

# East Ridge Middle School Clermont, FL

August 2012



**HDR**

## East Ridge Middle School

# East Ridge Middle School Snapshot

January 13, 2012

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

Total Students: 1,085

- Provided Bus Transportation : 792
- Not Provided Bus Transportation: 293

Students Living within the “Walk Zone”: 252

- Provided Bus Transportation: 132
- Not Provided Bus Transportation: 120

Observation Day (Partly Cloudy)

- Walkers: 60 (est.)
- Bike Riders: 1



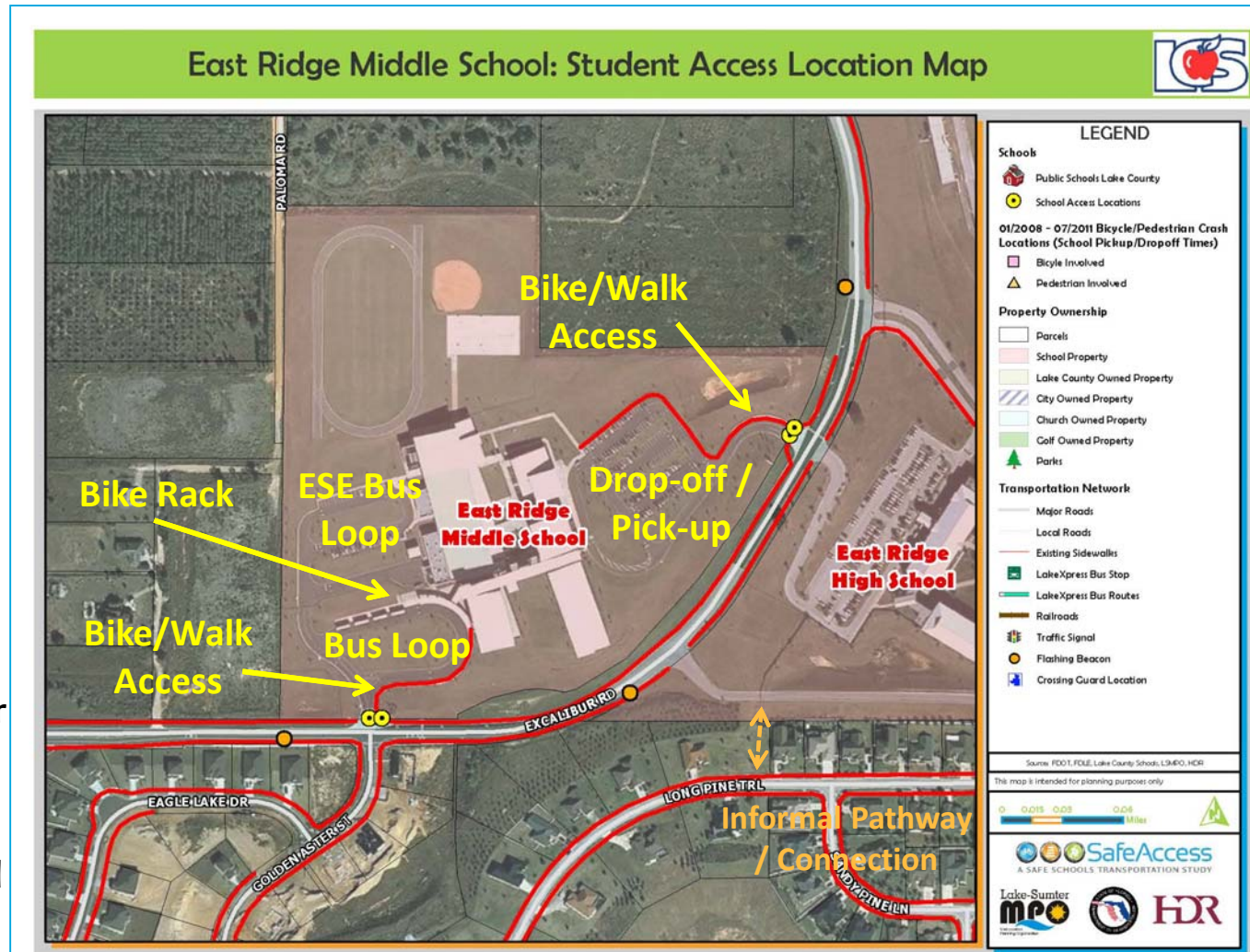
- ✓ East Ridge Middle School website – Click [here](#)
- ✓ City of Clermont website – Click [here](#)
- ✓ Lake County Schools website – Click [here](#)



## East Ridge Middle School

### Findings:

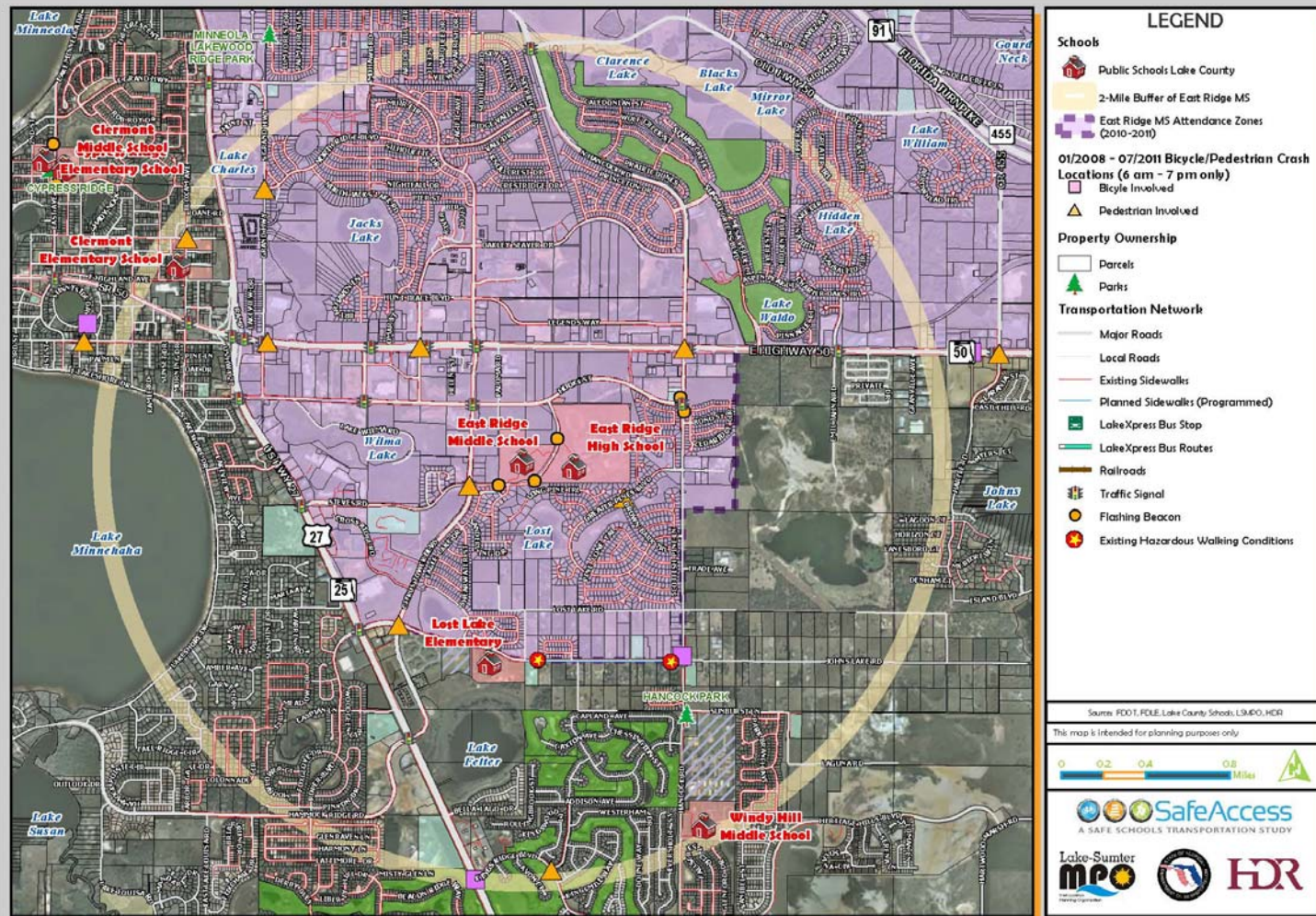
- ✓ Access for drop-off/pick-up and bus loop are on opposite sides of school
- ✓ Bike/walk access on each side of school; most walkers use rear bus loop access point
- ✓ Excalibur Rd traffic is almost exclusively school-related
- ✓ 20 mph school zone on Excalibur Rd extends from west of Golden Aster St to north of ERHS student parking
- ✓ City of Clermont annexed Excalibur Rd in January





# Attendance and 2-Mile "Walk" Zone Map

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





# Arrival and Dismissal Schedule

**8:45 am:** Gates open for drop-off;  
breakfast program starts

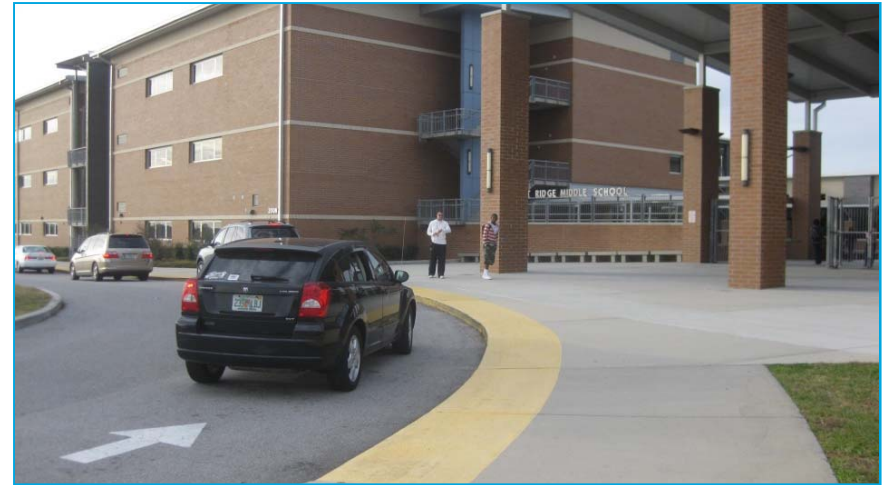
**9:05 am:** School start time

**4:00 pm:** School release time;  
walkers, bicyclists and car  
riders are released

**4:05 pm:** Bus riders are released,  
called by bus number

**4:12-4:13 pm:** Buses leave

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





Bus loop



Bus lane encroachment at Excalibur Rd

## Findings:

- ✓ 19 regular buses and 5 ESE buses serve the school; ESE buses use a separate loop from the regular buses, which is located immediately north of the regular bus loop
- ✓ Bus ramp can hold 16 buses in front bus loop, queued in a single line; remaining buses stage at East Ridge HS bus driveway & wait for first set of buses to clear
- ✓ Bus access driveway is channelized as a right-in, right-out only
- ✓ Arrival & dismissal was organized & efficient; no operational issues observed
- ✓ Some buses encroach into the oncoming travel lane when exiting the school



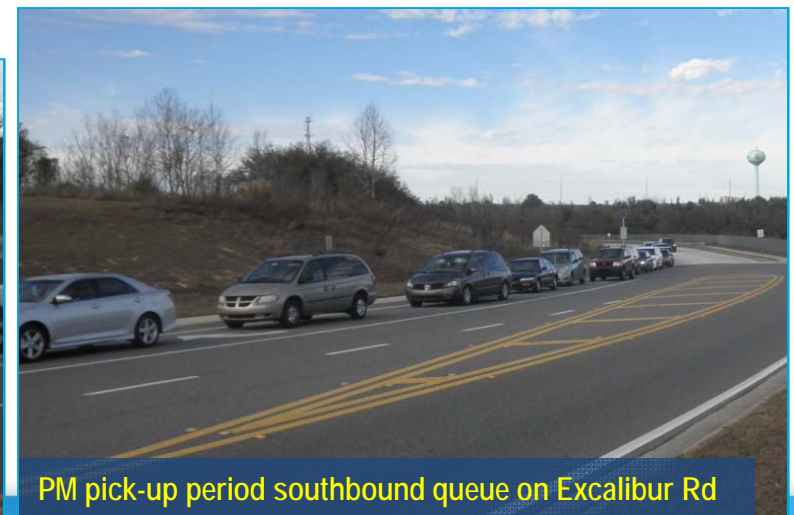
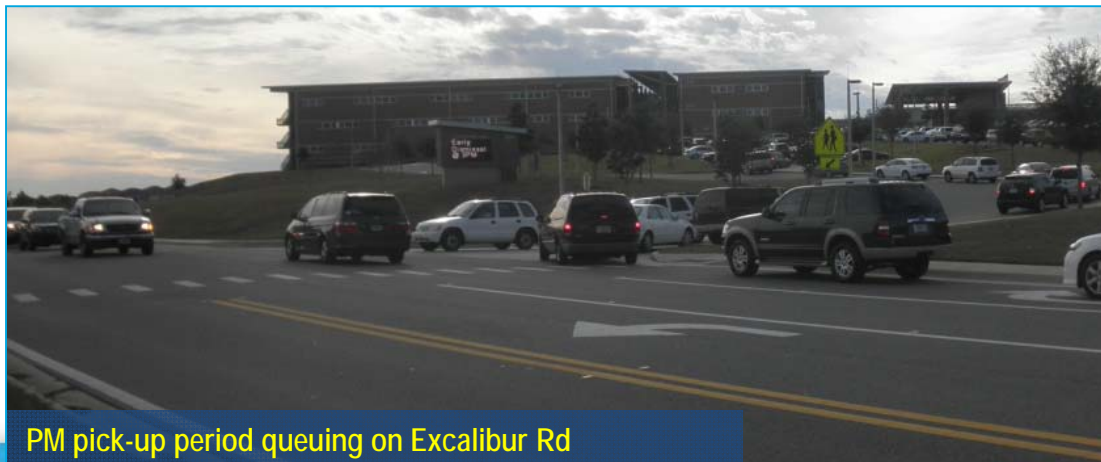
## Findings:

- ✓ AM queue observed to queue onto Excalibur Rd but not beyond the limits of the southbound right turn lane
- ✓ AM drop-off circulation pattern uses just the perimeter of the parking lot, but PM pick-up pattern weaves through the parking lot to provide more queue storage
- ✓ Pick-up queuing begins as early as 2:00 PM
- ✓ School staff direct vehicles in pick-up line to move to the end of the ramp when a spot opens up, which maximizes the use of the car ramp; up to about 120 cars can be processed in 15 minutes during PM pick-up



## Findings:

- ✓ Students watch for their car during pick-up line
- ✓ Students must be picked up on the car ramp; deputy posted to prevent parent walk-ups during pick-up period
- ✓ PM queue observed to queue onto Excalibur Rd beyond the limits of the southbound right turn lane (max queue of 20 cars on Excalibur Rd); southbound through vehicles would then drive around queued cars using the ERHS student parking lot left turn lane
- ✓ Principal suggested restricting exiting traffic to right-out only to improve traffic flow



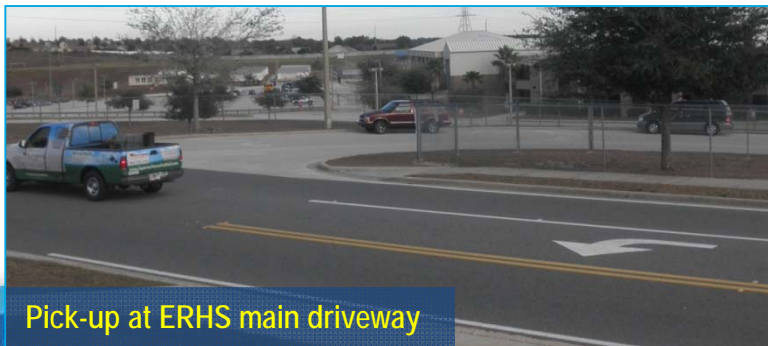




Pick-up on Excalibur Rd in bus loop right turn lane



Pick-up on Golden Aster St



Pick-up at ERHS main driveway

## Findings:

- ✓ Remote PM pick-up observed at:
  - ✓ Excalibur Rd, in the bus loop right turn lane (3 cars)
  - ✓ The main ERHS driveway (2 cars)
  - ✓ Along Golden Aster St (11 cars)
- ✓ There is no supervision of students off campus; there are potential safety issues and traffic disruptions when loading or unloading at unauthorized locations
- ✓ Vehicles parked or loading in bus loop right turn lane is a safety concern – they can screen crossing students from other southbound vehicles traveling around curve

## Recommendations:

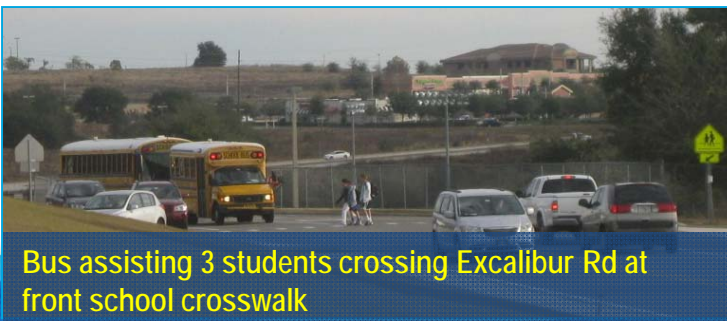
- ✓ Place No Standing signs on Excalibur Rd along bus loop right turn lane; No Parking/Stopping/Standing signs should be considered on Golden Aster St if complaints received
- ✓ Periodic police enforcement is needed to discourage remote pick-up on Excalibur Rd (and potentially Golden Aster St)



Bicyclist leaving school via rear walk/bike access



Bike parking adjacent to bus loop



Bus assisting 3 students crossing Excalibur Rd at front school crosswalk

## Findings:

- ✓ About 50-70 walkers observed; exact number difficult to determine since some “walkers” walked off campus & were picked up at a remote location
- ✓ Only 1 bicyclist observed
- ✓ Bike parking is nearly ideal; there is an abundant supply of bike racks, which are located in a secure, paved bike cage adjacent to the bus loop
- ✓ There are two walk/bike access points – one at front of school by the drop-off/pick-up access, and the other at the bus loop
- ✓ There are two midblock crosswalks on Excalibur Rd that serve the school, one at each walk/bike access point
- ✓ Most walkers were observed to use the crosswalk and sidewalk adjacent to the bus loop in both the AM and PM
- ✓ Only 4 students were observed using the sidewalk at the front of the school in the AM; 3 were assisted at the Excalibur Rd crosswalk by a bus that stopped and then turned on its flashing lights





Student darting across road outside crosswalk



Crosswalk near the bus loop in PM



Southbound blind curve approaching crosswalk

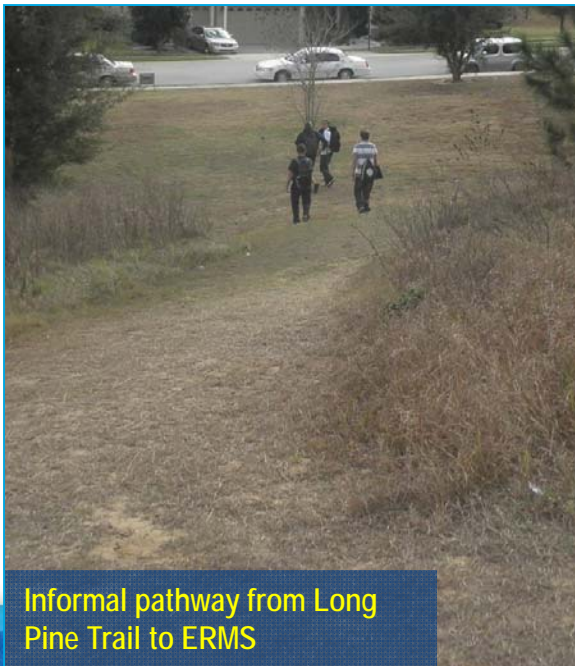
## Findings:

- ✓ There are safety concerns with the existing marked crosswalk near the bus loop driveway:
  - ✓ High volume of crossing students
  - ✓ There is no crossing guard at this location, so students are on their own to cross the street
- ✓ The crosswalk does not align with the desired travel path for most students; while most students cross at the marked crosswalk, two were observed darting across the road away from the crosswalk
- ✓ There is a blind curve in the southbound direction on Excalibur Rd just prior to reaching the crosswalk
- ✓ Vehicles observed parking in the bus loop right turn lane to wait for or pick up students can screen the crosswalk from other southbound motorists
- ✓ Several motorists were observed not yielding to crossing students and many motorists were observed to be traveling faster than the posted 20 mph school speed limit

## East Ridge Middle School



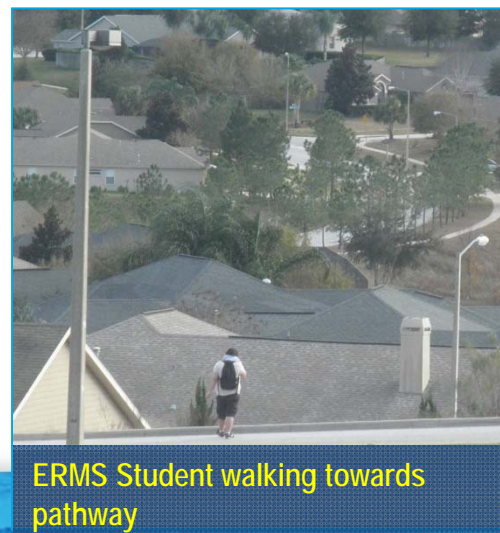
Informal pathway from Long Pine Trail to ERMS



Informal pathway from Long Pine Trail to ERMS

### Findings:

- ✓ Vast majority of students living within 2-mile walk zone live in 2 neighborhoods: Greater Pines & The Reserve at Lost Lake
- ✓ Sidewalks are incomplete on Hancock Rd
- ✓ Most direct route from Greater Pines to school is via an informal pathway connection from Long Pine Trail (can save nearly 1 mile in distance traveled to the school); several students were observed cutting through this area
- ✓ Pathway is across the east side of a large occupied lot; a “Private Property No Trespassing” sign is posted



ERMS Student walking towards pathway







Crosswalk at the main school driveway



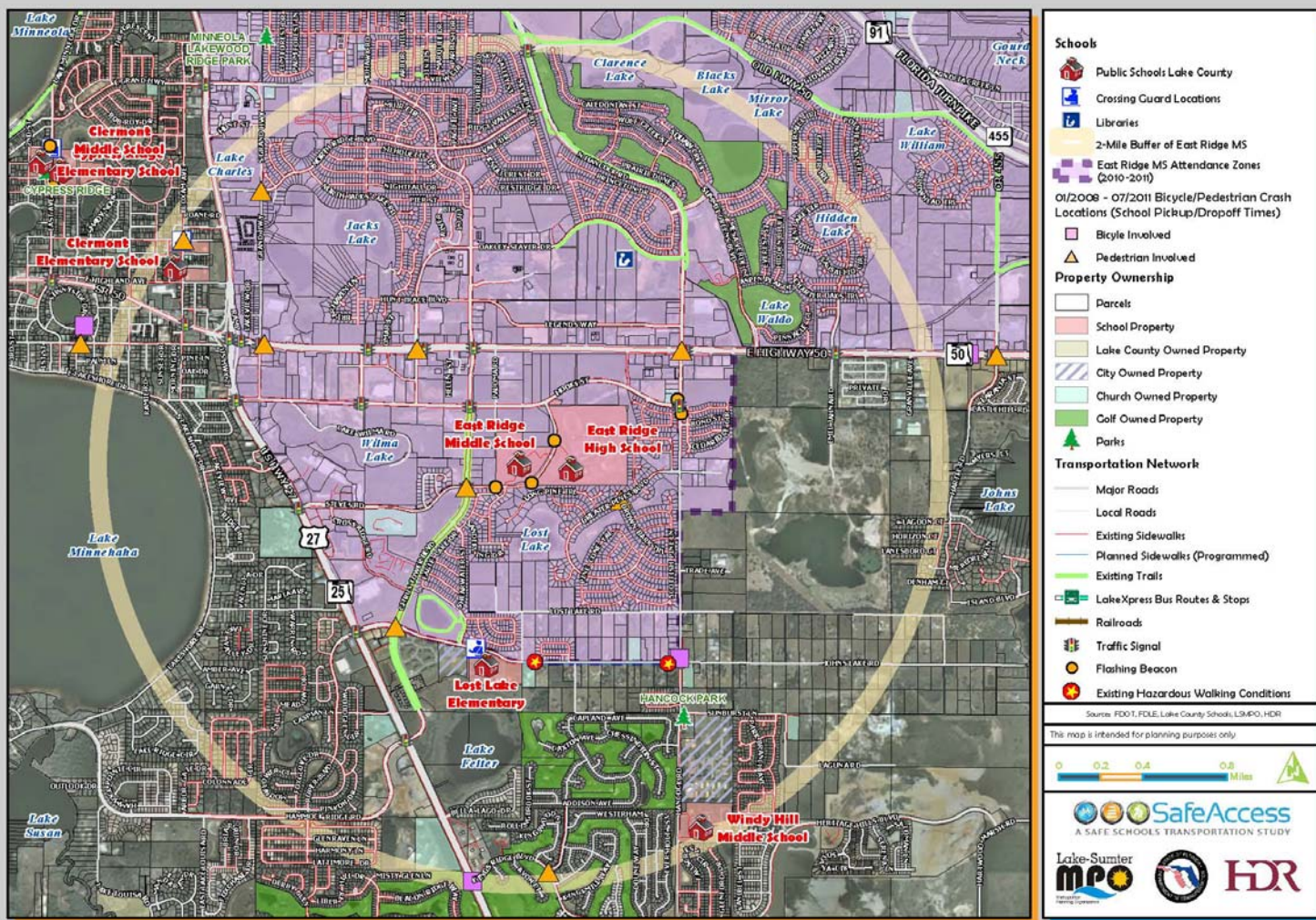
Crosswalk near the bus loop

## Recommendations:

- ✓ Enhance the two midblock crossings
- ✓ Add a crossing guard at the crosswalk adjacent to the bus loop or use rectangular rapid flashing beacons (RRFBs) at crossing
- ✓ Add new school speed zone sign with flashing beacon in southbound direction of Excalibur Rd south of ERHS bus loop driveway
- ✓ Consider potential purchase of easement from Greater Pines homeowner to formalize connection to school from Long Pine Trail; evaluate how to “formalize” (i.e., paved/unpaved, ADA compatibility due to grade of slope, use of fencing)

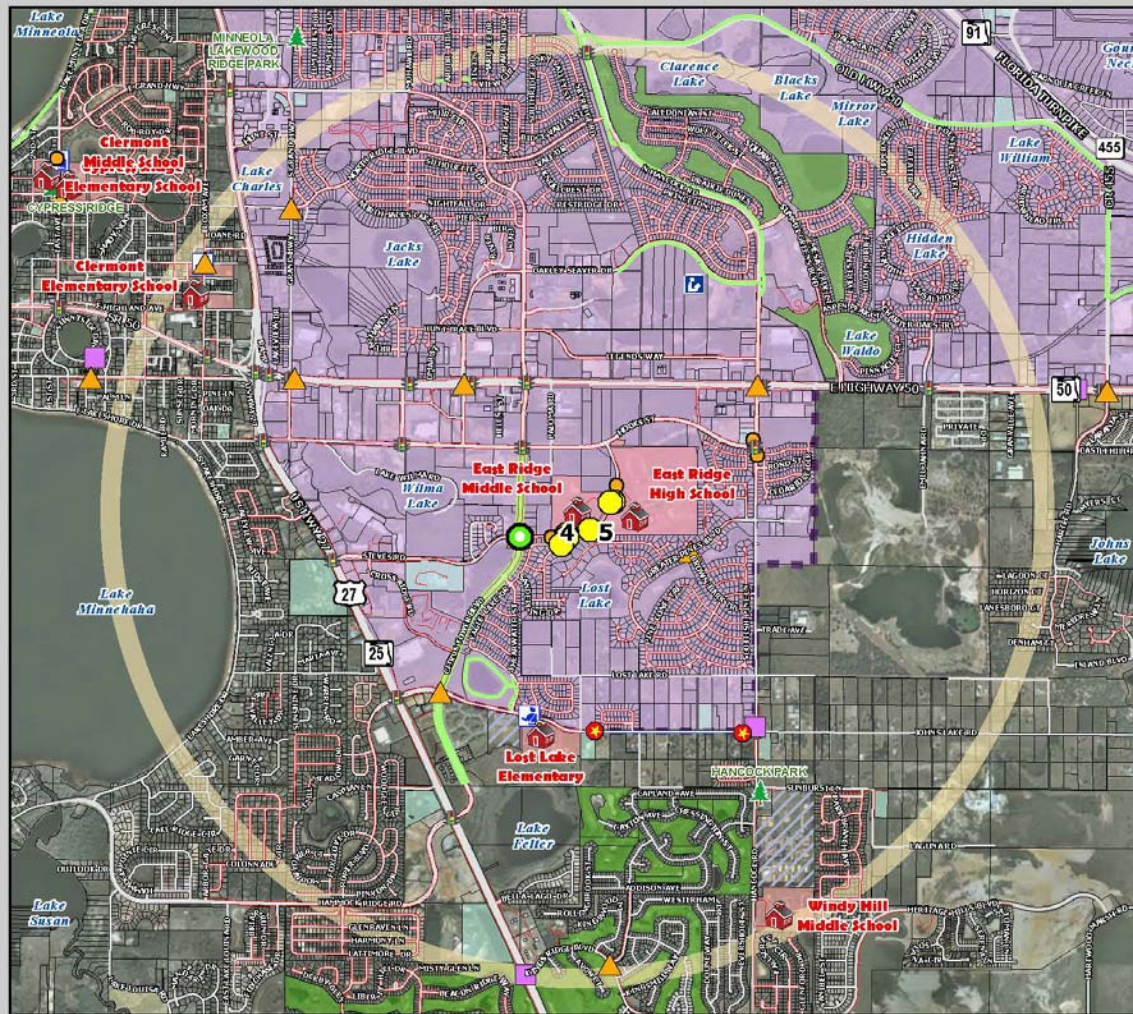
## East Ridge Middle School

### East Ridge Middle School: Existing Conditions Map





## East Ridge Middle School: Transportation Access Master Plan



### LEGEND

- Schools**
- Public Schools Lake County
  - Crossing Guard Locations
  - Libraries
  - 2-Mile Buffer of East Ridge MS
  - East Ridge MS Attendance Zones (2010-2011)
- 01/2008 - 07/2011 Bicycle/Pedestrian Crash Locations (School Pickup/Dropoff Times)**
- Bicycle Involved
  - Pedestrian Involved
- Property Ownership**
- Darrels
  - School Property
  - Lake County Owned Property
  - City Owned Property
  - Church Owned Property
  - Golf Owned Property
  - Parks
- Transportation Network**
- Major Roads
  - Local Roads
  - Existing Sidewalks
  - Planned Sidewalks (Programmed)
  - Existing Trails
  - LakeXpress Bus Routes & Stops
- Identified Improvement Projects**
- Priority Projects (by Project ID)
  - Recommended Projects

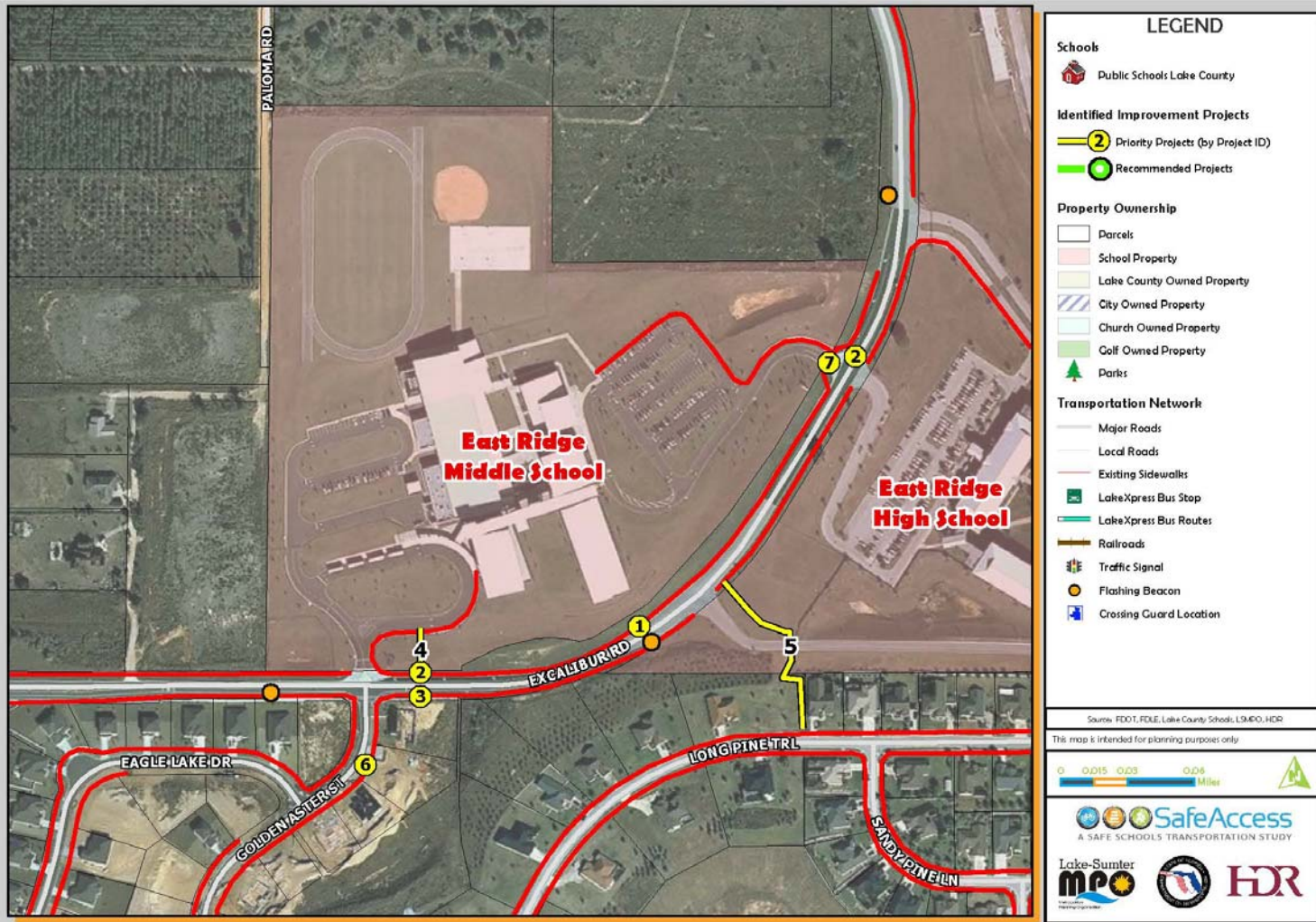
Sources: FDOT, FDEE, Lake County Schools, LCMPO, HDR

This map is intended for planning purposes only.





## East Ridge Middle School: Priority Projects







**SafeAccess**

A SAFE SCHOOLS TRANSPORTATION STUDY

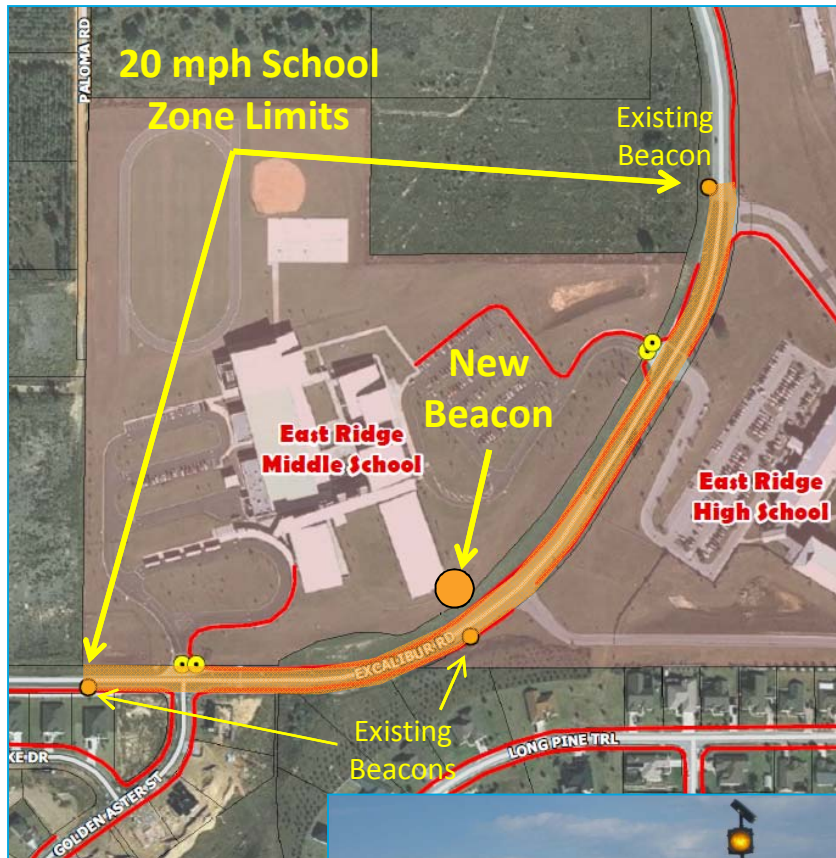
## East Ridge Middle School

# Recommended Priority Projects



### Priority Projects:

1. Add 2<sup>nd</sup> school zone speed sign with flashing beacon for southbound Excalibur Rd
2. Enhance existing midblock crosswalks on Excalibur Rd
3. Add crossing guard at crosswalk adjacent to bus loop
4. New direct sidewalk connection to midblock crosswalk at bus loop
5. Formalize pedestrian connection to Long Pine Trail
6. Add no parking/standing signs & enforcement
7. Restrict exiting traffic to right-out only at main school driveway (drop-off/pick-up area)



*Existing school zone speed sign with flashing beacon in eastbound direction just west of the school*



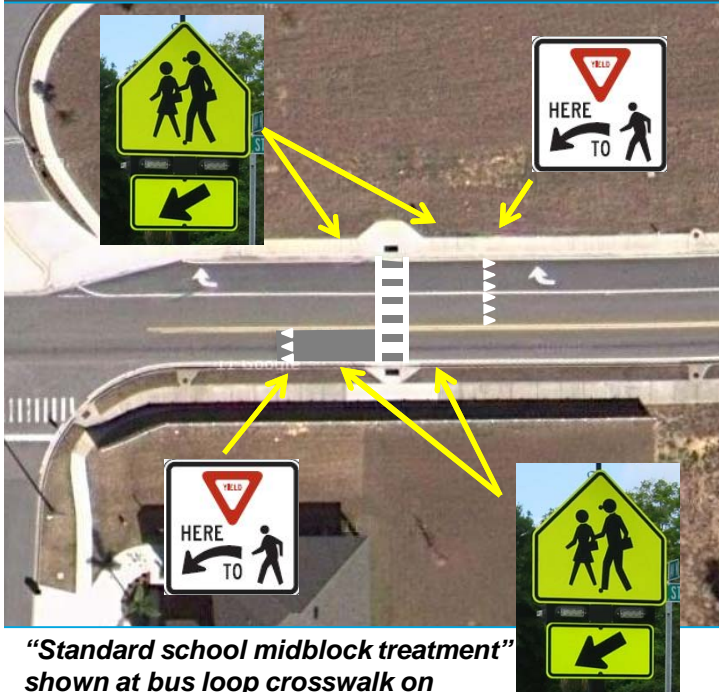
### Findings:

- ✓ 20 mph school zone on Excalibur Rd is nearly one-half mile long due to spacing of ERMS & ERHS driveways
- ✓ Only 1 existing 20 mph school zone sign with flashing beacon in southbound direction (2 in eastbound/northbound direction)
- ✓ Motorists exiting ERHS or from ERMS main driveway and heading south/west are not reminded of 20 mph speed zone; results in inappropriate speeds above 20 mph

### Recommendations:

- ✓ Add new school speed zone sign with flashing beacon in southbound direction of Excalibur south of ERHS bus loop driveway
- ✓ Increase enforcement of speed zone on Excalibur Rd; should be simpler since City's annexation





*“Standard school midblock treatment” shown at bus loop crosswalk on Excalibur Rd*

### Findings:

- ✓ Students are on their own to cross at either of the two midblock crossings connecting to the school (no crossing guards)
- ✓ Safety concerns (particularly at crosswalk by bus loop) due to blind curve, speeding, and illegal stopping/pick-up activity

### Recommendations:

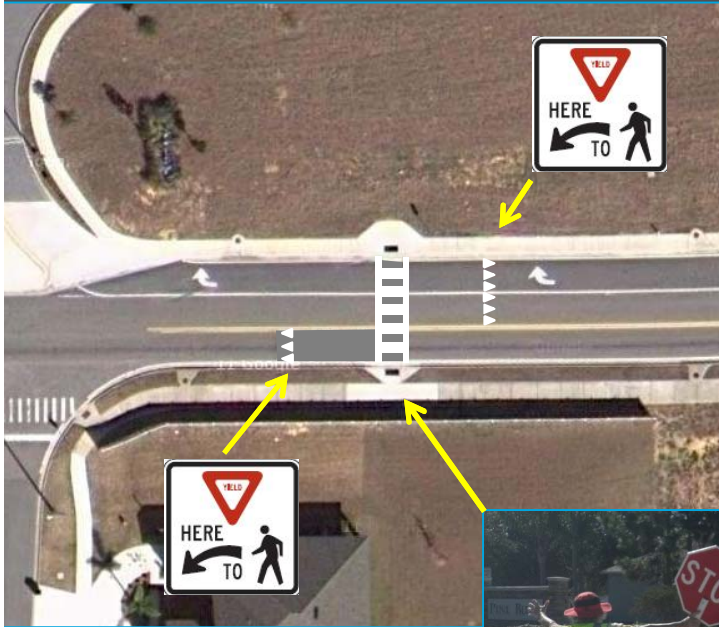
- ✓ Enhance crosswalks; use “standard” school midblock treatment:
  - ✓ High visibility ladder-style crosswalks
  - ✓ Standard school crossing signs supplemented with advance yield lines (set back 30 feet from crosswalk) & yield here to pedestrians signs
  - ✓ Add Rectangular Rapid Flashing Beacons (RRFBs) on both sides of the street in each direction, using passive detection (RRFBs are proven to increase motorist yielding)
  - ✓ -or- employ crossing guard



**Example RRFBs in St. Petersburg, FL**

### Recommendations:

- ✓ Crosswalk on Excalibur Rd adjacent to bus loop should still be enhanced with ladder style high visibility markings, warning signs, advance yield lines, and yield to pedestrians signs
- ✓ Crossing guard can be used in place of RRFBs



*Bus loop crosswalk on Excalibur Rd*



*Examples of Crosswalks with advance yield marks and / or signs*



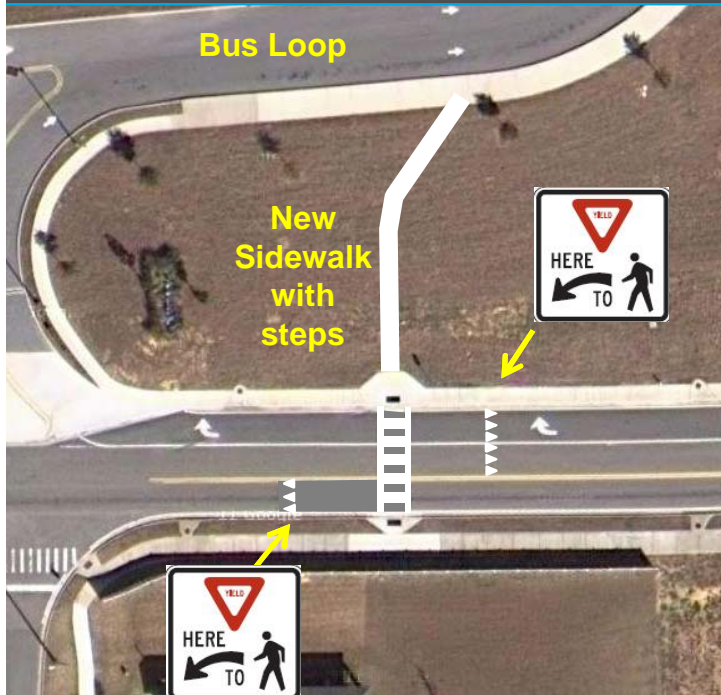


A SAFE SCHOOLS TRANSPORTATION STUDY

## East Ridge Middle School

# Priority Project #4

## New Direct Sidewalk Connection to Midblock Crossing



### Findings:

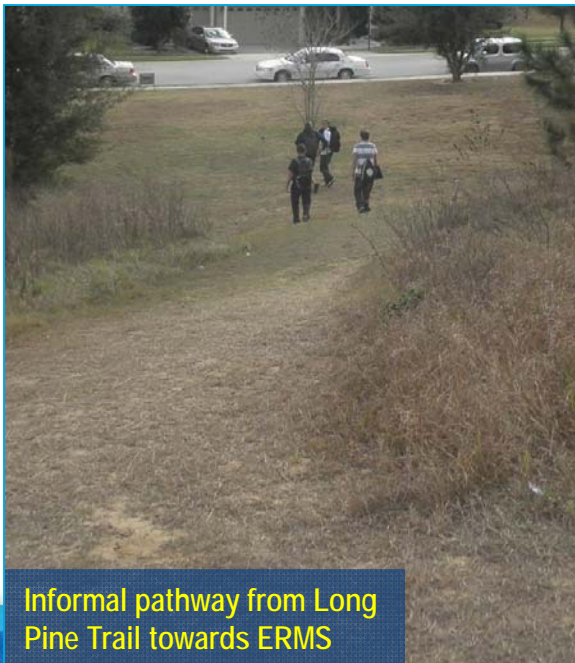
- ✓ The existing school sidewalk does not provide a direct route to the midblock crosswalk & most students have to walk out of their way to cross at the crosswalk
- ✓ While most students cross at the marked crosswalk, two were observed darting across the road away from the crosswalk
- ✓ A direct walkway to the midblock crosswalk would improve compliant use of the crosswalk
- ✓ Due to the elevation change down to Excalibur Rd, the new sidewalk would likely need to include steps (not an ADA issue since the existing sidewalk is accessible)

### Recommendations:

- ✓ Construct new sidewalk (with steps, as needed) providing a direct path to the midblock crosswalk



Informal pathway from Long Pine Trail towards ERMS



Informal pathway from Long Pine Trail towards ERMS

### Findings:

- ✓ Would provide a formal connection from neighborhood with highest number of walkers
- ✓ Existing informal pathway is already being used by numerous students to connect to Greater Pines neighborhood
- ✓ Pathway is across the east side of a large occupied lot; a “Private Property No Trespassing” sign is posted
- ✓ Would connect to proposed new sidewalk from bus loop driveway at Excalibur Rd to front of ERHS

### Recommendations:

- ✓ Evaluate purchase of easement from Greater Pines homeowner to provide formal connection to school from Long Pine Trail







A SAFE SCHOOLS TRANSPORTATION STUDY

East Ridge Middle School

# Priority Project #5

## Formalize Pedestrian Connection to Long Pine Trail



Informal pathway



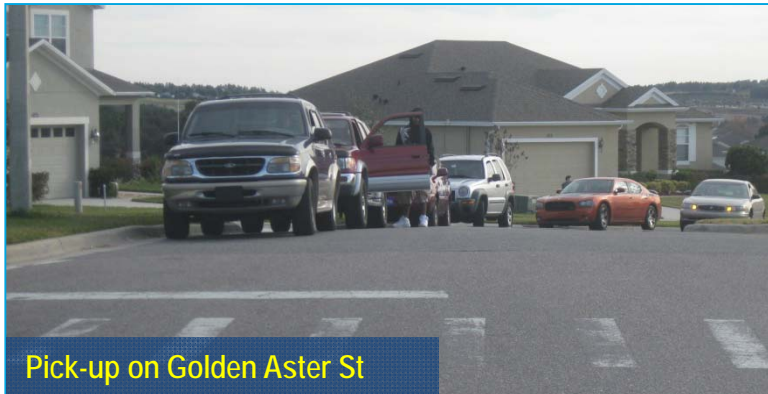
Informal pathway from Long Pine Trail towards ERMS

### Issues:

- ✓ Would likely require purchase of a minimum 10-foot wide easement from property owner (6-foot sidewalk with 2-foot buffer on each side)
- ✓ Will need to evaluate how best to “formalize” the connection
  - ✓ Keep unpaved vs. constructing new sidewalk
  - ✓ Reconfigure pathway with switchback to meet ADA
  - ✓ Potential use of fencing along pathway
  - ✓ Address security concerns, especially if pathway is fenced and has switchbacks
- ✓ Would need to stripe crosswalk across bus access driveway
- ✓ Formalizing pathway may increase remote pick-up activity on Long Pine Trail



Pick-up on Excalibur Rd in bus loop right turn lane



Pick-up on Golden Aster St

### Findings:

- ✓ Remote pick-up occurs on Excalibur Rd in bus loop right turn lane and on Golden Aster Rd
- ✓ Stopping in Excalibur Rd right turn lane is a safety concern due to potential vehicle screening of crossing students

### Recommendations:

- ✓ Place No Standing signs on Excalibur Rd along bus loop right turn lane; No Parking/Stopping/Standing signs should be considered on Golden Aster St if complaints received
- ✓ Periodic police enforcement is needed to discourage remote pick-up on Excalibur Rd (and potentially Golden Aster St if complaints received)



*Example sign for consideration at Excalibur Rd bus loop right turn lane*



*Example sign for consideration on Golden Aster St*





### Findings:

- ✓ No conflicts or operational issues observed at the main driveway
- ✓ Sight distance for left turns out onto Excalibur Rd can be limited due to inbound right turn queuing and road curvature
- ✓ Prohibiting left turns out would remove one conflicting movement with adjacent pedestrian crossing
- ✓ Hooks St & Citrus Tower Blvd connect to Excalibur Rd which provides close parallel facilities for circulation



### Recommendations:

- ✓ Restrict exiting traffic at pick-up area to right turns out only with channelizing island at driveway & signage
- ✓ Also consider restricting entering traffic to right turns only

### Issues:

- ✓ Right-out only traffic would increase the traffic volume at the midblock pedestrian crossing at bus loop driveway
- ✓ Would prohibit straight-through movement to ERHS

Project Priority	Item	Quantity	Units	Total
1	Flashing School Zone Beacon	1	Sign	\$500.00
2	Crosswalk	85	ft	\$190.00
2	Yield Here Signs	4	Signs	\$1,200.00
2	Pedestrian Crossing RRFB	2	Signs	\$15,000.00
2	Yield Stop Bars	80	ft	\$310.00
4	Sidewalk	110	ft	\$29,700.00
5	Crosswalk	24	ft	\$55.00
5	Sidewalk	240	ft	\$41,000.00
6	No Parking Signs	350	ft	\$1,500.00
7	Right Turn Channelizing Island	98	sy	\$28,800.00

### 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.





A SAFE SCHOOLS TRANSPORTATION STUDY

East Ridge Middle School

## Other Projects

### Recommendations:

- ✓ Add pedestrian features to north leg of Citrus Tower Blvd / Excalibur Rd intersection
  - ✓ Marked crosswalk
  - ✓ Pedestrian signals



Citrus Tower Blvd at Excalibur Rd





East Ridge 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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Transportation Partnerships*