Osteen, FL

# Volusia County MPO

November 2008



# Osteen Elementary School Bicycle and Pedestrian School Safety Review Study Phase 3B







# **School Summary**

Osteen Elementary School is located within the City of Deltona in the Osteen area. 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 750 students attending this school, 204 live within the designated walk zone area. During the 2007/2008 school year approximately 35 of these students walked or rode bicycles to school.

The Osteen area is primarily rural and the attendance zone for Osteen Elementary School includes areas where bus transportation is provided due to designated hazardous conditions. The majority of students walking or riding to and from school use the wide sidewalk along the east side of Courtland Boulevard as their primary travel route.

At the time of this Study, there were two crossing guard locations serving Osteen Elementary School students. The crossing guard location at Courtland Boulevard and Highland Drive closed prior to the 2008/2009 school year. Students living west of Courtland Boulevard who crossed with the guard at Highland Drive would benefit from a sidewalk along the west side of Courtland Boulevard to the crossing guard location at Courtland Boulevard and Doyle Road. Although less critical, a sidewalk should be constructed along the west side of Courtland Boulevard from Doyle Road south to the planned East Central Regional Rail-Trail. The Courtland Boulevard sidewalk is recommended as the Priority Project for this school.

No 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.



Figure 3.5.1

# Osteen Elementary School - Summary Sheet

**School Address:** 500 Doyle Road

Osteen, FL 32764

School Principal: Ms. Leslie Frazee

Phone: 407-688-9555 or 386-575-4255

Email: <a href="mailto:llfrazee@volusia.k12.fl.us">llfrazee@volusia.k12.fl.us</a>

**Volusia County School** 

**District Representative:** Saralee Morrissey, AICP

Phone: 386-947-8786, ext. 50772 Email: <a href="mailto:smorriss@volusia.k12.fl.us">smorriss@volusia.k12.fl.us</a>

**Volusia County Public Works** 

**Traffic Engineering:** Jon Cheney, P.E., Director

Phone: 386-736-5968 ext. 2709 Email: jcheney@co.volusia.fl.us

Crossing Guard Supervisor: Nancy Strickland

Phone: 386-860-7030 Email: <u>nstrickland@vcso.us</u>

City Representative: Tom Burbank, Acting Planning and Development

Services Director Phone: 386-878-8608

Email: tburbank@deltonafl.gov

(Previous representative, Becky Mendez, is no longer

with the City)

Scott McGrath, Principal Planner

Phone: 386-878-8624

Email: <a href="mailto:smcgrath@deltonafl.gov">smcgrath@deltonafl.gov</a>

**Volusia County MPO:** Stephan Harris, Bicycle and Pedestrian Coordinator

Phone: 386-226-0422 ext. 34 Email: <a href="mailto:scharris@co.volusia.fl.us">scharris@co.volusia.fl.us</a>

Site Visit Observation Date: April 23, 2008 (weather: clear, seasonal)

### **Meeting Attendees:**

Leslie Frazee, School Principal

- Nancy Strickland, Crossing Guard Supervisor
- Stephan Harris, MPO Bicycle and Pedestrian Coordinator
- Ginger Hoke, Hoke Design, Inc.

Number of Enrolled Students (2008 data): 750

Estimated Number of Students Living in Walk Zone: 204

Number of School Buses: 6

Number of Aftercare Buses/Vans: 6

Estimated Number of Walkers/Bicycle Riders: 30-40

Number of Bicycles on Site: 19

Number of Bicycle Helmets (stored with bicycle): 7

Staggered Student Dismissal: Yes (2:00 pm for walkers, bicyclists and vans, 2:05

for bus riders and car riders)

Estimated Number of Students Attending Breakfast: 200 (starts at 7:30)

Number of Students for School Site Aftercare: 120

Teachers Assisting in Arrival and Dismissal Safety:

Arrival: 8 Dismissal: 8

Title One School: No (47.23%)

Backpack Policy: No wheeled backpacks, some teachers may require clear backpacks

# **Summary of Principal Comments:**

- Students cross the eastern entrance driveway with no assistance (traffic control)
- Parents park along the north side of Doyle Road, often blocking the sidewalk
- The location of the flashing signal and the school pavement sign in relation to the new school site may be misleading to motorists
- Students bypass the guard and go through private property
- Westbound Doyle Road trail users have complained about conflicts with vehicular traffic entering and exiting the student drop-off and pick-up areas

# **Crossing Guard Locations:**

- Doyle Road and Courtland Boulevard (2 guards reduced to 1 for 08/09)
- Courtland Boulevard at Highland Drive (closing for the 08/09 school year)

# **Summary of Crossing Guard Supervisor Comments:**

- Students using a short-cut through the wooded area (private property) have run into homeless people and angry property owners
- School speed zone should be reviewed to see if it should be revised

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:

- S.R. 415 Phase 3 construction documents are complete, however recent budget cuts have resulted in elimination of funding for this program
- 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:** Residential development adjacent to the school site is on hold

# Number of Students Transported (Designated as Hazardous): 53

East and west S.R. 415 from Eastside Lane to Longwood Drive

Votran Route in Walk Zone: No

# **Findings and Recommendations**

**Finding:** The sidewalk on the north side of the parking area provides a safe walking area for sidewalk users to walk to designated access points.

**Recommendation:** This type of circulation design improves pedestrian safety and should be included in future school designs.



The sidewalk along the parking area encourages crossing at designated locations

**Finding:** Pedestrian access routes from the parking areas to the school buildings are not consistently barrier-free.

**Recommendation:** Schools should be designed to include barrier-free access for people using wheelchairs, bicycles and strollers. Although the school may meet minimum standards for ADA, the cost would be minimal to provide curb ramps at all desired pedestrian access points for planned schools.



Not all sidewalks have curb ramps on both sides of the crosswalk

**Finding:** The fenced bicycle parking area was not locked during the day.

**Recommendation:** Consistently lock the gate to the bicycle parking area while school is in session.



The gate to the bicycle rack area was unlocked

**Findings:** Approximately 5 students currently live south of Doyle Road near the school site who, if walking or bicycling to school, would walk along the south side of Doyle Road where there are no sidewalks. It is unlikely these students travel 1.4 additional miles to cross Doyle Road at the designated crossing at Courtland Boulevard or to the intersection of S.R. 415. There is a reduced speed zone (20mph) in front of the school but there is no crosswalk over Doyle Road.



In a related issue, the Principal has received complaints concerning pedestrian and bicycle safety from west bound trail users. These people must cross in front of traffic turning in and out of the student drop-off/pick-up area to reach the sidewalk located along the west side of the entrance drive.

Recommendations: Future plans should include a sidewalk along the south side of Doyle Road to collect students and lead them to a single crossing point connecting to the wide sidewalk/trail along school property. The need for a crossing guard should be reviewed. If no students cross Doyle Road, the use of the reduced speed



The sidewalk connecting Doyle Road to the school building is located to the west of the entrance

zone should also be reviewed. If residential development occurs south of Doyle Road near the school, the City of Deltona should consider requiring the developer to provide crosswalk engineering and implementation.

As an interim measure, if students are walking or bicycling to and from school and need to cross the student drop-off /pick-up parking entrance along Doyle Road, the School District should review the need for school staff to be posted at this entrance.

**Finding:** Fewer than half of the bicycle riders wore helmets.

**Recommendation:** Continue safety education efforts at assembly and randomly provide incentives for those wearing helmets.



Few bicyclists wear helmets

**Finding:** Some motorists park along Doyle Road to avoid the student pick-up line. This practice may conflict with sidewalk users or add to general traffic congestion/confusion.

**Recommendation:** The County should review the possibility of adding "no stopping or parking" signage along Doyle Road near the school.



Motorists park along the right of way on Doyle Road to avoid the car line

**Finding:** The abandoned access drives to the previous Osteen Elementary school location create an uneven surface for trail users along the north side of Doyle Road.

**Recommendations:** Although this is a minor issue, the driveway access points should be removed and repaved to create a level trail surface during future maintenance.

As an interim measure, trail maintenance staff may wish to mark the sides of the raised areas with yellow paint to increase visibility of grade changes.



The existing trail still contains access drives to the previous school site

**Finding:** On the observation day for this school, students using the trail removed loose sections of asphalt from the edges of the trail and threw them to see who could throw the farthest. Sections of asphalt remaining along the trail could pose a safety hazard for other trail users. Additionally, the edges of the trail were further damaged by this vandalism.

Recommendations: Consider patching trail edges as an interim measure. If possible, construct a defined trail edge and increase

Loose pieces of asphalt were thrown by students using the trail along Doyle Road

frequency of edging to prevent weed encroachment.

The county sheriff's office may wish to increase surveillance of this section of the trail on Doyle Road between Osteen Elementary School and Courtland Boulevard shortly after school dismissal. Coordination with the crossing guards at Doyle Road and Courtland Boulevard is recommended.

**Finding:** The crossing guard stated that the students have been taking a shortcut through private property. On one occasion, they notified her of a property owner chasing them to try to scare them. Although she has requested that students do not take this shortcut, some may still do so.

**Recommendations:** The guards may wish to randomly distribute incentives, such as coupons for "slurpees", to encourage students to use the trail and cross with the guards.

A short cut though private property is sometimes used by students

If the area north and west of the school

is developed, consider requiring developers to provide a connection to the rear of the Osteen Elementary School site. Plans for single family townhomes are currently on hold. The Volusia County School District is in favor of rear access to the school and is working with the City of Deltona.

Findings: Students living west of Courtland Boulevard cross that road with а crossina guard at the intersection of Highland Drive. This crossing guard location allows students to use the wide sidewalk along the east side of Courtland Boulevard. There is no sidewalk along the west side of Courtland Boulevard. This crossing guard location will be closed for the 2008/2009 school year.

**Recommendations:** The construction of a sidewalk along the west side of Courtland Boulevard from the intersection of Highland Drive to the intersection of Doyle Road is



The turn lane for a shopping center reduced available right of way for the sidewalk

recommended to encourage students to cross Courtland Boulevard with the guard at Doyle Road.

The construction of this sidewalk may be difficult due to the limited right of way along the turn lane into the old Winn Dixie Shopping Center. This proposed sidewalk is described in more detail as a Recommended Priority Project at the end of the chapter.

Findings: The nursery business adjacent to Osteen Elementary School has a sidewalk area that is used for pull-in parking directly from Doyle Road. Sidewalk users will likely choose to walk/ride bicycles behind parked vehicles and may increase their risk of vehicular conflict.

Recommendations: The City should consider working with the nursery to create a designated walk area in front of the parking spaces to separate the sidewalk from the parking area. The use of wheel stops is not recommended due to the potential for trip hazards. Either bollards or fencing would be preferred.

**Findings:** There is no crosswalk across Doyle Road where it intersects with S.R. 415. This area is still within the walk zone, although no students appear to cross this intersection.

Students living east of S.R. 415 are currently provided bus transportation due to hazardous conditions. The



Vehicles park on top of the wide concrete sidewalk along the nursery frontage along Doyle Road



A reduced speed zone is posted along Doyle Road near Osteen Elementary School

State recently cancelled plans to widen S.R. 415. In the future, if this road is widened, plans will include bicycle lanes and sidewalks on both sides within the walk zone.

Additionally, the East Central Regional Rail-Trail is planned south and parallel to Doyle Road.

**Recommendations:** The future widening of S.R. 415 and trail construction present an opportunity for coordination between the County and the State of Florida to further improve bicycle and pedestrian safety in this area.

Future plans for improvements of the Doyle Road and S.R. 415 intersection are recommended to include a pedestrian signalized crossing on both the north and south sides of Doyle Road S.R. 415.



the north and south sides of Doyle Road. This will also benefit future trail users who cross

# 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 form 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, if applicable (pink star).
- Existing Votran Routes and stops from Volusia County MPO (yellow lines along roadway centerline with yellow squares at bus stops).

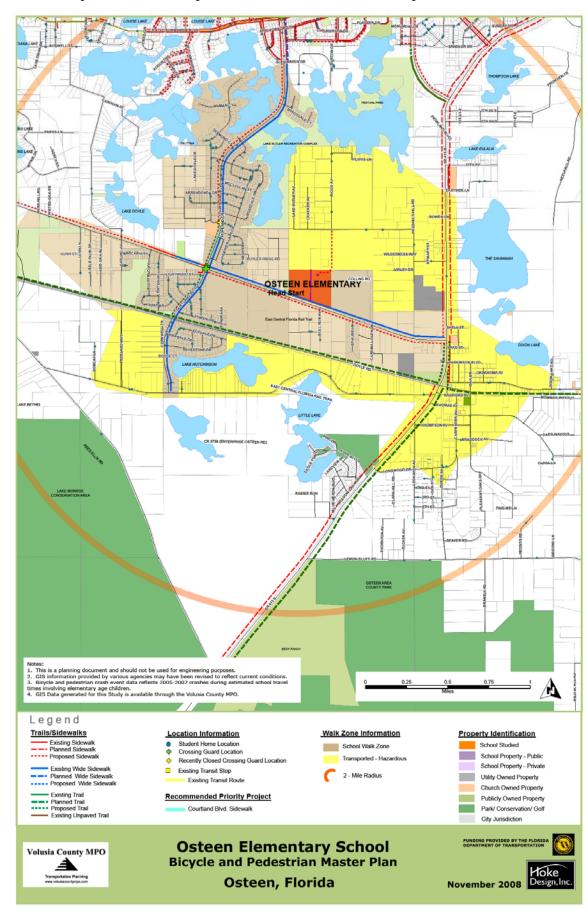
### Planned Conditions:

- 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.



# **Recommended Priority Project**



# **Courtland Boulevard Sidewalk**

**Project Location:** The west side of Courtland Boulevard from Highland Drive to the planned East Central Regional Rail-Trail corridor south of Doyle Road.

**Project Description:** A minimum 5' wide sidewalk

**Finding:** Students living west of Courtland Boulevard cross Courtland Boulevard with a crossing guard at the intersection of Highland Drive. This crossing guard location allows

students to use the wide sidewalk along the east side of Courtland Boulevard. There is no sidewalk along the west side of Courtland Boulevard. This crossing guard location will be closed for the 2008/2009 school year.

**Recommendations:** The construction of a sidewalk along the west side of Courtland Boulevard from the intersection of Highland Drive to the intersection of Doyle Road is recommended to encourage the students to cross Courtland Boulevard with the guard at Doyle Road.

Maintaining Agency: City of Deltona

Potential Constraints: The turn lane for the old Winn Dixie shopping center has greatly reduced available right of way and will make the construction of a continuous sidewalk more difficult. The City may need to obtain an easement to place the sidewalk along the parcel south of the turn lane. Alternatively, the City may wish to review the possibility of removing the turn lane and requiring motorists to use the entrance locations along Doyle Road.

**Potential Opportunities:** The construction of a sidewalk may encourage students to walk or bicycle to school and cross with the guards at Doyle Road.

Estimated Project Cost (not including right of way costs): \$331,000

Note: This project is highlighted blue on the corresponding Bicycle and Pedestrian Master Plan.



Courtland Boulevard looking south from Highland Avenue

