

**Volusia County  
MPO**

**November 2008**



# **Forest Lake Elementary School**

## **Bicycle and Pedestrian School Safety Review Study**

### **Phase 3B**



## School Summary

Forest Lake Elementary School is located along the north side of Doyle Road within the City of Deltona. Although the school is centrally located within the designated walk zone, the majority of the students do not have a direct access route to the school.

Of the 715 students attending this school, 356 live within the designated walk zone area. During the 2007/2008 school year approximately 20 of these students walked or rode bicycles to school. According to the school crossing guard supervisor, fewer students were walking or riding their bicycles to and from the school compared to previous years.

At the time of this Study, there was one crossing guard location at Doyle Road and Garfield Road serving Forest Lake Elementary School students. No reported bicycle or pedestrian crashes during estimated school travel times and involving elementary school age children have been reported within the walk zone during the last three years.

A wide sidewalk on the west side of Garfield Road is recommended as the Priority Project for the school.



Figure 3.4.1

## **Forest Lake Elementary School – Summary Sheet**

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**School Address:** 1600 Doyle Road  
Deltona, FL 32725

**School Principal:** David Fisher  
Phone: 386-575-4166  
Email: [dfisher@volusia.k12.fl.us](mailto:dfisher@volusia.k12.fl.us)

**Assistant Principal:** Ramonita Pagan  
Phone: 386-575-4166  
Email: [rpagan@volusia.k12.fl.us](mailto:rpagan@volusia.k12.fl.us)

**Volusia County School District Representative:** Saralee Morrissey, AICP  
Phone: 386-947-8786, ext. 50772  
Email: [smorriss@volusia.k12.fl.us](mailto:smorriss@volusia.k12.fl.us)

**Volusia County Public Works Traffic Engineering:** Jon Cheney, P.E., Director  
Phone: 386-736-5968 ext. 2709  
Email: [jcheney@co.volusia.fl.us](mailto:jcheney@co.volusia.fl.us)

**Crossing Guard Supervisor:** Nancy Strickland  
Phone: 386-860-7030  
Email: [nstrickland@vcso.us](mailto:nstrickland@vcso.us)

**City Representatives:** Tom Burbank, Acting Planning and Development Services Director  
(Previous representative, Becky Mendez is no longer with the City)  
Phone: 386-878-8608  
Email: [tburbank@deltonafl.gov](mailto:tburbank@deltonafl.gov)

Scott McGrath, Principal Planner  
Phone: 386-878-8624  
Email: [smcgrath@deltonafl.gov](mailto:smcgrath@deltonafl.gov)

**Volusia County MPO:** Stephan Harris, Bicycle and Pedestrian Coordinator  
Phone: 386-226-0422 ext. 34  
Email: [scharris@co.volusia.fl.us](mailto:scharris@co.volusia.fl.us)

**Site Visit Observation Dates:** May 29, 2008 (weather: seasonal, partly cloudy)

**Coordination Meeting:** May 29, 2008

**Meeting Attendees:**

- Ramonita Pagan, Assistant Principal
- Nancy Strickland, Crossing Guard Supervisor
- Scott McGrath, Principal Planner
- Stephan Harris, MPO Bicycle and Pedestrian Coordinator
- Meera Shenoy, Hoke Design, Inc.
- Ginger Hoke, Hoke Design, Inc.

**Number of Enrolled Students (2008 data):** 715 (Nine additional classrooms are planned)

**Estimated Number of Students Living in Walk Zone:** 356

**Number of School Buses:** 8

**Number of Aftercare Buses/Vans:** 7

**Estimated Number of Walkers/Bicycle Riders:** 20-25

**Number of Bicycles on Site:** 13 bicycles, 2 scooters

**Number of Bicycle Helmets (stored with bicycle):** 5

Note: Some students carried helmets into the classroom

**Staggered Student Dismissal:** Bus riders released 5 minutes early

**Estimated Number of Students Attending Breakfast:** 205 (starts at 7:30 am)

**Number of Students for School Site Aftercare:** 140

**Teachers Assisting in Arrival and Dismissal Safety:**

Arrival: 9

Dismissal: 13

**Title One School:** No (54.9%)

**Backpack Policy:** none

**Summary of Principal Comments:** No summary

**Crossing Guard Location:**

- Doyle Road and Garfield Road

**Summary of Crossing Guard Supervisor Comments:**

- Number of students walking to school has decreased; most are getting dropped at school by car
- Priority to fill the gap on Garfield Road

**Number of Bicycle and Pedestrian Crash Events within the Existing Walk Zone (elementary age, during estimated school travel times, 2005-2007):** 0

**Planned Road, Sidewalk, or other Improvements:**

- The City of Deltona has an ongoing sidewalk construction plan and budget
- The planned East Central Regional Rail-Trail will be located south of and parallel to Doyle Road and is slated for construction.

**Planned Development in Walk Zone:** Live Oak Subdivision (under construction)

**Number of Students Transported (Designated as Hazardous):** 12

- East and West of Doyle Road between Saxon Boulevard and Twisted Oak

**Number of Students Transported (Designated as Courtesy):** 0 (No students live in

this area at this time)

- No four foot level area along Enterprise-Osteen Road between Garfield Road and Greensprings Road

**Votran Route in Walk Zone:** No

## Findings and Recommendations

**Findings:** The entrance road to Forest Lake Elementary School has a wide sidewalk on the west side of the roadway creating a need for students living east of Forest Lake Elementary School to cross the school-related traffic coming in and out of the access road. School staff has been placed at this location to cross students over the access road.

Visibility of the crosswalk is reduced by the horizontal curve in Doyle Road, the sidewalk layout, traffic congestion and vegetation.

**Recommendations:** Review the possibility of shifting the school crossing area further south along the access road to be placed in front of the gate. This would require the construction of a short section of sidewalk on the east side of the access road to the recommended crosswalk location. The relocation of this crosswalk would increase motorist visibility of students. The existing crosswalk should remain for non-school related sidewalk traffic but should be shifted toward Doyle Road to align with the sidewalk.

Additionally, the vegetation near this intersection should be pruned to clear the understory to increase sight distance.



*The turn lane into the school is located along a curve in Doyle Road*



*The school crosswalk is difficult for entering motorists to see*



*Access to the school site also provides access to Pinelyn Road*



*School staff waits to cross a student and adult at the school entrance along Doyle Road*

**Finding:** The school flashing light and speed limit sign are located very close to the school entrance on Doyle Road.

**Recommendation:** Review the possibility of relocating the flashing school signal further to the east to provide motorists with increased advanced warning.



*The reduced speed flashing light is located near the school entrance*

**Findings:** There is a crossing guard at the intersection of Doyle Road and Garfield Road. However, some students use the existing sidewalk on the east side of Garfield Road and then cross without a guard at the curve in the road to reach the west side of the road.

**Recommendations:** Construct a sidewalk along the west side of Garfield Road from the intersection of Doyle Road to the planned East Central Regional Rail-Trail. The section of sidewalk from Doyle Road to Broken Pine Road is recommended as a Priority Project and is further described at the end of this chapter.



*Students stay on the east side sidewalk on Garfield Road and cross at the curve in the road*

**Finding:** Students living east of Saxon Boulevard may cross that street at various locations to reach the existing sidewalk along the west side.

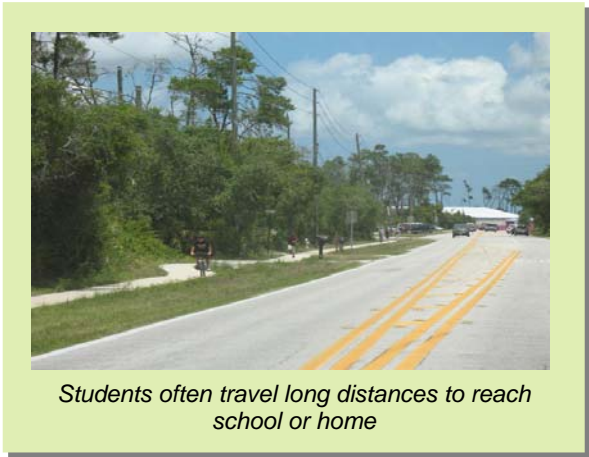
**Recommendation:** Construct a sidewalk along the east side of Saxon Boulevard from Normandy Boulevard to Tanner Court. This sidewalk will provide a facility to lead students to the intersection of Doyle Road and Saxon Boulevard where they can cross Saxon Boulevard using the pedestrian signal. Right of way availability needs to be verified.



*Saxon Boulevard looking north from Kingway Drive*

**Finding:** The majority of students living within the walk zone live north and west of the school property. There is no direct route for these students to travel to and from school, making their commute longer than necessary.

**Recommendations:** Research the possibility of acquiring an easement and constructing a pedestrian connection from Anderson Street to the school property. A more direct route would likely increase the number of walkers and bicycle riders for this school. If development occurs north of the school site, a connection should be required.



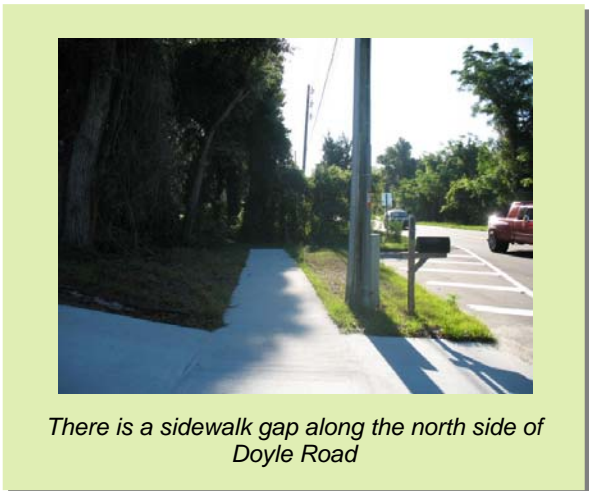
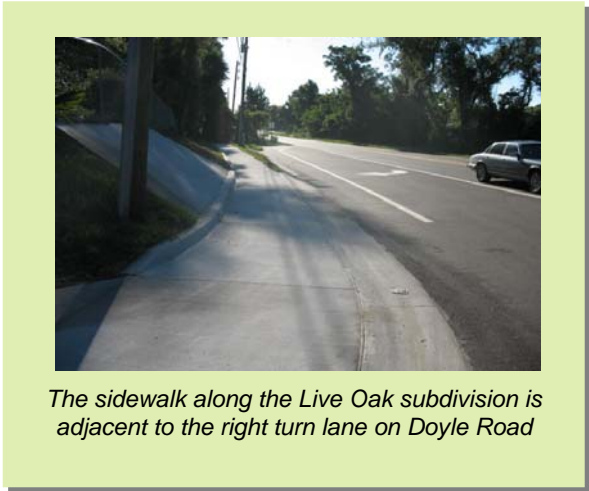
Bicycles provide more efficient transportation. Providing students in need with bicycles may encourage them to ride to and from school.

Providing students in need with bicycles

**Findings:** The sidewalk along Doyle Road constructed along the frontage of the Live Oak Subdivision is narrow and flush to the road. The construction of the turn lane used the available right of way. A sloped retaining wall was constructed along the back of the sidewalk.

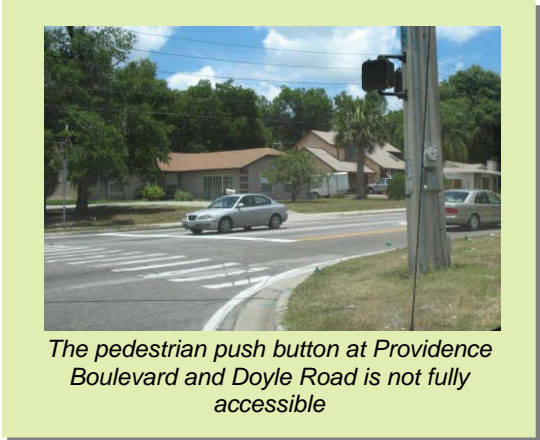
Additionally, a gap in the sidewalk on Doyle needs to be completed. According to a crossing guard supervisor, a crossing guard may be reinstated at Champlain Drive if students walk from this subdivision.

**Recommendations:** When completing the sidewalk gap along Doyle Road, reconstruct the area of sidewalk to separate it from the roadway. A retaining wall may be required.



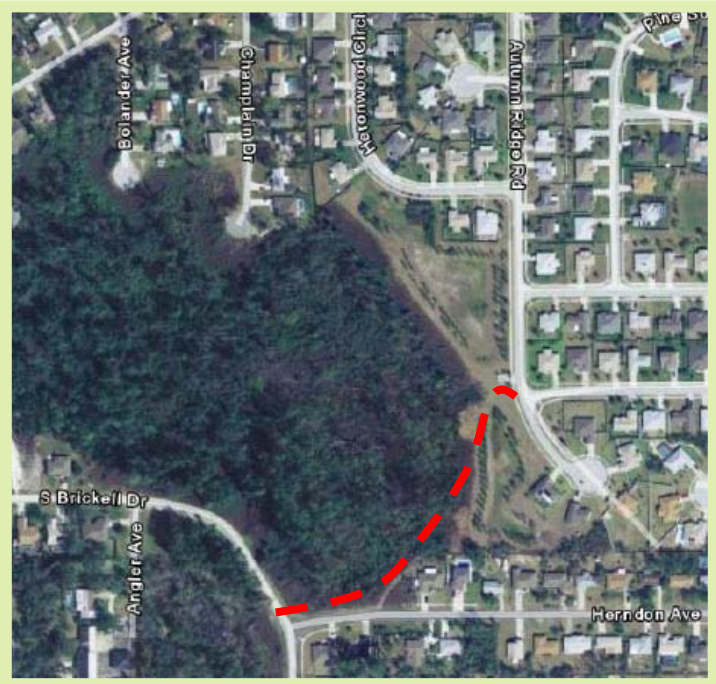
**Finding:** The pedestrian feature at the corner of Providence Boulevard and Doyle Road is not fully accessible.

**Recommendation:** Connect the crosswalk to a curb ramp and sidewalk to provide full access to the pedestrian signal control.



**Finding:** Students living south of Herndon Avenue or along South Brickell Drive currently would need to walk/bicycle long distances to reach school. The lack of a shortcut may reduce the number of students choosing to walk or ride to and from school.

**Recommendation:** City and County owned property should be reviewed to see if a connection can be constructed to link Autumn Ridge to South Brickell Drive, providing a shortcut for students living south of Cedar Pine Drive.



## Master Plan

The following Bicycle and Pedestrian Master Plan specifies a network of sidewalks and trails that, if implemented, will greatly increase the convenience and safety of travel for pedestrians and bicyclists. A 24"x36" fold-out map is included as a deliverable with this Study.

The Bicycle and Pedestrian Master Plan includes the following information:

### Existing Conditions:

- Existing Walk Zone area from School District GIS (shaded tan)
- Courtesy Transportation Zone from School District, if applicable (shaded blue)
- Hazardous Transportation Zone from School District, if applicable (shaded yellow)
- Student Home Locations from School District (dark blue dot)
- Existing Trails from County GIS and field review (solid green line)
- Existing Wide Sidewalk 6-8' from field review (solid blue line)
- Existing Sidewalks 3-5' from field review (solid red line)
- Existing Crossing Guard Locations from County GIS and field observations (green cross for existing to remain and yellow cross for existing to be closed)
- Bicycle or Pedestrian Crash Event Locations from 2005-2007 from County GIS data, during estimated school travel times and involving an elementary age bicyclist or pedestrian (pink star).
- Existing Votran Routes and stops from Volusia County MPO (yellow lines along roadway centerline with yellow squares at bus stops).

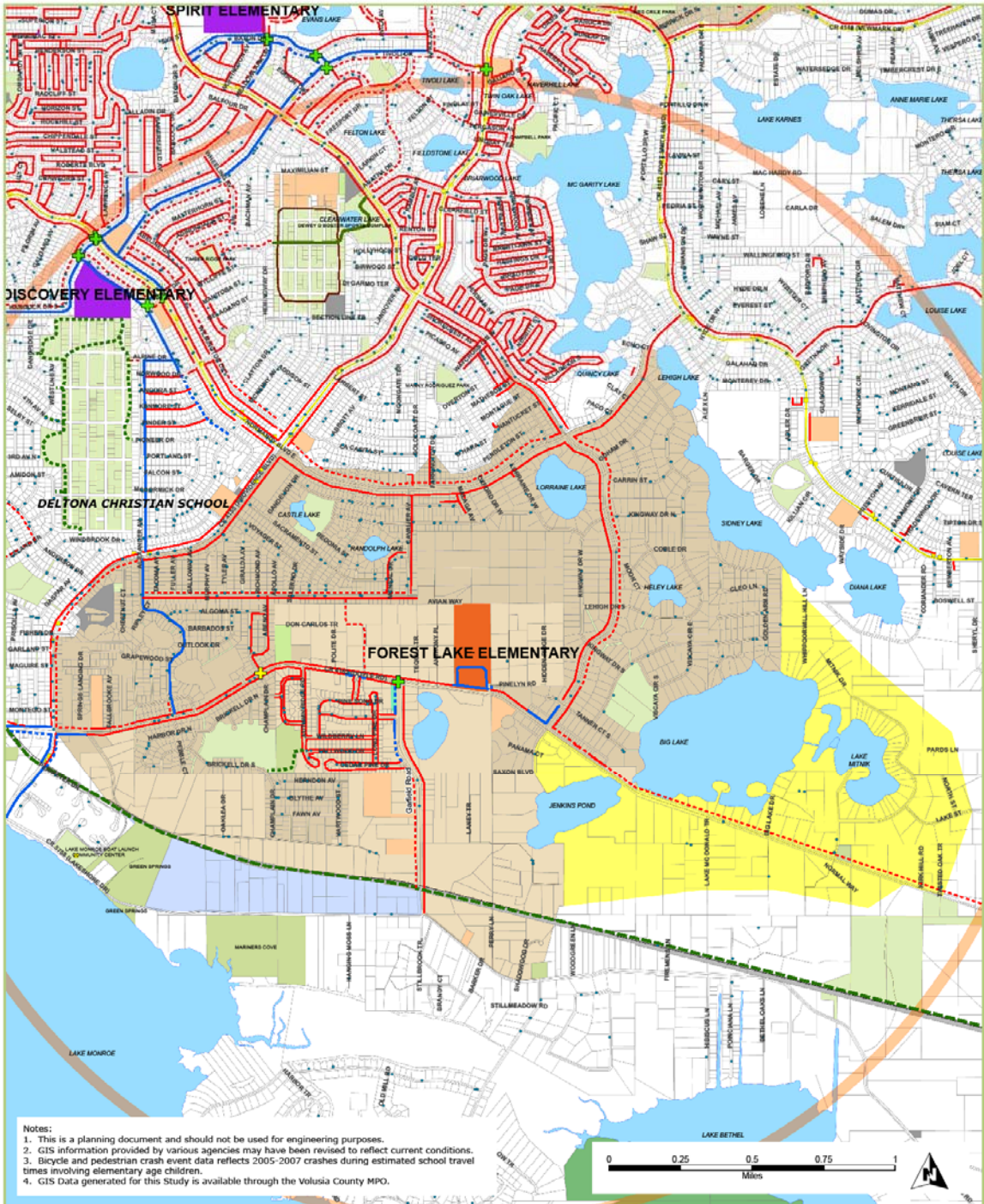
### Planned Conditions:

- Planned trail (long dashed dark green line)
- Planned wide sidewalk (long dashed blue line)
- Planned sidewalk (long dashed red line)

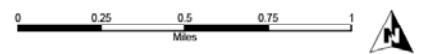
### Recommendations of this Study:

- Proposed Trails (dashed dark green line)
- Proposed Sidewalks 6-8' wide (dashed blue line)
- Proposed Sidewalks 5' (dashed red line)

This Master Plan and supplemental information supplied within the Implementation Report are meant as a guideline for sidewalk and trail planning. The Master Plan is not an engineering document.



Notes:  
 1. This is a planning document and should not be used for engineering purposes.  
 2. GIS information provided by various agencies may have been revised to reflect current conditions.  
 3. Bicycle and pedestrian crash event data reflects 2005-2007 crashes during estimated school travel times involving elementary age children.  
 4. GIS Data generated for this Study is available through the Volusia County MPO.



<p><b>Trails/Sidewalks</b></p> <ul style="list-style-type: none"> <li>Existing Sidewalk</li> <li>Planned Sidewalk</li> <li>Proposed Sidewalk</li> <li>Existing Wide Sidewalk</li> <li>Planned Wide Sidewalk</li> <li>Proposed Wide Sidewalk</li> <li>Existing Trail</li> <li>Planned Trail</li> <li>Proposed Trail</li> <li>Existing Unpaved Trail</li> </ul>	<p><b>Location Information</b></p> <ul style="list-style-type: none"> <li>Student Home Location</li> <li>Crossing Guard Location</li> <li>Recently Closed Crossing Guard Location</li> <li>Existing Transit Stop</li> <li>Existing Transit Route</li> </ul> <p><b>Recommended Priority Projects</b></p> <ul style="list-style-type: none"> <li>Garfield Road Sidewalk</li> </ul>	<p><b>Walk Zone Information</b></p> <ul style="list-style-type: none"> <li>School Walk Zone</li> <li>Transported - Hazardous</li> <li>Transported - Courtesy</li> <li>2 - Mile Radius</li> </ul>	<p><b>Property Identification</b></p> <ul style="list-style-type: none"> <li>School Studied</li> <li>School Property - Public</li> <li>School Property - Private</li> <li>Utility Owned Property</li> <li>Church Owned Property</li> <li>Publicly Owned Property</li> <li>Park/ Conservation/ Golf</li> <li>City Jurisdiction</li> </ul>
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<p>Volusia County MPO          Transportation Planning          www.volusiacountympo.com</p>	<p><b>Forest Lake Elementary School</b>  <b>Bicycle and Pedestrian Master Plan</b>  <b>Deltona, Florida</b></p>	<p>FUNDING PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION</p> <p>November 2008</p>
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## Recommended Priority Projects

### Garfield Road Sidewalk

**Project Location:** Along the west side of Garfield Road from Doyle Road to Broken Pine Road. A short section of wide sidewalk exists north and south of Broken Pine Road. If possible, extend the sidewalk to the planned East Central Regional Rail-Trail.

**Project Description:** 8' wide sidewalk

**Maintaining Agency:** Volusia County

**Potential Constraints:** Right of way needs to be verified.

**Potential Opportunities:** Increased connectivity to the future trail.

**Findings:** There is a crossing guard at the intersection of Doyle Road and Garfield Road. However, some students use the existing sidewalk on the east side of Garfield Road and then cross without a guard at the curve in the road to reach the west side of the road. The sidewalk along one side of the road encourages students to use the existing sidewalk and cross away from the crossing guard.

**Recommendations:** Construct a sidewalk along the west side of Garfield Road from the intersection of Doyle Road to the planned East Central Regional Rail-Trail.

**Estimated Project Cost (not including right of way costs):** \$66,700



*The sidewalk along the west side of Garfield Road does not connect to Doyle Road*

*Note: The Priority Project is highlighted on the corresponding Bicycle and Pedestrian Master Plan*