



A SAFE SCHOOLS TRANSPORTATION STUDY

# Carver Middle School Leesburg, FL



March 2013



# Carver Middle School Snapshot

May 23, 2012

Grades: 6<sup>th</sup> – 8<sup>th</sup>

Total Students: 832

- Provided Bus Transportation : 535
- Not Provided Bus Transportation: 297
- Buses assigned to school (15 reg, 5 ESE) 10

Students Living within the “Walk Zone”: 205

- Provided Bus Transportation: 88
- Not Provided Bus Transportation: 117

Observation Day (Sunny)

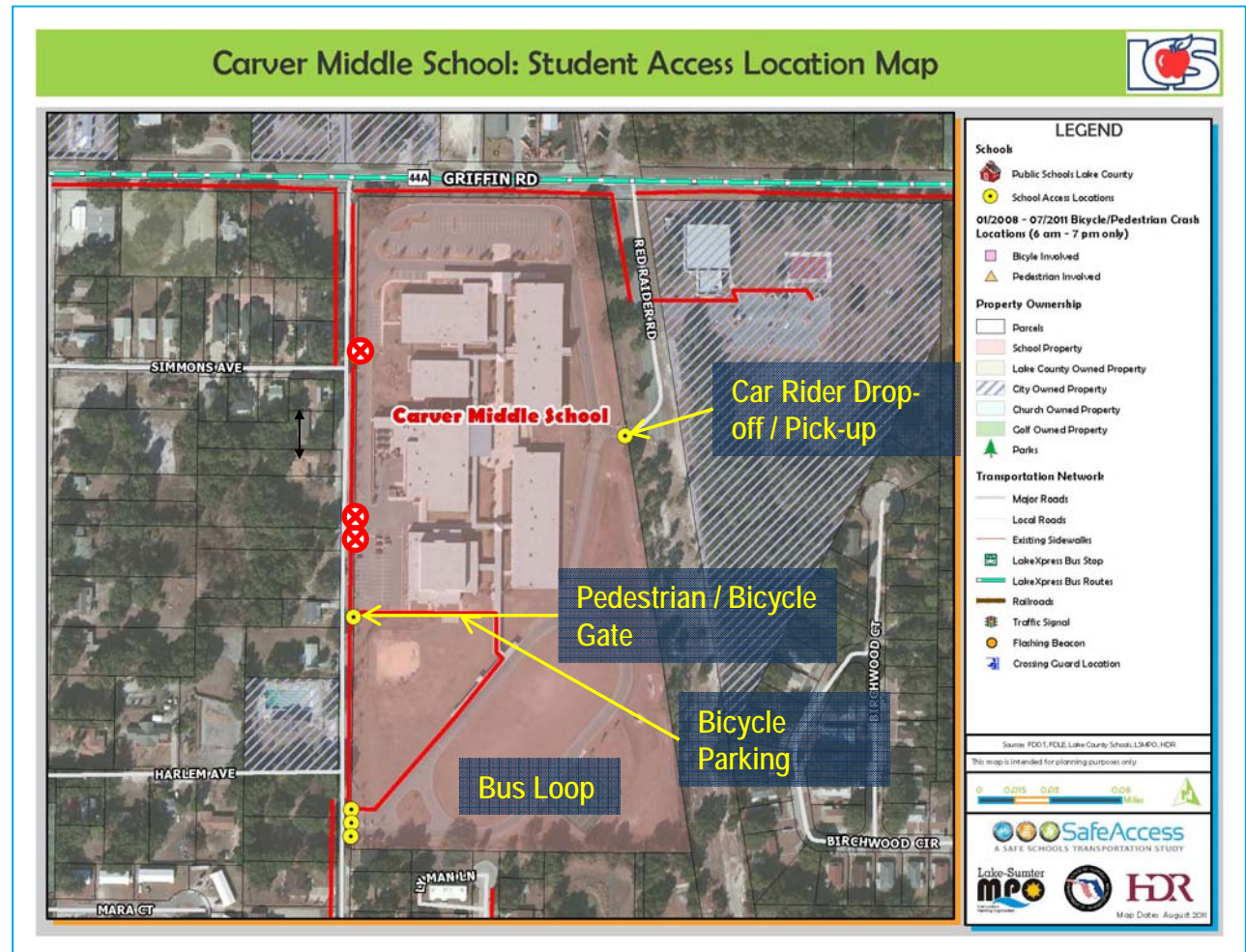
- Walkers: 40-60
- Bike Riders: 5



- ✓ Carver Middle School website – Click [here](#)
- ✓ City of Leesburg website – Click [here](#)
- ✓ Lake County Schools website – Click [here](#)

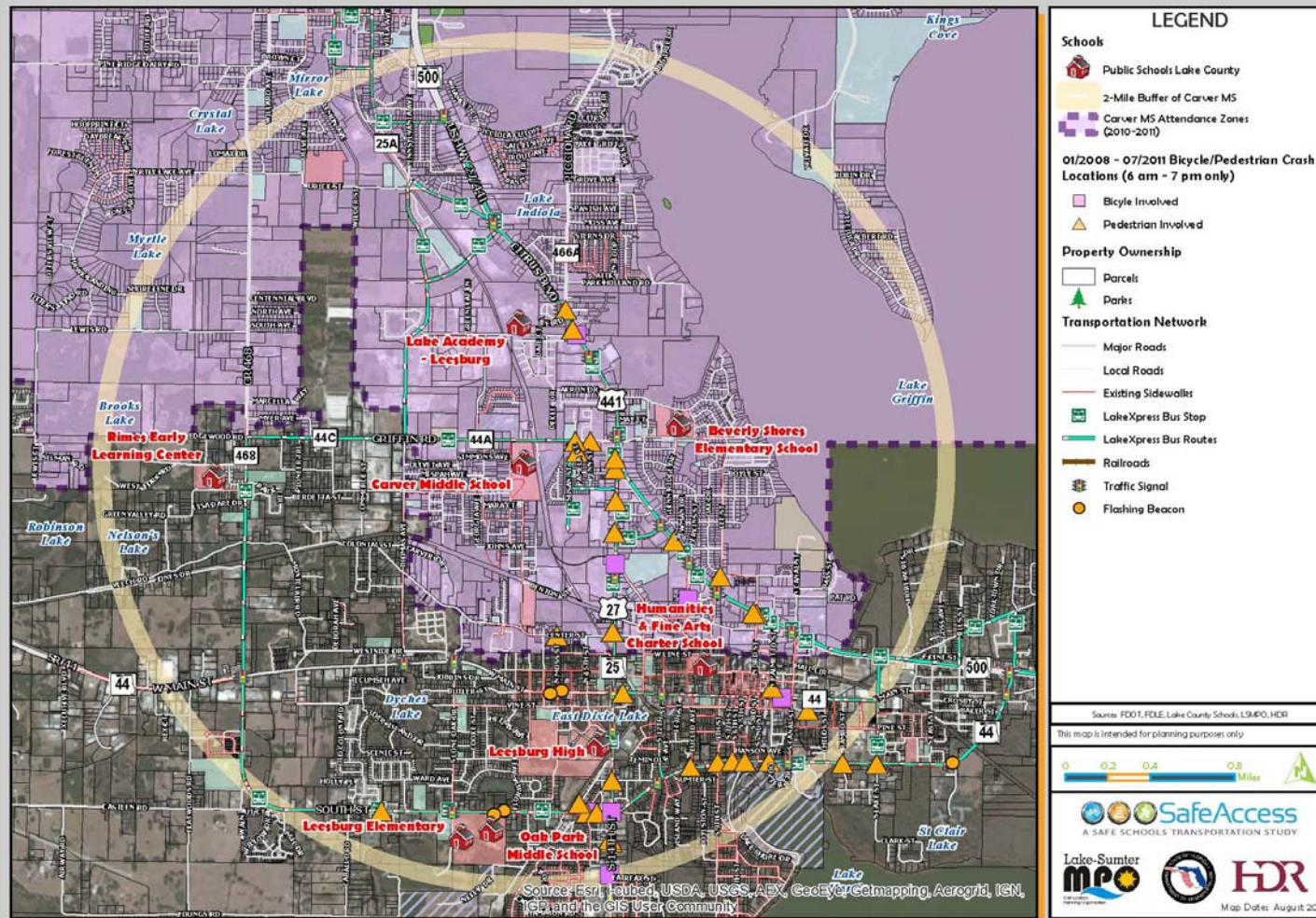
## Findings:

- ✓ Large group of students walk; all access for walkers and bicyclists is provided on Beecher St at southwest corner of school
- ✓ Bicyclists and walkers coming from east must walk around the school, a distance of 1/3 mile, to reach the gate
- ✓ Drop-off/pick-up loop via Red Raider Rd, which provides additional storage for queue
- ✓ Bus loop is separate and accessed via Beecher St
- ✓ Crossing guards at US 441 / Griffin Rd also assist Beverly Shores Elementary



# Attendance and 2-Mile "Walk" Zone Map

## Carver Middle School: Attendance and 2-Mile "Walk" Zone Map



# Arrival and Dismissal Schedule

- 6:00 am:** ELC starts (25 student signed up in the morning)
- 8:30 am:** School drop-off begins
- 9:10 am:** School start time
- 4:00 pm:** School release time
- 6:00 pm:** ELC ends (60 students signed up for afternoons)

*Note: Students are released one hour early on Wednesdays*





## Findings:

- ✓ The bus loop operations, and loading and unloading work well
- ✓ Adequate storage is provided on-site for 20 buses
- ✓ Driveway at exit has unmarked crosswalks and provides little direction on right-of-way

# Student Drop-off & Pick-up



## Finding:

- ✓ Parents drop off students on the at the north administration offices
- ✓ The queuing was not significant
- ✓ Vehicle flow moved well through the project
- ✓ If Red Raider Rd is extended as a through roadway a right turn lane would be needed at the school entrance
- ✓ The school expressed concerns over pedestrian safety at the Red Raider Rd intersection, noting a previous vehicle / pedestrian collision

## Recommendation

- ✓ Consider adding signage on Red Raider Rd at Griffin Rd advising vehicles to yield for pedestrians



*Remote Student Pick-up Area on Beecher St West of Pedestrian Gate*



## Findings:

- ✓ Parents were observed picking up near the bus exit

## Recommendations:

- ✓ Release walkers last; doing so may discourage remote pick-up if drivers have to wait for their students anyway



## Findings:

- ✓ There is only one pedestrian access - along the western boundary of the school
- ✓ There is not a pedestrian access to the north or east of campus
- ✓ Bicycles enter at pedestrian gate and park in an enclosed area between the gate and bus loop
- ✓ Sidewalk ends at the south school property line on Beecher St
- ✓ A large number of walkers journey south on Beecher St
- ✓ Previously school was accessed near Simmons Ave, signs and partial pavement markings remain and should be moved

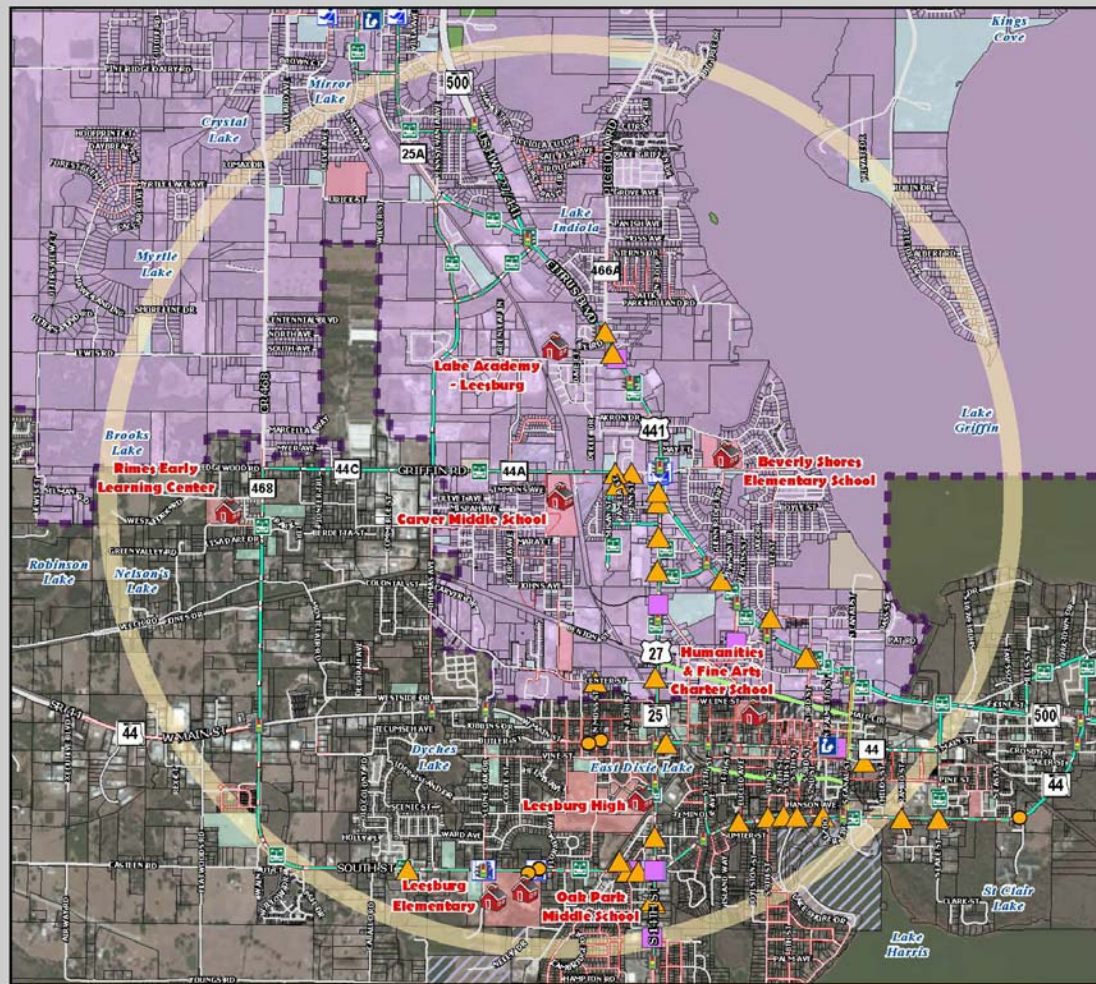




## Recommendations:

- ✓ It is recommended that a new north or east access and sidewalk be added to reduce student walk time by nearly five minutes, or approximately 1,400 ft
- ✓ Paint or repaint crosswalks near the school
- ✓ Install detectable warning mats where missing at sidewalk ramps
- ✓ Remove previous school crosswalk at Simmons Ave

## Carver Middle School: Existing Conditions Map



**LEGEND**

**Schools**

- Public Schools Lake County
- Crossing Guard Locations
- Libraries
- 2-Mile Buffer of Carver MS
- Carver MS Attendance Zones (2010-2011)

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

- Bicycle Involved
- Pedestrian Involved

**Property Ownership**

- Parcels
- School Property
- Lake County Owned Property
- City Owned Property
- Church Owned Property
- Golf Owned Property
- Parks

**Transportation Network**

- Major Roads
- Local Roads
- Existing Sidewalks
- Existing Trails
- Lake Xpress Bus Router & Stops
- Railroads
- Traffic Signal
- Flashing Beacon

Source: FDOT, FDLE, Lake County Schools, LCMPO, HDR

This map is intended for planning purposes only.

0 0.2 0.4 0.8 Miles

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Lake-Sumter  
**mco**

**HDR**

Map Dates: August 2011



### Findings:

- ✓ Lake County currently has a project funded to construct sidewalk (construction funded in 2013/14) on the west side of Thomas Ave from the end of the current sidewalk north of Dockside Dr / Tally Rd to Griffin Rd
- ✓ Once complete there will be an small section of Thomas Ave, between Griffin Rd and Harlem Ave, that does not have sidewalk

### Recommendation:

- ✓ Coordinate with Lake County on the schedule of the current project, and on design of crossing features at the Thomas Ave / Griffin Rd intersection
- ✓ Coordinate with the City of Leesburg, Lake County and Lake County Schools to identify funding for completing sidewalk on Thomas Ave between Griffin Rd and Harlem Ave



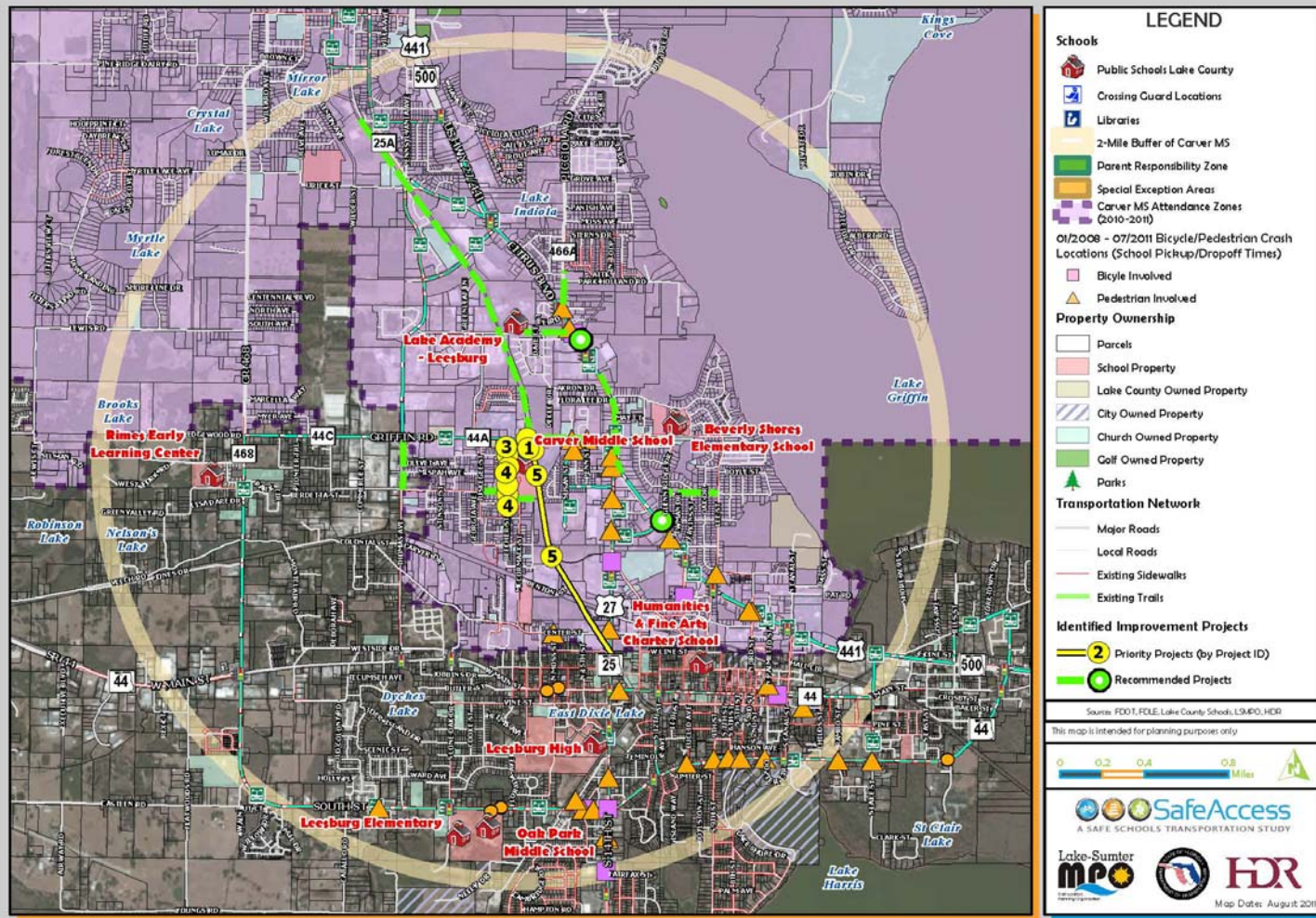
### Findings:

- ✓ The Gardenia Trail from Griffin Rd south to the Leesburg / Wildwood Trail is under construction
- ✓ The Leesburg / Wildwood Trail is under construction from US 27 to CR 468 (not pictured)

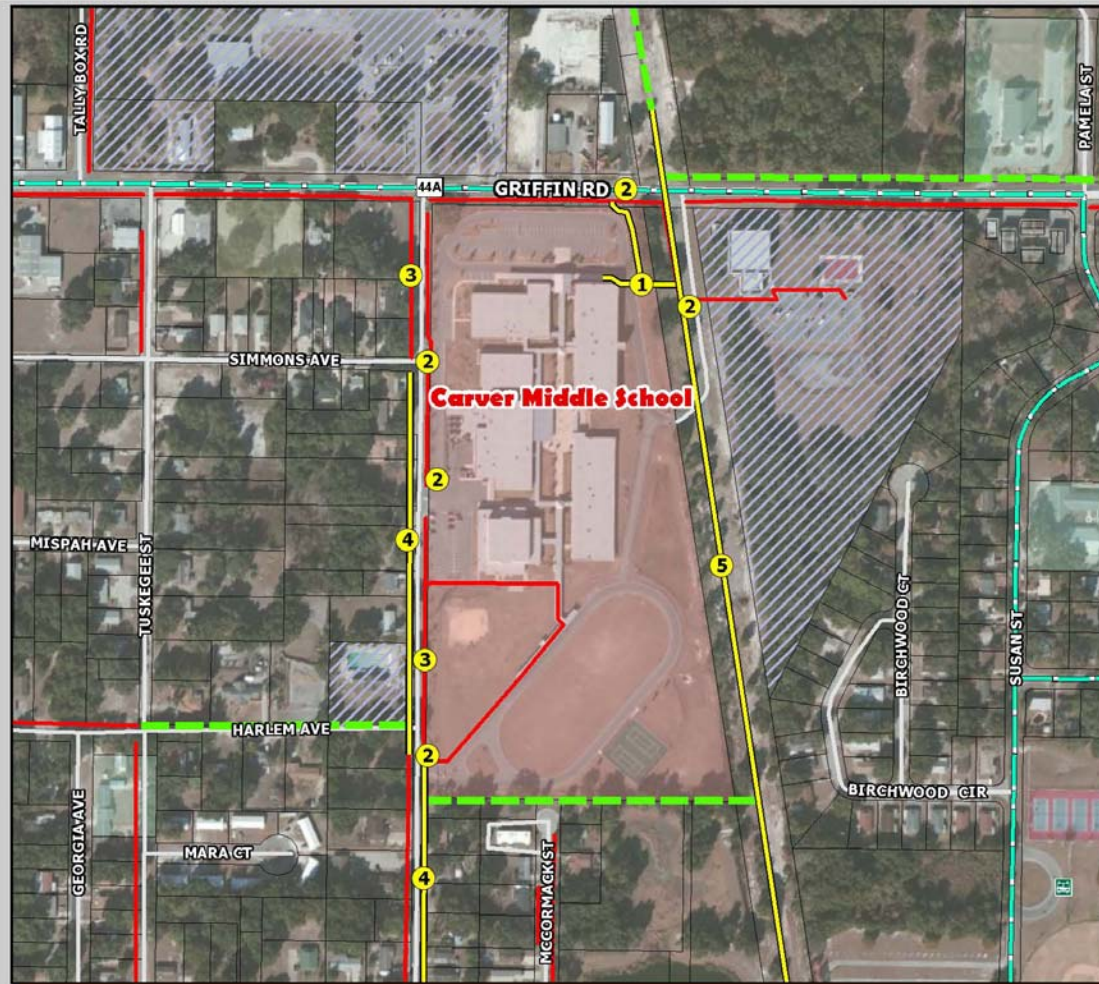
### Recommendation:

- ✓ Coordinate with Lake County on the schedule of the current project, including access to the school either as recommended in this study, or at the Red Raider Rd crosswalk at Griffin Rd
- ✓ Coordinate with the City of Leesburg, Lake County and Lake County Schools to identify funding for the recommended additional access to the school

## Carver Middle School: Transportation Access Master Plan



## Carver Middle School: Priority Projects



**LEGEND**

**Schools**

- Public Schools Lake County

**Identified Improvement Projects**

- Priority Projects (by Project ID)
- Recommended Projects

**Property Ownership**

- Parcels
- School Property
- Lake County Owned Property
- City Owned Property
- Church Owned Property
- Golf Owned Property
- Parks

**Transportation Network**

- Major Roads
- Local Roads
- Existing Sidewalks
- LakeXpress Bus Stop
- LakeXpress Bus Routes
- Railroads
- Traffic Signal
- Flashing Beacon
- Crossing Guard Location

Source: FDOT, FOLE, Lake County Schools, LSA40, HDR

This map is intended for planning purposes only.

0 0.02 0.04 0.08 Miles

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Lake-Sumter **mp** **HDR**

Map Date: August 2011

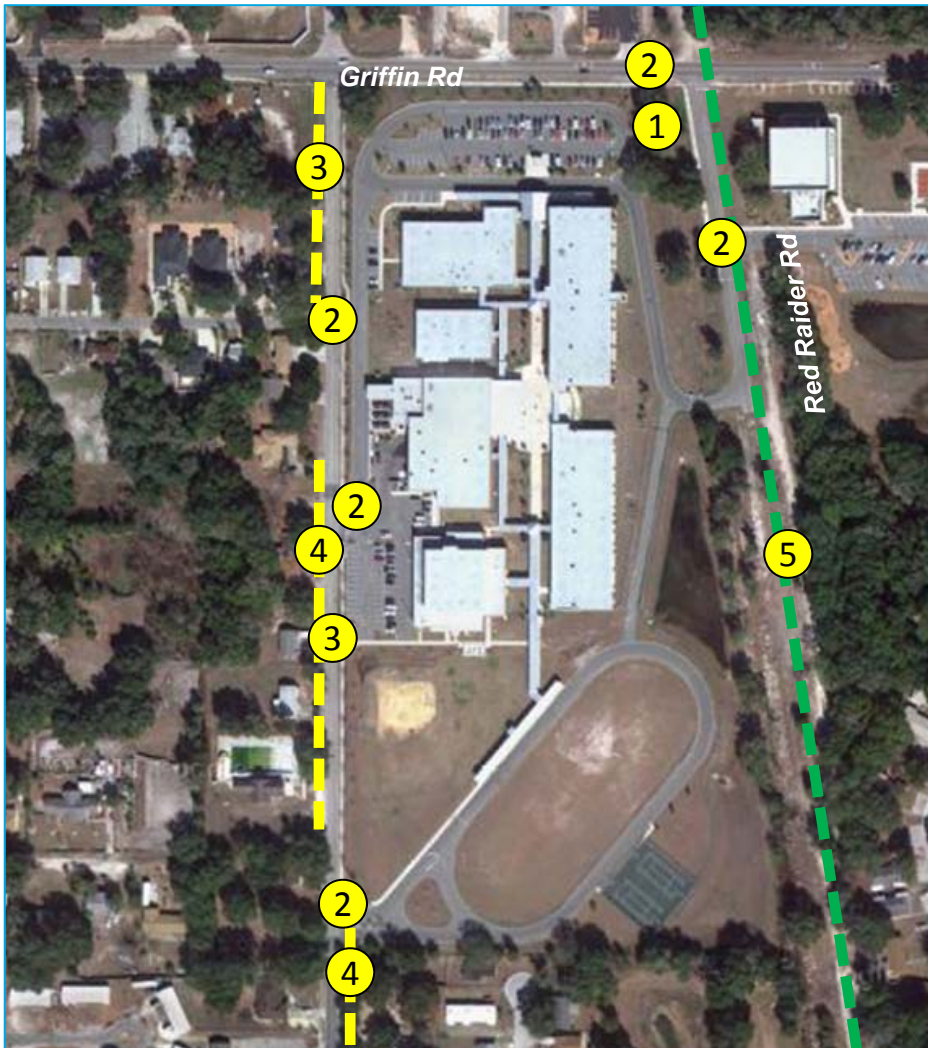


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**Carver Middle School**

# Recommended Priority Projects



## Priority Projects:

1. Construct new pedestrian access on northeast side of school
2. Improve signage, improve crosswalks, remove old crosswalks around school
3. Sidewalk Maintenance on Beecher St
4. Sidewalk gaps on Beecher St (pool property, east side of street south of school property)
5. Completion of Gardenia Tr





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## Carver Middle School

# Priority Project #1

## New sidewalk for the North School property

### Findings:

- ✓ Walk distance for students or faculty from the northeast to the west walk entrance adds approximately  $\frac{1}{4}$  mile (1,400 ft)
- ✓ Northeast car entrance is not a preferred walker entrance due to car-pedestrian conflict points

### Recommendations:

- ✓ Construct a sidewalk from the Griffin Rd sidewalk or from the sidewalk on Red Raider Rd at the Recreation Center to the sidewalk in front of the school
- ✓ Include a crosswalk at the car loop
- ✓ There are some grade issues at either location but should be able to be accommodated
- ✓ A culvert or bridge over the existing drainage ditches / areas may be needed at the north fence or the east fence





### Findings:

- ✓ Several crosswalks around the campus were in need of upgrading
- ✓ It was noted that there were occasional issues at Red Raider Rd and Griffin Rd

### Recommendations:

- ✓ Two old crosswalk should be removed on Beecher St
- ✓ Repaint crosswalks
  - ✓ Bus loop, faculty entrance, Beecher St at Griffin Rd, east car access at Griffin Rd
- ✓ Add pedestrian signage on Red Raider Rd and Griffin Rd, particularly when the Gardenia Tr is complete

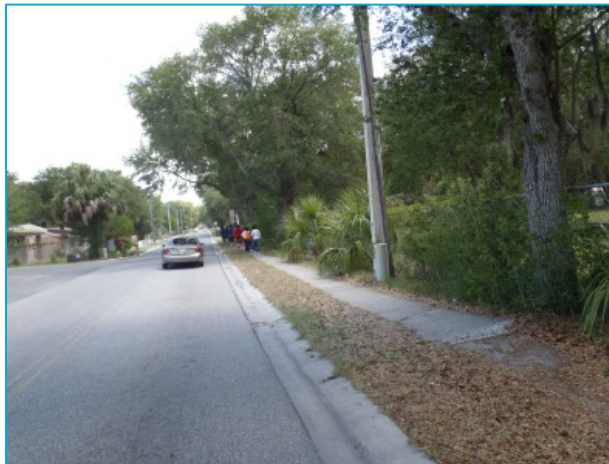


### Findings:

- ✓ Beecher St sidewalks are covered with debris and vegetation growth

### Recommendations:

- ✓ Clear and maintain the sidewalk





### Findings:

- ✓ There are two missing sections of sidewalk on Beecher St
  - ✓ Pool property, east side of street south of school property

### Recommendations:

- ✓ Construct sidewalk on along the pool property on Beecher St
- ✓ Construct sidewalk on east side of street south of school property







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## Carver Middle School

# Cost Estimates

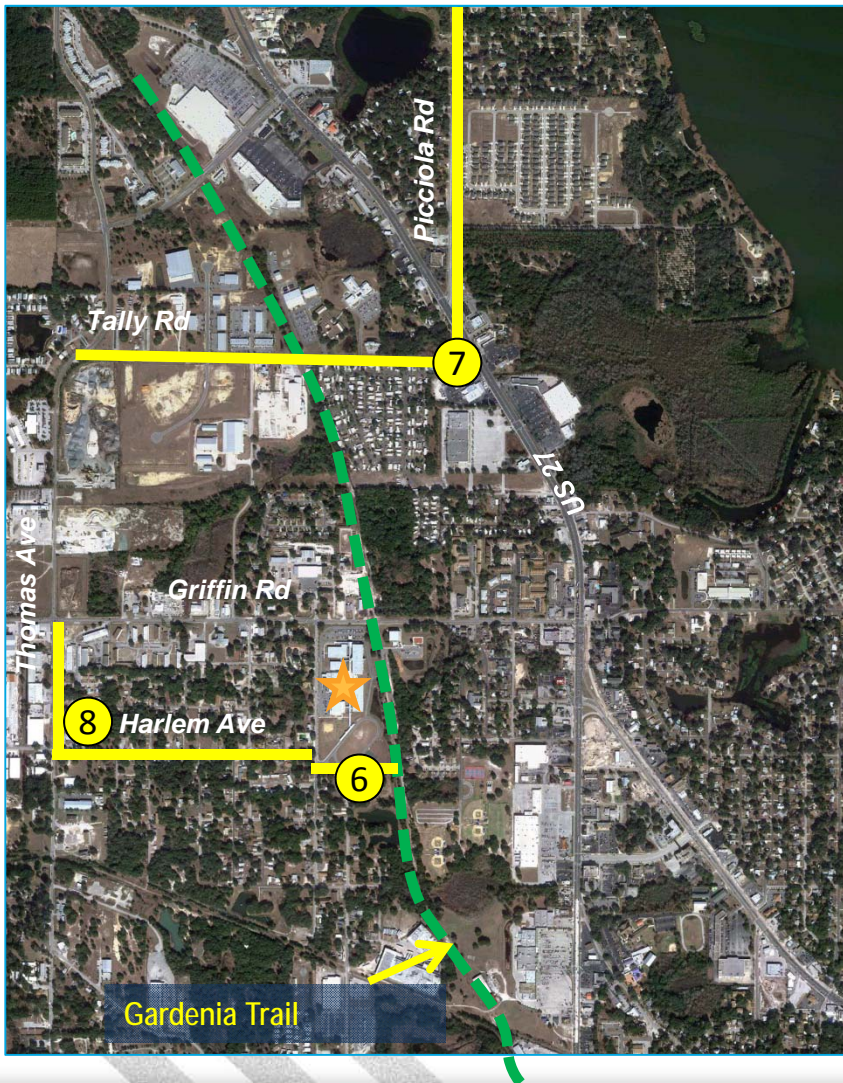
## For Priority Projects

Priority #	Item	Quantity	Units	Total
1	Sidewalk	415	ft	\$53,900.00
1	Crosswalk	25	ft	\$56.00
2	Crosswalks (4)	200	ft	\$447.00
2	Pedestrian Signs	7	Signs	\$2,100.00
2	Crosswalks (3)	97	ft	\$217.00
4	Sidewalk	1091	ft	\$103,900.00

### 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 design costs, CEI costs, or 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).
- Regular excavation & embankment to 1 ft depth is assumed
- No R/W costs included
- No specialized landscaping (beyond sodding) is included.
- Sidewalk is assumed to be 5 feet wide, unit given is in linear feet.

# Other Recommended Projects

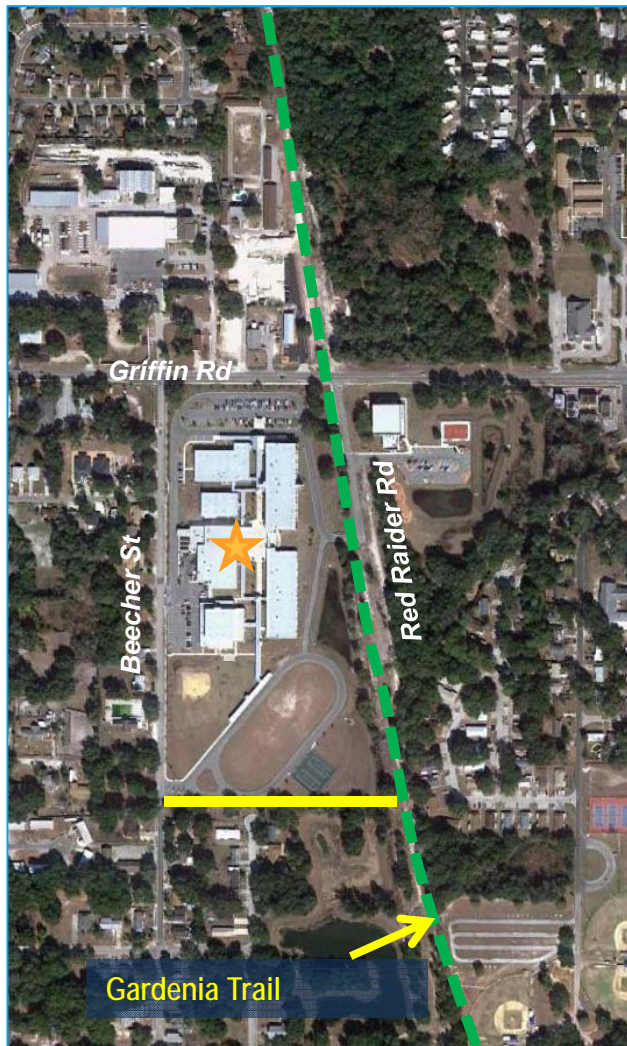


## Projects:

6. Add pedestrian facility from Beecher St at southern school property line connecting to Gardenia Tr Phase 1 and park
7. Add sidewalks to connect northern neighborhoods to school via Picciola Rd to US 41 to Tally Rd to Gardenia Tr (the Tally Rd portion should include completion of the sidewalk on both sides to Thomas Ave)
8. Add sidewalk connections
  - a. Harlem Ave from Thomas Ave to Beecher St
  - b. Thomas Ave between Harlem Ave and Griffin Rd

# Other Recommended Project

## #6 Construct Southern Connection to Trail



### Findings:

- ✓ Lack connection from Beecher St to trail
- ✓ Students currently using the trail alignment and in the future using the trail have to walk around  $\frac{3}{4}$  of the school to reach the existing pedestrian gate
- ✓ Wetlands may block connections to the south, also provides connection to park southeast of school along trail

### Recommendations:

- ✓ Create connection from Beecher St and pedestrian gate to the Gardenia Tr



# Other Recommended Project

## #7 Construct Southern Connection to Trail



### Findings:

- ✓ Connections to northern neighborhoods is missing

### Recommendations:

- ✓ Add sidewalks to connect northern neighborhoods to school
  - ✓ Add sidewalk on Picciola Rd from Picciola Cutoff to US 441
  - ✓ Mark crosswalks across driveways and narrow driveways where possible along US 441 to Tally Rd



- ✓ Add sidewalk on both sides of Tally Rd (sporadic existing sidewalk) to Thomas Ave including connection to Gardenia Tr

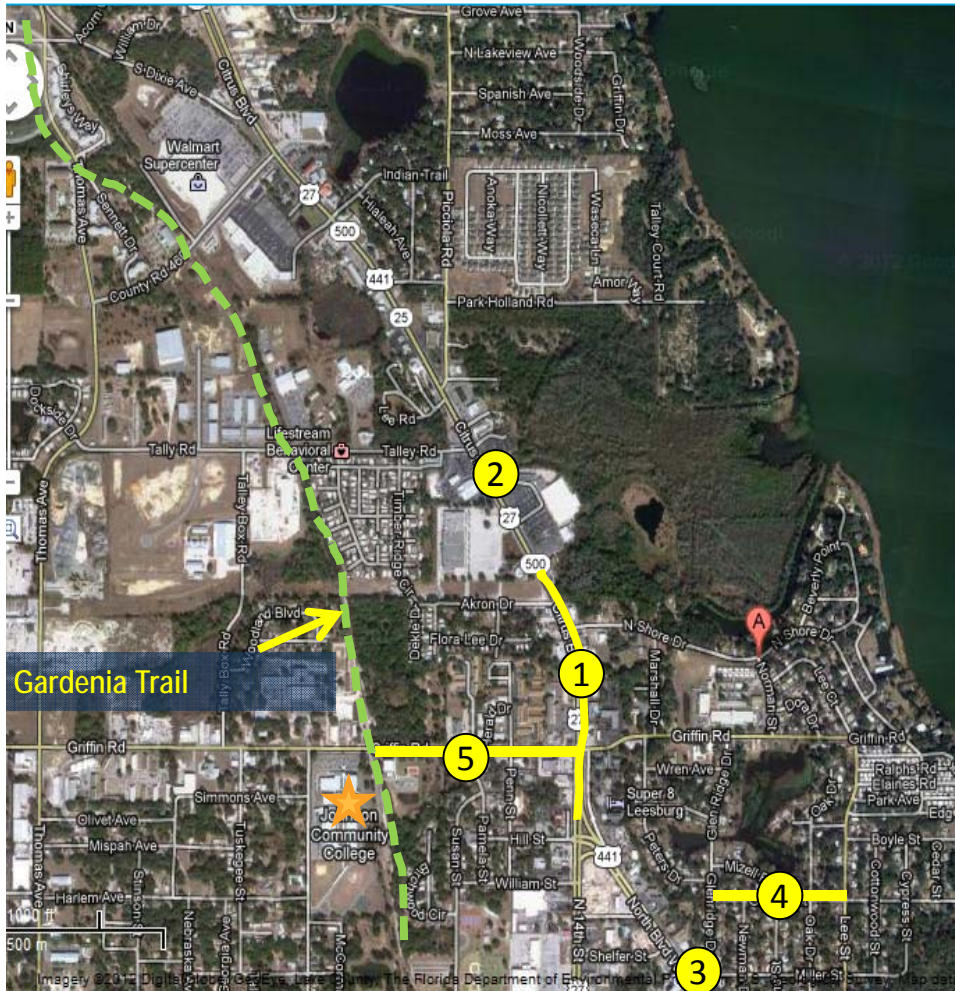
**US 441 - Picciola Rd to Tally Rd**



### Recommendations:

- ✓ Add sidewalk connections or complete sidewalk connections:
  - ✓ Harlem Ave from Thomas Ave to Beecher St
  - ✓ Thomas Ave between Harlem Ave and Griffin Rd

# Other Sidewalk Projects



## Recommendations:

1. US 441 - Connect existing sidewalk on east side of street between the Bealls southern driveway and existing sidewalk at US 27 (N 14<sup>th</sup> St)
2. Conduct a safety / access management study on US 441 to identify potential measures to limit new driveways, close existing driveways, incorporate pedestrian facilities and improve safety
3. Glen Ridge Rd / Citizens Blvd at US 441 (small section of sidewalk missing, largely open driveway)
4. Gibson St from Glen Ridge to Lee St
5. Griffin Rd from US 441 to Gardenia Tr - this would include designating a pedestrian area at the open parking at the northwest corner of the Griffin Rd and US 441, revising the parking areas for the businesses at this corner (shared parking) and constructing a sidewalk



Carver Middle 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.

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