

A SAFE SCHOOLS TRANSPORTATION STUDY

August 2012

East Ridge High Schoo

Glennont

ZA-S

umite

O SafeAccess A safe schools transportation study

East Ridge High School



East Ridge High School Snapshot

January 13, 2012	
Grades: 9 th – 12 th	
Total Students: 2,293	
Provided Bus Transportation :	1,247
 Not Provided Bus Transportation: 	1,046
Students Living within the "Walk Zone":	321
Provided Bus Transportation:	40
 Not Provided Bus Transportation: 	281
Observation Day (Partly Cloudy)	
Walkers:	50 (est.)
Bike Riders:	1

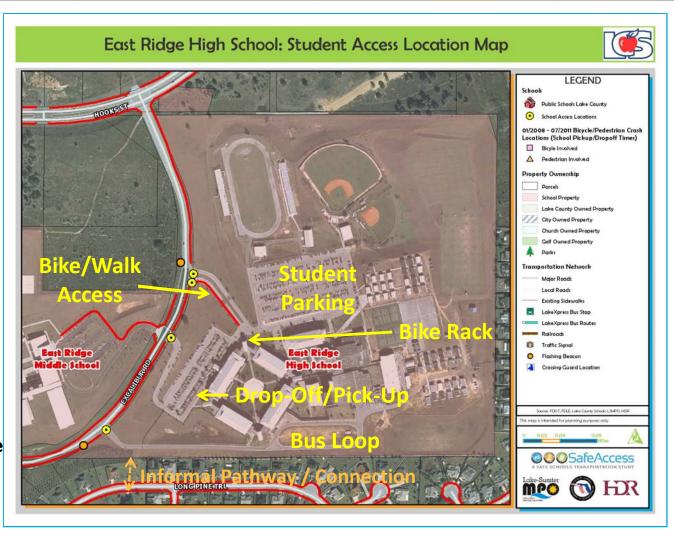


- East Ridge High School website Click here
 - City of Clermont website Click <u>here</u>
- Lake County Schools website Click here

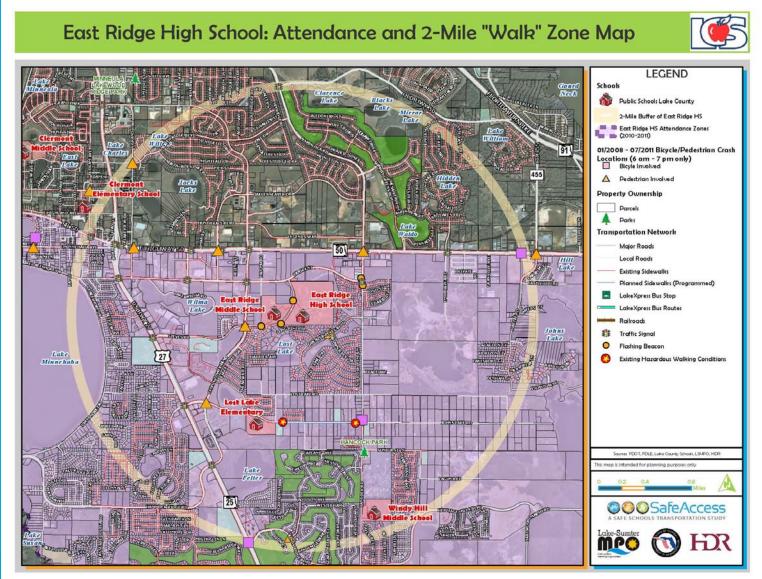
Campus Access Overview

Findings:

- Access for student parking, drop-off/pick-up, and bus loop are all separate
- Single bike/walk access at student parking driveway; most walking occurs to/from the south/west
- Excalibur Rd traffic is almost exclusively schoolrelated
- 20 mph school zone on Excalibur Rd extends from north of student parking access to west of East Ridge Middle School
- City of Clermont annexed Excalibur Rd in January



Attendance and 2-Mile "Walk" Zone Map





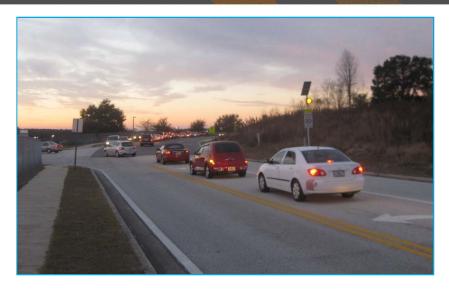
Arrival and Dismissal Schedule

a safe schools transportation study East Ridge High School

SafeAccess

- 7:25 am: School start time
- 2:25 pm: School release time (all students)
- 2:45 pm: Dual enrollment students allowed to return for after school activities

Note: Students are released one hour early on Wednesdays







SafeAccess East Ridge High School

Bus Access



Findings:

- Buses queue in a single line; adequate storage available for all buses (30 regular, 5 ESE), & additional space is available if needed
- Arrival and dismissal was organized and efficient
- Buses turn left out onto Excalibur Rd: no issues or conflicts observed
- Walkers have to cross bus driveway; some students use bus loop to walk in/out of school

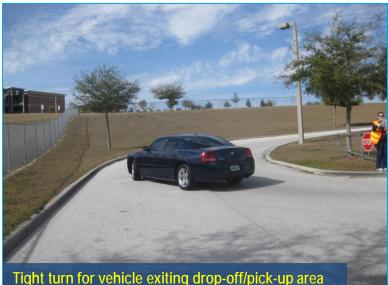
Student Drop-off & Pick-up

Findings:

- Moderate levels of queuing and congestion observed on Excalibur Rd due to drop-off/pick-up line (AM & PM)
- School staff noted that queues extended onto Hooks St & lots of crashes at Excalibur Rd/Hooks St intersection last year. 700 students were transferred to LMHS this year (reducing demand and potential conflicts)
- Queuing is not currently a significant issue since left turn lanes are provided on Excalibur Rd at all access points & there is very little non-school traffic
- Routing through parking lot is controlled by gates at parking row entrances
- There is a tight corner at the bottom of the hill, which can result in conflicts between entering & exiting vehicles







PM pick-up queue in front parking lot

Student Drop-off & Pick-up

Findings:

- Numerous conflicts observed at driveway exit in PM
 - Most walkers cross this driveway & often have to negotiate through queued vehicles
 - Sight distance for left turns out onto Excalibur Rd is limited due to queuing

Recommendations:

- Restrict exiting traffic at pick-up area to right turns out only with island at driveway; restrict entering traffic to right turns only
- Add center striping on driveway at bottom of hill to guide entering/exiting traffic & trim curb



Excalibur Rd at Pick-up Line Entrance/Exit (PM)



Excalibur Rd at Pick-up Line Entrance/Exit (PM)



Excalibur Rd at Pick-up Line Entrance/Exit (PM)



Excalibur Rd at Pick-up Line Entrance/Exit (PM)

Student Parking Lot



Findings:

- Approx. 600 student parking spaces available to sophomores, juniors, & seniors with parking permit; last year had waiting list of 40 students to get permit, this year about 200 empty spaces
- Student parking lot has 2 handicap parking spaces but no ramp is provided to sidewalk at these spaces; however, there is a ramp a few spaces down the same row of parking

Recommendations:

 Restripe parking row to locate handicap spaces on either side of existing curb ramp





Student Parking Access





Remote Drop-off (AM) at Student Lot driveway

Findings:

- Student parking exit gate is closed in AM and entrance gate is closed in PM to discourage parent drop-off/pick-up at student parking access driveway
- One vehicle observed entering the exit side in PM (occurred after most student traffic had exited)
- Student parking driveway has excess space at Excalibur Rd which results in significant amount of drop-off activity in AM and modest amount of pick-up activity in PM

Recommendations:

- Extend median island further out towards roadway to further discourage drop-off/pick-up activity at this location (with crosswalk restriped behind median nose)
- Consider having resource officer park vehicle at closed entrance or exit for enforcement

Remote Drop-off/Pick-up

Student Parking Lot Driveway



Remote Drop-off (AM) at Student Lot driveway



Remote Drop-off (AM) at Student Lot driveway



Remote Drop-off (AM) at Student Lot driveway

Findings:

- Approx. 20-25 vehicles observed dropping off students at top of student parking lot driveway in AM, & several vehicles picked-up students at this location in PM
- Although no conflicts were observed at this location, the potential exists for congestion, queuing, and conflicts due to unauthorized drop-off/pick-up activity



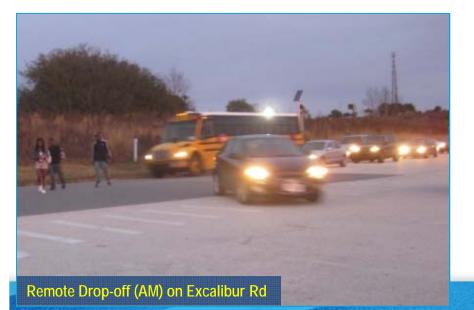


Remote Drop-off/Pick-up Excalibur Rd



Findings:

- Many students observed being dropped off or picked up along Excalibur Rd, many in dark conditions & having to cross the road
- 2 resource officers are present on the campus, but do not direct or monitor traffic along Excalibur Rd
- There is no supervision of students off campus; there are potential safety issues and traffic disruptions when loading or unloading at unauthorized locations





Safe Access Safe schools transportation study East Ridge High School

Remote Drop-off/Pick-up Long Pine Trail



Findings:

 Some students are picked up on Long Pine Trail after walking down informal "pathway" south of the school to Long Pine Trail

Recommendations:

- No standing signs (specific to school pick-up hours) should be considered on Long Pine Trail if complaints received
- Periodic enforcement likely needed to discourage remote pick-up





Bike/Walk Access





Findings:

- Only one bicyclist observed
- One bicycle rack is provided on campus; the location is on grass, security is bad (not bolted down, not within gated area) & "wheel bender" style are not ideal
- Walk/bike access to school is along the student parking lot driveway (northern most access point)
- No curb ramp or marked crosswalk provided along walk access immediately adjacent to front of school
- Nearly all walkers observed coming from/going to the south/west; only 2 students observed walking north from school (PM)
- Most walkers in AM observed to use bus loop and many use bus loop in PM as well, however there are no sidewalk and the location of the gates at the edge of the pavement creates a pinch point at gate, forcing pedestrians off the grass into the bus loop

Bike/Walk Access



Findings:

- Several students observed walking up main school driveway to Excalibur Rd in PM (no sidewalk + pinch point at gate)
- Safety concerns with students crossing main school driveway; significant conflicts observed during PM release period



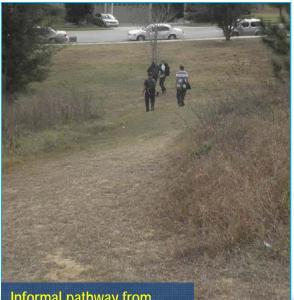
Student walking up main parking lot/dropoff/pick-up access driveway



lot/drop-off/pick-up access driveway

Bike/Walk Access





Informal pathway from Long Pine Trail to ERHS

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



Bike/Walk Access

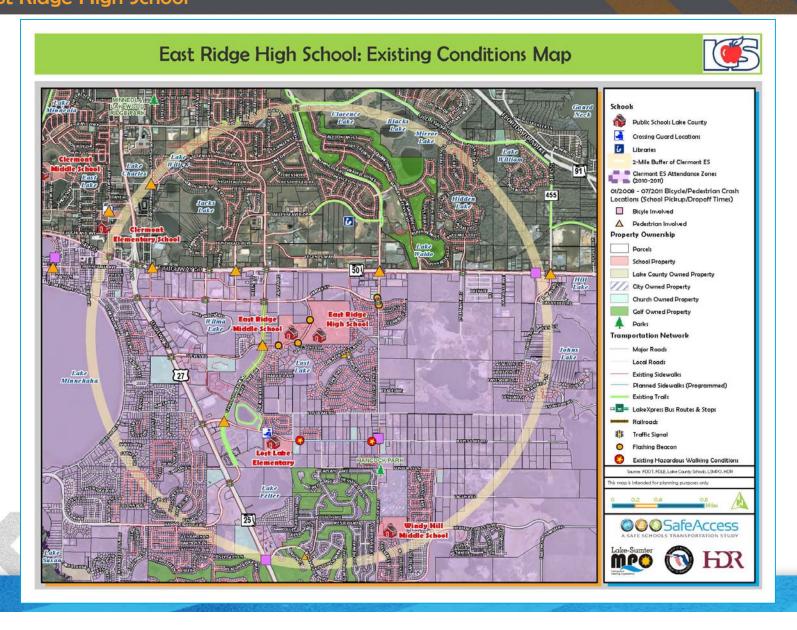
Recommendations:

- Consider potential purchase of narrow strip of property or 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)
- Construct new sidewalk connection to front of school from Excalibur Rd at bus loop driveway
- Relocate existing bike rack to paved location inside gated area; consider updating rack to newer style & providing more bike parking capacity

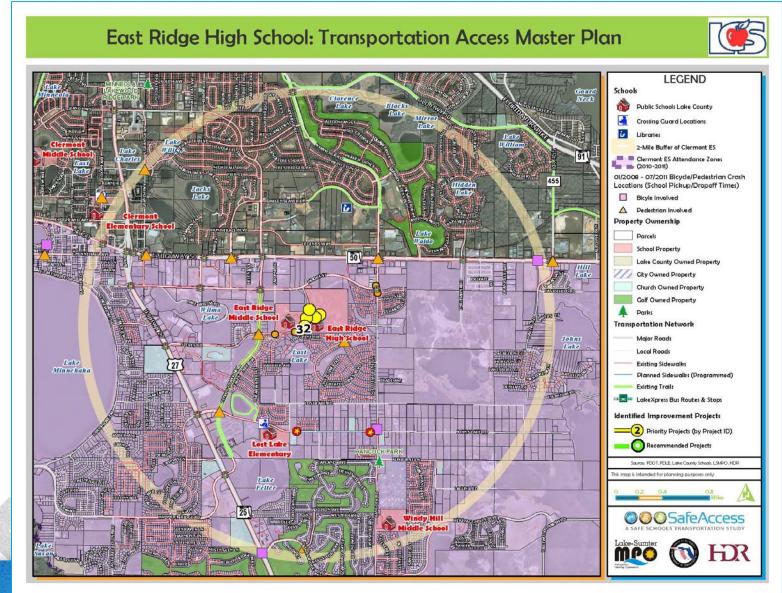




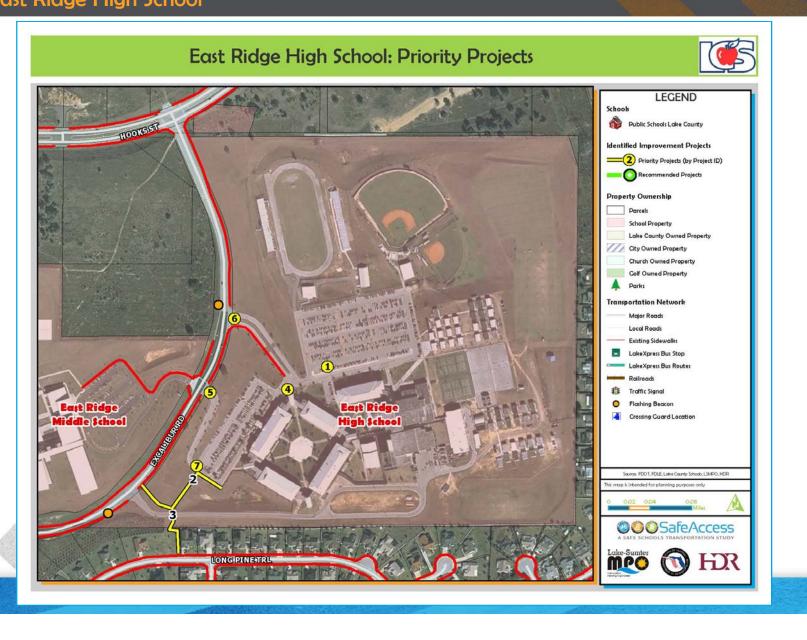
Existing Conditions Map



Transportation Access Master Plan

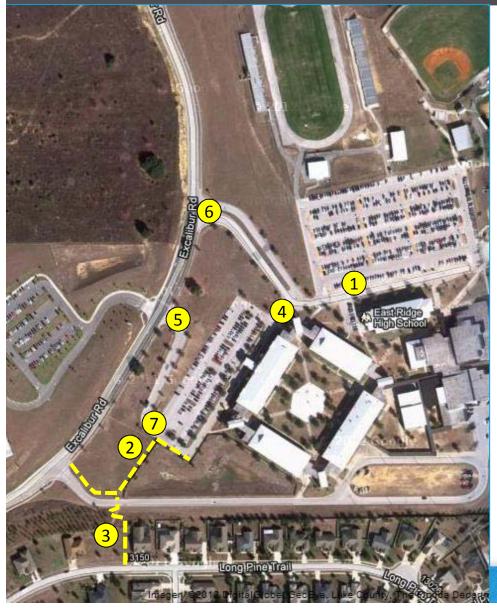


Priority Projects



Safe Schools transportation study Recommended Priority Projects

East Ridge High School



Priority Projects:

- 1. Student parking lot accessibility improvements
- 2. New south sidewalk connection from Excalibur Rd at bus loop to front of school
- 3. Formalize pedestrian connection to Long Pine Trail
- 4. North walk access curb ramps & crosswalk
- 5. Restrict exiting traffic to right-out only at main school driveway (drop-off/pick-up area)
- 6. Modifications to student parking access driveway at Excalibur Rd
- 7. Improvements to main school driveway/parking lot at bottom of hill

Priority Project #1

ADA Ramp not adjacent to Handicap Spaces in Student Lot



ADA Ramp not adjacent to Handicap Spaces in Student Lot

Findings:

Student parking lot has 2 handicap parking spaces but no ramp is provided to sidewalk at these spaces; however, there is a ramp a few spaces down the same row of parking

Student Parking Lot Accessibility Improvements

Recommendations:

Restripe portion of closest student parking row to school to locate handicap spaces on either side of existing curb ramp; this change would be less costly than constructing a new curb ramp at the existing handicap spaces

Priority Project #2

New South School Sidewalk Connection





driveway toward school faculty parking lot

Findings:

- Walk/bike access to school is along the student parking lot driveway (northern most access point)
- Nearly all walkers observed coming from/going to the south/west
- Many walkers already using other more convenient routes without sidewalks (main school driveway, bus loop)
- Safety concerns & significant conflicts at the main school driveway in the PM

Recommendations:

 Construct new sidewalk connection to front of school from Excalibur Rd at bus loop driveway



Priority Project #2 New South School Sidewalk Connection



Looking east along south edge of faculty parking lot, north of retention pond

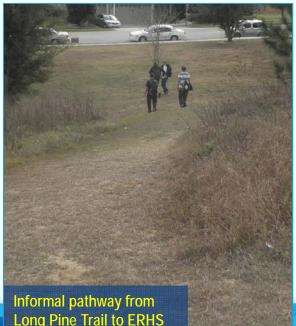


Issues:

- Only 5 feet of space available between back of curb & existing fence along north side of retention pond (6 feet is minimum sidewalk width at back of curb); would require fence to be moved towards the retention pond & existing hedge to be removed
- Would require new gate to be cut in fence along south side of faculty parking lot for sidewalk access
- Sidewalk alignment would still require walkers to cross the bus access driveway at Excalibur Rd (although no conflicts observed at this location)

Priority Project #3 Formalize Pedestrian Connection to Long Pine Trail





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 school

Recommendations:

 Evaluate purchase of all or part of property from Greater Pines homeowner to provide formal connection to school from Long Pine Trail



Priority Project #3

Informal pathway from Long Pine Trail to ERHS



ssues:

Would likely require purchase of a minimum 10-foot wide strip of property from property owner (6-foot sidewalk with 2-foot buffer on each side) Currently this is a double lot, so potentially the entire lot could be purchased, or both purchased and then the lot split and the home be resold.

Formalize Pedestrian Connection to Long Pine Trail

- 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 high visibility FDOT ladder style crosswalk across bus access driveway
- Formalizing pathway may increase remote pick-up activity on Long Pine Trail

Priority Project #4

North Walkers Access Curb Ramps & Crosswalk

Looking west along student parking lot driveway



Looking north from faculty parking lot towards area with missing curb ramp & crosswalk

Findings:

 No curb ramp or marked crosswalk provided along the existing walkers access sidewalk immediately adjacent to front of school

Recommendations:

 Construct missing curb ramps and mark crosswalk with high visibility FDOT ladder style crosswalks



O SafeAccess A safe schools transportation study

East Ridge High School

Priority Project #5 Main School Driveway Traffic Turning Restrictions



Conflicts at Main Parking Lot Entrance/Exit



Main School Driveway/Parking Lot Exit at Excalibur Rd



Findings:

- Numerous conflicts observed at driveway exit in PM
- Safety hazard for walkers who cross this driveway & often have to negotiate through queued vehicles
- Sight distance for left turns out onto Excalibur Rd is limited due to queuing
- 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 may potentially increase conflicts with traffic at student parking lot driveway
- Right-in only traffic may increase conflicts with exiting bus traffic

Priority Project #6

Student Parking Lot Driveway at Excalibur Rd

Student Parking Lot Driveway at Excalibur Rd



Findings:

- Student parking exit gate is closed in AM and entrance gate is closed in PM to discourage parent drop-off/pick-up at student parking access driveway
- Student parking driveway has excess space at Excalibur Rd which results in significant amount of drop-off activity in AM and modest amount of pick-up activity in PM

Recommendations:

- Extend median island further out towards roadway to further discourage drop-off/pick-up activity at this location
- Stripe crosswalk behind median nose (helps control speed of turning vehicles and provides safer pedestrian crossing)
- Consider periodic enforcement of remote drop-off or having resource officer park vehicle at closed entrance or exit

Issues:

 Improvement could result in more drop-off/pick-up activity directly on Excalibur Rd or move the issue to another location

Priority Project #7 Main School Driveway/Parking Lot Improvements



Findings:

There is a tight corner at the bottom of the hill on the main school driveway, which can result in conflicts between entering & exiting vehicles

Recommendations:

- Add center line striping and reflective pavement markers (RPMs) to provide positive guidance for both entering & exiting vehicles through turn; make entering lane narrower (11 feet) than exiting lane (13 feet) to help facilitate right turn
- Consider trimming corner of curbing at western-most parking row to enlarge turning radius





SafeAccess

Cost Estimates For Priority Projects

East Ridge High School

Project Priority	ltem	Quantity	Units	Total
2	Pass Through Gate	1	Gate	\$600.00
2	Sidewalk	590	ft	\$69,200.00
3	Crosswalk	24	ft	\$55.00
3	Sidewalk	240	ft	\$41,000.00
4	Crosswalk	54	ft	\$120.00
4	Curb Ramps	2	Ramps	\$950.00
5	Right Only Signs	2	Signs	\$600.00
5	Right Turn Channelizing Island	33	sy	\$20,000.00
6	Crosswalk	98	ft	\$220.00
6	Median Expansion	67	sy	\$24,200.00
7	Striping	127	ft	\$220.00

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.

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 Wood;

Project Manager, Transportation Planner (352) 315-0170 mwoods@lakesumtermpo.com

Mindy Heath, AICP

Consultant Project Manager (407) 420-4200 Mindy.heath@hdrinc.com





