

SAFE ROUTES TO SCHOOL

2018

INFRASTRUCTURE APPLICATION ANALYSIS

**100
SCHOOLS**

Recommendations for Safe Routes infrastructure improvements were developed to improve walking conditions of 99 elementary & K-8 schools and one high school to date.

APPROVED

**100%
APPROVED
2011-2018**

FDOT approved all Safe Routes to School applications submitted on behalf of the Miami-Dade TPO.



\$11 MILLION

Unlocking over \$11 million in Florida Department of Transportation's (FDOT) project funding.

INFRASTRUCTURE IMPROVEMENTS

- Filling sidewalk gaps
- Installing or enhancing crosswalks
- Improving signage and wayfinding
- Installing bike lanes and bike parking



PREPARED FOR

Miami-Dade Transportation
Planning Organization



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BACKGROUND

This report is an opportunity for a macro-level data collection and analysis of all past Miami-Dade County Safe Routes to School (SRTS) applications to benefit future SRTS studies and their outcomes post-construction. The following report aims to summarize the Miami-Dade school prioritization process, identify all past Miami-Dade SRTS applications, document post-construction outcomes, and clearly present the data in order to benefit future Miami-Dade SRTS application efforts. In addition, during this analysis, the data provided from the Miami-Dade County Public Schools (MDCPS) annual student travel survey has been evaluated. Before and after construction periods were compared where data was available noting any apparent improvement in safety or mode shift to walking or biking to schools, post-construction, to further justify the impact of the SRTS program.

SAFE ROUTES TO SCHOOL PROGRAM HISTORY

The federal SRTS program was established in August 2005 as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and provided funding for State Departments of Transportation to create and administer SRTS programs. Signed into law in 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) authorized the Transportation Alternatives Program (TAP) which replaced the funding for the SRTS Program. MAP-21 did not provide specific funding for SRTS, but SRTS projects were eligible for TAP and Surface Transportation Program (STP) funds.

In 2015 the Fixing America's Surface Transportation (FAST) Act replaced the former TAP program with a set-aside of funds under the Surface Transportation Block Grant Program (STBG). For administrative purposes, the Federal Highway Administration (FHWA) refers to these funds as the TA Set-Aside. The TA Set-Aside authorizes funding for programs and projects defined as *transportation alternatives*, including SRTS projects. The national total for TA is \$850 million per year for fiscal years (FYs) 2018-2020. The Florida Department of Transportation (FDOT) administers the SRTS program for the state.

Miami-Dade County has maintained a program to build safe routes to school since the 1970s. In 2011 the Miami-Dade TPO took the lead in prioritizing schools and developing SRTS infrastructure applications. The TPO has a very successful track record of prioritizing schools and submitting infrastructure applications to the FDOT that continues to the present day.

The most common form of infrastructure upgrades that qualify under this program are improvements that facilitate walkability and bikeability such as: filling sidewalk and bicycle facility gaps, installing or enhancing crosswalks, improving signage and wayfinding, installing new sidewalks, 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 any special cases involving unusual infrastructure deficiencies that may hinder the safety of students traveling to and from school.

MIAMI-DADE TPO'S SCHOOL PRIORITIZATION PROCESS

In 2011 a quantitative method was developed for prioritizing Miami-Dade elementary and K-8 schools for infrastructure improvements. A quantitative prioritization was introduced to remove subjectivity and streamline the process of identifying schools with the greatest need for SRTS infrastructure improvements.

In 2013 the prioritization criteria were updated and modified based on an assessment of the strength of the prioritization factors based on a review of the prioritization results. The "*automobile ownership within school's attendance boundary*" became "*percentage of students eligible for free or reduced lunch*" because it was deemed more school-specific and potentially a stronger indicator of income levels of parents that may contribute to the determination of student's travel mode to and from the school. Also the "*number of students living within 0.5 miles*" was modified to "*percent of students living within 0.5 miles*" for consistency with the other factors.

Using this method, the steps taken in 2014 to prioritize schools for the SRTS infrastructure applications were as follows:

1. The list of all elementary and K-8 public schools in Miami-Dade County was obtained from MDCPS.
2. Schools that have already developed SRTS infrastructure plans were removed from the list.



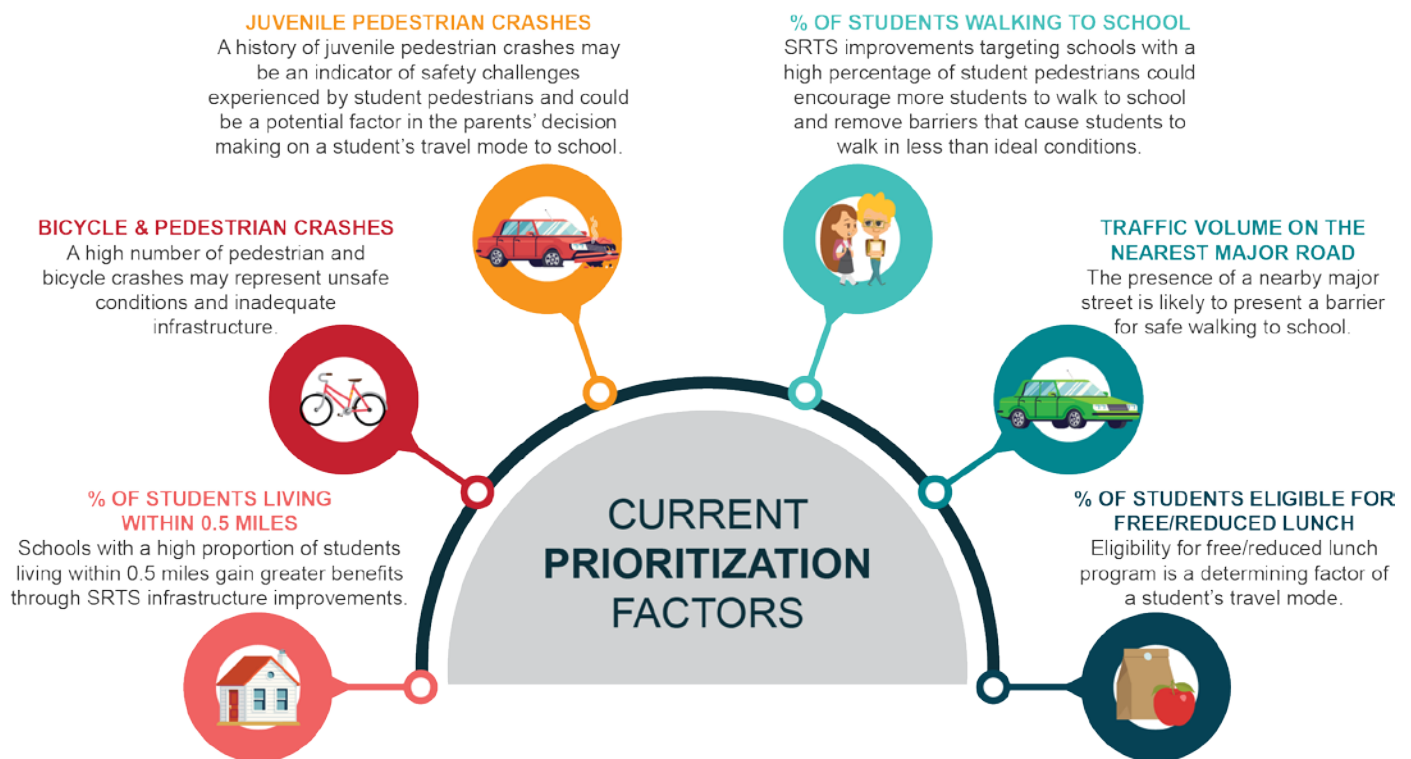
3. Data for the ranking criteria was obtained.
4. Each school was ranked based on the six (6) individual factors resulting in six separate ranks based on individual variables. (see page 2 graphic for factor details)
5. The “percent of students walking to school” was assumed to be the most influential factor and therefore a factor of 2 was applied.
6. A composite ranking based on the individual rankings was calculated to develop the prioritized list.

This prioritized list has been utilized each year beginning in 2014 to determine the next schools for the SRTS infrastructure applications. Each year an increment of 10 schools is identified in ranking order.

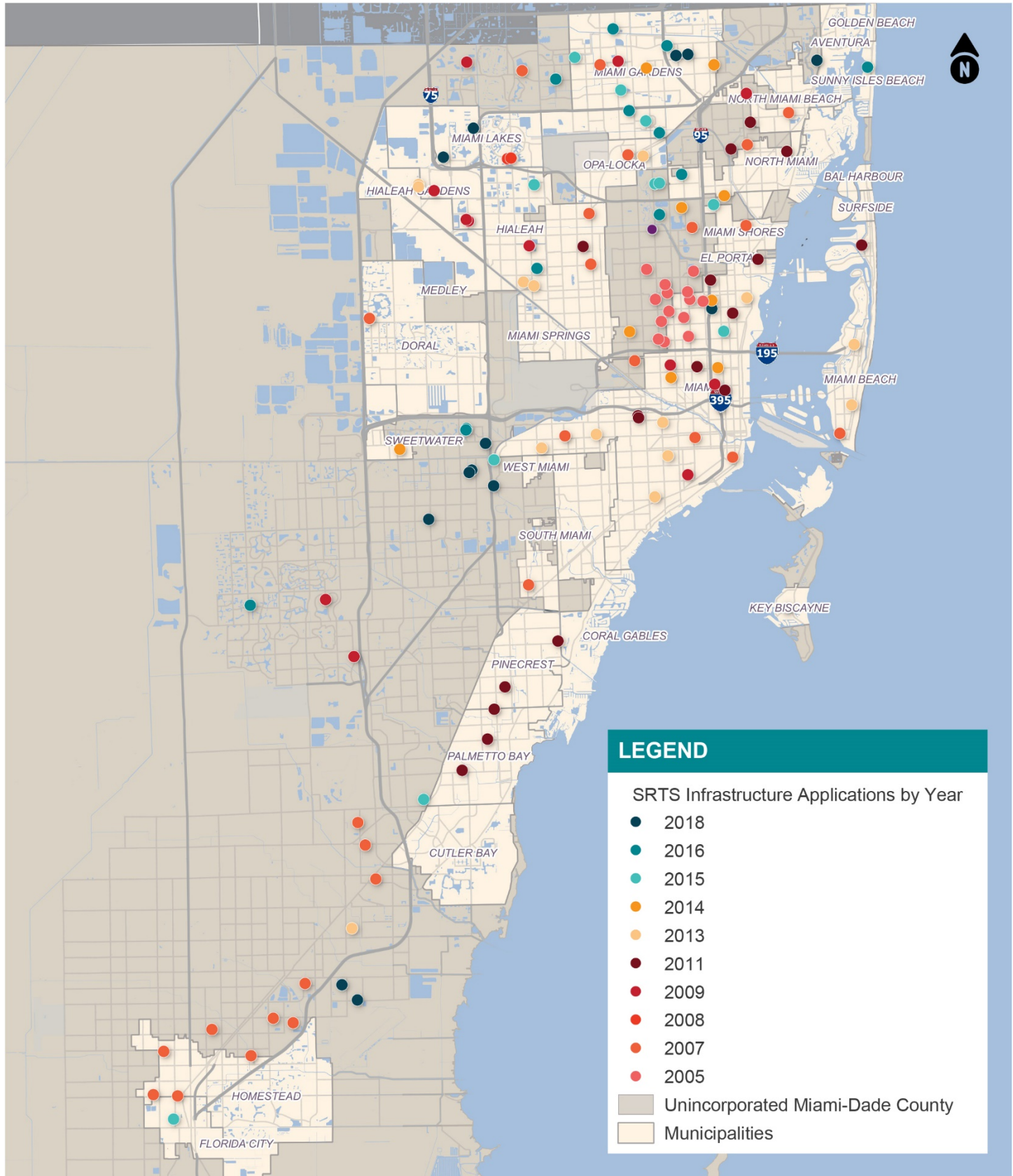
In 2017 the TPO took a new approach to the application. Using the existing prioritization criteria the TPO collaborated with the MDPDS to include one high school, Miami Edison Senior High, and also attempted to include schools in close proximity to each other with the intent of having infrastructure upgrades benefit students from multiple schools utilizing the same Safe Route.

WALKSAFE AND SCHOOL SURVEYS

WalkSafe is a program from the University of Miami KiDZ Neuroscience Center. WalkSafe's missions are to prevent pediatric pedestrian-hit-by-car accidents through education, promote physical activity, and advocate for safer walking environments. WalkSafe provides an interactive three-day curriculum within school settings – in addition to working with communities, government, and traffic safety partners. One facet of this approach is evaluation. For the evaluation, WalkSafe uses a variety of tools that collect information on curriculum implementation, walking and biking trends (including student modes of transportation), crash data, and parent attitudes on walking and biking. WalkSafe routinely collaborates with community partners to monitor the data and tailor efforts to meet the evolving needs of the community. The MDCPS annual student travel survey is administered and archived by the WalkSafe program. This survey asks each student how they travel to and from school.



Safe Routes to School Infrastructure Applications

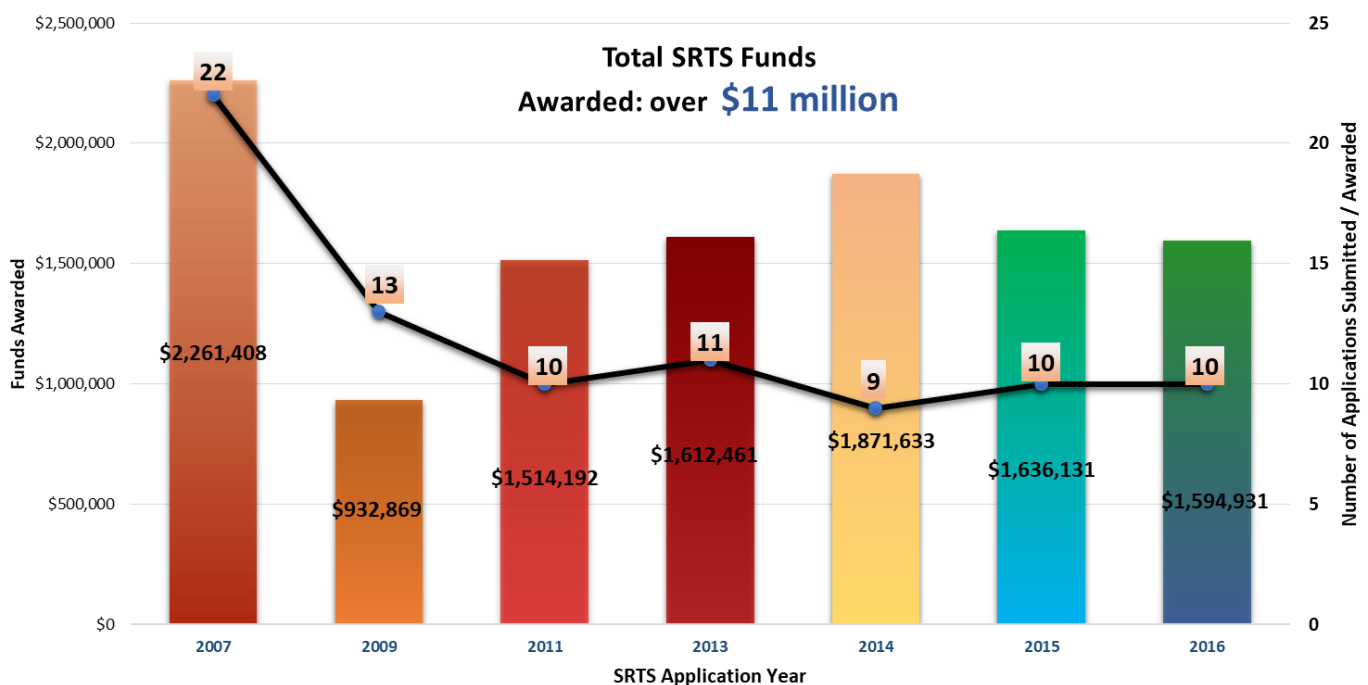




ANALYSIS

All past SRTS applications can be found on the TPO's website: <http://www.miamidadetpo.org/bicycle-pedestrian-program.asp> (2018 applications are pending FDOT approval and not yet available online). Since 2007, over **\$11 million** has been applied for and programmed by FDOT for schools throughout the County for SRTS infrastructure improvements. As seen on the SRTS Infrastructure Applications map on page three, the schools that have been awarded funding since 2005 are located throughout the County, in both municipalities and in unincorporated Miami-Dade

FDOT contracts with the Miami-Dade County Department of Transportation and Public Works which in turn contracts with private companies for the infrastructure improvement construction of the SRTS projects. In April 2018 the TPO reached out to the County for an update on the construction status of the SRTS projects. The County responded that SRTS projects for a total of 12 schools from the 2007 application cycle have been completed. According to the County, projects for one school with a 2007 application was under construction as were 10 schools with 2009 applications and 10 schools with 2011 applications. No other status data was available.

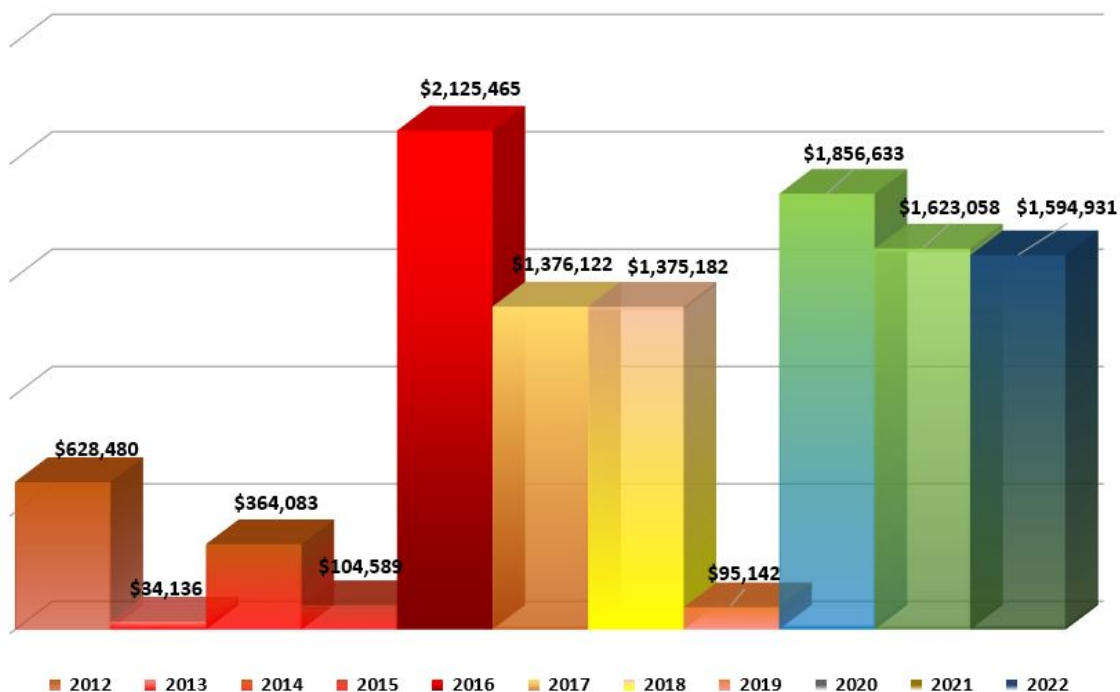


WalkSafe was then contacted for school tally data from the annual student travel survey in order to review the mode choice before and after the SRTS project construction had been completed. Based on the schools from the County with infrastructure improvements completed and the annual student travel survey data that was available, six schools were able to be compared using before and after tally data. These schools are: Laura C. Saunders Elementary, Pine Villa Elementary, Ludlam Elementary, South Pointe Elementary, Caribbean Elementary, and South Miami Heights Elementary.

FINDINGS AND RECOMMENDATIONS

Although only six schools were able to be analyzed using the WalkSafe annual student travel survey's mode information before and after project construction due to data availability, a comparison of the tallies show that mode shift has occurred with a 4% increase in walking. However, bicycling decreased by 0.4%.

Safe Routes to School FDOT Work Program Funding Year



With only six schools to compare, mode shift may also be due to other factors. The continued tracking of the data as project construction is completed is recommended on an annual basis to be able to quantify the benefits of the program improvements in terms of mode shift.

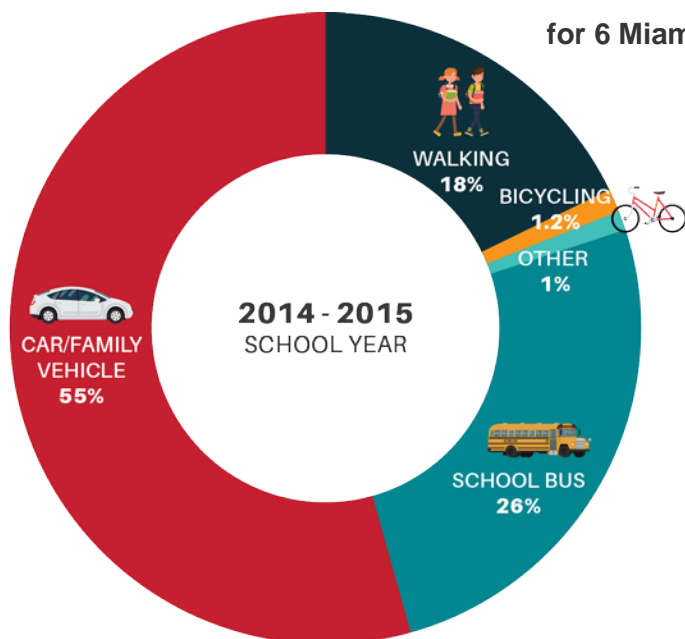
In reviewing the FDOT funding data by year, a timeline was developed to view each project through the design and construction process from application year to design year to construction funding year. However, the FDOT Work Program does not track when the construction was completed. Construction funding year is not the same as the year of actual construction. Therefore the information provided by County staff was used to determine the project construction completed status. For the applications completed in 2007 and noted as construction completed by the County, the average timeframe from application to construction completed was 11 years. Based on the data from the County and the FDOT Work Program, the average number of years from application to construction funded is seven years.

Based on this timeframe, the projects from the 2009 and 2011 applications should be constructed within the next year. In addition, a few projects have construction funded in 2014 and were not noted by the

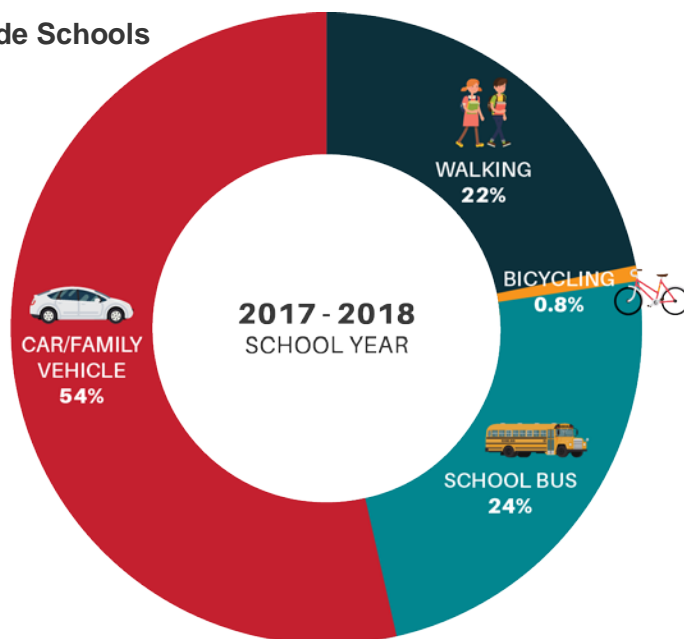
SRTS Project Funding Timeline



**Before and After Data from the Annual Student Travel Survey
for 6 Miami-Dade Schools**



BEFORE



AFTER

County as completed or under contract. It is recommended to reach out to the County and/or FDOT for further feedback on these projects.

Overall the timeframe between application and design has gotten shorter, potentially leading to a shorter process for completion. And the data from the six schools completed with before and after mode data demonstrate success in increasing walking mode shift with a minimal decrease in bicycling mode shift. The initial findings confirm the benefits of the Safe Routes To School Program and identify opportunities for further coordination and communication. The results of this analysis should be used to coordinate with stakeholders to accelerate the timeline for implementation.