

Bicycle and Pedestrian School Safety Review Study: Assessment Report



New Smyrna Beach Middle School New Smyrna Beach, FL



July 12, 2011



**Volusia County Transportation Planning Organization
Bicycle and Pedestrian School Safety Review Study**

**Assessment Report
New Smyrna Beach Middle School
New Smyrna Beach, FL**

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EXECUTIVE SUMMARY

Lassiter Transportation Group, Inc. (LTG) was contracted by the Volusia County Transportation Planning Organization (TPO) to prepare an Assessment Report for the Bicycle and Pedestrian School Safety Review Study for 17 Volusia County schools. The Assessment Report for the Bicycle and Pedestrian School Safety Review Study will aid the Volusia County TPO in making recommendations for projects that will improve conditions within the walk zones for these schools, and potentially make walking and biking to school a more attractive mode of transportation for students. The subject of this Assessment Report is New Smyrna Beach Middle School. Evaluation of the walk zone for New Smyrna Beach Middle School has resulted in recommendations for sidewalk improvements as follows:

Purpose

The purpose of this study is to improve the environment for students to walk or bicycle to school. The goal for the assessment phase of the Bicycle and Pedestrian School Safety Review Study is to provide the Volusia County TPO with a comprehensive study that will delineate each of the listed school's concerns, document the observed pedestrian and bicycle circulation routes adjacent to the school sites, and then make recommendations for improvements. The assessment examines the walk zone surrounding the school to evaluate safety issues that may affect students walking or bicycling to school.

The U.S. Department of Health and Human Services Center for Disease Control (CDC) and Prevention has determined that students are not as active as they were 10 years ago when physical activity was incorporated into each student's schedule (KidsWalk-to-School, CDC). This has caused the percentage of overweight students from ages six to eleven years to double over the past 30 years. The CDC has determined that the following are benefits associated with students who walk or ride their bicycle to school.

- Increased practice of safe bicycle, pedestrian, and traffic skills
- Knowledge of their environment
- Improved childhood health
- Improved sense of self-image and autonomy
- Reduced childhood obesity
- Conducive to a healthy social and emotional development
- More alert students who do better in school
- Increased likelihood that students will grow up to lead a healthy lifestyle

The Safe Routes to School (SRTS) program and the CDC went on to say that not only does a safe walking and bicycling environment benefit students, but it also benefits the community in the following ways:

- Decline in the congestion on the roads
- Decreased opportunities for traffic accidents
- Improved air quality
- Improved community security
- Reduced fuel consumption
- Enhanced community accessibility
- Increased community involvement
- Improved partnerships among schools, parents, community groups, and the local government leaders

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INTRODUCTION

LTG has been retained to conduct an Assessment Report for New Smyrna Beach Middle School as part of a Bicycle and Pedestrian School Safety Review Study for the Volusia TPO. New Smyrna Beach Middle School is located at 1200 South Myrtle Avenue, in the City of New Smyrna Beach. A school location map, that also illustrates the walk zone of the school, is presented as Figure 1.

Background on New Smyrna Beach Middle School

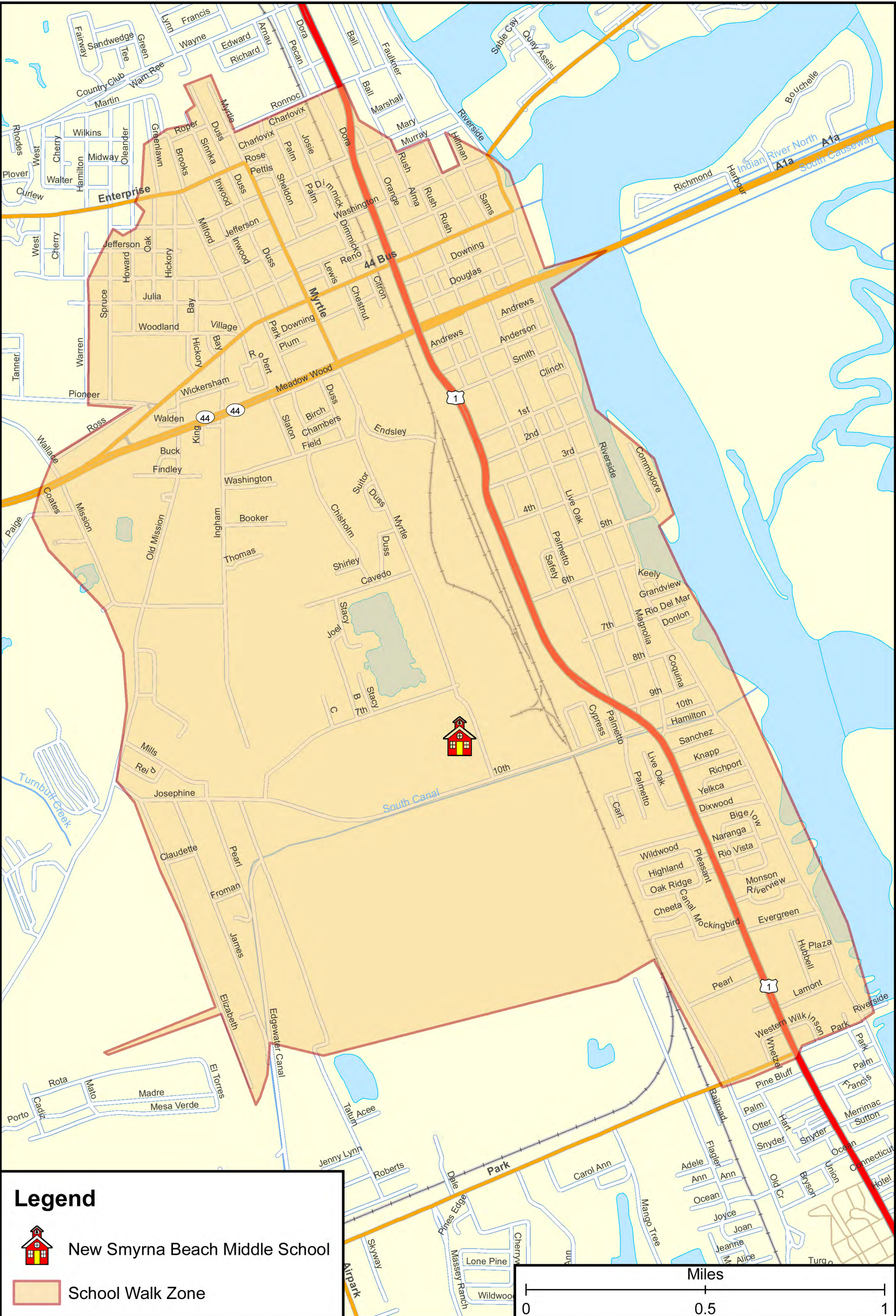
New Smyrna Beach Middle School is the community middle school for southeast Volusia County. Six elementary schools feed into the school. The Principal of New Smyrna Beach Middle School is Mr. Joe Rawlings.

The following information on New Smyrna Beach Middle School has been provided by Principal Rawlings:

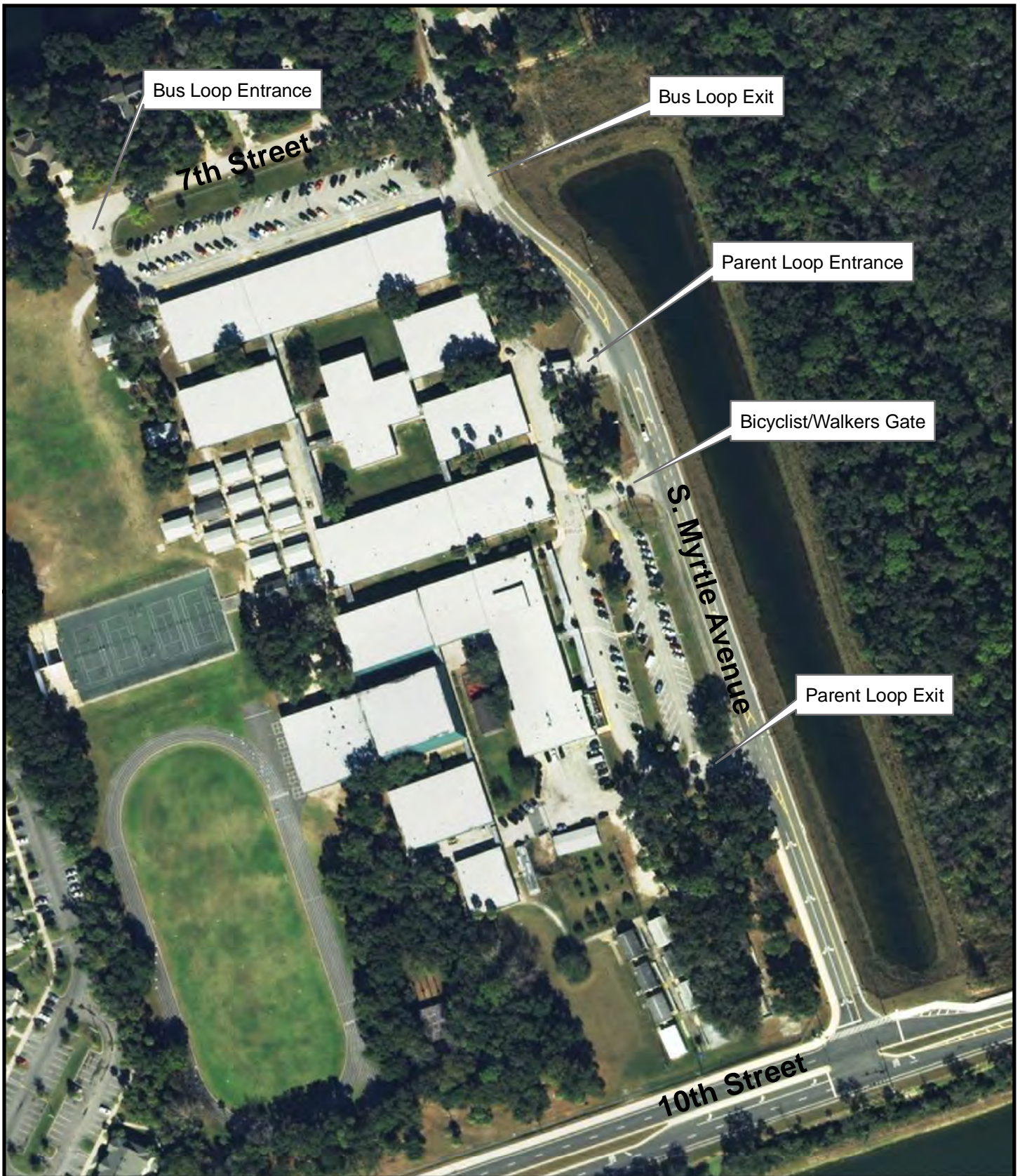
- **Student Population:** 1,310 Students
- **Percentage of Walkers:** 15 percent (approximately 200 students)
- **Number of Volusia County Buses in Use:** 14
- **Location and Description of Access Points:** There are four driveways on Myrtle Avenue. The northern most driveway is a one-way exit for the bus loop. Immediately south of the bus loop exit driveway is the one-way parent loop entrance driveway. The southernmost driveway is the one-way parent loop exit driveway. Between the parent loop entrance and exit driveways is the fourth driveway. During the morning arrival and afternoon dismissal periods this driveway is not open for vehicle access. The fence across this driveway is pulled across the driveway to make it accessible only to walkers and bicyclists. The driveway for the bus loop entrance is located on West 7th Street. Figure 2 depicts the location of these access points.

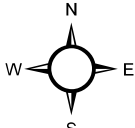




Illustration 1: Walker/Bicycle Access on Myrtle Avenue



<p>New Smyrna Beach Middle School Bicycle and Pedestrian School Safety Review Study New Smyrna Beach, FL</p>		
<p>School Location and Walk Zone</p>		<p>Figure: 1</p>



<p>New Smyrna Beach Middle School Bicycle and Pedestrian School Safety Review Study New Smyrna Beach, FL</p>		
<p>Aerial of School</p>	<p>Figure: 2</p>	

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EXISTING CONDITIONS

New Smyrna Beach Middle School is located at 1200 South Myrtle Avenue in the City of New Smyrna Beach. Access to the school is provided via South Myrtle Avenue, a north/south collector, which connects 10th Street to SR 44/Lytle Avenue.

School Walk Zone

The New Smyrna Beach Middle School walk zone is primarily bounded by Enterprise Avenue to the north, Mission Drive to the west, the Intracoastal Waterway to the east, and Park Avenue to the south. New Smyrna Beach High School, Read-Pattillo Elementary School and the New Smyrna Beach/Edgewater Campus of Daytona State College are also located within the school's walk zone.

Both SR 44 which is an east/west arterial and US 1 which is a north/south arterial run through the school's walk zone. Additionally, the FEC railroad tracks run north/south through the walk zone. The school's walk zone consists of both commercial and residential land uses. The downtown Canal Street business area is located within the walk zone. This area plus the SR 44 and US 1 corridors primarily contain the commercial land uses. The residential areas south of SR 44 are primarily located north and west of the school and between US 1 and the Halifax River. North of SR 44, the residential areas are located west of the railroad tracks.

Votran Route 41 travels along US 1, south of SR 44, including 10th Street from US 1 to Parktown Boulevard, adjacent to the Daytona State College Campus. According to Principal Rawlings, students who ride this route use the bus stop at the corner of 10th Street and Palmetto Street.

Figure 3 shows the approximate locations of the other schools within the walk zone, the traffic signals and the bicycle crash locations identified in Table 1.

Crash Data

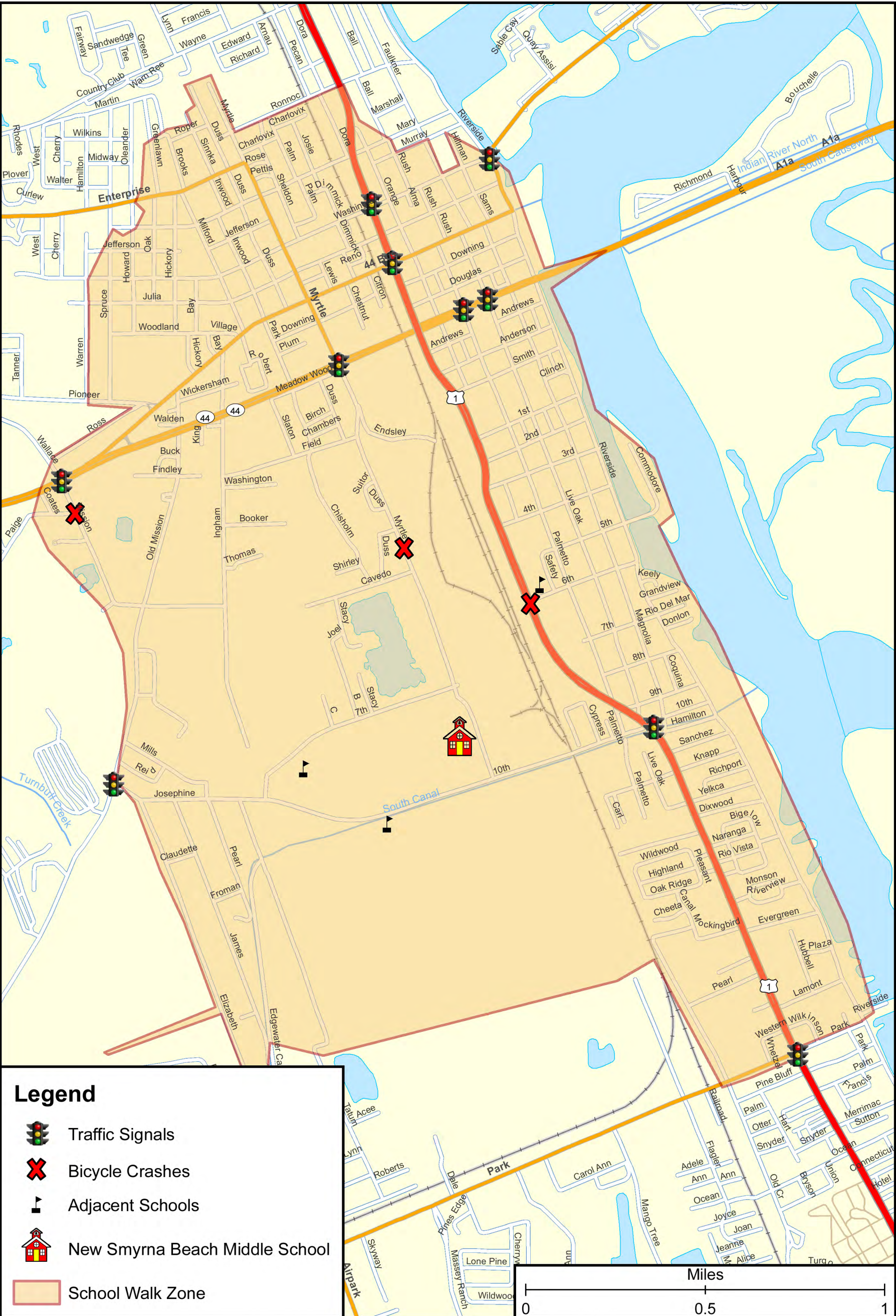
Pedestrian and bicycle crash data for New Smyrna Beach Middle School's walk zone was obtained from Volusia County and is presented in Table 1. The data in Table 1 was generated based on the following guidelines:

- Data was collected during the timeframes of 8:15 a.m.- 9:15 a.m. and 3:15 p.m.- 4:15 p.m. on Mondays, Tuesdays, Thursdays, and Fridays
- Data was collected during the timeframes of 8:15 a.m.- 9:15 a.m. and 2:15 p.m.- 3:15 p.m. on Wednesdays
- Data was collected within the walk zone of the school
- Crashes occurring within the last three years

Table 1
Bicycle and Pedestrian Crash Data
New Smyrna Beach Middle School Assessment Study

DATE	ACCIDENT INTERSECTION	BICYCLE/ PEDESTRIAN INVOLVMENT	DAY/NIGHT	AGE OF CYCLIST/ PEDESTRIAN
10/15/2008	S. Myrtle Avenue, 50 feet N of Joel St	Collision with Bicycle	Daylight 2:56 p.m.	14
1/26/2009	6 th Street at S. Dixie Freeway	Collision with Bicycle	Daylight 3:37 p.m.	69
4/22/2009	Mission Drive at Paige Avenue	Collision with Bicycle	Daylight 2:05 p.m.	Estimated mid to early 20s

Data collected for this table is attached as Appendix A. The crash data shows that within the walk zone, there were three bicycle-related accidents. In the first incident listed in the table, the bicyclist was at fault and issued a citation for failure to yield right-of-way. In the second incident, the bicyclist was found at fault and not cited and in the third incident, the bicyclist left the scene of the accident.



<p>New Smyrna Beach Middle School Bicycle and Pedestrian School Safety Review Study New Smyrna Beach, FL</p>		
<p>Existing Conditions</p>	<p>Figure: 3</p>	

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MEETINGS

A meeting was held at New Smyrna Beach Middle School on Tuesday, December 7, 2010. In attendance were members of LTG Staff, Volusia TPO Staff, New Smyrna Beach Middle School Principal Joe Rawlings, New Smyrna Beach Police Officers Joshua Holloway and Daniel LaPolla, and City of New Smyrna Beach Planning Manager Gail Henrikson. This meeting, along with questionnaires which were produced by LTG and completed by Principal Rawlings, assisted in identifying matters of concern within the school walk zone (see completed questionnaires as well as initial letters sent to establish this meeting in Appendix B).

Meeting Summary

Most prevalent among the concerns discussed in the meeting, as expressed by Principal Rawlings, is the heavy vehicle traffic in the parent loop during afternoon dismissal period. Principal Rawlings has proactively assisted in the safe operation of the parent pick-up loop by having administration and teachers present during the arrival and dismissal periods. This staff presence allows for the safe crossing of students who enter the school at the walker's gate and need to cross the parent loop and for smooth operation of the traffic in the parent loop. Other concerns pointed out by Principal Rawlings are as follows:

- The absence of flashing beacons on Myrtle Avenue 10th Street to indicate the school zone and reduced speed limit associated with the school arrival and dismissal periods.
- The sidewalk on Myrtle Avenue changes from the west side to the east side about halfway between the school and SR 44. At the crossing there are small STOP signs controlling the pedestrian movement that are visible from the roadway. This causes confusion to the drivers who sometimes stop at these STOP signs and cause rear end collisions.
- The vacant property across the street adjacent to the railroad is an area of concern to the principal and police since students hang out in the woods on that property which creates potential safety issues.
- Votran Bus stop at the corner of 10th Street and Palmetto is heavily used by students. The waiting area for the bus stop is along the narrow sidewalk and becomes congested with pedestrian traffic and those waiting for the bus. Additionally, Palmetto Street is very narrow and does not have a sidewalk.



Illustration 2: Staff presence in parent loop during afternoon dismissal

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FINDINGS AND RECOMMENDATIONS

The amount of walkers to New Smyrna Beach Middle, estimated by the Principal is approximately 200 students or 15 percent of the student population. Good and, seemingly, well-maintained sidewalk coverage is already in place serving the collector roadways within the walk zone. Portions of the school's walk zone lie east of US 1 and north of SR 44 requiring pedestrians and cyclists to cross these state roadways.

This section of the report includes data collected during the on-site and off-site investigative observations of New Smyrna Beach Middle School and its walk zone. Areas of interest identified in the meeting with Principal Rawlings and completed questionnaires were investigated, along with a thorough field review of conditions within the walk zone.

LTG evaluated the safety of sidewalk features based on conditions that are deemed hazardous in the *2009 Florida Statutes*, the *Americans with Disabilities Act (ADA) of 1990 Guidelines*, the *Manual on Uniform Traffic Control Devices (MUTCD)*, the *Florida Department of Transportation (FDOT)*, and the *Federal Highway Administration (FHWA)*. The relevant excerpts are included in Appendices C and D.

For a walkway that is parallel to the road, the *2009 Florida Statutes*, Chapter 1006.23 considers the following conditions to be hazardous:

- If there is not an area at least four feet wide adjacent to the road, having a surface upon which students may walk without being required to walk on the road surface
- If the road along which students must walk is uncurbed, has a posted speed limit of 55 miles per hour or greater, and the walk area is not set off the road by at least three feet.

For walkways that are perpendicular to the road, the *2009 Florida Statutes*, Chapter 1006.23 considers the following conditions to be hazardous:

- If the traffic volume on the road exceeds the rate of 360 vehicles per hour, per direction (including all lanes), during the time students walk to and from school and if the crossing site is uncontrolled (an "uncontrolled crossing site" is an intersection or other designated crossing site where no crossing guard, traffic enforcement officer, or STOP sign or other traffic control signal is present during the times students walk to and from school)
- If the total traffic volume on the road exceeds 4,000 vehicles per hour through an intersection or other crossing site controlled by a STOP sign or other traffic control signal, unless crossing guards or other traffic enforcement officers are also present during the times students walk to and from school

On-Site Investigation - A.M. Observations

LTG visited New Smyrna Beach Middle School on Thursday, January 20, 2011, during student arrival and dismissal. Both periods were observed for an interval of 25 minutes before and after the bell for a comprehensive view of all queuing, entering, and exiting patterns at different entry/exit points around the school as well as student walking and cycling practices at the crosswalk and along the adjacent roadways. The following general information was gathered:

Observation: LTG began the investigation by observing the parent loop. The presence of a staff member allowed for safe crossing of students at the crosswalk across the parent loop and smooth operation of the traffic utilizing the parent loop. A few vehicles dropped students off along Myrtle Avenue and adjacent to the walker's gate.

Recommendations: Continue to send information to the parent's regarding the importance of utilizing the parent loop for dropping off their students.

Observation: The school had one bike rack area with approximately 40 bicycles. On the day of observation, helmet usage was poor among the observed bikers.

Recommendations: This school may be a good candidate for the receipt of free bicycle helmets through programs headed by the Department of Health or the Sheriff's Office.

Observation: All four sidewalk crossings on Myrtle Avenue at the school's driveways do not have crosswalks.

Recommendations: Crosswalks should be installed at all four sidewalk crossings across the school's driveways on S. Myrtle Avenue.



Illustration 3: Bike Rack



Illustration 4: Broken sidewalk on Myrtle Ave.



Illustration 5: Sidewalk of Myrtle Avenue at driveway to pedestrian gate.

Observation: The sidewalk in front of the school on S. Myrtle Avenue is broken.

Recommendations: The sidewalk should be repaired.

Observation: The sidewalk approaching the drive to the walker's/bicyclist's gate from the south does not have a ramp.

Recommendations: A sidewalk ramp should be installed at this location

On-Site Investigations - P.M. Observations

Observation: The absence of sidewalk crossings along Myrtle Avenue at the school's driveways present the same hazardous situation during the dismissal period for students as it does on the arrival period.

Recommendation: As previously recommended, crosswalk markings should be placed across the school's driveways.

Observation: Prior to afternoon dismissal, vehicles stack up both adjacent to Myrtle Avenue and on Myrtle Avenue waiting for students to be dismissed. In the principal meeting, this situation was discussed with the principal and the City's Police Department. This occurrence is necessary to allow enough stacking space for parents arriving prior to dismissal and is allowed as long as the through travel lanes on Myrtle Avenue are not blocked. On the day of the observation, vehicles were stacking in the Myrtle Avenue southbound through-lane, blocking traffic. Cars were also stacked in the northbound left-turn lane into the parent loop. These vehicles, however, were not blocking the through travel lanes on Myrtle Avenue.

Recommendation: It is recommended that this situation continue to be monitored and that parents be reminded that they may not block the through travel lanes on Myrtle Avenue.



Illustration 6: Students crossing entrance to parent loop during afternoon dismissal, conflict with vehicles turning into parent loop and no helmet usage



Illustration 7: Vehicles stacking adjacent to Myrtle Avenue, not blocking travel lanes.



Illustration 8: Vehicles stack up in the Myrtle Avenue southbound through-lane prior to afternoon dismissal

Off-Site Investigation

Observation: There are two conflicting crosswalks across Myrtle Avenue, south of Cavedo Street, one on a diagonal and one perpendicular to the roadway. Both are faded and worn. The sidewalk on the east side of the roadway intersects the roadway on an angle. The small STOP signs for the pedestrian crossing are angled so that they are visible from the roadway and cause confusion of drivers approaching the area. It was discussed in the meeting that a number of rear end collisions occur at this location.

Recommendation: The diagonal pavement markings at this location should be removed and the perpendicular pavement markings should be refurbished. The sidewalk on the east side of the roadway should be reconstructed at 90 degrees to the roadway. Additionally, the pedestrian control STOP signs should be angled so that they are not visible from vehicles on the roadway.

Observation: There is no pedestrian gate across the sidewalk at the railroad crossing and Canal Street.

Recommendation: A pedestrian gate should be installed at this crossing

Observation: Students cross SR 44 at Myrtle Avenue without waiting for the pedestrian signal.

Recommendation: This action is a behavioral issue and it is recommended that this situation continue to be monitored and that students be reminded of the dangers of crossing this roadway

Observation: The waiting area for the Votran bus stop at 10th street and Palmetto Street is along the narrow sidewalk and becomes congested with pedestrian traffic and those waiting for the bus.

Recommendation: Coordinate with the County and their proposed widening of 10th Street from Myrtle Avenue to US 1 to ensure that a sufficient waiting area is provided. Additionally, coordinate with Votran to install a bench.



Illustration 9: Crosswalk across S. Myrtle Avenue



Illustration 10: Students crossing SR 44 against the signal

Parallel and Perpendicular Sidewalk Inventory

An inventory of sidewalk coverage within the walk zone was taken. The focus of this inventory was the east/west and north/south urban collectors within the walk-zone. This was to verify whether there are routes of continuous sidewalk coverage that can be taken to and from the school and whether or not any of these routes are considered hazardous based on the parallel criteria listed above. There are no streets within the walk zone with a posted speed limit of 55 miles per hour or greater. The parallel sidewalk coverage on these urban collector roads is summarized in Tables 2 and 3.

The perpendicular sidewalk conditions are summarized in Table 4. Peak-hour, directional volumes were estimated using the Volusia County Traffic Counts for collector and arterial roadways within the school walk zone by applying a peak-hour factor of 0.0977 and a directional factor of 0.55. Crossing conditions are deemed to be hazardous if they meet the criteria listed above for walkways perpendicular to the roadway.

Table 2
East/West Parallel Collector Sidewalk Inventory
New Smyrna Beach Middle School Assessment Study

East/West Roadway	Segment	Sidewalk Details				Hazardous Condition?
		Sidewalk Coverage	Side of Road			
			North	South	Exceptions/Comments	
Park Avenue	Old Country Rd to Us 1	✓	✓	✓		No
	US 1 to Riverside Dr	✓	✓	✓		No
10 th Street	Old Mission Rd to Tatum Ave	✓	✓			No
	Tatum Ave to Myrtle Ave	✓	✓			No
	Myrtle Ave to US 1	✓	✓			No
SR 44	Mission Dr to Myrtle Ave	✓	✓	✓		No
	Myrtle Ave to Palmetto St	No			Not a likely pedestrian route.	No
	Palmetto St to Live Oak St	✓	✓	✓		No
Canal Street	SR 44 to Myrtle Ave	✓		✓		No
	Myrtle Ave to US 1	✓	✓	✓		No
	US 1 to Riverside Dr	✓	✓	✓		No

Table 3
North/South Parallel Collector Sidewalk Inventory
New Smyrna Beach Middle School Assessment Study

North/ South Roadway	Segment	Sidewalk Details				Hazardous Condition?
		Sidewalk Coverage	Side of Road			
			East	West	Exceptions/Comments	
Mission Drive	Old Mission Rd to SR 44	✓	✓	✓		No
Old Mission Road	Josephine St to Mission Dr	✓	✓	✓		No
	Mission Dr to SR 44	✓	✓	✓		No
Myrtle Avenue	10 th St to 7 th St	✓		✓		No
	7 th St to Joel St	✓		✓		No
	Joel St to SR 44	✓	✓			No
	SR 44 to Canal St	✓	✓	✓		No
	Canal St to Enterprise Rd	✓		✓		No
US 1	Park Ave to 10 th St	✓	✓	✓		No
	10 th St to Canal St	✓	✓	✓	No sidewalk on the west side of US 1 adjacent to the FEC Railroad property	No
	Canal St to Ronnoc Ln	✓	✓	✓		No

Table 4
Perpendicular Sidewalk Evaluation
New Smyrna Beach Middle School Assessment Study

Roadway	Perpendicular Street	Daily Traffic Volume	Peak-Hour Directional Traffic Volume	Exceed Volume Threshold	Traffic Signal or Stop Sign	Hazardous Condition
SR 44	Myrtle Ave	25,500	1,370	Yes	Yes	No
	Palmetto St	22,000	1,182	Yes	Yes	No
	Live Oak St	22,000	1,182	Yes	Yes	No
Canal St	Myrtle Ave	12,500	672	Yes	No	Yes
	US 1	12,500	672	Yes	Yes	No
US 1	10 th St	27,000	1,451	Yes	Yes	No
	Palmetto St	25,000	1,343	Yes	No	Yes
	Canal St	25,000	1,343	Yes	Yes	No
	Washington St	26,000	1,397	Yes	Yes	No

Based on the criteria for hazardous conditions identified above, there are no roadways with hazardous conditions identified in the walk zone. The perpendicular sidewalk inventory identifies 2 crossings deemed hazardous based on predicted walk routes; US 1 at Palmetto Street and Canal Street at Myrtle Avenue.

It should be noted that while there is no crosswalk at Palmetto and US 1, there is a signal controlled crossing of US 1 at 10th Street to accommodate pedestrians needing to cross US 1 from the eastern portion of the walk zone. Additionally, there is a crosswalk at the crossing of Canal Street at Myrtle Avenue; however the traffic on Canal Street does not stop. Given the peak-hour directional volume on Canal Street, this creates a hazardous condition based on the criteria for perpendicular roadways. It is recommended that a study be conducted to determine if a pedestrian signal is warranted at the Myrtle Avenue crossing of Canal Street.

Florida Highway Administration (FHWA) guidelines indicate that urban collector roadways should have sidewalk coverage on both sides of the roadway where there is commercial development, and on at least one side of the road where there is residential development. The following sidewalk and crosswalk improvements are recommended to improve connectivity within the walk zone:

- Install crosswalk on Myrtle Avenue across all four school driveways.
- Install sidewalk landing on Myrtle Avenue at the driveway accessing the walker/bicycle gate.
- Repair/replace the sidewalk on S. Myrtle Avenue in front of the school.
- Refurbish crosswalk on Myrtle Avenue where the sidewalk switches from the east side of the road to the west side on the road (approximately 0.10 mile south of Cavedo Street).
- Conduct a study to determine if a pedestrian crossing is warranted at the Myrtle Avenue crossing of Canal Street.
- Install a pedestrian gate at the Canal Street crossing of the railroad.

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SUMMARY

Table 5 summarizes all recommendations that have been made within this report. These recommendations and existing conditions are also illustrated on Figure 4. It should be noted that Volusia County has identified \$1,000,000 for the purpose of constructing sidewalks at not-yet determined locations in its 2010/2011-2014/2015 Transportation Improvement Program. Therefore, it is recommended that the City of New Smyrna Beach and the County collaborate to implement the recommendations of highest priority.

Table 5
Summary of Recommended Improvements
New Smyrna Beach Middle School Assessment Study

Location	Observations	Recommendations
On-Campus		
Sidewalk crossings in front of four school driveways on S. Myrtle Avenue	All four sidewalk crossings on Myrtle Avenue at the school's driveways do not have crosswalks.	Crosswalks should be installed at all four sidewalk crossings across the school's driveways on S. Myrtle Avenue.
Myrtle Avenue at the driveway accessing the walker/bicycle gate	The sidewalk approaching the drive to the walker's/bicyclist's gate from the south does not have a landing.	A sidewalk landing should be installed at this location.
S. Myrtle Avenue in front of the school	The sidewalk on S. Myrtle Avenue in front of the school is broken in places	The sidewalk should be replaced or repaired
General	Poor helmet usage.	School should work with programs that provide free helmets to school students such as those offered through the Sheriff's office and Department of Health
Off-Campus		
S. Myrtle Avenue, approximately 0.1 miles south of Cavedo Street	Conflicting crosswalk markings and angle of pedestrian STOP signs.	Diagonal crosswalk should be removed, perpendicular crosswalk should be restriped, sidewalk on the east side of the roadway should be reconstructed at 90 degrees to the roadway and pedestrian STOP signs should be angled so they are not confused as roadway STOP signs
Intersection of Canal Street and Myrtle Avenue	The crossing of Canal Street is an uncontrolled crossing site. Given the traffic volumes on Canal Street, this is considered a hazardous condition.	Conduct a study to determine if a pedestrian crossing is warranted at the Myrtle Avenue crossing of Canal Street.
10 th Street at Palmetto Street	The waiting area for the Votran bus stop at 10 th street and Palmetto Street is along the narrow sidewalk and becomes congested with pedestrian traffic and those waiting for the bus.	Coordinate with the County and their proposed widening of 10 th Street from Myrtle Avenue to US 1 to ensure that a sufficient waiting area is provided. Additionally, coordinate with Votran to install a bench.
Canal Street crossing of the FEC Railroad	The sidewalk crossing is not protected by a railroad crossing gate.	Recommend that a pedestrian gate be installed at this location
General	Group walking, headed by parents or adults.	Growth of the Walking Bus Program targeted at existing groups with view to expand.

Figure 4

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EXECUTIVE SUMMARY – IMPLEMENTATION REPORT

Lassiter Transportation Group, Inc. (LTG) was retained by the Volusia Transportation Planning Organization (VTPO) to prepare an Implementation Report for the Bicycle and Pedestrian School Safety Review Study for 17 Volusia County schools. The Implementation Report for the Pedestrian and Bicycle School Safety Review Study is based on observations and recommendations of the Assessment Report and includes cost data, ranking criterion for the recommended improvements, and the best practices to follow on old and new developments. The subject of this Implementation Report is New Smyrna Beach Middle School. Recommendations for sidewalk improvements within this report have an associated total cost of \$22,157.29.

Assessment of Existing Conditions

Conditions within the walk zone of New Smyrna Beach Middle School have been presented and assessed within the Assessment Report contained in the previous sections. Recommendations were also made within those sections to improve observed conditions. These recommendations are evaluated within the following sections, based on these factors:

- Safety severity
 - Distance from the school
 - Crashes
 - Traffic flow (how it affects walkers and bicyclists)
- Benefits associated with improvement
 - Walker and bicyclist traffic
 - Walking and bicycling network/connectivity
- Constructability
- Cost

Each safety issue was rated, ranked, and placed on a prioritized list. A preliminary cost estimate was completed using the FDOT's *2010 Basis of Estimates Manual*. Actual construction costs may vary based on detailed engineering. It is noted that an in-depth engineering constructability analysis of the project should be conducted to determine if the recommendation can be constructed at the suggested estimated cost since recommendations are based on field observations.

8

BEST PRACTICES

This section of the report will address the best practices which make walking and bicycling a safer mode of transportation for students. These practices are not only applicable to the walk zone but to any new or old development that supports walking and bicycling. The data gathered for this section of the report comes from the Federal Highway Administration (FHWA), Americans with Disabilities Act of 1990 (ADA), and other documents that are supported by the FDOT and the Volusia County School District.

Sidewalk Design for New Roadways and Developments

Findings

Sidewalk design for new roadways and developments are usually based on anticipated pedestrian demand, the type of development, whether residential, industrial, or commercial, and the jurisdiction. Developers may not want to construct sidewalks because the adjoining properties may not have sidewalks. In some cases, development requirements did not address sidewalk construction or connectivity. These conditions have led to developments that do not include sidewalk connectivity.

Best Practices

When planning a development which is located within the walk zone of a school, safe, connected networks of sidewalks that can be easily navigated by students should be required. If it is not possible to have safe sidewalks then multi-use trails should be considered.

All sidewalks should provide for disabled pedestrians and ought to be incorporated into the planning process for all new roadways and developments. The FHWA has established the following guidelines to assist local jurisdiction with determining when and where pedestrian facilities are needed.

- Develop sidewalks as integral parts of all city streets
- If land use plans anticipate pedestrian activity then sidewalks should be constructed as part of the street development
- Sidewalks should connect nearby urban communities
- Provide sidewalks in rural and suburban areas at schools, local businesses, and industrial plants that result in pedestrian concentrations
- Provide sidewalks whenever the roadside and land development conditions are such that pedestrians regularly move along a main or high-speed highway
- Incorporate sidewalks in rural areas with higher traffic speeds and the general absence of lighting
- Construct sidewalks along any street or highway without shoulders, even if there is light pedestrian traffic

The FHWA went on to say that to initiate the sidewalk installation guidelines above and to promote accessible sidewalk facilities, municipalities should consider the following recommendations:

- Agencies should accept bids from contractors who understand and construct accessible facilities
- Require employees and contractors to demonstrate their knowledge of accessibility topics. If, at any stage of the development process (i.e., planning, design, or installation) accessibility is not addressed, hold the responsible party accountable and make improvements.

- Engineering, transportation, and public policy decision makers should partner with transit providers on projects and programs, and require that transit systems include accessible pedestrian facilities
- Consult with representatives from disability agencies and organizations during all phases of project development
- Include persons with disabilities in the first phases of programming, planning, designing, operating, and constructing pedestrian facilities
- Agencies should ensure that accessibility guidelines are followed throughout planning, project development, and construction of pedestrian facilities

Other local agencies, such as the school board within which the development falls, and the City or County planner, should make sure that the sidewalks are within the minimum set requirements, have good connectivity between residential and commercial developments, increases the allowable densities near major intersections (wider sidewalks), are near major shopping areas and transit lines, and ensure pedestrian-friendly sidewalk designs. However, specific design principles must be in place before these options can be exercised. Planning for pedestrian sidewalk usage should be one of the primary goals for developers and should be an integral part of planning for walkable communities.

Appendix D presents the FHWA's guidelines of best practices for the installation of new sidewalks. New developments should consider the following sidewalk safety features to plan for walkers and bicyclists:

- Sidewalks should be constructed on both sides of the road
- Wide pathways
- Acceptable lighting
- No obstacles within walkway
- Sidewalk connectivity
- Sidewalk network
- ADA compliant
- Pedestrian facilities (e.g., shaded benches)
- Changes in grade and slope should be moderate

Sidewalk Retrofit

Findings

Cities, counties, and states have codes and regulations that determine how wide a sidewalk must be and how much shoulder should exist between the sidewalk and pavement. The cities and counties must also follow regulations, set by the ADA, to aid disabled pedestrians. These codes have changed as a result of society working towards consuming less energy and promoting safety and healthier lifestyles. In some older neighborhoods, sidewalks are not up to standards since ADA guidelines were not developed and implemented until the 1990s. If the roadway is retrofitted in the future, then existing sidewalks must be brought into compliance with current ADA standards.

Issues with retrofitting sidewalks may include right-of-way costs, conflicting drainage features or swales in the right-of-way, and steep grades. Some sidewalks may have all the aforementioned issues but insufficient right-of-way for retrofitting.

Best Practices

It is best to create developments with school routes, pedestrian transit routes, and amenities within close walking distances. However, retrofitting sidewalks should be considered in older, noncompliant developments. Additional right-of-way may be required to implement retrofit recommendations.

Projects aimed at retrofitting older sidewalks should research data pertaining to what type of right-of-way exists, a cost analysis of the right-of-way purchase, cost of construction, the condition of existing sidewalks, and the benefits associated with the project. The right-of-way acquisitions process is detailed in *The Real Estate Acquisition Handbook* and is produced by the FDOT.

Existing Substandard Sidewalk

Findings

Older neighborhoods and developments that did not plan for pedestrians may have existing substandard sidewalks. Substandard sidewalk issues include the following (Pedestrian and Bicycle Information Center):

- Sidewalks are buckled, lifted, or cracked due to tree roots or other causes
- Sidewalks are blocked due to the placement of utility poles, sign posts, potholes, fire hydrants, bus benches, newspaper racks, parked cars, or other obstructions
- Sidewalks are blocked by bushes or low tree branches
- Sidewalks lack curb ramps at street corners, crosswalks, and driveways
- The driveway side slopes are steep and hard to cross
- Sidewalk shoulders and adjacent drop-offs are excessive

Any of these existing conditions may make walking and bicycling difficult. When sidewalks are obstructed or do not have curb ramps, it is difficult for walkers and bicyclists to get off the sidewalk and on to the pavement to walk around the obstruction. Driveways with steep side slopes may cause walkers to trip or bicyclists to lose balance.

Best Practices

It is important to determine what sidewalks are substandard and those sidewalks should be placed on a prioritized list to be repaired or brought up to current standards. Maintaining existing sidewalks is paramount to providing a safe walking and bicycling environment.

The restriction of heavy vehicles on the sidewalk, installing root barriers if trees are planted too close to a sidewalk, and removing obstacles will keep sidewalks safe for students who are walking or bicycling to school. Depending on the average width of tree root spread, there should be rules that determine what species, and how far, trees must be planted from the sidewalk to prevent cracks and buckling. Trees and bushes should be kept trimmed to avoid blocking the sidewalk and to maximize the mobility of pedestrians. For obstacles that cannot be moved, regulations should be developed that prevent future installations affecting the sidewalk.

Driveways that have steep slopes should be re-graded to conform to ADA approved practices. This will allow for an easy transition between the sidewalk and the driveway for all pedestrians and bicyclists.

Curb ramps should be installed at all crossings, wherever applicable, such as at an intersection or at a mid-block crossing. Sidewalks should end at a detectable warning strip or whenever the sidewalk changes, such as at a mid-block crossing, and should conform to standards approved by the ADA. Standards set by the ADA include the width, length, slope, and texture of curb ramps and the width and length of landings, if they are needed.

Sidewalk Maintenance

Findings

A sidewalk that clearly has maintenance issues may inhibit pedestrian and bicyclist usage. Existing sidewalks may be hazardous to pedestrians and bicyclists if the following issues exist (FHWA):

- Step separation - a vertical displacement of 13 mm (0.5 in) or greater that could cause pedestrians to trip or prevent the wheels of a wheelchair or stroller from rolling smoothly
- Badly cracked concrete - holes and rough spots ranging from hairline cracks to indentations wider than 13 mm (0.5 in)

- Spalled areas - fragments of concrete or other building material detached from larger structures
- Settled areas that trap water - sidewalk segments with depressions, reverse cross slopes, or other indentations that make the sidewalk path lower than the curb; these depressions trap silt and water on the sidewalk and reduce the slip resistant nature of the surface.
- Tree root damage - roots from trees growing in adjacent landscaping that cause the walkway surface to buckle and crack
- Vegetation overgrowth - ground cover, trees, or shrubs on properties or setbacks adjacent to the path that have not been pruned can encroach onto the path and create obstacles
- Obstacles - objects located on the sidewalk, in setbacks, or on properties adjacent to the sidewalk that obstruct the passage space or the visibility of sidewalk users; obstacles commonly include trash receptacles, utility poles, newspaper vending machines, and mailboxes
- Blocked or inadequately protected drainage inlets and inadequate flow planning
- Temporary construction interruptions
- Inadequate patching after utility installation

Sidewalks are typically in the public right-of-ways and are the sole responsibility of the City or County, depending on who has jurisdiction over that roadway. In some cases, sidewalks are provided along privately maintained roads and common spaces and are the responsibility of a Homeowners Association (HOA) or other property management entity.

Best Practices

- A division of the City or County should be solely dedicated to sidewalk maintenance or, if in the case of privately maintained sidewalks, should be addressed through code enforcement procedures.
- Sidewalk maintenance issues should be placed on a prioritized list of sidewalk projects to be completed.
- Maintenance issues should be solved by using strategies standard to road maintenance. This will minimize the risk of walkers and bicyclists on their way to and from school; and all maintenance issues should be handled consistently throughout the jurisdiction.

Improving Existing Roadway Conditions

Findings

Existing roadway conditions may not offer enough safety for walkers and bicyclists. Motorists may speed within school walk zones and not pay attention to their surroundings. Motorists pulling out of driveways may look for oncoming vehicles but may not look for walkers and bicyclists crossing the driveway.

Best Practices

Roadway conditions can be improved to maintain safety and accessibility for walkers and students who may want to ride their bicycles to school. The following are best practices that improve existing roadway conditions for walkers and students who choose to ride their bicycles to school.

- Signage and pavement markings should be highly visible and current
- Traffic calming devices should be considered to reduce speeds
- Speed studies should be conducted to lower speed limits year-round
- ADA standards should be adhered to
- Consider one-way streets if traffic is too congested during the arrival and dismissal times
- Strict police enforcement should be imposed to deter illegal and unsafe parking practices as well as moving violations within the school zone

Pavement Markings

Findings

Pavement markings are essential to the transportation system to communicate and enhance the messages of roadway operational conditions by augmenting other traffic control devices. SCHOOL pavement markings and crosswalk markings are especially important since they alert the motorist of walkers and bicyclists entering the pavement at crosswalks and intersections. Pavement markings can easily fade or become obliterated over time. It was observed that SCHOOL markings, which warn motorists that they will soon enter into a SCHOOL zone, are often faded, cracked, or chipped.

Best Practices

The following best practices are recommended to improve the safety, life, and effectiveness of pavement markings.

- SCHOOL pavement markings and crosswalk markings should be clear and visible in order to warn motorists that they are entering a school zone and/or children are crossing.
- The FDOT's current standard (Index No. 17346) uses a special emphasis crosswalk that lengthens the life of the crosswalk marking.
- Thermoplastic paint should be used for all pavement and school markings to enhance the visibility of walkers and bicyclists. Thermoplastic paint should be used since it is durable, retro-reflective.
- The crosswalk should align with the sidewalk ramps.
- Crosswalks should be installed where walkers and bicyclists are in the pavement for the shortest distance and time possible.
- Pavement markings should be accompanied by the proper signage.
- Pedestrian median refuges should be installed for long crosswalks with interim medians.
- Walkers and bicyclists should be dissuaded from crossing at intersections or mid-block crossings where heavy traffic exists unless accompanied by crossing guards.

Traffic Signal Control

Findings

Traffic signalization has an important role in promoting safety for students who walk or bicycle to school. Drivers at busy intersections can easily overlook students trying to cross a street; consequently, signals allow students the necessary time to safely cross busy intersections.

School flashing beacons (Illustration 11) also play an important role in safety. Flashing beacons alert drivers that they are entering a school zone and indicate that the displayed speed limit is in effect. It was observed that school flashing beacons can be operated manually or can be pre-set to turn off/on during pre-programmed timeframes. Manually run school flashing beacons are usually operated by school crossing guards, who are primarily assigned to cross elementary school students. Unfortunately, this does not address the needs of middle school students.

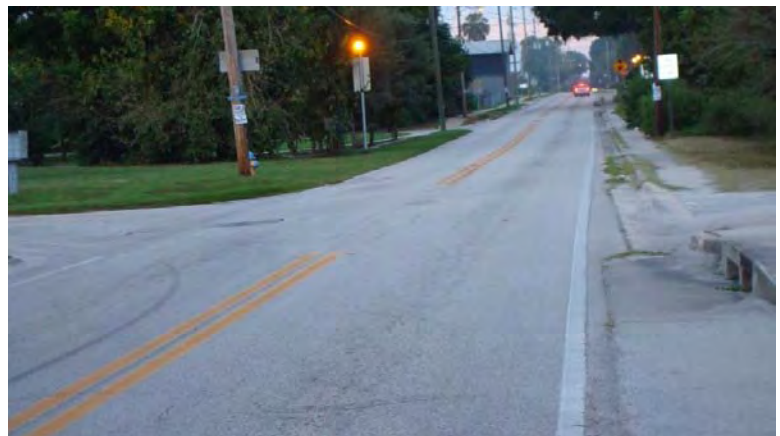


Illustration 11: Flashing beacon traffic signal control

Best Practices

- Pedestrian signal heads should be considered at all intersections that utilize traffic control signals for motor vehicles within the school walk zones.
- Pedestrian signal buttons should be placed such that it is obvious to elementary and middle school students which buttons to press to access the desired sidewalk.
- Pedestrian signal heads should employ the countdown display which exhibits the symbols of the WALKING MAN beside the numerical countdown. This will help students to decide if they have enough time to cross or if they should wait for the next pedestrian signal phase.
- Students should be educated on the proper ways to cross an intersection when using a pedestrian signal head.
- For students who must cross more than two lanes of traffic, the assignment of crossing guards or overhead pedestrian bridges should be considered.
- U-turns and right-on-reds should be prohibited at intersections where students utilize pedestrian crossings.
- School attendance zones that have crossings at heavily congested intersections should have their walk zones re-evaluated so that students can either walk to another school or transportation could be provided.

Enforcement and Education

Findings

Walkers and bicyclists do not always follow proper crossing procedures. Students may dart through traffic to access the school in the mornings or access a vehicle parked across the road from the school in the afternoons. Students may also cross streets at mid-block without the aid of a crosswalk or an adult. When crosswalks do exist, students do not always follow proper crossing procedures. (Illustration 12).

Regulations are not always followed by adults dropping off/picking up students. Motorists were observed to park in No Parking areas and make prohibited vehicular movements, including u-turns. Some motorists were observed to be speeding within the reduced-speed zone.

Students who choose to ride their bicycles to school do not always wear helmets (Illustration 13).



Illustration 12: Students crossing SR 44 against the signal

Best Practices

- Students and parents should be educated on proper crossing procedures. Parents, crossing guards, and School Resource Officers (SRO) should be the main resources for safety.
- Parents should receive flyers or recorded messages on a school-wide basis to inform them of the proper drop-off/pick-up procedures. Strict enforcement of these procedures should eventually deter parents from practicing unsafe drop-off/pick-up actions.
- Prohibited vehicular movements should be strictly handled and higher fines could be considered, where allowable by law, during the arrival and dismissal times of school.
- Helmets should always be worn by bicycling students. Parents, school staff, crossing guards, and school resource officers should encourage helmet usage. Non-compliant helmet users should be dealt with consistently and strictly.
- Encourage walking and bicycling by providing free helmets, stickers, reflective gear, or create an incentive program.
- Schools should provide a safe and secure bicycle storage facility for students who choose to ride their bicycles to school.
- Parents should be informed about the different walking and bicycling programs available and the school and its volunteers should assist in planning and implementing those programs.
- Students who are regular walkers and bicyclists should be paired with other walkers and bicyclists who live in the same area.
- Crossing guards should be involved in the re-zoning of walk zones since they have a better understanding of the distribution of the walker and bicyclist population.



Illustration 13: Students crossing entrance to parent loop during afternoon dismissal, conflict with vehicles turning into parent loop and no helmet usage

School Board Considerations

Findings

School districts generally employ the two-mile walk route to determine the walk zone. This is not always the best option to promote safety. Students may have to cross congested intersections, too many intersections, and/or busy driveways.

Sidewalks are not always located on both sides of the road. This may encourage unsafe crossings where no crosswalks exist. Walk zones can also include sidewalks that end at an unsignalized intersection with no safe alternative to gain access to the sidewalk on the opposite side of the roadway.

It was noted that schools prefer to have one controlled point of entry that is monitored by school staff. In these cases, students who walk or ride their bicycles to school may have to cross busy driveways including drop-off/pick-up loops, bus loops, and even parent and teacher parking lots, to enter/exit the controlled point of entry.

Best Practices

- As defined in F.S. 1006.23, the School District staff collaborates with the Sheriff's crossing guards, City and County Public Works and FDOT to evaluate a school's walk zone and its hazardous walking conditions as defined.
- In effort to avoid the inter-mingling of elementary, middle, and high school traffic, school arrival and dismissal, Volusia County School District has a three-tiered bell schedule. Further, each school separates bus traffic from parent pick-up/drop-off traffic.
- It is necessary to review all new development plans within the school walk zone to ensure that developers are providing sidewalks on either side of the road and maintaining sidewalk connectivity and networking to the school. Volusia County School District is a member of city and county development review teams and reviews new site plans and subdivisions to ensure adequate area is designated for school bus stops and sidewalks. City and County land development regulations require sidewalks.
- All new schools should be planned with good sidewalk connectivity/network to all neighborhoods and developments within its walk zone.
- As required by F.S. 1006.23, Volusia County School District provides bus service to students who do not have access to safe routes to school.
- There are certain programs which promote walking and bicycling to school. Volusia County School District currently participates in such programs (e.g. Walking School Bus, SAFE KIDS Walk This Way, and International Walk to School Day). Bicycle and pedestrian safety is part of the existing elementary physical education curriculum.
- A No Backpack policy should be considered to encourage walking and bicycling to school and consideration to the following is recommended:
 - All textbooks should be accessible on-line
 - A set of textbooks should be available at the local library
 - Provide students with a set of textbooks to keep at home
- Each school should enforce bicycle safety, helmet usage should be closely monitored for compliance, and PTA meetings to ensure parent support and compliance with these policies should be promoted.
- All teachers assisting during arrival/dismissal should wear safety vests when they are crossing students or interacting with vehicular traffic.

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MASTER IMPROVEMENT PLAN

Refer to Figure 4 of the Assessment Section for the recommendations. It highlights the locations of existing conditions as well as the proposed improvements. The following sections will provide more details on the recommendations shown in Figure 4.

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CONSTRUCTABILITY MATRIX

The matrix in Table 5 shows the estimated cost of sidewalk-related projects that are recommended for improvement. FDOT's *2010 Basis of Estimates* manual was used to develop the constructability matrix. The estimated construction costs for these recommendations are \$22,157.29. The costs shown in the constructability matrix includes material and labor fees. As mentioned before, these improvements are based on field observations and should be verified by a contractor prior to construction.

Table 6
Constructability Matrix
New Smyrna Beach Middle School Implementation Report

PRIORITY #	PROJECT NAME	DESCRIPTION		PAY ITEM NUMBER	PAY ITEM DESCRIPTION	PLAN QTY	UNIT MEASURE	UNIT PRICE	ESTIMATED COST
		LOCATION	RECOMMENDATION						
1	Sidewalk Repair	S. Myrtle Avenue in front of school	Replace missing asphalt sidewalk	339-1	MISCELLANEOUS ASPHALT PAVEMENT	0.25	TN	\$149.52	\$37.38
			Remove portion of concrete sidewalk to install ramp	110-4	REMOVAL OF EXISTING CONCRETE PAVEMENT	1.00	SY	\$12.07	\$12.07
			Install sidewalk ramp according to Std. Index No. 310	522-1	SIDEWALK CONC, 4" THICK	1.00	SY	\$45.22	\$45.22
	Pavement Markings		Special emphasis crosswalk should be installed at the parent loop exit driveway	711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	150.00	LF	\$4.51	\$676.50
				711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	120.00	LF	\$1.84	\$220.80
			Special emphasis crosswalk should be installed at driveway adjacent to the walkers gate	711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	160.00	LF	\$4.51	\$721.60
				711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	130.00	LF	\$1.84	\$239.20
			Special emphasis crosswalk should be installed at the parent loop entrance driveway	711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	240.00	LF	\$4.51	\$1,082.40
				711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	190.00	LF	\$1.84	\$349.60
			Special emphasis crosswalk should be installed at the bus loop exit driveway	711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	190.00	LF	\$4.51	\$856.90
				711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	150.00	LF	\$1.84	\$276.00
			SUBTOTAL:						

Table 6 (cont'd.)
Constructability Matrix
New Smyrna Beach Middle School Implementation Report

2	Sidewalk Installation	S. Myrtle Avenue approximately 0.1 mile south of Cadevo Street	Remove Miscellaneous Asphalt	327-70-7	MILLING OF EXISTING ASPHALT PAVEMENT, 4" THICK	22.00	SY	\$1.10	\$24.20
	Install sidewalk at 90 degrees to roadway		522-1	SIDEWALK CONC, 4" THICK	31.00	SY	\$45.22	\$1,401.82	
	Remove diagonal crosswalk pavement markings		710-17	THERMOPLASTIC, REMOVE	180.00	SF	\$2.11	\$379.80	
	Special emphasis crosswalk should be installed at 90 degrees to Pavement. Reinstall pedestrian STOP signs		711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	140.00	LF	\$4.51	\$631.40	
			711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	110.00	LF	\$1.84	\$202.40	
SUBTOTAL:									\$2,639.62
3	Warrant Study	10 th Street at Palmetto Street	Conduct pedestrian signal warrant study						\$5,000
4	Railroad crossing gate	Canal Street Crossing of FEC Railroad	Pedestrian crossing gate should be installed						\$10,000
TOTAL:									\$22,157.29

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RECOMMENDED PRIORITY PROJECTS

This section of the report provides additional information about each project in ranking order.

Background: The VTPO is continuing in its capacity to improve the safety of the school walk zone for walkers and bicyclists who live within the school walk zone. The safety issues addressed within this report will be reviewed by the VTPO for potential funding to implement the recommended changes and, thereby, improve the safety of the school walk zone, where possible. The safety issues which produce the following four sidewalk recommendations are that gaps in sidewalk coverage along major school routes may force students to walk or bicycle within the travelled way. Provision of well connected sidewalks dictates exactly where students should walk.

Project No. 1: S. Myrtle Avenue Crosswalk and Sidewalk Repairs

Submitting Agency: Volusia County
Project Location: S. Myrtle Avenue in front of school
School Served: New Smyrna Beach Middle School
Project Description: Crosswalk pavement markings, sidewalk repair, sidewalk landing
LAP Coordinator: Volusia County
Maintaining Agency: Volusia County

Project Description: This project includes installing special emphasis crosswalks at the four school driveways on the west side of S. Myrtle Avenue, repairing the damaged sidewalk and installing a ramp at the walkers/bicyclists gate.

Estimated Cost: The estimated cost for this project is \$4,517.67.

Project No. 2: Installation of Crosswalk

Submitting Agency: Volusia County
Project Location: S. Myrtle Avenue approximately 0.1 miles south of Cadevo Street
School Served: New Smyrna Beach Middle School
Project Description: Sidewalk installation
LAP Coordinator: Volusia County
Maintaining Agency: Volusia County

Project Description: This project includes removing a portion of the existing asphalt pavement on the east side of the roadway, north of the crossing, and replacing with a concrete sidewalk constructed at 90 degrees to the crossing, removing the existing diagonal crosswalk and restriping the existing perpendicular special emphasis crosswalk across Myrtle Avenue. The pedestrian STOP signs should be reinstalled and angled to control the pedestrian movement.

Estimated Cost: The estimated cost for this project is \$2,639.62.

Project No. 3: Pedestrian Signal Warrant Study

Submitting Agency: Volusia County
Project Location: Canal Street crossing of Myrtle Avenue
School Served: New Smyrna Beach Middle School
Project Description: Pedestrian Signal Warrant Study
LAP Coordinator: Volusia County
Maintaining Agency: Volusia County

Project Description: This project includes conducting a study to determine if a pedestrian signal is warranted at the Myrtle Avenue crossing of Canal Street.

Estimated Cost: The estimated cost for this project is \$5,000

Project No. 4: Installation of Pedestrian Gate at Railroad Crossing

Submitting Agency: Volusia County
Project Location: Canal Avenue at FEC Railroad
School Served: New Smyrna Beach Middle School
Project Description: Install pedestrian gate at railroad crossing
LAP Coordinator: Volusia County
Maintaining Agency: FEC

Project Description: This project includes installing pedestrian gate and the Canal Street crossing of the FEC Railroad.

Estimated Cost: The estimated cost for this project is \$10,000.

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"2010 Basis of Estimates Manual." < <http://www.dot.state.fl.us/Specificationsoffice/Estimates/BasisofEstimates/BOEManual/BOEOnline.shtm>>.

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"Safe Routes to School Guideline." < http://www.saferoutesinfo.org/guide/pdf/SRTS-Guide_full.pdf>.

12

APPENDICES

Appendices

Appendix A

Crash Reports

FLORIDA TRAFFIC CRASH REPORT LONG FORM

MAIL TO DEPT OF HIGHWAY SAFETY & MOTOR VEHICLES, TRAFFIC CRASH
RECORDS, NEIL KIRKMAN BUILDING, TALLAHASSEE FL 32399-0537

DO NOT WRITE IN THIS SPACE

Time & Location	DATE OF CRASH	TIME OF CRASH	TIME OFFICER NOTIFIED	TIME OFFICER ARRIVED	INVEST. AGENCY REPORT NUMBER	HSMV CRASH REPORT NUMBER
	10 15 2008	2:56 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	2:57 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	3:03 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	2008100216	80305396
	COUNTY / CITY CODE	FEET or MILE(S)	N S E W	CITY OR TOWN	(Check if in City or Town)	COUNTY
	08/44		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	NEW SMYRNA BEACH	<input checked="" type="checkbox"/>	VOLUSIA
Time & Location	AT NODE NO	or FEET or MILE(S)	FROM NODE NO	NEXT NODE NO	NO OF LANES	1 DIVIDED 2 UNDIVIDED
					2	2
Time & Location	AT THE INTERSECTION OF (street, road or highway) or FEET or MILE(S)			N S E W	FROM INTERSECTION OF (street, road or highway)	
	50			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	JOEL ST	

Vehicle 1	DRIVER ACTION	1 Phantom 2 Hit & Run 3 N/A	YEAR	MAKE	TYPE	USE	VEH LICENSE NUMBER	STATE	VEHICLE IDENTIFICATION NUMBER	18 Undercarriage 19 Overturn 20 Windshield 21 Trailer SHOW FIRST POINT OF VEHICLE DAMAGE AND CIRCLE DAMAGED AREA(S)				
	3				10	01								
	TRAILER OR TOWED VEHICLE INFORMATION			TRAILER TYPE										
Vehicle 2	VEHICLE TRAVELING	ON	AT	Est MPH	Posted Speed	EST VEHICLE DAMAGE	1 Disabling 2 Functional 3 No Damage	EST TRAILER DAMAGE	1 Tow Rotation List 2 Tow Owner's Request 3 Driver 4 Other					
	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			10	30	\$50.00	1		4					
	MOTOR VEHICLE INSURANCE COMPANY (LIABILITY OR PIP)				POLICY NUMBER	VEHICLE REMOVED BY	OTHER RESPONSIBLE							
	NAME OF VEHICLE OWNER (Check Box if Same As Driver) <input checked="" type="checkbox"/>				CURRENT ADDRESS (Number and Street)	CITY AND STATE	ZIP CODE							
Pedestrian 1	SAME AS DRIVER													
	NAME OF OWNER (Trailer or Towed Vehicle)				CURRENT ADDRESS (Number and Street)	CITY AND STATE	ZIP CODE							
	NAME OF MOTOR CARRIER (Commercial Vehicle Only)				CURRENT ADDRESS (Number and Street)	CITY, STATE AND ZIP CODE	US DOT or ICC MC IDENTIFICATION NUMBERS							
	NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN				CURRENT ADDRESS (Number and Street)	CITY, STATE & ZIP CODE	DATE OF BIRTH							
Pedestrian 2	BRANDON M. BECK				607 DOWNING ST, NEW SMYRNA BEACH FL 32168				07/23/1994					
	DRIVER LICENSE NUMBER	STATE	DL TYPE	REQ END	ALCO/DRUG TEST TYPE	RESULTS	ALCO/DRUG	PHYS DEF	RES	RACE	SEX	INJ	S EQUIP	EJECT
	7	FL	3	1	1 Blood 3 Urine 5 None 2 Breath 4 Refused	5	1	1	1	1	1	3	1	2
	HAZARDOUS MATERIALS BEING TRANSPORTED	PLACARDED	IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND		WAS HAZARDOUS MATERIAL SPILLED?	RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE	DRIVER'S PHONE NO							
Vehicle 2	DRIVER ACTION	1 Phantom 2 Hit & Run 3 N/A	YEAR	MAKE	TYPE	USE	VEH LICENSE NUMBER	STATE	VEHICLE IDENTIFICATION NUMBER	18 Undercarriage 19 Overturn 20 Windshield 21 Trailer SHOW FIRST POINT OF VEHICLE DAMAGE AND CIRCLE DAMAGED AREA(S)				
	3	99	MTS	01	01	366KGD	FL	4A3AK34YXXE058658						
	TRAILER OR TOWED VEHICLE INFORMATION			TRAILER TYPE										
Vehicle 2	VEHICLE TRAVELING	ON	AT	Est MPH	Posted Speed	EST VEHICLE DAMAGE	1 Disabling 2 Functional 3 No Damage	EST TRAILER DAMAGE	1 Tow Rotation List 2 Tow Owner's Request 3 Driver 4 Other					
	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			30	30	\$1000.00	1		2					
	MOTOR VEHICLE INSURANCE COMPANY (LIABILITY OR PIP)				POLICY NUMBER	VEHICLE REMOVED BY	EDGEWATER TOWING							
	NAME OF VEHICLE OWNER (Check Box if Same As Driver) <input type="checkbox"/>				CURRENT ADDRESS (Number and Street)	CITY AND STATE	ZIP CODE							
Pedestrian 2	GARY L. STEWART				3980 CRESTHILL LANE, NEW SMYRNA BEACH FL 32168									
	NAME OF OWNER (Trailer or Towed Vehicle)				CURRENT ADDRESS (Number and Street)	CITY AND STATE	ZIP CODE							
	NAME OF MOTOR CARRIER (Commercial Vehicle Only)				CURRENT ADDRESS (Number and Street)	CITY, STATE AND ZIP CODE	US DOT or ICC MC IDENTIFICATION NUMBERS							
	NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN				CURRENT ADDRESS (Number and Street)	CITY, STATE & ZIP CODE	DATE OF BIRTH							
Pedestrian 2	JENNA L. STEWART				3980 CRESTHILL LANE, NEW SMYRNA BEACH FL 32168				04/04/1992					
	DRIVER LICENSE NUMBER	STATE	DL TYPE	REQ END	ALCO/DRUG TEST TYPE	RESULTS	ALCO/DRUG	PHYS DEF	RES	RACE	SEX	INJ	S EQUIP	EJECT
	S363432926240	FL	5	1	1 Blood 3 Urine 5 None 2 Breath 4 Refused	5	1	1	1	1	2	1	1	
	HAZARDOUS MATERIALS BEING TRANSPORTED	PLACARDED	IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND		WAS HAZARDOUS MATERIAL SPILLED?	RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE	DRIVER'S PHONE NO							

Code Information	VEHICLE TYPE	VEHICLE USE	TRAILER TYPE	RESIDENCE (Driver / Ped)	PHYSICAL DEFECTS	ALCOHOL / DRUG USE	LOCATION IN VEHICLE
	01 Automobile 02 Van 03 Light Truck / P.U. - 2 or 4 rear tires 04 Medium Truck - 4 rear tires 05 Heavy Truck - 2 or more rear axles 06 Truck Tractor (Cab-Boat) 07 Motor Home (RV) 08 Bus (driver + seats for 9-15) 09 Bus (driver + seats for over 15) 10 Bicycle 11 Motorcycle 12 Moped 13 All Terrain Vehicle 14 Train 15 Low Speed Vehicle 77 Other	01 Private Transportation 02 Commercial Passengers 03 Commercial Cargo 04 Public Transportation 05 Public School Bus 06 Private School Bus 07 Ambulance 08 Law Enforcement 09 Fire / Rescue 10 Military 11 Other Government 12 Dump 13 Concrete Mixer 14 Garbage or Refuse 15 Cargo Van 77 Other	01 Single Semi Trailer 02 Tandem Semi Trailer 03 Tank Trailer 04 Saddle Mount / Flatbed 05 Boat Trailer 06 Utility Trailer 07 House Trailer 08 Pole Trailer 09 Towed Vehicle 10 Auto Transport 77 Other	1 County of Crash 2 Elsewhere in State 3 Non-Resident Out of State 4 Foreign 5 Unknown DL TYPE 1 A 2 B 3 C 4 D/Chaufeur 5 E/Operator 6 E/Oper - Rest 7 None RACE 1 White 2 Black 3 Hispanic 4 Other REQUIRED ENDORSEMENTS 1 Yes 2 No 3 No Endorsement Required	1 No Defects Known 2 Eyesight Defect 3 Fatigue / Asleep 4 Hearing Defect 5 Drowsiness 6 Seizure, Epilepsy, Blackout 7 Other Physical Defect INJURY SEVERITY 1 None 2 Possible 3 Non-Incapacitating 4 Incapacitating 5 Fatal (Within 30 Days) 6 Non-Traffic Fatality	1 Not Drinking or Using Drugs 2 Alcohol - Under Influence 3 Drugs - Under Influence 4 Alcohol & Drugs - Under Influence 5 Had Been Drinking 6 Pending ALCO/DRUG Test Results SAFETY EQUIPMENT IN USE 1 Not in use 2 Seat Belt / Shoulder Harness 3 Child Restraint 4 Air Bag - Deployed 5 Air Bag - Not Deployed 6 Safety Helmet 7 Eye Protection	1 Front Left 2 Front Center 3 Front Right 4 Rear Left 5 Rear Center 6 Rear Right 7 In Body of Truck 8 Bus Passenger 9 Other EJECTED 1 No 2 Yes 3 Partial

Section 3

Driver Action	1. Phantom 2. Hit & Run 3. N/A	YEAR	MAKE	TYPE	USE	VEH LICENSE NUMBER	STATE	VEHICLE IDENTIFICATION NUMBER	SHOW FIRST POINT OF VEHICLE DAMAGE AND CIRCLE DAMAGED AREA(S)						
TRAILER OR TOWED VEHICLE INFORMATION		TRAILER TYPE													
Vehicle	VEHICLE TRAVELING		ON		AT		Est MPH	Posted Speed	EST VEHICLE DAMAGE	1 Disabling 2 Functional 3 No Damage	EST TRAILER DAMAGE				
	MOTOR VEHICLE INSURANCE COMPANY (LIABILITY OR PIP)		POLICY NUMBER		VEHICLE REMOVED BY:		1 Tow Rotation List 2 Tow Owner's Request		3 Driver 4 Other						
Pedestrian	NAME OF VEHICLE OWNER (Check Box If Same As Driver)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE								
	NAME OF OWNER (Trailer or Towed Vehicle)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE								
	NAME OF MOTOR CARRIER (Commercial Vehicle Only)		CURRENT ADDRESS (Number and Street)		CITY, STATE AND ZIP CODE		US DOT or ICC MC IDENTIFICATION NUMBERS								
	NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN		CURRENT ADDRESS (Number and Street)		CITY, STATE & ZIP CODE		DATE OF BIRTH								
DRIVER LICENSE NUMBER		STATE	DL TYPE	REQ END	ALC/DRUG TEST TYPE		RESULTS	ALC/DRUG	PHYS DEF	RES	RACE	SEX	INJ	S EQUIP	EJECT
HAZARDOUS MATERIALS BEING TRANSPORTED		PLACARDED	IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD, AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND		WAS HAZARDOUS MATERIAL SPILLED?		RECOMMEND DRIVER RE-EXAM IF YES EXPLAIN IN NARRATIVE		DRIVER'S PHONE NO						
1 Yes 2 No		1 Yes 2 No			1 Yes 2 No		1 Yes 2 No								

# 1	PROPERTY DAMAGED - OTHER THAN VEHICLES	EST AMOUNT	OWNER'S NAME	ADDRESS	CITY	STATE	ZIP
# 2	PROPERTY DAMAGED - OTHER THAN VEHICLES	EST AMOUNT	OWNER'S NAME	ADDRESS	CITY	STATE	ZIP

CONTRIBUTING CAUSES - DRIVER / PEDESTRIAN 01 No Improper Driving / Action 02 Careless Driving (Explain In Narrative) 03 Failed To Yield Right - of - Way 04 Improper Backing 05 Improper Lane Change 06 Improper Turn 07 Alcohol - Under Influence 08 Drugs - Under Influence 09 Alcohol & Drugs - Under Influence 10 Followed Too Closely 11 Disregarded Traffic Signal 12 Exceeded Safe Speed Limit 13 Disregarded Stop Sign 14 Failed To Maintain Equip / Vehicle 15 Improper Passing 16 Drove Left of Center 17 Exceeded Stated Speed Limit 18 Obstructing Traffic 19 Improper Load 20 Disregarded Other Traffic Control 21 Driving Wrong Side / Way 22 Fleeting Police 23 Vehicle Modified 24 Driver Distraction (Explain In Narrative) 77 All Other (Explain In Narrative)	VEHICLE DEFECT 01 No Defects 02 Def Brakes 03 Worn / Smooth Tires 04 Defective / Improper Lights 05 Puncture / Blowout 06 Steering Mech 07 Windshield Wipers 08 Equipment / Vehicle Defect 77 All Other (Explain In Narrative) POINT OF COLLISION 01 On Road 02 Not On Road 03 Shoulder 04 Median 05 Turn Lane WORK AREA 01 None 02 Nearby 03 Entered	VEHICLE MOVEMENT 01 Straight Ahead 02 Slowing / Stopped / Stalled 03 Making Left Turn 04 Backing 05 Making Right Turn 06 Changing Lanes 07 Entering / Leaving / Parking Space 08 Properly Parked 09 Improperly Parked 10 Making U-Turn 11 Passing 12 Driverless or Runaway Vehicle 77 All Other (Explain In Narrative)	VEHICLE SPECIAL FUNCTIONS 1 None 2 Farm 3 Police Pursuit 4 Recreational 5 Emergency Operation 6 Construction / Maintenance SOURCE OF CARRIER INFORMATION 1 Not Applicable 2 Shipping Papers 3 Vehicle Side 4 Driver 5 Other LOCATION TYPE 1 Primarily Business 2 Primarily Residential 3 Open Country
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FIRST / SUBSEQUENT HARMFUL EVENT(S) 01 Collision With MV in Transport (Rear End) 02 Collision With MV in Transport (Head On) 03 Collision With MV in Transport (Angle) 04 Collision With MV in Transport (Left Turn) 05 Collision With MV in Transport (Right Turn) 06 Collision With MV in Transport (Sideswipe) 07 Collision With MV in Transport (Backed Into) 08 Collision With Parked Car 09 Collision With MV on Roadway 10 Collision With Pedestrian 11 Collision With Bicycle 12 Collision With Bicycle (Bike Lane) 13 Collision With Moped 14 Collision With Train 15 Collision With Animal 16 MV Hit Sign / Sign Post 17 MV Hit Utility Pole / Light Pole 18 MV Hit Guardrail 19 MV Hit Fence 20 MV Hit Concrete Barrier Wall 21 MV Hit Bridge/Pier/Abutment/Rail 22 MV Hit Tree / Shrubbery 23 Collision With Construction Barricade Sign 24 Collision With Traffic Gate 25 Collision With Crash Attenuators 26 Collision With Fixed Object Above Road 27 MV Hit Other Fixed Object 28 Collision With Moveable Object on Road 29 MV Ran Into Ditch/Culvert 30 Ran Off Road Into Water 31 Overtaken 32 Occupant Fell From Vehicle 33 Tractor / Trailer Jackknifed 34 Fire 35 Explosion 36 Downhill Runaway 37 Cargo Loss or Shift 38 Separation of Units 39 Median Crossover 77 All Other (Explain In Narrative)	ROAD SYSTEM IDENTIFIER 01 Interstate 02 U.S. 03 State 04 County 05 Local 06 Turnpike / Toll 07 Forest Road 08 Private Roadway 77 All Other (Explain In Narrative)	LIGHTING CONDITION 01 Daylight 02 Dusk 03 Dawn 04 Dark (Street Light) 05 Dark (No Street Light) 88 Unknown	ROAD SURFACE CONDITION 01 Dry 02 Wet 03 Slippery 04 Icy 77 All Other (Explain In Narrative) WEATHER 01 Clear 02 Cloudy 03 Rain 04 Fog 77 All Other (Explain In Narrative) ROAD SURFACE TYPE 01 Slag/Gravel/Stone 02 Blacktop 03 Brick/Block 04 Concrete 05 Dirt 77 All Other (Explain In Narrative)
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ROAD CONDITIONS AT TIME OF CRASH 01 No Defects 02 Obstruction With Warning 03 Obstruction Without Warning 04 Road Under Repair / Construction 05 Loose Surface Materials 06 Shoulders - Soft / Low / High 07 Holes / Ruts / Unsafe Paved Edge 08 Standing Water 09 Worn / Polished Road Surface 77 All Other (Explain In Narrative)	VISION OBSTRUCTED 01 Vision Not Obstructed 02 Inclement Weather 03 Parked / Stopped Vehicle 04 Trees / Crops / Bushes 05 Load On Vehicle 06 Building / Fixed Object 07 Signs / Billboards 08 Fog 09 Smoke 10 Glare 77 All Other (Explain In Narrative)	TRAFFIC CONTROL 01 No Control 02 Special Speed Zone 03 Speed Control Sign 04 School Zone 05 Traffic Signal 06 Stop Sign 07 Yield Sign 08 Flashing Light 09 Railroad Signal 10 Officer / Guard / Flagperson 11 Posted No U-Turn 12 No Passing Zone 77 All Other (Explain In Narrative)	SITE LOCATION 01 Not At Intersection / RR X-ing / Bridge 02 At Intersection 03 Influenced By Intersection 04 Driveway Access 05 Railroad 06 Bridge 07 Entrance Ramp 08 Exit Ramp 09 Parking Lot - Public 10 Parking Lot - Private 11 Private Property 12 Toll Booth 13 Public Bus Stop Zone 77 All Other (Explain In Narrative)	TRAFFICWAY CHARACTER 01 Straight - Level 02 Straight - Upgrade / Downgrade 03 Curve - Level 04 Curve - Upgrade / Downgrade TYPE SHOULDER 01 Paved 02 Unpaved 03 Curb
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Violator(s)	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER
	1	BRANDON BECK	316.121-1	FAILURE TO YIELD RIGHT OF WAY	9311-FNO
	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER
	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER

FLORIDA TRAFFIC CRASH REPORT

NARRATIVE/DIAGRAM

MAIL TO: DEPARTMENT OF HIGHWAY SAFETY & MOTOR VEHICLES, TRAFFIC CRASH
RECORDS SECTION, NEIL KIRKMAN BUILDING, TALLAHASSEE FL 32399-0500

DO NOT WRITE IN THIS SPACE

TIME EMS NOTIFIED (FATALITIES ONLY) <input type="checkbox"/> AM <input type="checkbox"/> PM	TIME EMS ARRIVED (FATALITIES ONLY) <input type="checkbox"/> AM <input type="checkbox"/> PM	DATE OF CRASH 10/15/2008	COUNTY/CITY CODE 08/44	INVEST AGENCY REPORT NUMBER 2008100216	HSMV CRASH REPORT NUMBER 80305396
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(NARRATIVE)

Vehicle 1 (V-1) was traveling north on Myrtle Avenue. Vehicle 2 (V-2) was traveling north on the left side of the roadway. The driver of V-1 failed to observe V-2 prior to moving to the right side of the roadway, causing V-2 to strike the rear of V-1. The driver of V-1 was ejected off of V-1, striking the windshield of V-2. The driver of V-1 came off the windshield of V-2 landing on the roadway.

Note: The driver of V-1 was found at fault for violation of right of way, and issued a citation. The driver of V-1 was taken to Bert Fish Medical Center to be treated for large abrasions on his back. V-2 was towed from the scene by Edgewater Towing, and driver of V-2 rode with the tow truck driver.

** E N D **

SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S EQUIP	EJECT
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S EQUIP	EJECT
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S EQUIP	EJECT
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S EQUIP	EJECT
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S EQUIP	EJECT
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S EQUIP	EJECT

Violator(s)	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER
	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER

WITNESS NAME (1) LEROEY HORNE JR 300 OAK ST, NEW SMYRNA BEACH FL 32168			WITNESS NAME (2)		
FIRST AID GIVEN BY - NAME FIRE RESCUE/EVAC			INJURED TAKEN TO BERT FISH MEDICAL CENTER		
1 Physician or Nurse 2 Paramedic or EMT 3 Police Officer 4 Certified 1st Aider 5 Other 2			BY - NAME EVAC		
WAS INVESTIGATION MADE AT SCENE? 1 YES 1 2 NO	IF NO, THEN WHERE?	IS INVESTIGATION COMPLETE? 1 YES 1 2 NO	IF NO, THEN WHY?	DATE OF REPORT 10/15/2008	PHOTOS TAKEN 1 YES 2 2 NO
INVESTIGATOR - RANK & SIGNATURE Joshua Holloway			ID/BADGE NUMBER 0987	DEPARTMENT NEW SMYRNA BEACH POLICE DEPARTMENT	
			FHP SO PD OTHER <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		

DIAGRAM

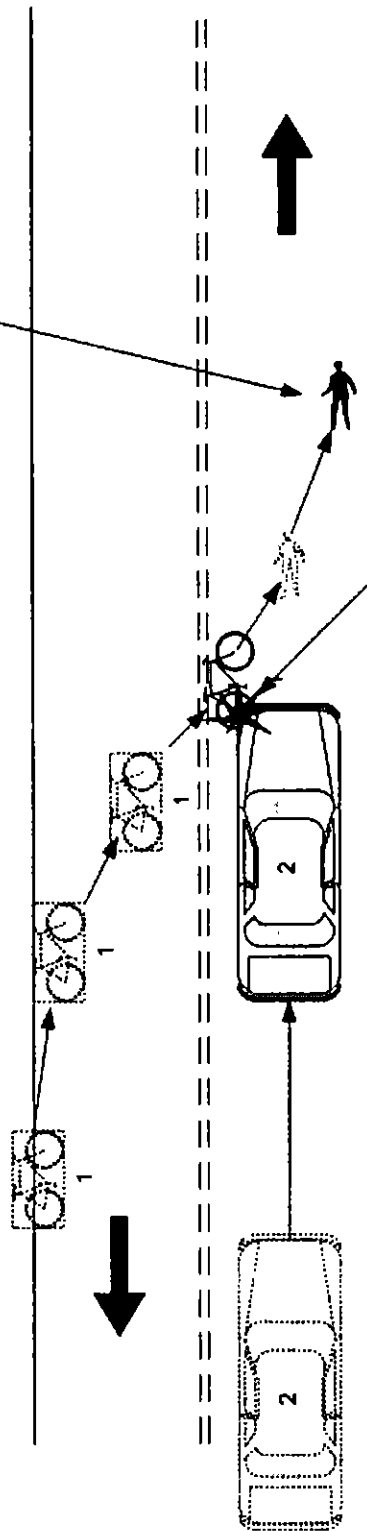


Indicate North

Approximate
Point of Rest

Approximate Point of Impact

S MYRTLE AV



Drawing Not To Scale.

FLORIDA TRAFFIC CRASH REPORT LONG FORM

MAIL TO: DEPT. OF HIGHWAY SAFETY & MOTOR VEHICLES, TRAFFIC CRASH
RECORDS, NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

DO NOT WRITE IN THIS SPACE

Time & Location	DATE OF CRASH 01/26/2009		TIME OF CRASH 3:37 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		TIME OFFICER NOTIFIED 3:39 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		TIME OFFICER ARRIVED 3:44 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		INVEST. AGENCY REPORT NUMBER 2009010457		HSMV CRASH REPORT NUMBER 80305516	
	COUNTY / CITY CODE 08/44		FEET or MILE(S) <input type="checkbox"/> FEET <input type="checkbox"/> MILE(S)		N S E W <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		CITY OR TOWN NEW SMYRNA BEACH		(Check if in City or Town) <input checked="" type="checkbox"/>		COUNTY VOLUSIA	
	AT NODE NO. or FEET or MILE(S) 2		FROM NODE NO. or FEET or MILE(S) 2		NEXT NODE NO. or FEET or MILE(S) 2		NO. OF LANES 2		1 DIVIDED 2 UNDIVIDED 2		ON STREET, ROAD OR HIGHWAY 6TH ST	
AT THE INTERSECTION OF (street, road or highway) or FEET or MILE(S) N S E W FROM INTERSECTION OF (street, road or highway)												
S DIXIE FRWY												
Vehicle	DRIVER ACTION 1 Phantom 2 Hit & Run 3 N/A 3		YEAR 06		MAKE TOYT		TYPE 01		USE 01		VEH LICENSE NUMBER WE11K	
	VEHICLE IDENTIFICATION NUMBER JTMZK33V166001397		EST. MPH 5		POSTED SPEED 30		EST. VEHICLE DAMAGE \$0.00		1 Disabling 2 Functional 3 No Damage 3		EST. TRAILER DAMAGE 1	
	TRAILER OR TOWED VEHICLE INFORMATION		POLICY NUMBER		VEHICLE REMOVED BY: DRIVER		1 Tow Rotation List 2 Tow Owner's Request 3 Driver 4 Other 4					
Motorist	NAME OF VEHICLE OWNER (Check Box if Same As Driver) <input type="checkbox"/>		CURRENT ADDRESS (Number and Street) 1410 PALMETTI AVE, NEW SMYRNA BCH FL 32168		CITY AND STATE FL 32168		ZIP CODE					
	NAME OF OWNER (Trailer or Towed Vehicle)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE					
	NAME OF MOTOR CARRIER (Commercial Vehicle Only)		CURRENT ADDRESS (Number and Street)		CITY, STATE AND ZIP CODE		US DOT or ICC MC IDENTIFICATION NUMBERS					
Pedestrian	NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN JOHN E. SEYMOUR		CURRENT ADDRESS (Number and Street) 2378 OTISCO VAL RD, MARIETTA NY 13110		CITY, STATE & ZIP CODE NY 13110		DATE OF BIRTH 12/28/1940					
	DRIVER LICENSE NUMBER 638978775		STATE NY		DL TYPE 4		REQ. END 3		ALCOHOL TEST TYPE 1 Blood 3 Urine 5 None 2 Breath 4 Refused 5		RESULTS 1	
	HAZARDOUS MATERIALS BEING TRANSPORTED 1 Yes 2 No 2		PLACARDED 1 Yes 2 No 2		IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD, AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND		WAS HAZARDOUS MATERIAL SPILLED? 1 Yes 2 No 2		RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE 1 Yes 2 No 2		DRIVER'S PHONE NO () () ()	
Vehicle	DRIVER ACTION 1 Phantom 2 Hit & Run 3 N/A 3		YEAR 06		MAKE TOYT		TYPE 01		USE 01		VEH LICENSE NUMBER WE11K	
	VEHICLE IDENTIFICATION NUMBER JTMZK33V166001397		EST. MPH 5		POSTED SPEED 30		EST. VEHICLE DAMAGE \$0.00		1 Disabling 2 Functional 3 No Damage 3		EST. TRAILER DAMAGE 1	
	TRAILER OR TOWED VEHICLE INFORMATION		POLICY NUMBER		VEHICLE REMOVED BY: DRIVER		1 Tow Rotation List 2 Tow Owner's Request 3 Driver 4 Other 3					
Motorist	NAME OF VEHICLE OWNER (Check Box if Same As Driver) <input checked="" type="checkbox"/>		CURRENT ADDRESS (Number and Street) 2014015594		CITY AND STATE		ZIP CODE					
	NAME OF OWNER (Trailer or Towed Vehicle)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE					
	NAME OF MOTOR CARRIER (Commercial Vehicle Only)		CURRENT ADDRESS (Number and Street)		CITY, STATE AND ZIP CODE		US DOT or ICC MC IDENTIFICATION NUMBERS					
Pedestrian	NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN LAREN S. BARRETT		CURRENT ADDRESS (Number and Street) 3306 OAK VISTA DR, DAYTONA BEACH FL 32128		CITY, STATE & ZIP CODE FL 32128		DATE OF BIRTH 03/08/1946					
	DRIVER LICENSE NUMBER B630537465880		STATE FL		DL TYPE 5		REQ. END 3		ALCOHOL TEST TYPE 1 Blood 3 Urine 5 None 2 Breath 4 Refused 5		RESULTS 1	
	HAZARDOUS MATERIALS BEING TRANSPORTED 1 Yes 2 No 2		PLACARDED 1 Yes 2 No 2		IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD, AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND		WAS HAZARDOUS MATERIAL SPILLED? 1 Yes 2 No 2		RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE 1 Yes 2 No 2		DRIVER'S PHONE NO () () ()	
Code Information	VEHICLE TYPE		VEHICLE USE		TRAILER TYPE		RESIDENCE (Driver / Ped)		PHYSICAL DEFECTS		ALCOHOL / DRUG USE	
	01 Automobile 02 Van 03 Light Truck - P.U. - 2 or 4 rear tires 04 Medium Truck - 4 rear tires 05 Heavy Truck - 2 or more rear axles 06 Truck Tractor (Cab-Boiler) 07 Motor Home (RV) 08 Bus (driver + seats for 9-15) 09 Bus (driver + seats for over 15) 10 Bicycle 11 Motorcycle 12 Moped 13 All Terrain Vehicle 14 Train 15 Low Speed Vehicle 77 Other		01 Private Transportation 02 Commercial Passengers 03 Commercial Cargo 04 Public Transportation 05 Public School Bus 06 Private School Bus 07 Ambulance 08 Law Enforcement 09 Fire / Rescue 10 Military 11 Other Government 12 Dump 13 Concrete Mixer 14 Garbage or Refuse 15 Cargo Van 77 Other		01 Single Semi Trailer 02 Tandem Semi Trailer 03 Tank Trailer 04 Saddle Mount / Flatbed 05 Boat Trailer 06 Utility Trailer 07 House Trailer 08 Pole Trailer 09 Towed Vehicle 10 Auto Transport 77 Other		1 County of Crash 2 Elsewhere in State 3 Non-Resident Out of State 4 Foreign 5 Unknown DL TYPE 1 A 2 B 3 C 1 White 2 Black 3 Hispanic 4 Other 5 E/ Operator 6 E/ Oper - Rest 7 None REQUIRED ENDORSEMENTS 1 Yes 2 No 3 No Endorsement Required		1 No Defects Known 2 Eyesight Defect 3 Fatigue / Asleep 4 Hearing Defect 5 Illness 6 Seizure, Epilepsy, Blackout 7 Other Physical Defect INJURY SEVERITY 1 None 2 Possible 3 Non-Incapacitating 4 Incapacitating 5 Fatal (Within 30 Days) 6 Non-Traffic Fatality		1 Not Drinking or Using Drugs 2 Alcohol - Under Influence 3 Drugs - Under Influence 4 Alcohol & Drugs - Under Influence 5 Had Been Drinking 6 Pending ALCOHOL TEST RESULTS SAFETY EQUIPMENT IN USE 1 Not in use 2 Seat Belt / Shoulder Harness 3 Child Restraint 4 Air Bag - Deployed 5 Air Bag - Not Deployed 6 Safety Helmet 7 Eye Protection	
	LOCATION IN VEHICLE 1 Front Left 2 Front Center 3 Front Right 4 Rear Left 5 Rear Center 6 Rear Right 7 In Body of Truck 8 Bus Passenger 9 Other EJECTED 1 No 2 Yes 3 Partial											

S e c t i o n 3	Vehicle Pedestrian	DRIVER ACTION 1 Phantom 2 Hit & Run 3 N/A	YEAR	MAKE	TYPE	USE	VEH LICENSE NUMBER	STATE	VEHICLE IDENTIFICATION NUMBER	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	18 Undercarriage 19 Overturn 20 Windshield 21 Trailer 22 Front End 23 Side 24 Rear 25 Driver's Side 26 Passenger's Side 27 Other
		TRAILER OR TOWED VEHICLE INFORMATION	TRAILER TYPE	EST. MPH	Posted Speed	EST. VEHICLE DAMAGE	1 Disabling 2 Functional 3 No Damage	EST. TRAILER DAMAGE	SHOW FIRST POINT OF VEHICLE DAMAGE AND CIRCLE DAMAGED AREA(S)		
		VEHICLE TRAVELING N S E W	ON AT	POLICY NUMBER	VEHICLE REMOVED BY	1 Tow Rotation Lost 2 Tow Owner's Request 3 Driver 4 Other					
		NAME OF VEHICLE OWNER (Check Box if Same As Driver)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE			
		NAME OF OWNER (Trailer or Towed Vehicle)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE			
		NAME OF MOTOR CARRIER (Commercial Vehicle Only)		CURRENT ADDRESS (Number and Street)		CITY, STATE AND ZIP CODE		US DOT or ICC MC IDENTIFICATION NUMBERS			
		NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN		CURRENT ADDRESS (Number and Street)		CITY, STATE & ZIP CODE		DATE OF BIRTH			
		DRIVER LICENSE NUMBER		STATE	DL TYPE	REC END	ALCOHOL/DRUG TEST TYPE 1 Blood 3 Urine 5 None 2 Breath 4 Refused	RESULTS	ALCOHOL/DRUG PHYS DEF RES RACE SEX INJ S EQUIP EJECT		
		HAZARDOUS MATERIALS BEING TRANSPORTED		PLACARDED	IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND		WAS HAZARDOUS MATERIAL SPILLED?	RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE	DRIVER'S PHONE NO		
		1 Yes 2 No		1 Yes 2 No			1 Yes 2 No	1 Yes 2 No			
		PROPERTY DAMAGED - OTHER THAN VEHICLES		EST. AMOUNT	OWNER'S NAME		ADDRESS		CITY STATE ZIP		
		PROPERTY DAMAGED - OTHER THAN VEHICLES		EST. AMOUNT	OWNER'S NAME		ADDRESS		CITY STATE ZIP		
CONTRIBUTING CAUSES - DRIVER / PEDESTRIAN											
VEHICLE DEFECT											
VEHICLE MOVEMENT											
VEHICLE SPECIAL FUNCTIONS											
PEDESTRIAN ACTION											
LOCATION TYPE											
FIRST / SUBSEQUENT HARMFUL EVENT(S)											
ROAD SYSTEM IDENTIFIER											
LIGHTING CONDITION											
ROAD SURFACE CONDITION											
WEATHER											
ROAD SURFACE TYPE											
ROAD CONDITIONS AT TIME OF CRASH											
VISION OBSTRUCTED											
TRAFFIC CONTROL											
SITE LOCATION											
TRAFFICWAY CHARACTER											
TYPE SHOULDER											
Violator(s)											
SECTION #											
NAME OF VIOLATOR											
FL STATUTE NUMBER											
CHARGE											
CITATION NUMBER											
SECTION #											
NAME OF VIOLATOR											
FL STATUTE NUMBER											
CHARGE											
CITATION NUMBER											
SECTION #											
NAME OF VIOLATOR											
FL STATUTE NUMBER											
CHARGE											
CITATION NUMBER											

FLORIDA TRAFFIC CRASH REPORT

NARRATIVE/DIAGRAM

MAIL TO: DEPARTMENT OF HIGHWAY SAFETY & MOTOR VEHICLES, TRAFFIC CRASH
RECORDS SECTION, NEIL KIRKMAN BUILDING, TALLAHASSEE FL 32399-0500

DO NOT WRITE IN THIS SPACE

TIME EMS NOTIFIED (FATALITIES ONLY) <input type="checkbox"/> AM <input type="checkbox"/> PM	TIME EMS ARRIVED (FATALITIES ONLY) <input type="checkbox"/> AM <input type="checkbox"/> PM	DATE OF CRASH 01/26/2009	COUNTY/CITY CODE 08/44	INVEST AGENCY REPORT NUMBER 2009010457	HSMV CRASH REPORT NUMBER 80305516
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(NARRATIVE)

V-2 was stopped at the stop sign on 6th St and S. US 1. V-1 was traveling south on the sidewalk of northbound S. US 1. V-2 was making a right turn onto S. US 1, the driver of V-2 could not see V-1 on the sidewalk. The driver of V-1 advised he saw V-2 and thought they were going to wait before making the right turn, so he proceeded through the intersection resulting in V-2 striking V-1. The driver of V-1 sustained injuries to his left leg but refused medical treatment on scene and advised he would go to the hospital on his own. There were no other injuries reported. Both vehicle were removed by the drivers. The driver of V-1 was found at fault but was not cited.

**** END ****

SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S EQUIP.	EJECT

Violator(s)	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER
	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER

WITNESS NAME (1)	CURRENT ADDRESS	CITY & STATE	ZIP CODE	WITNESS NAME (2)	CURRENT ADDRESS	CITY & STATE	ZIP CODE
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FIRST AID GIVEN BY - NAME EVAC	1 Physician or Nurse 2 Paramedic or EMT 3 Police Officer 4 Certified 1st Aider 5 Other	INJURED TAKEN TO 2	BY - NAME
--	---	------------------------------	-----------

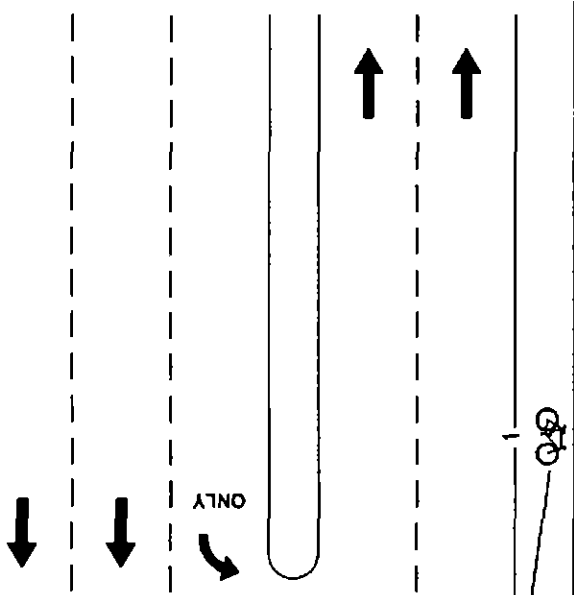
WAS INVESTIGATION MADE AT SCENE? 1 YES 1 2 NO	IF NO, THEN WHERE?	IS INVESTIGATION COMPLETE? 1 YES 1 2 NO	IF NO, THEN WHY?	DATE OF REPORT 01/26/2009	PHOTOS TAKEN 1 YES 2 2 NO	IF YES, BY WHOM? 1 INVESTIGATING AGENCY <input type="checkbox"/> 2 OTHER
INVESTIGATOR - RANK & SIGNATURE OFC William Schaeffer		ID/BADGE NUMBER 1112	DEPARTMENT NEW SMYRNA BEACH POLICE DEPARTMENT		FHP SO PD OTHER <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	

DIAGRAM

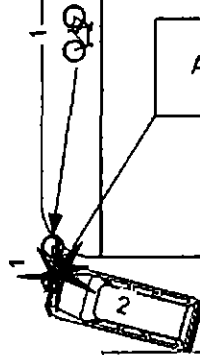


Indicate North

S DIXIE FRWY

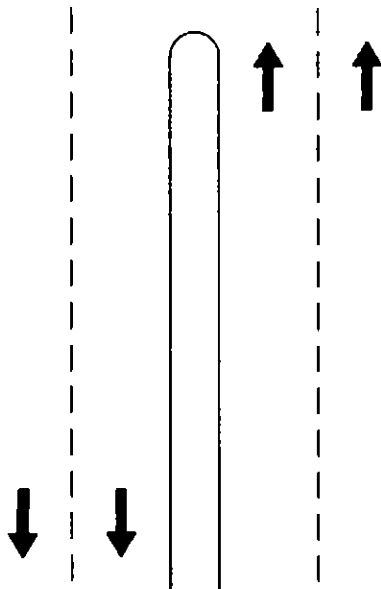


Approximate point of impact



6TH ST

S DIXIE FRWY



Drawing Not To Scale.

FLORIDA TRAFFIC CRASH REPORT LONG FORM

MAIL TO: DEPT. OF HIGHWAY SAFETY & MOTOR VEHICLES, TRAFFIC CRASH
RECORDS, NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

DO NOT WRITE IN THIS SPACE

Time & Location	DATE OF CRASH 04 22 2009		TIME OF CRASH 2:05 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		TIME OFFICER NOTIFIED 2:11 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		TIME OFFICER ARRIVED 2:20 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		INVEST. AGENCY REPORT NUMBER 2009040402		HSMV CRASH REPORT NUMBER 80305621	
	COUNTY / CITY CODE 08/44		FEET or MILE(S) N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W of NEW SMYRNA BEACH		CITY OR TOWN NEW SMYRNA BEACH		(Check if in City or Town) <input checked="" type="checkbox"/>		COUNTY VOLUSIA			
	AT NODE NO. or FEET or MILE(S) 25		FROM NODE NO. 2		NEXT NODE NO. 4		NO. OF LANES 4		1. DIVIDED 2. UNDIVIDED 2		ON STREET, ROAD OR HIGHWAY 300 BLK MISSION DR	
	AT THE INTERSECTION OF (street, road or highway) or FEET PAIGE AV		MILE(S) N <input type="checkbox"/> S <input checked="" type="checkbox"/> E <input type="checkbox"/> W		FROM INTERSECTION OF (street, road or highway)							

Vehicle	DRIVER ACTION 1. Phantom <input type="checkbox"/> 2. Hit & Run <input type="checkbox"/> 3. N/A <input checked="" type="checkbox"/>		YEAR 2	MAKE 10 01	TYPE 10 01	USE 10 01	VEH. LICENSE NUMBER 0	STATE 40	VEHICLE IDENTIFICATION NUMBER \$0.00	EST. VEHICLE DAMAGE 1. Disabling <input type="checkbox"/> 2. Functional <input checked="" type="checkbox"/> 3. No Damage <input type="checkbox"/>		EST. TRAILER DAMAGE 2
	TRAILER OR TOWED VEHICLE INFORMATION		TRAILER TYPE		POLICY NUMBER		VEHICLE REMOVED BY:		1. Tow Rotation List 2. Tow Owner's Request		3. Driver 4. Other <input type="checkbox"/>	
	NAME OF VEHICLE OWNER (Check Box if Same As Driver) <input type="checkbox"/>		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE					
	NAME OF OWNER (Trailer or Towed Vehicle)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE					

Pedestrian	NAME OF MOTOR CARRIER (Commercial Vehicle Only)		CURRENT ADDRESS (Number and Street)		CITY, STATE AND ZIP CODE		US DOT or ICC MC IDENTIFICATION NUMBERS								
	NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN		CURRENT ADDRESS (Number and Street)		CITY, STATE & ZIP CODE		DATE OF BIRTH								
	DRIVER LICENSE NUMBER		STATE FL	DL TYPE 5	REQ. END. 3	ALC/DRUG TEST TYPE 1 Blood 3 Urine 5 None 2 Breath 4 Refused 5	RESULTS	ALC/DRUG 1	PHYS. DEF. 1	RES. 1	RACE 1	SEX 2	INJ. 1	S. EQUIP 2	EJECT 5
	HAZARDOUS MATERIALS BEING TRANSPORTED 1 Yes 2 No 2		PLACARDED 1 Yes 2 No 2		IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD, AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND.		WAS HAZARDOUS MATERIAL SPILLED? 1 Yes 2 No 2		RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE 1 Yes 2 No 2		DRIVER'S PHONE NO. (386) 689-2967				

Vehicle	DRIVER ACTION 1. Phantom <input type="checkbox"/> 2. Hit & Run <input type="checkbox"/> 3. N/A <input checked="" type="checkbox"/>		YEAR 97	MAKE HOND	TYPE 01 01	USE 01 01	VEH. LICENSE NUMBER R040LZ	STATE FL	VEHICLE IDENTIFICATION NUMBER JHMEJ6577VS001202	EST. VEHICLE DAMAGE 1. Disabling <input type="checkbox"/> 2. Functional <input checked="" type="checkbox"/> 3. No Damage <input type="checkbox"/>		EST. TRAILER DAMAGE 2
	TRAILER OR TOWED VEHICLE INFORMATION		TRAILER TYPE		POLICY NUMBER		VEHICLE REMOVED BY:		1. Tow Rotation List 2. Tow Owner's Request		3. Driver 4. Other <input checked="" type="checkbox"/>	
	NAME OF VEHICLE OWNER (Check Box if Same As Driver) <input checked="" type="checkbox"/>		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE					
	NAME OF OWNER (Trailer or Towed Vehicle)		CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE					

Pedestrian	NAME OF MOTOR CARRIER (Commercial Vehicle Only)		CURRENT ADDRESS (Number and Street)		CITY, STATE AND ZIP CODE		US DOT or ICC MC IDENTIFICATION NUMBERS								
	NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN SARAH B. KING		CURRENT ADDRESS (Number and Street) 3125 SABAL PALM DR, EDGEWATER FL 32141		CITY, STATE & ZIP CODE 01/22/1983		DATE OF BIRTH								
	DRIVER LICENSE NUMBER K520782835220		STATE FL	DL TYPE 5	REQ. END. 3	ALC/DRUG TEST TYPE 1 Blood 3 Urine 5 None 2 Breath 4 Refused 5	RESULTS	ALC/DRUG 1	PHYS. DEF. 1	RES. 1	RACE 1	SEX 2	INJ. 1	S. EQUIP 2	EJECT 5
	HAZARDOUS MATERIALS BEING TRANSPORTED 1 Yes 2 No 2		PLACARDED 1 Yes 2 No 2		IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD, AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND.		WAS HAZARDOUS MATERIAL SPILLED? 1 Yes 2 No 2		RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE 1 Yes 2 No 2		DRIVER'S PHONE NO. (386) 689-2967				

Code Information	VEHICLE TYPE		VEHICLE USE		TRAILER TYPE		RESIDENCE (Driver / Ped.)		PHYSICAL DEFECTS		ALCOHOL / DRUG USE		LOCATION IN VEHICLE	
	01 Automobile 02 Van 03 Light Truck / P.U.-2 or 4 rear tires 04 Medium Truck - 4 rear tires 05 Heavy Truck - 2 or more rear axles 06 Truck Tractor (Cab-Boat) 07 Motor Home (RV) 08 Bus (driver + seats for 9-15) 09 Bus (driver + seats for over 15) 10 Bicycle 11 Motorcycle 12 Moped 13 All Terrain Vehicle 14 Train 15 Low Speed Vehicle 77 Other		01 Private Transportation 02 Commercial Passengers 03 Commercial Cargo 04 Public Transportation 05 Public School Bus 06 Private School Bus 07 Ambulance 08 Law Enforcement 09 Fire / Rescue 10 Military 11 Other Government 12 Dump 13 Concrete Mixer 14 Garbage or Refuse 15 Cargo Van 77 Other		01 Single Semi Trailer 02 Tandem Semi Trailer 03 Tank Trailer 04 Saddle Mount / Flatbed 05 Boat Trailer 06 Utility Trailer 07 House Trailer 08 Pole Trailer 09 Towed Vehicle 10 Auto Transport 77 Other		1 County of Crash 2 Elsewhere in State 3 Non-Resident Out of State 4 Foreign 5 Unknown DL TYPE 1 A 2 B 3 C 1 White 2 Black 3 Hispanic 4 Other RACE 1 Male 2 Female REQUIRED ENDORSEMENTS 1 Yes 2 No 3 No Endorsement Required		1 No Defects Known 2 Eyesight Defect 3 Fatigue / Asleep 4 Hearing Defect 5 Illness 6 Seizure, Epilepsy, Blackout 7 Other Physical Defect INJURY SEVERITY 1 None 2 Possible 3 Non-Incapacitating 4 Incapacitating 5 Fatal (Within 30 Days) 6 Non-Traffic Fatality		1 Not Drinking or Using Drugs 2 Alcohol - Under Influence 3 Drugs - Under Influence 4 Alcohol & Drugs - Under Influence 5 Had Been Drinking 6 Pending ALC/DRUG Test Results SAFETY EQUIPMENT IN USE 1 Not in use 2 Seat Belt / Shoulder Harness 3 Child Restraint 4 Air Bag - Deployed 5 Air Bag - Not Deployed 6 Safety Helmet 7 Eye Protection		1 Front Left 2 Front Center 3 Front Right 4 Rear Left 5 Rear Center 6 Rear Right 7 In Body of Truck 8 Bus Passenger 9 Other EJECTED 1 No 2 Yes 3 Partial	

Section 3

DRIVER ACTION 1. Phantom 2. Hit & Run 3. N/A	YEAR	MAKE	TYPE	USE	VEH. LICENSE NUMBER	STATE	VEHICLE IDENTIFICATION NUMBER	2 3 4 5 6 7 1 15 16 17 8 14 13 12 11 10 9		18. Undercarriage 19. Overturn 20. Windshield 21. Trailer SHOW FIRST POINT OF VEHICLE DAMAGE AND CIRCLE DAMAGED AREA(S)
	TRAILER OR TOWED VEHICLE INFORMATION		TRAILER TYPE							
VEHICLE TRAVELING N S E W		ON AT		EST. MPH	Posted Speed	EST. VEHICLE DAMAGE		1. Disabling 2. Functional 3. No Damage		EST. TRAILER DAMAGE
MOTOR VEHICLE INSURANCE COMPANY (LIABILITY OR PIP)					POLICY NUMBER		VEHICLE REMOVED BY:		1. Tow Rotaon List 2. Tow Owner's Request 3. Driver 4. Other	
NAME OF VEHICLE OWNER (Check Box If Same As Driver)					CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE	
NAME OF OWNER (Trailer or Towed Vehicle)					CURRENT ADDRESS (Number and Street)		CITY AND STATE		ZIP CODE	
NAME OF MOTOR CARRIER (Commercial Vehicle Only)					CURRENT ADDRESS (Number and Street)		CITY, STATE AND ZIP CODE		US DOT or ICC MC IDENTIFICATION NUMBERS	
NAME OF DRIVER (Taken From Driver License) / PEDESTRIAN					CURRENT ADDRESS (Number and Street)		CITY, STATE & ZIP CODE		DATE OF BIRTH	
DRIVER LICENSE NUMBER		STATE	DL TYPE	RED. END.	ALC/DRUG TEST TYPE 1 Blood 3 Urine 5 None 2 Breath 4 Refused		RESULTS	ALC/DRUG	PHYS. DEF.	RES.
HAZARDOUS MATERIALS BEING TRANSPORTED		PLACARDED	IF YES, INDICATE NAME OR 4 DIGIT NUMBER FROM DIAMOND OR BOX ON PLACARD, AND 1 DIGIT NUMBER FROM BOTTOM OF DIAMOND.		WAS HAZARDOUS MATERIAL SPILLED?		RECOMMEND DRIVER RE-EXAM, IF YES EXPLAIN IN NARRATIVE		DRIVER'S PHONE NO.	
1 Yes 2 No		1 Yes 2 No			1 Yes 2 No		1 Yes 2 No			

# 1	PROPERTY DAMAGED - OTHER THAN VEHICLES	EST. AMOUNT	OWNER'S NAME	ADDRESS	CITY	STATE	ZIP
# 2	PROPERTY DAMAGED - OTHER THAN VEHICLES	EST. AMOUNT	OWNER'S NAME	ADDRESS	CITY	STATE	ZIP

CONTRIBUTING CAUSES - DRIVER / PEDESTRIAN		VEHICLE DEFECT		VEHICLE MOVEMENT		VEHICLE SPECIAL FUNCTIONS	
01 No Improper Driving / Action 02 Careless Driving (Explain In Narrative) 03 Failed To Yield Right - of - Way 04 Improper Backing 05 Improper Lane Change 06 Improper Turn 07 Alcohol - Under Influence 08 Drugs - Under Influence 09 Alcohol & Drugs - Under Influence 10 Followed Too Closely 11 Disregarded Traffic Signal 12 Exceeded Safe Speed Limit 13 Disregarded Stop Sign 14 Failed To Maintain Equip. / Vehicle 15 Improper Passing 16 Drove Left of Center 17 Exceeded Stated Speed Limit 18 Obstructing Traffic		01 No Defects 02 Def. Brakes 03 Worn / Smooth Tires 04 Defective / Improper Lights 05 Puncture / Blowout 06 Steering Mech. 07 Windshield Wipers 08 Equipment / Vehicle Defect 77 All Other (Explain In Narrative)		01 Straight Ahead 02 Slowing / Stopped / Stalled 03 Making Left Turn 04 Backing 05 Making Right Turn 06 Changing Lanes 07 Entering / Leaving / Parking Space 08 Properly Parked 09 Improperly Parked 10 Making U-Turn		1 None 2 Farm 3 Police Pursuit 4 Recreational 5 Emergency Operation 6 Construction / Maintenance SOURCE OF CARRIER INFORMATION 1 Not Applicable 2 Shipping Papers 3 Vehicle Side 4 Driver 5 Other	
19 Improper Load 20 Disregarded Other Traffic Control 21 Driving Wrong Side / Way 22 Fleeing Police 23 Vehicle Modified 24 Driver Distraction (Explain in Narrative) 77 All Other (Explain In Narrative)		POINT OF COLLISION 01 On Road 02 Not On Road 03 Shoulder 04 Median 05 Turn Lane		PEDESTRIAN ACTION 01 Crossing Not at Intersection 02 Crossing at Mid-block Crosswalk 03 Crossing at Intersection 04 Walking Along Road With Traffic 05 Walking Along Road Against Traffic 06 Working on Vehicle in Road		LOCATION TYPE 1 Primarily Business 2 Primarily Residential 3 Open Country	
01 None 02 Nearby 03 Entered		WORK AREA 01 None 02 Nearby 03 Entered		07 Working In Road 08 Standing/Playing In Road 09 Standing In Pedestrian Island 77 All Other (Explain In Narrative) 88 Unknown			

FIRST / SUBSEQUENT HARMFUL EVENT(S)		ROAD SYSTEM IDENTIFIER		LIGHTING CONDITION	
01 Collision With MV in Transport (Rear End) 02 Collision With MV in Transport (Head On) 03 Collision With MV in Transport (Angle) 04 Collision With MV in Transport (Left Turn) 05 Collision With MV in Transport (Right Turn) 06 Collision With MV in Transport (Sideswipe) 07 Collision With MV in Transport (Backed Into) 08 Collision With Parked Car 09 Collision With MV on Roadway 10 Collision With Pedestrian 11 Collision With Bicycle 12 Collision With Bicycle (Bike Lane) 13 Collision With Moped 14 Collision With Train 15 Collision With Animal 16 MV Hit Sign / Sign Post 17 MV Hit Utility Pole / Light Pole 18 MV Hit Guardrail 19 MV Hit Fence 20 MV Hit Concrete Barrier Wall 21 MV Hit Bridge/Pier/Abutment/Rail 22 MV Hit Tree / Shrubbery 23 Collision With Construction Barricade Sign 24 Collision With Traffic Gate 25 Collision With Crash Attenuators 26 Collision With Fixed Object Above Road 27 MV Hit Other Fixed Object 28 Collision With Moveable Object on Road		29 MV Ran Into Ditch/Culvert 30 Ran Off Road Into Water 31 Overturned 32 Occupant Fell From Vehicle 33 Tractor / Trailer Jackknifed 34 Fire 35 Explosion 36 Downhill Runaway 37 Cargo Loss or Shift 38 Separation of Units 39 Median Crossover 77 All Other (Explain in Narrative)		01 Interstate 02 U.S. 03 State 04 County 05 Local 06 Turnpike / Toll 07 Forest Road 08 Private Roadway 77 All Other (Explain In Narrative)	
01 Daylight 02 Dusk 03 Dawn 04 Dark (Street Light) 05 Dark (No Street Light) 88 Unknown		ROAD SURFACE CONDITION 01 Dry 02 Wet 03 Slippery 04 Icy 77 All Other (Explain In Narrative)		WEATHER 01 Clear 02 Cloudy 03 Rain 04 Fog 77 All Other (Explain In Narrative)	
ROAD CONDITIONS AT TIME OF CRASH 01 No Defects 02 Obstruction With Warning 03 Obstruction Without Warning 04 Road Under Repair / Construction 05 Loose Surface Materials 06 Shoulders - Soft / Low / High 07 Holes / Ruts / Unsafe Paved Edge 08 Standing Water 09 Worn / Polished Road Surface 77 All Other (Explain In Narrative)		VISION OBSTRUCTED 01 Vision Not Obstructed 02 Inclement Weather 03 Parked / Stopped Vehicle 04 Trees / Crops / Bushes 05 Load On Vehicle 06 Building / Fixed Object 07 Signs / Billboards 08 Fog 09 Smoke 10 Glare 77 All Other (Explain In Narrative)		TRAFFIC CONTROL 01 No Control 02 Special Speed Zone 03 Speed Control Sign 04 School Zone 05 Traffic Signal 06 Stop Sign 07 Yield Sign 08 Flashing Light 09 Railroad Signal 10 Officer / Guard / Flagperson	
SITE LOCATION 01 Not At Intersection / RR X-ing / Bridge 02 At Intersection 03 Influenced By Intersection 04 Driveway Access 05 Railroad 06 Bridge 07 Entrance Ramp 08 Exit Ramp 09 Parking Lot - Public 10 Parking Lot - Private		TRAFFICWAY CHARACTER 01 Straight - Level 02 Straight - Upgrade / Downgrade 03 Curve - Level 04 Curve - Upgrade / Downgrade TYPE SHOULDER 01 Paved 02 Unpaved 03 Curbed			

Violator(s)	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER
	1		316.121-1 (N059)	FAIL TO YIELD	NOT CITED
	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER
	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER

FLORIDA TRAFFIC CRASH REPORT

NARRATIVE/DIAGRAM

MAIL TO: DEPARTMENT OF HIGHWAY SAFETY & MOTOR VEHICLES, TRAFFIC CRASH
RECORDS SECTION, NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0500

DO NOT WRITE IN THIS SPACE

TIME EMS NOTIFIED (FATALITIES ONLY) <input type="checkbox"/> AM <input type="checkbox"/> PM	TIME EMS ARRIVED (FATALITIES ONLY) <input type="checkbox"/> AM <input type="checkbox"/> PM	DATE OF CRASH 04/22/2009	COUNTY / CITY CODE 08/44	INVEST. AGENCY REPORT NUMBER 2009040402	HSMV CRASH REPORT NUMBER 80305621
--	---	------------------------------------	------------------------------------	---	---

(NARRATIVE)

Vehicle #2 (V-2) was traveling northbound on Mission Drive and entered the center turn lane to turn left onto Paige Avenue. As V-2 began to slow, a bicyclist traveled westbound across Mission Drive and struck V-2. The bicyclist fell on the hood of V-2 but was not injured. The driver of V-2 advised the bicyclist that she was going to phone the police, at which time the bicyclist mounted his bicycle and fled westbound.

The bicyclist is described as a white male in his mid to early 20's, unshaven and wearing a white shirt and short pants.

The bicyclist was not located in the immediate area and a report was filed for documentation purposes.

***** END *****

SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S. EQUIP.	EJECT.
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S. EQUIP.	EJECT.
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S. EQUIP.	EJECT.
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S. EQUIP.	EJECT.
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S. EQUIP.	EJECT.
SEC#	PASS#	PASSENGER'S NAME	CURRENT ADDRESS	CITY & STATE	ZIP CODE	DATE OF BIRTH	RACE	SEX	LOC	INJ	S. EQUIP.	EJECT.

Violator(s)	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER
	SECTION #	NAME OF VIOLATOR	FL STATUTE NUMBER	CHARGE	CITATION NUMBER

WITNESS NAME (1)		CURRENT ADDRESS	CITY & STATE	ZIP CODE	WITNESS NAME (2)		CURRENT ADDRESS	CITY & STATE	ZIP CODE
FIRST AID GIVEN BY - NAME		1. Physician or Nurse 2. Paramedic or EMT 3. Police Officer 4. Certified 1st Aider 5. Other <input type="checkbox"/>			INJURED TAKEN TO:		BY - NAME		
WAS INVESTIGATION MADE AT SCENE?	1. YES <input type="checkbox"/> 2. NO <input checked="" type="checkbox"/>	IF NO, THEN WHERE?	IS INVESTIGATION COMPLETE?	1. YES <input type="checkbox"/> 2. NO <input checked="" type="checkbox"/>	IF NO, THEN WHY? NO INFO HIT & RUN	DATE OF REPORT	PHOTOS TAKEN	1. YES <input type="checkbox"/> 2. NO <input checked="" type="checkbox"/>	IF YES, BY WHOM? 1. INVESTIGATING AGENCY <input type="checkbox"/> 2. OTHER <input type="checkbox"/>
INVESTIGATOR - RANK & SIGNATURE			ID/BADGE NUMBER	DEPARTMENT			FHP SO PD OTHER <input checked="" type="checkbox"/>		

PO Christopher Salomone

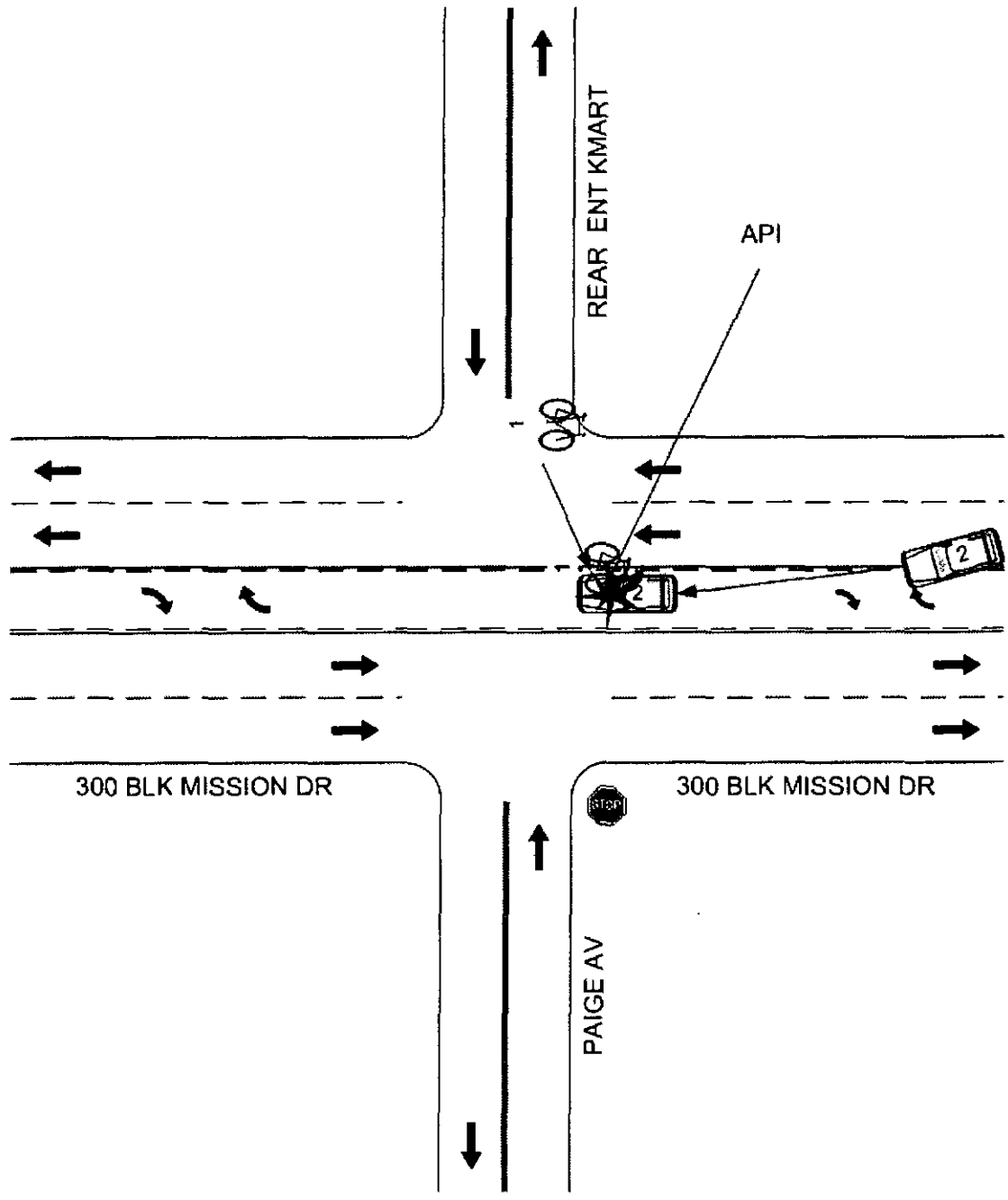
0565

NEW SMYRNA BEACH POLICE DEPARTMENT

DIAGRAM



Indicate North



Drawing Not To Scale.

Appendix B

Letter to Principal and Completed
Principal Questionnaire



Via Email (jsrawlin@volusia.k12.fl.us)

Ref: 3706.12

November 30, 2010

Principal Joe Rawlings
New Smyrna Beach Middle School
1200 South Myrtle Avenue
New Smyrna Beach, Florida 32168

Re: Volusia County Transportation Planning Organization (VCTPO) Bike and Pedestrian Safety Review

Dear Mr. Rawlings:

The VCMPO has been awarded a Florida Department of Transportation (FDOT) safety grant to study bicycle and pedestrian safety as it relates to schools, such as New Smyrna Beach Middle School, in the VCTPO planning area. Lassiter Transportation Group, Inc. has been retained to conduct these studies on the VCTPO's behalf.

We would like input from you to identify any bicycle and pedestrian safety-related issues or concerns that the school may be experiencing. Enclosed with this letter is a questionnaire form detailing the information that we are requesting. We would like to arrange a meeting with you, at your convenience, to discuss these items and will contact you in the near future to this end.

If you should have any questions or comments regarding this letter, please feel free to contact me at (386) 257-2571.

Sincerely,

LASSITER TRANSPORTATION GROUP, INC.



R. Sans Lassiter, PE
President

- c: Stephan C. Harris, Bicycle & Pedestrian Coordinator, VCTPO
- Saralee Morrissey, AICP, Director of Site Acquisitions & Intergovernmental Coordinator, Volusia County Schools
- Jon Cheney, PE, Volusia County Traffic Engineering
- Lt. Bobby Lambert, Volusia County Sheriff's Office
- Gail Henrikson, AICP, Planning Manager, City of Port New Smyrna Beach
- Joan Carter, M.A., Bicycle & Pedestrian Coordinator, FDOT D-5



PRINCIPAL
QUESTIONNAIRE

TO: New Smyrna Beach Middle School
Principal Joe Rawlings
1200 South Myrtle Avenue
New Smyrna Beach, Florida 32168

FROM: Stephan Harris
Volusia County Transportation Planning Organization (VCTPO)
2570 W. International Speedway Blvd, Suite 120
Daytona Beach, FL 32114-8145

**RE: MEETING DATE (TBD)
SCHOOL WALK ZONE SAFETY ANALYSIS**

The Volusia County Transportation Planning Organization (VCTPO) is conducting assessments aimed at improving the safety conditions for students who bicycle or walk to and from school. New Smyrna Beach Middle School has been chosen as one of the schools to be studied during this study phase. The following questionnaire will aid us in this effort. Your participation is key to the success of this analysis and is greatly appreciated.

You will be meeting with our traffic engineering consultants who will be conducting this study, Lassiter Transportation Group. Each staff member responsible for conducting the on-site analysis has gone through the appropriate back-ground check. Should you have any questions, please do not hesitate to contact them directly. Mr. Sans Lassiter or Ms. Crystal Mercedes PH: (386) 257-2571 or by E-mail: rlassiter@lassitertransportation.com or cmercedes@lassitertransportation.com.

1. Number of students currently enrolled: _____

Comments: _____

2. Number of students (or approximate percentage) who walk/bicycle to/from school: _____

Comments: _____

3. Are you aware of any facility (sidewalk, crosswalk, etc.) maintenance issues? If yes, please explain.

4. Are you aware of any parents who stop and/or park along the walk zone route to drop-off/pick-up their students to avoid the regular school pick-up lines? If yes, does this cause a safety issue with the students who walk/bicycle?

5. Are you aware of any safety hazards or issues along the school's walk zone?

6. Please list all known crash incidents within the walk zone. Did any of the crashes cause an issue for walkers/bikers? If yes, please explain.

7. What is your biggest concern relative to the conditions faced by the students who walk/bicycle to/from school?

8. What changes/improvements would you like to see relative to the conditions faced by the students who walk/bicycle to/from school?

COMMENTS:

Appendix C

2009 Florida Statute Excerpts

The 2009 Florida Statutes

[Title XLVIII](#)

K-20 EDUCATION CODE

[Chapter 1006](#)

SUPPORT FOR LEARNING

[View Entire Chapter](#)

(1) DEFINITION.--As used in this section, "student" means any public elementary school student whose grade level does not exceed grade 6.

(2) TRANSPORTATION; CORRECTION OF HAZARDS.--

(a) It is intended that district school boards and other governmental entities work cooperatively to identify conditions that are hazardous along student walking routes to school and that district school boards provide transportation to students who would be subjected to such conditions. It is further intended that state or local governmental entities having jurisdiction correct such hazardous conditions within a reasonable period of time.

(b) Upon a determination pursuant to this section that a condition is hazardous to students, the district school board shall request a determination from the state or local governmental entity having jurisdiction regarding whether the hazard will be corrected and, if so, regarding a projected completion date. State funds shall be allocated for the transportation of students subjected to such hazards, provided that such funding shall cease upon correction of the hazard or upon the projected completion date, whichever occurs first.

(3) IDENTIFICATION OF HAZARDOUS CONDITIONS.--When a request for review is made to the district school superintendent or the district school superintendent's designee concerning a condition perceived to be hazardous to students in that district who live within the 2-mile limit and who walk to school, such condition shall be inspected by a representative of the school district and a representative of the state or local governmental entity that has jurisdiction over the perceived hazardous location. The district school superintendent or his or her designee and the state or local governmental entity or its representative shall then make a final determination that is mutually agreed upon regarding whether the hazardous condition meets the state criteria pursuant to this section. The district school superintendent or his or her designee shall report this final determination to the department.

(4) STATE CRITERIA FOR DETERMINING HAZARDOUS WALKING CONDITIONS.--

(a) *Walkways parallel to the road.*--

1. It shall be considered a hazardous walking condition with respect to any road along which students must walk in order to walk to and from school if there is not an area at least 4 feet wide adjacent to the road, having a surface upon which students may walk without being required to walk on the road surface. In addition, whenever the road along which students must walk is uncurbed and has a posted speed limit of 55 miles per hour, the area as described above for students to walk upon shall be set off the road by no less than 3 feet from the edge of the road.

2. The provisions of subparagraph 1. do not apply when the road along which students must walk:

a. Is in a residential area which has little or no transient traffic;

- b. Is a road on which the volume of traffic is less than 180 vehicles per hour, per direction, during the time students walk to and from school; or
- c. Is located in a residential area and has a posted speed limit of 30 miles per hour or less.

(b) *Walkways perpendicular to the road.*--It shall be considered a hazardous walking condition with respect to any road across which students must walk in order to walk to and from school:

1. If the traffic volume on the road exceeds the rate of 360 vehicles per hour, per direction (including all lanes), during the time students walk to and from school and if the crossing site is uncontrolled. For purposes of this subsection, an "uncontrolled crossing site" is an intersection or other designated crossing site where no crossing guard, traffic enforcement officer, or stop sign or other traffic control signal is present during the times students walk to and from school.
2. If the total traffic volume on the road exceeds 4,000 vehicles per hour through an intersection or other crossing site controlled by a stop sign or other traffic control signal, unless crossing guards or other traffic enforcement officers are also present during the times students walk to and from school.

Traffic volume shall be determined by the most current traffic engineering study conducted by a state or local governmental agency.

History.--s. 297, ch. 2002-387.

Title XXIII

Chapter 316

[View Entire Chapter](#)

MOTOR VEHICLES STATE UNIFORM TRAFFIC CONTROL

316.75 School crossing guards.--The Department of Transportation shall adopt uniform guidelines for the training of school crossing guards. Each local governmental entity administering a school crossing guard program shall provide a training program for school crossing guards according to the uniform guidelines. Successful completion of the training program shall be required of each school guard except:

- (1) A person who received equivalent training during employment as a law enforcement officer.
- (2) A person who receives less than \$5,000 in annual compensation in a county with a population of less than 75,000.
- (3) A student who serves in a school patrol.

School crossing guard training programs may be made available to nonpublic schools upon contract.

History.--s. 2, ch. 92-194; s. 42, ch. 97-190.

Note.--Former s. 234.302.

Title XXIII**Chapter 316****[View Entire Chapter](#)****MOTOR VEHICLES STATE UNIFORM TRAFFIC CONTROL****316.2065 Bicycle regulations.--**

(1) Every person propelling a vehicle by human power has all of the rights and all of the duties applicable to the driver of any other vehicle under this chapter, except as to special regulations in this chapter, and except as to provisions of this chapter which by their nature can have no application.

(2) A person operating a bicycle may not ride other than upon or astride a permanent and regular seat attached thereto.

(3)(a) A bicycle may not be used to carry more persons at one time than the number for which it is designed or equipped, except that an adult rider may carry a child securely attached to his or her person in a backpack or sling.

(b) Except as provided in paragraph (a), a bicycle rider must carry any passenger who is a child under 4 years of age, or who weighs 40 pounds or less, in a seat or carrier that is designed to carry a child of that age or size and that secures and protects the child from the moving parts of the bicycle.

(c) A bicycle rider may not allow a passenger to remain in a child seat or carrier on a bicycle when the rider is not in immediate control of the bicycle.

(d) A bicycle rider or passenger who is under 16 years of age must wear a bicycle helmet that is properly fitted and is fastened securely upon the passenger's head by a strap, and that meets the standards of the American National Standards Institute (ANSI Z 90.4 Bicycle Helmet Standards), the standards of the Snell Memorial Foundation (1984 Standard for Protective Headgear for Use in Bicycling), or any other nationally recognized standards for bicycle helmets adopted by the department. As used in this subsection, the term "passenger" includes a child who is riding in a trailer or semitrailer attached to a bicycle.

(e) Law enforcement officers and school crossing guards may issue a bicycle safety brochure and a verbal warning to a bicycle rider or passenger who violates this subsection. A bicycle rider or passenger who violates this subsection may be issued a citation by a law enforcement officer and assessed a fine for a pedestrian violation, as provided in s. 318.18. The court shall dismiss the charge against a bicycle rider or passenger for a first violation of paragraph (d) upon proof of purchase of a bicycle helmet that complies with this subsection.

(4) No person riding upon any bicycle, coaster, roller skates, sled, or toy vehicle may attach the same or himself or herself to any vehicle upon a roadway. This subsection does not prohibit attaching a bicycle trailer or bicycle semitrailer to a bicycle if that trailer or semitrailer is commercially available and has been designed for such attachment.

(5)(a) Any person operating a bicycle upon a roadway at less than the normal speed of traffic at the time and place and under the conditions then existing shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:

1. When overtaking and passing another bicycle or vehicle proceeding in the same direction.
2. When preparing for a left turn at an intersection or into a private road or driveway.

3. When reasonably necessary to avoid any condition, including, but not limited to, a fixed or moving object, parked or moving vehicle, bicycle, pedestrian, animal, surface hazard, or substandard-width lane, that makes it unsafe to continue along the right-hand curb or edge. For the purposes of this subsection, a "substandard-width lane" is a lane that is too narrow for a bicycle and another vehicle to travel safely side by side within the lane.

(b) Any person operating a bicycle upon a one-way highway with two or more marked traffic lanes may ride as near the left-hand curb or edge of such roadway as practicable.

(6) Persons riding bicycles upon a roadway may not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles. Persons riding two abreast may not impede traffic when traveling at less than the normal speed of traffic at the time and place and under the conditions then existing and shall ride within a single lane.

(7) Any person operating a bicycle shall keep at least one hand upon the handlebars.

(8) Every bicycle in use between sunset and sunrise shall be equipped with a lamp on the front exhibiting a white light visible from a distance of at least 500 feet to the front and a lamp and reflector on the rear each exhibiting a red light visible from a distance of 600 feet to the rear. A bicycle or its rider may be equipped with lights or reflectors in addition to those required by this section.

(9) No parent of any minor child and no guardian of any minor ward may authorize or knowingly permit any such minor child or ward to violate any of the provisions of this section.

(10) A person propelling a vehicle by human power upon and along a sidewalk, or across a roadway upon and along a crosswalk, has all the rights and duties applicable to a pedestrian under the same circumstances.

(11) A person propelling a bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall yield the right-of-way to any pedestrian and shall give an audible signal before overtaking and passing such pedestrian.

(12) No person upon roller skates, or riding in or by means of any coaster, toy vehicle, or similar device, may go upon any roadway except while crossing a street on a crosswalk; and, when so crossing, such person shall be granted all rights and shall be subject to all of the duties applicable to pedestrians.

(13) This section shall not apply upon any street while set aside as a play street authorized herein or as designated by state, county, or municipal authority.

(14) Every bicycle shall be equipped with a brake or brakes which will enable its rider to stop the bicycle within 25 feet from a speed of 10 miles per hour on dry, level, clean pavement.

(15) A person engaged in the business of selling bicycles at retail shall not sell any bicycle unless the bicycle has an identifying number permanently stamped or cast on its frame.

(16)(a) A person may not knowingly rent or lease any bicycle to be ridden by a child who is under the age of 16 years unless:

1. The child possesses a bicycle helmet; or

2. The lessor provides a bicycle helmet for the child to wear.

(b) A violation of this subsection is a nonmoving violation, punishable as provided in s. 318.18.

(17) The court may waive, reduce, or suspend payment of any fine imposed under subsection (3) or subsection (16) and may impose any other conditions on the waiver, reduction, or suspension. If the court finds that a person does not have sufficient funds to pay the fine, the court may require the performance of a specified number of hours of community service or attendance at a safety seminar.

(18) Notwithstanding s. 318.21, all proceeds collected pursuant to s. 318.18 for violations under paragraphs (3)(e) and (16)(b) shall be deposited into the State Transportation Trust Fund.

(19) The failure of a person to wear a bicycle helmet or the failure of a parent or guardian to prevent a child from riding a bicycle without a bicycle helmet may not be considered evidence of negligence or contributory negligence.

(20) Except as otherwise provided in this section, a violation of this section is a noncriminal traffic infraction, punishable as a pedestrian violation as provided in chapter 318. A law enforcement officer may issue traffic citations for a violation of subsection (3) or subsection (16) only if the violation occurs on a bicycle path or road, as defined in s. 334.03. However, they may not issue citations to persons on private property, except any part thereof which is open to the use of the public for purposes of vehicular traffic.

History.--s. 1, ch. 71-135; s. 1, ch. 76-31; s. 2, ch. 76-286; s. 1, ch. 78-353; s. 8, ch. 83-68; s. 5, ch. 85-309; s. 1, ch. 86-23; s. 7, ch. 87-161; s. 21, ch. 94-306; s. 899, ch. 95-148; s. 1, ch. 96-185; s. 2, ch. 97-300; s. 161, ch. 99-248.

Note.--Former s. 316.111.

Appendix D

Americans with Disabilities Accessibility Guidelines Excerpts

4.7 Curb Ramps.

4.7.1 Location. Curb ramps complying with 4.7 shall be provided wherever an accessible route crosses a curb.

4.7.2 Slope. Slopes of curb ramps shall comply with [4.8.2](#). The slope shall be measured as shown in [Fig. 11](#). Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt changes. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp, or accessible route shall not exceed 1:20.

4.7.3 Width. The minimum width of a curb ramp shall be 36 in (915 mm), exclusive of flared sides.

4.7.4 Surface. Surfaces of curb ramps shall comply with [4.5](#).

4.7.5 Sides of Curb Ramps. If a curb ramp is located where pedestrians must walk across the ramp, or where it is not protected by handrails or guardrails, it shall have flared sides; the maximum slope of the flare shall be 1:10 (see [Fig. 12\(a\)](#)). Curb ramps with returned curbs may be used where pedestrians would not normally walk across the ramp (see [Fig. 12\(b\)](#)).

4.7.6 Built-up Curb Ramps. Built-up curb ramps shall be located so that they do not project into vehicular traffic lanes (see [Fig. 13](#)).

4.7.7 Detectable Warnings. A curb ramp shall have a detectable warning complying with [4.29.2](#). The detectable warning shall extend the full width and depth of the curb ramp.

4.7.8 Obstructions. Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.

4.7.9 Location at Marked Crossings. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides (see [Fig. 15](#)).

4.7.10 Diagonal Curb Ramps. If diagonal (or corner type) curb ramps have returned curbs or other well-defined edges, such edges shall be parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have 48 in (1220 mm) minimum clear space as shown in [Fig. 15\(c\)](#) and [\(d\)](#). If diagonal curb ramps are provided at marked crossings, the 48 in (1220 mm) clear space shall be within the markings (see [Fig. 15\(c\)](#) and [\(d\)](#)). If diagonal curb ramps have flared sides, they shall also have at least a 24 in (610 mm) long segment of straight curb located on each side of the curb ramp and within the marked crossing (see [Fig. 15\(c\)](#)).

4.7.11 Islands. Any raised islands in crossings shall be cut through level with the street or have curb ramps at both sides and a level area at least 48 in (1220 mm) long between the curb ramps in the part of the island intersected by the crossings (see [Fig. 15\(a\)](#) and [\(b\)](#)).

4.8 Ramps.

4.8.1* General. Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with 4.8. [Appendix Note](#)

4.8.2* Slope and Rise. The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30 in (760 mm) (see [Fig. 16](#)). Curb ramps and ramps to be constructed on existing sites or in existing buildings or facilities may have slopes and rises as allowed in [4.1.6\(3\)\(a\)](#) if space limitations prohibit the use of a 1:12 slope or less. [Appendix Note](#)

4.8.3 Clear Width. The minimum clear width of a ramp shall be 36 in (915 mm).

4.8.4* Landings. Ramps shall have level landings at bottom and top of each ramp and each ramp run. Landings shall have the following features:

(1) The landing shall be at least as wide as the ramp run leading to it.

(2) The landing length shall be a minimum of 60 in (1525 mm) clear.

(3) If ramps change direction at landings, the minimum landing size shall be 60 in by 60 in (1525 mm by 1525 mm).

(4) If a doorway is located at a landing, then the area in front of the doorway shall comply with [4.13.6](#). [Appendix Note](#)

4.8.5* Handrails. If a ramp run has a rise greater than 6 in (150 mm) or a horizontal projection greater than 72 in (1830 mm), then it shall have handrails on both sides. Handrails are not required on curb ramps or adjacent to seating in assembly areas. Handrails shall comply with [4.26](#) and shall have the following features:

(1) Handrails shall be provided along both sides of ramp segments. The inside handrail on switchback or dogleg ramps shall always be continuous.

(2) If handrails are not continuous, they shall extend at least 12 in (305 mm) beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface (see [Fig. 17](#)).

(3) The clear space between the handrail and the wall shall be 1 - 1/2 in (38 mm).

(4) Gripping surfaces shall be continuous.

(5) Top of handrail gripping surfaces shall be mounted between 34 in and 38 in (865 mm and 965 mm) above ramp surfaces.

(6) Ends of handrails shall be either rounded or returned smoothly to floor, wall, or post.

(7) Handrails shall not rotate within their fittings. [Appendix Note](#)

4.8.6 Cross Slope and Surfaces. The cross slope of ramp surfaces shall be no greater than 1:50. Ramp surfaces shall comply with [4.5](#).