



# Complete Streets Master Plan

Project Advisory Committee (PAC)

Meeting #2

September 19, 2017

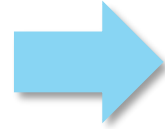
# Welcome and Introductions

- Please tell us about yourself and answer the following...
  - What are your thoughts on how Complete Streets are being built and/or implemented in Broward?



# Summary of Kick-off Meeting (May 22, 2017)

Project Overview



Guide the Broward MPO's future investment in Complete Streets  
Develop a data-driven analysis  
Incorporate transportation partners' input  
Develop a prioritized list of projects

Background Data



Complete Streets, Best Practices from around the Country,  
Maps, Analysis Ideas, and Coordination

What are our Priorities?



Develop prioritization criteria consistent with the goals and objectives established in Commitment 2040. Priority Pyramid – *Safety, Social Equity, and Added Mobility Options*

Outreach



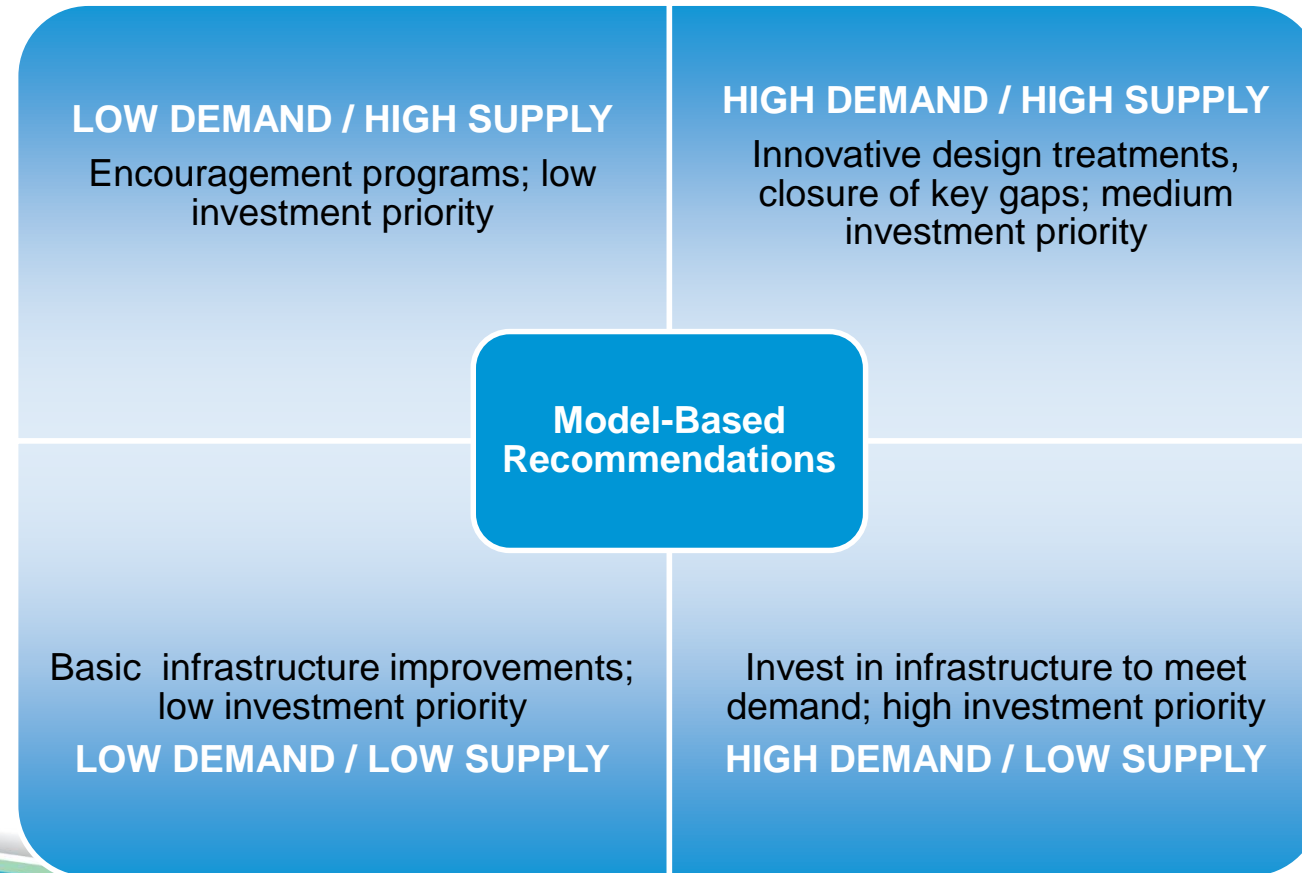
Fall 2017 – Public Outreach  
Winter 2018 – Potential eTown Hall Meeting to roll out the Master Plan

# Today's Agenda

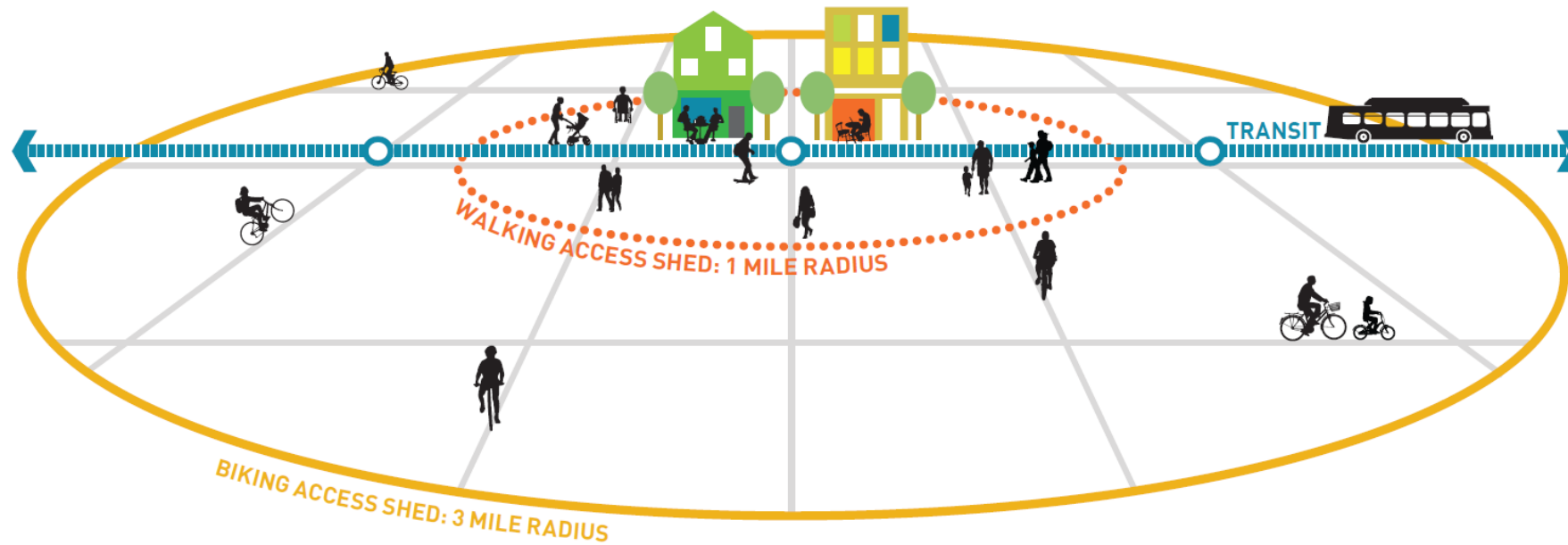
- Pedestrian & Bicycle Supply and Demand Analysis
- Equity Analysis
- Gap Analysis
- Lane Elimination Coordination
- Outreach
- Next Steps/Closing



# Analysis Strategy: Supply + Demand



# Align analysis with how people walk and bike



# Pedestrian Suitability

- Assesses *roadway variables* that influence pedestrian comfort
- Determines how *suitable* roadways are for pedestrians
- Identifies roadways that *require more robust pedestrian facilities* to maintain comfort

## Variables Assessed

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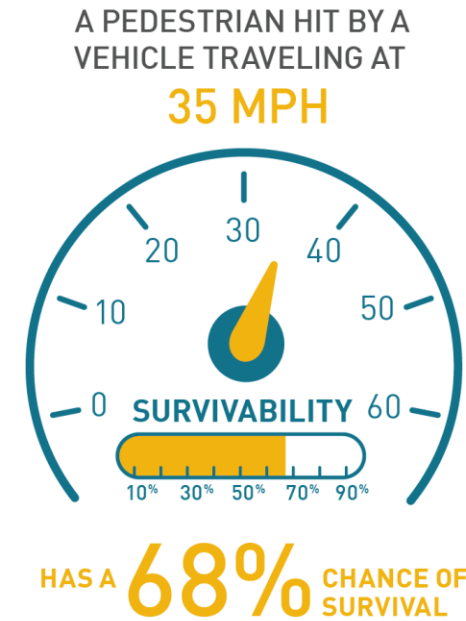
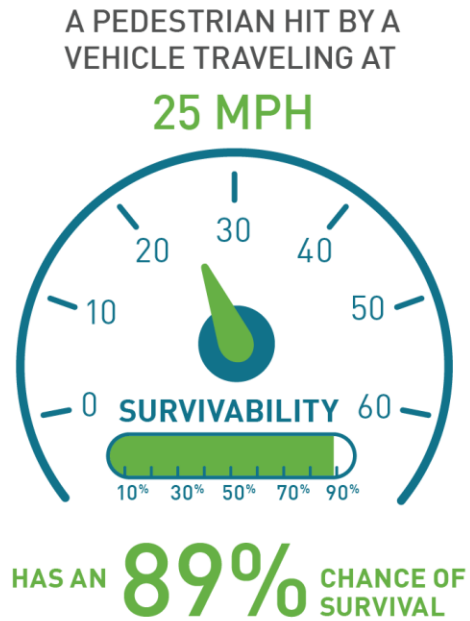
Posted Speed

Number of Travel Lanes

# Pedestrian Suitability

## Speed Variable

- Model rooted in relationship between *speed and crash severity*
- As *speeds increase*, chance of pedestrian *surviving crash decreases*





# Pedestrian Suitability *Exposure Variable*

- In model, exposure represented by *number of travel lanes*
- Multi-lane roads take longer to cross, *increasing pedestrian exposure*

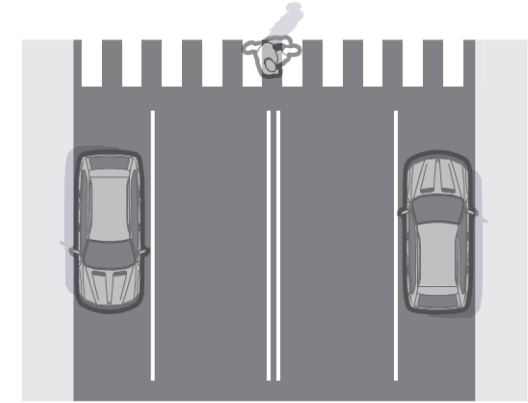
## WIDER STREETS TAKE LONGER TO CROSS

The MUTCD calculates walking speed at 3 feet per second (+ 2 seconds)

AT THIS SPEED,  
IT WILL TAKE A PEDESTRIAN

**15 SECONDS**

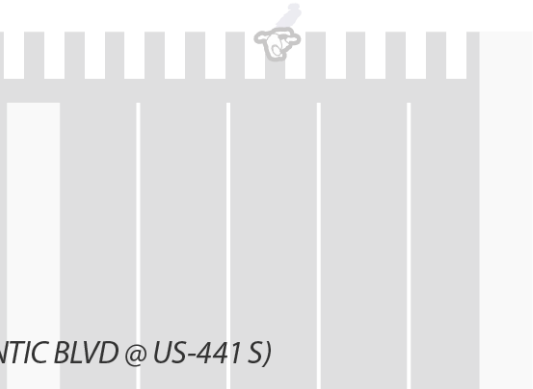
TO CROSS A **2-LANE ROAD**  
WITH PARKING



AT THIS SPEED,  
IT WILL TAKE A PEDESTRIAN

**40 SECONDS**

TO CROSS A **9-LANE ROAD**  
WITH A MEDIAN (SUCH AS W ATLANTIC BLVD @ US-441 S)

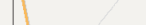


# Pedestrian Suitability Results Map

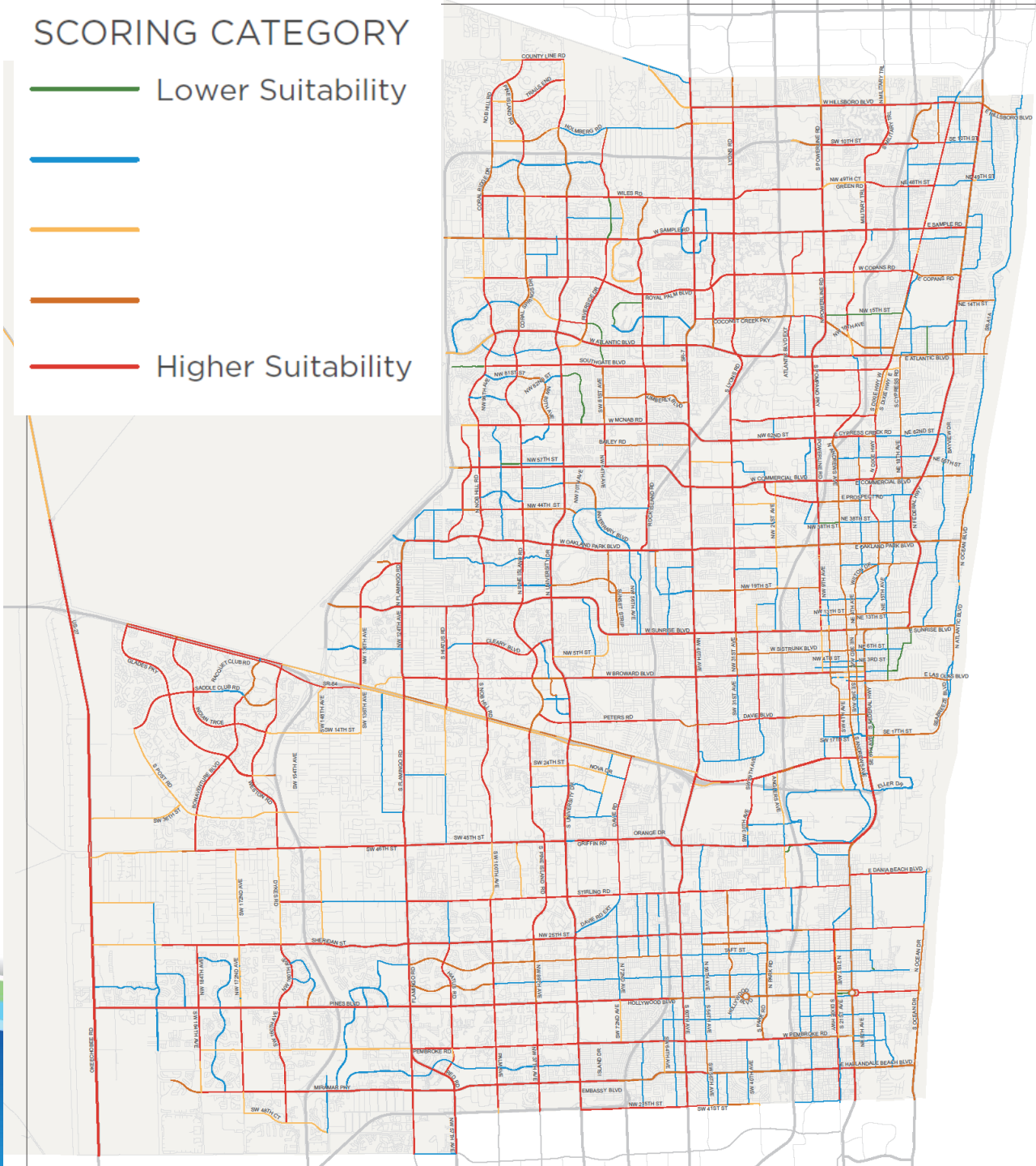
- 5-Tier suitability score
- Most roads received **low suitability score**
- These roads require **robust pedestrian facilities** to maintain comfort

## SCORING CATEGORY

Lower Suitability



Higher Suitability



# Bicycle Suitability

## 13 Input Factors

- AADT
- Travel and turn lanes
- Speed
- Presence/Absence of Bike Facility
- Median, curb and gutter
- Land Use
- Slopes and Railroad Crossings

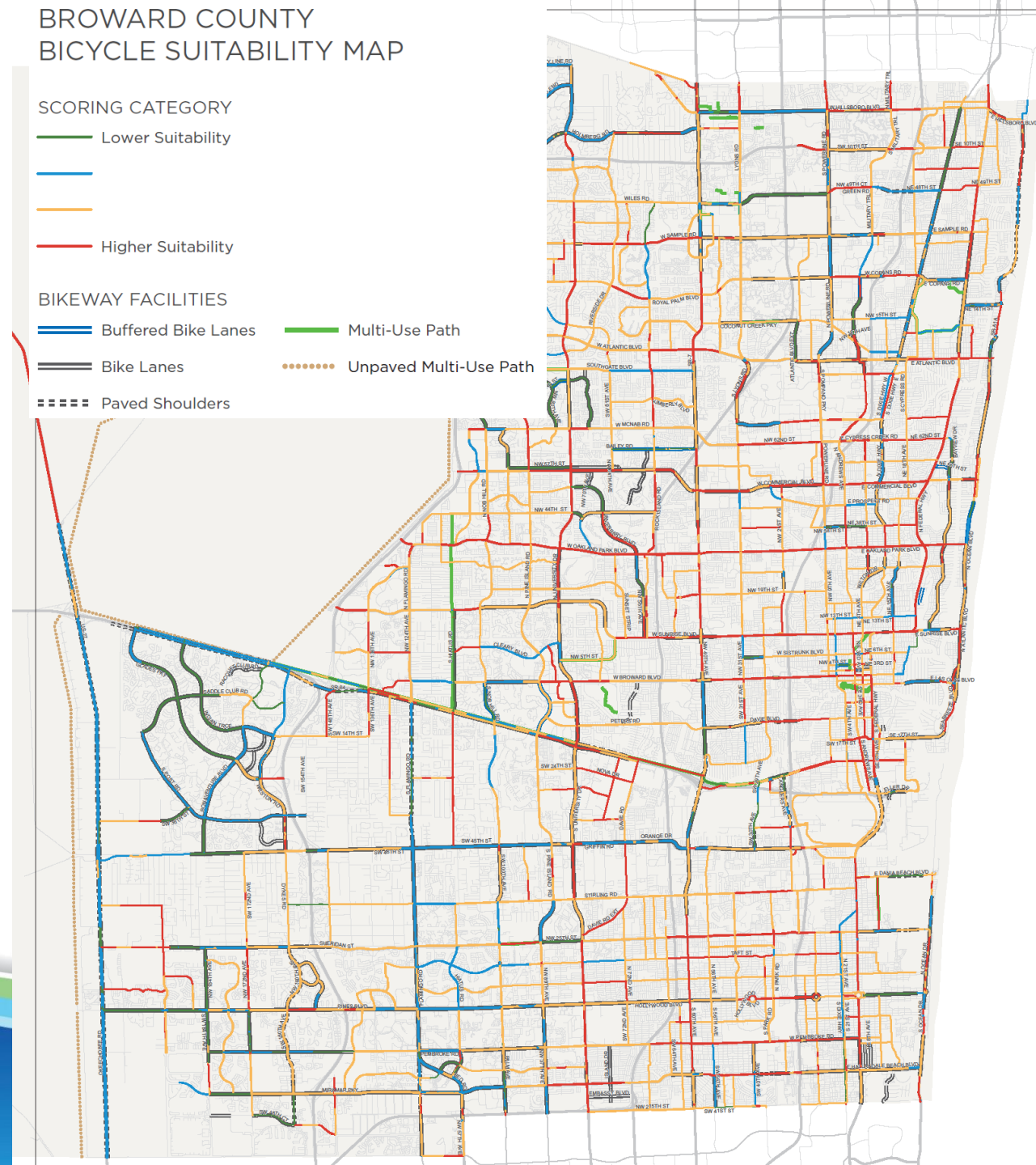
## BROWARD COUNTY BICYCLE SUITABILITY MAP

### SCORING CATEGORY

- Lower Suitability
- 
- Higher Suitability

### BIKEWAY FACILITIES

- Buffered Bike Lanes
- Bike Lanes
- Paved Shoulders
- Multi-Use Path
- Unpaved Multi-Use Path





# Demand Analysis

## Composite Results

- Estimates *propensity for walking and bicycling* in Broward County
- Uses six inputs to estimate demand

LIVE

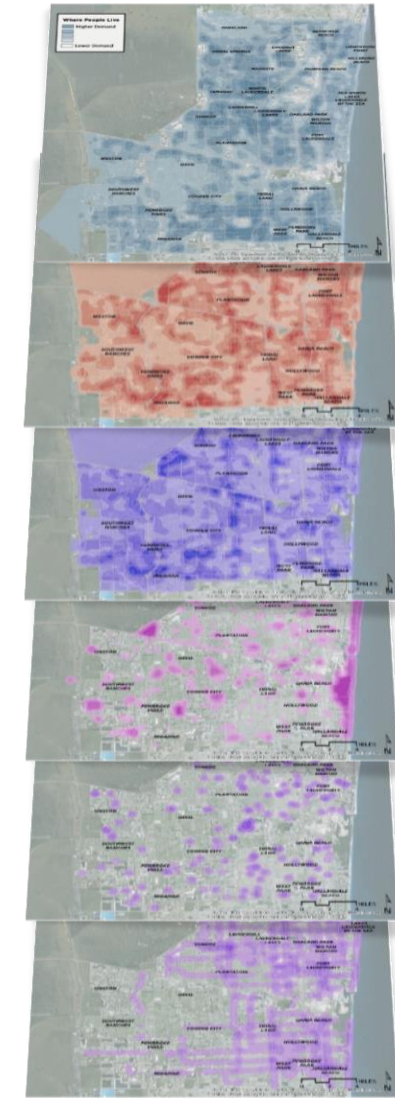
LEARN

WORK

SHOP

PLAY

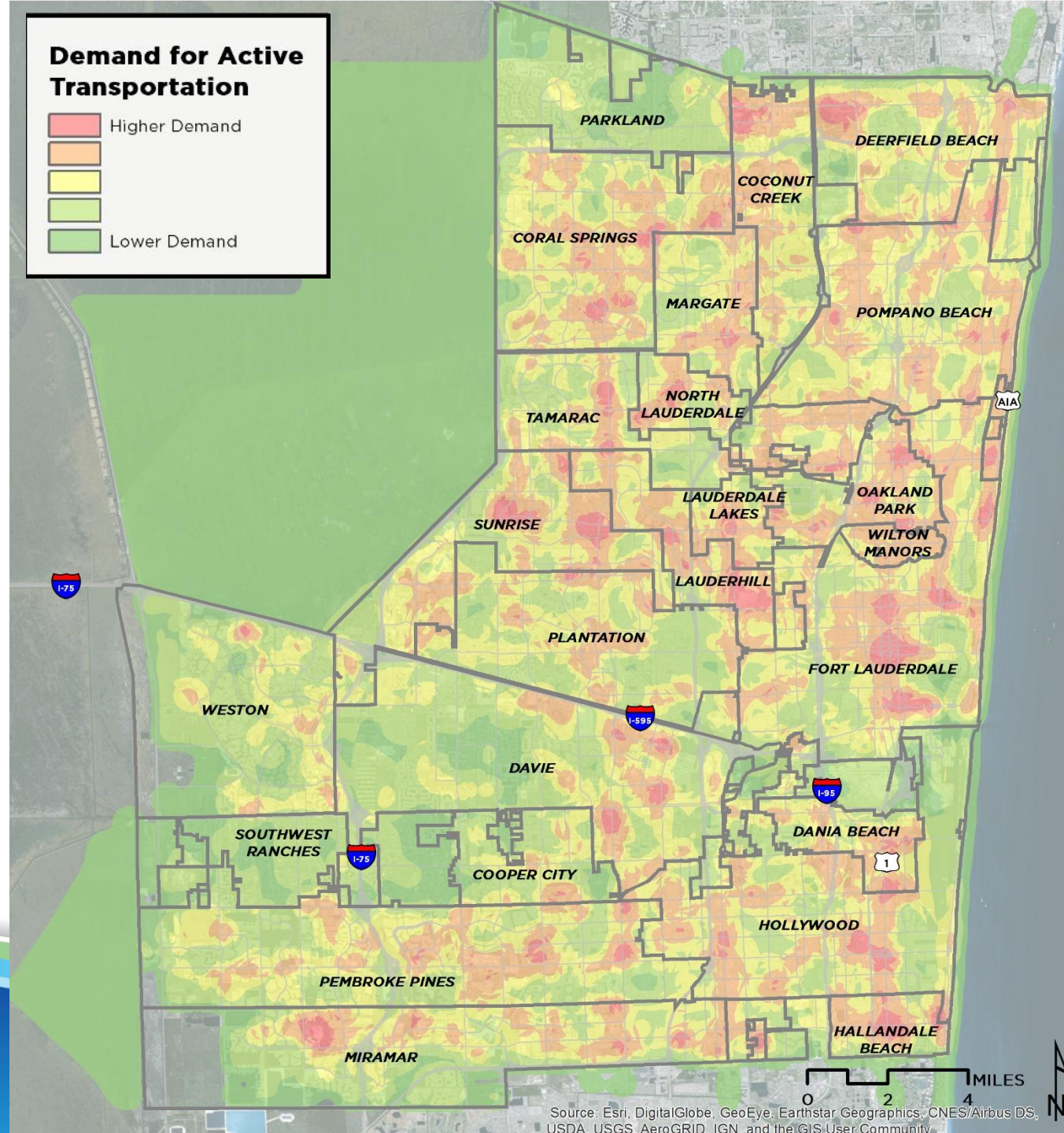
ACCESS TRANSIT





# Demand Analysis Composite Results

- Pockets of demand throughout county
- Hot spots range in size

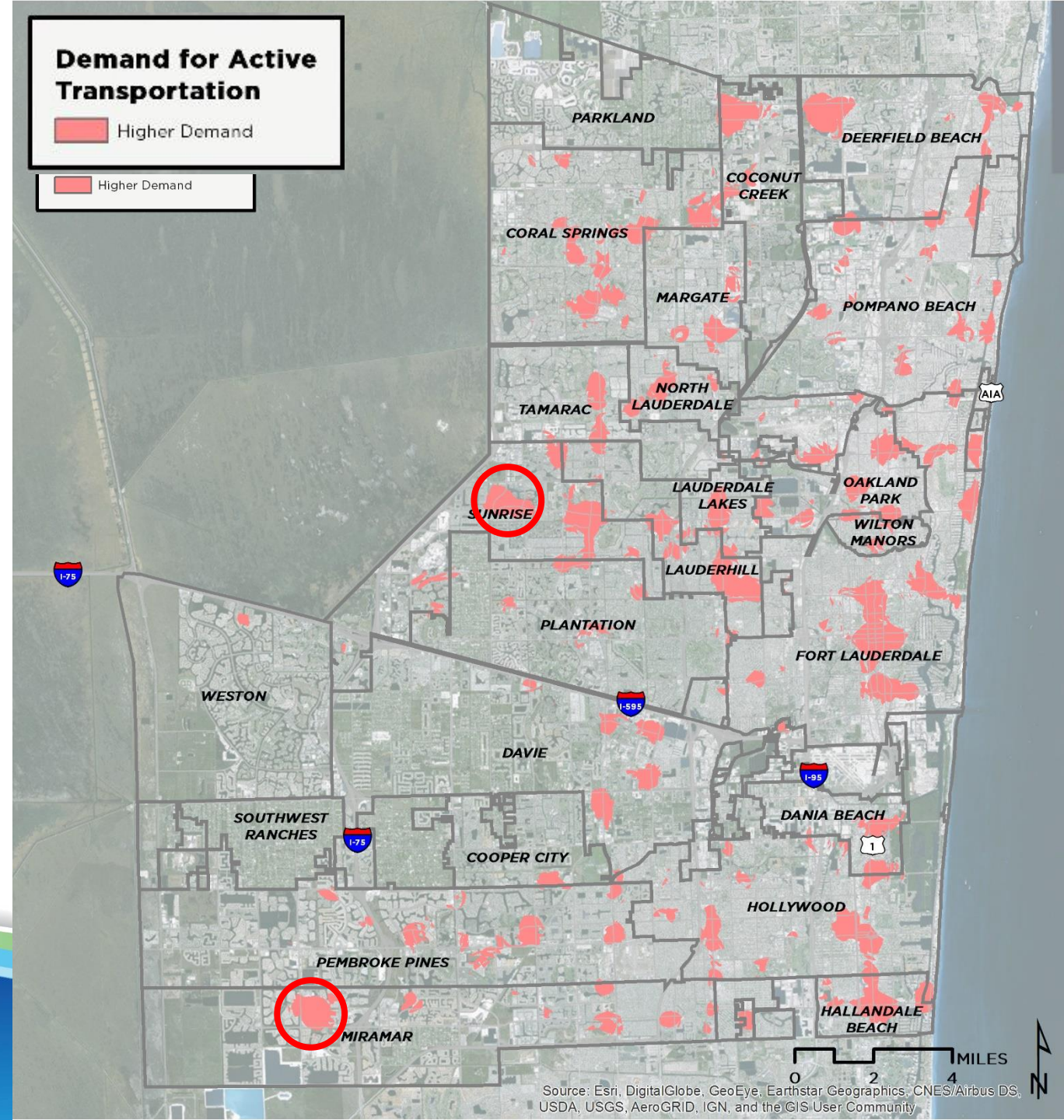




# Demand Analysis

## High Demand Areas

- Hot spots are *distributed*
- Size of hot spots *generally small*, compared to county size





# Demand Analysis

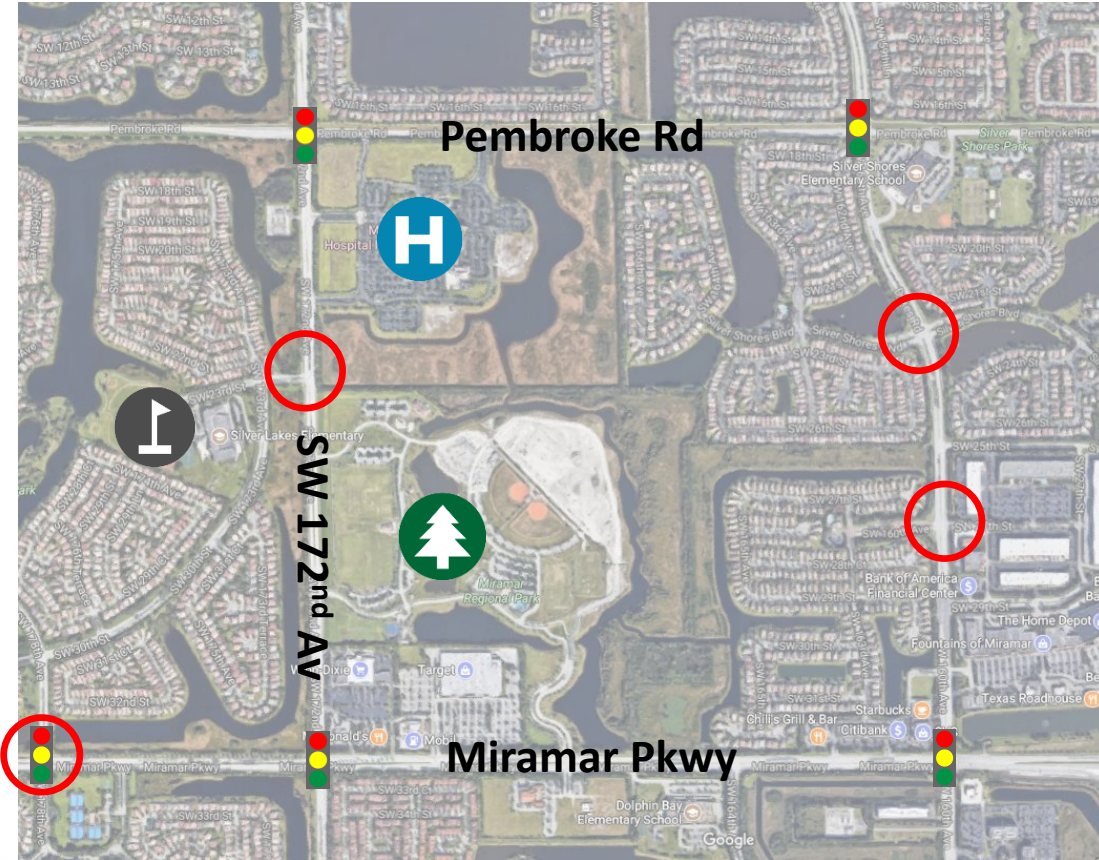
## High Demand Snap Shot

- Many hotspots correspond to **5 minute walk/bike shed**
- **Concentrating investments** in these areas = **highest potential impact on mode shift**
- Logic will guide recommendations





# High Demand Snap Shot - Miramar



- Limited neighborhood access
- Signalized crossings are more comfortable – but not all neighborhoods have them

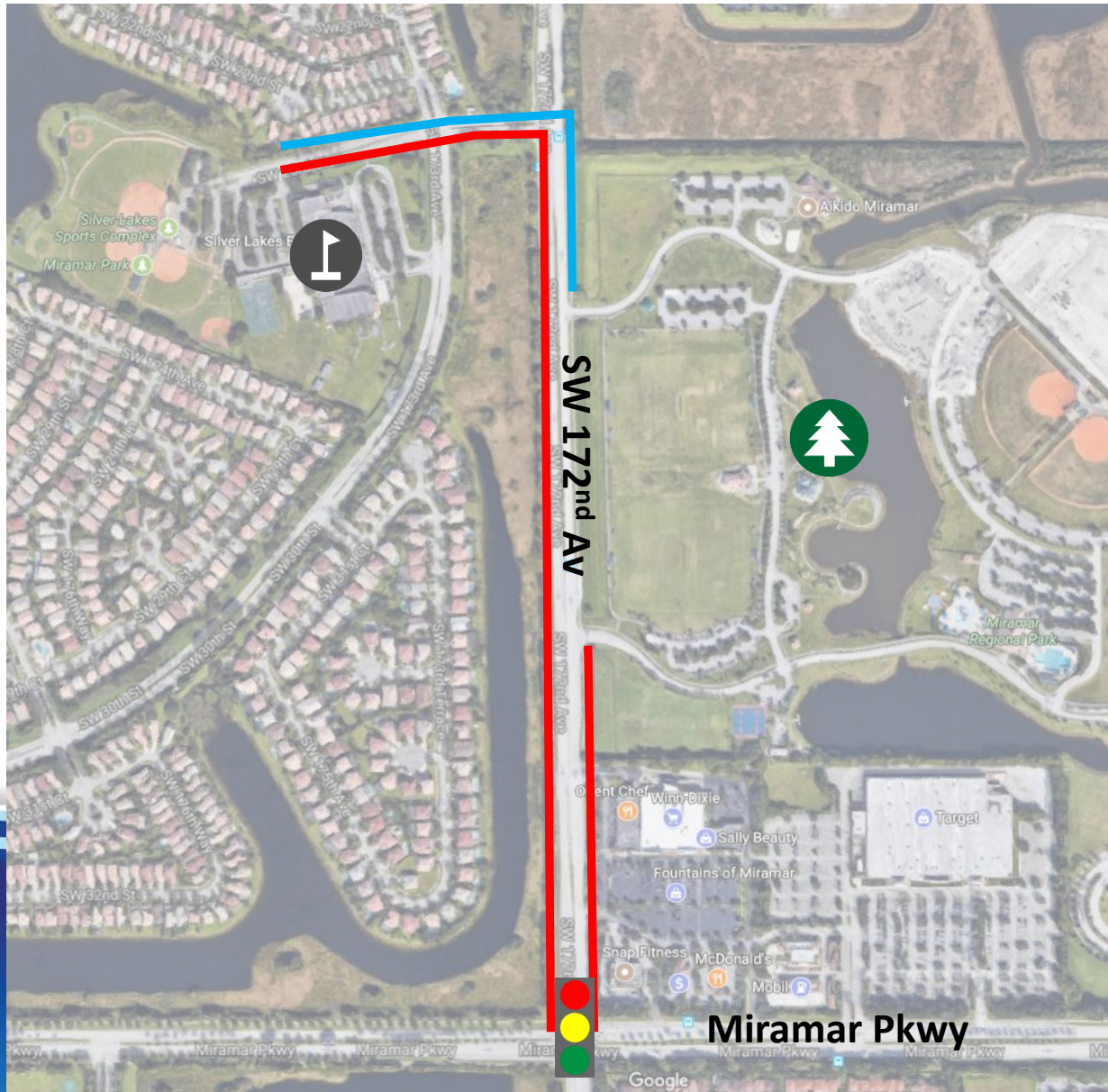
 Neighborhood Access to Arterial



Existing Traffic Signal



# High Demand Snap Shot - Miramar

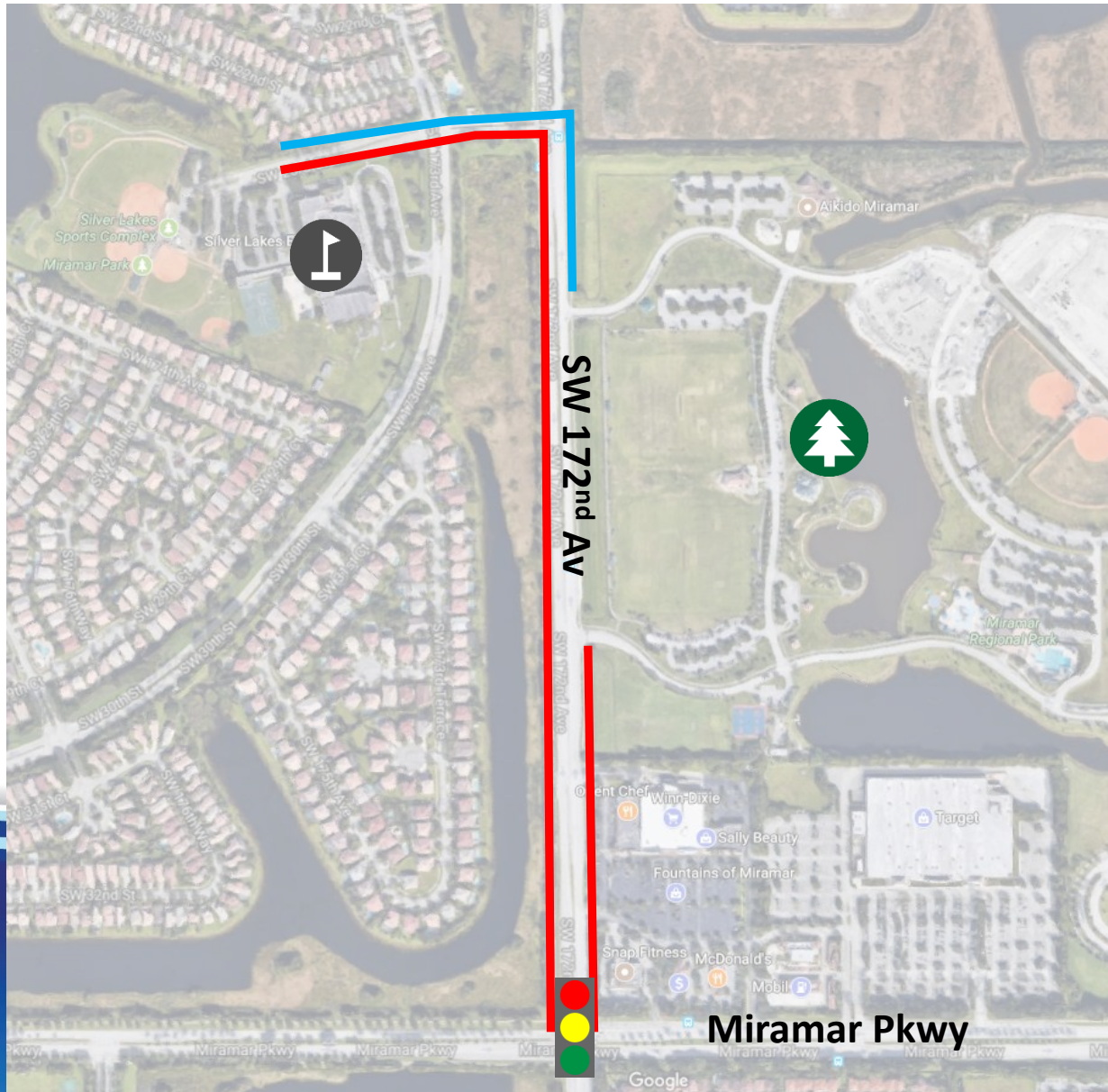


## School to Park

- Shortest route to park (that uses marked crossing) = **1 mile (20 minutes)**
- Shortest route (without marked crossing) = **.3 miles (5 minutes)**



# High Demand Snap Shot - Miramar



*What mode would you take with your kids today?*

# Equity Analysis

- Identifies areas with concentration of *historically vulnerable populations*
- These populations tend to *rely more on walking, bicycling and transit* for more trips
- Uses *six indicators*

## Equity Indicators

AGE



RACE



INCOME



EDUCATIONAL ATTAINMENT



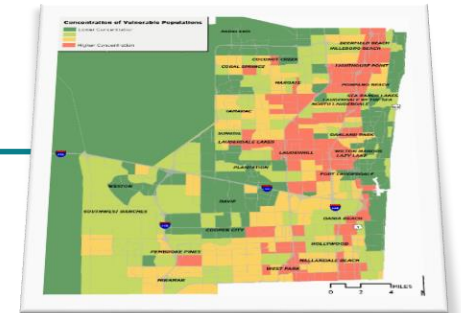
ENGLISH PROFICIENCY



VEHICLE ACCESS



## Composite Equity Map

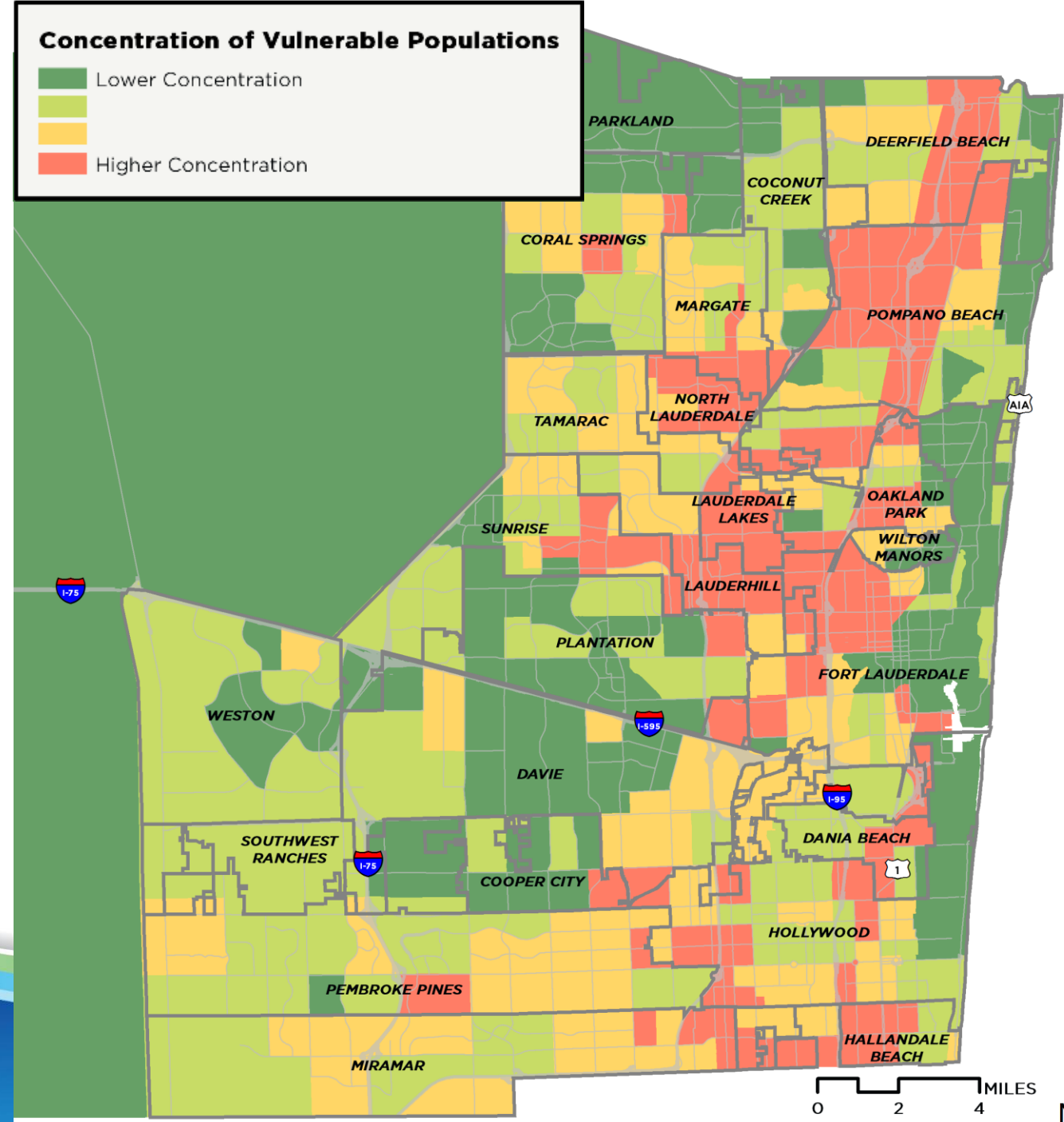




# Equity Analysis

## Composite Results

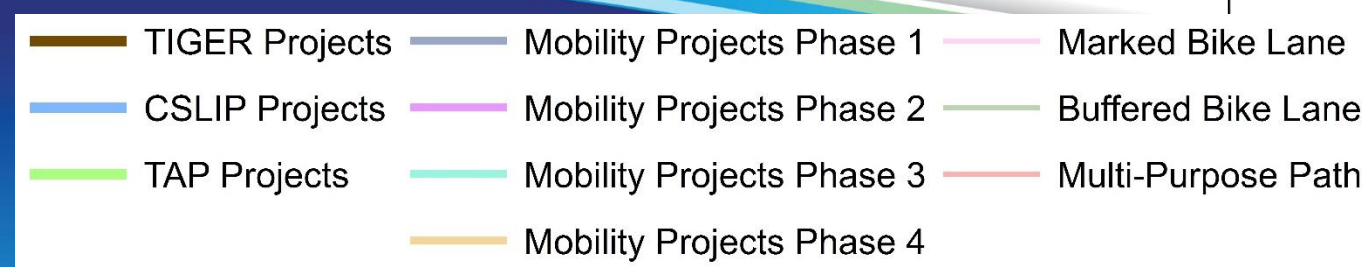
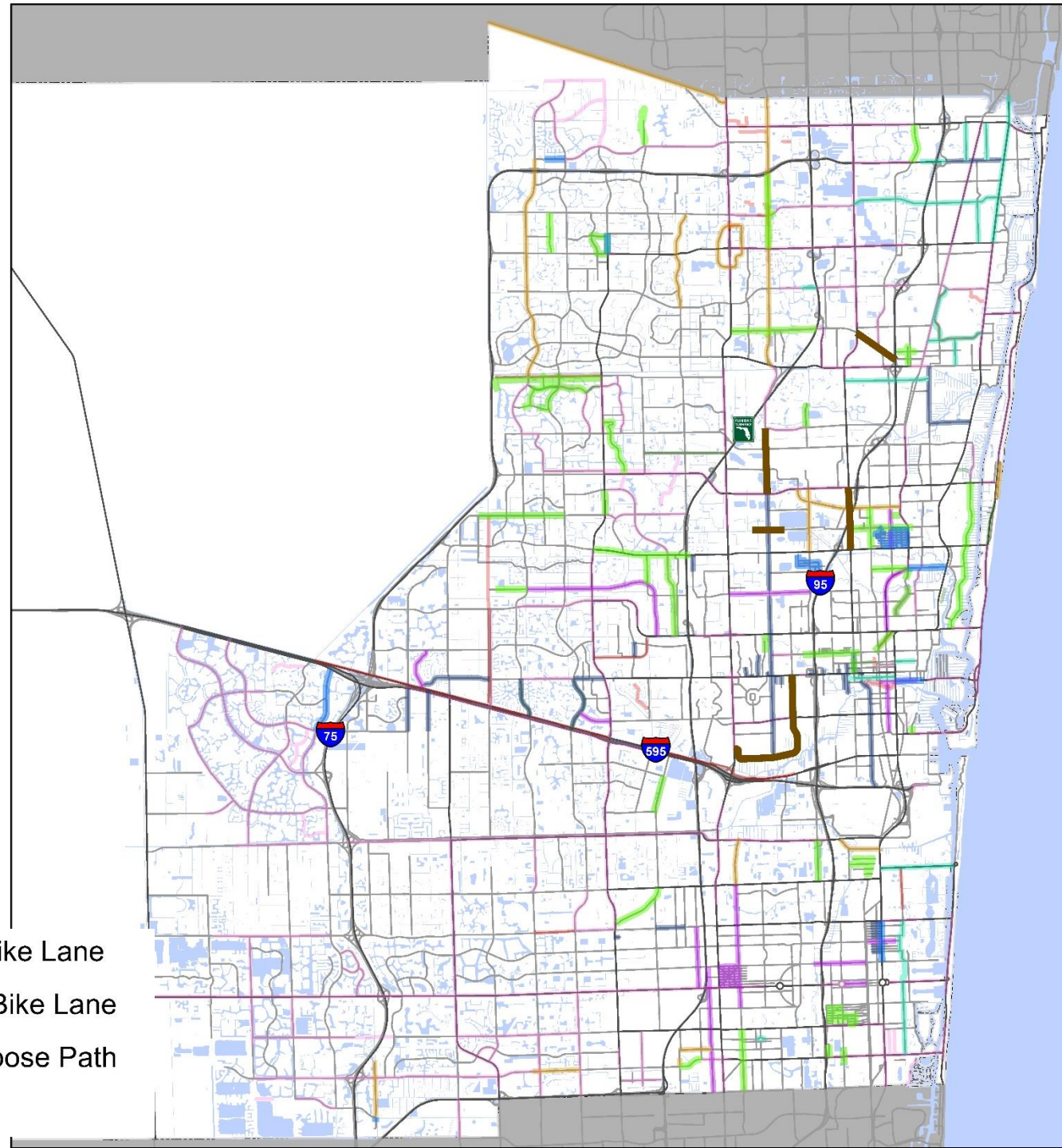
- 4-Tiered Scale
- Shows *concentrations of historically vulnerable populations*
- Identifies areas where more transportation investments may be needed



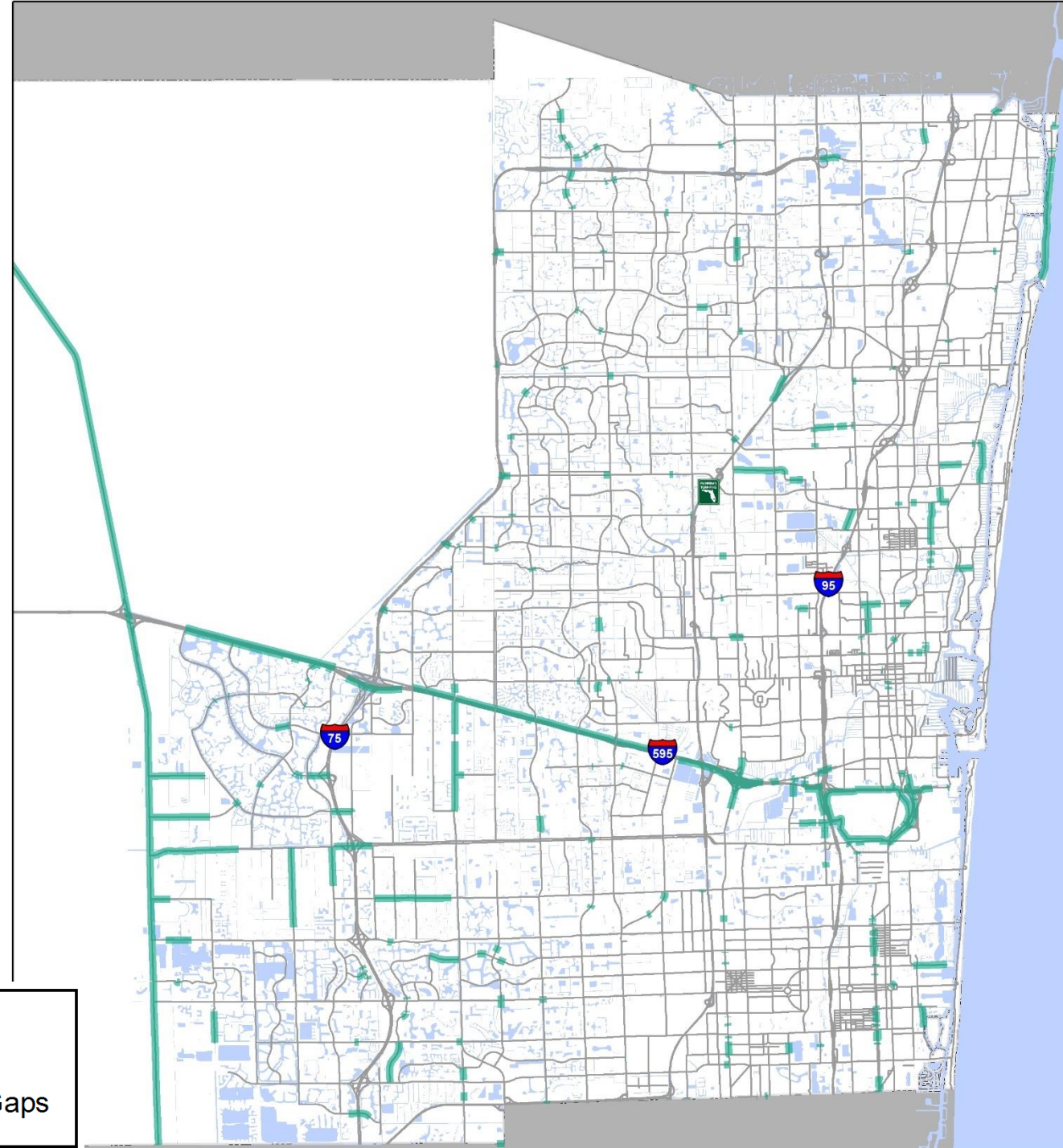


# Gap Analysis

- Building from existing facilities excluding...
  - Mobility Projects Phase 1 – 4
  - Transportation Alternatives Program (TAP) Projects
  - Complete Streets/Other Localized Initiative Program (CSLIP) Projects
  - Transportation Investment Generating Economic Recovery (TIGER) Projects



# Gap Analysis – Sidewalk Facility

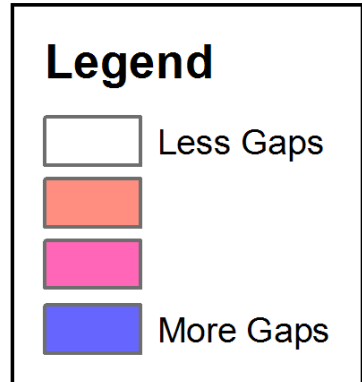
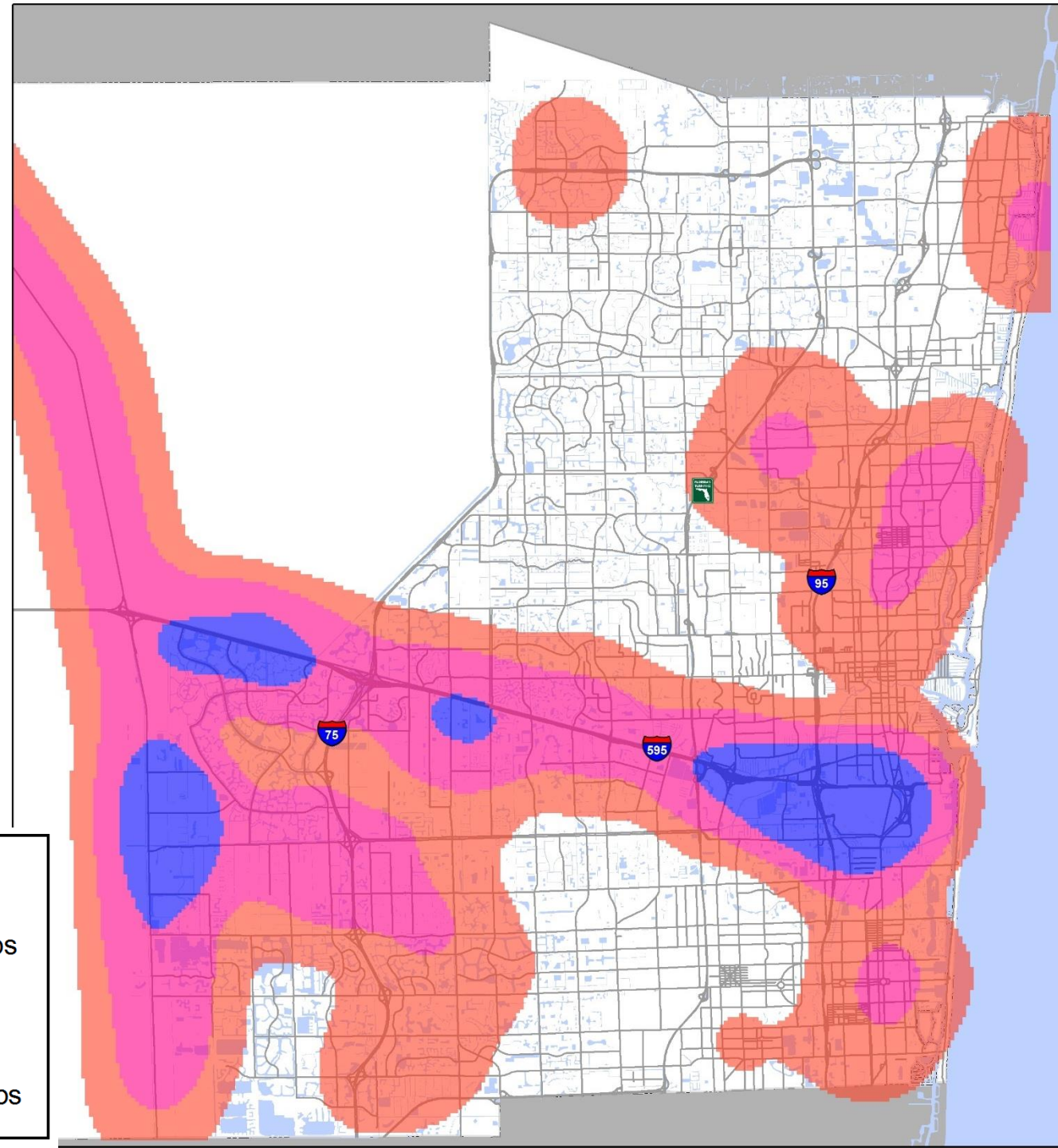


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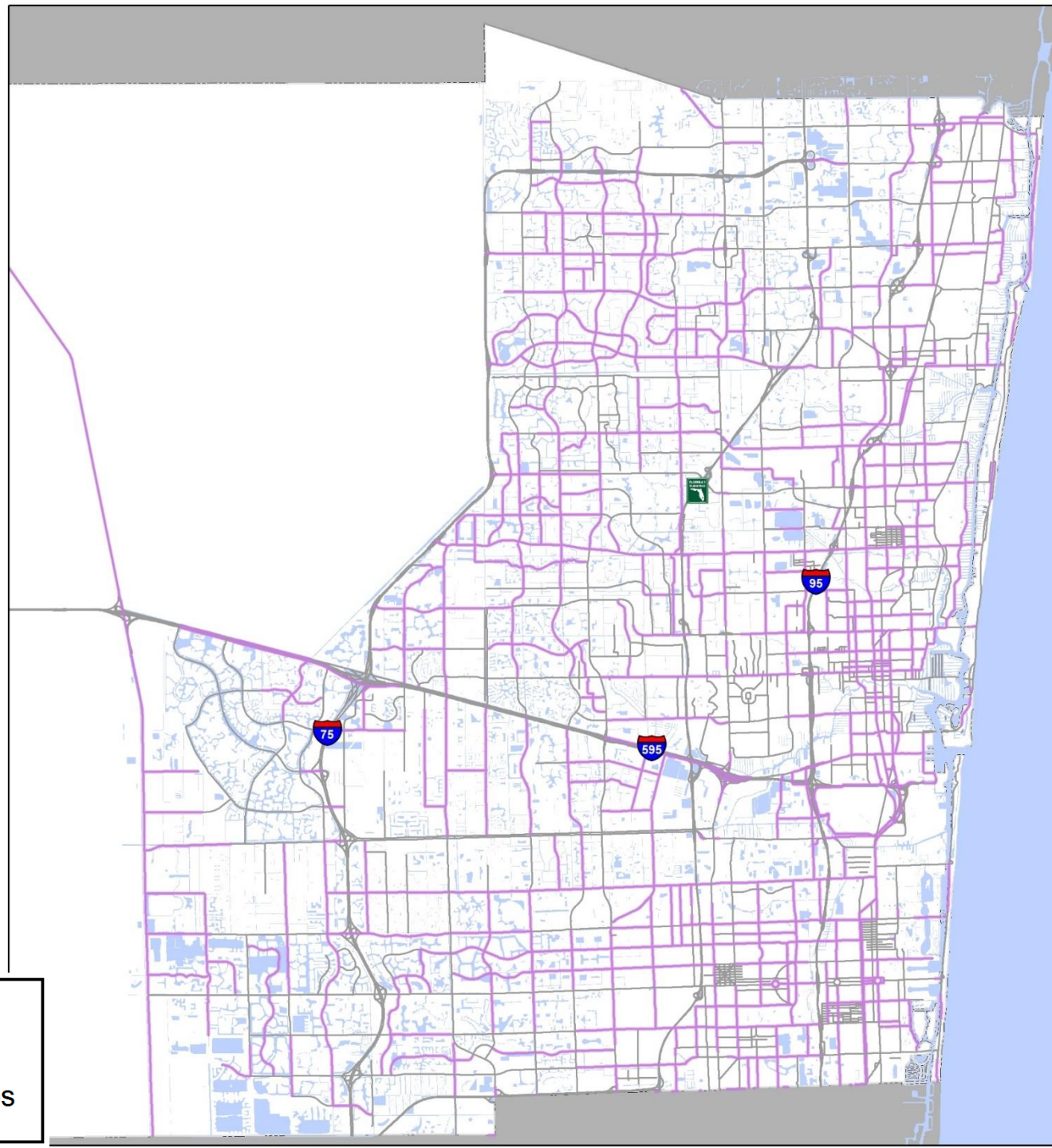
— Sidewalk Facility Gaps




# Gap Analysis – Sidewalk Facility



# Gap Analysis – Bike Facility

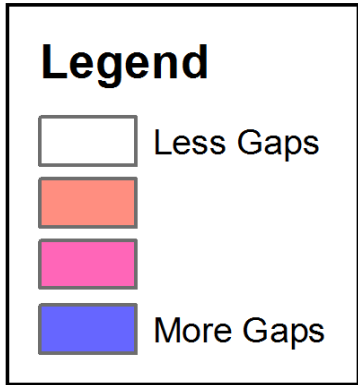
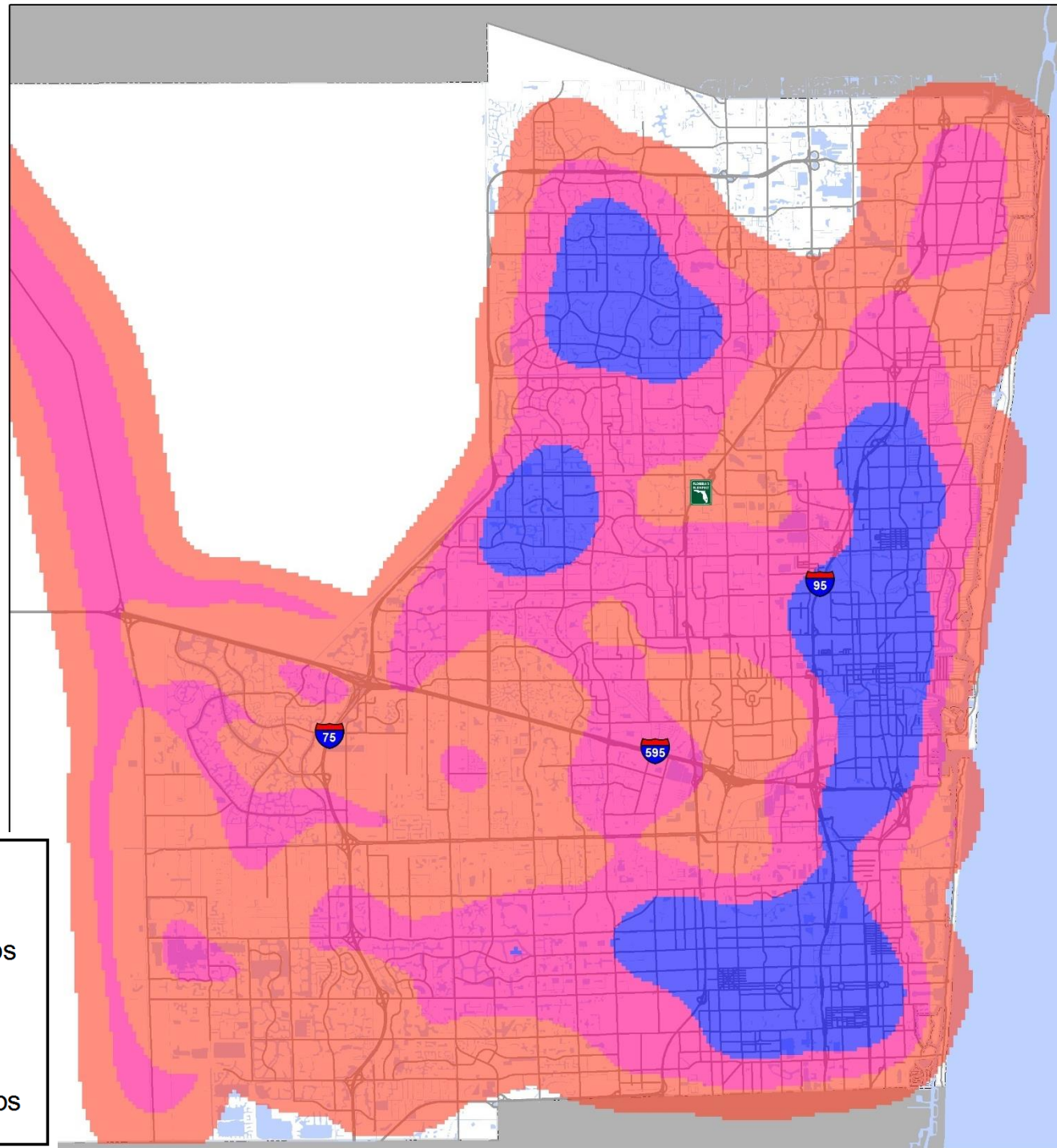


## Legend

 Bicycle Facility Gaps

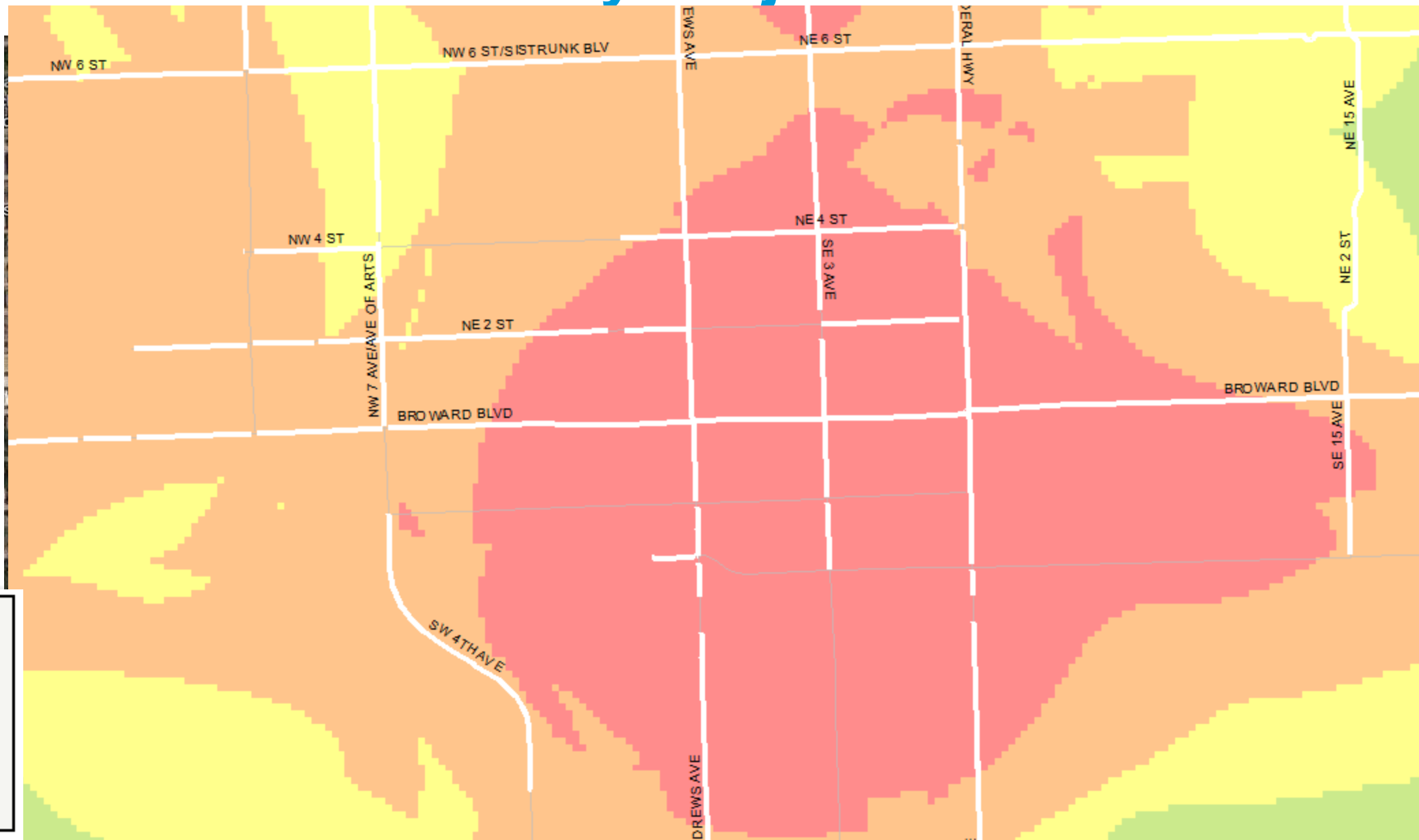


# Gap Analysis – Bike Facility





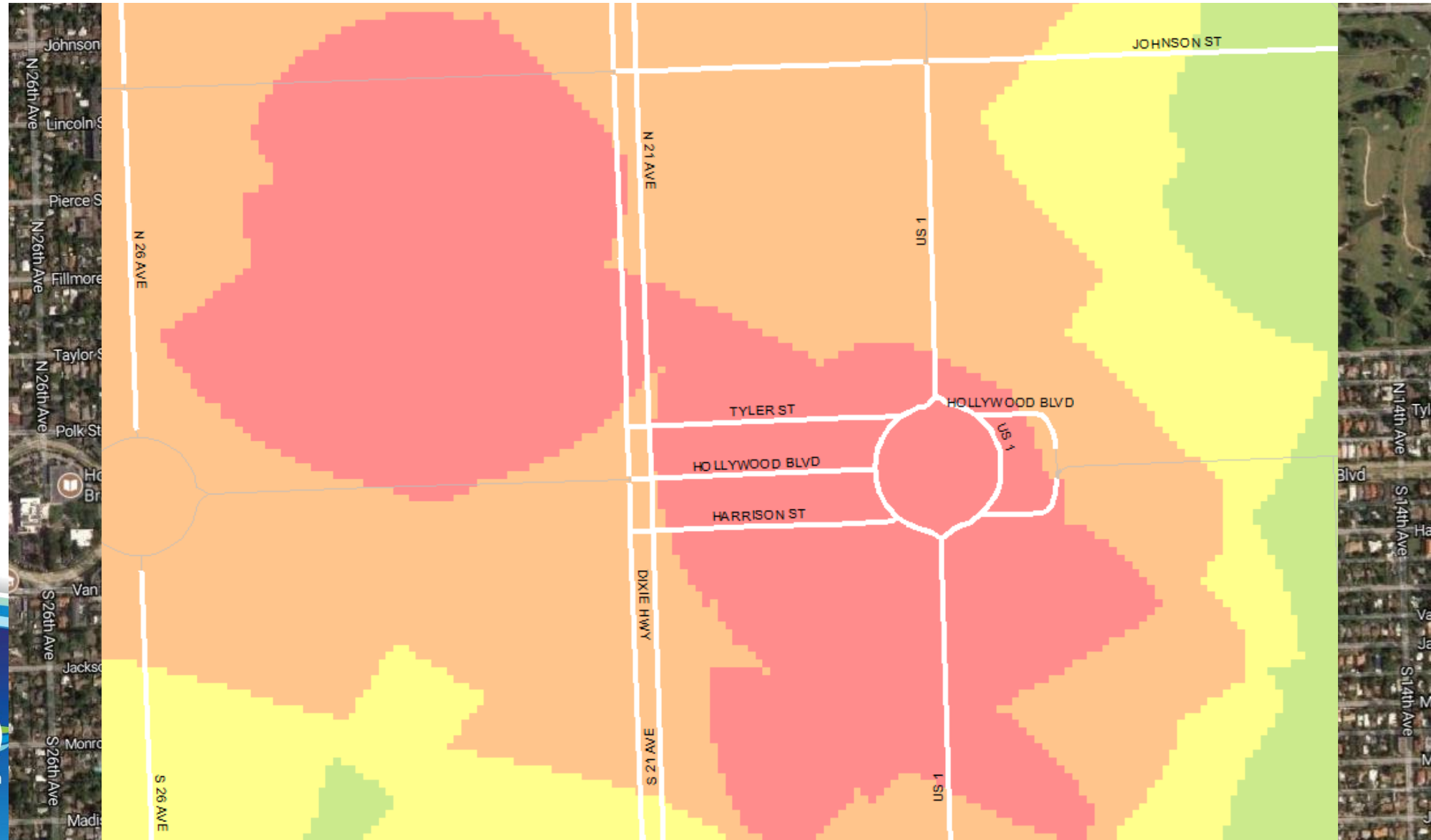
# Potential Areas for Mobility Projects



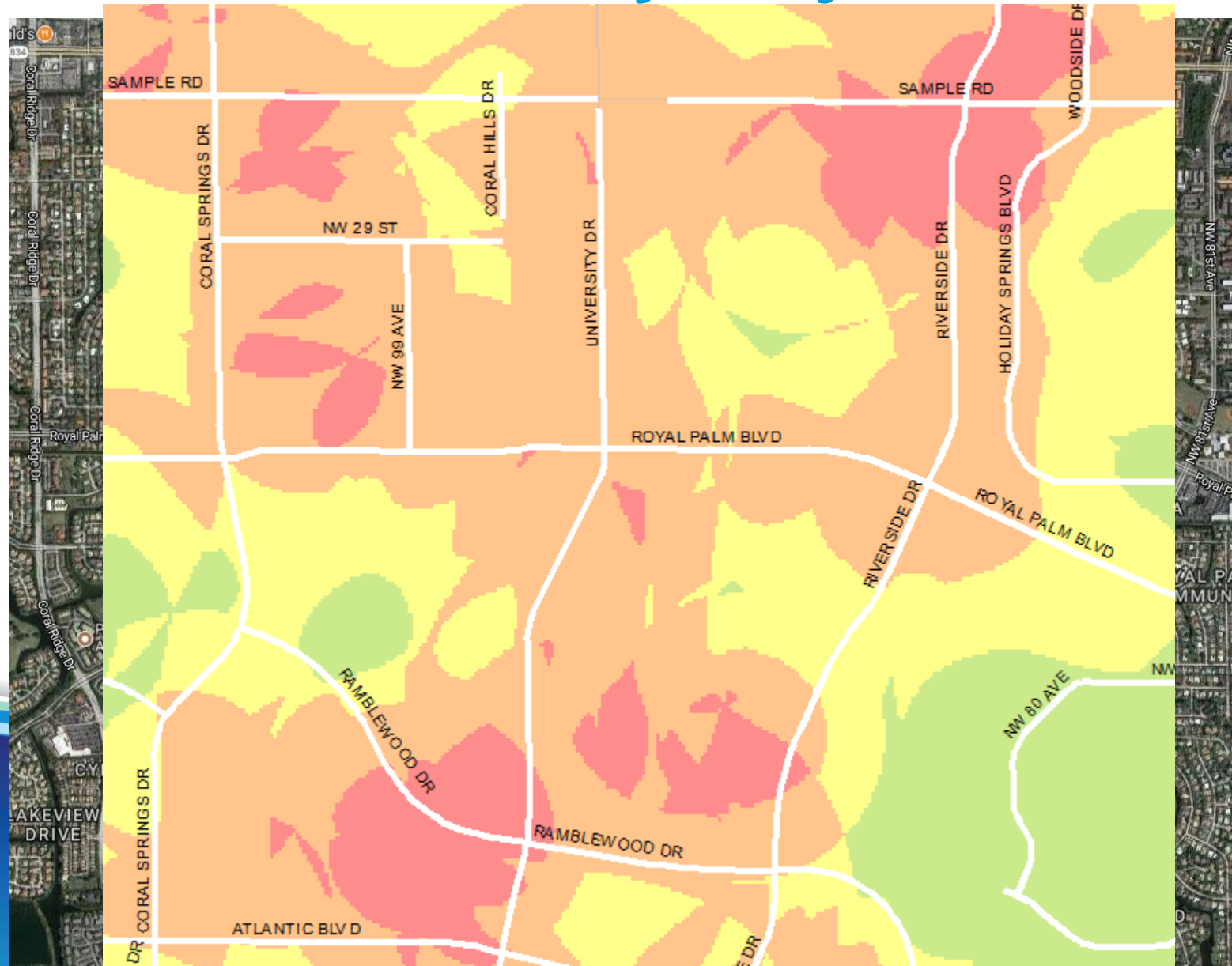
**Legend**

- Sidewalk/Bicycle Facility Gaps
- Higher Demand
- Medium Demand
- Low Demand
- Lower Demand

# Potential Areas for Mobility Projects



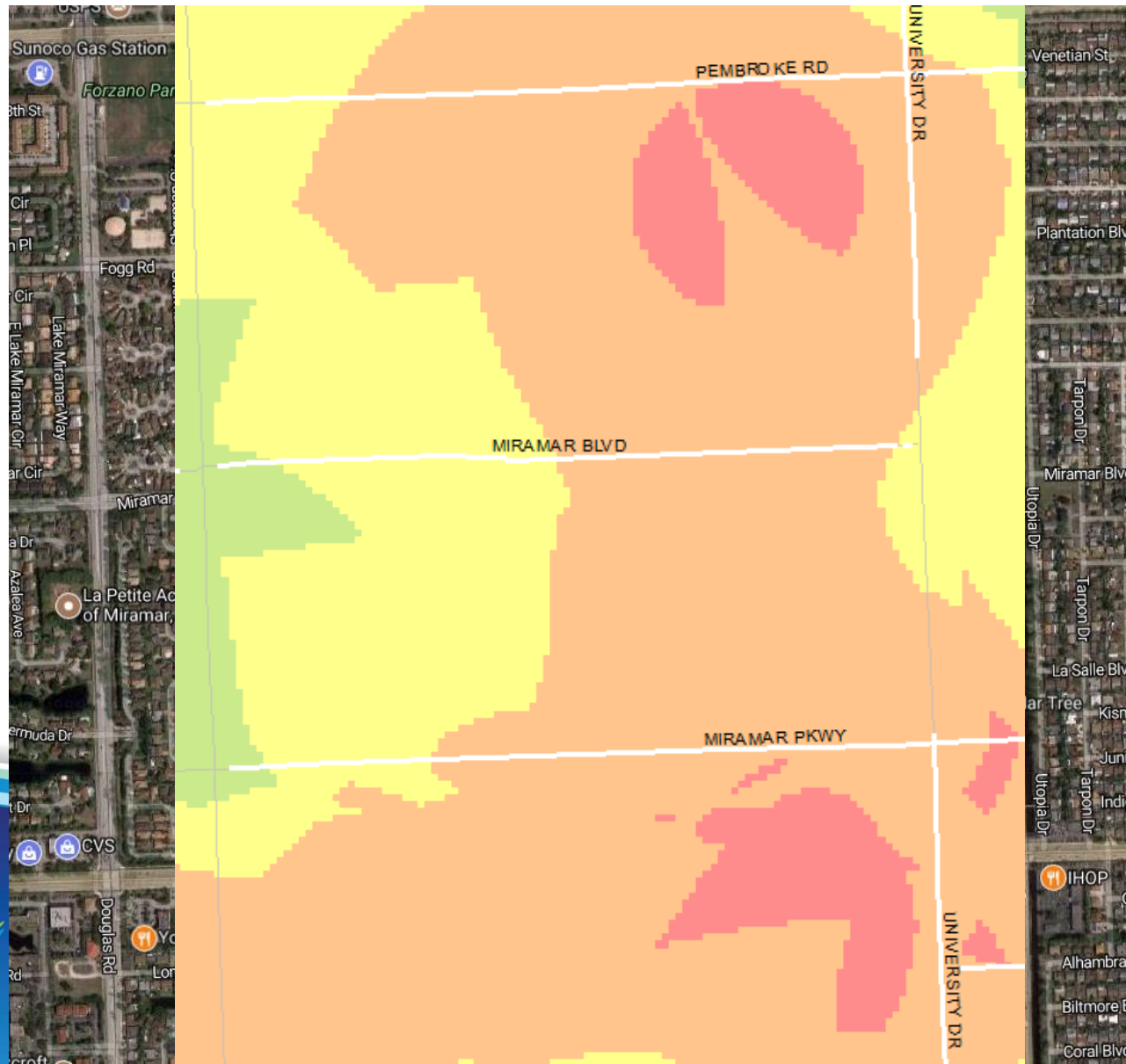
# Potential Areas for Mobility Projects



**Legend**

- Sidewalk/Bicycle Facility Gaps
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# Potential Areas for Mobility Projects

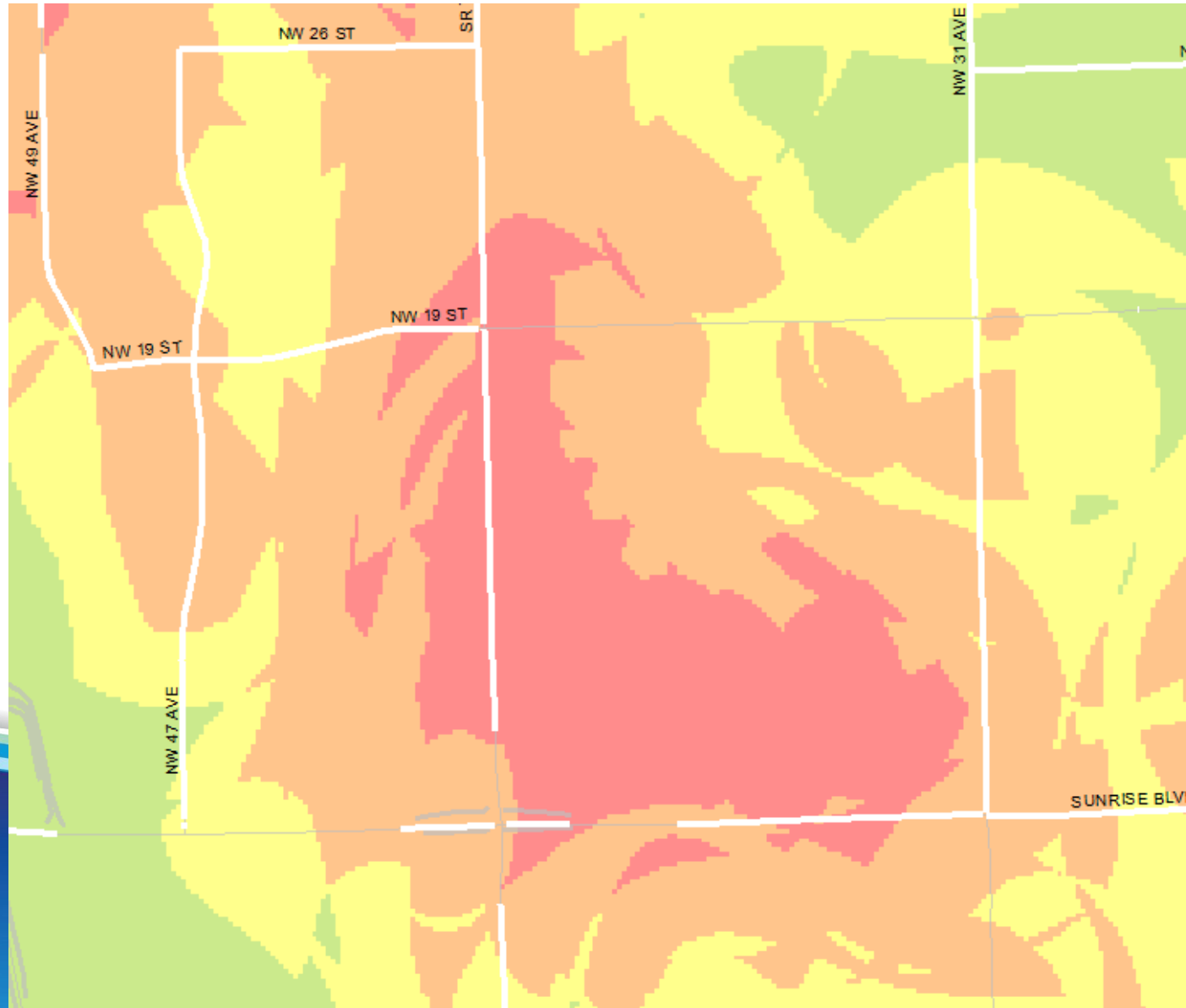


**Legend**

- Sidewalk/Bicycle Facility Gaps
- Higher Demand
- Medium Demand
- Low Demand
- Lower Demand



# Potential Areas for Mobility Projects



**Legend**

- Sidewalk/Bicycle Facility Gaps
- Higher Demand
- Medium Demand
- Lower Demand
- Very Low Demand

# Lane Elimination Coordination

- Planned Projects Overview
  - Reviewed CIPs, Comp Plans, Transportation Plans and others to identify potential Lane Elimination projects
  - Summary table by city of findings

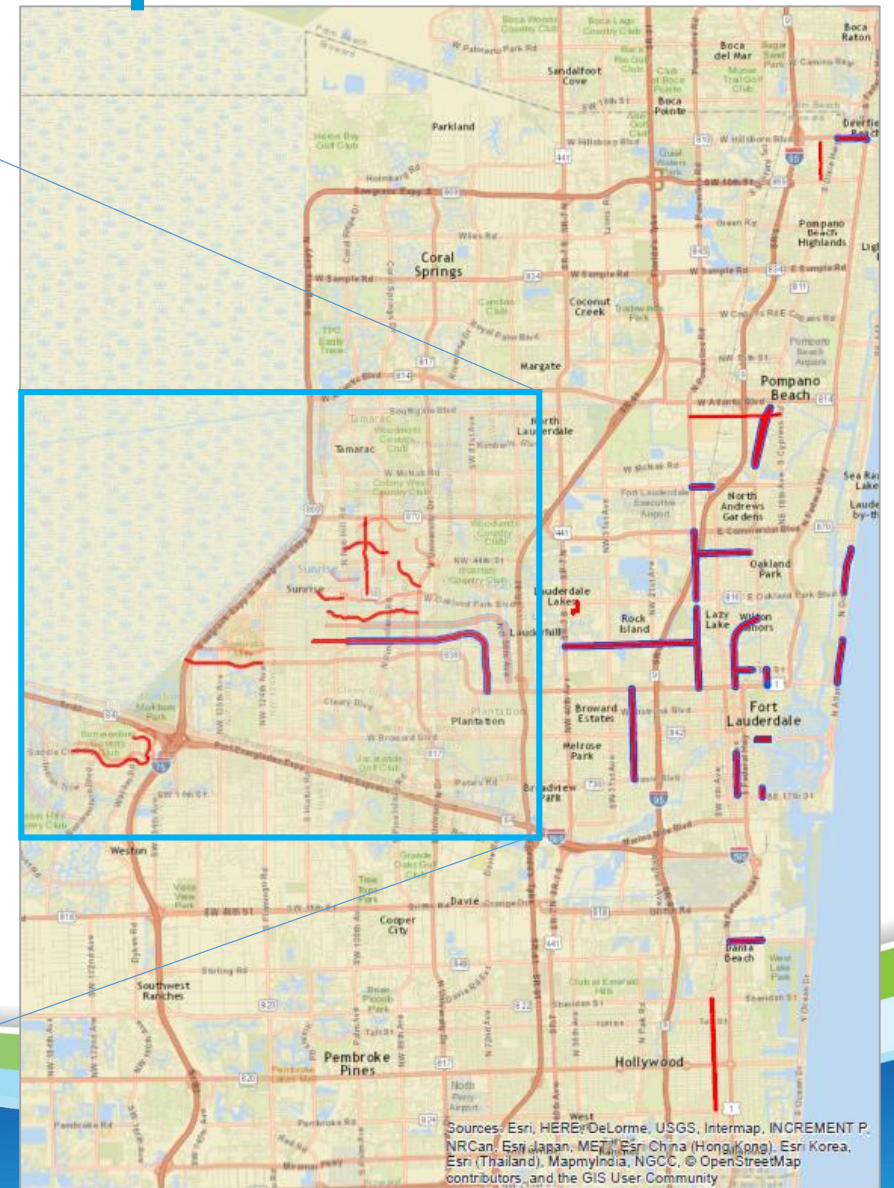
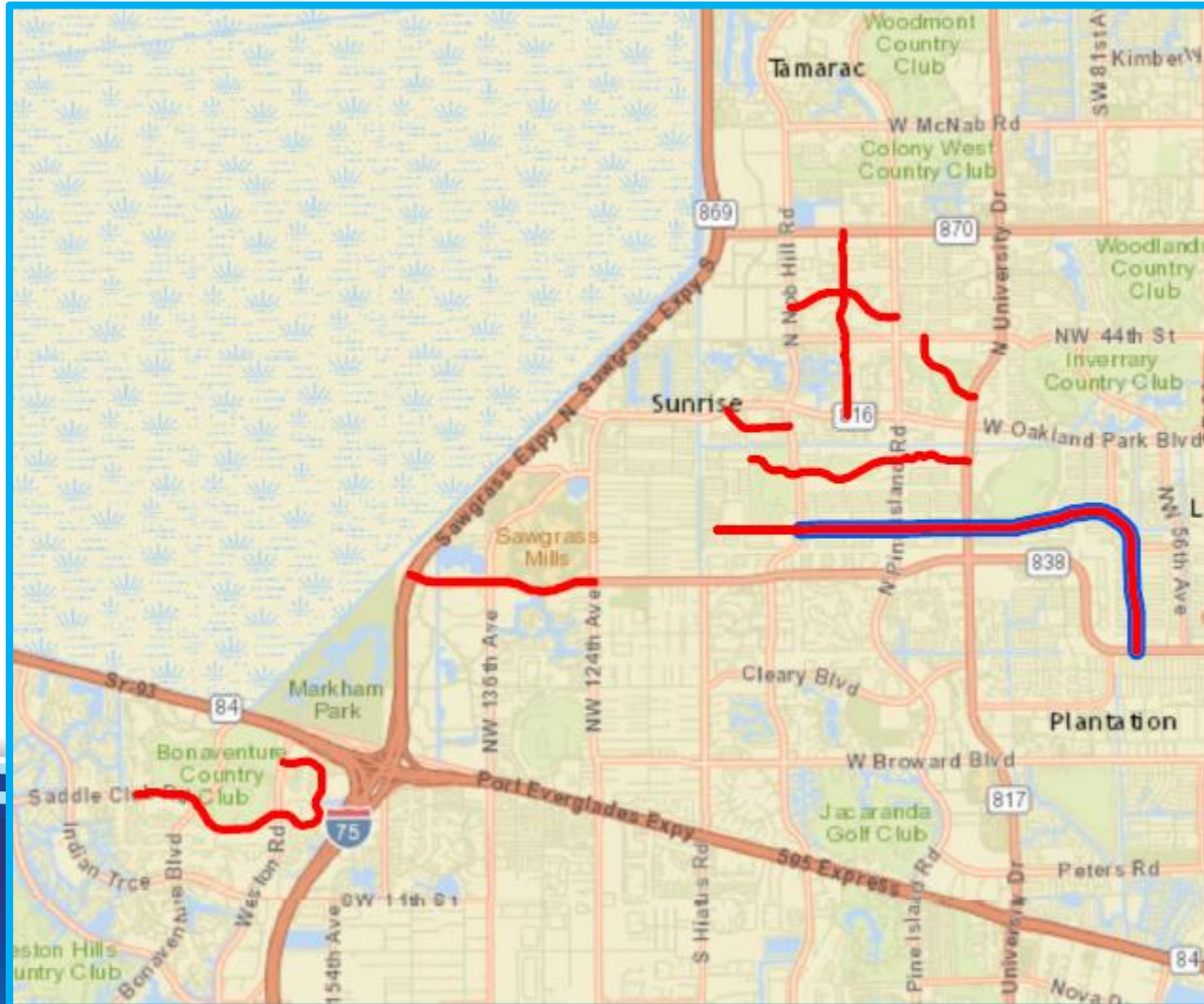


# Planned Projects Overview

Planned Lane Repurposing/Eliminations in Broward County							
City	Lane Elimination found in						Notes
	CIP*	Comp. Plan	Trans. Plan	Bike/Ped. Plan	Complete Sts. Plan	Other plans	
Broward County	No	No	No	-	No	-	Comp plan and Long Range Trans. Plan supports Complete Streets initiatives
Coconut Creek	No	No	-	-	-	No (Mainstreet Design Standards) No (Hillsboro Corridor Vision plan)	
Cooper City	No	No	No	-	-	-	
Coral Springs	No	No	-	-	-	No (Community Redevelopment Plan)	University Drive Complete Streets
Dania	No	No	No	No	No	-	
Davie	No	No	No	-	-	-	
Deerfield Beach	No	No	-	-	Yes	-	MLK and 3rd Ave. (SW 9th St. to SW 1 St.)
Fort Lauderdale	Yes	No	-	-	No	No (Downtown Master Plan) No (Vision Zero Plan)	Cordova Rd. (SE 15th St. to SW 17th St.); Vision Zero Plan supports lane elimination
Hallandale Beach	No	No	No	No	-	-	Complete Streets funding in CIP
Hillsboro Beach	-	No	-	-	-	-	
Lauderdale by the Sea	No	-	-	-	-	No (Strategic Plan)	
Lauderdale Lakes	-	No	No	-	No	Yes(Redevelopment plan)	NW 36th Terrace Road Diet
Lauderhill	No	-	-	-	-	-	
Lazy Lake	-	-	-	-	-	-	
Lighthouse Point	No	No	-	-	-	-	
Margate	No	-	-	-	-	No (Redevelopment Plan) No (SR7 Corridor Master Plan)	Transit Oriented Corridor-City Center proposed improvements on Melalueca Drive (Atlantic Blvd. to NW 9th Ct.) and SR7 (entire corridor)
Miramar	No	No	-	-	No	No	Historic Miramar Complete Streets projects
North Lauderdale	No	-	-	-	-	No	
Oakland Park	No	No	-	No	No	-	Bike/Ped Plan 2017 in production
Parkland	No	No	-	-	-	-	
Pembroke Park	No	-	-	-	-	-	
Pembroke Pines	No	No	-	-	-	No (Green Plan)	
Plantation	No	No	-	-	-	-	
Pompano Beach	No	No	-	No	No	No (Downtown Pompano Connectivity Plan)	MLK Blvd. Complete Streets
Sea Ranch Lakes	-	-	-	-	-	-	
Sunrise	Yes	No	-	Yes	-	-	Sunset Strip SW 64 St. (Sunrise Blvd. to Nob Hill Rd. and NW 19th St. to NW 72 Ave.); Springtree Lakes Dr./NW 49 St. (Nob Hill Rd. to Pine Island Rd.) ; NW 94th Ave. (Oakland Park Blvd. to Commercial Blvd.); Springtree Dr (NW 44th St. to University Drive); Joshlee Blvd. /NW 33rd St. (Oakland Park Blvd. to Nob Hill Rd.); Sunrise Lakes Blvd. (NW 105th Lane to University Drive); Sunrise Blvd. (Sawgrass Expressway Trail to Flamingo Rd.); New River Circle (Weston Rd. to Weston Rd.)
SW Ranches	No	No	-	-	-	-	
Tamarac	No	-	-	-	-	No (Parks Plan)	Complete Streets proposed in Parks Plan
West Park	No	-	-	-	-	-	Kimley-Horn Traffic Calming Study; SR7 Transit Oriented Corridor
Weston	No	-	-	Yes	-	-	Saddle Club Road Road Diet (Lakeview Drive to Weston Road)
Wilton Manors	No	No	-	-	No	-	NE 26th St. Complete Streets design in CIP; Complete Streets proposed on Powerline Rd., Andrews Ave., Dixie Hwy., Wilton Dr.; Transit Oriented Corridor proposed on Oakland Park Blvd. and Andrews Ave.

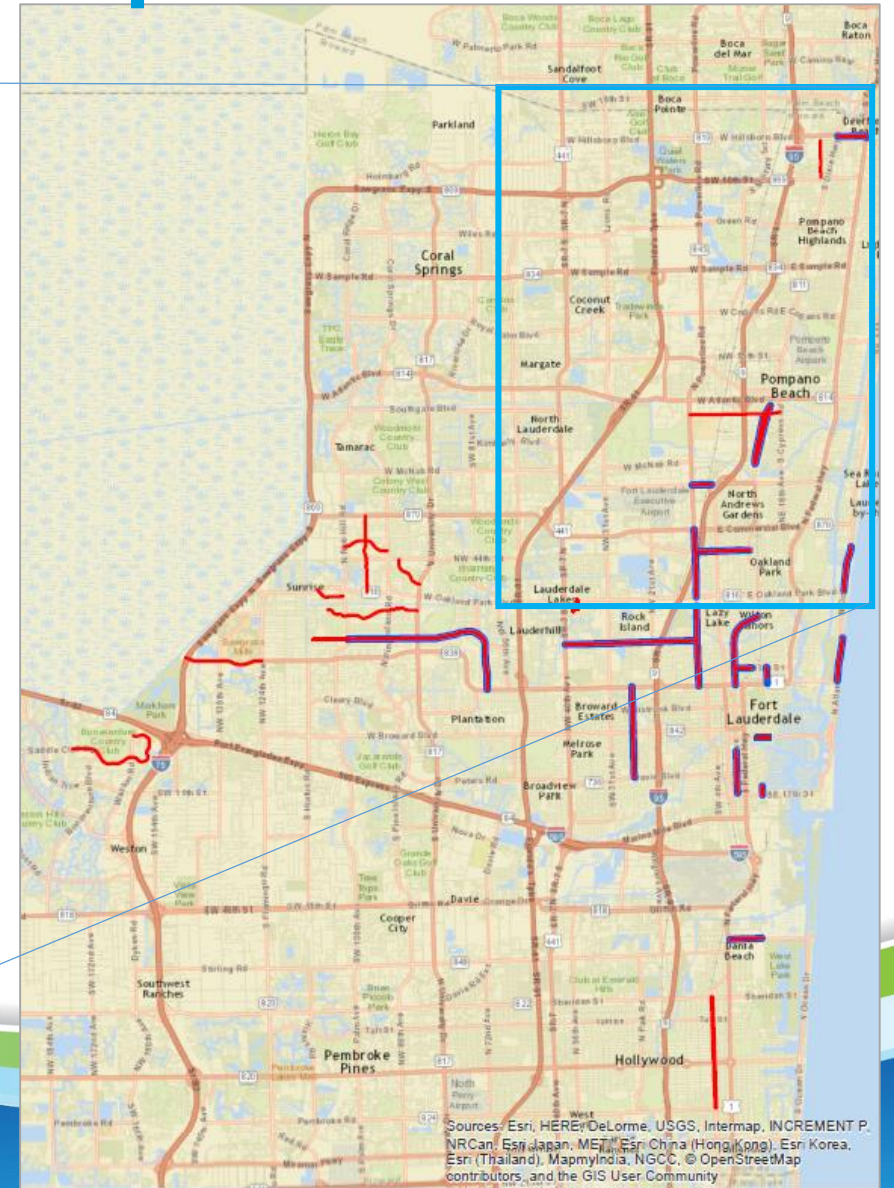
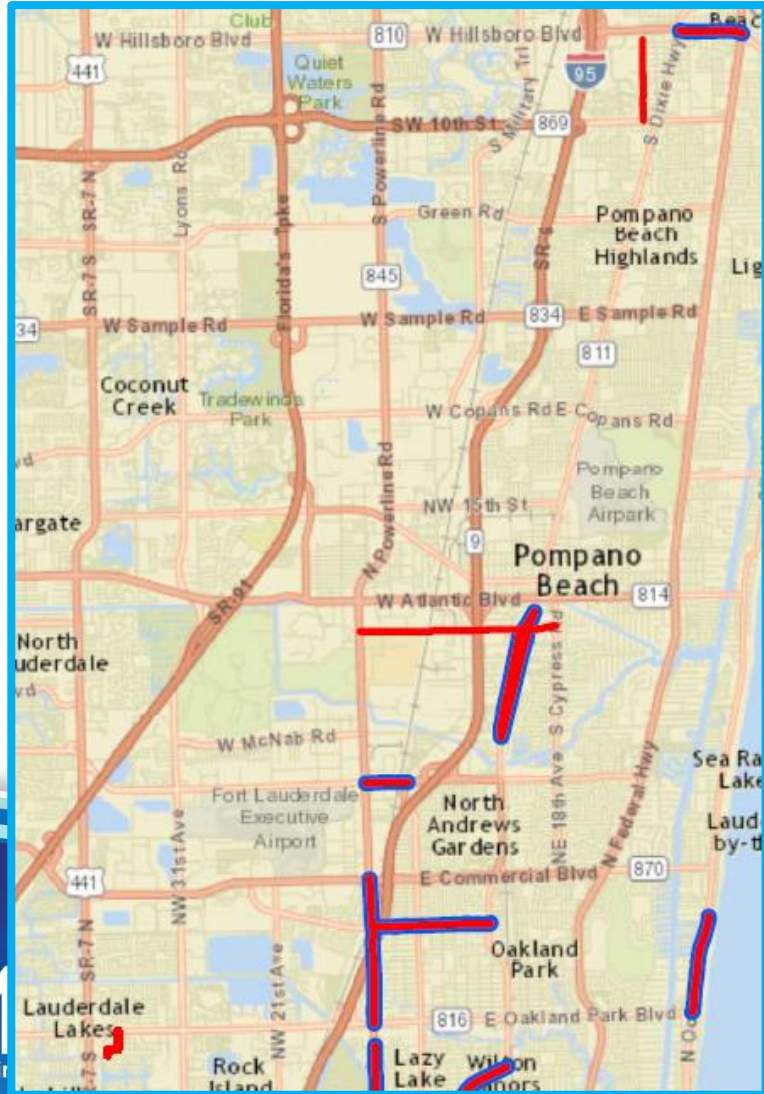
\* - Projects identified in CIP means planned projects are funded

# Planned Projects Overview Map Update



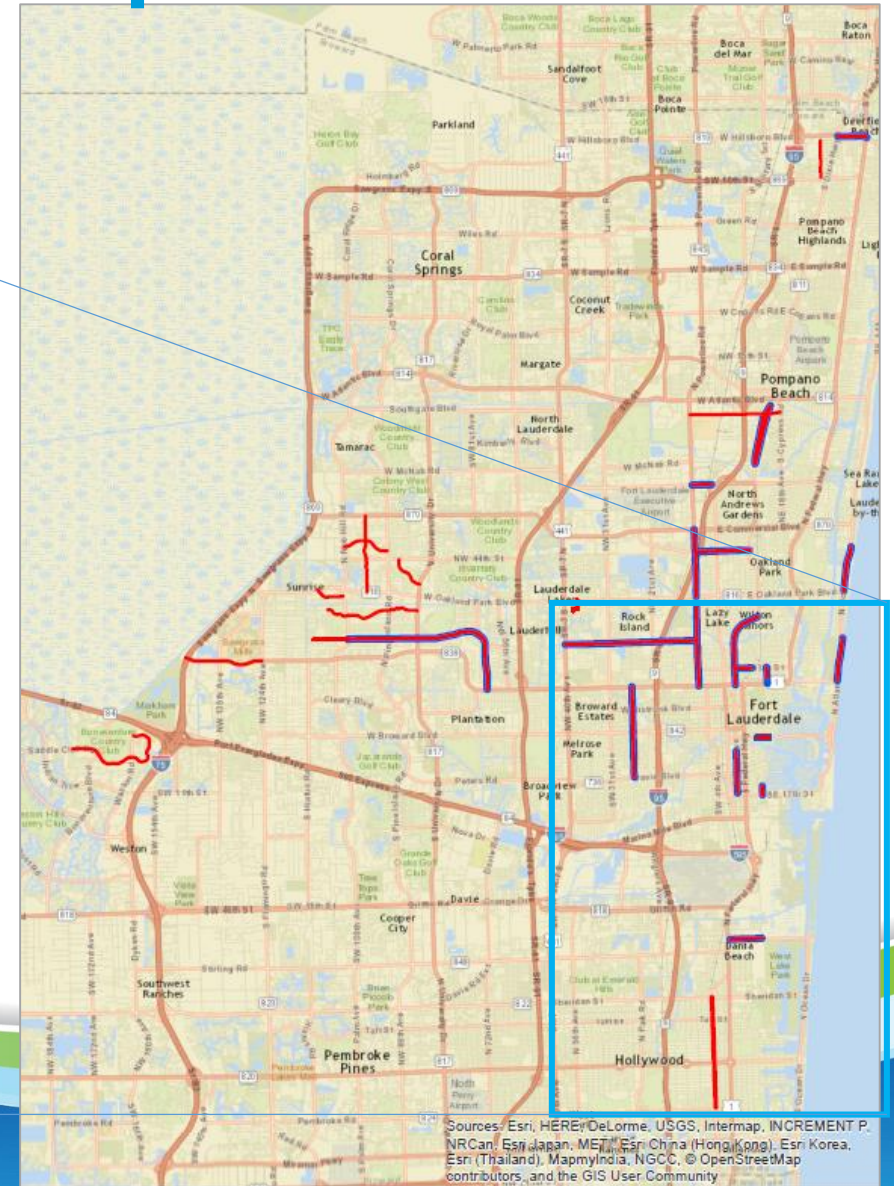
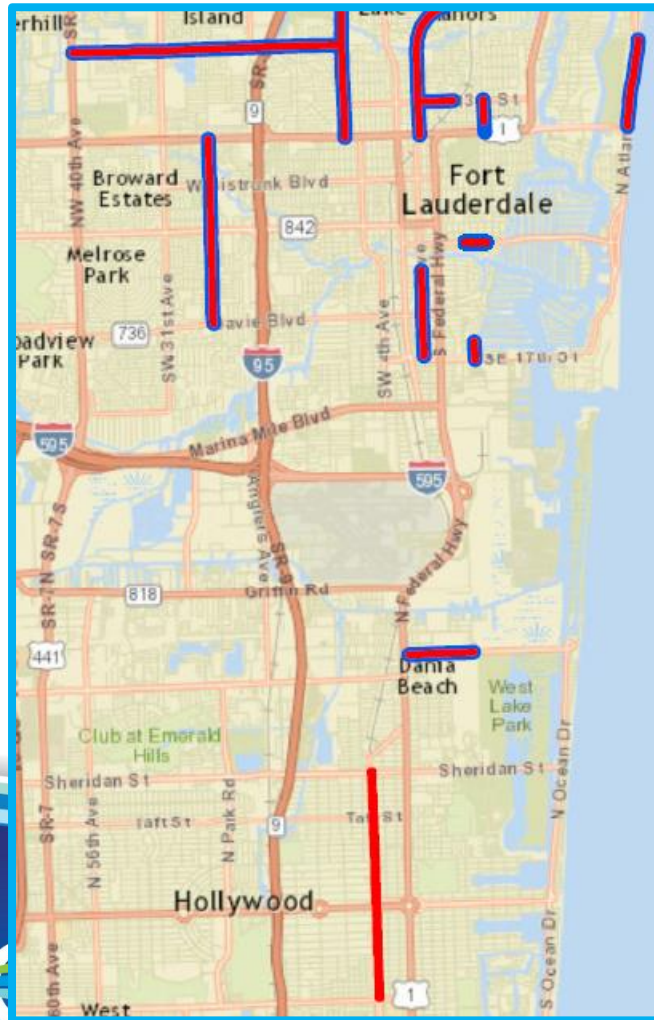


# Planned Projects Overview Map Update





# Planned Projects Overview Map Update



# Lane Elimination Coordination

- COORDINATION ENTITIES
  - MPO
  - FDOT
  - Broward County Traffic Engineering
  - Broward County Transit
  - Broward County Schools
  - Neighboring Cities
  - Local Emergency Services

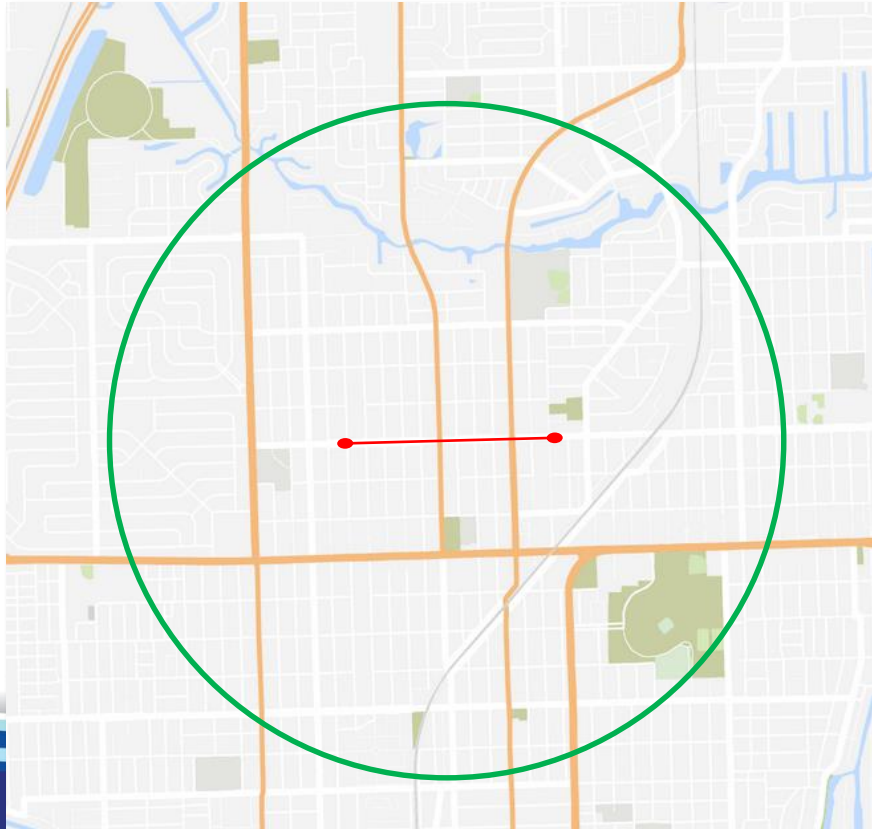


# Lane Elimination Coordination

Any Proposed Lane Elimination should encompass a review of the following potential impacts in close proximity to the proposed project:

- Planned Projects
- Street Network Impacts
- Planning Impacts

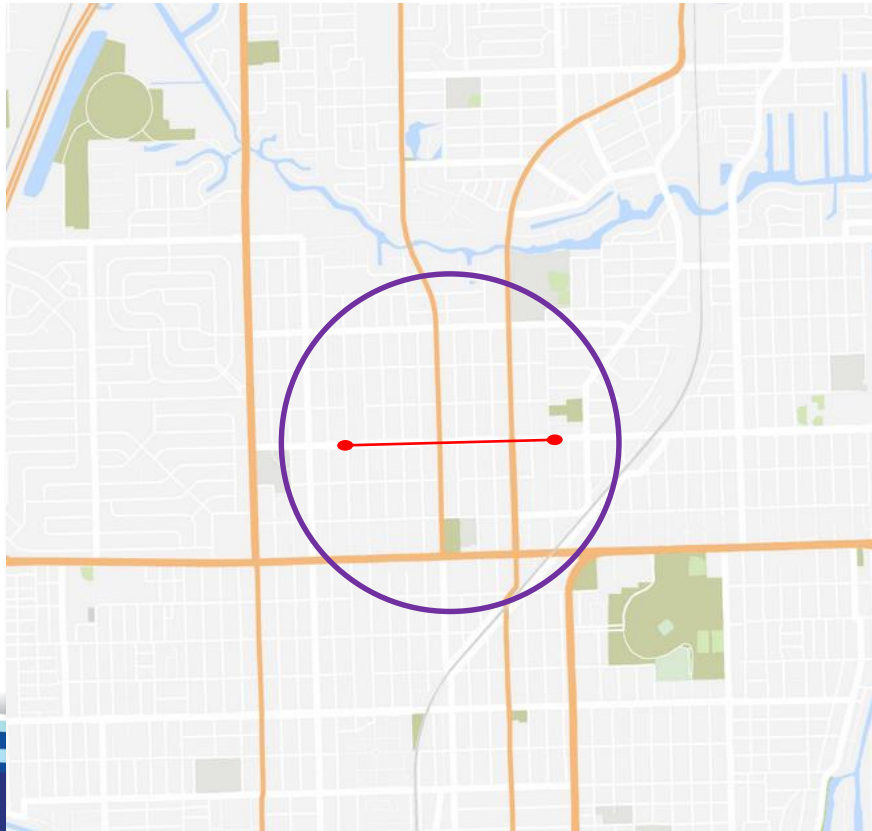
# Lane Elimination Coordination Proximity Review



Within 1 Mile:

- Other Lane Elimination Projects
- FDOT roadway projects
- MPO roadway projects
- Planned developments
- Projects in the current CIP that may create street network impact

# Lane Elimination Coordination Proximity Review



## Within ½ Mile

- Planned or ongoing traffic calming studies
- Planned access management changes
- Bus stops
- Projects in TDP
- One-way streets
- Existing traffic calming



# Lane Elimination Coordination

## LE Status for Tracking

	On FDOT Roads		On Non-FDOT Roads		Active/Inactive
	FDOT LE Status	Definition	MPO/Local LE Project Status	Definition	
	<b>Under Consideration</b>	The project is in early stages of consideration, but no official study has begun. The project is not yet in the FDOT LE review process.	<b>Under Consideration</b>	The project is in early stages of consideration, but no official study has begun	Active
	<b>Planned</b>	The project is in early stages of consideration, possibly with a study underway. <b>FDOT Step 1 Initial Meeting has taken place</b>	<b>Planned</b>	The project is in early stages of consideration, possibly with a study underway	Active
	<b>Under Review</b>	An LE request and concept report have been submitted to FDOT and the LE is being reviewed by FDOT. <b>FDOT Step 2 Interim Meeting and Concept Report are complete</b>	<b>In Coordination</b>	Currently in MPO/Local LE Coordination Process	Active
	<b>Approved</b>	LE request has been reviewed by FDOT and is approved, but no project has been programmed yet. <b>FDOT Step 3 Final Review is complete and the LE was approved</b>	<b>Approved</b>	Completed MPO LE Coordination Process and is approved	Active
	<b>Programmed</b>	LE is approved and funds have been allocated for the design and/or construction of the project	<b>Funded</b>	Project has been planned, coordinated, approved and a funding source has been identified for the entire project	Active
All LE Projects	<b>Design</b>	The project is currently being designed		Active	
	<b>Under Construction</b>	The project is currently being constructed		Active	
	<b>Construction Complete</b>	Project has been constructed and finalized		Inactive	
	<b>Withdrawn</b>	The project was once under consideration and has been temporarily withdrawn from consideration		Inactive	
	<b>Cancelled</b>	The project was once under consideration and has been permanently withdrawn from consideration		Inactive	

# Lane Elimination Coordination – Next Steps

- Finalize nomenclature for Lane Elimination status (between FDOT and MPO)
- Update Lane Elimination Database with newly identified projects and their status
- Prepare model run showing countywide impacts to currently known Lane Elimination projects



# BROWARD

## COMPLETE STREETS

## MASTER PLAN

Better Streets • Better Communities • Better Broward



# Outreach Strategies Update

- High-Tech
  - Website: BetterBroward.org
  - Instant Polling Technology and Digital Input Mapping
    - Eg. <http://touchbroward.org/hcz/srb/submit-an-issue/>
  - Web-based Communication Through Social Media
  - eTown Hall Meeting

# Sample Social Media Post



Kids are more active when walking & biking are safe.  
What areas of Broward do you want to see safer streets in? Take our Survey toward a #BetterBroward  
<Link here>

# Outreach Strategies Update

- High-Touch
  - Focus Groups
  - One-on-One Interaction
  - Viewing Parties of eTown Hall Meeting



# Focus Group #1: Broward Municipal Services District

- October
- Community Member Led
- Leveraging:
  - Safer Paths to Safer Places
  - Walking School Bus
  - Past Complete Streets Community Input Efforts
  - Healthy Community Zone



# Focus Group #2: City of Lauderdale Lakes

- October
- Community Member Led
- English and Haitian-Creole
- Leveraging Current Efforts
  - Pedestrian Safety WorkGroup
  - Safe Routes Broward
  - Healthy Community Zone
  - Walk to School Day



# Public Involvement Plan Discussion



# Next Steps...

- Continue Inter-agency Coordination through PAC
- Develop Project Prioritization
- Refine Needs and Projects

