

2017

# SAFE ROUTES TO SCHOOL

## INFRASTRUCTURE PLANS



**Prepared For:**  
Miami-Dade Transportation  
Planning Organization



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**MARLIN**

# Safe Routes to School 2017 Infrastructure Plans

Prepared for:

Miami-Dade County Transportation Planning Organization



Work Order # GPC VI-18-08

Prepared by:

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## 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 manages the Miami-Dade Safe Routes to School Infrastructure Plans, 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 2016 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.



Figure 1: Walk Safe Event at Local Miami-Dade School

## Study Method

The two objectives of this study are:

1. Develop Safe Routes to School recommendations for ten selected elementary / K-8 schools, identify safe routes, infrastructure improvements, cost estimates, and create a Safe Route walking map
2. Prepare FDOT Safe Routes to School infrastructure funding 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 March 31, 2017. All applications can be found in Appendix A.

The 2016 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 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.



Figure 2: Marlin Staff Assisting with Parent Surveys

### 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 2016 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 and K-8 schools 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 |
|------------------------------|-----------------------------------------------|----------------------|
| Rainbow Park Elementary      | 15355 NW 19th Ave, Miami Gardens, FL 33054    | \$ 132,193.00        |
| Norwood Elementary           | 19810 NW 14th Court, Miami Gardens, FL 33169  | \$ 311,252.00        |
| North County K-8 Center      | 3250 Nw 207th Street, Miami Gardens, FL 33056 | \$ 467,025.73        |
| Golden Glades Elementary     | 16520 NW 28th Ave, Opa Locka, FL 33054        | \$ 541,341.00        |
| Benjamin Franklin K-8 Center | 13100 NW 12th Ave, North Miami, FL 33168      | \$ 385,554.00        |
| Charles R. Hadley Elementary | 8400 NW 7th St, Miami, FL 33126               | \$ 124,038.00        |
| Mae M. Walters Elementary    | 650 W 33rd St, Hialeah, FL 33012              | \$ 187,624.00        |
| Lake Stevens Elementary      | 5101 NW 183 Street, Miami, FL 33055           | \$ 105,789.00        |
| Henry E.S. Reeves Elementary | 2005 NW 111th St, Miami, FL 33101             | \$ 525,742.00        |
| Dante Fascell Elementary     | 15625 SW 80th Street, Miami, FL 33193         | \$ 116,113.00        |

Figure 3: Selected Schools for 2017 SRTS Infrastructure Plans Study



Figure 4: Bike Safe Event at Local Miami-Dade School



## 2017 Safe Routes to School Locations



Figure 5: 2017 SRTS School Selections

## RAINBOW PARK ELEMENTARY



Figure 6: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 398          |
| Estimated percent of students that live within ½ mile walk |            | 44%          |
| Estimated percent of students that walk or bike to school  |            | 39%          |
| Estimated Cost of Recommendations                          |            | \$132,193.00 |

### OBSERVATIONS & RECOMMENDATIONS

Recommendations include installation and upgrade of crosswalks, as well as some signage and ADA improvements. Most recommended improvements were in close proximity to the school, where many intersections lacked high-emphasis crosswalks. The proposed Safe Route to this school is mostly along neighborhood streets and only requires crossing two major roads.

Rainbow Park Elementary has an attendance boundary that requires minimal crossings of major streets. Many students live within a ½ mile of the school and only need to travel along the neighborhood street network. A small percentage of students live west of NW 27th Avenue and need to cross that major street in order to walk to school. NW 27th Avenue was observed to have crossing guards during arrival and dismissal times. NW 22nd Avenue is also a busy street that some students need to cross. A signalized, midblock crossing was observed on NW 22nd Avenue, and it also had a crossing guard during arrival and dismissal times.



## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies for this school revealed that most students are driven to school. Walking is the second most common form of travel, followed by the school bus.

Parent surveys indicate that most parents do not allow their children to walk to school due to concerns about violence or crime. A secondary for parents not allowing their students to walk is due to a lack of having an adult to walk with. This school may benefit from activities to encourage walking such as a Walking School Bus to engage parents and identify adults that can walk with kids to school.

## FIELD VISIT PHOTOS



Figure 7: Sidewalk Gap



Figure 8: Crosswalk Enhancement Opportunity



Figure 9: Informative Signage Regarding Benefits of Walking, Biking, and Taking Transit



## RAINBOW PARK ELEMENTARY PROPOSED SAFE ROUTE

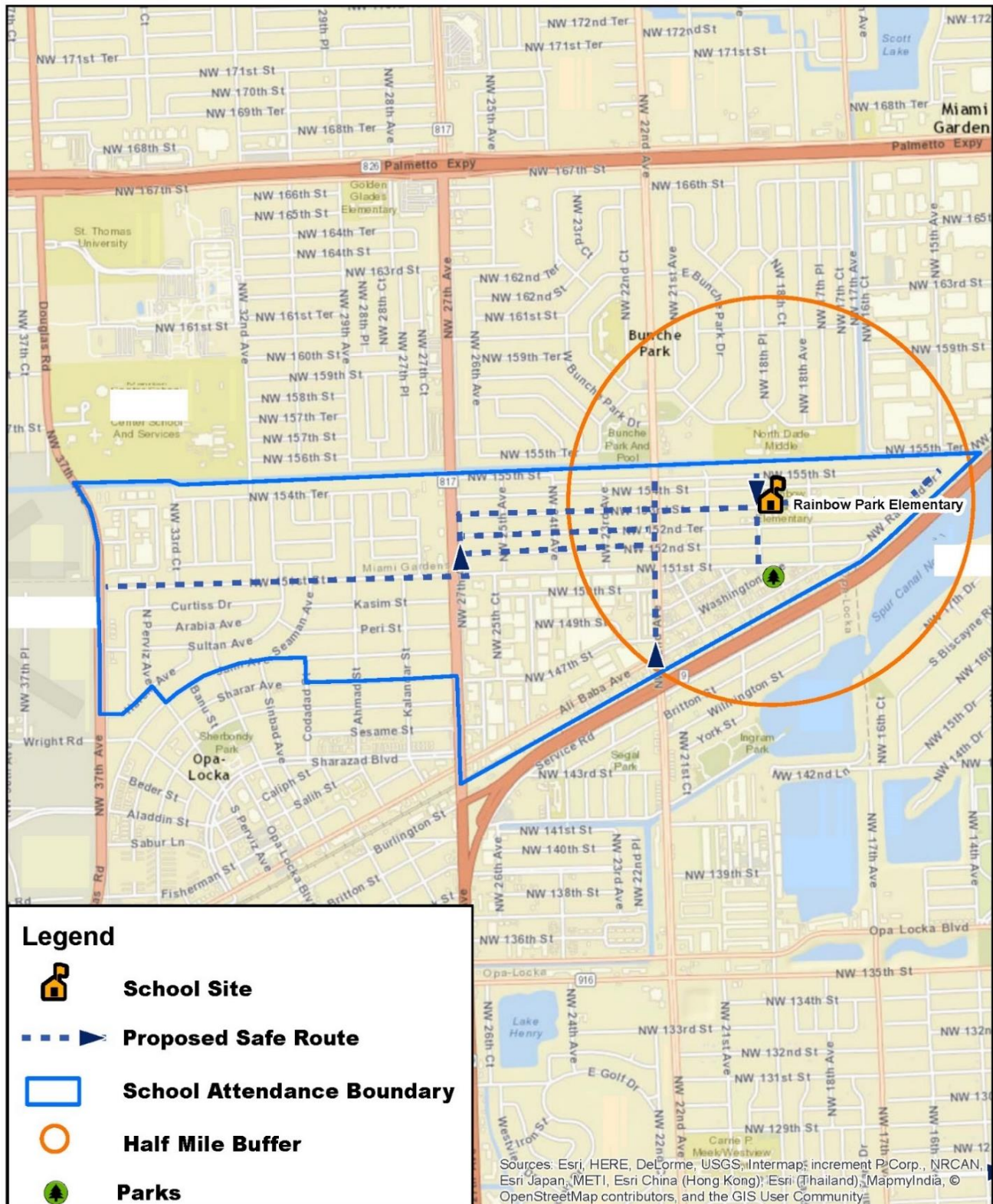


Figure 110: Rainbow Park Elementary Proposed Safe Route Map



## RAINBOW PARK ELEMENTARY RECOMMENDATIONS



Figure 11: Rainbow Park Elementary Recommendations Map



## NORWOOD ELEMENTARY



Figure 12: School Entrance

|                                                            |              |
|------------------------------------------------------------|--------------|
| Enrollment                                                 | 496          |
| Estimated percent of students that live within ½ mile walk | 46%          |
| Estimated percent of students that walk or bike to school  | 33%          |
| Estimated Cost of Recommendations                          | \$311,252.00 |

### OBSERVATIONS & RECOMMENDATIONS

Recommendations for this school include sidewalks, crosswalk, and ADA upgrades. The school attendance boundary is bisected by NW 199th Street, which is a major arterial that provides a connection to Florida's Turnpike and Hard Rock Stadium.

NW 199th is the only major street that needs to be crossed in order for students to walk or bike to school. There are three intersections with 199th Street within the attendance boundary, with a crossing guard being located at only one of them during arrival and dismissal. The crossing guard is located immediately in front of the school at the NW 199th St/NW 14th Ct. intersection.

Most improvements recommended for Norwood Elementary are intended to improve the visibility of pedestrian crossings in the neighborhood around the school. Installation of crosswalks and sidewalk connections to the crosswalks should improve walking conditions for students in this area. Some improvements for intersections with NW 199th Street include ADA upgrades and improvements to signage that alerts drivers of a turning restriction due to pedestrians.



## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies for this school indicate that a substantial percentage of students are driven to school. Travel tallies indicate that many students living within half a mile of the school are also driven, despite their close proximity. This is likely due to the need to cross NW 199th Street to reach the school.

Traffic, Violence or Crime, and Distance were among the top reasons that parents do not allow their children to walk to school. One parent indicated that they felt that the NW 199th Street intersection should have more than one crossing guard due to the high volume of traffic. They also commented that many drivers run the red light, creating a hazard for pedestrians.

## FIELD VISIT PHOTOS



Figure 13: Outdated Push Button



Figure 124: Crosswalk Enhancement Opportunity



Figure 15: Snake Creek Trail

This map displays the school site for Norwood Elementary, marked with a yellow house icon. A blue dashed line with arrowheads indicates the proposed safe route, which starts near the school and follows a path through the neighborhood. A solid blue line outlines the school attendance boundary. An orange circle represents the half-mile buffer around the school site. The map includes a legend with the following items:

- School Site**: Yellow house icon.
- Proposed Safe Route**: Blue dashed line with arrowheads.
- School Attendance Boundary**: Solid blue line.
- Half Mile Buffer**: Orange circle.
- Parks**: Green tree icon.

The map shows a grid of streets including NW 207th St, NW 206th St, NW 204th St, NW 203rd St, NW 202nd St, NW 201st St, NW 200th St, NW 199th St, NW 198th St, NW 197th St, NW 196th St, NW 195th St, NW 194th St, NW 193rd St, NW 192nd St, NW 191st St, NW 190th St, NW 189th St, NW 188th St, NW 187th St, NW 186th St, NW 185th St, NW 184th St, NW 183rd St, NW 182nd St, NW 181st St, NW 180th St, NW 179th St, NW 178th St, NW 177th St, NW 176th St, NW 175th St, NW 174th St, NW 173rd St, NW 172nd St, NW 171st St, NW 170th St, NW 169th St, NW 168th St, NW 167th St, NW 166th St, NW 165th St, NW 164th St, NW 163rd St, NW 162nd St, NW 161st St, NW 160th St, NW 159th St, NW 158th St, NW 157th St, NW 156th St, NW 155th St, NW 154th St, NW 153rd St, NW 152nd St, NW 151st St, NW 150th St, NW 149th St, NW 148th St, NW 147th St, NW 146th St, NW 145th St, NW 144th St, NW 143rd St, NW 142nd St, NW 141st St, NW 140th St, NW 139th St, NW 138th St, NW 137th St, NW 136th St, NW 135th St, NW 134th St, NW 133rd 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## NORWOOD ELEMENTARY RECOMMENDATIONS



Figure 17: Norwood Elementary Recommendations Map



## NORTH COUNTY K-8 CENTER

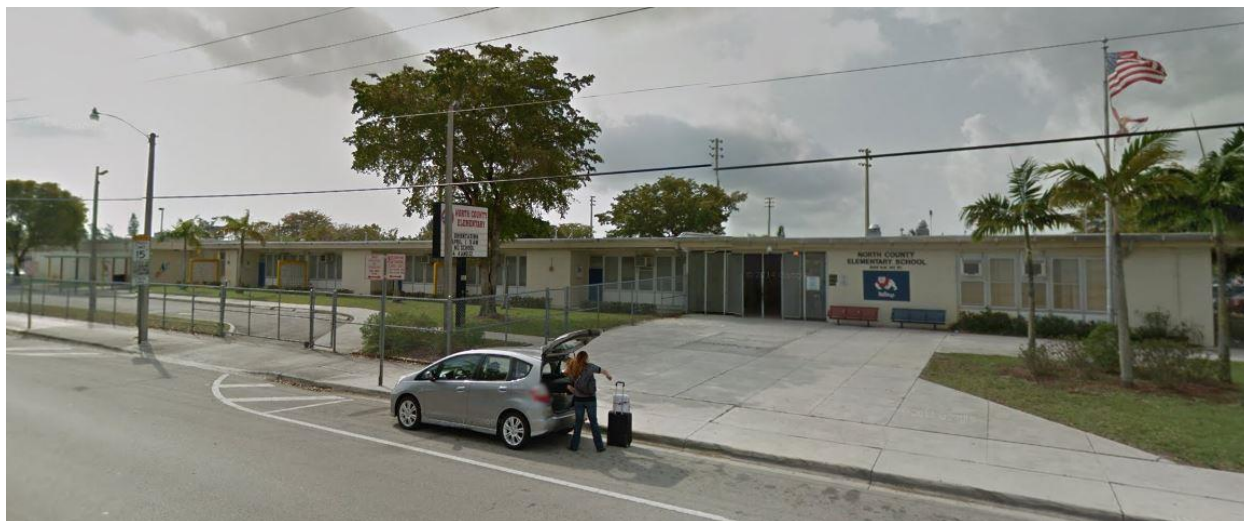


Figure 18: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 449          |
| Estimated percent of students that live within ½ mile walk |            | 31%          |
| Estimated percent of students that walk or bike to school  |            | 67%          |
| Estimated Cost of Recommendations                          |            | \$467,025.73 |

### OBSERVATIONS & RECOMMENDATIONS

North County K-8 Center has a linear attendance boundary that requires travel along or across NW 207th Street for nearly all students. The only major street in the attendance boundary is NW 27th Avenue, and this is where the crossing guards are located during arrival and dismissal times. The intersection of NW 27th Avenue @ NW 207th Street is a very large intersection and requires multiple crossing guards to safely escort students.

Most recommendations for North County K-8 Center are for crosswalks at neighborhood intersections to increase the visibility for pedestrians. In particular, crosswalks were recommended along some side streets on NW 207th Street due to the relatively fast-moving traffic flow along the street and the fact that all traffic on the side streets is turning traffic which may not be inclined to be looking for pedestrians. Other recommendations include modification of the turning radius at an entrance to a community. Wide radii at this intersection leaves pedestrians vulnerable to turning cars that do not need to slow down in order to make turns. Additionally, a canal with a poor guardrail configuration was observed in the eastern part of the attendance boundary. Sidewalks were not continuous in this area and were recommended to provide a safe, continuous path for students.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student Travel Tallies indicate that most students travel to and from school by car. Some students carpool. Walking and biking was the second most popular method of travel to school. Parent surveys show that most students have a 5 minute or less-than 5 minute drive to school, indicating very close proximity. Many Parent Surveys cited violence or crime, speed of traffic along route, and amount of traffic along route as reasons for not allowing their children to walk to school.

## FIELD VISIT PHOTOS



Figure 19: Student Using Hoverboard for Transportation



Figure 20: Outdated Signage



Figure 21: Sidewalk Gap Adjacent to Canal



Figure 22: Students Crossing through Roundabout



## NORTH COUNTY K-8 PROPOSED SAFE ROUTE

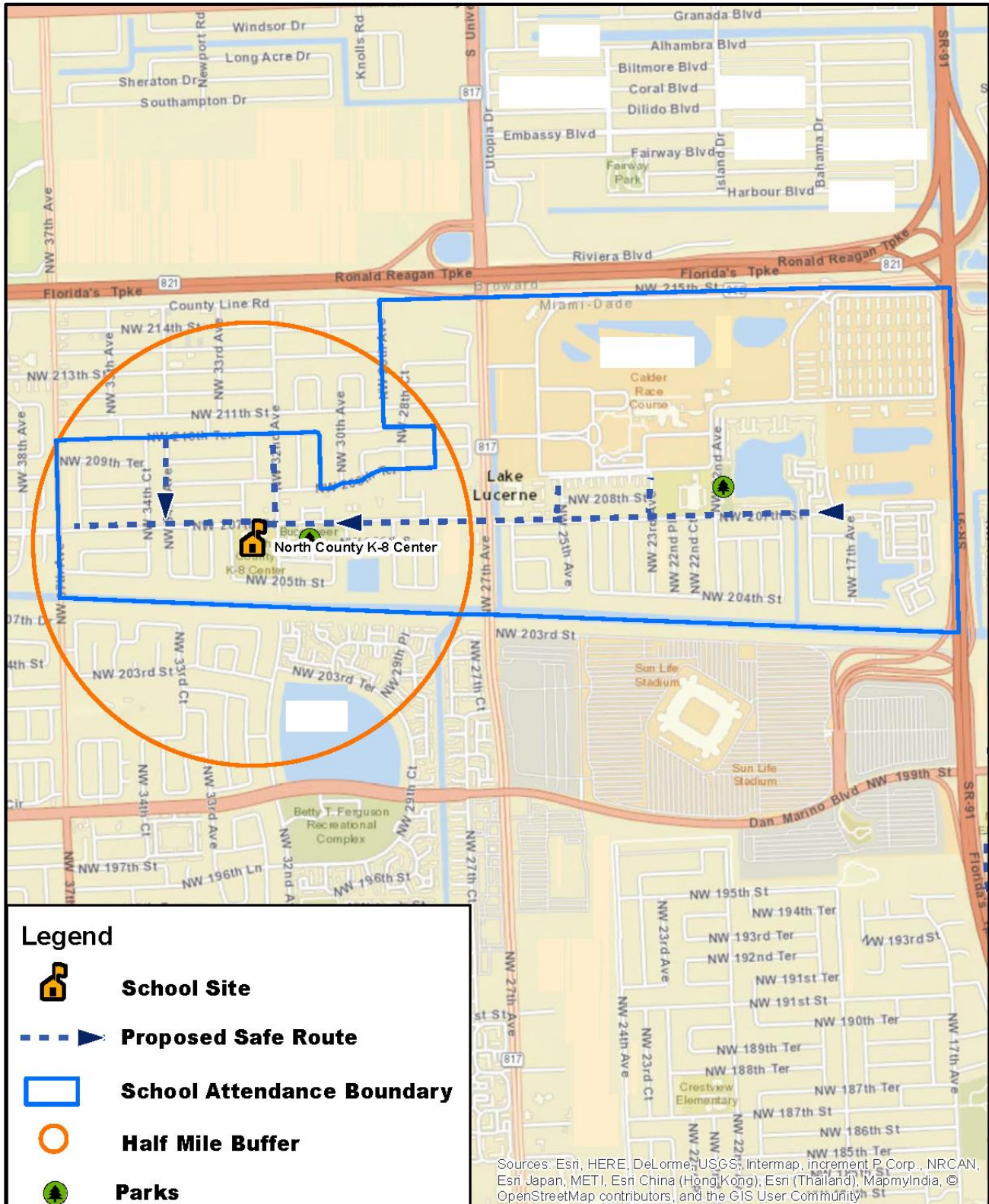


Figure 23: North County K-8 Center proposed Safe Route map



## NORTH COUNTY K-8 RECOMMENDATIONS

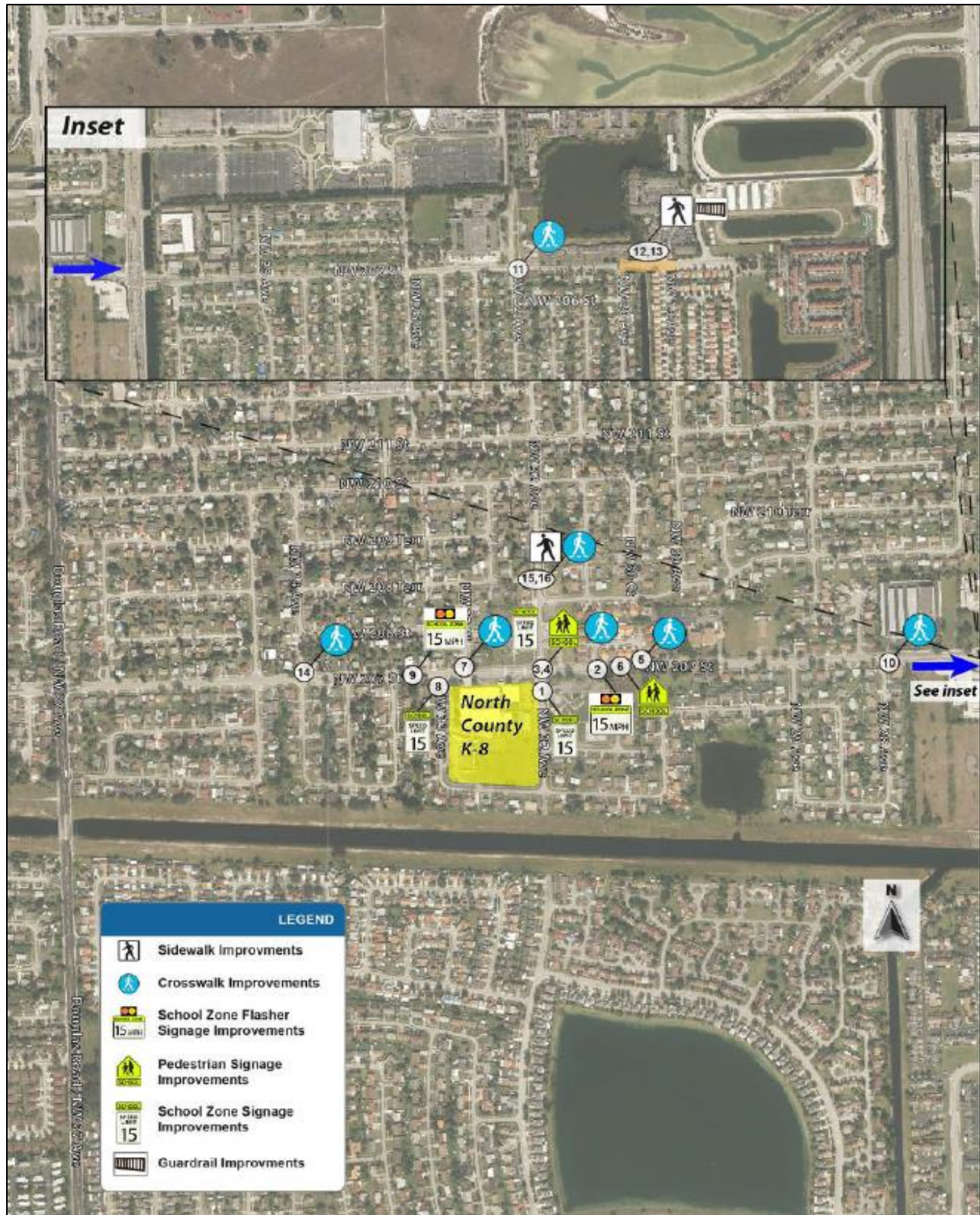


Figure 24: North County K-8 Recommendations Map



## GOLDEN GLADES ELEMENTARY



Figure 25: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 244          |
| Estimated percent of students that live within ½ mile walk |            | 90%          |
| Estimated percent of students that walk or bike to school  |            | 41%          |
| Estimated Cost of Recommendations                          |            | \$541,341.00 |

## OBSERVATIONS & RECOMMENDATIONS

Recommendations for this school include sidewalks, crosswalks, signage, and improved connections to the pedestrian bridge that goes over the Palmetto Expressway.

Most students in the attendance boundary for Golden Glades Elementary live on the south side of the expressway, but improvements to the pedestrian bridge can have a significant impact for students and the community. Most students can reach Golden Glades Elementary via the neighborhood street network without having to cross any major streets. Therefore, most of the recommended improvements were for sidewalk and crosswalk connections.

The most outstanding observation for this school was the need for maintenance and access to the pedestrian bridge. A follow-up Operations and Maintenance report will detail issues regarding this facility.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

The Parent Surveys reflect a concern for students regarding crossing the pedestrian bridge. One parent commented that having a guard there would be nice, and another parent specifically mentioned bullying as a concern. In general, it appears that due to many students' close proximity to school (within  $\frac{1}{4}$  mile) walking is the predominant means of getting to school. The Parent Surveys also reflected concerns about violence or crime, and safety of the intersections as concerns for their students.

## FIELD VISIT PHOTOS



Figure 26: Sidewalk Gap Leading to Pedestrian Bridge



Figure 27: Lack of Crosswalks and Sidewalks



Figure 28: No Sidewalk Access to Pedestrian Bridge



Figure 29: Sidewalk Gap



## GOLDEN GLADES ELEMENTARY PROPOSED SAFE ROUTE

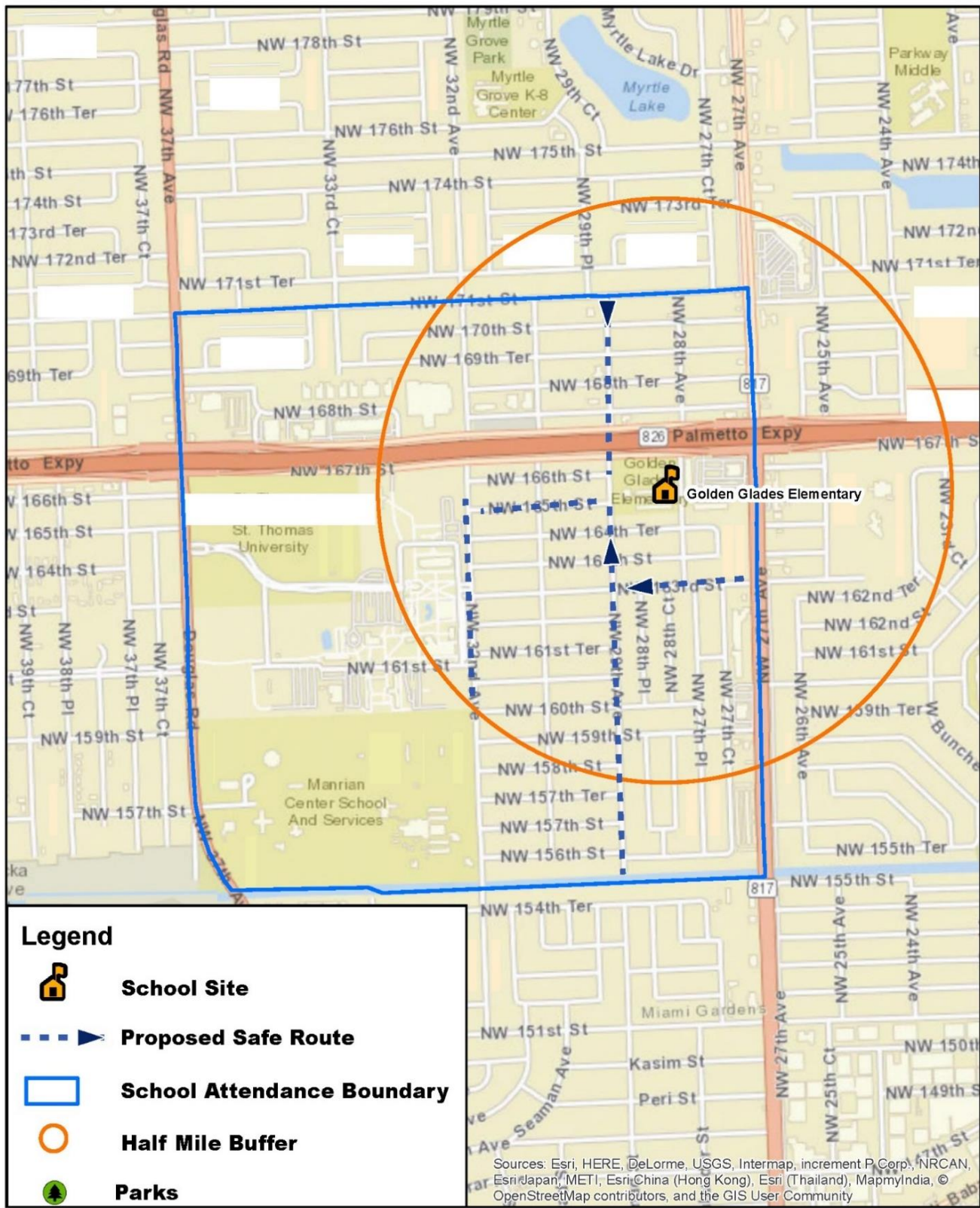


Figure 30: Golden Glades Elementary Proposed Safe Route Map



## GOLDEN GLADES ELEMENTARY RECOMMENDATIONS

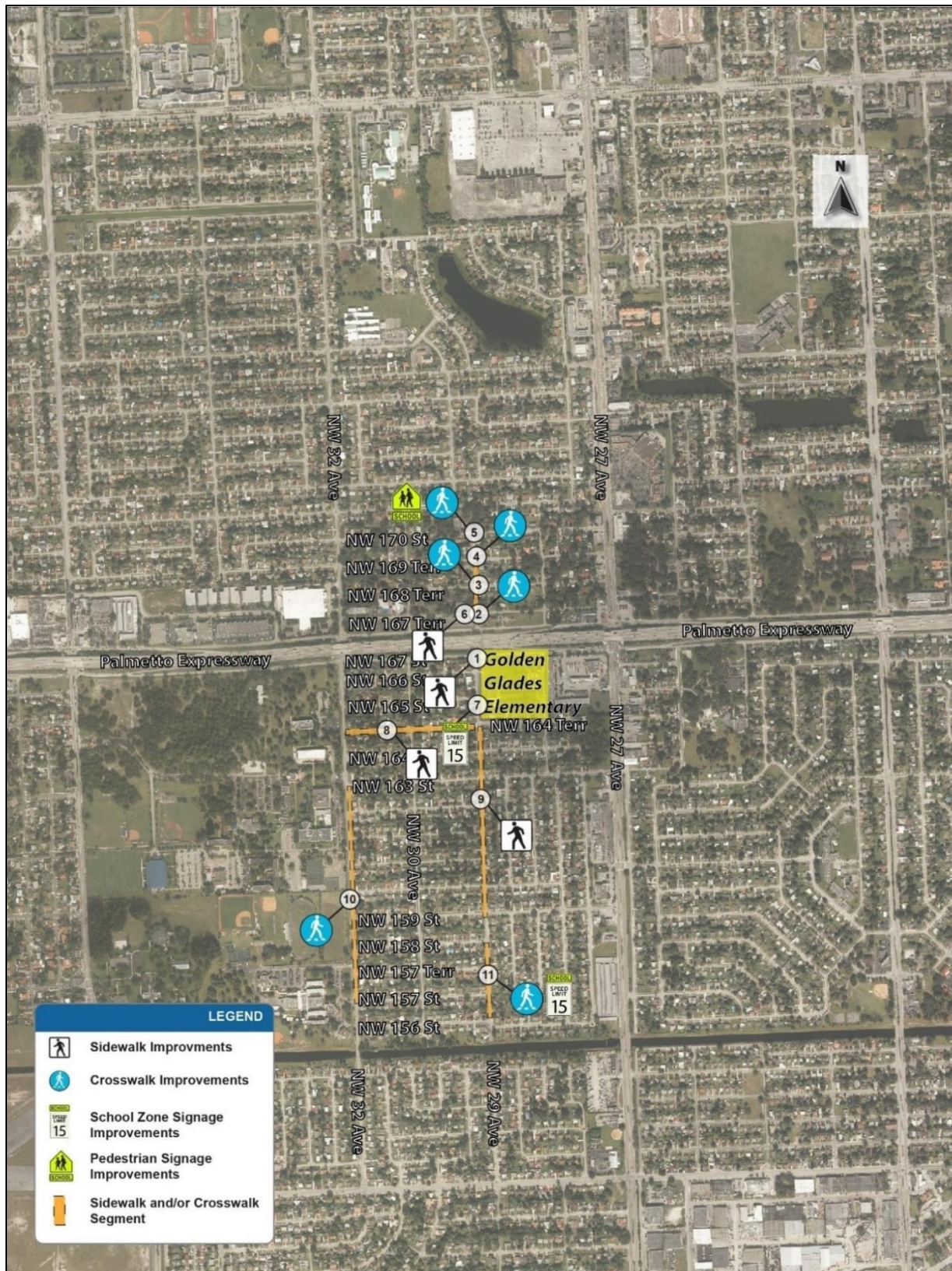


Figure 31: Golden Glades Elementary Recommendations Map



## BENJAMIN FRANKLIN K-8 CENTER



Figure 32: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 568          |
| Estimated percent of students that live within ½ mile walk |            | 52%          |
| Estimated percent of students that walk or bike to school  |            | 60%          |
| Estimated Cost of Recommendations                          |            | \$385,554.00 |

### OBSERVATIONS & RECOMMENDATIONS

Recommendations for this school included sidewalks, crosswalks, and ADA upgrades. The area surrounding the school already had many safety and aesthetic features such as new sidewalks, crosswalks, and roundabouts. Further away from the school it was observed that there was still a need for some sidewalk and crosswalk connections.

Students walking or biking to Benjamin Franklin K-8 can generally get there without having to walk along or across any major streets. Some students must cross NW 135th Street, which is a 3 lane, one way street that needs to be crossed at a signal. A signalized, midblock crossing exists for this purpose.

Recommendations for this school should complement the existing and planned infrastructure for traffic calming and pedestrian safety.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies indicate that many students that live within  $\frac{1}{4}$  mile of the school are still driven in the family vehicle. Parent Survey results indicate that the likely reason for this is a concern about violence or crime. Parent Survey results reflect that there is generally not as much concern about infrastructure and amenities for walking to school (such as sidewalks and crossing guards), but more of a concern about climate, traffic, and violence or crime.

## FIELD VISIT PHOTOS



Figure 33: Bike Parking on School Grounds



Figure 34: Crosswalk Enhancement Opportunity



Figure 35: Lack of Crosswalks and Sidewalk Links



Figure 36: Sidewalk Gap



## BENJAMIN FRANKLIN K-8 PROPOSED SAFE ROUTE



Figure 37: Benjamin Franklin K-8 Proposed Safe Route Map



## BENJAMIN FRANKLIN K-8 RECOMMENDATIONS



Figure 38: Benjamin Franklin K-8 Recommendations Map



## CHARLES R. HADLEY ELEMENTARY



Figure 39: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 1039         |
| Estimated percent of students that live within ½ mile walk |            | 47%          |
| Estimated percent of students that walk or bike to school  |            | 28%          |
| Estimated Cost of Recommendations                          |            | \$124,038.00 |

### OBSERVATIONS & RECOMMENDATIONS

Recommendations for this schools include signs, sidewalks, crosswalks, and ADA upgrades. This school has 700 students that live within a ½ mile radius of the school, yet due to poor access and connections, only 485 students actually have a ½ mile walk to the school. The school is surrounded by many gated communities that do not connect to the school or to the street the school is on.

Signs and crosswalks were key recommendations for this school due to the nature of intersections that a student would need to cross in order to reach the school. The T-intersection of NW 87th Ave and NW 7th Street poses a hazard for students due to the right and left turn movements that are permitted.

Signal timing that allows for a leading pedestrian phase could be considered to provide opportunity for a safer crossing at signalized intersections in the neighborhood. Signal timing was observed at the corner of NW 8th Street and NW 82nd Ave that provided an all-red phase for vehicles when the pedestrian button was pushed.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies indicate that many students are driven to school. Parent Survey results indicate not much concern about amenities and infrastructure for walking, and more concern about violence or crime, and the amount and speed of traffic along the route. It appears that the layout and access to the communities near this school are somewhat prohibitive for providing students a convenient opportunity to walk or bike to school, despite being in close proximity.

## FIELD VISIT PHOTOS



Figure 40: Outdated Signage



Figure 41: Outdated Signage



Figure 42: Sidewalk Gap



[illegible]

Safe Routes to School Infrastructure Plans | 2017



## CHARLES R. HADLEY ELEMENTARY RECOMMENDATIONS



Figure 44: Charles R. Hadley Elementary Recommendations Map



## MAE M. WALTERS ELEMENTARY



Figure 45: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 571          |
| Estimated percent of students that live within ½ mile walk |            | 40%          |
| Estimated percent of students that walk or bike to school  |            | 8%           |
| Estimated Cost of Recommendations                          |            | \$187,624.00 |

## OBSERVATIONS & RECOMMENDATIONS

Recommendations for this school include sidewalk and crosswalk connections, signs, and installation of pedestrian countdown signals. It was observed that many of the pedestrian signs in this neighborhood need to be upgraded.

This school has an adequate grid network in the neighborhood, but has some higher-traffic streets that require crossing at a signalized intersection. W 8th Ave was observed to have significant traffic volumes during arrival time and was recommended for improvements to the signal to increase pedestrian safety. Some sidewalk installations were recommended on W 9th and W 11th Ave to improve connectivity along the Safe Route.

Improvements were also recommended immediately adjacent to the school to increase the safety of a curve near a pedestrian crossing. These improvements will provide benefits for students and the community, as they are right next to a park.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies indicate that an overwhelming majority of students are driven to school in the family vehicle. It was observed that this could be a cultural aspect of this neighborhood. Parent Survey responses indicate a concern about violence or crime, as well as speed of traffic along the route as primary concerns for why they do not allow their students to walk to school.

## FIELD VISIT PHOTOS



Figure 46: Outdated Push Button Device



Figure 47: Outdated Signage



Figure 48: Outdated Signage



Figure 49: Lack of Sidewalk Links



## MAE M. WALTERS ELEMNTARY PROPOSED SAFE ROUTE

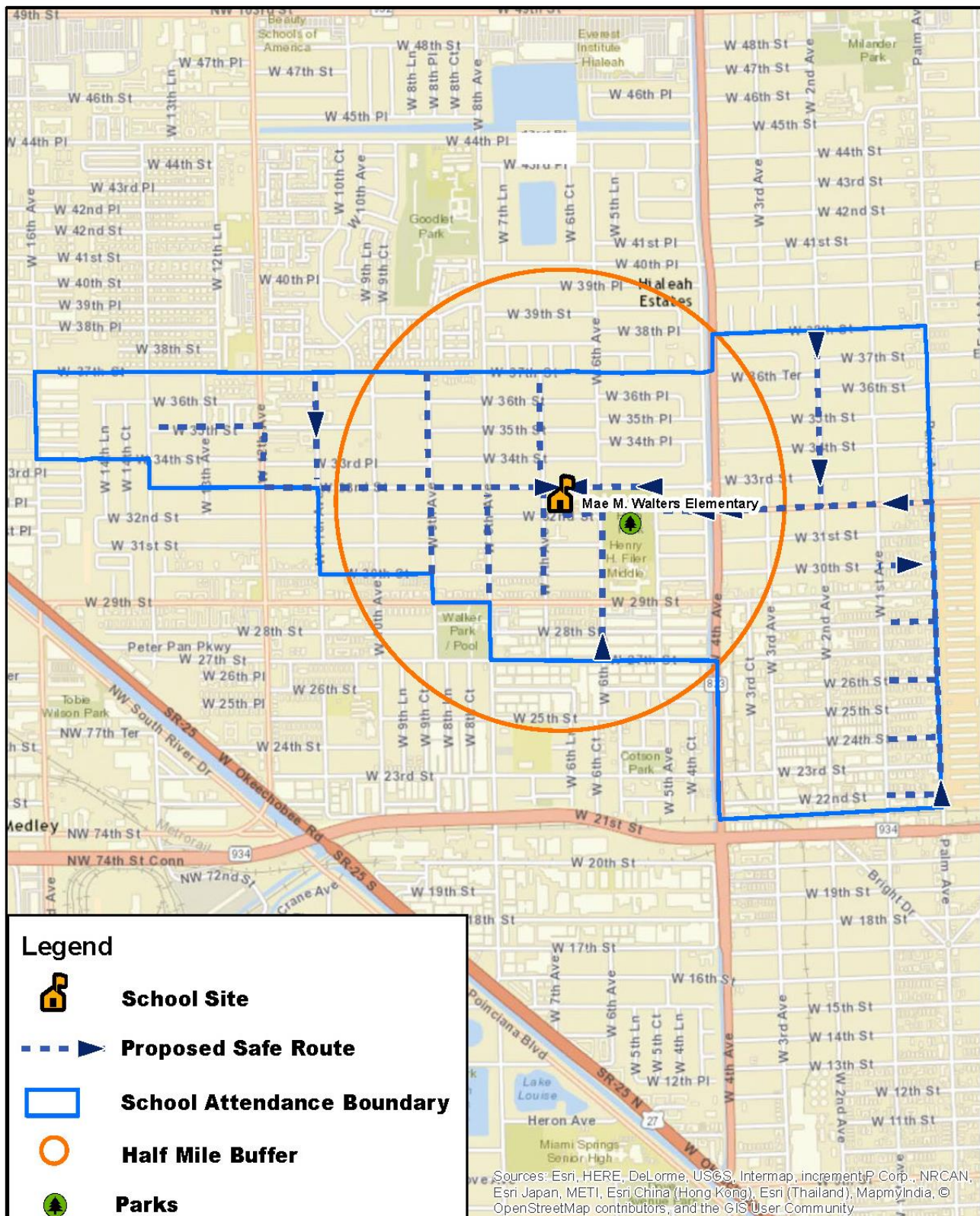


Figure 50: Mae M. Walters Elementary Proposed Safe Route Map



## MAE M. WALTERS ELEMENTARY RECOMMENDATIONS



Figure 51: Mae M. Walters Elementary Recommendations Map



## LAKE STEVENS ELEMENTARY



Figure 52: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 295          |
| Estimated percent of students that live within ½ mile walk |            | 13%          |
| Estimated percent of students that walk or bike to school  |            | 16%          |
| Estimated Cost of Recommendations                          |            | \$105,789.00 |

### OBSERVATIONS & RECOMMENDATIONS

Recommendations for this school include installation of crosswalks and sidewalks. The attendance boundary for this school includes some major streets such as NW 183rd Street and NW 47th Ave. The layout of communities in this school's attendance boundary does not provide much direct access for students to walk to school, which is reflected in the number of students that live within a ½ mile walk.

A side road along the north side of NW 183rd Street provides access for vehicles and pedestrians to reach Lake Stevens Elementary. Crossing guards were also present at the intersection of NE 183rd Street and NW 52nd Ave.

Most communities in the attendance boundary had only one access point to the main street network.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies indicate that a very small percentage of students walk or bike to Lake Stevens Elementary. Relatively few students live within a ½ mile of the school, which is likely the major factor in why most students are driven to school.

Parent Surveys indicate weather or climate and violence or crime as the primary concerns for why parents do not allow their children to walk or bike to school. Other factors related to safety and infrastructure were secondary causes of equal concern to each other. These factors include safety of intersections, traffic along route, and existence of sidewalks or pathways.

## FIELD VISIT PHOTOS



Figure 53: Lack of Crosswalks



Figure 54: Sidewalk Gap



Figure 55: Lack of Crosswalk



## LAKE STEVENS ELEMENTARY PROPOSED SAFE ROUTE



Figure 56: Lake Stevens Elementary Proposed Safe Route Map



## LAKE STEVENS ELEMENTARY RECOMMENDATIONS

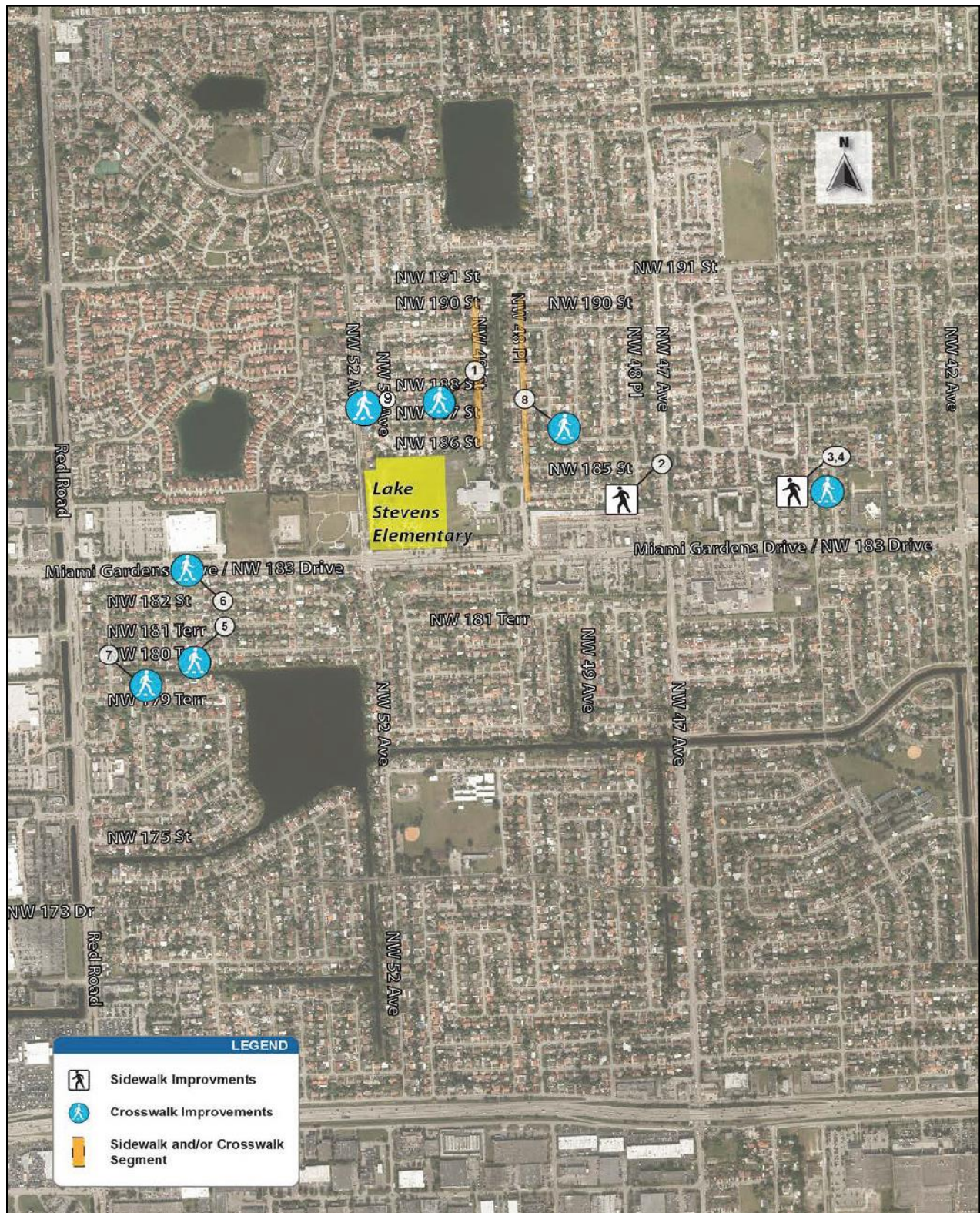


Figure 57: Lake Stevens Elementary Recommendations Map



## HENRY E.S. REEVES ELEMENTARY



Figure 58: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 690          |
| Estimated percent of students that live within ½ mile walk |            | 22%          |
| Estimated percent of students that walk or bike to school  |            | 70%          |
| Estimated Cost of Recommendations                          |            | \$525,742.00 |

### OBSERVATIONS & RECOMMENDATIONS

Recommendations for this school include installation of sidewalks and crosswalks, and upgrades to school zone signs. The relatively large attendance boundary for Henry Reeves Elementary calls for improvements beyond half a mile from the school. Many recommendations for this school are within one mile.

The attendance boundary includes other schools, so improvements along neighborhood streets can benefit the community in general. NW 22nd Ave is the only major street enclosed in the attendance boundary. Most side streets along NW 22nd Ave already have crosswalks. A relatively small percentage of walking or biking students would need to use NW 22nd Ave to reach the school.

Another observation is the neighborhood immediately to the west of NW 22nd Ave. It is only accessible via NW 119th Street, creating a long walking path for students that live very close to the school.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies indicate that a majority of students are driven to school. A small percentage walk or bike, which is reflective of where students live relative to the school. The Student Travel Tally indicates that nearly the same number of students walk or bike to school as those that take the school bus.

Parent Surveys for this school indicate a general concern about violence or crime, safety, and speed and amount of traffic along the route.

## FIELD VISIT PHOTOS



Figure 59: Crosswalk Enhancement Opportunity



Figure 60: Bridge Maintenance Required



Figure 61: Lack of Sidewalks and Crosswalks



Figure 62: Afterschool Route for Students



## HENRY E.S. REEVES ELEMENTARY PROPOSED SAFE ROUTE

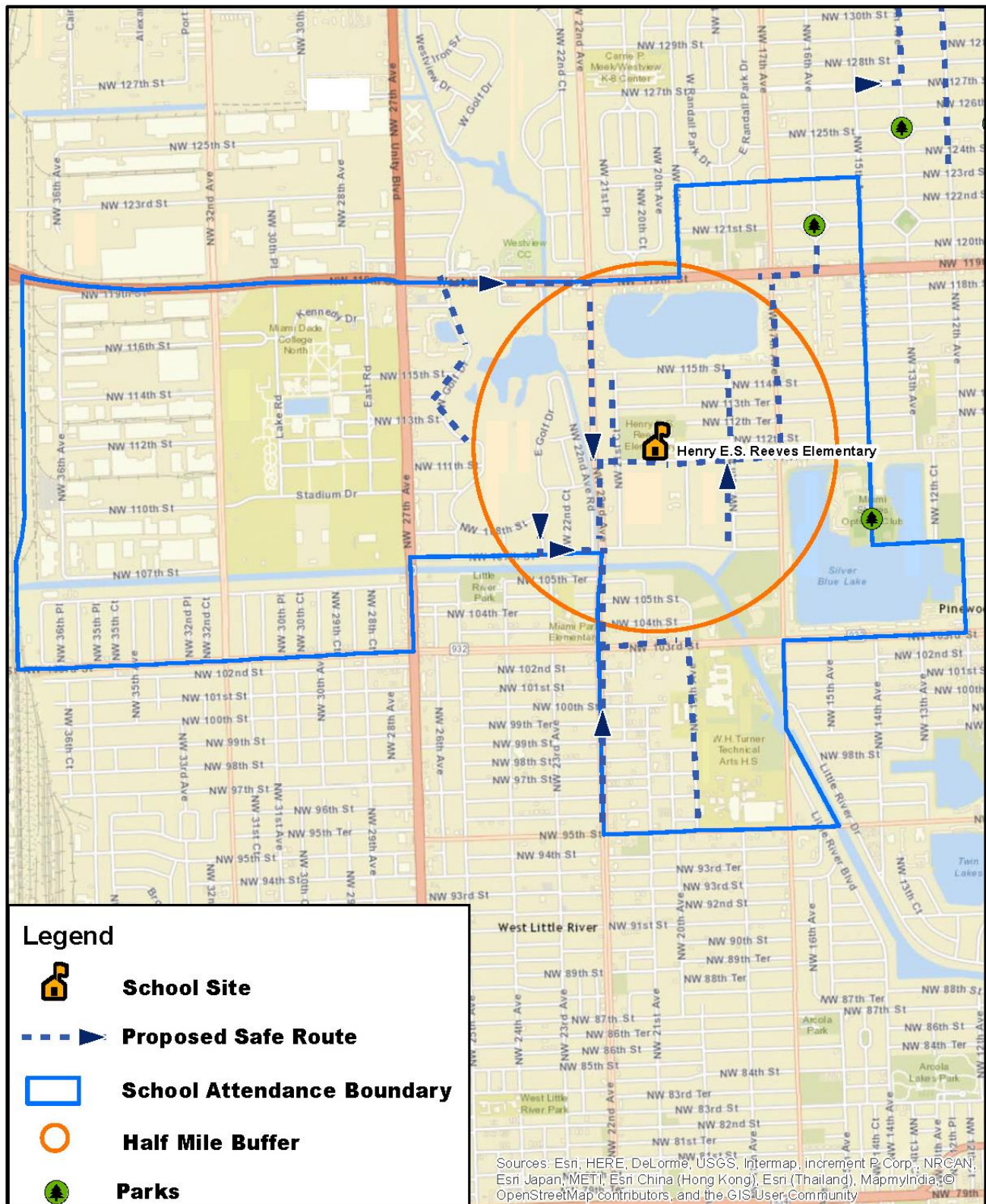


Figure 63: Henry E. S. Reeves Elementary Proposed Safe Route Map



## HENRY E.S. REEVES ELEMENTARY RECOMMENDATIONS



Figure 64: Henry E.S. Reeves Elementary Recommendations Map



## DANTE FASCELL ELEMENTARY



Figure 65: School Entrance

|                                                            |            |              |
|------------------------------------------------------------|------------|--------------|
|                                                            | Enrollment | 527          |
| Estimated percent of students that live within ½ mile walk |            | 85%          |
| Estimated percent of students that walk or bike to school  |            | 75%          |
| Estimated Cost of Recommendations                          |            | \$116,113.00 |

## OBSERVATIONS & RECOMMENDATIONS

The residential area surrounding Dante Fascell Elementary consists of many neighborhoods with limited access, meaning that the way in and out of these neighborhoods is along busy streets. Improving the visibility of crosswalks and signs will enhance safety for students that walk or bike to school.

The school is surrounded by residential areas with easy access to the school. Students living within half a mile should be able to safely walk with proposed safe routes improvements. Only 2% of students take the school bus, meaning there is a big opportunity to get kids to walk instead of being driven by their parents. The attendance boundary includes two major cross streets with heavy traffic that provide the only access to the neighborhoods. There is not a grid network of neighborhood streets for students to use, and they must walk along these busy streets.

95% of the school's population is Hispanic, 2% White, 2% Black, 1% other. Median household income in this area is around 30K/year indicating the potential for low car ownership in the neighborhood. 87.6% of students are eligible for free or reduced lunch. This area could benefit from an SRTS project given the low income and likelihood that driving to school is not an option for many students.

## STUDENT TRAVEL TALLY AND PARENT SURVEY RESULTS

Student travel tallies indicate that 75% of students walk or bike to school, meaning that nearly 400 students will be affected by improvements to a safe walking route. In addition, the Student Travel Tally indicates that other preferred modes of travel are the school bus and family vehicle.

Parent Surveys for this school indicate a general concern about the amount of traffic along route, safety at intersections and crossings, speed of traffic, weather and violence and crime. Parents generally believe walking/biking to school is a Very Healthy activity.

## FIELD VISIT PHOTOS



Figure 66: Crosswalk Enhancement Opportunity

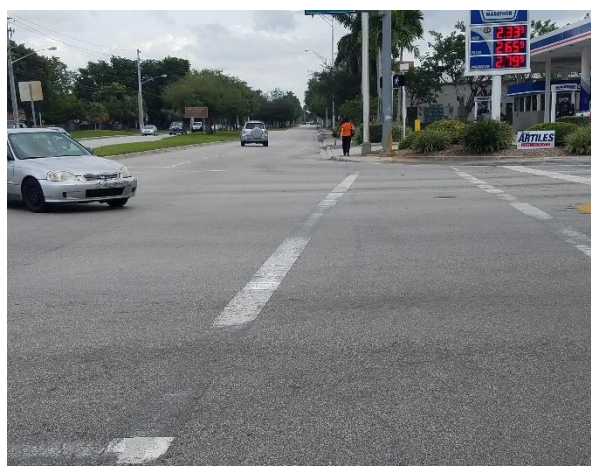


Figure 67: Crosswalk Enhancement Opportunity



Figure 68: Outdated Push Button



Figure 69: Crosswalk Enhancement Opportunity



## DANTE FASCELL ELEMENTARY

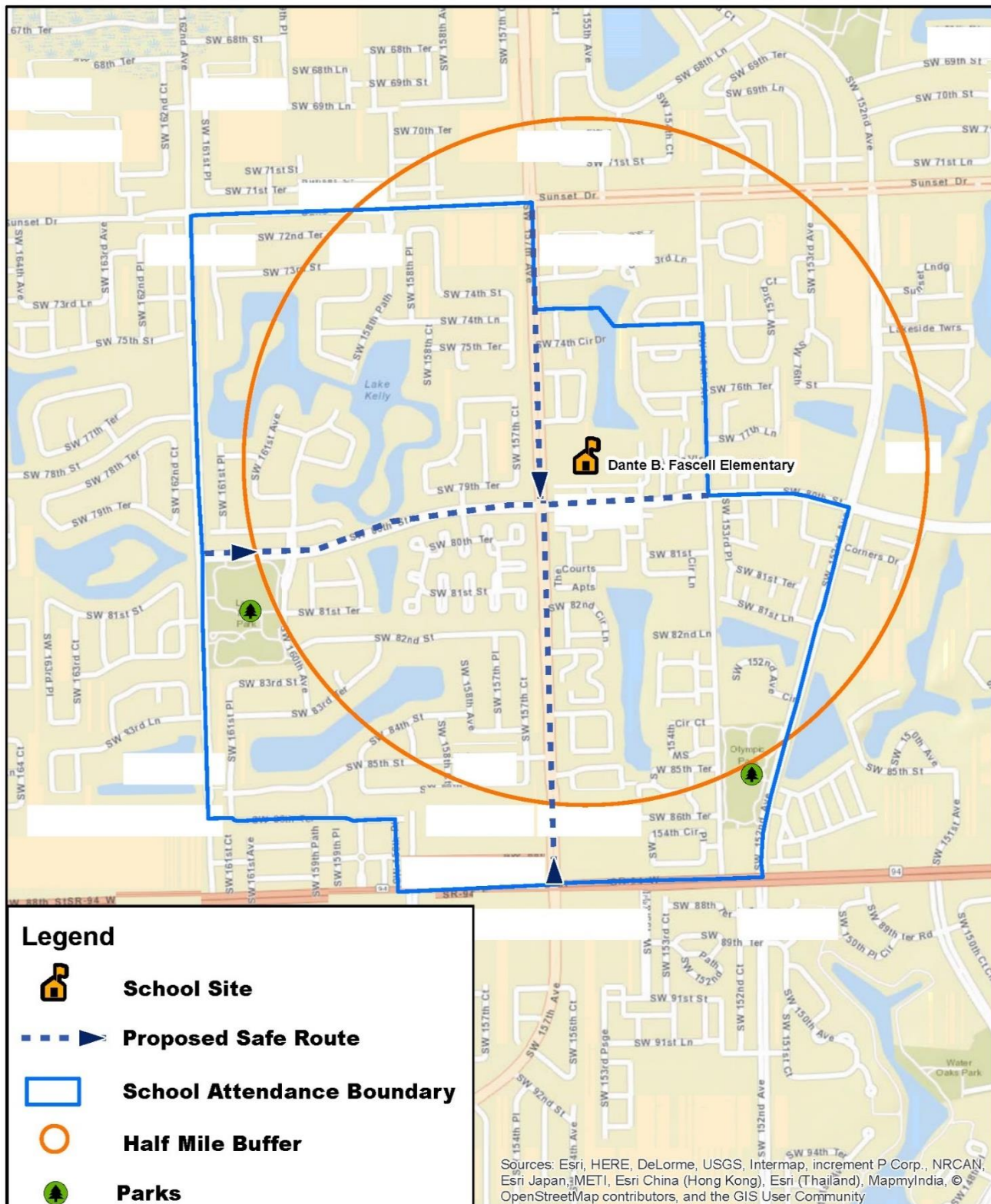


Figure 70: Dante Fascell Elementary Proposed Safe Route Map



## DANTE FASCELL ELEMENTARY RECOMMENDATIONS

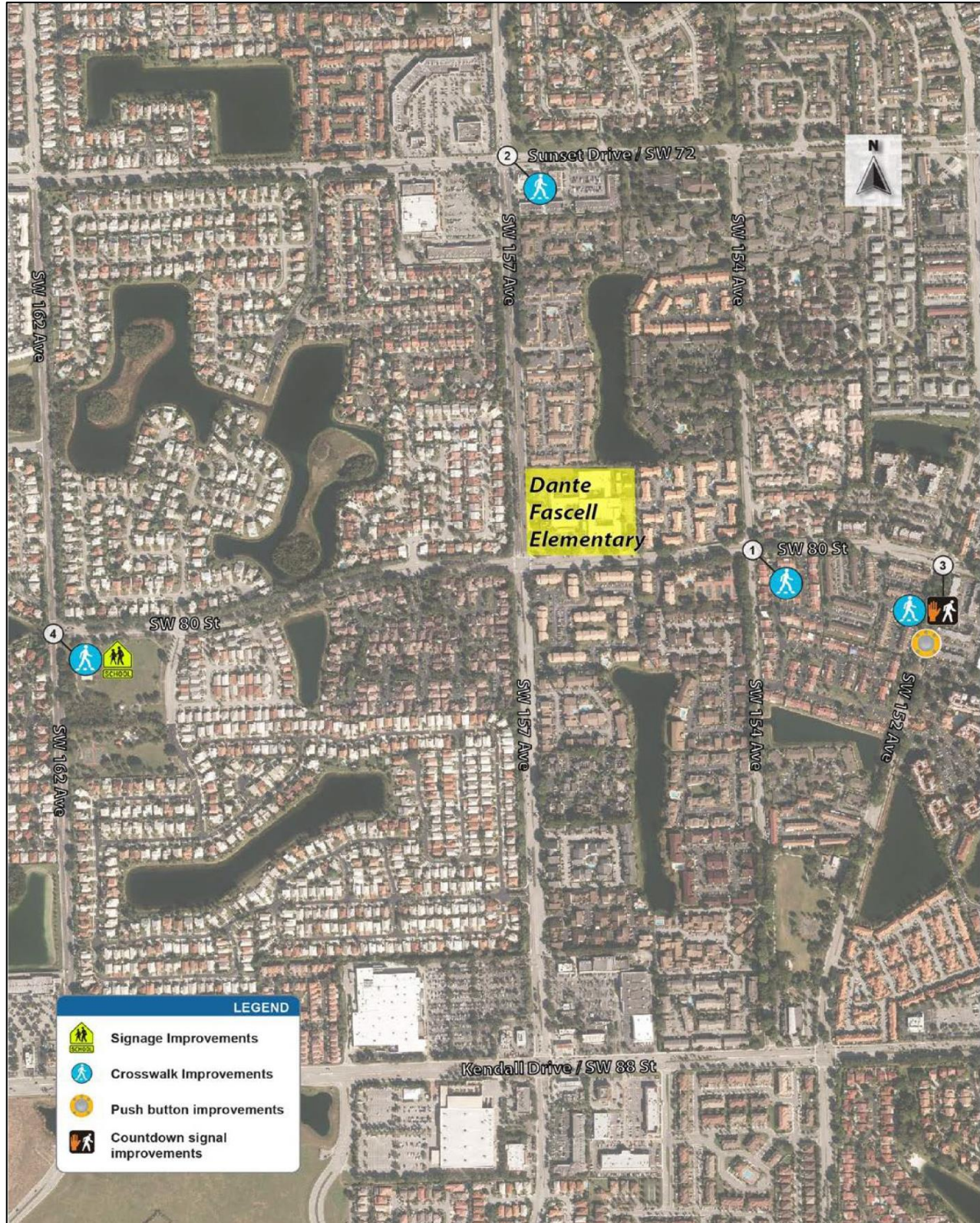


Figure 71: Dante Fascell Elementary Recommendations Map