

**Volusia County
MPO**

June 2009



**R. J. Longstreet Elementary School
Bicycle and Pedestrian School Safety Review Study
Phase 3C**



Volusia County MPO



**Transportation
Planning**

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School Summary

R.J. Longstreet Elementary School is a small school located between the Halifax River and the Atlantic Ocean. The school itself is located within the City of Daytona Beach and portions of the walk zone extend into unincorporated Volusia County and the City of Daytona Beach Shores (shaded pink in Figure 3.7.1). Peninsula Drive is a State Road and provides the main north-south access route to the school.

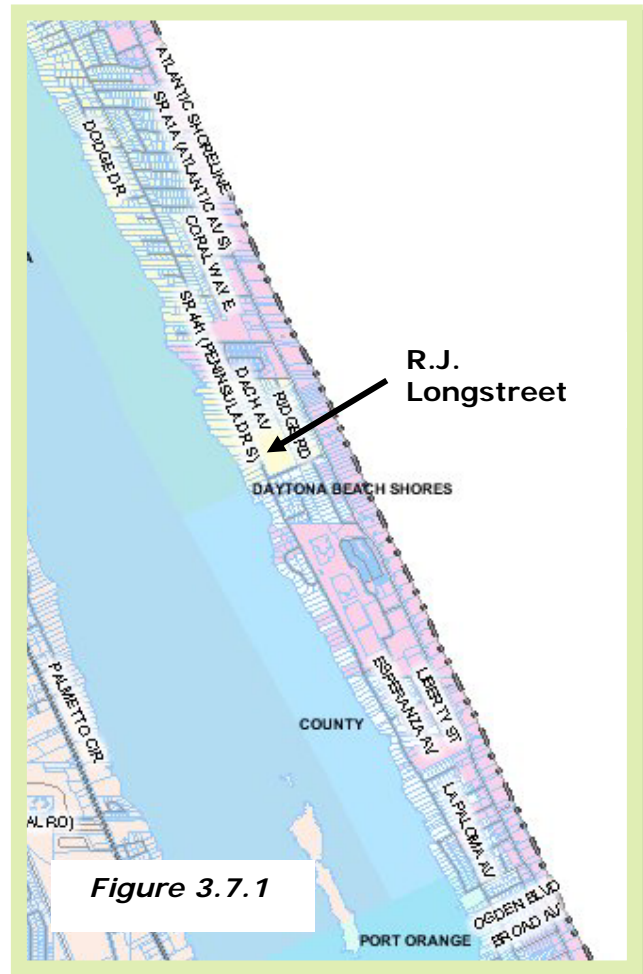
Of the 338 students attending this school, 103 live within the designated walk zone area. During the 2008/2009 school year, approximately eight of these students walked or rode bicycles to school.

The student drop-off and pick-up line is located in front of the main building with motorist access from Peninsula Drive. The parking area near the drop-off and pick-up line extends into the road right of way and creates a fragmented sidewalk along Peninsula Drive. The majority of pedestrians and bicyclists observed on the day of the site visit appeared to be middle school students who traveled to and from their bus stop location on Thames Avenue near Peninsula Drive.

At the time of this Study, there were no crossing guard locations serving this school. Additionally, no bicycle or pedestrian crashes were reported during estimated school travel times involving an elementary school age child within the walk zone from 2005-2007.

The sidewalk along the east side of Peninsula Drive is narrow and close to the roadway in most places and may discourage bicycle and pedestrian travel to school.

The recommended Priority Project for this school is a sidewalk on the north side of Thames Avenue from Peninsula Drive to S.R. A1A.



R. J. Longstreet Elementary School – Summary Sheet

School Address: 2745 South Peninsula Drive
Daytona Beach, Florida 32118

School Principal: Bonnie Gyarfas
Phone: 386-322-6172
Email: bgyarfas@volusia.k12.fl.us

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

Volusia County Public Works Traffic Engineering: Jon Cheney, P.E., Director
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Jim McCroskey, Assistant City Manager
Daytona Beach Shores
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Volusia County MPO: Stephan Harris, Bicycle and Pedestrian Coordinator
Phone: 386-226-0422 ext. 34
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Consultant Representative: Ginger Hoke, RLA, Hoke Design, Inc.
Phone: 407-923-6027
Email: ginger@hokedesign.com

Site Visit Observation Date: November 19, 2008 (weather: cold, clear)

Meeting Attendees:

- Janice Church, Teacher on Assignment
- Michael Marcum, P.E., City of Daytona Beach
- Stephan Harris, Volusia County MPO Project Manager
- Ginger Hoke, Hoke Design, Inc.

*Note: Ginger Hoke met with Principal Bonnie Gyarfas on November 17, 2008.
Stephan Harris and Ginger Hoke met with Jim McCroskey & Stewart Cruz of City of
Daytona Beach Shores on November 19, 2008.*

Number of Enrolled Students (2008 data): 338

Estimated Number of Students Living in Walk Zone: 103

Number of School Buses: 2 (150-160 students)

Number of Aftercare Buses/Vans: 1 student uses a daycare bus on Wednesdays

Estimated Number of Walkers/Bicycle Riders: 5-8 students

Number of Bicycles on Site: 2

Number of Bicycle Helmets (stored with bicycle): 1

Staggered Student Dismissal: KN and 1st Grade go to buses ahead of other students

Estimated Number of Students Attending Breakfast: 85-100

Number of Students for School Site Aftercare: 50

Teachers Assisting in Arrival and Dismissal Safety:

Arrival: 6 **Dismissal:** 6

Title One School: (2008/2009): Yes, 57%

Backpack Policy: No

Bicycle/Pedestrian Safety Education Programs: Yes, the P.E. teacher holds an annual bicycle rodeo that lasts for one month and every class attends

Summary of Principal Comments:

- Few students walk or bicycle to school
- A sidewalk was added near the student drop-off entrance to separate pedestrians from vehicles and the bicycle rack was relocated

Number of Bicycle/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 Daytona Beach Shores plans to work with the County and St. Johns River Water Management District to make storm water improvements along Peninsula Drive within City limits
- The City of Daytona Beach plans to work with the State of Florida to reduce the width of S.R. A1A from Dunlawton Avenue to the south (outside of the school walk zone)
- The City of Daytona Beach Shores passed a bicycle and pedestrian referendum in 2006

Planned Development in Walk Zone:

- Daytona Beach Shores has plans for a Town Center to the north of the Longstreet walk zone (concept is included at the end of this chapter)

- Daytona Beach Shores plans on renovating the Max Samuel Park/McElroy Park

Planned Stimulus Recovery Projects: None

City use of GIS: Daytona Beach – Yes, Daytona Beach Shores - No

Number of Students Transported (Designated as Hazardous): 0

Votran Route in Walk Zone: Yes, along S. R. A1A

Findings and Recommendations

Circulation Description: Student drop-off and pick-up is located off Peninsula Drive. The parking area at this location includes an access drive that uses Peninsula Drive right of way. To avoid using Peninsula Drive, motorists may circulate within the parking area. This may result in motorists driving against traffic and using the right of way where bicyclists or pedestrians may be riding or walking.

Motorists temporarily park along Dach Avenue and in the rear parking area and escort students to and from classrooms.

Most pedestrians and bicyclists observed were middle school students walking along Peninsula Drive on the way to the bus stop located on Thames Avenue.



The student drop-off and pick-up parking area along Peninsula Drive

Finding: The student drop-off and pick-up parking area extends into Peninsula Drive right of way and creates a fragmented sidewalk. Pedestrians and bicyclists using the sidewalk must walk within the access drive behind parked vehicles. A few middle school students were observed walking along the east side of Peninsula Drive behind parked vehicles to reach the bus stop along Thames Avenue.



A middle school student walks behind parked vehicles in front of R.J. Longstreet Elementary School

Recommendations: The School District should review the possibility of removing the line of parking closest to Peninsula Drive to allow for the continuation of the sidewalk along the east side of Peninsula Drive. Staff parking to the rear of the building may possibly be expanded to accommodate loss of parking spaces.

Consider relocating the bus stop location to another area to reduce traffic pedestrian and motorist conflict along Peninsula Drive in front of R.J. Longstreet elementary School.

Finding: The stop bar for the exiting motorists extends from the existing sidewalk 52 feet and may be misconstrued as a sidewalk zone within a paved area.

Recommendations: Relocate and confine the stop bar to the exit area only and allow clear passage for sidewalk users. Paint a hatched crosswalk along the length of the parking area and replace with a concrete sidewalk when feasible.



The view of the stop bar aligned with the sidewalk along Peninsula Drive

Finding: There are two accessible parking spaces in the student drop-off and pick-up parking area. Neither space is connected to the building with a crosswalk.

Recommendation: If possible, relocate the accessible parking spaces to the north side of the parking lot. As an interim measure, connect the existing accessible parking spaces to the building with a painted crosswalk.



The accessible parking space east of the fence is not connected to the building with a crosswalk



The accessible parking space west of the fence is not connected to the building with a crosswalk

Finding: The school principal relocated the bicycle rack to a more secure area that is less visible from the roadway.

Recommendation: To reduce bicycle theft and to increase student confidence, all schools experiencing theft should locate bicycle racks to secure areas.



Principal Gyarfas stands near the relocated bicycle rack

Finding: The stop sign at the end of the student drop-off and pick-up area is mounted too low. Sidewalk users, especially bicycle riders, may need additional vertical clearance.

Recommendation: Raise signs on or near the school campus to conform to MUTCD standards.



The stop sign at the exit onto Peninsula Drive is mounted too low

Findings: There are no sidewalks along the south side of Dach Avenue near the school and motorists park temporarily in this location. Bicyclists and pedestrians do not have a designated area of travel.

Recommendations: Review the possibility of adding a sidewalk along the south side of Dach Avenue to connect to the existing sidewalk located on the east side of Dach Avenue. This sidewalk should be placed as far from the roadway edge as feasible to allow for temporary parking along Dach Avenue.



Motorists park temporarily along the south side of Dach Avenue

Finding: The rear access drive to the school is 24 feet wide and the parking area has 20 parking spaces, including one accessible space.

Recommendation: To create additional staff parking, review the possibility of double-loading the existing parking. The possibility of adding additional parking along the access drive should be reviewed. The addition of a sidewalk would benefit motorists parking along the access drive and would serve students who walk or bicycle from Ridge Road. There are some potential grading problems that may reduce the overall number of spaces.



The rear access road to the school from Ridge Road

Findings: Peninsula Drive functions as an alternate route to S.R. A1A and is also designated as an evacuation route. Although the speed limit ranges from 35 to 40 mph, motorists appear to exceed this range. The speed limit along SR A1A is 35mph and motorists may choose Peninsula Drive to reduce travel time.

There is a narrow sidewalk (43" wide) along the east side of Peninsula Drive. The sidewalk is located directly against the road in some areas and some sections need repair.



The east side of Peninsula Drive looking north from Boynton Avenue

Peninsula Drive is a State maintained road within the walk zone. The school walk zone includes jurisdiction in Daytona Beach and Daytona Beach Shores.

The City of Daytona Beach Shores is currently working with St. Johns River Water Management District to provide additional storm water attenuation for Peninsula Drive. The City is interested in pursuing grants to include sidewalk improvements with this project.

Recommendations: Due to the relatively few students living within the Longstreet Elementary School walk zone, this Study does not recommend a specific priority project for funding. Widening and improving the sidewalk along Peninsula Drive would create a more walkable community and may encourage residents and visitors to walk or ride bicycles.



The sidewalk along Peninsula Drive near Simpson Avenue needs to be repaired

A reduced speed limit and stepped-up enforcement may inhibit motorists' speed through this area.

Sidewalk sections adjacent or nearly adjacent to the roadway should be treated uniformly to guide sidewalk users and to provide visual separation between the gutter and the sidewalk. The use of red paint to delineate the sidewalk is effective and should be continuous.



Red markings differentiate the roadway from the sidewalk along some sections of Peninsula Drive

Finding: The sidewalk along the east side of Peninsula Drive is interrupted by pull-in parking for the church property.

Recommendation: If possible, eliminate the pull-in parking and construct a continuous sidewalk. Alternatively, provide a sidewalk along the east side of the parking area (on church property) to provide a continuous sidewalk.



Looking north along the east side of Peninsula Drive at the pull-in parking area

Finding: Thames Avenue from Peninsula Drive to SR A1A does not have sidewalks on either side. This road borders the school property and provides access to SR A1A. Middle school students and at least one Longstreet Elementary student used the side of the roadway while walking or bicycling to or from school.

Recommendations: Construct a minimum 5' wide sidewalk along the north side of Thames Avenue from Peninsula Drive to SR A1A. This project is recommended as a Priority Project and is described further at the end of this chapter.



A student and parent walk along the Thames Avenue to SR A1A

Finding: At this time, no students appear to be crossing SR A1A to travel to or from school. Numerous condominium units are located on the east side of SR A1A and may potentially house students in the future. Crossing SR A1A unaided by an adult or crossing guard may be unsafe for an elementary age student.

Recommendation: If students move into the condominiums, the safety of crossing SR A1A will need to be reviewed.



SR A1A looking north

Finding: Many sections of sidewalk along SR A1A have recently been improved and provide a good object-free zone. A few signs are still located within the sidewalk and may impact sidewalk users.

Recommendation: Relocate signage to an area outside of the walkway.



A sign pole is located within the sidewalk on SR A1A

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 Bicycle and Pedestrian Master Plan is included as a deliverable with this Study.

The Master Plan includes the following information:

Existing Conditions:

- Existing Walk Zone area from School District GIS (shaded tan)
- 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)
- 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).

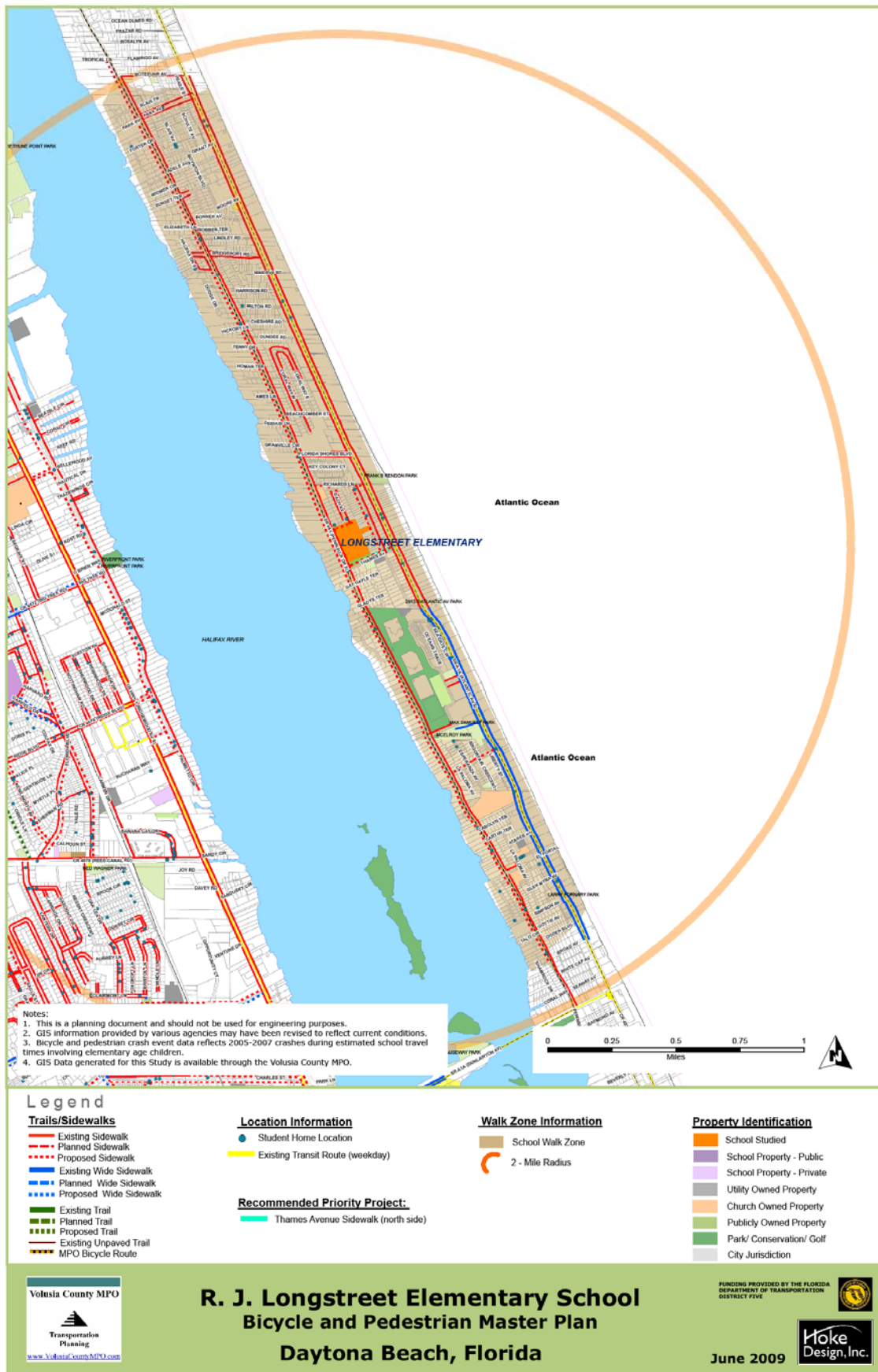
Planned Conditions:

- 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.



Recommended Priority Project

Thames Avenue Sidewalk (north side)

School Served: R.J. Longstreet Elementary School

Project Location: North side of Thames Avenue from Peninsula Drive to S.R. A1A

Project Description: A minimum 5 foot wide sidewalk 994 feet long

Findings: Thames Avenue from Peninsula Drive to SR A1A does not have sidewalks on either side. This road borders the school property and provides access to S.R. A1A. Many of the pedestrians observed were middle school students heading to their bus stop located at Thames Avenue near the gate to the school playground.

On the day of the observation, a student and an adult walked along the edge of the road to reach the sidewalk on S.R. A1A.

Recommendations: Construct a minimum 5' wide sidewalk along the north side of Thames Avenue from Peninsula Drive to SR A1A. As an interim measure, trim back vegetation to provide a level area adjacent to the road.

Maintaining Agency: City of Daytona Beach

Potential Constraints: Right of way complications exist between Ridge Road and SR A1A where a retaining wall needs structural maintenance and vegetation encroaches into the right of way.

Potential Opportunities: There are few sidewalks near the school that provide a direct connection between Peninsula Drive and S.R. A1A.

Estimated Project Cost (not including right of way costs, if applicable): \$120,000

Note: The Priority Project is highlighted in blue on the corresponding Bicycle and Pedestrian Master Plan.



Middle school students wait for the bus along Thames Avenue near R.J. Longstreet Elementary



Vegetation encroaches into the narrow level area adjacent to the north side of Thames Avenue



Town Center Master Plan