


South Dade Trail Corridor Connections Feasibility Study



EXECUTIVE SUMMARY

January | 2025

Introduction

The integration of bicycle and pedestrian trails within Miami-Dade County provides opportunities to not only enhance transportation options, but to create a healthier and more sustainable community.

The South Dade Trails Corridor Connections Feasibility Study ('Study') focuses on the interconnectivity of bicycle and pedestrian trails within the South Dade Transportation Planning Area of Miami-Dade County to establish pathways that seamlessly intertwine with the vibrant fabric of the region.

Utilizing strategic planning methodologies, the Study assesses the viability, benefits, and challenges of future trail connections throughout the existing and planned bicycle and pedestrian network within South Dade. The results of the Study establish a foundation for an interconnected network that encourages active lifestyles, promotes equity, broadens transportation options, and enriches the quality of life for residents and visitors alike.

Study Purpose

The purpose of this study is to conduct a feasibility analysis on potential bicycle/pedestrian trail corridor connections in the South Dade area of Miami-Dade County.

Study Background

At the Miami-Dade Transportation Planning Organization (TPO) Governing Board meeting of October 4, 2022, the Board requested the TPO Executive Director, through Resolution #38-2022, to prepare a scope of services and budget to conduct a feasibility study on trail corridor connections in South Dade.

Study Area

The study area is concentrated on trails within the Florida Greenways and Trails System (FGTS)¹ inside the South Dade Transportation Planning Area, which encompasses 233 square miles and is home to an estimated 450,000 residents. The study area includes the following municipalities: Florida City, Homestead, Cutler Bay, Palmetto Bay, Pinecrest, and Coral Gables.



¹ The Office of Greenways and Trails (OGT) within the Florida Department of Environmental Protection (FDEP) maintains the Florida Greenways and Trails System (FGTS), which is a statewide interconnected trail system.

Study Trails

In the South Dade area, there are seven (7) greenway trails, all of which are in various phases of development between the proposed, programmed, and existing stages. The trails are listed in the figure to the right and are currently classified within the FGTS as either Land Trail Priorities² or Land Trail Opportunities³. The CSX trail is listed twice below as portions of the trail are classified in either category. **Figure 1-1** displays the South Dade FGTS trails.



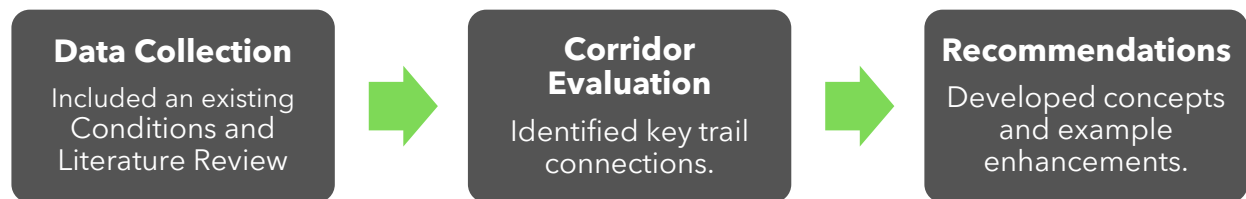
Study Coordination

Input throughout the study process was received through key stakeholders including CSX, the City of Homestead, the Florida Department of Transportation (FDOT), Miami-Dade County, the Miami-Dade TPO, and the Rails-to-Trails Conservancy. A project working group (PWG) was formed at the beginning of the study comprised of representatives from the stakeholders listed above. Three PWG meetings were held throughout the study process on the dates listed below. The minutes for each of the PWG meetings are included in **Appendix A**. In addition to PWG meetings, the study team coordinated with stakeholders as needed throughout the study process.

- **PWG Meeting 1:** January 18, 2023
- **PWG Meeting 2:** April 3, 2023
- **PWG Meeting 3:** October 28, 2024

Study Process

The study process consisted of three primary elements: data collection and literature review, a corridor evaluation, and recommendations.



² *Land Trail Priorities* are defined as the most important corridors and connections within the FGTS. The Land Trail Priority classification is a prerequisite for a project to be considered for state funds such as FDOT’s Shared-Use Nonmotorized (SUN) Trail Program.

³ *Land Trail Opportunities* are defined as corridors which represent existing, planned, and conceptual non-motorized multi-use trails.

Data Collection and Literature Review

The first step in the study process was to gather and review relevant data to be used during the study. This included compiling a library of GIS shapefiles and datasets relevant to trails development within the project area and reviewing recent planning documents and local programs.

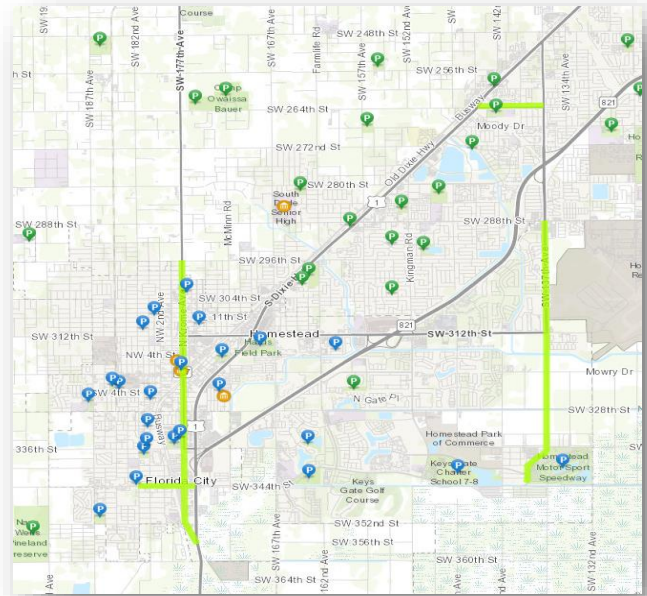
Data Collection

Data collected was utilized as background and supportive data throughout the study. Data sources include: Miami-Dade County Open Data Hub, Miami-Dade County Parks, Recreation, and Open Space (PROS) Department; Florida Department of Environmental Protection (FDEP), and interactive web applications.

Miami-Dade County Open Data Hub

The Miami-Dade County Open Data Hub served as a key source of data for this project. Several base datasets were retrieved for the project including:

- Bike Facilities
- Bike Comfort
- Bike Lane
- Bike Routes
- Bus Stop
- County Park Boundaries
- Zoning
- Land Use
- Metrorail Station
- Paved Path
- SMART Corridors
- Traffic Signals
- Municipalities
- National and State Park or Preserve



Screen capture from the Park and Culture Webapp

Other Data Sources

Additional datasets retrieved from other sources include:

- Greenway Development Status and Miami Loop from Miami-Dade County PROS
- Land Trail Priorities and Land Trail Opportunities from the FDEP

Interactive Web Applications

Furthermore, interactive web applications were used as reference including:

- [Park and Culture Webapp](#) and [Bike305](#) from Miami-Dade County
- FDOT D6 Bicycle Network interactive map ([BPTool](#))
- FDOT [ConnectPed Public](#)

Literature Review

A literature review was conducted of previous TPO bicycle and pedestrian studies along with current state and local programs. Information gathered from these sources was used to identify future programming of the seven identified trails. The documents reviewed are listed below in the table below. The table also indicates which of the seven identified trails is mentioned in the document. One-page summary sheets are provided for each document in the study final report.

Plan Title	Year	Biscayne-Everglades	Krome	South Dade	CSX	Black Creek	Mowry	Princeton
TPO Documents and Studies								
2045 Bike/Ped Master Plan	2019	X	X			X		
2045 Long Range Transportation Plan	2019	X	X	X	X	X		X
Bicycle and Pedestrian Data Collection Report	2018							
CSX Southwest Railroad Corridor Assessment	2023			X	X			
Miami-Dade County Vision Zero Plan	2018							
Public Easement Bicycle/ Pedestrian Network Plan	2018		X		X			
SMART Trails Master Plan	2019			X				X
SW 127th Avenue Connector Study	2017				X			
SW 152nd Street Mobility	2017					X		
TIP (2023-2027)	2022	X	X	X		X		
Current Programs								
Bike Friendly Miami-Dade	2017							
DTPW First Mile/Last Mile	2022			X		X		X
DTPW Vision Zero Implementation	2022							
FDEP OGT	2018	X	X	X	X	X	X	X
FDM - Other Facilities Chapters 222-224	2022							
FDOT Non-Motorized Traffic Monitoring Program	2018							
FDOT SUN-Trail Program	2022	X	X	X				
Other Documents								
CSX Public Projects Manual	2022							
FDOT D6 Bike Network Assessment	2022	X	X	X		X		
Homestead Parks Master Plan	2023	X			X			
PROS Greenways and Trails Prioritization Plan	2007	X						

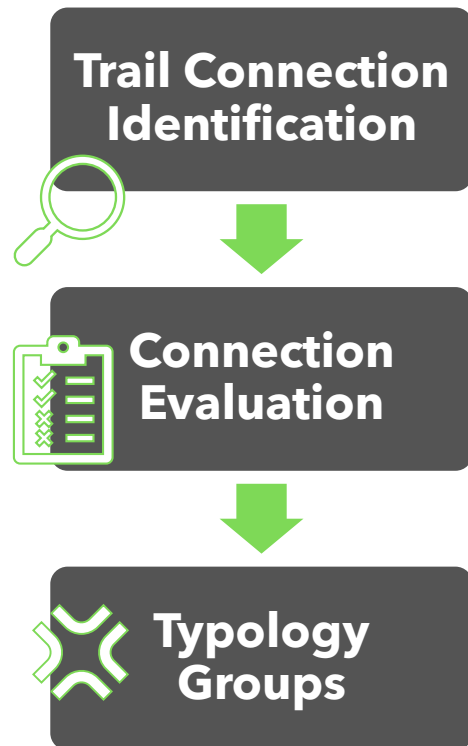
Corridor Evaluation

The second step in the study process was to conduct a corridor evaluation on the study trails. The corridor evaluation focused on areas in which the existing or planned trails intersected, forming trail connection opportunities. During this process, 18 trail connections were identified representing a variety of typologies across the study area.

These connections were then evaluated based on their capacity to improve the network as well as serve as pilot locations for future trail connection improvements that will improve the overall safety, visibility, and accessibility of the trail network.

The result of this process yielded four groups of trail emphasis areas and typologies to move forward into the next phase of the study, which develops recommendations that will enhance the non-motorized connectivity and safety for those emphasis areas.

The four emphasis areas and typologies including their locations listed are below. Each of the groups include two to four of the initial 18 connections. The groups are numbered from south to north and not by priority.



Group 1 - Florida City

The intersections of the South Dade Trail, Biscayne-Everglades Greenway, and the Krome Path along West Palm Drive.

Group 2 - Homestead Trail Confluence

The intersections of the South Dade Trail, Biscayne-Everglades Greenway, and the Krome Path along Mowry Drive.

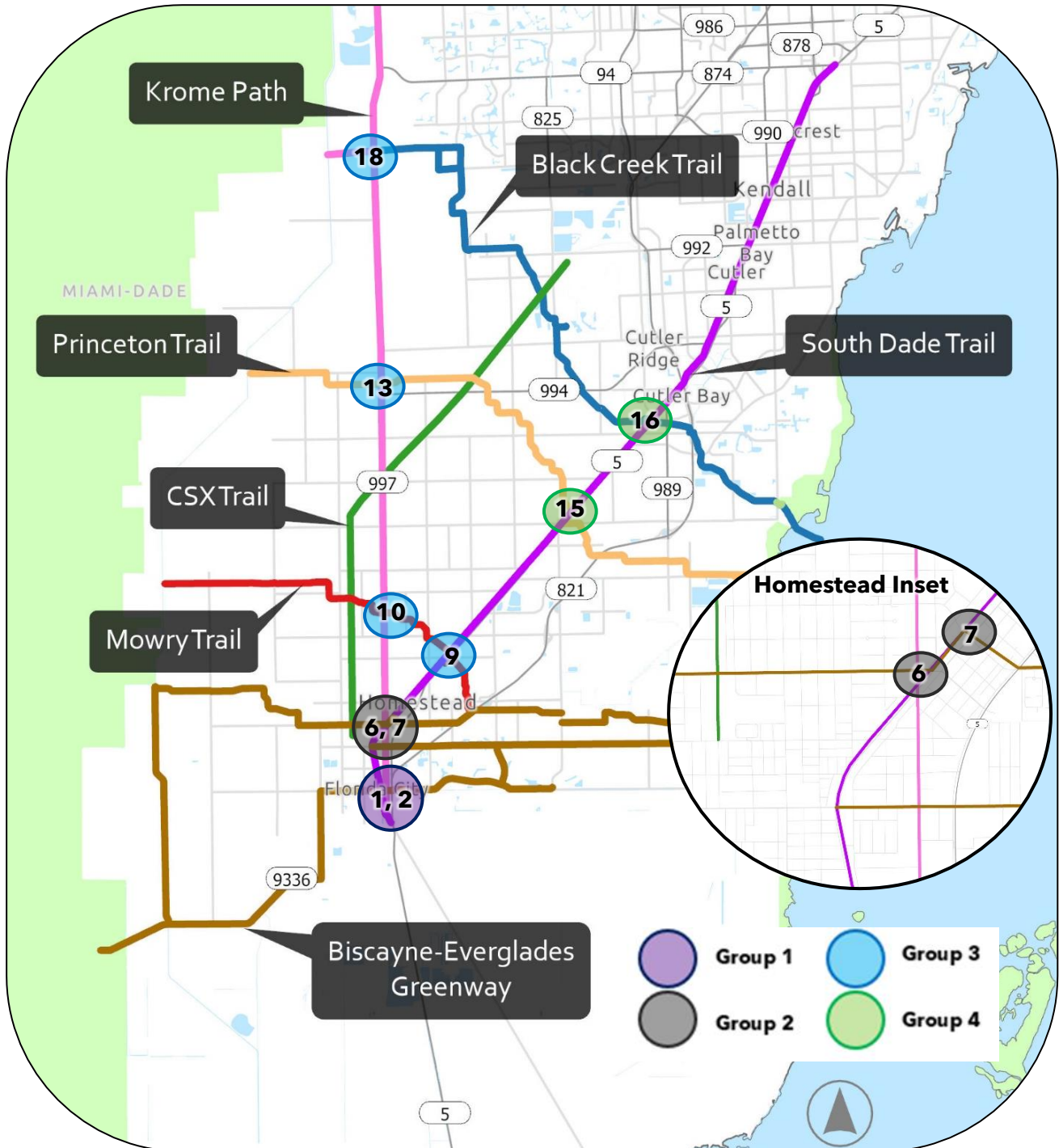
Group 3 - Canal Crossings

The intersections of the Krome Path with the Mowry, Princeton, and Black Creek canals and trails.

Group 4 - US 1 Commercial

The intersections of the South Dade Trail with Princeton and Black Creek trails along US 1.

Figure 1 Study Area and Trail Grouping



CSX Linear Park

In addition to the typology groups identified during the corridor evaluation, the potential CSX Linear Park through the City of Homestead was included as a focus area in this study. This focus area was included as a result of the findings of documents that were published after the start of this study, including the *CSX Railroad Corridor Assessment Final Report* published in November 2023 and the *City of Homestead Parks Master Plan*, in combination with meetings from CSX in 2024 regarding the feasibility of a linear park within their right-of-way.

- ◆ **CSX Railroad Corridor Assessment Final Report:** stated that CSX intends to maintain the option to implement passenger rail service within the corridor in the future.
- ◆ **Homestead Parks Master Plan:** Conceptualized obtaining CSX right-of-way to implement a linear park throughout the CSX corridor.

This linear trail would serve the South Dade region as a whole by providing a quality regional trail facility while linking currently disconnected neighborhoods and communities within the City of Homestead across the existing CSX right-of-way.

The study team merged the ideas conceptualized amongst the stakeholders in Summer 2024 to explore the feasibility of a rail-with-trail concept that would preserve the future passenger rail along the corridor *and* the linear park through the City of Homestead within the same right-of-way, or an interim use agreement for the corridor that would facilitate a linear park within the right-of-way until a passenger rail is implemented.

Figure 2 Proposed Linear Park Concept, City of Homestead



Source: Homestead Parks Master Plan, Figure 89

Recommendations

The final phase of the study process was to develop recommendations for each of the final groups and for the future of the CSX linear park. To accomplish this, a set of enhancements was developed for each group with the premise that the same type of enhancements could be applied to all of the trail connections within the group.

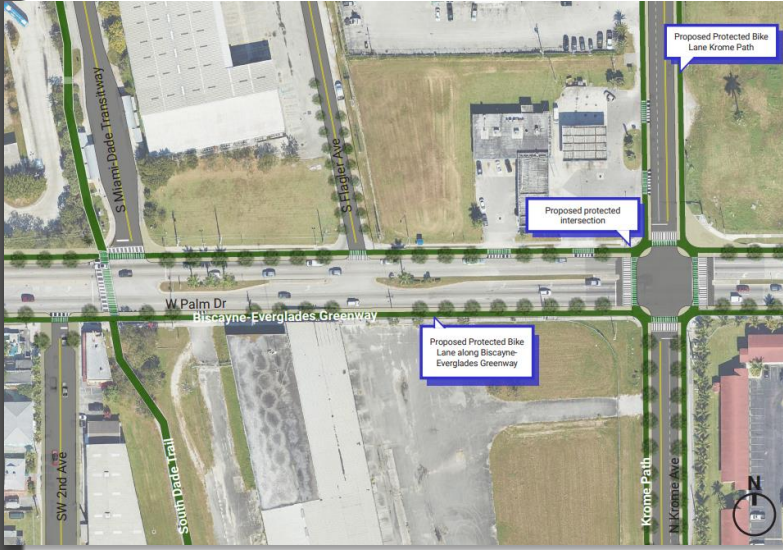
The recommendations were developed using best practice reference documents for bicycle, pedestrian, and trail infrastructure connection enhancements including documents from: **AASHTO, FDOT, FHWA, ITE's, NACTO**, and the **Rails-to-Trails Conservancy's (RTC)**.

Overall, the customized recommendations for each group were designed with scalability in mind, ensuring that the enhancements could be consistently implemented across trail connections within the group. The table below provides a summary of recommendations by typology group. Renderings for each group are provided in the final document.

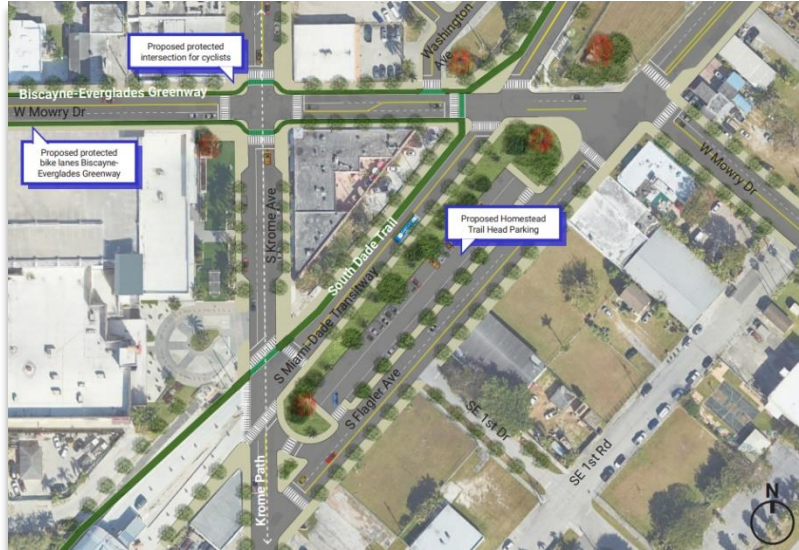
Enhancement Group	Enhancement	Group 1: Southern Terminus	Group 2: Homestead Confluence	Group 3: Canal Crossings	Group 4: US 1 Commercial
Protected Intersection Designs	Corner Refuge Islands	✓	✓		✓
	Setback Crossings	✓	✓		✓
	High Visibility Crosswalks	✓	✓	✓	✓
	Path Markings Through Intersection	✓	✓	✓	✓
	Green Painted Bike Lanes	✓	✓	✓	✓
	Pedestrian Refuge Islands	✓	✓	✓	✓
	Protected Bike Lanes	✓			
	Bike Lane/Path Transition	✓	✓	✓	✓
	Raised Intersections or Crossings	✓	✓	✓	✓
Traffic Signal Enhancements	Leading Pedestrian Intervals (LPIs)	✓	✓		✓
	Bicycle-Specific Traffic Signals	✓	✓	✓	✓
Lighting and Visibility	Enhanced Lighting	✓	✓	✓	✓
	In-Pavement Lighting Systems	✓	✓	✓	✓
Wayfinding	Trailhead Signage	✓	✓	✓	✓
	Directional Signage Along Trail	✓	✓	✓	✓
	Digital Integration	✓	✓	✓	✓
Trailhead Design	Parking Area	✓	✓		
	Restroom Facilities	✓	✓		
	Recreational Amenities	✓	✓		
	Environmental and Aesthetic	✓	✓		
Canal Crossings	New Bike/Ped Bridge			✓	
	Trail Underpass			✓	

Typology Group Renderings

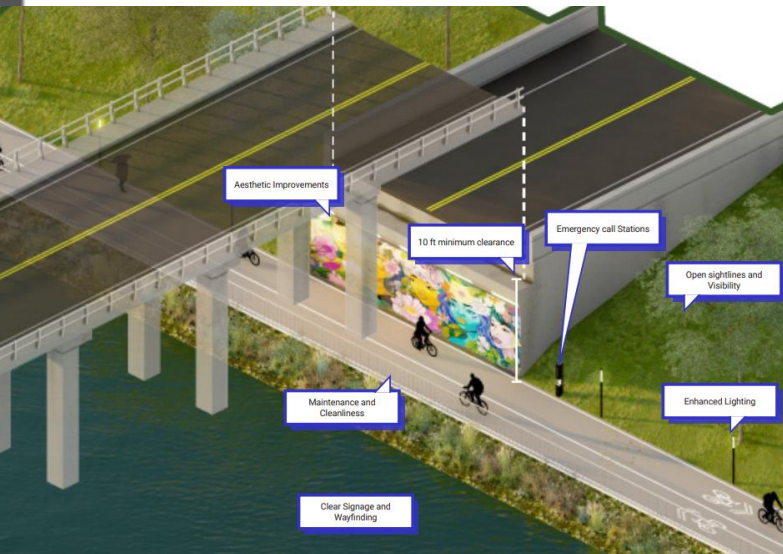
The images below represent some of the renderings that were developed for the typology groups. Full page images of the renderings, include before-and-after images are provided in the final report.



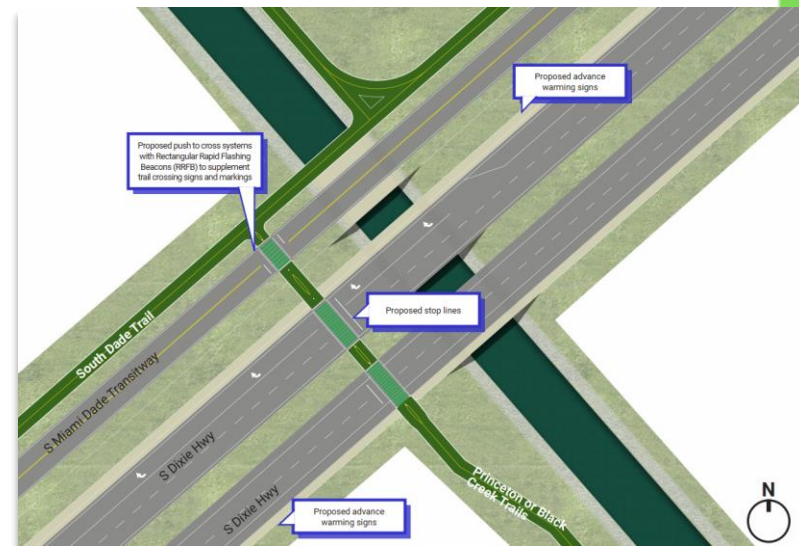
Group 1: Florida City/Southern Terminus Rendering



Group 2: Homestead Confluence Rendering



Group 3: Canal Crossing Rendering



Group 4: US 1/Busway Rendering

CSX Linear Trail Recommendations

The proposed alternatives for the CSX rail line through the City of Homestead focus on revitalizing the corridor while balancing transportation needs and community benefits. The proposed alternatives include: Rail-with-Trail, a linear park concept, trail relocation, improved sidewalk connections, and an enhanced maintenance agreement.

Rail with Trail

One key alternative is the rail-with-trail concept, which envisions a multi-use path running alongside the rail line, preserving the corridor for potential future passenger rail service. This approach would enhance mobility by providing safe, accessible spaces for pedestrians and bicycles without compromising the rail infrastructure.

Linear Park

Another alternative is a linear park concept detailed in the *Homestead Parks Master Plan*. This concept could be executed through either an interim agreement between CSX and the City of Homestead, or through an outright purchase of the corridor. This option would focus on transforming the existing rail line into a public green space, potentially with trails, landscaping, and recreational amenities.

Trail Relocation

A third alternative under consideration is relocating the trail to a parallel road, such as SW 187th/14th Avenue, instead of using the CSX rail corridor. This option would place the trail in an area that may be easier to develop and maintain, while still providing connections across the CSX corridor.

Improved Sidewalk Connections

A fourth and potential short-term alternative involves improving existing sidewalk and desire path connections across the currently underutilized CSX tracks. This option would focus on creating safer, more formalized pedestrian and bicycle crossings by upgrading informal pathways that have already emerged through community use.

Enhanced Maintenance Agreement

A final alternative is to negotiate an enhanced maintenance agreement with CSX to ensure better upkeep of the area surrounding the tracks. A formal agreement for CSX to regularly maintain the vegetation, remove litter, and address safety hazards would significantly improve the aesthetic and safety of the corridor, even without additional infrastructure.

All of these alternatives aim to enhance community connections across the CSX corridor, transforming a blighted and underutilized space into a valuable public asset. Each option offers distinct benefits, from preserving future rail service to creating immediate recreational opportunities, ensuring the revitalization of the corridor meets both transportation and community goals.



Frisco Trail in Arkansas with fencing, lighting, and narrow setbacks.
Image Source: [Rails with Trails: Best Practices and Lessons Learned](#).

