

SAFE ROUTES TO SCHOOL

INFRASTRUCTURE PLANS

2018



PREPARED FOR
Miami-Dade Transportation
Planning Organization



PREPARED BY
MARLIN Engineering, Inc.
15600 SW 288th Street, Suite 208
Miami, FL 33033
305.477.7575
www.marlinengineering.com



The Miami-Dade TPO complies with the provisions of Title VI of the Civil Rights Act of 1964, which states: No person in the United States shall, on grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. It is also the policy of the Miami-Dade TPO to comply with all of the requirements of the Americans with Disabilities Act. For materials in accessible format please call (305) 375-4507.

The preparation of this report has been financed in part from the U.S. Department of Transportation (USDOT) through the Federal Highway Administration (FHWA) and/or the Federal Transit Administration (FTA), the State Planning and Research Program (Section 505 of Title 23, U.S. Code) and Miami-Dade County, Florida. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

SAFE ROUTES TO SCHOOL 2018 INFRASTRUCTURE PLANS

PREPARED FOR

Miami-Dade County Transportation
Planning Organization



**Miami-Dade Transportation
Planning Organization**

Work Order # GPC VI-35

PREPARED BY

MARLIN Engineering Inc.





TABLE OF CONTENTS

A	OVERVIEW	4
B	SELECTED SCHOOLS	6
C	RECOMMENDATIONS	8
	Airbase K-8	8
	Everglades K-8	13
	Mandarin Lakes K-8 School	18
	Miami Edison Senior High School	23
	Norland Elementary School	28
	Norland Middle School	33
	Ojus Elementary School	38
	Olympia Heights Elementary School	43
	Seminole Elementary School	48
	West Miami Middle School	53
D	APPENDIX 1: OPERATIONS MAINTENANCE TABLE	58
E	APPENDIX 2: 2018 SAFE ROUTE APPLICATIONS	61

OVERVIEW

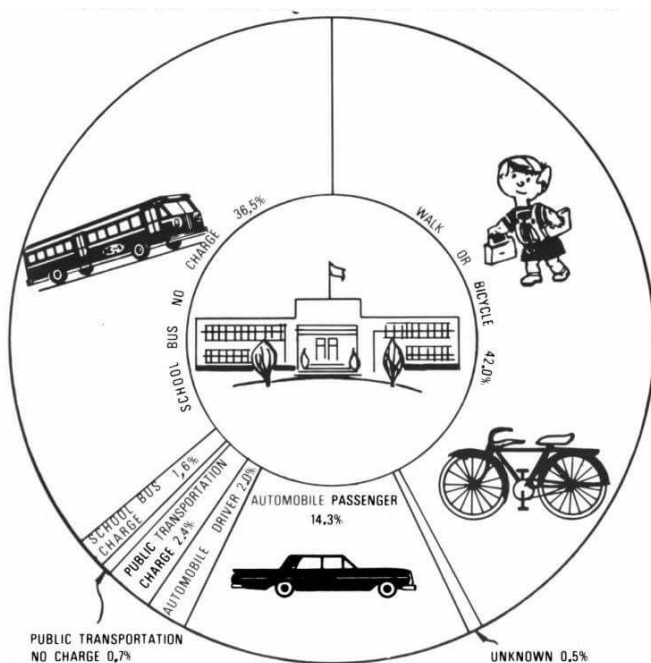
Safe Routes to School (SRTS) is a Federal program funded by the Federal Highway Administration. The Goal of the SRTS program is to provide students and parents with educational programming and upgraded infrastructure that improves safety and convenience for those traveling to and from school by foot, bike, and/or transit. The first modern SRTS U.S. program began in 1997 in Bronx, NY and has since coordinated and managed over \$1.15 billion in infrastructure plans to partnering schools across the United States. The Miami-Dade Transportation Planning Organization (TPO) manages the Miami-Dade Safe Routes to School Infrastructure Plans program, and partnering agencies include the Florida Department of Transportation (FDOT) District 6, Miami-Dade County Public Schools (MDCPS) and Miami-Dade Department of Transportation and Public Works (DTPW).

The most common form of infrastructure upgrades that qualify under this program are improvements that facilitate walkability and bikeability such as: filling sidewalk gaps, installing or enhancing crosswalks, improving signage and wayfinding, installing bike lanes and bike parking. Other more detailed upgrades may include: upgrading traffic control devices, installing parking restrictions, upgrading facilities to be ADA compliant, and more.

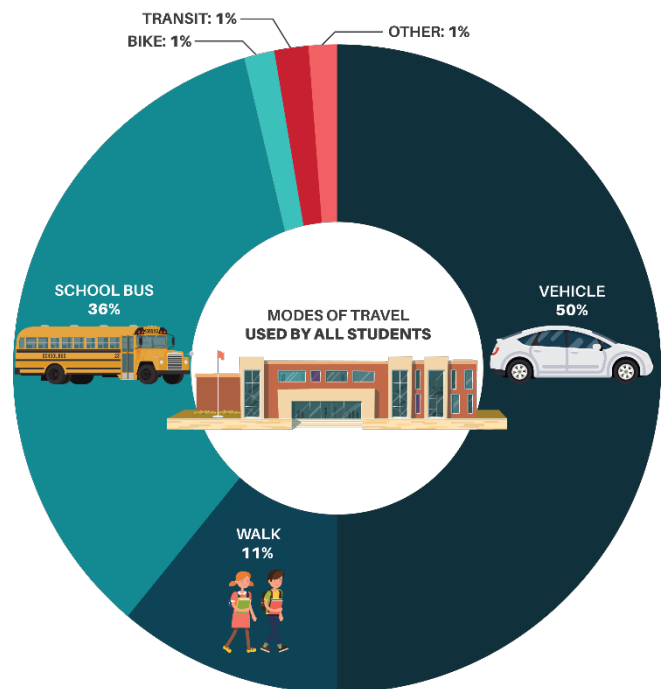
In addition to promoting infrastructure improvements, the Safe Routes to School Program encourages use of the comprehensive “5 E’s” approach to facilitate safer walking and biking. The FDOT Community Traffic Safety Team (CTST) facilitates active participation in Engineering, Education, Enforcement, Encouragement, and Evaluation efforts at schools to ensure a holistic approach to improving walking and biking for students. The CTST membership includes the School Board, TPO, DTPW, FDOT, law enforcement, University of Miami’s WalkSafe and BikeSafe programs and others involved in student safety and transportation. This multi-disciplinary, inter-agency coordination helps move the process forward from application through implementation.

The 2018 Safe Routes to School Infrastructure Plans are a continuation of previous efforts by the TPO that have been taking place since the mid-2000s. Each year, the Miami-Dade TPO selects priority schools to be studied for Safe Routes to School improvements. The ten schools selected this year are from the Prioritization Results table in Appendix D of the 2013 Safe Routes to School Plan.

FHWA National Mode Split Data Over Time



FHWA 1970



FHWA 2009



STUDY METHOD

The two objectives of this study are:

1. Develop Safe Routes to School recommendations for ten selected elementary/middle/K-8 Center, and High school, identify safe routes, infrastructure improvements, conceptual cost estimates, and create a Safe Route walking map
2. Prepare FDOT Safe Routes to School infrastructure grant applications for each selected school

Deliverables for this study include a completed Safe Routes to School Infrastructure Plans application to be submitted to FDOT by April 13, 2018. All applications can be found in Appendix A.

The 2018 Safe Routes to School Infrastructure recommendations were developed by conducting site visits at each school, and by processing information obtained from interviews with school crossing guards, discussions with school administrators, and from parent and classroom surveys that asked questions regarding walking and biking conditions within a mile of the schools. All information collected was analyzed to determine infrastructure recommendations to include in the Safe Routes to School application and the best Safe Route to recommend for students. If any deficiencies were observed that were outside of the scope of Safe Routes to School, they were documented and will be provided to MDCPS, Miami-Dade DTPW, or to school administrators for consideration using other funding sources.

STUDENT TRAVEL DATA

MDCPS provided the research team with data on school attendance boundaries and student residence locations. Proposed Safe Routes were developed by connecting student residence locations to school locations through observation and use of survey data. WalkSafe provided information from the annual MDCPS student travel survey. In addition to this, Student Travel Tallies and Parent Surveys were conducted to obtain data on the number of students walking and biking as well as what concerns parents have about their child's route to school.

SCHOOL SITE VISITS

Each of the ten selected schools was visited during arrival or dismissal time to observe the walking and biking patterns of students as they arrived or departed from school. The observation teams walked the school neighborhoods, interviewed crossing guards when possible, spoke to parents, and took photos to document conditions within the school attendance boundary area. The entire boundary area was driven to survey and observe roadway signage, sidewalk, intersection and crossing conditions.

RECOMMENDATIONS

Recommendations for infrastructure improvements were developed using the guidelines for eligible improvements for Safe Routes to School infrastructure funding applications. Proposed Safe Routes were also identified based on existing infrastructure and recommended improvements.





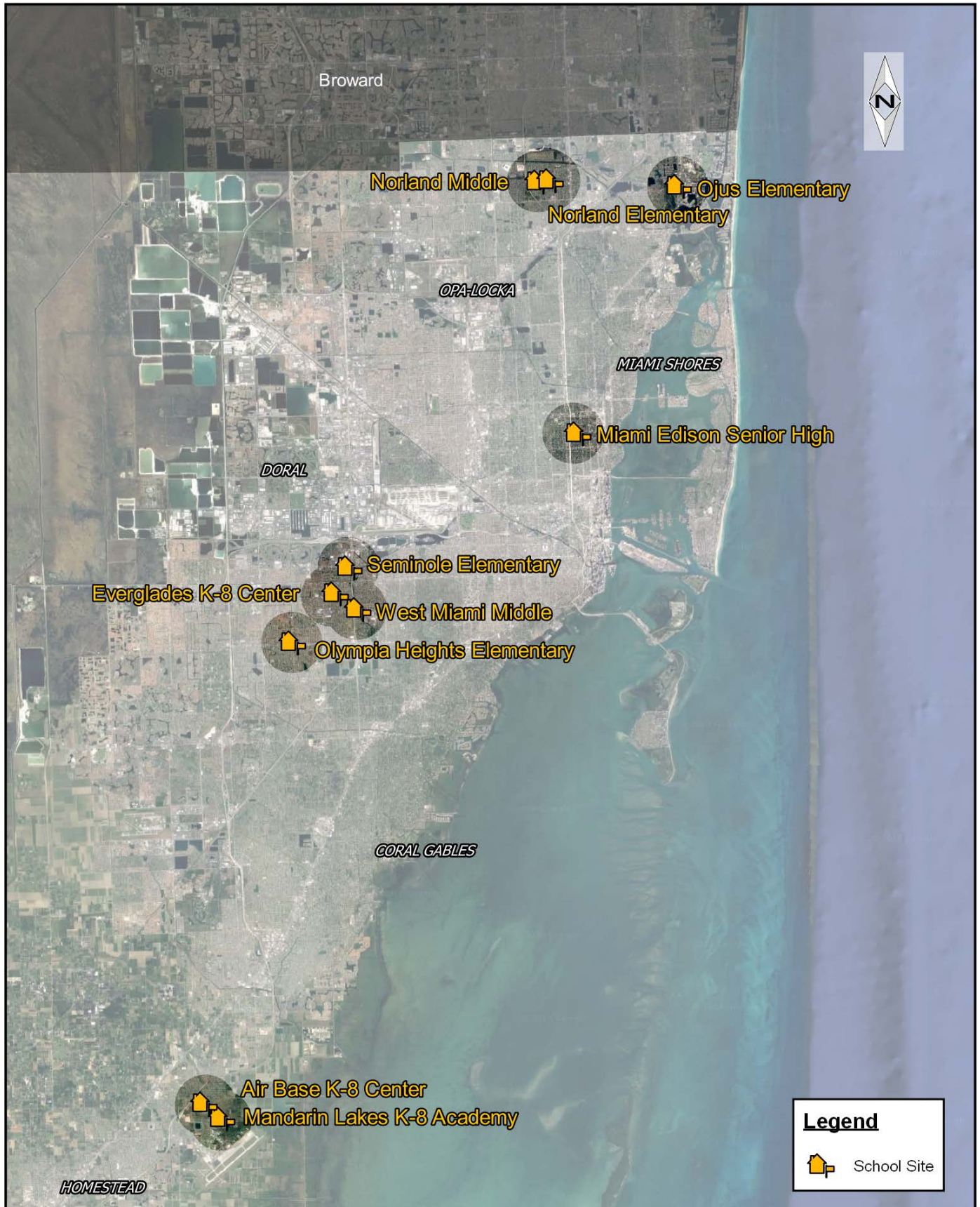
SELECTED SCHOOLS

This year, ten schools were selected for the 2018 Safe Routes to School Infrastructure Plans. The schools were selected from a list of elementary and K-8 schools in Miami-Dade County, prioritized in the 2013 Safe Routes to School Infrastructure Plans report. Miami-Dade County has been working from this list for several years to implement Safe Routes to School improvements where they are most needed. Schools were prioritized based on factors such as the number of pedestrian and bicycle crashes, percentage of students who walk, and nearby traffic volumes. This year's selected schools included elementary, middle, K-8, and one high school detailed in Figure 3.

SRTS Infrastructure improvements were recommended per the guidelines and cost estimates were developed for each application. Cost estimates submitted for proposed Safe Routes to School infrastructure improvements are comprehensive and include the cost of materials, mobilization, Maintenance of Traffic (MOT), design, administration, and Construction Engineering Inspection (CEI).

School	Address	Recommendations Cost Estimate
Airbase K-8 Center	1289 SW 292 nd Street, Homestead, FL 33032	\$53,228.00
Everglades K-8 Center	8375 SW 16 th Street, Miami, FL 33155	\$363,131.00
Mandarin Lakes K-8 Center	12225 SW 280 th Street, Homestead, FL 33032	\$163,000.00
Miami Edison Senior High School	6161 NW 5 th Court, Miami, FL 33127	\$64,977.00
Norland Elementary School	19340 NW 8 th Court, Miami Gardens, FL 33169	\$306,712.00
Norland Middle School	1235 NW 192 nd Avenue, Miami Gardens, FL 33169	\$195,915.00
Ojus Elementary School	18600 Dixie Highway, Miami, FL 33165	\$532,146.00
Olympia Heights Elementary School	9797 SW 40 th Street, Miami, FL 33165	\$92,736.00
Seminole Elementary School	121 SW 78 th Place, Miami, FL 33144	\$672,560.00
West Miami Middle School	7525 Coral Way, Miami, FL 33155	\$229,961.00

2018 SAFE ROUTES TO SCHOOL LOCATIONS



AIRBASE K-8



	Enrollment	1071
Estimated percent of students that live within ½ mile walk		321
Estimated percent of students that walk or bike to school		2%
Estimated Cost of Recommendations		\$53,228.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals that 1 bicycle crash and 1 pedestrian crash occurred within the vicinity of the school, during regular school hours, within the past 3 years. Other nearby facilities include Pine Island Lake Park, Homestead Air Reserve Park, And Kevin Broils Park.

Low numbers of identified walkers and bikers to the school may attribute to the current conditions of the existing bicycle and pedestrian infrastructure. Improving infrastructure may attribute to higher rates of non-motorized travel modes to and from the school.

Out dated school zone and pedestrian signage was witnessed around the school. Numerous standard cross walks were document and should be upgraded to high emphasis crosswalks.

Infrastructure recommendations include crosswalk additions and enhancements, intersection push-button upgrades and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, debris removal, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	38	0%	0%	8%	92%	0%	0%	0%
Afternoon	38	0%	0%	8%	92%	0%	0%	0%

No Response Morning: 0

No Response Afternoon: 0

Percentage may not total 100% due to rounding

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Sidewalk does not connect to crosswalk



Outdated signage



Proposed upgrade to high-emphasis crosswalk

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 272nd St @ 127th Ave	200' west of int.						1	WB			
2	SW 272nd St @ 128th Ave	100' north of int.						1	SB			
3	SW 272nd St @ 128th Ave	100' north of int.				1	ES					
4	SW 128th Ave	500' from SW 272nd St						1	ES			
5	SW 128th Ave	100' north of 272nd St				1						estimated 100' of repairs
6	SW 128th Ave	1,100' north of 272nd St										Tree trim around school flashers
7	SW 128th Ave	800' north of 272nd St						1				Southbound
8	SW 268th St	128th Ave	128th Ct									Trim back excess foliage obstructing sidewalk ROW on north side
9	SW 272nd St	50' west of school						1	SS			Ped sign maintenance
10	SW 272nd St	100' west of school						1	SS			No parking maintenance
11	SW 272nd St	100' west of school						1	SS			No parking maintenance
12	SW 272nd St	175' west of school						1	SS			No Angle Parking
13	SW 272nd St	600' west of school								1	EB	School pavement marking
14	SW 272nd St	west of school				1						North side of SW 272nd St
15	SW 132nd Ave	North of SW 272nd St										Sidewalk maintenance

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Signage replacements needed



Downed signage



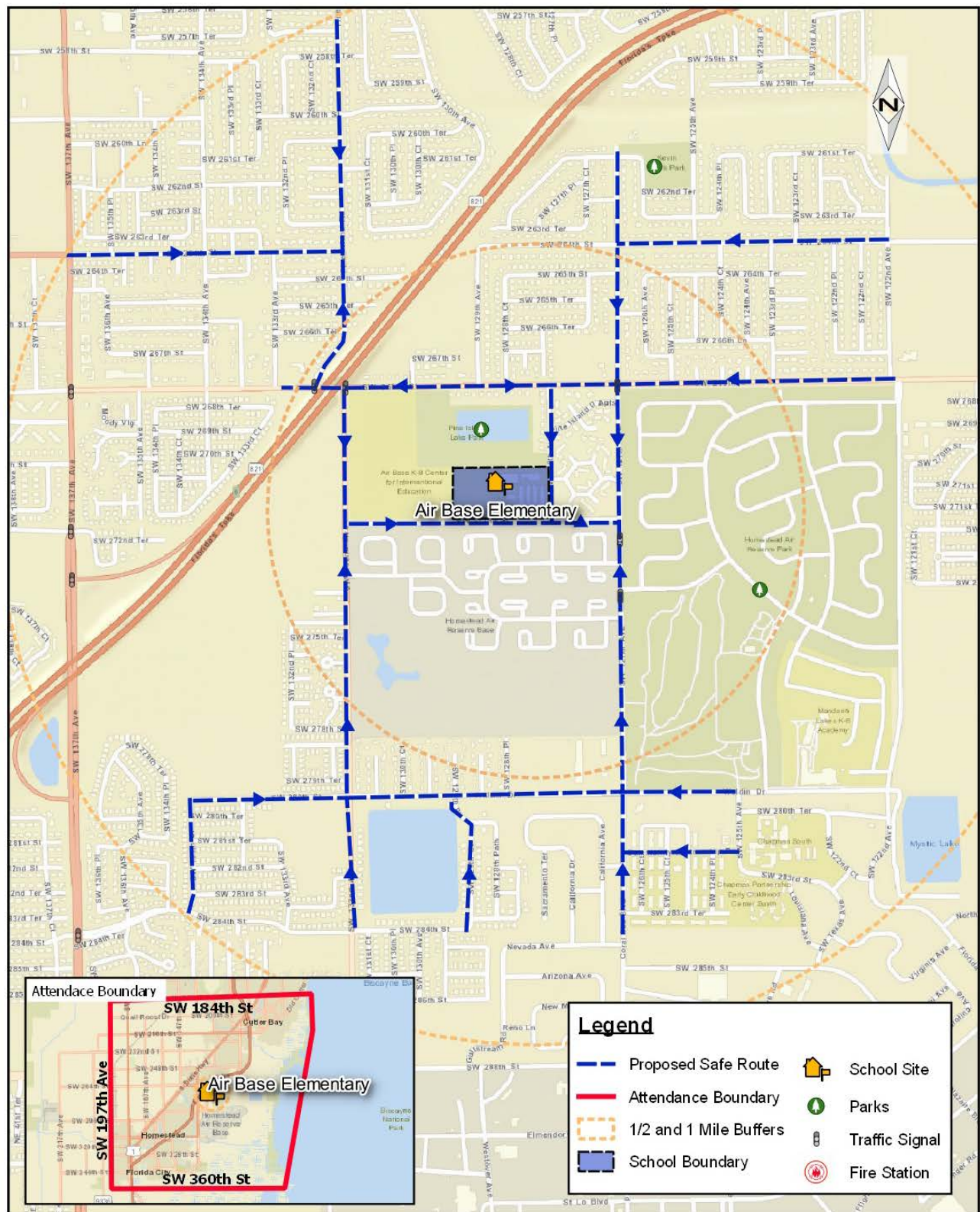
Signage replacements needed



Overgrowth of vegetation impeding sidewalk right of way

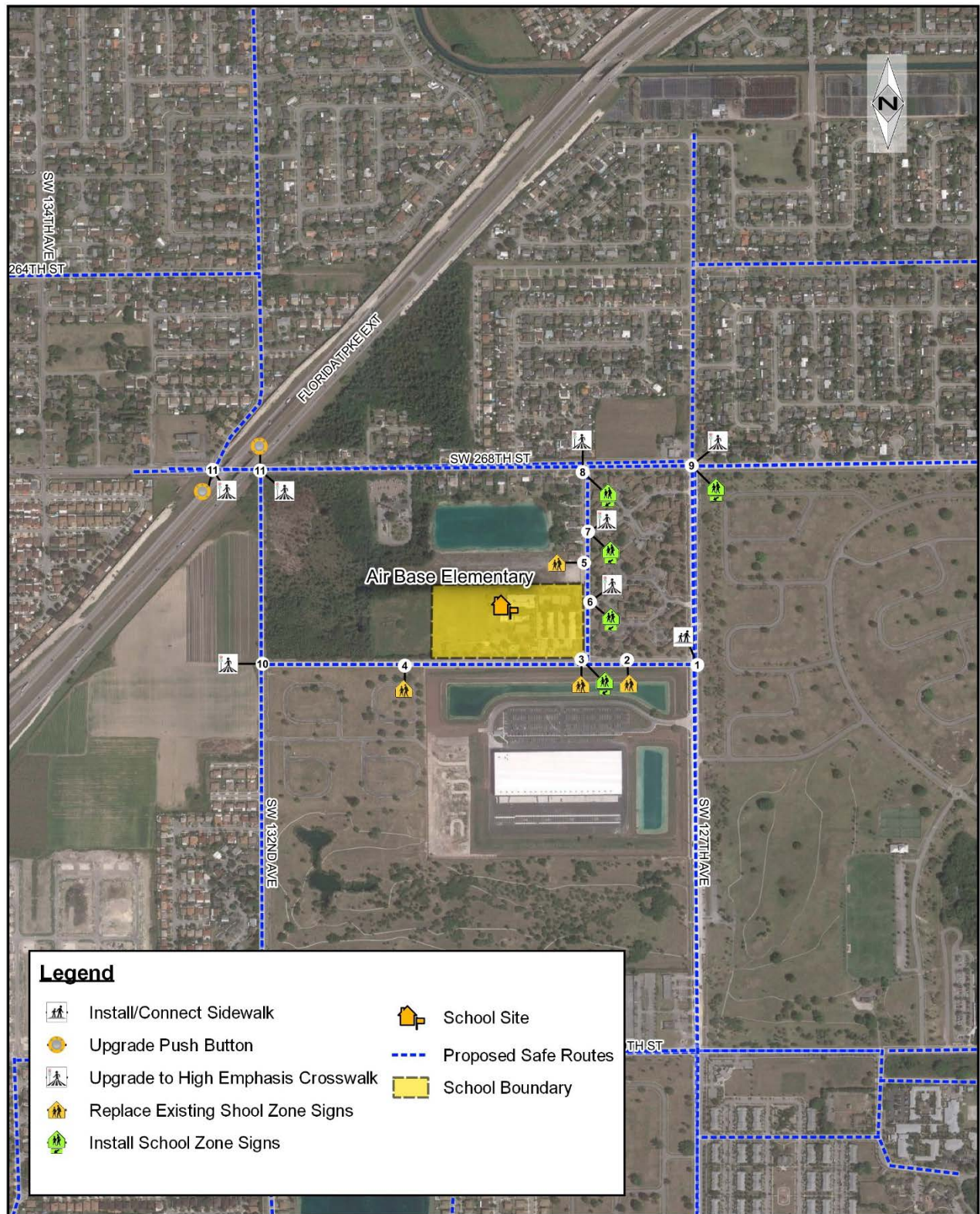
AIRBASE K-8

PROPOSED SAFE ROUTE MAP



AIRBASE K-8

RECOMMENDATIONS MAP



EVERGLADES K-8



	Enrollment	1032
Estimated percent of students that live within ½ mile walk		500
Estimated percent of students that walk or bike to school		6.5%
Estimated Cost of Recommendations		\$363,161.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals 2 bicycle crashes and 2 pedestrian crashes occurring within vicinity of the school, during school hours, within the past 3 years. Nearby facilities include Francisco Human Rights Park, Miami-Dade Public Library West Dade Region, and Rockway park.

The fact that this school does not reside on a main road is an advantage towards creating an environment more conducive to walking and biking. With many neighborhood streets lacking standard cross walks or sidewalk connections, parents may not feel comfortable to have their children walk or bike to and from school. With more bicycle and pedestrian infrastructure, motorists may drive at slower speeds anticipating more non-motorized travelers.

The school's roadway grid network of streets provides many routes to get to and from the school. Many neighborhood street intersections lacked crosswalks and sidewalk connections that need to be filled. Out dated school zone and pedestrian signage was witnessed around the school. Numerous standard cross walks were observed and should be upgraded to high-emphasis crosswalks.

Infrastructure recommendations include crosswalk additions and enhancements, intersection push-button upgrades and signage updates.

Regarding operations and maintenance, recommendations include debris removal, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	60	12%	0%	8%	80%	0%	0%	0%
Afternoon	60	15%	0%	12%	73%	0%	0%	0%

No Response Morning: 0

No Response Afternoon: 0

Percentage may not total 100% due to rounding

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed crosswalk



Proposed crosswalk



Proposed crosswalk

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 84th Ave	SW 20th St	SW 21th St					1	WS			Roundabout traffic circle signs were observed hit by vehicles.
2	SW 82nd Ct @ 16th St							1	SS			
3	SW 82nd Ct @ 16th St									1	WB	
4	SW 82nd Ct @ 16th St									1	SS	
5	SW 82nd Ave @ 16th St											Curb landscaping maintenance on SW leg
6	SW 82nd Ave @ 16th St					1	SE					
7	16th St mid-block in front of school									1		
8	16th St west side of school											Landscaping maintenance

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Downed signage



Vegetation blocking signage



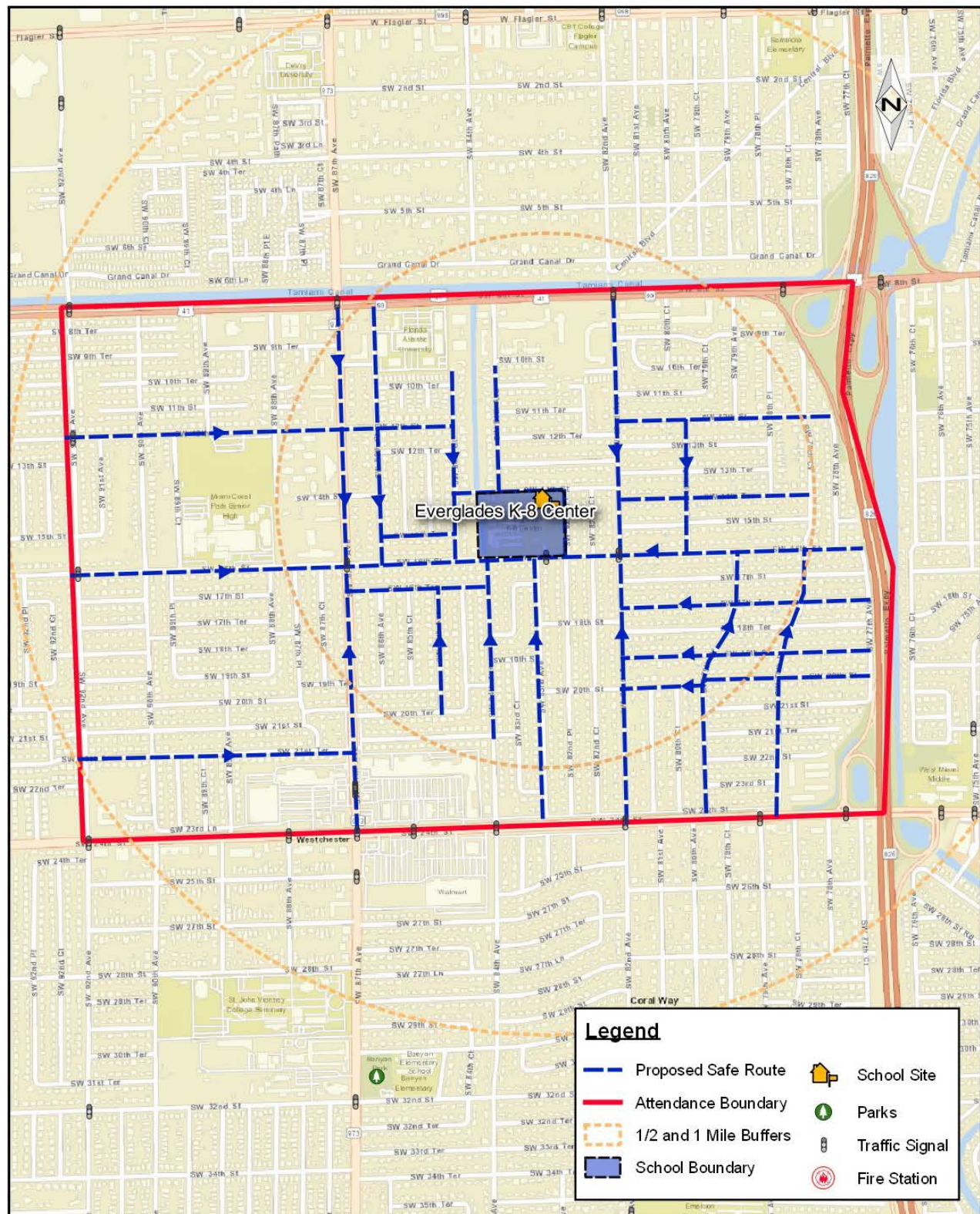
Leaning signage



Leaning signage

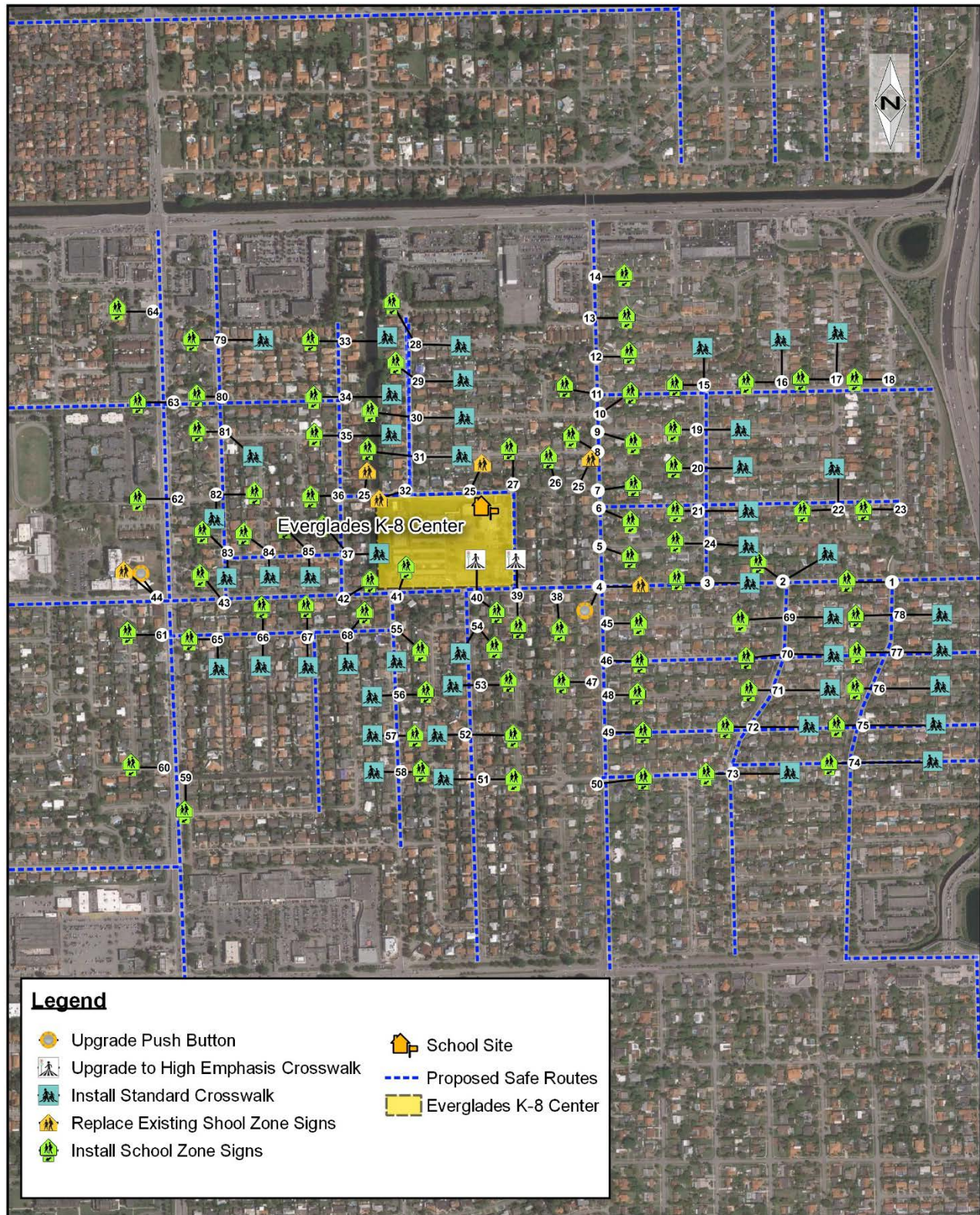
EVERGLADES K-8

PROPOSED SAFE ROUTE MAP



EVERGLADES K-8

RECOMMENDATIONS MAP



MANDARIN LAKES K-8 SCHOOL



	Enrollment	980
Estimated percent of students that live within ½ mile walk		20%
Estimated percent of students that walk or bike to school		300
Estimated Cost of Recommendations		\$163,000.00

OBSERVATIONS & RECOMMENDATIONS

Crash Data reveals 3 bicycle crashes and 1 pedestrian crash occurring within vicinity of the school, during regular school hours, within the past 3 years. Nearby facilities include; Homestead Air Reserve Park and Pine Island Lake Park.

SW 280 St the primary road providing access to the school. Students were witnessed walking and biking on the grass or roadway, sharing space with motorists because of a lack of sidewalk. Crossing guards stated more school zone signs, flashers and pavement marking are needed on SW 280th Street's approach to the school.

The lack of a north side sidewalk on SW 280th Street, leading toward the school could be a deterrent to making parents comfortable having their children walk/bike to and from school. Being that this is the main road leading toward the school, filling the sidewalk gap may help encourage more parents to allow their children to travel to and from school by foot or bike.

Infrastructure recommendations include sidewalk installations, crosswalk additions and enhancements, and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, debris removal, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	1	1	0	0	0	0	0	0
Afternoon	1	1	0	0	0	0	0	0

No Response Morning: 0

No Response Afternoon: 0

Numbers rather than percents are displayed because the number of respondents for this question was less than 30

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed sidewalk connection



Outdated signage



Proposed sidewalk connection



Proposed upgrade to high-emphasis crosswalk

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 280th St	School Entrance A						1	s			Stop sign leaning
2	SW 280th St @ 124th Ct	SW 280th St	SW 281st St	1								
3	SW 280th St @ 124th Ct	SW 280th St	SW 281st St			1						
4	SW 280th Ct	800' E of Int @ 127th Ave		1								Hole in park fence, homeless present next to fence
5	SW 280th St @ 124th Ct											
6	School Entrance											Bike Parking maintenance

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Broken fencing



Sharp rootage along Safe Route



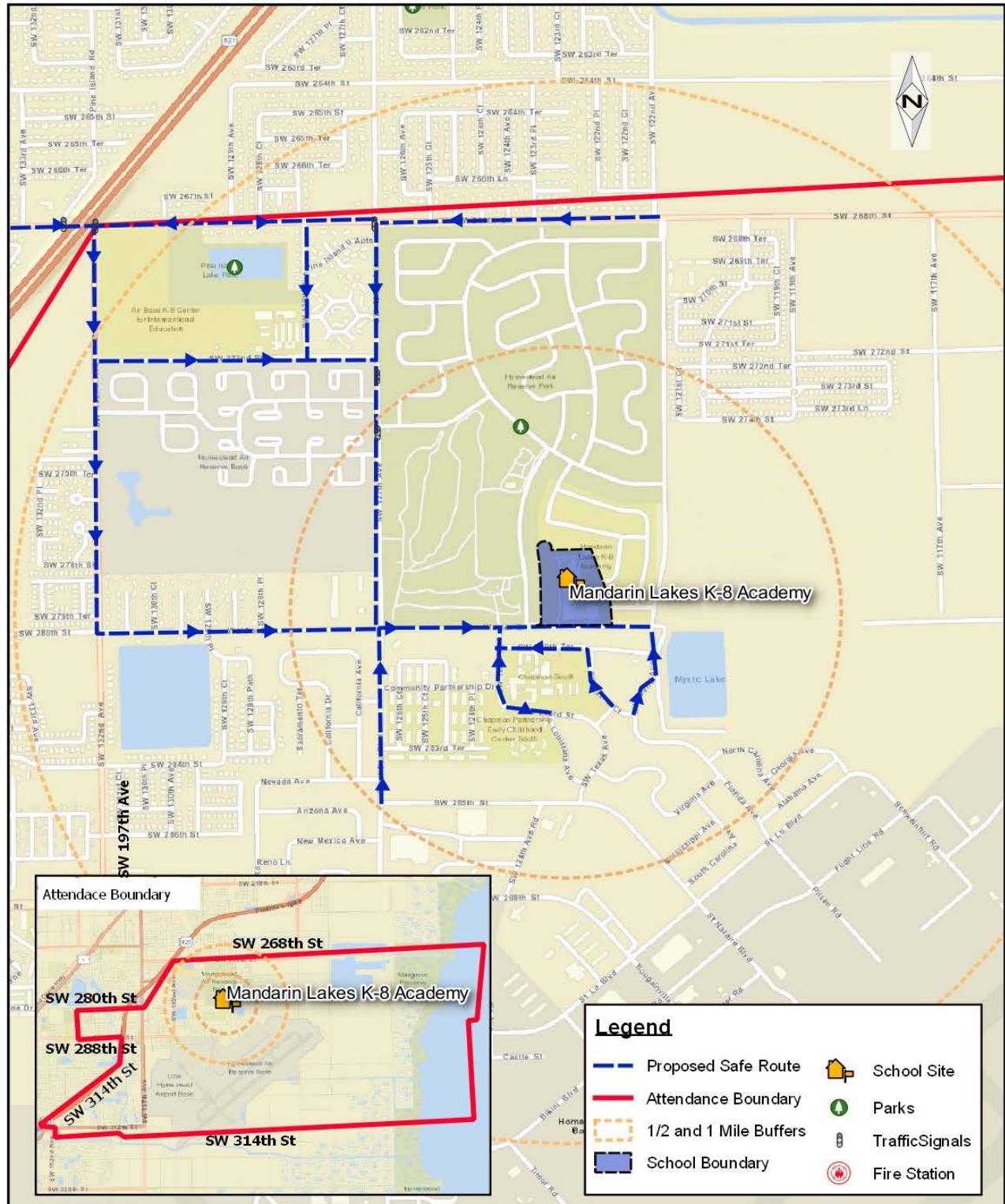
Leaning signage



Tilted signage

MANDARIN LAKES K-8

PROPOSED SAFE ROUTE MAP



MANDARIN LAKES K-8

RECOMMENDATIONS MAP



MIAMI EDISON SENIOR HIGH SCHOOL



	Enrollment	793
Estimated percent of students that live within ½ mile walk		500
Estimated percent of students that walk or bike to school		65%
Estimated Cost of Recommendations		\$64,977.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals that 1 bicycle crash and 4 pedestrian crashes occurred within vicinity of the school, during regular school hours, within the past 3 years. Other nearby facilities include; Athalie Range Park, Edison Center Branch Library, Buena Vista Park, and Sherdavia Jenkins Peace Park. 65% of the school's population either walks or bikes to school.

The school's assistant principal explained that the I-95 entrance ramp and its proximity to the school's entrance creates an environment where cars are driving too fast. The intersection leading between the I-95 expressway entrance and school entrance should have high emphasis crosswalks and cautionary signage. Numerous mid-block crossings were witnessed NW 62nd St. during dismissal.

The school's roadway grid network of streets provides many routes to get to and from the school. Many neighborhood street intersections lacked crosswalks and sidewalk connections that need to be filled. Out dated school zone and pedestrian signage was witnessed around the school. Numerous cross walks were standard and should be upgraded to high emphasis crosswalks.

Infrastructure recommendations include crosswalk additions and enhancements, signage installations and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, debris removal, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	37	49%	0%	5%	35%	0%	11%	0%
Afternoon	36	58%	0%	6%	22%	0%	14%	0%

No Response Morning: 0

No Response Afternoon: 1

Percentages may not total 100% due to rounding

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed crosswalk and signage enhancements



Outdated signage



Proposed high-emphasis crosswalk



Proposed crosswalks



OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	NW 62nd St. @ 4th Ave.	25' east of 4th Ave.						1	EB			
2	NW 60th St.	2nd Ave.	240 House address			1	BS					
3	NW 60th St. @ 5th Ct.											Debris piles in open space adjacent to I-95 and where buses stage
4	NW 58th St. @ 5th Ct.					1	NL					
5	NW 67th St. @ 4th Ave.					1	SL					

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Downed signage



Overgrown vegetation



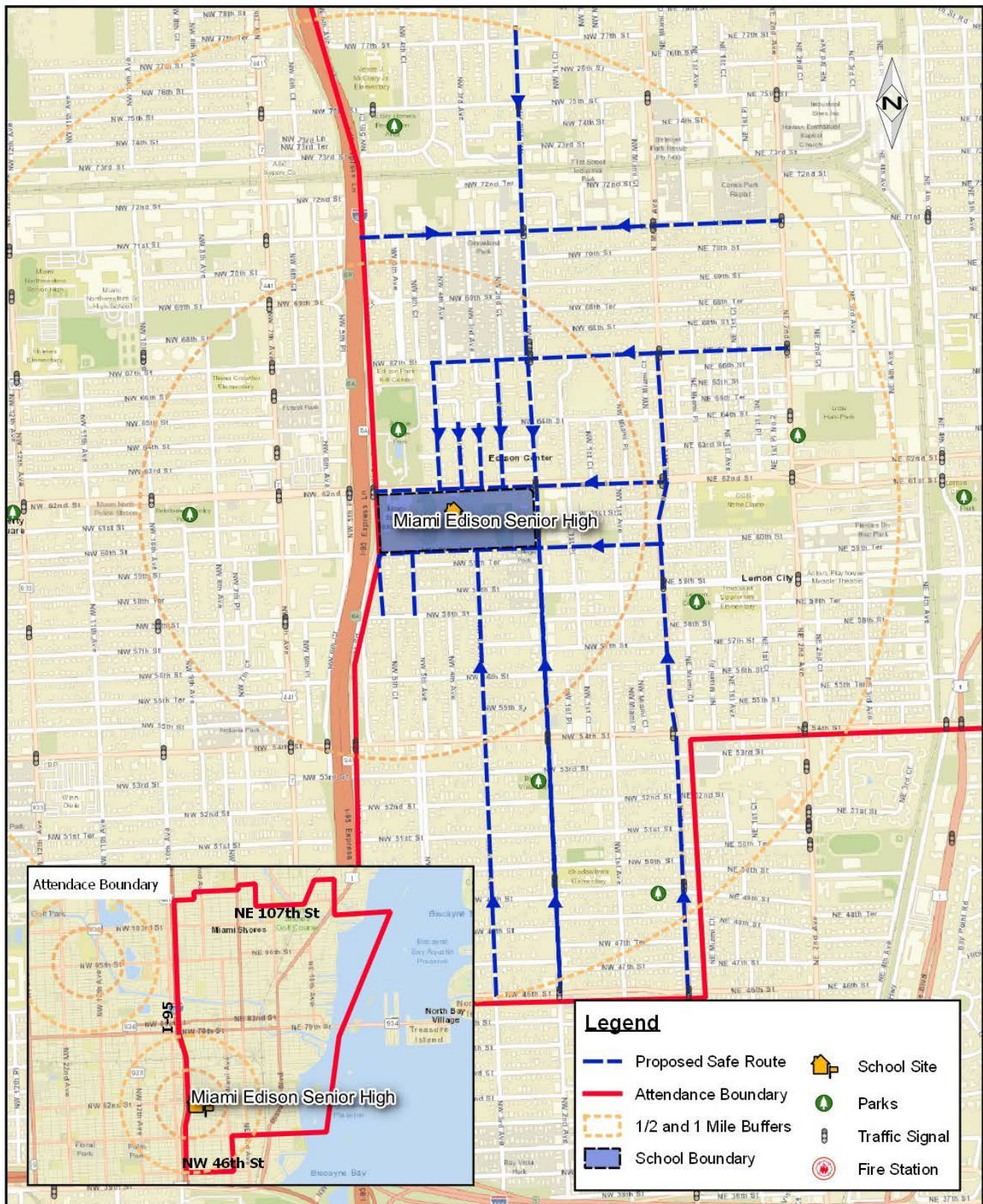
Sidewalk repairs



Faded pavements markings

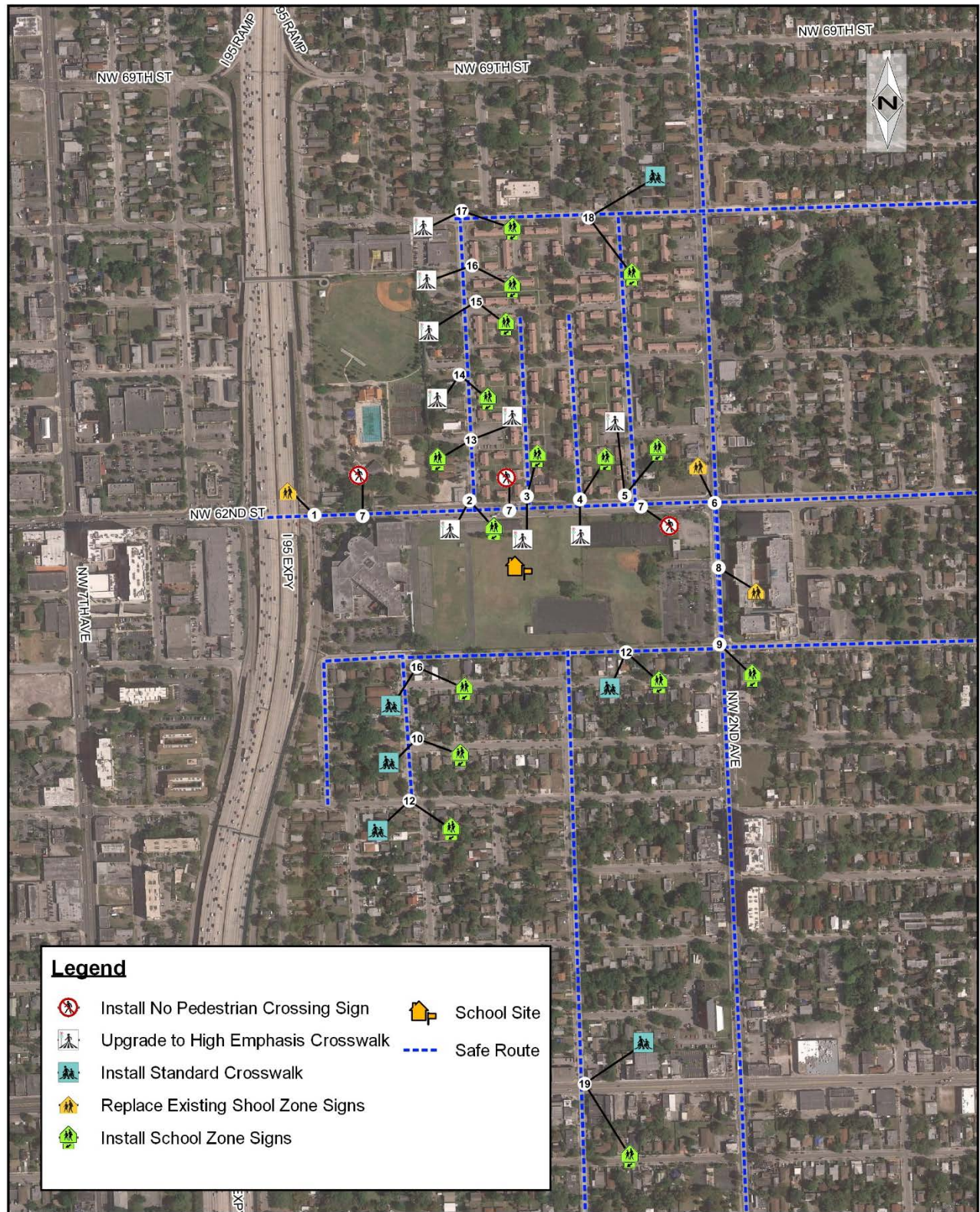
MIAMI EDISON SENIOR HIGH SCHOOL

PROPOSED SAFE ROUTE MAP



MIAMI EDISON SENIOR HIGH SCHOOL

RECOMMENDATIONS MAP



NORLAND ELEMENTARY SCHOOL



	Enrollment	728
Estimated percent of students that live within ½ mile walk		350
Estimated percent of students that walk or bike to school		10%
Estimated Cost of Recommendations		\$306,712.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals 3 bicycle crashes and 1 pedestrian crash occurring within vicinity of the school, during regular school hours, within the past 3 years. Nearby facilities include; North Dade Optimist Club fields, Norwood Park, and Snake Creek Trail.

This school lies adjacent to Norland Middle School meaning that safe routes improvements could benefit students at both schools. The fact that this school does not reside on a main road is an advantage towards creating an environment more conducive to walking and biking. One of the school Crossing guards mentioned that vehicles along SR 860/ Miami Gardens Dr east and westbound approaches are often running the red light since there is a lot of congestion issues at the intersection during arrival/dismissal times.

The school's roadway grid network of streets provides many routes to get to and from the school, resulting in many areas that needed to be evaluated. With many neighborhood streets lacking standard cross walks and/or sidewalk connections, parents may not feel comfortable to have their children walk or bike to and from school. Many neighborhood street intersections lacked crosswalks and sidewalk connections that need to be filled.

Infrastructure recommendations include crosswalk additions and enhancements, intersection push-button upgrades and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, debris removal, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	6	0	0	1	5	0	0	0
Afternoon	4	0	0	1	3	0	0	0

No Response Morning: 0

No Response Afternoon: 2

Numbers rather than percents are displayed because the number of respondents for this question was less than 30

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed high-emphasis crosswalks



Faded pavement markings



Proposed high-emphasis crosswalks



OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 24th St. @ 7801 Address			1	NL							
2	SW 24th St. @ 7801 Address							1	NL			
3	SW 24th St. @ 77th Ave.							1	NL			2 signs
4	SW 24th St. @ 77th Ave.									1	EB	
5	SW 24th St. @ Palmetto EB north ramp			1	EB							
6	SW 24th St. @ 75th Ave.			4	4L							
7	Waterway Dr. @ 75th Ave.			1	NL							
8	SW 24th St. @ 75th Ave.							1				School zone sign maintenance
9	SW 24th St. @ 74th Ave.									1	WB	
10	SW 16th St. @ 74th Ave.			4	4L							

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Leaning signage



Debris pile



Broken fencing



Faded pavement markings

PROPOSED SAFE ROUTE MAP



NORLAND ELEMENTARY SCHOOL

RECOMMENDATIONS MAP



NORLAND MIDDLE SCHOOL



	Enrollment	880
Estimated percent of students that live within ½ mile walk		360
Estimated percent of students that walk or bike to school		5%
Estimated Cost of Recommendations		\$195,915.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals 3 bicycle crashes and 1 pedestrian crash occurring within vicinity of the school, during regular school hours, within the past 3 years. Nearby facilities include; North Dade Optimist Club Fields, Cloverleaf Park, and Snake Creek Trail.

This school lies adjacent to Norland Middle School meaning that safe routes improvements could benefit students at both schools. The fact that this school does not reside on a main road is an advantage towards creating an environment more conducive to walking and biking. Drivers were observed speeding along NW 192 Terrace in front of the school.

With more bicycle and pedestrian infrastructure within neighborhood streets, motorists may drive at slower speeds anticipating more non-motorized travelers. neighborhood street intersections lacked crosswalks and sidewalk connections that need to be filled. Out dated school zone and pedestrian signage was witnessed around the school. Numerous cross walks were standard and should be upgraded to high emphasis crosswalks.

Infrastructure recommendations include crosswalk additions and enhancements, intersection push-button upgrades and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	6	0	0	3	3	0	0	0
Afternoon	6	0	0	3	3	0	0	0

No Response Morning: 0

No Response Afternoon: 0

Numbers rather than percents are displayed because the number of respondents for this question was less than 30

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed high-emphasis crosswalk



Proposed push-button upgrades



Proposed high-emphasis crosswalk



OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 192nd Terr (Behind school)											Debris pile impeding Safe Route
2	SW 192nd Terr (Behind school)											Broken fence

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Downed signage



Leaning signage



Faded pavement markings



Faded pavement markings

PROPOSED SAFE ROUTE MAP



RECOMMENDATIONS MAP



OJUS ELEMENTARY SCHOOL



	Enrollment	948
Estimated percent of students that live within ½ mile walk		400
Estimated percent of students that walk or bike to school		9%
Estimated Cost of Recommendations		\$532,146.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals 3 bicycle crashes and 7 pedestrian crashes occurring within vicinity of the school, during regular school hours, within the past 3 years.

SW 185th Street serves as the primary barrier to making Ojus Elementary more conducive to increased rates of walking and biking. NE 185 Street is a heavily utilized roadway for motorists. Cautionary signage must be improved to alert drivers that they are approaching a school zone. One of the school Crossing guards mentioned that vehicles along NE 185th Street east and westbound approaches are often running the red light since there is a lot of congestion issues at the intersection during arrival/dismissal times. Safe Routes improvements to this road are a priority to encourage more students to walk and bike to school.

Infrastructure recommendations include crosswalk additions and enhancements, signage additions and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	317	3%	0.6%	16%	76%	2%	1%	0.3%
Afternoon	303	6%	0.7%	23%	63%	2%	2%	3%

No Response Morning: 8

No Response Afternoon: 22

Percentages may not total 100% due to rounding

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed sidewalk connection



Proposed sidewalk connection



Proposed high-emphasis crosswalk



Proposed sidewalk connection

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	NE 186th St @ West Dixie Hwy											Silt buildup clogging drainage on NW corner
2	NE 186th St @ 26 Pl	Roundabout	Roundabout					1				
3	NE 25th Pl (across Shell gas station)							1	SS			Downed signage impeding Safe Route
4	NE 186th St @ 26th Ave Bus Stop							1	SS			
5	NE 186th St @ 26th Ave Bus Stop							1	SS			
6	NE 26th Ave							1	ES			
7	NE 187th @ 26th Ave							1	WS			Signage debris impeding Safe Route

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Drainage maintenance



Leaning signage



Downed signage impeding sidewalk right of way



Leaning signage

OJUS ELEMENTARY SCHOOL

RECOMMENDATIONS MAP



OLYMPIA HEIGHTS ELEMENTARY SCHOOL



	Enrollment	439
Estimated percent of students that live within ½ mile walk		300
Estimated percent of students that walk or bike to school		2%
Estimated Cost of Recommendations		\$92,736.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals that 3 bicycle crashes and 8 pedestrian crashes have occurred within vicinity of the school, during regular school hours, within the past 3 years. Nearby facilities include; Blue Lakes Park and Dade County Mobile Library Services.

SW 40th Street serves as the primary barrier to making Olympia Heights more conducive to increased rates of walking and biking. Safe Routes improvements to this road are a priority to encourage more students to walk and bike to school. One of the school Crossing guards stated that there is a lot of speeding occurring along Bird Road/SW 40th St. Proposed Speed display and more speed limit signs along SW 40th St. segment. Finally, out dated school zone and pedestrian signage was witnessed around the school. Numerous cross walks were standard and should be upgraded to high emphasis crosswalks.

Infrastructure recommendations include crosswalk additions and enhancements, intersection push-button upgrades and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, tree trimming, and repainting pavement markings.

STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	23	3	0	3	17	0	0	0
Afternoon	21	2	0	4	15	0	0	0

No Response Morning: 0

No Response Afternoon: 2

Numbers rather than percents are displayed because the number of respondents for this question was less than 30

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed signage upgrades



Proposed push-button upgrade



Proposed sidewalk connection

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 97th Ave @ School Exit	East side of school						1	Exit			
2	SW 40th St @ 97th Ave			1	WS							
3	SW 97th Ave	SW 40th St @ 97th Ave	SW 42nd St									Bike Lane maintenance
4	SW 39th St @ 97th Ave Mid-block							1	SB			
5	SW 39th St @ 97th Ave Mid-block			1								
6	SW 37th St @ 97th Ave							1	ES			Ped sign
7	SW 36th St @ 97th Ave			1	ES							
8	SW 35th St @ 97th Ave			1	ES							
9	SW 34th St @ 97th Ave			1	ES							
10	SW 36th St @ 97th Ave					1	ES					

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Proposed high-emphasis crosswalk



Sidewalk maintenance



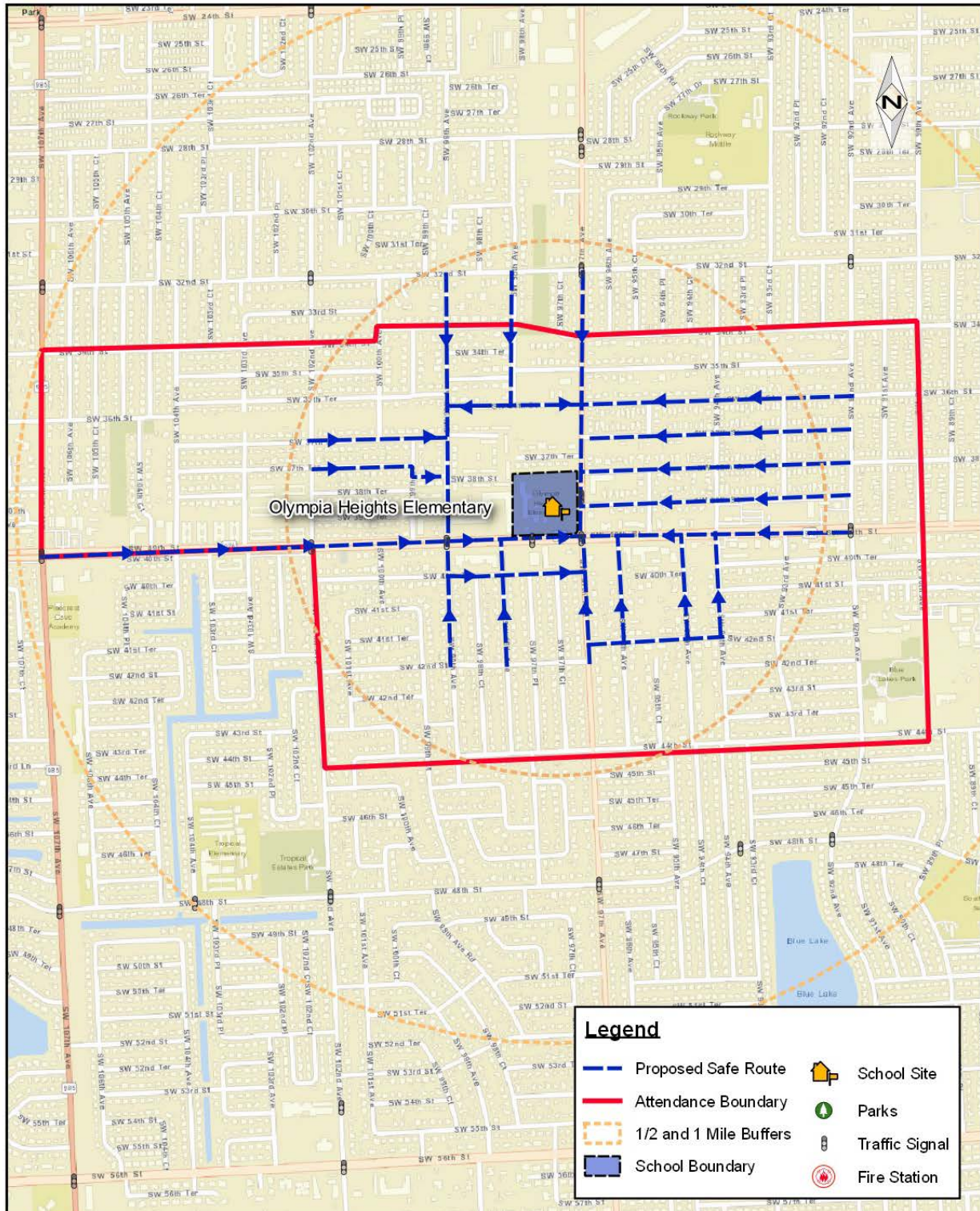
Signage replacement



Proposed high-emphasis crosswalk

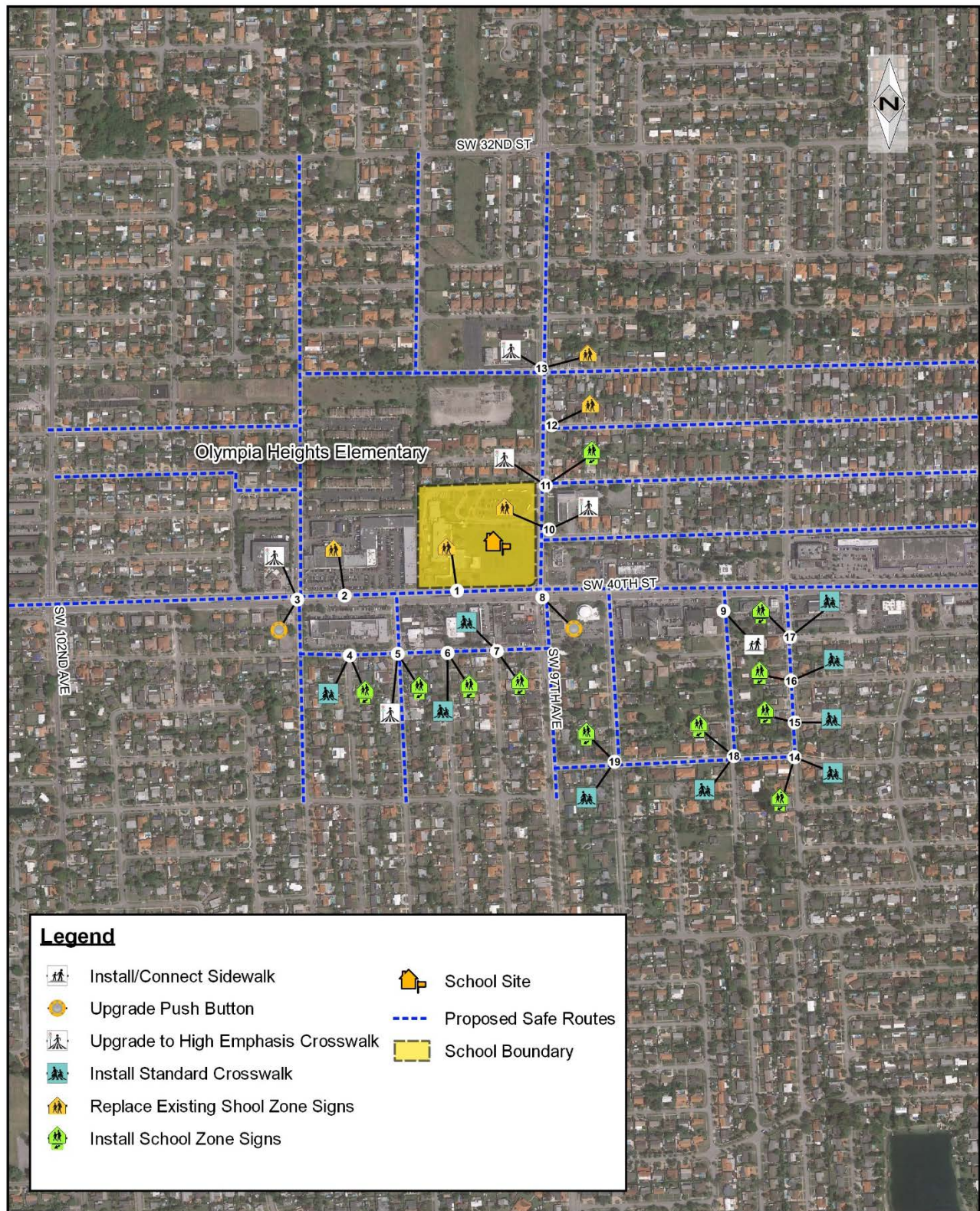
OLYMPIA HEIGHTS ELEMENTARY SCHOOL

PROPOSED SAFE ROUTE MAP



OLYMPIA HEIGHTS ELEMENTARY SCHOOL

RECOMMENDATIONS MAP



SEMINOLE ELEMENTARY SCHOOL



	Enrollment	587
Estimated percent of students that live within ½ mile walk		250
Estimated percent of students that walk or bike to school		1%
Estimated Cost of Recommendations		\$672,560.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals 1 pedestrian crash occurring within vicinity of the school, during regular school hours, within the past 3 years.

W Flagler Street serves as the primary barrier to making Seminole Elementary more conducive to increased rates of walking and biking. Safe Routes improvements to this road are a priority to encourage more students to walk and bike to school. Low numbers of identified walkers and bikers to the school may attribute to the current safety conditions of the existing bicycle and pedestrian infrastructure.

Infrastructure recommendations include sidewalk installations, crosswalk additions and enhancements, intersection push-button upgrades and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, tree trimming, and repainting pavement markings.



STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	10	2	0	2	6	0	0	0
Afternoon	8	2	0	2	4	0	0	0

No Response Morning: 0

No Response Afternoon: 2

Numbers rather than percents are displayed because the number of respondents for this question was less than 30

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed signage upgrade



Proposed sidewalk connection



Proposed sidewalk connection



Proposed high-emphasis crosswalk

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	Flagler @ 78th Ave											Landscaping maintenance along easement on eastside of
2	78th Ave @ 2nd St	245 Address						1				
3	78th Ct @ 2nd St							1				Trees blocking street signage
4	78th Ct @ 2nd St											Debris pile impeding Safe Route
5	Flagler @ 78th Ave	School entrance										Debris piles impeding Safe Route
6	Flagler @ 78th Ave	School entrance										Debris pile impeding Safe Route
7	SW 78th Ave @ Bank Entrance					1	WS					

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Leaning signage



Leaning signage



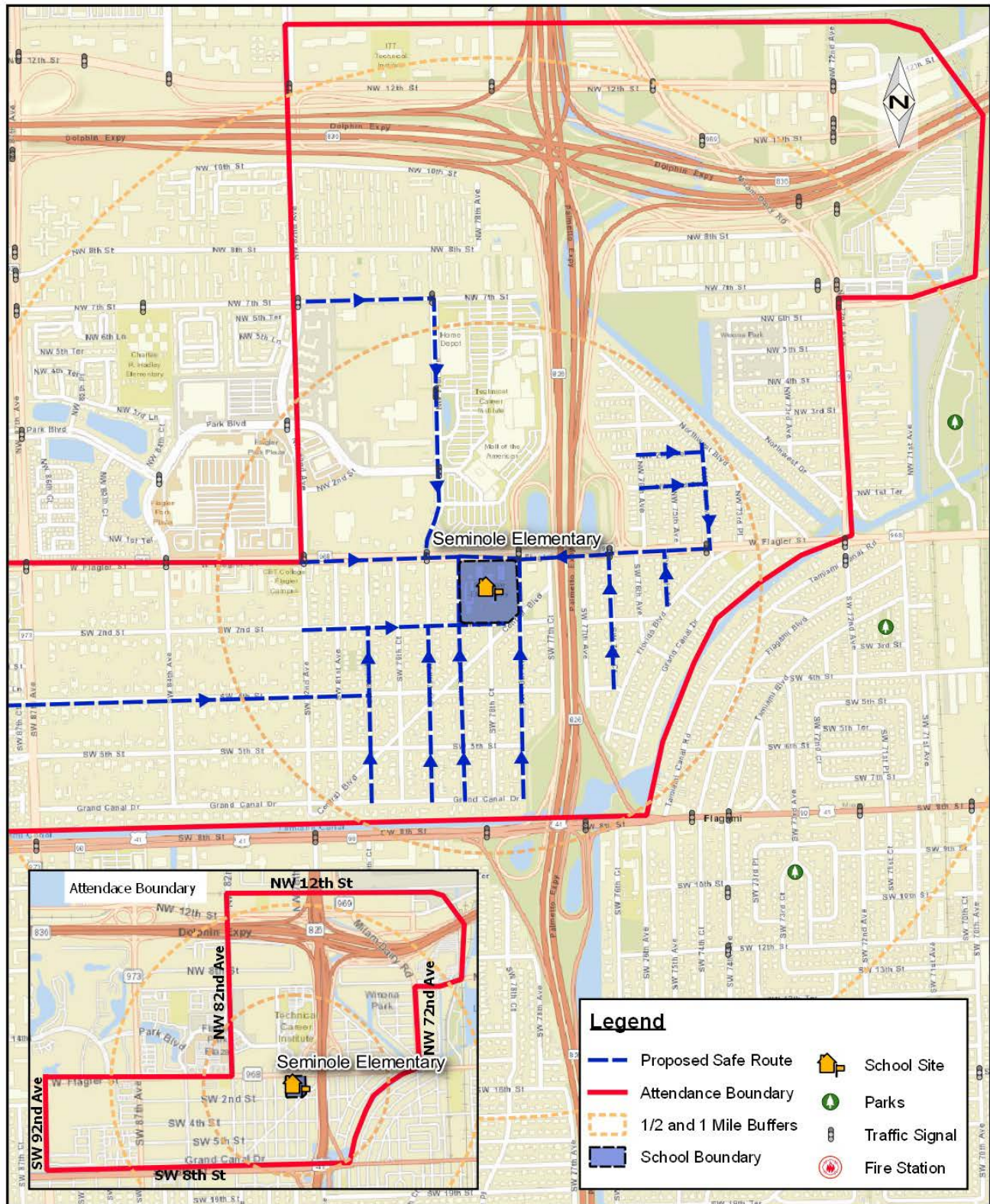
Faded signage



Debris pile impeding sidewalk right of way

SEMINOLE ELEMENTARY SCHOOL

PROPOSED SAFE ROUTE MAP



SEMINOLE ELEMENTARY SCHOOL

RECOMMENDATIONS MAP



WEST MIAMI MIDDLE SCHOOL



	Enrollment	701
Estimated percent of students that live within ½ mile walk		300
Estimated percent of students that walk or bike to school		11%
Estimated Cost of Recommendations		\$229,961.00

OBSERVATIONS & RECOMMENDATIONS

Crash data reveals 1 pedestrian crash occurring within vicinity of the school, during regular school hours, within the past 3 years.

SW 24th Street and SW 75th Ave. serve as the primary barriers to making West Miami Middle more conducive to increased rates of walking and biking. Teachers express that cars speed down 75th Ave. There is also a lot of congestion issues during arrival/dismissal times. Propose traffic calming features down SW 75th Ave. Improving infrastructure may attribute to higher rates of non-motorized travel modes to and from the school.

Infrastructure recommendations include sidewalk installations, crosswalk additions and enhancements, intersection push-button upgrades and signage updates.

Regarding operations and maintenance, recommendations include sidewalk repairs, tree trimming, and repainting pavement markings.

STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	69	7%	0%	43%	76%	3%	0%	0%
Afternoon	67	10%	0%	52%	36%	1%	0%	0%

No Response Morning: 0

No Response Afternoon: 2

Percentages may not total 100% due to rounding

SAMPLE INFRASTRUCTURE RECOMMENDATIONS



Proposed high-emphasis crosswalks



Proposed high-emphasis crosswalk



Proposed high-emphasis crosswalk



Proposed ramps

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 24th St @ 7801 Address			1	NL							
2	SW 24th St @ 7801 Address							1	NL			
3	SW 24th St @ 77th Ave							1	NL			2 signs
4	SW 24th St @ 77th Ave									1	EB	
5	SW 24th St @ Palmetto EB north ramp			1	EB							
6	SW 24th St @ 75th Ave			4	4L							
7	Waterway Dr @ 75th Ave			1	NL							
8	SW 24th St @ 75th Ave							1				School zone sign maintenance
9	SW 24th St @ 74th Ave									1	WB	
10	SW 16th St @ 74th Ave			4	4L							

SAMPLE OPERATIONS AND MAINTENANCE RECOMMENDATIONS



Broken fencing



Debris pile impeding sidewalk right of way



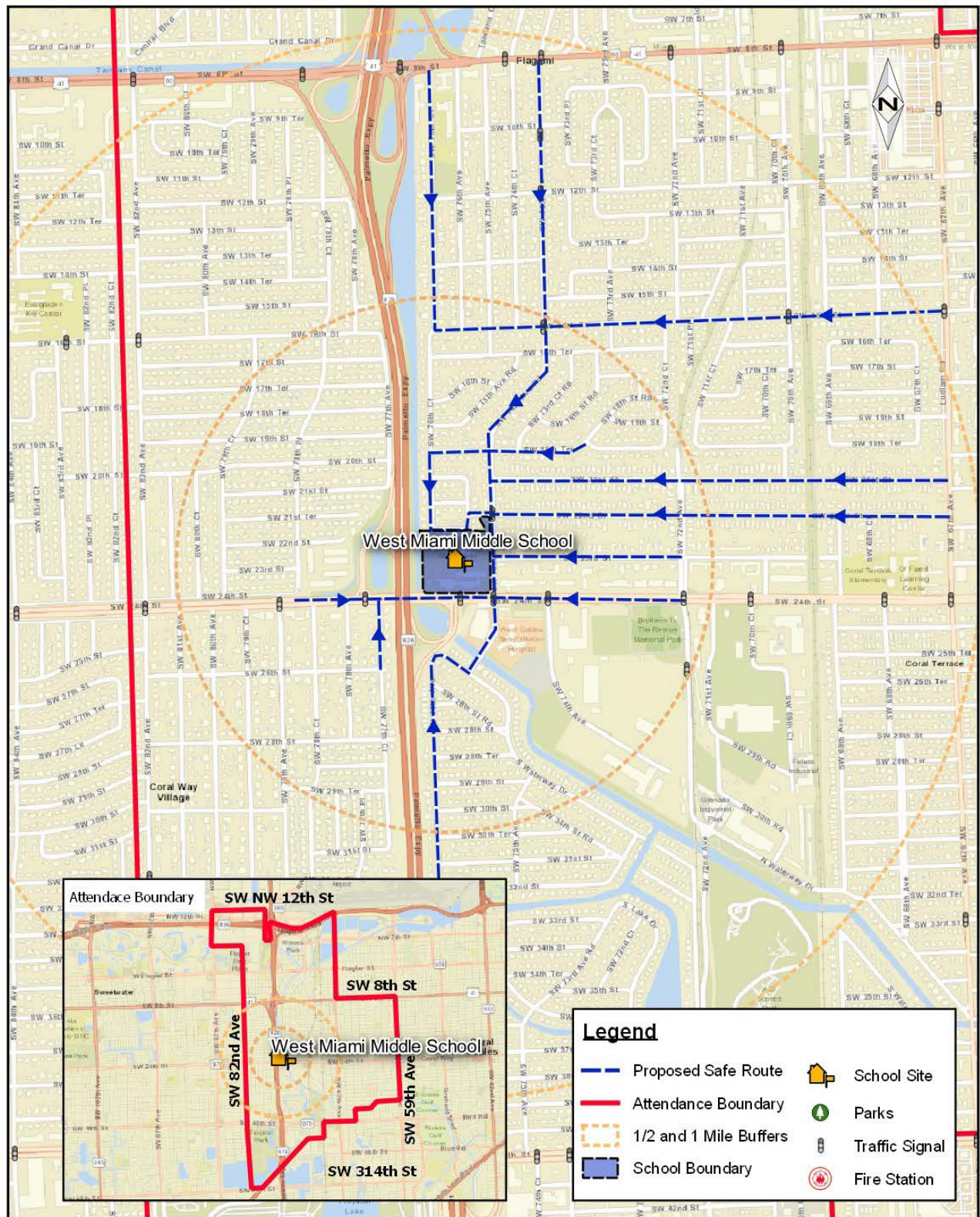
Downed signage



Signage replacement

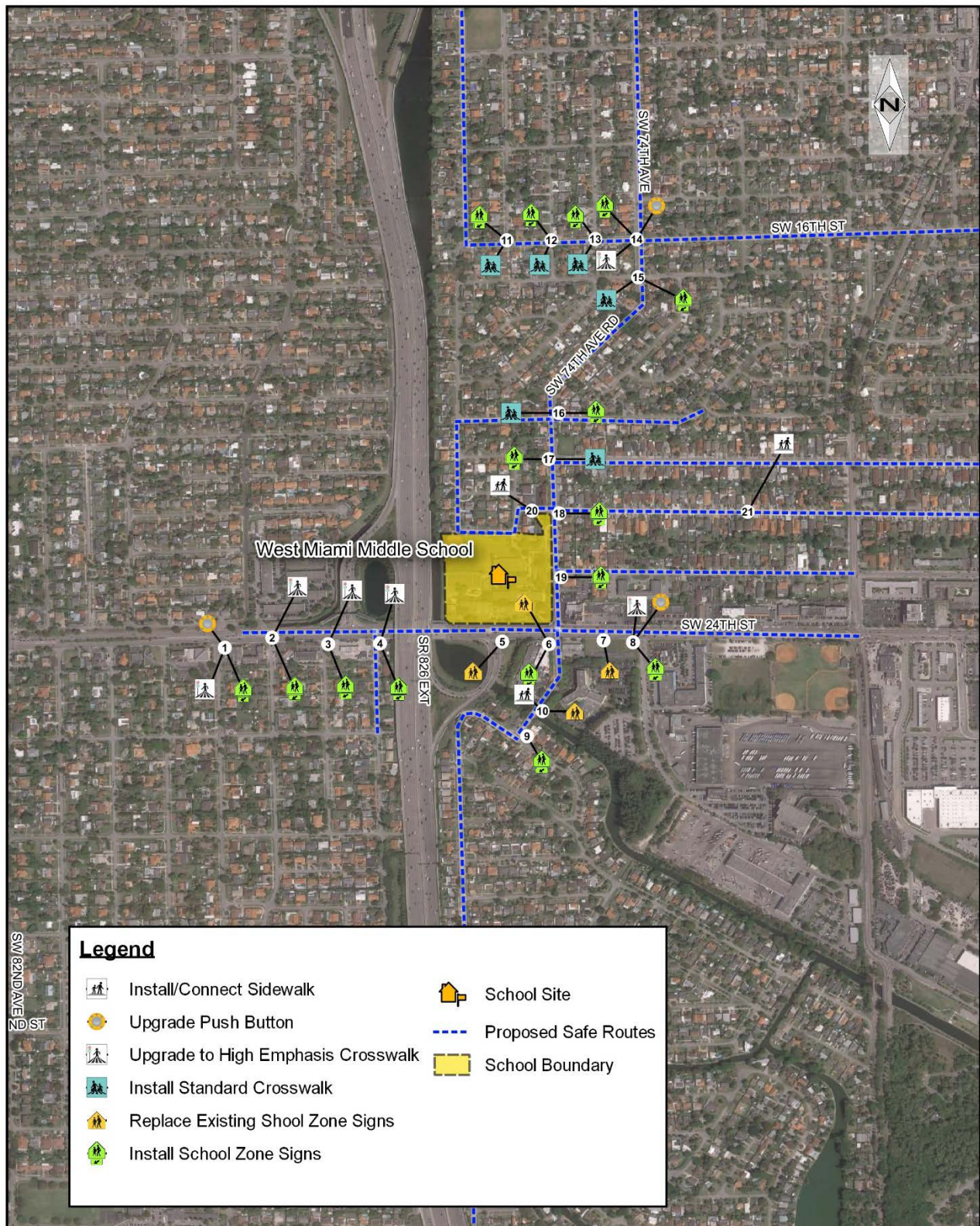
WEST MIAMI MIDDLE SCHOOL

PROPOSED SAFE ROUTE MAP



WEST MIAMI MIDDLE SCHOOL

RECOMMENDATIONS MAP



APPENDIX A

OPERATIONS AND MAINTENANCE TABLE

OPERATIONS AND MAINTENANCE TABLE

AIRBASE K-8 MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 272nd St @ 127th Ave	200' west of int.						1	WB			
2	SW 272nd St @ 128th Ave	100' north of int.						1	SB			
3	SW 272nd St @ 128th Ave	100' north of int.				1	ES					
4	SW 128th Ave	500' from SW 272nd St						1	ES			
5	SW 128th Ave	100' north of 272nd St				1						estimated 100' of repairs
6	SW 128th Ave	1,100' north of 272nd St										Tree trim around school flashers
7	SW 128th Ave	800' north of 272nd St						1				Southbound
8	SW 268th St	128th Ave	128th Ct									Trim back excess foliage obstructing sidewalk ROW on north side
9	SW 272nd St	50' west of school						1	SS			Ped sign maintenance
10	SW 272nd St	100' west of school						1	SS			No parking maintenance
11	SW 272nd St	100' west of school						1	SS			No parking maintenance
12	SW 272nd St	175' west of school						1	SS			No Angle Parking
13	SW 272nd St	600' west of school								1	EB	School pavement marking
14	SW 272nd St	west of school				1						North side of SW 272nd St
15	SW 132nd Ave	North of SW 272nd St										Sidewalk maintenance
EVERGLADES K-8 MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 84th Ave	SW 20th St	SW 21th St					1	WS			Roundabout traffic circle signs were observed hit by vehicles.
2	SW 82nd Ct @ 16th St							1	SS			
3	SW 82nd Ct @ 16th St									1	WB	
4	SW 82nd Ct @ 16th St									1	SS	
5	SW 82nd Ave @ 16th St											Curb landscaping maintenance on SW leg
6	SW 82nd Ave @ 16th St					1	SE					
7	16th St mid-block in front of school									1		
8	16th St west side of school											Landscaping maintenance
MANDARIN LAKES K-8 MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 280th St	School Entrance A						1	S			Stop sign leaning
2	SW 280th St @ 124th Ct	SW 280th St	SW 281st St	1								
3	SW 280th St @ 124th Ct	SW 280th St	SW 281st St			1						
4	SW 280th Ct	800' E of int @ 127th Ave		1								Hole in park fence, homeless present next to fence
5	SW 280th St @ 124th Ct											
6	School Entrance											Bike Parking maintenance
MIAMI EDISON HIGH MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	NW 62nd St. @ 4th Ave.	25' east of 4th Ave.						1	EB			
2	NW 60th St.	2nd Ave.	240 House address			1	BS					
3	NW 60th St. @ 5th Ct.											Debris piles in open space adjacent to I-95 and where buses stage
4	NW 58th St. @ 5th Ct.					1	NL					
5	NW 67th St. @ 4th Ave.					1	SL					
NORLAND ELEMENTARY MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 24th St. @ 7801 Address			1	NL							
2	SW 24th St. @ 7801 Address							1	NL			
3	SW 24th St. @ 77th Ave.							1	NL			2 signs
4	SW 24th St. @ 77th Ave.									1	EB	
5	SW 24th St. @ Palmetto EB north ramp			1	EB							
6	SW 24th St. @ 75th Ave.			4	4L							
7	Waterway Dr. @ 75th Ave.			1	NL							
8	SW 24th St. @ 75th Ave.							1				School zone sign maintenance
9	SW 24th St. @ 74th Ave.									1	WB	
10	SW 16th St. @ 74th Ave.			4	4L							



NORLAND MIDDLE MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 192nd Terr (Behind school)											Debris pile impeding Safe Route
2	SW 192nd Terr (Behind school)											Broken fence
OJUS ELEMENTARY MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	NE 186th St @ West Dixie Hwy											Silt buildup clogging drainage on NW corner
2	NE 186th St @ 26 Pl	Roundabout	Roundabout					1				
3	NE 25th Pl (across Shell gas station)							1	SS			Downed sigange impeding Safe Route
4	NE 186th St @ 26th Ave Bus Stop							1	SS			
5	NE 186th St @ 26th Ave Bus Stop							1	SS			
6	NE 26th Ave							1	ES			
7	NE 187th @ 26th Ave							1	WS			Sigange debris impeding Safe Route
OLYMPIA HEIGHTS ELEMENTARY MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 97th Ave @ School Exit	East side of school						1	Exit			
2	SW 40th St @ 97th Ave			1	WS							
3	SW 97th Ave	SW 40th St @ 97th Ave	SW 42nd St									Bike Lane maintenance
4	SW 39th St @ 97th Ave Mid-block							1	SB			
5	SW 39th St @ 97th Ave Mid-block			1								
6	SW 37th St @ 97th Ave							1	ES			Ped sign
7	SW 36th St @ 97th Ave			1	ES							
8	SW 35th St @ 97th Ave			1	ES							
9	SW 34th St @ 97th Ave			1	ES							
10	SW 36th St @ 97th Ave					1	ES					
SEMINOLE ELEMENTARY MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	Flagler @ 78th Ave											Landscaping maintenance along easement on eastside of
2	78th Ave @ 2nd St	245 Address						1				
3	78th Ct @ 2nd St							1				Trees blocking street signage
4	78th Ct @ 2nd St											Debris pile impeding Safe Route
5	Flagler @ 78th Ave	School entrance										Debris piles impeding Safe Route
6	Flagler @ 78th Ave	School entrance										Debris pile impeding Safe Route
7	SW 78th Ave @ Bank Entrance					1	WS					
WEST MIAMI MIDDLE MAINTENANCE												
Item	Street/Intersection	From	To	Crosswalk	Direction	Sidewalk	Direction	Signage	Direction	Pavement Markings	Direction	Other
1	SW 24th St @ 7801 Address			1	NL							
2	SW 24th St @ 7801 Address							1	NL			
3	SW 24th St @ 77th Ave							1	NL			2 signs
4	SW 24th St @ 77th Ave									1	EB	
5	SW 24th St @ Palmetto EB north ramp			1	EB							
6	SW 24th St @ 75th Ave			4	4L							
7	Waterway Dr @ 75th Ave			1	NL							
8	SW 24th St @ 75th Ave							1				School zone sign maintenance
9	SW 24th St @ 74th Ave									1	WB	
10	SW 16th St @ 74th Ave			4	4L							

APPENDIX B

SAFE ROUTES TO SCHOOL APPLICATIONS

(final applications to be provided upon request)