

# Executive Summary #GPC IV-18

## Safe Routes to School Plans 2011

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Prepared for



## INTRODUCTION

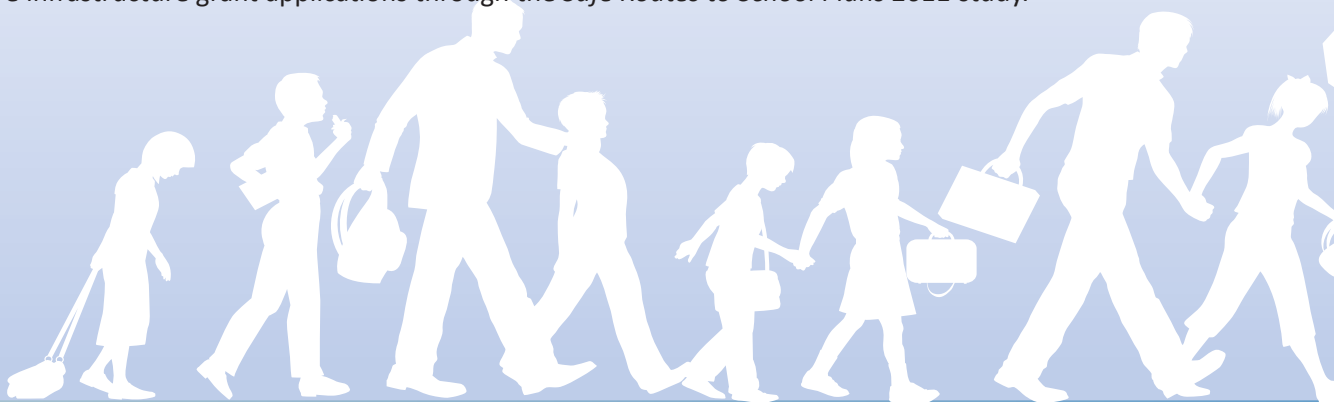
The Safe Routes to School (SRTS) program strives to encourage children in grades K-8 to walk and cycle to school by making walking and cycling to school safer and more appealing. In addition to encouraging more children to walk or cycle to school, the SRTS programs also address the safety needs of children who are already walking or cycling in less than ideal conditions. Other benefits of the SRTS program include reducing traffic congestion near schools and reducing childhood obesity and inactivity. The National Safe Routes to School program, which was established in 2005 through the SAFETEA-LU transportation reauthorization bill, provides funding through the Departments of Transportation for SRTS initiatives.

The Miami-Dade County Metropolitan Planning Organization (MPO) initiated the *Safe Routes to School Plans 2011* study with the following objectives:

- Develop a formalized method to prioritize elementary and K-8 school for SRTS infrastructure grant applications.
- Develop SRTS infrastructure improvements, cost estimates, and safe routes for 10 priority schools.
- Prepare the Florida Department of Transportation's (FDOT) Infrastructure Funding Application for the selected schools.

## SRTS Program in Miami-Dade County

Miami-Dade County has implemented several SRTS programs over the past several years. The Miami-Dade County Public Schools (MDCPS), in coordination with the Miami-Dade County Public Works and Waste Management Department (PWWMD) and Miami-Dade MPO, applies for the SRTS grants annually. So far, SRTS infrastructure improvements have been implemented or funding has been secured for a total of 63 elementary and K-8 schools in Miami-Dade County. There are approximately 220 elementary public schools in the County. As such, over 150 elementary schools were considered to select 10 schools to prepare infrastructure grant applications through the *Safe Routes to School Plans 2011* study.



## PRIORITIZATION CRITERIA

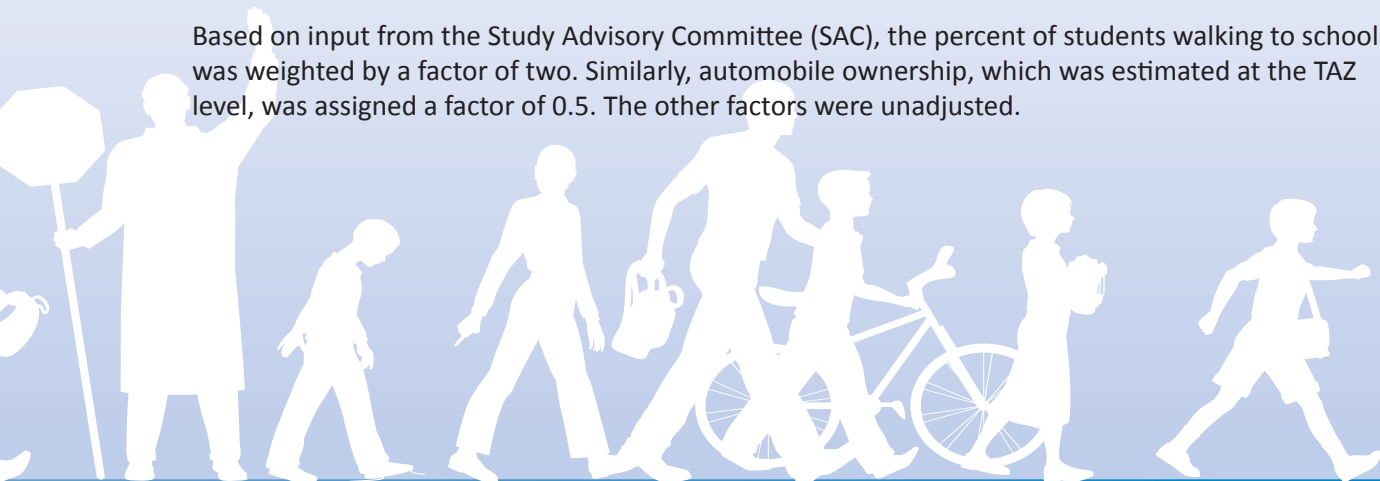
The purpose of developing a prioritization method is to ensure an objective approach is used to select 10 schools with the greatest needs out of over 150 eligible schools within the MDCPS system. This method can also contribute to the effective use of limited SRTS infrastructure funds. Once a prioritization method is in place, it can be reapplied in the future years to select schools for SRTS grant applications.

The prioritization method consists of two steps: (1) ranking of schools based on quantitative factors, and (2) conducting field reviews to ascertain the potential for SRTS improvements for the highest ranked schools (based on quantitative analysis). *Table 1* lists the quantitative prioritization factors.

**Table 1: Prioritization Factors**

Students living within 0.5 miles	Schools with a high number of students living within a 0.5-mile radius are given priority since greater benefits of SRTS improvements are expected. The students living within 0.5 miles were estimated by MDCPS using its GIS databases.
Bicycle and pedestrian crashes	A high number of pedestrian and bicycle crashes in general represents unsafe conditions and inadequate infrastructure. Crash data was provided by the Miami-Dade MPO for a five-year period between 2005 and 2009.
Juvenile pedestrian crashes	Assumes juvenile pedestrian crashes are representative of safety challenges experienced by student pedestrians.
Percent of students walking to school	Schools with a high percentage of student walkers are given priority. This information is collected by MDCPS and the WalkSafe program staff annually.
Traffic volume on the nearest major road	The presence of a nearby major street is likely to present a barrier for safe walking to school. Traffic data was obtained from the FDOT and Miami-Dade County.
Automobile ownership	Low household auto ownership typically indicates a high propensity for walking to school. This information was obtained at Traffic Analysis Zone (TAZ) level from the MPO's Long Range Transportation Plan model.

Based on input from the Study Advisory Committee (SAC), the percent of students walking to school was weighted by a factor of two. Similarly, automobile ownership, which was estimated at the TAZ level, was assigned a factor of 0.5. The other factors were unadjusted.



## Prioritization Results

In general, the top ranked schools are located within the more heavily urbanized areas such as the City of Miami, Miami Beach, and North Miami. After ranking the schools based on the prioritization factors, field reviews were conducted to assess pedestrian facilities and potential unsafe conditions for student pedestrians in the vicinity of schools in the top quartile of prioritization. If the existing facilities were deemed satisfactory or the necessary right-of-way is not available, such schools were eliminated from consideration. Field reviews were conducted sequentially based on the priority ranking and when a school was eliminated, the next ranked school was reviewed. This process was repeated until 10 schools with notable pedestrian infrastructure enhancement needs were identified. *Table 2* lists the schools selected for SRTS improvements based on field reviews. A location map of the 10 schools is included as *Figure 1*.

**Table 2: Selected Schools for SRTS Improvements**

School	Address	Municipality
Phyllis Ruth Miller Elementary	840 NE 87th Street	Miami
Jesse J. McCrary Jr. Elementary (formerly Little River Elementary)	514 NW 77th Street	Miami
Toussaint L'ouverture Elementary	120 NE 59th Street	Miami
Kensington Park Elementary	711 NW 30th Avenue	Miami
Santa Clara Elementary	1051 NW 29th Terrace	Miami
Linda Lentin K-8 Center	14312 NE 2nd Court	Unincorporated Miami-Dade
Phillis Wheatley Elementary	1801 NW 1st Place	Miami
North Hialeah Elementary	4251 E 5th Avenue	Hialeah
Natural Bridge Elementary	1650 NE 141st Street	North Miami
Oak Grove Elementary	15640 NE 8th Avenue	Unincorporated Miami-Dade



Crosswalk without access ramps and paved sidewalks near Phyllis Ruth Miller Elementary



On-street parking partially blocking the view of pedestrian crossing Phillis Wheatley Elementary





Figure 1: Location Map of Selected Schools

## SRTS RECOMMENDATIONS

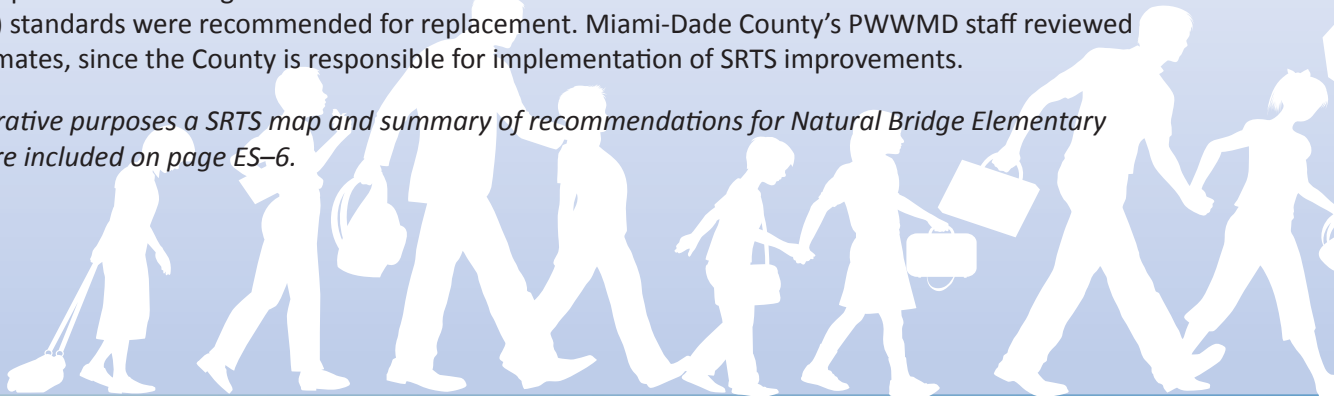
The primary focus area for SRTS improvements is the street network within 0.5 miles of a school. While SRTS funding guidelines allow improvements within two miles of a school, improvements closer to a school generally have a greater benefit than improvements further away from a school. Where needed, the study area was extended beyond 0.5 miles. To facilitate the identification of improvements, GIS maps were created to visualize land use, street network, traffic signal locations, and bicycle and pedestrian crash locations. Field reviews were conducted to observe students' walking patterns and existing infrastructure. Additional input was gathered from MDCPS Community Traffic Safety Team (CTST), students, parents, and school staff through meetings and surveys. The focus of school level meetings was to identify the challenges experienced by students who walk to school, areas within attendance boundary that generate student walkers, commonly used walking routes, specific infrastructure improvements, opportunities for education and encouragement through WalkSafe programs, and the need for enforcement or crossing guards. Overall, 17 school level meetings and four CTST meetings were conducted.

The SRTS improvements were developed based on the guidelines developed by the Miami-Dade MPO, FDOT, and National Center for SRTS. The land use, crash data, and aerial maps were also used to identify residential areas and potential safe routes. Factors considered when identifying safe routes included:

- Route directness
- Potential student population served
- Input provided by school staff and parents
- Crash history
- Traffic volume, number of lanes, and speed limit
- Roadway surrounding and potential risk elements
- Existing traffic control devices and enforcement measures
- Right-of-way availability
- Implementation feasibility and cost

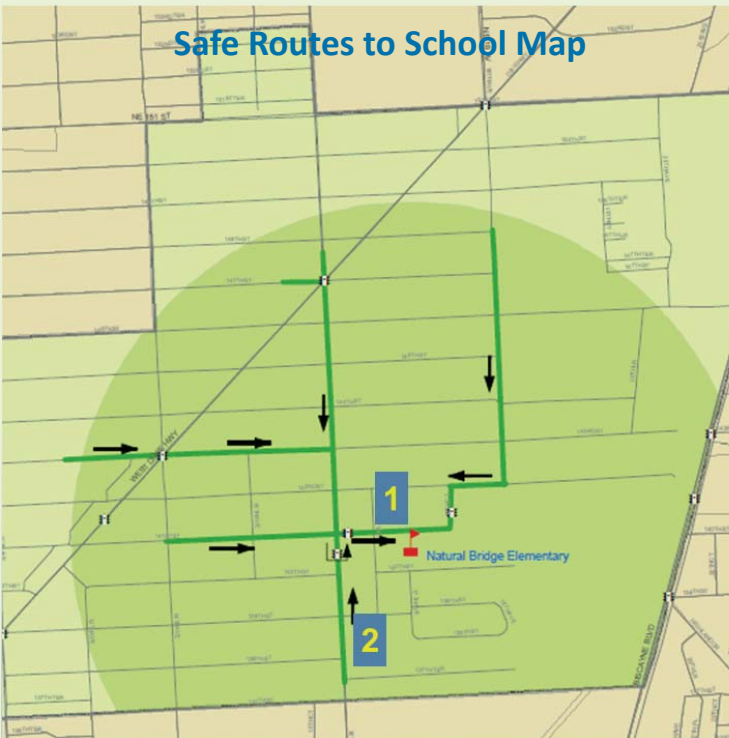
Common SRTS recommendations include sidewalks, crosswalks, school crossing signs, and school flashers. Since SRTS is a federal grant program, recommendations were made for new or upgraded Americans with Disabilities Act (ADA) facilities for pedestrians within proposed safe routes. Existing signs and pavement markings that do not meet the current Manual on Uniform Traffic Control Devices (MUTCD) standards were recommended for replacement. Miami-Dade County's PWWMD staff reviewed cost estimates, since the County is responsible for implementation of SRTS improvements.

*For illustrative purposes a SRTS map and summary of recommendations for Natural Bridge Elementary School are included on page ES-6.*



<i>School</i>	<b>Natural Bridge Elementary</b>
<i>Address</i>	1650 NE 141 Street, North Miami, FL 33181
<i>Enrollment</i>	560
<i>Estimated students living within 0.5 miles</i>	180
<i>Estimated percent of students walking/biking</i>	20% – 25%
<i>Recommendations</i>	Rectangular rapid flashing beacons, remove pedestrian traffic signal, school zone flashers, speed feedback signs, sidewalks, crosswalks, signage, and ADA improvements
<i>Cost</i>	\$130,000

### Safe Routes to School Map



## SRTS GRANT APPLICATIONS

The FDOT is the administrator of SRTS grants in Florida. SRTS funds are administered through the FDOT Districts and overseen by the State Safe Routes to School Coordinator. The SRTS program guidelines and other documents for infrastructure projects and non-infrastructure programs are available on the FDOT program webpage [http://www.dot.state.fl.us/safety/SRTS\\_files/SRTS.shtm](http://www.dot.state.fl.us/safety/SRTS_files/SRTS.shtm). Since FDOT plans its work according to a 5-year Work Program, it solicits projects for future years in anticipation that the SRTS program will be continued in the next Transportation Act. As such, projects submitted in FY 2011-12 are expected to be funded during FY 2017.

Ten SRTS grant applications were submitted to the FDOT District Six requesting funding for the proposed infrastructure improvements. The total funding request of the 10 applications is approximately \$1.4 million. A summary of the funding request is provided in *Table 3*. The grant applications also identified education, encouragement, and enforcement strategies, which could complement engineering improvements, to implement a comprehensive SRTS program. The MDCPS, school staff, parents, law enforcement agencies, and WalkSafe are expected to coordinate implementation of non-infrastructure SRTS initiatives. Further, evaluation methodologies were identified to gauge the success of SRTS improvements. Establishing an evaluation method also helps to identify necessary adjustments to the SRTS program to ensure goals and objectives are met.

**Table 3: Summary of SRTS Grant Request**

School	Priority	Funding Request
Phyllis Ruth Miller Elementary	1	\$75,000
Jesse J. McCrary Jr. Elementary (formerly Little River Elementary)	2	\$125,000
Toussaint L'ouverture Elementary	3	\$156,000
Kensington Park Elementary	4	\$136,000
Santa Clara Elementary	5	\$117,000
Linda Lentin K-8 Center	6	\$169,000
Phillis Wheatley Elementary	7	\$124,000
North Hialeah Elementary	8	\$175,000
Natural Bridge Elementary	9	\$130,000
Oak Grove Elementary	10	\$200,000
Total		\$1,407,000

1. Priority rankings as identified in the MDCPS grant application cover letter.
2. Rounded to the nearest \$1,000.