

# SAFE ROUTES TO SCHOOL INFRASTRUCTURE APPLICATION ANALYSIS

# 2019

**133  
SCHOOLS**

Recommendations for Safe Routes infrastructure improvements were developed to improve walking conditions of 122 elementary & K-8 schools, 5 middle schools and 6 high schools to date.



**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 (TPO)



Miami-Dade Transportation  
Planning Organization

### PREPARED BY

MARLIN Engineering, Inc.  
15600 SW 288<sup>th</sup> Street, Suite 208  
Miami, FL 33033

305.477.7575 | [www.marlinengineering.com](http://www.marlinengineering.com)

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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 mode shift in walking or biking to schools, post-construction.

## 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 21<sup>st</sup> 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.

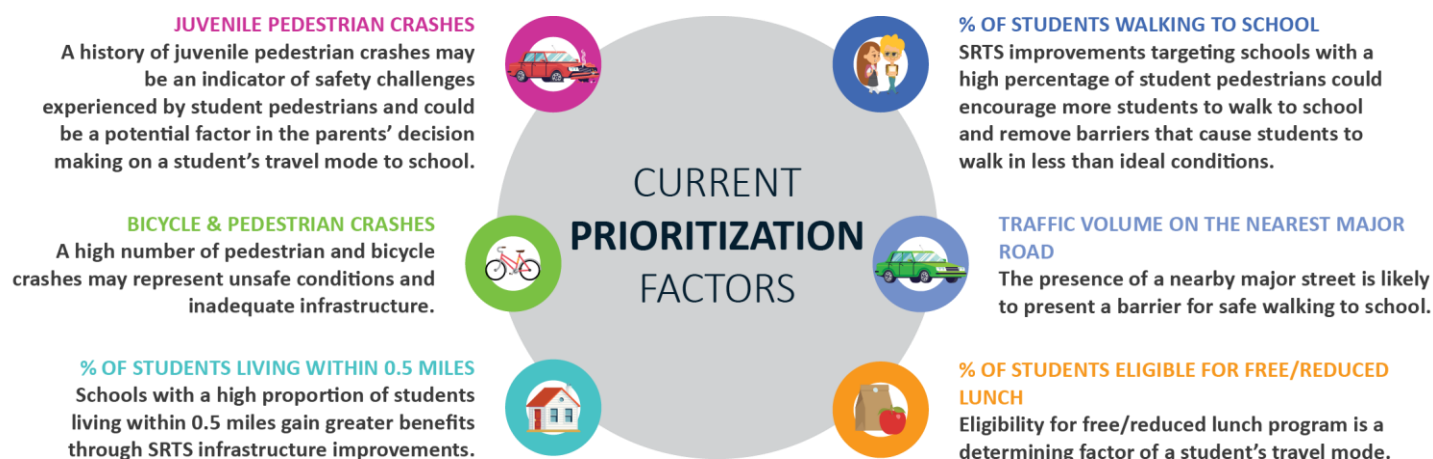
This prioritized list was utilized each year beginning in 2014 to determine the next schools for the SRTS infrastructure applications. Each year an increment of 10 schools was identified in ranking order.

In 2017 the TPO took a new approach to the application. Using the existing prioritization criteria the TPO collaborated with the MDCPS 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.

In 2018 all MDCPS facilities were considered, including elementary, middle, and high schools. Middle and high school facilities showed a greater need for improvements. In addition, surveys taken in Miami-Dade County indicated that for the 2017/2018 academic year, more students were walking and biking to middle and high school than to elementary and K-8 schools. As such, middle and high facilities were prioritized for the current cycle of applications. Five middle and five high schools were identified for SRTS application.

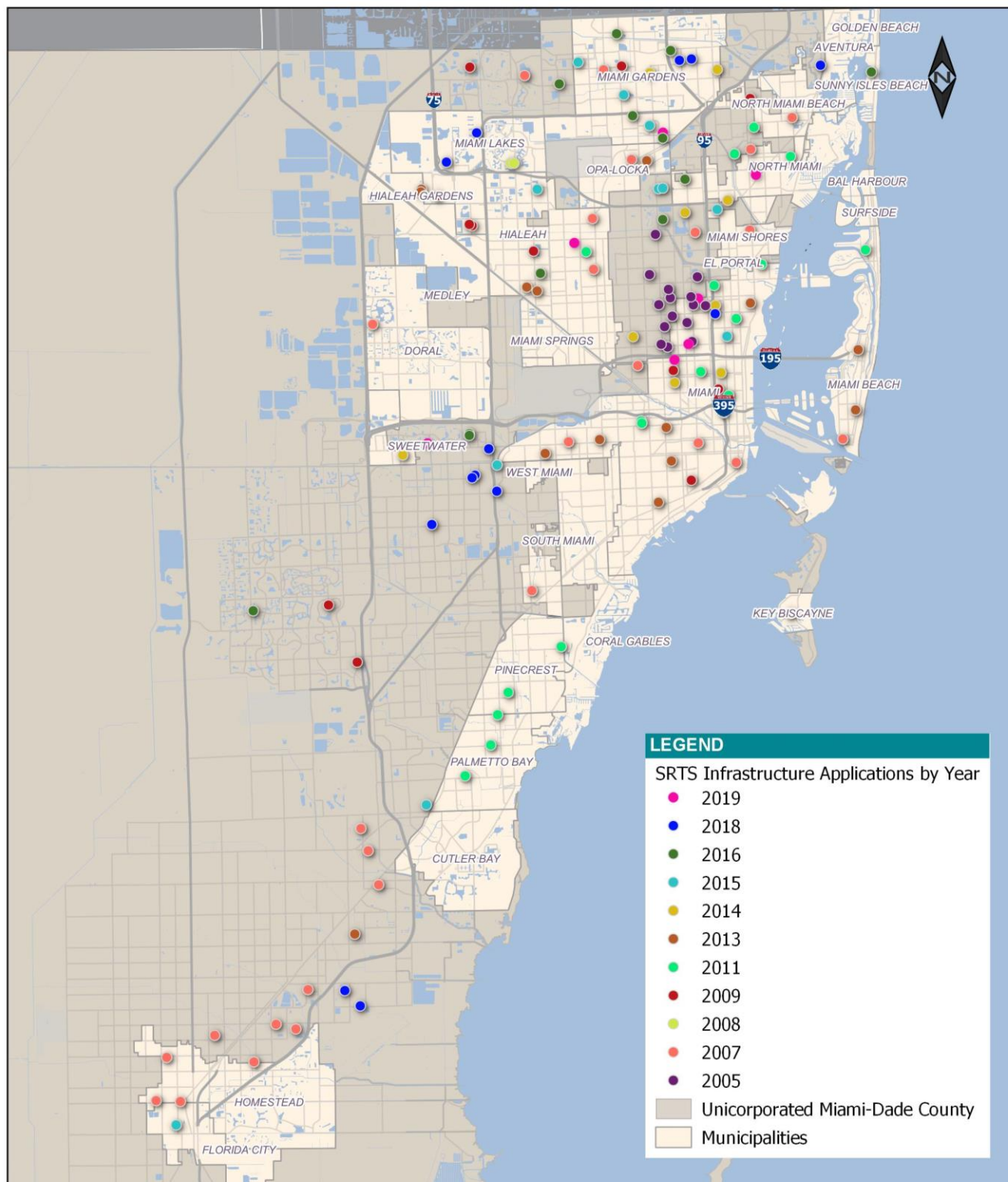
## WALKSAFE AND SCHOOL SURVEYS

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> (2019 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 March 2019 the TPO reached out to the County for an update on the construction status of the SRTS projects. The County responded that SRTS projects from application cycles 2005, 2007, 2008, 2009, and 2011 have been completed for a total of 68 schools.

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, eight schools were able to be compared using before and after tally data. These schools are: Campbell Drive Elementary, Fulford Elementary, Henry M. Flagler Elementary, William A. Chapman Elementary, Leisure City K-8 Center, North Miami Elementary, Southside Elementary, and Coconut Palm Elementary.

## FINDINGS AND RECOMMENDATIONS

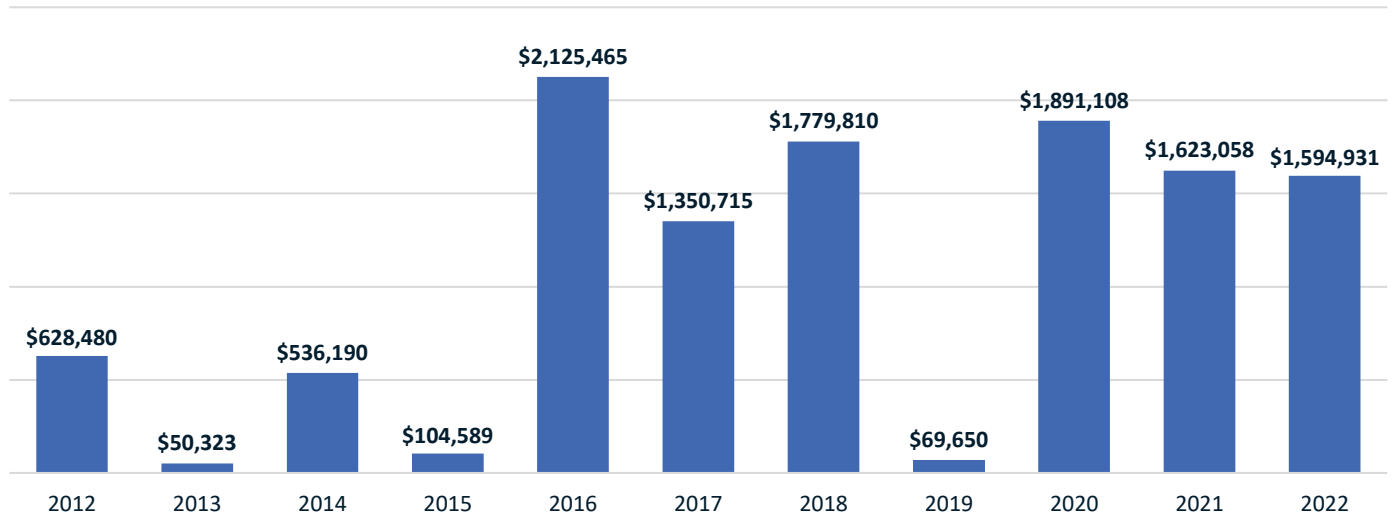
Due to data availability and the recent construction of many of the projects only eight schools were able to be analyzed using the WalkSafe annual student travel survey's mode information before and after project construction. A comparison of the tallies indicate a 14% decrease in walking to school and a 1% decrease in bicycling to school, with four schools showing no change in percent bicycling.

The findings are complex. Initial review of the data indicates an increase in the car/family vehicle mode choice. Further investigation is recommended to determine if mode shift toward the car/family vehicle is due to the tally day or if the students who both walk and use the car/family vehicle indicated car/family vehicle on the tally. Note that key to a successful tally is a large number of participants. The enrollment could be compared to the number of participants to determine participation levels. In addition, using another source of data to track the program could provide different results. For example, a deeper dive into the crash data over time is recommended. Also important to the success of the implementation of safe route infrastructure is coordination of the education and enforcement components of the project and the school's traffic management. Further consideration of the schools' approach to outreach is recommended.





## Safe Routes to School FDOT Work Program Funding Year Over \$11 Million Awarded



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. 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 68 schools. The timeline can continue to be updated through ongoing coordination with the County to track progress and schools with infrastructure construction completed.

### SAFE ROUTES TO SCHOOL PROJECT FUNDING TIMELINE



Safe Routes to School Application Funding Timeline																							
FM#	SCHOOL NAME	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Current Year	2020	2021	2022	Application to CST Funded (Years)			
																2019							
422704-2	Arcola Lake Elementary	App Year?																		N/A			
	Charles R. Drew Elementary																						
	Dr H W Mack/W Little River																						
	Earlington Heights Elementary																						
	Holmes Elementary																						
	Kelsey L. Pharr Elementary																						
	Lenora B. Smith Elementary																						
	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																			N/A			
	Barbara Hawkins Elementary																						
	Bob Graham Education Center																						
	Eugenia B. Thomas K-8 Center																						
	Flamingo Elementary																						
	Joella C. Good Elementary																						
	Miami Shores Elementary																						
	Poinciana Park Elementary																						
	Thena C. Crowder Elementary																						
Van E. Blanton Elementary																							
431498-1	Coconut Palm			App Years					3,816	9,626	CST Completed								6				
425853-1	Irving & Beatrice Peskoe Elementary																					N/A	
	North Miami Elementary																						
	Southside Elementary																						
425855-1	Laura C. Saunders Elementary																					9	
	Ludlam Elementary																						
	Pine Villa Elementary																						
425856-1	West Homestead Elementary																						5
	Campbell Drive Elementary																						
	Fulford Elementary																						
	Henry M. Flagler Elementary																						
	Riverside Elementary																						
425857-1	W.J. Bryan Elementary																						9
	William A. Chapman Elementary																						
	Caribbean Elementary																						
425857-2	South Miami Heights Elementary																						9
	South Pointe Elementary																						
425857-2	Miami Lakes Elem - City CST																						N/A
431504-1	Leisure City K-8 Center																						6
431505-1	Avocado Elementary																			7			
	Dr. Robert B. Ingram Elementary																						
	Redondo Elementary																						

FM#	SCHOOL NAME	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Current Year	2020	2021	2022	Application to CST Funded (Years)
																2019				
428210-1	Ben Sheppard Elementary					App Year						\$74,589		\$673,100	CST Completed					8
	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																			
	Melrose Elementary																			
	Spanish Lake Elementary																			
	Winston Park K-8 Center																			
431501-1	Frederick Douglass Elementary										\$185,180			CST Completed						5
	Paul Laurence Dunbar Elementary																			
433443-1	Linda Lentin K-8 Center							App Year			\$86,540		\$663,700	\$75,235	CST Completed					6
	Natural Bridge Elementary																			
	North Hialeah Elementary																			
	Oak Grove Elementary																			
	Phyllis Ruth Miller Elementary																			
433444-1	Jesse J. McCrary Jr/Little River Elem							App Year			\$75,880		\$581,960	\$30,877	CST Completed					6
	Kensington Park Elementary																			
	Phillis Wheatley Elementary																			
	Santa Clara Elementary																			
435480-1	Toussaint L'ouverture Elementary												\$19,159		\$148,885					5
	Hialeah Gardens Elementary																			
435481-1	Kinloch Park Elementary												\$20,190		\$156,785					5
	Kinloch Park Middle																			
436940-1	Citrus Grove Elementary									App Year				\$75,605	\$522,023					5
	Fairlawn Elementary																			
	Shenandoah Elementary																			
	Silver Bluff Elementary																			
436941-1	James H. Bright Elementary													\$55,256	\$413,139					5
	Morningside Elementary																			
	Nathan Young Elementary																			
	Norman S. Edelpcup/Sunny Isles Beach K-8																			
439897-1	(include with 436941-1)																\$34,475	\$197,638		8
	Eneida Massas Hartner Elementary														\$4,961					6
	Lakeview Elementary																			
	Jose de Diego Middle																			
	Arch Creek Elementary																			
	N. Miami Middle																			
438163-1	Comstock Elementary										App Year			\$72,675		\$4,961				6
	Gratigny Elementary																			
	Hibiscus Elementary																			
438165-1	Edison Park Elementary													\$90,508						6
	Crestview Elementary																			
	Lorah Park Elementary																			
	Sweetwater Elementary																			



FM#	SCHOOL NAME	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Current Year	2020	2021	2022	Application to CST Funded (Years)	
																2019					
439894-1	Carrie P Meek/Westview Elementary											App Year								6	
	Flagami Elementary																				
	Hubert O Sibley Elementary																				
	Shadowlawn Elementary																				
439895-1	Bunche Park Elementary																				6
	Miami Gardens Elementary																				
	Myrtle Grove Elementary																				
	North Twin Lakes Elementary																				
439896-1	Florida City Elementary																				6
	Robert Russa Moton Elementary																				
441234-1	Benjamin Franklin Elementary												App Year							6	
	Golden Glades Elementary																				
	Lake Stevens Elementary																				
	North County Elementary																				
	Rainbow Park Elementary																				
441235-1	Charles R. Hadley Elementary												App Year							N/A	
	Dante B. Fascell Elementary																				
	Henry E.S. Reeves Elementary																				
	Mae Walters Elementary																				
	Norwood Elementary																				
N/A	Air Base Elementary																			N/A	
	Edison High																				
	Everglades K-8 Center																				
	Mandarin Lakes K-8 Academy																				
	Naranja Elementary																				
	Norland Elementary																				
	Norland Middle																				
	Ojus Elementary																				
	Olympia Heights Elementary																				
	Seminole Elementary																				
N/A	West Miami Middle																			N/A	
	North Miami Senior High																				
	North Miami Middle																				
	Miami Central Senior High																				
	Miami Jackson Senior High																				
	Carol City Middle																				
	North Dade Middle																				
	Ruben Dario Middle																				
	Miami Northwestern Senior High																				
	Hialeah Senior High																				
Georgia Jones-Ayers Middle																					
TOTAL SCHOOLS	133														Average Years Application to Construction Funded					6	