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City of Plantation  
City Council Chambers and via Zoom

NOTICE IS HEREWITH GIVEN TO ALL INTERESTED PARTIES THAT IF ANY PERSON SHOULD DECIDE TO APPEAL ANY DECISION MADE AT THE FORTHCOMING MEETING FOR WHICH THIS AGENDA CONSTITUTES NOTICE, SUCH PERSON WILL NEED A RECORD OF THE PROCEEDINGS CONDUCTED AT SUCH MEETING AND FOR SUCH PURPOSE MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE, WHICH RECORD INCLUDES TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED.

THE CITY OF PLANTATION WILL PROVIDE REASONABLE ACCOMODATIONS FOR DISABLED INDIVIDUALS REQUESTING SPECIAL ASSISTANCE IN ORDER TO ATTEND OR PARTICIPATE IN THIS MEETING; PROVIDED, HOWEVER, THAT A REQUEST FOR SUCH ASSISTANCE MUST BE MADE TO THE OFFICE OF THE CITY CLERK (954) 797-2237 AT LEAST THREE (3) CALENDAR DAYS PRIOR TO THE SCHEDULED MEETING.

**1 Roll Call**

**2 Workshop**

**3 Arterial Connectivity Study along I-595 Corridor Presentation**

Summary:

Representatives from the Arterial Connectivity Study team will be present to present a progress update and findings from their work. The presentation team will include Lisa Dykstra and Winston Harris from RS&H along with representatives from FDOT and the Broward MPO.

**Plantation Workshop  
Agenda**

**Notice of  
Workshop**

**Wednesday, July 28, 2021 ~ 5:00 PM**



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City of Plantation  
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**Subject:**

Arterial Connectivity Study along I-595 Corridor Presentation

**Summary:**

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**Prepared By:**

Carole Morris

**ATTACHMENTS:**

| <b>Description</b>   | <b>Upload Date</b> | <b>Type</b>     |
|----------------------|--------------------|-----------------|
| 595 Study Fact Sheet | 7/16/2021          | Backup Material |
| Presentation         | 7/19/2021          | Presentation    |

# ARTERIAL CONNECTIVITY STUDY ALONG I-595 CORRIDOR

FINANCIAL PROJECT ID 441954-1-12-01  
FACT SHEET



## STUDY OVERVIEW

The Broward Metropolitan Organization (MPO) and Florida Department of Transportation (FDOT) have partnered to conduct a planning study to address connectivity for all modes and congestion along the eight (8) north-south roadways that cross Interstate 595 (I-595) and State Road 84 (SR 84) in central Broward County.

## NORTH-SOUTH STUDY ROADWAYS:



- 136<sup>th</sup> Avenue
- Flamingo Road
- Hiatus Road
- Nob Hill Road
- Pine Island Road
- University Drive
- Davie Road
- US 441/State Road 7

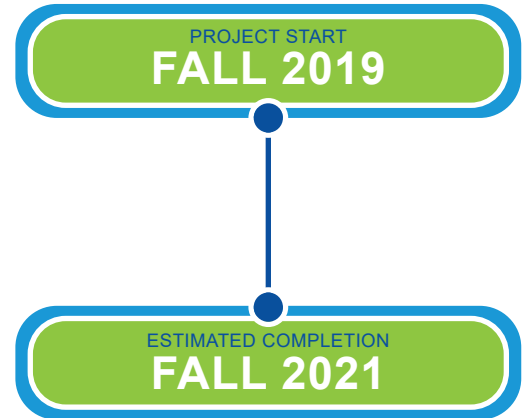
## ISSUES TO BE ADDRESSED INCLUDE:

- Connectivity, safety and mobility for vehicular traffic including transit
- Connectivity, safety and mobility for bicycle and pedestrian traffic including the New River Greenway
- Reducing congestion along the north-south study roadways which serve as a gateway to and from the communities adjacent to the I-595 corridor

## STUDY PURPOSE

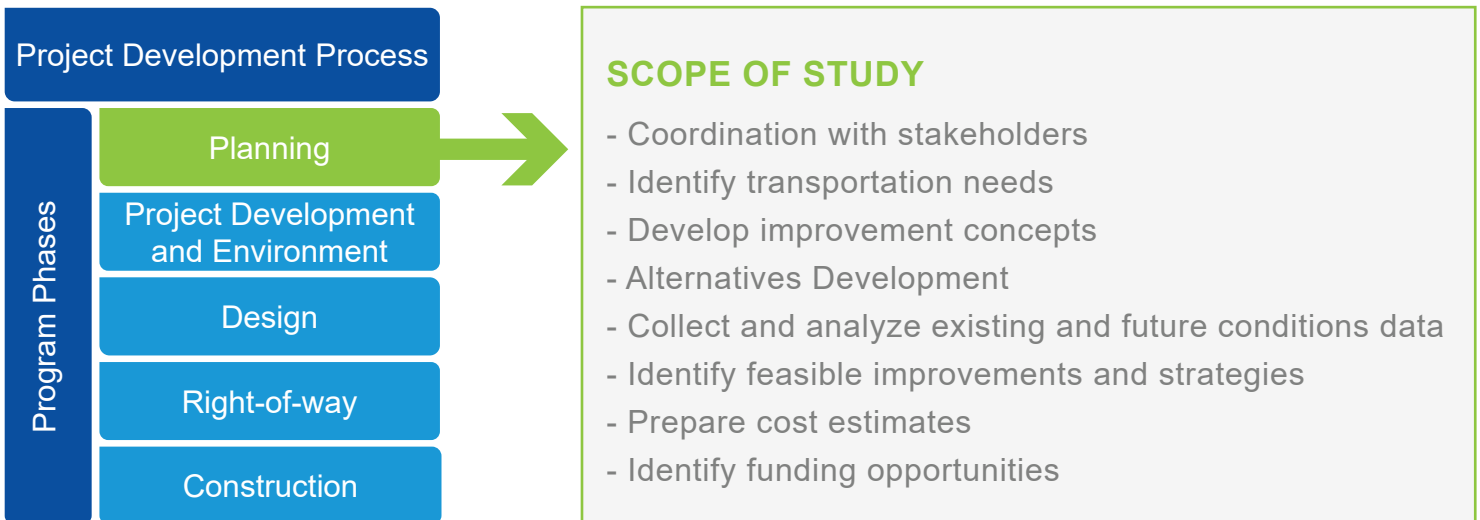
The purpose of this initiative is to identify and define transportation problems and develop effective solutions to fulfill the goal of providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84. All types of improvement strategies are being considered including land use and policy strategies; geometric modifications to roadways; pedestrian, bicycle, greenway, and transit infrastructure improvements; and technology and traffic signal improvements.

## ARTERIAL CONNECTIVITY STUDY TIMELINE



## CURRENT STATUS OF STUDY

The project is currently in the planning phase. During this phase, the study team is coordinating with stakeholders to identify transportation needs and develop improvement concepts.



### STAY CONNECTED

If you would like additional study information, please visit the Broward MPO website at [ww.browardmpo.org](http://ww.browardmpo.org). Click on the "what we do" tab, current project/ studies, Arterial Connectivity Study



### OR CONTACT

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# Arterial Connectivity Study along I-595 Corridor

## City of Plantation Stakeholder Coordination Meeting

*July 28, 2021*

FM No. 441954-1-12-01



*A Joint MPO and FDOT Project*



# Introductions



**Chon Wong**  
**FDOT Project Manager**



**Winston Harris, PE**  
**Consultant Project Manager**



**Claudia Olarte, PE**  
**FDOT Deputy  
Project Manager**



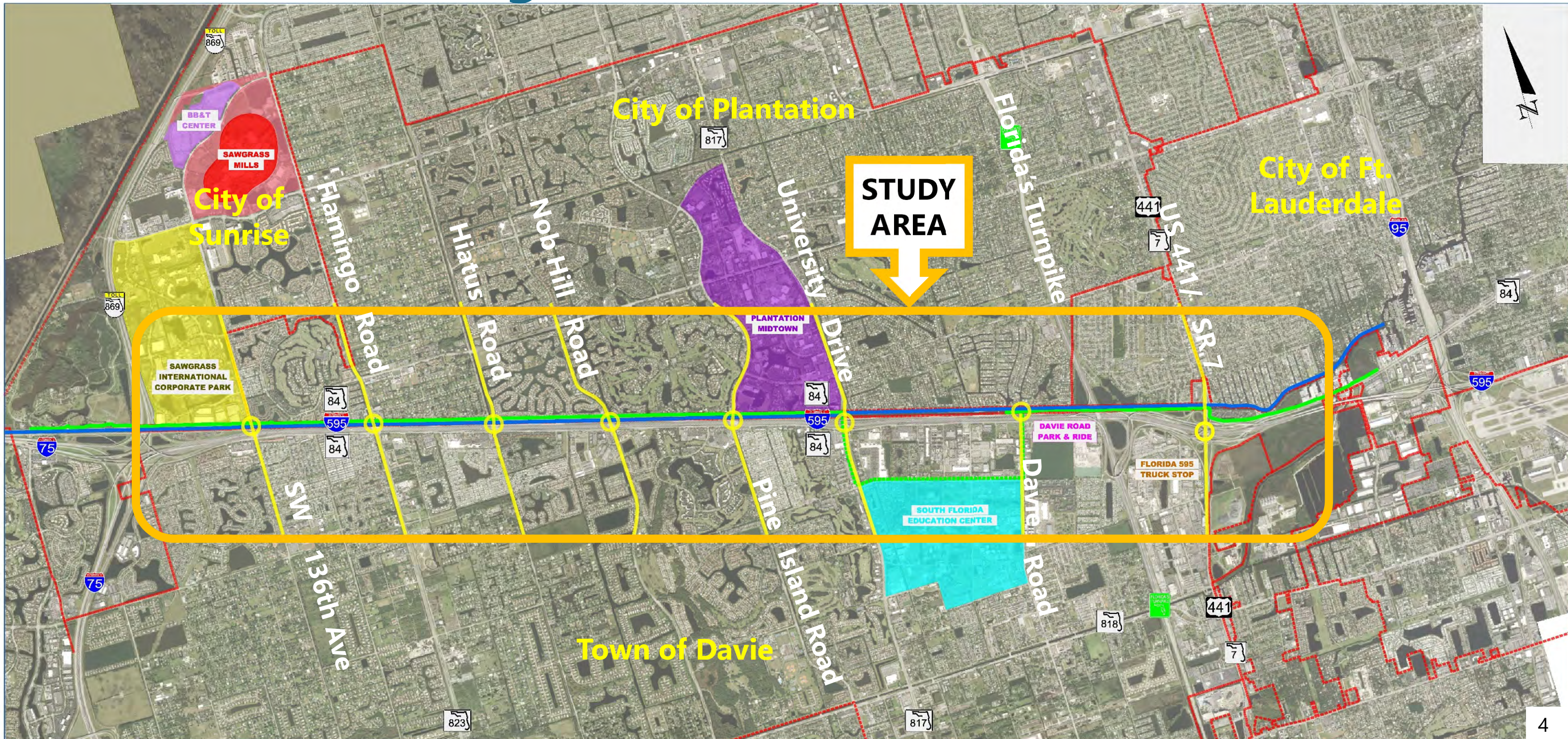
**Lisa Dykstra, PE**  
**Consultant Deputy  
Project Manager**

# Purpose of Presentation

- » **Overview of Study**
- » **Overview of Recommendations**
  - Mitigation Concepts (Infrastructure Improvements)
  - Local Planning Actions



# Study Area: North-South Arterials and SR 84 along I-595 from I-75 to east of SR 7





# Goal and Objectives

**Goal: Provide congestion relief for north-south travel and improve access to/from SR 84 and I-595**

## Key Objectives:

**Identify Deficiencies**

**Collaborate with stakeholders to develop effective solutions**

**Implement Plan for Mitigation Measures**

**Preserve mobility of I-595/SR 84 and surrounding roadway network**

**Understand trip generators & traffic flow patterns**

**Identify traffic operations, safety, pedestrian, bicycle, and transit deficiencies**

**Identify short- and long-term congestion relief improvements**

**Identify and recommend local land use strategies; and connectivity improvements for bicyclists & pedestrians**

**Package into projects for funding and implementation**

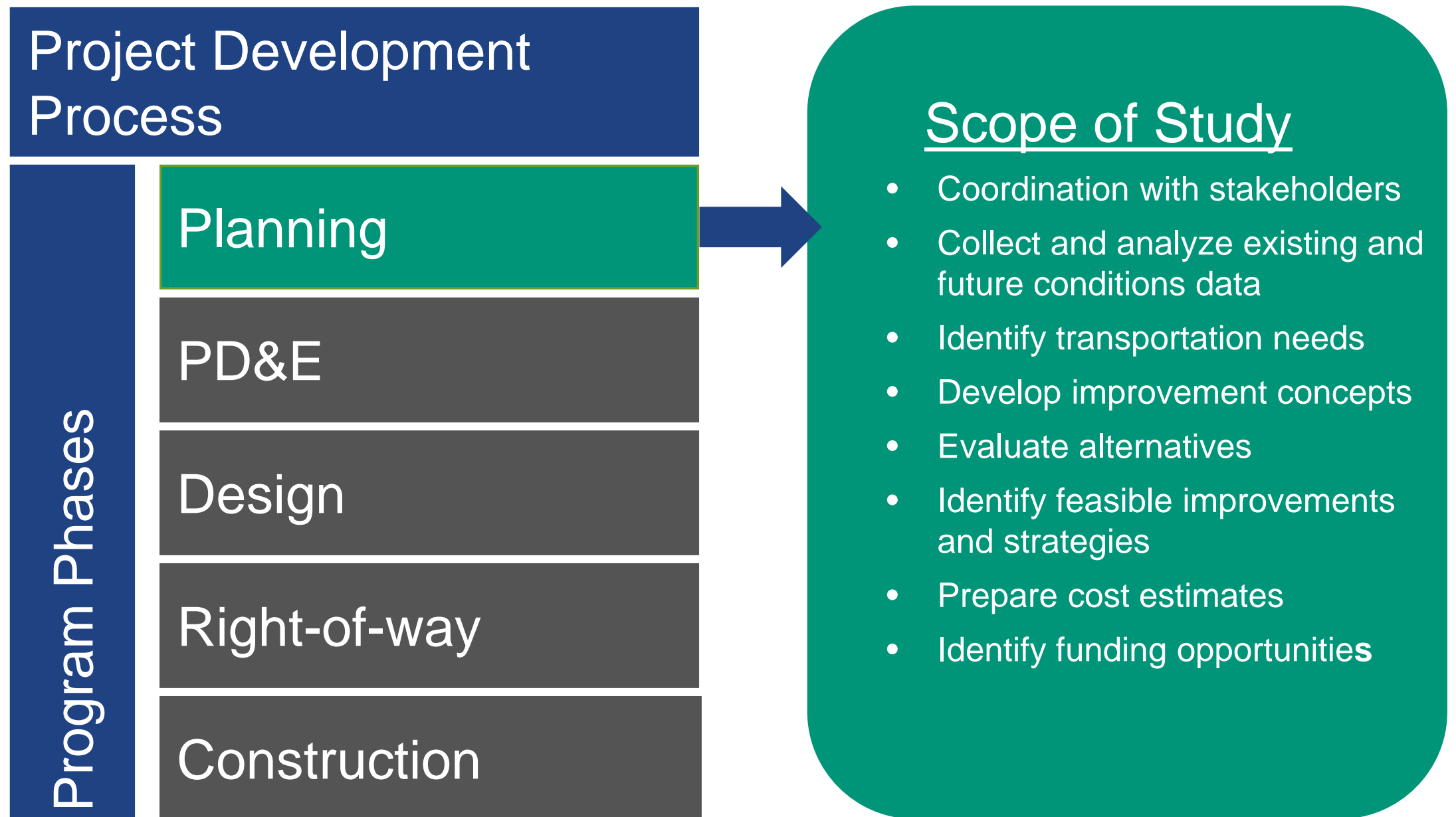
**Estimate costs and impacts of mitigation measures**

**Identify funding sources**



# Where does Planning fit in FDOT Project Delivery Process

- FDOT delivers a project utilizing a 5-phase process
  - ✓ The Planning Phase is the first phase



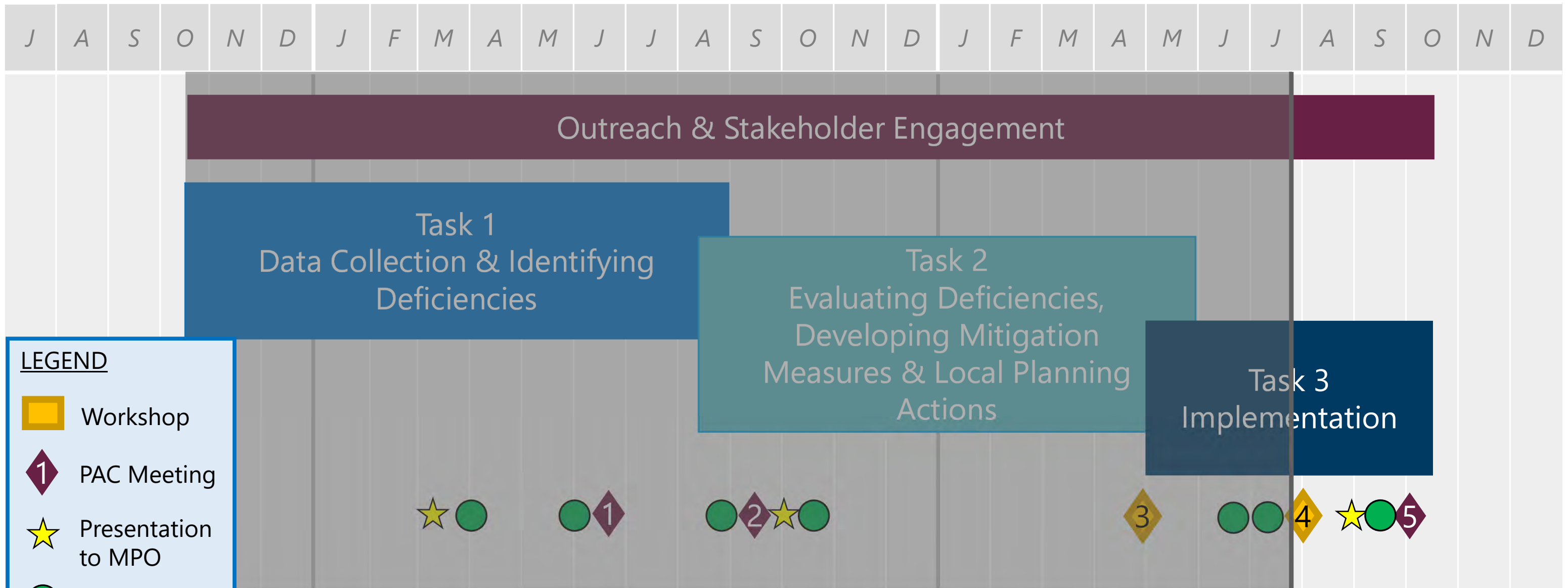


# Schedule

2019

2020

2021



**LEGEND**

- Workshop
- PAC Meeting
- Presentation to MPO
- Report/Tech Memo Due

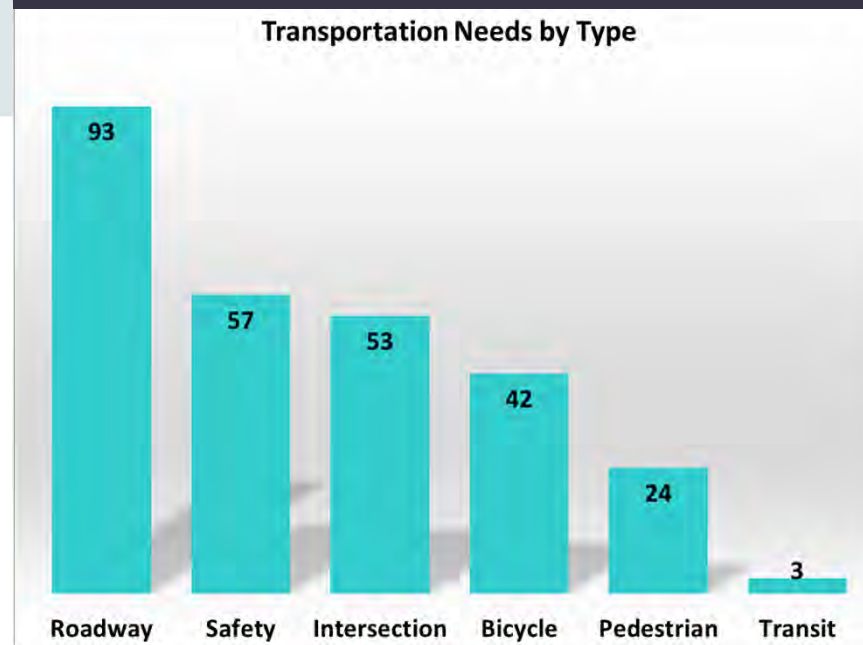


# Stakeholder Involvement / Public Outreach

## Stakeholder Involvement

- Initial Stakeholder Meetings
- Presentations to Broward MPO CAC, TAC, Board, and FTAC
- Project Advisory Committee Meetings
  - *Adjacent municipalities*
  - *Broward County*
  - *FDOT*
  - *Broward MPO*

## Online Public Survey Results



## Public Outreach

- Online Public Survey Conducted Jul. to Aug. 2020
- Factsheet
- Project Flyer
- Social Media
- Study Websites
- Email message for partner distribution



# Network Deficiencies

## Roadway Capacity Needs

- 3 study roadways exceed capacity today (University Drive, SR 7, SR 84)
- 6 study roadways will exceed capacity by 2045 (3 existing + Davie Road, Pine Island Road, Nob Hill Road)

## Intersection Capacity Needs

- 17 (40%) study intersections exceed capacity today, including the SR 84 interchanges
- 31 (70%) study intersections will exceed capacity by 2045

## Safety Improvement Needs

- 36 high crash locations within study area, crashes concentrated along SR 84, University Drive
- Bicycle and pedestrian crashes concentrated along SR 84, University Drive, and SR 7



# Network Deficiencies

## Greenway

- Vehicular & ped/bike conflicts at crossings on north/south roads
- Connectivity gaps to the Greenway

## Sidewalk

- Sidewalk gaps on all study roads except Davie Road & SR 84

## Bicycle Lanes

- Missing or inadequate bicycle facilities along study roads
- Buffered bike lanes are preferred

## Transit

- Missing or inadequate bus stop facilities, shelters and benches
- Consider regional transit plans & local bus circulator needs



# ***Overview of Mitigation Concepts (Infrastructure Improvements)***



# Key Improvement Strategies

## Roads and Intersections

- Meet target Level of Service D through year 2045, wherever feasible
- Increase capacity – add lanes
- Bypass signalized intersections – add overpass, bypass lanes and flyovers
- Reduce intersection conflicting movements/signal phases – reconfigure intersection movements

## New River Greenway

- Provide grade separated crossings
- Fill missing gaps in greenway

## Pedestrian and Bicycles

- Add bicycle lanes/shared-use paths
- Fill sidewalk gaps

## Transit

- Install/Update bus facilities

## Freight

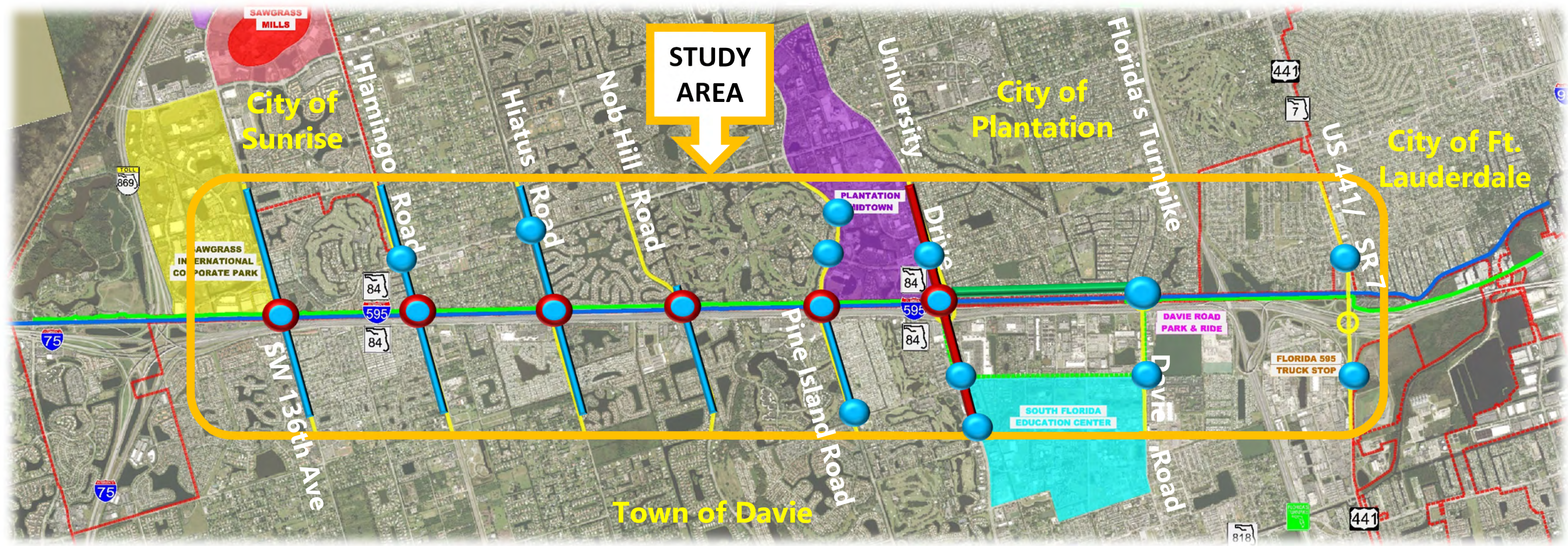
- Improve truck access




## Considerations

- Avoid need for additional right of way
- Avoid private property impacts
- Minimize impacts to I-595 mainline
- Minimize impacts to New River Canal
- Avoid impacts to social and economic, cultural, natural, or physical resources (parks, cemeteries, etc.)



# Recommended Infrastructure Improvements



|                                                                                     |                                 |                                                                                       |                                                     |
|-------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------|
|  | = intersection modifications    |  | = Interchange & Greenway Crossing modifications     |
|  | = Roadway capacity improvements |  | = Roadway improvements, bicycle lanes and sidewalks |
|  | = Greenway extension            |                                                                                       |                                                     |



# Recommended Infrastructure Improvements

## NW/SW 136 Avenue

- Modify interchange at SR 84/I-595
- Greenway crossing underpass
- Bicycle lanes and sidewalks

## Flamingo Road

- Modify interchange at SR 84/I-595
- Modify intersection at Broward Blvd.
- Greenway crossing overpass
- Bicycle lanes and sidewalks

## Hiatus Road

- Modify interchange at SR 84/I-595
- Modify intersection at Broward Blvd.
- Greenway crossing overpass
- Bicycle lanes and sidewalks

## Nob Hill Road

- Modify interchange at SR 84/I-595
- Greenway crossing overpass
- Bicycle lanes and sidewalks

## Pine Island Road

- Modify interchange at SR 84/I-595
- Modify intersection at Nova Drive
- Modify intersection at Peters Road
- Modify intersection at SW 6<sup>th</sup> Court
- Greenway crossing overpass
- Bicycle lanes and sidewalks

# Recommended Infrastructure Improvements

## University Drive

- Modify interchange at SR 84/I-595
- Add 4<sup>th</sup> NB & SB through lane capacity
  - Elevated section
  - At-grade sections
- Modify intersection at SW 30<sup>th</sup> Street
- Modify intersection at Peters Road
- Midtown Bridge reliever route
- Greenway crossing underpass
- Bicycle lanes and sidewalks

## Davie Road

- Modify interchange at SR 84/I-595
- Modify intersection at Nova Drive
- Shared use path through SR 84 interchange

## SR 7

- Modify intersection at Oakes Road
- Modify intersection at Riverland Road
- Modify SR 84 / I-595 ramp connections

## New River Greenway

- HAWK Signal Crossings (short term)
- Overpass/Underpass Crossings (long term)
- Fill gap between University Drive and Davie Road



# Corridor Concepts – Summary of Benefits

| MOE / Performance Measures | Build Corridor Concept (2045 Condition)            | NW/SW 136 <sup>th</sup> Avenue | Flamingo Road | Hiatus Road | Nob Hill Road | Pine Island Road | University Drive | Davie Road | SR 7 / US-441 |
|----------------------------|----------------------------------------------------|--------------------------------|---------------|-------------|---------------|------------------|------------------|------------|---------------|
| Level of Service           | All intersections operate at LOS D or better?      | Yes                            | Yes           | No (E)      | No (E)        | No (E/F)         | No (E/F)         | Yes        | Yes           |
| Delays                     | % reduction in total intersection delay            | <b>90%</b>                     | <b>55%</b>    | <b>60%</b>  | 35%           | <b>55%</b>       | <b>50%</b>       | <b>85%</b> | 35%           |
| North South Travel Time    | % reduction in total travel time                   | <b>50%</b>                     | 10%           | 20%         | 20%           | 25%              | 40%              | <b>65%</b> | 30%           |
| Bicycle & pedestrian needs | Enhances bicycle lanes, sidewalk, shared use paths | Yes                            | Yes           | Yes         | Yes           | Yes              | Yes              | Yes        | Yes           |
| Transit needs              | Accommodates bus stops and shelters                | Yes                            | Yes           | Yes         | Yes           | Yes              | Yes              | Yes        | Yes           |



# University Drive Corridor Concept at SR 84

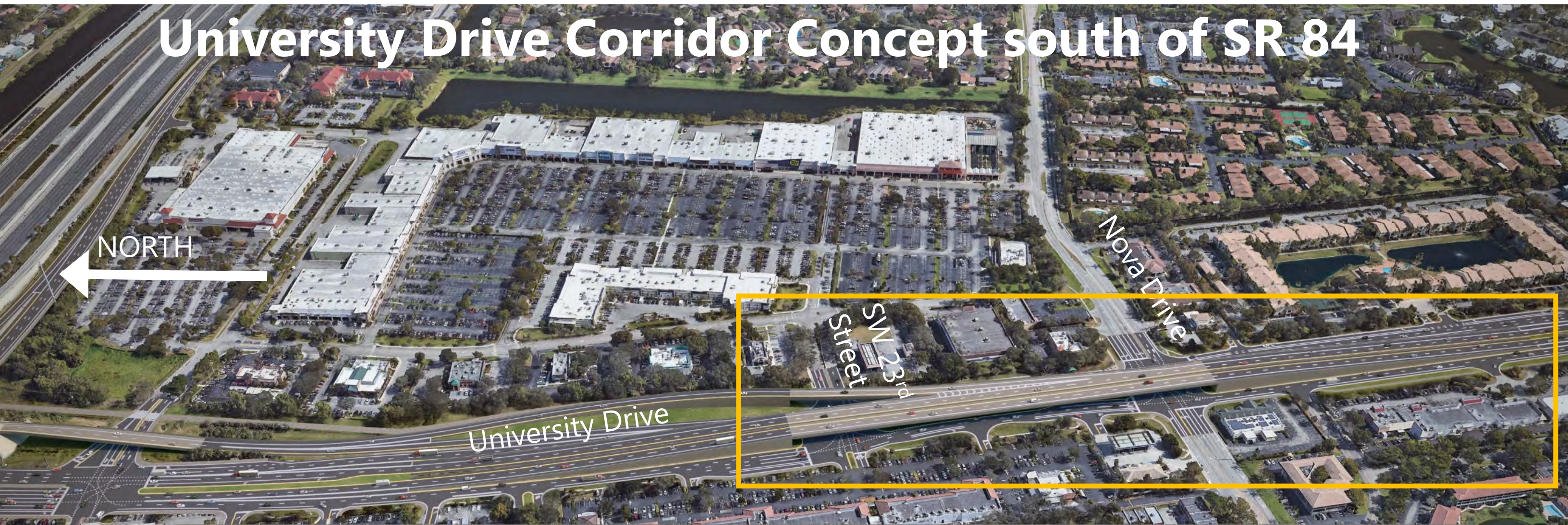
←  
NORTH





# University Drive Corridor Concept south of SR 84

NORTH





# NW/SW 136 Avenue Corridor Concept Rendering

NORTH



NW 136<sup>th</sup> Avenue

Eastbound SR 84

I-595





# New River Greenway Overpass Crossing at Flamingo Road

NORTH  
←

Flamingo Road

New River Greenway







# *Overview of Local Planning Actions*



# Local Planning Actions (LPAs)

## » What

- Recommended actions for local governments to take, in addition to infrastructure construction improvements to help address study area deficiencies.

## » Why

- » Infrastructure improvements alone can not address all deficiencies.

## » Recommendations

- » Initial list of nearly 50 strategies
- » Focus on Top 9 LPA strategies
- » LPAs categorized using a “5 E” approach



ENGINEERING



EDUCATION



ENCOURAGEMENT



ENFORCEMENT



EVALUATION

# Local Planning Actions Top 9 Recommendations

## ENGINEERING

1. Develop Access Management Plans
2. Implement Transportation Systems Management & Operations (TSM&O) Strategies

## EDUCATION

3. Disseminate Transportation Demand Management (TDM) Information & Develop TDM Ordinances
4. Conduct Safety Education Campaign

## ENCOURAGEMENT

5. Coordinate with Broward County Transit & Encourage Transit-Oriented Development (TOD)
6. Establish a Regional Transportation Management Association (TMA) or Working Group for Study Area
7. Encourage Use of Existing & New Parallel Roadway Relievers

## ENFORCEMENT

8. Increase Law Enforcement to Address Speeding and Aggressive and Reckless Driving

## EVALUATION

9. Track Performance Measures for Study Corridors



# Study Team Next Steps

## » July - August

- Develop Master List of Improvements with costs & timeframes for funding
- Project Advisory Committee (PAC) Meeting #4
- Final stakeholder meetings

## » August - September

- ***Present findings to Broward MPO Committees and Board***
- Submit master improvement list

## » October

- Finalize study, end of planning phase

# Stakeholders Next Steps

## » Support Recommended Mitigation Measures

- Add infrastructure improvements to comprehensive plans or Capital Improvement Plans
- Pass resolution(s) of support
- Seek funding for recommended improvements
- Initiate next steps for Local Planning Action strategies





# Thank You

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## Websites:

- ❖ <https://www.browardmpo.org/current-projects-studies/arterial-connectivity-study-along-i-595-corridor>
- ❖ [https://www.d4fdot.com/bcfdot/arterial connectivity study along I-595 corridor.asp](https://www.d4fdot.com/bcfdot/arterial_connectivity_study_along_I-595_corridor.asp)

