	SR 7/US 441	NW 31ST AVE	1.0	$702,450
78	**RIVERLAND RD**	Pedestrian	COMPLETE SIDEWALKS WITH BUFFERS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	DAVIE BLVD	SR 7/US 441	2.6	$1,822,100
78	**RIVERLAND RD**	Bicycle	NARROW AUTO LANES AND INCREASE PAVED WIDTH TO CREATE BUFFERED BIKE LANES.	DAVIE BLVD	SR 7/US 441	2.6	$1,431,900
79	**SW 27TH AVE**	Pedestrian	IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	BROWARD BLVD	DAVIE BLVD	1.0	$816,750
79	**SW 27TH AVE**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO CREATE BIKE LANE.	BROWARD BLVD	DAVIE BLVD	1.0	$668,250
81	**SE 3RD AVE**	Pedestrian	ADD PED-ORIENTED LIGHTING. ADD SHADE. ADD SIDEWALK BUFFER SOUTH OF SE 16TH ST. BY NARROWING SIDEWALK. ENHANCE PED CROSSING.	DAVIE BLVD	SE 17TH ST	0.5	$384,100
81	**SE 3RD AVE**	Bicycle	REMOVE MEDIAN TO CREATE BIKE LANES.	DAVIE BLVD	SE 17TH ST	0.5	$252,900

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
82	**SE/NE 3RD AVE**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ENHANCE PEDESTRIAN CROSSING.	NE 6TH ST	DAVIE BLVD	1.5	$695,700
82	**SE/NE 3RD AVE**	Bicycle	REMOVE MEDIAN & CENTER TURN LANES TO CREATE BIKE LANES. ADD SHARROWS AND SHARED ROAD SIGNS ON BRIDGE.	NE 6TH ST	DAVIE BLVD	1.5	$770,300
119	**SE/SW 6TH ST**	Roadway	ROADWAY REDESIGN TO INCORPORATE THE ONE-WAY CONDITION IN FRONT OF THE JUDICIAL COMPLEX AND TWO-WAY CONDITION FOR THE SECTIONS EAST AND WEST OF THE COMPLEX. CREATE TRANSIT, PEDESTRIAN, AND BIKE ACCOMMODATIONS.	ANDREWS AVE	FEDERAL HIGHWAY	0.4	$3,000,000
141	**SE 16TH ST**	Pedestrian	PEDESTRIAN ENHANCEMENTS, CROSSWALKS, MEDIANS, SIDEWALK BUFFERS, LIGHTING	CORDOVA RD	SE 15TH ST	0.3	$175,500
141	**SE 16TH ST**	Bicycle	BICYCLE ACCOMMODATIONS AS APPROPRIATE	CORDOVA RD	SE 15TH ST	0.3	$95,040
80	**SE 17TH ST**	Pedestrian	NARROW LANES TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSING.	EISENHOWER BLVD	US 1	0.8	$1,008,000
80	**SE 17TH ST**	Bicycle	GREENWAY	EISENHOWER BLVD	US 1	0.8	$1,293,000
83	**SE 30TH ST**	Pedestrian	ADD SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	US 1	ANDREWS AVE	0.2	$116,050
83	**SE 30TH ST**	Bicycle	STRIPE 11' AUTO LANES AND WIDEN PAVED AREA AS NEEDED TO CREATE BIKE LANES.	US 1	ANDREWS AVE	0.2	$94,950

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
84	**SEABREEZE BLVD (A1A SOUTHBOUND)**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. PROPOSED GREENWAY IN CORRIDOR.	BAHIA MAR HOTEL/SR A1A	SEVILLA ST	0.9	$617,000
84	**SEABREEZE BLVD (A1A SOUTHBOUND)**	Bicycle	GREENWAY	BAHIA MAR HOTEL/SR A1A	SEVILLA ST	0.9	$1,454,000
87	**SR A1A**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING ON 2 SIDES NORTH OF NE 9TH ST. ADD PEDESTRIAN-ORIENTED LIGHTING ON 1 SIDE SOUTH OF SE 9TH ST. ADD SHADE. PROPOSED GREENWAY IN CORRIDOR.	FLAMINGO AVE	LAS OLAS BLVD	4.4	$1,409,000
87	**SR A1A**	Bicycle	GREENWAY	FLAMINGO AVE	LAS OLAS BLVD	4.4	$7,109,000
88	**SR A1A**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING ON 1 SIDE. ADD SHADE. PROPOSED GREENWAY IN CORRIDOR.	LAS OLAS BLVD	EISENHOWER BLVD	2.2	$940,000
88	**SR A1A**	Bicycle	GREENWAY.	LAS OLAS BLVD	EISENHOWER BLVD	2.2	$3,555,000
89	**SR 7**	Pedestrian	NARROW AUTO LANES/MEDIAN AND IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS AND SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN – ORIENTED LIGHTING. ADD SHADE.	DAVIE BLVD	I-595	1.4	$1,144,550
89	**SR 7**	Bicycle	NARROW AUTO LANES/MEDIAN AND IMPLEMENT ROAD DIET TO EXTEND BIKE LANES SOUTH AND CREATE BUFFERS FOR BIKE LANES.	DAVIE BLVD	I-595	1.4	$936,450

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
85	**SR 84**	Pedestrian	PORT BYPASS TO BE DESIGNED AS COMMERCIAL AVENUE WITH SIDEWALKS ON 2 SIDES, SIDEWALK BUFFERS ON 2 SIDES, PEDESTRIAN-SCALE LIGHTING, AND SHADE. PORT TO PROVIDE MULTIMODAL CONNECTIONS	US 1	PORT ENTRANCE	0.8	$1,293,000
85	**SR 84**	Bicycle	PORT BYPASS RD TO BE DESIGNED AS COMMERCIAL AVENUE WITH BIKE LANES.	US 1	PORT ENTRANCE	0.8	$760,000
86	**SR 84**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE.	I-95	US 1	2.0	$1,298,000
86	**SR 84**	Bicycle	PROPOSED GREENWAY IN CORRIDOR.	I-95	US 1	2.0	$3,231,000
92	**SUNRISE BLVD**	Pedestrian	NARROW AUTO LANES/MEDIAN AND IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS AND SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	US 1	NW 24TH AVE	1.9	$2,336,800
92	**SUNRISE BLVD**	Bicycle	NARROW AUTO LANES/MEDIAN AND IMPLEMENT LANE/ ROAD DIET TO TRANSFORM BIKE SHOULDERS INTO BIKE LANES, EXTEND BIKE LANES EAST, AND CREATE BUFFERS FOR BIKE LANES.	US 1	NW 24TH AVE	1.9	$1,735,200

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
90	**SUNRISE BLVD**	Pedestrian	NARROW AUTO LANES/MEDIAN AND IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS AND SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSING.	NE 26TH AVE	US 1	2.1	$711,650
90	**SUNRISE BLVD**	Bicycle	NARROW AUTO LANES/MEDIAN AND IMPLEMENT ROAD DIET TO TRANSFORM BIKE SHOULDERS INTO BIKE LANES, EXTEND BIKE LANES EAST, AND CREATE BUFFERS FOR BIKE LANES.	NE 26TH AVE	US 1	2.1	$523,350
91	**SUNRISE BLVD**	Pedestrian	NARROW AUTO LANES/MEDIAN AND IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS AND SPACE FOR BUS SHELTER PADS. ADD PEDESTRIAN – ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSING.	SR A1A	NE 26TH AVE	0.5	$509,800
91	**SUNRISE BLVD**	Bicycle	NARROW AUTO LANES/MEDIAN AND IMPLEMENT LANE/ ROAD DIET TO EXTEND BIKE LANES EAST.	SR A1A	NE 26TH AVE	0.5	$358,200
95	**SW/SE 2ND ST**	Pedestrian	ADD PEDESTRIAN-SCALE LIGHTING THROUGH PARKING GARAGE. WAYFINDING UNDER PARKING GARAGE.	US 1	BRICKELL AVE	0.5	$27,000
95	**SW/SE 2ND ST**	Bicycle	ADD SHARROWS AND SHARED-LANE SIGNAGE.	US 1	BRICKELL AVE	0.5	$17,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
97	**SW 4TH AVE**	Pedestrian	COMPLETE SIDEWALK ON 2 SIDES. IMPLEMENT LANE/ ROAD DIET TO CREATE SIDEWALK BUFFERS. ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	SR 84/SW 24TH ST	PERIMETER RD/SW 34TH ST	0.8	$657,000
98	**SW 4TH AVE**	Pedestrian	ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE. NARROW AUTO LANES TO ADD SIDEWALK BUFFER SOUTH OF SW 20TH ST.	DAVIE BLVD	SR 84/SW 24TH ST	1	$799,200
99	**SW 4TH AVE**	Pedestrian	ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	BROWARD BLVD	DAVIE BLVD	1.1	$733,700
100	**SW 9TH AVE**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	DAVIE BLVD	SR 84	1.4	$1,140,000
100	**SW 9TH AVE**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO CREATE 5' BIKE LANES.	DAVIE BLVD	SR 84	1.4	$558,000
113	**SW 9TH AVE**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	SR 84	SW 32ND CT	0.5	$424,000
114	**SW 9TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	US 1	SW 4TH AVE	1	$848,000
93	**SW 17TH ST**	Pedestrian	COMPLETE SIDEWALK ON 2 SIDES. ADD PEDESTRIAN-SCALE LIGHTING.	SW 4TH AVE	SW 9TH AVE	0.4	$260,000
93	**SW 17TH ST**	Bicycle	PROVIDE BIKE ACCOMMODATIONS	SW 4TH AVE	SW 9TH AVE	0.4	$130,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
102	**SW/SE 17TH ST**	Bicycle	WEST OF ANDREWS AVE, CREATE BIKE LANES BY NARROWING INSIDE AUTO LANES AND RESTRIPING WIDE OUTSIDE LANES WITH 1 AUTO LANE AND 1 BIKE LANE. IMPLEMENT LANE/ROAD DIET BETWEEN ANDREWS & SE 3RD AVE TO CREATE 5-LANE SECTION WITH BIKE LANES. CONVERT STRIPED SHOULDERS IN CURVES EAST OF SE 3RD AVE TO BIKE LANES. REPLACE EASTBOUND RIGHT-TURN LANE AT US 1 WITH BIKE LANE & SIDEWALK BUFFER. RETRIPE WESTBOUND AUTO LANES USE CURBS TO CREATE 2 AUTO LANES AND BIKE LANE.	US 1/SR 5	SW 4TH AVE	0.7	$347,400
102	**SW/SE 17TH ST**	Pedestrian	REMOVE EASTBOUND RIGHT TURN LANE AT US 1 TO CREATE SIDEWALK BUFFER. ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	US 1/SR 5	SW 4TH AVE	0.7	$1,301,600
96	**SW 31ST AVE**	Pedestrian	ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	BROWARD BLVD	RIVERLAND RD	0.9	$928,300
96	**SW 31ST AVE**	Bicycle	NARROW AUTO LANES AND WIDEN PAVED AREA TO CREATE 5' BIKE LANES.	BROWARD BLVD	RIVERLAND RD	0.9	$686,700
77	**US 1**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT LANE/ROAD DIET TO EXTEND SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. LPIS. ADD SHADE. ENHANCE 1 PEDESTRIAN CROSSING.	SE 24TH ST/ SR 84	I-595	0.8	$710,550

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
77	**US 1**	Bicycle	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO CREATE BUFFERED BIKE LANES.	SE 24TH ST/ SR 84	I-595	0.8	$522,450
101	**SW 7TH ST**	Pedestrian	COMPLETE SIDEWALKS ON 2 SIDES. ADD PEDESTRIAN-SCALE LIGHTING. ADD SHADE.	US 1	SW 4TH AVE	1	$775,000
103	**US 1**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO EXTEND SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. LPIS. ENHANCE PEDESTRIAN CROSSINGS.	DAVIE BLVD	SR 84	1	$931,050
103	**US 1**	Bicycle	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO CREATE BUFFERED BIKE LANES.	DAVIE BLVD	SR 84	1	$643,950
104	**US 1**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO EXTEND SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS.	BROWARD BLVD	DAVIE BLVD	1	$931,050
104	**US 1**	Bicycle	OUTSIDE TUNNEL, NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO CREATE BUFFERED BIKE LANES. LPIS. INSIDE TUNNEL, NARROW AUTO LANES TO CREATE BIKE LANES. SUPPLEMENT WITH ADVANCE SIGNAGE.	BROWARD BLVD	DAVIE BLVD	1	$643,950

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
105	**US 1**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO EXTEND SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. ENHANCE PEDESTRIAN CROSSINGS. ADD LPI SIGNALS.	NE 6TH ST	BROWARD BLVD	0.5	$544,950
105	**US 1**	Bicycle	IMPLEMENT LANE/ ROAD DIET TO CREATE BUFFERED BIKE LANES. CONTINUE MULTI-USE PATH NORTH AND SOUTH WITH FUTURE REDEVELOPMENT.	NE 6TH ST	BROWARD BLVD	0.5	$328,050
106	**US 1**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO EXTEND SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. LPIS.	NE 15TH AVE	NE 6TH ST	0.9	$772,200
106	**US 1**	Bicycle	NARROW AUTO LANES AND IMPLEMENT ROAD DIET TO CREATE BIKE LANES.	NE 15TH AVE	NE 6TH ST	0.9	$631,800
107	**US 1**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO EXTEND SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. LPIS. ENHANCE PEDESTRIAN CROSSING.	NE 13TH ST	NE 15TH AVE	1	$740,250
107	**US 1**	Bicycle	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO CREATE BIKE LANES.	NE 13TH ST	NE 15TH AVE	1	$546,750
108	**US 1**	Pedestrian	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO EXTEND SIDEWALK BUFFERS. ADD PEDESTRIAN-ORIENTED LIGHTING. ADD SHADE. LPIS. ENHANCE PEDESTRIAN CROSSINGS.	MCNAB RD	NE 13TH ST	5	$4,553,550

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
108	**US 1**	Bicycle	NARROW AUTO LANES AND IMPLEMENT LANE/ ROAD DIET TO CREATE BIKE LANES.	MCNAB RD	NE 13TH ST	5	$3,195,450
109	**VICTORIA PARK RD**	Pedestrian	ADD PEDESTRIAN-ORIENTED LIGHTING.	NE 7TH ST	BROWARD BLVD	0.7	$381,150
109	**VICTORIA PARK RD**	Bicycle	NARROW AUTO LANES & WIDEN PAVED AREA TO TRANSFORM SHOULDERS TO BIKE LANES PER RESIDENT INPUT.	NE 7TH ST	BROWARD BLVD	0.7	$311,850
PROJECTS SPECIFIC TO MICS PLANS							
A	**CITY-WIDE PREMIUM TRANSIT CORRIDOR PEDESTRIAN ACCOMMODATIONS**	Pedestrian	IMPROVE PEDESTRIAN ACCOMMODATIONS ON STREETS THAT ARE WITHIN 1/2 MILE OF PREMIUM TRANSIT CORRIDORS TO FILL GAPS IN CONNECTIVITY	CITY-WIDE	CITY-WIDE	366	$53,205,521
B	**ADA TROLLEY STOPS**	Transit	UPGRADE SUN-TROLLY STOPS TO BE ADA COMPLIANT	CITY-WIDE	CITY-WIDE		$550,000
C	**CITY WAYFINDING PROGRAM**	Roadway	IMPLEMENT A WAYFINDING PROGRAM	CITY-WIDE	CITY-WIDE		$1,000,000
E	**RIVERWALK STREETSCAPE SEAWALL PEDESTRIAN IMPROVEMENT PROJECT**	Pedestrian	NEW SEAWALL, BOARDWALK (AS AN EXTENSION OF THE WALK), LIGHTING, BRICK PAVERS, AND STREET FURNITURE.	NEW RIVER DR	LAS OLAS BLVD		$550,000
F	**FLAGLER GREENWAY - PHASE II**	Bicycle	EXTEND THE EXISTING FLAGLER GREENWAY	ANDREWS AVE	BROWARD BLVD	0.6	$2,000,000
G	**PROGRESSO DR GREENWAY**	Bicycle	DESIGN AND CONSTRUCT 12' MULTIUSE GREENWAY ALONG PROGRESSO DR	NE 4TH ST	SUNRISE BLVD	0.9	$6,000,000
H	**WAVE STREETCAR EXTENSIONS**	Transit	DESIGN AND CONSTRUCTION OF THE WAVE STREETCAR EXTENSIONS TO THE AIRPORT, PORT, TRI-RAIL STATION ON BROWARD BLVD	MULTIPLE	MULTIPLE		$60,000,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
H.1	**AIRPORT EXTENSION**	Transit	WAVE EXPANSION TO THE INTERNATIONAL AIRPORT VIA ANDREWS AVE AND US1	AIRPORT	SE 17TH ST		
H.2	**CONVENTION CENTER EXTENSION**	Transit	WAVE EXPANSION TO THE CONVENTION CENTER ALONG 17TH ST	EISENHOWER BLVD	ANDREWS AVE		
H.4	**TRI-RAIL EXTENSION**	Transit	WAVE EXPANSION TO BROWARD BLVD TRI-RAIL STATION VIA BROWARD, SE 2ND ST	SE 1ST AVE	ANDREWS AVE		
H.5	**SISTRUNK EXTENSION**	Transit	WAVE EXPANSION ALONG SISTRUNK BLVD AND NE 27TH AVE	NE 27TH AVE	ANDREWS AVE		
I	**DOWNTOWN INTELLIGENT TRANSPORTATION SYSTEM**	Transit	REAL-TIME TRANSIT, EVENT AND DESTINATION INFORMATION THROUGH TECHNOLOGIES THAT INCLUDE INTERACTIVE KIOSKS, SMART PHONE APPLICATIONS, AND A WEBSITE	CITY-WIDE	CITY-WIDE		$711,165
J	**CITY-WIDE SIDEWALKS, NON-PREMIUM TRANSIT CORRIDORS**	Pedestrian	COMPLETE SIDEWALKS ON STREETS CITY-WIDE TO FILL GAPS IN CONNECTIVITY NOT IN PREMIUM TRANSIT CORRIDORS	CITY-WIDE	CITY-WIDE	218	$31,690,718
116	**E LAS OLAS BLVD**	Roadway	CONVERT ONE-WAY SECTION WEST OF ANDREWS AVE TO TWO-WAY	ANDREWS AVE	HIMMARSHEE ST	0.1	$105,000
117	**DIXIE HWY**	Roadway	TRAFFIC CIRCLE	NE 18TH CT	NE 18TH CT	0.1	$81,000
120	**NW 14TH & NW 15TH ST**	Roadway	CONSTRUCTION OF NEW ROADS WHERE THEY ARE CURRENTLY NOT PAVED	POWERLINE RD	ANDREWS AVE		$1,800,000
121	**SW 5TH AVE**	Roadway	ROAD DIET RESTRIPE TO BE COMPLETE STREET WITH PARALLEL PARKING, 2 LANES OF TRAFFIC, AND A BIKE LANE IN EACH DIRECTION.	HIMMARSHEE ST	BROWARD BLVD	0.1	$1,042,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
122	**ANDREWS AVE**	Roadway	ROAD DIET RESTRIPE AS PART OF CONTEXT SENSITIVE CORRIDOR TO INCLUDE BIKE LANES AND ON-STREET PARKING	NE 6TH ST/ SISTRUNK BLVD	SE 17TH ST	2	$10,400,000
123	**NE 3RD AVE**	Roadway	ROAD DIET RESTRIPE AS PART OF CONTEXT SENSITIVE CORRIDOR TO INCLUDE BIKE LANES AND ON-STREET PARKING	NE 6TH ST/ SISTRUNK BLVD	SE 17TH ST	2	$10,400,000
124	**BROWARD BLVD**	Pedestrian	WALKABILITY UPGRADES IN COMPLIANCE WITH WALKABILITY STUDY	MULTIPLE	MULTIPLE		$2,523,000
125	**LAS OLAS BLVD**	Pedestrian	LAS OLAS TUNNEL TOP PLAZA	SR 5/US 1	SR 5/US 1	0.02	$1,638,000
126	**BROWARD BLVD**	Roadway	ROUNDABOUT	SW/NW 5TH AVE	SW/NW 5TH AVE	0.1	$878,000
127	**BROWARD BLVD**	Roadway	EXPLORE BAT LANE CONCEPT. OFF-PEAK ON-STREET PARKING.	NE/SE 7TH AVE	NW/SW 1ST AVE	0.6	$520,000
128	**SUNRISE BLVD**	Roadway	ROUNDABOUT	SR 5/US 1	NE 19TH AVE	0.1	$878,000
129	**SUNRISE BLVD**	Roadway	ROUNDABOUT	SR 5/US 1	NE 7TH AVE	0.1	$878,000
130	**ALMOND AVE**	Pedestrian	NEW SIDEWALKS, LANDSCAPING, AND LIGHTING WILL ADDRESS PUBLIC SAFETY ISSUES. INSTALLATION OF REQUIRED INFRASTRUCTURE TO CLOSE OFF PORTION OF STREET TO CREATE PEDESTRIAN MALL FOR SPECIAL EVENTS.	POINSETTIA ST	LAS OLAS BLVD	0.1	$2,635,500
131	**LAS OLAS INTRACOASTAL PROMENADE**	Pedestrian	WATERFRONT PROMENADE AT LAS OLAS CIRCLE INCLUDING WALKWAY, LANDSCAPING LIGHTING, PEDESTRIAN AMENITIES.	LAS OLAS CIRCLE	BIRCH RD	0.4	$7,280,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
132	**CHANNEL SQUARE**	Pedestrian	WATER TAXI STOP, LANDSCAPED PLAZA AND STREETSCAPE IMPROVEMENTS. "CANALWALK"	CHANNEL SQUARE	CHANNEL SQUARE	0.1	$4,900,100
133	**SR A1A**	Pedestrian	WEST SIDE CORRIDOR IMPROVEMENTS - SIDEWALK, TREES AND LIGHT POLES, ADA UPGRADES TO SEBASTIAN PARKING LOT	FT LAUDERDALE BEACH PARK	SUNRISE BLVD	2.0	$3,895,336
134	**FAT VILLAGE CORRIDOR IMPROVEMENTS**	Pedestrian	STREET ENHANCEMENTS TO NW 1ST AVE AND NW 5TH ST BETWEEN ANDREWS AVE AND N FLAGLER DR.	NW 5TH ST	NW 6TH ST	0.2	$540,000
135	**LAS OLAS BLVD SAFETY PROJECT**	Pedestrian	DESIGN AND CONSTRUCTION OF SAFETY IMPROVEMENTS INCLUDING ADA TROLLEY STOPS, ON-STREET PARKING, SIDEWALKS, STREETSCAPE, TRAFFIC CALMING, LANDSCAPING, PEDESTRIAN SIGNALIZATION AND CROSSWALK UPGRADES	ANDREWS AVE	SE 15TH AVE	0.9	$3,341,282

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
136	**NE 13TH ST CORRIDOR IMPROVEMENTS**	Roadway	COMPLETE STREETS PROJECT INCLUDING LANE REDUCTION, COLORED BIKE LANES, SAFETY ZONE, DECORATIVE CROSSWALKS, STREET LIGHTS, IN-GROUND LED LIGHTED CROSSWALK, TREE CANOPY, ADA IMPROVEMENTS, ON-STREET PARKING.	ANDREWS AVE	FEC RAILROAD	0.7	$1,310,000
137	**NE 15TH AVE**	Roadway	LANE REDUCTION, ADDITION OF BIKE LANES AND ON-STREET PARKING. MODIFICATION OF SIGNAL HEADS, CREATE NORTHBOUND TO EASTBOUND DEDICATED RIGHT TURN LANE, EXTEND THE NORTHBOUND TO WESTBOUND LEFT TURN, MILL AND RESURFACE INTERSECTION	SUNRISE BLVD	NE 13TH ST	0.4	$500,000
138	**BAYVIEW DR**	Roadway	COLOR ENHANCED BIKE LANES, DECORATIVE CROSSWALKS, STREET LIGHTS, IN-GROUND LED LIGHTING, TREE CANOPY ENHANCEMENT, AND ADA IMPROVEMENTS	SUNRISE BLVD	COMMERCIAL BLVD	4.0	$1,400,000

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
139	**ANDREWS AVE BRIDGE**	Pedestrian	RENOVATIONS TO THE ANDREWS AVE BRIDGE WITH REDESIGNED ACCESS RAMPS AND STAIRS, AND THE PROVISION OF ENCLOSED SPACE UNDER THE NORTH SIDE OF THE BRIDGE.	RIVERWALK	RIVERWALK	0.1	$1,000,000
TRANSIT							
600	**WATER FERRY**	Transit	ENHANCED TRANSIT SERVICE ON WATERWAYS TO SUPPLEMENT LAND-BASED TRANSIT BOTH ACROSS RIVER AND TO COMMUTING DESTINATIONS	MULTIPLE	MULTIPLE		UNK
601	**NEW TROLLEYS**	Transit	PURCHASE OF 15 TROLLEYS FOR COMMUNITY BUS SERVICE				$3,725,100
602	**NEW RIVER BOAT CROSSING & PAVILION**	Transit	CREATE BOAT DOCKS/ RAMPS ON THE NORTH AND SOUTH SIDES OF THE NEW RIVER AT THE KINNEY TUNNEL TO PROVIDE A BOAT CROSSING FOR RESIDENTS AS WELL AS ACCESS TO A FERRY SERVICE SYSTEM. PROJECT ONLY INCLUDES COST OF PURCHASING CROSS RIVER ACCESS. SITES AND CROSSINGS NEED TO BE DETERMINED	US 1	US 1		$750,000

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
TRANSIT HUBS							
10002	**BROWARD BLVD**	Transit	GATEWAY HUB	NW/SW 1st Ave			$8,196,178
10010	**CYPRESS CREEK RD**	Transit	GATEWAY HUB	Cypress Creek Tri-Rail Station			$8,196,178
10017	**BROWARD BLVD**	Transit	GATEWAY HUB	I-95			$8,196,178
10030	**ANDREWS AVE**	Transit	ANCHOR HUB	FEC & SE 17th St			$1,930,844
10031	**SUNRISE BLVD**	Transit	ANCHOR HUB	ANDREWS AVE			$1,930,844
10059	**OAKLAND PARK BLVD**	Transit	ANCHOR HUB	US 1			$1,930,844
10062	**ANDREWS AVE**	Transit	ANCHOR HUB	SR 84			$1,930,844
10089	**OAKLAND PARK BLVD**	Transit	ANCHOR HUB	SR A1A			$1,930,844
10092	**SUNRISE BLVD**	Transit	ANCHOR HUB	SR A1A			$1,930,844
400	**SISTRUNK BLVD**	Transit	COMMUNITY HUB	NE 3RD AVE			$56,948
401	**SW 3RD AVE**	Transit	COMMUNITY HUB	SW 6TH ST			$56,948
402	**ANDREWS AVE**	Transit	COMMUNITY HUB	SW 6TH ST			$56,948
403	**ANDREWS AVE**	Transit	COMMUNITY HUB	SW 7TH ST			$56,948
404	**LAS OLAS BLVD**	Transit	COMMUNITY HUB	SE 3RD AVE			$56,948
405	**SW 1ST AVE**	Transit	COMMUNITY HUB	SE 2ND ST			$56,948
406	**SE 2ND AVE**	Transit	COMMUNITY HUB	SE 2ND ST			$56,948
407	**ANDREWS AVE**	Transit	COMMUNITY HUB	NE 4TH ST			$56,948
408	**NE 3RD ST**	Transit	COMMUNITY HUB	NE 3RD AVE			$56,948
409	**SUNRISE BLVD**	Transit	COMMUNITY HUB	BAYVIEW DR/ GALLERIA			$56,948
410	**SUNRISE BLVD**	Transit	COMMUNITY HUB	GATEWAY			$56,948
411	**SUNRISE BLVD**	Transit	COMMUNITY HUB	NE 15TH AVE			$56,948

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
412	**OAKLAND PARK BLVD**	Transit	COMMUNITY HUB	BAYVIEW DR			$56,948
413	**CYPRESS CREEK RD**	Transit	COMMUNITY HUB	NW 21ST AVE			$56,948
414	**CYPRESS CREEK RD**	Transit	COMMUNITY HUB	NW 31ST AVE			$56,948
415	**COMMERCIAL BLVD**	Transit	COMMUNITY HUB	NW 31ST AVE			$56,948
416	**ANDREWS AVE**	Transit	ANCHOR HUB	DAVIE BLVD			$1,930,844
417	**SISTRUNK BLVD**	Transit	COMMUNITY HUB	NW 7TH AVE			$56,948
418	**SISTRUNK BLVD**	Transit	COMMUNITY HUB	NW 19TH AVE/ LINCOLN PARK			$56,948
419	**SISTRUNK BLVD**	Transit	COMMUNITY HUB	NW 27TH AVE			$56,948
420	**SISTRUNK BLVD**	Transit	COMMUNITY HUB	NW 15TH AVE			$56,948
421	**A1A**	Transit	ANCHOR HUB	LAS OLAS BLVD			$1,930,844
422	**A1A**	Transit	COMMUNITY HUB	ALHAMBRA DR			$56,948
423	**SE 17TH ST**	Transit	COMMUNITY HUB	CONVENTION CENTER			$56,948
424	**SE 17TH ST**	Transit	COMMUNITY HUB	CORDOVA DR			$56,948
425	**SE 17TH ST**	Transit	COMMUNITY HUB	SE 15TH AVE			$56,948
426	**SE 17TH ST**	Transit	COMMUNITY HUB	SE 23RD AVE			$56,948
427	**SE 17TH ST**	Transit	COMMUNITY HUB	HARBOR DR			$56,948
428	**BROWARD BLVD**	Transit	COMMUNITY HUB	NW 7TH AVE			$56,948
429	**BROWARD BLVD**	Transit	COMMUNITY HUB	NW 15TH AVE			$56,948
430	**BROWARD BLVD**	Transit	COMMUNITY HUB	NW 27TH AVE			$56,948
431	**BROWARD BLVD**	Transit	COMMUNITY HUB	NW 31ST AVE			$56,948
432	**CYPRESS CREEK RD**	Transit	COMMUNITY HUB	US 1			$56,948

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
433	**COMMERCIAL BLVD**	Transit	ANCHOR HUB	US 1			$1,930,844
434	**NE 13TH ST**	Transit	COMMUNITY HUB	FEC			$56,948
SECONDARY BIKE ACCOMMODATIONS							
D	**CITY-WIDE SECONDARY ROAD BIKE ACCOMMODATIONS**	Bicycle	CITY-WIDE SECONDARY ROAD BIKE ACCOMMODATIONS	CITY-WIDE	CITY-WIDE	67.3	
200	**NW 35TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W CYPRESS CREEK RD	NW 53RD RD	0.9	$285,120
201	**NW 33RD AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W PROSPECT RD	COMMERCIAL BLVD	0.6	$190,080
202	**NW 12TH AVE & NW 10TH TER**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W CYPRESS CREEK RD	COMMERCIAL BLVD	1.1	$348,480
203	**NE 14TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W CYPRESS CREEK RD	NE 15TH AVE	1	$316,800
204	**NE 16TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W CYPRESS CREEK RD	COMMERCIAL BLVD	1	$316,800
205	**NE 18TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	COMMERCIAL BLVD	NE 45TH ST	0.4	$126,720

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
206	**NE 26TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 56TH ST	COMMERCIAL BLVD	0.5	$158,400
207	**NE 22ND AVE & NE 32ND ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	US 1	OAKLAND PARK BLVD/ SR 816	1.3	$411,840
208	**GALT OCEAN DR**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	A1A	OCEAN BLVD/ SR A1A	0.8	$253,440
209	**NE32ND ST & NE23 AVE & NE33RD AVE, ACCESS RDS**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	A1A	OAKLAND PARK BLVD/ SR 816	0.4	$126,720
210	**OAKLAND PARK BLVD**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	N OCEAN BLVD	US 1	0.2	$63,360
211	**NE 33RD AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E OAKLAND PARK BLVD	BEACH	1.1	$348,480
212	**N ATLANTIC BLVD**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E OAKLAND PARK BLVD	NE 19TH CT	1	$316,800
213	**NORTH BEACH BOARDWALK**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 19TH ST	NE 19TH CT	1.2	$380,160
214	**CROSS-OVER TO BIRCH STATE PARK (N)**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 19TH ST	NE 17TH CT	0.3	$95,040
215	**BIRCH STATE PARK LOOP**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	BIRCH STATE PARK LOOP	BIRCH STATE PARK N ENTRANCE	2.3	$728,640
216	**CENTRAL BEACH BOARDWALK**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 14TH CT	BIRCH STATE PARK S ENTRANCE	2.1	$665,280
217	**N BIRCH RD**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E SUNRISE BLVD	NE 14TH CT	0.3	$95,040
218	**N BIRCH RD**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	RIOMAR ST	FORT LAUDERDALE BEACH	0.5	$158,400

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
219	**VISTAMAR ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	BAYSHORE DR	LAS OLAS CIR	0.3	$95,040
220	**N BIRCH RD**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	VISTAMAR ST	A1A	0.3	$95,040
221	**ORTON AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	VISTAMAR ST	RIOMAR ST	0.3	$95,040
222	**ANTIOCH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	VISTAMAR ST	RIOMAR ST	0.3	$95,040
223	**BAYSHORE DR**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	VISTAMAR ST	RIOMAR ST	0.6	$190,080
224	**TERRAMAR ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	BAYSHORE DR	A1A	0.3	$95,040
225	**BREAKERS AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	VISTAMAR ST	A1A	0.3	$95,040
226	**RIOMAR ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	BAYSHORE DR	RIOMAR ST	0.3	$95,040
227	**LAS OLAS CIR**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	S BIRCH RD	A1A	0.4	$126,720
228	**SOUTH BEACH BOARDWALK**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	FORT LAUDERDALE BEACH PARK ENTRANCE	LAS OLA BLVD	1.6	$506,880
229	**MAYAN DR & GRACE RD**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	FORT LAUDERDALE BEACH PARK ENTRANCE	GRACE DR	0.6	$190,080
230	**SE 19TH PL & BARBARA DR**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	GRACE DR	A1A	0.6	$190,080
231	**SE 12TH ST & SE 10TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SE 17TH ST	SE 17TH ST	0.8	$253,440

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
232	**SW FLAGLER AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 2ND ST	US 1	1.4	$443,520
233	**SE 14TH CT**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	S ANDREWS AVE	SW 14TH ST	0.3	$95,040
234	**SW 1ST AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 14TH ST	SE 3RD AVE	0.3	$95,040
235	**SE 4TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SE 17TH ST	SE 17TH ST	1.3	$411,840
236	**ANDREWS AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SE 24TH ST (SR840)	ELLER DR	0.8	$253,440
237	**SE 6TH AVE & SW 33RD ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SE 6TH AVE	ELLER DR	0.8	$253,440
238	**SW 34TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 2ND AVE	SW 34TH ST	0.2	$63,360
239	**SW 28TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 12TH ST	E PERIMTETER RD	0.6	$190,080
240	**SW 33RD CT**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 15TH AVE	SW 4TH AVE	0.3	$95,040
241	**SW 32TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 28TH ST	SW 12TH AVE	0.3	$95,040
242	**SE 15TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 20TH ST	SW 32ND CT	1	$316,800
243	**SW 20TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 15TH AVE	SW 33RD ST	0.9	$285,120
244	**SW 35TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	DAVIE BLVD	SW 4TH AVE	0.9	$285,120

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
245	**SW 20TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 35TH AVE	SW 20TH ST	0.5	$158,400
246	**SW 16TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SR 7	SW 31ST AVE	1	$316,800
247	**INDIANA AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	DAVIE BLVD	SW 31ST AVE	0.6	$190,080
248	**E/W CAMPUS CIR**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	INDIANA AVE	E/W CAMPUS CIR	0.5	$158,400
249	**FLORIDA AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E/W CAMPUS CIR	INDIANA AVE	0.6	$190,080
250	**IOWA AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E/W CAMPUS CIR	W BROWARD BLVD	0.5	$158,400
252	**SW 7TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 31ST AVE	SW 2 ND CT	0.5	$158,400
253	**SW 10TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 27ST AVE	SW 27ST AVE	0.3	$95,040
254	**SW 24TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W BROWARD BLVD	SW 24TH AVE	1	$316,800
255	**SW 18TH AVE & SW 16TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W BROWARD BLVD	DAVIE BLVD	1.2	$380,160
256	**SW 4TH AVE / CT**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W BROWARD BLVD	DAVIE BLVD	0.7	$221,760
257	**SW 9TH AVE & SW 10TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W BROWARD BLVD	SW 11TH AVE	1.3	$411,840
258	**SW 4TH PL**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 11TH AVE	SW 16TH AVE	0.6	$190,080

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
259	**NW 15TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NW 6TH ST	SW 4TH AVE	0.5	$158,400
260	**NW 12TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NW 6TH ST	W BROWARD BLVD	0.5	$158,400
261	**NW 5TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NW 15TH AVE	W BROWARD BLVD	0.7	$221,760
262	**NW 18TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NW 6TH ST	NW 7TH AVE	0.3	$95,040
263	**NW 21ST AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NW 6TH ST	NW 3RD CT	0.3	$95,040
264	**NW 3RD CT**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NW 21ST AVE	NW 3RD CT	0.4	$126,720
265	**NE 11TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	N POWERLINE RD	NW 15TH AVE	2	$633,600
278	**NE 7TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	US 1	NE 18TH AVE	0.5	$158,400
279	**NE 6TH TER**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 8TH ST	NE 6TH ST	0.1	$31,680
280	**NE 7TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE FLAGLER DR	NE 7TH ST	0.8	$253,440
281	**N FLAGLER DR**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	N ANDREWS AVE	NE 6TH ST	1.1	$348,480
282	**NE 7TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 13TH ST	NE 13TH ST	0.2	$63,360
283	**NE 12TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE FLAGLER DR	NE 11TH ST	0.7	$221,760

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
284	**NE 12TH ST & FLAGLER DR & NE 15TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SUNRISE BLVD	NE 18TH AVE	0.7	$221,760
285	**NE 17TH CT**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	N DIXIE HWY	NE 15TH AVE	0.2	$63,360
286	**NE 18TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 13TH ST	NE 15TH AVE	0.5	$158,400
290	**NE 16TH CT & NE 9TH AVE & NE 17TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 16TH ST	NE 13TH ST	0.6	$190,080
291	**MILL POND PARK**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	MILL POND PARK	N DIXIE HWY	1.6	$506,880
292	**NW 14TH CT**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 15TH AVE	MILL POND PARK	0.5	$158,400
293	**NW 18TH AVE/ ST & NW 16TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	W SUNRISE BLVD	NW 9TH AVE	0.6	$190,080
295	**NE 16TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 9TH ST	NW 6TH ST	1.2	$380,160
296	**NE 13TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E SUNRISE BLVD	BRICKEL DR	1	$316,800
297	**SE 17TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SE 2ND ST	E BROWARD BLVD	0.3	$95,040
298	**TARPON DR 7 S BRICKELL DR**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E LAS OLAS BLVD	BRICKELL DR	0.3	$95,040
299	**N NEW RIVER PATH**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 7TH AVE	SE 17TH AVE	1.4	$443,520
300	**SE 8TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	E BROWARD BLVD	E LAS OLAS BLVD	0.2	$63,360

APPENDIX B: PROJECT NEEDS LIST WITH COST ESTIMATES (CONTINUED)

FTL #	FACILITY	TYPE	DESCRIPTION	TO	FROM	LENGTH (MILES)	CONSTRUCTION
301	**S NEW RIVER PATH & SW 7TH AVE**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 9TH ST	E LAS OLAS BLVD	1.5	$475,200
302	**SW 6TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	SW 7TH AVE	US 1	0.6	$190,080
303	**SW 3RD & SW 4**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	S NEW RIVER PATH	SE 3RD AVE	0.4	$126,720
304	**SW 17TH AVE LOOP**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	DAVIE BLVD	SW 6TH ST	1.3	$411,840
305	**S - NORTH FORK NEW RIVER PATH**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NW 25 TER (CITY LIMITS)	DAVIE BLVD	1.2	$380,160
306	**S - NORTH FORK NEW RIVER PATH**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 24TH AVE	DW 2ND ST	0.4	$126,720
307	**NE 6TH CT**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	N VICTORIA PARK	I-95	0.2	$63,360
308	**NW 19TH ST**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	N POWERLINE RD	NE 7TH ST	0.2	$63,360
309	**WESTSIDE - EX AIRPORT LOOP**	Bicycle	SECONDARY ROAD BIKE ACCOMMODATIONS	NE 62ND ST	NW 7TH AVE	2.2	$696,960

APPENDIX C: PRIORITIZATION CRITERIA

APPENDIX C: PRIORITIZATION CRITERIA

The following data support future application of the proposed prioritization methodology.

MPO 2035 LRTP PRIORITIZATION CRITERIA

EVALUATION CRITERIA	MEASURE	POINTS AWARDED	REASON FOR POINTS
Travel Market Size	Trip density within 1/4 mile of transit project (2035)	3	Top 76-100 percentile
		2	51-75 percentile
		1	26-50 percentile
		0	0-25 percentile
Cost Effectiveness	Capital Cost Per Rider (Premium Transit)	3	0-25 percentile
		2	26-50 percentile
		1	51-75 percentile
		0	Top 76-100 percentile
Contributes to Efficiency of Transit System Users	Number of connections to premium transit routes	3	Number of connections in the top 76-100 percentile
		2	Number of connections between 51-75 percentile
		1	Number of connections between 26-50 percentile
		0	Number of connections between 0-25 percentile
Ability to Leverage New Funding Sources (i.e. sales tax, user tax, VMT tax, New Starts)	Cost Effectiveness Index (CEI) (Annualized capital and O&M cost normalized by ridership)	3	CEI in the top 0-25 percentile
		2	CEI between 26-50 percentile
		1	CEI between 51-75 percentile
		0	CEI between 76-100 percentile
Tax Increment Financing Opportunities	Area (in acres) of CRA/TOD/TOC/Higher Density Mixed Use designation within half-mile of transit project	3	Top 76-100 percentile
		2	51-75 percentile
		1	26-50 percentile
		0	0-25 percentile
Service to Transit Dependents	Transit dependent population (zero-auto households) within 1/4 mile of transit project	3	Top 76-100 percentile
		2	51-75 percentile
		1	26-50 percentile
		0	0-25 percentile
Reduction in Greenhouse Gas Emissions	Reduction in carbon dioxide emission (in pounds) per year	3	Top 76-100 percentile
		2	51-75 percentile
		1	26-50 percentile
		0	0-25 percentile
Reduction in Single Occupancy Vehicle Travel of VMT	Passenger miles	3	Top 76-100 percentile
		2	51-75 percentile
		1	26-50 percentile
		0	0-25 percentile

EXHIBIT A-2: EVALUATION CRITERIA FOR MOBILITY HUBS

EVALUATION CRITERIA	MEASURE	POINTS AWARDED	REASON FOR POINTS
Provides Critical Connections Along Selected Cost Feasible Transit Corridors	Number of Transit Corridors Served	3	Three or more high capacity transit projects
		2	Two high capacity transit projects
		1	One high capacity transit project or More than 3 local bus routes
		0	Does not meet above categories
Serves Existing Developed Areas	Number of jobs (employment) and population within 1/2 mile of mobility hub	3	Top 76-100 percentile
		2	51-75 percentile
		1	26-50 percentile
		0	0-25 percentile
Local request/support through LRTP input or other Plan Designation	Number of published plans/ studies and requests	3	Yes for existing or future plans/studies
		2	- not applicable-
		1	No - Plan/Study status unknown and/or request from local jurisdiction
		0	- not applicable-
Public/Private Partnership Opportunities	Project Status/ Initiative	3	CRA Established
		2	CRA/TOD/TOC/DRI/Higher Denisity Mixed Use Designation
		1	Infill or redevelopment sites available but not designated
		0	No supporting land use initiative
Tax Increment Financing Opportunities	Land Use Studies	3	High TFID potential
		2	- not applicable-
		1	- not applicable-
		0	Not likely to support TIF

APPENDIX C: PRIORITIZATION CRITERIA (CONTINUED)

EXHIBIT A-3: EVALUATION CRITERIA FOR BICYCLE AND PEDESTRIAN SIDEWALK PROJECTS

EVALUATION CRITERIA	MEASURE	POINTS AWARDED	REASON FOR POINTS
Improvements near schools	Proximity to schools (all schools for pedestrian projects and middle/ high/colleges for bike projects	3	Within 1/4 mile
		2	Within 1/4 - 1/2 mile
		1	Within 1/2 - 1 mile
		0	More than 1 mile from schools
Integration with Greenways	Proximity to Greenways	3	Within 1/4 mile
		2	Within 1/4 - 1/2 mile
		1	Within 1/2 - 1 mile
		0	More than 1 mile from greenways
Supports Mobility Hubs	Within Range of Mobility Hub and Ranked according to Mobility Hub Priority	3	Top 76-100 percentile
	Gateway Hub Pedestrian - within 1/2 mile of Hub Bike - within 2 mile of Hub	2	51-75 percentile
	Anchor Hub Pedestrian - within 1/4 mile of Hub Bike - within 1 mile of Hub	1	26-50 percentile
	Community Hub Pedestrian - within 1/4 mile of Hub Bike - within 1 mile of Hub	0	0-25 percentile
Provides Continuity/ Connectivity to the overall transit/bike/ pedestrian system	Proximity to Transit Route/Type of Service	3	Adjacent/connects to Premium or Regular Transit Route
		2	Adjacent/connects to Community Bus Routes
		1	Provides “Missing Link” to Ped/Bike System-no transit connection
		0	Does not meet above categories

CITY OF FORT LAUDERDALE
City Commission Agenda Memo **#13-0219**
CONFERENCE MEETING

TO: Honorable Mayor & Members of the Fort Lauderdale City Commission

FROM: Lee Feldman, ICMA-CM, City Manager

DATE: April 2, 2013

TITLE: Discussion of Community Investment Plan (CIP) Prioritization Matrix

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Development of the Community Investment Plan (CIP) is under way for FY 2014 through FY 2018. As you will recall, a worksheet was developed last year for weighting the priorities of the Mayor and Commission as a factor of the staff ranking process for CIP projects. The Prioritization Matrix is attached and contains instructions for completion by the Mayor and each Commissioner.

Each set of criteria contained in the worksheet requires ranking by level of importance on a scale of 1 (least important) to 5 (most important). Staff will tabulate the individual responses and compute the average to determine the relative weight of each prioritization criteria. The averaged relative weights will be used in conjunction with individual project scoring to generate a ranked list of proposed Community Investment Plan projects. The staff rankings of CIP projects will be subject to the deliberations of the City Commission during the budget review process.

There are two significant changes from the criteria ranked by the Commission last year. The first change is the inclusion of a broader definition of "public safety" to "improves neighbor safety", which also includes reducing risk. The second change is the replacement of the "neighborhood enhancement" criteria with "addresses aging infrastructure needs and maintenance of existing facilities." The results of the ranking from the FY 2013 process are attached as Exhibit 2.

Please let me know if you have any questions, comments or concerns.

Resource Impact: There is no fiscal impact associated with this action.

Attachment: Exhibit 1 - FY 2014 Prioritization Matrix
Attachment: Exhibit 2 – FY 2013 Prioritization Final Average Weight

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Prepared by: Laura Reece, Assistant Manager CIP/Grants
Budget Manager: Emilie R. Smith

April 2, 2013 Page **1** of **1**
(ID #13-0219)

APPENDIX C: PRIORITIZATION CRITERIA (CONTINUED)

FY 2013 COMMUNITY INVESTMENT PLAN PRIORITIZATION MATRIX RELATIVE WEIGHT DETERMINATION

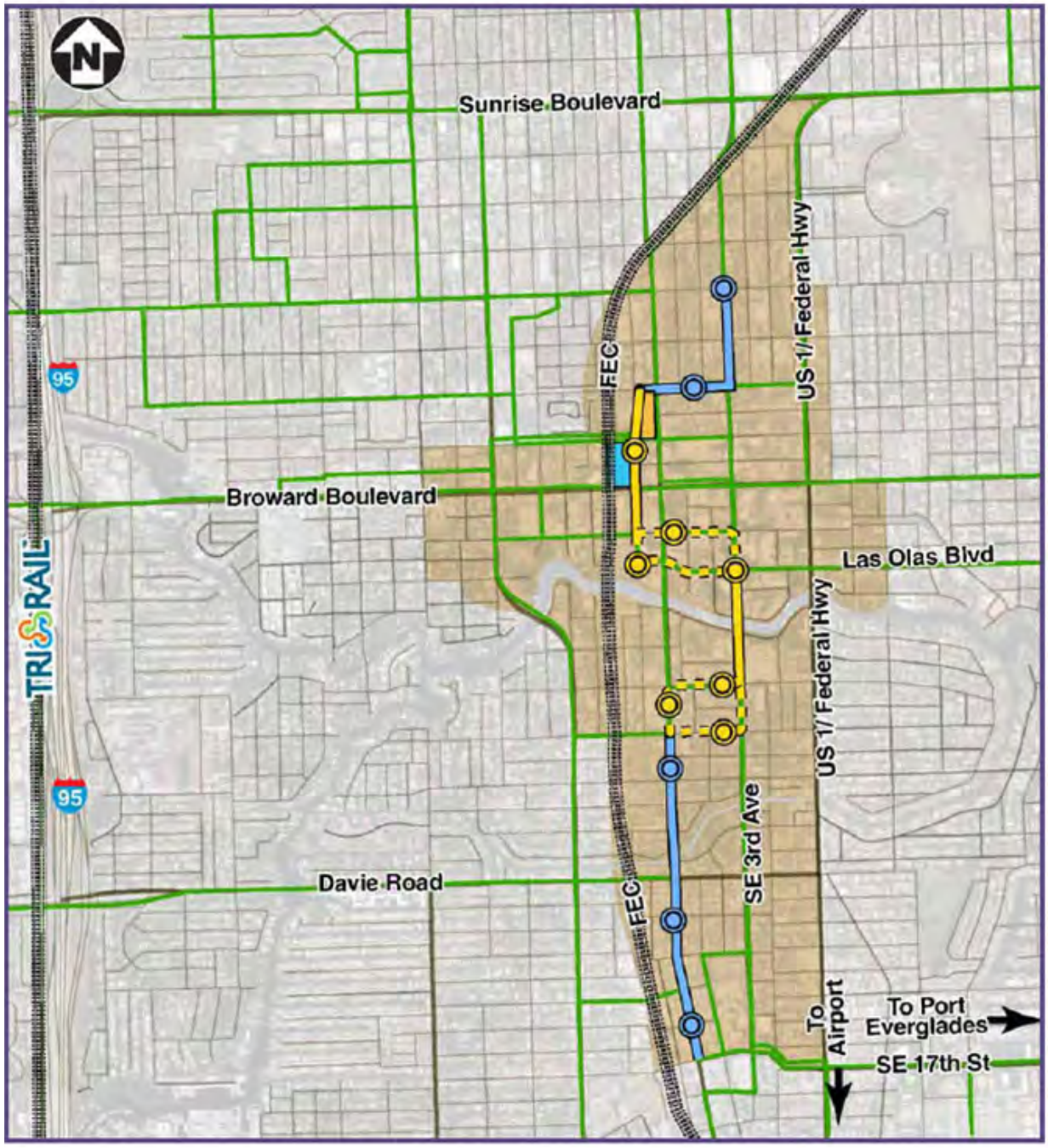
	PRIOIRTIZATION CRITERIA	FINAL AVERAGE WEIGHT
BASIC PROGRAM ATTRIBUTES	**FEDERAL, STATE OR OTHER LEGAL REQUIREMENTS** Whether there is a federal, state, local mandate, grant, court order, judgment, or other requirement that the project must be completed	3.5
	PROJECT FEASIBILITY Whether there are obstacles to proceeding with the project. (land acquisition, easements, approvals required, etc.)	2
	COSTS AND SOURCES OF FUNDS Whether the project would impact the City's debt, installment payments, personnel or other operating costs and/or whether the project would yield revenue	4.25
	RELEVANT PERFORMANCE MEASURES Whether the project application identifies the anticipated timeline and estimated cost of each major component of the project	2.5
	PROJECT CONSISTENCY WITH EXISTING APPROVED PLANS Whether the project is directly consistent with the city's Master Plan(s) and advances the Strategic Plan and Vision of the City Commission	2.75
IMPACT ON STRATEGIC GOALS/CYLINDERS OF EXCELLENCE	**INFRASTRUCTURE** **Improves traffic, mobility, connectivity, pedestrian, cyclist safety** Whether the project would result in filling mobility gaps, supporting more effective interconnectivity, and ensuring increased and safe accessibility to activities, events and locations (bikeway path, commuter retail)	2
	PUBLIC PLACES/INFRASTRUCTURE **Environmental benefits** Whether the project would significantly improve the condition of the environment (LEED certified building, solar powered energy)	1
	NEIGHBORHOOD ENHANCEMENT **Extent of Benefit** Whether the project would benefit the neighbors, neighborhoods, and surrounding areas (community center, swimming pool, sports complex)	4
	BUSINESS DEVELOPMENT **Promotes/accelerates sustainable economic development** Whether the project would directly result in capital investment, increased tax base, increased property values, or improved job opportunities	3
	PUBLIC SAFETY **Life, safety, health requirements** Whether the project addresses an immediate, continual public health and/or safety hazard and is considered an urgent safety need (bicycle/pedestrian lane on heavily traveled roadways)	5

SCORING CRITERIA GUIDE

Benefit Rating Criteria	Relative Weight:	4.6	2	3.8	2.2	2.4	3.2	2.6	2.4	3	3.8
Relationship to Federal, State or other legal requirements	SCORING CRITERIA GUIDE	0 = Project is not mandated or otherwise required by federal, state or local regulations, or legal requirements such as court order, judgment, or interlocal agreements	0 = It is not feasible at this time or within 5 years	0 = Project would increase debt service, installment payments, personnel or other operating costs and/or decrease revenues	0 = Project does not impact results: productivity or efficiency	0 = Project has no direct tie to any existing City Commission approved plan.	0 = Project does not help to fill mobility gaps, support more effective interconnectivity, or ensure increased and safe accessibility to activities, events and locations (bikeway, path, commuter rail)	0 = Project no or a negative impact on addressing sea-level rise, flooding, energy efficiency, water quality, water efficiency or other sustainability measures.	0 = Project would not repair or replace the City's aging infrastructure (e.g. bridges, seawalls, roads) or provide for capital maintenance of existing City facilities (e.g. community centers, swimming pools, or sports complex)	0 = Project has either no impact or a negative impact on capital investment, the tax base, property values, or job opportunities	0 = Project would have no impact on neighbor health, safety or risk reduction
Project feasibility		1 = Project is needed to meet required by federal, state or local regulations or legal requirements such as court order, judgment, or interlocal agreements	1 = Project is feasible but may have certain obstacles to overcome	1 = Project would neither increase nor decrease debt service, installment payments, personnel or other operating costs or revenues	1 = Project may impact results: productivity or efficiency, or may help establish a performance measure baseline.	1 =Project may be consistent with a plan under development and in line with City Commission approved goals adopted or under development.	1 = Project helps to fill mobility gaps and support more effective interconnectivity. Helps to ensure increased or safe accessibility to activities, events and locations (bus benches, sidewalk or street repair)	1 = Project would begin to aid in addressing sea-level rise, flooding, energy efficiency, water quality, water efficiency or other sustainability measures.	1 = Project would provide for some repair or replacement of the City's aging infrastructure (e.g. bridges, seawalls, roads) or provide for capital maintenance of existing City facilities (e.g. community centers, swimming pools, or sports complex)	1 = Project has a minimal impact on capital investment, increased tax base, increased property values, or improved job opportunities.	1 = Project would positively impact public safety or risk reduction but will not address an urgent safety or public health need
Costs and sources of funds		2 = Project is required by federal, state or local regulations or legal requirements such as court order, judgment, or interlocal agreements	2 = It is feasible to proceed with project based on staff and/ or contract capacity, a well-planned timeline and milestones, no obstacles (land acquisition or easements approvals required, etc.)	2 = Project would decrease debt service, installment payments, personnel or other operating costs and/or increase revenues. Project could be grant funded.	2 = Project data shows a projected improvement that is 'smarter, cheaper, faster' delivery of service through innovation, productivity, or efficiency.	2 = Project is explicitly included in City Commission approved plan.	2 = Project would directly result in filling mobility gaps, supporting more effective interconnectivity, and ensuring increased and safe accessibility to activities, events and locations (bikeway path, commuter rail)	2= Project would significantly address sea-level rise, flooding, energy efficiency, water quality, water efficiency or other sustainability measures. For example, it reduces kWh and ghg as identified in the goals of the SAP, conserves water, and reduces waste (LEED certified building, solar powered energy)	2 = Project would significantly repair or replace the City's aging infrastructure (e.g. bridges, seawalls, roads) or provide for capital maintenance of existing City facilities (e.g. community centers, swimming pools, or sports complex)	2 = Project significantly promotes or accelerates capital investment, increases the tax base, increases property values, or improves job opportunities.	2 = Project reduces a risk, addresses an immediate neighbor health and/or safety hazard and is considered an urgent safety need (bicycle/pedestrian lane on heavily traveled roadways)
Relay performance measures											
Reflect consistency with existing approved plans											
Improves traffic, mobility, connectivity, pedestrian, cyclist safety											
Environmental benefits											
Addresses aging infrastructure needs and maintenance of existing facilities											
Promotes/accelerates sustainable economic development											
Improves Neighbor Safety											
WE BUILD COMMUNITY											

APPENDIX C: PRIORITIZATION CRITERIA (CONTINUED)

THE WAVE PROJECT ALIGNMENT MAP



HIGHWAY SAFETY MANUAL: PROJECTS THAT POSITIVELY IMPACT PEDESTRIAN/BICYCLE SAFETY

Per HSM Chapter 13 and its appendix, studies indicate that the following features tend to positively impact pedestrian/bicyclist safety: presence of sidewalk or wide shoulder; sidewalks on both sides; raised pedestrian crosswalks; pedestrian crossing with pedestrian-activated flashing beacon, signs, and advance pavement markings; alternative crosswalk devices at mid-block locations; raised median or pedestrian refuge; widened median; dedicated bicycle lanes; wider curb lane; shared bus/bicycle lane; narrowing auto lanes to stripe bicycle lane next to on-street parking; and separate bike facilities (subject to design). Road/lane diets tend to positively impact overall safety. Additionally, FHWA's Evaluation of Shared Lane Markings report suggests that sharrows have a positive impact on bicyclist safety.

ACTIVE TRANSPORTATION DEMAND SCORE

In order to support future prioritization of the mobility projects in TABLE 21, an active transportation demand score (ATDS) was calculated for each MCD. The ATDS is meant to assess the level of need for active transportation (i.e., non-automobile transportation) by considering populations that are less likely to travel by car as well as areas that lend themselves to active transportation in general. The ATDS was calculated at the Census Tract level using demographic data obtained from the U.S. Census Bureau as well as the City of Fort Lauderdale. Areas with a higher ATDS would be more likely to benefit from active transportation improvements.

The methodology for this calculation reflects that used in the East Portland In Motion plan (2012). To calculate the total score, each Census tract in the study area was assigned seven different sub-scores, ranging from 1 to 5, with 5 indicating a higher level of demand for active transportation. The sub-scores were determined by dividing the range of possible scores for each of seven indicators into five classes based on natural breaks. Then the scores were summed to give a total ATDS. No weighting was applied. The seven sub-score indicators are the following:

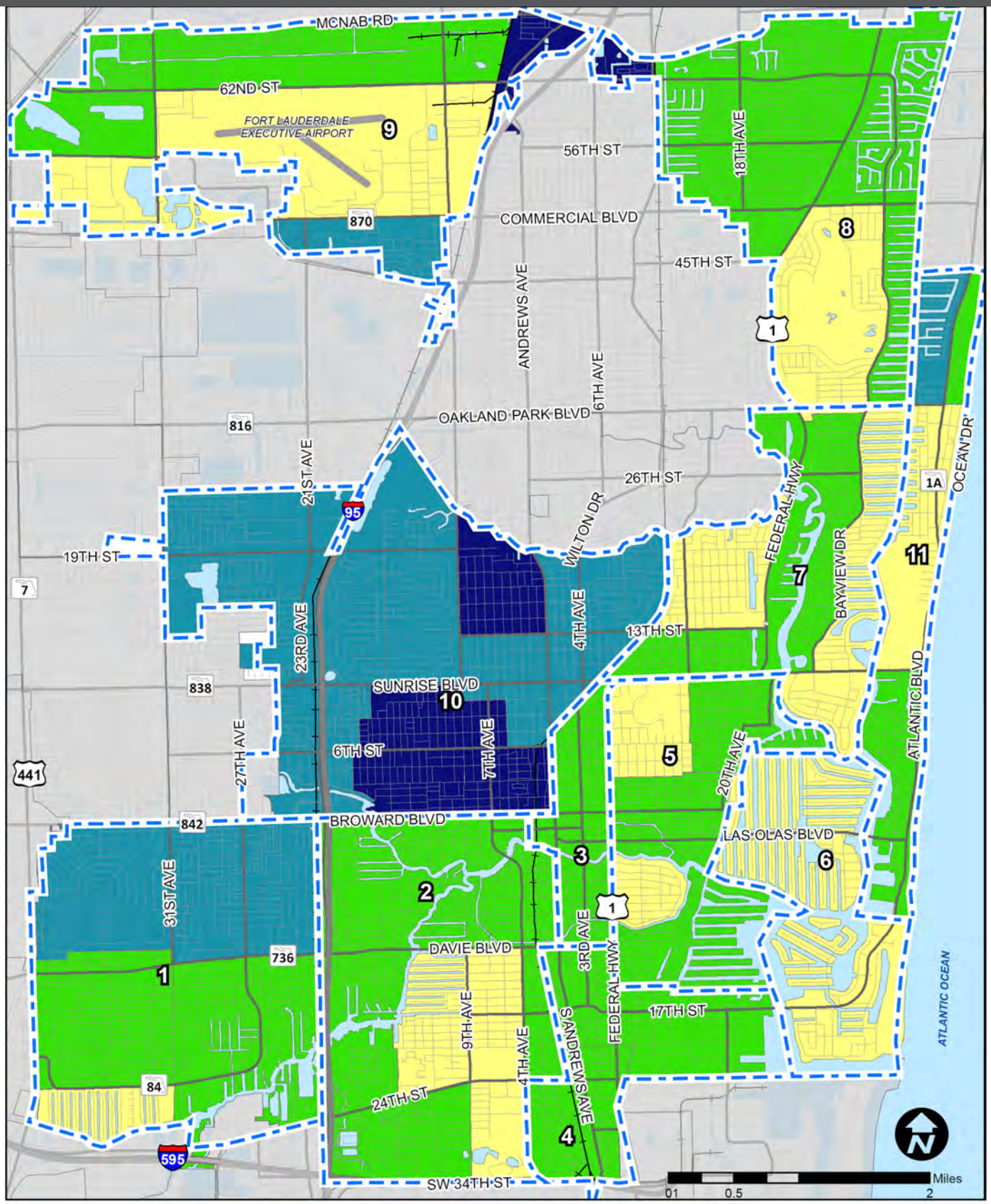
1. Population Density (persons per acre)
2. Business Density (business addresses per acre)
3. Children (persons 18 and under per acre)
4. Seniors (persons 65 and over per acre)
5. Non-White Residents (persons not identifying as white per acre)
6. Poverty Rate (percentage of households with income below the federal poverty line)
7. Zero-Car Households (households without access to a car per acre)

APPENDIX C: PRIORITIZATION CRITERIA (CONTINUED)

The table below shows how the sub-scores were determined for each indicator. The map that follows shows the ATDS for each Census tract in the city.

ACTIVE TRANSPORTATION DEMAND SCORE CALCULATION

EVALUATION CRITERIA	MEASURE	SCORE VALUE 1	2	3	4	5
Population Density	Persons Per Acre, 2007-2011 Average	0-4.99	5-7.49	7.5-9.99	10-14.99	15+
Business Density	Businesses Per Acre, 2013	0-0.24	0.25-0.74	0.75-1.49	1.50-2.49	2.5+
Children	Population 18 and Under, 2007-2011 Average	0-0.74	0.75-1.24	1.25-1.99	2-2.99	3+
Seniors	Population 65 and Over, 2007-201 Average	0-0.74	0.75-0.99	1-1.99	2-2.99	3+
Non-white	Population Identifying as Other Than "One Race:White," 2007-2011 Average	0-0.49	0.50-1.49	1.5-3.99	4-7.99	8+
Poverty Rate	Percentage of Households with Income Below Poverty Line, 2007-2011 Average	0-2.49%	2.5-4.9%	5-9.9%	10-19.9%	20%+
Zero Car Households	Households With No Car, 2007-2011 Average	0-0.09	0.10-0.24	0.25-0.49	0.50-1.49	1.5+

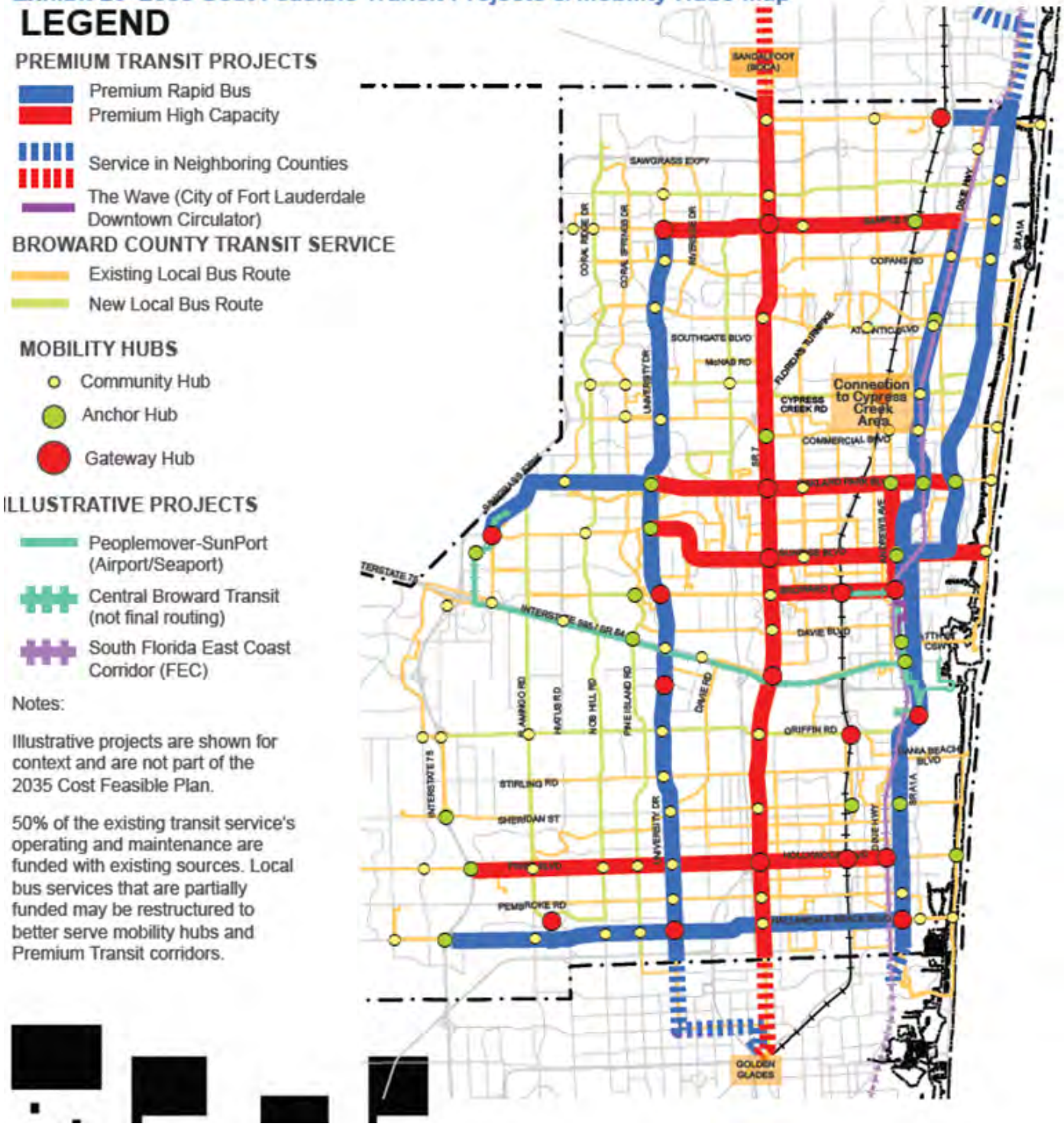


9 - 15
16 - 20
21 - 25
26 - 31
Multimodal Connectivity District

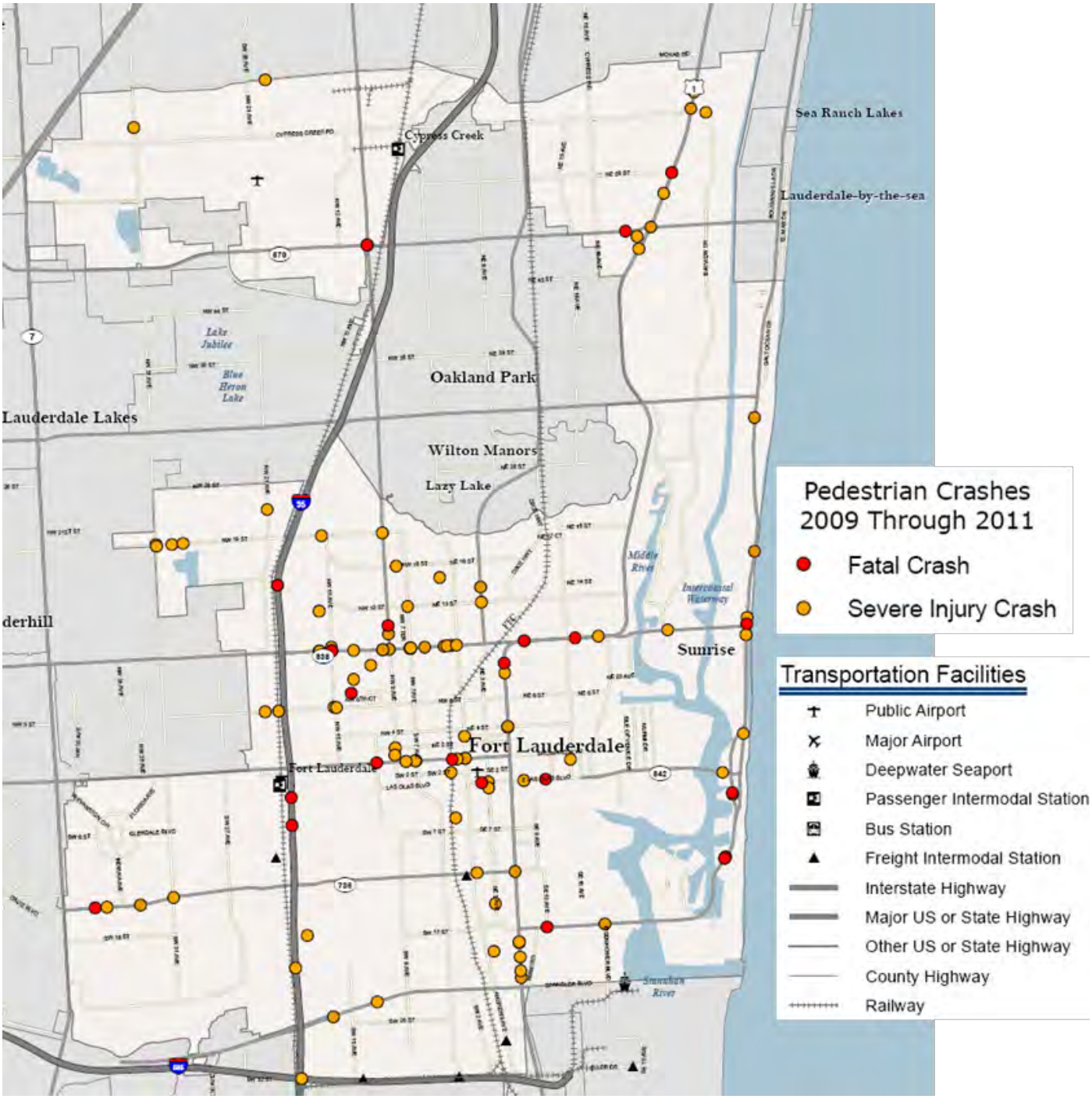
APPENDIX C: PRIORITIZATION CRITERIA (CONTINUED)

PREMIUM TRANSIT CORRIDORS AND MOBILITY HUBS

Exhibit 23–2035 Cost Feasible Transit Projects & Mobility Hubs Map



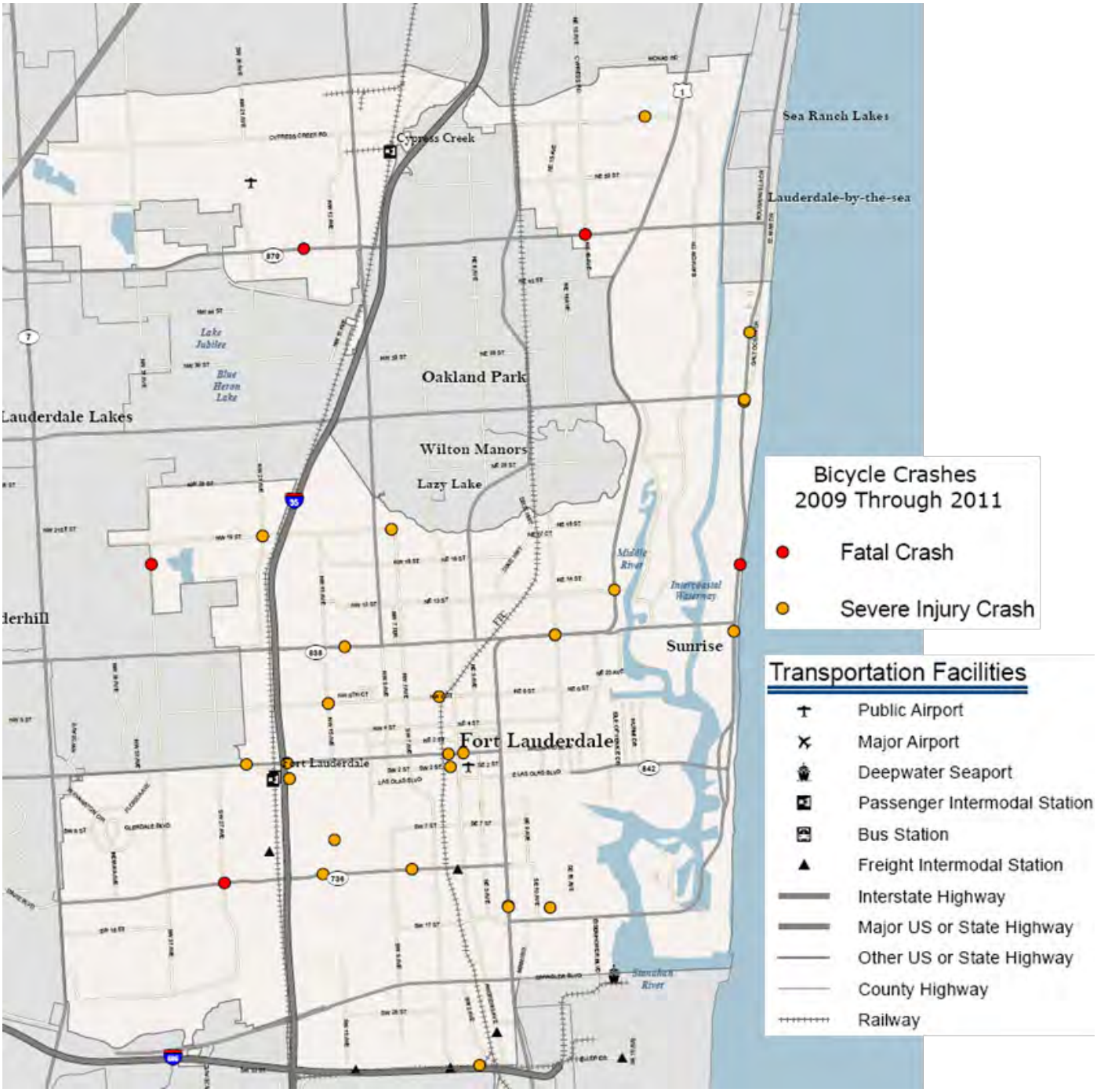
CITY OF FORT LAUDERDALE PEDESTRIAN CRASH SUMMARY



Source: FDOT

APPENDIX C: PRIORITIZATION CRITERIA (CONTINUED)

CITY OF FORT LAUDERDALE BICYCLE CRASH SUMMARY



Source: FDOT