

SCHOOL ROUTES ANALYSIS

RONALD MCNAIR MAGNET MIDDLE SCHOOL

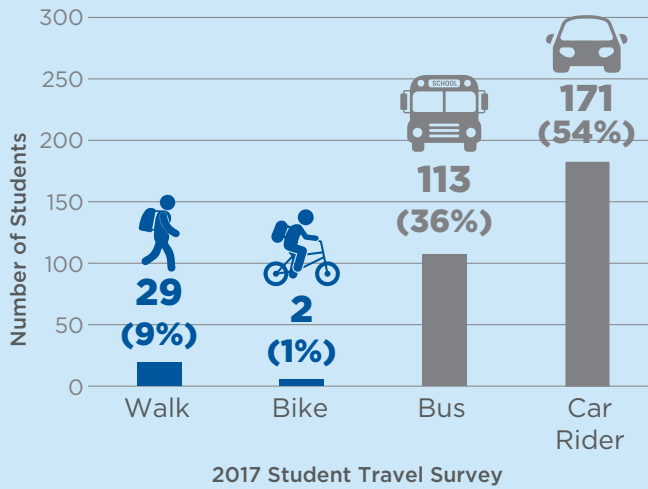


GRAPHICAL SUMMARY REPORT

JULY 2023



Student Travel Modes (2017)



Total Bicycle & Pedestrian Crashes within Study Area

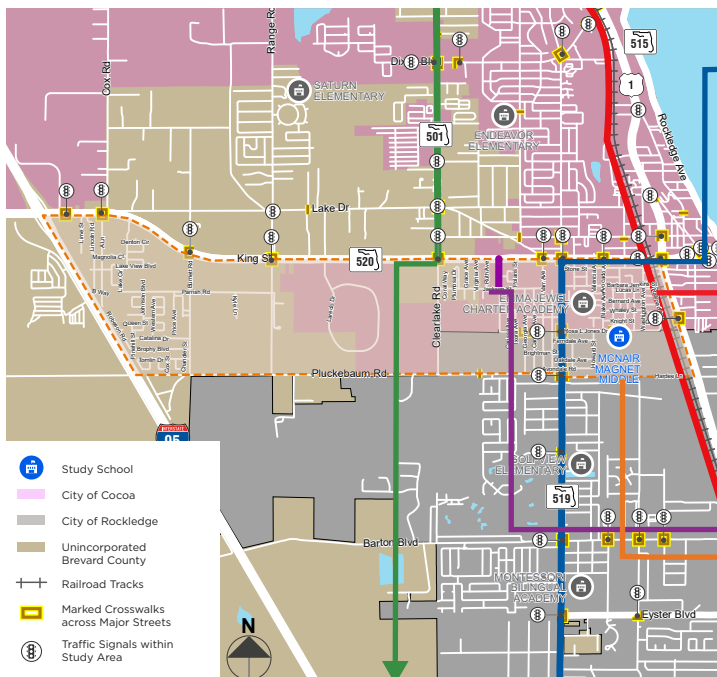


School Aged Bicycle & Pedestrian Crashes within Study Area



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

Signals and Crossings within Study Area



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

- Prioritized filling sidewalk and bicycle facility gaps throughout the county.
- Alternative alignment of proposed East Coast Greenway is along US 1.

Aurora Street Sidewalk

- Construct a sidewalk along Aurora Street from Jackson Street to SR 520 (King Street).

2018 SCTPO Transit Bus Stop Accessibility Study

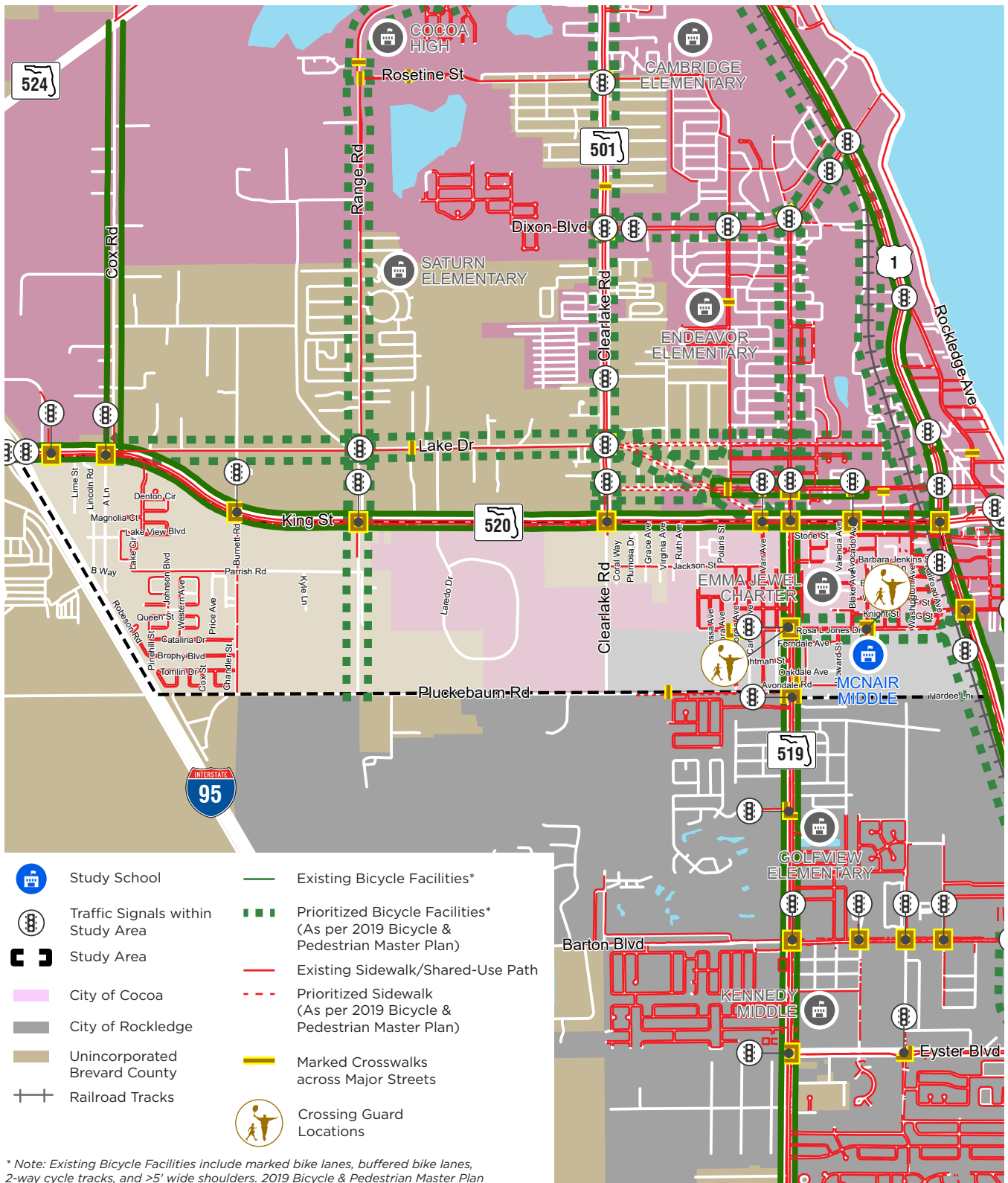
- The 2018 Space Coast Area Transit Bus Stop Accessibility Study prioritized accessibility and safety improvements needed at each bus stop.

SR 501 (Clearlake Road) from SR 520 to South of Michigan Avenue

- Adding horizontal deflection and spot medians to slow vehicle speeds.
- Widening existing sidewalks and adding sidewalk from Endeavour Elementary School to Broadcast Court.
- Adding raised midblock crossings with pedestrian signals.

Figure 1: Background Information

School Routes Analysis McNair Middle 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 Pedestrian and Bicycle Facilities
 School Routes Analysis
McNair Middle School



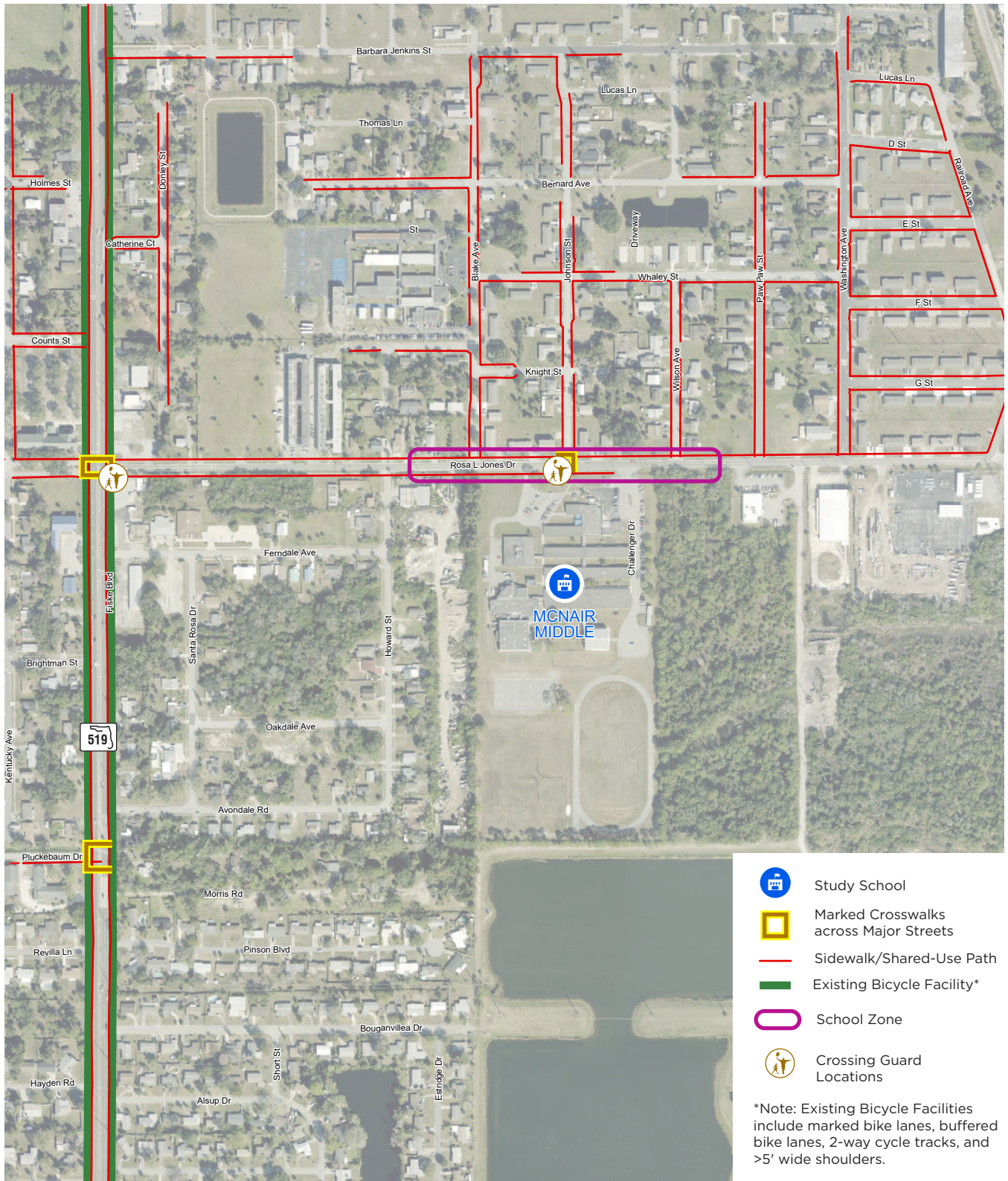


Figure 3: School Context Aerial
School Routes Analysis
McNair Middle School



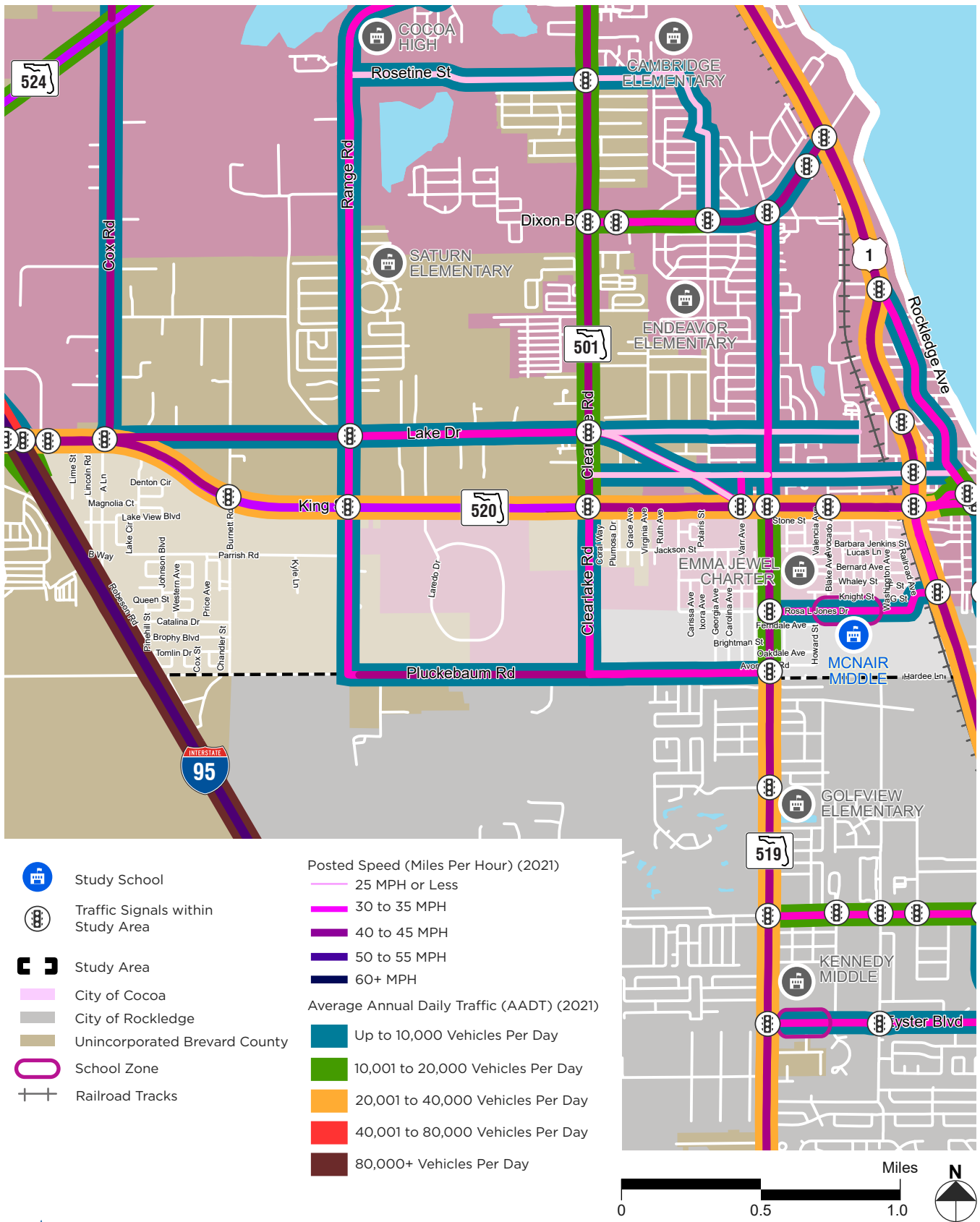
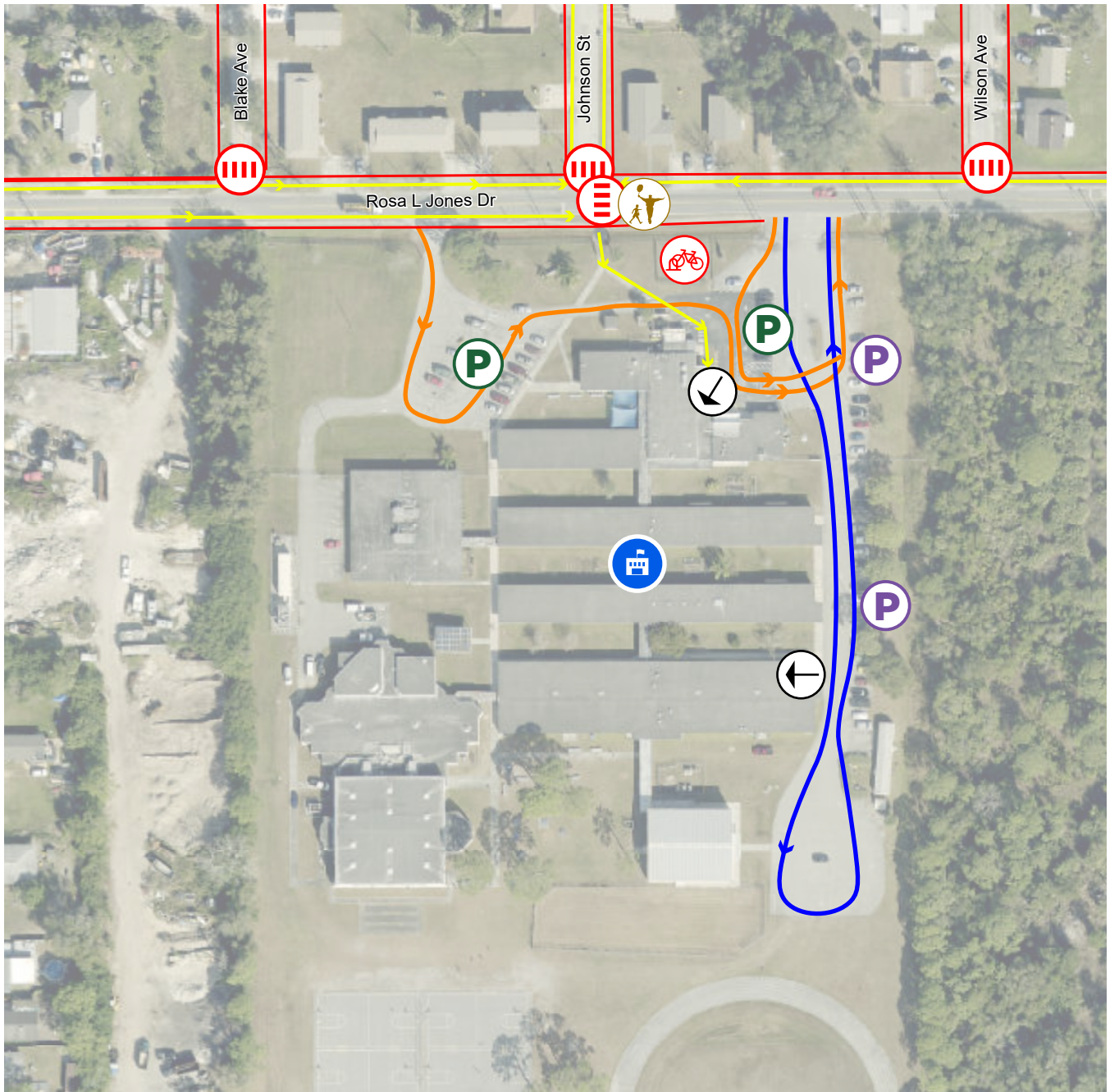


Figure 4: Existing Conditions Traffic Data School Routes Analysis McNair Middle School



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|--|---|---|--|--|
|  McNair Middle |  Bike Parking |  Crossing Guard Location | Circulation Patterns | |
|  Marked Crosswalks |  Staff Parking |  Existing Sidewalk | |  Walkers/Bikers |
|  School Building Entrance |  Staff/Visitor Parking | | |  Bus Loop |
| | | |  Parent Drop-Off/Pick-Up Loop | |



Figure 5: Existing School Circulation Map
 School Routes Analysis
McNair Middle School

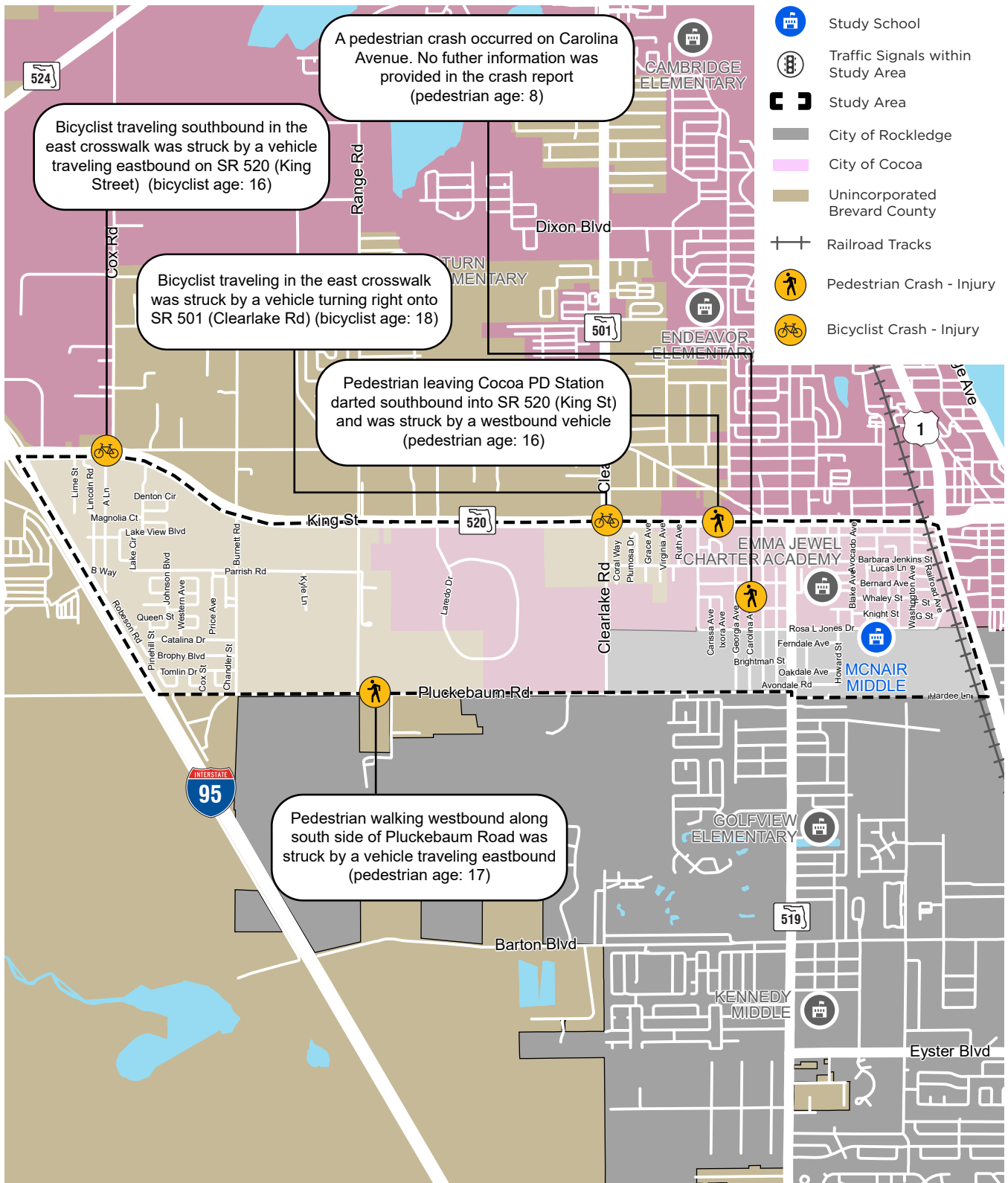


Figure 6: School Aged Pedestrian and Bicycle Crashes (August 2016 to July 2022)

School Routes Analysis
McNair Middle School



School Campus Recommendations

No.	Location	Recommendation	Type	Time-Frame	Cost Estimate
1	School Campus	Restripe crosswalks on the school campus to be high-visibility. Add stop bar with "Stop Here for Pedestrian" signage before the middle crosswalk in the parent drop-off/pick-up loop.	Crossing	Maintenance	<\$10,000
2	School Campus	Restrict access at the eastern driveway to the school campus to only allow buses to enter with "Bus Only" signage and add a stop bar across the driveway. Staff parking on the east side of campus must enter the school campus through the western driveway. Remove the pavement markings directing traffic south from the western driveway.	School Circulation	Maintenance	<\$10,000
3	School Campus	Restrict five of the parking spaces on the west side of the school campus to "visitor only" to provide a space for visitors to park once entering the western school driveway.	School Circulation	Maintenance	<\$10,000
4	School Campus	Add more paved staff parking where the grass area currently exists on the east side north of where the current staff parking ends.	Roadway	Near-Term	\$30,000 to \$35,000
5	School Campus	Add high-visibility crosswalk across the western school driveway.	Crossing	Maintenance	<\$10,000

Study Area Recommendations

No.	Location	Recommendation	Type	Time-Frame	Cost Estimate
6	Rosa L Jones Drive & SR 519 (Fiske Boulevard)	Add another crossing guard at Rosa L Jones Drive & SR 519 (Fiske Boulevard).	Enforcement	Near-Term	Enforcement
7	Rosa L Jones Drive	Fill sidewalk gap on the south side of Rosa L Jones Drive from the eastern school driveway to US 1. Add a high-visibility crosswalk across the eastern school driveway.	Sidewalk	Long-Term	\$280,000 to \$330,000

Table 1: Recommendations Summary
School Routes Analysis
McNair Middle School



Study Area Recommendations

No.	Location	Recommendation	Type	Time-Frame	Cost Estimate
8	Rosa L Jones Drive	Conduct a speed study and if justified, implement speed humps along Rosa L Jones Drive from SR 519 (Fiske Boulevard) to US 1.	Traffic Calming	Long-Term	Further Study Required to Perform Speed Study
9	Rosa L Jones Drive	Install/upgrade pedestrian ramps that meet current standards along Rosa L Jones Drive from SR 519 (Fiske Boulevard) to US 1.	Sidewalk	Long-Term	\$50,000 to \$60,000
10	Rosa L Jones Drive	Remove debris and widen sidewalks along Rosa L Jones Drive from SR 519 (Fiske Boulevard) to US 1.	Maintenance/Sidewalk	Maintenance/Near-Term	Maintenance/ Further Study Required to Determine Sidewalk Improvements
11	Rosa L Jones Drive	Fill bicycle facility gap prioritized in the 2019 Space Coast TPO Bicycle & Pedestrian Master Plan on Rosa L Jones Drive from SR 519 (Fiske Boulevard) to US 1.	Roadway	Long-Term	Further Study Required to Determine Appropriate Bicycle Facility
12	Rosa L Jones Drive & Johnson Street	Restripe faded crosswalks to high-visibility crosswalks.	Crossing	Maintenance	<\$10,000
13	Rosa L Jones Drive, Blake Avenue, Johnson Street, and Wilson Avenue	Add flashing beacon signage at school zones along Rosa L Jones Drive, Blake Avenue, Johnson Street, and Wilson Avenue. Restripe pavement markings, add advance school zone warning signs, and add "End School Zone" signage. Remove redundant flashing beacon signage at the intersection of Rosa L Jones Drive & Johnson Street.	Sign/Signal	Near-Term	\$70,000 to \$80,000
14	Clearlake Road	Fill bicycle facility gap prioritized in the 2019 Space Coast TPO Bicycle & Pedestrian Master Plan on Clearlake Road from Pluckebaum Road to SR 520 (King Street).	Roadway	Long-Term	Further Study Required to Determine Appropriate Bicycle Facility

Table 1: Recommendations Summary Cont.

School Routes Analysis McNair Middle School



Study Area Recommendations

No.	Location	Recommendation	Type	Time-Frame	Cost Estimate
15	SR 519 (Fiske Boulevard) & Rosa L Jones Drive	Add northbound and southbound left turn signal heads along SR 519 (Fiske Boulevard).	Sign/Signal	Near-Term	Further Study Required to Determine Signal Head Design
16	SR 519 (Fiske Boulevard) & Rosa L Jones Drive	Consider implementing pedestrian friendly signal timing countermeasures including protected left turn phasing, a leading pedestrian interval (LPI), rest in walk, restricting right turn on red movements, adding protected/ permissive left turn phasing, etc. Fix the loose railing and remove extra concrete at the southeast corner of the intersection. Fix the broken pedestrian signal at the southwest corner of the intersection.	Sign/Signal	Near-Term	Further Study Required to Evaluate Signal Retiming Measures

Table 1: Recommendations Summary Cont.

School Routes Analysis **McNair Middle School**



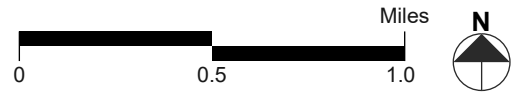
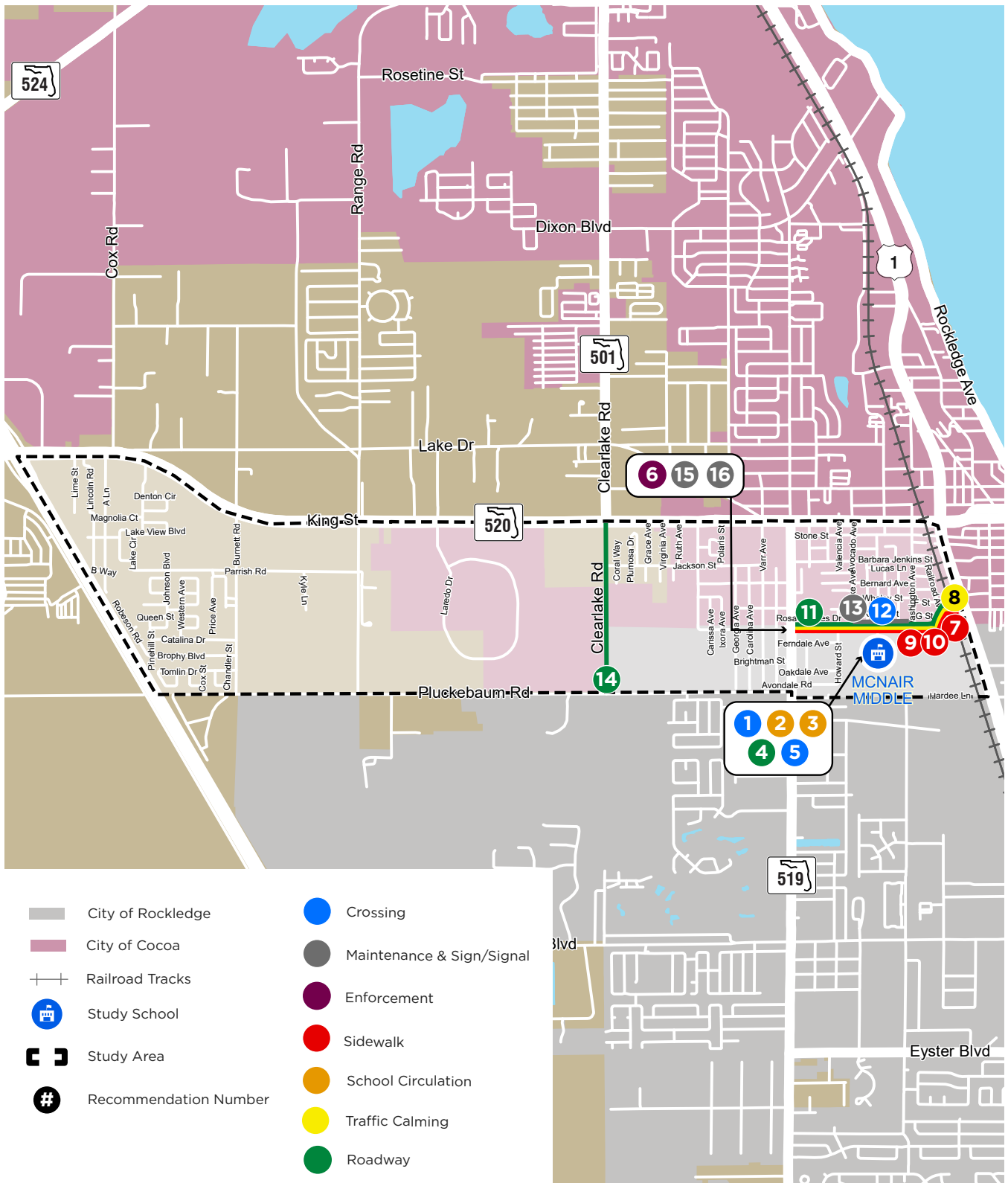


Figure 7: Recommendations
 School Routes Analysis
McNair Middle School



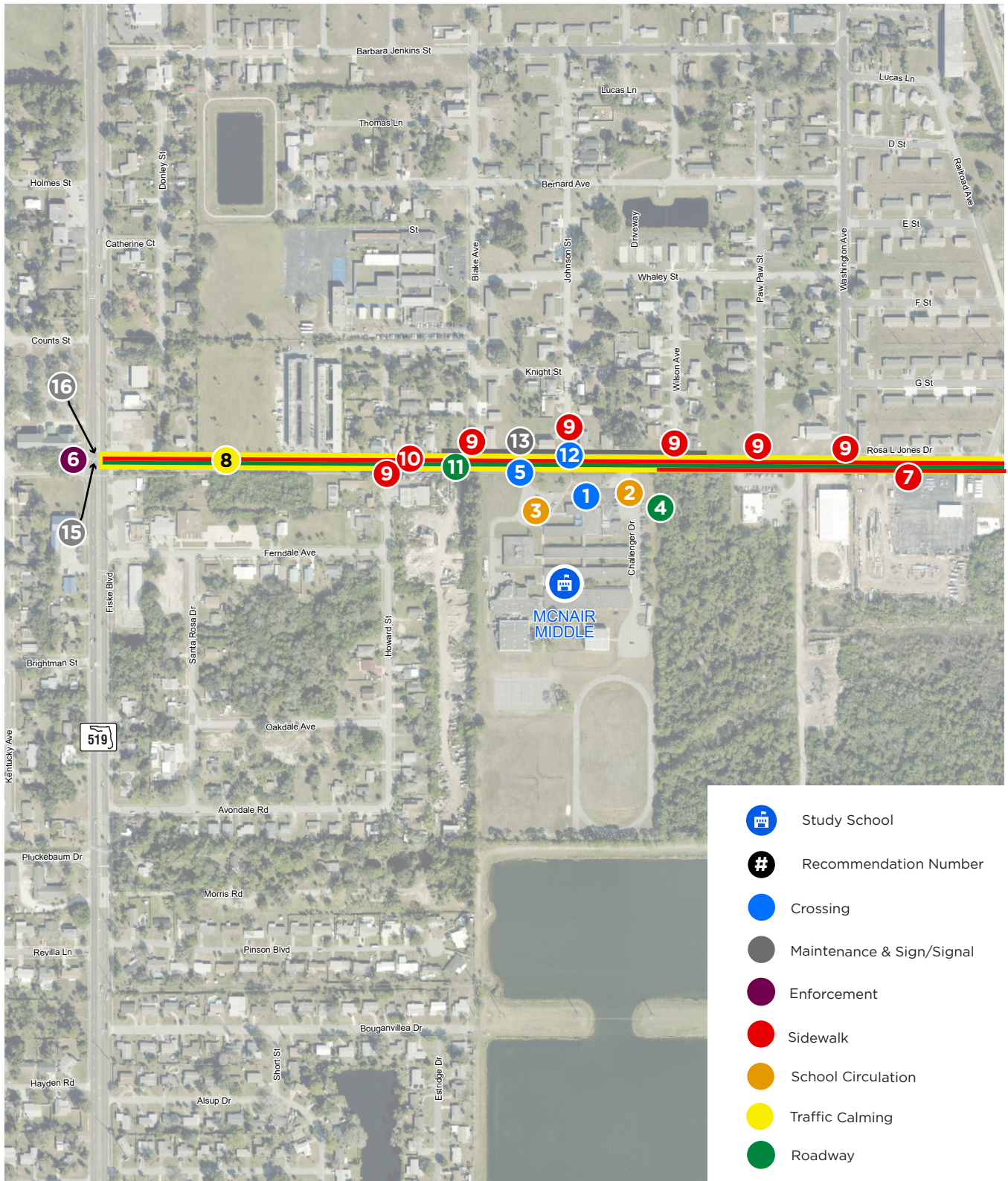


Figure 8: Recommendations: School Context Aerial
School Routes Analysis
McNair Middle School



Prepared For:



2725 Judge Fran Jamieson Way,
Bldg. B, Room 105,
Melbourne, FL 32940

Prepared By:



225 E Robinson Street,
Suite 355,
Orlando, FL 32801