



A SAFE SCHOOLS TRANSPORTATION STUDY

Eustis Heights Elementary School Eustis, FL



December 2011



Eustis Heights Elementary School Planned Re-Build



LSMPO Project Manager Michael Woods works with project stakeholders

Planned Rebuild

Eustis Heights Elementary is planned for a complete re-build. The School District is working with an architect and a committee to develop plans.

The LSMPO team was asked to review this school to provide recommendations for consideration during the ongoing planning process.

The final school site plan and circulation layout are directly related to recommendations for off-campus improvements. This Study includes recommendations that may need to be updated to better reflect the final site layout for the school. For instance, the crossing over SR 19 may shift to provide the most direct route/safest route for most students. Additionally, future funding for crossing guards may be reduced, emphasizing the need to create “stand-alone” crossings for students that include safe pedestrian crossing features.

Eustis Heights Elementary School Re-Build Recommendations



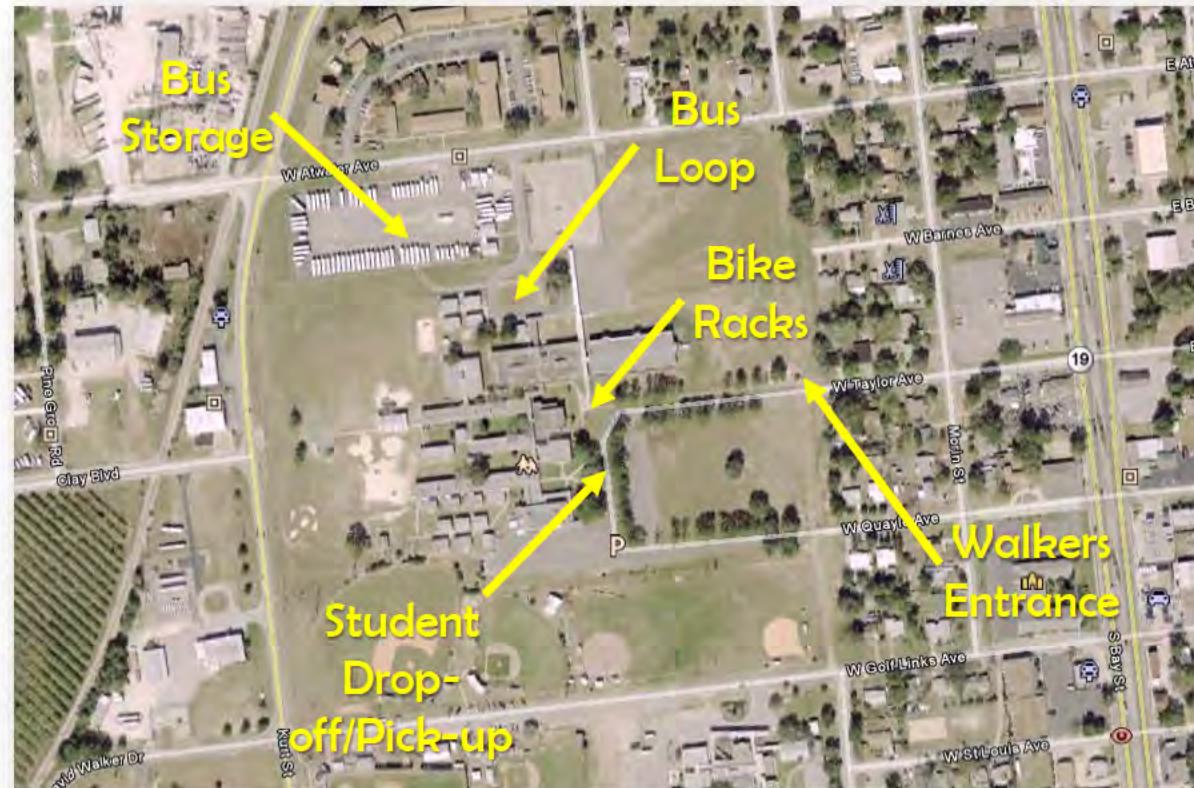
- ✓ Review the possibility of a North Lake Trail Trailhead/ Remote Bus Shuttle.
- ✓ Ensure the crossing guard location on S.R. 19 and Taylor Road reflects school campus circulation changes.

- ✓ The new campus layout should include an emergency access plan that incorporates arrival and dismissal conditions.
- ✓ Consider constructing a recreational/access trail around the ball fields that includes a connection to Lake Technical Center. Locate the school in the northeast corner of the site to reduce the distance traveled for most walkers.
- ✓ Orient the school to face the Titcomb Street right of way.
- ✓ Locate the cafeteria on the southern end of the school.
- ✓ Share the ball field parking with school parking (near the cafeteria).
- ✓ Place the bus loop in front of the school.
- ✓ Provide a connection to the planned transit stop at Lake Technical Center.

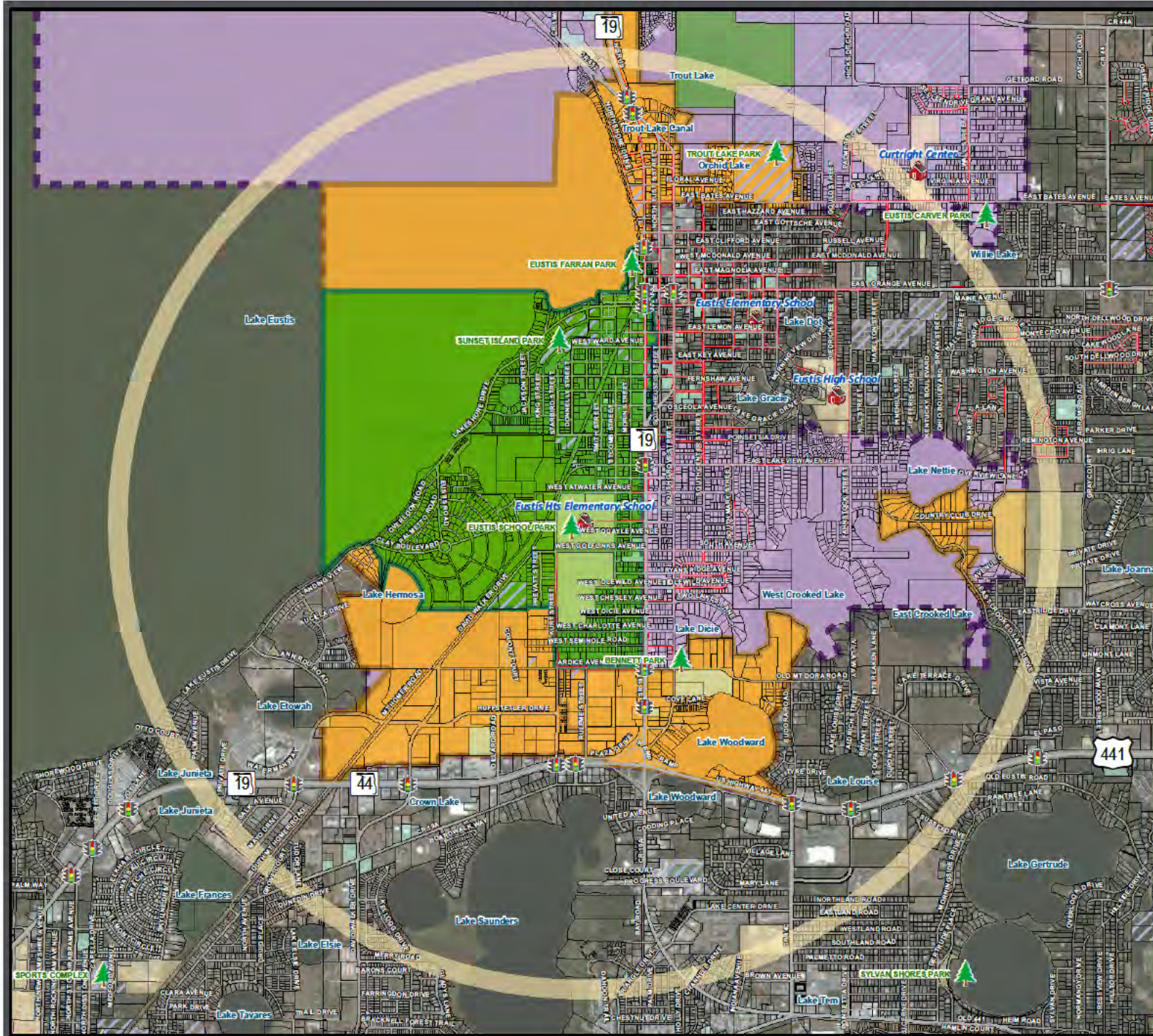
Eustis Heights Elementary School

General Findings:

1. The school is located on the outside of the residential core of Eustis. Lake Technical Center and a few recreational facilities are located within the same area, creating a neighborhood and regional destination.
2. S.R. 19 creates a physical barrier between the school and the neighborhood east of S.R. 19.
3. S.R. 19, Kurt Street, Lakeview Avenue and the Railroad contribute to undesirable walking conditions, especially for elementary-age students.



Eustis Heights Elementary School: Attendance and 2-Mile "Walk" Zone Map



LEGEND

- SAS Schools Studied
- Parks
- Existing Sidewalks and Trails**
 - Existing Sidewalks
 - Existing Trails
- Road System**
 - Major Roads
 - Local Roads
- Other Layers**
 - Eustis Heights Elementary School Attendance Zone
 - Parent Responsibility Zone
 - Special Exception Area
 - 2-Mile Buffer of Eustis Heights Elementary School
 - Parcels
 - School Property - Public
 - Church Owned Property
 - County Owned Property
 - City Owned Property
 - Railroad
 - LakeXpress Bus Route
 - Traffic Signal

Source: FDOT, Lake County Schools, Hoke Design, Inc, and TranSystems

This map is intended for planning purposes only



SafeAccess
A SAFE SCHOOLS TRANSPORTATION STUDY

Map Date: December 2011

Start Time: 7:30 am

Release Time: 3:00 pm



Findings:

- ✓ 16 buses access the school from Atwater Avenue. Twelve daycare-related vehicles also use this school access point.
- ✓ One motorist was observed using this access point to avoid the car line.

Recommendations:

- ✓ When redeveloping the school, consider Barnes Avenue for a bus access point and Quayle Avenue for a bus exit point.
- ✓ Continue excellent monitoring and enforcement.



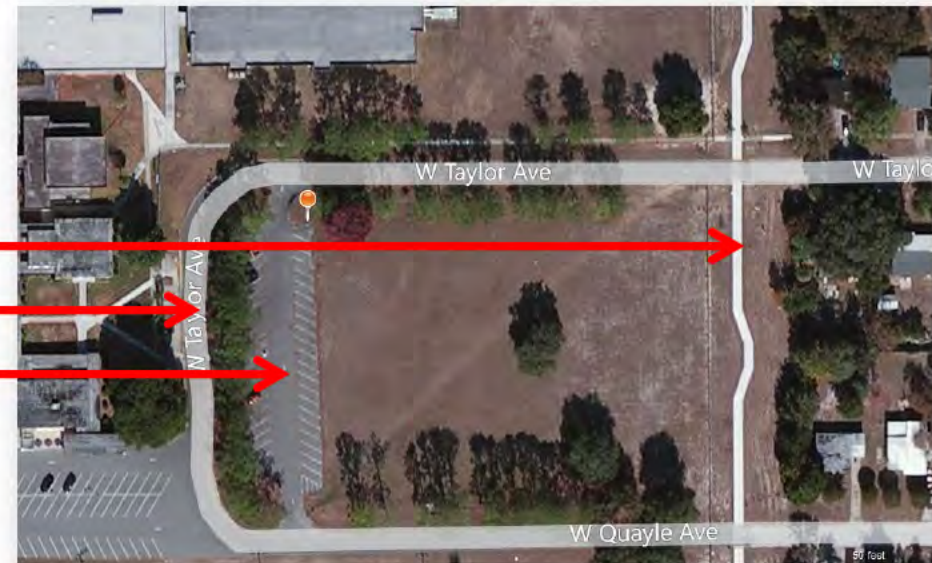
Student Drop-off & Pick-up

Findings:

- ✓ Motorists enter the car line from Taylor Avenue (one-way) and exit onto Quayle Avenue.
- ✓ A fence located west of the trail has gates for motorists and pedestrians.
- ✓ Access to the visitor parking area is difficult during peak arrival and dismissal.



New trail
Drop-off Area
Parking



Student Drop-off & Pick-up



Findings Continued:

- ✓ Motorists drop-off and pick-up students along a fenced sidewalk with numbered openings.
- ✓ Students often need to maneuver between the fence and the car to reach an opening.

Student Drop-off & Pick-up



Findings Continued:

- ✓ Temporary cones prevent motorists from passing and also serve to emphasize the crosswalk that connects the visitor parking lot to the school.
- ✓ Pedestrians using the parking area must cross through the car line to access the school.
- ✓ A sign in the parking area notifies parents of unsafe drop-off procedures.

Student Drop-off and Pick-up Recommendations



Sample Layout of a Double Drop-off/Pick-up Design

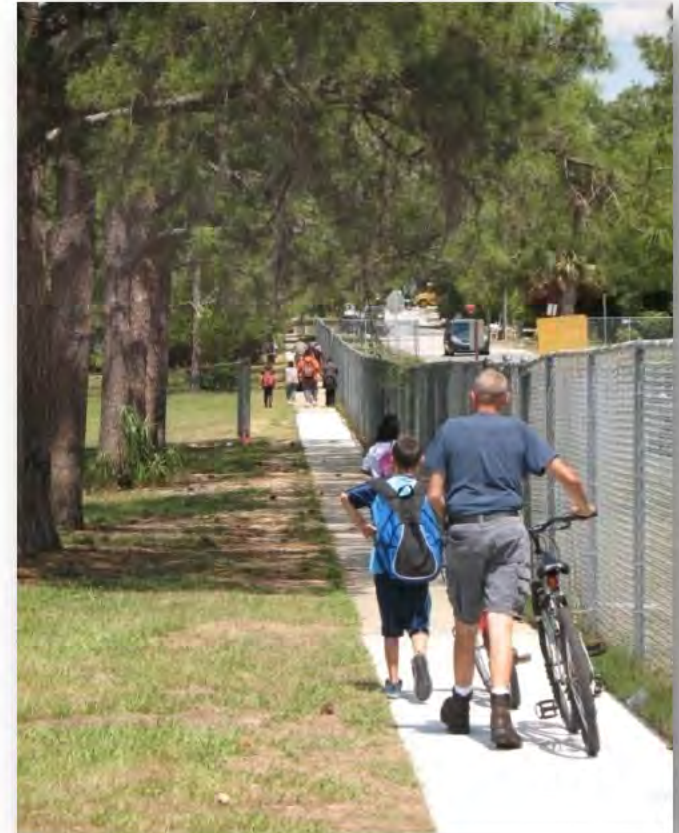
Recommendations:

- ✓ Design the school circulation layout to eliminate or reduce pedestrian conflicts with vehicles. Refer to the Re-Build Concept Plan at the beginning of this report.
- ✓ Consider a site design that includes two drop-off/pick-up areas to increase car line efficiency (see sample layout).

Bicycle/Pedestrian “Walkers” Access

Findings:

- ✓ Walkers and students riding bicycles primarily access the school using the sidewalk along the drop-off and pick-up access drive (Taylor Avenue). This sidewalk connects to the new trail located within the Titcomb Street right of way.
- ✓ Pedestrian access is also provided on the north side of the school from Atwater Avenue. Extensive fencing directs students around the staff parking and bus loop area.





Findings Continued:

- ✓ New bicycle racks are centrally located at the end of the campus access sidewalk.
- ✓ The pedestrian gates are locked promptly and tardy bicyclists or pedestrians must share the vehicular access drive with motorists.



Recommendations:

- ✓ Increase the bicycle parking capacity (completed).
- ✓ Allow another 10 or 15 minutes before locking the gates to increase safety for late students.



Bay Street and Taylor Road Crossing

Findings:

- ✓ Many of the students within the “walk zone” live east of S.R. 19. More than half (estimated) of these students find their own way to school (car, walk, bike, carpool).
- ✓ Few Eustis Heights Elementary students cross at this location, but several students were observed crossing in the opposite direction, possibly to Eustis Middle School or to Eustis Elementary School (out-of zone).
- ✓ Many students who live east of S.R. 19 are provided bus transportation.
- ✓ The crossing is not at a signalized intersection and it may be difficult for the single guard to control traffic on this divided highway.

Recommendations:

- ✓ Consider recording the number of students using this crossing and their destination.
- ✓ Use of this crossing may increase with the implementation of a more complete sidewalk network on the east side of S.R. 19.
- ✓ Use of this crossing may increase if school transportation budgets are further reduced.



Lakeview Avenue and Titcomb Street Crossing

Findings:

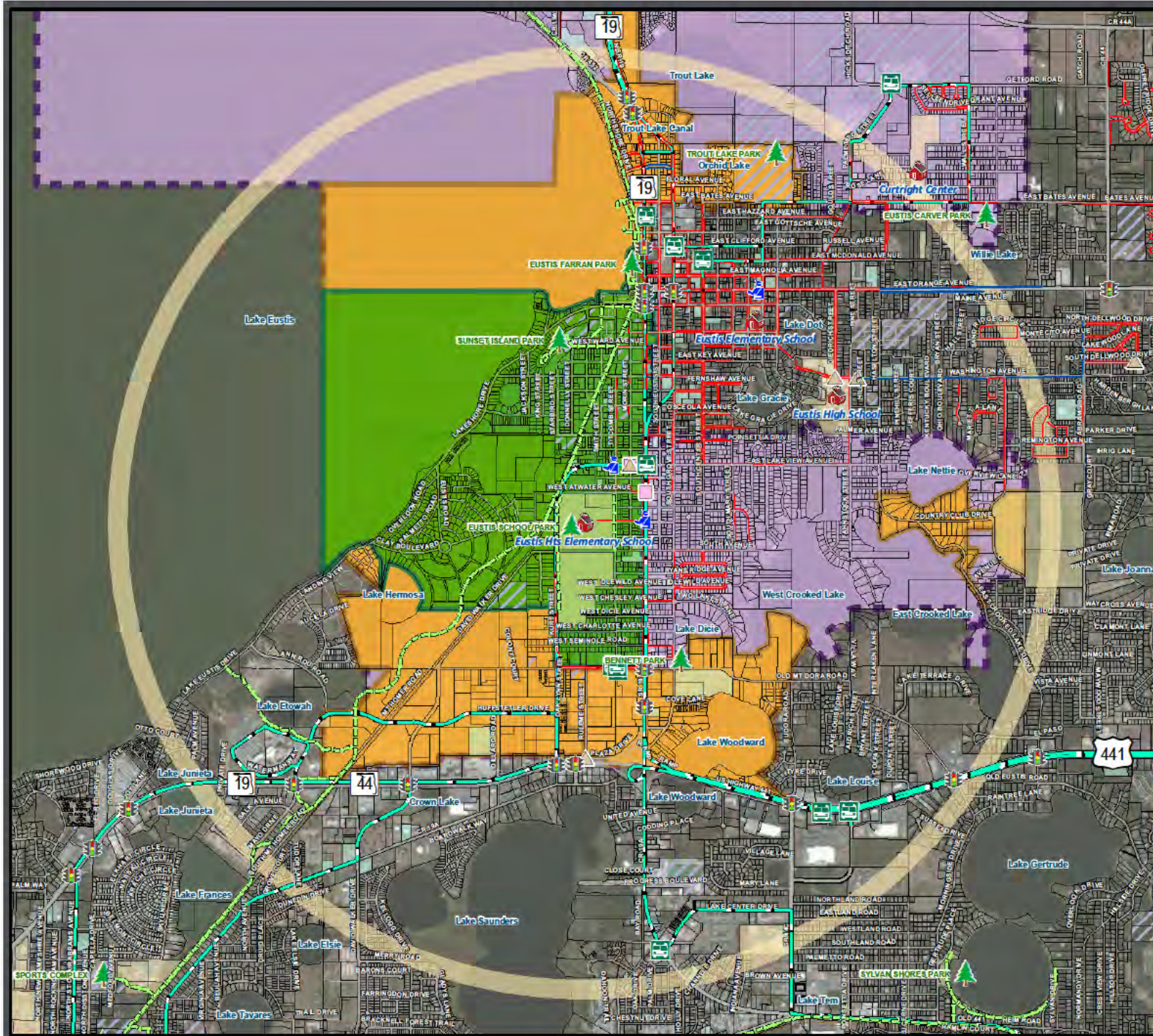
- ✓ The crossing over Lakeview Avenue is staffed by a City of Eustis crossing guard.
- ✓ Lakeview Avenue has a large pavement width, possibly encouraging higher motorist speeds.
- ✓ Sight distance for east bound motorists is reduced by a curve in the road.

Recommendations:

- ✓ Consider re-striping the roadway to reduce lane width and provide bicycle lanes.
- ✓ Increase speed limit enforcement efforts.



Eustis Heights Elementary School: Existing Conditions Map



LEGEND

- SAS Schools Studied
- Library
- Crossing Guard Location
- 2008 - December 2011 Bicycle/Pedestrian Involved Crash Locations During School Pickup & Dropoff Times (6:45-7:30 AM & 3:00-3:30 PM)
 - Bicyclist Involved
 - Pedestrian Involved
- Existing Sidewalk and Trail Network
 - Existing Sidewalks
 - Existing Trails
- Road System
 - Major Roads
 - Local Roads
- Other Layers
 - Eustis Heights Elementary School Attendance Zone
 - Special Exception Area
 - Parent Responsibility Zone
 - 2-Mile Buffer of Eustis Heights Elementary School
 - Parcels
 - School Property - Public
 - Church Owned Property
 - County Owned Property
 - City Owned Property
 - Railroad
 - LakeXpress Bus Route
 - LakeXpress Bus Stop
 - Traffic Signal

Source: FDOT, FDLE, Lake County Schools, Hobe Design, Inc, and TranSystems

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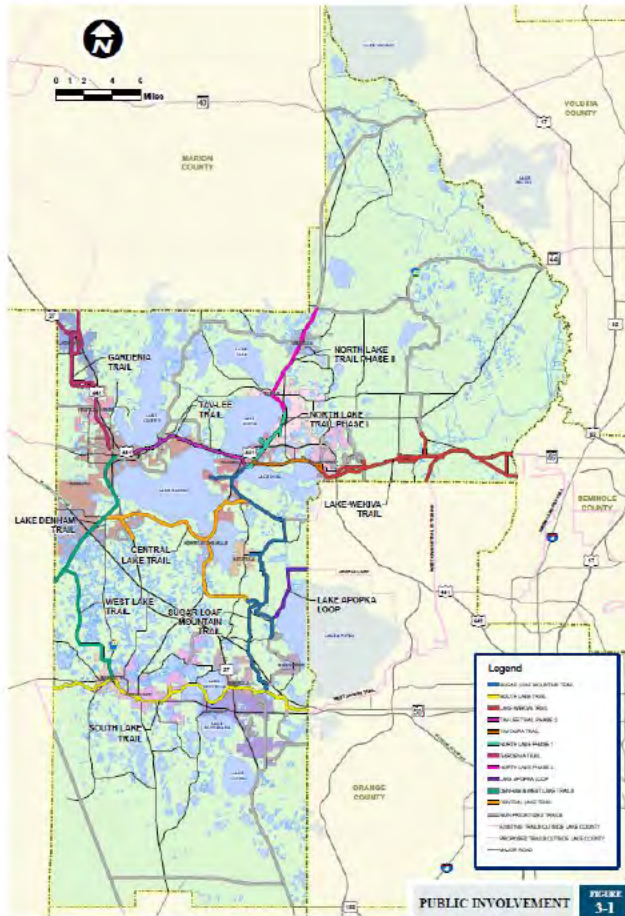


SafeAccess
A SAFE SCHOOLS TRANSPORTATION STUDY

Lake-Sumter MPO

TranSystems

Map Date: December 2011



Finding:

✓ The Lake County Trails Master Plan calls for a rail/trail corridor through the City of Eustis.

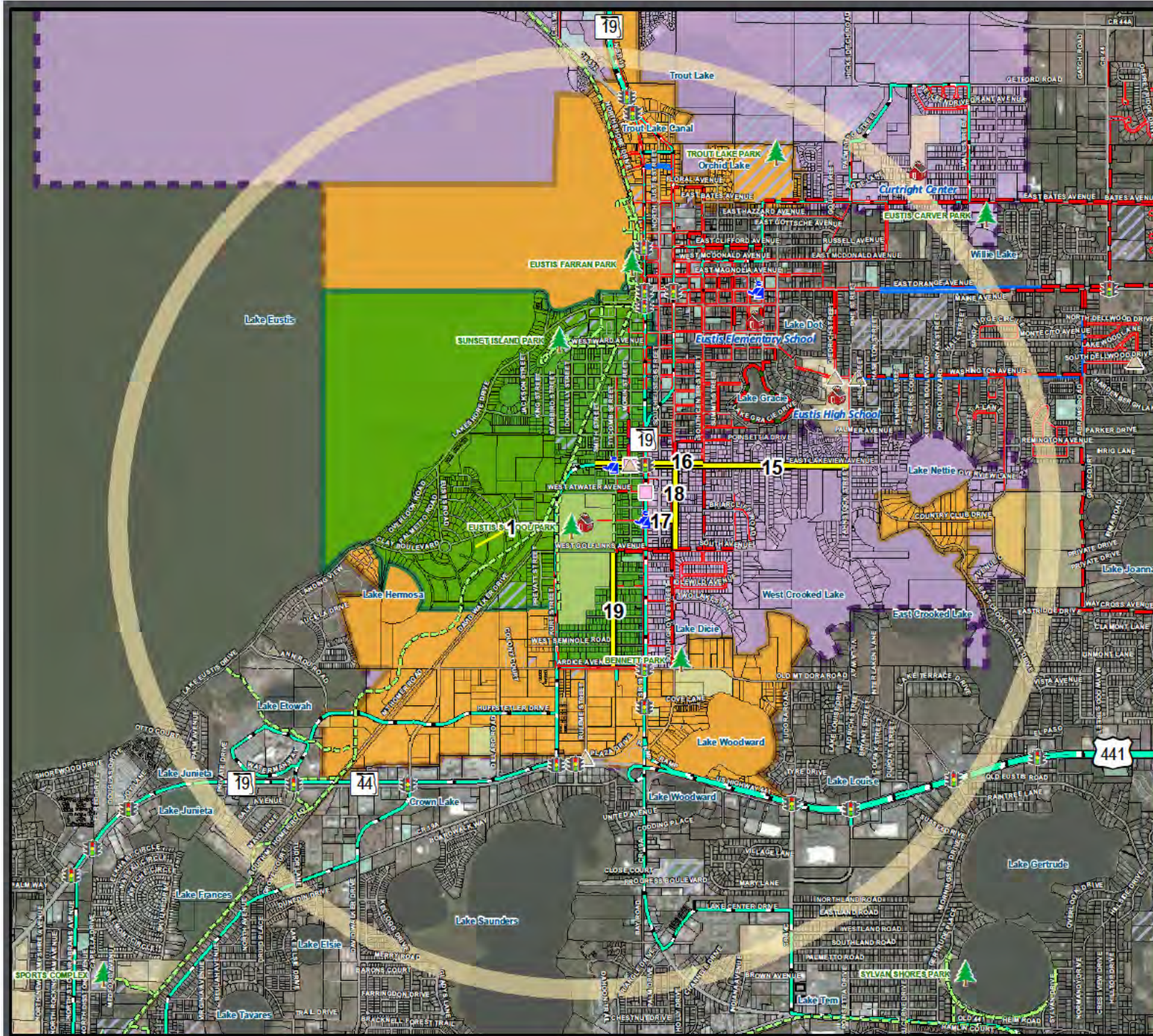
Recommendations:

✓ The City of Eustis should continue to work with area stakeholders to pursue funding to construct this trail.

✓ Provide connections from the trail to the school and include a pedestrian crossing over Kurt Street.



Eustis Heights Elementary School: Transportation Access Master Plan



LEGEND

- SAS Schools Studied
- Library
- Crossing Guard Location
- 2008 - December 2011 Bicycle/Pedestrian Involved Crash Locations During School Pickup & Dropoff Times (6:45-7:30 AM & 3:00-3:30 PM)
 - Bicyclist Involved
 - Pedestrian Involved
- Existing/Planned Projects
 - Existing Sidewalks
 - Existing Trails
 - Planned Sidewalks (Funded)
 - Planned Trails Projects (Lake County 2008 Trails Master Plan)
- SAS Projects Identified
 - SAS Priority Projects (By Project ID#)
 - SAS Recommended Projects - Sidewalks
 - SAS Recommended Projects - Trails
- Road System
 - Major Roads
 - Local Roads
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Map Date: December 2011

Eustis Heights Elementary School

Eustis Heights Elementary School (Recommended Projects)

PROJECT MAP ID#	Project Type	Street Name / Title	Side	Starting Point	Stopping Point	Status	Eustis Hts.
17	Sidewalk Placement	Taylor Ave.	North	S.R 19	S. Grove St.	Priority	PRIORITY #1
18	Sidewalk Placement	Grove Street	East	East Lakeview Ave.	E. Golflinks Ave.	Priority	PRIORITY #2
19	Sidewalk Placement	Titcomb Street	West	Golflinks Ave.	Ardice Ave.	Priority	PRIORITY #3
15	Sidewalk Placement	Lakeview Ave.	South	Fahnstock St.	South St.	Priority	PRIORITY #4
16	Sidewalk Placement	Lakeview Ave.	North	South St.	Center St.	Priority	PRIORITY #5

*Note: Please see full project list for all Eustis Area Schools by clicking [here](#)

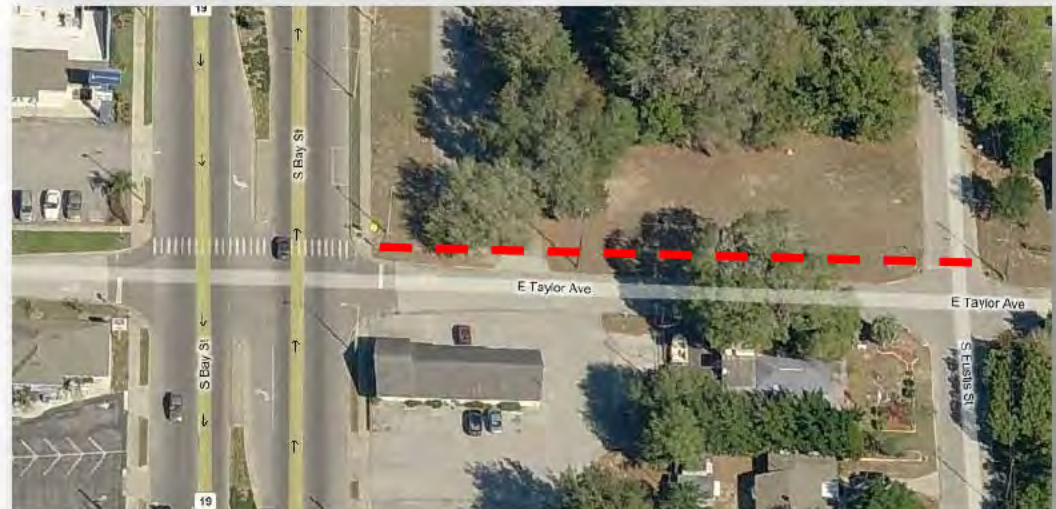
Findings:

- ✓ There is a crossing guard location at S.R. 19 and Taylor Avenue.
- ✓ There are no sidewalks along the north or south sides of Taylor Avenue from S.R. 19 to Grove Street.
- ✓ The right of way may be constrained in this location.

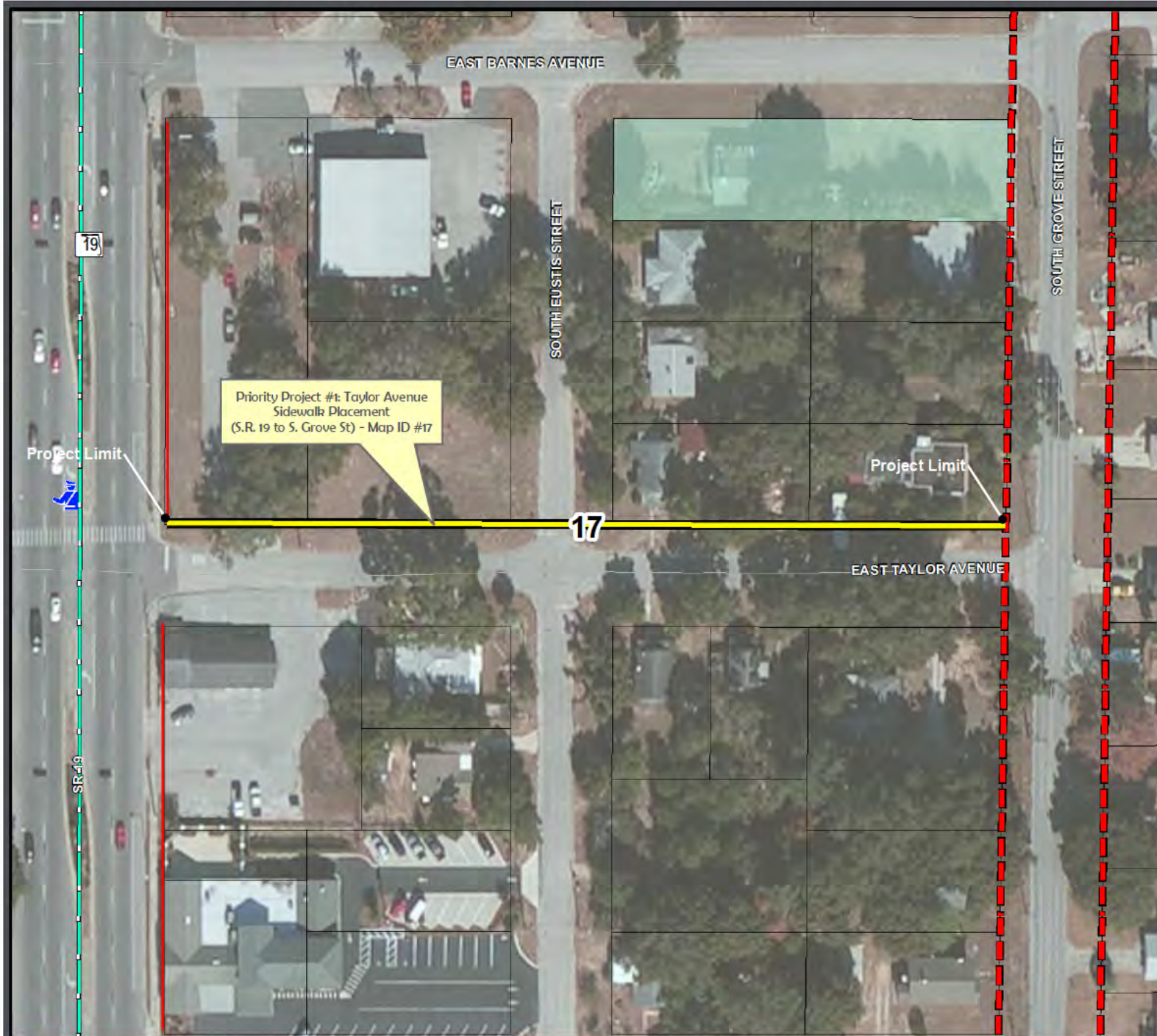


Recommendations:

- ✓ Construct a sidewalk on the north side of Taylor Avenue from S.R. 19 to Grove Street.
- ✓ Review the possibility of creating a three-way stop condition at the intersection of Taylor Avenue and Grove Street with a crosswalk over Grove Street.



Priority Project #1: Taylor Avenue (S.R. 19 to to S. Grove St) - ID #17



LEGEND

- SAS Schools Studied
- Library
- Crossing Guard Location
- Existing/Planned Projects**
- Existing Sidewalks
- Existing Trails
- Planned Sidewalks (Funded)
- Planned Trails Projects (Lake County 2008 Trails Master Plan)
- SAS Projects Identified - Eustis Heights Elementary School**
- Priority Project #1 (Map ID #17)
- SAS Recommended Projects - Sidewalks
- SAS Recommended Projects - Trails
- Road System**
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Source: FDOT, Lake County Schools, Holte Design, Inc, and TranSystems

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Map Date: December 2011

Potential Construction Costs:

LONG RANGE ESTIMATE - TAYLOR AVE (NORTH), EUSTIS FLORIDA

17. FROM S.R. 19 TO S. GROVE ST.

543

Prepared by TranSystems

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	Fiscal Year 2011		Fiscal Year 2012		Fiscal Year 2013		Fiscal Year 2014		Fiscal Year 2015	
				UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$7,000.00	\$7,000.00	\$7,460.00	\$7,460.00	\$8,014.30	\$8,014.30	\$8,575.30	\$8,575.30	\$9,175.57	\$9,175.57
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$4,000.00	\$4,000.00	\$4,280.00	\$4,280.00	\$4,579.80	\$4,579.80	\$4,900.17	\$4,900.17	\$5,243.18	\$5,243.18
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00	\$1,070.00	\$1,070.00	\$1,144.90	\$1,144.90	\$1,225.04	\$1,225.04	\$1,310.80	\$1,310.80
	DESIGN SURVEY	1	LS	\$10,000.00	\$10,000.00	\$10,700.00	\$10,700.00	\$11,449.00	\$11,449.00	\$12,250.43	\$12,250.43	\$13,107.96	\$13,107.96
	SIGNING & PAVEMENT MARKING	1	LS	\$5,000.00	\$5,000.00	\$5,350.00	\$5,350.00	\$5,724.50	\$5,724.50	\$6,125.22	\$6,125.22	\$6,553.98	\$6,553.98
522-1	CONCRETE SIDEWALK, 4" THICK (5' WIDE)	302	SY	\$81.33	\$24,634.55	\$87.02	\$26,251.97	\$93.11	\$28,089.81	\$99.63	\$30,055.98	\$106.81	\$32,159.79
110-1-2	CLEARING & GRUBBING	0.06	AC	\$13,268.00	\$826.97	\$14,196.76	\$894.85	\$15,190.53	\$946.79	\$16,253.87	\$1,013.07	\$17,391.84	\$1,083.98
120-1	REGULAR EXCAVATION	101	CY	\$7.43	\$747.13	\$7.95	\$799.43	\$8.51	\$855.39	\$9.10	\$915.26	\$9.74	\$979.33
120-8	EMBANKMENT	101	CY	\$10.36	\$1,043.77	\$11.11	\$1,116.93	\$11.89	\$1,195.01	\$12.72	\$1,276.88	\$13.81	\$1,388.17
570- 1	SODDING	302	SY	\$5.00	\$1,509.33	\$5.35	\$1,613.92	\$5.72	\$1,726.99	\$6.13	\$1,847.77	\$6.55	\$1,977.12
	SUB- TOTAL				\$55,660.74		\$59,557.00		\$63,725.99		\$68,186.80		\$72,959.88
	CONTINGENCY (15%)				\$8,349.11		\$8,933.55		\$9,558.90		\$10,228.02		\$10,943.98
	DESIGN FEES (10%)				\$6,400.99		\$6,849.05		\$7,328.49		\$7,841.48		\$8,390.39
	CEI FEES (10%)				\$7,041.08		\$7,533.96		\$8,061.34		\$8,625.63		\$9,229.42
	TOTAL ESTIMATED CONSTRUCTION COST (2011):				\$64,009.85		\$68,490.54		\$73,284.98		\$78,414.92		\$83,903.86

ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on 15% of the construction cost
- Estimate includes maintenance of traffic costs (15% of construction costs).
- Regular excavation & embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others
- 7% Yearly Escalation

Findings:

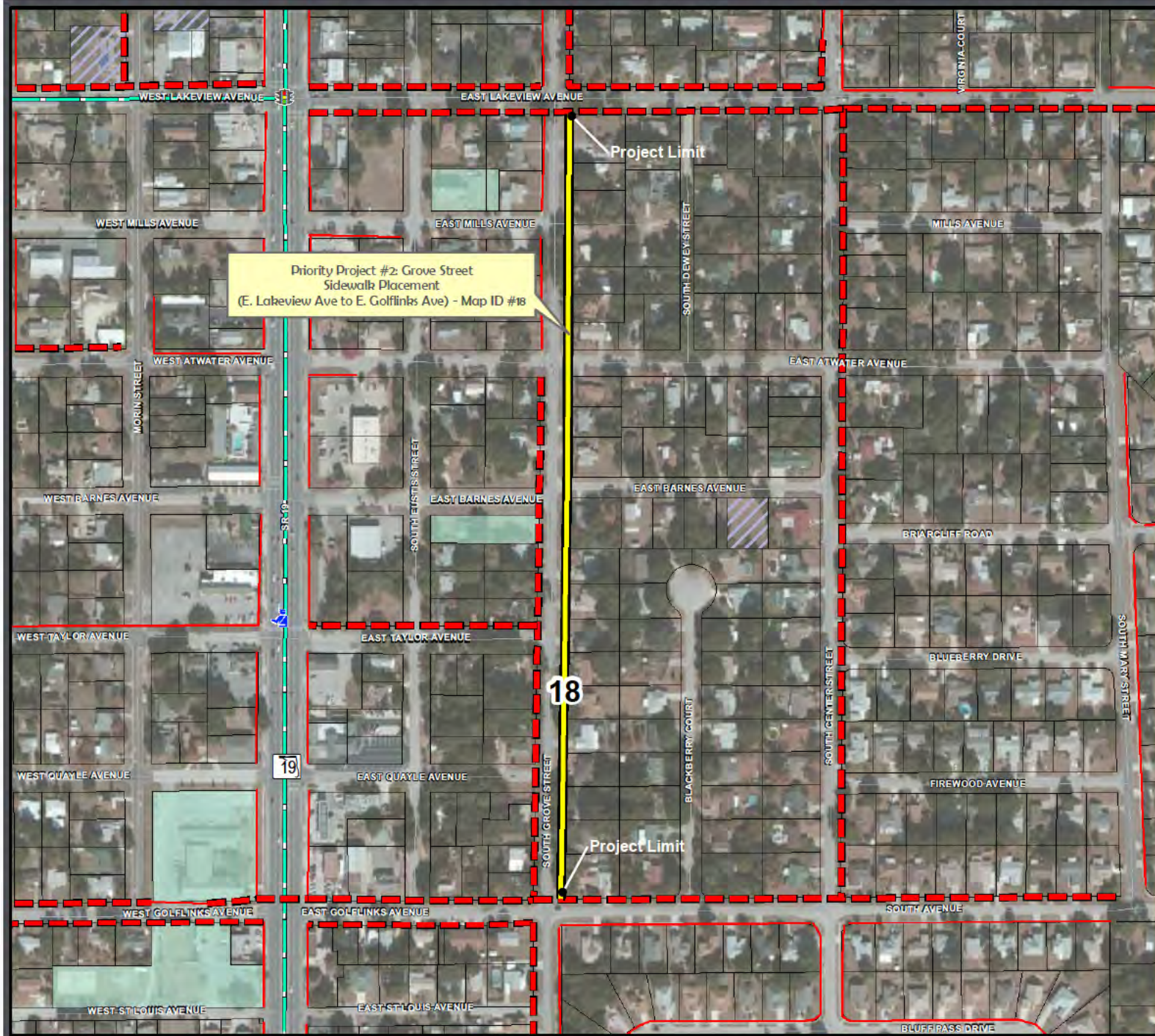
- ✓ There are no sidewalks on the east side of Grove Street to serve students living east of this facility.
- ✓ Bus transportation is provided for some students living east of Grove Street.

Recommendations:

- ✓ Construct a five foot wide (minimum) sidewalk on the east side of Grove Street from Lakeview Avenue to Golflinks Avenue.



Priority Project #2: Grove St (E. Lakeview Ave to E. Golflinks Ave) - ID #18



LEGEND

- SAS Schools Studied
- Library
- Crossing Guard Location
- Existing/Planned Projects**
 - Existing Sidewalks
 - Existing Trails
 - Planned Sidewalks (Funded)
 - Planned Trails Projects (Lake County 2008 Trails Master Plan)
- SAS Projects Identified - Eustis Heights Elementary School**
 - Priority Project #2 (Map ID #18)
 - SAS Recommended Projects - Sidewalks
 - SAS Recommended Projects - Trails
- Road System**
 - Major Roads
 - Local Roads
- Other Layers**
 - Eustis Heights Elementary School Attendance Zone
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 - Traffic Signal

Source: FDOT, Lake County Schools, Holte Design, Inc, and TranSystems

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Map Date: December 2011

Potential Construction Costs:

LONG RANGE ESTIMATE - GROVE ST (EAST), EUSTIS FLORIDA

18 EAST LAKEVIEW AVE TO E GOLFLINKS AVE.

1872

Prepared by TranSystems

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	Fiscal Year 2011		Fiscal Year 2012		Fiscal Year 2013		Fiscal Year 2014		Fiscal Year 2015	
				UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$19,000.00	\$19,000.00	\$20,330.00	\$20,330.00	\$21,753.10	\$21,753.10	\$23,275.82	\$23,275.82	\$24,005.12	\$24,005.12
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$15,000.00	\$15,000.00	\$16,050.00	\$16,050.00	\$17,173.50	\$17,173.50	\$18,375.65	\$18,375.65	\$19,861.94	\$19,861.94
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00	\$1,070.00	\$1,070.00	\$1,144.90	\$1,144.90	\$1,225.04	\$1,225.04	\$1,310.80	\$1,310.80
	DESIGN SURVEY	1	LS	\$10,000.00	\$10,000.00	\$10,700.00	\$10,700.00	\$11,448.00	\$11,448.00	\$12,250.43	\$12,250.43	\$13,107.96	\$13,107.96
	SIGNING & PAVEMENT MARKING	1	LS	\$5,000.00	\$5,000.00	\$5,350.00	\$5,350.00	\$5,724.50	\$5,724.50	\$6,125.22	\$6,125.22	\$6,553.98	\$6,553.98
522-1	CONCRETE SIDEWALK, 4" THICK (5' WIDE)	1,040	SY	\$81.33	\$84,583.20	\$87.02	\$90,504.02	\$93.11	\$96,839.31	\$99.63	\$103,618.06	\$106.61	\$110,871.32
110-1-2	CLEARING & GRUBBING	0.21	AC	\$13,266.00	\$2,800.98	\$14,196.75	\$3,050.54	\$15,190.53	\$3,264.08	\$16,253.87	\$3,492.57	\$17,391.64	\$3,737.05
120-1	REGULAR EXCAVATION	347	CY	\$7.43	\$2,575.73	\$7.95	\$2,766.03	\$8.51	\$2,948.96	\$9.10	\$3,155.38	\$9.74	\$3,376.26
120-6	EMBANKMENT	347	CY	\$10.38	\$3,598.40	\$11.11	\$3,850.29	\$11.88	\$4,119.81	\$12.72	\$4,408.19	\$13.61	\$4,716.77
570- 1	SODDING	1,040	SY	\$5.00	\$5,200.00	\$5.35	\$5,584.00	\$5.72	\$5,953.48	\$6.13	\$6,370.22	\$6.55	\$6,816.14
	SUB-TOTAL				\$148,808.31		\$159,224.89		\$170,370.63		\$182,296.58		\$195,057.34
	CONTINGENCY (15%)				\$22,321.25		\$23,883.73		\$25,555.59		\$27,344.49		\$29,258.60
	DESIGN FEES (10%)				\$17,112.96		\$18,310.86		\$19,592.62		\$20,964.11		\$22,431.59
	CEI FEES (10%)				\$18,824.25		\$20,141.95		\$21,551.89		\$23,060.52		\$24,674.75
	TOTAL ESTIMATED CONSTRUCTION COST (2011) :				\$171,129.55		\$183,108.62		\$195,926.23		\$209,641.06		\$224,315.94

ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
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- Estimate includes maintenance of traffic costs (15% of construction costs).
- Regular excavation & embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others
- 7% Yearly Escalation

Findings:

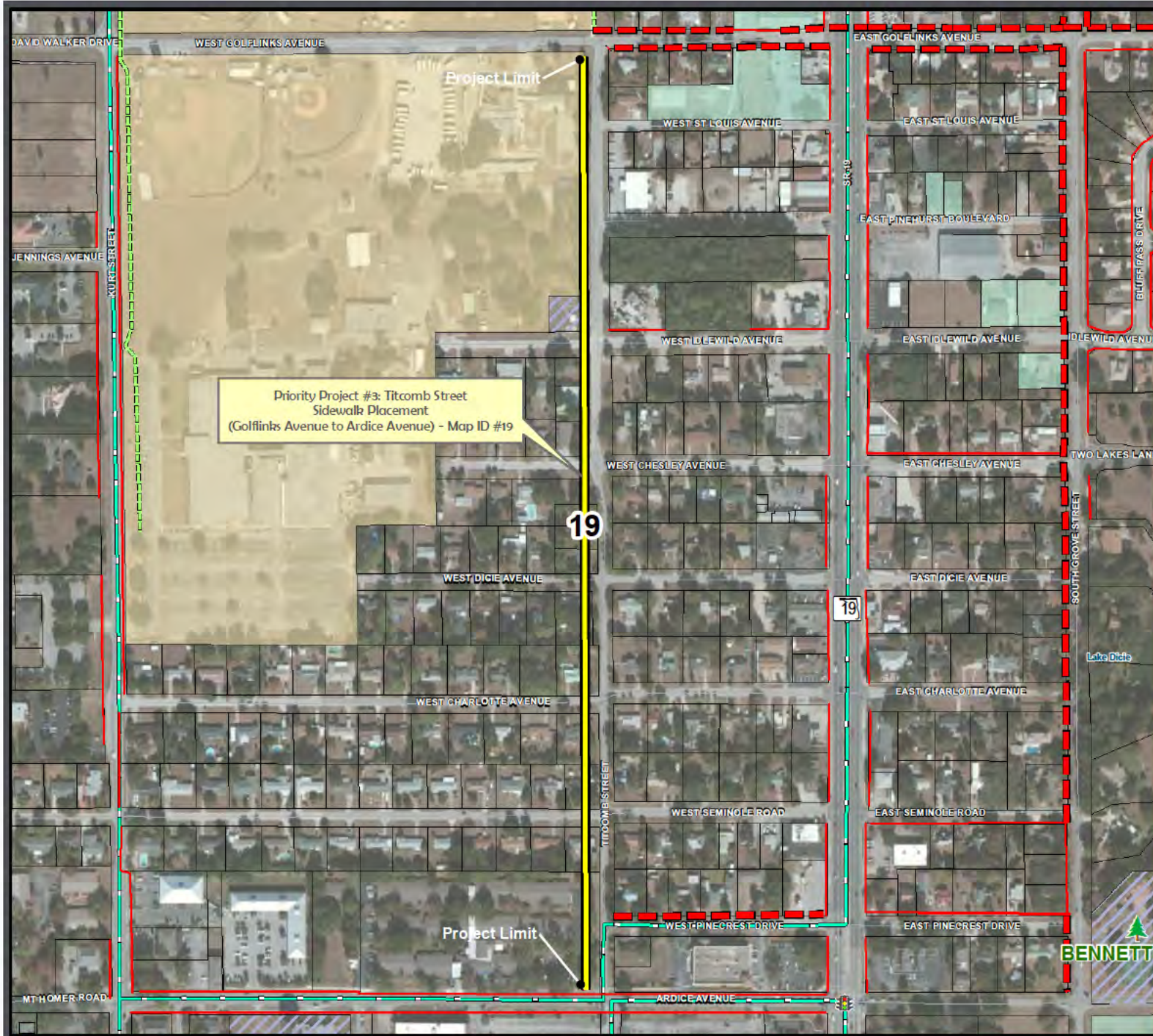
- ✓ There are no sidewalks on either side of Titcomb Street from the multi-use path (that ends at Golflinks Avenue) to Ardice Avenue.

Recommendations:

- ✓ Construct a five (5) foot wide sidewalk on the west side of Titcomb Street from the existing multi-use path to Ardice Avenue.
- ✓ Provide sidewalk connections to transit stops in this area.
- ✓ Consider striping Titcomb Street to show designated bicycle lanes on both sides of the road.



Priority Project #3: Titcomb Street (Golflinks Avenue to Ardice Avenue) - ID #19



LEGEND

- SAS Schools Studied
- Library
- Crossing Guard Location
- Existing/Planned Projects**
 - Existing Sidewalks
 - Existing Trails
 - Planned Sidewalks (Funded)
 - Planned Trails Projects (Lake County 2008 Trails Master Plan)
- SAS Projects Identified - Eustis Heights Elementary School**
 - Priority Project #3 (Map ID #19)
 - SAS Recommended Projects - Sidewalks
 - SAS Recommended Projects - Trails
- Road System**
 - Major Roads
 - Local Roads
- Other Layers**
 - Eustis Heights Elementary School Attendance Zone
 - 2-Mile Buffer of Eustis Heights Elementary School
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 - Railroad
 - LakeXpress Bus Route
 - Traffic Signal

Source: FDOT, Lake County Schools, Hole Design, Inc, and TranSystems

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Map Date: December 2011

Potential Construction Costs:

LONG RANGE ESTIMATE - TITCOMB ST (WEST), EUSTIS FLORIDA

19 FROM GOLFLINKS AVE TO ARDICE AVE

2576

Prepared by TranSystems

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	Fiscal Year 2011		Fiscal Year 2012		Fiscal Year 2013		Fiscal Year 2014		Fiscal Year 2015	
				UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL CCST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$18,000.00	\$18,000.00	\$19,260.00	\$19,260.00	\$20,608.20	\$20,608.20	\$22,050.77	\$22,050.77	\$23,594.33	\$23,594.33
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$13,000.00	\$13,000.00	\$13,910.00	\$13,910.00	\$14,883.70	\$14,883.70	\$15,925.58	\$15,925.58	\$17,040.35	\$17,040.35
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00	\$1,070.00	\$1,070.00	\$1,144.90	\$1,144.90	\$1,225.04	\$1,225.04	\$1,310.80	\$1,310.80
	DESIGN SURVEY	1	LS	\$10,000.00	\$10,000.00	\$10,700.00	\$10,700.00	\$11,449.00	\$11,449.00	\$12,250.43	\$12,250.43	\$13,107.96	\$13,107.96
	SIGNING & PAVEMENT MARKING	1	LS	\$5,000.00	\$5,000.00	\$5,350.00	\$5,350.00	\$5,724.50	\$5,724.50	\$6,125.22	\$6,125.22	\$6,553.98	\$6,553.98
522-1	CONCRETE SIDEWALK, 4" THICK (5' WIDE)	1,431	SY	\$50.00	\$71,555.56	\$53.50	\$76,564.44	\$57.25	\$81,923.96	\$61.25	\$87,656.63	\$65.54	\$93,794.74
110-1-2	CLEARING & GRUBBING	0.30	AC	\$13,268.00	\$3,923.14	\$14,196.76	\$4,197.76	\$15,190.53	\$4,491.60	\$16,253.87	\$4,806.01	\$17,391.84	\$5,142.43
120-1	REGULAR EXCAVATION	477	CY	\$7.43	\$3,544.39	\$7.95	\$3,782.49	\$8.51	\$4,057.97	\$9.10	\$4,342.02	\$9.74	\$4,646.97
120-6	EMBANKMENT	477	CY	\$10.38	\$4,951.64	\$11.11	\$5,298.28	\$11.88	\$5,669.14	\$12.72	\$6,065.98	\$13.81	\$6,490.60
570- 1	SODDING	1,431	SY	\$2.90	\$4,150.22	\$3.10	\$4,440.74	\$3.32	\$4,751.59	\$3.55	\$5,094.20	\$3.80	\$5,440.09
	SUB- TOTAL				\$135,124.94		\$144,583.69		\$154,704.55		\$165,533.87		\$177,121.24
	CONTINGENCY (15%)				\$20,268.74		\$21,687.55		\$23,205.69		\$24,830.08		\$26,568.19
	DESIGN FEES (10%)				\$15,539.37		\$16,627.12		\$17,791.02		\$19,036.39		\$20,368.94
	CEI FEES (10%)				\$17,093.31		\$18,269.84		\$19,570.13		\$20,940.03		\$22,405.84
	TOTAL ESTIMATED CONSTRUCTION COST (2011):				\$155,393.69		\$166,271.24		\$177,910.23		\$190,363.95		\$203,689.42

ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on 15% of the construction cost
- Estimate includes maintenance of traffic costs (15% of construction costs).
- Regular excavation & embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others
- 7% Yearly Escalation

Findings:

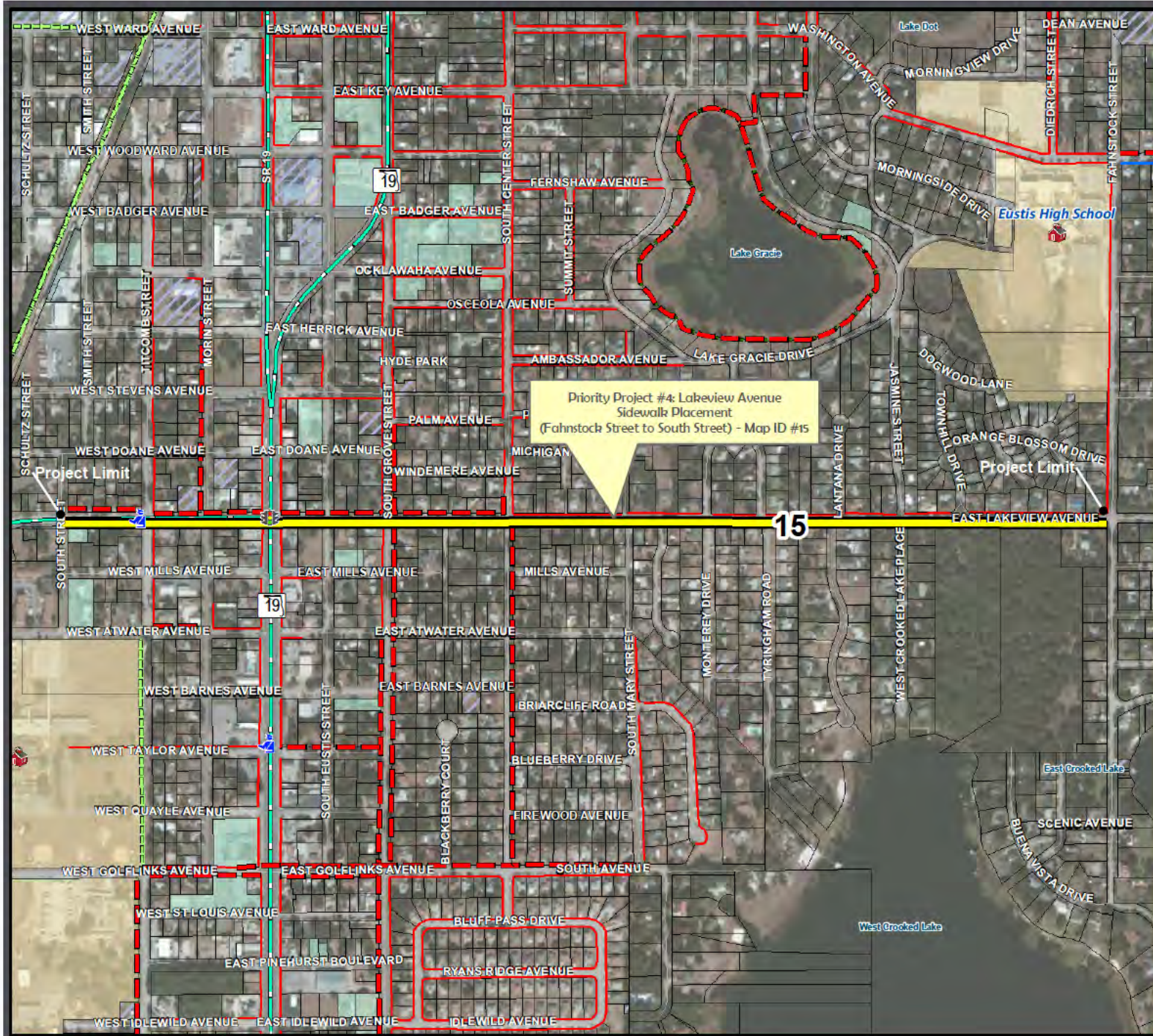
- ✓ There are no sidewalks on the south side of Lakeview Avenue from Fahnstock Street to South Street.
- ✓ There is a two-way stop condition at Lakeview Avenue and Fahnstock Street, with the stop condition on Fahnstock Street.
- ✓ The right of way may be constrained in this location.
- ✓ Tree locations within the right of way create the need for additional right of way.

Recommendations:

- ✓ Construct a five (5) foot wide sidewalk on the south side of Lakeview Avenue from Fahnstock Street to South Street.
- ✓ Review the possibility of creating a four-way stop condition at Fahnstock Street and Lakeview Avenue.



Priority Project #4: Lakeview Ave (Fahnstock Street to South Street) - ID #15



LEGEND

- SAS Schools Studied
- Library
- Crossing Guard Location
- Existing/Planned Projects**
 - Existing Sidewalks
 - Existing Trails
 - Planned Sidewalks (Funded)
 - Planned Trails Projects (Lake County 2008 Trails Master Plan)
- SAS Projects Identified - Eustis Heights Elementary School**
 - Priority Project #4 (Map ID #15)
 - SAS Recommended Projects - Sidewalks
 - SAS Recommended Projects - Trails
- Road System**
 - Major Roads
 - Local Roads
- Other Layers**
 - Eustis Heights Elementary School Attendance Zone
 - 2-Mile Buffer of Eustis Heights Elementary School
 - Parcels
 - School Property - Public
 - Church Owned Property
 - County Owned Property
 - City Owned Property
 - Railroad
 - LakeXpress Bus Route
 - Traffic Signal

Source: FDOT, Lake County Schools, Hole Design, Inc, and TranSystems

This map is intended for planning purposes only



SafeAccess
A SAFE SCHOOLS TRANSPORTATION STUDY

Lake-Sumter MPO
Metropolitan Planning Organization

STATE OF FLORIDA
Department of Transportation

TranSystems

Map Date: December 2011

Priority Project #4

Lakeview Avenue Sidewalk (South Side)

Fahnstock Street to South Street - Project Detail

Potential Construction Costs:

LONG RANGE ESTIMATE - LAKEVIEW AVE (SOUTH SIDE), EUSTIS FLORIDA

15 FROM FAHNSTOCK ST. TO SOUTH ST

5736

Prepared by TransSystems

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	Fiscal Year 2011		Fiscal Year 2012		Fiscal Year 2013		Fiscal Year 2014		Fiscal Year 2015	
				UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$31,000.00	\$31,000.00	\$33,170.00	\$33,170.00	\$36,461.90	\$36,461.90	\$37,976.33	\$37,976.33	\$40,634.68	\$40,634.68
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$25,000.00	\$25,000.00	\$26,750.00	\$26,750.00	\$29,622.50	\$29,622.50	\$30,626.08	\$30,626.08	\$32,766.90	\$32,766.90
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00	\$1,070.00	\$1,070.00	\$1,144.90	\$1,144.90	\$1,226.04	\$1,226.04	\$1,310.80	\$1,310.80
	DESIGN SURVEY	1	LS	\$10,000.00	\$10,000.00	\$10,700.00	\$10,700.00	\$11,449.00	\$11,449.00	\$12,250.43	\$12,250.43	\$13,107.96	\$13,107.96
	SIGNING & PAVEMENT MARKING	1	LS	\$5,000.00	\$5,000.00	\$5,350.00	\$5,350.00	\$5,724.50	\$5,724.50	\$6,125.22	\$6,125.22	\$6,553.98	\$6,553.98
522-1	CONCRETE SIDEWALK, 4" THICK (8' WIDE)	3,187	SY	\$40.00	\$127,486.67	\$42.90	\$136,399.33	\$46.80	\$148,936.59	\$49.00	\$156,152.16	\$52.43	\$167,082.80
110-1-2	CLEARING & GRUBBING	0.66	AC	\$13,266.00	\$8,735.08	\$14,196.76	\$9,347.18	\$15,190.53	\$10,001.48	\$16,253.87	\$10,701.58	\$17,391.84	\$11,450.70
120-1	REGULAR EXCAVATION	1,082	CY	\$7.43	\$7,892.31	\$7.95	\$8,444.77	\$8.51	\$9,035.91	\$9.10	\$9,668.42	\$9.74	\$10,346.21
120-6	EMBANKMENT	1,082	CY	\$10.38	\$11,025.87	\$11.11	\$11,797.68	\$11.88	\$12,823.51	\$12.72	\$13,507.16	\$13.61	\$14,452.86
570- 1	SODDING	3,187	SY	\$3.50	\$11,153.33	\$3.75	\$11,934.07	\$4.01	\$12,769.45	\$4.29	\$13,683.31	\$4.59	\$14,619.74
	SUB- TOTAL				\$238,273.86		\$254,953.03		\$272,799.74		\$291,895.72		\$312,328.42
	CONTINGENCY (15%)				\$35,741.08		\$38,242.95		\$40,919.96		\$43,784.36		\$46,849.26
	DESIGN FEES (10%)				\$27,401.49		\$29,319.60		\$31,371.97		\$33,568.01		\$35,917.77
	CEI FEES (10%)				\$30,141.64		\$32,251.56		\$34,509.17		\$36,924.81		\$39,509.55
	TOTAL ESTIMATED CONSTRUCTION COST (2011) :				\$274,014.94		\$293,195.98		\$313,719.70		\$336,680.98		\$359,177.69

ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on 15% of the construction cost
- Estimate includes maintenance of traffic costs (15% of construction costs).
- Regular excavation & embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others
- 7% Yearly Escalation

Findings:

- ✓ There are no sidewalks along the north side of Lakeview Avenue from Center Street to South Street.
- ✓ There is a crossing guard location at the intersection of Lakeview Avenue and Titcomb Street. Some students cross Lakeview Avenue away from the guard (information from crossing guard, not observed).
- ✓ The right of way (grass shoulder) on the northeast side of the intersection of Lakeview Avenue and S.R. 19 has a retaining wall that may obstruct non-motorist travel.
- ✓ The pedestrian push-button signal on the northeast corner of the intersection of S.R. 19 and Lakeview Avenue may not be accessible for persons with disabilities.
- ✓ Lakeview Avenue is paved to accommodate drainage west of S.R. 19. This wide roadway and the super-elevated curve may increase motorist speeds.



Recommendations:

- ✓ Construct a five (5) foot wide sidewalk along the north side of Lakeview Avenue from Center Street to South Street. The addition of sidewalks and landscaping in this area may help to create a neighborhood feel that would slow motorists and serve the pedestrians in the area.
- ✓ Review the possibility of providing bulb-outs at this location to reduce crosswalk exposure for students and to provide traffic calming measures. This may require drainage modifications.
- ✓ Relocate push buttons for the pedestrian signal at the northeast intersection of Lakeview Avenue and S.R. 19.

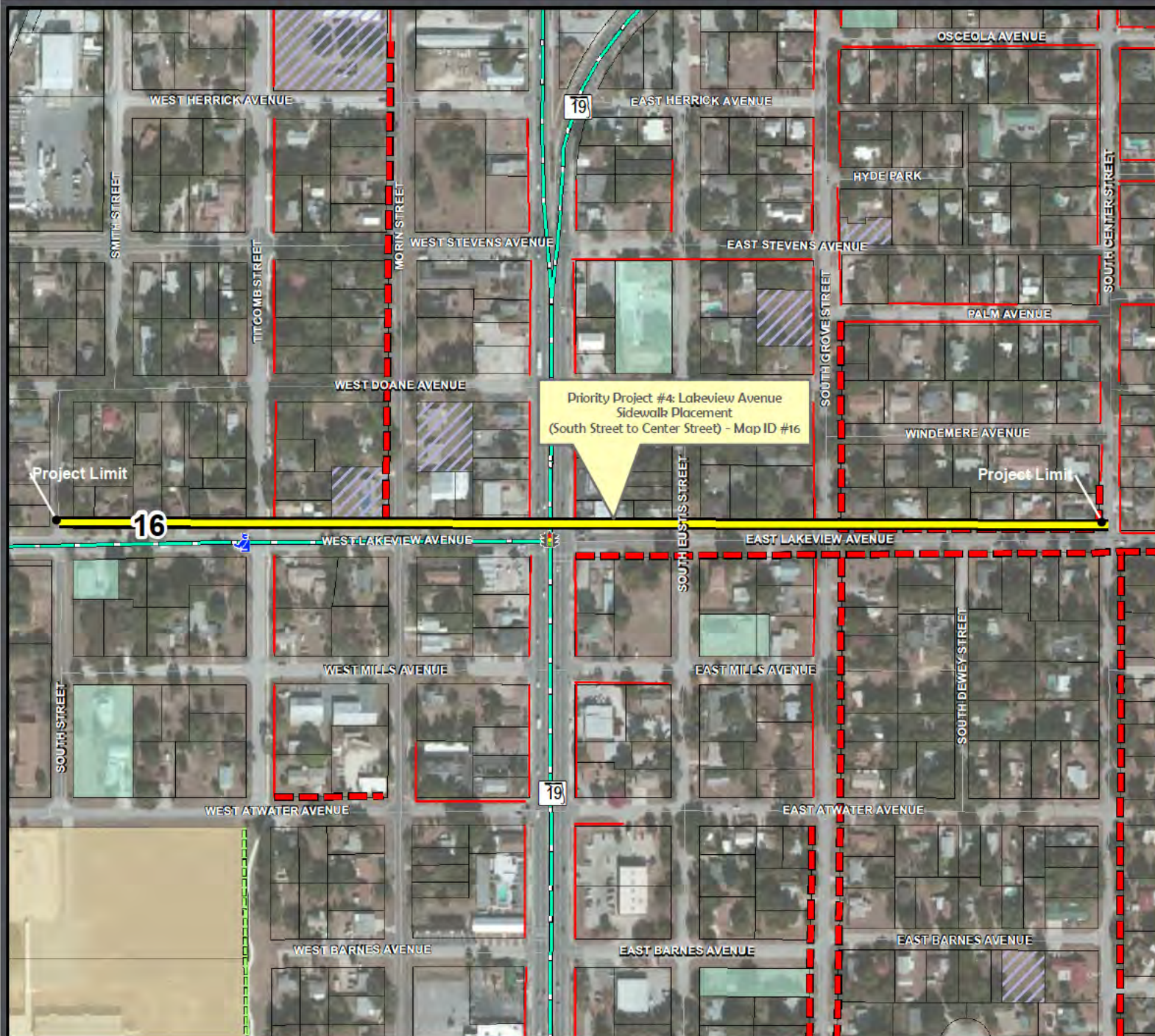


Interim Measures:

- ✓ As a temporary measure, sign and stripe the roadway to reduce the travel lane.
- ✓ Review the possibility of adding advance crossing signage for east bound motorists.
- ✓ Increase speed limit enforcement (20mph) during posted school zone times.



Priority Project #5: Lakeview Ave (South Street to Center Street) - ID #16

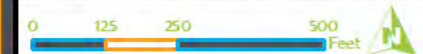


LEGEND

- SAS Schools Studied
- Library
- Crossing Guard Location
- Existing/Planned Projects**
 - Existing Sidewalks
 - Existing Trails
 - Planned Sidewalks (Funded)
 - Planned Trails Projects (Lake County 2008 Trails Master Plan)
- SAS Projects Identified - Eustis Heights Elementary School**
 - Priority Project #5 (Map ID #16)
 - SAS Recommended Projects - Sidewalks
 - SAS Recommended Projects - Trails
- Road System**
 - Major Roads
 - Local Roads
- Other Layers**
 - Eustis Heights Elementary School Attendance Zone
 - 2-Mile Buffer of Eustis Heights Elementary School
 - Parcels
 - School Property - Public
 - Church Owned Property
 - County Owned Property
 - City Owned Property
 - Railroad
 - LakeXpress Bus Route
 - Traffic Signal

Source: FDOT, Lake County Schools, Holte Design, Inc, and TranSystems

This map is intended for planning purposes only



SafeAccess
A SAFE SCHOOLS TRANSPORTATION STUDY



Map Date: December 2011

Potential Construction Costs:

LONG RANGE ESTIMATE - LAKEVIEW AVE (NORTH), EUSTIS FLORIDA

16 LAKE VIEW AVE FROM SOUTH ST TO CENTER ST

2445

Prepared by TransSystems

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	Fiscal Year 2011		Fiscal Year 2012		Fiscal Year 2013		Fiscal Year 2014		Fiscal Year 2015	
				UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$17,000.00	\$17,000.00	\$18,190.00	\$18,190.00	\$19,463.30	\$19,463.30	\$20,825.73	\$20,825.73	\$22,283.53	\$22,283.53
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$13,000.00	\$13,000.00	\$13,910.00	\$13,910.00	\$14,883.70	\$14,883.70	\$15,925.56	\$15,925.56	\$17,040.35	\$17,040.35
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00	\$1,070.00	\$1,070.00	\$1,144.90	\$1,144.90	\$1,225.04	\$1,225.04	\$1,310.80	\$1,310.80
	DESIGN SURVEY	1	LS	\$10,000.00	\$10,000.00	\$10,700.00	\$10,700.00	\$11,449.00	\$11,449.00	\$12,250.43	\$12,250.43	\$13,107.96	\$13,107.96
	SIGNING & PAVEMENT MARKING	1	LS	\$5,000.00	\$5,000.00	\$5,350.00	\$5,350.00	\$5,724.50	\$5,724.50	\$6,125.22	\$6,125.22	\$6,553.98	\$6,553.98
522-1	CONCRETE SIDEWALK, 4" THICK (5' WIDE)	1,358	SY	\$60.00	\$87,916.87	\$63.50	\$72,670.83	\$57.25	\$77,767.79	\$61.25	\$83,200.84	\$65.54	\$89,024.90
110-1-2	CLEARING & GRUBBING	0.28	AC	\$13,268.00	\$3,723.63	\$14,196.76	\$3,984.28	\$15,190.53	\$4,263.18	\$16,253.87	\$4,561.61	\$17,391.64	\$4,880.92
120-1	REGULAR EXCAVATION	453	CY	\$7.43	\$3,364.14	\$7.95	\$3,599.83	\$8.51	\$3,851.80	\$9.10	\$4,121.21	\$9.74	\$4,409.70
120-6	EMBANKMENT	453	CY	\$10.36	\$4,699.83	\$11.11	\$5,026.82	\$11.88	\$5,380.84	\$12.72	\$5,767.50	\$13.61	\$6,160.52
670- 1	SODDING	1,358	SY	\$2.90	\$3,939.17	\$3.10	\$4,214.91	\$3.32	\$4,509.95	\$3.55	\$4,825.65	\$3.80	\$5,163.44
	SUB- TOTAL				\$129,643.44		\$138,718.48		\$148,428.77		\$158,818.78		\$169,936.10
	CONTINGENCY (15%)				\$19,446.52		\$20,807.77		\$22,264.32		\$23,822.82		\$25,490.41
	DESIGN FEES (10%)				\$14,909.00		\$15,952.62		\$17,069.31		\$18,264.16		\$19,542.65
	CEI FEES (10%)				\$16,399.89		\$17,547.89		\$18,776.24		\$20,090.58		\$21,496.92
	TOTAL ESTIMATED CONSTRUCTION COST (2011) :				\$149,089.95		\$159,526.25		\$170,693.08		\$182,641.60		\$195,426.51

ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on 15% of the construction cost
- Estimate includes maintenance of traffic costs (15% of construction costs).
- Regular excavation & embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others
- 7% Yearly Escalation

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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*Promoting Regional
Transportation Partnerships*