

SR 7 MULTIMODAL IMPROVEMENTS CORRIDOR STUDY

Project Advisory Committee Meeting #4

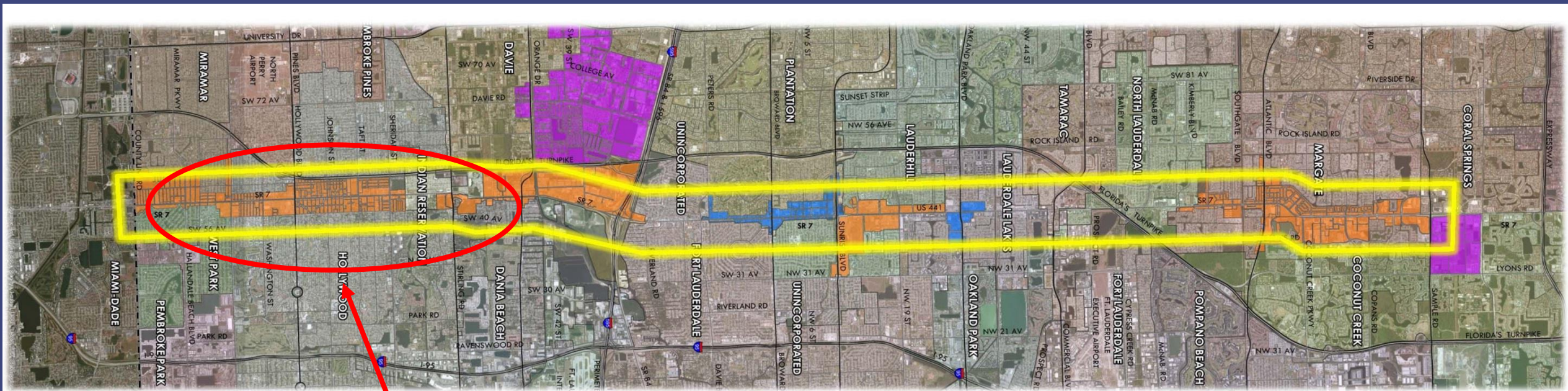


January 19, 2016

- Baseline conditions
- Hot spot safety and operational reviews
- Short term improvement concepts
- Bike/pedestrian network gaps and candidate projects
- Public outreach status report
- Upcoming meetings/next steps

Baseline Conditions— Study Area

- South of Miami-Dade county line to north of Sample Road
- Approximately 1/2 Mile on either side of SR 7 (or logical extents)
- Includes consideration of operations at Golden Glades Intermodal Center



Ongoing FDOT reconstruction project to six-lane SR 7 (Stirling Road to SW 26th Street)

Baseline Conditions— Overview

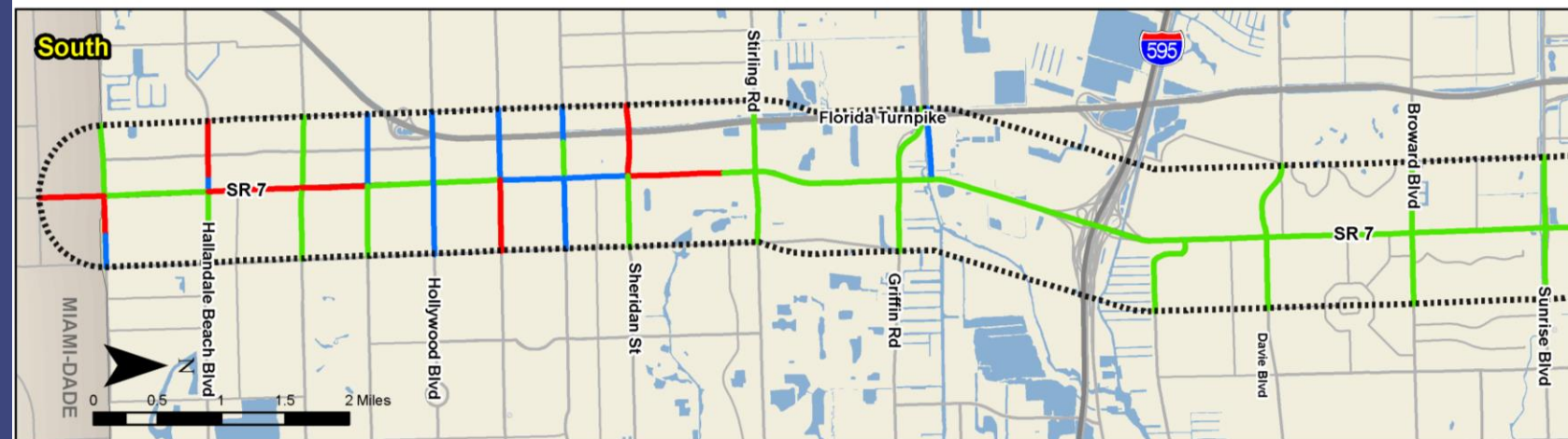
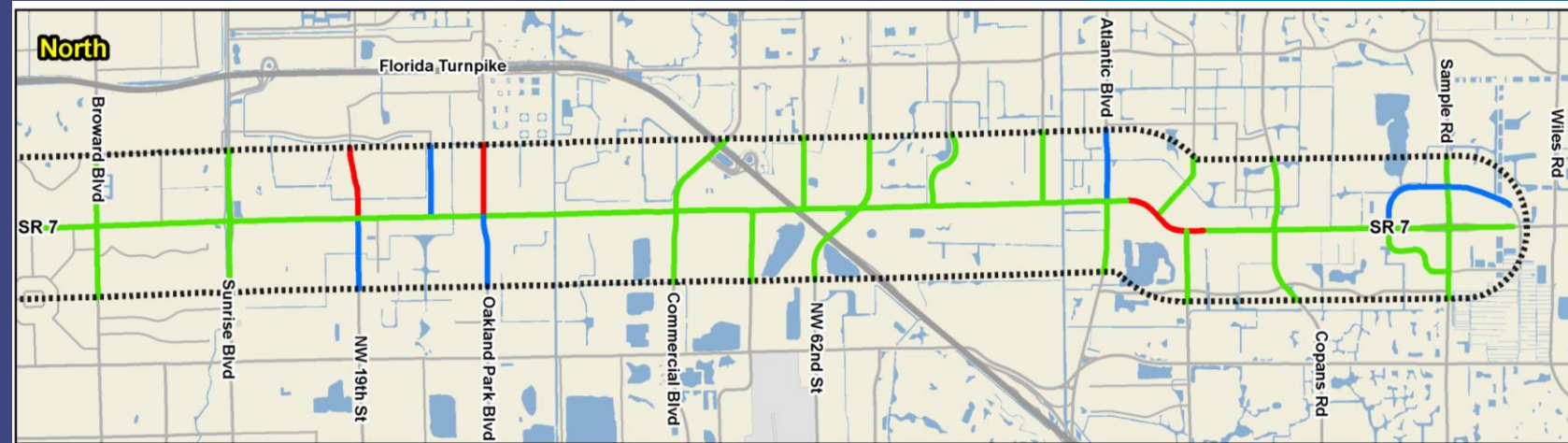
Baseline Conditions (Report Chapter 3-A—draft provided)

- Multimodal transportation analysis
 - Roadway characteristics and operations
 - Transit
 - Bicycle and pedestrian infrastructure and gaps
- Safety analysis
 - Analysis of five-year crash data
 - Identification of potential safety “hot spots”
- Land use/socioeconomic analysis
 - Existing and future land use
 - Redevelopment potential
 - Population and employment growth

Baseline Conditions— Multimodal Transportation Analysis

2014 Generalized LOS

- Most segments operating at LOS C
- Higher volumes eastbound cross streets
- Six-lanes will help failing segments in southern corridor



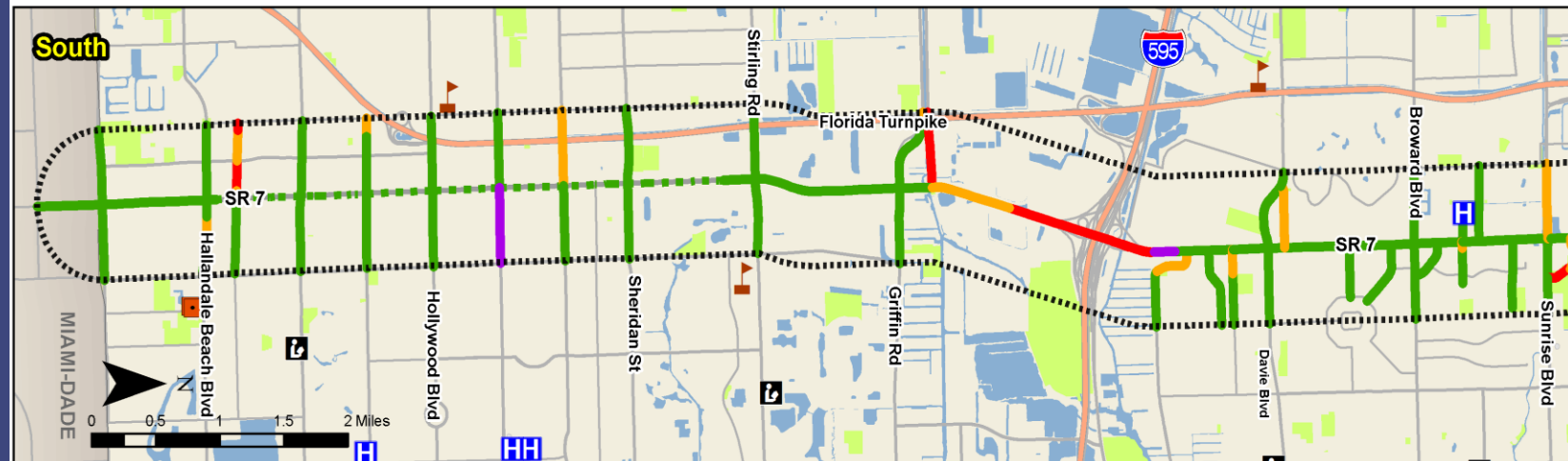
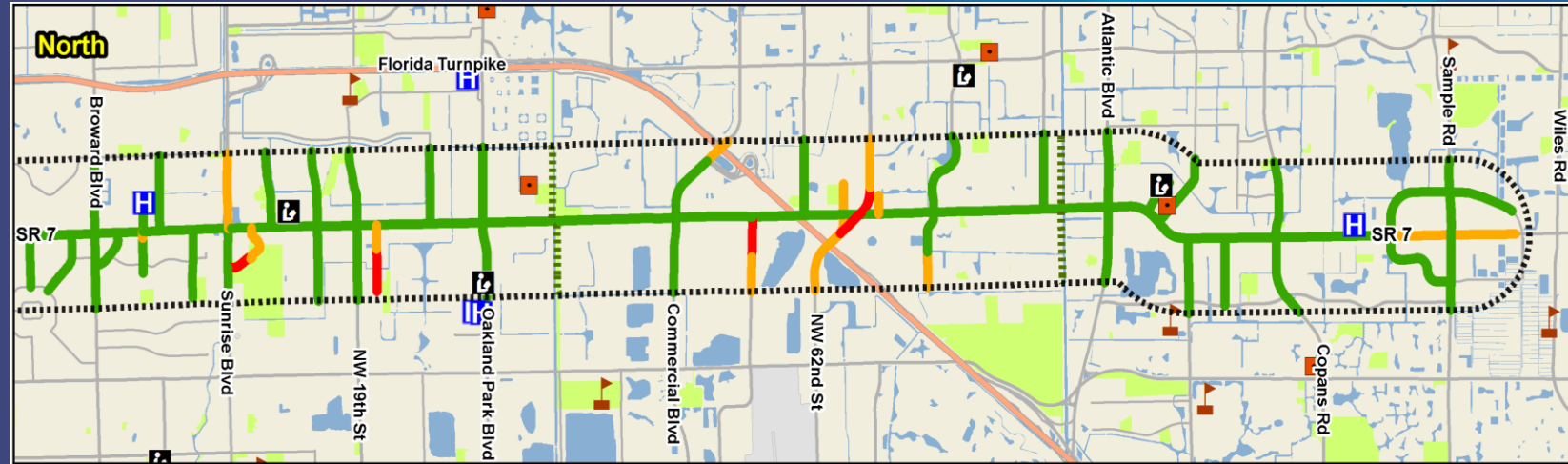
2014 Generalized Daily Level of Service (LOS) From 2014 AADT



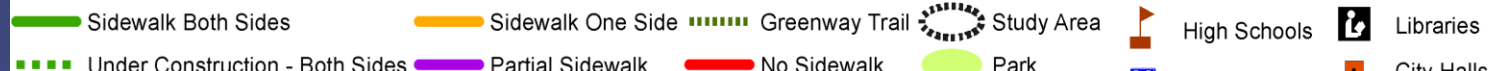
Baseline Conditions— Multimodal Transportation Analysis

Sidewalk network

- Primarily complete (or will be following reconstruction)
- Connectivity to major activity centers



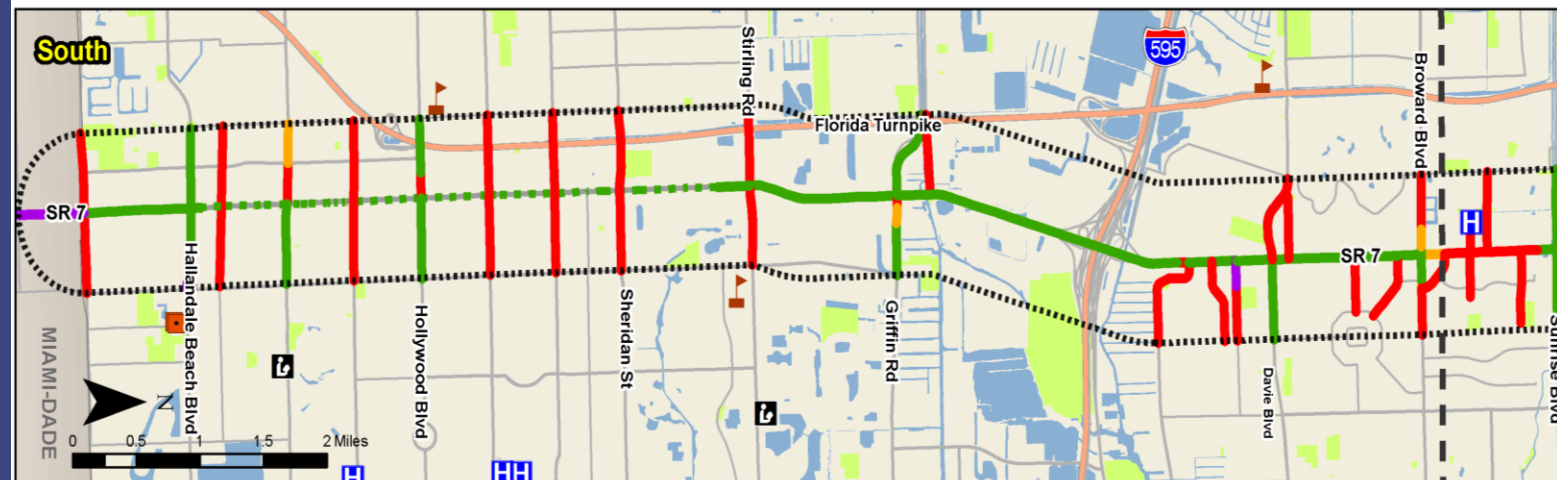
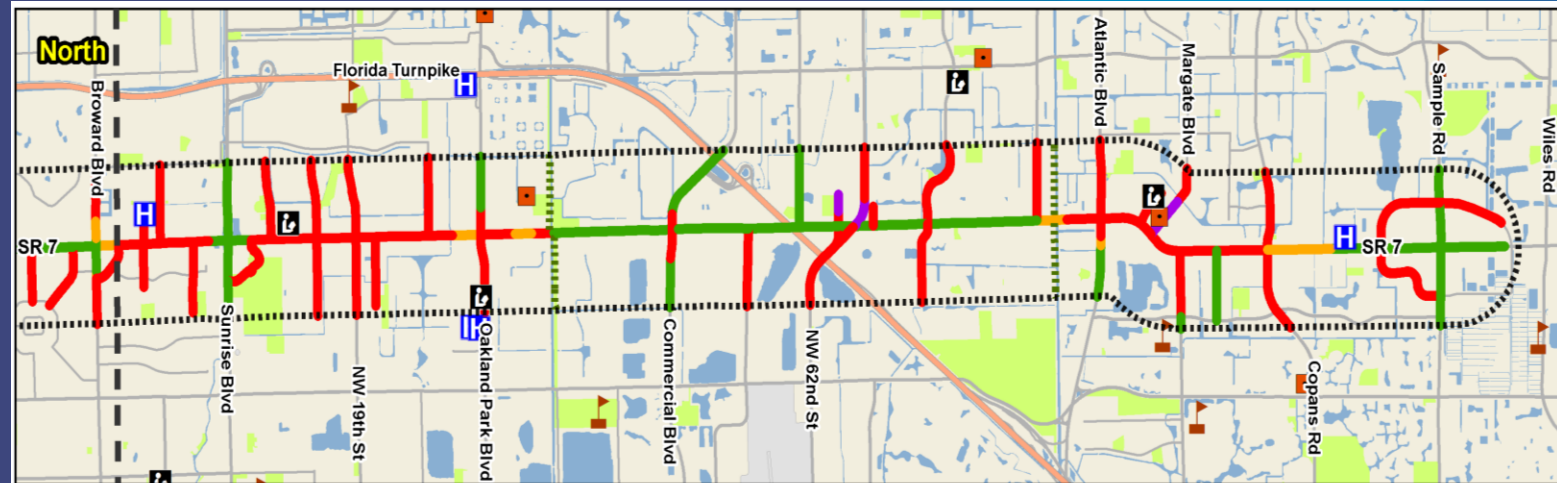
Sidewalk Network



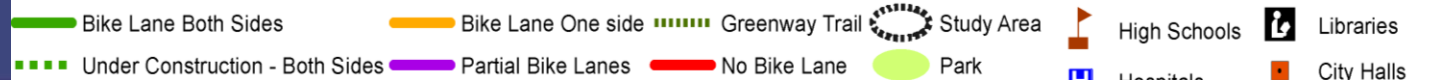
Baseline Conditions— Multimodal Transportation Analysis

Bicycle network

- Considerable gaps in bicycle network
- Reconstruction will provide bike lanes in southern corridor



Bicycle Network

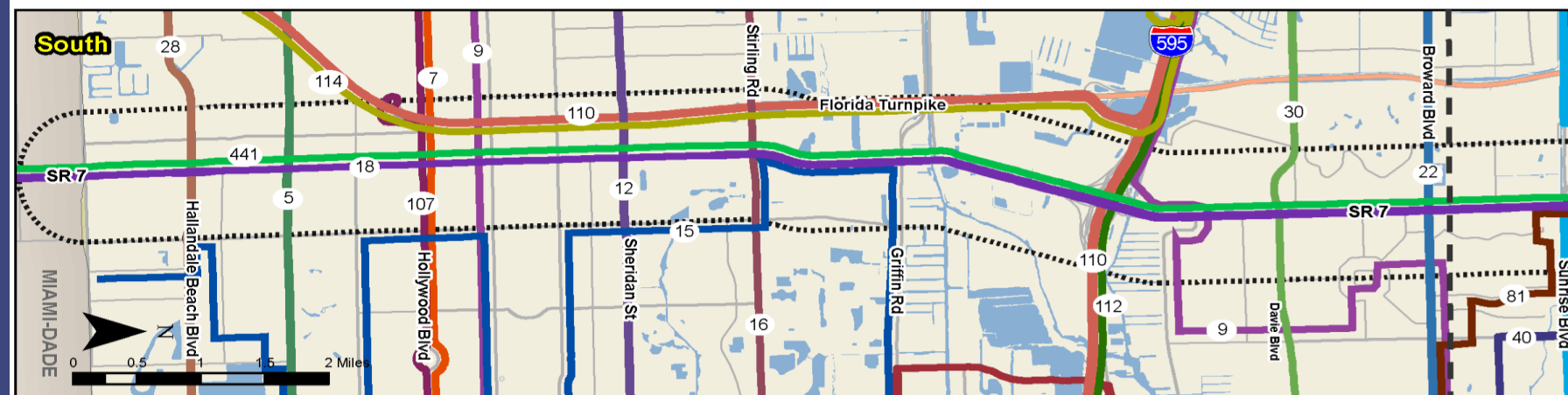
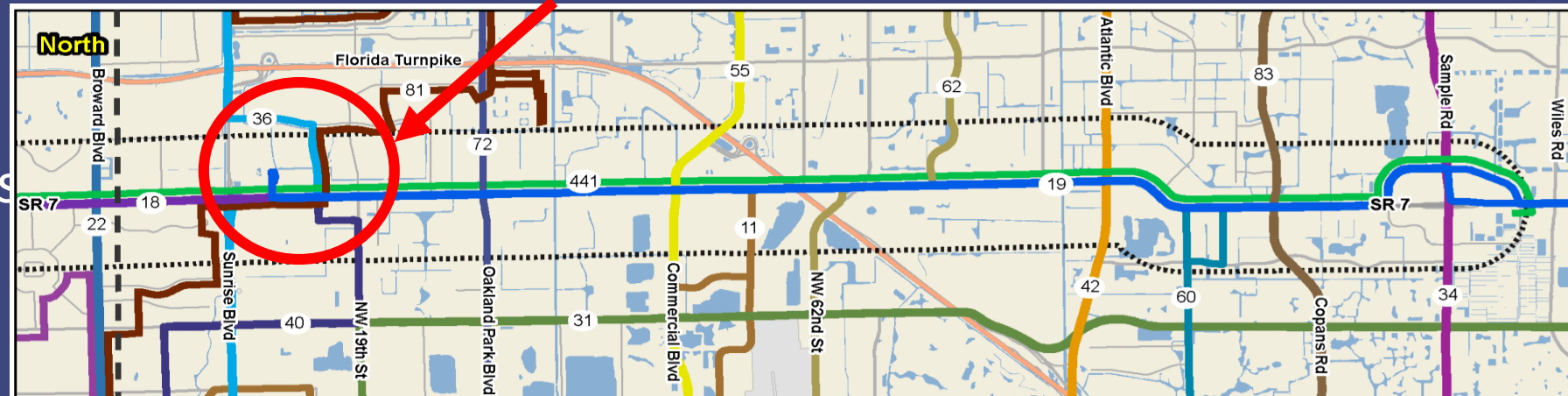


Baseline Conditions— Multimodal Transportation Analysis

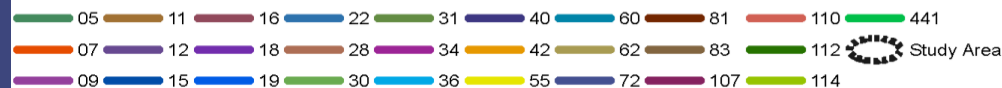
Lauderdale Mall Transfer Center

Transit network

- 28 fixed routes
- 3 north-south routes
 - Route 18
 - Route 19
 - Breeze 441
- Peak frequency
 - 2 routes <15 min
 - 21 routes 16-30 min**
 - 4 routes 31-59 min
 - 1 routes 60+ min

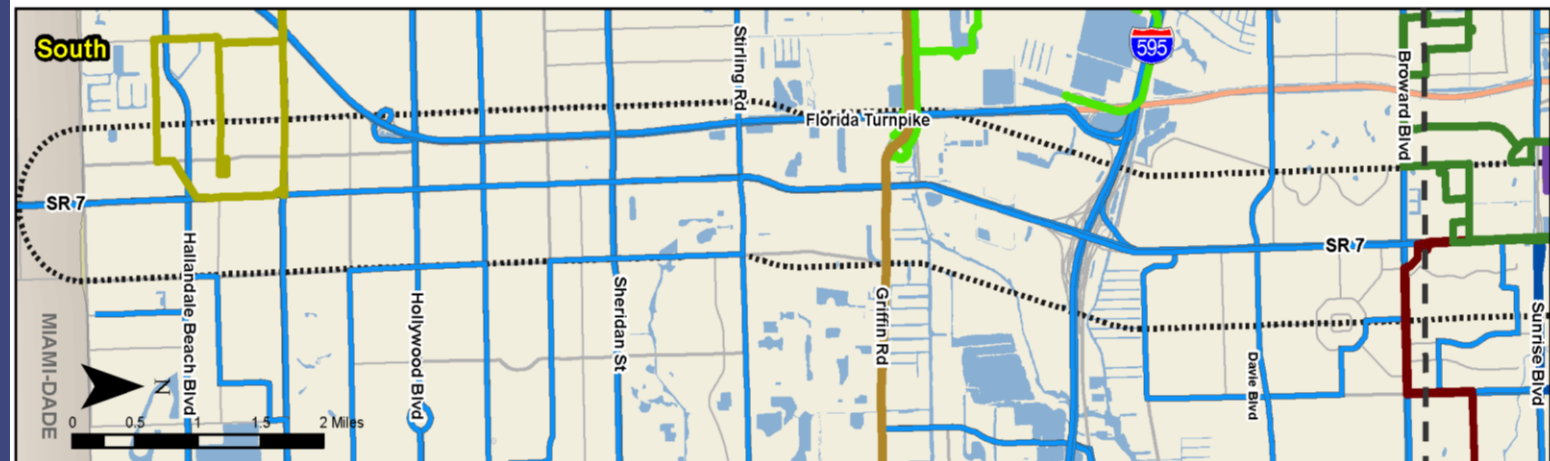
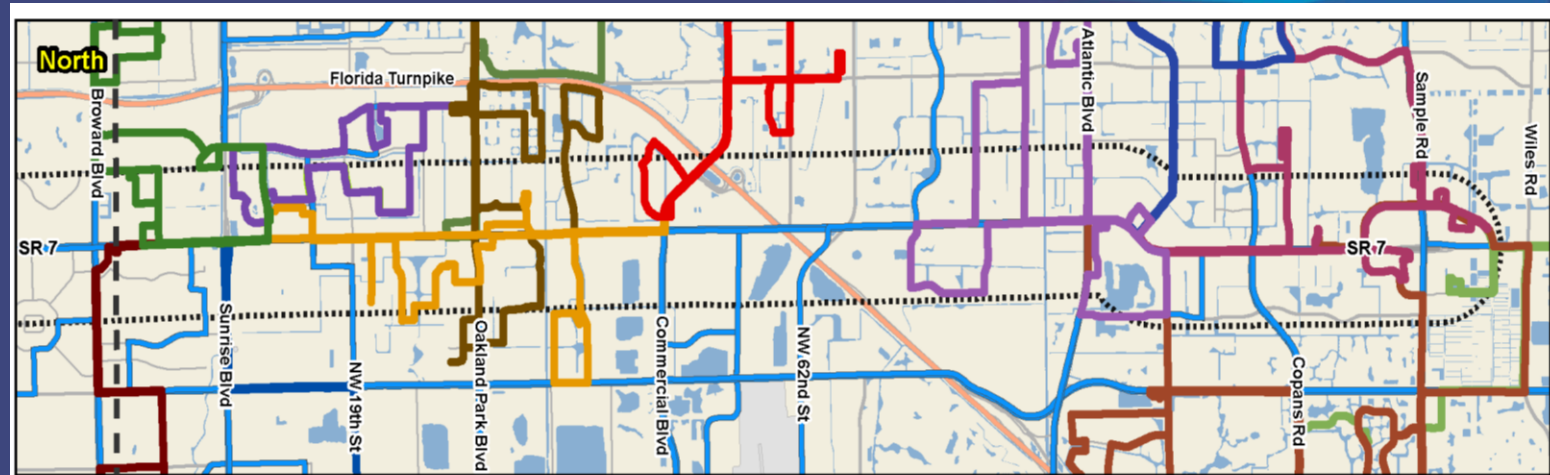


BCT Routes



Baseline Conditions— Multimodal Transportation Analysis

- Community bus network
 - Supplement BCT service
 - Connect to fixed-route network
 - Primarily found in northern corridor



Community Routes

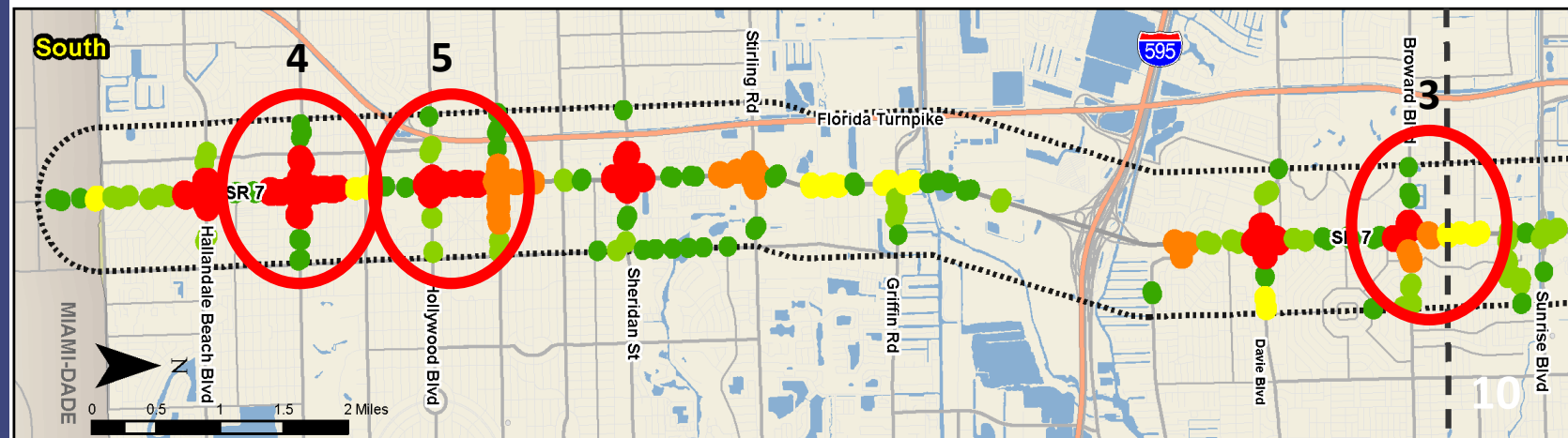
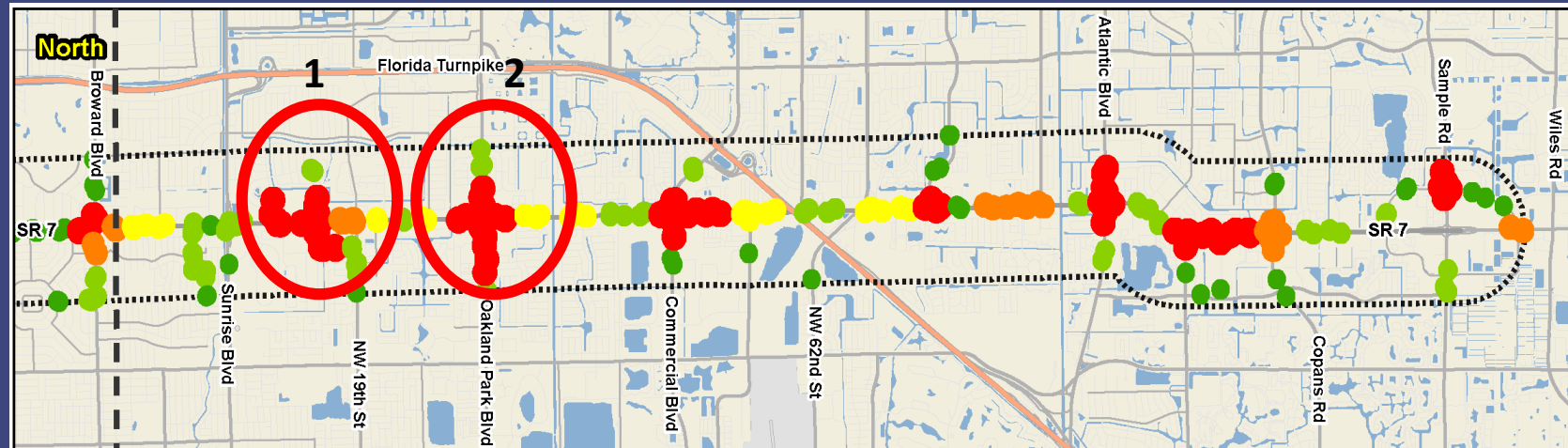


Baseline Conditions— Multimodal Transportation Analysis

High transit ridership areas
(avg. 2,500+ weekday riders)

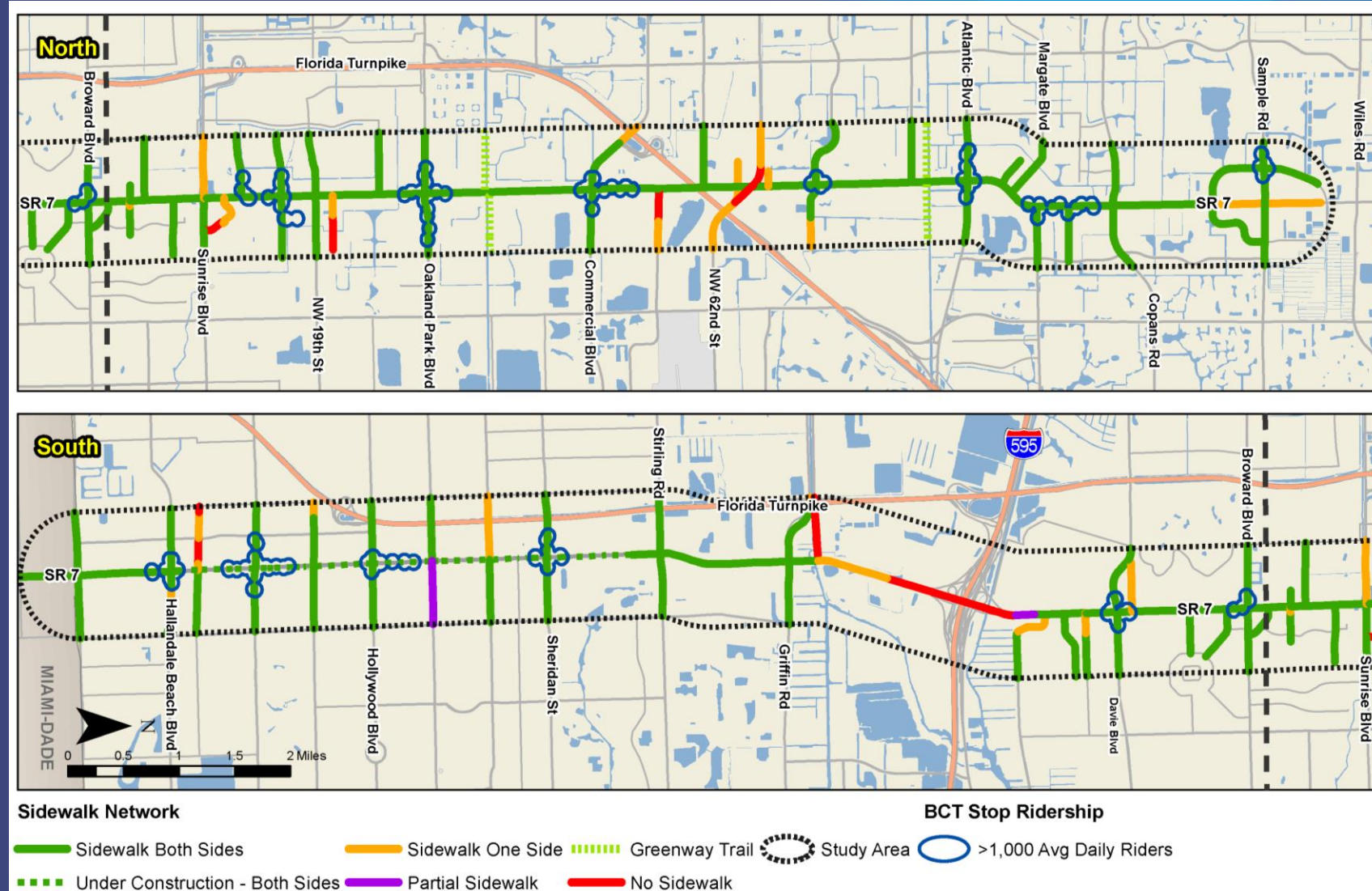
1. Lauderhill Mall
2. Oakland Park Blvd
3. Broward Blvd
4. Hallandale Beach Blvd
5. Hollywood Blvd

- 1,000+ daily riders
- 501-1,000 daily riders
- 201-500 daily riders
- 51-200 daily riders
- 0-50 daily riders



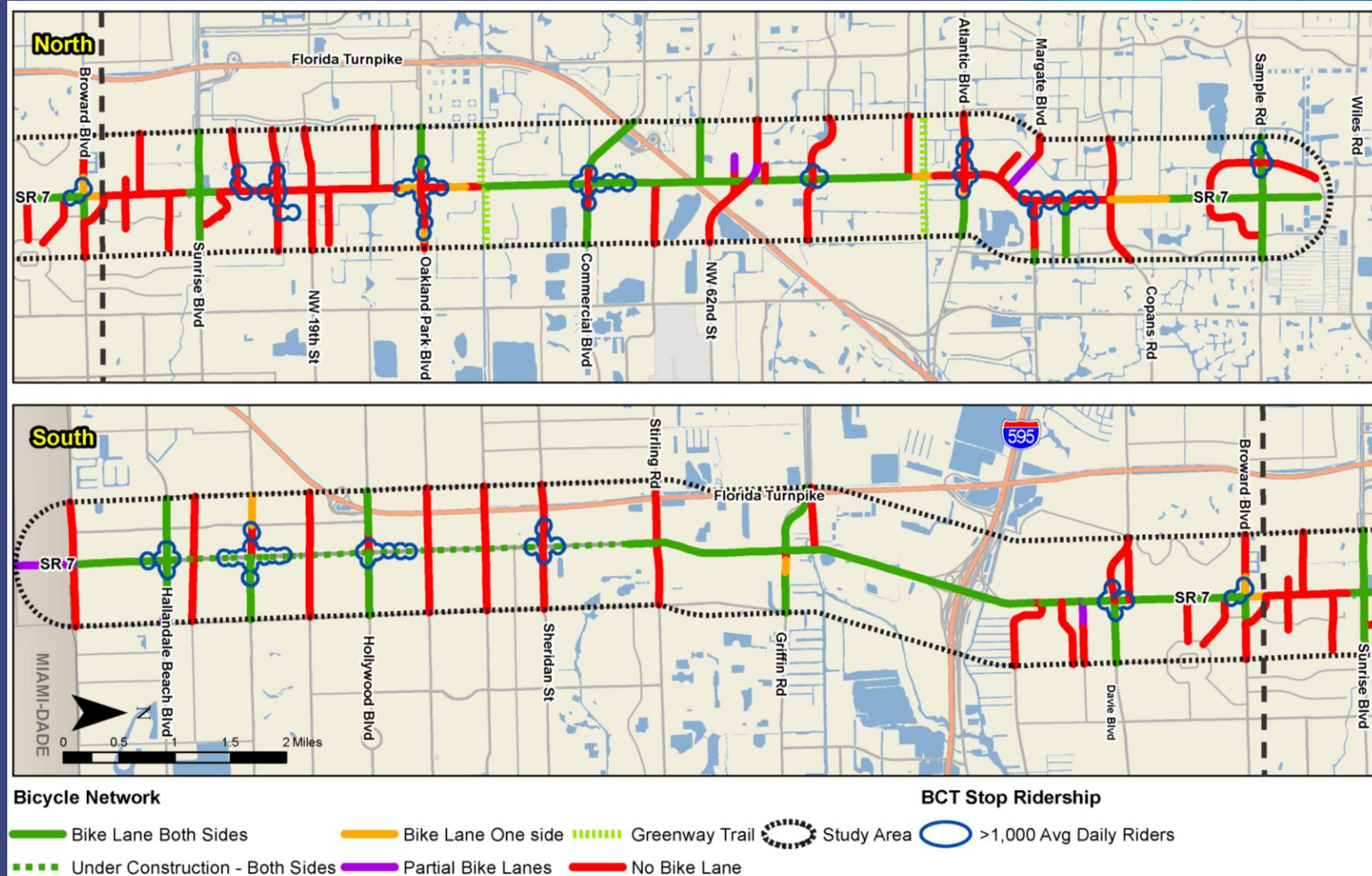
Baseline Conditions— Multimodal Transportation Analysis

Sidewalk network
compared to high-
ridership transit stops



Baseline Conditions— Multimodal Transportation Analysis

Bicycle network compared to high-ridership transit stops



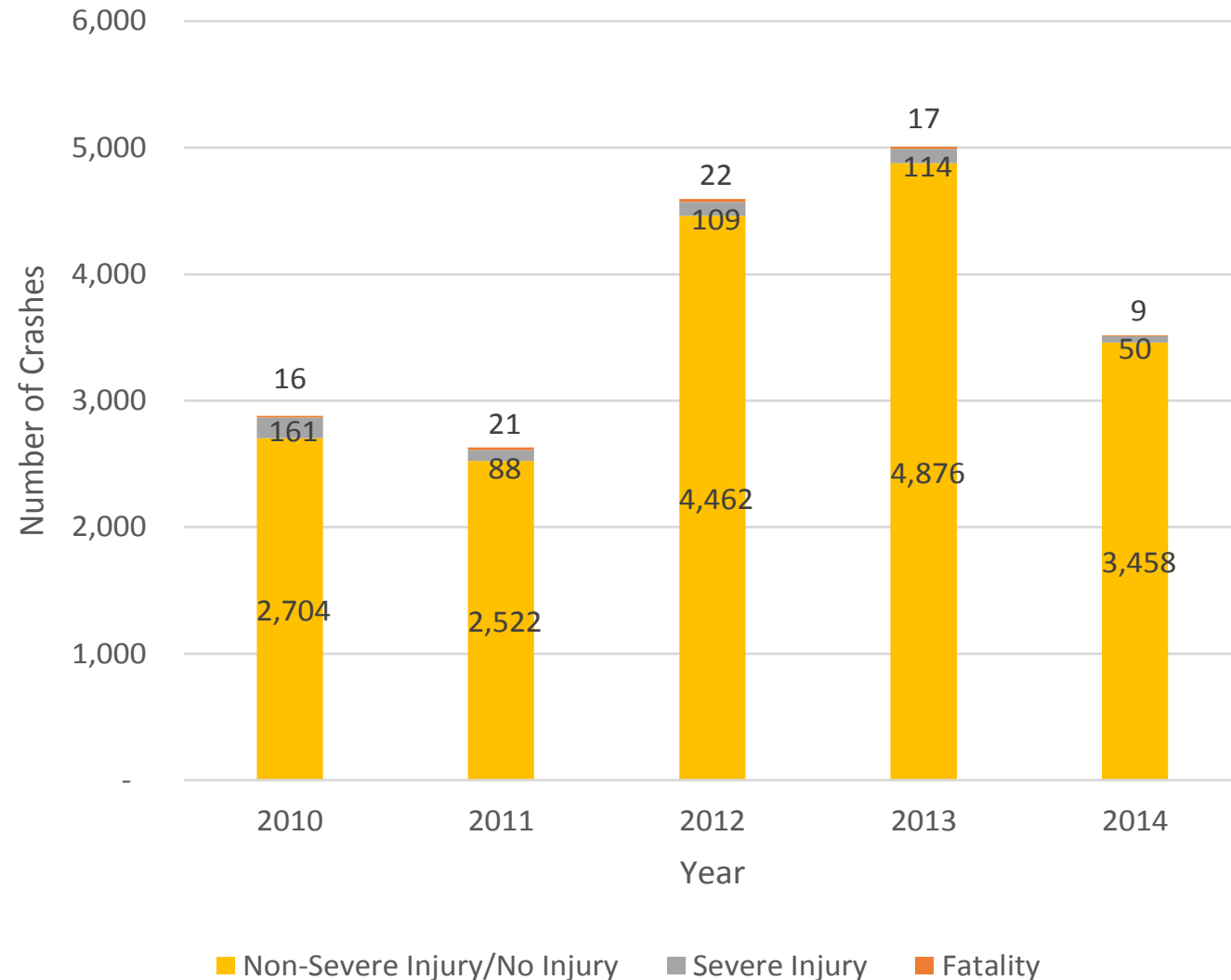
Baseline Conditions— Safety Analysis

Crash analysis overview

- Five-year data (2010-2014)
- 18,640 total crashes
- 0.5% fatal
- 2.8 % severe injury

Countywide

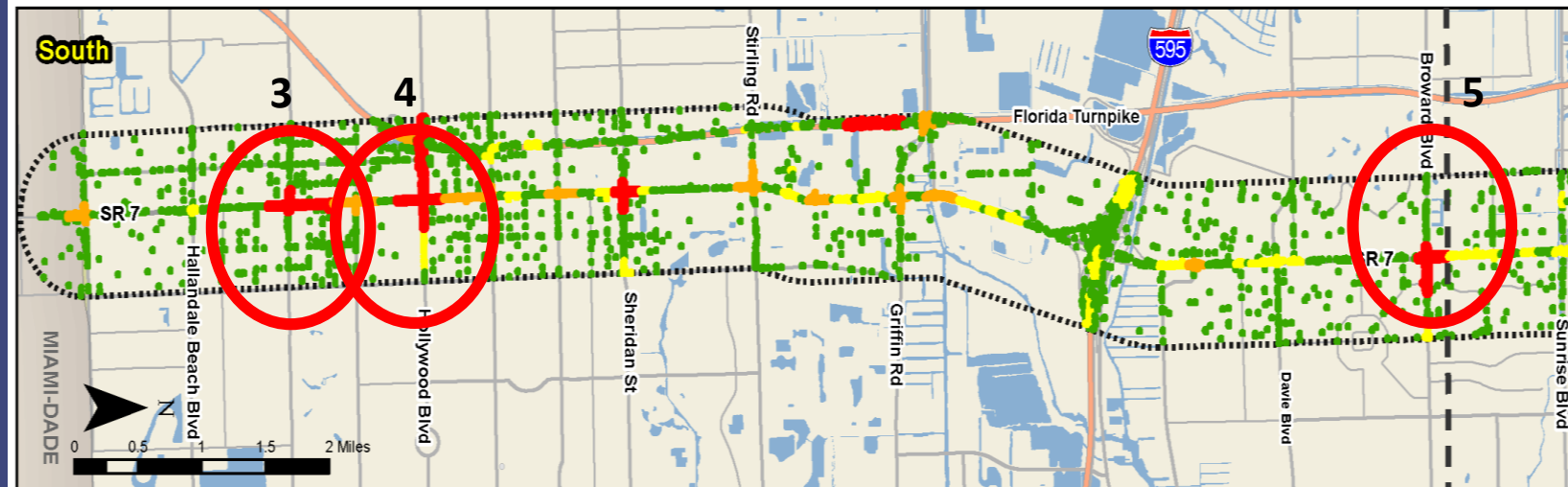
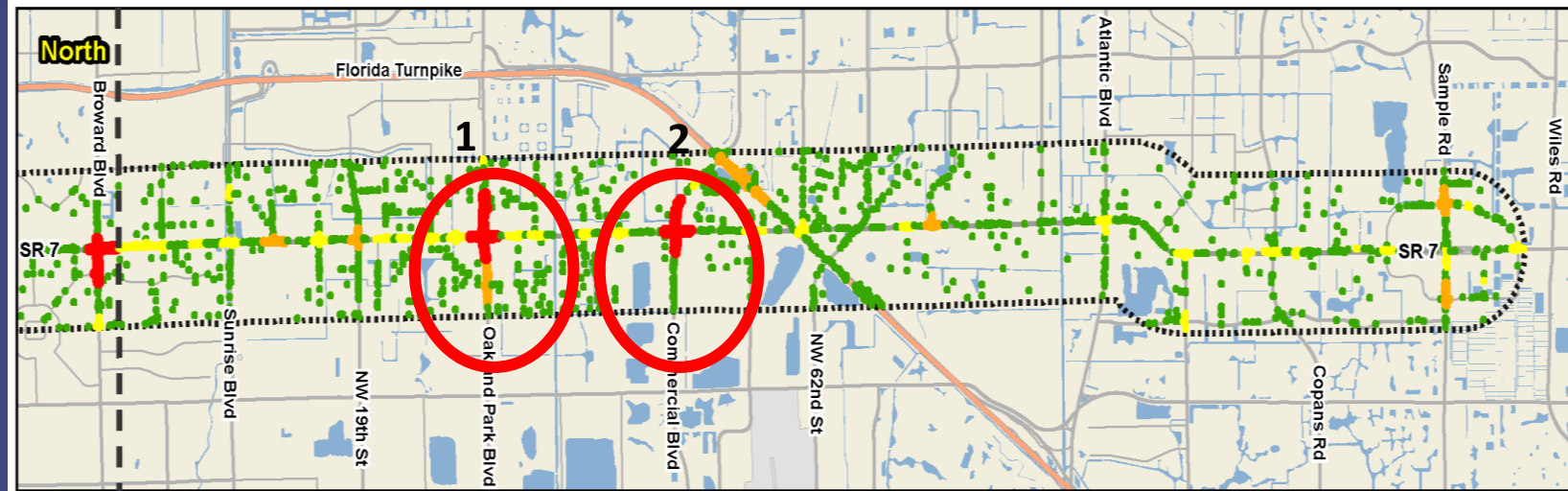
- 0.3% fatal
- 2.9 % severe injury



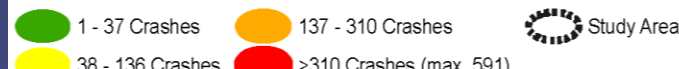
Baseline Conditions— Safety Analysis

High crash locations

1. Oakland Park Blvd (591)
2. Commercial Blvd (562)
3. Pembroke Rd (520)
4. Hollywood Blvd (516)
5. Broward Blvd (499)

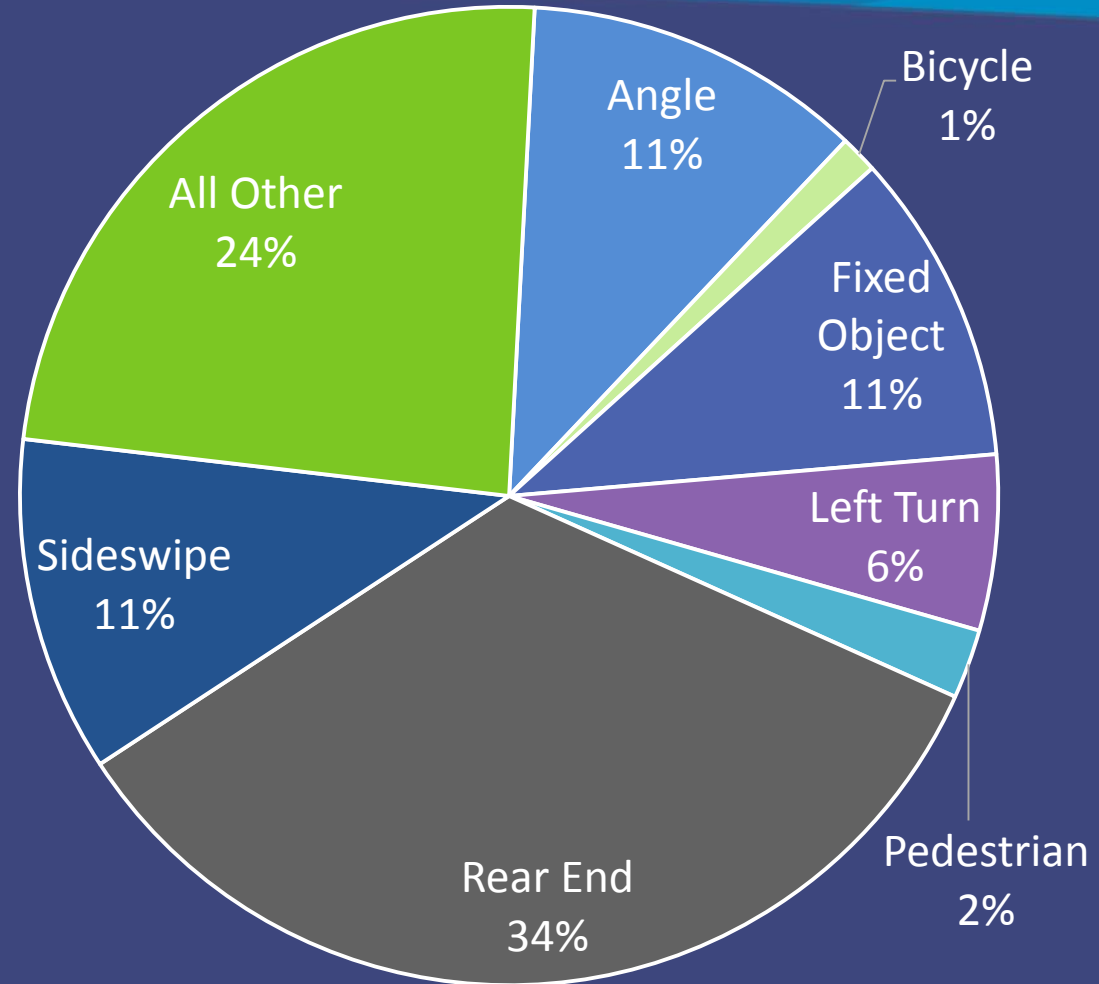


Total Crashes



Baseline Conditions— Safety Analysis

Distribution of crash type



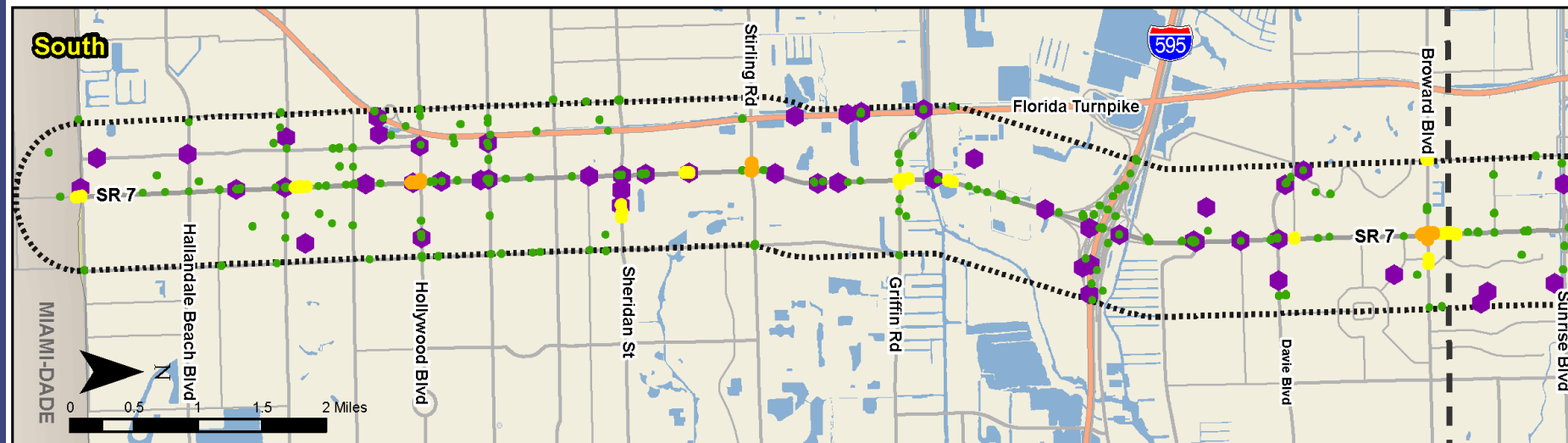
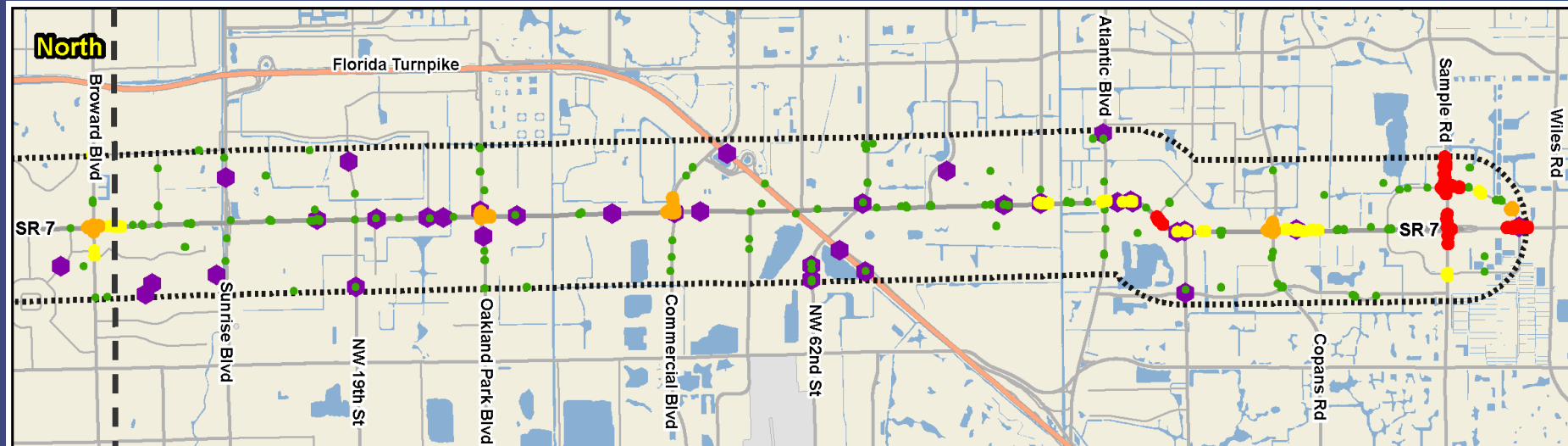
Baseline Conditions— Safety Analysis

Severe injury crashes

- 1-4 severe injuries
- 5-8 severe injuries
- 9-13 severe injuries
- >13 severe injuries
(max 38)

Fatalities

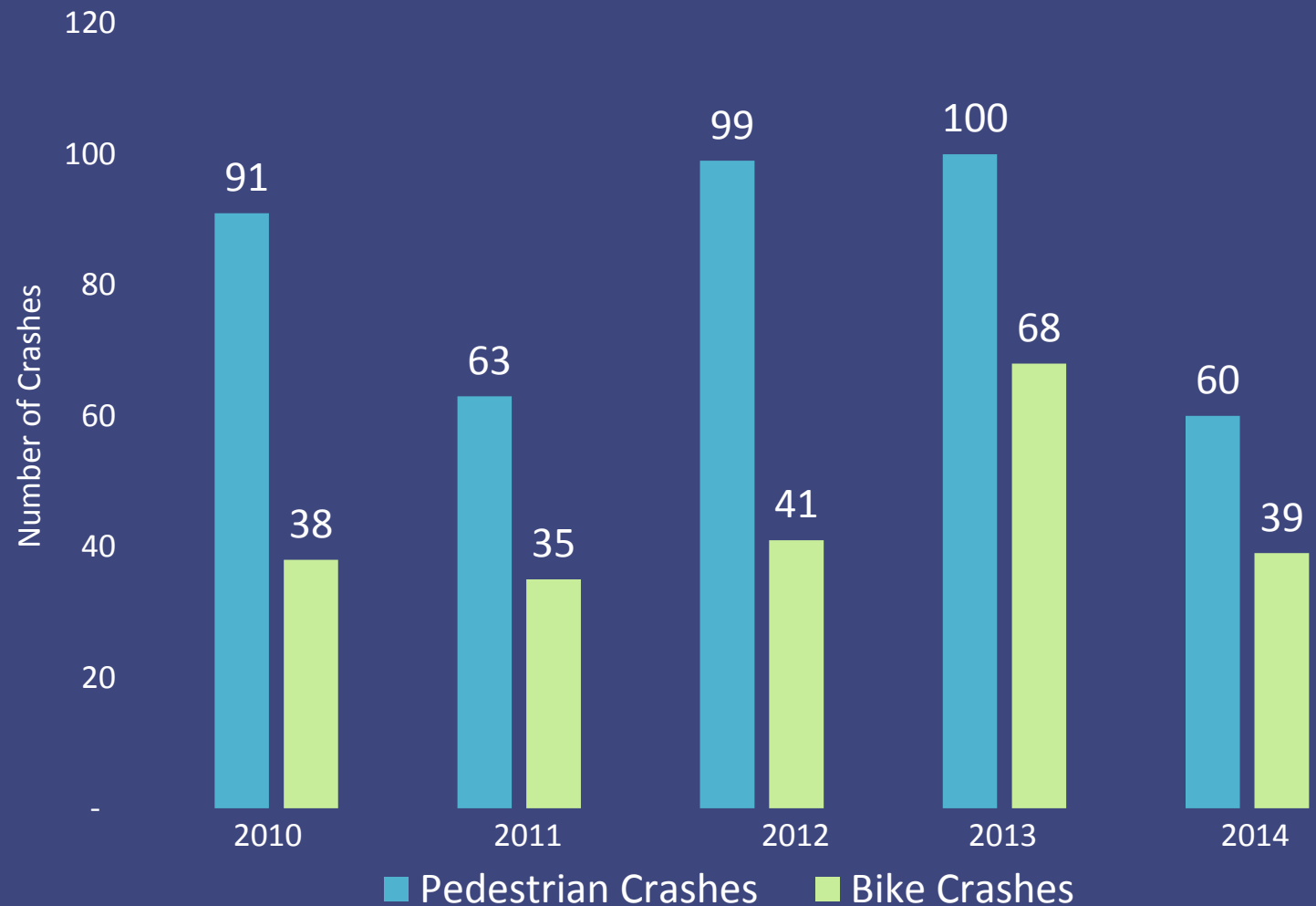
- 1-2 fatalities



Baseline Conditions— Safety Analysis

Pedestrian and bike crashes

- 65% pedestrian-related
- 22% severe injury/fatal (compared to 3.3% of all crashes)



Baseline Conditions— Safety Analysis

Bicycle and pedestrian crashes only:

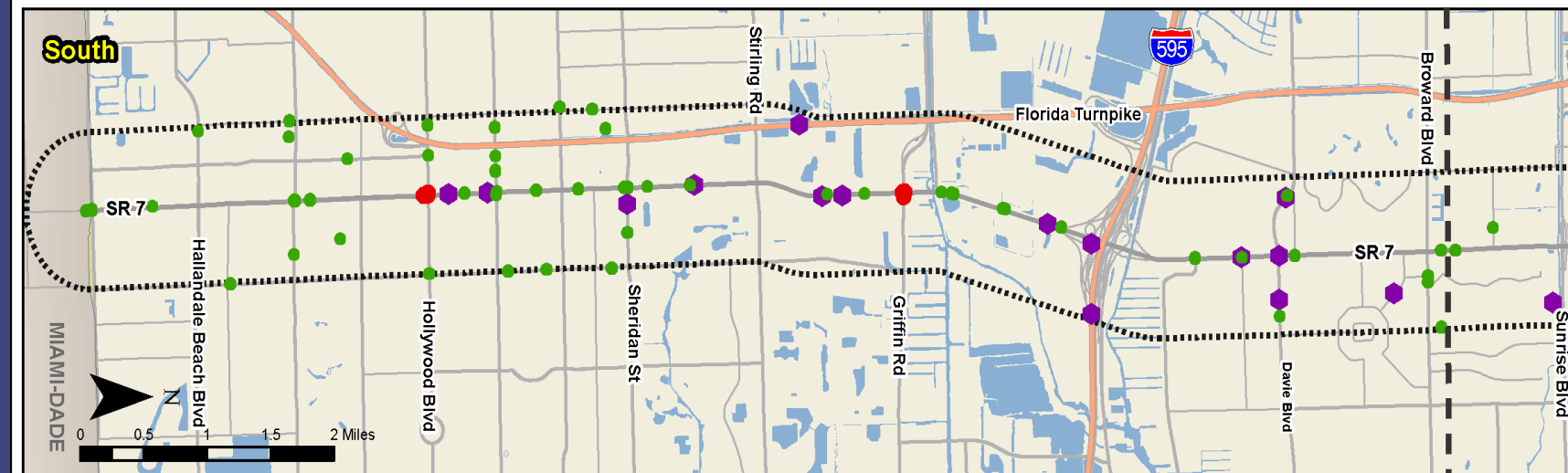
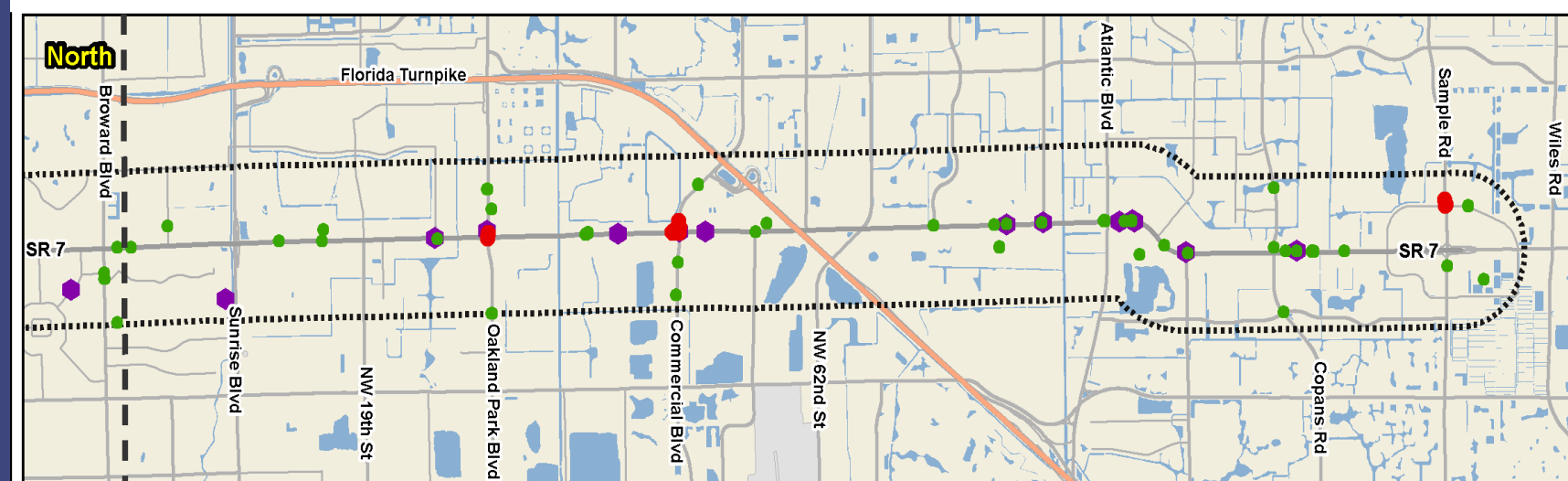
- Severe injury crashes

● 1-3 severe injuries

● 4-6 severe injuries

- Fatalities

● 1-2 fatalities



Baseline Conditions— Safety Analysis

Safety “Hot Spot” analysis

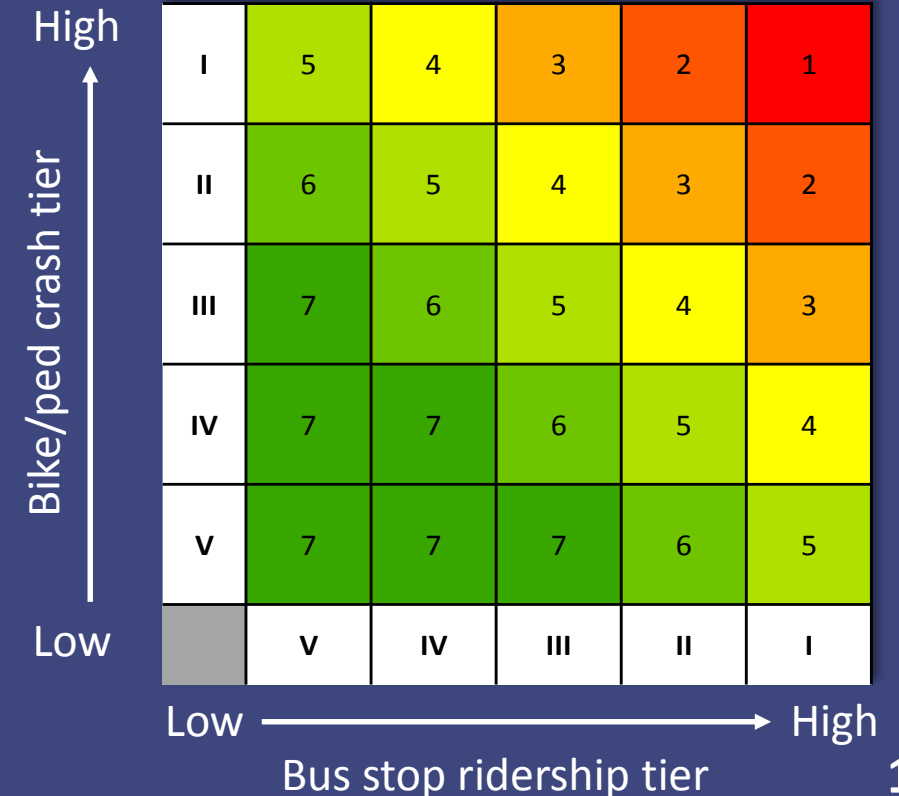
- Identify locations with high transit ridership and high bike/ped crashes

Bus stop ridership tiers

Bus Stop Ridership Area Tier	Tier Break Values (avg daily riders)
I	>1,000
II	501-1,000
III	201-500
IV	51-200
V	0-50

Bike/ped crash tiers

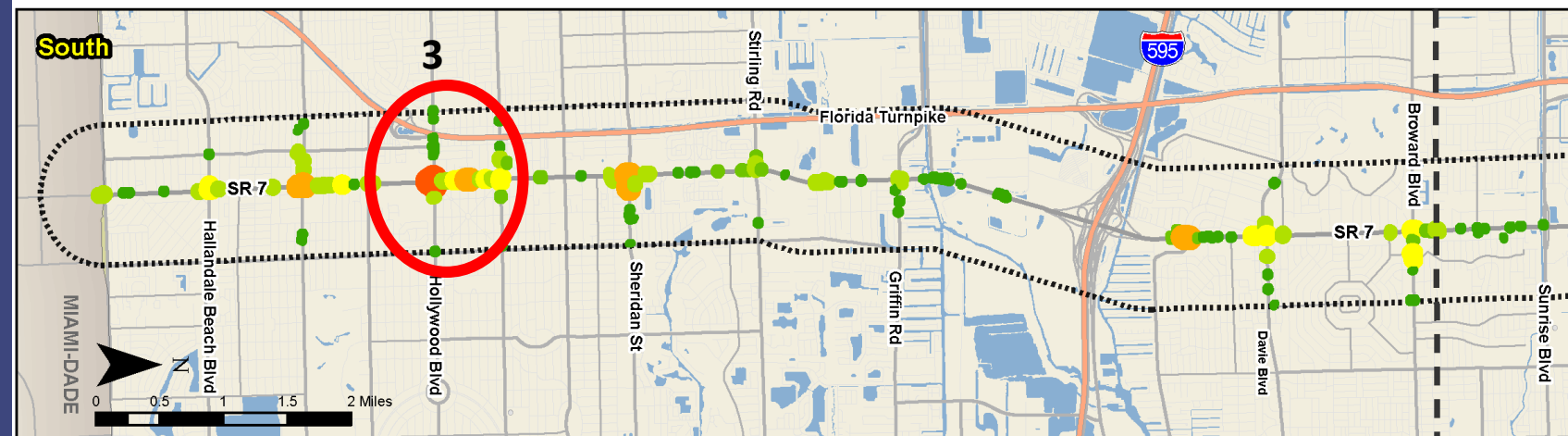
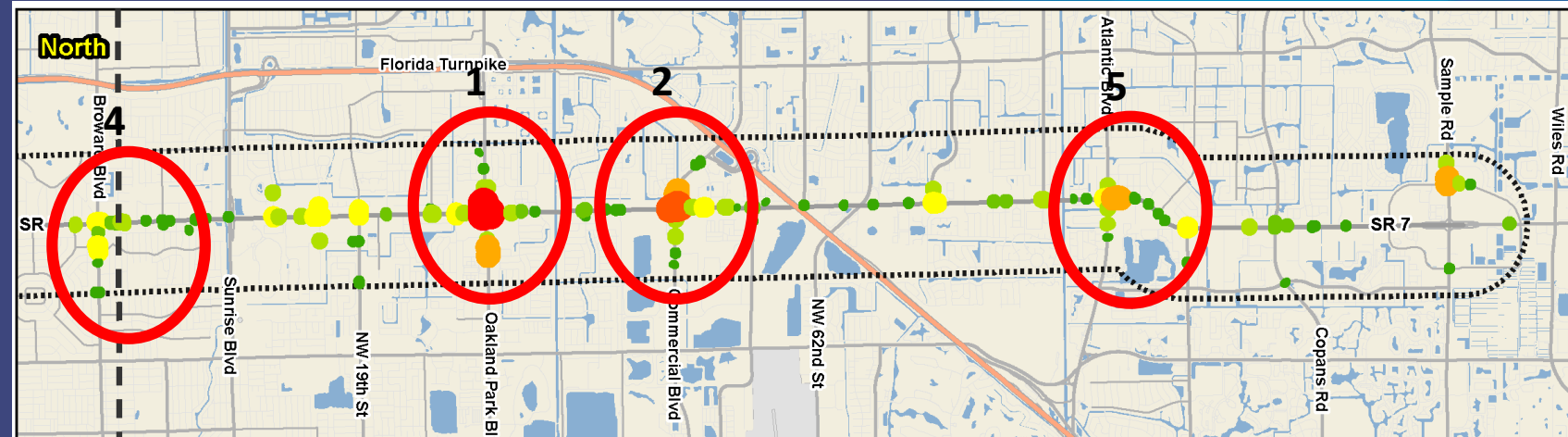
Pedestrian and Bicycle Crash Area Tier	Tier Break Values (total crashes)
I	>14
II	10-14
III	6-9
IV	3-5
V	1-2



Baseline Conditions— Safety Analysis

Prioritized ridership-crash areas

1. Oakland Park Blvd
2. Commercial Blvd
3. Hollywood Blvd
4. Broward Blvd
5. Atlantic Blvd



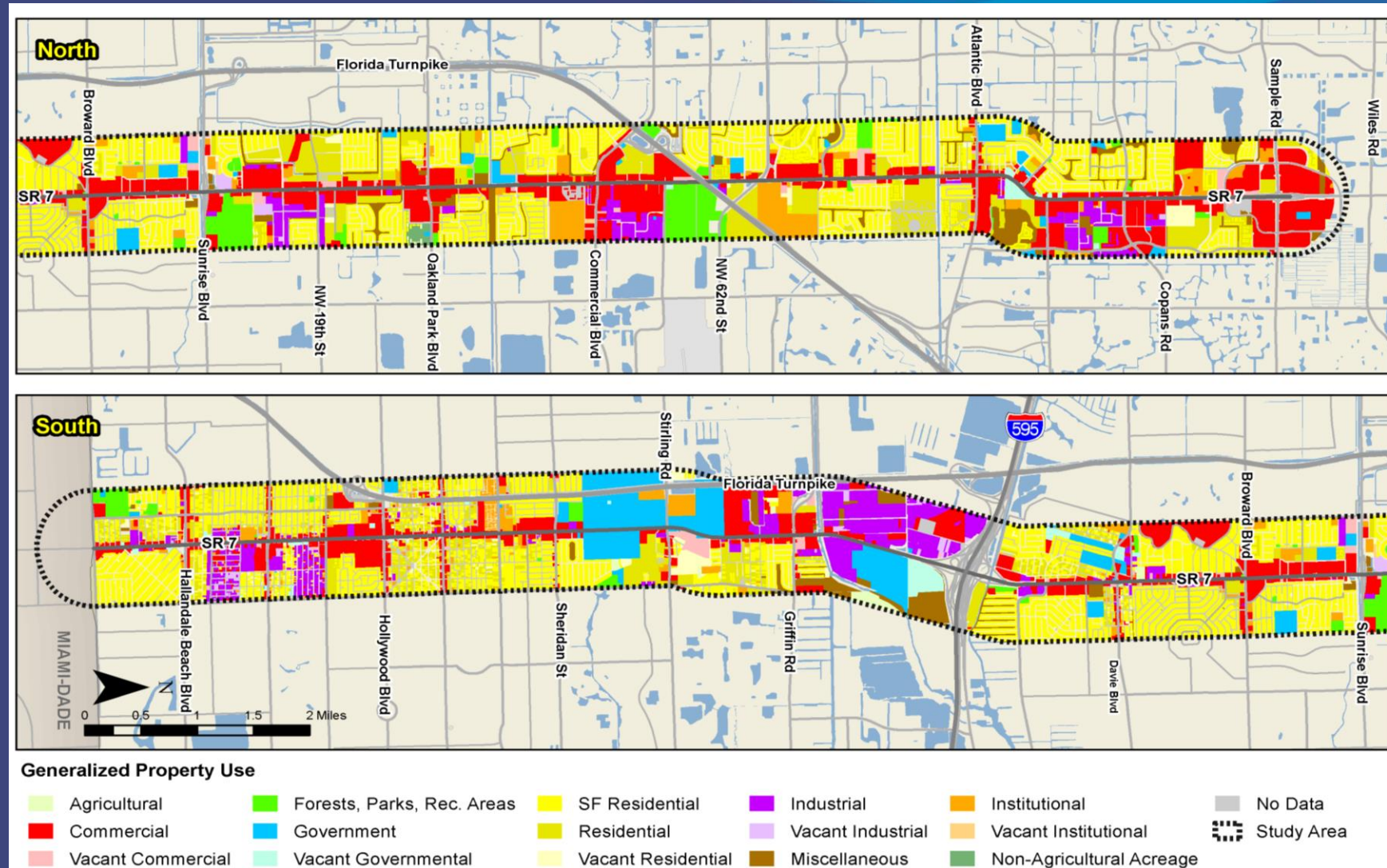
Ridership-Crash Tiers



Baseline Conditions— Land Use Analysis

Existing land use

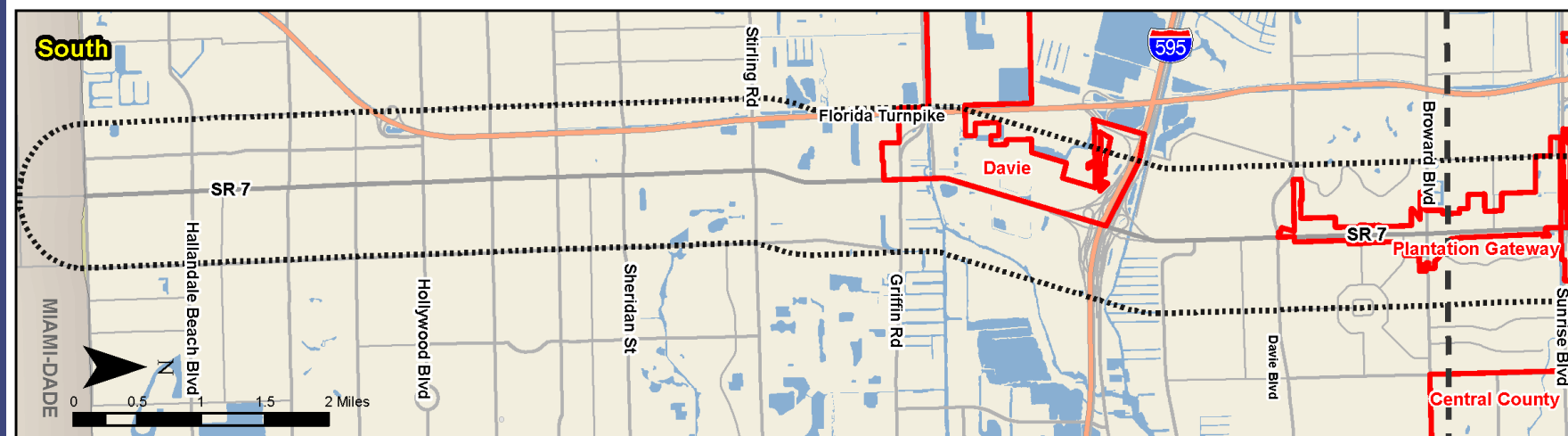
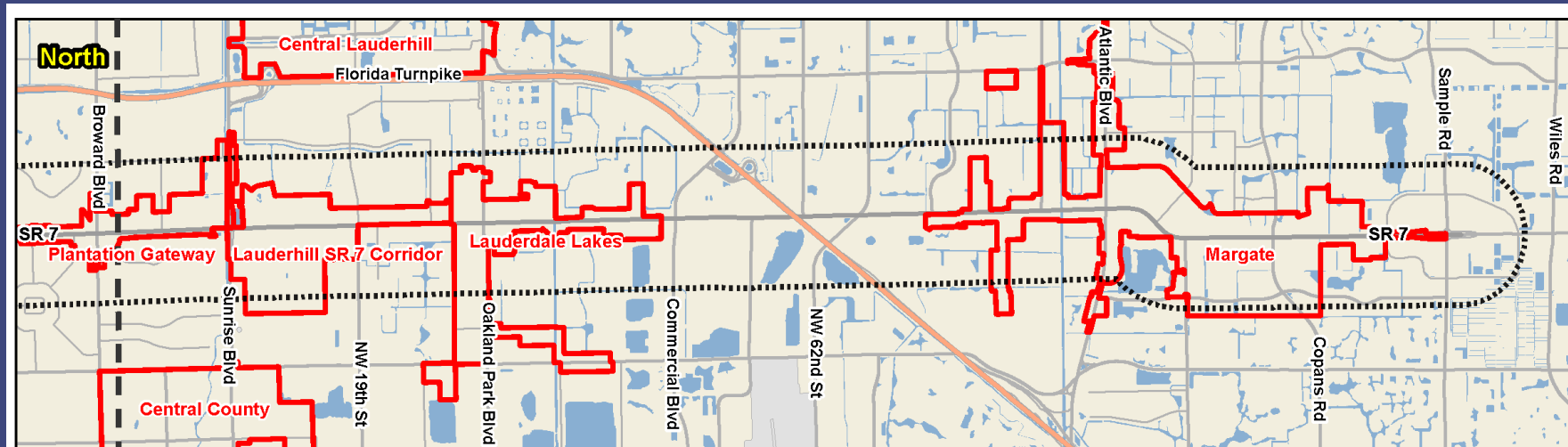
- 33% residential
- 16% commercial
- 12% right of way
- 8% vacant
- 6% industrial
- 5% government
- 20% other



Baseline Conditions— Land Use Analysis

Redevelopment potential:

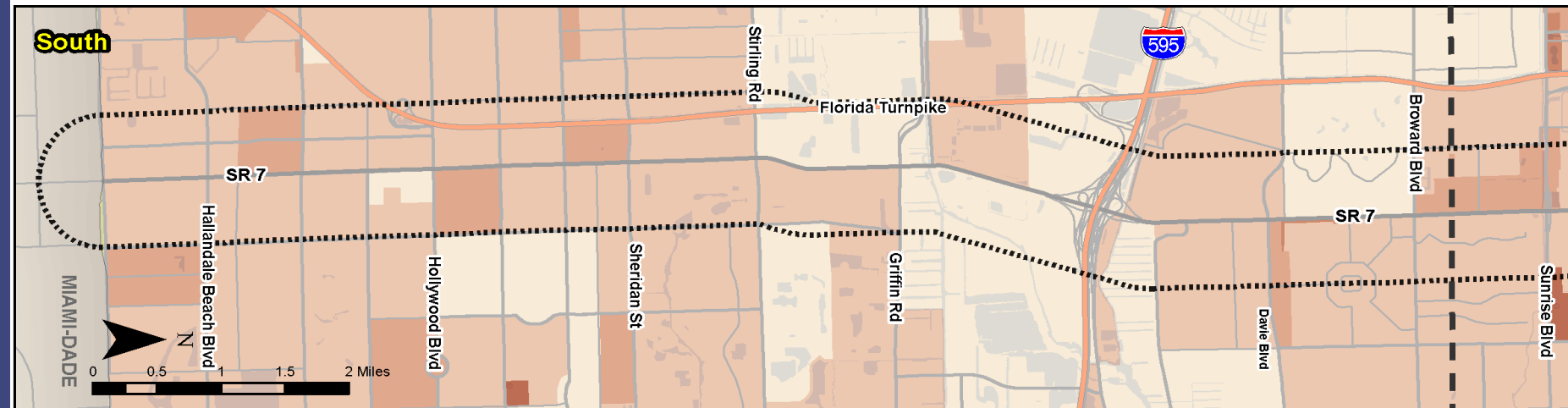
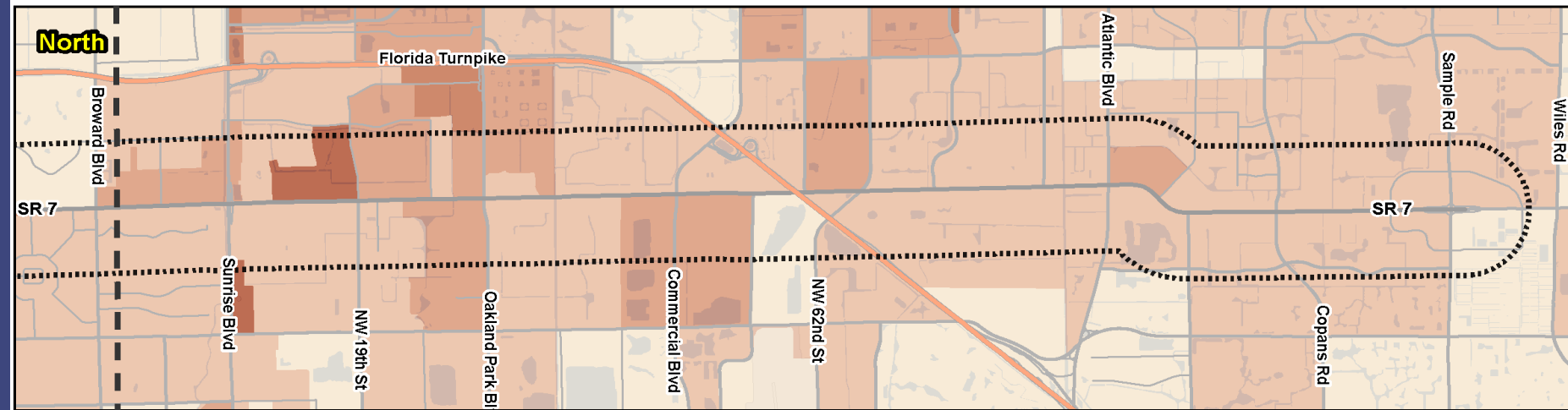
- CRAs (map to right)
- Property value/acre
- Building age (non-residential only)
- Building-to-land value ratio



Baseline Conditions— Land Use Analysis

Urban intensity

- Total persons per acre
- Population and employees
- Indicates relative support for transit



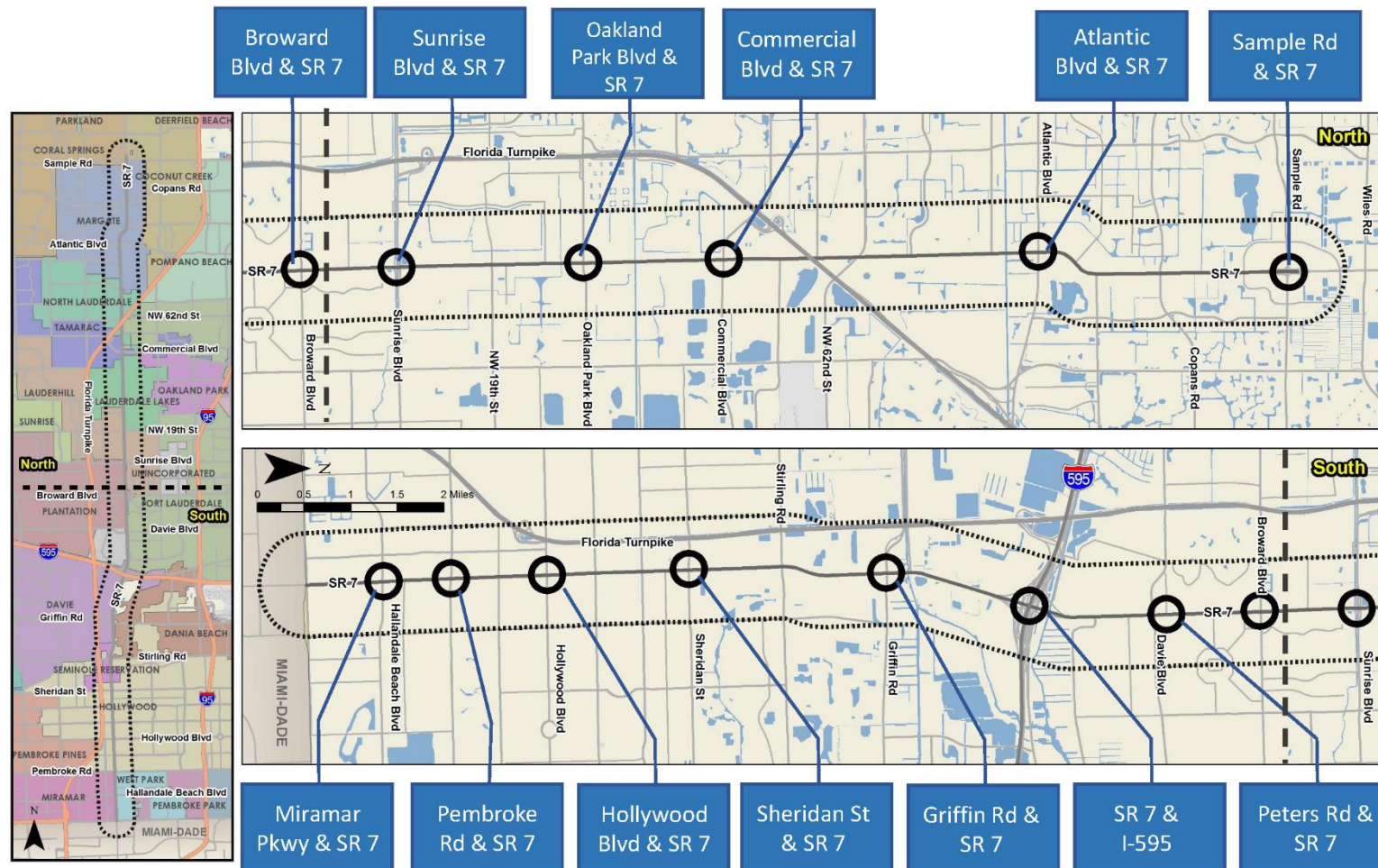
Total Persons per Acre 2040 (Population + Employment)



Baseline Conditions— Land Use Analysis

Report Chapter 3-D: Land Use Analysis (forthcoming)

- Review of local comprehensive plans/codes
- Land use/redevelopment evaluation of the 13 mobility hubs



Baseline Conditions— Land Use Analysis

	Special Land Use Designations	Increased Densities	Mixed-Use/ Transit-Supportive Design	Connectivity	Urban Form and Design	Transition to Neighborhoods	Incentivizes*
North Lauderdale							X
Margate	TOC, CRA	X	X	X	X	X	X
Coral Springs							X
Coconut Creek	RAC	X	X	X	X		X
Plantation	LAC, CRA	X	X	X	X	X	X
Tamarac							X
Lauderdale Lakes	LAC, CRA	X	X	X	X	X	X
Lauderhill	TOC, CRA	X	X	X	X	X	X
Fort Lauderdale							X
West Park	TOC	X	X	X	X	X	X
Davie	TOC, CRA	X	X	X	X	X	X
Hollywood	TOC	X	X	X	X	X	X
Miramar	TOC	X	X	X	X	X	X

Hot Spot Safety/ Operational Reviews

- Five “hot spot” intersections selected based on:
 - FHWA weighted factors
 - Adjusted weighted factors
- Hot spot locations in reconstruction zone removed from consideration
- Hot spot locations reviewed for safety/operations include:
 1. Stirling Road
 2. Broward Boulevard
 3. NW 19th Street
 4. Oakland Park Boulevard
 5. Commercial Boulevard

Hot Spot Safety/ Operational Reviews

Pedestrian conflicts/
unsafe behavior



Signal timing/
queuing issues



Striping/signage issues



Short-Term Improvement Concepts



Right-Turn Yield to Pedestrians Signs

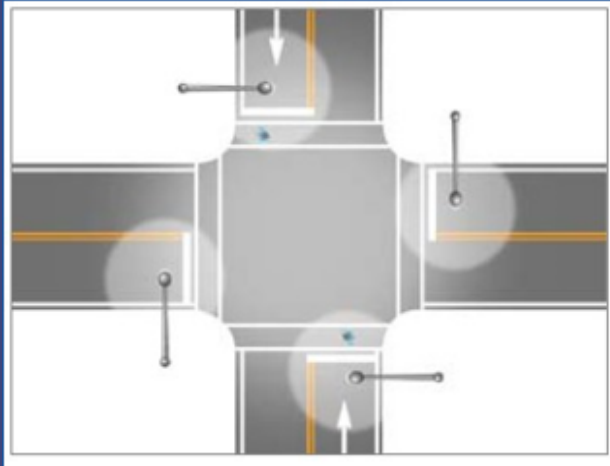
R10-15 signs should be considered in locations where high-speed/high volume right turns are likely. Examples include locations where intersection skew allows for higher-speed movements or where dual right-turn lanes are provided.



Countdown Pedestrian Signals

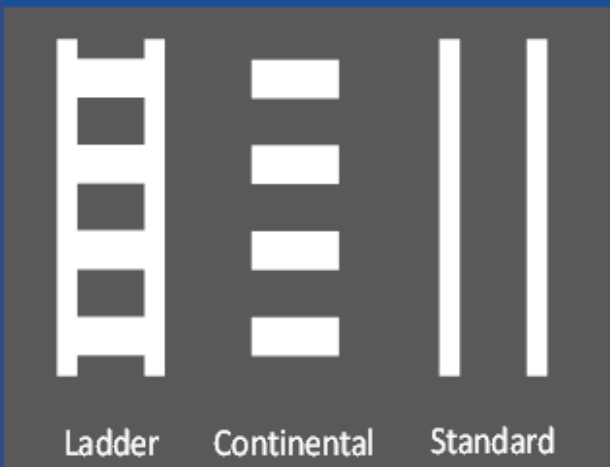
Countdown pedestrian signals provide more definitive feedback to pedestrians than standard flashing “Don’t Walk” indications and have become standard in many jurisdictions throughout Florida. If installed, they should be timed such that the maximum “Walk” phase is provided and the countdown will reach zero concurrent with the thru phase going to amber.

Short-Term Improvement Concepts



Intersection/Crosswalk Area Lighting

Roadway lighting is a critical component of roadway safety and should be designed to provide the adequate illumination for all roadway users. There are many factors that affect roadway lighting (location, orientation, intensity, color, ambient light, etc.) and its effectiveness in increasing safety. New research on the placement of lighting in relationship to crosswalks is summarized in FHWA's *Informational Report on Lighting Design for Midblock Crosswalks*; Figure 1 provides an example of the preferred lighting locations.



High-Emphasis Crosswalk Markings

Crosswalks are a vital part of the pedestrian network; they define a designated crossing area for pedestrians and alert drivers to the likelihood of pedestrians. There are many different types of acceptable crosswalk markings/treatments, but the ladder crosswalk marking (Figure 2) is often considered the preferred treatment. The longitudinal markings, in addition to the parallel edge-line markings, of the ladder crosswalk, provide more surface area to be seen by drivers and are more visible from further distances.

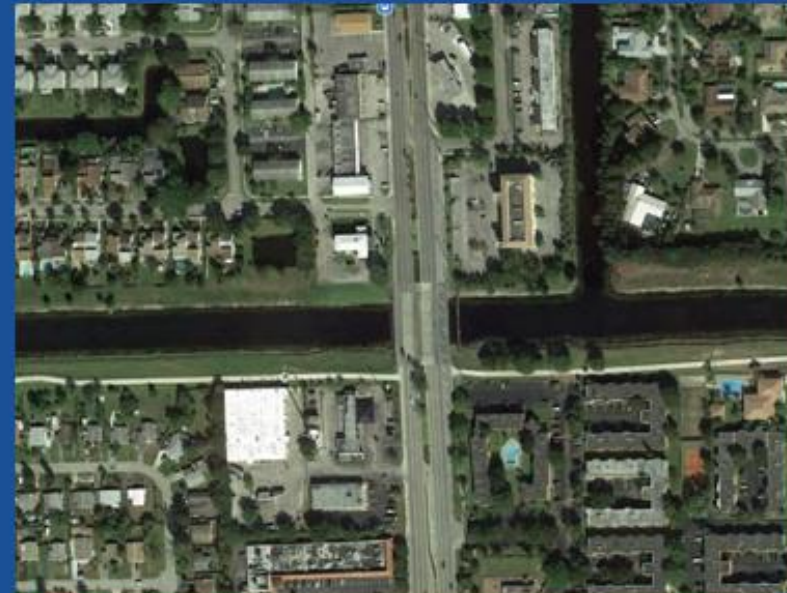
Short-Term Improvement Concepts

Trail Crosswalks

There are two locations along the corridor where a paved trail running along a canal does not have any crossing infrastructure along SR 7. On a six-lane roadway, the preferred crossing treatment is either a pedestrian hybrid beacon (formerly referred to as a HAWK) or a pedestrian signal.



C-13 Trail
Between
Oakland Park
Blvd. and
Commercial
Blvd.



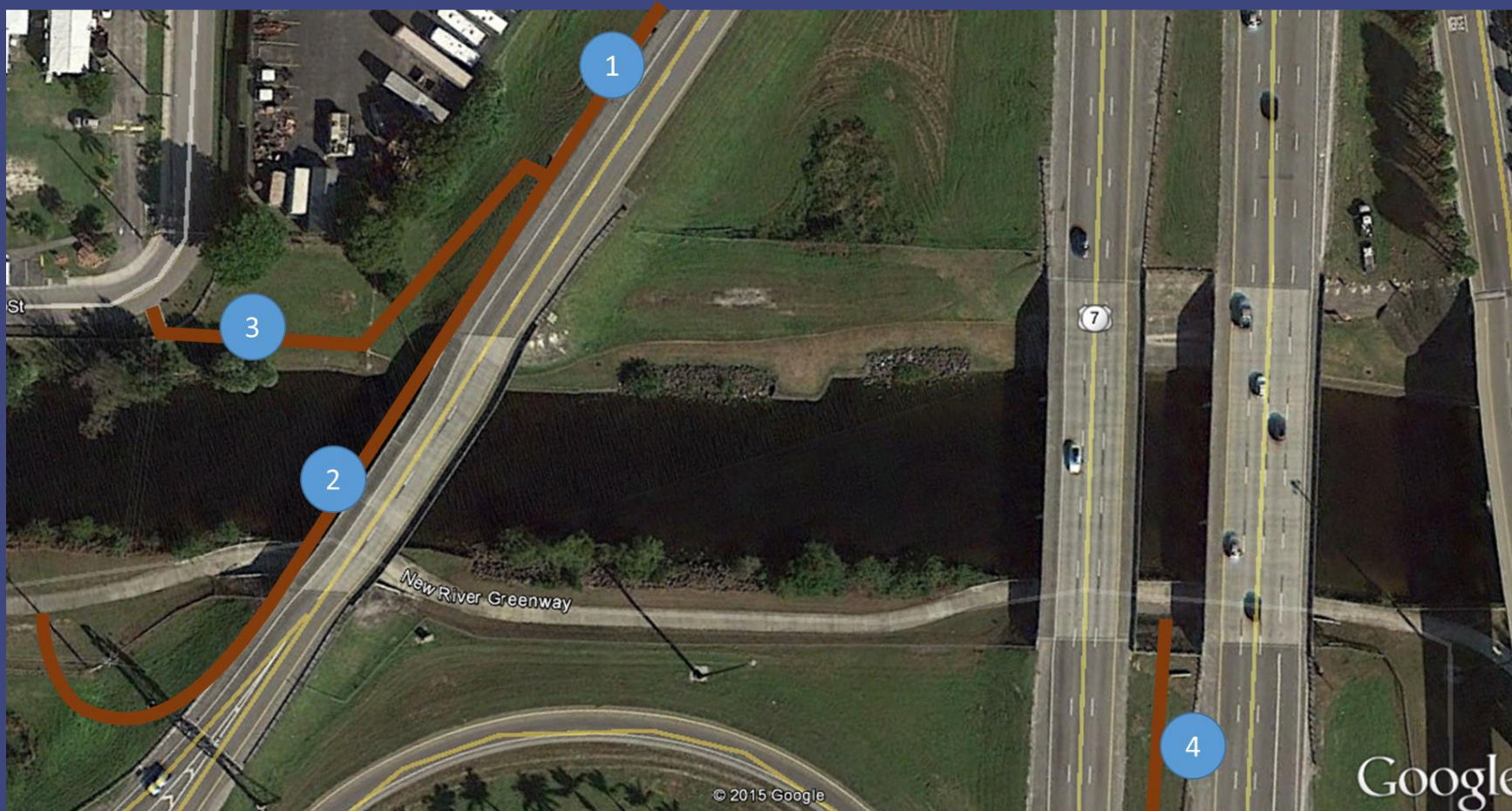
C-14 Trail
South of
Atlantic Blvd.

Bicycle/Pedestrian Network Gaps and Candidate Projects

- Arterial and Collector Network and Other Roadways Identified by PAC and Working Groups
- Key Issues along SR-7
 - I-595 Interchange Area
 - Right-of-way available; but ramp conflicts suggest need for a different solution
 - Considering a center mixed use trail facility with access to New River Greenway
 - Segments Missing Bike Lanes
 - Existing 10 and 11ft lanes cannot be narrowed to “harvest” bike lanes
 - Consideration of widening sidewalks/development of side-paths may be the best option

Bicycle/Pedestrian Network Gaps and Candidate Projects

- I 595 Interchange Concept

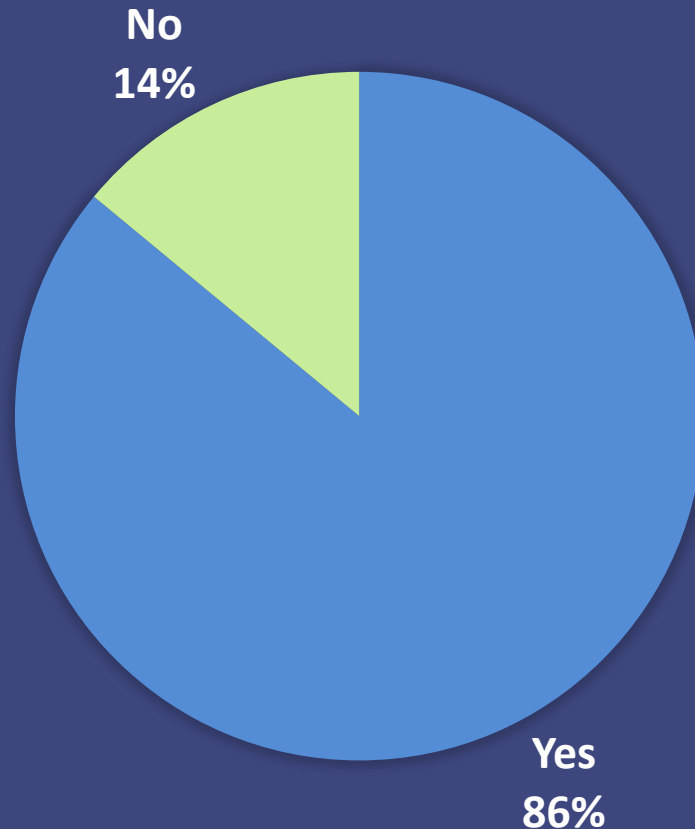


1. Sidewalk/trail connection to New River Road along west side of SR 7
2. Cross along SB to WB ramp or new parallel bridge
3. Optional Connection to Neighborhood
4. Construct shared-use path in median of SR 7 to Oakes Road.

E-Townhall meeting (November 12th) statistics:

- Just over 20,000 people within the study area received a phone call
- 2,347 people accepted the call to participate
- At one point there were 451 people participating at once
- A total of 346 people participated longer than 5 minutes with an average call time of 37.5 minutes.
- The event concluded with 181 people on the phone.
- An additional 18 people participated via the website
- 3 people participated at the designated listening location (Plantation City Hall)
- 10 people asked their question live

- E-Townhall meeting—sample polling question



Is this your first time participating in a meeting where the SR 7 multimodal improvements corridor study is being discussed?

Public Outreach Status Report

Community meetings held/scheduled to-date:

- Future
- Haitian-American Chamber of Commerce (scheduled Feb.)
 - Broward College (scheduled 1/21)
 - Oakbrook Condominiums (scheduled 1/26)

- Completed
- Kiwanis Club
 - Ascension Peace Presbyterian Church
 - Broward Estates Civic Association
 - Davie-Cooper Chamber of Commerce
 - Advisory Board Gateway Development Office
 - SR 7 Smart Growth Partnership Lunch and Learn
 - Hollywood Gardens West Civic Association
 - Broward Estates Civic Association
 - Saint George Community
 - Advisory Board Gateway Development Office



Transit intercept surveys:

- Conducted August 17th and August 26th
- 1,143 surveys collected
- Most respondents surveyed while waiting for the bus

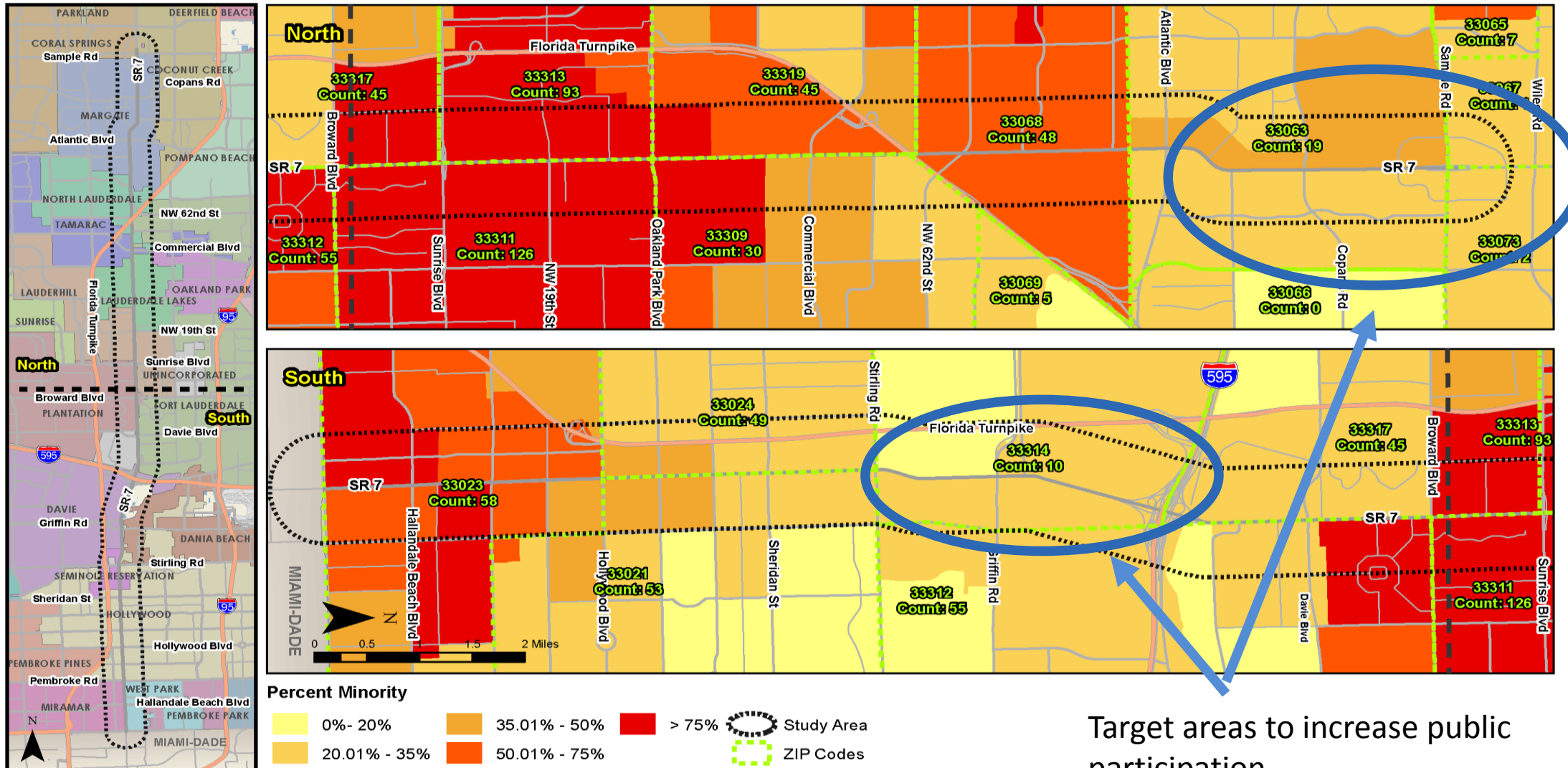
Other outreach techniques used:

- Project website (www.improveSR7.org)
- Project business card and fact sheet
- Cell phone text messages and email blast notices

Mid-project public outreach evaluation

- Zip codes collected during various outreach activities mapped
- Compared against Environmental Justice (EJ) areas to identify areas of low participation
- Findings:
 - Overall good participation in EJ-designated areas
 - Lower participation in northern areas of corridor (residential areas of Margate and commercial/industrial areas of Coral Springs and Coconut Creek)
 - Identify future outreach activities to target these areas

Public Outreach Status Report



Source: U.S. Census Bureau, 2010 Summary File 1

Target areas to increase public participation

Upcoming Meetings/ Next Steps

- Working Group meetings (Round 2—late January)
 - Review today's information
- Next PAC meeting (anticipated ~date):
 - Public outreach status report
 - Project Prioritization System
- Working Group Meetings (Round 3—anticipated ~ date)
 - Review proposed recommendations