

Safe Routes to School INFRASTRUCTURE APPLICATION ANALYSIS

2020

**141
SCHOOLS**

Pedestrian safety improvements have been identified and funded for 107 elementary, 10 K-8 schools, 14 middle schools, and 10 high schools since 2005.

**\$17
MILLION**

More than \$17 million has been allocated to the improvement of walking conditions for Miami-Dade County students by FDOT through the Safe Routes to School program.

INFRASTRUCTURE IMPROVEMENTS

- Safety Improvements
- New sidewalks
- Installing or improving existing crosswalks
- Signage and wayfinding
- Bicycle lanes and amenities



June 12, 2020

INTRODUCTION

The purpose of this report is to provide the following information:

- an overview of the Safe Routes to School (SRTS) program
- a historical review of Miami-Dade County's participation in the program since 2005
- a status update on SRTS improvements that have been completed or are in the FDOT Work Program

The success rate of Miami-Dade County's SRTS grant applications is almost 100%, enabling years of infrastructure improvements that provide safety enhancements for students walking and bicycling to school since 2005. Of the 392 public schools in Miami-Dade County, 141 have been served or are in the process of being served by this program over a period of 15 years. The Miami-Dade Transportation Planning Organization (TPO), the Miami-Dade Department of Transportation and Public Works, Miami-Dade County Public Schools, and FDOT are committed to this important partnership to continue improving student safety through the SRTS program.

The following report provides:

- a description of the history of the SRTS program
- the prioritization process used by the TPO to select schools each year
- a high level summary of the County's school surveys
- a summary of SRTS grants awarded for Miami-Dade County schools
- a matrix depicting those grant cycles since 2005

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HISTORY OF THE SRTS PROGRAM

SRTS is a federally funded program that was established by the 2005 federal transportation bill, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Subsequent federal transportation legislation, the Moving Ahead for Progress in the 21st Century Act (MAP-21) did not fund a distinct SRTS program, but increased funding in the Transportation Alternatives Program (TAP), which is eligible funding for multimodal oriented improvements typical of the SRTS program. The current federal transportation bill, the Fixing America's Surface Transportation Program (FAST) Act signed into law in 2015 replaced the TAP program with a set-aside from the Surface Transportation Block Grant (STBG) program, referred to by the Federal Highway Administration (FHWA) as the Transportation Alternatives set-aside. This new program, similar to the previous TAP program, is eligible for SRTS improvements, providing a total of \$850 million annually for alternative transportation improvements.

The Florida Department of Transportation (FDOT) is the statewide administrator of the SRTS program with the primary goal to remove barriers to children safely walking and bicycling to school, thus improving safety, traffic congestion, and air quality in the areas around schools. The strategies employed by the SRTS program are not limited to infrastructure improvements; the grant application process also includes an education program to increase awareness among children, their parents, and the broader transportation community. Infrastructure improvements eligible to receive SRTS grants include sidewalks and other pedestrian infrastructure; bicycle facilities and bicycle parking amenities; and traffic control improvements like crosswalks, signage, flashing beacons, pedestrian signals at intersections, and other operational devices.

Since 2011, the Miami-Dade TPO has taken the lead role for Miami-Dade County in the identification, prioritization, and grant application process for SRTS improvements in Miami-Dade County. Since 2011 Miami-Dade infrastructure improvements funded through the SRTS program include improvements to bicycle and pedestrian facilities servicing 83 schools, of which 18 have been completed.

MIAMI-DADE TPO'S SCHOOL PRIORITIZATION PROCESS

The TPO has developed, and refined over the years, a prioritization framework based on quantitative criteria to support a performance-based planning process. The framework consists of six metrics that assess and quantify the multimodal demand within a half-mile buffer of each of the Miami-Dade County public schools, safety data within those areas, traffic data on nearby major roads, and socioeconomic characteristics in the buffered areas. This multi-faceted set of criteria represent an effective and objective process to prioritize schools. The figure below depicts the criteria graphically, including the various nuances within each category.

The quantitative evaluation process has been applied consistently since 2013, beginning with removal of schools that have previously been awarded SRTS grants to fund infrastructure plans. The next steps consisted of obtaining and summarizing each data element for all elementary and middle schools and ranking them both by individual metrics and by a composite score. One of the criteria, the "Percent of students walking to school" is weighted by a factor of two, as it was determined to be the most important of the criteria.

During the period between 2011 and 2017, only elementary and middle schools were considered for SRTS grant applications in Miami-Dade County, but starting in 2018, high schools were added based on data indicating a higher

proportion of bicycle and pedestrian access to high schools than to elementary schools. Since then, applications for 10 high schools have been submitted, including four in the current application cycle.

WALKSAFE AND SCHOOL SURVEYS

The WalkSafe program is a children pedestrian advocacy program dedicated to preventing pedestrian-hit-by-car (PHBC) incidents through education and safety advocacy through programs like SRTS. The program is run by the University of Miami KiDS Neuroscience Center and promotes the six "E's" of improving safety, which include Education, Engineering, Enforcement, Evaluation, Equity and Encouragement¹. The Engineering component is spearheaded by the SRTS program, as is the Evaluation component, through before and after surveys that evaluate the effectiveness of the variety of programs designed to encourage, support, and improve the safety of children using the pedestrian and bicycle modes of transportation to access their schools. WalkSafe collaborates with a variety of government and community groups to maintain current understanding of safety trends and improvement needs. The annual WalkSafe survey is designed to maintain school specific data regarding the level of bicycle and pedestrian access to respective schools, which helps both to understand which schools are most in need of safe and effective bicycle and pedestrian infrastructure and to focus encouragement efforts on those schools with lower rates of bicycle and pedestrian access.

Prioritization Framework Quantitative Criteria

JUVENILE PEDESTRIAN CRASHES

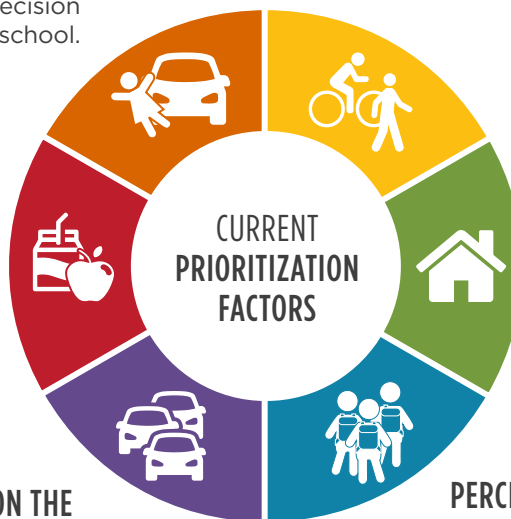
A history of juvenile pedestrian crashes may be an indicator of safety challenges experienced by student pedestrians and could be potential factor in the parent's decision making on a student's travel mode to school.

BICYCLE & PEDESTRIAN CRASHES

A high number of pedestrian and bicycle crashes may represent unsafe conditions and inadequate infrastructure.

PERCENT OF STUDENTS ELIGIBLE FOR FREE/REDUCED LUNCH

Eligibility for a free/reduced lunch program is a determining factor of a student's travel mode.



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.

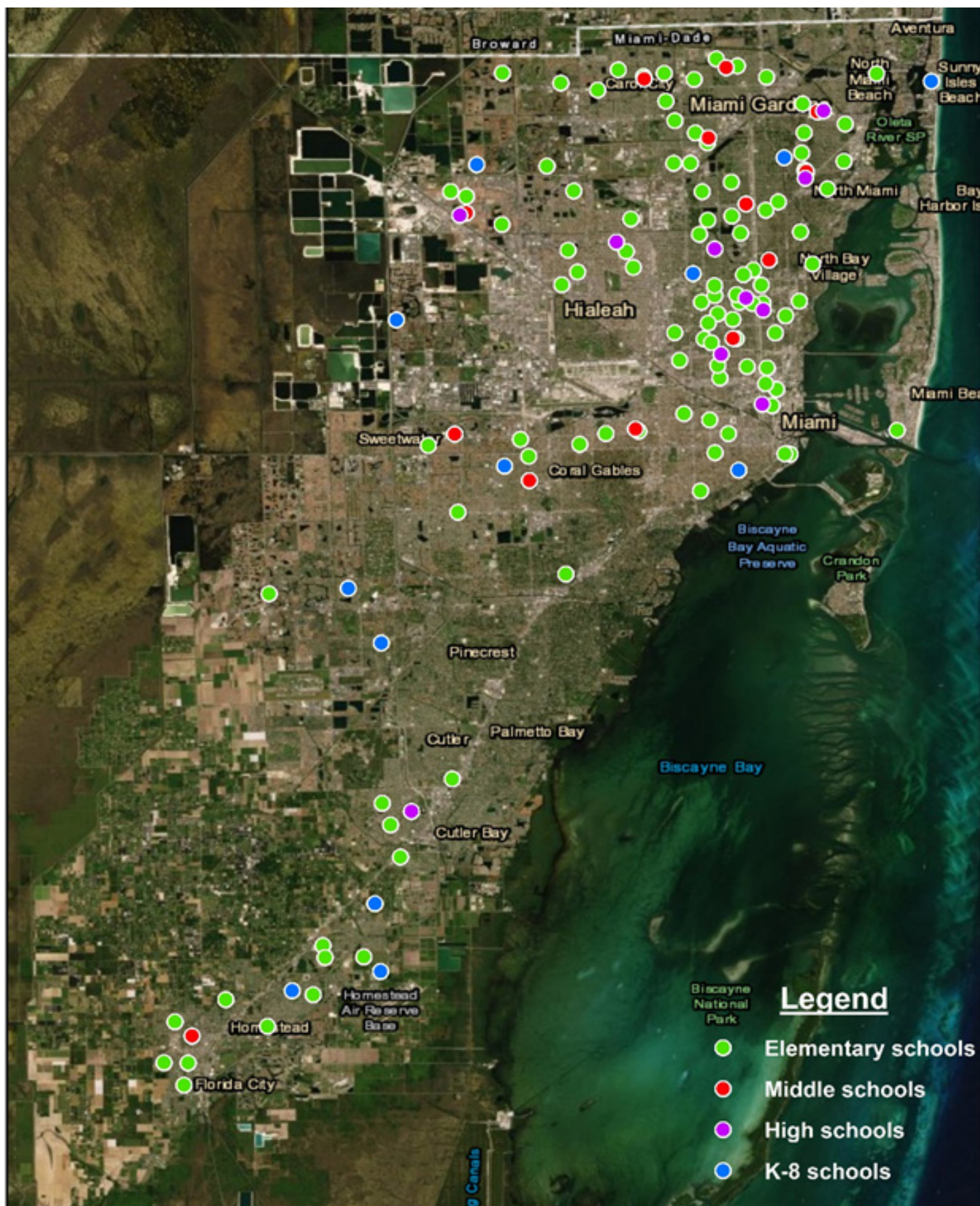
PERCENT OF STUDENTS LIVING WITHIN .5 MILES

Schools with a high proportion of students living within 0.5 miles of the school

PERCENT OF STUDENTS WALKING TO SCHOOL

SRTS improvements targeting schools with a high percentage of students pedestrians could encourage more students to walk to in less than ideal conditions.

¹ On June 9, 2020, the Safe Routes Partnership announced that it revised the Six "E's" Framework to remove Enforcement and add Engagement going forward. This announcement was made as this 2020 Infrastructure Plans Report was being finalized. The new framework will thus be reflected in future Safe Routes to School studies by the TPO.



DATA ANALYSIS

All past SRTS applications can be found on the TPO's website: <http://www.miamidadetpo.org/bicycle-pedestrian-program.asp> (2020 applications are pending FDOT approval and not yet available online). Since 2007, over \$12 million has been requested and granted to Miami-Dade County for SRTS infrastructure improvements. As depicted on the SRTS Infrastructure Applications map on page three, schools that have been awarded funding since 2005 are located throughout the County. While most are elementary schools, middle schools were introduced into the prioritization process in 2013, and in the 2018 SRTS cycle, the first high school was funded for SRTS improvements. The 2019 grant applications included five high schools and five middle schools. Of the eight schools submitted for SRTS grants in the 2020 cycle, half are middle schools and half are high schools.

FDOT enters into an agreement 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. As of March 2020, SRTS projects from application cycles 2005, 2007, 2008, 2009, 2011, and 2013 have been completed for a total of 75 schools. SRTS improvements for two schools from the 2013 application cycle are currently under construction and another two are in the permitting process.

WalkSafe's 2020 annual student travel survey, which provides student travel mode choice and is used to analyze before-and-after data for SRTS projects, was unable to be completed due to school closures related to COVID-19.

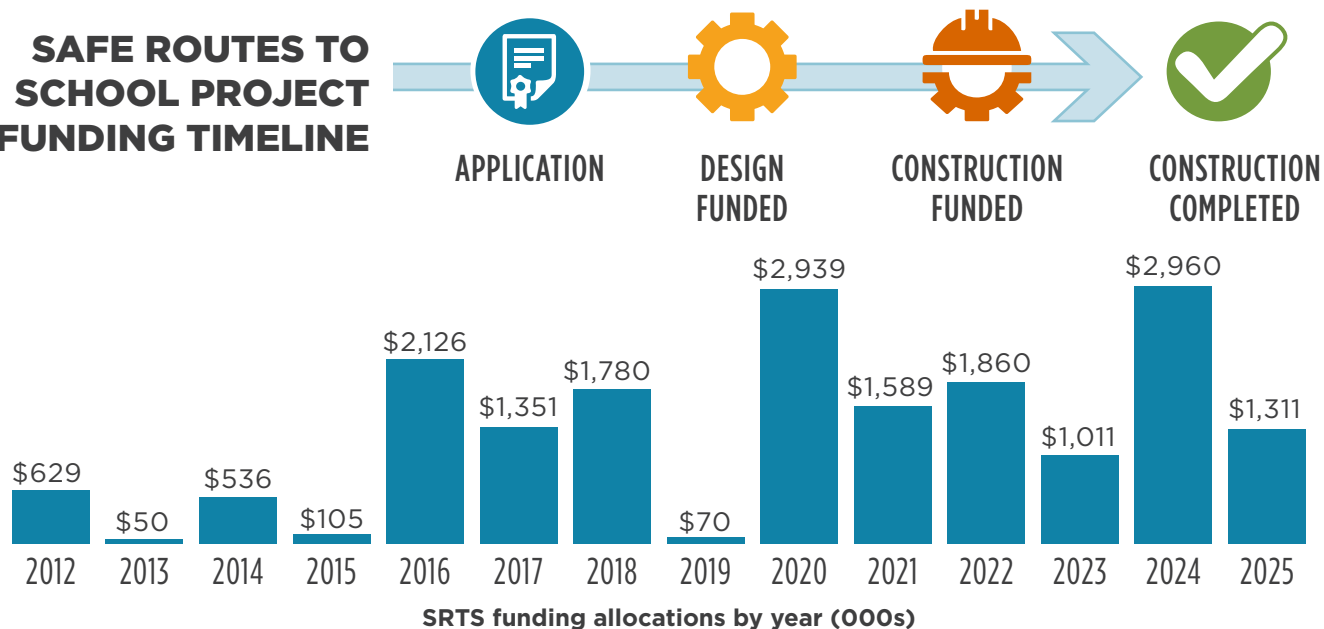
FINDINGS AND RECOMMENDATIONS

As the 2020 WalkSafe annual student travel survey could not be completed, effects of the recently completed SRTS infrastructure projects on student travel mode could not be analyzed. However, student travel mode data prior to SRTS project construction for the five schools with recently completed SRTS projects is presented in the following table.

SCHOOL NAME	STUDENT TRAVEL MODE				
	WALKING	BICYCLING	SCHOOL BUS	CAR/FAMILY VEHICLE	PUBLIC TRANSPORTATION
Fairlawn Elementary	1%	0%	10%	89%	0%
Silver Bluff Elementary	0%	0%	20%	80%	0%
James H Bright Elementary	2%	0%	47%	51%	0%
Morningside Elementary	15%	1%	25%	59%	0%
Nathan Young Elementary	70%	0%	10%	20%	0%

A review of SRTS funding allocations by year in FDOT's Work Program illustrates committed funding to design and construction of SRTS improvements over time, as depicted in the chart below. This, combined with the County's data on SRTS project completions, provide a comprehensive accounting of the history and success of the SRTS program for Miami-Dade County. Based on the data from the County and the FDOT Work Program, the average number of years from application to construction funded is six years. SRTS infrastructure improvements have been completed at 75 schools. The timeline will continue to be updated on an annual basis through ongoing coordination with the County to track progress and schools with infrastructure construction completed. The matrix on the following pages provides a full accounting of the SRTS program in Miami-Dade County since its inception, including application year, funding by year, and construction year for all applications, as available.

SAFE ROUTES TO SCHOOL PROJECT FUNDING TIMELINE



Safe Routes to School

Safe Routes to School																	CURRENT YEAR				Application to CST Funded (Years)
FM#	SCHOOL NAME	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
422704-2	Arcola Lake Elementary																				
	Charles R. Drew Elementary																				
	Dr H W Mack/W Little River																				
	Earlington Heights Elementary																				
	Holmes Elementary																				
	Kelsey L. Pharr Elementary																				
	Lenora B. Smith Elementary																			5	
	Liberty City Elementary																				
	Lillie C. Evans Elementary																				
	Martin Luther King Elementary School																				
	Miami Park Elementary																				
	Olinda Elementary																				
	Orchard Villa Elementary																				
425908-1	Amelia Earhart Elementary																				
	Barbara Hawkins Elementary																				
	Bob Graham Education Center																				
	Eugenia B. Thomas K-8 Center																				
	Flamingo Elementary																			7	
	Joella C. Good Elementary																				
	Miami Shores Elementary																				
	Poinciana Park Elementary																				
	Thena C. Crowder Elementary																				
	Van E. Blanton Elementary																				
431498-1	Coconut Palm								\$3,816	\$9,626										6	
425853-1	Irving & Beatrice Pescoe Elementary																				
	North Miami Elementary																			8	
	Southside Elementary																				
425853-1	Laura C. Saunders Elementary																				
	Ludlam Elementary								\$79,939				\$469,423							8	
	Pine Villa Elementary																				
	West Homestead Elementary																				
425856-1	Campbell Drive Elementary																				
	Fulford Elementary																				
	Henry M. Flagler Elementary								\$438,841											5	
	Riverside Elementary																				
	W.J. Bryan Elementary																				
	William A. Chapman Elementary																				
425857-1	Caribbean Elementary																				
	South Miami Heights Elementary								\$101,084				\$371,033							9	
	South Pointe Elementary																				
425857-2	Miami Lakes Elem - City CST											\$30,000								10	
431504-1	Leisure City K-8 Center								\$24,540	\$188,590										6	

FM#	SCHOOL NAME	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	CURRENT YEAR	2021	2022	Application to CST Funded (Years)	
431505-1	Avocado Elementary																				
	Dr. Robert B. Ingram Elementary																				
	Redondo Elementary																				
428210-1	Ben Sheppard Elementary																				
	Brentwood Elementary																				
	Coral Way K-8 Center																				
	Devon Aire K-8 Center																				
	Ernest R Graham Elementary																				
	Gertrude Edelman/Sabal Palm Elementary																				
	Maya Angelou Elementary																				
	Meadowlane Elementary																				
431501-1	Frederick Douglass Elementary																				
	Paul Laurence Dunbar Elementary																				
433443-1	Linda Lentin K-8 Center																				
	Natural Bridge Elementary																				
	North Hialeah Elementary																				
	Oak Grove Elementary																				
433444-1	Phyllis Ruth Miller Elementary																				
	Jesse J. McCrary Jr/Little River Elem																				
	Kensington Park Elementary																				
	Phillis Wheatley Elementary																				
435480-1	Santa Clara Elementary																				
	Toussaint L'ouverture Elementary																				
435481-1	Hialeah Gardens Elementary																				
435481-1	Kinloch Park Elementary																				
436940-1	Kinloch Park Middle																				
	Citrus Grove Elementary																				
	Fairlawn Elementary																				
	Shenandoah Elementary																				
436941-1	Silver Bluff Elementary																				
	James H. Bright Elementary																				
	Morningside Elementary																				
	Nathan Young Elementary																				
439897-1	Norman S. Edelcup/Sunny Isles Beach K-8																				
	(include with 436941-1)																				
	Eneida Massas Hartner Elementary																				
	Lakeview Elementary																				
	Jose de Diego Middle																				
	Arch Creek Elementary																				
	N. Miami Middle																				

FM#	SCHOOL NAME	2013	2014	2015	2016	2017	2018	2019	CURRENT YEAR 2020	2021	2022	2023	2024	2025	Application to CST Funded (Years)
438163-1	Comstock Elementary														6
	Gratigny Elementary							\$72,675							
	Hibiscus Elementary														
438165-1	Edison Park Elementary														5
	Crestview Elementary														
	Lorah Park Elementary							\$90,508							
	Sweetwater Elementary									\$702,610					
439894-1	Carrie P Meek/Westview Elementary														5
	Flagami Elementary														
	Hubert O Sibley Elementary							\$9,736		\$686,592					
	Shadowlawn Elementary														
439895-1	Bunche Park Elementary														5
	Miami Gardens Elementary														
	Myrtle Grove Elementary							\$9,936		\$340,471					
	North Twin Lakes Elementary														
439896-1	Florida City Elementary														5
	Robert Russa Moton Elementary							\$10,000		\$398,457					
441234-1	Benjamin Franklin Elementary														6
	Golden Glades Elementary														
	Lake Stevens Elementary														
	North County Elementary									\$272,053					
	Rainbow Park Elementary										\$1,379,850				
441235-1	Charles R. Hadley Elementary														8
	Dante B. Fascell Elementary														
	Henry E.S. Reeves Elementary										\$215,081		\$1,082,037		
	Mae Walters Elementary														
	Norwood Elementary														
445161-1	Air Base Elementary										\$9,241		\$45,452		6
445156-1	Edison High											\$10,326		\$46,673	7
445162-1	Everglades K-8 Center										\$55,405		\$302,434		6
445160-1	Mandarin Lakes K-8 Academy										\$28,176		\$210,811		6
445163-1	Naranja Elementary														
445163-1	Norland Elementary											\$47,729		\$256,378	7
445165-1	Norland Middle											\$30,654		\$163,932	7
444296-1	Ojus Elementary									\$102,740		\$439,406			5
445155-1	Olympia Heights Elementary											\$15,616		\$78,704	7
445158-1	Seminole Elementary										\$101,007		\$558,528		6
445154-1	West Miami Middle										\$36,286		\$192,723		6
446297-1	North Miami Senior High													\$106,778	n/a
446301-1	North Miami Middle													\$109,144	n/a
445743-1	Miami Central Senior High											\$139,009			n/a
446302-1	Miami Jackson Senior High													\$156,882	n/a
446298-1	Carol City Middle													\$162,435	n/a

