Miami-Dade TPO Task Force

SMART Street Transportation Enhancements Program

SMART STEP

TPO URBAN & NON-URBAN MOBILITY TASK FORCE

PROGRAM EVALUATION

JUNE 2024

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SECTION 1: EXECUTIVE SUMMARY

The Miami-Dade Transportation Planning Organization (TPO) Urban Mobility & Non-Urban Core Task Forces were created to focus on addressing bicycle and pedestrian mobility challenges in Miami-Dade County. As a result, the SMART Street Transportation Enhancement Program (STEP) was created to facilitate interagency coordination, innovation, and implementation of pedestrian and bicycle improvement projects that increase connectivity and enhance safety.

The SMART STEP was launched with eleven projects in 2021 to address the access and mobility challenges throughout the County. Safety improvements to major crosswalks as well as specific improvements for the needs of the mobility-impaired were recommended for locations in the Urban Core, while improvements to the Non-Urban areas included high-visibility crosswalks, Americans with Disabilities Access (ADA) compliant pedestrian facilities, and continuous bicycle facilities.

This report assesses the implementation progress of eleven projects within the SMART STEP program. It aims to derive "lessons learned" from these projects to enhance the efficiency of ongoing initiatives. Among these projects, eight have already been completed, while three are scheduled for future implementation. The evaluation has reviewed the projects to identify the opportunities that propelled some projects and the challenges that slowed or changed the trajectory of others.

The review has been structured to independently review the factors of opportunity and challenge for each project with respect to design, location, jurisdictions, participation and advocacy, programming, cost and funding, permitting, and methods of evaluation. From each of the factors, recommendations are drawn based on the opportunities and challenges notes. In summary, the recommendations are:

DESIGN

- As part to the efforts to evolve the program into a quick build version of complete streets, a proof of concept is to be created that will be used as a resource comprised of approved concepts for pedestrian and bicycle friendly projects in various urban and non-urban areas. The goal is to prioritize projects that consist of standardized designs with minimal mobilization and construction needs, while being able to identify projects that may require more design time and effort.

LOCATION

- Prioritize small-scale projects that are located along low-volume streets and off-street locations that are owned by Miami-Dade County. Projects located along major roadways with high volume have high benefits; however, programming should account for maintenance of traffic and coordination with other projects to minimize impact.

JURISDICTION

- Roadways with the Unincorporated Municipal Service Area (UMSA) of Miami-Dade County minimize cross-jurisdictional coordination and should be prioritized as projects that can have a shorter lead time to quick-build. Projects in a single municipal jurisdiction should be prioritized over projects that span multiple municipalities, where coordination requires greater time.

PROGRAMMING

- For projects that are within municipal jurisdictions, prioritize projects that fit into their capital improvement programs as a small add-on, especially for projects that are scheduled to go into design within the year. Stand-alone projects should be maintained on a separate track, with greater attention and coordination until programmed for construction.

PERMITTING

- The proof of concept, recommended under "Design", would be reviewed and have input for permitting agencies to fast-track design, permitting and construction procedures, to benefit projects and their lead agencies. The TPO would work with permitting agencies toward a separate queue for review, providing for faster permitting for the municipal and UMSA projects.

EVALUATION-EFFECTIVE/SAFETY

- Identify project priorities and potential for effectiveness by using Pedestrian Level-of-Service (PLOS), Bicycle Level-of-Service (BLOS), and Level of Transportation (LTS), that focus of user experience instead of user volumes and are performed with less analysis time. Continue to monitor safety improvement with vehicular and pedestrian accident reports to evaluate effectiveness.

FUNDING

- Develop a program with dedicated funding and a 2-year cycle for calls for projects. As this evaluation of the eleven initial SMART STEP projects progress, the TPO will recommend the unified administration, eligibility of projects, prioritization of projects, and on-going funding sources for the SMART STEP program.

EDUCATION

- Work with all agencies and potential lead municipalities to streamline and reduce study effort to align scopes of services with the recommendations above.

SECTION 2: INTRODUCTION

The transportation system in Miami-Dade County is a connected network that offers various transportation options, from major investments like the SMART Plan (Metrorail corridor extensions) to smaller bicycle and pedestrian path connections to meet the everyday access and mobility needs throughout the impacted communities. The main focus at this level is to reduce the Level of Transportation Street (LTS), rather than improving the Transportation Level of Service (LOS). In order to function effectively, access and mobility of the pathways require continuous maintenance and new implementation ideas to ensure a seamless connected experience for all commuters.

TPO URBAN CORE TASK FORCE PROJECTS

W 74 PL @ W 3 CT & AMELIA EARHART PARK – HIALEAH, FL

PROJECT COST
$267,000

MIAMI-DADE COUNTY

The objective at these two project locations was to enhance and prioritize pedestrian mobility along the corridor into Amelia Earhart Park. Improvements were made to the main crosswalk at the intersection of W 3 Court and also included the construction of a new pedestrian access gate into Amelia Earhart Park. The project was completed in April 2022.

NW 74 ST @ NW 107 AVE – DORAL, FL

PROJECT COST
$120,319

DORAL FLORIDA

The objective at this project location was to enhance bicycle/pedestrian movement as part of the connection to a dedicated path. This includes a special emphasis crosswalk in addition to green bike lanes along NW 74 Street. The project was completed in December 2022.

SE 8 ST @ BRICKELL AVE INTERSECTION – MIAMI, FL

PROJECT COST
$126,344

FDOT
TPO

The objective at this project location was to enhance and prioritize pedestrian mobility. This project includes a "pedestrian scramble" crosswalk at the intersection and a "blank out" electronic sign displaying specific instructions to motorists. This project was completed in August 2022.

SW 6 ST @ SW 8 AVE (LIGHTHOUSE FOR THE BLIND) – MIAMI, FL

PROJECT COST
$45,350

FDOT

The objective at this project location was to increase resources for the visually and hearing impaired. The implementation of the Polara PedApp smartphone application will assist pedestrians navigate the intersection. This project was completed in April 2022.

SW 72 ST @ SW 57 AVE – CORAL GABLES & SOUTH MIAMI, FL

ESTIMATED PROJECT COST
$268,500

MIAMI-DADE COUNTY

The objective at this project location is to enhance and prioritize pedestrian mobility. This project includes a "pedestrian scramble" crosswalk at the intersection that will give pedestrians more time to cross from several directions simultaneously.

While these SMART Plan projects are small in size and may be overlooked in the overall transportation improvement programs that focus mainly on larger-scale projects, they offer significant impacts to the communities in relation to the estimated cost. Between the design and constructability phase of these projects, they offer both an opportunity and challenge: to find a way to complete pedestrian and bicycle facilities and first-and-last-mile links while also effectively coordinating with numerous local municipal government agencies to advance the long-term scheduling of the SMART Plan.

TPO NON-URBAN CORE TASK FORCE PROJECTS

NW 157 ST (BUNCHE PARK DR) @ NW 22 AVE – MIAMI GARDENS, FL

PROJECT COST
$74,618

The objective at this project location was to enhance and prioritize bicycle/pedestrian mobility. This project includes the installation of special emphasis crosswalks with green bicycle lanes at the conflict points within the intersections. The project was completed in March 2022.

PALMETTO METRORAIL STATION (NW 79 AVE) – MEDLEY, FL

PROJECT COST
$10,000

The objective at this project location is to provide pedestrian safety connectivity. Improvements were made from the Palmetto Metrorail Station to the adjacent industrial park, in an effort to provide a safe walkway for users. The project was completed in April 2023.

SW 92 ST @ SW 122 AVE – UMSA, FL

PROJECT COST
$23,177

The objective at this project location is to enhance and prioritize pedestrian mobility. This project includes the installation of a pedestrian crossing on all four sides of the intersection. The project was completed in October 2021.

SW 160 ST FROM SW 147 CT TO SW 137 AVE – UMSA, FL

ESTIMATED PROJECT COST
$180,000

The objective at this project location is to enhance and prioritize bicycle mobility. This project includes the installation of special emphasis crosswalks with green bicycle lanes at the conflict points at the various intersections.

SW 142 AVE FROM SW 160 ST TO SW 168 ST – UMSA, FL

ESTIMATED PROJECT COST
$250,000

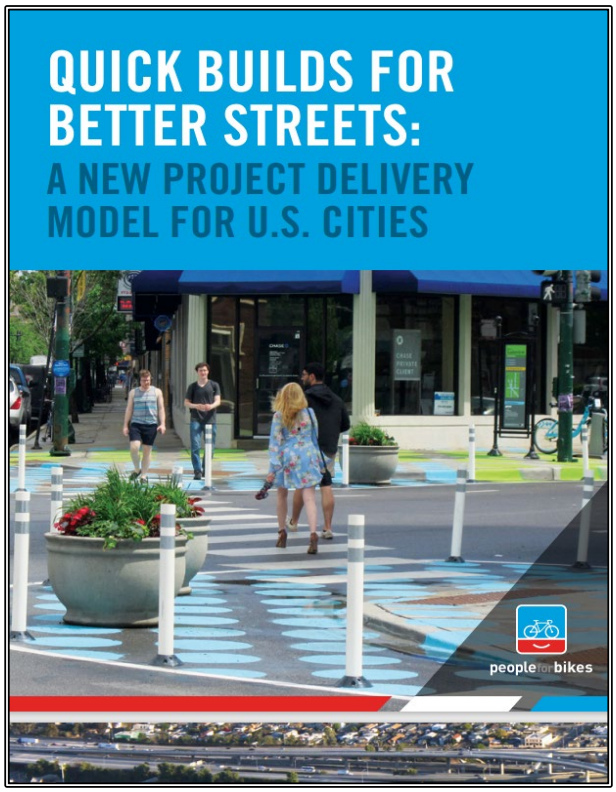
The objective at this project location is to enhance and prioritize bicycle mobility. This project includes the installation of high emphasis crosswalks with green bicycle lanes at the conflict points at the various intersections.

PALM DR/SW 344 ST @ SOUTH DADE TRANSITWAY – FLORIDA CITY, FL

PROJECT COST
$46,273

The objective at this project location is to enhance and prioritize bicycle/pedestrian mobility. This project includes the new of high emphasis pedestrian crosswalks, and green colored cycle crossings. This project was completed in March 2023.

SECTION 3: QUICK BUILD MOBILITY PROJECTS IN OTHER CITIES



Source: National Association of City Transportation Officials (NACTO)

At the start of the SMART STEP evaluations, best practices were sought from nationwide and statewide cases. Many municipalities, particularly in urban areas have established quick-build programs that focus on community-level mobility improvements. These programs in a similar manner to the SMART STEP, are defined by their minimal budget, compressed timeline, and community focus. Eight peer programs are documented in a 2016 report by the National Association of City Transportation Officials (NACTO), titled *Quick Builds for Better Streets: A New Project Delivery Model for U.S. Cities*. The report draws from the experiences in eight major metropolitan US cities, including: Austin, Texas; Chicago, Illinois; Denver, Colorado; Memphis, Tennessee; New York City; Pittsburgh, Pennsylvania; San Francisco, California; and Seattle, Washington. Unlike the SMART STEP projects, these quick builds include pilot projects and interim design projects that are installed on a temporary basis and designed with less permanent materials and installation methods, with the intent to serve community needs until they are replaced with permanent projects.

The Miami-Dade SMART STEP unique in the sense of all its projects are not demonstration or temporary projects that are intended to be removed after a short period of time. This is a key difference from peer quick build programs in other cities and counties where temporary projects can be implemented as part of quick-build programs, and often very quickly. Once a SMART STEP project is constructed, it will last for many years if maintained and will incrementally move the County towards a complete first-and-last-mile network for pedestrian, bicycle and micro-mobility that becomes integral to the SMART Plan for Miami-Dade County.

Notwithstanding this critical difference, some initial lessons were gathered from the peer review and were incorporated into the initial structuring of evaluation and recommendations for this evaluation. In summary, the national quick-build needs identified in the NACTO report were:

- **Team:** Designate at least one specialist to be involved with each project, and include on the team engaged elected officials, project designers, budget and procurement experts, communications and outreach professionals.

- **System for Seizing Opportunity**, that helps cities to take advantage of opportunities to move projects forward.

- **Institutionalized Urgency**, that requires installation deadlines that are mandatory.

- **Reliable Funding Sources**, that leverage the capital project program model to apply state and federal grants opportunities.

- **Contracting Plan:** Quick-build jobs are rarely compatible with full bid cycles. Cities need either on-call contracts with designers and contractors or in-house crews.

- **Outreach Plan:** Quick Build installations often come in the middle of the public outreach process, not near the end, and so require a distinct approach for public outreach.

- **Communications:** Quick-build projects need language and images that help the public understand that it's a way to improve public involvement, not circumvent it.

- **Maintenance Plan:** Quick-build projects due to their more unique design (these peer projects are temporary installations), require their own unique maintenance plans.

- **Measurement:** Objective metrics are an essential part of the process for making adjustments and for demonstrating success.

Toward developing this evaluation of the initial SMART STEP projects, the eight needs identified in the NACTO report became a starting point; however, they were interpreted and adapted to the SMART STEP projects. These eight needs of the NACTO report, through the process of evaluating the initial SMART STEP projects became the categories for evaluations, which are:

- *Design*
- *Location*
- *Jurisdiction, Participation, and Advocacy*
- *Programming*
- *Permitting*
- *Evaluation – Measures of Effectiveness and Impacts*
- *Cost, Procurement, and Funding*
- *Education*

SECTION 4: SMART STEP

The SMART Street Transportation Enhancements Program (STEP) was created to address bicycle and pedestrian mobility challenges in Miami Dade County for all residents and visitors. The SMART STEP Program is about creating a model to get connections on the ground with a quick build approach to build the network, improve residents' mobility and build strong advocacy for the SMART Plan.

Quick build defines a method for improving communities in Miami-Dade for walking, bicycling, and micro transit first-and-last-mile connections on a minimal budget and compressed timeline. The compressed timeline is a key characteristic as is intended to develop new pathways toward implementation of projects to immediately serve community mobility and safety.

SMART STEP projects are not demonstration or temporary projects that are intended to be removed after a short period of time, and this is a key difference from peer quick build programs in other cities and counties where temporary projects can be implemented as part of quick-build programs, and often very quickly. Once a SMART STEP project is constructed, it will last for many years if maintained and will incrementally move the County towards a complete first-and-last-mile network for pedestrian, bicycle and micro-mobility that becomes integral to the SMART Plan for Miami-Dade County.

COORDINATION: In 2021, SMART STEP was created to facilitate interagency coordination, innovation, and accelerated implementation of pedestrian and bicycle improvement projects that increase connectivity and enhance safety. The TPO worked collaboratively with the Miami-Dade County Department of Transportation and Public Works (DTPW), Florida Department of Transportation District Six (FDOT D6), Miami-Dade County Parks, Recreation and Open Spaces (PROS), and municipalities to implement these SMART STEP projects countywide.

COMMUNITY SUPPORT: The SMART STEP projects leverage opportunities for speed and ease of installation; however, projects do not move forward without engagement, and open lines of communication with the community members who will be most impacted by a project. Beyond meeting a community's needs, the incremental successes of the community quick builds that are part of the SMART STEP Program also generates community support and enthusiasm toward implementation of the larger SMART Program.

PROJECTS: SMART STEP launched with eleven initial projects that are summarized in **Table 4-A**, and categorized by their location as belonging to the Urban Mobility Task Force (in the urban core) or the Non-Urban Mobility Task Force. The access and mobility challenges of the urban core have been addressed by making safety and convenience improvements to major crosswalks, improving safety for mobility impaired. Improvements to the non-urban areas include high-visibility crosswalks, ADA access, and continuous bike facilities.

TABLE 4-A: SMART STEP PROGRAM INITIAL PROJECT SUMMARY

PROJECT	LOCATION	LEAD AGENCY	STATUS	ESTIMATED PROJECT COST
URBAN MOBILITY TASK FORCE				
High Emphasis Crosswalk and create safe pedestrian access to Amelia Earhart Park	W 74th Place / W 3rd Court and Amelia Earhart Park west entrance at W 74th Place **Hialeah**	DTPW PROS TPO	Completed	$267,000
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 74th Street and NW 107th Avenue **Doral**	City of Doral DTPW TPO	Completed	$120,319
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired	SW 6th Street and SW 8th Avenue (Miami Lighthouse for the Blind) **Miami**	City of Miami FDOT TPO	Completed	$45,350
Pedestrian Scramble Crosswalk	Brickell Avenue and SE 8th Street Intersection **Miami**	City of Miami FDOT TPO	Completed	$126,344
Pedestrian Scramble Crosswalk	SW 72nd Street (Sunset Drive) and SW 57th Avenue (Red Road) **Coral Gables & South Miami**	Coral Gables South Miami DTPW TPO	Project In-Progress	$268,500
NON-URBAN MOBILITY TASK FORCE				
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 22nd Avenue and NW 157th Street **Miami Gardens**	City of Miami Gardens DTPW TPO	Completed	$74,618
Pedestrian Safety Connection between industrial park and Metrorail Station	Palmetto Metrorail Station **Medley**	Town of Medley DTPW TPO	Completed	$10,000
High Emphasis 4-Way Crosswalks	SW 92nd Street and SW 122nd Avenue **USMA**	DTPW TPO	Completed	$23,177
Green Bicycle Lanes At 9 traffic conflict points along the corridor	SW 160th Street from SW 147th Court to SW 137th Avenue **USMA**	DTPW TPO	Project In-Progress	$250,000
Green Bicycle Lanes At 9 traffic conflict points along the corridor	SW 142nd Avenue from SW 160th Street to SW 168th Street **USMA**	DTPW TPO	Project In-Progress	$180,000
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks	Palm Drive / SW 344th Street and South Dade Transitway **Florida City**	Florida City FDOT TPO	Completed	$46,273

TABLE 4-B: SMART STEP PROGRAM PROJECT LOCATIONS

SECTION 5: SUMMARY OF OPPORTUNITES AND CHALLENGES

Of the eleven projects, eight have already been completed, while three are scheduled for future implementation at a later time. With this effort now receiving national recognition, the TPO is performing an initial quick-response evaluation to provide recommendations to the Task Force for improving the responsiveness and efficacy of the SMART STEP Program going forward. The evaluation has reviewed the projects through interviews with participants, comparison to other programs, and performing analysis of available data. The opportunities that propelled the projects and the challenges that slowed or changed the trajectory of others have been identified, along with considerations for leveraging the opportunities, addressing challenges, and restructuring aspects of the program to systematically improve the program outcomes.

The effort has been structured to independently review the factors of opportunity and challenge for each project with respect to design, location, jurisdictions, participation, programming, cost, procurement funding, permitting, and evaluation. From each of the factors, recommendations are drawn based on the opportunities and challenges notes. Each of the opportunities and challenges are summarized below, and in the following sections for each factor.

DESIGN

OPPORTUNITIES: Simpler projects that rely on standardized designs with minimal mobilization and construction needs, such as pavement markings, signal operations, and pedestrian paths and ramps create opportunities for quick, high benefit-to-cost ratios.

CHALLENGES: Large projects with location-specific design parameters, significant materials and work mobilizations, and significant disruptions and maintenance-of-traffic requirements create challenges to quick implementation and favorable benefit-to cost ratios.

LOCATION

OPPORTUNITIES: Projects selected to complete network gaps, such as high-emphasis crosswalks along highly used pedestrian corridors, barriers to pedestrian paths at transit stations and parks or green bike lanes across conflict points along bicycle facilities create opportunities for quick implementation and high benefit-to-cost ratios.

CHALLENGES: Projects that create new pedestrian or bicycle paths and other facilities over long paths create challenges as new facilities that require additional planning, design, and permitting work. These type of projects should be programmed to anticipate additional time to implement.

JURISDICTIONS, PARTICIPATION AND ADVOCACY

OPPORTUNITIES: Projects that minimize cross jurisdictional coordination create better opportunities for quick permitting; however, within municipalities, advocacy is a critical asset to moving these projects forward.

CHALLENGES: Projects that are located where there are multiple jurisdictions, such as involving more than one municipality and unincorporated Miami-Dade County can add time to coordination for design, programming, permitting and construction.

PROGRAMMING

OPPORTUNITIES: Improvements that can be "piggybacked" on existing roadway projects, such as green bike lanes or high-emphasis pedestrian crossings added to an existing resurfacing or roadway reconstruction project provide better opportunities for rapid and cost-effective implementation.

CHALLENGES: Projects where the procurement schedule does not fit into a larger program of capital improvements become challenged for quick implementation and are more likely delayed until implementation becomes a better fit into a jurisdiction's capital improvement program.

PERMITTING

OPPORTUNITES: Projects that minimize the number of permitting reviews create greater opportunities for quick implementation with minimized potential for design changes.

CHALLENGES: Projects that affect utilities, drainage, and other potential review disciplines require additional time to implement and may have additional potentials for design modifications that can affect the outcome of the project.

EVALUATION – MEASURES OF EFFECTIVENESS AND IMPACTS

OPPORTUNITIES: Level of Transportation Stress (LTS) is now an accepted methodology and as a measure of effectiveness is based on existing environmental and built infrastructure conditions and can be evaluated up front, saving time, and providing a measure related to the improvement in user experience instead of often statistically insignificant measures of utilization.

CHALLENGES: Depending on the type of project, before and after evaluation of the project is required, with time required for the reporting, particularly beforehand where the additional time delays implementation.

COST, PROCUREMENT AND FUNDING

OPPORTUNITIES: Lower cost projects tend to have greater opportunity for quick implementation as the project work is more likely to be implemented on a work order basis under general services contracts for the lead agency.

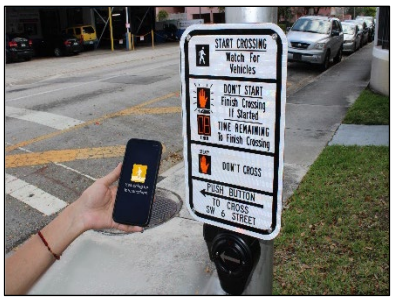
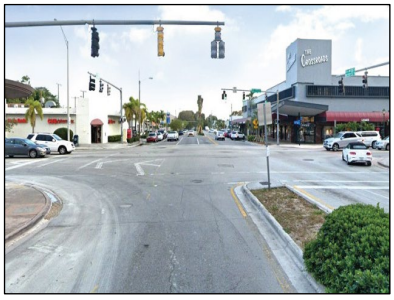
CHALLENGES: High-cost projects, particularly at levels that require state or federal funding, have additional requirements for planning, design and construction, and extensive reporting back to the funding agency.

PROJECT DESIGN: OPPORTUNITES FOR REPLICATION AND CHALLENGES TO ADDRESS

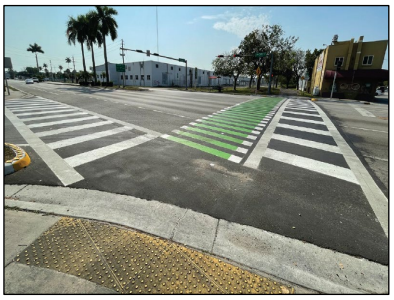
This section focuses on the effect of project design on implementation of SMART STEP projects. Simpler projects that rely on standardized designs with minimal mobilization and construction needs, such as pavement markings, signal operations, and pedestrian paths and ramps create opportunities for quick, high benefit-to-cost ratios. Large projects with location-specific design parameters, significant materials and work mobilizations, and significant disruptions and maintenance-of-traffic requirements create challenges to quick implementation and favorable benefit-to cost ratios.

SMART STEP PROJECT DESIGN IMPACTS

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF DESIGN ON IMPLEMENTATION
URBAN MOBILITY TASK FORCE				
High Emphasis crosswalk to create safe pedestrian access to Amelia Earhart Park **(COMPLETED)**	Amelia Earhart Park West Entrance at W 74th Place **(HIALEAH)**			The high-emphasis crosswalk is of standard design that is consistent with DTPW requirements. The pedestrian park entrance and pathway are also a standard sidewalk design and ADA compliance.
	W 74th Place/W 3rd Court **(HIALEAH)**			
Green Bicycle Lane & High Emphasis 4-Way Crosswalks **(COMPLETED)**	NW 74th Street and NW 107th Avenue **(DORAL)**			There are green unbuffered bicycle lane markings with a hatched area to cross turn lanes and driveways along with the high emphasis crosswalks. This includes a 45-degree crosswalk to the southeast corner turn island following standard designs, consistent with the Miami-Dade County DTPW requirements.

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF DESIGN ON IMPLEMENTATION
URBAN MOBILITY TASK FORCE				
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired **(COMPLETED)**	SW 6th Street and SW 8th Avenue (Miami Lighthouse for the Blind) **(MIAMI)**			The Polara PedApp smartphone application for the visually impaired is a unique proof-of-concept project. Although complete, documenting the project and proving standard criteria for use and design will shorten the time required for expanding its use.
Pedestrian Scramble Crosswalk **(COMPLETED)**	Brickell Avenue and SE 8th Street **(MIAMI)**			The pedestrian scramble markings and operational design create the 4-way protected pedestrian phase. Although based on accepted traffic engineering, the project and especially the signal operation phasing and timing are unique to the location and required additional analysis effort.
Pedestrian Scramble Crosswalk **(PENDING)**	SW 72nd Street and SW 57th Avenue **(Coral Gables & South Miami)**			The pedestrian scramble markings and operational design to create the 4-way protected pedestrian phase are unique to the location and require more substantial design efforts. Early reports indicate that delays are due to multiple jurisdictional coordination and various funding mechanisms. Future improvements at this location will be redesigned.

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF DESIGN ON IMPLEMENTATION
NON-URBAN MOBILITY TASK FORCE				
Green Bicycle Lane & High Emphasis 4-Way Crosswalks **(COMPLETED)**	NW 22nd Avenue and NW 157th Street **(MIAMI GARDENS)**			There is green unbuffered bicycle lane markings with a hatched area to cross the intersections and bus turnouts along with the high emphasis crosswalks, and restored ADA ramps following standard designs, and consistent with DTPW requirements.
Pedestrian Safety Connection between industrial park and Metrorail Station **(COMPLETED)**	Palmetto Metrorail Station **(MEDLEY)**	 	 	The proposed sidewalk, gateway, and high emphasis crossings through the station parking lot following standard designs, consistent with DTPW requirements. Proposed landscaping is also consistent with requirements for traffic safety and security. The project had significant delays for reasons not related to design.
High Emphasis 4-Way Crosswalks **(COMPLETED)**	SW 92nd Street and SW 122nd Avenue **(USMA)**			The new 4-way, high emphasis crosswalks, and upgraded ADA ramps at all corners follow standard designs for the suburban intersection, consistent with DTPW requirements. The project suffered delays for reasons not related to design.

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF DESIGN ON IMPLEMENTATION
NON-URBAN MOBILITY TASK FORCE				
Green Bicycle Lanes At 9 traffic conflict points along the corridor **(PENDING)**	SW 160th Street from SW 147th Court to SW 137th Avenue **(USMA)**			The green unbuffered bicycle lane markings with hatched lines to cross intersections and other identified conflict points are consistent with DTPW design requirements.
Green Bicycle Lanes At 9 traffic conflict points along the corridor **(PENDING)**	SW 142nd Avenue from SW 160th Street to SW 168th Street **(USMA)**			The green unbuffered bicycle lane markings with hatched lines to cross intersections and other identified conflict points are consistent with DTPW design requirements. The project was not implemented for reasons that are not related to design.
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks **(PENDING)**	Palm Drive/SW 344th Street and South Dade Transitway **(FLORIDA CITY)**			There is green unbuffered bicycle lane makings with a hatched area to cross the intersections and diversion to pass the bus turn-outs along with the high emphasis crosswalks following standard designs consistent with DTPW requirements. The project suffered delays for reasons not related to design.

PROJECT DESIGN LESSONS LEARNED:

OPPORTUNITIES: Projects that rely on standardized designs with minimal mobilization and construction needs, such as pavement markings, signal operations, and pedestrian paths and ramps are implemented without delay or additional costs due to special designs.

CHALLENGES: Projects with location-specific design parameters, such as the scramble crosswalks in the urban areas require additional study to assure safety and minimized impact to traffic flow. At this time, especially on busy intersections, these projects are also proofs-of-concept, in that they are unique projects in Miami-Dade County, and if successful and effective are intended for replication in other appropriate locations. As such, they have high value to the overall program but are challenged by additional effort and time in design.

PROJECT DESIGN RECOMMENDATIONS:

1. Prioritize simpler projects that rely on standardized designs such as pavement markings, signal operations, and pedestrian paths and ramps that have minimal mobilization and construction needs.

2. Projects such as the scramble crosswalks are important to the SMART STEP overall, and the initial efforts require more design time and effort. These should be prioritized early in the program as proof-of-concepts, with reporting and documentation necessary to create standardized criteria and streamline future implementations.

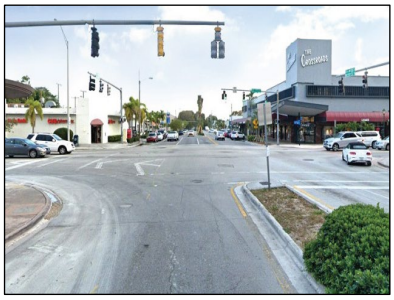
3. As part of an effort to evolve the SMART STEP into a quick-build implementation of complete streets, a guideline should be created to support efficient design and permitting. The manual would not be intended to reinvent, but to create a single reference point comprised of accepted designs for different pedestrian and bicycle projects in urban and non-urban environments for the SMART STEP Program.

PROJECT LOCATION: OPPORTUNITES FOR REPLICATION AND CHALLENGES TO ADDRESS

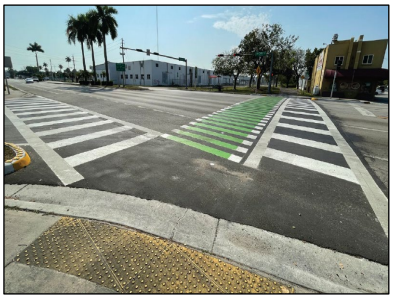
This section focuses on the effect of project location on implementation of SMART STEP projects. Projects selected to complete network gaps, such as high-emphasis crosswalks along highly used pedestrian corridors, barriers to pedestrian paths at transit stations and parks or green bike lanes across conflict points along bicycle facilities create opportunities for quick implementation and high benefit-to-cost ratios. Projects that create new pedestrian or bicycle paths over long paths create challenges that require additional planning, design, and permitting work. These type of projects should be programmed to anticipate additional time to implement.

SMART STEP PROJECT LOCATION IMPACTS

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF LOCATION ON IMPLEMENTATION
URBAN MOBILITY TASK FORCE				
High Emphasis crosswalk to create safe pedestrian access to Amelia Earhart Park **(COMPLETED)**	Amelia Earhart Park West Entrance at W 74th Place **(HIALEAH)**			The location of the high-emphasis crosswalk project is on a local industrial street. Project extents are small, and the intersection has low traffic volumes, so maintenance of traffic is not a significant issue. The pedestrian entrance and path in the park is a relatively small project located with no impact to traffic.
	W 74th Place/W 3rd Court **(HIALEAH)**			
Green Bicycle Lane & High Emphasis 4-Way Crosswalks **(COMPLETED)**	NW 74th Street and NW 107th Avenue **(DORAL)**			The location of the project is along major roadways. Traffic volumes are high, and although pavement markings have minimal impact on traffic, the impact is higher than at a low volume location. There is greater importance at this location to coordinate with other projects to minimize traffic impact.

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF LOCATION ON IMPLEMENTATION
URBAN MOBILITY TASK FORCE				
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired **(COMPLETED)**	SW 6th Street and SW 8th Avenue (Miami Lighthouse for the Blind) **(MIAMI)**			The location is at a high-volume urban intersection; however, there is no impacts because the design of the project requires no work that is disruptive to pedestrian or traffic flow.
Pedestrian Scramble Crosswalk **(COMPLETED)**	Brickell Avenue and SE 8th Street **(MIAMI)**			The location is at a high-volume urban intersection which requires greater attention to scheduling for maintenance of traffic, as well as additional monitoring time.
Pedestrian Scramble Crosswalk **(PENDING)**	SW 72nd Street and SW 57th Avenue **(Coral Gables & South Miami)**			The location is at a high-volume urban intersection which requires greater attention to scheduling for maintenance of traffic, as well as additional monitoring time. The project was not implemented.
NON-URBAN MOBILITY TASK FORCE				
Green Bicycle Lane & High Emphasis 4-Way Crosswalks **(COMPLETED)**	NW 22nd Avenue and NW 157th Street **(MIAMI GARDENS)**			**<u>ADDITIONAL TIME AND COORDINATION</u>** The project is compact. The intersection, located at Bunche Park and Pool has high pedestrian value, and is along a County collector roadway with relatively high traffic volumes, which required coordination with other programmed roadway work.

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF LOCATION ON IMPLEMENTATION
NON-URBAN MOBILITY TASK FORCE				
Pedestrian Safety Connection between industrial park and Metrorail Station **(COMPLETED)**	Palmetto Metrorail Station **(MEDLEY)**	 	 	Located within the Metrorail station and parking premises, a County-owned property. The project does not impact roadway operations, and require coordination for maintenance of traffic.
High Emphasis 4-Way Crosswalks **(COMPLETED)**	SW 92nd Street and SW 122nd Avenue **(USMA)**			The project is compact. Located along a collector street in a medium density apartment area, the project has high pedestrian value, and is along a County collector roadway with relatively greater traffic volumes and greater coordination to reduce traffic impact.
Green Bicycle Lanes At 9 traffic conflict points along the corridor **(PENDING)**	SW 160th Street from SW 147th Court to SW 13th Avenue **(USMA)**			The project limits span a ½-mile and is comprised of 9 sub-projects. Although traffic volumes are not high, the fact that it is comprised of 9 sub-projects requires additional time, sequencing, and coordination. The project was not implemented.

PROJECT	LOCATION	BEFORE	AFTER	IMPACT OF LOCATION ON IMPLEMENTATION
NON-URBAN MOBILITY TASK FORCE				
Green Bicycle Lanes At 9 traffic conflict points along the corridor **(PENDING)**	SW 142nd Avenue from SW 160th Street to SW 168th Street **(USMA)**			The project limits span a full mile and is comprised of 9 sub-projects. Although traffic volumes are not high, the fact that it is comprised of 9 sub-projects requires additional time, sequencing, and coordination. The project was not implemented.
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks **(COMPLETED)**	Palm Drive/SW 344th Street and South Dade Transitway **(FLORIDA CITY)**			The project limits are compact; however, the project is located at the intersection of a high-volume roadway and the transitway, which both require additional coordination for maintenance of traffic and transit operations. The project schedule was delayed.

PROJECT LOCATION LESSONS LEARNED:

OPPORTUNITIES: Projects selected to complete network gaps, such as high-emphasis crosswalks along highly used pedestrian corridors, barriers to pedestrian paths at transit stations and parks or green bike lanes across conflict points on bicycle facilities are easier to implement in a quick-build methodology. Where the locations are off-street and County-owned, there are better opportunities. Where the locations are on low traffic volume locations, there are also better possibilities for quick-build projects.

CHALLENGES: Projects that create new pedestrian or bicycle paths and other facilities over long paths create challenges as new facilities that require additional planning, design and permitting work. They should be prioritized with more time to complete. High benefit pedestrian and bicycle improvements are often at high traffic volume locations, that require greater time and coordination to program and minimize traffic impacts. These projects are important to the SMART STEP Program and should be prioritized with more lead time in anticipation of more complex timing to minimize traffic impact.

PROJECT LOCATION RECOMMENDATIONS:

1. Prioritize compact projects that are off-street and on property owned by the transportation and public agencies.

2. Prioritize compact projects that are on low-volume streets that are easier for quick-build methodology and minimize maintenance of traffic issues.

3. Projects located along major roadways with high volumes have high benefit; however, programming should account for maintenance of traffic and coordination with other projects to minimize impact. These projects are an important part of the SMART STEP but should be programmed to start with long lead times to implementation.

4. Projects comprised of multiple sub-projects should also be programmed to start with long lead times to implementation.

PROJECT JURISDICTIONS, PARTICIPATION AND ADVOCACY: OPPORTUNITES FOR REPLICATION AND CHALLENGES TO ADDRESS

This section focuses on the effect of the number of jurisdictions, participation among jurisdiction, and advocacy on implementation of SMART STEP projects. Projects that minimize cross jurisdictional coordination, such as County roadway improvements that are not in a municipality create better opportunities for quick permitting. However, the findings of this report also show that projects within municipalities can also be implemented quickly where municipal ownership can streamline permitting and procurement.

Advocacy is a critical asset to moving these projects forward. By advocacy, we refer to community or neighborhood champions to keep pushing a project to completion. Projects that are located where there are multiple jurisdictions, involving more than one municipality and unincorporated Miami-Dade County can add time to coordination for design, programming, permitting and construction. We have noted that projects that become delayed, often do not have community or jurisdictional advocates to keep pushing projects to completion.

SMART STEP PROJECT JURISDICTIONS, PARTICIPATION & ADVOCACY IMPACTS

PROJECT	LOCATION	LEAD AGENCIES	IMPACT ON IMPLEMENTATION
URBAN MOBILTY TASK FORCE			
High Emphasis Crosswalk and create safe pedestrian access to Amelia Earhart Park	W 74th Place/W 3rd Court and Amelia Earhart Park entrance at W 74th Place	City of Hialeah DTPW, PROS TPO	**SUPPORTIVE - COUNTY JURISDICTION AND PARKS DEPT.** Coordination between County departments and the City did not create efficiencies nor delays that were noted.
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 74th Street and NW 107th Avenue	City of Doral DTPW TPO	**SUPPORTIVE - CITY JURISDICTION** Interview with City staff noted that Municipal ownership is helpful, and that streamlined permitting for municipal projects is needed.
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired	SW 6th Street and SW 8th Avenue (Miami Lighthouse for the Blind)	City of Miami FDOT, TPO Miami Lighthouse	**SUPPORTIVE - ADVOCACY** This is a unique, proof-of-concept project. TPO Staff noted the assistance of the Miami Lighthouse as an opportunity to provide technical assistance.
Pedestrian Scramble Crosswalk	Brickell Avenue and SE 8th Street Intersection	City of Miami FDOT TPO	**SUPPORTIVE - CITY JURISDICTION** For the urban area, this was a proof-of-concept project. Reports from TPO staff note extraordinary support from FDOT and the City as a coordination opportunity.

PROJECT	LOCATION	LEAD AGENCIES	IMPACT ON IMPLEMENTATION
Pedestrian Scramble Crosswalk	SW 72nd Street and SW 57th Avenue	Coral Gables South Miami DTPW TPO	**DELAYED DUE TO FUNDING MECHANISM - TIME NOT ESTABLISHED.** **MULTI-JURISDICTIONAL ASPECTS** The project is currently under construction. Multiple municipal jurisdictions were to be a factor among coordination with adjacent development, and other programming issues.
NON-URBAN MOBILITY TASK FORCE			
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 22nd Avenue and NW 157th Street	City of Miami Gardens DTPW, TPO	**SUPPORTIVE – CITY JURISDICTION** Interviews with City staff note that municipal ownership is helpful, and streamlined permitting for municipal projects is needed.
Pedestrian Safety Connection between industrial park and Metrorail Station	Palmetto Metrorail Station	Town of Medley DTPW	**DELAYED – MULTIPLE JURISDICTION COORDINATION** Project is complete but was delayed due to coordination between Miami-Dade DTPW and the City to complete the sidewalk on both sides of the fence.
High Emphasis 4-Way Crosswalks	SW 92nd Street and SW 122nd Avenue	DTPW TPO	**SUPPORTIVE – SINGLE JURISDICTION** Coordination between Miami-Dade County DTPW created efficiencies. Delays did not occur.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 160th Street from SW 147th Court to SW 137th Avenue	DTPW TPO	**NOT SUPPORTIVE** **SINGLE JURISDICTION – NO ADVOCACY** The project was not implemented. While the project was in a single jurisdiction, when schedule updates experienced delay, it appears that there was greater need for advocacy.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 142nd Avenue from SW 160th Street to SW 168th Street	DTPW TPO	**NOT SUPPORTIVE** **SINGLE JURISDICTION – NO ADVOCACY** The project was not implemented. While the project was in a single jurisdiction, when schedule updates experienced delay, it appears that there was greater need for advocacy.
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks	Palm Drive / SW 344th Street and South Dade Transitway	Florida City FDOT TPO	**SUPPORTIVE – CITY & FDOT (STATE) JURISDICTIONS** The project is complete; however, it did experience delays that were for other reasons than jurisdictional coordination.

PROJECT JURISDITION & COORDINATION LESSONS LEARNED:

OPPORTUNITIES: Projects that minimize cross jurisdictional coordination, such as county and state roadway improvements that are not in a municipality create better opportunities for quick permitting. However, the findings of this report also show that projects within municipalities can also be implemented quickly where municipal ownership and advocacy can streamline permitting and procurement.

CHALLENGES: Projects that are located where there are multiple jurisdictions, such as involving more than one municipality and unincorporated Miami-Dade County can add time to coordination for design, programming, permitting and construction. Ownership of the project can become challenged. Municipal staff that participated in projects also noted that there is a desire that municipalities have access to a more streamlined permitting with County Departments in terms of queuing before review.

PROJECT JURISDITION & COORDINATION RECOMMENDATIONS:

1. Roadways within UMSA minimize cross-jurisdictional coordination and should be prioritized as projects that can have a shorter lead times for the quick-build methodology. This recommendation can be particularly effective in the non-urban areas where there are more opportunities in UMSA.

2. In the urban area, interviews and reviews find that where municipalities take ownership of projects it is greatly to the benefit of the process. Projects in a single municipal jurisdiction should be prioritized over projects that span multiple municipal jurisdictions.

PROJECT PROGRAMMING: OPPORTUNITES FOR REPLICATION AND CHALLENGES TO ADDRESS

This section focuses on the effect of project programming on implementation of SMART STEP projects. Improvements that can be "piggybacked" on existing roadway projects, such as green bike lanes or high-emphasis pedestrian crossings added to an existing resurfacing or roadway reconstruction project provide better opportunities for rapid and cost-effective implementation. In particular, the green bicycle lane, and high emphasis 4-way crosswalks in Doral were implemented this way after some initial delay. Projects where the procurement schedule does not fit into a larger program of capital improvements become challenged for quick implementation and are more likely delayed until implementation becomes a better fit into a jurisdiction's capital improvement program.

Further, projects that precede improvements under another capital improvement program or as part of development partnerships will lag, waiting for implementation through these programs and means. While waiting for future coordination is a potential benefit for a better project, within the focus of SMART STEP implementation it causes delay.

SMART STEP PROJECTS AND IMPACTS OF PROJECT PROGRAMMING

PROJECT	LOCATION	CONSTRUCTED WITH OTHER PROJECTS	IMPACT ON IMPLEMENTATION
URBAN MOBILTY TASK FORCE			
High Emphasis Crosswalk and create safe pedestrian access to Amelia Earhart Park	W 74th Place/W 3rd Court and Amelia Earhart Park west entrance at W 74th Place	Constructed as a Stand-Alone Project	There are no noted impacts to implementation as a stand-alone project.
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 74th Street and NW 107th Avenue	Constructed as a Coordinated Project	The City of Doral used an existing procurement contract and performing project on a work order basis; however, there were delays from this process also. The project was completed in coordination with roadway resurfacing.
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired	SW 6th Street and SW 8th Avenue (Miami Lighthouse for Blind)	Implemented as a Stand-Alone Project	There are no noted impacts to implementation as a stand-alone project.

PROJECT	LOCATION	CONSTRUCTED WITH OTHER PROJECTS	IMPACT ON IMPLEMENTATION
Pedestrian Scramble Crosswalk	Brickell Avenue and SE 8th Street Intersection	Implemented as a Stand-Alone Project	There are no noted impacts to implementation as a stand-alone project.
Pedestrian Scramble Crosswalk	SW 72nd Street and SW 57th Avenue	Not Complete Stand-Alone Project	The project has not been implemented due to coordination issues and the potential to coordinate with on and off-street improvements as part of a major abutting land development project. Part of the discussions with the development project which is in the City of South Miami are additional intersection improvements along Red Road to the north of this project that should be coordinated with the treatment for this intersection.
NON-URBAN MOBILITY TASK FORCE			
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 22nd Avenue and NW 157th Street	Constructed as a Coordinated Project	The City of Miami Gardens programmed this project to be constructed with a roadway resurfacing and sidewalk improvement project that was to the benefit of quick implementation.
Pedestrian Safety Connection between industrial park and Metrorail Station	Palmetto Metrorail Station	Constructed as a Stand-Alone Project	The project is complete but was delayed mostly for reasons due to coordination between jurisdiction, and not impacted by its stand-alone implementation.
High Emphasis 4-Way Crosswalks	SW 92nd Street and SW 122nd Avenue	Constructed as a Stand-Alone Project	There are no noted impacts to implementation as a stand-alone project.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 160th Street from SW 147th Court to SW 137th Avenue	Not Complete Stand-Alone Project	The project has not been implemented due to a combination of coordination, advocacy, and programming.

PROJECT	LOCATION	CONSTRUCTED WITH OTHER PROJECTS	IMPACT ON IMPLEMENTATION
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 142nd Avenue from SW 160th Street to SW 168th Street	Not Complete Stand-Alone Project	The project has not been implemented due to by a combination of coordination, advocacy, and programming delays.
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks	Palm Drive / SW 344th Street and the South Dade Transitway	Constructed as a Coordinated Project	The project is complete, and after an initial delay, it was coordinated with other South Dade Busway project work.

PROJECT PROGRAMMING LESSONS LEARNED:

OPPORTUNITIES: Projects that can be "piggybacked" on existing roadway projects, such as green bike lane projects or high-emphasis pedestrian crossings coordinated with an existing resurfacing or roadway reconstruction project to provide opportunities for more rapid and cost-effective implementation.

CHALLENGES: Projects where the procurement schedule does not fit into a larger program of capital improvements become challenged for quick implementation and are more likely delayed until implementation becomes a better fit into a jurisdiction's capital improvement program.

PROJECT PROGRAMMING RECOMMENDATIONS:

1. For projects that are within municipal jurisdictions, prioritize projects that fit into municipal capital improvement programs as a small add-ons, especially for projects that are scheduled to go into design within the year. Where possible, projects may be added past the design phase, if they do not significantly alter the design of the larger project.

2. Stand-alone projects do not need to be prioritized further back; however, they should be maintained on a separate track, with greater attention and coordination until programmed for construction.

PROJECT PERMITTING: OPPORTUNITES FOR REPLICATION AND CHALLENGES TO ADDRESS

This section focuses on the effect of project permitting on implementation of SMART STEP projects. Projects that minimize the number of permitting reviews create greater opportunities for quick implementation with minimized potential for design changes. Projects that affect utilities, drainage, and other potential review disciplines require additional time to implement and may have additional potentials for design modifications that can affect the outcome of the project.

SMART STEP PROJECTS AND IMPACTS OF PERMITTING

PROJECT	LOCATION	PERMITTING AGENCY	IMPACT ON IMPLEMENTATION
URBAN MOBILTY TASK FORCE			
High Emphasis Crosswalk and create safe pedestrian access to Amelia Earhart Park	W 74th Place/W 3rd Court and Amelia Earhart Park Entrance at W 74th Place	DTPW	**SUPPORTIVE** County staff did not note permitting to be a barrier to implementation of this project.
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 74th Street and NW 107th Avenue	DTPW	**SUPPORTIVE** City staff noted that while permitting was not a barrier, there is a desire for streamlined permitting for municipal projects regarding queue time before review.
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired	SW 6th Street and SW 8th Avenue (Miami Lighthouse for the Blind)	FDOT	**SUPPORTIVE** The project is unique and did not have a typical permitting requirement. DTPW staff, City of Miami staff and FDOT were highly coordinated to assure the success of this model project.
Pedestrian Scramble Crosswalk	Brickell Avenue and SE 8th Street Intersection	FDOT, DTPW	**SUPPORTIVE** The project is a proof-of-concept for the urbanized Miami Dade area. Subsequent projects can be modeled on the experiences here as documented in the "*Post Implementation Evaluation of the Scramble Crosswalk*" report, dated August 2022.
Pedestrian Scramble Crosswalk	SW 72nd Street and SW 57th Avenue	DTPW	**NOT APPLICABLE** The project has not been implemented nor permitted.
NON-URBAN MOBILITY TASK FORCE			
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 22nd Avenue and NW 157th Street	DTPW	**SUPPORTIVE** City staff noted that while permitting was not a barrier, there is a desire for streamlined permitting for municipal projects regarding queue time before review.

PROJECT	LOCATION	PERMITING AGENCY	IMPACT ON IMPLEMENTATION
Pedestrian Safety Connection between industrial park and Metrorail Station	Palmetto Metrorail Station	DTPW	**SUPPORTIVE** County staff not the City did not note permitting to be a barrier to implementation of this project.
High Emphasis 4-Way Crosswalks	SW 92nd Street and SW 122nd Avenue	DTPW	**SUPPORTIVE** County staff did not note permitting to be a barrier to implementation of this project.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 160th Street from SW 147th Court to SW 137th Avenue	DTPW	**NOT APPLICABLE** The project has not been implemented nor permitted.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 142nd Avenue from SW 160th Street to SW 168th Street	DTPW	**NOT APPLICABLE** The project has not been implemented nor permitted.
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks	Palm Drive / SW 344th Street and South Dade Transitway	FDOT, DTPW	**SUPPORTIVE** County staff did not note permitting to be a barrier to implementation of this project.

PROJECT PERMITTING LESSONS LEARNED:

OPPORTUNITIES: Projects that minimize the number of permitting reviews create greater opportunities for quick implementation with minimized potential for design changes.
The recommendations from the design section to develop a design manual will support more efficient permitting.

CHALLENGES: Project that affect utilities, drainage, and other potential review disciplines require additional time to be implemented and may have additional potentials for design modifications that can affect the outcome of the project.

PROJECT PERMITTING RECOMMENDATIONS:

1. A guideline was recommended in the design section to support efficient design and permitting. The manual would not be intended to reinvent, but to create a single reference point comprised of accepted designs for different pedestrian and bicycle projects in urban and non-urban environments. In addition to reviewing accepted engineering standards and criteria and applying them to typical situations in Miami Dade County, the guideline would be reviewed and have input from permitting agencies. The purpose of the design manual is to benefit quick-build projects to have shorter design and permitting times and costs.

2. Along with a guideline that provides pre-accepted and permittable SMART STEP project design types, and the subsequent potential for expedited review, the TPO would work with permitting agencies toward a separate queue for review, providing for faster permitting for the municipal and UMSA projects.

PROJECT EVALUATION: OPPORTUNITES FOR REPLICATION AND CHALLENGES TO ADDRESS

Objective metrics are an essential part for the SMART STEP projects to make adjustments to the project design or future project replications. Objective measurements are also critically important for demonstrating success and high benefit-cost ratios to continue program funding. This section focuses on the effect of project evaluation methods toward implementation of SMART STEP projects.

Depending on the type of project, before and after evaluation of the project is required, with time required for the reporting, particularly beforehand where the additional time delays implementation. SMART STEP projects are all related to pedestrian and bicycle facilities. Current evaluation uses increase in utilization or decreases in accidents both of which require long lead time and may not produce useful results.

- **Utilization:** For quantitatively evaluating utilization, Pedestrian Level-of-Service (PLOS) or Bicycle Level-of-Service (BLOS) require pedestrian and bicycle counts where, in all except the most-dense urban environments, produce very low numerical values that take time and may lack statistical strength. Measures of impacts where vehicular traffic throughput is affected, require traffic counts (lane, direction and/or turning movements) involving long lead times for before and after evaluation.
- **Safety:** More than utilization, safety data typically produces very low statistical values for single locations where values in the range of 0 and 1 are not significant for analysis. Evaluation of these metrics requires the use of safety data that is collected annually and counts data for which the utilization of an improvement may take some time for people to adjust patterns.

Level of Transportation Stress (LTS) is now an accepted methodology and as a measure of effectiveness is based on existing environmental and built infrastructure conditions and can be evaluated up front. It is a measure of perceived safety and comfort, and as such is of greater primacy when encouraging first and last mile trips to transit.

SMART STEP PROJECTS & IMPACTS OF EVALUATION MEASURES OF EFFECTIVENESS (MOE)

PROJECT	LOCATION	MOE's	IMPACT ON IMPLEMENTATION
URBAN MOBILTY TASK FORCE			
High Emphasis Crosswalk and create safe pedestrian access to Amelia Earhart Park	W 74th Place/W 3rd Court and Amelia Earhart Park west entrance at West 74th Place	Before and after pedestrian utilization. Before and after pedestrian accident counts.	**NOT SUPPORTIVE** Pedestrian accident counts are 0 for Years 2019, 2020, and 2021. Since statistics are too low for evaluation, using counts for review require significant lead time before project implementation.
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 74th Street and NW 107th Avenue	Before and after pedestrian and bicycle counts. Before and after ped/bike accident counts.	**NOT SUPPORTIVE** Evaluations using counts are numerically too low for where there is no bike lane and require significant lead time before project implementation
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired	SW 6th Street and SW 8th Avenue (Miami Lighthouse for the Blind)	Before and after pedestrian counts. Before and after pedestrian accident counts.	**NOT APPLICABLE** The project is unique in addressing the needs of a special population and counts are not applicable.
Pedestrian Scramble Crosswalk	Brickell Avenue and SE 8th Street Intersection	Before and after pedestrian counts. Before and after pedestrian accident counts.	**REDESIGN MOE CRITERIA** Pedestrian accident counts are 2 for Years 2019, 2020, and 2021. Evaluations using pedestrian counts require significant lead time before project implementation. The actual utilization of the crosswalk may not be affected, as the improvement aims for comfort and lowering of pedestrian stress.
Pedestrian Scramble Crosswalk	SW 72nd Street and SW 57th Avenue	Before and after pedestrian counts. Before and after pedestrian accident counts.	**NOT APPLICABLE REDESIGN MOE CRITERIA FOR EXSITING CONDITION FOR FUTURE PROJECT** The project has not been implemented, and no initial counts have been performed for existing conditions.

PROJECT	LOCATION	MOE's	IMPACT ON IMPLEMENTATION
NON-URBAN MOBILITY TASK FORCE			
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 22nd Avenue and NW 157th Street	Before and after pedestrian & bicycle counts. Before and after ped/bike accident counts.	**NOT SUPPORTIVE** Pedestrian accident counts are 0 for Years 2019, 2020, and 2021. Statistics are too low for evaluation
Pedestrian Safety Connection between industrial park and Metrorail Station	Palmetto Metrorail Station	Before and after pedestrian counts.	**NOT APPLICABLE** Pedestrian before counts were not taken as the path was a "desire line" natural wear path in the grass through a fence opening. However, in future projects, "desire line" paths can be evaluated as done in the TPO's *Bicycle and Pedestrian Data Collection Update* in 2018.
High Emphasis 4-Way Crosswalks	SW 92nd Street and SW 122nd Avenue	Before and after pedestrian counts. Before and after pedestrian accident counts	**NOT SUPPORTIVE** Pedestrian accident counts are 0 for Years 2019, 2020, and 2021. Since statistics are too low for evaluation, using pedestrian counts for review require significant lead time before project implementation. The actual utilization of the crosswalk may not be affected, as the improvement aims for comfort and lowering of pedestrian stress.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 160th Street from SW 147th Court to SW 137th Avenue	Before and after bicycle counts and bicycle accident counts.	**NOT APPLICABLE REDESIGN MOE CRITERIA FOR EXSITING CONDITION FOR FUTURE IMPLEMENTATION** The project has not been implemented, and no initial counts have been performed for existing conditions.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 142nd Avenue from SW 160th Street to SW 168th Street	Before and after bicycle counts and bicycle accident counts.	**NOT APPLICABLE REDESIGN MOE CRITERIA FOR EXSITING CONDITION FOR FUTURE IMPLEMENTATION** The project has not been implemented, and no initial counts have been performed for existing conditions.
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks	Palm Drive / SW 344th Street and South Dade Transitway	Before and after pedestrian and bicycle counts. Before and after ped/bike accident counts.	**NOT APPLICABLE REDESIGN MOE CRITERIA FOR EXSITING CONDITION FOR FUTURE IMPLEMENTATION** Initial counts have not been taken.

PROJECT EVALUATION LESSONS LEARNED:

OPPORTUNITIES: Depending on the type of project, before and after evaluation of the project is required with time required for the reporting, particularly beforehand where the additional time delays implementation. SMART STEP projects are almost exclusively related to pedestrian and bicycle facilities. Evaluations using Pedestrian Level-of-Service (PLOS), Bicycle Level-of-Service (BLOS), and Level of Transportation Stress (LTS) are based on existing environmental and built infrastructure conditions and can be evaluated without long periods of time, and low-value statistics. Further, they place emphasis on pedestrian and bicyclist comfort and perception of safety as well as actual safety in a before-the-fact context, both of which are more related to user satisfaction than the necessarily after-the-fact accident data. User comfort and perception of safety is also of greater primacy when encouraging first-and-last-mile trips to transit and is therefore more relevant to the purposes of the SMART STEP.

CHALLENGES: Current measures of effectiveness are utilization and safety; however, evaluation of these metrics requires the use of safety data that is collected annually and counts data for which the utilization of an improvement may take some time for people to adjust patterns. Measures of impacts where vehicular traffic throughput is affected, require traffic counts (lane, direction and/or turning movements) that require long lead times for before and after evaluation.

- **Utilization:** Evaluations using Pedestrian Level-of-Service (PLOS) and Bicycle Level-of-Service (BLOS) require pedestrian and bicycle counts where, in all except the most-dense urban environments, produce very low numerical values that take time and often lack statistical rigor. Measures of impacts where vehicular traffic throughput is affected, require traffic counts (lane, direction and/or turning movements) that require long lead times for before and after evaluation.
- **Safety:** More than utilization, safety data typically produces very low statistical values for single locations, where values in the range of 0 and 1 are not significant for analysis. Evaluation of these metrics requires the use of safety data that is collected annually and counts data for which the utilization of an improvement may take some time for people to adjust patterns

DATA COLLECTION: The findings regarding the inefficacy of utilization and safety data counts on an individual project basis were determined early in the evaluation process. It was agreed, that although originally part of the scope, the data collection would not yield useful data points on all except the Brickell Avenue / SE 8th Street scramble intersection, and this part of the effort was not continued. Future evaluations will be according to the recommendations below.

PROJECT EVALUATION RECOMMENDATIONS:

1. Identify project priorities and potential for effectiveness by using the methodologies as appropriate: 1) Pedestrian Level-of-Service (PLOS), 2) Bicycle Level-of-Service (BLOS), and 3) Level of Transportation Stress (LTS). LTS should be considered for all pedestrian and bike projects as it is a before-the-fact MOE based on existing environmental conditions.

Pedestrian Level of Transportation Stress (LTS)

The County's pedestrian network is defined by its inventory of pedestrian facilities, specifically the network of sidewalks, paths, shared streets where appropriate, and crossing facilities; however, the pedestrian infrastructure is greatly underutilized because of the lack of safe, comfortable, and convenient continuous paths. Past research has demonstrated that Americans have varying levels of tolerance for traffic stress, which is a combination of perceived danger and other stressors (e.g., noise, exhaust fumes) associated with walking close to and crossing automobile traffic. While a small fraction of the population will tolerate walking along an unbuffered sidewalk with heavy or fast traffic, a large majority is "traffic-intolerant," willing to tolerate only a small degree of traffic stress. There are a few schemes to classify streets according to the stress they impose on pedestrians. The Level of Transportation Stress (LTS) methodology classifies road segments by one of four levels of pedestrians:

- LTS 1, generally suitable for children under the age of ten who are trained to safely cross street.
- LTS 2, the level that will be tolerated by the mainstream adult population.
- LTS 3, the level tolerated by who can be characterized as confident but still prefers better facilities.
- LTS 4 is uncomfortable for most able-bodied adults.

The inputs for evaluating Pedestrian LTS are listed below, and all can be evaluated before-the-fact.

- Presence of a sidewalk
- Posted vehicular speeds
- Number of adjacent vehicular lanes
- Vehicle volumes (Annual Average Daily Traffic)
- Sidewalk buffer from closest vehicle travel lane
- Sidewalk width

Bicycle Level of Transportation Stress (LTS)

The County's bicycle network is defined by its inventory of facilities, specifically the network of bicycle lanes, buffered bike lanes, off-street multi-use paths, shared-rights-of-way (sharrow), and bicycle intersection or other crossing facilities. The bicycle infrastructure is often greatly underutilized because of the lack of safe, comfortable and convenient continuous paths. The LTS methodology for bicyclists also classifies road segments by one of four levels:

- LTS 1 roadways are considered those suitable for all ages and abilities. The only roadways which would be classified as LTS 1 are those with separated or buffered bike lanes on low-speed, low-volume roads.
- LTS 2, the level that will be tolerated by the mainstream adult population but is not suitable for young children or elderly persons.
- LTS 3, the level tolerated by who can be characterized as confident but still prefer better facilities.
- LTS 4 roadways are those that those used primarily by able bodied adults either using the roadway out of necessity, with no other option to reach a destination, or who have a high tolerance for stress. These roadways are not suitable for adolescents, or those who are uncomfortable with high stress roadways when bicycling.

The inputs for evaluating Bicycle LTS are listed below, and all can be evaluated before-the-fact.

- Type of facility
- Posted vehicular speed
- Number of travel lanes
- Vehicle volumes (Annual Average Daily Traffic)

2. Continue to monitor crashes involving pedestrian and bicycle to evaluate effectiveness in aggregate for the entire program, not on an individual project level. The periodic County-wide updates that include approximately 70 locations with seasonality and peak periods considered. They are updated as part of the TPO's participation with the National Bicycle and Pedestrian Documentation Project (NBPDP).

3. Do not monitor effectiveness by before and after bicycle and pedestrian counts on an individual project basis; instead, include SMART STEP project locations in the "*Miami-Dade Bicycle and Pedestrian Data Collection Update*" as part of the "*National Bicycle and Pedestrian Data Collection Project*" (NBPDP) to evaluate the effect of the program on the overall network, and recognizing the value of completing gaps for a complete network as critically important to increasing bicycle and pedestrian mobility in Miami-Dade.

PROJECT COST, FUNDING, AND PROCUREMENT: 0PPORTUNITES FOR REPLICATION AND CHALLENGES TO ADDRESS

This section focuses on the effect of project cost, funding, and procurement on implementation of SMART STEP projects. Lower cost projects tend to have greater opportunity for quick implementation as the project scope is more likely to be implemented on a work order basis under general services contracts for the lead agency. General services contracts must have the contractual capacity for these projects, along with a dedicated funding sources, or a funding source that fits the needs. In other words, where there is a contract mechanism with funds dedicated to the program, and where the contract mechanism provides for approvals on a work-order basis, there are strong opportunities for success.

High-cost projects, particularly at levels that require state or federal funding, have additional requirements for planning, design and construction, and extensive reporting back to the funding agency. Where approval and procurement of the project must be made individually and where a dedicated funding source is not available, there are significant challenges that can delay or change the design and implementation of a project. It was noted, in particular with municipal project managers where public works staffing is often leaner, that there is a strong preference for funding mechanisms that do not leverage programs with extensive reporting requirements.

SMART STEP PROJECTS IMPACTS OF COST, FUNDING & PROCUREMENT

PROJECT	LOCATION	COST AND FUNDING	IMPACT ON IMPLEMENTATION
URBAN MOBILTY TASK FORCE			
High Emphasis Crosswalk and create safe pedestrian access to Amelia Earhart Park	W 74th Place/W 3rd Court and Amelia Earhart Park west entrance at W 74th Place	**$267,000** Local Funding	There are no noted cost impacts to implementation due to the cost.
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 74th Street and NW 107th Avenue	**$120,319** Local Funding	There are no noted cost impacts to implementation due to the cost.
Smartphone Assistance for Intersection Crossing for Visually & Hearing Impaired	SW 6th Street and SW 8th Avenue (Miami Lighthouse for the Blind)	**$45,350** State Funding	There are no noted cost impacts to implementation due to the cost.
Pedestrian Scramble Crosswalk	Brickell Avenue and SE 8th Street Intersection	**$126,344** State Funding	There are no noted cost impacts to implementation due to the cost.
Pedestrian Scramble Crosswalk	SW 72nd Street and SW 57th Avenue	**$268,500** Local Funding & LAP	The project is delayed coordinating with other improvements along Red Road and a major abutting development. Total and net project cost are likely to be affected.

PROJECT	LOCATION	COST AND FUNDING	IMPACT ON IMPLEMENTATION
NON-URBAN MOBILITY TASK FORCE			
Green Bicycle Lane, and High Emphasis 4-Way Crosswalks	NW 22nd Avenue and NW 157th Street	**$74,618** Local Funding	There are no noted cost impacts to implementation due to the cost.
Pedestrian Safety Connection between industrial park and Metrorail Station	Palmetto Metrorail Station	**$10,000** Local Funding	There are no noted cost impacts to implementation due to the cost.
High Emphasis 4-Way Crosswalks	SW 92nd Street and SW 122nd Avenue	**$23,177** Local Funding	There are no noted cost impacts to implementation due to the cost.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 160th Street from SW 147th Court to SW 137th Avenue	**$250,000** LAP (Federal)	The project has not been constructed due to coordination delays. Project cost is not an identified factor of the delay.
Green Bicycle Lanes at 9 traffic conflict points along the corridor	SW 142nd Avenue from SW 160th Street to SW 168th Street	**$180,000** LAP (Federal)	The project has not been constructed due to coordination delays. Project cost is not an identified factor of the delay.
Green Bicycle Lane, and High Emphasis 2-Way Crosswalks	Palm Drive/SW 344th Street and South Dade Transitway	**$46,273** LAP (Federal)	There are no noted cost impacts to implementation due to the cost.

PROJECT COST, PROCUREMENT AND FUNDING LESSONS LEARNED:

OPPORTUNITIES: Lower cost projects tend to have greater opportunity for quick implementation as the project work is more likely to be implemented on a work order basis under general services contracts for the lead agency. General services contracts must have the contractual capacity for these projects along with a dedicated funding sources, or a funding source that fits the needs. Where there is a contract mechanism with funds dedicated to the program that provides for approvals on a work-order basis, there are strong opportunities for success.

CHALLENGES: High-cost projects, particularly at levels that require state or federal funding, have additional requirements for planning, design, construction, and extensive reporting back to the funding agency. Where approval and procurement of the project must be made individually, and where a dedicated funding source is not available, there are significant challenges that can delay or change the trajectory of design and implementation of a project.

In particular, municipal staff noted that the need to use FDOT Local Agency Program (LAP) funds that are sourced from Federal-aid Highway Program allocations, require certification, reporting and additional requirements that significantly increase time to procure funds. In these jurisdictions, limited time and staff effort are available for follow-up reporting. The reporting

requirements and staff time increase the cost of the project. Based on municipal staff interviews, a project cost between $250,000 and $400,000 represents an upper limit.

PROJECT COST, PROCUREMENT AND FUNDING RECOMMENDATIONS:

1. Prioritize projects for the SMART STEP that have cost estimates below $250,000.

2. Develop the SMART STEP into an independent work program designed specifically to accomplish the complete streets and bicycle and pedestrian safety plan as a funded program. The TPO should recommend unified administration, coordinated eligibility of projects, coordinated prioritization of projects, and on-going funding source of the SMART STEP program, such that funding for individual projects is streamlined and projects that fit the criteria are shovel ready as possible.

SECTION 6: RECOMMENDATIONS

1) **Design:**
   - Prioritize simpler projects that rely on standardized designs with minimal mobilization and construction needs, such as pavement markings, signal operations, and pedestrian paths and ramps.
   - Project such as the scramble crosswalks are important to the SMART STEP, and the initial efforts require more design time and effort. Prioritize these projects early in the program as proof-of-concepts, with reporting and documentation necessary to standardize design and process criteria and streamline future implementations of the same project types.
   - As part of an effort to evolve the SMART STEP into a quick-build implementation of complete streets, a program guideline should be created to support efficient design and permitting. The guideline is not to reinvent, but to create a single reference compromised of accepted designs for pedestrians and bicycle projects in urban and non-urban environment.

2) **Location:**
   - Prioritize small-scale projects that are off-street on property owned by the County that are located along low-volume streets that are easier for quick-build and minimize maintenance of traffic issues.
   - Projects located along major roadways with high volumes have high benefit; however, programming should account for maintenance of traffic and coordination with other projects to minimize impact. These projects are an important part of the SMART STEP but should be programmed to expect more lead time.
   - Projects comprised of multiple sub-projects should also be programmed to expect more lead time.

3) **Jurisdiction:**
   - Roadways within UMSA minimize cross-jurisdictional coordination and should be prioritized as projects that can have a shorter lead time to quick-build. This recommendation is particularly effective for the NON-URBAN MOBILITY TASK FORCE where there are more opportunities in UMSA.
   - In the urban area, initial review notes that municipalities take ownership of projects to the benefit of the process. Projects in a single municipal jurisdiction should be prioritized over projects that span multiple municipalities, where coordination requires greater time.

4) **Programming:**
   - For projects that are within municipal jurisdictions, prioritize projects that fit into their capital improvement programs as a small add-on to, especially for projects that are scheduled to go into design within the year. Where possible, projects may be added past the design phase.

- Stand-alone projects do not need to be prioritized further back; however, they should be maintained on a separate track, with greater attention and coordination until programmed for construction.

5) **Permitting:**
   - A guideline was recommended in the design section to support efficient design and permitting. The guideline would not be intended to reinvent, but to create a single reference point comprised of accepted designs for different pedestrian and bicycle projects in urban and non-urban environments. In addition to providing accepted engineering standards and criteria for application to typical situations in Miami Dade County, the guideline would be reviewed and have input from permitting agencies to fast-track design, permitting and construction procedures, to benefit quick-build projects and their lead agencies.
   - Along with a guideline that provides pre-accepted and permittable SMART STEP project design types, and the subsequent potential for expedited review, the TPO would coordinate with permitting agencies toward a priority queue for review, providing for expedited permitting for the municipal and UMSA projects.

6) **Evaluation-Effectiveness/Safety:**
   - Identify project priorities and potential for effectiveness by using Pedestrian Level-of-Service (PLOS), Bicycle Level-of-Service (BLOS), and Level of Transportation Stress (LTS), with a focus beyond volumes of users to user experience. These evaluation methods are based on environmental and roadway criteria that are evaluated as part of project prioritization. Do not monitor effectiveness by before and after bicycle and pedestrian counts on an individual project basis; instead, include SMART STEP project locations in the "Miami-Dade Bicycle and Pedestrian Data Collection Update" as part of the "National Bicycle and Pedestrian Data Collection Project" (NBPDP) to evaluate the effect of the program on the overall network, and recognizing the value of completing gaps for a complete network as critically important to increasing bicycle and pedestrian mobility in Miami-Dade.
   - Continue to monitor safety improvement with vehicular / bike and vehicular / pedestrian accident reports to evaluate effectiveness in countywide aggregate for the URBAN MOBILITY TASK FORCE and NON-URBAN MOBILITY TASK FORCE, not at an individual project level with small statistical samples.

7) **Funding:**
   - Develop a dedicated funding and a 2-year cycle for calls for projects. In addition to funding, the program will provide project acceleration and technical support through Recommendations 1 through 15 to accomplish the complete streets and bicycle and pedestrian safety plan program programmatically. As this evaluation of the eleven initial SMART STEP projects progresses, the TPO will recommend the unified administration, eligibility of projects, prioritization of projects, and on-going funding sources of the SMART STEP.

8) **Education:**
   - Work with all agencies and potential lead municipalities to streamline and reduce study effort to align scopes of services with the recommendations above.

SECTION 7: INDIVIDUAL PROJECT FACT SHEETS

Each individual fact sheet highlights the improvements that were made in order to meet both accessibility and mobility needs at the specific locations. Among these projects, eight have already been completed, while three are scheduled for future implementation.

Completed Projects

- Hialeah – High Emphasis Crosswalk and pedestrian access to Amelia Earhart Park
- Doral – Green Bicycle Lane, and High Emphasis 4-Way Crosswalks
- Miami – Smartphone Assistance for Intersection Crossings for Visually and Hearing Impaired
- Miami – Pedestrian Scramble Crosswalk, Brickell
- Miami Gardens – Green Bicycle Lane, and High Emphasis 4-Way Crosswalks
- Medley – Pedestrian Safety Connection at Palmetto Metrorail Station
- South Dade (UMSA) – High Emphasis 4-Way Crosswalks
- Florida City – Green Bicycle Lanes and High Emphasis Crosswalk at South Dade Transitway

Pending Projects

- Coral Gables/South Miami – Pedestrian Scramble Crosswalk
- South Dade (UMSA) – Green Bicycle Lanes Along SW 160th Street
- South Dade (UMSA) – Green Bicycle Lanes Along SW 142nd Street

COMPLETED PROJECTS

Miami-Dade TPO Task Force

SMART Street Transportation Enhancements Program

SMART STEP

W 74TH PLACE AT W 3RD COURT & AMELIA EARHART PARK ENTRANCE - HIALEAH, FL

TPO TASK FORCE MISSION

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PROJECT LOCATION A

W 74th Place at W 3rd Court, Hialeah, FL

PROJECT LOCATION B

Amelia Earhart Park Entrance, Hialeah, FL

PROJECT OVERVIEW

The objective at these two locations was to enhance and prioritize pedestrian mobility along the corridor into Amelia Earhart Park. The improvements at "Location A" were made to the main crosswalk at the intersection of W 3 Court. The improvements at "Location B" include the installation of a new pedestrian access gate and age-friendly enhancements at the entrance to Amelia Earhart Park. In addition, hazardous conditions caused by illegal dumping have been addressed. This project was completed in December 2022.

ESTIMATED PROJECT COSTS

LOCATION A	LOCATION B
$5,000	$262,000

MIAMI-DADE COUNTY

SMART STEP

SUMMARY OF IMPROVEMENTS

- Crosswalk pavement marking improvements

SUMMARY OF IMPROVEMENTS

- Age-friendly pedestrian enhancements
- Pedestrian access to Amelia Earhart Park

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NW 74TH STREET & NW 107TH AVENUE – DORAL, FL

TPO TASK FORCE MISSION

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PROJECT LOCATION

NW 74th Street and NW 107th Avenue – Doral, FL

PROJECT OVERVIEW

The objective at this project location was to enhance bicycle/ pedestrian movement as part of the connection to a dedicated path. This includes a special emphasis crosswalk in addition to green bike lanes along NW 74 Street. The project was completed in December 2022.

PROJECT COST

$120,319

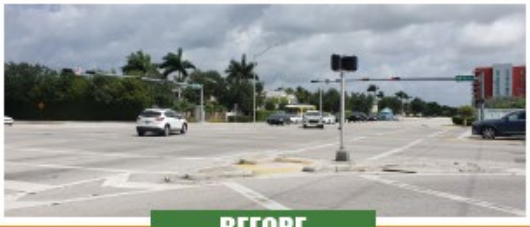
DORAL FLORIDA

SMART STEP

NW 74TH STREET & NW 107TH AVENUE PROJECT ENHANCEMENTS

SUMMARY OF IMPROVEMENTS

- Improvements to the bicycle/ pedestrian crossing
- Adding green colored bike lanes to the east leg of the intersection on both sides of the roadway



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SMART Street Transportation Enhancements Program

SMART STEP

SW 6TH STREET & SW 8TH AVENUE (LIGHTHOUSE FOR THE BLIND) – MIAMI, FL

TPO TASK FORCE MISSION

The Miami-Dade Transportation Planning Organization (TPO) Urban & Non-Urban Mobility Task Forces were created to focus on addressing bicycle and pedestrian mobility challenges in Miami-Dade County. As a result, the **SMART Street Transportation Enhancements Program (STEP)** was created to facilitate interagency coordination, innovation, and accelerated implementation of pedestrian and bicycle improvement projects that increase connectivity and enhance safety. The Miami-Dade TPO is working collaboratively with the Miami-Dade County Department of Transportation and Public Works (DTPW), Florida Department of Transportation District Six (FDOT D6), Miami-Dade County Parks, Recreation and Open Spaces (PROS), and municipalities to implement these SMART STEP projects countywide.

PROJECT LOCATION

SW 6th Street and SW 8th Avenue (Lighthouse for the Blind) – Miami, FL

PROJECT OVERVIEW

The objective at this Urban Task Force project location is to increase resources for the visually and hearing impaired. Through the implementation of the Polara PedApp smartphone application, the enhancements implemented at this location will grant these stakeholders the opportunity to use their smartphones to assist them with crossing the intersection. The app includes several benefits that will make it easier for them to navigate through the corridor. This project was completed in February 2022.

PROJECT COST

$45,350

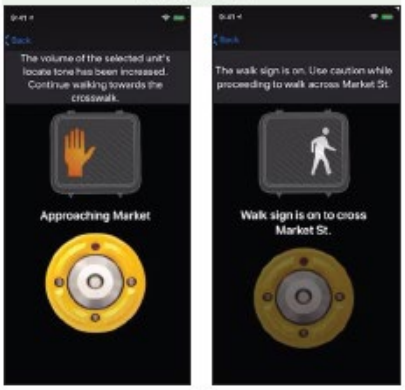
FDOT

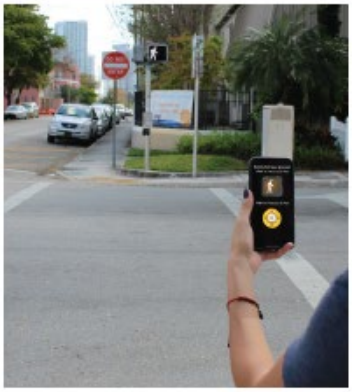
SMART STEP

SUMMARY OF IMPROVEMENTS

- Adding the Polara PedApp smartphone application for the visually impaired will provide the following benefits:
  - Assist with identifying upcoming crossings
  - Make it possible to select the direction of crossing through app as they approach it
  - Visually sounds and vibrates on personal device to alert of walk sign
  - Offers a contactless option to activating a pedestrian signal
  - Allows those with both visual and hearing impairments to more easily navigate the intersection

POLARA PEDAPP SMARTPHONE APPLICATION





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SE 8TH STREET & BRICKELL AVENUE INTERSECTION – MIAMI, FL

TPO TASK FORCE MISSION

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PROJECT LOCATION

SE 8th Street and Brickell Avenue Intersection – Miami, FL

PROJECT OVERVIEW

The objective at this project location was to enhance and prioritize pedestrian mobility. This project includes a "pedestrian scramble" cross-walk at the intersection and a "blank out" electronic sign displaying specific instructions to motorists. This project was completed in August 2022.

FINAL PROJECT COST

$126,344

FDOT

TPO

SMART STEP

SE 8TH STREET AND BRICKELL AVENUE PEDESTRIAN ENHANCEMENTS

SUMMARY OF IMPROVEMENTS

- Implementation of Pedestrian Scramble Crosswalk

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NW 157TH STREET & NW 22ND AVENUE – MIAMI GARDENS, FL

TPO TASK FORCE MISSION

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PROJECT LOCATION

NW 157th Street (Bunche Park Drive) and NW 22nd Avenue – Miami Gardens, FL

PROJECT OVERVIEW

The objective at this project location was to enhance and prioritize bicycle/pedestrian mobility. This project includes the installation of special emphasis crosswalks with green bicycle lanes at the conflict points within the intersections. The project was completed in March 2022.

PROJECT COST

$74,618

MIAMI-DADE COUNTY

SMART STEP

NW 157TH STREET AND NW 22ND AVENUE BICYCLE AND PEDESTRIAN ENHANCEMENTS

SUMMARY OF IMPROVEMENTS

- Improvements for pedestrian crossing
- Implement green colored bicycle lanes at the intersection

BEFORE

AFTER

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PALMETTO METRORAIL STATION (NORTH SIDE TOWARDS NW 79TH AVENUE) – MEDLEY, FL

TPO TASK FORCE MISSION

The Miami-Dade Transportation Planning Organization (TPO) Urban & Non-Urban Mobility Task Forces were created to focus on addressing bicycle and pedestrian mobility challenges in Miami-Dade County. As a result, the **SMART Street Transportation Enhancements Program (STEP)** was created to facilitate interagency coordination, innovation, and accelerated implementation of pedestrian and bicycle improvement projects that increase connectivity and enhance safety. The Miami-Dade TPO is working collaboratively with the Miami-Dade County Department of Transportation and Public Works (DTPW), Florida Department of Transportation District Six (FDOT D6), Miami-Dade County Parks, Recreation and Open Spaces (PROS), and municipalities to implement these SMART STEP projects countywide.

PROJECT LOCATION

Palmetto Metrorail Station (north side towards NW 79th Avenue) Medley, FL

PROJECT OVERVIEW

The objective at this project location is to provide pedestrian safety connectivity. Improvements were made from the Palmetto Metrorail Station to the adjacent industrial park, in an effort to provide a safe walkway for users. The project was completed in April 2023.

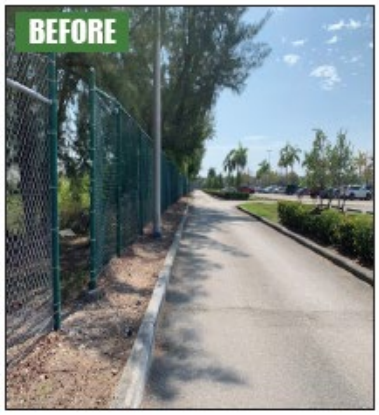
PROJECT COST

$10,000

MIAMI-DADE COUNTY

SMART STEP

PALMETTO METRORAIL STATION (NORTH SIDE TOWARDS NW 79TH AVENUE)



SUMMARY OF IMPROVEMENTS

- Provide a pedestrian transit connection from the Palmetto Metrorail Station to the industrial park located north of the station

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SMART STEP

SW 92ND STREET & SW 122ND AVENUE – UMSA, FL

TPO TASK FORCE MISSION

The Miami-Dade Transportation Planning Organization (TPO) Urban & Non-Urban Mobility Task Forces were created to focus on addressing bicycle and pedestrian mobility challenges in Miami-Dade County. As a result, the **SMART Street Transportation Enhancements Program (STEP)** was created to facilitate interagency coordination, innovation, and accelerated implementation of pedestrian and bicycle improvement projects that increase connectivity and enhance safety. The Miami-Dade TPO is working collaboratively with the Miami-Dade County Department of Transportation and Public Works (DTPW), Florida Department of Transportation District Six (FDOT D6), Miami-Dade County Parks, Recreation and Open Spaces (PROS), and municipalities to implement these SMART STEP projects countywide.

PROJECT LOCATION

SW 92nd Street & SW 122nd Avenue – UMSA, FL

PROJECT OVERVIEW

The objective at this project location is to enhance and prioritize pedestrian mobility. This project includes the installation of a pedestrian crossing on all four sides of the intersection. The project was completed in October 2021.

FINAL PROJECT COST

$23,177

MIAMI-DADE COUNTY

SMART STEP

SW 92ND STREET & SW 122ND AVENUE – UMSA, FL

SUMMARY OF IMPROVEMENTS

- Improvement for pedestrian crossing
- New installation/upgrade of existing ramps at all corners of the intersection

BEFORE

AFTER

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SMART STEP

PALM DRIVE/SW 344TH STREET & SOUTH DADE TRANSITWAY – FLORIDA CITY, FL

TPO TASK FORCE MISSION

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PROJECT LOCATION

Palm Drive/ SW 344th Street and South Dade TransitWay – Florida City, FL

PROJECT OVERVIEW

The objective at this project location is to enhance and prioritize bicycle/pedestrian mobility. This project includes the new of high emphasis pedestrian crosswalks, and green colored cycle crossings. This project was completed in March 2023.

PROJECT COST

$46,273

FDOT

SMART STEP

PALM DRIVE/SW 344TH STREET & SOUTH DADE TRANSITWAY PEDESTRIAN ENHANCEMENTS

SUMMARY OF IMPROVEMENTS

- Implementing high emphasis pedestrian crosswalk pavement markings, and green colored bike crossing pavement markings

BEFORE

AFTER

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Miami-Dade Transportation Planning Organization

PENDING PROJECTS

Miami-Dade TPO Task Force

SMART Street Transportation Enhancements Program

SMART STEP

SW 72ND STREET & SW 57TH AVENUE – CORAL GABLES & SOUTH MIAMI, FL

TPO TASK FORCE MISSION

The Miami-Dade Transportation Planning Organization (TPO) Urban & Non-Urban Mobility Task Forces were created to focus on addressing bicycle and pedestrian mobility challenges in Miami-Dade County. As a result, the **SMART Street Transportation Enhancements Program (STEP)** was created to facilitate interagency coordination, innovation, and accelerated implementation of pedestrian and bicycle improvement projects that increase connectivity and enhance safety. The Miami-Dade TPO is working collaboratively with the Miami-Dade County Department of Transportation and Public Works (DTPW), Florida Department of Transportation District Six (FDOT D6), Miami-Dade County Parks, Recreation and Open Spaces (PROS), and municipalities to implement these SMART STEP projects countywide.

PROJECT LOCATION

SW 72nd Street and SW 57th Avenue – Coral Gables and South Miami, FL

PROJECT OVERVIEW

The objective at this project location is to enhance and prioritize pedestrian mobility. This project includes a "pedestrian scramble" cross-walk at the intersection that will give pedestrians more time to cross from several directions simultaneously.

ESTIMATED PROJECT COST

$268,500

MIAMI-DADE COUNTY

SMART STEP

SW 72ND STREET AND SW 57TH AVENUE PEDESTRIAN ENHANCEMENTS

SUMMARY OF IMPROVEMENTS

- Implementation of Pedestrian Scramble Crosswalk

FOR MORE INFORMATION, PLEASE CONTACT:
Kevin Walford – Project Manager
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305-375-2642

PLEASE VISIT OUR PROJECT WEBSITE FOR ADDITIONAL INFORMATION AND PROJECT UPDATES www.miamidadetpo.org/website_goeshere

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SMART Street Transportation Enhancements Program

SMART STEP

SW 160TH STREET FROM SW 147TH COURT TO SW 137TH AVENUE - UMSA, FL

TPO TASK FORCE MISSION

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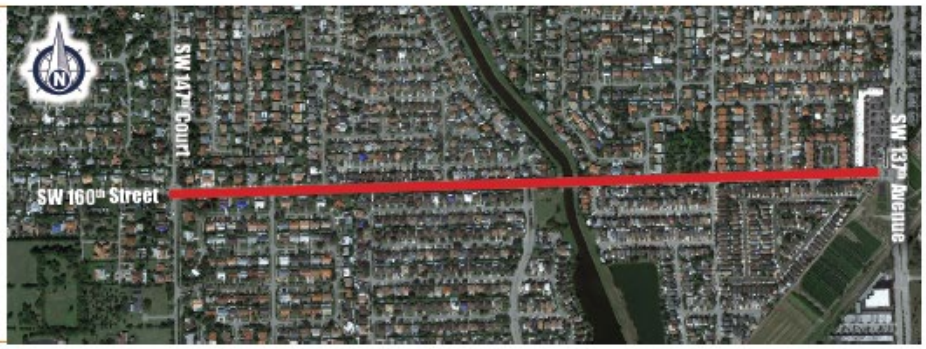
PROJECT LOCATION

SW 160th Street from SW 147th Court to SW 137th Avenue



PROJECT OVERVIEW

The objective at this project location is to enhance and prioritize bicycle mobility. This project includes the installation of special emphasis crosswalks with green bicycle lanes at the conflict points at the various intersections.

ESTIMATED PROJECT COST

$180,000

TPO Miami-Dade Transportation Planning Organization

SMART STEP

SW 160TH STREET FROM SW 147TH COURT TO SW 137TH AVENUE – CONFLICT POINTS

SUMMARY OF IMPROVEMENTS

- Implement green-colored bicycle lanes at traffic conflict points along the corridor

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SMART Street Transportation Enhancements Program

SMART STEP

SW 142ND AVENUE FROM SW 160TH STREET TO SW 168TH STREET – UMSA, FL

TPO TASK FORCE MISSION

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PROJECT LOCATION

SW 142nd Avenue from SW 160th Street to SW 168th Street – UMSA, FL

PROJECT OVERVIEW

The objective at this project location is to enhance and prioritize bicycle mobility. This project includes the installation of high emphasis crosswalks with green bicycle lanes at the conflict points at the various intersections.

ESTIMATED PROJECT COST

$250,000

TPO Miami-Dade Transportation Planning Organization

SMART STEP

SW 142ND AVENUE FROM SW 160TH STREET TO SW 168TH STREET- CONFLICT POINTS

SUMMARY OF IMPROVEMENTS

- Implement green-colored bicycle lanes at traffic conflict points along the corridor

BEFORE

AFTER

FOR MORE INFORMATION, PLEASE CONTACT:
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TPO

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