

Sawgrass Bay Elementary School Lake County, FL

August 2012





A SAFE SCHOOLS TRANSPORTATION STUDY

Sawgrass Bay Elementary School

Sawgrass Bay Elementary School Snapshot

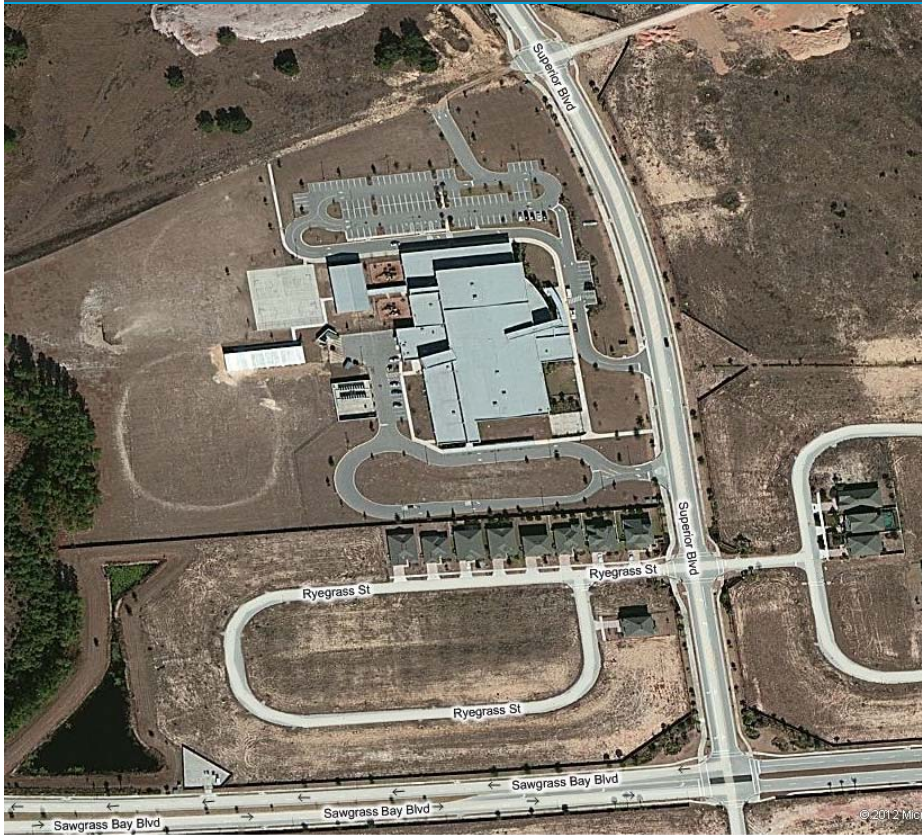
January 18, 2012

Grades: Pre-K through 5th

Total Students:	1,134
■ Provided Bus Transportation :	780
■ Not Provided Bus Transportation:	354
■ Buses assigned to school	18
(1 double route, 14 Regular, 4 ESE)	19 routes

Students Living within the "Walk Zone":	242
■ Provided Bus Transportation:	135
■ Not Provided Bus Transportation:	107

Observation Day (Sunny)	
■ Walkers:	2
■ Bike Riders:	6



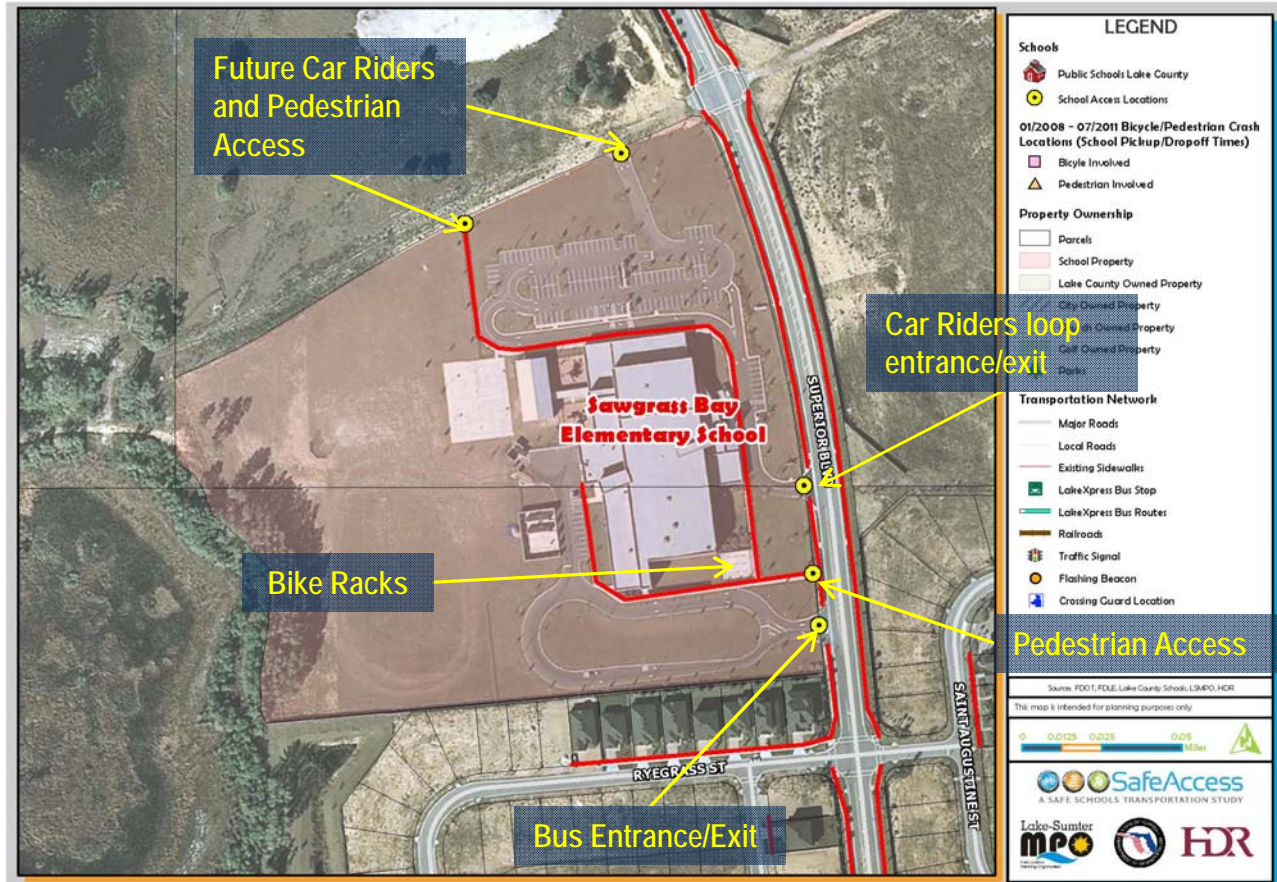
- ✓ Sawgrass Bay Elementary School website – Click [here](#)
- ✓ Lake County website – Click [here](#)
- ✓ Lake County Schools website – Click [here](#)

Sawgrass Bay Elementary School

Findings:

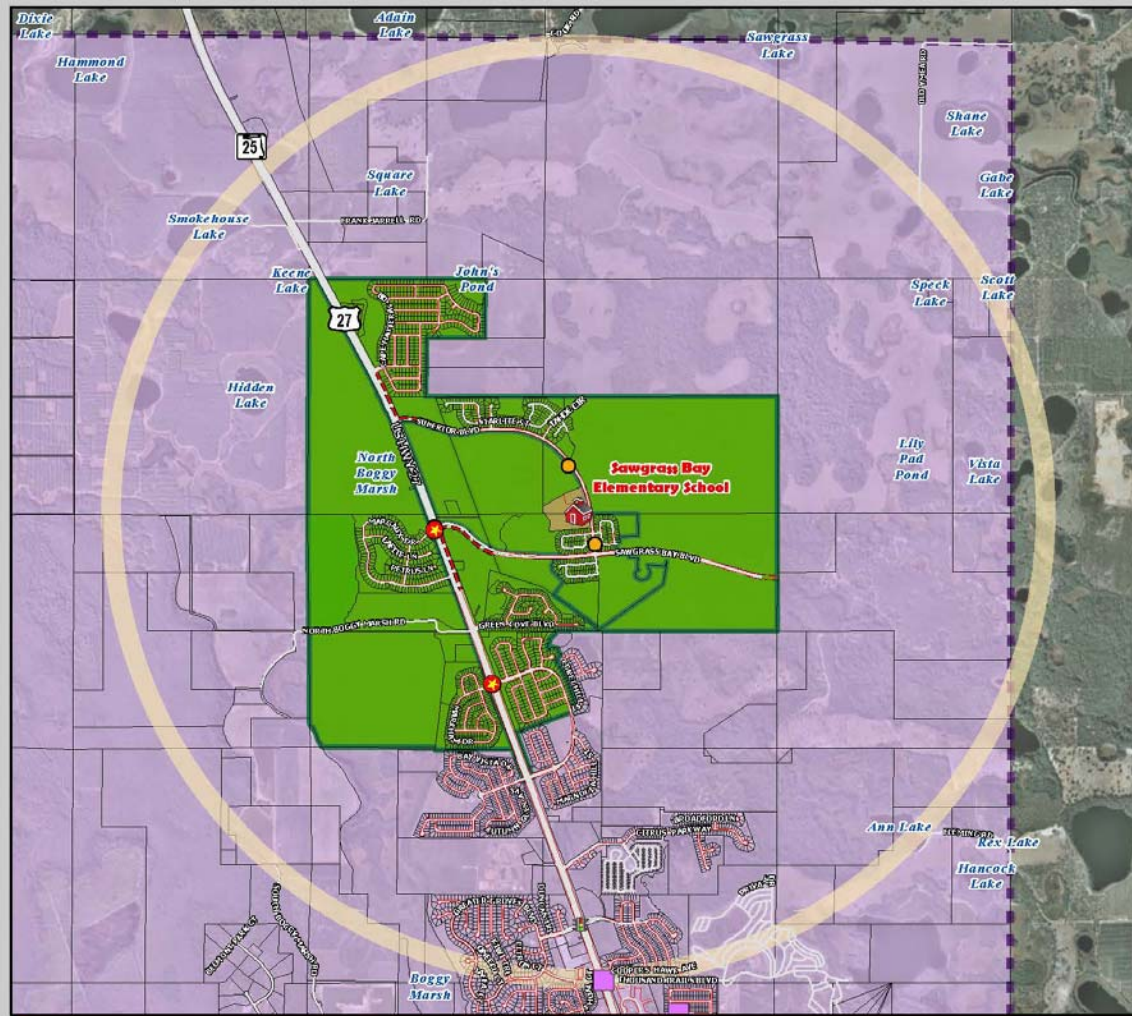
- ✓ Approximately 56% of students within the 2 mile walk zone are bused
- ✓ There is one car drop-off / pick-up area, it is separate from the bus loop
- ✓ Walking access allowed at multiple points (through grass)
- ✓ It appears that the original plan for the school included connections to the property to the north, but that property has not been developed

Sawgrass Bay Elementary School: Student Access Location Map



Attendance and 2-Mile "Walk" Zone Map

Sawgrass Bay Elementary School: Attendance and 2-Mile "Walk" Zone Map



LEGEND

Schools

- Public Schools Lake County
- 2-Mile Buffer of Sawgrass Bay ES
- Parent Responsibility Zone
- Special Exception Areas
- Sawgrass Bay ES Attendance Zones (2010-2011)

01/2008 - 07/2011 Bicycle/Pedestrian Crash Locations (6 am - 7 pm only)

- Bicycle Involved
- Pedestrian Involved

Property Ownership

- Parcels
- Parks

Transportation Network

- Major Roads
- Local Roads
- Existing Sidewalks
- SSATS Identified Projects - Sidewalks
- LakeXpress Bus Stop
- LakeXpress Bus Routes
- Railroads
- Traffic Signal
- Flashing Beacon
- Existing Hazardous Walking Conditions

Sources: FDOT, FCLE, Lake County Schools, LSUMPO, HDR

This map is intended for planning purposes only

0 0.2 0.4 0.8 Miles

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Lake-Sumter
mpe

Arrival and Dismissal Schedule

- 6:30 am:** Extended Care opens
- 8:00 am:** Gates Open; 14 Regular Buses (1 double route), 4 ESE Buses, 5 Bus Loading Positions (under const.)
- 8:30 am:** School Start Time
- 2:30 pm:** Pre-K ESE picks up in bus lane, regular VPK at front
- 3:00 pm:** Release time: buses generally come in 2 waves & are called by group; walkers are held about 10 minutes for staggered release



Note: Students are released one hour early on Wednesdays



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Bus Access



Findings:

- ✓ Bus loop area was under construction due to classroom addition during observations
- ✓ Queue mostly accommodated (1 brief exception), will need to be monitored when unloading occurs at regular position due to shorter storage area (note: upon return to regular position unloading, queue spilled to street)
- ✓ Groups of buses arrive in waves

Student Drop-off & Pick-up

Findings:

- ✓ The car-rider drop-off / pick-up and parking all enter through a single point with one-way in and one-way out, which creates conflicts
- ✓ There are conflicts within the queue and from parents entering queue through unfinished adjacent roadway
- ✓ A few parents have been observed previously using Ryegrass as a remote pick-up/drop-off

Morning Observations

- ✓ Exit is signed “Right Out Only”, but several were observed exiting left
- ✓ Queue did not extend to Superior Boulevard
- ✓ Conflicts were observed between cars in the pick-up drop-off area and walkers crossing from the north through the grass to the school entrance



Morning Drop-off



Morning Drop-off

Afternoon Observations:

- ✓ 1:48 pm (early dismissal day) the car line queue backed up onto Superior
- ✓ 1:48 pm announcement for walkers to front office and car riders to front of building
- ✓ Queue peaked at 13 cars NB and 6 cars SB on Superior
- ✓ Queued traffic forces buses to 'slalom' or drive into the opposing lane around stopped cars to reach bus access
- ✓ Two private buses load at pick-up area, parents get impatient with waiting and want to go around, driving through entrance lane
- ✓ Queue was cleared from street by approximately 1:58

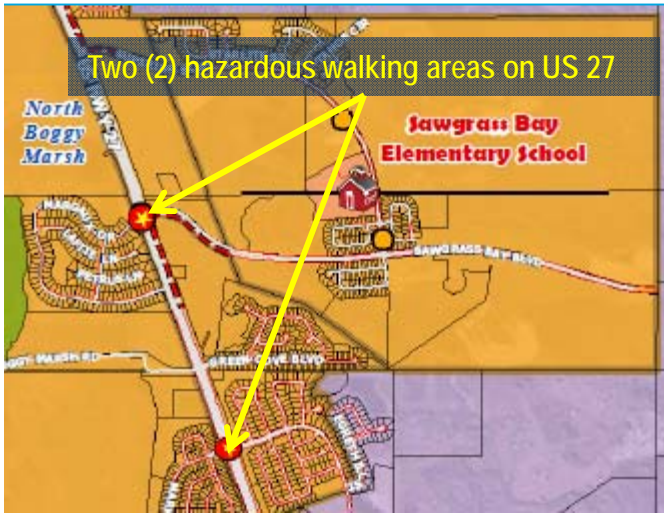




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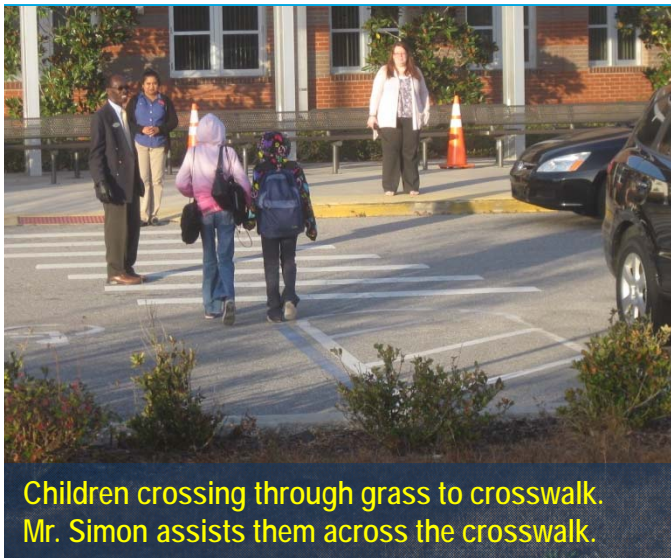
Sawgrass Bay Elementary School

Bicycle/Pedestrian “Walkers” Access

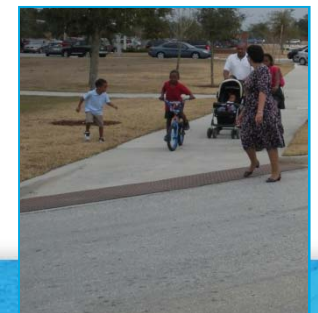


School Existing Conditions and Procedures:

- ✓ There are two (2) identified hazardous walking zones within the 2 mile walk zone, both are US 27 crossings
- ✓ Students walking from the north must walk through the grass, and then cross at a crosswalk from the handicap striping in the parking lot, or walk past the school to the pedestrian access, then back past the bicycle parking to the entrance
- ✓ There are no crossing guards
- ✓ There is not a good location to cross for students living to the east, observed assistance from teacher, and parent accompanying children
- ✓ There is no formal procedure for releasing walkers, they are held a short time (will have to revisit as number of walkers increases)

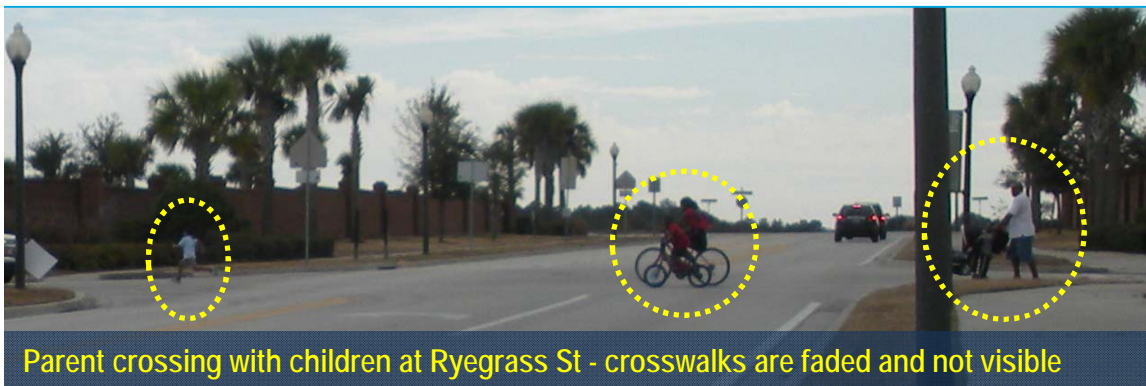


Children crossing through grass to crosswalk. Mr. Simon assists them across the crosswalk.



School Existing Conditions and Procedures:

- ✓ This is the first year there have been cyclists
- ✓ Cyclists coming from the north must walk across the driveway to the drop-off / pick-up area to access the walkway to the bicycle parking area
- ✓ Many of the crossings are faded, are missing zebra or ladder style markings, or are not marked at all
- ✓ There has been an observed increase in the number of new homes beginning construction in the areas immediately adjacent to the school, which will continue to increase the number of walkers and cyclists



Bicycle/Pedestrian “Walkers” Access

Recommendations

- ✓ Restore/add ladder style crosswalks at school driveways
- ✓ Restore / upgrade the crosswalks at Ryegrass Street to ladder style crosswalks
- ✓ Provide a midblock crossing with island at front of school and provide a paved pedestrian entrance
- ✓ Develop formal plan for walkers/cyclists for dismissal and consider if there is need for crossing guard
- ✓ Consider adding a safe bicycling unit to the PE curriculum



Children waiting for car pick-up, walkers would have to cross to grass at the crosswalk between the cars



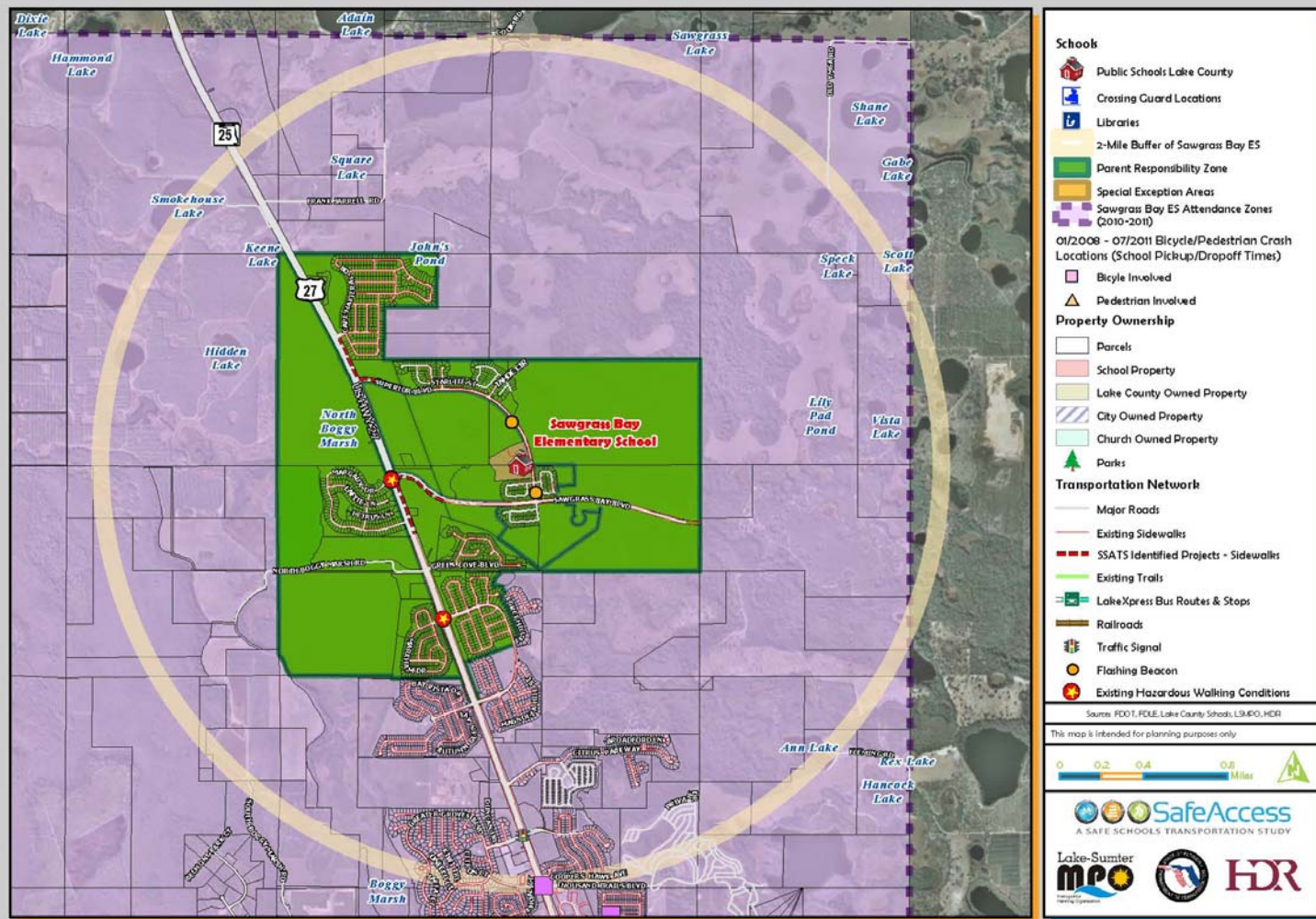
Staff acting as cross guard across Superior Blvd



Cyclists northbound on the east side of Superior Blvd



Sawgrass Bay Elementary School: Existing Conditions Map



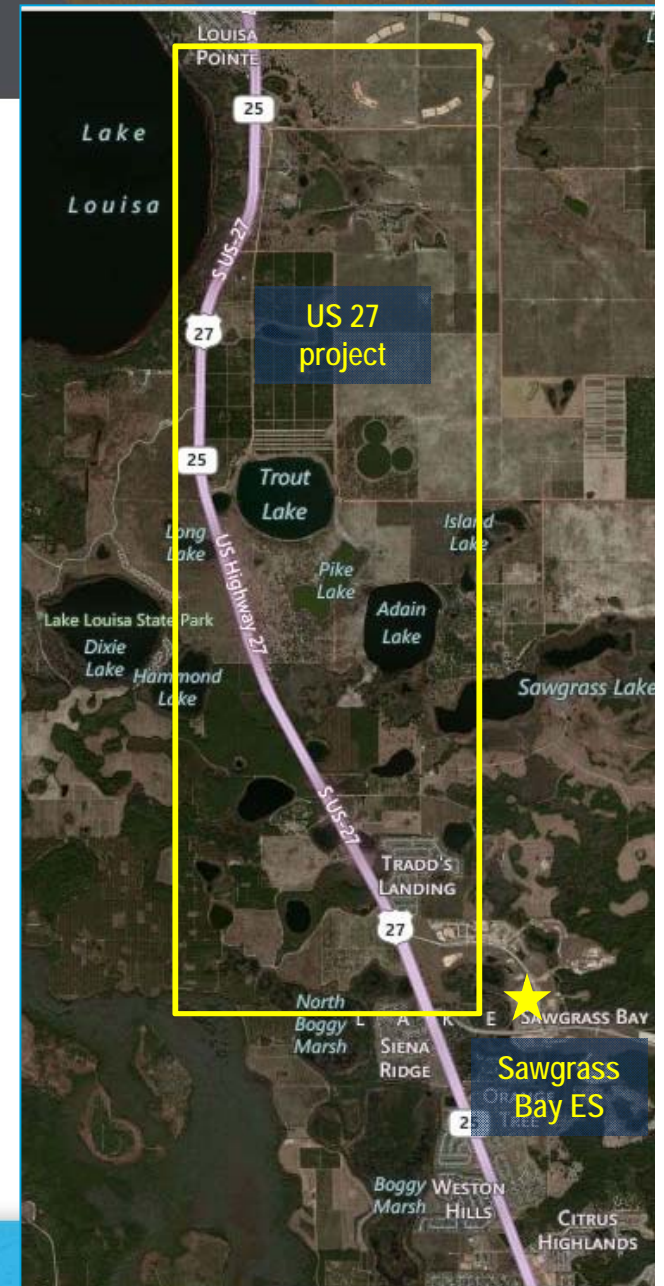
Completed / Planned Projects

Findings:

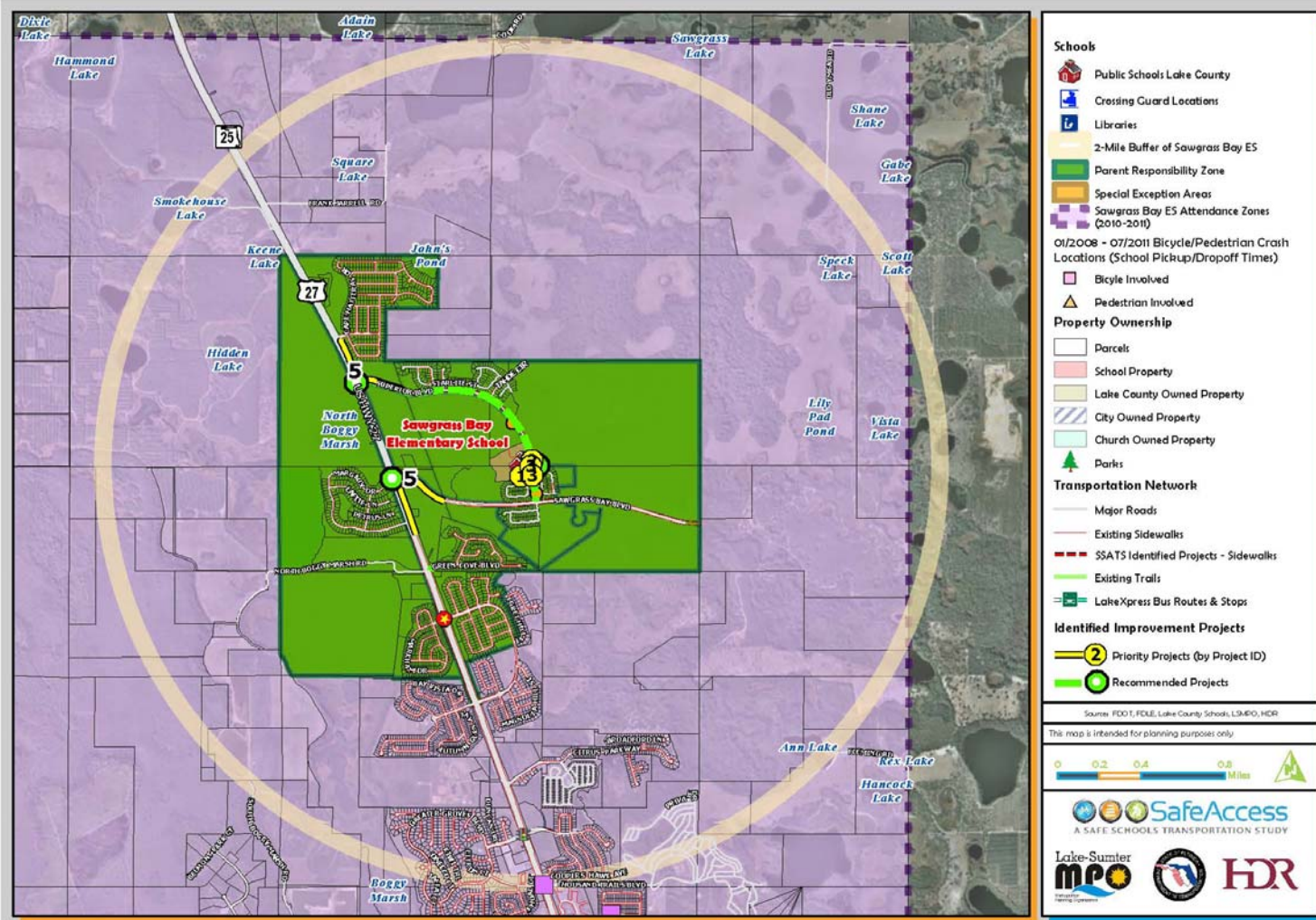
- ✓ The FDOT has added sidewalks on US 27 in conjunction with the 6 lane widening.
- ✓ Widening of US 27 to 6 lanes from north of Boggy Marsh Road (end of current 6 lane) to north of Lake Louisa Road is schedule for design in 2014, currently construction is not funded in the 5 year work program.

Recommendations:

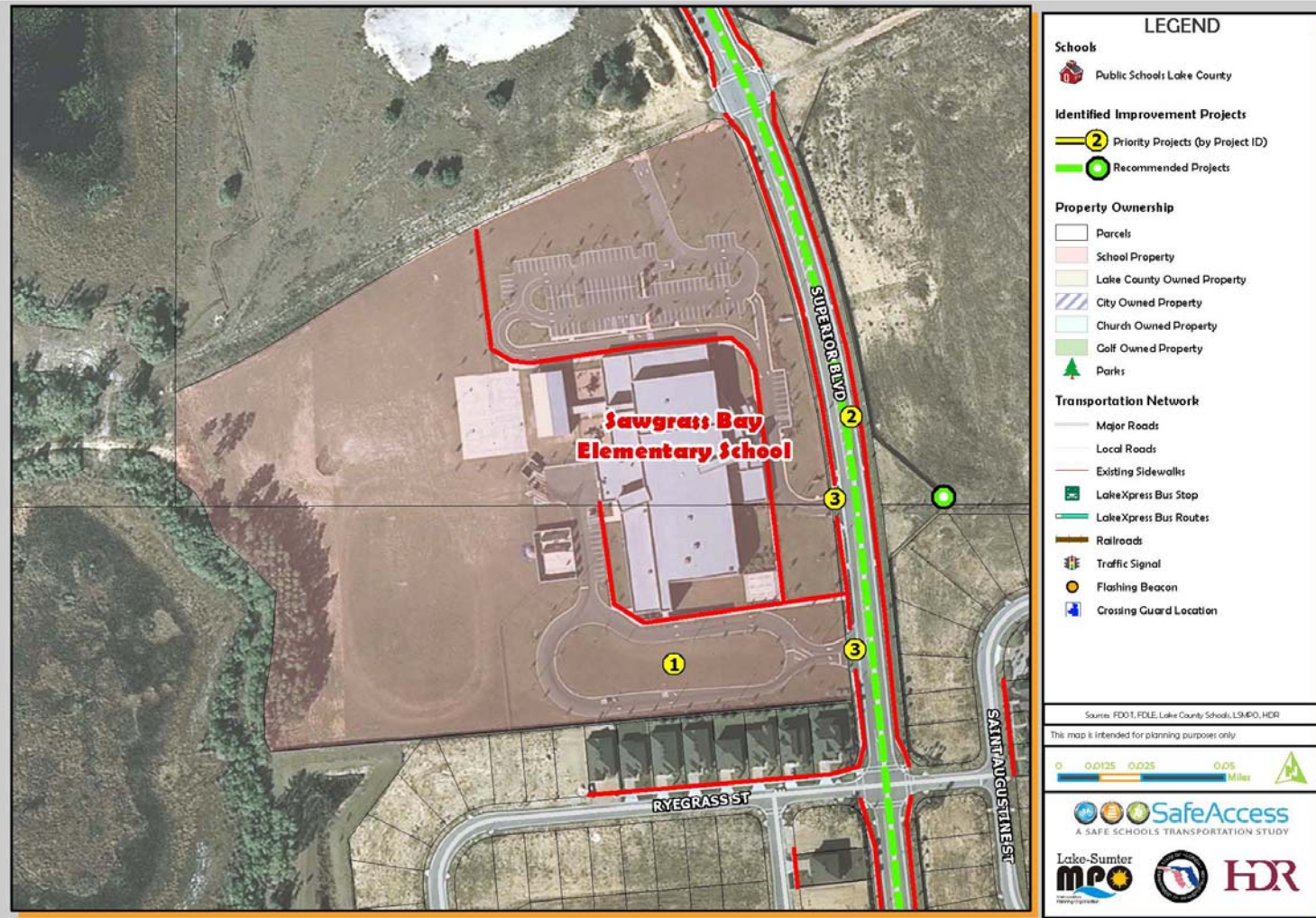
- ✓ Coordinate with the MPO / FDOT to be kept aware of the timing of this improvement.
- ✓ Coordinate with the County to add sidewalks on Sawgrass Bay Blvd and Superior Boulevard connecting to US 27 in conjunction with the US 27 widening project. This will provide connections from the adjacent developments on the east side of US 27 to the school (Tradd's Landing and Orange Tree).



Sawgrass Bay Elementary School: Transportation Access Master Plan



Sawgrass Bay Elementary School: Priority Projects



Priority Projects:

1. Bus Loop Circulation Improvements
2. Add a new pedestrian entrance and crosswalk with an island across from School entrance
3. Reinstall / update crosswalks at school driveways to FDOT ladder style crosswalks, repair pavement at bus exit
4. Add access from 4 legged intersection to northern driveway and expand parking
5. Add sidewalk on US 27 from end of existing sidewalk to north of Harvest Blvd (*off map*)
6. Add sidewalk on Superior Blvd from end of sidewalk to US 27 (north side is priority) (*off map*)
7. Add Sidewalk on Sawgrass Bay Blvd from end of sidewalk to US 27 (south side is priority) (*off map*)

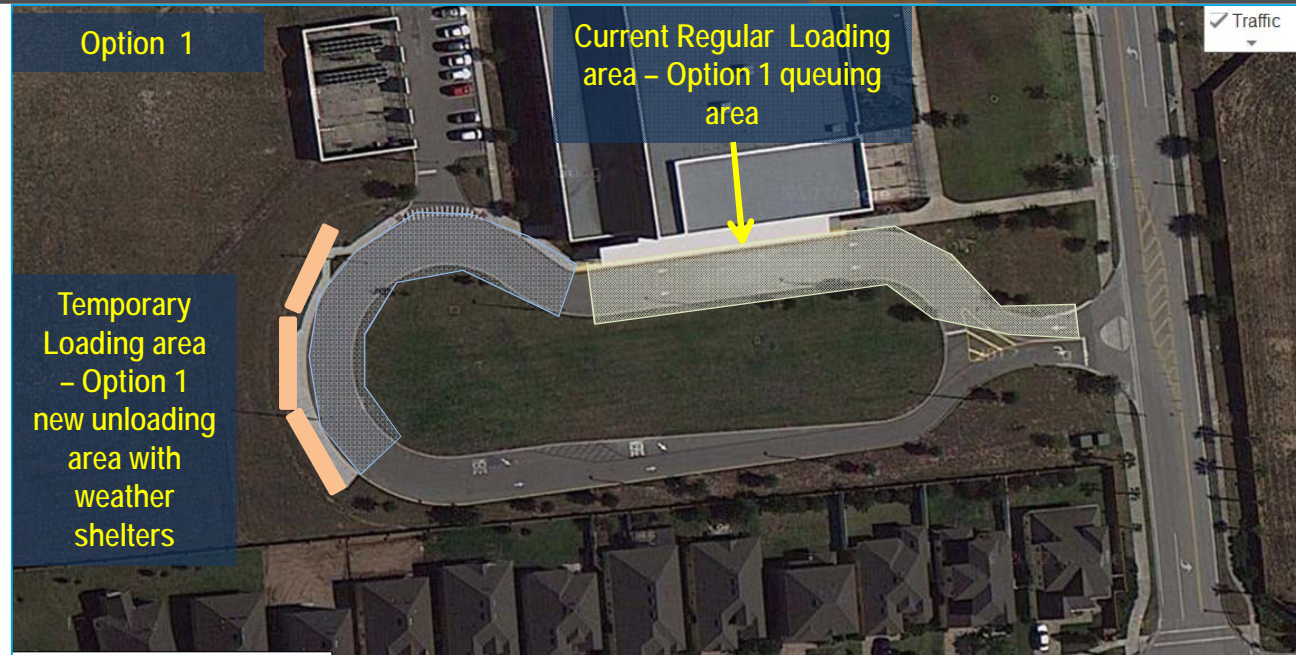


Findings:

- ✓ During observations, the bus loop area was under construction and unloading occurred at the western side of the loop, the normal position is at the school side on the north, once construction was complete, the bus queue could not be accommodated in the loop and spilled onto Superior Blvd. Three potential options are presented here, all would require additional study and design work, but are presented here as initial, lower cost, options.

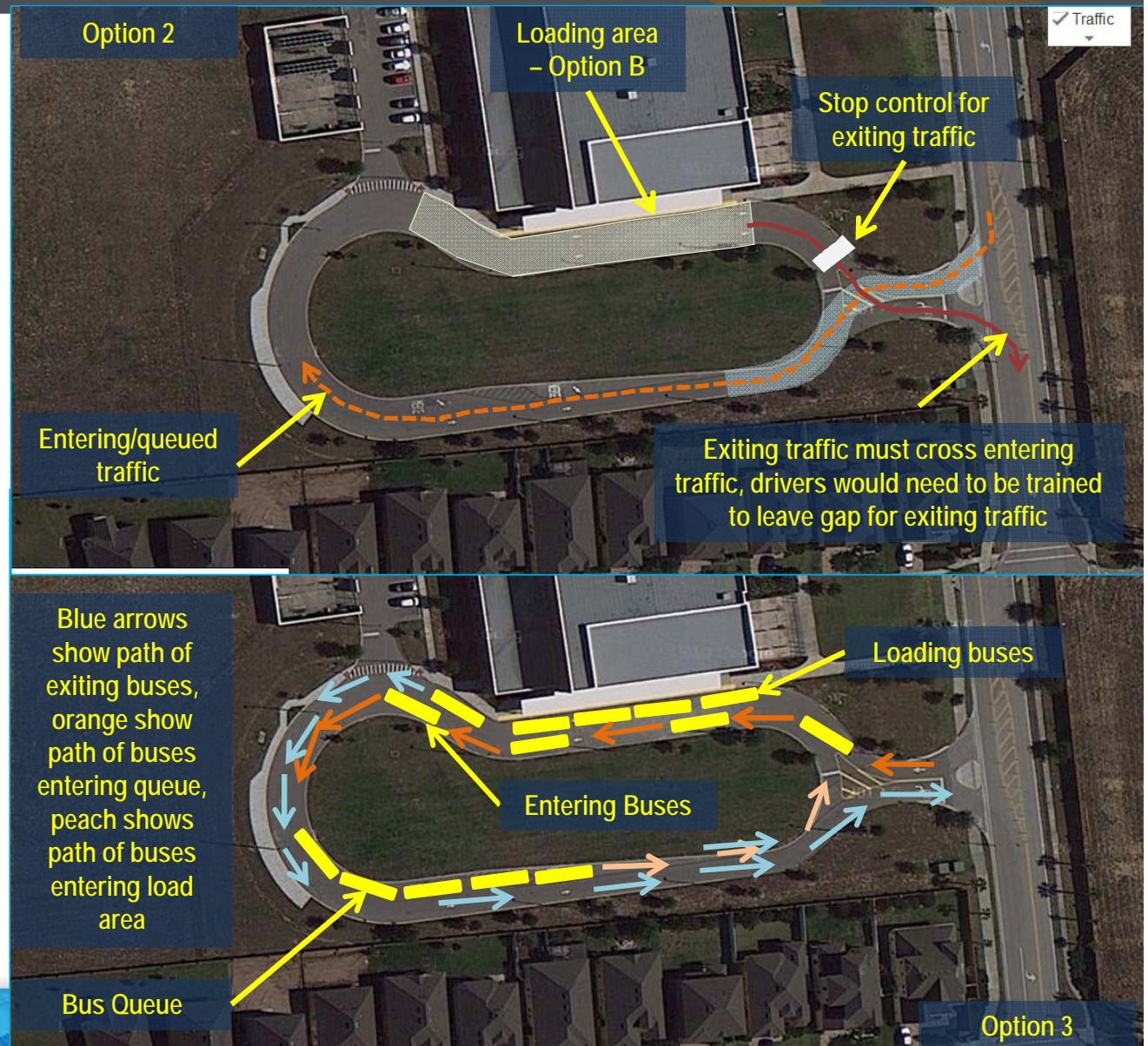
Recommendations:

- ✓ Option 1: Consider moving loading back to the western side of the loop with additional covered areas and provide for queuing in the regular loading area and driveway.



Recommendations cont:

- ✓ Option 2: Change the entrance to provide for buses to circulate in the opposite direction, allowing for queuing on the southern side of the loop. Note this creates a weave condition at the bus loop entrance. In addition, there would be safety considerations with students exiting the buses on the driveway side as opposed the school side.
- ✓ Option 3: Circulate the waiting buses to the outside of the unloading / loading buses and queuing them on the south side of the loop.



Priority Project #2

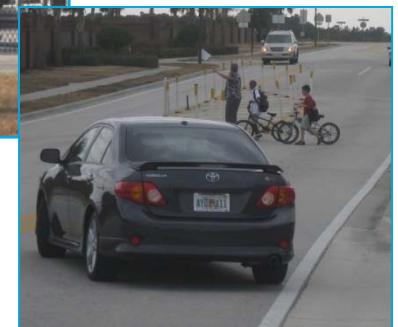
School Pedestrian Access Improvements including crosswalks and new pedestrian entrance

Findings:

- ✓ As the amount of residential homes in the area immediately surrounding the school increases, the amount of pedestrian and bicycle activity will also increase.
- ✓ Currently pedestrians and cyclists should enter the school at the pedestrian access south of the car loop driveway, this requires all pedestrians and cyclists coming from the north to pass the school and cross the car loop driveway.
- ✓ Most of the existing (and future) residential development is to the north/and east of Superior Blvd. The only existing marked crosswalks for these future students would be at Ryegrass Street or the unnamed, unbuilt roadway north of the school. Superior Blvd is not stop controlled at these intersections which may be a future safety concern.



Cyclist walking bicycle across driveway and into parking area, as directed by staff



Staff assisting with crossings

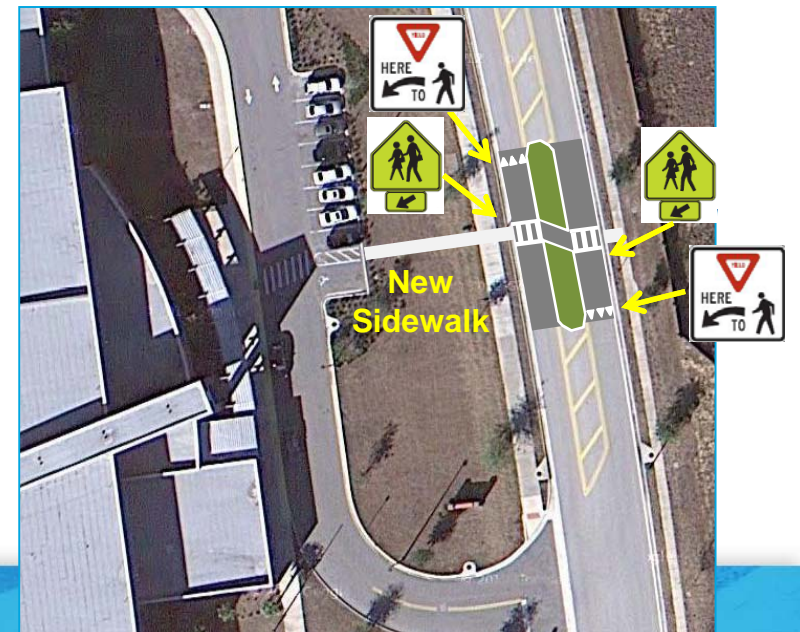


Priority Project #2

School Pedestrian Access Improvements including crosswalks and new pedestrian entrance

Recommendations:

- ✓ Add midblock crossing of Superior Blvd in front of the school with raised median island; build sidewalk connection to the existing handicap parking space & crosswalk across the loop driveway
- ✓ Use “standard” school midblock treatment
 - ✓ High visibility ladder-style crosswalks
 - ✓ Standard school crossing signs supplemented with advance yield lines (set back 30 feet from crosswalk) & yield here to pedestrians signs
- ✓ Angled median break allows crossing of one direction at a time and forces crossing pedestrians to look towards oncoming traffic
- ✓ Raised median should not be installed until inbound drop-off/pick-up pattern is changed with new access in order to continue to allow southbound vehicles to pass a queue in the center lane; if crosswalk constructed before new access, set up as shown but add median islands later



Priority Project #3

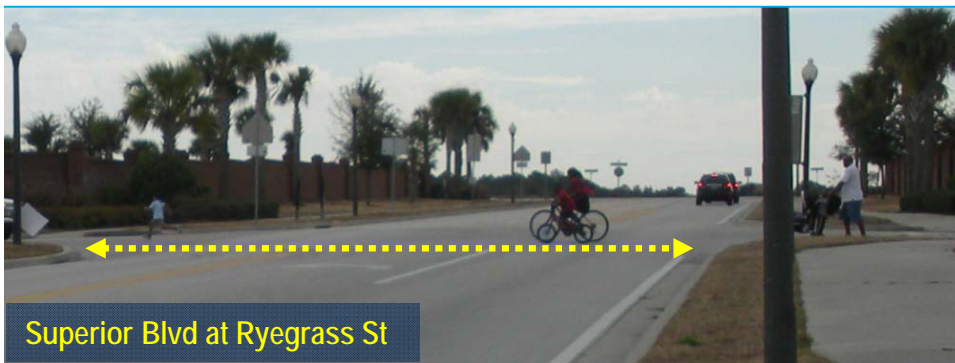
Reinstall / update crosswalks at school driveways to ladder style crosswalks

Findings:

- ✓ The crosswalks at the car and bus loops accessing the school, or crossing school driveways, have become faded, or were never painted
- ✓ The crosswalks at Ryegrass St need to be repainted also. If priority project #1 is not implemented, the Ryegrass St crosswalk should also be updated

Recommendation:

- ✓ Repaint all of the crosswalks at school driveways and at Ryegrass St with FDOT ladder style crosswalks and appropriate signage





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Priority Projects #4

Construct new access on north side of school
Reroute Car Loop



Findings:

- ✓ Currently there is a planned future access to the parking car loop area on the northern boundary of the school
- ✓ The parking at this school is insufficient, several vehicles were observed parked in field because lot was full

Recommendation:

- ✓ Work with Lake County, the school board and the owner/developer of the adjacent property to build the access and expand the parking area
- ✓ Reroute the drop-off / pick-up loop from the new access using a one-way inbound flow

Priority Projects #5/6/7

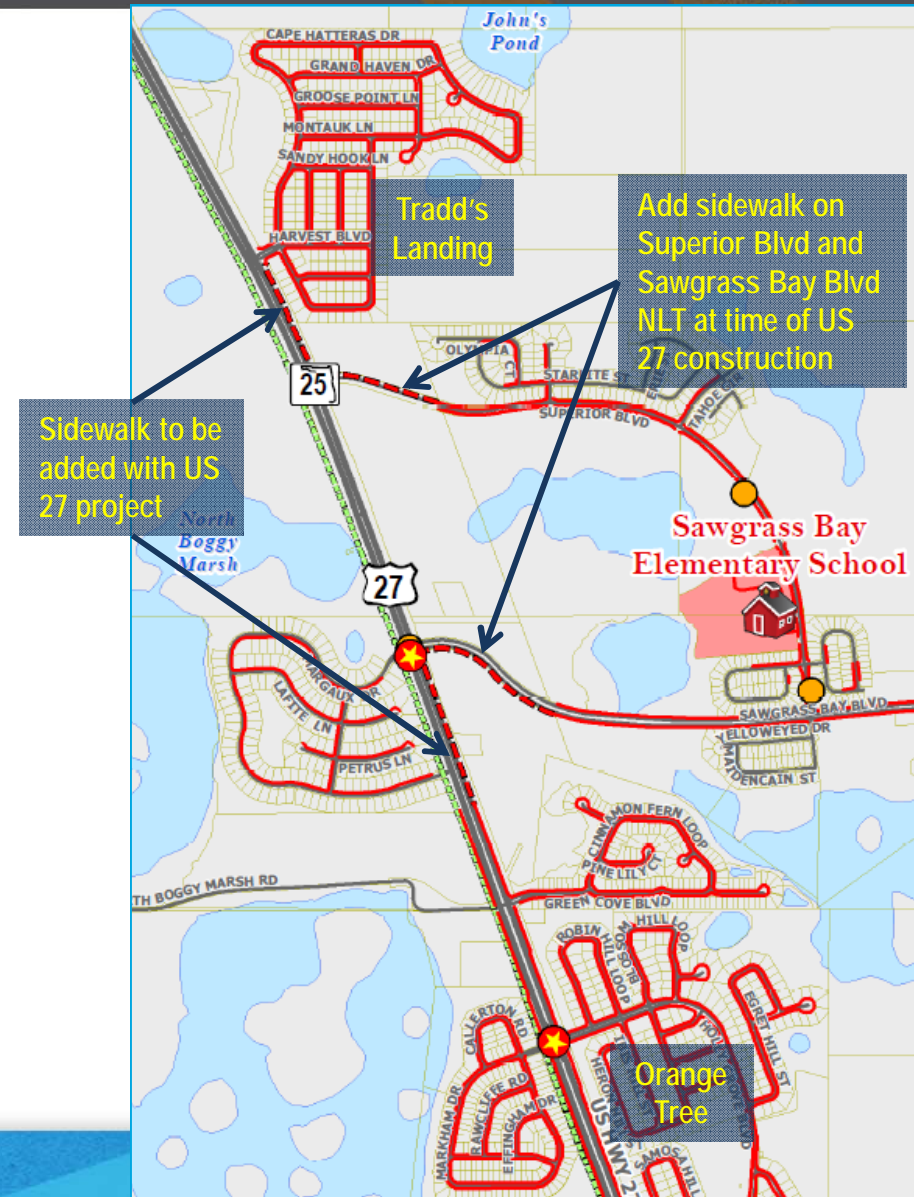
Sidewalks on US 27, Superior Blvd and Sawgrass Bay Blvd

Findings:

- ✓ There are currently small missing sections of sidewalks that if complete would allow students within the walk zone to access the school, without crossing US 27. These include the sidewalks on US 27 and on Superior Blvd and Sawgrass Bay Blvd.

Recommendations:

- ✓ Coordinate with the MPO/FDOT to be kept aware of the timing of the US 27 6-lane improvement, which will include sidewalk.
- ✓ Coordinate with the County to add sidewalks on Sawgrass Bay Blvd and Superior Blvd connecting to US 27 in conjunction with the US 27 widening project. This will provide connections from the nearest adjacent developments on the east side of US 27 to the school (Tradd's Landing and Orange Tree).



Sawgrass Bay Elementary School

Project Priority	Item	Quantity	Units	Total
2	Crosswalk	24	ft	\$55.00
2	Crosswalk Signage	4	Signs	\$1,200.00
2	Crosswalk Yield bars	20	ft	\$80.00
2	Sidewalk	50	ft	\$24,900.00
2	Pedestrian Island	87	sy	\$27,100.00
3	Crosswalk	254	ft	\$570.00
4	New School Entrance to parking	467	sy	\$43,000.00
5a	Sidewalk	1,100	ft	\$109,300.00
5b	Sidewalk	1,600	ft	\$150,000.00

ESTIMATE BASIS AND ASSUMPTIONS:

- Sidewalk estimates based on estimating tool developed for Phase 1, Estimates for all other improvements based on Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012).
- Estimate does not include utility relocation costs, utility relocation assumed by others.
- The mobilization costs are based on 15% of the construction cost and estimates include maintenance of traffic costs (15% of construction costs).
- No Regular excavation & embankment to 1 ft depth is assumed
- No R/W Impact
- No specialized landscaping (beyond sodding) is included.
- Sidewalk is assumed to be 5 feet wide, unit given is in linear feet.



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Other Recommendations

Roadway	From/To	Project
Green Cove Blvd	Gap in sidewalk on south side of roadway at US 27	Add Sidewalk
Add / Require sidewalk on Tahoe circle	Superior Blvd to Superior Blvd	Add / complete require sidewalk on both sides, particularly if the long term plan ties this road back to the road adjacent to the school.
Requirements for sidewalk connections to Avalon Groves		
Pedestrian path across from school	Internal to adjacent neighborhood	With development of adjacent property
Superior Blvd	Sawgrass Blvd to US 27	Add islands as appropriate in 3 lane sections where there will be no driveways / turning movements
Crossings of US 27	At Superior Blvd, Sawgrass Blvd	With signals, pedestrian actuated phases and crossing guards (multiple) if needed to reduce busing costs
Add Parking	At School	Additional Parking (with project 3 potentially)





Sawgrass Bay Elementary School

Contact Information

This website represents an ongoing commitment to increase safe access to schools within the Lake-Sumter Metropolitan Planning Organization Planning Area.

Updates to data, and suggestions for programming and project ideas are welcome from all agencies and the general public.

Mike Woods

Project Manager, Transportation Planner

(352) 315-0170

mwoods@lakesumtermpo.com



Mindy Heath, AICP

Consultant Project Manager

(407) 420-4200

Mindy.heath@hdrinc.com



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