

# SCHOOL ROUTES ANALYSIS

## HANS CHRISTIAN ANDERSEN ELEMENTARY SCHOOL

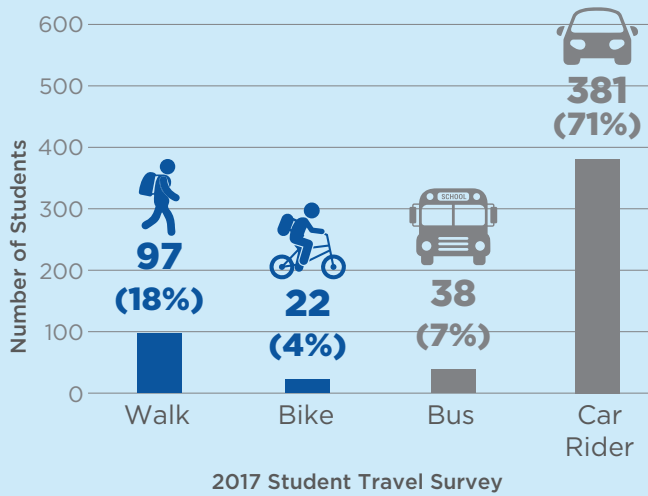


## GRAPHICAL SUMMARY REPORTS

JUNE 2023



## Student Travel Modes (2017)



## Total Bicycle & Pedestrian Crashes within Study Area



## School Aged Bicycle & Pedestrian Crashes within Study Area



August 2016 to July 2022 Crashes from University of Florida's Signal Four Analytics Database

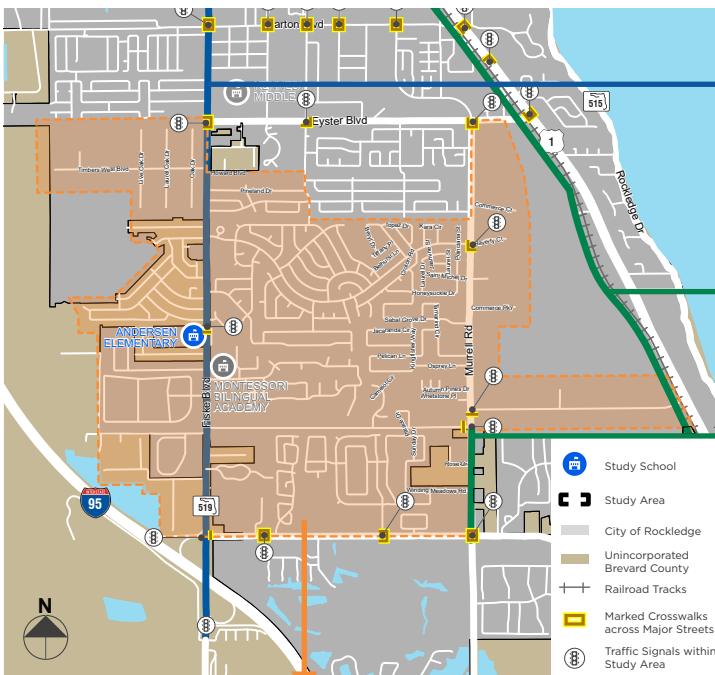
## Signals and Crossings within Study Area

10 Signalized Intersections



0 Unsignalized Marked Crosswalks Across Major Streets

7 Crossing Guards



### 2018 Space Coast Area Transit Bus Stop Accessibility Study

- This study prioritized accessibility and safety improvements needed at each bus stop.

### Previous & Ongoing Plans

#### SR 519 (Fiske Boulevard)

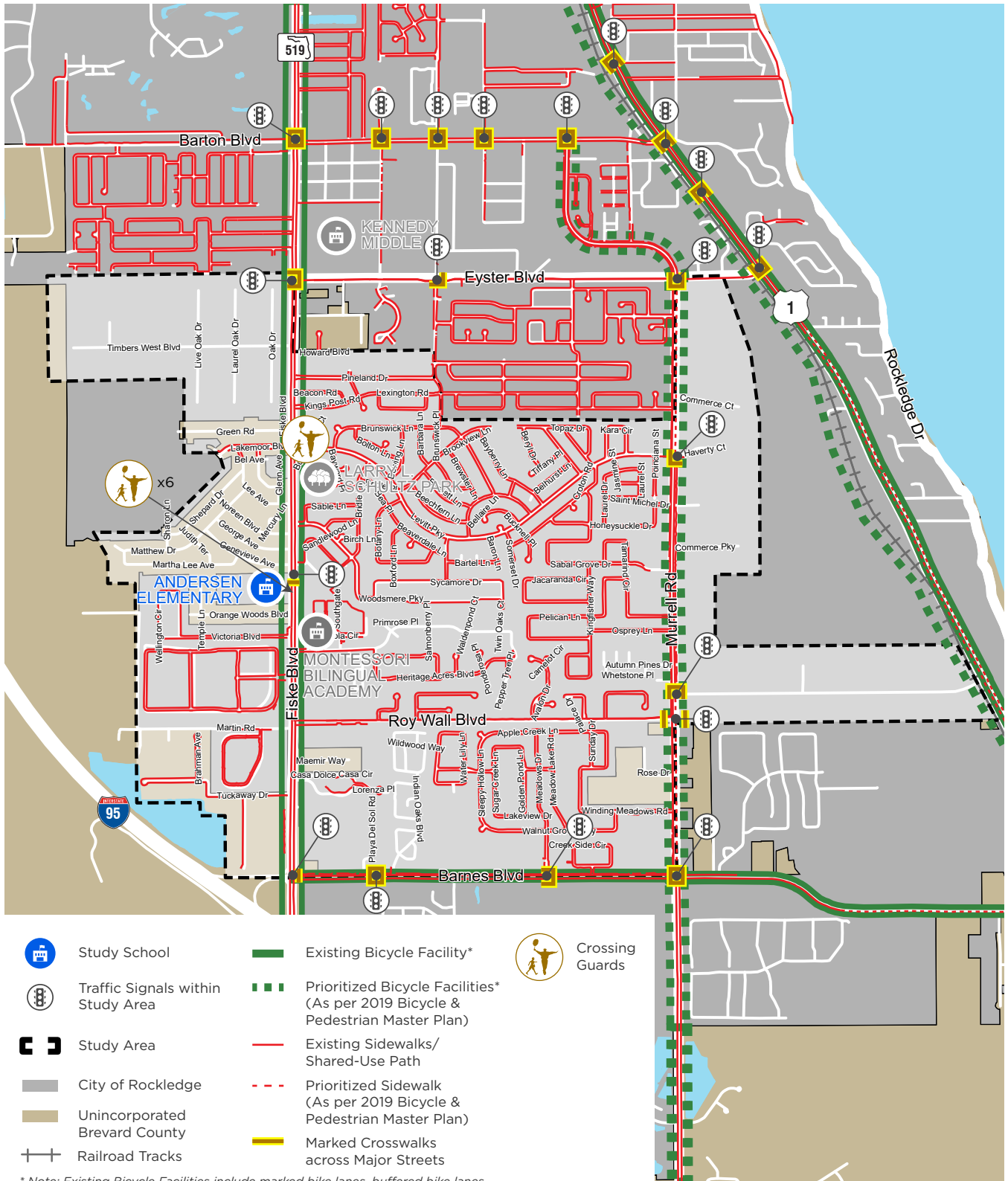
- Concept development study to advance the long term vision of the corridor to address the safety and mobility needs of the community, including for vehicle, transit, bicycle and pedestrian modes.
- Construct six foot wide sidewalks where possible, extend the Brevard Zoo trail, and tighten turning radii where possible.
- Construct curb & gutter north of Barbra Jenkins Street and conduct an areawide drainage study.

#### 2019 SCTPO Bicycle & Pedestrian Master Plan

- The 2019 SCTPO Bicycle & Pedestrian Master Plan includes filling sidewalk and bicycle facility gaps throughout the county.
- Near Andersen Elementary School, this includes filling bicycle and pedestrian facility gaps along Murrell Road.
- The alternative alignment for the East Coast Greenway trail is located along the west side of US 1 within the study area.



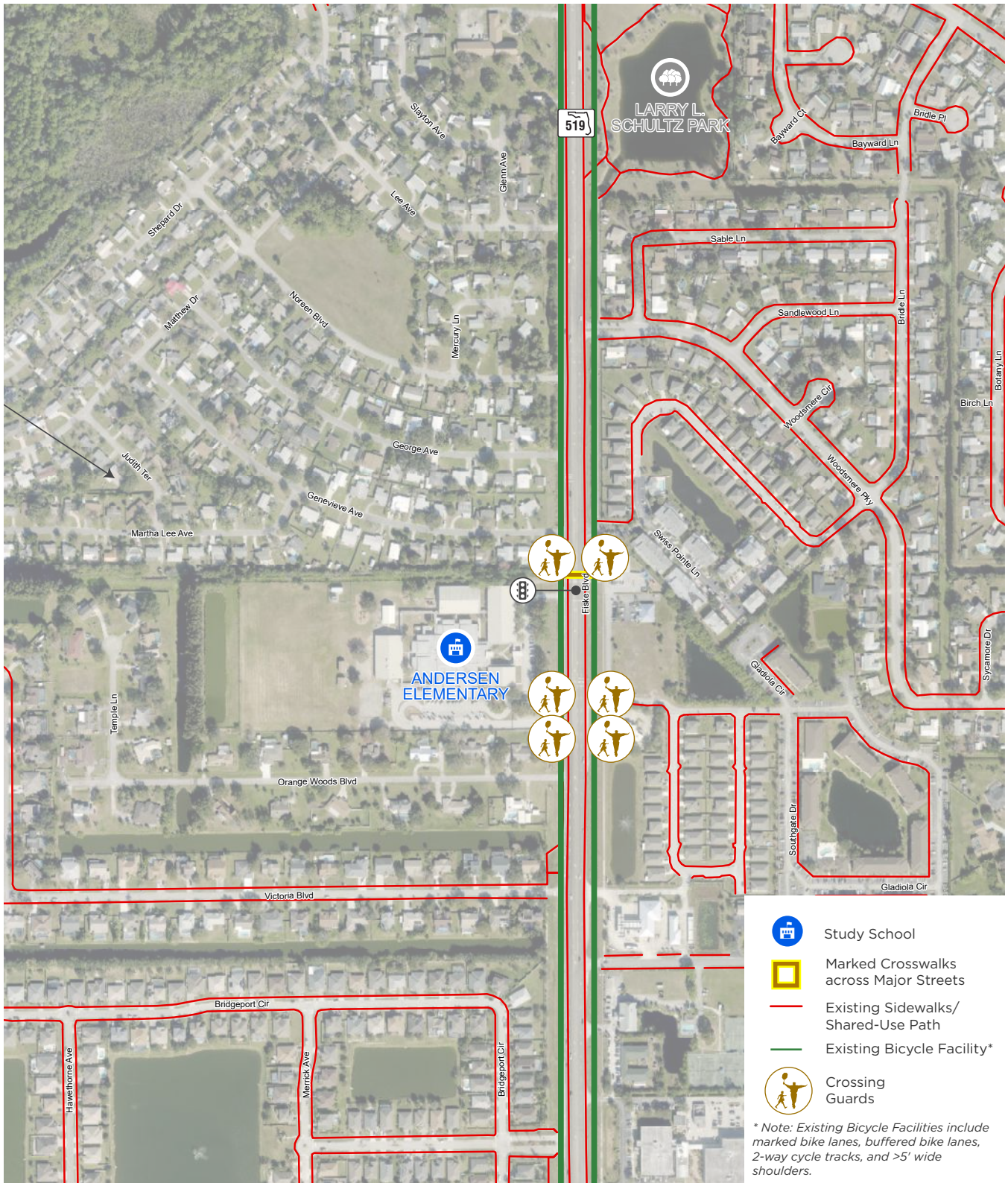
**Figure 1: Background Information**  
School Routes Analysis  
**Andersen Elementary School**



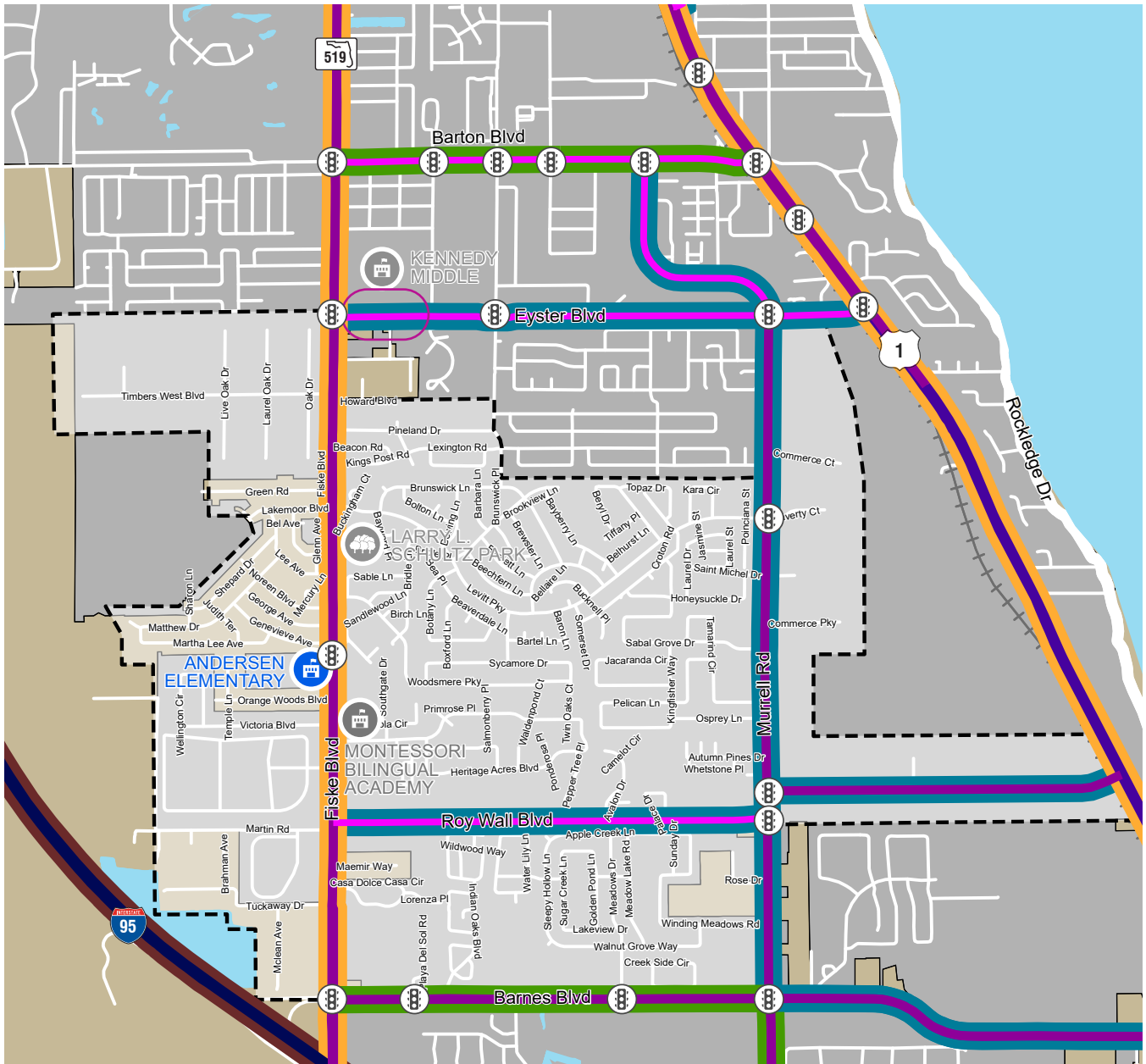
\* Note: Existing Bicycle Facilities include marked bike lanes, buffered bike lanes, 2-way cycle tracks, and >5' wide shoulders. 2019 Bicycle & Pedestrian Master Plan does not identify specific bicycle facility types for Prioritized Bicycle Facilities.


















**Figure 2: Existing and Planned Bicycle and Pedestrian Facilities**  
 School Routes Analysis  
**Andersen Elementary School**





**Figure 3: School Context Aerial**  
**School Routes Analysis**  
**Andersen Elementary School**




-  Study School
-  Traffic Signals within Study Area
-  Study Area
-  City of Rockledge
-  Unincorporated Brevard County
-  Railroad Tracks
-  School Zone
- Posted Speed (Miles Per Hour) (2021)
  -  25 MPH or Less
  -  30 to 35 MPH
  -  40 to 45 MPH
  -  50 to 55 MPH
  -  60+ MPH
- Average Annual Daily Traffic (AADT) (2021)
  -  Up to 10,000 Vehicles Per Day
  -  10,001 to 20,000 Vehicles Per Day
  -  20,001 to 40,000 Vehicles Per Day
  -  40,001 to 80,000 Vehicles Per Day
  -  80,000+ Vehicles Per Day



**Figure 4: Existing Conditions Traffic Data**  
 School Routes Analysis  
**Andersen Elementary School**



 Andersen Elementary School

 Marked Crosswalks

 School Building Entrance

 Bike Parking

 Staff Parking


 Staff/Visitor Parking


 Crossing Guard

 Existing Sidewalk

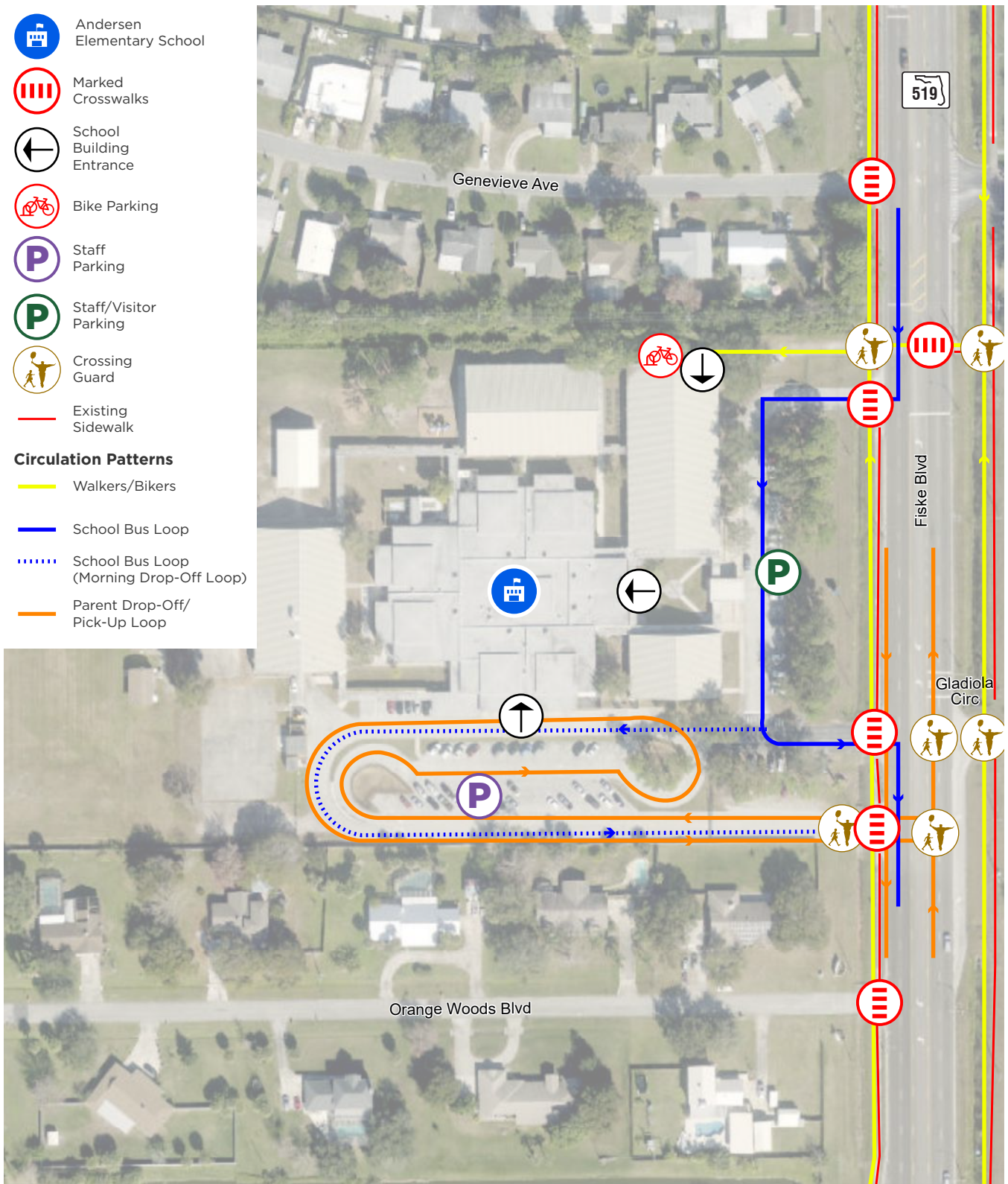
**Circulation Patterns**

 Walkers/Bikers

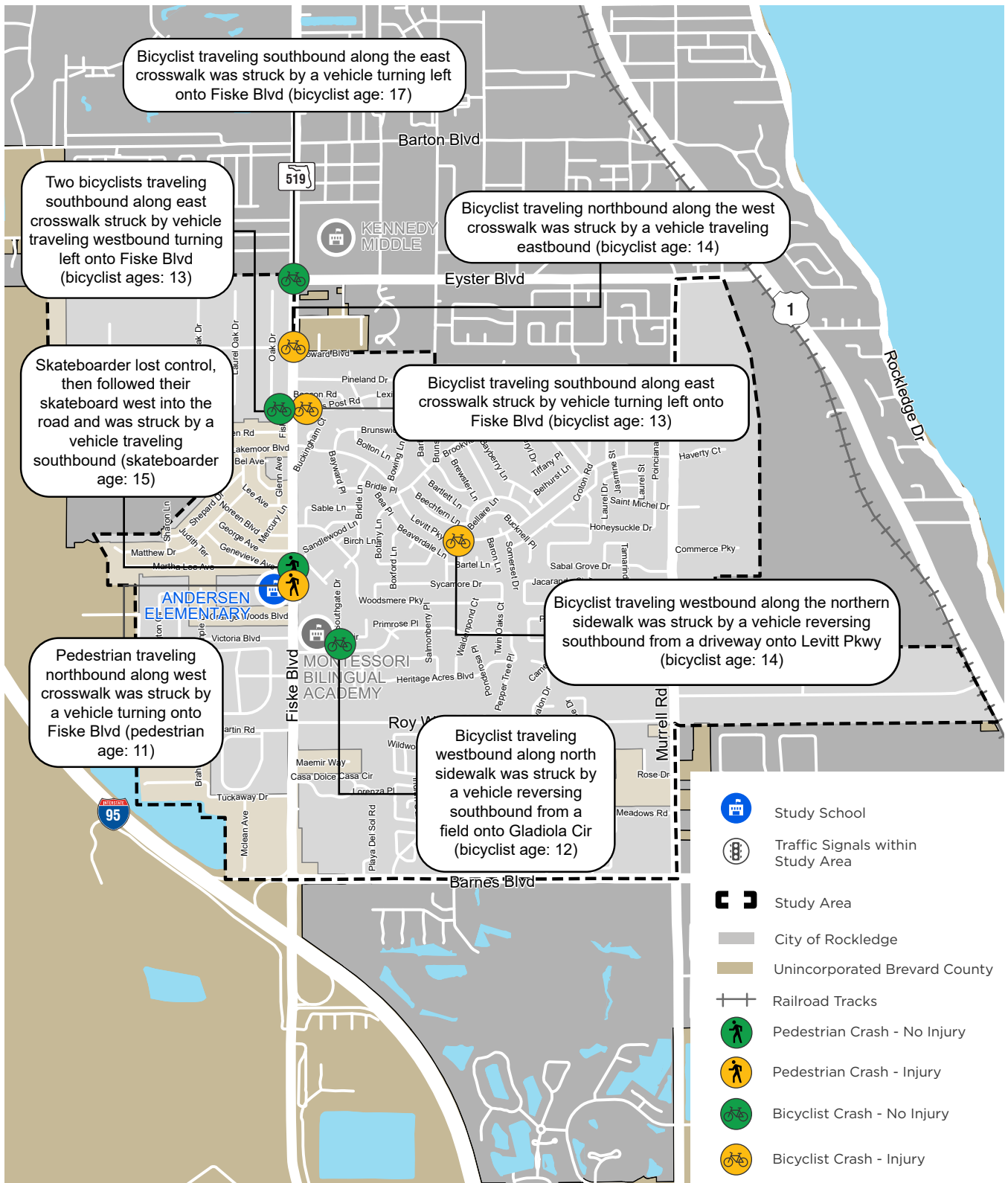
 School Bus Loop

 School Bus Loop (Morning Drop-Off Loop)

 Parent Drop-Off/Pick-Up Loop



**Figure 5: Existing School Circulation Map**  
School Routes Analysis  
**Andersen Elementary School**



- Study School
- Traffic Signals within Study Area
- Study Area
- City of Rockledge
- Unincorporated Brevard County
- Railroad Tracks
- Pedestrian Crash - No Injury
- Pedestrian Crash - Injury
- Bicyclist Crash - No Injury
- Bicyclist Crash - Injury



**Figure 6: School Aged Pedestrian and Bicycle Crashes (August 2016 to July 2022)**  
 School Routes Analysis  
**Andersen Elementary School**



## School Campus Recommendations

No.	Location	Recommendation	Type	Time-Frame	Cost Estimate
1	Pedestrian and Bicyclist Entrance to School Campus	Widen the sidewalk into the school campus to provide more space for pedestrians and bicyclists that enter the school campus.	Sidewalk	Near-Term	\$45,000 to \$55,000
2	School Campus	Add signage restricting access to northern driveway and enforcement to force parents to drop-off/pick-up their student in the parent drop-off/pick-up loop.	Sign/Signal & Enforcement	Near-Term	<\$10,000

## Study Area Recommendations

No.	Location	Recommendation	Type	Time-Frame	Cost Estimate
3	Levitt Parkway	Add sidewalk on the north side of Levitt Parkway from Kara Circle to Murrell Road.	Sidewalk	Near-Term	\$105,000 to \$120,000
4	Murrell Road	Fill sidewalk gap prioritized in the 2019 SCTPO Bicycle & Pedestrian Master Plan on the east side of Murrell Road from just north of Barnes Boulevard to Gus Hipp Boulevard.	Sidewalk	Near-Term	\$315,000 to \$370,000
5	Roy Wall Boulevard, Levitt Parkway, and Murrell Road	Install/upgrade pedestrian ramps that meet current standards along: <ul style="list-style-type: none"> <li>• Roy Wall Boulevard from SR 519 (Fiske Boulevard) to Murrell Road;</li> <li>• Levitt Parkway from SR 519 (Fiske Boulevard) to Murrell Road; and</li> <li>• Murrell Road from Barnes Boulevard to Eyster Boulevard.</li> </ul>	Sidewalk	Near-Term	\$170,000 to \$200,000
6	Genevieve Avenue	Add sidewalk on both sides of Genevieve Avenue from Martha Lee Avenue to SR 519 (Fiske Boulevard).	Sidewalk	Near-Term	\$260,000 to \$300,000
7	School Campus	Add high-visibility crosswalks at school driveways where sidewalks are present.	Crossing	Maintenance	<\$10,000

**Table 1: Recommendations Summary**

School Routes Analysis

**Andersen Elementary School**





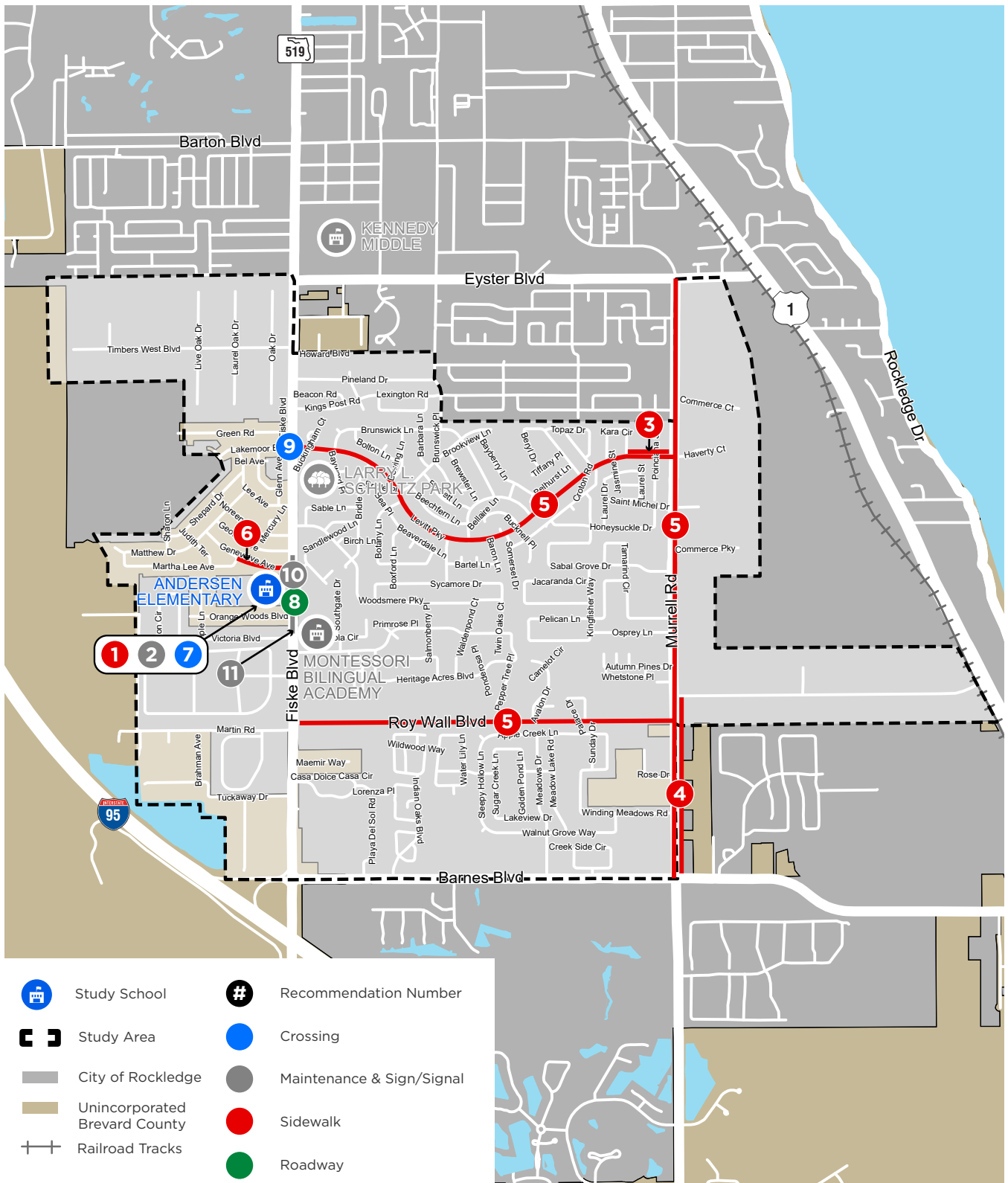
## Study Area Recommendations

No.	Location	Recommendation	Type	Time-Frame	Cost Estimate
8	SR 519 (Fiske Boulevard) & Gladiola Circle/Second Southernmost School Campus Driveway	Restrict left turns at the intersection, add a pork-chop median along Gladiola Circle/School Campus Driveway, and add a spot median along SR 519 (Fiske Boulevard). This reduces the vehicle-to-vehicle conflict points by 30 and vehicle-to-pedestrian and bicycle conflict points by 3.	Roadway	Near-Term	\$60,000 to \$65,000
9	SR 519 (Fiske Boulevard) & Levitt Parkway/Lakemoor Boulevard	Conduct a midblock crossing study at the south leg of the intersection. If justified, add a midblock crossing with a Pedestrian Hybrid Beacon (PHB) or pedestrian signal and center median to provide a crossing opportunity for students walking and biking to/from school and accessing Larry L. Schultz Park to cross SR 519 (Fiske Boulevard). Add another crossing guard for the movement across SR 519 (Fiske Boulevard).	Crossing/Enforcement	Long-Term	Further Study Required for Midblock Crossing Study
10	SR 519 (Fiske Boulevard) & Pedestrian Crossing Just South of Genevieve Avenue	Conduct a signal timing study to evaluate the feasibility of increasing the pedestrian crossing time to allow all bicyclists and pedestrians to cross during one cycle during the afternoon peak period and reducing the cycle length.	Sign/Signal	Maintenance	Further Study Required to Determine Signal Timing
11	SR 519 (Fiske Boulevard)	Conduct a school zone analysis to determine if a school zone is justified along SR 519 (Fiske Boulevard) near the school campus. If justified, add flashing beacon signage along SR 519 (Fiske Boulevard). Restripe pavement markings and add advance school zone warning signs.	Sign/Signal	Near-Term	Further Study Required to Conduct School Zone Analysis

**Table 1: Recommendations Summary Cont.**







## School Routes Analysis Andersen Elementary School

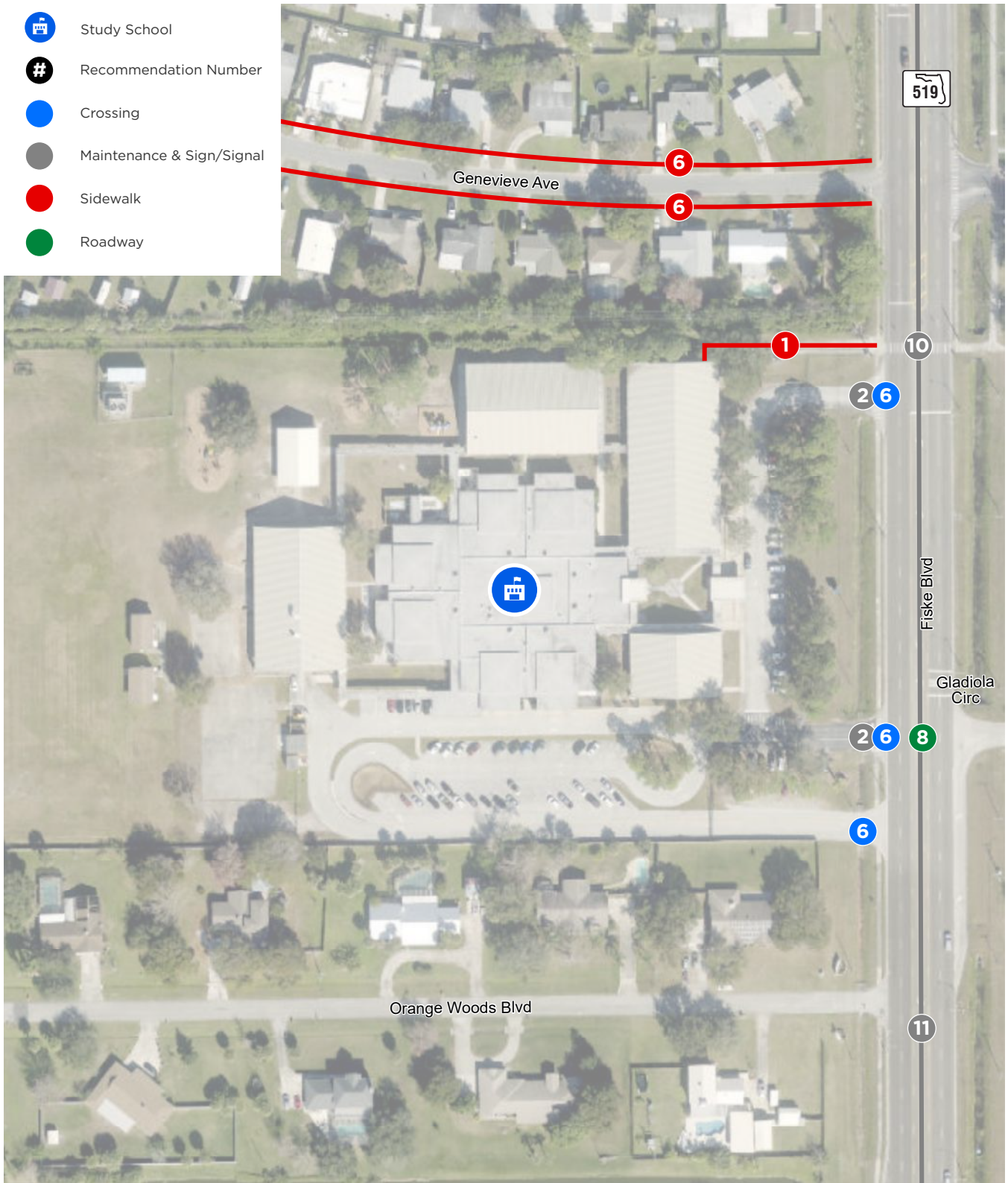




**Figure 7: Recommendations**  
 School Routes Analysis  
**Andersen Elementary School**



-  Study School
-  Recommendation Number
-  Crossing
-  Maintenance & Sign/Signal
-  Sidewalk
-  Roadway



**Figure 8: Recommendations: School Campus Aerial Map**  
 School Routes Analysis  
**Andersen Elementary School**



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