

# SR 776 Corridor Planning Study

From Sarasota County Line to US 41

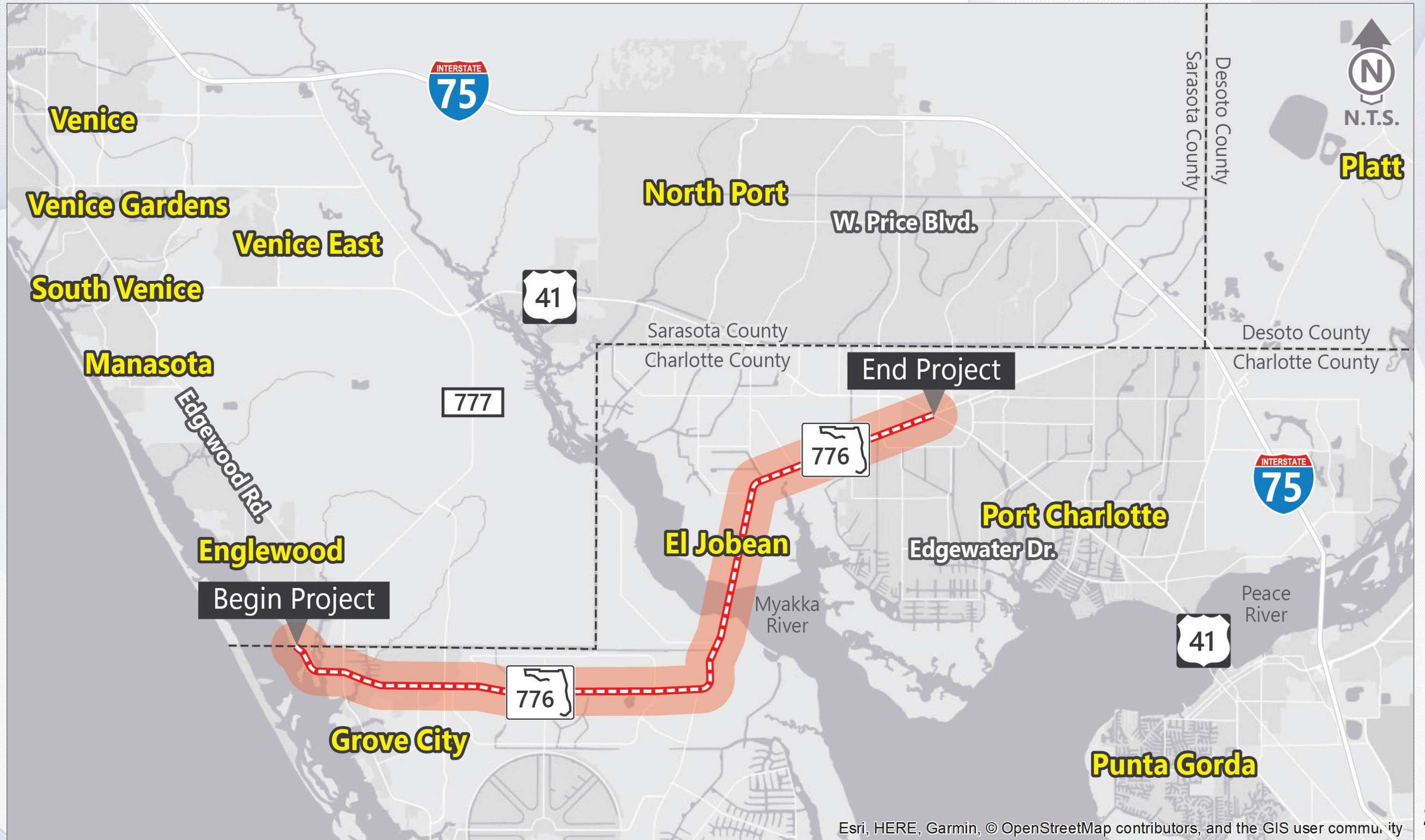
**Citizens Advisory Committee (CAC)  
Charlotte County – Punta Gorda MPO**

June 30, 2021



# SR 776 Study Corridor

(Approximate Length 16.5 miles)



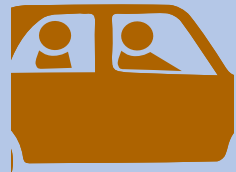
# Agenda



**Study Purpose and Objectives**



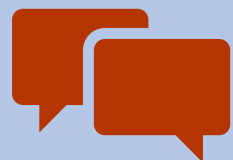
**Draft Recommendations**



**Study Timeline**



**Next Steps**



**Feedback and Discussion**

# Study Purpose and Objectives

## Study Purpose

*“Improve **Safety, Mobility, Connectivity & Reliability** for people who drive, walk, bike and use transit”*

## Major Public Concerns

- Capacity/operational improvements
- Law enforcement
- New traffic controls
- Add transit

## Objectives

- Conduct safety, operational and multimodal analysis
- Intersection specific improvements (no widening of SR 776)
- Identify and prioritize short-term (Year 2025), mid-term (Year 2035), and long-term (Year 2045) improvements



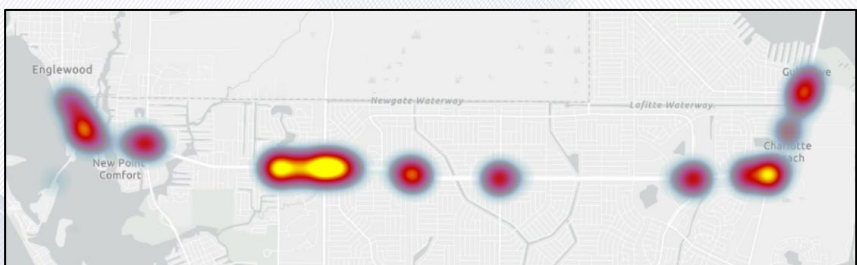
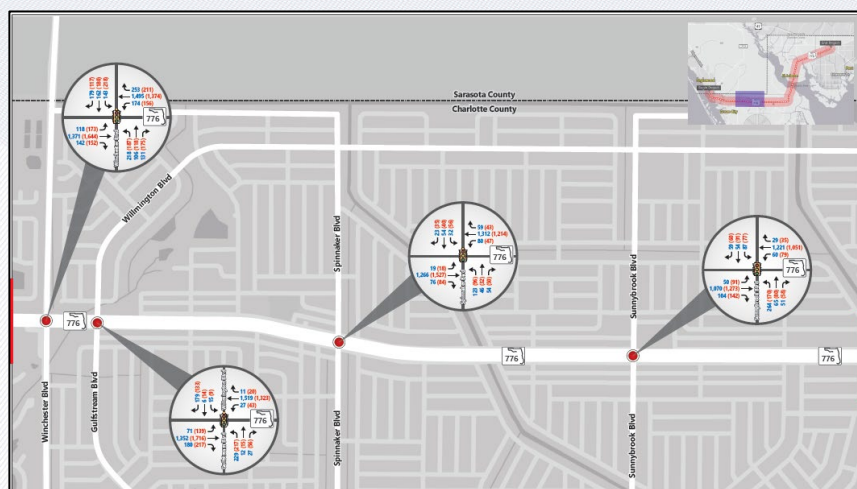
# Study Methodology

## Key Elements

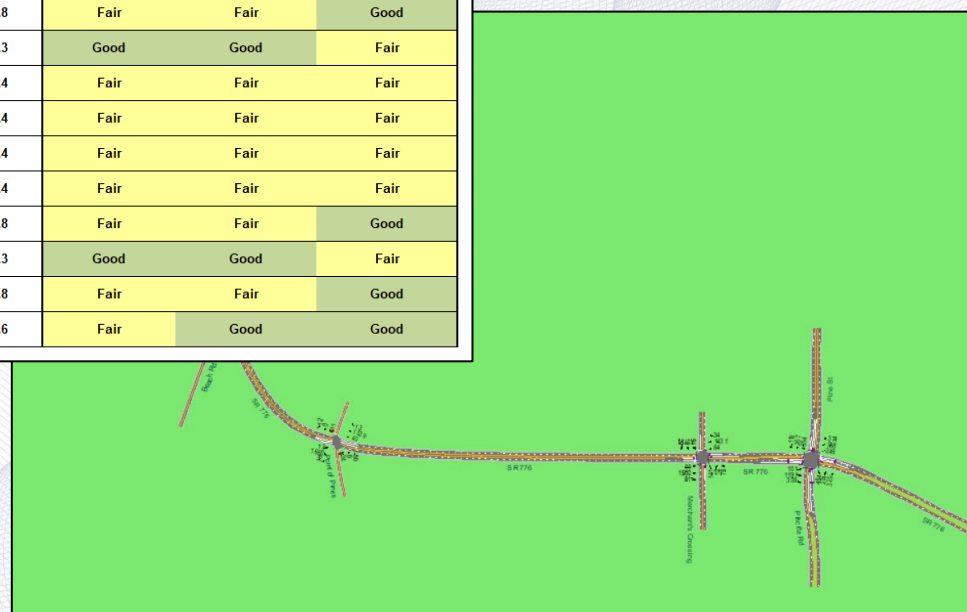
- Existing and anticipated future traffic volumes
- Field observations
- Historical crash data
- Operational analysis
- Stakeholder input
- CAP-X analysis
- FDOT programmed and planned improvements projects
- FDOT and FHWA guidelines
- Similar projects

## Improvement Types

- Turn lanes
- Operational
- Innovative intersection types
- Safety
- Multimodal/ADA
- Lighting
- ITS
- Planning

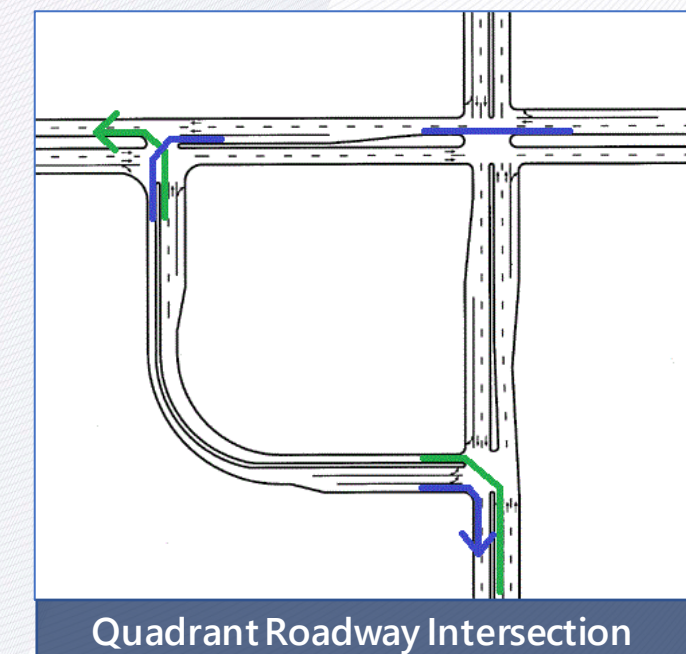
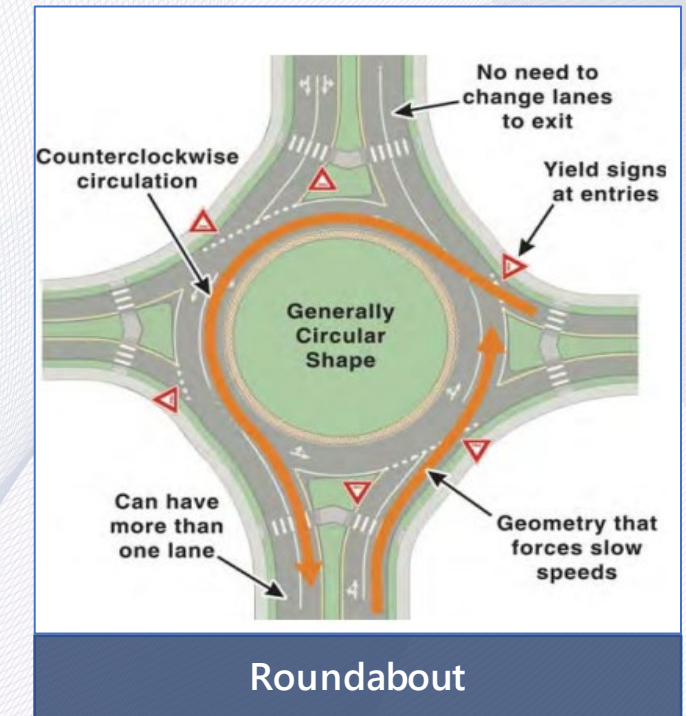
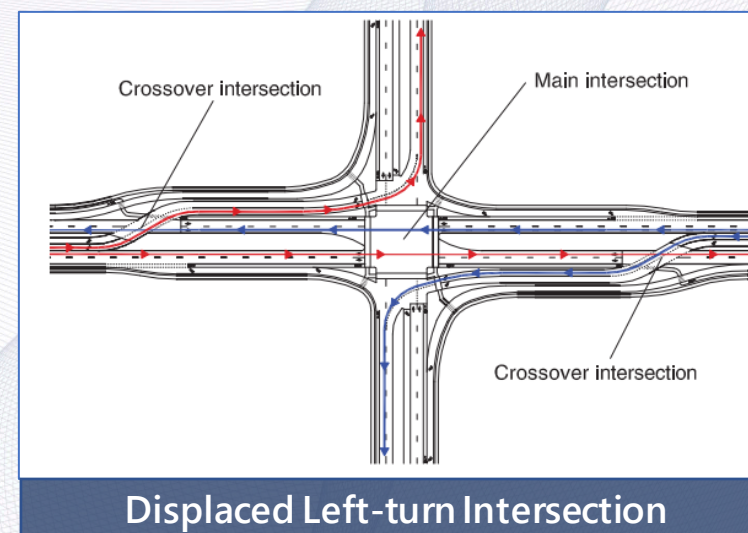
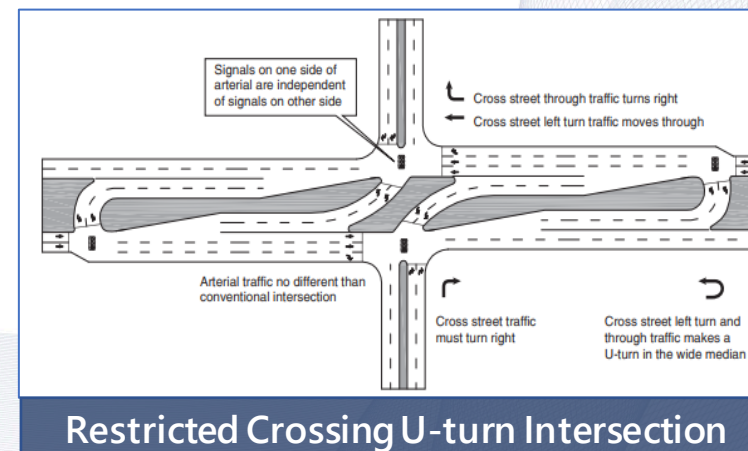
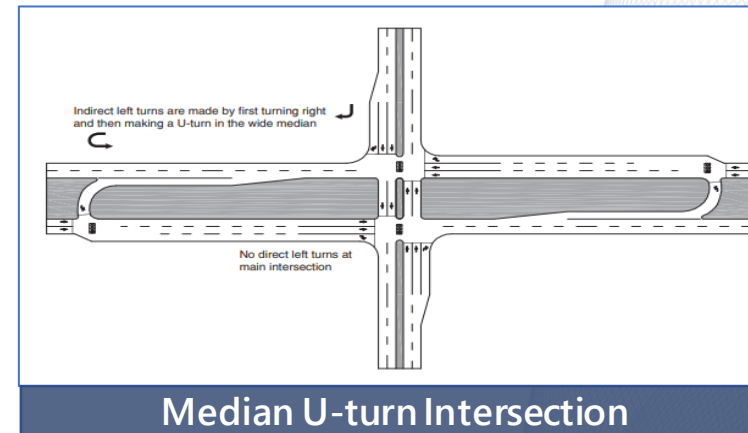


| Capacity Analysis for Planning of Junctions |                   |             |                  |                           |                        |                        |
|---|-------------------|-------------|------------------|---------------------------|------------------------|------------------------|
| Dynamic Results Summary                     |                   |             |                  |                           |                        |                        |
| TYPE OF INTERSECTION                        | Overall V/C Ratio | V/C Ranking | Multimodal Score | Pedestrian Accommodations | Bicycle Accommodations | Transit Accommodations |
| Displaced Left Turn                         | 0.49              | 1           | 4.8              | Fair                      | Fair                   | Good                   |
| Signalized Restricted Crossing U-Turn N-S   | 0.50              | 2           | 6.3              | Good                      | Good                   | Fair                   |
| Quadrant Roadway S-W                        | 0.51              | 3           | 4.4              | Fair                      | Fair                   | Fair                   |
| Quadrant Roadway N-W                        | 0.51              | 3           | 4.4              | Fair                      | Fair                   | Fair                   |
| Quadrant Roadway N-E                        | 0.52              | 5           | 4.4              | Fair                      | Fair                   | Fair                   |
| Quadrant Roadway S-E                        | 0.52              | 5           | 4.4              | Fair                      | Fair                   | Fair                   |
| Partial Displaced Left Turn N-S             | 0.52              | 5           | 4.8              | Fair                      | Fair                   | Good                   |
| Partial Median U-Turn N-S                   | 0.53              | 8           | 6.3              | Good                      | Good                   | Fair                   |
| Traffic Signal                              | 0.56              | 9           | 4.8              | Fair                      | Fair                   | Good                   |
| 2NS X 1EW                                   | 0.70              | 10          | 5.6              | Fair                      | Good                   | Good                   |



# Traditional/Innovative Intersection Improvements

- **Anticipated Safety Benefits** (Source: FDOT)
  - **Exclusive right turn lane:**
    - 11% reduction (all crash types)
  - **Additional left turn lane:**
    - 4% reduction (all crash types)
  - **Extend storage:**
    - 11% reduction (all crash types)
  - **Roundabout**
    - 90% fewer fatalities/75% fewer injuries
    - 10-40% fewer pedestrian/bicycle crashes



# General Safety/Multimodal/ADA Improvements

- Consider pulling median noses as close to intersection
- Retroreflective back plates to signal heads
- Detectable warning surfaces on curb ramps
- Hardened centerlines/pedestrian refuge
- High-friction surface treatment
- Provide high emphasis crosswalk where needed
- Near perpendicular right turns
- Tightening the corner radii
- Speed feedback signs

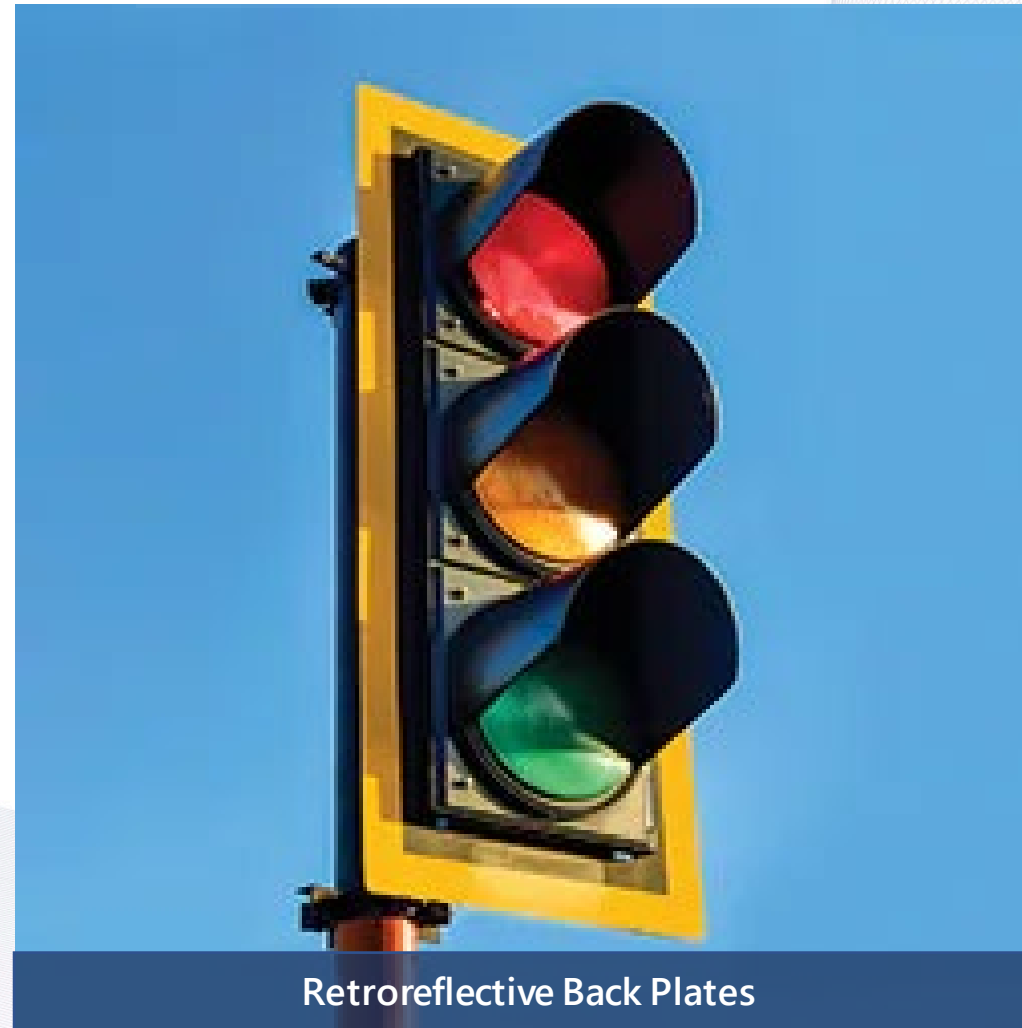
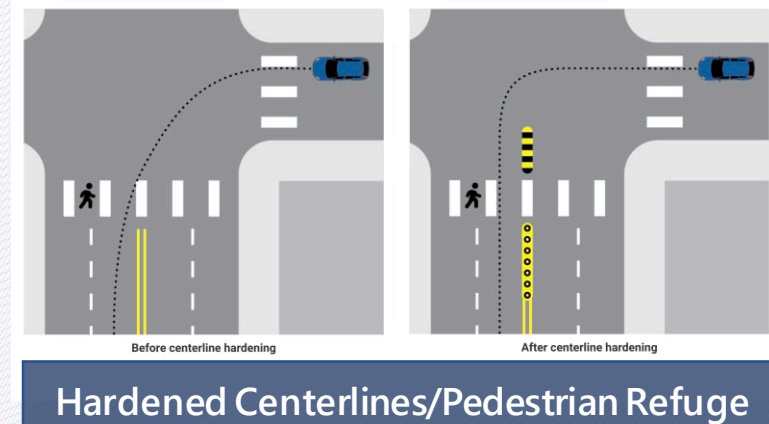
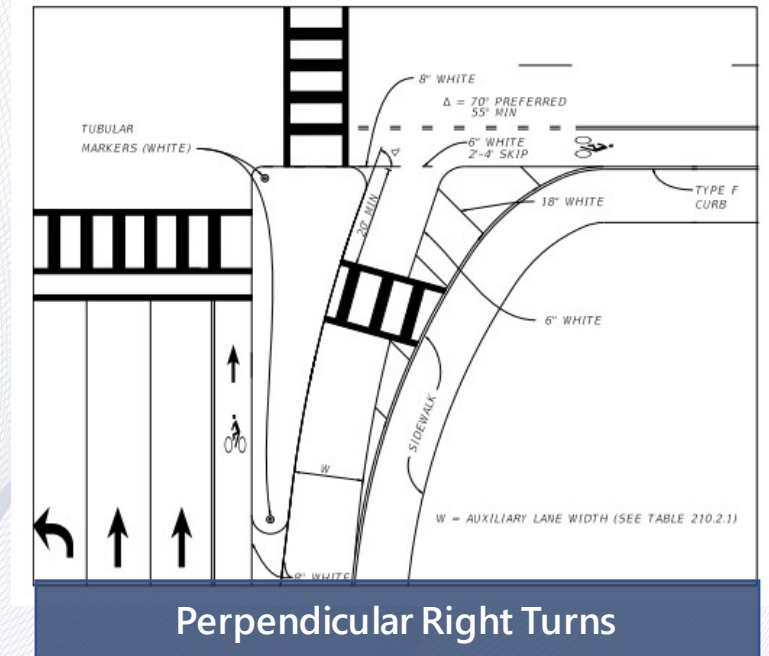


Figure 212.12.3 Near Perpendicular Right Turn Lane



WHAT IS HIGH FRICTION SURFACE TREATMENT? (HFST)



High Friction Surface Treatments (HFST) are pavement surfacing systems with exceptional skid-resistant properties that are not typically acquired by conventional materials.

# Recommended Intersection Improvements

| SR 776 at                       | Year 2025 Short Term Improvements   | Year 2035 Mid Term Improvements   | Year 2045 Long Term Improvements   |
|---------------------------------|---|---|--|
| <b>Beach Road</b>               |   | <ul style="list-style-type: none"> <li>Provide a 500 feet queue length for NB left turn lane</li> </ul>   | <ul style="list-style-type: none"> <li>*Additional EB and additional NB left turn lane or consider a roundabout</li> </ul> |
| <b>Point of Pines Road</b>      |   | <ul style="list-style-type: none"> <li>RCUT with U-turns east and west of this location (consistent with the 2020 Access Management Study)</li> </ul> |  |
| <b>Merchants Crossings</b>      | <p><i>NB/SB Approaches:</i></p> <ul style="list-style-type: none"> <li>Shared left/through lane to exclusive left lane, and right lane into shared through/right lane</li> <li>Left turns under permissive + protected phase</li> </ul> |   | <ul style="list-style-type: none"> <li>*Add exclusive EB right turn lane</li> </ul>  |
| <b>Placida Road/Pine Street</b> | <ul style="list-style-type: none"> <li>Extend WB left turn storage.</li> <li>Signal coordination b/w Pine Street and Merchants Crossings</li> </ul>   | <ul style="list-style-type: none"> <li>Add additional WB left turn lane</li> </ul>  | <ul style="list-style-type: none"> <li>*Add exclusive NB right turn lane</li> </ul>  |
| <b>Sana Casa Drive</b>          | <ul style="list-style-type: none"> <li>Add additional NB left turn lane</li> </ul>  | <ul style="list-style-type: none"> <li>*Add exclusive EB and WB right turn lanes</li> </ul>   |  |
| <b>Oriole Boulevard</b>         | <ul style="list-style-type: none"> <li>NB and SB left turn lanes under permissive + protected phase</li> </ul>  | <ul style="list-style-type: none"> <li>*Add exclusive EB and WB right turn lanes</li> </ul>   | <ul style="list-style-type: none"> <li>Additional WB left turn lane</li> </ul>   |
| <b>Winchester Boulevard</b>     | <ul style="list-style-type: none"> <li>*Add exclusive EB right turn lane</li> </ul>   | <ul style="list-style-type: none"> <li>Extend EB and WB left turn storage lengths</li> </ul>  | <ul style="list-style-type: none"> <li>*Add exclusive NB and SB right turn lanes</li> </ul>                                |

**Notes: \* Potential ROW needed; Safety/multimodal/ADA improvements are not included**

# Recommended Intersection Improvements

| SR 776<br>at   | Year 2025<br>Short Term Improvements   | Year 2035<br>Mid Term Improvements  | Year 2045<br>Long Term Improvements  |
|--|--|---|--|
| <b>Willmington Boulevard/Gulfstream Boulevard (West)</b> | <ul style="list-style-type: none"> <li>NB and SB left turns under permissive + protected phase</li> <li>Signal coordination b/w San Casa Drive, Oriole Boulevard, Winchester Boulevard and Willmington Boulevard/Gulfstream Boulevard (West)</li> </ul>  |   | <ul style="list-style-type: none"> <li>Additional NB left turn lane</li> </ul>   |
| <b>Spinnaker Boulevard</b>                               | <ul style="list-style-type: none"> <li>Add exclusive EB right turn lane</li> </ul>   | <ul style="list-style-type: none"> <li>Add exclusive WB right turn lane</li> </ul>  | <ul style="list-style-type: none"> <li>Consider a roundabout</li> </ul>  |
| <b>Sunnybrook Boulevard</b>                              | <ul style="list-style-type: none"> <li>Add exclusive EB right turn lane</li> </ul> <p><i>NB/SB Approaches:</i></p> <ul style="list-style-type: none"> <li>Convert shared left/through lane to exclusive left lane, and right lane into shared through/right lane</li> <li>Left turns under permissive + protected phase</li> <li>Close the median openings at Sunnybrook Boulevard and N Access Road and Sunnybrook Boulevard and S Access Road</li> </ul> | <ul style="list-style-type: none"> <li>Extend shared NB and SB through/right lanes</li> </ul>   |  |
| <b>Willmington Boulevard/Gulfstream Boulevard (East)</b> | <ul style="list-style-type: none"> <li>Signalization</li> </ul>  | <ul style="list-style-type: none"> <li>Add exclusive WB right turn lane</li> </ul>  |  |
| <b>Coliseum Boulevard/Pinedale Drive</b>                 | <ul style="list-style-type: none"> <li>NB and SB left turns under permissive + protected phase</li> </ul>  | <ul style="list-style-type: none"> <li>Add exclusive EB and WB right turn lanes</li> </ul>  |  |
| <b>CR 771/Gasparilla Road/Sailors Way</b>                |  | <ul style="list-style-type: none"> <li>Additional NB left turn lane</li> <li>Add exclusive SB left turn lane under protected phase</li> </ul> | <ul style="list-style-type: none"> <li>*Additional WB left turn lane, Quadrant Roadway Intersection (SE corner) or a partial E/W Displaced Left Turn intersection</li> </ul> |

Notes: \* Potential ROW needed; Safety/multimodal/ADA improvements are not included

# Recommended Intersection Improvements

| SR 776 at                              | Year 2025 Short Term Improvements  | Year 2035 Mid Term Improvements  | Year 2045 Long Term Improvements   |
|--|--|--|--|
| <b>Gillot Boulevard</b>                |  |  | <ul style="list-style-type: none"> <li>*Consider a roundabout</li> </ul>   |
| <b>Jacobs Street</b>                   |  | <ul style="list-style-type: none"> <li>Add exclusive WB right turn lane</li> <li>Signalization of RCUT</li> </ul>  |  |
| <b>Cornelius Boulevard</b>             | <ul style="list-style-type: none"> <li>Signalization (or RCUT)</li> </ul>  | <ul style="list-style-type: none"> <li>Add exclusive WB right turn lane</li> </ul>   |  |
| <b>Biscayne Drive</b>                  | <ul style="list-style-type: none"> <li>Add exclusive WB right turn lane and signalization</li> </ul>   |  | <ul style="list-style-type: none"> <li>Consider a roundabout</li> </ul>  |
| <b>Charlotte Sports Park Entrance</b>  | <ul style="list-style-type: none"> <li>Signal warrant study/pedestrian signal/HAWK evaluation</li> </ul>   | <ul style="list-style-type: none"> <li>Add exclusive EB and WB right turn lanes</li> </ul>   |  |
| <b>Flamingo Boulevard</b>              | <ul style="list-style-type: none"> <li>*Add exclusive EB right turn lane</li> <li>Add exclusive NB right turn lane</li> </ul>  | <ul style="list-style-type: none"> <li>Add additional WB left turn lane and exclusive WB right turn lane</li> <li>Add additional NB left turn lane and NB shared through/right lane</li> <li>Consider adequate geometry for the addition of the north leg</li> </ul> | <ul style="list-style-type: none"> <li>Consider a Displaced Left Turn intersection</li> </ul>  |
| <b>Toledo Blade Boulevard</b>          | <ul style="list-style-type: none"> <li>Add exclusive *EB and WB right turn lanes</li> <li>Remove permissive phases for EB and WB left turn lanes</li> <li>Extend queue length for SB left turn lane</li> </ul> | <ul style="list-style-type: none"> <li>Add additional EB left turn lane</li> <li>Add an exclusive SB right turn lane and an additional NB left turn lane</li> </ul>  | <ul style="list-style-type: none"> <li>Consider a Displaced Left Turn intersection</li> </ul>  |
| <b>Murdock Circle/Enterprise Drive</b> | <ul style="list-style-type: none"> <li>Extend SB left turn storage</li> </ul>  | <ul style="list-style-type: none"> <li>Additional NB left turn lane and remove split phasing</li> </ul>  |  |
| <b>US 41</b>                           |  |  | <ul style="list-style-type: none"> <li>Eliminate EB/WB left turn movements. *EB left can use Enterprise Drive and WB left can use Murdock Circle</li> <li>Consider a partial Displaced Left Turn intersection (N/S)</li> </ul> |

**Notes: \* Potential ROW needed; Safety/multimodal/ADA improvements are not included**

# Intersection Improvements – Priority Rankings

## Ranking based on:

- Operational analysis results
- Crash rates
- Programmed and planned improvement projects
- Stakeholder input
- Engineering judgement

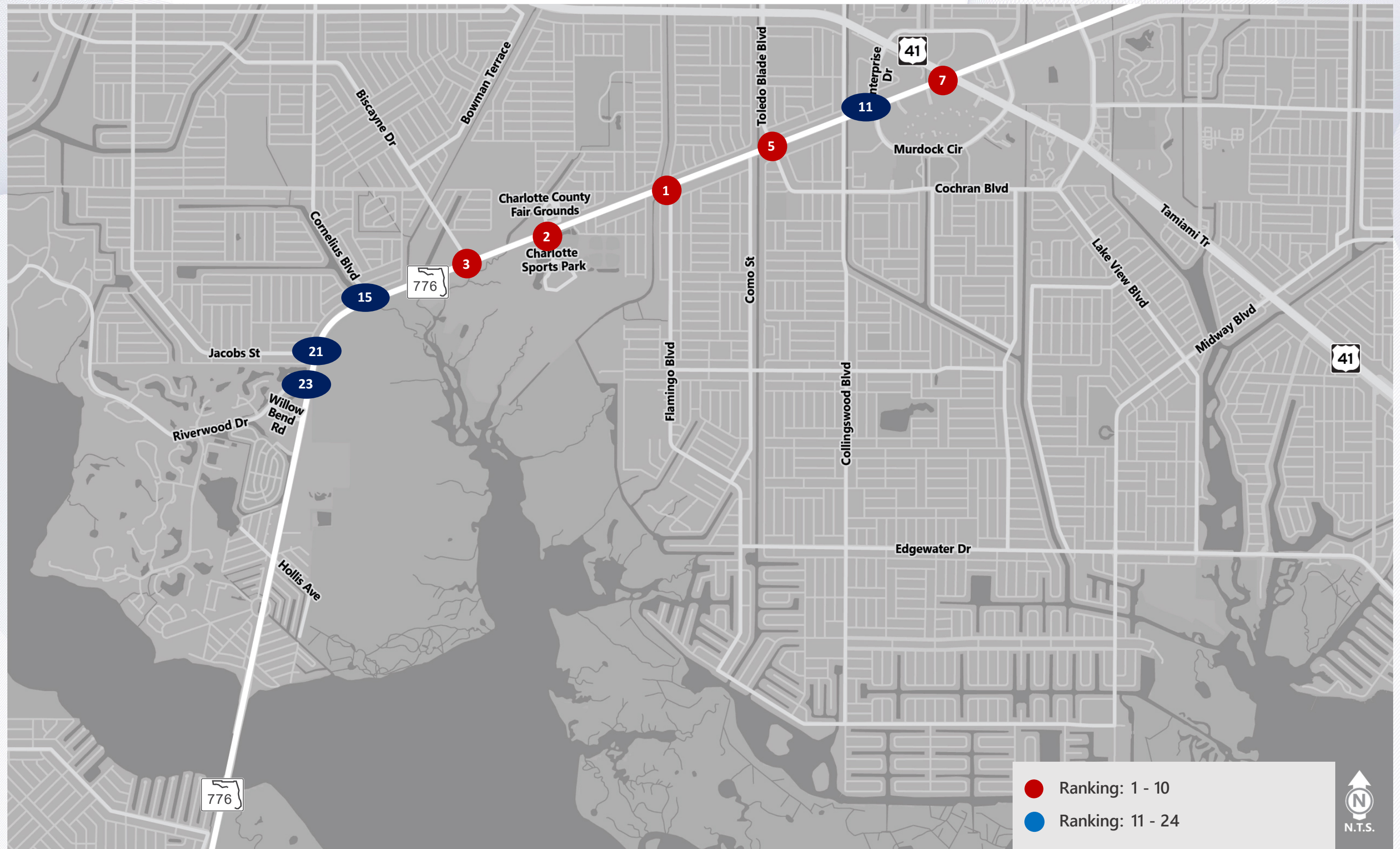
| Intersection along SR 776                         | Rank |
|---|------|
| Flamingo Boulevard                                | 1    |
| Charlotte Sports Park Entrance                    | 2    |
| Biscayne Drive                                    | 3    |
| Willmington Boulevard/Gulfstream Boulevard (East) | 4    |
| Toledo Blade Boulevard                            | 5    |
| Winchester Boulevard                              | 6    |
| US 41   | 7    |
| Beach Road  | 8    |
| Sunnybrook Boulevard                              | 9    |
| CR 771/Gasparilla Road/Sailors Way                | 10   |
| Murdock Circle/Enterprise Drive                   | 11   |
| San Casa Drive                                    | 12   |

| Intersection along SR 776                         | Rank |
|---|------|
| Merchants Crossings                               | 13   |
| Placida Road/Pine Street                          | 14   |
| Cornelius Boulevard                               | 15   |
| Willmington Boulevard/Gulfstream Boulevard (West) | 16   |
| Coliseum Boulevard/Pinedale Drive                 | 17   |
| Oriole Boulevard                                  | 18   |
| Spinnaker Boulevard                               | 19   |
| Gillot Boulevard                                  | 20   |
| Jacobs Street                                     | 21   |
| Point of Pines Road                               | 22   |
| Riverwood Drive                                   | 23   |
| Bay Heights Road                                  | 24   |

# Intersection Improvements – Priority Rankings



# Intersection Improvements – Priority Rankings



● Ranking: 1 - 10  
● Ranking: 11 - 24



# Multimodal Improvement Projects

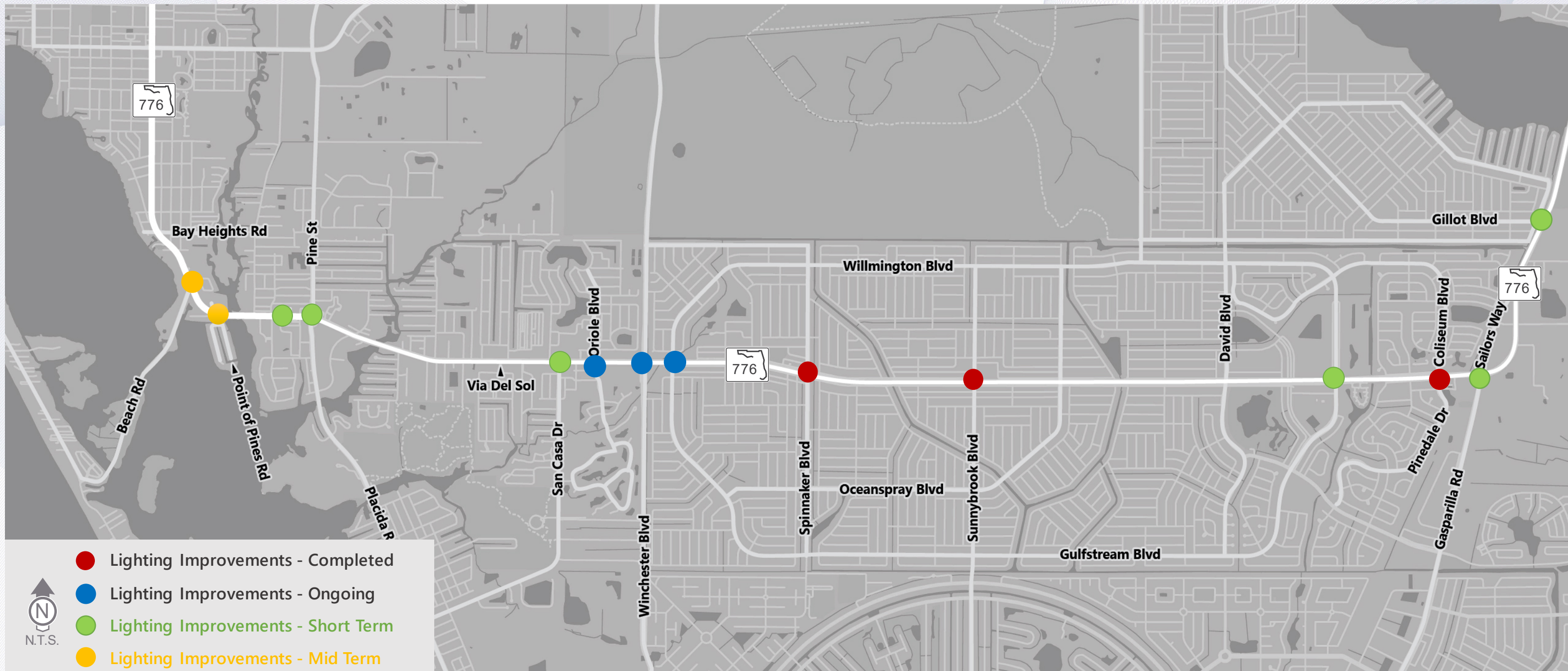
Source: Charlotte County Punta Gorda MPO LRTP Cost-Feasible Plan



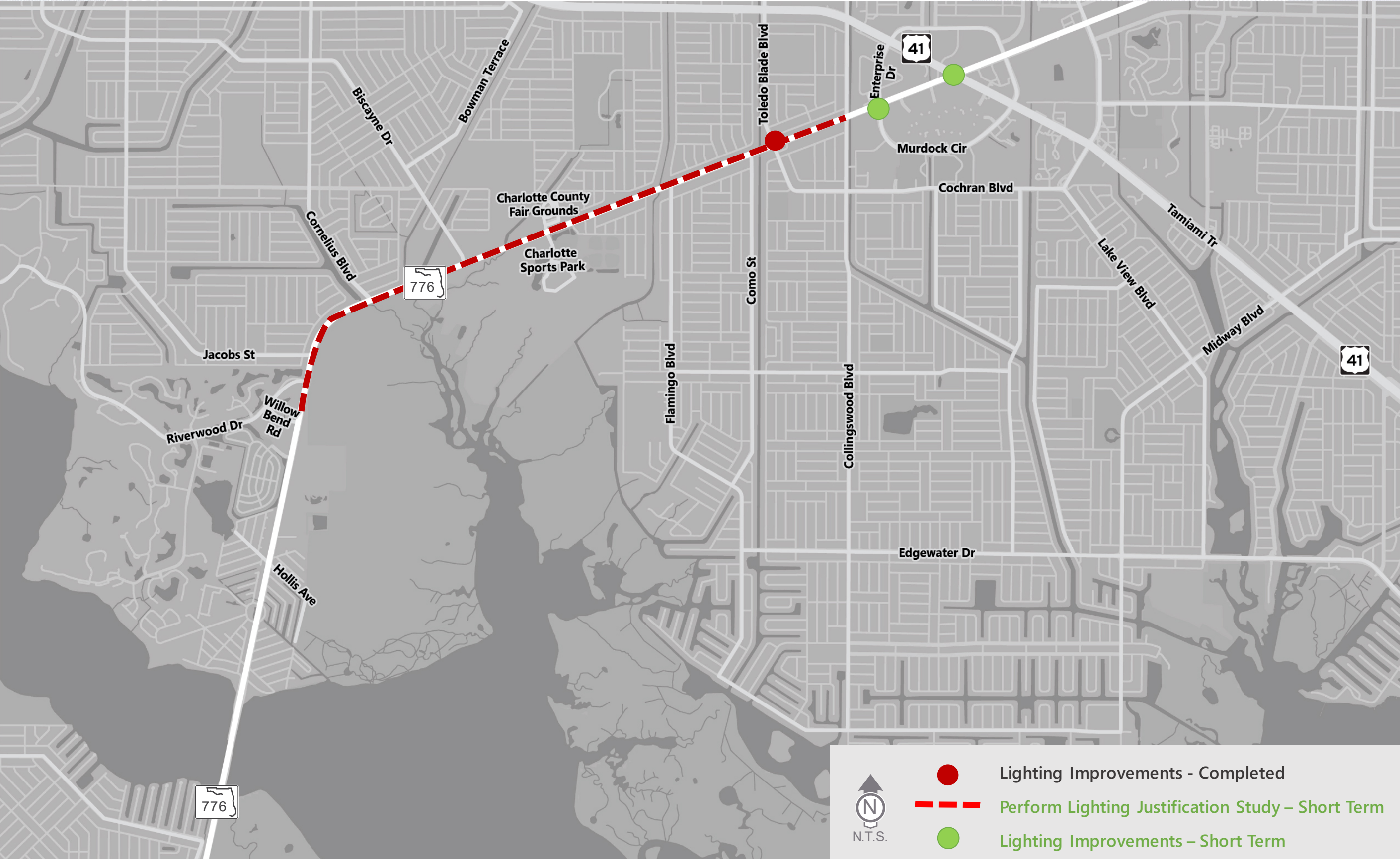
# Multimodal Improvement Projects



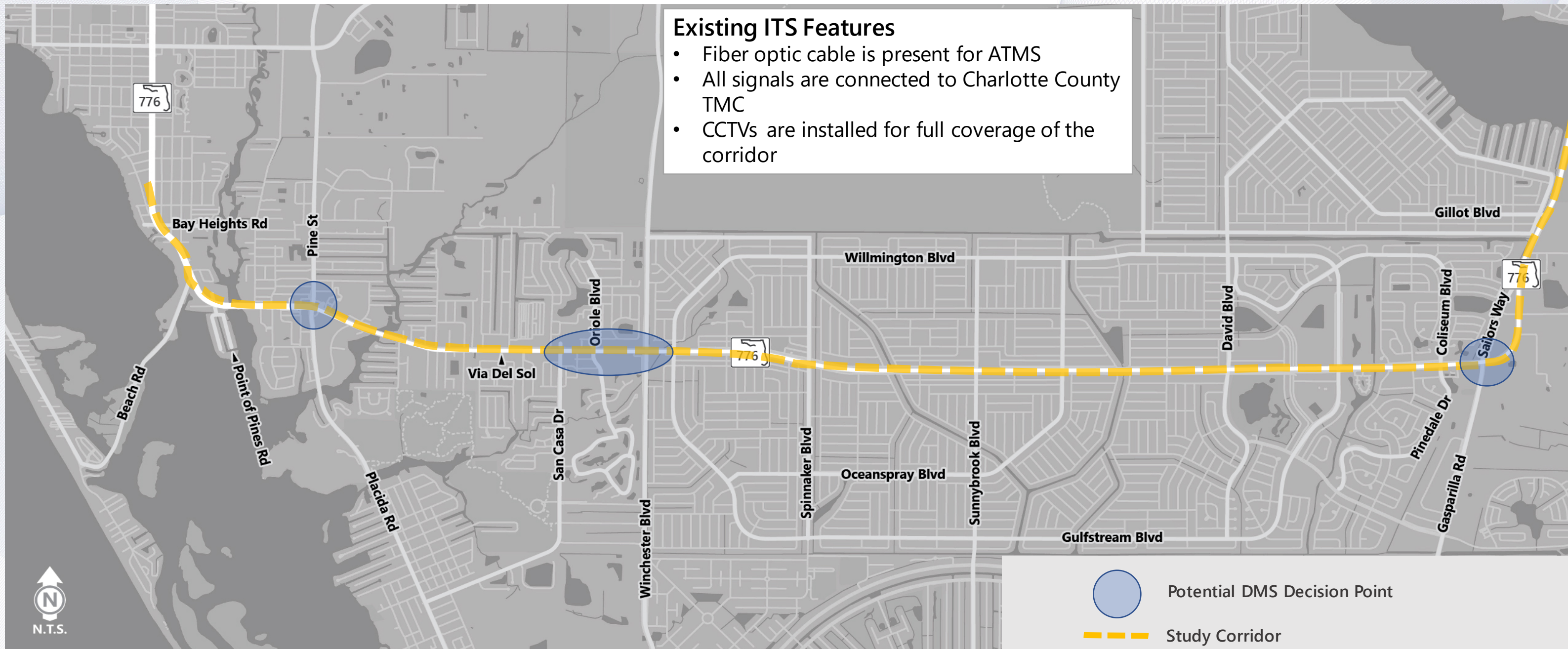
# Lighting Recommendations



# Lighting Recommendations



# ITS Recommendations



**Mid Term**

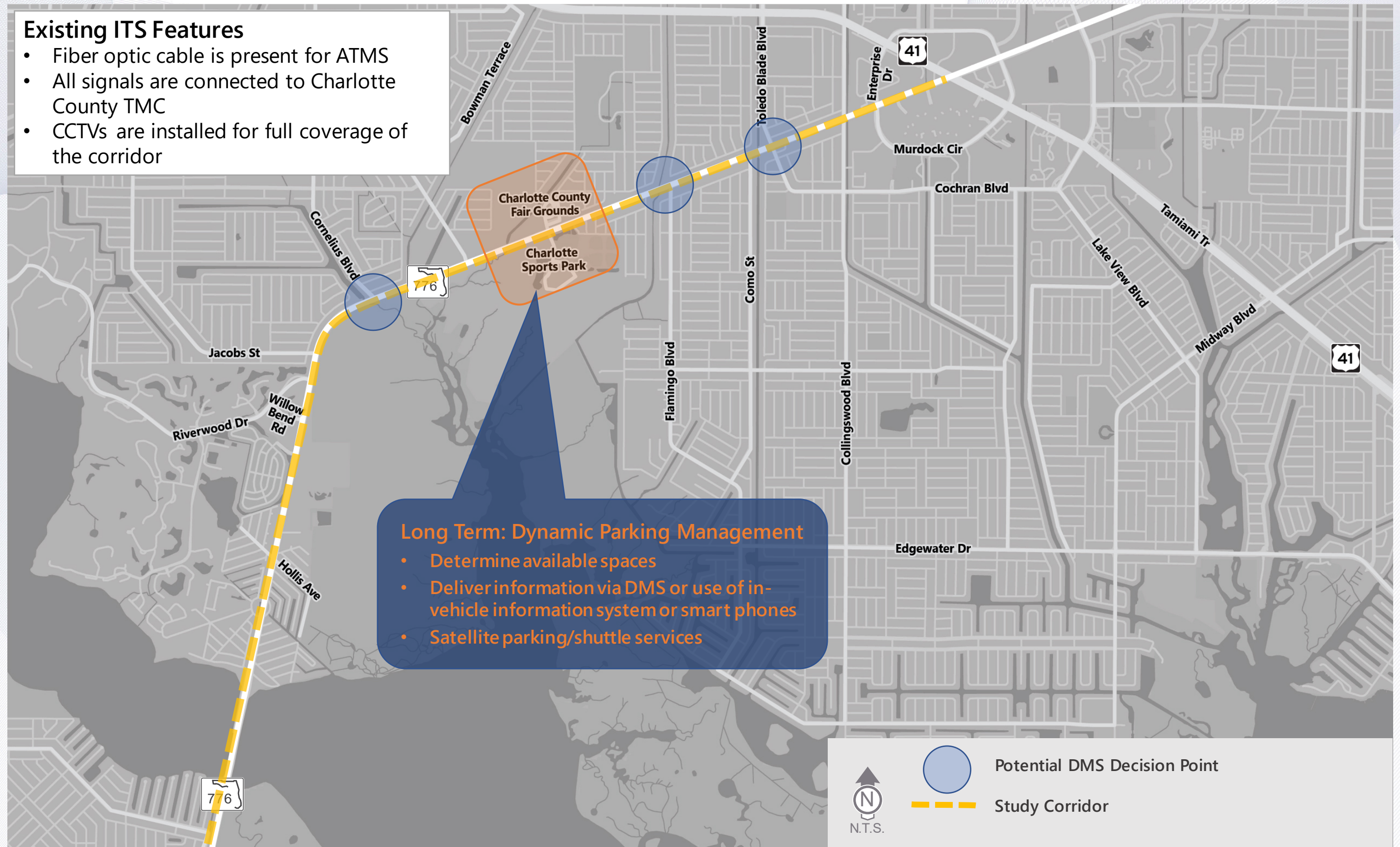
- **Install speed/volume sensors, Bluetooth devices, and Arterial DMS (ADMS)**
  - Disseminate real-time traffic information, detour routing for incidents, construction & event information
  - Measure near real-time/historic travel time & origin-destination information for performance reporting and optimization
- **Connected Vehicle (CV) Technology Ready Corridor**
  - Vehicle-to-vehicle (V2V) & Vehicle-to-Infrastructure (V2I), Road-side Units & Communications Infrastructure
  - Congestion alerts, collision avoidance, weather alerts, blind spot alerts, pedestrians nearby etc.
  - Can be combined with adaptive traffic control system



# ITS Recommendations

## Existing ITS Features

- Fiber optic cable is present for ATMS
- All signals are connected to Charlotte County TMC
- CCTVs are installed for full coverage of the corridor



# Planning Strategies

**Corridor Conditions Analysis**

**Stakeholder Conversations**

**Comprehensive Plan Review**

| Improvement Action's    |                       |                        |
|-------------------------|-----------------------|------------------------|
| Year 2025<br>Short Term | Year 2035<br>Mid Term | Year 2045<br>Long Term |

## Strategies

- Safety
- Quality of Life and Public Health
- Accessibility
- Environment
- Land Use

## Goals

- Provide a safe and efficient transportation system
- Enable vibrant and healthy communities
- Improve multimodal mobility and access for all users
- Reduce negative environmental transportation impacts
- Create an efficient land use pattern of development linked with a supportive transportation network

# Potential Neighborhood Connections

Source: Charlotte County Property Appraiser Parcel Data

Myakka State Forest

Jennings Blvd

David Blvd

Wilmington Blvd

Coliseum Blvd

Gillot Blvd

Maturing Neighborhood

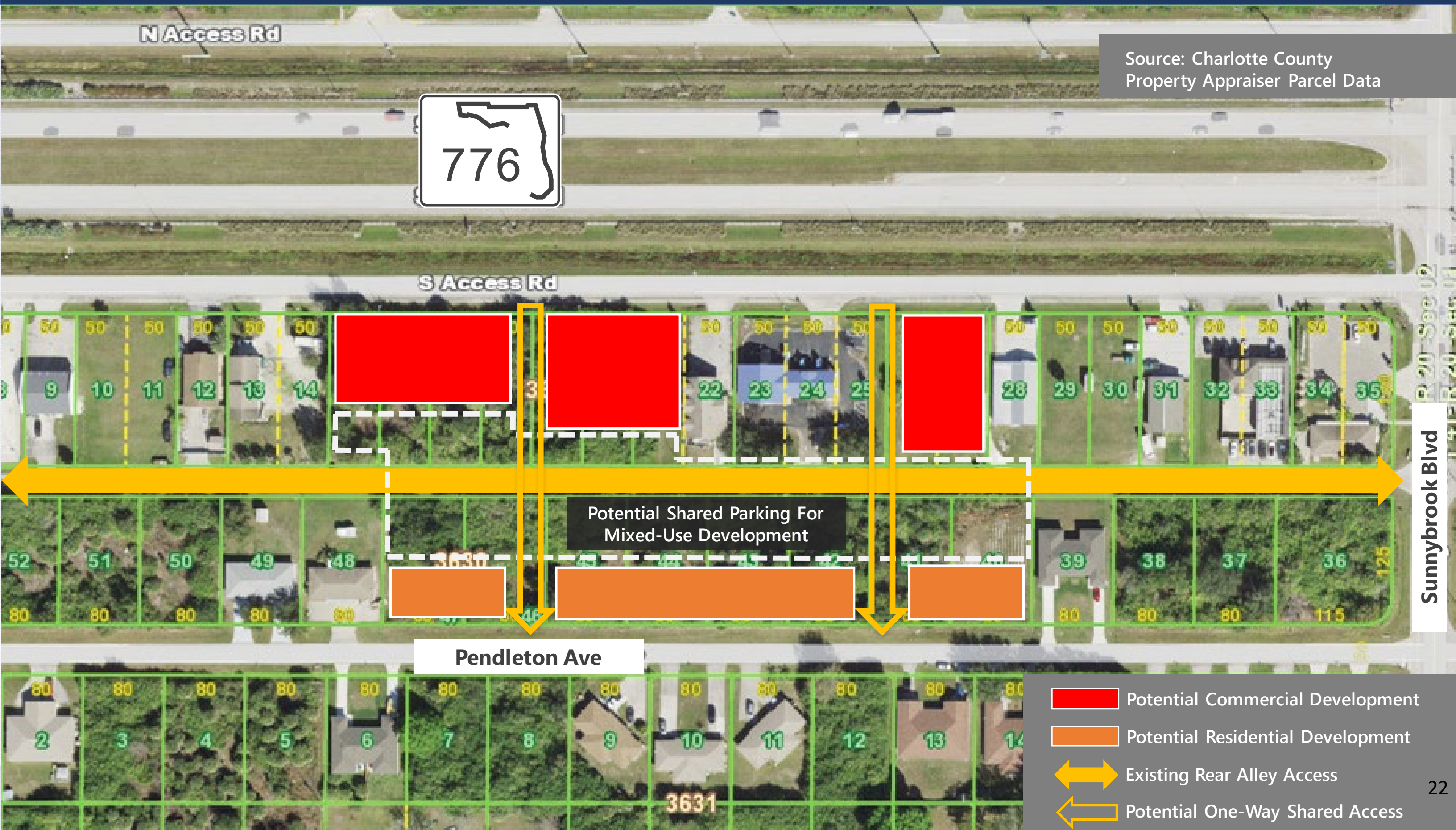
Maturing Neighborhood



- Existing Traffic Signal
- Existing Connections
- Potential Connections

# Potential Commercial Retrofit





Source: Charlotte County  
Property Appraiser Parcel Data



Potential Shared Parking For  
Mixed-Use Development

Pendleton Ave

Sunnybrook Blvd

-  Potential Commercial Development
-  Potential Residential Development
-  Existing Rear Alley Access
-  Potential One-Way Shared Access

# SR 776 at Charlotte Sports Park - Improvements



|   | Capacity/<br>Operational<br>Improvements                    | Safety/ADA/<br>Multimodal<br>Improvements  |
|---|---|--|
| Year 2025<br>Short Term<br>Improvements | 1 – Signal warrant study/ pedestrian signal/HAWK evaluation | <ul style="list-style-type: none"> <li>Remove portion of curb ramp on the SE corner that indicates this is a location to cross SR 776</li> <li>Consider providing positive offset for WB and EB left turns (or protected phasing if signalized)</li> <li>Remove extraneous curb ramps on the south side of the intersection</li> </ul> |
| Year 2035<br>Mid Term<br>Improvements   | 2 – Add exclusive EB and WB right turn lanes along SR 776   |  |

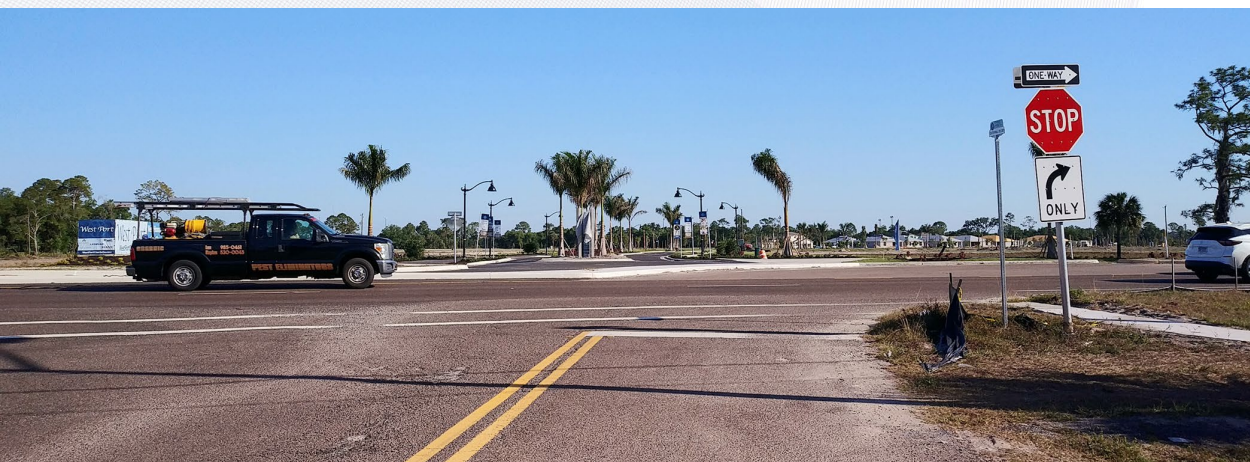
## Emergency vehicle access during game days

- Currently being coordinated with Charlotte County/FDOT/Sheriff's Office

# SR 776 at Torrence Street – Improvements



Looking West along SR 776 Eastbound



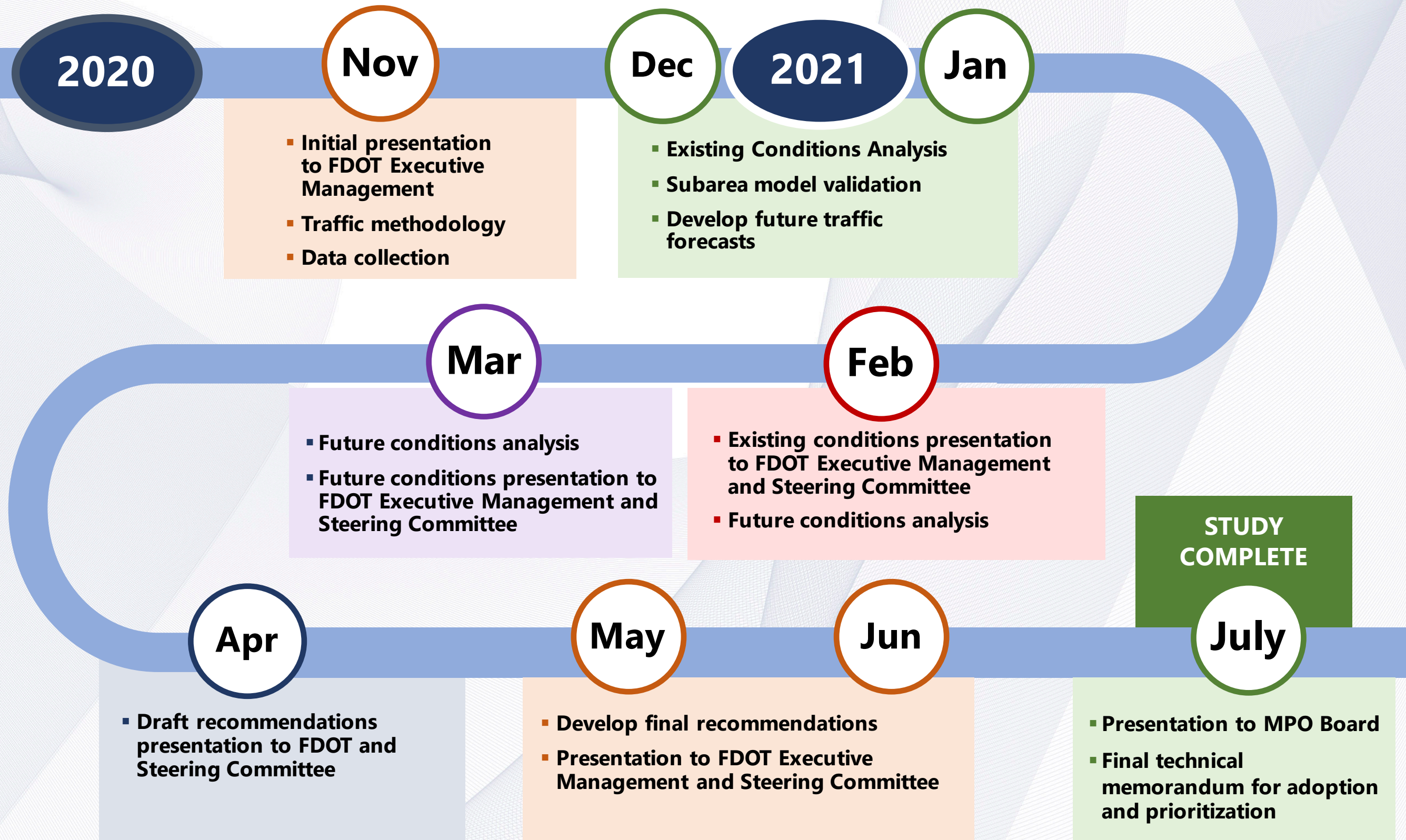
Looking North along Torrence Street



Looking West along SR 776 Westbound

- **West Port (Murdock Village) Development – northside of SR 776 at Torrence Street**
  - Exclusive EB left turn lane and WB right turn lane along SR 776 (recently constructed)
- **Traffic data collection (Event Day) - April 10th, 2021 (Saturday) 7 AM to 11 PM**
  - SR 776 at Charlotte Sports Park Entrance
  - SR 776 at Wooster Street
  - SR 776 at Ester Avenue
  - SR 776 at Torrence Street
  - SR 776 at Tea Street
- **Year 2025 Short Term Improvements**
  - 1 – EB right turn lane at SR 776 and Torrence Street
  - Advance street signs for Torrence Street on SR 776 (EB & WB)

# SR 776 Study Timeline



# Next Steps

- **Develop final recommendations**
- **Finalize the report**
- **Presentation to MPO Board (July 19, 2021)**
- **Amend TIP and LRTP**

# Feedback and Discussion

**WATCH FOR  
MOTORCYCLES**

