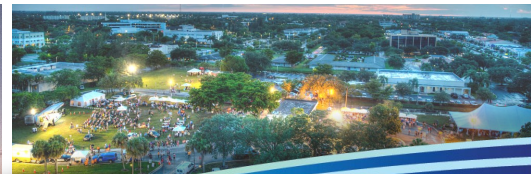




Broward Metropolitan Planning Organization (MPO) Regional Complete Streets Initiative



Lead Applicant:	Broward Metropolitan Planning Organization
Location:	Broward County, Florida
Total Project Cost:	\$19,173,888
TIGER Request:	\$11,443,371 (60%)
Total Non-federal Funding (match):	\$7,730,517 (40%)



Broward MPO

REGIONAL COMPLETE STREETS INITIATIVE

TIGER VIII (2016) Grant Application

Organization Name/Lead Applicant: Broward MPO
DUNS Number: 831340828

Authorized Representative: Ricardo Gutierrez

Total Project Cost: \$19,173,888
TIGER Request: \$11,443,371 (60%)
Total Non-federal Funding (match): \$7,730,517 (40%)

Project Type: Urban
Primary Project Type: Bike-Pedestrian
Secondary Project Type: Bike/Ped-Complete

Website with Supportive Information

<http://www.wgianalytics.net/tiger8bmpo>



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PROJECT DESCRIPTION

OVERVIEW

The Broward Metropolitan Planning Organization's (Broward MPO) *Regional Complete Streets Initiative* will fill in five (5) critical gaps and extend the reach of the existing Broward Regional Complete Streets network to restore safe multimodal access to community resources for vulnerable populations. This is the Broward MPO's second TIGER application for Complete Streets projects. The 2016 application includes a more targeted network of improvements and addresses the elements discussed in the 2015 debrief call with U.S. Department of Transportation (USDOT). Building upon the region's existing Complete Streets efforts and working with five local partners, **the Broward MPO will leverage \$7.7 million of local funding to complete a 70-mile portion of Broward's bicycle and pedestrian transportation network** to:

- 1) **"Fill in the gaps"** in the Regional Complete Streets Network to improve safety conditions for all users. Completing these connections will provide safe and seamless facilities for bicyclists and pedestrians. The roadways in the Broward region are among the least safe in the nation for bicyclists and pedestrians. Complete Streets aim to reduce travel speeds and "friction" among modes, creating a safer environment for all ages and abilities.
- 2) **Extend** the reach of the current Regional Complete Streets Network into major activity centers such as colleges,

universities, hospitals, parks, large employment centers and residential complexes.

- 3) **Connect** Broward's most vulnerable residents to destinations that bridge the divide and provide access to opportunity.
- 4) **Create** healthy and livable communities by providing active transportation options. Obesity is on the rise in America, and Complete Streets provide alternatives for active transportation to access everyday needs.

To meet the above goals, the Broward MPO proposes to **construct 9.2 miles of safe, clearly delineated bicycle and pedestrian facilities in existing right-of-way** and include innovative features such as **internally illuminated reflective pavement marking (IIRPM)** to improve visibility. Once completed, this project will improve the **quality of life** for Broward's residents and visitors by fostering a **safe environment, reducing travel time** for users, and **improving accessibility** to and around key activity sectors in the Broward region. These areas contain high concentrations of jobs, low-income and minority households, educational centers, commercial opportunities, and civic services.

The proposed improvements are part of the Broward MPO's Complete Streets program that has already programmed approximately \$120 million in bicycle and pedestrian facilities to create safer, healthier streets for all users. Projects under this program are already being designed and constructed through a well-established process made possible through a partnership with the Florida Department

of Transportation (FDOT). Phase I of the program broke ground in February 2015. Working with the FDOT and local partners, the Broward MPO will utilize this effective strategy to deliver these TIGER projects in the same timely and efficient manner.



Figure 1 Phase I Completed Projects

BACKGROUND

Nearly **10,000 bicyclists and pedestrians were struck on Broward’s streets between 2010 and 2015 resulting in 381 fatalities.**¹ According to the most recent *Dangerous by Design (2014)* report published by Smart Growth America, the State of Florida ranked worst in the nation for bicycle and pedestrian safety with the Broward-Miami-Dade region ranking fourth overall.² The Broward MPO’s *Regional Complete Streets Initiative* targets an ongoing safety epidemic affecting people who walk and ride bicycles in the Broward region. Incorporating safe and continuous bicycle and pedestrian facilities into Broward’s transportation network is part of the Broward MPO’s larger goals to reduce these crashes and provide an enhanced quality of life for residents and visitors.

1 FDOT Crash Analysis Reporting System (CARS) and Signal Four Analytics

Recognizing the need to reduce these crash statistics and protect the region’s most vulnerable populations, the Broward MPO has led the effort to promote context-sensitive Complete Streets solutions in the region through policy-based programs and regional infrastructure investments. Additionally, it fostered a partnership with the FDOT forging an approach which combines engineering and planning to develop holistic solutions for retrofitting Broward’s street network. To date, the Broward MPO’s Complete Streets efforts will add nearly 100 miles of bicycles facilities and 40 miles of sidewalk improvements to the existing transportation system.



Figure 2 Buffered Bicycle Lane Currently Under Construction

To maintain this momentum, the Broward MPO is seeking funding, above and beyond existing means, to “fill in the gaps” as part of the current investment.

The *Regional Complete Streets Initiative* focuses on completing a 70-mile bicycle and pedestrian network located on the east side of Broward County, home to its most populous city, Fort Lauderdale, often characterized as the urban center of the county. **Many of the region’s large**

2 <http://www.smartgrowthamerica.org/documents/dangerous-by-design-2014/dangerous-by-design-2014.pdf>

employment centers, educational facilities, civic centers, and tourist destinations are located in this area providing nearly 230,000 primary jobs.³

Unfortunately, the neighborhoods in this portion of the county have traditionally been subjected to a pattern of disinvestment brought on by rapid post-World War II suburban development which focused growth in the western suburbs. As a result, the surrounding communities represent a high concentration of zero car households, populations living in poverty, and minority populations who are most vulnerable in Broward's auto-oriented development pattern. Providing safe bicycle and pedestrian amenities are a crucial step to removing the barriers to opportunity for these residents.

CHALLENGES THE PROJECT PLANS TO ADDRESS

The *Regional Complete Streets Initiative* is a response to the region's high number of bicycle and pedestrian crashes and the existing lack of connectivity and continuity in this portion of Broward's Complete Streets network. Further, these issues limit access to economic opportunity for residents who cannot afford a vehicle and must rely on other modes of transportation.

An analysis of available bicycle/pedestrian crash data between 2011 and 2015, tabulated in **Exhibit 1** shows that over a five-year period, there were 23 reported crashes involving bicyclists and pedestrians along the five project gaps. This finding emphasizes the need to design and construct safer facilities for all travelers.

While the Broward MPO has been working diligently to "fill in the gaps" in its bicycle and pedestrian facilities network, crucial portions of the system remain incomplete. As a cyclist or pedestrian, connectivity and continuity are an important factor in mode choice and increasing real and perceived safety. With an existing 9.2-mile gap in the *Regional Complete Streets Initiative* system, Broward's residents are missing vital connections in a 70-mile portion of the network that provides access to major employment centers, educational facilities, and healthcare needs.

Adding to the above challenges, Broward's auto-oriented development pattern has traditionally limited access to jobs, healthcare, and education for the region's most vulnerable populations. According to the 2014 U.S. Census American Community Survey, the neighborhoods served by the *Regional Complete Streets Initiative* constitute higher than average rates of poverty, minorities, and zero car households. **Almost 25% of the area's residents live at or below the poverty line**, making car ownership a financial burden. This is reflected in the amount of **zero-car households (11%)** found in the area. Further, these neighborhoods are majority-minority communities which tend to experience a disproportionate share of these financial hardships.⁴

Promoting quality of life and improving Broward's health has been a prime driver for the Broward MPO and its non-profit health partners. As part of its Complete Streets efforts, the Broward MPO has worked closely with the Broward Regional Health Council to weave active

³ U.S. Census OnTheMap

⁴ U.S. Census American Community Survey (2014)

transportation into promoting a healthy lifestyle while working to reduce the high incidence of preventable diseases in the Broward region. Approximately **30% of males and females in Broward are considered obese**, an increase of over 10%

and 4% respectively since 2001. This issue is compounded by the fact that half of Broward’s population does not meet their recommended physical exercise needs, further increasing the rates of these preventable diseases.⁵

EXHIBIT 1. BICYCLE/PEDESTRIAN CRASHES WITHIN THE EXISTING GAPS (2011-2015)

Existing Gap	Bicycle	Pedestrian
Hammondville Rd.	1	1
NW 31 st Ave.	1	3
Powerline Rd.	2	7
Lauderdale Lakes Greenway	0	1
Riverland Rd./SW 27 th Ave.	3	4
Totals	7	16

Source: University of Florida Signal Four Analytics Crash Data

PROPOSED IMPROVEMENTS TO ADDRESS THESE CHALLENGES

As illustrated in **Exhibit 2**, the Broward MPO *Regional Complete Streets Initiative* will construct new bicycle and pedestrian facilities that will improve safety and access for Broward’s residents and provide more transportation alternatives to increase connectivity to work places and educational facilities. Enhancing these mobility opportunities will also serve the larger goal of the Broward MPO’s Complete Streets effort by promoting active transportation and increasing quality of life. The Broward MPO, in conjunction with Broward County and the four (4) municipalities, will provide **\$7,730,517** of the **\$19,173,888** total project cost of these five project segments, a **40% match of local to TIGER funds**.

By constructing 9.2 miles of missing bicycle and pedestrian facilities, the Broward MPO *Regional Complete Streets Initiative* will restore **non-motorized transportation access to nearly 40 elementary, middle, and high schools, 12 colleges and universities, 13 employment centers and downtown districts, six libraries, and two major hospitals in the region**. Of the 230,000 primary jobs located within this network, nearly 50,000 are held by people who live and work within the area.⁶ Providing safe and reliable routes for people walking or riding bicycles will offer viable transportation alternatives, including transit, other than a car to these destinations.

The five project segments will also deliver safer facilities by constructing on-street

5 Institute for Health Metrics and Evaluation (IHME), US County Profile: Broward County, Florida. Seattle, WA: IHME, 2015.

6 U.S. Census OnTheMap

bicycle lanes and pedestrian walkways, which can reduce the incidence of crashes. A recently published report by Smart Growth America found that of 37 Complete Streets projects, most tended to improve safety for all users, increased walking and biking, and even, at times, decreased automobile traffic. According to the report, “our analysis found that the safer conditions created by Complete Streets projects avoided a total of \$18.1 million in collision and injury costs in one year alone.”⁷

In other words, approximately \$500,000 **annual** cost avoidance per project if averaged across all 37 projects. According to the same study:

Safety - 70% of projects experienced a reduction in collisions, 56% of projects experienced a reduction in injuries.

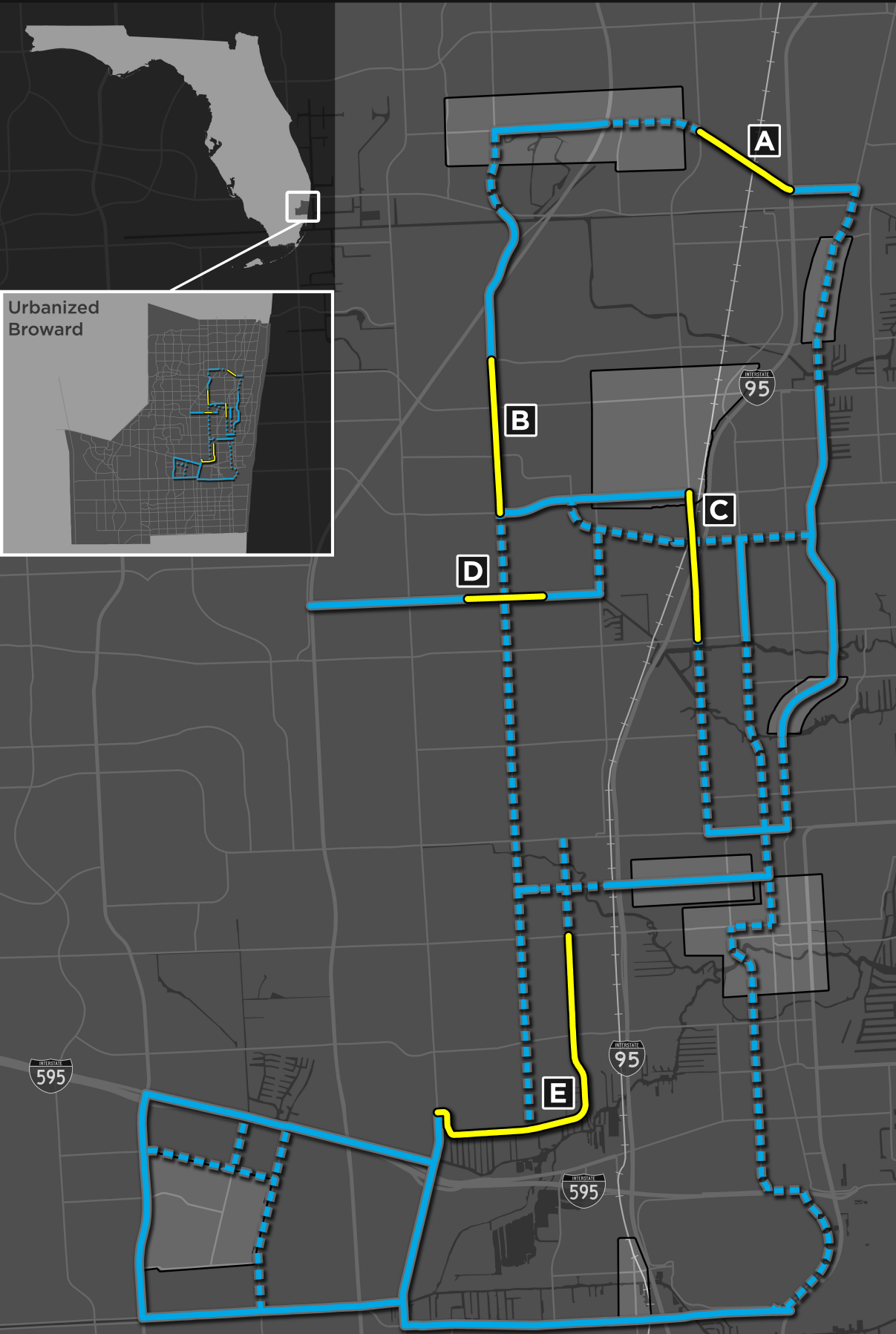
Latent Demand – 13 projects collected pedestrian counts. Of those, pedestrian activity increased in 12 projects after their Complete Streets improvements. 23 projects collected bicycle counts. Of those, bicycling increased in 22 projects after their Complete Streets improvements.

Transit Use - Of the 37 projects examined, seven (7) reported transit ridership information. Of those, 6 measured increased ridership.




⁷ Safer Street, Stronger Economies. Smart Growth America. Published March, 2015.

2016 TIGER Network Projects

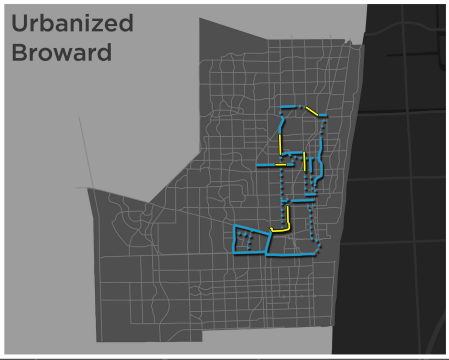
Exhibit 2



Legend

-  Proposed TIGER
-  In Progress Facility
-  Existing Facility

- A** Hammondville Road
- B** NW 31st Avenue
- C** Powerline Road
- D** Lauderdale Lakes Greenway
- E** Riverland Road/ SW 27th Avenue



Finally, the *Regional Complete Streets Initiative* proposes to pilot innovative internally illuminated reflective pavement markings (IIRPMs) on segments of the project to highlight potential conflict zones in areas where lighting may be inadequate. This will create a more visible delineation between vehicle travel lanes and bicycle lanes to alert drivers and cyclists on their respective routes. The project intends to monitor the benefits of this technology with the hope of linking safety benefits to these illuminated markers.



Figure 3 Internally Illuminated Reflective Pavement Marking (IIRPM) Application

EXPECTED USERS OF THE PROJECT

The proposed *Regional Complete Streets Initiative* will serve Broward’s residents and visitors alike including, people who ride bicycles, walk, ride public transit, drive, or are mobility-impaired. Additionally, the proposed improvements will provide a direct benefit to people who are unable to drive such as school-age children and the elderly. The network of safe and convenient

routes will benefit additional users such as transit commuters, and bicyclists/pedestrians who currently have no accommodation for non-motorized travel.

Broward’s residents and visitors will benefit from direct routes that reduce travel times and provide greater access to a variety of transportation alternatives to connect with their daily needs. Users will also benefit from increased safety along these routes and improvements in quality of life associated with active transportation.

LADDERS OF OPPORTUNITY

“We can help communities build projects that create ladders of opportunity...which means we can support them...in a way that connects people to job centers and education, that revitalizes economically distressed neighborhoods, and that creates pathways to good jobs.”

-Anthony Foxx, Secretary of Transportation, April 2015

In the Broward region, access to everyday needs often requires driving a vehicle. Costs may make it difficult for Broward County’s diverse population and visitors to safely reach their destinations. The cost of owning and operating one car can be upwards of \$8,000 annually, making up nearly 20% of the median household income in Broward.⁸ In response, the *Regional Complete Streets Initiative* fully encompasses the USDOT concept of “ladders of opportunity.” The project will transform Broward’s bicycle and pedestrian environment by constructing critical facilities to provide affordable multimodal connections to jobs, schools, businesses, retail, hospitals, parks and service centers. In fact, Smart Growth

8 U.S. Bureau of Transportation Statistic, 2009

America found more people were employed along Complete Streets projects after a project was completed. This is likely due to the growth in new business when private investment follows public investment, which the same report indicated occurred in all six communities sampled.⁹

A lack of bicycle lanes, dangerous street conditions, and sidewalks in poor condition are barriers to opportunity. In utilizing key partnerships with FDOT, Broward County and municipalities, the Broward MPO can help revitalize Broward County's underserved communities by giving minority and low-income (Environmental Justice) population centers safer access to jobs without the need to invest in an automobile.

INFRASTRUCTURE BASELINE

All of the identified gaps currently prioritize vehicular traffic and do not offer dedicated bicycle and/or pedestrian facilities. These facilities are characterized as more traditional roadways with wide travel lanes and are served by existing Broward County Transit Routes. **Exhibit 3** provides an overview of the project roadway characteristics and metrics.

Hammondville Road: This 1.15 mile segment currently consists of a 4-lane divided roadway with 12 foot travel lanes, 8 foot traffic separator, and includes no bicycle provisions. The Average Annual Daily Traffic (AADT) on the roadway is 16,500 as reported by Broward County Traffic Engineering.

NW 31st Avenue: This 1.61 mile segment currently consists of a 6-lane divided

roadway with 12 foot travel lanes, 15.5 foot median, and includes no bicycle provisions. The AADT on the roadway is 29,500 as reported by Broward County Traffic Engineering.

Powerline Road: This 1.53 mile segment currently consists of a 6-lane roadway with 11 foot travel lanes, a 15.5 foot median, and includes no bicycle provisions. The AADT on the roadway is 25,550 as reported by Broward County Traffic Engineering.

Lauderdale Lakes Greenway: This 0.26 mile segment is a vital gap in the larger three mile C-13 greenway trail and does not provide a pedestrian or bicycle facility.

Riverland Road/SW 27th Avenue: This 4.66 mile segment consists of a 2-lane roadway with 12 foot wide travel lanes and includes no bicycle provisions from SR-7/US-441 to Davie Blvd. From Davie Blvd. north to Broward Blvd. the segment consists of a 4-lane roadway with 11 foot travel lanes and includes no bicycle provisions. The AADT on the roadway is 7,900 as reported by Broward County Traffic Engineering.

PROPOSED IMPROVEMENTS

In an effort to balance mobility, all projects propose to redesign the existing right of way through the addition of bicycle lanes and/or pedestrian walkways.

Hammondville Road: This project proposes resurfacing and reducing through lane widths to accommodate 7 feet buffered bike lanes in each direction from Powerline Road to I-95. Existing sidewalks will be reconstructed and retrofitted to ensure they comply with ADA standards. Drainage

⁹ Safer Street, Stronger Economies. Smart Growth America. Published March, 2015.

will be enhanced as part of this project. Pedestrian and vehicular lighting will be provided, in addition to landscaping.

NW 31st Avenue: Project proposes milling and resurfacing, reducing the width of three travel lanes from 12 feet to 11 feet and reducing the median width from Commercial Boulevard to McNab Road in order to accommodate a continuous 5 feet bicycle lane. New mast arms will be included at three intersections.

Powerline Road: Project proposes milling and resurfacing the roadway and repurposing the outside travel lanes to accommodate a 7 feet buffered bicycle lane in both directions and providing 4 feet landscaped islands from Oakland Park Boulevard to Commercial Boulevard.

Lauderdale Lakes Greenway: This project proposes an extension of the Lauderdale

Lakes Greenway multi-purpose path from NW 29th Avenue to the NW 31st Avenue intersection, providing continuous connection to the remainder of the greenway. Project also includes pedestrian lighting, landscaping, and aesthetic features.

Riverland Road/SW 27th Avenue: Project proposes reducing travel lane widths from 12 foot to 11 feet to accommodate bicycle lanes in both directions of Riverland Road from SR-7 to Davie Boulevard. Additional work includes milling and resurfacing for the purpose of restriping the existing lane configuration to remove a single travel lane in each direction to provide buffered bicycle lanes from Davie Boulevard to Broward Boulevard. Internally illuminated reflective pavement markings (IIRPMs) will also be installed throughout the entire project to more clearly delineate the travel lane and bicycle lanes in low-light conditions.

EXHIBIT 3. INVENTORY OF EXISTING GAPS IN THE REGIONAL COMPLETE STREETS NETWORK

Existing Gap	Length (Miles)	No. of Lanes	AADT	Capacity	V/C	LOS
Hammondville Rd.	1.15	4	16,500	32,400	0.51	D
NW 31 st Ave.	1.61	6	29,500	53,910	0.55	C
Powerline Rd.	1.53	6	25,550	59,900	0.43	C
Lauderdale Lakes Greenway	0.26	2		<i>not applicable</i>		
Riverland Rd./ SW 27th Ave.	4.66	2	7,900	24,570	0.32	C

Source: Broward MPO and the Broward County Traffic Division

PROJECT LOCATION

All elements of the *Regional Complete Streets Initiative* will be completed within the limits of Broward County, which is located in southeast Florida, in the center of

the Miami-Fort Lauderdale-West Palm Beach Metropolitan Statistical Area (MSA). As of 2010, the population was 1,748,066, making it the second most populous county in Florida and 18th most populous in the

United States.¹⁰ The *Regional Complete Streets Initiative* completes a 70-mile bicycle and pedestrian network located in the eastern, urbanized portion of the county which includes the county's largest city, Fort Lauderdale. This area is more urban in context and is more densely populated when compared with neighboring suburbs.

The location of the *Regional Complete Streets Initiative* and its relation to key activity sectors and points of interest, illustrated in **Exhibit 4**, makes the *Regional Complete Streets Initiative* the Broward MPO's and its partners a top priority in completing the region-wide bicycle and pedestrian network.

The following narrative provides a general overview of the region in which the Complete Streets project segments will be constructed. Detailed engineering specifications for each of the project segments, including Long Range Estimates, are provided on the Broward MPO's *Regional Complete Streets Initiative* TIGER VIII (2016) grant application [website](#).¹¹

The network served by the *Regional Complete Streets Initiative* includes a diverse range of destinations including five downtown districts two educational centers, and five business parks. More specifically, destinations include the South Florida Educational Center, the Education Corridor, Greater Downtown Fort Lauderdale, and Uptown Business District in Fort Lauderdale.

The South Florida Education Center (SFEC) is home to multiple schools and universities. Most notable as the largest private employer in Broward County is Nova Southeastern University in Davie with 27,000 students¹² and 4,037 employees¹³.

Greater Downtown Fort Lauderdale has employment and opportunities in legal and financial services, education, arts and culture, retail and restaurants, aviation, creative industries, international trade and services, life sciences, manufacturing, marine, technology and tourism.

The Uptown Business District is the largest employment center in Broward County, containing a number high-tech industries and corporate headquarters, such as Citrix and Microsoft, which are actively interested in improving multimodal connections for their employees.

Additionally, the *Regional Complete Streets Initiative* will provide for bicycle and pedestrian connections to the Wave Streetcar that will begin service as a circulator in Downtown Fort Lauderdale. Groundbreaking is scheduled for 2017. The Wave Streetcar will provide transit connectivity to destinations, allowing users to bike or walk into the Downtown area to visit some of Fort Lauderdale's most popular attractions.

10 2010 U.S. Census

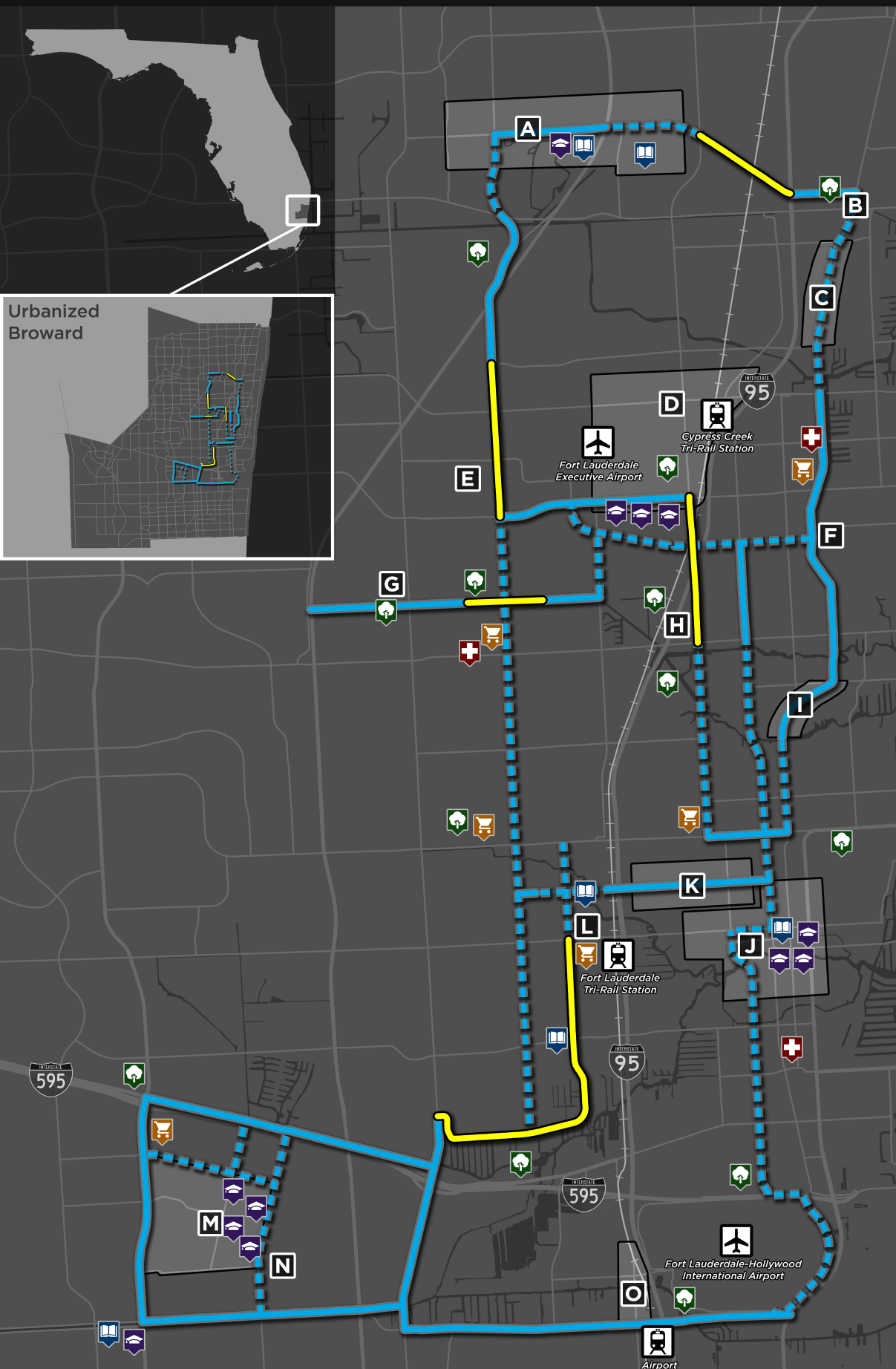
11 <http://www.wgianalytics.net/tiger8bmpo>

12 http://www.gfalliance.org/clientuploads/Economic%20Sourcebook%202014/13-Education_Final.pdf




13 http://www.gfalliance.org/clientuploads/Economic%20Sourcebook%202014/3-Business_Climate_Final.pdf






2016 TIGER Network Destinations

Exhibit 4



Legend

-  Proposed TIGER
-  In Progress Facility
-  Existing Facility

-  Hospital
-  Park/Greenway
-  College
-  Library
-  Shopping Center

- A** North Broward Education Corridor
- B** NE Transit Center
- C** Dixie Industrial Park
- D** Uptown Business District
- E** Fort Lauderdale Commerce Center
- F** Oakland Park Central Business District
- G** Lauderdale Lakes City Hall
- H** Oakland Park Commerce
- I** The Drive at Wilton Manors
- J** Downtown Fort Lauderdale
- K** Sistrunk Business District
- L** Safety Complex Park
- M** South Florida Education Center
- N** Downtown Davie
- O** Corporate Park



DETAILED PROJECT DESCRIPTION

The five *Regional Complete Streets Initiative* project segments, each having independent utility, provide a unique connection to the overall network. Recognizing the specific context of each project, detailed descriptions of the individual improvements are provided below.

Hammondville Road: This project is a segment of the Education Corridor that links educational facilities in the cities of Coral Springs, Margate, Coconut Creek and Pompano Beach. This five mile stretch of roadway has invested steadily to apply the Complete Streets approach within the last few years. The City of Pompano Beach has been aggressively completing its portion of the Education Corridor known as Hammondville Road by constructing sidewalks and bicycle lanes. Unfortunately, due to funding limitations, this segment has not been completed. This project proposes resurfacing and reducing through lane widths to accommodate 7 foot buffered bike lanes in each direction from Powerline Road to I-95. Existing sidewalks will be reconstructed and retrofitted to ensure they comply with ADA standards. Drainage will be enhanced as part of this project. Pedestrian and vehicular lighting will be provided, in addition to landscaping.



Figure 4 Hammondville Road (Existing)



Figure 5 Hammondville Road Existing Complete Streets improvements (East of proposed project)

Of the 12,659 individuals that live within a mile of this project, 9,794 are classified as minorities. The poverty level within a mile of this project is 38.1% compared with the county average of 14.6%. The median income within a mile of the project is \$21,980, over 50% less than the county average. The percentage of households without a vehicle within a mile of this project is 24.4% while the county average is 7.7%.¹⁴ The area within one mile of the project includes over 14,500 primary jobs. The improvements included as part of this project will provide non-motorized connectivity to nearly 400 residents who both live and work in the immediate area.¹⁵ This project also has connections to four

14 2014 American Community Survey (ACS)

15 U.S. Census OnTheMap

different bus routes (14, 20, 42, and 60). These routes connect to the Education Corridor, Uptown Fort Lauderdale (Broward County's largest employment center) and the City of Pompano Beach's redeveloping downtown.

NW 31st Avenue: This facility is a wide 6-lane roadway allowing motorists to comfortably move at high rates of speed. There is a critical need to make improvements to this roadway to calm traffic and provide safe pedestrian and bicycle accommodations. This project proposes milling and resurfacing, reducing the width of three travel lanes from 12 feet to 11 feet, and reducing the median width from Commercial Boulevard to McNab Road in order to accommodate a continuous 5-foot bicycle lane. New mast arms will be included at three intersections.

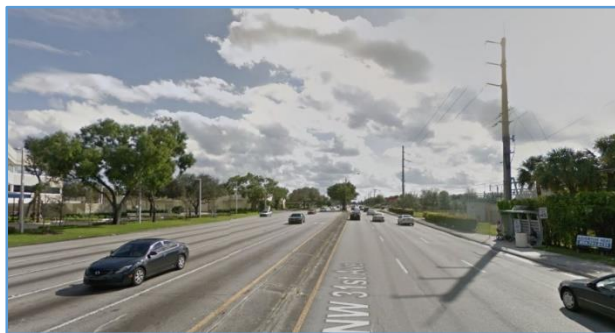


Figure 6 NW 31st Avenue (Existing)

Of the 14,082 individuals that live within a mile of this project, 8,246 are classified as minorities. The poverty level in the immediate area is 21.8% compared with the county average of 14.6%. The median income within a mile of the project is \$43,875 while the county average is \$51,574. The percentage of households without a vehicle within a mile of this project is 9.9% which is slightly higher than

the county average.¹⁶ Approximately 18,000 primary jobs would be served by this project and provide access to 345 people who both live and are employed in the immediate area.¹⁷ This project has connections to four different bus routes (11, 31, 55, and 62) These routes connect the Fort Lauderdale Executive Airport, Uptown Business District (Broward County's largest employment center), Fern Forest Park, and the Fort Lauderdale Commerce Center.

Powerline Road: The City of Oakland Park has created a mixed-use district known as the Powerline Road Zoning District (PRZD). The goal for this district is to encourage redevelopment opportunities for existing and new property. These opportunities include adding residential, retail, entertainment and office uses. This project proposes milling and resurfacing the roadway and repurposing the outside travel lanes to accommodate a 7-foot buffered bicycle lane in both directions and providing 4-foot landscaped islands from Oakland Park Boulevard to Commercial Boulevard.

Of the 24,527 individuals that live within a mile of this project, 9,834 are classified as minorities. The poverty level within a mile of this project is 20.9% with a median income of \$43,941. The percentage of households without a vehicle within a mile of this project is 9.2% compared with county average of 7.7%.¹⁸ Over 18,000

¹⁶ 2014 American Community Survey (ACS)
¹⁷ U.S. Census OnTheMap

¹⁸ 2014 American Community Survey (ACS)

primary jobs are located within one mile of the project. The bicycle and pedestrian improvements included as part of this project will also directly serve nearly 600 residents who both live and work in the immediate area.¹⁹ Further, the project has connections to three different bus routes (14, 55 and 72). These routes connect Lockhart Stadium, which is home to a professional soccer team, Uptown Business District (Broward County’s largest employment center) and Fort Lauderdale Executive Airport.



Figure 8 Powerline Road (Existing)

Lauderdale Lakes Greenway: The Lauderdale Lakes Greenway Trail will complete the long-standing gap in the C-13 Greenway trail between the cities of Oakland Park and Lauderdale Lakes. It provides non-motorized linkages to and from neighborhoods and a safe pedestrian/non-vehicular connection to four schools, the City of Lauderdale Lakes City Hall, a major city park, employment centers and a public swimming pool, all of which are adjacent to the trail. This project proposes an extension of the Lauderdale Lakes Greenway multi-purpose path from NW 29th Avenue to the NW 31st Avenue intersection, providing continuous

19 U.S. Census OnTheMap



Figure 7 Lauderdale Lakes Greenway (Existing)



Figure 9 Lauderdale Lakes Greenway (Existing) connection to the remainder of the Greenway.

Of the 21,257 individuals that live within a mile of this project, 15,909 are classified as minorities. The poverty level within a mile of this project is 21.3% while the county average is at 14.6%. The median income within a mile of the project is \$43,541 while the county average is \$51,574. The percentage of households without a vehicle within a mile of this project is 11% while the county average is 7.7%, making the connection to mass transit a necessity.²⁰ The Greenway has connections to two different bus routes (11 and 31). These

20 2014 American Community Survey (ACS)

routes connect to major employment centers such as the Fort Lauderdale Executive Airport, Oakland Park Flea Market, and Fort Lauderdale Commerce Center. Over 9,000 primary jobs are located within one mile of this project. Additionally, the project will also provide employment access to 318 people who both live and work in the immediate area.²¹

As an enhancement to the bicycle and pedestrian realm along the trail, the project includes pedestrian lighting, landscaping, and aesthetic features such as benches, exercise stations and art displays. The City of Lauderdale Lakes ranks among the highest in diabetes-related deaths per square mile; the completion of this Greenway gives the City an opportunity to educate, affect and improve the health and lifestyle of many residents - especially the youth - and reverse the effects of the national diabetes pandemic directly linked to diet, obesity and the lack of exercise.

Riverland Road/SW 27th Avenue: The City of Fort Lauderdale is working toward creating a paradigm shift in the way that their streets are designed and used. Fort Lauderdale’s “Connecting the Block Program” identified this corridor as a roadway that needed a major transition from being car-centric to being a multi-modal facility; this project provides the neighborhoods safe choices for mobility beyond its current auto-oriented design. This project proposes milling and resurfacing, in addition to reducing travel lane widths from 12 feet to 11 feet to accommodate bicycle lanes in both directions of Riverland Road from SR-7 to Davie Boulevard. Additional work includes

milling and resurfacing for the purpose of restriping the existing lane configuration to remove a single travel lane in each direction and provide buffered bicycle lanes from Davie Boulevard to Broward Boulevard. It also includes the reconstruction of sidewalks and/or crosswalks to comply with ADA standards, and the addition of appropriate signage and restriping. Improvements to this facility will also include the addition of internally illuminated reflective pavement markings (IIRPM) throughout the project, completing 4.7 miles of lighted bike lanes on both sides of the road.



Figure 10 Riverland Road (Existing)

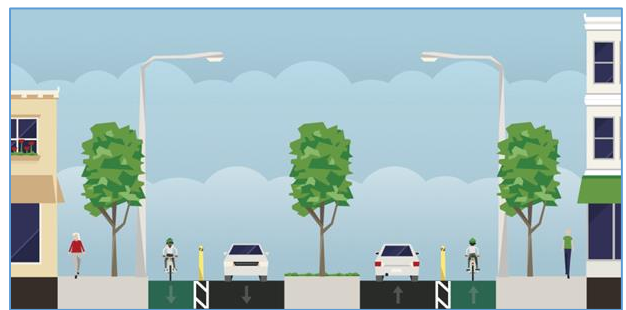


Figure 11 Riverland Road (Proposed)

Of the 42,306 individuals that live within one mile of this project, 22,239 are classified as minorities. The poverty level within a mile of this project is 23.9% compared with the county average of 14.6%. The median income within a mile of

21 U.S. Census OnTheMap

the project is \$42,339, nearly 20% lower than the county average (\$51,574). The percentage of households without a vehicle within a mile of this project is 7.9%, on par with the county average of 7.7%.²² This project provides connections to six different bus routes (9, 18, 22, 30, 81 and 441 Express). Over 14,000 primary jobs are located within one mile of the project, while over 800 residents who both live and work in the immediate area²³ would be directly served by this project. These routes connect to Downtown Fort Lauderdale, South Florida Education campus, Sawgrass mall, Downtown Hollywood, Palm Beach and Miami-Dade County.

IMPACTED POPULATIONS

"Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 1994

The entire project will be completed within the limits of Broward County. As shown in **Exhibits 5-7**, analyses of the various gaps in the regional Complete Streets network, using 2010 U.S. Census and 2014 American Community Survey data, indicate that the majority of people living within 1 mile of the project segments are from Environmental Justice (EJ) populations.

Advancing the mobility of minority and low-income populations is one of the

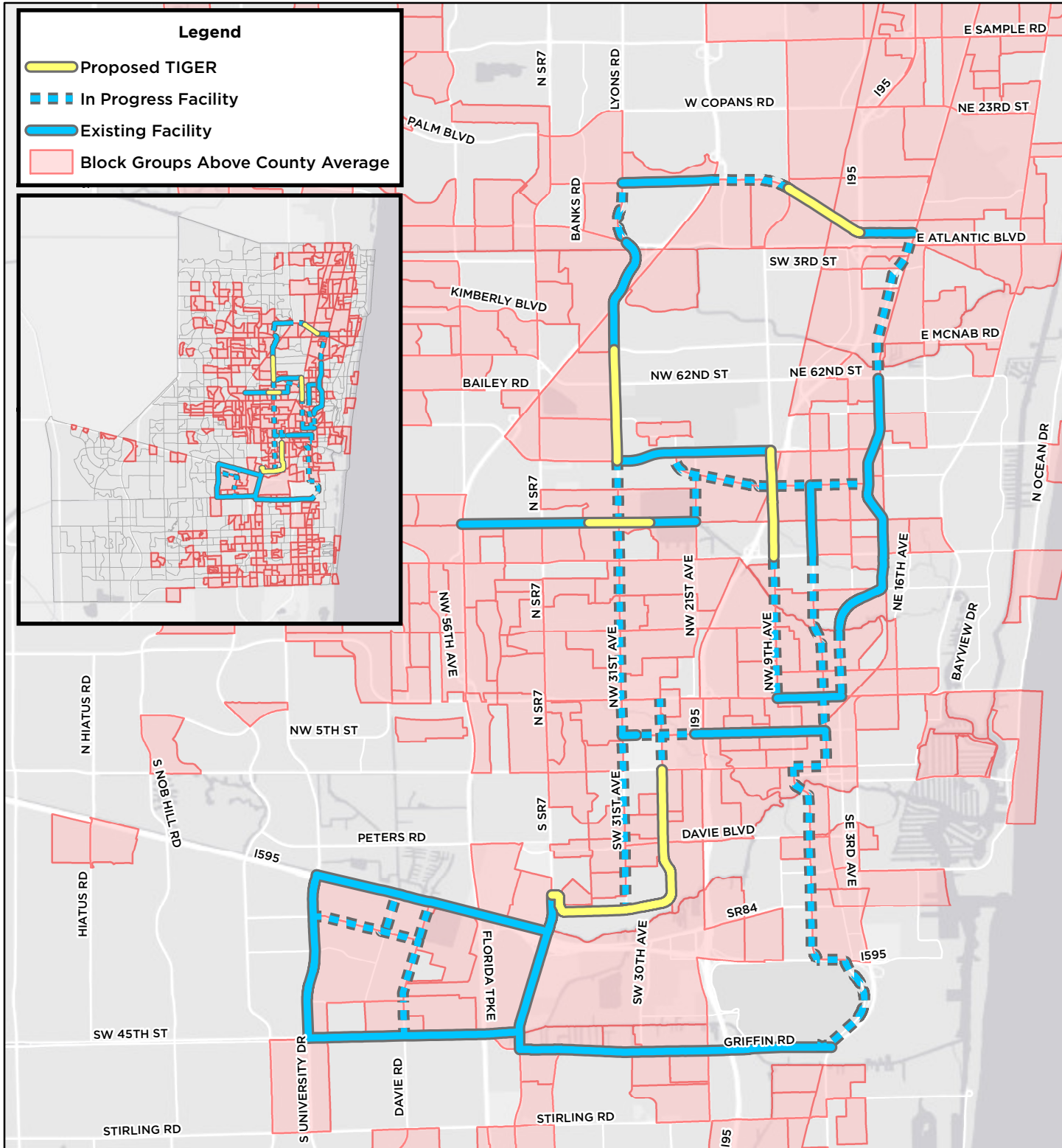
cornerstones of USDOT's "Ladders of Opportunity." These populations will be the first beneficiaries of reduced travel time, improved safety conditions, and better accessibility afforded by the *Regional Complete Streets Initiative*. Gaps in the network disproportionately impact minority and low income populations by creating physical barriers that limit access to jobs and key services, making the *Regional Complete Streets Initiative* a top priority for the Broward MPO and its partners. **Exhibit 4** illustrated the location of each project segment and it's relation to key activity sectors and employment centers.

22 2014 American Community Survey (ACS)

23 U.S. Census OnTheMap

Poverty Levels Above County Average

Exhibit 6B



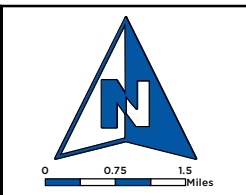
Prepared By:

 Broward Metropolitan Planning Organization
BrowardMPO.org

Notes:
 County average is 1,463 people living in poverty per 10,000 people (ACS 2014: 5 Year)

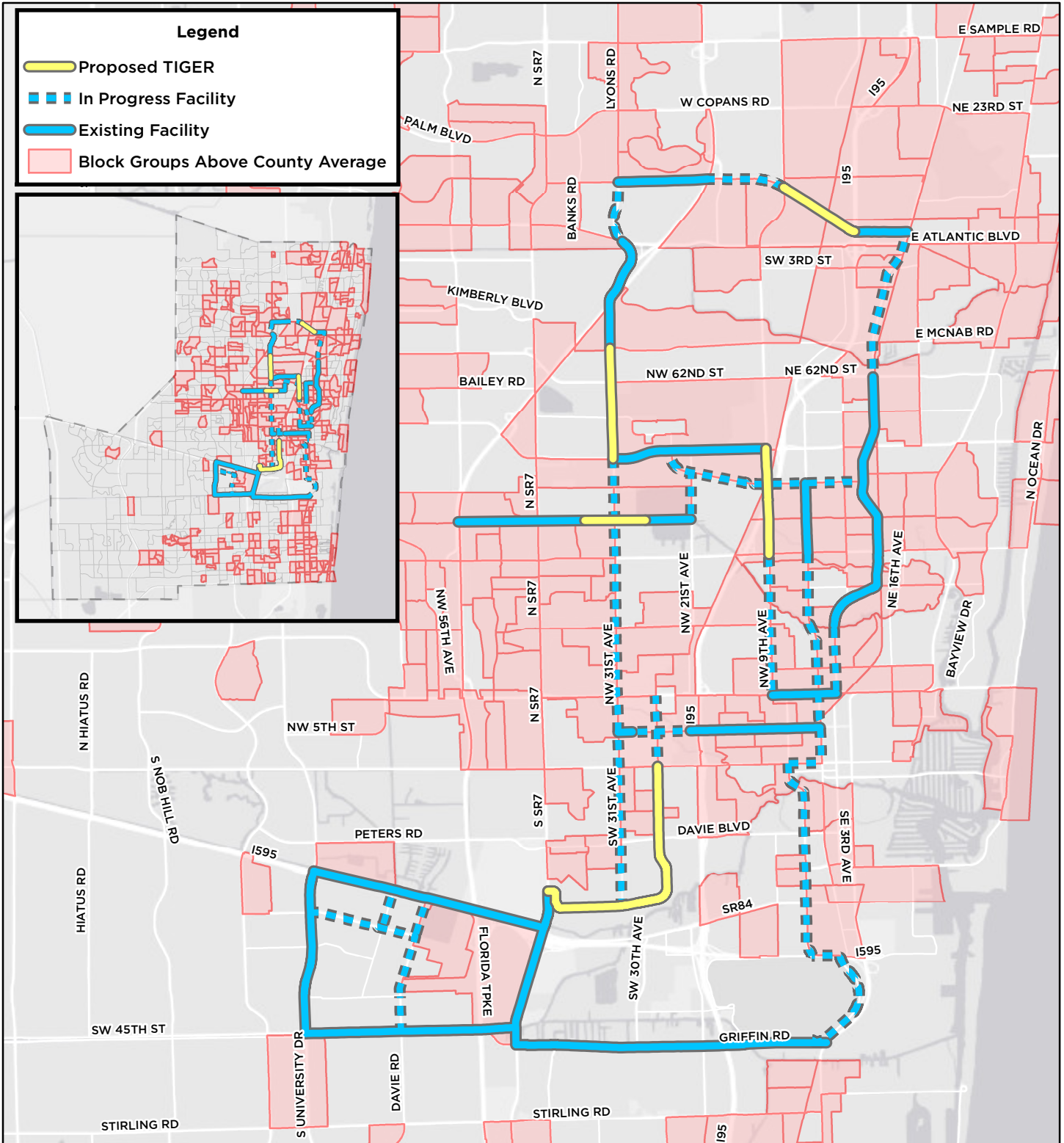
This map is provided "as is" without warranty or any representation of accuracy, timeliness, or completeness. The MPO makes no warranties, expressed, or implied, as to the use of this map. The owner of this map acknowledges and accepts the limitations of the map, including the fact that the data coverages are dynamic and in constant state of maintenance, correction, and update. For complaints, questions or concerns about civil rights or nondiscrimination; or for special requests under the American with Disabilities Act, please contact: Christopher Ryan, Public Information Officer/Title VI Coordinator at (954) 876-0036 or ryanc@browardmipo.org

Source: Broward MPO
 File Name: Poverty.mxd
 Map Date: April 27, 2016
 Aerial Image Date: N/A
 Created by: C. Campobasso



Zero Car Households Above County Average

Exhibit 7B



Prepared By:



BrowardMPO.org

Notes:

County average is 7.7 zero car households per 100 households (ACS 2014: 5 Year)

This map is provided "as is" without warranty or any representation of accuracy, timeliness, or completeness. The MPO makes no warranties, expressed, or implied, as to the use of this map. The owner of this map acknowledges and accepts the limitations of the map, including the fact that the data coverages are dynamic and in constant state of maintenance, correction, and update. For complaints, questions or concerns about civil rights or nondiscrimination; or for special requests under the American with Disabilities Act, please contact: Christopher Ryan, Public Information Officer/Title VI Coordinator at (954) 876-0036 or ryan.c@browardmpo.org

Source:
Broward MPO
File Name:
ZeroCar.mxd

Map Date: April 27, 2016

Aerial Image Date: N/A

Created by: C. Campobasso

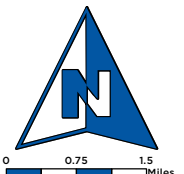


EXHIBIT 5. EJ POPULATION ALONG PROPOSED PROJECT SEGMENTS: PERCENT MINORITY

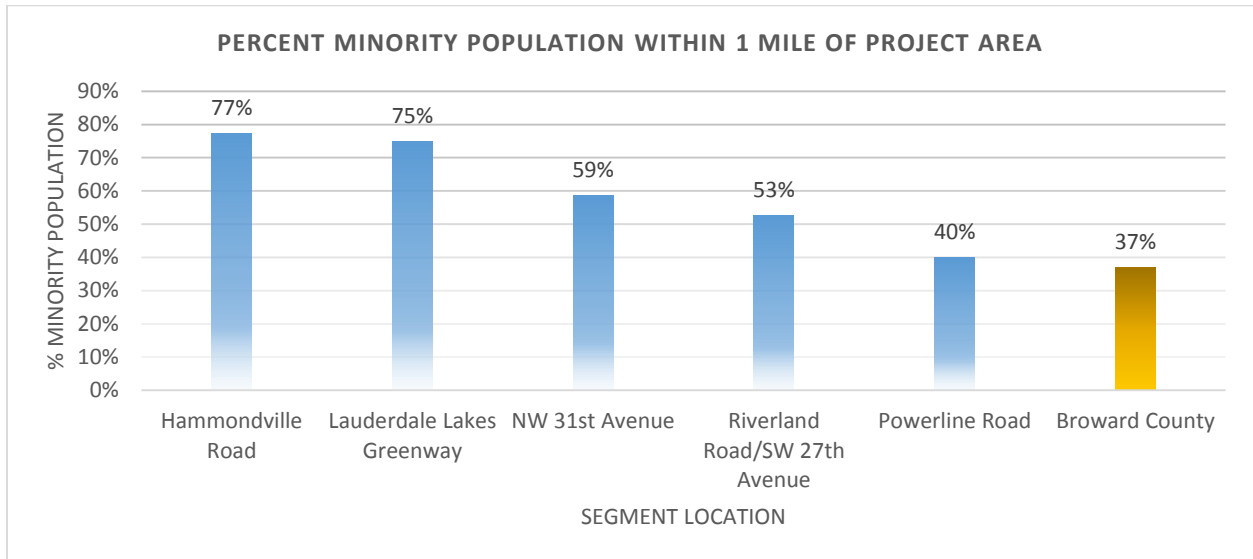


EXHIBIT 6. EJ POPULATION ALONG PROPOSED PROJECT SEGMENTS: PERCENT POVERTY

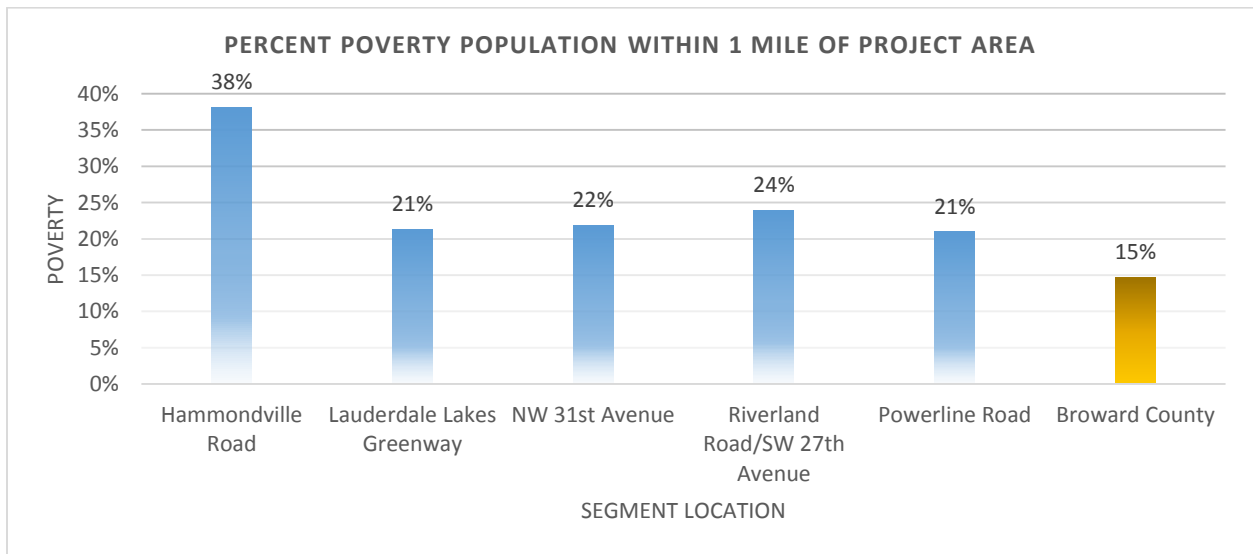
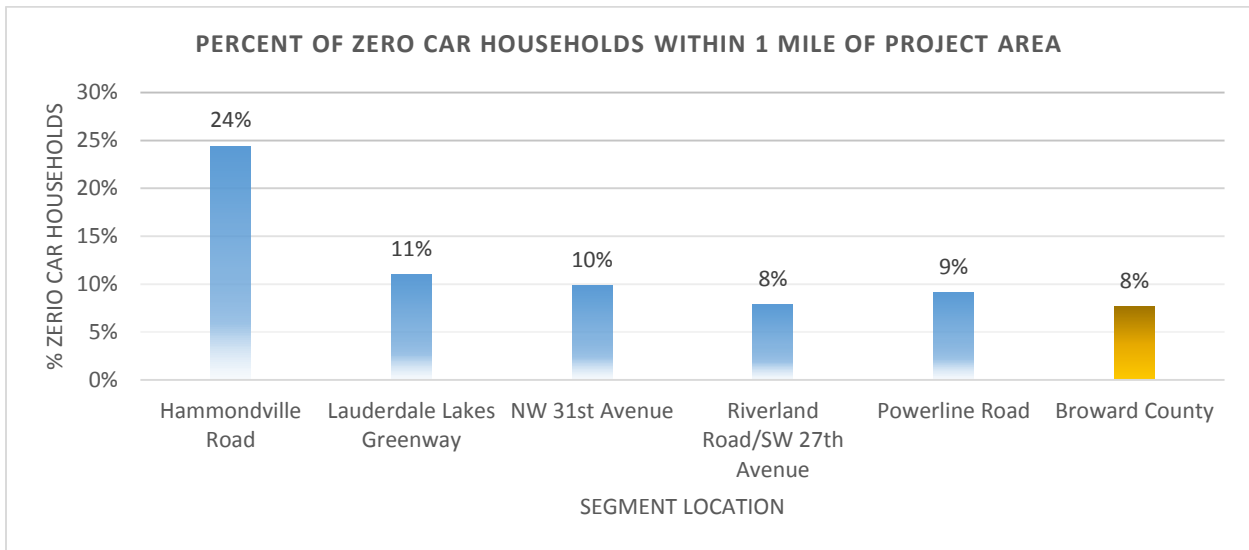


EXHIBIT 7. EJ POPULATION ALONG PROPOSED PROJECT SEGMENTS: PERCENT ZERO CAR HOUSEHOLD



PROJECT PARTIES

This grant application is being submitted by the Broward MPO, in partnership with FDOT – District IV Office, Broward County Government, and the municipalities of Fort Lauderdale, Lauderdale Lakes, Oakland Park, and Pompano Beach. Clear roles and responsibilities have been established to ensure a successful implementation of each project identified in the TIGER grant. The following section describes each of the project partners.

BROWARD MPO

The Broward MPO is the lead applicant for this TIGER VIII (2016) funding grant and the designated MPO for Broward County. The Broward MPO is a transportation policy-making Board comprised of elected officials who represent the Broward County Board of County Commissioners, the 31 Broward municipalities, the South Florida Regional Transportation Authority (SFRTA) and the Broward County School Board.

The Broward MPO’s vision is to transform transportation in Broward County to achieve optimum mobility with emphasis on mass transit while promoting economic vitality, protecting the environment, and enhancing quality of life.

The mission of the Broward MPO is to influence the expenditure of federal and state funds to provide a regional transportation system that ensures the safe and efficient mobility of people and goods, optimizes transit opportunities, and enhances our community’s environmental and economic well-being. For the purposes of the *Regional Complete Streets Initiative* and this application, the Broward MPO has established partnerships with local, county and state governments and is gathering the necessary information and back-up materials required to submit this application. More importantly, the Broward MPO will continue its commitment to work with the FDOT through a well-established implementation program to design and construct the projects identified in this TIGER grant application. As the lead applicant, the Broward MPO’s main

function is to ensure that the application conforms with the strategic goals and objectives of USDOT and to ensure that all project stakeholders are properly represented.

FLORIDA DEPARTMENT OF TRANSPORTATION

The Florida Department of Transportation (FDOT) is a major partner and has agreed to administer, design and construct all of the projects via a successful implementation program in partnership with the Broward MPO. The Broward MPO's existing \$120 million investment in bicycle and pedestrian improvements is currently being implemented through this program. Phase I of the mobility program broke ground in February 2015 and includes \$15 million in active transportation improvements located in eight different municipalities in Broward. Projects include sidewalks, buffered bike lanes and multi-purpose paths. Phase II, currently in design, includes two demonstration projects which were selected to illustrate Complete Streets principles and measure the benefit of a "Complete Street." Furthermore, these two projects, one located in an urban environment and the other in a suburban setting, aim to demonstrate the importance of urban context in determining the type of facility needed to properly accommodate all users. Construction is scheduled to start as early as July 2017.

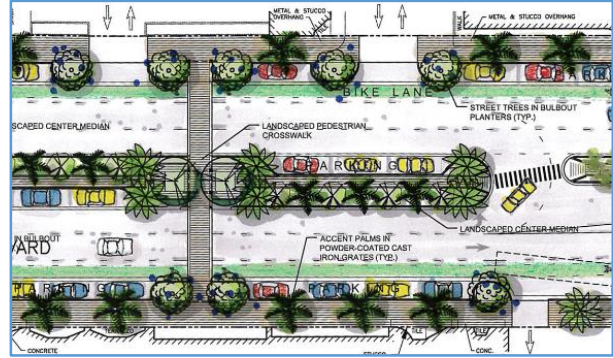


Figure 12 Proposed Hollywood Blvd. Demonstration Project (In Design)

BROWARD COUNTY

In 2013, Broward County Government amended their Land Development Code and Land Use Plan and modified their Minimum Engineering standards to facilitate the implementation of Complete Streets projects in Broward. The County is committed to creating a healthier and safer transportation system for all users including those in greatest need, and is providing \$2.47 million as a local match for this application. As part of its roles and responsibilities, Broward County Government has agreed to actively participate during the implementation of all projects and to maintain the County owned project segments once completed. These project segments include:

- NW 31st Ave.
- Riverland Road/SW 27th Ave.

LOCAL MUNICIPALITIES

In response to the "Mayor's Challenge for Safer People and Safer Streets," many cities within Broward County viewed this application as an opportunity to demonstrate their leadership. This includes promoting Complete Streets projects which meet the goals of the Challenge and provide safe and equitable access to the major

commercial, residential and recreational facilities within their jurisdictions. Four municipalities have joined the Broward MPO in this application and provided a local match. These municipalities include:

- The City of Fort Lauderdale
- The City of Lauderdale Lakes
- The City of Oakland Park
- The City of Pompano Beach

In addition to the local match, these municipalities have committed to actively participate during the implementation of the projects, conduct additional community outreach if needed and will continue to maintain projects segments within their jurisdiction. The projects include:

- Lauderdale Lakes Greenway
- NW 31st Ave.
- Riverland Road/SW 27th Ave.
- Hammondville Rd
- Powerline Rd

COMMUNITY SUPPORT

While not a funding partner, the local businesses, community organizations, and other public agencies have played an important role in bringing the *Regional*

Complete Streets Initiative to fruition. Many non-financial Letters of Support have been received from a variety of stakeholders. Each letter is available on the Broward MPO's *Regional Complete Streets Initiative* TIGER VIII (2016) grant application [website](#).²⁴

GRANT FUNDS AND SOURCES/USES OF FUNDS

As shown in **Exhibit 8**, the Broward MPO requests \$11,443,371 in TIGER 2016 funding to complete the Regional Complete Streets Initiative. The Broward MPO will combine these funds with \$7,730,517 in municipal and County matching funds. The total cost for the entire project is \$19,173,888, of which 60% will be TIGER funded, with the remaining 40% covered by matching funds. Of the total project funding, \$2,551,462 will be used for design. The long range estimates (LRE) developed by FDOT are available on the Broward MPO's *Regional Complete Streets Initiative* TIGER VIII (2016) grant application [website](#).²⁵

²⁴ <http://www.wgianalytics.net/tiger8bmpo>

²⁵ <http://www.wgianalytics.net/tiger8bmpo>

EXHIBIT 8. PROJECT FUNDING SUMMARY

Project Segment	Length (miles)	Total Cost	Local Match	Partner	Percent Match	TIGER Request
Riverland Rd./SW 27 th Ave.	4.66	\$4,974,040	\$1,520,000	Broward County/ Fort Lauderdale	31%	\$3,454,040
Hammondville Rd.	1.15	\$7,284,249	\$3,500,000	Pompano Beach	48%	\$3,784,249
Lauderdale Lakes Greenway	0.26	\$458,504	\$250,000	Lauderdale Lakes	55%	\$208,504
NW 31 st Ave.	1.63	\$5,136,061	\$1,800,000	Broward County	35%	\$3,336,061
Powerline Rd.	1.53	\$1,321,034	\$660,517	Oakland Park	50%	\$660,517
Total	9.23	\$19,173,888	\$7,730,517		40%	\$11,443,371

SELECTION CRITERIA

As specified by USDOT, the selection criteria evaluates safety, state of good repair, economic competitiveness, quality of life, and environmental sustainability. For their

part, the project partners have identified long-term, transformative benefits for all users, in all categories. **Exhibit 9** summarizes how the *Regional Complete Street Initiative* will satisfy the TIGER selection criteria.

EXHIBIT 9. TIGER SELECTION CRITERIA SUMMARY

Criteria	How the Project Satisfies Selection Criteria
Primary Criteria	
Safety	<p>Broward County is ranked second among the top ten worst counties in Florida for pedestrian and bicyclist fatalities. The project will increase safety for pedestrians and bicyclists by constructing clearly delineated bicycle facilities and trails, completing crucial links in Broward’s non-motorized network. The network is designed to benefit all users with multimodal reliability, connectivity, access, and efficiency. Additional elements include lighting, landscaping, and innovative illuminated pavement markers.</p> <hr/> <p>Crash Reduction – <i>Smart Growth America reports that 70% of complete streets projects experienced a reduction in collisions and 56% of projects experienced a reduction in injuries.</i>²⁶</p> <p>Safety Comparison - <i>Before and after studies in Orlando, Florida found that similar roadway treatments increased bicycle and pedestrian demand by 30% and 23% respectively as well as reduced crashes and injuries by 33% and 66% respectively.</i>²⁷</p>
State of Good Repair	<p>The project will improve the condition of existing transportation facilities by redesigning and reconstructing 9.2 miles of roadway, ensuring long-term resiliency.</p> <hr/> <p><i>The Regional Complete Streets Initiative will benefit all users, not just bicyclists and pedestrians, by improving curb and gutter conditions, ensuring the latest design standards are incorporated, and extending roadway service life through mode shift over time.</i></p>
Economic Competitiveness	<p>In an effort to revitalize communities, the projects will provide access to jobs and education for all users, especially the economically and transportation disadvantaged. The Broward MPO <i>Regional Complete Streets</i> Initiative will also provide non-motorized transportation access to nearly 40 elementary, middle, and high schools, 12 colleges and universities, 13 employment centers and downtown districts, 6 libraries, and 2 major hospitals in the region. As part of a larger Complete Streets network, the</p>

26 Safer Street, Stronger Economies. Smart Growth America. Published March, 2015.
27 <http://urbanhs.com/wp-content/uploads/2012/04/3-Safety-and-Health-Benefits.pdf>

Criteria

How the Project Satisfies Selection Criteria

proposed projects will result in near-term access to affordable and sustainable multimodal transportation options.

Destinations - South Florida Education Center, Greater Downtown Fort Lauderdale, the Wave Streetcar, area businesses, regional parks, schools, government and community centers.

Job Access - Of the 230,000 primary jobs located within this network, nearly 50,000 are held by people who both live and work within the area.

Quality of Life

Approximately 30% of males and females in Broward are considered obese, while only half Broward's population meet their daily requirements for physical activity. The projects will improve access, provide affordable, efficient, convenient choices for all users, enhance communities and neighborhoods, and foster active, healthy lifestyles while minimizing environmental impacts and providing safety and comfort for all users.

Promoting Active Lifestyle – Smart Growth America reports that, of 37 Complete Streets projects, 13 collected pedestrian counts. Of those, pedestrian activity increased after improvements in 12 Complete Streets projects. 23 collected bicycle counts. Of those, bicycling increased in 22 projects after their Complete Streets improvements.

Environmental Sustainability

The project will offer access to alternative transportation options and foster an environment where shorter trips can be made by walking or bicycling. Trips by automobile will be reduced which will marginally reduce air quality impacts.

Climate – Transportation accounts for nearly 30% of all greenhouse gases. Complete Streets help keep streets green by providing space along right-of-ways for low or no emission travel. Design features can calm traffic, provide comfort and visual appeal, and help with stormwater runoff.

Criteria	How the Project Satisfies Selection Criteria
Secondary Criteria	
Innovation	<p>The project proposes to pilot innovative internally illuminated reflective pavement markings (IIRPMs) in project segments to highlight potential conflict zones in areas where lighting may be inadequate for drivers and cyclists.</p> <hr/> <p><i>These lights are 100% solar-powered, brighter than conventional pavement markings, and are maintenance free once installed.</i></p>
Partnership	<p>The Broward MPO has already established a well-defined, collaborative process with the FDOT, Broward County and local municipalities to move projects forward from the planning phase into construction. This process has been embraced by all government entities since it expedites project implementation, and establishes clear roles and responsibilities for all parties involved. This collaboration has resulted in a highly successful implementation program that FDOT will utilize to manage all aspects of project implementation including design and construction for the <i>Regional Complete Streets Initiative</i>.</p> <hr/> <p><i>Well-established implementation program through a partnership with FDOT resulting in a \$120 million investment in Bicycle/Pedestrian projects with \$15 million currently under construction.</i></p>

RESULTS OF THE BENEFIT-COST ANALYSIS

While this project has many indirect benefits, its primary long-term benefits are a reduced need for bicyclists and pedestrians to travel out of their way to access safe facilities and a reduction in the number of bicycle and pedestrian related crashes. As such, the Benefit-Cost Analysis focuses on those aspects of the project to evaluate the project's merits.

Recreational use of the facilities will promote positive health outcomes and foster more livable communities. Because the literature is not clear on the value of those impacts, the Benefit-Cost Analysis did not quantify the monetary value of likely health impacts. Therefore, the Benefit-Cost Analysis, as tabulated in **Exhibit 10** and **Exhibit 11**, is inherently conservative in the variables used to quantify net benefits.

FINDINGS

Even with limiting the Benefit-Cost Analysis to benefits associated with time, fuel and safety

savings, the project demonstrates a positive Benefit-Cost ratio of **1.456** and positive net present value of \$8,266,522. Due to the nature of the project (i.e., filling in gaps), other alternatives and a no-build scenario are not appropriate comparisons.

The results presented in this analysis are inherently conservative. When the safety assessment is expanded to include crashes on cross streets at project segment intersections, multiple bicycle and pedestrian fatalities are present. Given the nature of how crashes are reported and subsequently catalogued at intersections they were not potentially

attributed to the project segment. However, if one fatality is avoided every 10-years over the 20-year evaluation period (identified in the subsequent section), the Benefit-Cost ratio increases to 1.799.

The goal of the analysis is to understand whether the project’s benefits to society exceed its costs in both the short and long-term. **Exhibit 12** presents the Regional Complete Streets Initiative benefits over a 20-year period. The analysis assumes all construction is complete by 2021, and all projects are open and accessible.

EXHIBIT 10. BENEFIT-COST ANALYSIS SUMMARY

Baseline Problem Address	Change to Baseline	Type of Impacts	Population Affected by Impacts	Economic Benefit	BCA Page
Gaps in the regional Complete Streets network and number of bike/ped crashes	Redesign and reconstruction of 9.2 miles of existing roadways and trails to more safely accommodate a full mix of multimodal traffic	Reduced travel times for existing and new bicyclists and pedestrians, minor mode shift, safer roadway environment	Low-income households, people unable to travel by auto and people who chose not to use an auto to meet their daily needs	Net present value (NPV) of \$8,266,522 B-C ratio of 1.456	Tab No. 3, “Summary”
Summary of Results	Travel time, fuel cost savings, and safety benefits that exceed the project’s cost.				

EXHIBIT 11. QUANTITATIVE SUMMARY OF THE PROJECT’S BENEFITS AND COSTS

Project	Net Present Value	Year NPV is Positive	Discounted Benefits	Discounted Costs	B-C Ratio
Broward MPO’s <i>Regional Complete Streets Initiative</i>	\$8,266,522	2033	\$26,380,958	\$18,114,436	1.456

EXHIBIT 12. BENEFIT COST SUMMARY OVER 20 YEARS

Calendar Year	Project Year*	Discounted Net Benefits	Discounted Net Costs
2016	-	\$0	\$0
2017	-	\$0	\$1,674,368
2018	-	\$0	\$779,397
2019	-	\$0	\$6,755,920
2020	-	\$0	\$7,568,246
2021	0	\$1,661,534	\$778,398
2022	1	\$1,613,139	\$36,421
2023	2	\$1,566,155	\$35,360
2024	3	\$1,520,539	\$34,330
2025	4	\$1,476,251	\$33,330
2026	5	\$1,433,253	\$32,359
2027	6	\$1,391,508	\$31,417
2028	7	\$1,350,979	\$30,502
2029	8	\$1,311,630	\$29,613
2030	9	\$1,273,427	\$28,751
2031	10	\$1,236,337	\$27,914
2032	11	\$1,200,327	\$27,101
2033	12	\$1,165,366	\$26,311
2034	13	\$1,131,424	\$25,545
2035	14	\$1,098,469	\$24,801
2036	15	\$1,066,475	\$24,078
2037	16	\$1,035,413	\$23,377
2038	17	\$1,005,255	\$22,696
2039	18	\$975,976	\$22,035
2040	19	\$947,549	\$21,393
2041	20	\$919,951	\$20,770
Totals		\$26,380,958	\$18,114,436
Benefit-Cost Ratio			1.456

*Project opens 2021; 20-year life cycle to 2041.

DETAILED ASSESSMENT

Transmitted with this document is the detailed Benefit/Cost spreadsheet developed for the project. The detailed assessment of benefits and costs demonstrates an evaluation of the project during design, procurement and construction impacts and costs. The analysis assumes all construction is complete by 2021.

The primary spreadsheet can be downloaded from the Broward MPO's *Regional Complete Streets Initiative* TIGER VIII (2016) grant application [website](#).²⁸ It is organized as follows:

- 1st Tab - KeyAssumptions - This is where any of the assumptions used in the benefit-cost analysis are input and the source of parameters documented.
- 2nd Tab – CS_Initiative - This is where the parameters from the KeyAssumptions are applied and results are calculated for each year out to 20 years after construction. Separate analyses are presented by year for each of the following:
 - Construction and Maintenance Costs;
 - Travel Time Savings by Non-Motorized and General Traffic;
 - Fuel Savings;
 - Safety Benefits
 - Undiscounted Net Cost;
 - Discounted @ 3.00% 2016 \$; and
 - Running Total.
- 3rd Tab - Summary - This is where a summary of the benefit-cost analysis findings is presented.
- 4th Tab – Survey_FuelPrices - This is where the average price of gasoline was calculated.

²⁸ <http://www.wgianalytics.net/tiger8bmpo>

PROJECT READINESS

The Broward MPO's *Regional Complete Streets Initiative* is a continuation of the committed \$120 million mobility program used by the MPO to construct an additional 100 miles of bicycle facilities and approximately 40 miles of sidewalks along Broward County's existing roadways. As a part of this ongoing process, the design and construction for each *Regional Complete Streets Initiative* segment will follow an aggressive schedule, as illustrated in **Exhibit 13**, with design taking approximately 15 months, and construction taking place shortly after. The Broward MPO's approach to realize the short-term and long-term benefits from the project will result in multiple contracts and work orders that will be let concurrently.

TECHNICAL FEASIBILITY

FDOT has assumed management for design, construction and administration of all project segments. Assuming a grant agreement is in place for early 2017, construction will start in early 2019 with the project segments open to multimodal traffic in early 2021. A dedicated FDOT mobility team will work closely with the Broward MPO and manage all aspects of project implementation including design and construction. Detailed engineering specifications for each of the project segments, including Long Range Estimates, are provided on the Broward MPO's *Regional Complete Streets Initiative* TIGER VIII (2016) grant application [website](#).²⁹

FINANCIAL FEASIBILITY

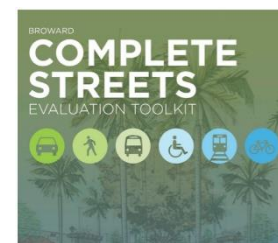
The primary capital expenditures associated with the project segments are localized upgrades to existing roadway and greenway

facilities and located within the existing right-of-ways. Due to the nature of these improvements, the *Regional Complete Streets Initiative* **qualifies for a Categorical Exclusion (CE) from the NEPA process.**

In anticipation of an award, the Broward MPO has included a **signed federal wage rate requirements** and **signed letters of financial support** from all funding partners, as required by USDOT. Each applicant is prepared to meet all federal wage funding match requirements consistent with the requirements of the Notice of Funding Opportunity for the Department of Transportation's National Infrastructure Investments under the Consolidated and Further Continuing Appropriations Act, 2016. Signed federal wage letters and letters of financial support are available on the Broward MPO's *Regional Complete Streets Initiative* TIGER VIII (2016) grant application [website](#).³⁰

PROJECT MONITORING

The Broward MPO has developed a *Complete Streets Evaluation Toolkit* as part of its commitment to Complete Streets projects. The toolkit is a collection of materials that make up the guide lines and tools necessary to conduct evaluations of Complete Streets policies and project implementation, as well as evaluations of the success of constructed Complete Streets elements. The *Complete Streets Evaluation Toolkit* was designed to be used by cities that may or may not have fully



²⁹ <http://www.wgianalytics.net/tiger8bmpo>

³⁰ <http://www.wgianalytics.net/tiger8bmpo>

implemented a Complete Streets policy or project.³¹

The *Complete Streets Evaluation Toolkit* includes:

- Complete Streets evaluation manual
- Evaluation spreadsheet and worksheet tools
- Field data collection tools

As part of the evaluation process, the Broward MPO has committed to obtaining

before and after bicycle and pedestrian counts along the project segments. In addition the *Complete Streets Evaluation Toolkit* will collect data related to the mobility, safety, health, and economic vitality of Complete Streets facilities. The MPO has further committed to sharing that information with USDOT as case study materials for use in monitoring how effective Complete Streets projects are in generating mode shift and increasing multimodal demand.

EXHIBIT 13. PROJECT SCHEDULE

Item Description	Months	Start	End	2017	2018	2019	2020	2021
Design	15	Feb-2017	May-2018	[Green bar spanning Feb-2017 to May-2018]				
Specifications and Contract	4	Jun-2018	Sep-2018		[Green bar spanning Jun-2018 to Sep-2018]			
Letting	1	Sep-2018	Oct-2018		[Green bar spanning Sep-2018 to Oct-2018]			
Award and Execution of Construction. Contract	3	Oct-2018	Dec-2018		[Green bar spanning Oct-2018 to Dec-2018]			
Construction	24	Feb-2019	Feb-2021			[Green bar spanning Feb-2019 to Feb-2021]		

31 <http://www.browardmpo.org/projects-studies/complete-streets/evaluation-toolkit-2>

April 28th, 2016

The Honorable Anthony Foxx
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Subject: TIGER 2016 Discretionary Grants

Dear Secretary Foxx:

The Broward Metropolitan Planning Organization (MPO) will comply with requirements of subchapter IV of Chapter 31 to title 40, United States Code (Federal Wage Rate Requirements) for all contracted or in-house work necessary to implement the proposed project.

The Broward Metropolitan Planning Organization (MPO) uses contract specifications requiring prime contractors and all subcontractors to pay their laborers and mechanics employed under the contract a wage not less than the prevailing wage applicable to their work classification, as specified by the current and applicable federal Wage Determination. If no federal work classification appears to apply, the prime contractor shall make a written request to obtain the applicable work classifications and wage rates prior to the start of construction.

The prime contractor is responsible for ensuring subcontractors comply with Davis-Bacon and Related Acts requirements. If the Broward MPO is awarded a TIGER grant for the *Regional Complete Streets Initiative* we will require all prime and sub-contractors meet all applicable Federal Wage Rate Requirements.

Sincerely,



Greg Stuart
Executive Director

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Richard Blattner

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Bryan Caletka

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