

Volusia County MPO

June 2009



Westside Elementary School

Bicycle and Pedestrian School Safety Review Study

Phase 3C



Volusia County MPO



Transportation
Planning

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School Summary

Westside Elementary School is located on Jimmy Ann Drive north of Mason Avenue within the City of Daytona Beach. The school is centrally located within the walk zone and most students live east of Jimmy Ann Drive. Of the 450 students attending this school, 375 live within the designated walk zone area. During the 2008/2009 school year, over 100 of these students walked or rode bicycles to school.

Over 300 students walked or rode their bicycles to school during the "Walk to School Day" sponsored by the Volusia County MPO and FDOT. Most students use the 5 foot wide sidewalk located on the north side of 5th Street as their primary travel route. Students cross Jimmy Ann Drive at 5th Street with the assistance of one crossing guard. A second crossing guard, located at 3rd Street and Jimmy Ann Drive, closed at the end of this year.

There were no reported pedestrian crashes during estimated school travel times involving an elementary school age child within the walk zone from 2005 to 2007.

This Study recommends two Priority Projects for this school. The first project is a sidewalk on the south side of 5th Street from Jimmy Ann Drive to Imperial Drive. The second project is a sidewalk on the west side of Jimmy Ann Drive from Cardinal Estates Boulevard to just beyond 5th Street.



Westside Elementary School – Summary Sheet

School Address: 1210 Jimmy Ann Drive
Daytona Beach, Florida 32117

School Principal: Judy Winch
Phone: 386-258-4678
Email: jewinch@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
Phone: 386-736-5968 ext. 2709
Email: jcheney@co.volusia.fl.us

Crossing Guard Supervisor: Cindy Pagliari
Phone: 386-323-0151
Email: cpagliari@vcso.us

City Representative: James Sloane, P.E., City of Daytona Beach
Phone: 386-671-8610
Email: sloanej@codb.us

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

Consultant Representative: Ginger Hoke, RLA, Hoke Design, Inc.
Phone: 407-923-6027
Email: ginger@hokedesign.com

Site Visit Observation Date: November 5, 2008 (weather: clear, seasonal)

Meeting Attendees:

- Judy Winch
- Robert Maltoni, P.E. Coach
- James Neal, Custodian
- Cindy Pagliari
- James Sloane, P.E.
- Stephan Harris
- Ginger Hoke
- Valerie Jensen, Hoke Design, Inc.

Number of Enrolled Students (2008 data): 450

Estimated Number of Students Living in Walk Zone: 375

Number of School Buses: 2

Number of Aftercare Buses/Vans: 2 vans

Estimated Number of Walkers/Bicycle Riders: over 100

Number of Bicycles on Site: 13

Number of Bicycle Helmets (stored with bicycle): 0

Staggered Student Dismissal: Yes; walkers first, car riders second and bus riders last

Estimated Number of Students Attending Breakfast: 400

Number of Students for School Site Aftercare: 50

Teachers Assisting in Arrival and Dismissal Safety:

Arrival: 2

Dismissal: all staff

Title One School: (2008/2009): Yes, 87% (This is a Plus-One school)

Backpack Policy: No

Bicycle/Pedestrian Safety Education Programs: On a monthly basis, the Principal escorts students who walk or ride bicycles to school. The Volusia County MPO held their *2008 Walk Your Child to School Day* at this school and is following through with the Florida Department of Transportation (FDOT) to provide bicycle and pedestrian related items to students.

Summary of Principal Comments:

- Sidewalks along Jimmy Ann Drive and 5th Street need maintenance
- Vegetation blocks the sidewalk on Jimmy Ann Drive
- One of the two crossing guard positions along 5th Street and Jimmy Ann Drive recently closed
- There are no sidewalks from the school to Starling Drive
- Right turn lane for motorists exiting the school onto Jimmy Ann Drive would be helpful

Crossing Guard Locations:

- Jimmy Ann Drive and 5th Street
- Jimmy Ann Drive and 3rd Street (Closed at the end of 2008/2009)
- Jimmy Ann Drive in front of the school (recently closed)

Summary of Crossing Guard Supervisor Comments: None

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

Note: The principal stated that there was a bicycle or pedestrian crash near the crest of the hill along 5th Street. This crash does not appear in the crash data for the years 2005-2007 and may have occurred after this time period or was not reported.

Planned Road, Sidewalk, or other Improvements:

- The City has budgeted \$50,000 for sidewalk construction and has a 5-year sidewalk plan
- Ongoing sidewalk construction along portions of Jimmy Ann Drive, Clyde Morris Boulevard and Mason Avenue
- The County plans to widen LPGA Boulevard

Planned Stimulus Recovery Projects:

- Resurfacing of Jimmy Ann Drive (Mason Avenue to LPGA Boulevard)
- C.R. 4019/LPGA Boulevard
- C.R. 483/Clyde Morris Boulevard
- Eighth Street

Planned Development in Walk Zone: A mixed-use development is planned at the end of 5th Street west of the school site

City use of GIS: Yes

Number of Students Transported (Designated as Hazardous): 0

Votran Route in Walk Zone: Yes, along Jimmy Ann Drive, 3rd Street, Derbyshire Road and Mason Avenue

Findings and Recommendations

Finding: The distance from Jimmy Ann Drive to the entrance drive of the south parking lot is very short and the car line may extend onto Jimmy Ann Drive, reducing safety for crosswalk users.

Recommendation: The School District may wish to review the possibility of closing the southern parking lot entrance nearest Jimmy Ann Drive and redirecting traffic to the western entrance to serve both incoming and exiting motorists. The existing sidewalk connection should remain open.



Finding: The visitor parking area has one accessible parking space. Access to this space was blocked by cones on the east side of the parking lot. To access the space, motorists would have had to drive against the directional arrow.

Recommendation: Combining the entrance and exit drives at the western exit (see previous recommendation) would allow motorists better access to the accessible parking space.



Cones block access to the accessible parking space located in the visitor parking area (space is to the right, outside of view)

Finding: The accessible parking stall in the southern parking lot does not have a connecting crosswalk to the school sidewalk.

Recommendation: A 5' wide access area should be painted along the side of the accessible parking space and connected to the existing curb ramp with a crosswalk (see Appendix H).



The accessible parking stall on the south side of the school needs a connecting crosswalk to the curb ramp

Findings: Although over 100 students walk or bicycle to school, few of these students ride bicycles. According to school staff, students have experienced bicycle theft as they travel to or from school. Some on-campus theft has occurred in previous years.

No students wore helmets on the day of the site observation.

Recommendations: The principal should continue her considerable efforts to provide a safe school and community center for students and their parents. Additional measures to increase student safety and the perception of safety include:



Few students rode bicycles to and from school and no students wore helmets

- Continue to provide students with basic self-defense and anti-bullying education
- Encourage students to travel in groups
- Encourage parents or older siblings to escort students to and from school
- Encourage students to register their bicycles with the City of Daytona Beach
- If available, the City of Daytona Beach should consider offering confiscated bicycles to students in need
- Provide wider sidewalks separated from the roadway on both sides of the road along major travel routes
- Consider implementing a reward program for helmet use – possibly using “Walk – n- Roll” punch cards at school or at the crossing guard location (See Appendix F).

There are excellent suggestions for increased safety for bicyclists and walkers listed on the State of Florida *Safe Routes to School* website (see Appendix F).

The Volusia County MPO should continue their efforts to provide bicycle and pedestrian safety education, helmet fittings, and bicycle and pedestrian accessories. The Volusia

County MPO Bicycle and Pedestrian Safety video should be used to supplement school staff education efforts.

Finding: Students living north of Westside Elementary who walk/ride along the west side of Jimmy Ann Drive must cross the bus/staff parking lot and go beyond the school to reach the access point at 5th Street.

Recommendations: To reduce potential conflict with school related traffic, the School District may wish to review the possibility of adding a sidewalk along the north side of the bus entrance drive, connecting to the existing sidewalk that serves accessible parking near the playground.

Additionally, this would provide safe access to the fenced play area located north of the school. The stop sign at the entrance to the parking area should be reviewed for removal.



The northern parking lot access from Jimmy Ann Drive looking west



Finding: There are no sidewalks along the west side of Jimmy Ann Drive from LPGA Boulevard to just beyond 5th Street. Students living in Colonial Estates cross Jimmy Ann Drive unaided to reach the sidewalk on the east side. The students cross Jimmy Ann Drive a second time with the crossing guard at 5th Street.

Recommendations: Construct a minimum 5' wide sidewalk on the west side of Jimmy Ann Drive from Colonial Estates Boulevard to the existing sidewalk



Vegetation encroaches into the sidewalk along 3rd Street

south of 5th Street. This project is further detailed as a Priority Project at the end of this chapter.

Findings: Although the school begins serving breakfast at 7:15am, students arrive on campus as early as 6:50am to wait for breakfast. The crossing guard arrives at her post at 7:10am. Some students may cross Jimmy Ann Drive without assistance.

Recommendations: Shift the time that the crossing guard is at her post to 7:00am to provide earlier coverage of the crossing. If possible, add 15 minutes to the morning shift to accommodate students attending the tutoring program that begins at 7:00am. If necessary, provide additional street lighting at the crossing guard location.



A guard crosses students at 3rd Street and Jimmy Ann Drive

Findings: The speed limit along Jimmy Ann Drive is 45 mph; 15 mph within the school zone area. Motorists' impatience and high volumes of students who walk or bicycle to school may increase the potential for conflict near the crosswalk at 5th Street and Jimmy Ann Drive.

5th Street currently terminates west of the school property. A mixed-use development is planned at the end of the roadway.

Recommendations: The City may wish to increase speed limit enforcement in this area to reduce the number of motorists ignoring the reduced speed zone and flashing lights. Additionally, review the feasibility of extending the zone limit to south of 3rd Street to reduce traffic speeds near the closed crossing guard location on 3rd Street.

The principal suggested the addition of a right turn lane from 5th Street onto Jimmy Ann Drive to reduce the wait time for motorists exiting the student pick-up and drop-off area. If the property at the end of 5th Street is developed, the developer should be requested to add this turn lane.



The intersection of Jimmy Ann Drive and 5th Street



Jimmy Ann Drive and 5th Street

Findings: The 5th Street sidewalk is the primary route travelled by students who walk or bicycle to and from school. There is a 5 foot wide sidewalk along the north side of 5th Street that is insufficient in width for the large number of students served. Students frequently cross 5th Street at various locations as they travel to and from school. Site observations indicated that several students, especially younger students, cross the roadway without first checking for vehicles.



Students use the sidewalk along the north side of 5th Street and cross at various locations

Recommendation: Construct a minimum 5' wide sidewalk along the south side of 5th Street from Jimmy Ann Drive to Imperial Drive. A wider sidewalk is preferred.

This sidewalk is one of the recommended Priority Projects for this school and is detailed further at the end of this chapter.

Findings: There are no sidewalks along the south side of 3rd Street from Jimmy Ann Drive to Derbyshire Road. Students living south of 3rd Street cross that street at various locations to use the sidewalk along the north side. Students were observed crossing 3rd Street near the intersection of Glenwood Street. The curve in the road may limit sight distance for motorists and sidewalk users.



A student crossed near the curve in the roadway on the day of the site visit

There is a convenience store on 3rd Street at Jimmy Ann Drive with a paved right of way with no defined pedestrian zone.

Additionally, 3rd Street is a designated Votran bus route. Right of way appears to be somewhat limited.

Recommendations: Construct a minimum 5' wide sidewalk along the south side of 3rd Street from Jimmy Ann Drive to Derbyshire Road. Construction of this sidewalk will encourage students to cross 3rd Street at the intersection of Jimmy Ann Drive. The crossing guard location at this intersection will be closed for the 2009/2010 school year. Despite the lack of a crossing guard, students will most likely be safer crossing 3rd Street at a marked intersection.

If possible, the convenience store access area should be reduced or striped to provide a pedestrian zone.

The sidewalk should include design considerations for Votran users. Construction sidewalk costs may be higher than normal due to grading issues, numerous driveway cuts and mailboxes located within the right of way.

Finding: Glenwood Street terminates into 3rd Street with a right and left turn lane. The separated exit and double stop signs may be confusing to motorists.

Recommendations: Consolidate the exit area of Glenwood Street to one lane. Remove the extra stop sign and add a crosswalk. Future road improvements for 3rd Street should include an expanded pedestrian area and sidewalk on the south side of the road between Glenwood Street and Derbyshire Road.



Glenwood Street and 3rd Street

Finding: The storm grate at the intersection of 3rd Street and Imperial Drive may catch the wheels of bicyclists, strollers or wheelchairs.

Recommendations: Replace the grate with a grate recommended for bicycle use. This intersection also needs a crosswalk.



The drain grate at the intersection of 3rd Street and Imperial Drive

Findings: Some property owners have placed obstacles within public right of way to discourage encroachment by vehicles. These obstacles may create unsafe conditions for pedestrians or bicyclists using the right of way.

Recommendations: The construction of sidewalks along both sides of the road is preferred but is costly to implement. As an interim measure, a clear pedestrian zone within the right of way should be provided. The City may wish to coordinate efforts with property owners to eliminate right of way encroachments. The use of bollards to prevent undesirable parking should be considered as an alternative.



Stones block the right of way at Lakewood Park Drive and 5th Street

Findings: Vegetation encroaches onto some sidewalks within the Westside Elementary School walk zone.

Recommendations: Increase frequency of sidewalk maintenance and work with property owners to reduce vegetation encroachment.



Vegetation encroaches into the sidewalk along 3^d Street

Findings: Fountain Lake is a new subdivision located north of the school on the east side of Jimmy Ann Drive. Students living east of Sunset Boulevard and Laurel Drive may cut through undeveloped lots located between 8th Street and Fountain Lake Boulevard.

Recommendations: The City should review the possibility of obtaining an easement to provide continued pedestrian access between neighborhoods. Development policies should be created to encourage pedestrian connectivity between subdivisions and to schools.



Pedestrians cross private property to travel between 8th Street and Fountain Lake Boulevard

Findings: There are no continuous sidewalks along the west side of Derbyshire Road. Students living along the west side of Derbyshire Road or in the neighborhood that connects to Derbyshire Road at Westwood Drive must walk along the side of a busy road as part of their route to and from school.

Recommendations: A minimum 8' wide sidewalk should be constructed along the west side of Derbyshire Road from LPGA Boulevard to Mason Avenue. If possible, extend the sidewalk to Mason Avenue. This sidewalk will also serve Votran bus riders and the many residents who walk or bicycle in this area.



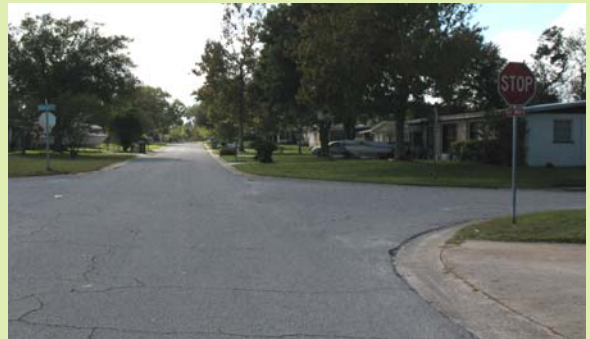
Students walk along the west side of Derbyshire Road



The west side of Derbyshire Road looking south

Finding: Stop bars and crosswalks are missing from some intersections. These markings help reduce speeds and emphasize pedestrian zones.

Recommendation: Paint stop bars and crosswalks along intersections within the walk zone.



Stop bars and crosswalks are missing at some stop locations

Finding: Sidewalks within the Cedar Highlands neighborhood were constructed without curb ramps at road intersections.

Recommendation: Add curb ramps at street intersections to provide a continuous accessible route for people using bicycles, strollers or wheelchairs.



Sidewalks do not include curb ramps on Cedar Highlands Boulevard

Finding: Pedestrian signals at the intersection of Jimmy Ann Drive and Clyde Morris Boulevard are not fully accessible.

Recommendation: Provide a level, paved area connecting the shoulder of Clyde Morris Boulevard to the base of the pedestrian signal pole. Future sidewalks in this area should connect to pedestrian push buttons.



The pedestrian signal at the northwest corner of Clyde Morris Boulevard and Jimmy Ann Drive is not accessible for all users

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)
- Existing Crossing Guard Locations from County GIS and field observations (green cross for existing to remain and yellow cross for recently closed)
- Existing Votran Routes and stops from Volusia County MPO (yellow lines along roadway centerline with yellow squares at bus stops).

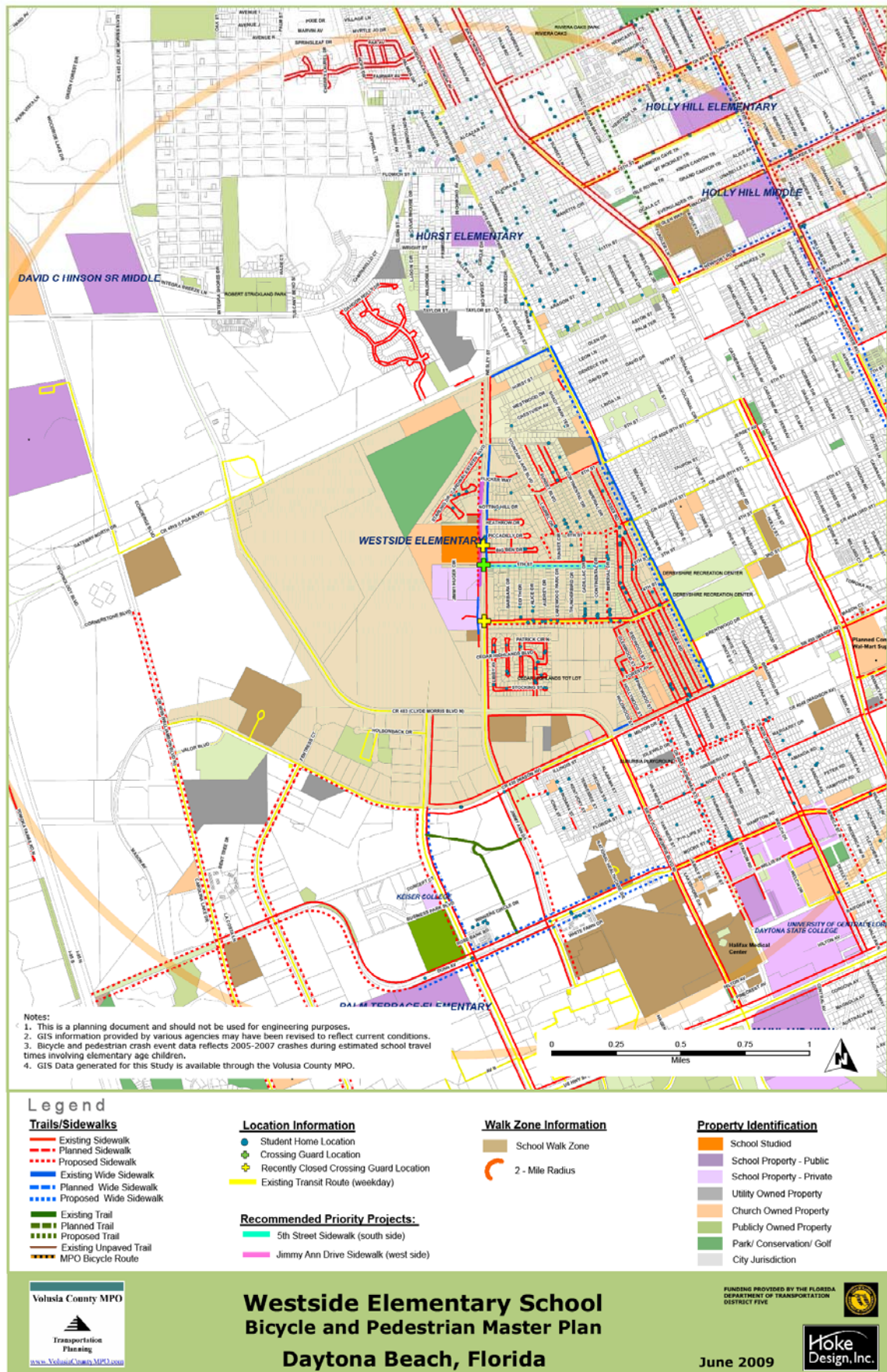
Planned Conditions:

- 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)
- Blue Highlighted sidewalk is a recommended Priority Project
- Purple highlighted sidewalk is a recommended Priority Project

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



5th Street Sidewalk (south side)

School Served: Westside Elementary School

Project Location: South side of 5th Street from Jimmy Ann Drive to Imperial Drive

Project Description: A minimum 5 foot wide sidewalk, 2525 feet long.

Findings: The 5th Street sidewalk is the primary route travelled by students who walk or bicycle to and from school. There is a 5 foot wide sidewalk along the north side of 5th Street that is insufficient in width for the large number of students served. Students frequently cross 5th Street at various locations as they travel to and from school. Site observations indicated that several students, especially younger students, cross the roadway without first checking for vehicles.

Recommendation: Construct a minimum 5' wide sidewalk along the south side of 5th Street from Jimmy Ann Drive to Imperial Drive. A wider sidewalk is preferred.

Maintaining Agency: City of Daytona Beach

Potential Constraints: Right of way limitations or obstructions, eight road crossings and 11 driveway cuts.

Potential Opportunities: A decrease in the number of students crossing 5th Street away from the guard location at Jimmy Ann Drive. Additionally, this sidewalk may ease congestion along the north side sidewalk.

Estimated Project Cost (not including right of way costs, if applicable): \$265,000

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



A student crosses 5th Street to reach the south side



Students walk along both sides of 5th Street on their way home



The existing 5' wide sidewalk on the north side of the road is inadequate for the number of users

Recommended Priority Project

Jimmy Ann Drive Sidewalk (west side)

School Served: Westside Elementary School

Project Location: West side of Jimmy Ann Drive from Cardinal Estates Boulevard to beyond 5th Street to connect with the existing sidewalk. (Total: 2750LF).

Project Description: A minimum 5' wide sidewalk, 2,750 feet long. A wider sidewalk is preferred to provide for multiple user groups simultaneously.

Findings: Students living north of the school currently use a shortcut between two private lots on Starling Drive to access the west side of Jimmy Ann Drive where they walk along an unpaved shoulder to the school property. There are no sidewalks along Jimmy Ann Drive north of the school or along the school site. An existing sidewalk section is located south of 5th Street.

Recommendations: Construct a minimum 5 foot wide sidewalk along the west side of Jimmy Ann Drive from Cardinal Estates Boulevard to the existing section of sidewalk south of 5th Street. Expanding the project to include a continuous sidewalk on the west side of Jimmy Ann Drive from LPGA Boulevard to Mason Avenue would serve the many bicyclists and pedestrians in the area.



Jimmy Ann Drive looking south from Cardinal Estates Boulevard



Construction of any future sidewalks along school frontage should be placed near the property line

Locate the sidewalk near the right of way line to avoid drainage structures and swales. Unless right of way limitations are severe, sidewalks should not be located directly against a fence or wall. A minimum 2' wide clear area should be provided.

Maintaining Agency: City of Daytona Beach

Potential Constraints: Drainage structures are centered within available right of way

Potential Opportunities: Students living north of Westside Elementary School and west of Jimmy Ann Drive will have a direct sidewalk connection to the school and will no longer need to cross Jimmy Ann Drive to reach the sidewalk on the east side of the roadway.

Halifax Behavioral Services and the WORC Workcenter are located on the west side of Jimmy Ann Drive between 3rd Street and Mason Avenue. People attending these facilities may benefit from a continuous sidewalk system along Jimmy Ann Drive. Additionally, bicyclists and pedestrians traveling to the Votran bus stops along Jimmy Ann Drive near 3rd Street would benefit from the construction of this project.

Estimated Project Cost (not including right of way costs, if applicable):

\$288,000

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