



SafeAccess

A SAFE SCHOOLS TRANSPORTATION STUDY



Leesburg High School Leesburg, FL

March 2013



Leesburg High School Snapshot

May 17, 2012

Grades: 9th – 12th

Total Students: 1,641

- Provided Bus Transportation : 818
- Not Provided Bus Transportation: 823
- Buses Assigned to School (22 reg, 4 ESE) 26

Students Living within the “Walk Zone”: 455

- Provided Bus Transportation: 72
- Not Provided Bus Transportation: 383

Observation Day (Sunny)

- Walkers: 50 est
- Bike Riders: 6



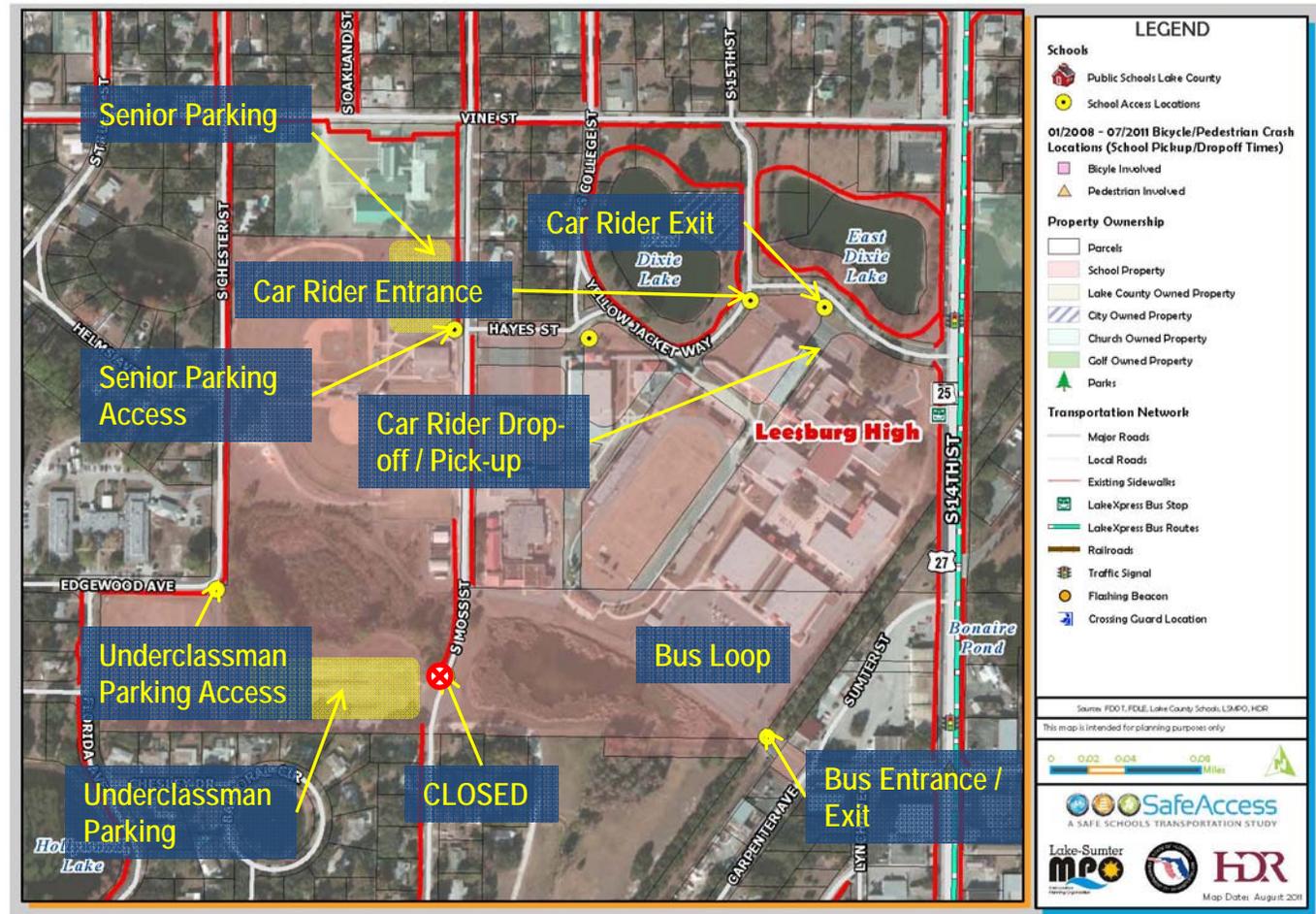
- ✓ Leesburg High School website – Click [here](#)
- ✓ City of Leesburg website – Click [here](#)
- ✓ Lake County Schools website – Click [here](#)

Leesburg High School

Findings:

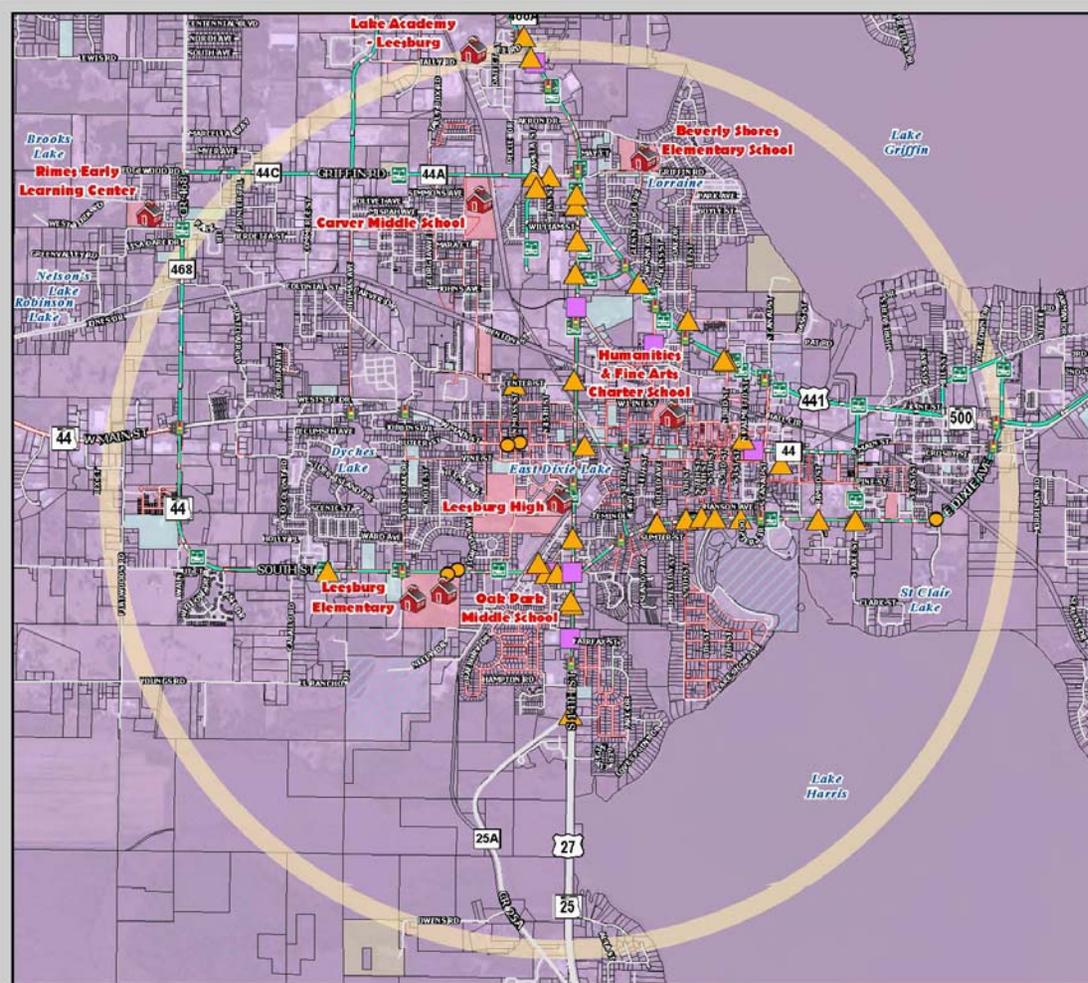
- ✓ This school is located adjacent to US 27
- ✓ Pedestrians access school from all directions
- ✓ Licensed students may purchase parking passes to drive selves to school
- ✓ Seniors are assigned parking spaces in the Senior parking lot
- ✓ Underclassman parking is first come, first serve
- ✓ The school has a large footprint with several access points

Leesburg High School: Student Access Location Map



Attendance and 2-Mile "Walk" Zone Map

Leesburg High School: Attendance and 2-Mile "Walk" Zone Map



LEGEND

Schools

- Public Schools Lake County
- 2-Mile Buffer of Leesburg HS
- Leesburg HS 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
- LakeXpress Bus Stop
- LakeXpress Bus Routes
- Railroads
- Traffic Signal
- Flashing Beacon

Sources: FDOT, FOLE, Lake County Schools, LSMPO, HDR
This map is intended for planning purposes only.

Arrival and Dismissal Schedule

- 6:45 am:** Buses start to drop off students
- 7:18 am:** First bell for start of school
- 7:25 am:** School starts
- 2:30 pm:** All students released from school; no staggered release; after school programs start



Note: Students are released one hour early on Wednesdays



Findings:

- ✓ One administrator and 3 teachers supervise the bus loop
- ✓ Buses line up in the same order for pick-up every day
- ✓ “Sidewalk” is painted on the asphalt on the south side of the bus loop

Recommendations:

- ✓ Construct sidewalk extension around southern portion of bus loop where a walkway is painted today
- ✓ Construct a concrete pad that will allow access to chillers while differentiating walkway from parking lot
- ✓ Construct sidewalk along north side of Sumter St from existing terminus east of Carpenter Ave into campus to existing sidewalk on north side of bus loop



Painted Sidewalk



Sumter St Facing Bus Loop Entrance / Exit

Findings:

- ✓ School closes gate at the vehicle entrance to prevent left turns from westbound Yellow Jacket Way or through movements from 15th St during drop-off and pick-up
- ✓ Two lanes are provided; one for drop-off / pick-up and one for through traffic
- ✓ Parking has been blocked in the spaces closest to the car ramp due to an accident involving a student
- ✓ There is no crosswalk provided from the car ramp to the parking spaces
- ✓ Students parking in visitor spaces is an issue for the school
- ✓ Missing stop sign from visitor parking east of car loop lanes



Morning Queue



Morning Drop-off with Gate Closed



Vehicle Lanes

Morning Observations:

- ✓ Heavy drop-off noted at 7:09 AM
- ✓ Speeding observed on Yellow Jacket Way in front of the school after the bell rang for school to start
- ✓ Overall, drop-off ran smoothly

Afternoon Observations:

- ✓ Vehicle queue started before 1:00 PM
- ✓ 11 vehicles queue outside of entrance (on Hayes St) at 1:44 PM
- ✓ No vehicle queue by 1:53 PM



Student Drop-off and Pick-up Recommendations



Barricaded Parking on Car Loop



Missing Stop Sign for Visitor Parking

Recommendations:

- ✓ Install stop sign at visitor parking exit east of car loop
- ✓ Remove parking spaces closest to the car ramp
- ✓ Construct sidewalk to provide connectivity to existing sidewalk network
 - ✓ Include ADA accessible ramps with detectable warning mats
 - ✓ Add crosswalks to designate crossing areas
 - ✓ Southern crosswalk at Lee Meadows Ave should be placed on north side of gate so students do not cross in traffic lanes
 - ✓ Move stop bar on WB Yellow Jacket Way

Remote Drop-off/Pick-up



Remote Drop-off Near Senior Lot

Findings:

- ✓ Remote drop-off / pick-up occurs near the senior parking lot and Yellow Jacket Way in front of the school
- ✓ There are potential safety issues and traffic disruptions when loading or unloading near senior parking

Recommendations:

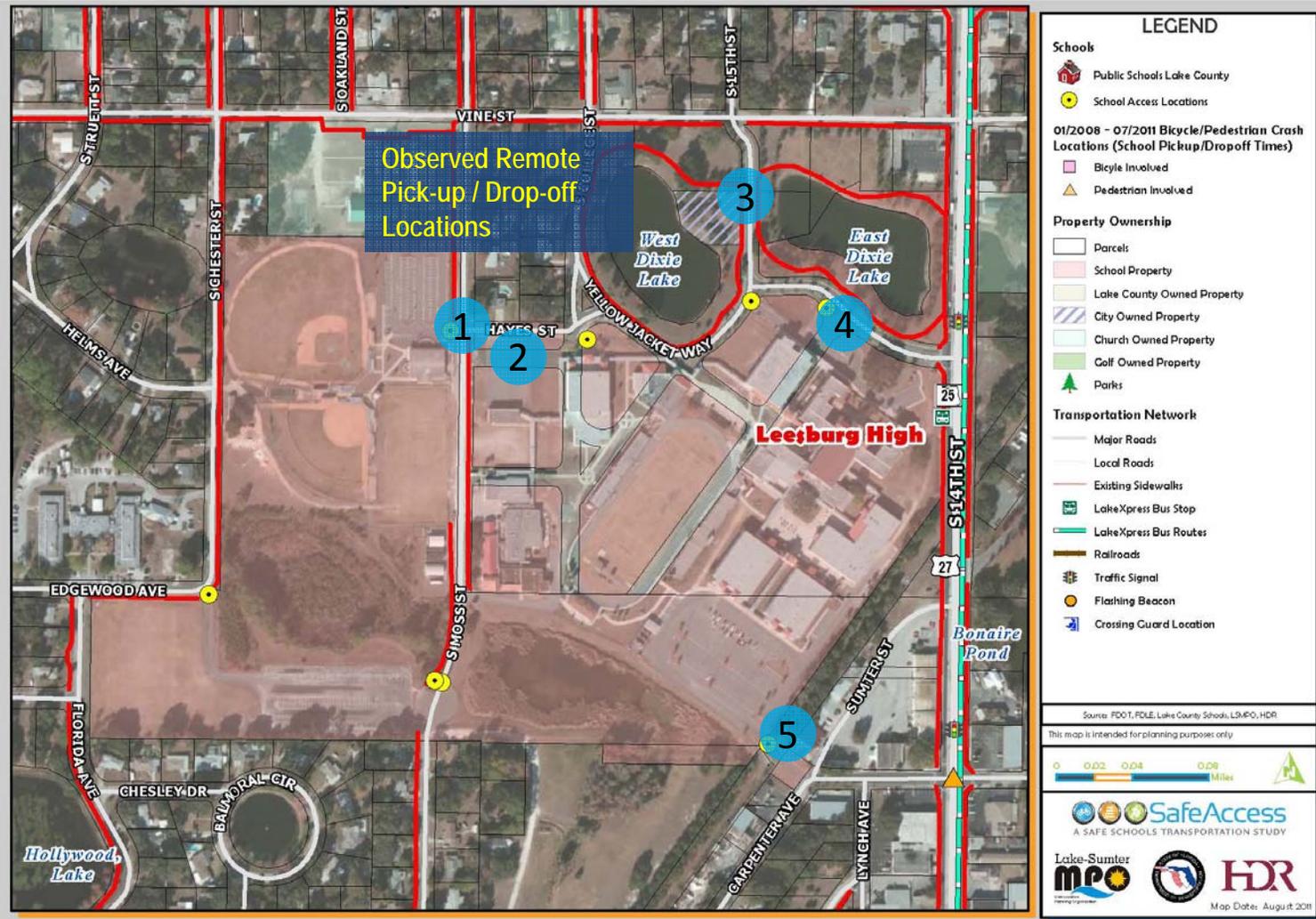
- ✓ Improve southern shoulder of Hayes Ave to be grass with vertical curb and new sidewalk
 - ✓ Traffic calming feature; “narrowing” the road can encourage drivers to naturally reduce speeds
 - ✓ Mark new curb as fire lane



Remote Drop-off on Hayes Ave

Leesburg High School

Leesburg High School: Student Access Location Map





No Sidewalk from Underclassman Parking Lot to Edgewood Ave



Entrance / Exit to Underclassman Parking Lot



No ADA Ramps Provided

Findings:

- ✓ Senior parking lot is located at Moss St / Hayes Ave
 - ✓ Most students observed to walk through campus to parking lot
 - ✓ Lack of ADA accessible features to handicap parking in the Senior Lot / Ball Field parking
- ✓ Underclassman parking lot is located at Edgewood Ave / Chester St
 - ✓ No sidewalk connection to existing Edgewood Ave sidewalk

Recommendations:

- ✓ Install accessible route from handicap parking in Senior Lot to school
- ✓ Construct a sidewalk connector from underclassman parking lot along driveway (south / west side) to existing sidewalk on Edgewood Ave

Findings:

- ✓ Students arrive / exit from all directions on campus
- ✓ No sidewalk connection to existing network in the front part of the campus
- ✓ Existing bicycle rack is an old "wheel bender" style that does not support the bike at two points above wheel hubs; rack placed in grass and not on concrete pad
- ✓ Missing or faded crosswalks were noted at several intersections near the school
- ✓ Several students were observed to walk down Edgewood Ave towards Lone Oak Dr



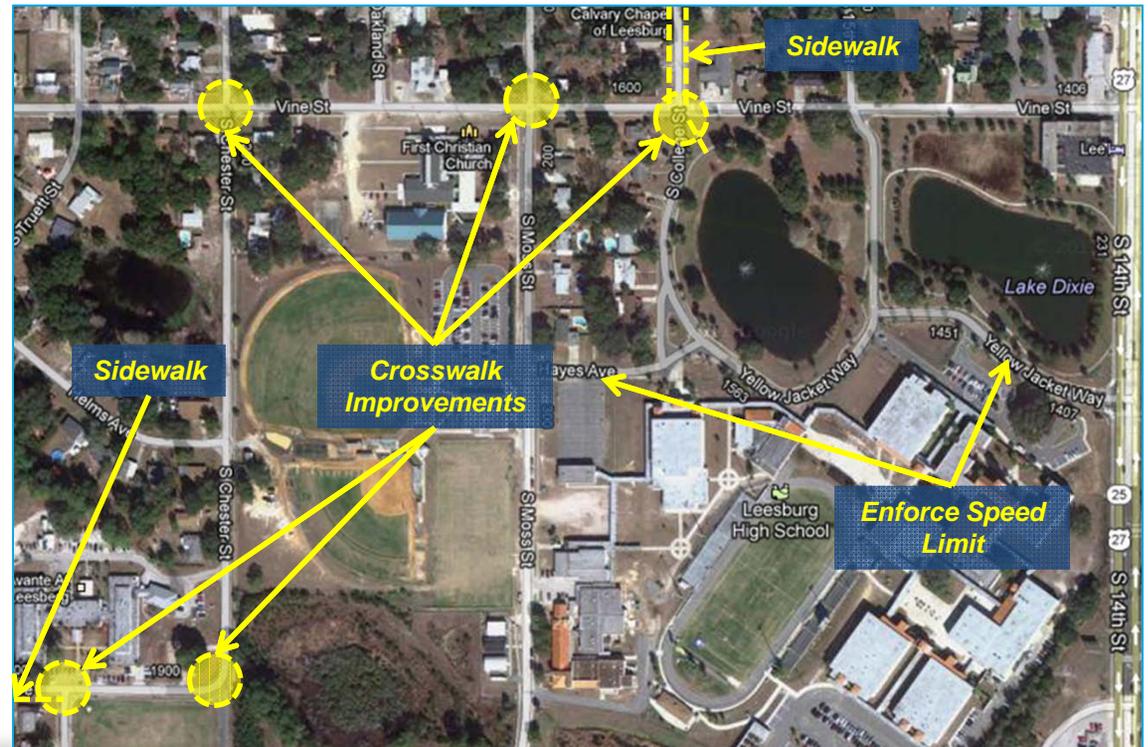


ADA Observation:

- ✓ Student using a motorized scooter / wheelchair was observed taking the path shown in blue after dismissal. Due to lack of sidewalks and accessible ramps, the student took this route in the vehicle travel lane.

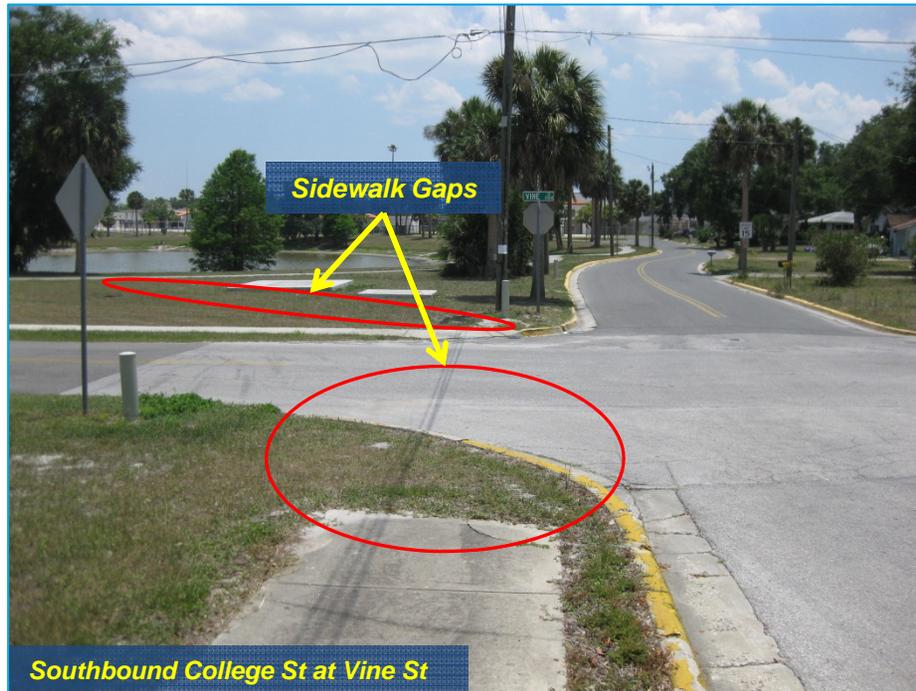
Recommendations:

- ✓ Install high-visibility crosswalks at cross streets along Vine St and Edgewater Ave; install sidewalk connections to school
- ✓ Continue to enforce the motorist speed limit; install speed humps on Hayes Ave and Yellow Jacket Way
- ✓ Replace bicycle rack for inverted “U” style and place on a concrete pad; provide secondary bike rack near bus loop
- ✓ Construct sidewalk on Edgewood Ave between Lone Oak Dr and Florida Ave
- ✓ Construct curb extension on Main St at Moss St with high visibility crosswalks

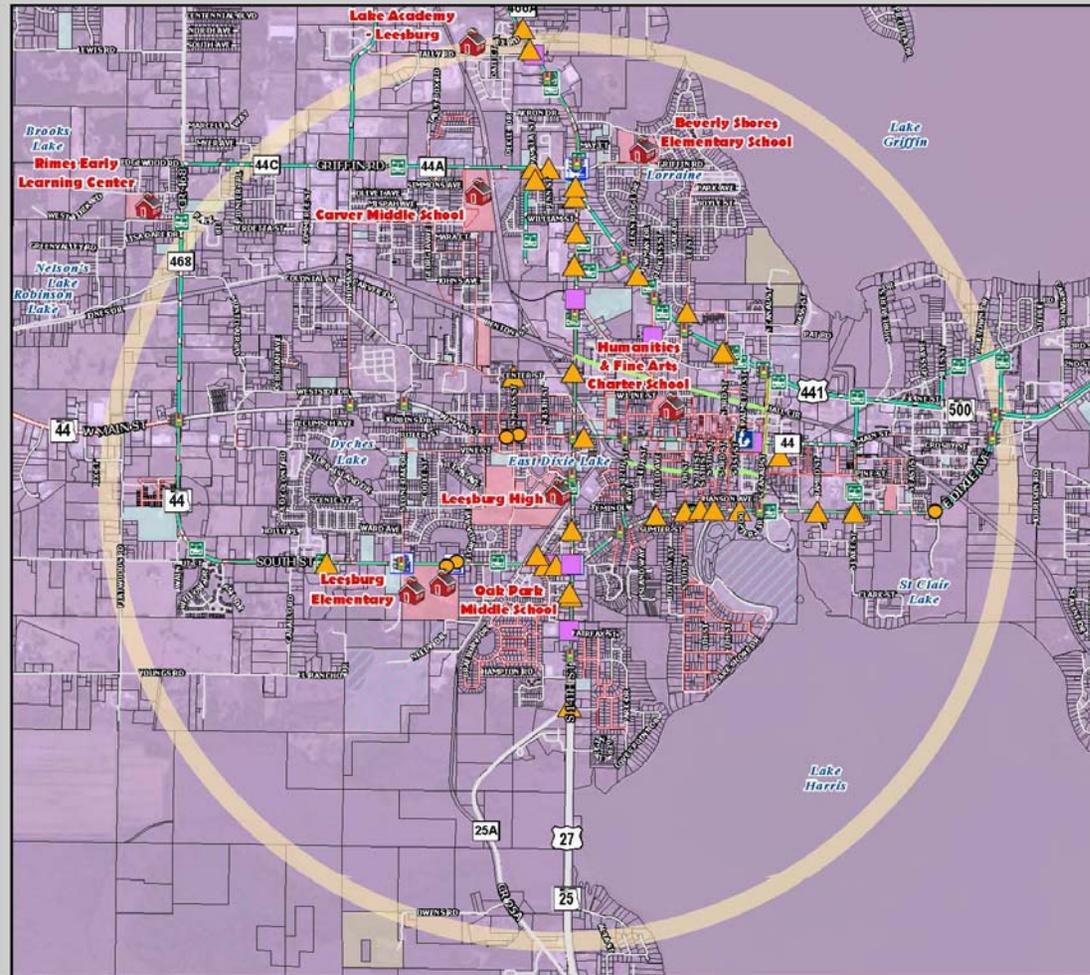


Recommendations:

- ✓ Construct sidewalk along College St to Vine St
- ✓ Update existing school zone speed limit sign on Vine St east of Moss St (EB) to use flashing beacons



Leesburg High School: Existing Conditions Map



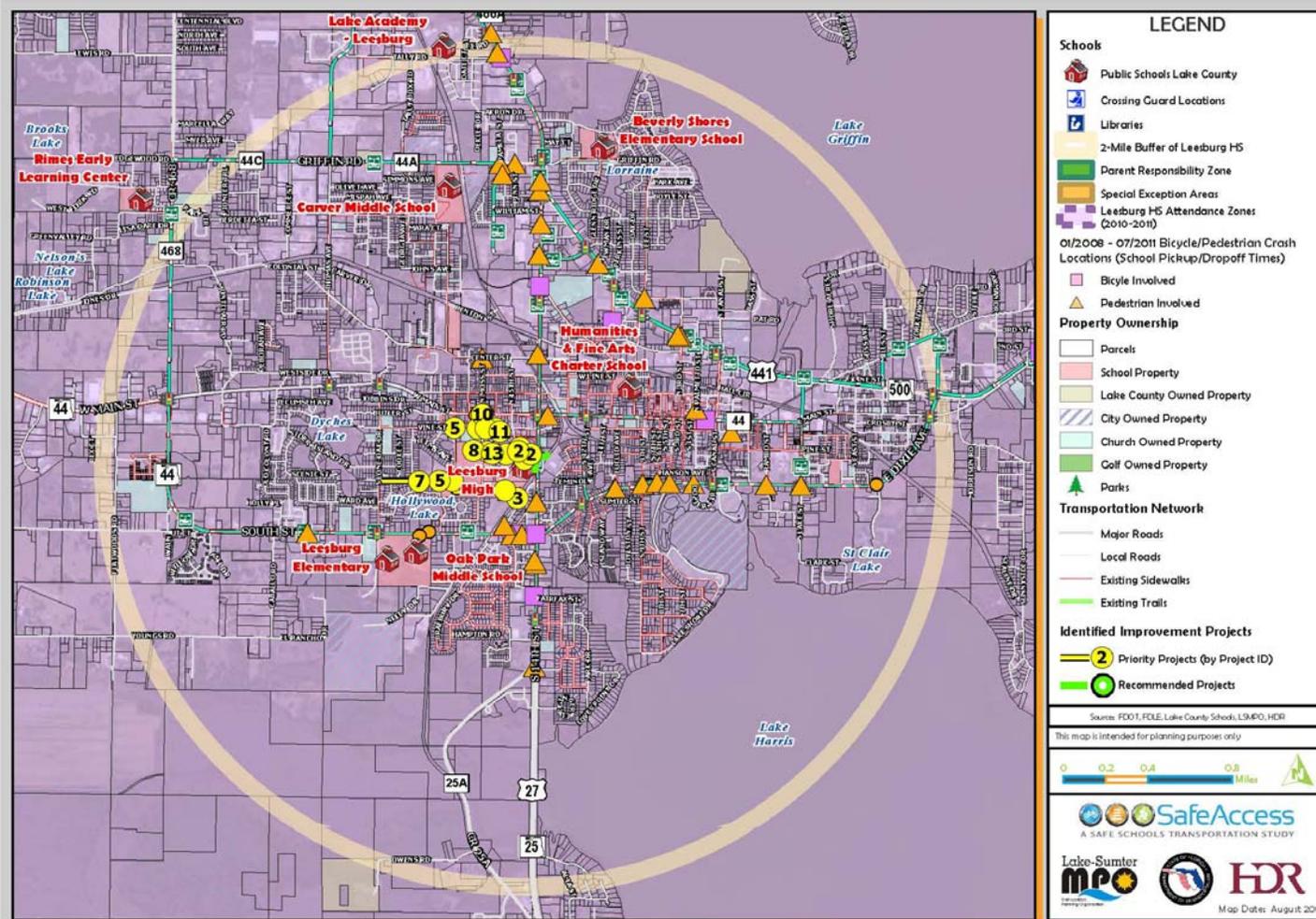
- Schools**
- Public Schools Lake County
 - Crossing Guard Locations
 - Libraries
 - 2-Mile Buffer of Leesburg HS
 - Leesburg HS Attendance Zones (2010-2011)
- 01/2008 - 07/2011 Bicycle/Pedestrian Crash Locations (School Pickup/Dropoff Times)**
- Bicycle Involved
 - Pedestrian Involved
- Property Ownership**
- 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
 - LakeXpress Bus Routes & Stops
 - Railroads
 - Traffic Signal
 - Flashing Beacon

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

This map is intended for planning purposes only.



Leesburg High School: Transportation Access Master Plan



Project Number	Roadway	Location	Project
1	At School	Car Loop	Remove row of parking row closest to car ramp; install stop sign from parking lot east of car loop
2	At School	Car Loop	Construct new sidewalk from visitor parking to 15th St & from front of school to US 27/Yellow Jacket Way; provide connections to existing sidewalks; Install crosswalks on Yellow Jacket Way & in school parking lot
3	Sumter St	East of Carpenter Ave to Bus Loop	Construct sidewalk along north side of Sumter St & along east side of bus loop
4	At School	Underclassman Parking Lot to Edgewood Ave	Construct sidewalk from student parking lot to existing sidewalk on Edgewood Ave
5	Edgewater Ave	Florida Ave to Chester Ave	Install high-visibility crosswalks at all cross streets
	Vine St	Chester St to College St	Install high-visibility crosswalks at all cross streets
6	Vine St	At Moss St	Update existing school zone speed limit sign to use flashing beacons

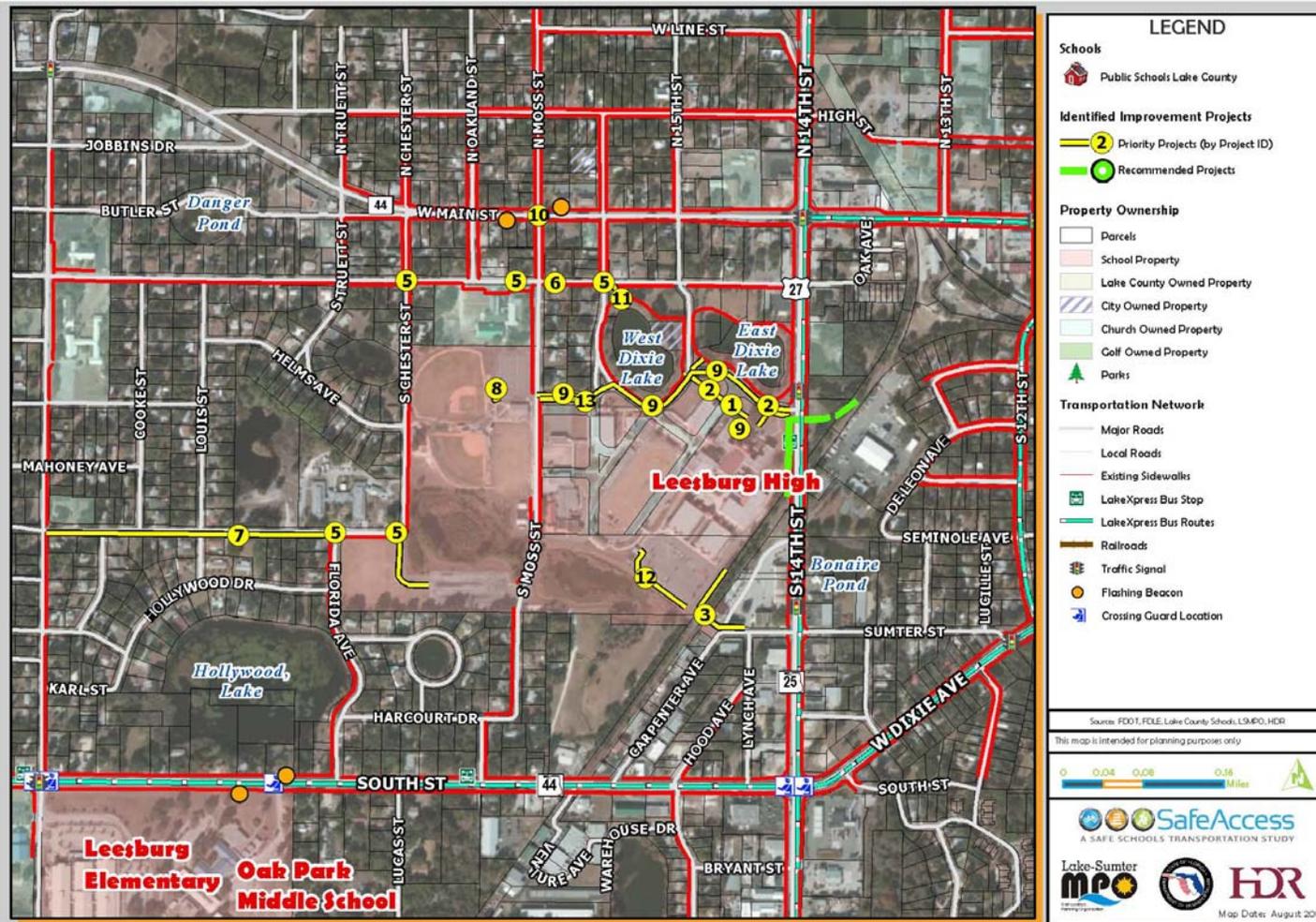
Project Number	Roadway	Location	Project
7	Edgewood Ave	Lone Oak Dr to Florida Ave	Construct sidewalk on south side of Edgewood Ave
8	At School	Senior Parking Lot	Install ADA accessible route from handicap parking in Senior Lot to school
9	Yellow Jacket Way	15th St to 14th St	Enforce motorist speed limit; install speed humps
	Hayes Ave	Moss St to Yellow Jacket Way	Enforce motorist speed limit; install speed humps
	At School	Bicycle Rack	Replace bicycle rack for inverted "U" style and place on a concrete pad; provide secondary bike rack near bus loop
10	Main St	At Moss St	Construct curb extensions with high-visibility crosswalks



Project Number	Roadway	Location	Project
11	College St	At Vine St	Construct sidewalk connection on both sides of College St to Vine St
12	At School	Bus Loop	Construct concrete pad that allows access to chillers while marking designated pedestrian walkway
	At School	Bus Loop	Construct raised sidewalk where pedestrian walkway is painted on pavement
13	Hayes Ave	Moss St to College St	Reconstruct southern shoulder with curb & sidewalk; mark curb as fire lane

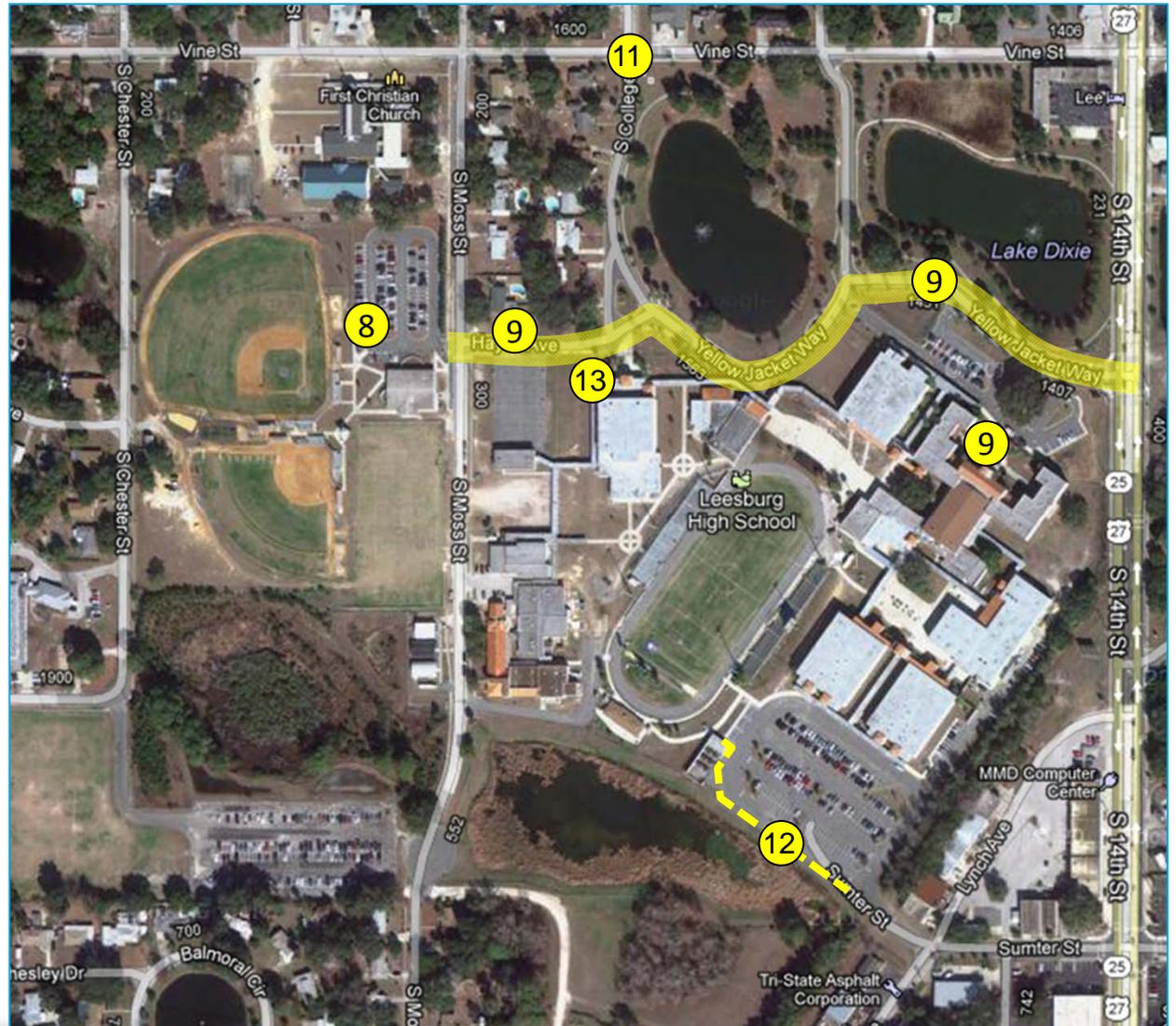


Leesburg High School: Priority Projects



Priority Projects:

8. Install ADA accessible amenities at Ball Field / Senior Lot parking
9. Enforce speed limit and install speed humps on Yellow Jacket Way and Hayes Ave; improve bicycle parking
10. Construct curb extension at Main St and Moss St (off map)
11. Construct sidewalks at College St and Vine St
12. Construct concrete pad for chiller access; extend sidewalk around bus loop
13. Reconstruct southern shoulder of Hayes Ave; repaint pavement markings



Priority Project #1

Permanently Remove Visitor Parking Closest to School

Findings:

- ✓ School has desire to remove front row parking after an accident involving a student
 - ✓ Currently barricade spaces; students drive around barricades

Recommendations:

- A. Low Cost Improvement: Repaint parking spaces as No Parking and enforce towing of unauthorized vehicles
- B. Preferred Improvement: Grass extension with curbing and sidewalk (yellow dashed line - Project 2) as shown, Install ADA accessible ramp with detectable warning mat at crosswalk



- ✓ Install crosswalk at walkway leading into campus
- ✓ Install stop sign at visitor parking lot exit east of car loop

Findings:

- ✓ A student in a wheelchair was observed to go all the way around the parking spaces, out the exit and down Yellow Jacket Way and 15th St in the road until reaching an accessible ramp to the existing sidewalk
- ✓ Students observed walking directly from front of school through parking lot and north on US 27

Recommendations:

- ✓ Construct new sidewalk connections from the front of the school and car loop to the existing sidewalks at Yellow Jacket Way / 15th St and the US 27 signal
- ✓ Install ADA ramps with detectable warning mats and crosswalks



Recommendations:

- ✓ Construct sidewalk on Sumter St (north side) from existing terminus east of Carpenter Ave into school property, then north on edge of parking lot to connect with sidewalk on north side of bus loop; mark crosswalk across drive aisle adjacent to north side of bus loop



Recommendations:

- ✓ Construct sidewalk connector from underclassman parking lot along driveway (south / west side) to existing sidewalk on Edgewood Ave
- ✓ May require relocation of fence and / or gate at lot entrance / exit





A SAFE SCHOOLS TRANSPORTATION STUDY

Leesburg High School

Priority Project #5

Install High-Visibility Crosswalks on Vine St & Edgewood Ave

Recommendations:

- ✓ Add high-visibility crosswalk markings at cross streets along Edgewood Ave from Florida Ave to Chester St and Vine St from Chester St to College St



Recommendations:

- ✓ Update existing school zone speed limit sign on Vine St east of Moss St (eastbound) to use flashing beacons rather than sign plaque with times





A SAFE SCHOOLS TRANSPORTATION STUDY

Leesburg High School

Priority Project #7

Construct Sidewalk on Edgewood Ave

Recommendations:

- ✓ Construct sidewalk on south side of Edgewood Ave from Lone Oak Dr to Florida Ave





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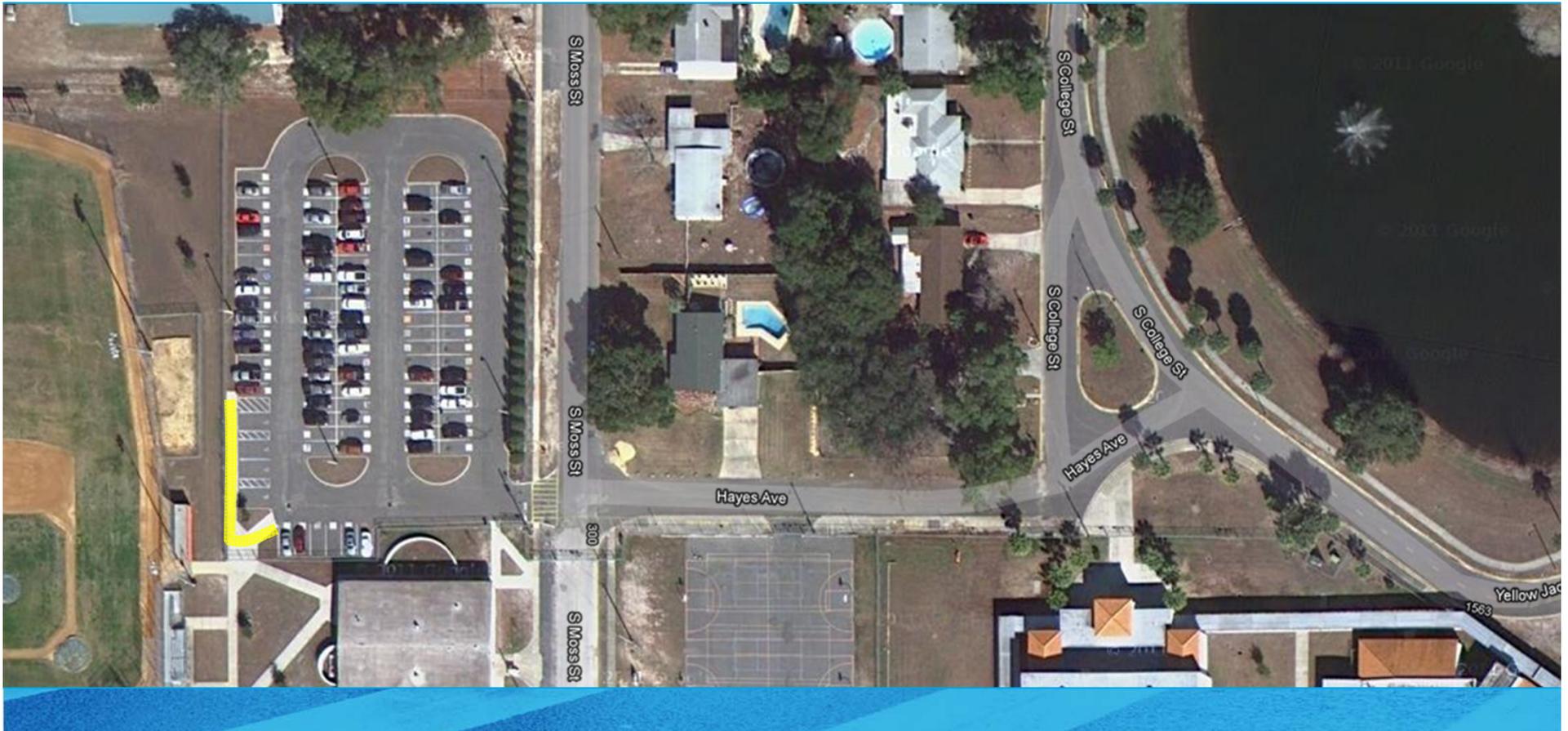
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Priority Project #8

Install ADA Amenities from Senior Lot to School

Recommendations:

- ✓ ADA accessible curb ramps needed at Senior Lot handicap parking





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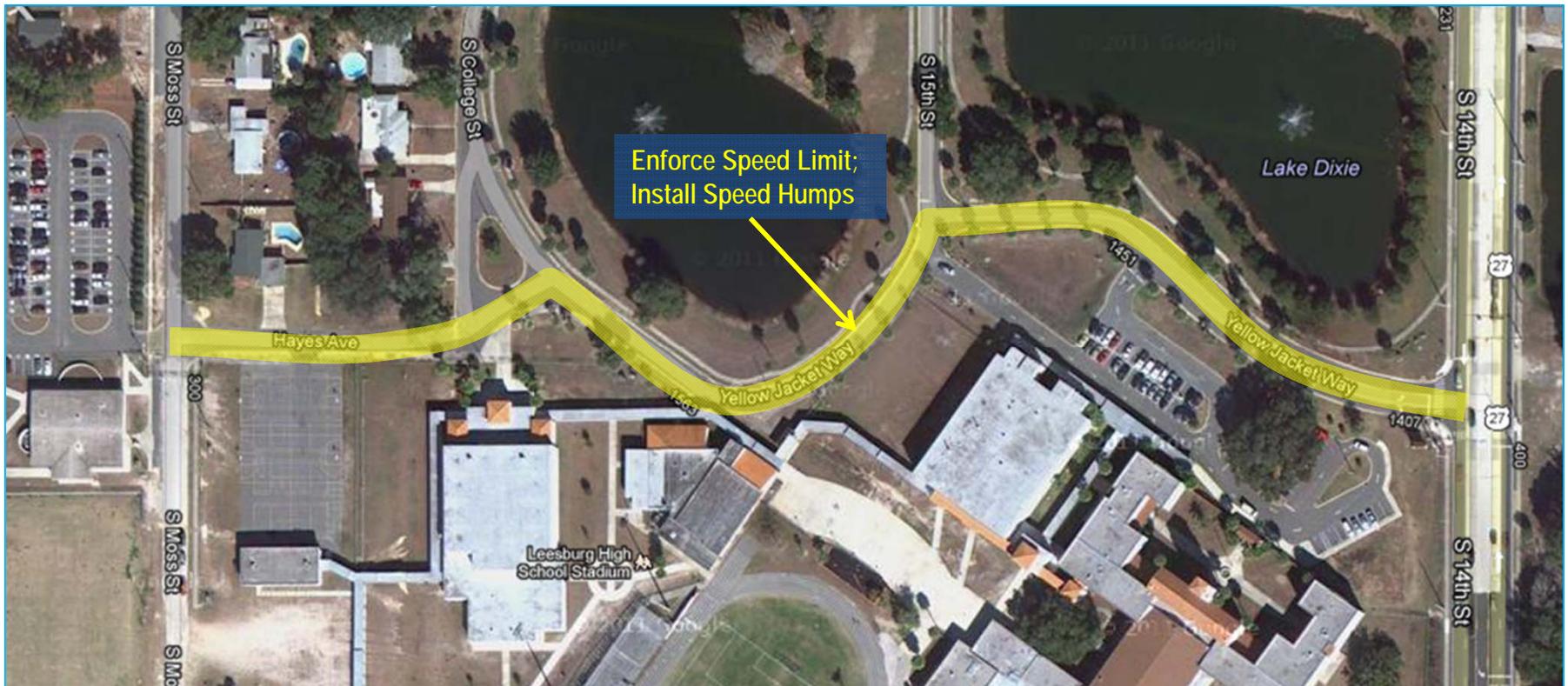
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Priority Project #9a

Enforce Speed Limit on Yellow Jacket Way / Hayes Ave

Recommendations:

- ✓ Install speed humps for natural speed enforcement
- ✓ Coordinate with the Leesburg Police Department to enforce the speed limit on Yellow Jacket Way



Recommendations:

- ✓ Replace existing bicycle rack with permanent inverted “U” style which supports the bicycle by two points on the frame rather than the wheel; Place bicycle rack on concrete pad with sidewalk connection / access to the school campus
- ✓ Install a second bicycle rack near the bus loop





A SAFE SCHOOLS TRANSPORTATION STUDY

Leesburg High School

Priority Project #10

Construct Curb Extensions on Main St at Moss St

Findings:

- ✓ Main St has a short 20 mph school zone at the Moss St intersection
- ✓ Numerous students live north of Main St and could cross at Moss St within the school zone, although there is no crossing guard at this location
- ✓ This section of Main St is a 2-lane road with on-street parking on both sides of the street
- ✓ Adding curb extensions into the Main St parking lanes would shorten the crossing distance for students and make them more visible to motorists

Recommendations:

- ✓ Construct curb extensions on Main St on the four corners of Moss St and stripe high visibility ladder style crosswalks on east and west legs of intersection



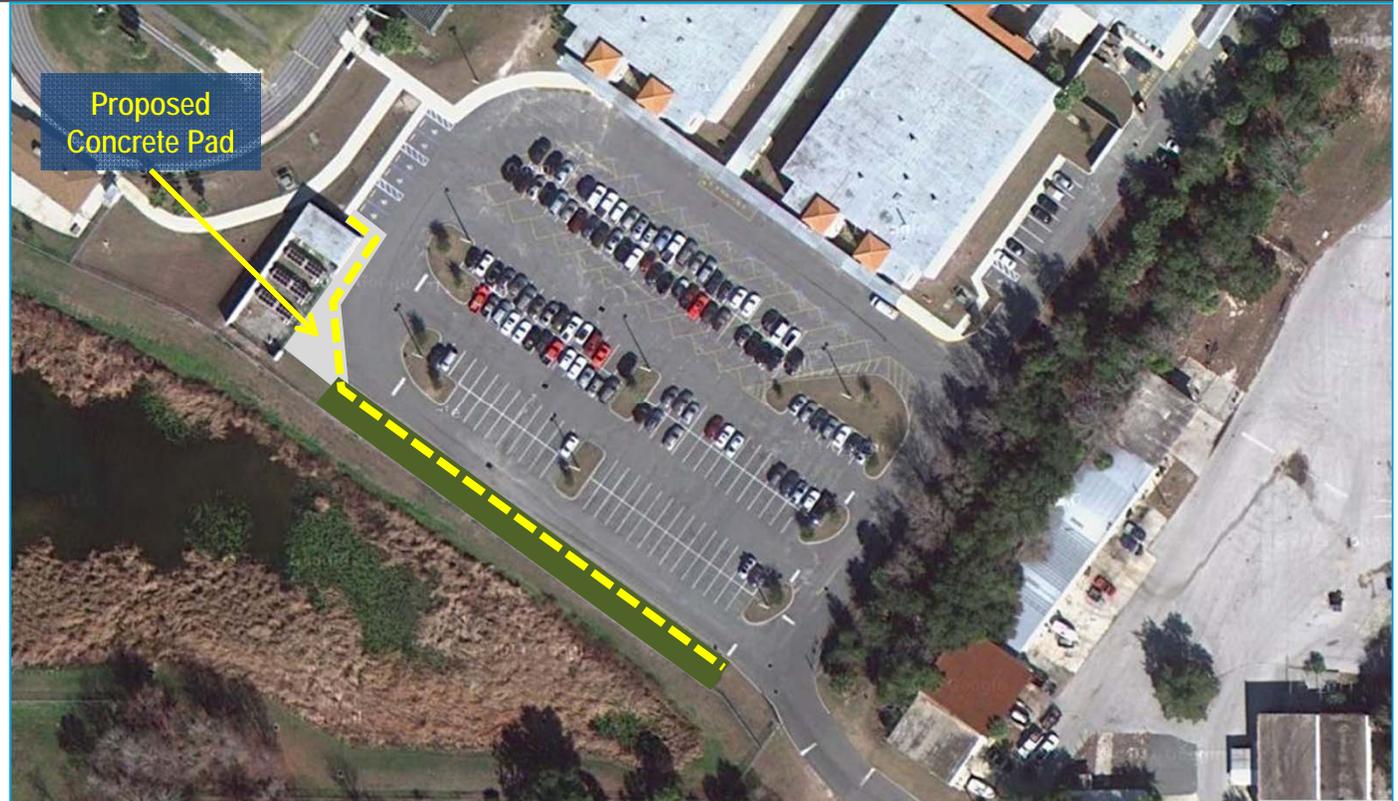
Recommendations:

- ✓ Extend sidewalks on both sides of College St south to Vine St intersection and construct curb ramps
- ✓ Construct sidewalk connector in southeast corner of College St / Vine St intersection to sidewalk around pond



Findings:

- ✓ Pedestrian walkway is currently painted on the pavement
- ✓ Buses line up like a “horseshoe”



Recommendations:

- ✓ Extend the sidewalk in front of the chillers; provide driveway on “diagonal” portion to allow access to the chillers
- ✓ Extend the sidewalk from the chillers to the bus loop exit; permanently remove parking spaces currently marked with painted walkway (i.e. fill in with grass and raised curbing)



A SAFE SCHOOLS TRANSPORTATION STUDY

Leesburg High School

Priority Project #13

Reconstruct Shoulder on Hayes Avenue

Recommendations:

- ✓ Improve southern shoulder of Hayes Ave to be grass with “Type F” curbing between Moss St and College St
- ✓ Mark new curb as fire lane



Priority #	Item	Quantity	Units	Total
1	Remove Parking	310	sy	\$44,900.00
1	Crosswalk	24	ft	\$54.00
1	Stop Sign	1	Sign	\$300.00
2	Sidewalk	445	ft	\$58,100.00
2	Crosswalks (3)	97	ft	\$217.00
3	Sidewalk	545	ft	\$64,100.00
3	Crosswalk	32	ft	\$71.00
4	Sidewalk	374	ft	\$51,500.00
5	Crosswalks (14)	505	ft	\$1,127.00
6	Sign With Beacon	1	Sign	\$500.00
7	Sidewalk	1500	ft	\$141,600.00

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

Magnolia Trail Extension

Findings:

- ✓ Existing Magnolia Tr western terminus is 12th St
- ✓ Trail is proposed to be extended west and alignment has it running directly adjacent to Leesburg HS

Recommendations:

- ✓ When trail is extended west of 12th St, alignment should swing out to cross US 27 at the Yellow Jacket Way then proceed south along west side of US 27 as a wide sidewalk (shown in yellow) to rejoin original alignment
- ✓ Wider US 27 sidewalk will likely require a retaining wall and railing due to the elevation change at the edge of existing sidewalk





Leesburg High 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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