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Miami-Dade County Citizens' Independent Transportation Trust

COMPREHENSIVE
REPORT ON EXISTING
AND PROPOSED
BICYCLE/PEDESTRIAN
AND MICROMOBILITY
POLICIES, SERVICES,
AND INFRASTRUCTURE



Recommendations and Improvements for Existing Transit Hubs and First- and Last-Mile Connectivity



Task Work Order No. EVN0000308-02: First- and Last-Mile Bicycle-Pedestrian Mobility Improvements in Municipalities in Miami-Dade County

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Task Work Order No. EVN0000308-02: First- and Last-Mile Bicycle-Pedestrian Mobility Improvements in Municipalities in Miami-Dade County

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SECTION 1

Introduction



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1. Introduction

Miami-Dade County, through the Citizens Independent Transportation Trust (CITT), is exploring ways municipalities can contribute to the development of multimodal transportation systems by connecting trails, greenways, and pathways. These efforts aim to provide safe, sustainable, and accessible mobility options while improving first- and last-mile connections. This initiative supports the broader goals of the People's Transportation Plan (PTP), funded by a voter-approved half-cent sales tax since 2002¹, to enhance transportation infrastructure and services across the county.

Miami-Dade County's transit system is a vital component of our community's mobility, connecting residents and visitors to key destinations, such as universities, colleges, and major institutions. The existing network serves as the backbone of daily commutes and access to essential services and to major educational institutions. The **Comprehensive Report on Existing Transit Hubs and Higher Educational Institutions in Miami-Dade County** provides a comprehensive overview of the current state of transit mobility serving major institutions and countywide transit hubs. The document also provided an overview of ridership statistics and other key performance metrics.

This document, titled **Recommendations and Improvements for Existing Transit Hubs and First-and Last-Mile Connectivity**, provides a comprehensive analysis of strategies and actions aimed at improving multimodal transportation access for municipalities within Miami-Dade County. It focuses on enhancing infrastructure, optimizing connectivity, and fostering sustainable mobility solutions. The main objective is to facilitate seamless integration of walking, cycling, and other travel modes, enabling Miami-Dade County residents to conveniently access nearby transit stations, bus stops, and transportation hubs. By addressing key challenges and proposing targeted solutions countywide and for educational facilities, the document strives to empower communities to adopt more wideranging and efficient transit systems.

¹ History of the People's Transportation Plan - Miami-Dade County (miamidade.gov)

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SECTION 2

Existing Conditions



2. Existing Conditions

Providing first- and last-mile access is crucial, as transit usage drops by 90% when riders must walk over half a mile². In Miami-Dade's urban areas, more than half of the population resides farther than half a mile from high-quality transit. Implementing first- and last-mile solutions could significantly boost ridership among those living beyond this distance.

The Office of Citizens' Independent Transportation Trust (CITT) recognizes that first-and last-mile connectivity plays a pivotal role in the success of transit systems³. Despite representing a relatively small segment of the overall journey, it plays a significant role in shaping commuters' willingness to use public transit. Historically, "walking" has been the dominant method for covering these initial and final stretches.

However, advancements in technology over the past decade have introduced a variety of new alternatives, such as bike-sharing or scooter-sharing services. The concept of first- and last-mile, as illustrated in **Figure 2-1**, refers to the various transportation options available to bridge the gap between a commuter's starting point (i.e., their home) and the nearest transit station, as well as the journey from the station to their destination (i.e., their workplace).

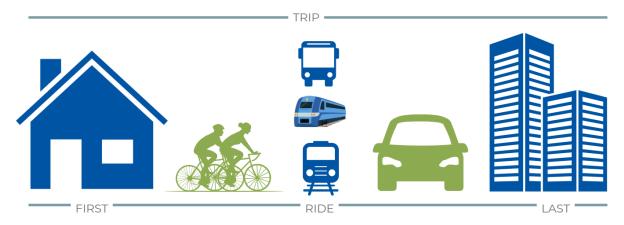


Figure 2- 1: First- and Last Mile Services

Municipalities could support first- and last-mile access through:

- ✓ Infrastructure: Building out a network of micromobility infrastructure, such as bicycle lanes as well as Public Right-of-Way Accessibility Guidelines (PROWAG) and Americans with Disabilities Act (ADA) accessible sidewalks to support first- and last-mile solutions,
- ✓ Service Provision: Operating shared micromobility and/or active transportation modes (e.g., shared bicycles, scooters) or micro-transit feeder services such as Freebee as well as services for older and disabled transit users, and

² New evidence on walking distances to transit stops: Identifying redundancies and gaps using variable service areas

³ First and Last Mile/Leg Connectivity and Shared Mobility

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✓ **Integration and Streamline**: Improving information and payment systems (e.g., bicycle availability and open payments) and recommending first- and last-mile planning/implementation for local jurisdictions nearby.

For all proposed improvements and recommendations, it is important that the CITT works continuously with the municipalities to first evaluate the state of bus stops and transit/rail stations for planning purposes and then provide rider information on accessibility. Overall, municipalities could address universal accessibility needs for bus stops that are owned and maintained by them. Addressing this accessibility and safety for the last mile is as important as providing bus stops and facilities that are accessible for the rider's well-being.

To determine the main areas where the highest potential of transit utilization and identification of first- and last-mile initiatives are, an analysis of land uses, population and employment density, pedestrian and bicycle infrastructure, and transit infrastructure per jurisdiction was conducted and summarized in the following sub-sections. Additionally, transit routes and micromobility options and initiatives were detailed and analyzed in the report the **Review of Municipal, County, State, and Federal First- and Last-Mile Initiatives Report**, which was completed in December 2024. Based on the information gathered, a higher emphasis should be given for first- and last-mile projects that next to transit hubs. These projects should have additional funding streams, adding flexibility to existing programs to enhance bike and pedestrian infrastructure.

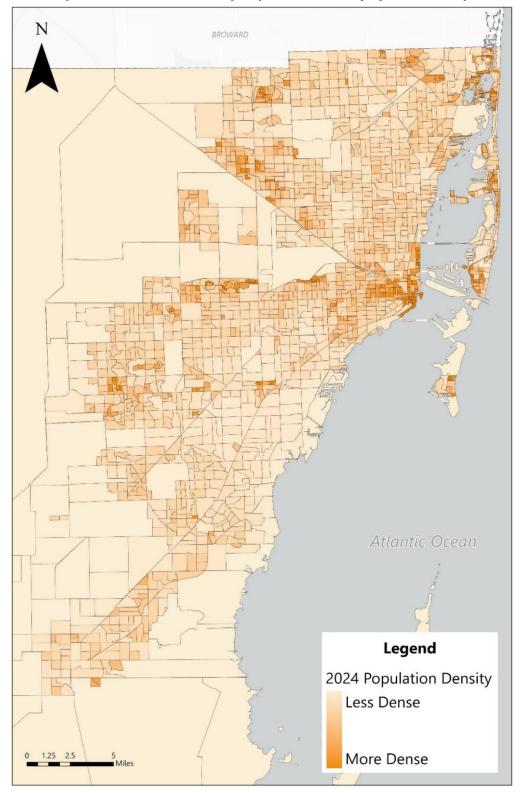
2.1 Population Density

Population density is a fundamental factor influencing transit accessibility and efficiency. Urban neighborhoods with higher densities are typically better served by traditional public transportation options, such as buses and rail systems, compared to suburban areas, where lower density makes it more challenging to provide frequent and widespread transit services. In suburban environments, alternative transit solutions—such as on-demand transportation, paratransit services, and microtransit—are often necessary to accommodate residents' mobility needs.

Two key demographic groups significantly impact transit demand: the aging population and immigrant communities. Older adults often require specialized transit services, such as paratransit or accessibility-focused infrastructure, while immigrants—many of whom may rely on public transit due to economic or licensing barriers—contribute to ridership demand. As density increases, the availability and efficiency of transit options must evolve, particularly through first- and last-mile solutions that enhance connectivity between transit hubs and surrounding neighborhoods.

Population Density and Transit Demand in Miami-Dade County

As illustrated in **Map 2-1**, population density varies across Miami-Dade County, influencing transit accessibility and infrastructure needs. Dense block group concentrations can be found in the northeast section of the county, including Aventura, Sunny Isles, and North Miami Beach. Similarly, the northwest area features high-density clusters near Hialeah and Hialeah Gardens. Miami's urban core—particularly Downtown and Brickell—exhibits the highest population density, reinforcing its role as a major transit hub. Additional pockets of density exist in the western portion of the county, particularly around Sweetwater and West Miami. By contrast, less densely populated areas, such as Unincorporated Miami-Dade, Palmetto Bay, and Homestead/Florida City, present unique transit challenges due to lower residential concentrations and wider geographic spread.



Map 2-1: Miami-Dade County Population Density by Block Groups

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Given the variations in population density, first- and last-mile recommendations should prioritize areas with higher density, where transit investments are likely to yield the greatest impact. Densely populated neighborhoods tend to be more pedestrian-friendly and feature zoning and land-use policies that support multimodal transportation options. These areas provide opportunities for enhancing transit accessibility through improved infrastructure, expanded service frequency, and better integration with pedestrian and bicycle networks. Consequently, proposed transit enhancements should be strategically concentrated in high-density regions of Miami-Dade County to optimize efficiency, ridership, and accessibility.

2.2 Employment

The economic landscape in Miami and nationwide plays a pivotal role in shaping both employment opportunities and transit demand. In South Florida, most public transit users are daily commuters, relying on the system for access to jobs primarily located in central downtown areas or designated employment hubs⁴. While these urban centers continue to attract a growing number of positions, suburban and exurban job locations present unique challenges for transit accessibility. Unlike densely concentrated employment hubs, suburban job centers tend to be widely dispersed, making it difficult to establish efficient transit networks that effectively serve workers in these areas. As a result, individuals in suburban regions often depend on personal vehicles, leading to reduced transit ridership.

Several additional factors contribute to evolving transit usage patterns, including shifting labor dynamics, increasing suburbanization, and ongoing industrial restructuring. Changes in work schedules, the decentralization of industries, and the expansion of suburban communities collectively influence commuting behaviors, underscoring the need for adaptable and responsive transit solutions. Without strategic planning, these trends could further exacerbate the reliance on private vehicles, limiting the role of public transit in South Florida's transportation landscape⁵.

- Industrial Restructuring: The transition from manufacturing-based economies to serviceoriented industries is driving employment into suburban and decentralized locations. Service
 sector jobs do not require co-location, meaning businesses can operate independently across
 various regions. As a result, workers are commuting to a broader range of locations, making it
 difficult for transit systems to accommodate their needs efficiently. However, income disparities
 caused by restructuring could increase transit ridership among low-income workers, who rely
 more heavily on public transit.
- Flexible Labor Force: After the COVID-19 pandemic, changes in work schedules and job locations have led to unpredictable commuting patterns. Unlike traditional 9-to-5 jobs, many workers now operate under flexible or nonstandard hours. Additionally, gig economy employment often requires individuals to travel between multiple locations, making conventional transit routes less viable. The inconsistency in work schedules further complicates transit planning, as demand fluctuates throughout the day rather than being concentrated in peak commuting hours.

⁴ Tri-Rail Ridership Continues to Show Signs of Growth In 2025

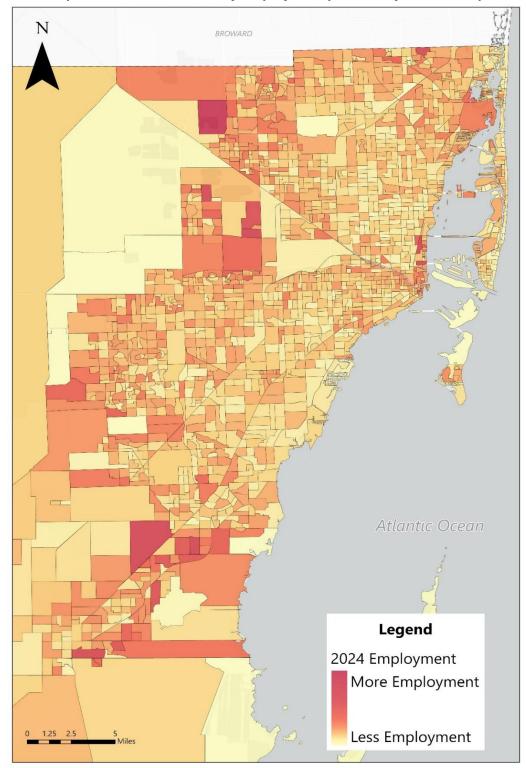
⁵ TCRP Report 28: Transit Markets of the Future: The Challenge of Change (Part A)

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- Work-from-Home and Telecommuting: Remote work has grown substantially, reducing the
 number of daily home-to-office commutes. While fewer commuters mean less congestion,
 transit ridership declines as fewer workers rely on public transportation. At the same time,
 telecommuters may still require transit for occasional travel, such as business meetings or
 coworking space access, but the overall decline in daily commuters affects transit revenue.
- Women's Labor Force Participation: More women are entering the workforce, increasing the number of potential transit users. However, their complex travel patterns—such as combining work, childcare, and household errands—make transit use less straightforward. Single parents and working mothers often need flexible travel options, which traditional transit systems may not provide. While the absolute number of women using transit may grow, the percentage of employed women relying on public transportation might decline due to time constraints and the necessity of multi-stop trips.

As depicted in **Map 2-2**, the distribution of the employed population varies across different regions of the County. The northeastern section, particularly areas such as Aventura, North Miami, and North Miami Beach, exhibits a higher concentration of employed residents. Similarly, the northwestern portion, encompassing the Hialeah and Hialeah Gardens area, also reflects a significant number of employed individuals. Clusters of employment can be observed in the Doral and Sweetwater area, highlighting another key employment hub.

However, in contrast to the population density map, the southern portion of the County shows a relatively higher concentration of employed residents, suggesting distinct commuting patterns and economic activity in that area. Finally, consistent with the population density map, Downtown Miami and Brickell continue to demonstrate a strong prevalence of employed individuals, reinforcing their status as central employment districts within the County. These concentrated employment zones play a crucial role in shaping transit demand and commuting behaviors.



Map 2-2: Miami-Dade County Employed Population by Block Group

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2.3 Land Uses

Transit ridership is highly influenced by land use patterns and population density, as these factors determine the feasibility and efficiency of public transportation systems. As outlined in the Population Density subsection, areas with higher density—typically urban cores—exhibit greater transit demand compared to suburban or lower-density regions. High-density urban environments are often characterized by mixed-use developments, increased floor-area ratios, and integrated multimodal transportation infrastructure, all of which contribute to higher transit accessibility and utilization.

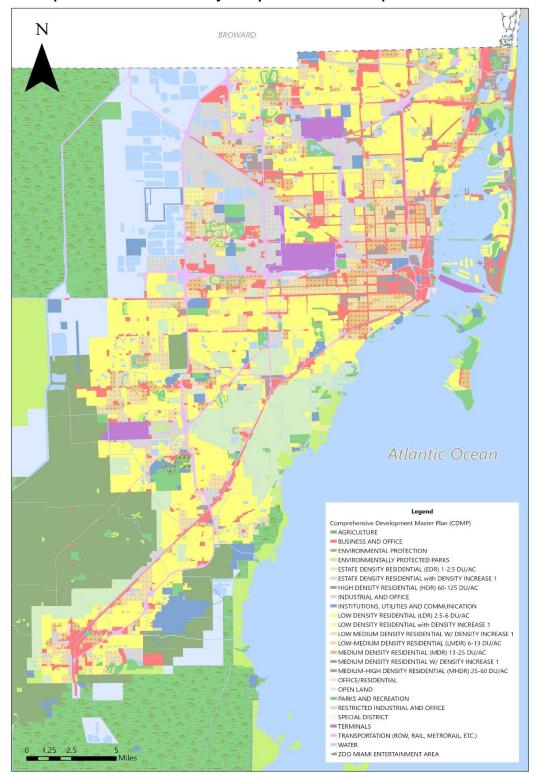
Conversely, suburbanization and low-density residential developments present challenges for traditional transit operations due to dispersed land use and lower population density. Suburban areas generally lack the critical mass required for frequent and cost-effective transit services, making fixed-route public transportation less viable. However, demographic shifts, including growing population concentrations in aging suburbs and the emergence of suburban employment hubs, are expanding transit serviceable areas beyond historical urban centers⁶. These trends offer transit agencies new opportunities to accommodate suburban commuters by optimizing service routes and integrating adaptive mobility solutions.

In response to these evolving land use dynamics, the Miami-Dade County's Bus Rapid Transit (BRT) project, known as the South Corridor, aims to enhance regional mobility by establishing high-performance bus corridors along dedicated lanes, such as the South Dade Transitway. This initiative is expected to catalyze transit-oriented development (TOD) within the corridor, leading to increased density and land-use adjustments that support multimodal access. The introduction of BRT infrastructure, including advanced bus stations with real-time service updates, signal prioritization, and improved pedestrian connectivity, will reinforce transit demand while shaping future urban development patterns to align with transit-centric growth models.

Map 2-3 illustrates the distribution of designated land use categories across the County. Most parcels fall within the low-density residential classification (2.1–5 units per acre) and medium-density residential classification (5.01–12 units per acre), indicating widespread suburban development patterns. Commercial land uses are predominantly situated along major transportation corridors, reflecting their role in supporting mobility and economic activity. Additionally, a significant concentration of industrial land use parcels is observed in the northwest portion of the County, reinforcing its status as a hub for manufacturing, logistics, and other industrial operations.

Higher-density residential development (exceeding 12 units per acre) is largely concentrated on the east side of the County, specifically within the boundaries of the City of Miami. These areas accommodate a mix of multifamily housing, mixed-use developments, and transit-oriented communities (TOC), contributing to the region's urban growth and accessibility. Future land use was created for each of the municipalities in Miami-Dade County, and are included in **Appendix A.**

⁵ TCRP Report 28: Transit Markets of the Future: The Challenge of Change (Part A)



Map 2-3: Miami Dade County Comprehensive Development Master Plan

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2.4 Existing Bicycle and Pedestrian Infrastructure

Bicycle infrastructure plays a crucial role in first- and last-mile best practices, particularly in urban mobility and public transit accessibility. Bicycle infrastructure provides an affordable, efficient, and environmentally friendly transportation option. It particularly benefits individuals who may not have access to a car or who seek alternatives to congestion-heavy areas. According to NACTO's *Urban Bikeway Design Guide (Third Edition)*⁷, transit stops between bikeways must effectively manage several interactions between different street users to remain safe, efficient, and accessible, including interactions between:

- The transit vehicle and other traffic, including people on bikes and other motor vehicles,
- Boarding and alighting transit passengers and people on bikes,
- Boarding and alighting transit passengers and motor vehicles, and
- Boarding and alighting transit passengers and transit vehicles.

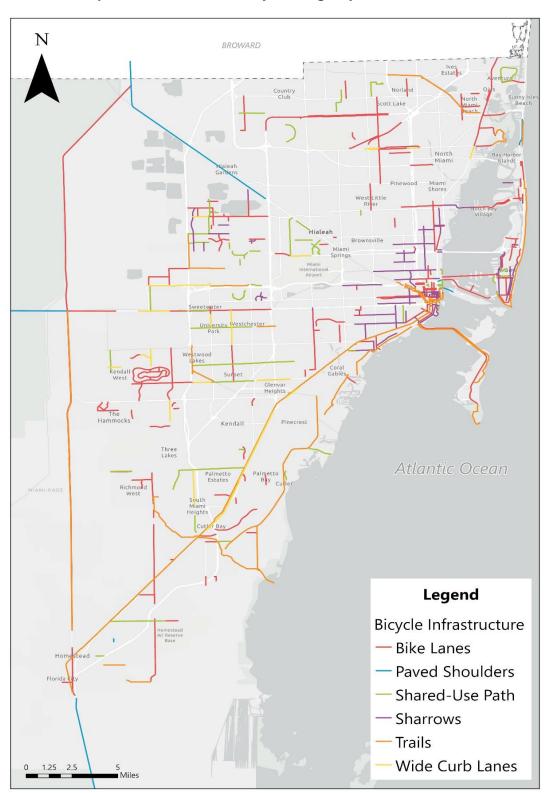
The design and environment of transit stops and platforms are influenced by various contextual factors, including their specific location along a roadway, the spatial orientation of station elements, and the surrounding land use. As Miami-Dade County continues expanding its bicycle infrastructure, these considerations will play a crucial role in ensuring seamless multimodal connectivity between cyclists and transit services.

Bicycle infrastructure that facilitates access to Metrobus stops includes a variety of features designed to enhance safety and convenience for cyclists, as observed in **Map 2-4**. These elements range from dedicated separated bike lanes, paved shoulders, shared-use paths, and recreational trails to wide curb lanes that allow for safe cycling adjacent to vehicular traffic. The availability and extent of bicycle infrastructure vary significantly across municipalities. For instance, Hialeah and Miami Shores currently lack designated bicycle facilities, limiting cyclists' ability to connect efficiently to transit stops. In contrast, Miami Beach boasts an extensive network of bikeway routes, designated bicycle lanes, and paved pathways, offering a well-integrated system that promotes bicycle use as a first- and last-mile solution. A comprehensive mapping of bicycle infrastructure by jurisdiction is provided in **Appendix A**.

Similarly, pedestrian infrastructure plays a vital role in ensuring accessibility to Metrobus stops. Sidewalk networks managed by both Miami-Dade County and the Florida Department of Transportation (FDOT) contribute to the overall walkability of transit areas, as shown in **Map 2-5**. However, the density and quality of pedestrian facilities vary considerably between jurisdictions. Suburban municipalities tend to have fewer continuous sidewalks, which may pose challenges for pedestrian mobility and transit accessibility. Conversely, urban areas feature a more connected pedestrian network, providing safer and more convenient access to public transit. An in-depth mapping of pedestrian infrastructure across jurisdictions is included in **Appendix A**.

-

⁷ <u>Urban Bikeway Design Guide - NACTO</u>



Map 2-4: Miami-Dade County Existing Bicycle Infrastructure

N BROWARD Legend Sidewalk Infrastructure (MDC) Sidewalk Infrastructure (FDOT)

Map 2-5: Miami-Dade County Existing Pedestrian Infrastructure

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SECTION 3

Recommendation and Improvement Toolkits



3 Recommendation and Improvement Toolkits

Miami-Dade County, through CITT, is actively exploring innovative strategies for municipalities to contribute to the development of a comprehensive multimodal transportation system. Central to this vision is the integration of trails, greenways, and pathways that connect seamlessly with transit stations, enabling easier, safer, and more attractive first- and last-mile access for transit users.

Recognizing that most transit users in Miami-Dade County reach transit stations and bus stops primarily by walking or using personal mobility devices, this Recommendations and Improvements Toolkit is designed as an actionable, easy-to-use resource to identify and overcome key barriers to these first- and last-mile connections. Unlike conventional approaches that often focus solely on roadway design, this toolkit centers on the real needs and experiences of transit users, ensuring that solutions are rider-centric, practical, and responsive to diverse mobility patterns.

The methodology underpinning this toolbox involves a multi-faceted analysis designed to pinpoint priority areas and tailor recommendations that maximize ridership potential and connectivity improvements. Key analytical components considered include:

- Land Use Patterns: The toolbox evaluated the diversity and intensity of land uses in municipalities—including residential, commercial, institutional, and industrial areas—around transit hubs. Understanding these patterns provides insight into where trips originate and terminate, helping to identify corridors and zones with the highest potential for transit use and first- and last-mile improvements.
- Population and Employment Density: High-density residential and employment areas were
 mapped to highlight neighborhoods and districts where first- and last-mile enhancements will
 serve the greatest number of transit users. This density-driven approach ensures investments are
 focused on corridors likely to experience the most substantial transit ridership gains.
- Pedestrian and Bicycle Infrastructure: The quality, safety, and connectivity of existing non-motorized networks have been assessed. Sidewalk conditions, crosswalk safety, bike lanes, and accommodations for personal mobility devices have been inventoried to identify general infrastructure gaps and potential opportunities for upgrades.
- Transit Infrastructure and Accessibility: The location and frequency of transit stops, stations, and service availability are reviewed to understand current accessibility. This includes an evaluation of how well transit hubs are integrated with surrounding neighborhoods and how easy it is for users to navigate from origin points to transit entry points.

This improvement toolbox report offers a comprehensive menu of recommendations designed to address the identified gaps and challenges in first and last mile connections. This menu presents a range of strategies—from infrastructure enhancements and safety improvements to policy and programmatic initiatives—that municipalities and agencies can select, and tailor based on their unique local contexts and priorities. By providing flexible options, the toolbox empowers stakeholders to implement practical, rider-focused solutions that improve accessibility, safety, and overall user experience at transit stations.

While the recommendations presented in this recommendation toolbox report for improvements are broad in scope, each subsection includes targeted examples that build upon findings from the existing conditions of analysis. These examples are designed to guide in identifying practical, site-

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specific strategies for enhancing connectivity, accessibility, and user experience at existing transit hubs. By grounding general recommendations in real-world observations, the toolkit aims to bridge the gap between high-level planning goals and on-the-ground implementation.

3.1 Mass Transit Service, Metrorail Stations and Transit Hubs Toolkit

Metrorail stations serve as essential transit hubs within the Miami-Dade County transportation network by acting as centralized points where multiple transit modes intersect. These stations provide key transfer opportunities between Metrorail lines, Metrobus routes, municipal trolley routes, and other mobility options such as personal mobility devices, bikeways, and pedestrian pathways. By facilitating easy and efficient connections among these services, Metrorail stations enhance overall network accessibility and support seamless, multimodal travel for riders. Additionally, many Metrorail stations are strategically located near major employment centers, residential areas, and commercial districts, further reinforcing their role as vital nodes that connect people to destinations across the county.

Land uses surrounding the Miami Metrorail systems are diverse and reflect a mix of urban intensities. Near Downtown and Brickell stations, land use is characterized by high-density residential buildings, commercial office buildings, and mixed-use developments with retail and dining. Along stations such as Coconut Grove, Vizcaya, and Douglas Road, the corridor transitions to medium-density residential neighborhoods, civic institutions, and parkland, including TOD nodes.

In the northern and southern segments, particularly near Hialeah and South Miami, station land uses include light industrial zones, strip commercial centers, and low-rise multifamily housing with emerging infill redevelopment and proximity to stations. The areas surrounding the Metrorail also include major civic and healthcare anchors such as Jackson Memorial Hospital and the University of Miami, which generates significant transit ridership and influences adjacent land uses. Retail plazas and big-box stores are common near suburban stations like Dadeland North and Dadeland South, where park-and-ride facilities support car-to-rail commuting patterns. Several corridors, especially near Allapattah and Brownsville, exhibit lower-income transit-dependent communities, often with underutilized parcels and redevelopment potential. Recent zoning changes and incentives have encouraged TOD particularly in areas like Coconut Grove and South Miami, fostering walkable, higher-density communities with improved public realm design. Industrial and logistics land uses dominate near stations like Earlington Heights, Okeechobee, Palmetto, and Santa Clara, reflecting the city's transportation and employment geography.

Effective first- and last-mile connections are critical to maximizing the accessibility and usability of these transit hubs. By improving pedestrian, bicycle, and micromobility linkages between diverse land uses and Metrorail stations, transit ridership can be increased, and the overall transit experience enhanced. Tailoring first/last mile solutions to the varying urban intensities—from dense downtown cores to medium-density residential areas—ensures that transit users can safely and conveniently reach stations, supporting sustainable and equitable mobility across the corridor.

3.1.1 Tool #1: Bus Passenger Shelter Program for Metrobus Stops in Miami-Dade County

Most of the bus shelters in Miami-Dade County are located on corridors served by Miami-Dade Transit's Metrobus service. The agency has four (4) types of bus shelters, described as followed and illustrated in **Figure 3-1**:

- Cantilever Shelter: For sidewalks with 5 to 6 feet of right-of-way.
- Slim Shelter: For sidewalks with 8 feet of right-of-way.
- Shelter with Advertising Panel: Requires 11 feet of right-of-way.
- Shelter without Advertising Panel: Also requires 11 feet of right-of-way.

Figure 3- 1: Types of Miami-Dade Transit Bus Shelters





Cantilever shelter

Slim shelter





Shelter with an advertising panel

Shelter without an advertising panel

Source: Miami-Dade Bus Passenger Shelter Program

The installation of these facilities is performed through the Bus Passenger Shelter Program, which is a public initiative designed to enhance the comfort, safety, and accessibility of transit riders by installing and maintaining bus shelters across the county. Managed by the Miami-Dade County Department of Transportation and Public Works (DTPW), the program partners with municipalities and private contractors to provide well-designed shelters at bus stops serving high ridership or areas with significant pedestrian activity.

This program is a testament to Miami-Dade County's commitment to creating a more welcoming and accessible transit system. The initiative focuses on ensuring that all bus passenger shelters—

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whether newly installed or existing—along with trash containers and bicycle racks, are consistently well-maintained, safe, clean, and brightly illuminated, all while showcasing an attractive and modern design. As part of this effort, the program will refurbish the 1,031 existing shelters within the Metrobus service area countywide. These updates will align older shelters with the sleek, comfortable design of the newly installed ones, fostering a cohesive and enhanced experience for all riders.

As individual municipalities move forward with prioritizing locations to enhance bus passenger amenities, it is crucial to coordinate closely with Miami-Dade DTPW to ensure that selected locations within particular municipal boundaries are integrated into the county's established bus shelter and amenity program. This collaboration will help ensure that bus shelters and amenities meet the following objectives:

- Scalability: Bus shelters and related amenities should be scaled appropriately to fit the context
 of each municipality's urban design, street widths, and pedestrian volumes. Coordination with
 Miami-Dade DTPW will ensure that the shelters are tailored to match the spatial constraints of
 localities, the street typology or context classification of corridors, and the needs of transit riders.
- **Contextual Design:** The design should be mindful of the surrounding environment, such as neighborhoods, businesses, and community centers. The goal is to ensure the shelter serves the transit riders without disrupting the local aesthetic or urban character of communities.
- ADA Compliance: Shelters should comply with accessibility guidelines to provide barrier-free
 access for all users, including individuals with disabilities. Ensuring smooth pedestrian flow to
 and from bus stops should be a top priority.
- Effective Placement: Bus shelters should be positioned to maintain pedestrian pathways and allow for easy transitions between walking, cycling, and bus use. This will minimize obstacles and ensure that pedestrians, especially those with mobility challenges, can move freely without having to navigate around obstructions.
- **Dedicated Space for Bikes and Micromobility Modes:** To maintain safety and efficiency for all users, bus shelters should be designed to allow cyclists and micromobility devices (e.g., escooters) to pass freely without obstruction. Consideration should be given to creating dedicated bike lanes or passing zones around the shelter when feasible.
- Clear Separation of Modes: A key aspect of this coordination is ensuring that the design
 minimizes potential conflicts between buses, pedestrians, cyclists, and other forms of
 micromobility. For example, bus shelters should be positioned and designed in a way that clearly
 separates these modes when feasible, while allowing for seamless transitions at key transit
 nodes.
- Seamless Multimodal Travel: Coordination with Miami-Dade DTPW ensures that the selected locations align with the county's vision for multimodal connectivity. This means ensuring that bus shelters, bike lanes, pedestrian pathways, and transit hubs are interconnected to create a seamless experience for users switching between different modes of transportation (e.g., walking to the bus, riding a bike to a Metrorail or Tri-Rail train station, etc.).
- Connectivity with Transit Networks: The selected locations should also be designed to connect
 with other transit options, such as Metrorail, Metromover, Tri-Rail, Brightline, Amtrak, or future
 transit systems. Proper integration can make it easier for riders to switch between modes without
 excessive walking or time delays.

3.1.2 Tool #2: National Association of City Transportation Officials (NACTO) Bus Stop Placement Guidance

Far-Side Bus Stops

According to the *FDOT Accessing Transit: Version IV Design Handbook for Florida Bus Passenger Facilities*, far side bus stops are the most prevalent and favored by roadway designers. This preference is due to the enhanced safety they offer, as pedestrians can cross behind the bus rather than in front of it, reducing the risk of crashes. Additionally, on multi-lane roads, far side stops improve the visibility of pedestrians for drivers who are waiting at traffic signals. Far-side stops minimize conflicts with turning vehicles and provide improved safety for pedestrians. Pedestrians crossing at the intersection are more visible to drivers because the bus does not block sightlines as it would at near-side stops. At far-side stops, traffic signals may create natural gaps in traffic, helping buses merge back in more easily. Far-side bus stops also improve bus efficiency as having the stops on the far-side avoids stopping twice (light plus stop) and enhances signal coordination.

Some of the disadvantages of far-side bus stops is that they could result in traffic queue into intersections. They may also obscure sight distance for crossing vehicles. Far-side bus stops may also increase the number of rear-end accidents associated with a bus stopping unexpectedly, particularly if the bus was already stopped at a red light.

In Miami-Dade County, approximately 2,905 bus stops out of 6,503 (or approximately 45% of all bus stops) are located on the far side of intersections. The prevalence of far-sided bus stops is a deliberate design choice that emphasizes pedestrian safety and improves visibility at crossings.

A graphic of the location of the far-side transit stop can be found in **Figure 3-2**.

NO PARKING NO PARKING

SIDEWALK BUS TOP
SIGN

Source: NACTO

Figure 3-2: Far-Side Bus Stop

Near-Side Bus Stops

NACTO provides useful guidance on bus stop placement, highlighting both the advantages and disadvantages of near-side stops depending on roadway conditions. On two-lane streets where vehicles cannot easily pass a stopped bus, near-side stops are generally preferred. They allow passengers to board and alight before the intersection, often resulting in shorter walking distances to cross streets or nearby destinations. Near-side stops can also benefit from upstream signal priority, reducing delay for transit vehicles.

However, near-side stops have notable drawbacks. When located on streets with wide shoulders or multiple lanes, especially where vehicles can pass a stopped bus without control (e.g., no traffic

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signal), visibility and sight distance can be compromised—posing risks to crossing pedestrians and slowing transit operations. Additionally, buses stopping before an intersection may block the view of traffic signals or create conflicts with right-turning vehicles.

In contrast, far-side stops are generally preferred in settings with multiple lanes or where sight distance is limited, as they place the stop beyond the intersection and improve pedestrian safety and traffic flow. On signalized corridors with wide shoulders or multiple lanes, either near-side or far-side placement may be appropriate, depending on specific factors such as pedestrian activity, signal phasing, and right-turn volumes.

A graphic showing the location and characteristics of near-side transit stops can be found in **Figure 3-3**.

12'
12'-20'
NO PARKING BUS NO PARKING
SIDEWALK BUS STOP
SIGN

Source: NACTO

Figure 3- 3: Near-Side Bus Stop

Other general guidelines to be considered when placing near-side transit stops are the following:

- On long blocks where near-side stops provide better access to pedestrian destinations like parks, mass transit station entrances, waterfronts, and schools.
- In areas where traffic calming measures or parking regulations prevent the use of far-side stops.
- When access to facilities such as senior centers or hospitals is more convenient from the near side of the intersection.
- Where the presence of driveways or alleys complicates the placement of far-side stops.

In Miami Dade County, there are approximately 2,752 bus stops out of 6,503 bus stops (or about 42% of all bus stops), the second most prevalent, those located just before an intersection. While near-side bus stops are slightly less prevalent than far-side ones, their placement on multilane roadways serves specific operational and infrastructure-related purposes.

Near-side stops are positioned before a bus crosses an intersection, allowing passengers to board and alight before the bus encounters the traffic signal. In many cases, these stops are placed on arterial or multilane corridors where buses must stay in the rightmost travel lane or shoulder, and where curb space may be more readily available on the approach of an intersection. This positioning is often guided by the surrounding roadway context, particularly in areas with multiple travel lanes and limited right-of-way options.

The placement of near side stops on multilane roads requires careful consideration of safety. Because the bus may block the view of pedestrians from divers in adjacent lanes, there is an increased risk of conflicts, particularly if vehicles attempt to pass a stopped bus without yielding to crossing pedestrians. This is especially concerning on corridors with high traffic volumes and higher travel speeds, where stopping sight distance and driver response times are limited.

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To mitigate these issues, Miami-Dade County and other transit agencies often implement complementary design strategies such as pedestrian refuge islands, curb extensions and advanced stop bars to improve visibility and reduce conflicts at near-side stops. Additionally, clear signage, lighting, and crosswalk markings are essential to enhance safety for pedestrians navigating near-side bus stop environments.

While near-side stops account for nearly half of the county's bus stop inventory, their use on multilane roadways is often dictated by roadway geometry, available infrastructure, and operational needs. Their effective integration requires careful planning to balance transit efficiency with pedestrian safety, particularly in high-volume traffic environments.

Mid-Block Transit Stops

According to NACTO, mid-block bus stops require more space between parked cars and other barriers to allow buses to enter and exit the stop, except where there is a bus bulb or bay⁸. They are recommended for:

- Long blocks with important destinations midblock such as waterfronts, campuses, and parks.
- Major transit stops with multiple buses queuing.

One of the most detrimental disadvantages of mid-block bus stop locations is that it encourages passengers to cross the street at mid-block (jaywalking)⁹, as bus stops and other transit facilities are potential pedestrian crossings. Consequently, if the correct infrastructure is not put in place, bus

passengers may face difficult challenges when accessing and existing the transit facility. An example of that safety concern can be found in **Figure 3-4**, where pedestrians cross at an unmarked location in front of the bus. Another disadvantage is that midblock stops require additional restrictions on parking.

It is preferable that all streets directly served by transit and adjacent to public facilities such as parks, schools, libraries, and other community locations be designed or retrofitted to accommodate crossing pedestrians, as shown in **Figure 3-5.** In Miami-Dade County, there are 179 bus stops coded







Source: Florida Department of Transportation - Accessing
Transit Design Handbook for Florida Bus Passenger Facilities
Version IV, 2023

mid-block (or close to 3% of all stops). Therefore, improvements are necessary at these specific locations, as passengers may be encouraged to cross the street at mid-block. Ensuring safer pedestrian crossings will enhance overall safety and accessibility for transit users.

⁸ Bus Stops | National Association of City Transportation Officials (NACTO)

⁹ Stops, Spacing, Location and Design | FTA

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Intersecting Stops with Low Stops with Interest **Bus Routes Utilized Stops Utilization Spaced** accessibility Hospitals Particularly those Maintaining One Block Apart and pedestrian Schools the ability to serving high proportions safety issues **Shopping Centers** transfer of seniors and persons with disabilities Senior Centers **Apartment Buildings** and so on...

Figure 3-5: Guide to Balancing Stop Spacing

Source: From Sorry to Superb: Everything You Need to Know about Great Bus Stops

3.1.3 Tool #3: FDOT Accessing Transit: Version IV Design Handbook for Florida Bus Passenger Facilities

When installing bus stop amenities, the universal design is an approach that needs to be followed. Universal Design is a defined as the "design and composition of environment so that it can be accessed, understood, and used to the greatest extent possible by all people regardless of age, size, ability or disability." Although an universal design is not enforced by law, FDOT's Accessing Transit: Version III Design Handbook for Florida Bus Passenger Facilities provides guidance to install bus benches, as depicted in **Figure 3-6**. Guidelines are in accordance with Rule Chapter 14-20.003 of the Florida Administrative Code (F.A.C.)¹¹ and they are the following:

- Benches should be placed facing the street, and shall not exceed 74 inches in length, 28 inches in depth, and 44 inches in height.
- Benches shall not be placed on limited access facilities. Benches are prohibited in medians
 except when maintained by bus rapid transit providers utilizing an inside lane for passenger
 transport.
- Transit bus benches shall be placed only at transit bus stops designated by a public transit
 agency in accordance with Rule 14-20.004, F.A.C. Convenience or comfort benches may not be
 constructed in medians.
- Commercial advertising shall be displayed upon a bench only on the front or rear surface of the backrest area.
- Advertising displayed on a bench shall not be greater than 72 inches in length nor greater than 24

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¹⁰ Florida Department of Transportation - Accessing Transit Design Handbook for Florida Bus Passenger Facilities Version IV, 2023

¹¹ Rule Chapter 14-20.003, F.A.C.

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inches in height, and no advertising displayed upon a bench shall be of a reflectorized material.

- Locate benches, as follows:
 - As close to the right of way as practicable and not less than four feet from the back of curb for curbed roadways with a posted speed limit of 45 mph or less.
 - Outside of the clear zone as close to the right of way as practicable for flush shoulder roadways, and as close to the right of way as practicable for curbed roadways with a posted speed limit greater than 45 mph.

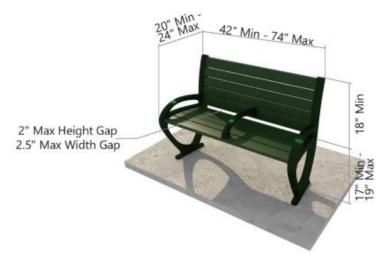


Figure 3- 6: General Bench Dimensions

Source: Florida Department of Transportation - Accessing Transit Design Handbook for Florida Bus Passenger
Facilities Version IV, 2023

Other recommendations for bus bench installation include:

- Incorporate artistic and aesthetic elements into street furniture design to enhance the urban environment as part of a streetscape effort.
- Design trash receptacles to be compatible with other bus stop components, featuring a removable plastic liner with a minimum capacity of 35 gallons.
- Anchor both benches and trash receptacles to prevent unauthorized movement.
- Construct furniture for easy relocation to accommodate bus route changes, street improvement projects, etc.
- Use materials, coatings, and surfaces that are graffiti-resistant, and ensure furniture is readily replaceable.
- Ensure seating areas are well-shaded, preferably using shade trees planted at the back of the sidewalk or existing buildings.

Shelters are vital amenities that provide safety, security, and comfort to transit users, and incorporating a universal design approach ensures accessibility for all, including individuals with disabilities. Customizing shelters with unique colors, designs, or branding allows jurisdictions to reflect their local identity and enhance community aesthetics. However, such customization must be approached with caution to avoid proprietary issues.

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Proprietary designs can create dependency on specific manufacturers or vendors for maintenance, repairs, or replacement parts. This dependency often limits flexibility, increases costs, and delays necessary updates or repairs if the original provider is unavailable or discontinues the product. Additionally, proprietary features may conflict with standardization efforts, complicating regional coordination and creating inconsistencies in the user experience across jurisdictions. To address these challenges, localities should focus on standardized, modular designs that permit customization while ensuring compatibility with widely available components. This approach helps avoid supply chain disruptions and reduces maintenance costs. Additionally, implementing clear procurement guidelines and establishing long-term maintenance agreements will ensure shelters remain both sustainable and cost-effective while reflecting the city's unique character.

As a baseline, Florida's general minimum dimensions for bus shelters are 10 feet by 3 feet by 7 feet high¹², with adequate interior clearances, as illustrated in **Figure 3-7**. These dimensions provide a functional standard to accommodate passengers comfortably while supporting universal design principles.

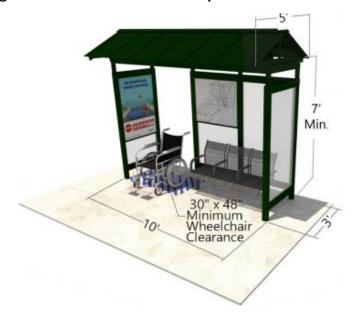


Figure 3-7: General Minimum Requirements for Shelters

Source: Florida Department of Transportation - Accessing Transit Design Handbook for Florida Bus Passenger
Facilities Version IV, 2023

Additionally, according to the FDOT Accessing Transit: Version III Design Handbook for Florida Bus Passenger Facilities and Rule Chapter 14-20.003, F.A.C., placement of shelter should follow these guidelines:

• **Location:** Shelters can only be erected at designated bus stops with a minimum of ten services in five days.

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¹² Florida Department of Transportation - Accessing Transit Design Handbook for Florida Bus Passenger Facilities Version IV, 2023

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- **Spacing:** Outside urban areas, limit shelters to two per mile on two-lane highways and four per mile on highways with four or more lanes.
- Prohibitions: No shelters on limited access facilities or medians, except for bus rapid transit.
- **Placement:** Close to the right of way, at least four feet from the curb for roads with speed limits of 45 mph or less. Outside the clear zone for flush shoulder and curbed roadways with speed limits over 45 mph.
- **Restrictions:** Must be 15 feet away from fire hydrants and accessible parking spaces.
- **Obstructions:** Must not block sidewalks, bike paths, driveways, or drainage structures, maintaining a clear width of five feet for pedestrian traffic.
- **Compliance:** New shelters must comply with Rule 14-20.003, F.A.C., and existing shelters must follow laws in effect at the time of installation.
- Accessibility: Entry and exit points must be at least 4 feet wide, with space for wheelchair users if a bench is provided.
- Utility Notification: Utility companies need to be notified before installation to avoid conflicts.
- **Utility Connections:** Must comply with Rule 14-46.001, F.A.C., and be approved by local building departments.
- Advertising Notification: Property owners need to be notified by certified mail if advertising is included.
- Advertising Limits: One ad per side, no larger than 72x60 inches, no reflective materials.
- **Licensing:** Outdoor advertising companies must have a current license.
- **Lighting:** No flashing lights; lights must not interfere with motorists and cannot be used solely for illuminating ads.
- Visibility: Shelters must allow visibility of passengers and not obstruct traffic views.
- Maintenance: Shelters must be securely attached, allowing for any necessary cleaning.
- **Upkeep:** Shelters must be maintained for aesthetics, function, and safety. Violations must be corrected within 60 days, or immediately if a safety hazard arises.
- **Relocation:** Shelters must be moved or reset for road construction or maintenance, at the shelter owner's expense—in this case, whether Miam-Dade County or the municipality.
- Sunset Clause¹³: This rule may be repealed unless reviewed and deemed necessary.

Other recommendations for bus shelter installation include:

- Considerations of adjacent land use types and intensities.
- The sidewalk condition at the bus stop and access to and from the stop
- Ensure the location has proper drainage to prevent water from pooling near the shelter.
- Ensure each shelter has access to electrical service and proper lighting.
- Design the shelter to offer maximum protection from wind and rain and consider the sun's angles to provide optimal shade during peak morning and afternoon use.

¹³ A sunset clause for bus shelters refers to a specific provision or condition in a policy, agreement, or contract that sets a predetermined expiration date for the approval, funding, or placement of bus shelters. Once the sunset date is reached, the clause requires that the program, agreement, or installation be reviewed, renewed, or terminated unless further action is taken.

3.1.4 Recommendations and Improvements

To support a robust, accessible, and sustainable multimodal transportation system, Miami-Dade County DTPW and local municipalities should adopt the following recommendations for transit hubs and stations based on guidelines and requirements gathered as part of this effort. These recommendations reflect both countywide strategies and localized improvements supported by previous studies, land use analysis, and site-specific audits:

3.1.4.1 Prioritize ADA Compliance at Bus Stops

A fundamental step toward equitable mobility is identifying and addressing the most challenging non-ADA-compliant bus stops. Approximately 46% of Miami-Dade County's 6,455 bus stops do not meet ADA accessibility standards due to incomplete sidewalks, improper slopes, missing warning surfaces, or obstruction by street furniture. The County should identify and prioritize the most challenging of these stops, particularly those near high-demand locations such as schools, hospitals, and transit stations, for immediate improvement. Upgrades should meet federal PROWAG standards and *FDOT Accessing Transit Design Handbook* specifications, including adequate boarding areas, tactile surfaces, and obstacle-free zones.

3.1.4.2 Target Stops near Educational Institutions, Parks, and Community Facilities

Transit stops located in proximity to major educational institutions (especially those with over 5,000 students), public parks, and civic buildings generate significant foot traffic and often lack essential amenities or safety features. These stops should be inventoried and assessed for compliance, accessibility, and amenity needs, and prioritized accordingly for investment. Enhancing access to these community anchors aligns with the broader goals of reducing vehicular congestion and encouraging youth and family ridership.

3.1.4.3 Focus First- and Last-mile Investments near High-Density Areas and Employment Hubs

Direct infrastructure upgrades in areas with high population and employment density, such as Downtown Miami, Hialeah, Doral, Sweetwater, and Brickell. These urban centers generate significant transit demand and present strong opportunities for multimodal connectivity. Enhance pedestrian and bicycle access within a half-mile radius of transit hubs, as identified in the *First- and Last-Mile/Leg Connectivity and Shared Mobility Study*¹⁴, will help reduce barriers to transit use, increase ridership, and support the County's broader goals of equitable and sustainable mobility. Improvements should include continuous sidewalks, high-visibility crosswalks, protected bike lanes, and adequate lighting to ensure safety and accessibility for all users.

¹⁴ First- and Last-Mile/Leg Connectivity and Shared Mobility

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3.1.4.4 Enhance Safety through Vision Zero Initiatives

Adopting Vision Zero principles involves designing roadways and intersections to eliminate traffic fatalities and severe injuries. A countywide emphasis on Vision Zero and safe system designs should guide improvements such as:

- Curb extensions and traffic calming measures
- Signal timing optimized for pedestrian and cyclist crossings
- High-visibility crosswalks and adequate lighting particularly near high-volume pedestrian zones and identified mid-block bus stops where jaywalking is prevalent
- Implement traffic calming elements such as curb extensions, narrower lanes, and landscaping
- Pedestrian signal prioritization at intersections near transit nodes
- Design and install high-intensity pedestrian crossings at Tri-Rail, Brightline, Amtrak, Metromover, and Metrorail access points to reduce pedestrian-vehicle conflict

3.1.4.5 Launch Municipal-Level Transit Development Plans (TDPs)

Assist municipalities in creating localized TDPs that assess first- and last-mile conditions and examine the performance gaps of local circulator services. These TDPs would address metrics such as on-time performance, first- and last-mile coverage, and accessibility and stop conditions. Additionally, evaluate local circulator services, on-demand shuttles, and integration opportunities with regional transit to improve service quality and reliability.

3.1.4.6 Conduct High-Definition Accessibility Mapping

Following models used in California by Los Angeles Metro, HD station-area maps evaluate sidewalk quality, crosswalk conditions, ADA features, street furniture, and lighting within a quarter-mile radius of key transit stations. These high-resolution assessments will enable targeted infrastructure improvements and serve as planning tools for future capital projects.

3.1.4.7 Expand and Integrate Micromobility Services

To enhance first- and last-mile connectivity and encourage active transportation, Miami-Dade County can expand its bicycle and micromobility infrastructure through strategic improvements. This includes increasing access to shared mobility options like scooters and bicycles and providing designated parking and charging areas at major transit hubs to improve safety and organization. Additional upgrades involve installing secure bike parking at high-demand locations such as schools, universities, and employment centers, along with bicycle repair stations to support regular users.

3.1.4.8 Use Ridership Data to Inform Planning

Evaluation of existing ridership patterns should guide the identification of underserved transit corridors and underperforming stops with improvement potential. Using GIS and Open Data Hub analytics, Miami-Dade should prioritize investments where latent demand exists and focus on boosting ridership through enhanced frequency, reduced wait times, and better stop design.

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3.1.4.9 Build a Consistent, Countywide, Multimodal Network

To support a robust multimodal transportation system, Miami-Dade County should encourage municipalities to:

- Prioritize greenway and trail connectivity, enhancing off-road access to transit hubs through protected bike and pedestrian routes.
- Align first- and last-mile improvements with land-use density and equity goals, emphasizing highimpact projects in dense urban cores and underserved neighborhoods.
- Maintain consistency in design standards for transit amenities like benches, shelters and signage, to minimize the use or proprietary features that limit interoperability or inflate maintenance costs. This recommendation is grounded in the *FDOT Design Manual*¹⁵ and ensures that facilities are universally accessible and maintainable.

These actions align directly with the PTP and the broader vision of expanding safe, sustainable transportation infrastructure countywide. This approach will ensure Miami-Dade County's transit infrastructure continues to evolve to meet the needs of residents and visitors, while supporting long-term sustainability and mobility goals.

3.2 Stations Near Educational Facilities Toolkit

Walkability and bikeability were evaluated at higher education institutions in Miami-Dade County with student populations of 5,000 or more. The assessment focused on connectivity, accessibility, and ease of access to public transit. Existing conditions were analyzed using tools like WalkScore and BikeScore, which assign numerical values based on proximity to amenities, infrastructure quality, and overall pedestrian and cyclist friendliness. The full findings of the existing conditions analysis are detailed in the Comprehensive Report on Existing Transit Hubs and Higher Educational Institutions in Miami-Dade County. Based on findings documented in such report, the following list summarizes proposed recommendations and implementation toolkit.

3.2.1 Tool #1: WalkScore Tiered Improvements

Walkability was evaluated using Esri Business Analyst, which produced "walkshed" maps to visualize how far a person can walk from key locations—such as transit stops, schools, or commercial centers—within specific time frames. The maps in the report highlight pedestrian access using color gradients: brown represents a 5-minute walk, green and lighter blue indicates a 10-minute walk, and darker blue up to 15 minutes. Yellow dots mark transit stops, helping to identify areas with strong pedestrian connectivity as well as gaps needing improvement.

In addition, WalkScore was used to provide a numerical rating of walkability for each location. This system scores areas based on the proximity of essential amenities, giving higher scores to locations where shops, schools, and transit are within a ¼-mile walk (about 5 minutes) and lower scores for longer distances. WalkScore also was used to evaluate walkability around higher educational facilities in Miami-Dade County. This metric assigns a score from 0 to 100 based on the proximity of amenities such as grocery stores, dining, schools, parks, and transit. Scores are categorized into five

¹⁵FDOT Design Manual - Roadside Safety

tiers: "Walker's Paradise" (90–100), where daily errands do not require a car; "Very Walkable" (70–89), where most errands can be accomplished on foot; "Somewhat Walkable" (50–69), where some errands are walkable but others require a vehicle; and "Car-Dependent" (0–49), where most or almost all errands require a car; and the lowest tier. This classification system provides a standardized way to compare walkability conditions across high educational campus areas.

By comparing WalkScores across institutions, this analysis helps identify which campuses support active transportation and which may require targeted first-/last-mile improvements. Based on the WalkScore analysis, comparative WalkScores for each educational facility are listed in **Table 3-1**, providing a snapshot of how walkable each campus is based on surrounding amenities, infrastructure, and transit access.

Table 3-1: Educational Centers in Miami-Dade County Comparative WalkScores

Educational Centers in Miami-Dade County	WalkScore
#1 Miami Dade College (MDC) – Wolfson Campus	99
#2 Florida International University – College of Engineering and Co	omputing 89
#3 Miami Dade College – Eduardo J. Padrón Campus	89
# 4 Miami-Dade College Medical Campus	84
#5 Miami Dade College Entrepreneurial Education Center (EEC)	83
#6 Miami Dade College (MDC) - Homestead Campus	80
#7 University of Miami – Main Campus	76
#8 Miami Dade College (MDC) – Hialeah Campus	74
#9 University of Miami- Leonard M. Miller School of Medicine	69
# 10 Florida National University	65
# 11 Florida International University (FIU) - Main Campus	64
# 12 Miami Dade College Kendall	61
# 13 Nova Southeastern University	60
# 14 Barry University	50
# 15 Miami-Dade College North	50
# 16 Embry Riddle Aeronautical University	48
# 17 Miami Dade College (MDC) – West Campus	43
# 18 Saint Thomas University	32
# 19 Keiser University	25
#20 Florida International University (FIU) - Biscayne Bay Campus (B	BC) 24
#21 University of Miami- School of Marine and Atmospheric Science	e 23

Based on this list, the recommendations are structured in tiers following WalkScore ratings, with proposed improvements scaled to the existing level of pedestrian infrastructure and walkability. This approach ensures that investment is prioritized where it is most needed, while recognizing and preserving areas that already support strong active transportation.

3.2.1.1 Tier 1: Walk Score 90–100 – "Walker's Paradise" (Minimal Improvements Needed)

These areas are highly supportive of walking and require only minimal improvements, such as upgrading standard crosswalks to high-visibility treatments, adding in shade trees, pedestrian scale lighting, and enhancing signage and wayfinding efforts. Based on the assessment, only the Miami-Dade College Wolfson Campus falls within this category, with a WalkScore of 99, reflecting its exceptional pedestrian environment. The campus features well-maintained sidewalks, frequent and safe crossings, pedestrian-prioritized street design, and direct access to multiple transit options including bus routes, Metromover, Trai-Rail, Brightline, and Metrorail. These conditions reduce dependence on private vehicles and demonstrate best practices in multimodal connectivity—practices that can serve as a model for improving pedestrian access at other educational institutions throughout Miami-Dade County.

3.2.1.2 Tier 2: Walk Score 70–89 – "Very Walkable" (Low-Level Improvements Needed)

In these areas, walking is convenient for most trips; however, opportunities remain to enhance infrastructure, safety, and connectivity. Recommendations for "Very Walkable" areas build upon those identified for "Walker's Paradise," with the addition of low-level enhancements such as street daylighting, pedestrian refuge islands, and Rectangular Rapid Flashing Beacons (RRFBs). These improvements aim to increase pedestrian visibility, reduce crossing distances, and enhance safety at key intersections and midblock crossings.

3.2.1.3 Tier 3: Walk Score 50–69 – "Somewhat Walkable" (Moderate Improvements Needed)

These areas offer partial pedestrian infrastructure, making walking possible for select trips. However, gaps in connectivity, facility quality, and safety limit broader pedestrian use. Moderate-level improvements are recommended, building upon the recommendations under "Very Walkable" but including moderate level improvements and suggestions like pedestrian hybrid beacons, leading pedestrian intervals, and pedestrian countdown signals. Moderate-level improvements could, under more intensive analysis, determine other enhancements such as filling sidewalk gaps, installing curb ramps, as well as improving pedestrian crossings and links to nearby transit stops.

3.2.1.4 Tier 4: Walk Score 25–49 – "Car Dependent" (Significant Improvements Needed)

Most errands in these areas require a car due to limited pedestrian infrastructure and disconnected street networks. While some walking is possible, conditions are generally unsafe or inconvenient. Recommendations for these areas build upon the "Somewhat Walkable" improvements but include infrastructure improvements such as curb/sidewalk extensions and examining sidewalks in more depth. Significant improvements such as building new sidewalks, installing protected crossings, enhancing access to nearby destinations, and creating safer pathways to transit may be required.

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3.2.1.5 Tier 5: Walk Score 0–24 – "Car Dependent (Very Limited Access)" (Highest Level of Improvements Needed)

A high level of investment is necessary to enable safe and convenient active transportation. Only two schools fall within this category: Florida International University's Biscayne Bay Campus and the University of Miami's Rosenstiel School of Marine and Atmospheric Science. These campuses require intensive improvements that align with recommendations from the previous tiers. While further analysis may be needed to tailor solutions, priority interventions include developing comprehensive sidewalk networks, implementing traffic calming measures, and creating more direct, multimodal connections to nearby transit hubs to support first- and last-mile mobility for students.

3.2.1.6 Recommendations

The Toolbox of recommended improvements, depicted in **Table 3-2**, outlines a range of strategies from low- to high-level interventions that correspond to WalkScore categories. These improvements are designed to address gaps in pedestrian infrastructure and enhance walkability based on the existing conditions identified through the WalkScore assessment.

Table 3- 2: WalkScore Improvements Toolbox

WalkScore	Description	Toolbox Recommended Improvements
		Crosswalks to high-visibility crossings (ladder or zebra style)
90–100	Walker's Paradise	Pedestrian scale lighting
	(Daily errands can be accomplished on foot)	Shade trees Signage/Wayfinding
		Crosswalks to high-visibility crossings (ladder or zebra style)
		Pedestrian scale lighting
	Vers Mellechle	Shade trees
70–89	Very Walkable (Most errands can be accomplished on foot)	Signage/Wayfinding
	(Street "daylighting"
		Pedestrian refuges Pedestrian refuges Pedestrian refuges Pedestrian refuges Pedestrian refuges
		Rectangular Rapid Flashing Beacons (RRFBs) Crosswalks to high-visibility crossings (ladder or zebra style)
		Pedestrian scale lighting
		Shade trees
		Signage/Wayfinding
50–69	Somewhat Walkable	Street "daylighting"
00 00	(Some errands can be accomplished on foot)	Pedestrian refuges
		Rectangular Rapid Flashing Beacons (RRFBs)
		Pedestrian Hybrid Beacons (PHBs) Leading Pedestrian Intervals (LPIs)
		Pedestrian countdown signals
		Crosswalks to high-visibility crossings (ladder or zebra style)
		Pedestrian scale lighting
		Shade trees
		Signage/Wayfinding
		Street "daylighting"
25–49	Car Dependent	Pedestrian refuges Pedestrian refuges Pedestrian refuges Pedestrian refuges Pedestrian refuges
	(Most errands require a car)	Rectangular Rapid Flashing Beacons (RRFBs) Pedestrian Hybrid Beacons (PHBs)
		Leading Pedestrian Intervals (LPIs)
		Pedestrian countdown signals
		Curb/Sidewalk extensions
		Sidewalks (both sides)
		Crosswalks to high-visibility crossings (ladder or zebra style)
		Pedestrian scale lighting Shade trees
		Signage/Wayfinding
		Street "daylighting"
		Pedestrian refuges
0–24	Car Dependent	Rectangular Rapid Flashing Beacons (RRFBs)
	(Almost all errands require a car)	Pedestrian Hybrid Beacons (PHBs)
		Leading Pedestrian Intervals (LPIs)
		Pedestrian countdown signals
		Curb/Sidewalk extensions Sidewalks (both sides)
		Sidewalks (both sides) Pedestrian ramps/curb cuts (detectable warnings/ADA compliance)
		Todostrian ramps/ours outs (detectable warnings/ADA compliance)

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3.2.2 Tool #2: BikeScore Tiered Improvements

Bikeability was also evaluated using Esri Business Analyst, which produced "bikeshed" maps to visualize how far a person can bike from key locations—such as transit stops, schools, or commercial centers—within specific time frames. These "bikeshed" modeled 5-, 10-, and 15-minute biking distances from each campus while excluding highways and water barriers, highlighting areas with strong bike access to transit and identified gaps in infrastructure

The BikeScore tool was used to evaluate bikeability around higher educational facilities in Miami-Dade County. This metric assigns a score from 0 to 100 based on factors such as the availability and quality of bike lanes, road connectivity, bike infrastructure, and bike-friendly amenities. Scores are categorized into four tiers: "Biker's Paradise" (90–100), where daily errands can be comfortably accomplished by bike; "Very Bikeable" (70–89), where biking is convenient for most trips; "Bikeable" (50–69), indicating some bike infrastructure is in place but gaps remain; and "Somewhat Bikeable" (0–49), where minimal bike infrastructure limits safe and convenient cycling. This classification system provides a standardized way to compare cycling conditions across campus areas.

By comparing BikeScores across institutions, the assessment helps identify which areas support safe and convenient bicycle access and which may benefit from targeted first-last-mile improvements to enhance active transportation options Comparative BikeScores for each educational facility are listed in **Table 3-3**, providing a snapshot of how bikeable each campus is based on surrounding amenities, infrastructure, and transit access.

Table 3- 3: Educational Centers in Miami-Dade County Comparative BikeScores

	Educational Centers in Miami-Dade County	BikeScore
# 1	Miami Dade College (MDC) – Wolfson Campus	84
# 2	Miami Dade College (MDC) - Homestead Campus	79
#3	University of Miami – Main Campus	79
#4	Florida International University (FIU) - Main Campus	72
# 5	University of Miami- Leonard M. Miller School of Medicine	71
# 6	Miami-Dade College Medical Campus	70
#7	Florida International University (FIU) - Biscayne Bay Campus (BBC)	62
# 8	Miami Dade College (MDC) – West Campus	58
# 9	Miami Dade College – Eduardo J. Padrón Campus	57
# 10	Miami Dade College Entrepreneurial Education Center (EEC)	55
# 11	Florida International University – College of Engineering and Computing	53
# 12	Miami Dade College (MDC) – Hialeah Campus	50
# 13	Miami-Dade College North	49
# 14	Nova Southeastern University	48
# 15	Keiser University	47
# 16	Florida National University	46
# 17	University of Miami- School of Marine and Atmospheric Science	43
# 18	Barry University	42
# 19	Embry Riddle Aeronautical University	42
# 20	Miami Dade College Kendall	41
# 21	Saint Thomas University	36

Based on the findings, the following recommendations are organized into tiers according to BikeScore classifications, with improvement strategies scaled to the existing level of bicycle infrastructure and accessibility. This framework ensures that investment in cycling infrastructure is appropriately matched to need—prioritizing the greatest improvements where bikeability is currently low, while reinforcing strengths in areas that already offer supportive environments for cycling. By targeting infrastructure gaps and enhancing first- and last-mile connectivity, municipalities can significantly improve safe, convenient, and equitable bicycle access across educational centers in Miami-Dade County.

3.2.2.1 Tier 1: BikeScore 90–100 – "Biker's Paradise" (Minimal Improvements Needed)

These areas are ideal for biking, offering seamless connectivity, high-quality infrastructure, and convenient access to everyday destinations. In such areas, daily errands can comfortably be completed by bicycle with minimal dependence on vehicles. However, no schools in Miami-Dade

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County currently fall within this category, underscoring a critical gap in bicycle-friendly infrastructure. Significant planning and investment are needed to elevate campuses into this top-tier category in the future.

3.2.2.2 Tier 2: BikeScore 70–89 – "Very Bikeable" (Low-Level Improvements Needed)

In this range, biking is convenient for most trips, and existing infrastructure provides a generally safe and accessible environment. Still, low-level improvements can further enhance safety, comfort, and connectivity. Recommended enhancements include adding bike lanes where gaps exist, improving wayfinding signage, enhancing lighting, as well as adding bike signals and wayfinding at major intersections. These measures can strengthen already functional networks and encourage greater bicycle use for daily trips.

3.2.2.3 Tier 3: BikeScore 50–69 – "Bikeable" (Moderate-Level Improvements Needed)

These areas have some bike infrastructure that supports cycling for select trips, but connectivity, safety, and facility quality remain inconsistent. Moderate-level improvements are needed to build a more robust and reliable network. Suggested actions include filling infrastructure gaps (such as completing bike lane corridors), installing protected bike lanes, adding intersection treatments for cyclists, and improving access to transit through bike-and-ride amenities.

3.2.2.4 Tier 4: BikeScore 0-49 - "Somewhat Bikeable" (Significant Improvements Needed)

In this category, conditions are generally not supportive of safe or convenient cycling. These areas are the least accessible by bicycle, often lacking even basic infrastructure such as bike lanes, safe crossings, or bike parking. Minimal bike facilities may exist, but connectivity to key destinations is limited. Substantial infrastructure investment is necessary to make bicycling a viable option. Highlevel improvements are required to enable safe and functional bike travel. This includes building entirely new cycling infrastructure (e.g., protected bike lanes, greenways, bike bridges), establishing safe crossings, integrating micromobility options, and improving access to transit hubs. Transforming these environments will require bold planning, interagency coordination, and long-term investment.

3.2.2.5 Recommendations

The Toolbox of recommended improvements, depicted in **Table 3-4**, outlines a range of strategies from low- to high-level interventions that correspond to BikeScore categories. These improvements are designed to address gaps in cyclist infrastructure and enhance bikeability based on the existing conditions identified through the BikeScore assessment.

Table 3- 4: BikeScore Improvements Toolbox

BikeScore	Description	Toolbox Recommended Improvements
90–100	Biker's Paradise (Daily errands can be accomplished on a bike)	Bikesharing programs Designated bicycle parking Wayfinding signage
70–89	Very Bikeable (Most errands can be accomplished on a bike)	Bikesharing programs Designated bicycle parking Wayfinding signage Bicycle boxes (at intersections) Bicycle signals Bicycle roadway crossings ("crossbikes")
50–69	Bikeable (Some infrastructure)	Bikesharing programs Designated bicycle parking Wayfinding signage Bicycle boxes (at intersections) Bicycle signals Bicycle roadway crossings ("crossbikes") Bicycle network connectivity Conflict zone markings (green paint) Separated bicycle lanes or shared-use paths Parallel bicycle routes Corner refuge islands Rectangular Rapid Flashing Beacons (RRFBs)
0–49	Somewhat Bikeable (Minimal bike infrastructure)	Bikesharing programs Designated bicycle parking Wayfinding signage Bicycle boxes (at intersections) Bicycle signals Bicycle roadway crossings ("crossbikes") Bicycle network connectivity Conflict zone markings (green paint) Separated bicycle lanes or shared-use paths Parallel bicycle routes Corner refuge islands Rectangular Rapid Flashing Beacons (RRFBs) Protected bicycle lanes or cycleways Two-stage queue turn boxes

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3.2.3 Tool #3: Campus Mobility Plan Creation

To meaningfully improve access to transit near educational institutions, universities—working closely with local governments and transit agencies—should develop dedicated Campus Mobility Plans. These plans serve as a blueprint for how students, faculty, and staff can safely and efficiently connect to the broader regional transportation network, particularly countywide services like Metrorail, Tri-Rail, Metromover, Brightline, and key Metrobus corridors.

A well-crafted Campus Mobility Plan begins by mapping and analyzing how people currently travel to, from, and within the campus, as described in **Figure 3-8**. This includes documenting walking routes to nearby stations, the availability and condition of bike lanes leading into campus, and the effectiveness of any university-run shuttle systems. For example, a university near a Metrorail station might discover that a major intersection lacks ADA-compliant crossings or that its bike lanes end abruptly a few blocks before reaching the station—creating real barriers for potential riders.

In addition to mapping infrastructure, the plan should collect user data—via surveys, heat maps, or mobile tracking tools—to understand common travel patterns. For instance, students living in off-campus housing might overwhelmingly rely on scooters or walking to reach transit, while faculty might prefer park-and-ride facilities paired with shuttle service. This helps prioritize improvements based on who needs them most and how they travel, rather than relying solely on assumptions or auto-centric metrics.

Implementation strategies should be tied to both municipal capital improvement schedules and academic planning calendars. Aligning sidewalk upgrades, micromobility infrastructure, or shuttle expansions with the start of a new semester ensures maximum impact and smooth rollouts. For example, if a university plans to open a new dormitory farther from the core campus, mobility upgrades around that area can be prioritized for completion before student move-in.

A Campus Mobility Plan provides a structured framework for stakeholders to pursue shared goals related to sustainability, accessibility, and campus development. Through active collaboration among institutions, agencies, and community partners, the plan becomes a unified platform that aligns objectives across different organizations. This collective approach strengthens the ability to achieve meaningful outcomes by leveraging shared resources and coordinated efforts. Once adopted, the plan clearly communicates both internally and externally the decisions made and the actions to be taken to improve mobility conditions. Collaboration not only increases the efficiency of implementation but also allows for more ambitious and impactful measures than any single stakeholder could achieve alone.

Ultimately, Campus Mobility Plans help frame transit access not just as a transportation issue, but as a matter of equity, campus safety, and sustainability. By investing in the infrastructure and policies that support active and public transportation, universities reinforce their commitment to a more inclusive and environmentally responsible future.

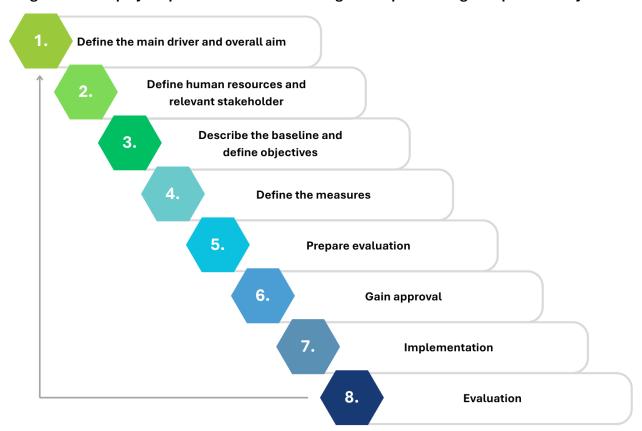


Figure 3-8: Step by Step Instructions for Creating and Implementing Campus Mobility Plans

Source: Guidance for Campus Mobility Plans

Step 1 – Define the main driver and overall aim: The primary goal is to identify and address existing gaps in first- and last-mile connectivity, ensuring seamless, safe, and convenient access between transit hubs and surrounding destinations to campuses. This involves focusing on improving multimodal linkages—such as pedestrian pathways, bicycle infrastructure, and micromobility options—to create an integrated transportation network that supports active travel modes and reduces reliance on private vehicles. By targeting these critical connections, the initiative aims to enhance overall mobility, increase transit ridership, and promote equitable access across the community.

Step 2 – Define human resources and relevant stakeholders: Form a multidisciplinary working group with members who have the expertise and decision-making authority needed for effective planning. Include university leadership (campus planning, facilities, sustainability), student organizations, city planning and transit agencies, property managers, and local community representatives. Experts can be invited as needed, and a steering committee may help resolve complex issues. Develop a clear communication plan to keep all stakeholders informed and engaged throughout the process. Agree on roles, responsibilities, timelines, and resources, and consider cost-sharing to enhance ownership and commitment.

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Step 3 – Describe the baseline and define objectives: This step focuses on developing the campus mobility plan, subdivided into two actionable steps:

Action 1: Baseline Assessment: Conduct a thorough baseline assessment to describe the
current state of mobility. This includes documenting existing conditions as detailed in the
Comprehensive Report of Existing Transit Hubs and Higher Educational Institutions in MiamiDade County.

The assessment should cover infrastructure quality, transit accessibility, pedestrian and bicycle facilities, connectivity, safety, and usage patterns to establish a foundation for planning and improvement efforts. Apart from the present situation, development plans and infrastructure plans at campuses and in the surrounding areas should also be described. Depending on the scope of the Campus Mobility Plan, it is advisable to include projections and relevant information covering the next 10 to 15 years. This forward-looking data provides valuable insight into anticipated growth, travel patterns, and development trends, which can guide the selection and prioritization of first- and last-mile improvement measures to effectively address future mobility needs.

Examples of relevant information to include in a baseline survey are:

- o Infrastructure and services for pedestrians, bicycles, public transportation, private and shared cars including electric mobility, car and bike parking.
- o Modal split, traffic flows, number of freight and waste transport.
- o Information on parking usage, e.g. occupancy over the day, user groups, and origin.
- o Travel times to important local areas by different means of transportation.
- Accessibility to the campus and availability of local services.
- o Number of employees and students, other businesses in the area, working hours.
- o Informational and promotional services and activities.
- Land use and spatial planning, plans for the surrounding area, earlier studies.
- Development and infrastructure plans.
- Action 2: Break down purpose and challenges into objectives. It is recommended to use the outcomes of the mobility status report to define objectives for the plan. The objectives should support the defined purpose. Objectives can be described based on the level of ambition, or quality and functionality. One key aspect is that objectives are measurable so that progress can be evaluated after the implementation of the campus mobility plan.

Step 4 – Define measures: Based on the local context and the capacity of the stakeholders, this step is subdivided into four actions:

- Action 1: Create a list of measures: Four types of mobility measures in a campus mobility plan are:
 - Strategic measures Measures to create or update policies or other strategic documents.
 - Physical environment and infrastructural measures including maintenance Measures to improve the physical environment within and close by the campus such as infrastructure for walking, cycling, public transport, car and freight traffic

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- Mobility management measures Measures that manage demand for mobility by changing drivers' attitudes and behavior.
- Regulation, service provision and legislation measures Measures that regulate how the system and services at campus should be used
- Action 2: Rate the measures: Rating of potential measures can be a complex task influenced by opinions, demands, and limitations. The most important aspects to consider when looking for measures to implement are the effectiveness of contributing to a more sustainable campus and meeting first-last-mile demand needs, and if the measure can be implemented. If not, it should not be taken into consideration.

To get a fair view of the feasibility and circumstances that must be considered for each measure, it is advised to rate the measures together with all the stakeholders. It is a good idea to prepare the effectiveness rating beforehand and anchor the rating to research and available knowledge of expected outcomes. Sometimes a more comprehensive assessment or cost-benefit analysis is necessary.

- Action 3: Develop an action plan: The action plan should provide clear guidance on which
 measures to implement and when, while remaining flexible enough to adapt to future changes—
 such as advancements in technology, shifts in infrastructure, or evolving user acceptance. In
 some cases, a single measure may be broken down into multiple sub-measures, each involving
 different stakeholders and responsibilities. The timing of these measures can be aligned with key
 project phases, including planning, construction, and the operational use of new buildings and
 infrastructure.
- Action 4: Describe and gain initial approval for the selected measures: The goal is to secure stakeholder approval for the proposed measures. To support this, the process should remain as transparent as possible, clearly outlining the responsibilities of each stakeholder. It is also advisable to allocate time for one-on-one meetings between the process lead and individual stakeholders, should any party request further discussion or clarification.

Step 5 – Prepare evaluation: To demonstrate the success of the campus mobility plan, clear indicators must be established. These indicators may include:

- Implementation tracking which measures have been carried out and by whom.
- Impact assessing outcomes such as changes in car usage, modal split, and parking demand.
- **Process** evaluating the effectiveness of collaboration and identifying areas for improvement.

An evaluation framework should be developed and shared with all stakeholders. This framework should outline what will be evaluated, why it matters, how and when the evaluation will take place, and how follow-up activities will be conducted. Ideally, the framework should be integrated into the overall action plan.

Step 6 – Gain approval: The campus mobility plan is considered successfully developed once all primary stakeholders have formally agreed to their roles and committed to the implementation phase. This step involves building consensus among key partners—such as university leadership, local municipalities, Miami-Dade DTPW, FDOT, and the Miami-Dade Transportation Planning Organization (TPO)—through collaborative discussions of the findings. The goal is to align the

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campus plan with broader countywide transportation initiatives and ensure its integration into ongoing planning efforts.

Implementation and Evaluation: Implementation of the measures outlined in the campus mobility plan will be carried out either individually by each stakeholder or collaboratively with other stakeholders and secondary partners. It is expected that some measures may become unfeasible or no longer appropriate due to new information, technological advancements, or shifts in public acceptance. This is acceptable, if stakeholders responsible for proposing alternative actions still support the overall objectives. These situations should be addressed through open dialogue within the evaluation forum to ensure continued alignment and progress.

In summary, universities, in coordination with local governments and transit agencies, should develop Campus Mobility Plans to:

- Analyze walk, bike, and shuttle access to nearby Metrorail, or major bus corridors.
- Identify key infrastructure barriers (e.g., disconnected sidewalks, unsafe intersections, lack of bike parking).
- Prioritize multimodal strategies based on student, faculty, and staff travel patterns.
- Recommend implementation timelines tied to capital improvements and academic cycles.

3.2.4 Tool #4: Establishment of Transit Partnership Agreements

To strengthen multimodal connectivity and maximize the use of public transportation by students, faculty, and staff, universities should establish formal partnership agreements with Miami-Dade DTPW and other relevant transit operators. These agreements serve as frameworks to coordinate planning, operations, and funding efforts that enhance mobility options between transit stations and academic campuses.

Through such partnerships, universities and transit agencies can collaborate on real-time data sharing, allowing students to access accurate bus and train arrival times via campus apps or kiosks, improving trip planning and reducing perceived wait times. For example, the University of Florida's partnership with Gainesville RTS enables the integration of real-time vehicle locations into the university's mobile platforms and digital signage across campus.

Partnerships can also support integrated fare programs, such as discounted or prepaid student transit passes. The University of Miami's existing EASY Card arrangement with Miami-Dade DTPW is one such example, providing students with seamless fare access to Metrorail and Metrobus. Expanding similar programs across additional Miami-Dade colleges and universities can help boost ridership and reduce reliance on personal vehicles.

These agreements can open the door to shared planning for service expansions or transit shuttle connections. For instance, if a campus is located more than a 10-minute walk from the nearest Metrorail station, the university, the local municipality (if applicable), and Miami-Dade DTPW could jointly evaluate options for timed shuttle loops, bike-share docks, or on-demand mobility services that link key parts of campus to regional transit. Florida International University (FIU), for example, has explored dedicated shuttle links between its campuses and nearby transit stops.

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3.2.4.1 Funding Source

Universities and transit agencies can jointly pursue federal or state grant opportunities, such as FTA's Enhancing Mobility Innovation or Transit-Oriented Development Planning programs. These funds can support campus-focused infrastructure improvements, such as enhanced pedestrian zones, protected bike lanes, and transit-supportive development.

FTA's Enhancing Mobility Innovation¹⁶ program advances a vision of mobility for all – safe, reliable, equitable, and accessible services that support complete trips. The program promotes technology projects that focus on the traveler experience and encourage people to get on board, such as integrated fare payment systems and user-friendly software for demand-response public transportation.

Enhancing Mobility Innovation projects fall under two categories:

- Accelerate innovative mobility: Concept development and/or demonstration projects that improve mobility and enhance the rider experience with a focus on innovative service delivery models, creative financing, novel partnerships, and integrated payment solutions.
- Software solutions: Projects that develop software solutions that facilitate integrated demandresponse public transportation that dispatches transit vehicles through riders' mobile devices or other technology.¹⁷

By establishing these formal partnerships, institutions and agencies can pool resources, align goals, and create a more integrated, efficient, and equitable transportation network that meets the unique needs of campus communities.

Lastly, formalizing partnerships between universities and Miami-Dade DTPW or other operators allows to:

- Coordinate real-time data sharing, route planning, and integrated fare programs (e.g., student transit passes).
- Explore service expansions or shuttle connections from stations to key campus locations.
- Jointly apply for FTA or state grants supporting university-oriented transit infrastructure.

3.2.5 Recommendations and Improvements

To enhance mobility around Miami-Dade County's educational institutions, targeted first- and last-mile connectivity plans should be developed based on detailed walkshed and bikeshed analyses. Findings from the assessment serve as a foundation for recommending infrastructure and policy strategies that enhance multimodal access, close critical connectivity gaps, and support safer, more convenient travel to and from Miami-Dade's academic institutions. These recommendations are outlined as follows.

¹⁶ FTA's Enhancing Mobility Innovations

¹⁷ FTA's Enhancing Mobility Innovations

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3.2.5.1 Prioritize Infrastructure Improvements Based on Access Gaps

Use the walkshed and bikeshed boundaries to prioritize areas that fall outside the 5- or 10-minute access zones, especially those with poor sidewalk or bikeway conditions. Investment should be focused on these underserved edges by:

- Filling sidewalk gaps within the 15-minute walkshed.
- Designing protected bike lanes for corridors where the 10-minute bikeshed overlaps with major student housing or commercial nodes.
- Upgrading intersections where students cross wide arterials to reach transit stops (e.g., along SW 8 Street and SW 107 Ave near FIU's Main Campus).

3.2.5.2 Develop Micromobility Hubs at Transit-Converging

Transit converging refers to locations where multiple transit services or modes intersect or operate in close proximity—such as where Metrorail stations connect with multiple Metrobus routes, or where different lines or services share a hub. These points serve as major transfer zones, making them ideal for improving multimodal access and first- and last-mile connections. Micromobility hubs should be developed at key transit-converging nodes where Metrobus and Metrorail access points overlap just outside campus walksheds. These hubs, illustrated in **Figure 3-9**, can facilitate seamless first- and last-mile connections by offering secure bike and scooter parking, charging stations, real-

time transit information, and clear signage directing users to campus destinations.

These hubs should include:

- Secure bike parking, scooter docks, and charging stations.
- Clear signage showing distances to campus and nearest building clusters.
- Real-time transit arrival displays to support seamless mode switching.
- Digital kiosks, shade structures and bike repair.
- Wayfinding that connects stations' exits directly to campus buildings and services.

Figure 3- 9: Mobility Hubs in Public Realm (Adgar Plaza Mobility Hub)



Source: Mobiline Miastro New Urban Mobility

3.2.5.3 Targeted FLM Planning Around Campus Transit Nodes

As part of a strategic partnership agreement between Miami-Dade DTPW, municipalities (if applicable), and local universities, focused first- and last-mile connectivity plans should be developed within a half-mile walking radius and a 1- to 2-mile biking radius of each campus transit station. These plans will guide Miami-Dade DTPW-led or municipal-led improvements such as the installation of protected bike lanes, dedicated scooter lanes, and secure micromobility parking to enhance multimodal access for students and faculty. The initiative should also identify opportunities

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to calm traffic, upgrade crosswalks, and improve lighting around campus areas to ensure safer, more comfortable connections to transit.

To improve pedestrian safety, the plans should identify intersections for high-visibility crosswalk upgrades using ladder-style markings, colored paving, and pedestrian refuge islands. Traffic calming measures such as raised crosswalks, speed humps, curb extensions (bulb-outs), and chicanes should be prioritized in student-heavy zones and near student residential housing. Lighting enhancements—such as pedestrian-scale LED lighting—should be installed along major walk and bike corridors to increase visibility during evening hours.

All improvements should align with Miami-Dade's Complete Streets Design Guidelines and Vision Zero Action Plan by incorporating universal design principles, reducing conflict points between modes, and targeting high-crash locations. These efforts will not only strengthen first-last-mile access to transit but also improve overall safety and comfort in campus-adjacent communities.

In summary, conducting focused First- and Last-Mile Connectivity Plans within a half mile walk and 1- to 2-mile bike radius of each campus station allows to:

- Propose protected bike lanes, dedicated scooter lanes, and secure micromobility parking.
- Identify opportunities to calm traffic, improve crosswalks, and add lighting for safer campus access.
- Integrate these improvements into larger municipal Complete Streets or Vision Zero initiatives.

3.3 Municipality First and Last Mile Improvements Toolkit

To improve access to transit and promote equitable mobility, municipalities within Miami-Dade County should develop and implement a series of targeted plans aimed at strengthening first- and last-mile connections. These connections are critical for ensuring seamless, safe, and convenient access to transit services, particularly in areas where riders rely heavily on walking, biking, or personal mobility devices to reach transit hubs and stations.

Findings from a review of local, regional, state, and federal policies, plans, and programs related to bicycle, pedestrian, and micromobility infrastructure were digitized to support municipal reporting and used to develop an interactive multimodal infrastructure dashboard and municipal fact sheets. This tool will help visualize modal connections, reveal infrastructure gaps, and enhance coordination between municipalities and agencies by consolidating data from multiple levels of government.

This section builds upon the findings of the literature review conducted as part of the **First- and Last-Mile Bicycle-Pedestrian Mobility Improvements in Municipalities in Miami-Dade County Report.** By analyzing existing policies, infrastructure, and service gaps identified through that comprehensive review, this section provides actionable, municipality-level recommendations designed to improve first- and last-mile connectivity. These strategies aim to bridge the critical distance between transit hubs and surrounding communities by enhancing walking, biking, and micromobility access. The recommendations are tailored to support municipal decision-makers in aligning local efforts with regional transportation goals, promoting equitable, safe, and seamless multimodal access across the county.

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Recognizing that transit success depends not only on the quality of the service itself but also on the accessibility of the areas surrounding it, the following strategies are recommended:

3.3.1 Tool #1: Local-First and Last-Mile Connectivity Plans

To achieve a more connected and equitable multimodal network, municipalities across Miami-Dade County should adopt local First- and Last-Mile Connectivity Plans that align with the regional vision outlined by Miami-Dade DTPW and FDOT District Six. These local plans serve as a framework for identifying gaps in pedestrian, bicycle, and micromobility infrastructure within a half mile walk and 1- to 2-mile bike radius of major transit hubs. Municipalities such as Coral Gables, Miami Beach, and Doral have already integrated elements of first- and last-mile planning in their transportation master plans by implementing traffic calming projects, expanding bike lanes, or upgrading crosswalk safety features near transit.

To ensure cohesive implementation across jurisdictions, municipalities must collaborate through interlocal agreements or Memorandums of Understanding (MOUs), especially when proposed infrastructure crosses boundaries or overlaps with county or state-owned roads. Political coordination is essential, as land use authority, funding mechanisms, and transportation priorities vary across local governments. For example, aligning a protected bikeway that links a municipal downtown to a nearby Metrorail station may require negotiation with FDOT District Six and Miami-Dade DTPW, as well as consensus from city commissions, the Miami-Dade TPO, or local advocacy groups.

These partnerships can be politically sensitive, especially when competing priorities—such as parking preservation or roadway capacity—conflict with multimodal goals. However, agencies such as the Miami-Dade TPO and CITT provide platforms to mediate these interests and ensure that first-and last-mile improvements are pursued with shared funding, consistent standards, and measurable outcomes. By working together, municipalities can avoid fragmented networks and instead create seamless connections that benefit transit users across city lines.

To support a truly multimodal transportation network, municipalities should align their planning efforts with Miami-Dade County's vision to enhance connectivity between greenways, trails, and transit hubs. Greenways and trails serve not only as recreational amenities, but also as essential first- and last-mile connectors that significantly extend the reach of the transit system. These active transportation corridors offer safe, comfortable, and scenic options for walking, biking, and micromobility use, and should be fully integrated into regional transportation strategies.

As part of this effort, a review of municipal first- and last-mile initiatives identified both existing and proposed non-motorized networks across incorporated areas of the county, with particular attention to first- and last-mile connections to transit hubs, transportation centers, and existing or planned transit routes. The analysis further included jurisdictional boundaries, Metrorail and Metrobus stations, and college and university campuses to reflect the complexity and interdependence of Miami-Dade's multimodal system.

Municipalities are encouraged to adopt dedicated First- and Last-Mile Connectivity Plans, either as standalone efforts or as integrated components of broader transportation, mobility, or comprehensive planning initiatives. These plans serve as critical tools for aligning local priorities with

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regional mobility goals, particularly those of the SMART Program and Miami-Dade County's multimodal transportation vision.

A well-developed First- and Last-Mile Connectivity Plan should:

- Identify Critical Gaps and Barriers: Use data from community surveys, crash reports, and field assessments to pinpoint infrastructure gaps, safety concerns, and barriers that limit access to transit. This should include both physical gaps (e.g., missing sidewalks or bike lanes) and qualitative barriers (e.g., perceived safety or lack of amenities).
- **Propose Targeted, Context-Sensitive Improvements**: Recommend a prioritized list of projects such as new or widened sidewalks, protected bike lanes, crosswalk enhancements, lighting upgrades, shared mobility hubs, and micro transit integration. Each recommendation should be tailored to the surrounding land use, density, and travel patterns.
- Coordinate Across Jurisdictions: Recognize that effective first- and last-mile connectivity often
 requires coordination with neighboring municipalities, Miami-Dade County, FDOT District Six,
 and regional agencies. Plans should include recommendations for interagency partnerships,
 shared funding opportunities, and design consistency at jurisdictional boundaries.
- Incorporate Performance Metrics: Establish clear metrics to track progress over time, such as the number of completed first- and last-mile improvements, changes in transit ridership, user satisfaction, and safety outcomes. This data-driven approach ensures accountability and continuous improvement.

By adopting and implementing robust local First- and Last-Mile Connectivity Plans, municipalities can play a pivotal role in bridging the "first and last mile" gap, enhancing multimodal access to transit, and supporting more resilient, inclusive, and transit-friendly communities.

3.3.2 Tool #2: Regional Active Mobility Data-Sharing Platform

Lack of standardized, accessible, and up-to-date data across jurisdictions hampers the ability to identify mobility gaps, measure project impacts, and coordinate first-last-mile improvements across municipal boundaries. A regional data-sharing platform is recommended, and it will support evidence-based planning, funding applications, and public transparency.

To improve coordination and data-driven planning across Miami-Dade County, this policy recommends the creation of a centralized, GIS-based data platform focused on bicycle and pedestrian mobility. This platform will empower municipalities by providing access to standardized, countywide data on active transportation infrastructure, planned improvements, and connectivity gaps to transit. With this tool, local governments can more effectively identify needs, align projects with regional goals, and measure the performance and equity impacts of their investments. By enabling shared visibility and streamlined collaboration, the platform strengthens each municipality's capacity to implement meaningful first- and last-mile mobility improvements in their communities

Key functions of the platform include:

• Infrastructure Inventory Sharing: Maintain a unified and updated layer of existing and planned bike lanes, sidewalks, trails, crosswalks, and bike parking across municipalities.

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- **Gap and Equity Analysis:** Map first-last-mile barriers to transit, especially in underserved areas, using overlays such as socio-demographic data, car ownership rates, and transit stop locations.
- **Performance Monitoring:** Collect and visualize ridership, crash data, sidewalk conditions, and project outcomes to inform future improvements and maintenance priorities.

Implementation steps include:

- **Lead Agency Designation:** Assign either the Miami-Dade TPO or Miami-Dade County DTPW as the lead entity to manage the platform.
- Stakeholder Onboarding: Create a data-sharing agreement with municipalities, transit agencies (Metrobus, Metromover, Tri-Rail, Brightline, and Amtrak), and relevant Miami-Dade TPO partners.
- **Technology Integration:** Build the platform using existing GIS tools (e.g., ArcGIS Online, GeoHub) and enable municipal access through a user portal.
- **Standardization:** Develop countywide data standards (e.g., symbology, metadata, asset types) for bicycle and pedestrian features.
- **Public Interface:** Include a public-facing dashboard that promotes transparency and encourages community input on mobility gaps and project priorities.

Potential partners include:

- Miami-Dade TPO
- Miami-Dade DTPW
- FDOT District Six
- Local municipal transportation and planning departments
- Nonprofits such as Green Mobility Network or Transit Alliance Miami

Funding Sources include:

- Federal grants (e.g., RAISE, Safe Streets and Roads for All)
- Miami-Dade TPO municipal program funds
- County or municipal CIP

3.3.3 Tool #3: Develop Municipal Transit Development Plans

Municipalities are encouraged to develop localized, municipal Transit Development Plans (TDPs) to systematically assess and improve their transit service in their corresponding jurisdiction. Guided by the principles outlined in the Florida Transit Development Plan Handbook, municipal TDPs serve as strategic, data-driven tools for evaluating transit performance, setting clear priorities, and aligning with broader county or regional goals with a focus on first- and last-mile connectivity. By tracking key performance metrics such as on-time performance, service coverage, and rider satisfaction, municipalities can ensure that their transit systems are responsive, efficient and equitable. These plans also support eligibility for state and federal funding, helping municipalities implement targeted improvements that enhance reliability, service quality and long-term sustainability.

Rather than relying solely on countywide data or broader assumptions, municipal TDPs offer a ground-level view of how well local systems are functioning and where improvements are most

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urgently needed. They create space for dialogue with community members, integrate local land use and development goals, and help prioritize investments in ways that reflect both current realities and future aspirations.

For municipalities, this means developing a localized TDP that evaluates all transit-related facilities and services within their jurisdiction. This includes municipal circulators, fixed-route services, transfer hubs, and first- and last-mile connections. A comprehensive assessment must be conducted to understand the condition, coverage, performance, and equity of the current system. Municipalities are also expected to coordinate with neighboring jurisdictions, county transit agencies, the Miami-Dade TPO, and FDOT District Six to ensure consistency and to identify opportunities for collaborative improvements.

Municipal TDPs should also include a clear timeline and implementation strategy. Identifying short-, medium-, and long-term priorities helps cities stay organized and responsive, particularly when seeking funding or responding to rapid changes in demand. A strong TDP supports grant eligibility and positions municipalities to take advantage of federal and state investment opportunities, including those tied to performance and equity.

To maintain compliance with state requirements, municipalities must prepare a TDP Progress Report in accordance with Florida Administrative Code (FAC) Rule 14-73.001. Transit Development Plans are required for recipients of state transit grant programs, as outlined in Section 341.052 of the Florida Statutes. Each TDP serves as the transit provider's guiding document for planning, development, and operations, based on a ten-year planning horizon. This includes the current fiscal year for which funding is being requested, as well as projections for the following nine years.

A major TDP update must be completed every five years, with annual progress reports required in the interim. All TDP updates and progress reports must be submitted to FDOT by March 1 each year. ¹⁸. Timely submission is essential, as it ensures continued eligibility for the State Transit Block Grant Program—a critical funding source that helps sustain local transit operations. This program, established by the Florida Legislature, is designed to provide a reliable and ongoing stream of financial support for public transportation systems across the state.

3.3.4 Tool #4: Municipal Implementation Plans

To ensure coordinated, effective improvements in active transportation across Miami-Dade County, municipalities should develop tailored Implementation Plans that prioritize and program first- and last-mile mobility enhancements. These plans should be closely aligned with local transportation and land-use strategies while supporting broader countywide goals for multimodal connectivity, sustainability, and equitable access.

3.3.4.1 Key Steps for Implementation

 Assess Local Needs and Conditions: Conduct and analyze existing assessments using walkability, bikeability, and transit accessibility metrics to identify key barriers to first- and last-

¹⁸ TDP Handbook FDOT Guidance for Preparing & Reviewing Transit Development Plans, Version III 2022 Update

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mile connections. Engage community stakeholders, including students and transit users, to ensure plans reflect real-world needs.

- Integrate with Existing Plans and Policies: Align proposed improvements with local comprehensive plans, Complete Streets policies, Vision Zero initiatives, and Safe Routes to School programs. This ensures consistency in goals and avoids duplicative efforts.
- Prioritize Projects Strategically: Develop a prioritization framework based on criteria such as safety, equity, access to transit, school proximity, and cost-effectiveness. Identify "quick win" projects alongside long-term investments to show early progress and build support.
- Establish Funding Mechanisms: Identify and secure diverse funding sources including local budgets, federal and state grants (e.g., Safe Streets and Roads for All, TAP), public-private partnerships, and potential bond initiatives. Consider creating municipal mobility funds dedicated to non-motorized infrastructure.
- Coordinate Across Jurisdictions: Encourage cross-municipal collaboration and data-sharing to create seamless connections between cities and unincorporated areas. A unified countywide framework—supported by the Miami-Dade TPO and relevant regional agencies—can help guide consistent standards, share best practices, and streamline project delivery.
- Track Progress and Adapt: Include monitoring mechanisms to evaluate project outcomes over time. Use GIS platforms and community feedback tools to track implementation, measure performance, and adjust priorities as needed.

Unified Municipal Implementation Plan efforts across Miami-Dade municipalities will amplify the effectiveness of local actions and create a more connected, resilient regional mobility network. A consistent framework for prioritization, funding, and evaluation will ensure that improvements to first- and last-mile infrastructure are equitable, strategic, and scalable, ultimately enhancing mobility for all residents—especially those who rely on walking, biking, and transit.

3.3.5 Tool #5: Expansion and Integration of Municipal Bikeshare Systems

As municipalities across Miami-Dade County seek to build more multimodal, sustainable transportation networks, expanding the bike-sharing systems presents a highly feasible and impactful opportunity. Local governments can play a pivotal role in enhancing active transportation by investing in bike infrastructure that is well-integrated into the broader transit ecosystem and accessible to all users.

3.3.5.1 Feasibility and Strategic Integration

At the municipal level, expanding bikeshare is both logistical and financially viable when guided by strong partnerships, clear policy direction and thoughtful planning. Many municipalities already possess foundational elements such as existing bikeways, proximity to transit stations, and demand in high-density or underserved neighborhoods. By identifying strategic locations —such as near Metrorail, Metrobus, Brightline, Amtrak, and Tri-Rail stations, parks, schools, and commercial corridors—municipalities can fill critical firs-t and last-mile gaps that traditional transit modes do not efficiently serve. Advances in bikeshare technology (e.g., GPS-enabled smart bikes) make system expansion more flexible and scalable, requiring less fixed infrastructure than older models.

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Public-private partnerships with operators can reduce implementation costs, while regional coordination can ensure consistency in bike availability, safety standards, and pricing.

3.3.5.2 Fare Integration

Aligning bikeshare fare structure with the existing fare systems of Metrorail, Metrobus, and/or Tri-Rail is a crucial next step toward seamless user experience. Municipalities should explore fare interoperability solutions, such as regional mobility passes, app-based account linking, or unified fare media (e.g., EASY Card integration). These options make mode-shifting more intuitive and reduce the financial burden on riders, particularly lower income users who rely on transit for daily mobility.

Ensuring that bikeshare systems fairly serve all neighborhoods should also be a core consideration. Municipalities can use data and community input to guide expansion into underserved areas, subsize memberships for qualifying riders, and prioritize connections to key services such as schools, libraries, and destinations of leisure.

The challenge of selecting station sites that function effectively both on their own and as part of a larger, interconnected network is a complex one. Public agencies must weigh local suitability alongside broader system performance to create a cohesive and efficient mobility network. To address this, municipalities should adopt a structured, data-informed, and community-driven sitting process that balances feasibility, equity, demand, and interagency coordination.

3.3.5.3 Policy and Implementation Recommendations

- Conduct a Bikeshare Feasibility and Siting Study (Municipal Level): Evaluate current demand, infrastructure gaps, and high-opportunity zones for bikeshare expansion.
- Align Local and Regional Plans: Coordinate with partners such as the Miami-Dade DTPW and Miami-Dade TPO to ensure station placement and service models integrate with the regional mobility network.
- **Pursue Fare System Integration:** Collaborate with fare system vendors and Miami-Dade DTPW to explore technical solutions for seamless fare payment
- **Pilot Equity-Based Programs:** Implement reduced fare of free access programs in targeted communities, supported by local grants or sponsorships.
- **Monitor and Adapt:** Develop performance metrics tied to ridership, accessibility and modal shift to evaluate the program's success and guide future phases.
- **Pursue Fare System Integration:** Collaborate with fare system vendors such as CitiBike or BCycle and the Miami-Dade DTPW to explore technical solutions for seamless fare payment.
- Align Local and Regional Plans: Coordinate with partners the Miami-Dade DTPW and Miami-Dade TPO to ensure station placement.

Aligning bikeshare fare structure with the existing fare systems of leisure, including stations at Metrorail, Metrobus and/or Tri-Rail stations is a crucial next step toward a seamless user experience. Advances in bikeshare technology (e.g., GPS-enabled smart bikes and e-bikes) make system expansion more flexible and scalable, requiring less fixed infrastructure than older models. Public-private partnerships with operators such as CitiBike or BCycle can reduce implementation costs,

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while regional coordination can ensure consistency in bike availability, safety standards, and pricing.

As municipalities across Miami-Dade County seek to build more multimodal, sustainable transportation networks, expanding the bikes-haring systems presents a highly feasible and impactful opportunity. Local governments can play a pivotal role in enhancing active transportation by investing in bike infrastructure that is well-integrated into the broader transit ecosystem and accessible to all transit users.

3.3.6 Tool #6: Evaluate the Enhancement of Bicycle and Pedestrian Amenities

Improving bicycle and pedestrian infrastructure at transit hubs and bus stops is a critical strategy for increasing transit ridership, expanding catchment areas, and creating a more accessible and seamless multimodal network. By investing in these amenities, municipalities and transit agencies can elevate the overall user experience while enabling more residents to safely and conveniently access transit on foot or by bicycle, especially those who live beyond a short walking distance from fixed-route services.

3.3.6.1 Rationale and Benefits

Gaps in safe, connected pedestrian and bike infrastructure often discourage potential riders from choosing transit. Enhancing access not only improves first- and last-mile connectivity but also addresses broad goals around health, sustainability, and congestion reduction.

Improving these amenities can increase the functional reach— or "catchment area"— of each stop and transit hub, bringing more homes, jobs, and destinations within a viable access range. A well-designed stop becomes more than a boarding location—it becomes a node within a fully integrated transportation system.

3.3.6.2 Key Improvement Strategies for Consideration at the Municipal Level

Key improvement strategies such as Bicycle Level of Service (BLOS), Pedestrian Suitability Modeling, and Multimodal User Surveys play a significant role in the evaluation and enhancement of pedestrian and bicycle amenities. BLOS assesses the quality and safety of bicycle infrastructure, helping to identify areas needing improvement. Pedestrian Suitability Modeling evaluates the suitability of pedestrian pathways, ensuring they meet the needs of all users, including those with disabilities. Multimodal User Surveys gather feedback from a diverse range of transportation users, providing valuable insights into their experiences and preferences. Together, these strategies offer a comprehensive approach to understanding and enhancing the infrastructure for cyclists and pedestrians, ultimately contributing to more sustainable and livable communities, as described in more detail below.

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3.3.6.2.1 Bicycle Level of Service (BLOS)

BLOS is a quantitative measure used to assess how safe, comfortable, and convenient a roadway or corridor is for people riding bicycles. It provides a standardized way to evaluate the quality of service that a roadway segment offers to cyclists based on a variety of factors such as traffic conditions, roadway geometry, and the presence or absence of bike facilities. BLOS calculates a score or letter grade (A-F) for roadway segment, like automobile level of service, but from the perspective of cyclists. The key factors typically include

- Traffic conditions vehicle speed, traffic volume, percentage of heavy vehicles
- Lane configuration number of lanes, lane width, presence and width of bike lanes or shoulders
- Pavement condition surface quality (bumps, cracks, debris) affecting cyclist comfort
- Crossing/Intersection signal timing, turning conflicts, distance between crossings
- Separation from Traffic physical separation (e.g., protected bike lanes, buffers and curbs

How Municipalities can use BLOS

- Evaluate existing conditions to identify corridors with poor BLOS near transit stations, schools or commercial centers and to prioritize routes with high demand but low quality of service. Use BLOS to evaluate current road segments and corridors based on cyclist comfort, safety, and connectivity. BLOS helps identify gaps or low-performing areas where cyclists experience discomfort or safety risks.
- Guide bike network planning to select corridors for protected bike lanes, traffic calming or bike boulevards based on BLOS results, and integrate BLOS analysis into Complete Streets or First-Last-Mile Plans
- Focus on enhancing corridors that link residential areas to transit stations or major bus stops.
- Monitor progress to use before-and-after BLOS scoring to evaluate the impact of new bicycle infrastructure investments.
- Support funding and policy decisions to provide data-driven justification for grant applications, roadway redesign and mobility budgets.
- Coordinate with neighboring municipalities and the county to ensure regional continuity in bike infrastructure standards and quality.

3.3.6.2.2 Pedestrian Suitability Modeling

Pedestrian suitability modeling is a strategic planning tool that helps municipalities assess, prioritize, and enhance walkability. It evaluates how well the built environment supports walking by analyzing factors such as sidewalk availability, safety, land use mix, intersection design, and pedestrian comfort.

By incorporating pedestrian suitability models into local planning efforts, municipalities can make data-informed decisions to improve first- and last-mile connections, increasing access to transit and support healthier, more sustainable communities.

Pedestrian suitability modeling helps identify areas with low pedestrian suitability scores, such as:

- Missing or narrow sidewalks
- Poor lighting

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- Wide road crossings without pedestrian signals, and
- Gaps in pedestrian network.

Municipalities should prioritize investments and target areas with low suitability scores for pedestrian improvements such as:

- High-visibility crosswalks and curb extensions
- ADA-compliant curb ramps
- Pedestrian refuge islands
- Traffic calming measures (e.g., narrowing lanes, reduce speeds)

Municipalities can include suitability scores in municipal mobility plans, land use plans, or zoning updates to guide growth toward walkable, transit supportive development. They may also inform Complete Streets or Vision Zero about policies with data-backed insights on pedestrian safety and accessibility needs. To support first- and last-mile connections, it is recommended to apply modeling to evaluate walking conditions within ½ mile of transit stations or mobility hubs. This can help pinpoint where upgrades are needed to connect sidewalks, enhance safety, and remove barriers—especially in areas where transit is underused due to poor pedestrian access.

3.3.6.2.3 Multimodal User Surveys

Multimodal user surveys are a valuable engagement and evaluation tool for municipalities seeking to improve bicycle and pedestrian infrastructure. These surveys gather firsthand input from people who walk, bike, and use transit—helping understand travel behaviors, identify barriers, and evaluate the effectiveness of investments in first- and last-mile connectivity.

Unlike technical models or GIS-based assessments, multimodal surveys provide user-experienced insight, such as:

- Perception of safety and comfort
- Reasons for choosing (or avoiding) walking/biking
- Satisfaction with existing amenities
- Specific locations that need improvement

This user feedback is crucial for designing responsive and effective infrastructure improvements.

3.3.7 Tool #7: Integrate Greenways, Trails, and Pathways

Coordinated implementation efforts across Miami-Dade municipalities are essential to expanding the reach and effectiveness of local mobility initiatives. By aligning municipal projects within a unified countywide framework, cities can contribute to a more connected, resilient, and multimodal regional transportation network. A consistent approach to project prioritization, funding, and performance evaluation ensures that improvements to first- and last-mile connections are equitable, strategic, and scalable—particularly benefiting those who rely on walking, bicycling, and public transit for daily travel.

For example, the SMART Trails Master Plan plays a key role in this vision by integrating greenways, shared-use paths, and trail systems into broader transportation and land-use planning. The plan

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proposes 20 new trail connections linking key population centers to high-activity destinations, including educational institutions, employment hubs, and transit stations. It also includes 14 miles of new active transportation facilities, 6 shared-use path bridges, and over \$62 million in planned investments along major SMART Plan transit corridors. These improvements will directly support first- and last-mile access by closing critical connectivity gaps between neighborhoods and transit infrastructure by integrating local Greenway Master Plans.

To maximize the impact of these investments, new municipal projects and mobility improvements should be designed to connect to and enhance the existing SMART Trails and Greenways network. This includes identifying missing trail links, leveraging planned corridors, and coordinating across jurisdictions to ensure seamless transitions between city boundaries. By using existing trails and pathways as a backbone, local governments can reduce redundancy, lower costs, and accelerate the implementation of meaningful infrastructure that supports safe, sustainable, and multimodal travel throughout the region.

3.3.8 Recommendations and Improvements

Miami-Dade County stands at a pivotal moment in its growth, with increasing demands for resilient, equitable, and multimodal transportation solutions. As the region continues to expand, the Countywide Master Plan must prioritize comprehensive strategies that enhance connectivity, reduce congestion, and support sustainable development. A critical component of this vision lies in addressing first- and last-mile challenges—ensuring that residents and visitors can easily access transit through safe, reliable, and accessible modes such as walking, biking, micromobility, and local circulators. Integrating first- and last-mile recommendations into the broader transportation framework is essential to bridging service gaps, improving ridership, and supporting the diverse needs of Miami-Dade's communities.

As Miami-Dade County continues to grow, the Countywide Master Plan must promote a unified vision for accessible and efficient mobility. This begins with evaluating county regulations to ensure that new development incorporates first- and last-mile connectivity from the outset.

A thorough review of the Miami-Dade TPO's 2050 Bicycle and Pedestrian Master Plan part of the 2050 Long-Range Transportation Plan (LRTP), and the Complete Streets Design Guidelines is essential to identify where first- and last-mile strategies are already addressed—and where critical gaps and opportunities for improvement remain. Strengthening these connections through safe pedestrian access, bike infrastructure, micromobility, and local circulators will help bridge service gaps, increase transit ridership, and advance equitable transportation countywide.

The following section outlines a Countywide Recommendations Toolbox, developed to promote first-and last-mile connectivity through high-level improvements that enhance safety, accessibility, and multimodal integration. These recommendations reflect Miami-Dade County's broader transportation and equity goals, providing a strategic framework to guide county-led investments, support regional transit corridors, and strengthen connections between greenways, transit hubs, and key destinations across jurisdictions.

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3.3.8.1 Implement Traffic Calming, Curb Extensions, and Landscaping

Traffic calming measures such as raised intersections, speed tables, and narrowed travel lanes are essential for reducing vehicular speeds near transit stops and improving pedestrian safety. Curb extensions at intersections reduce crossing distances, enhance visibility, and provide additional space for transit shelters or greenery. The incorporation of street trees and landscaping not only improves aesthetics but also offers shade and encourages walking. These features create a safer and more comfortable pedestrian environment, especially in high-traffic or underserved areas.

3.3.8.2 Optimize Signal Timing for Pedestrians and Cyclists

Updating signal timing to prioritize non-motorized users is critical. Leading pedestrian intervals (LPIs), extended crossing times for wide intersections, and dedicated bicycle signal phases can significantly improve safety and accessibility. Signal retiming should focus on areas with high pedestrian traffic or near schools, senior centers, and transit stations to ensure adequate crossing opportunities and minimize conflicts between vehicles and vulnerable road users.

3.3.8.3 Expand Bike Lanes, Parking, and Bikeshare Infrastructure

A robust bicycle network is essential for first- and last-mile connectivity. Countywide efforts should include installing:

- Protected and buffered bike lanes on arterial corridors
- Bicycle parking hubs at Metrorail, Metrobus, Brightline, Metromover, Amtrak, and Tri-Rail stations
- Expansion of the bikeshare system to underserved municipalities, integrated with the broader fare system to allow seamless multimodal travel

The emphasis should be on ensuring bike infrastructure continuity between neighborhoods and major transit nodes, especially in areas with limited car access or high transit dependency.

3.3.8.4 Install Wayfinding Signage to Destinations on Transit Connections

Effective pedestrian and cyclist wayfinding ensures seamless transitions between transportation modes. Signage should achieve the following:

- Direct users to nearby transit stations, bikeshare docks, schools, and public facilities
- Include real-time transit information at key nodes
- Be multilingual and ADA-compliant
- Wayfinding design must be consistent countywide to reinforce a coherent and user-friendly transit network

3.3.8.5 Upgrade Sidewalks and Crosswalks

Continuous, ADA-compliant sidewalks and well-marked, high-visibility crosswalks are foundational to safe and equitable access. Improvements should focus on:

- Filling sidewalk gaps near bus stops and stations
- Repairing deteriorated surfaces and ensuring ADA slope compliance

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- Adding mid-block crossings where pedestrian demand is high
- Incorporating tactile surfaces and pedestrian refuge islands where appropriate

3.3.8.6 Develop and Update Municipal Transit Development Plans

Municipalities should be encouraged, or required, to develop Transit Development Plans to evaluate and improve local circulator and shuttle services. Such planning is essential for ensuring that local investments in mobility align with countywide transit goals. These TDPs should:

- Align with MDT service integration
- Analyze performance metrics such as on-time performance, frequency, and ridership
- Recommend service enhancements that support last-mile connectivity

3.3.8.7 Assess Countywide Bikeshare Expansion Feasibility

To promote equitable and seamless multimodal connectivity, Miami-Dade County should conduct a comprehensive feasibility assessment for expanding the bikeshare system countywide. This effort would evaluate the potential for deploying additional bikeshare stations near Metrorail, Amtrak, Tri-Rail, Brightline, BRT, Metromover, and high-ridership Metrobus corridors, as well as key destinations such as universities, parks, and employment centers. Special emphasis should be placed on ensuring access in underserved neighborhoods where affordable mobility options are limited. Consideration must also be given to inclusive pricing structures, non-smartphone access, and station placement strategies that align with existing bicycle infrastructure.

3.3.8.8 Enhance Bicycle and Pedestrian Amenities at Transit Hubs

Improving the "catchment area" around transit hubs, which is typically defined as a 0.5-mile walk and a 3-mile bike ride, can significantly increase ridership by making stations more accessible and inviting. These upgrades can significantly enhance the user experience and reduce dependence on vehicle access. Key improvements include:

- · Secure, shaded bicycle parking
- Bicycle repair stations and air pumps
- Lighting, seating, and green buffers
- Integration with nearby trails or micromobility networks

3.4 First- and Last-Mile Framework Toolkit

Improving the first- and last-mile experience is essential to building a fully connected, equitable, and user-friendly transportation system. This section of the *First- and Last-Mile Framework Toolkit* presents an overview of recommendations designed to strengthen multimodal access to and from transit hubs—such as the Metrorail, Metromover, Tri-Rail, Brightline, and Amtrak stations—while also guiding improvements at the municipal level, where local streets, sidewalks, and public spaces shape the daily travel experience.

First- and last-mile gaps often act as a barrier to transit ridership. Riders may find it difficult to access a station safely by foot, bike, scooter, or bus, especially when infrastructure is fragmented, unclear, or uncomfortable. Addressing these gaps requires coordinated solutions that are both physical—

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such as crosswalks, bike lanes, bike parking, and signage—and informational, such as wayfinding, real-time data, and public outreach.

This Toolkit recommends a series of scalable interventions that municipalities and agencies can adopt based on local context. At transit hubs, improvements focus on enhancing pedestrian crossings, integrating bike and scooter facilities, improving signage, and organizing station areas for seamless transfers. At the municipal level, this Toolkit encourages municipalities to invest in safe pedestrian and bicycle routes, wayfinding systems that guide travelers to nearby destinations, and programs that raise awareness about active transportation options.

Together, these recommendations support a multimodal ecosystem where walking, biking, micromobility, and transit are easy to combine and navigate. By improving the first- and last-mile, Miami-Dade County and its municipalities can expand the reach of transit, reduce car dependency, and create safer, more connected communities across the region.

3.4.1 First- and Last-Mile Framework

To strengthen the equity and efficiency of first- and last-mile planning across Miami-Dade County, it is recommended that the County integrate elements of the *Cache Valley Transit District (CVTD) First-* and *Last-Mile Study's (2022)*¹⁹ framework particularly its typology classification matrix and Propensity-Accessibility Prioritization Tool. This framework provides a tested, data-driven approach to identifying where investments in pedestrian, bicycle, and micromobility infrastructure will yield the greatest return in terms of ridership, safety and access. At its core, the tool helps identify where people are likely to use transit, known as propensity, and where they currently lack safe and convenient access to it, known as accessibility. When these two layers are combined, the tool paints a clear picture of neighborhoods where first- and last-mile interventions could have the greatest impact.

For example, a community with many transit-dependent households but inadequate sidewalks or bike lanes would be flagged as high-priority for improvements. These areas often experience disconnect between transit access and safe, comfortable travel to and from transit stops, resulting in mobility gaps that disproportionately affect low-income residents, seniors and individuals without access to a personal vehicle.

A local example is the City of Opa-Locka, which has a high concentration of households that rely on public transportation for daily commuting yet face persistent infrastructure challenges. Many transit stops in the city are surrounded by incomplete sidewalk networks, narrow or crumbling paths, and limited pedestrian crossings. In some cases, transit users must walk in the roadway or cross wide, high-speed streets without adequate signage or lighting, conditions that discourage transit use and increase the risk of crashes. Similarly, the City of Hialeah, one of the most densely populated municipalities in Miami-Dade County, exhibits high rates of transit dependency. Many residents rely on the Metrobus, Metrorail, and Tri-Rail services to reach work and essential services. However, gaps in pedestrian infrastructure, inconsistent bike facilities, and long walking distances to safe crossings create a major barrier to accessing these transit options efficiently and safely. Despite being well-

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¹⁹ CVTD First and Last Mile Study

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served by transit lines, the lack of supportive infrastructure undermines the system's effectiveness for those who need it most.

By following the typology classification matrix and the Propensity Accessibility Prioritization Tool, this allows Miami-Dade County and the municipalities to focus its limited resources in the places that need it most, rather than spreading investments thinly across areas with little demand or existing access. This component estimates how likely people in each area are to use active or transit modes for first- and last-mile travel, based on demographic, socioeconomic, and land-use characteristics. Variables might include:

- Household income,
- Car ownership rates
- Age distribution (e.g., youth and seniors)
- Student population density
- Transit-dependent populations

Goal: Identify areas where there is latent demand for walking, biking, or transit access, but infrastructure or access gaps prevent usage

The CVTD First- and Last-Mile Study uses a four-parameter typology, which is already embedded in Miami-Dade County's existing bus stop typology framework:

- Walk Access evaluates the presence and continuity of sidewalks and pedestrian crossings within ¼ mile of a stop.
- Employment Density is measured by the number of jobs per Transportation Analysis Zone (TAZ).
- Residential Density refers to the number of residents per square mile.
- Transit Frequency measures the reliability and frequency of transit service at the stop.

Each characteristic is ranked as high, medium, or low based on the parameters shown in Table 3-5.

Table 3- 5: Typologies Characteristics Parameter

Characteristics	Characteristics Parameter			
Characteristics	Low	Medium	High	
Walk Access	Limited or no pedestrian infrastructure in the immediate vicinity. Few to no sidewalks or marked pedestrian	Sidewalks and pedestrian crossings are present, but they are inconsistent. Pedestrian infrastructure is intermittent, with gaps	Sidewalks and pedestrian crossings are continuous and well-connected. The area features uninterrupted pedestrian	
	crossings nearby.	in sidewalks and crossings.	infrastructure.	
Employment Density	The TAZ contains fewer than 500 jobs.	The TAZ contains between 500 and 5,000 jobs	The TAZ contains more than 5,000 jobs.	

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Characteristics	Characteristics Parameter			
Cilaracteristics	Low	Medium	High	
Residential Density	Population density is less than 1,000 people per square mile.	Population density ranges from 1,000 to 3,500 people per square mile.	Population density exceeds 3,500 people per square mile.	
Transit Frequency/Delivery	On-demand or fixed route with frequency of 60 minutes or greater	On-demand or fixed route with frequency of 30-60 minutes	Fixed route with frequency of 30 minutes or less	

Source: CVTD First and Last Mile Study

Based on the four typology characteristics, bus stops are divided into three typologies: Rural, Suburban Residential/Commercial, and Urban Downtown/Campus. A summary of the three typologies and characteristics are summarized in **Table 3-6.**

Table 3- 6: First- and Last-Mile Bus Stop Typologies and Criteria

	Transit Stop Typology			
	Rural	Suburban	Urban	
	nuiai	Residential/Commercial	Downtown/Campus	
Characteristics	Agricultural	Low- to medium-density		
	communities	neighborhoods, which may	Downtown area	
	and very low-	include community centers and	Downtown area	
	density housing	commercial corridors		
Walk Access	Low	Medium	High	
Employment	Low	Low	Low	
Density	LOW	LOW		
Residential Very Low Density		Medium	High	
		เกียนเน่น		
Transit	Low	Medium	Hierla	
Frequency		inedialii	High	

Source: CVTD First and Last Mile Study

Adapting this structure will enable each bus stop or station area in Miami-Dade County to be categorized as rural, suburban residential/commercial, or urban downtown/campus, with corresponding infrastructure recommendations tailored to each context. This avoids overbuilding in low-density areas or under-serving high-demand corridors.

Where CVTD's methodology adds further value is in its Propensity-Accessibility Matrix, which plots transit stop areas across two dimensions:

• **Propensity (vertical axis):** Represents the likelihood that a person within a ½-mile radius of a bus stop will use transit. This is based on demographic and land use data such as population density, car ownership, income, and proximity to destinations.

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• Accessibility (horizontal access): Measures the ease of accessing transit, based on the availability and quality of pedestrian and bicycle infrastructure such as bike lanes, ADA-compliant paths, lighting, and crosswalks within a ¼ to ½-mile of each bus stop.

Plotting each bus stop on this two-axis matrix, the study identified which locations had both a high demand for transit and low access (the highest priority for improvement), versus those with low demand and good access (lower priority). The resulting classification supports data-driven investment by highlighting areas where first- and last-mile infrastructure can have the greatest impact on improving ridership and access equity. The "P-I-C-K" rule of thumb should be considered when determining locations to prioritize and further analyze for implementing first- and last-mile strategies:

- **P Proceed**: High Propensity, High Accessibility (High priority location) these bus stop locations are generally recommended as candidate locations for future implementation of first-and last-mile strategies. These locations exhibit higher potential for transit propensity and higher opportunity for transit accessibility improvements.
- I Investigate: High Propensity, Low Accessibility (Medium priority location) these bus stop locations are medium priority candidate for future implementation of first- and last-mile strategies. These locations exhibit higher potential for transit propensity, but fewer potential opportunities for transit accessibility improvements.
- **C Consider**: Low Propensity, High Accessibility (Medium priority location) these bus stop locations are medium priority locations for future implementation of first- and last-mile strategies. These locations exhibit potential opportunities for transit accessibility improvements, but lower transit propensity potential.
- **K Keep for Consideration:** Low Propensity, Low Accessibility (Low priority locations) these bus stop locations are lower priority because of their low transit propensity and low accessibility scores.

This data-driven approach ensures that first- and last-mile strategies are targeted, equitable, and aligned with land use and transit service patterns across Miami-Dade County. It also supports long-term goals under the PTP by promoting seamless, safe, and sustainable connections to the regional transit network. A list of transit stop improvement elements descriptions is provided in **Table 3-7**.

Table 3-7: Transit Stop Improvement Elements Description

				Recommended for		
	Improvement Element	Description	Additional Consideration		Suburban Residential/ Commercial	Urban Downtown/ Campus
A	Bicycle Parking	Provide bicycle parking for cyclists. Covered bicycle parking can be provided in high-demand areas. Preferred bicycle racks are an-averted "U," "A," or "Post and Loop" configurations.	Single bike racks are added to concrete pads based on the surrounding population. Urban and/or commercial surroundings have a higher number of tracks recommended than rural and/or residential areas. Bicycle lockers and bike repair center may be considered for areas with high bicycle traffic.	~	~	~
В	Shelter	Shelters offer a waiting area protected from the elements and promote ridership.	Enclosed shelters are recommended due to South Florida weather. Cantilever shelters will be considered with future public outreach. It is recommended that shelters be considered at stops with 20 or more boardings per day.	As needed	✓	~
С	Exterior Bench	Provides overflow seating.	Exterior benches provide resting places that may be preferred over benches in enclosed shelters due to the heat of summer months. It is recommended that benches be considered at stops with 10 or more boardings per day.	As needed	✓	~
D	Concrete Pad	Concrete pads provide for a landing, walkway, and to place a bike rack and bench.	These improvements also provide for ADA access of the bus stop.	/	/	~
E	Sidewalk Connectivity	Provide safe walking spaces that are separate from roadway vehicles between the bus stop and destinations.	Sidewalk connectivity to bus stops improves safety, convenience, and comfort. Sidewalks should be compliant with ADA requirements. Ideally, sidewalks are 5-feet wide to allow side-by-side walking. Sidewalks should be no less than 4-feet wide.	~	✓	~
F	Pedestrian Crossings	Provide pedestrian curb ramps and other crosswalk improvements to enhance accessibility and safety for pedestrian crossings near bus stop.	Pedestrian improvements may include installing curb ramps, high visibility crosswalk pavement markings, or enhanced treatments such as Pedestrian Hybrid Beacons (PHB). For locations near schools, please consider designated safe routes to school.	As needed	As needed	~
G	Bulb outs / Traffic Calming	Improve the comfort and safety of pedestrians by shortening the crossings distances and reducing vehicle turning speed.	Bulb outs and curb extensions may affect drainage of the roadway and may make it difficult for larger vehicles to turn.	As needed	As needed	~
н	Street Lighting	Street lighting increases the visibility of pedestrians at the stop. This helps the bus driver to see the transit rider in dark conditions and increases the comfort level of the transit rider.	It is recommended that street lighting be considered at stops with 10 or more boardings per day.	As needed	As needed	As needed
ı	Trash Receptacle	Help keep transit stop areas clean of litter.	See American Public Transportation Association (APTA) White Paper of Trash and Recycling Receptacles for Transit Facilities ²⁰ .	As needed	✓	~

 $^{^{20}\,\}underline{\text{APTA Trash}}$ and Recycling Receptables for Transit Facilities

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Typology Descriptions - Rural

Transit stops in a rural typology serves areas of agricultural communities and very low-density housing. This typology faces the greatest first- and last-mile challenges due to the distance most people must travel to access bus stops, lack of existing bicycle or pedestrian infrastructure, and less frequent transit service, which reduces the appeal of taking transit instead of driving.

A local example of this typology is Florida City and the City of Homestead, located in the southernmost part of Miami-Dade County. While both municipalities are served by Metrobus and express services via the South Dade Transitway, much of their surrounding areas are rural and agricultural, with pockets of unincorporated land and low-density communities. Many residents live

far from major bus corridors and must walk along unpaved shoulders or roadways without sidewalks to reach transit stops. Additionally, gaps in bicycle infrastructure make it difficult for residents to bike safely to and from park-and-ride lots or station areas.

Given these conditions, rural communities like these two municipalities require tailored first- and last-mile strategies that focus on connecting residents to transit in flexible, cost-effective ways. This may include expanding on-demand transit shuttle services, improving trail and pathway connectivity, enhancing pedestrian safety around existing stops, and incorporating mobility hubs at key intersections or community centers.

By prioritizing investments in these underserved rural areas, Miami-Dade County and its partners can improve transit equity, reduce isolation, and ensure that residents in all community types, including those in agricultural and rural zones, have meaningful access to the regional transportation network.

Figure 3-10 illustrates existing and improvement conditions for a typical Rural typology, highlighting bicycle parking, concrete pads and landings, exterior benches, sidewalk connectivity, and pedestrian scale lighting. Transit stop improvement guidelines are summarized in **Table 3-8**.

Figure 3- 10: Rural Transit Stop Elements



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Table 3-8: Rural Transit Stop Guidance

Transit Stop Improvements	Guidance
Bicycle Parking	1 rack (minimum) 2 racks (recommended): preferred rack types are "U," "A," or "Post and Loop"
Shelter	(May be considered)
Exterior Bench	Consistent with demand, typically 10 or more boardings per day
Concrete Pad/Landings/Walkways	Connects to sidewalks (where provided)
Sidewalk Connectivity	Close sidewalk gaps within ¼ mile of stop (where provided)
Pedestrian Crossings	Improve pedestrian crossings, as needed
Bulbouts/Traffic Calming	(May be considered)
Street Lighting	Add lighting, as needed
Trach Receptacle	(May be considered)

Typology Descriptions – Suburban Residential/Commercial

Suburban residential/commercial typology consists of low- to medium-density neighborhoods that include community and recreation centers, schools, and autooriented commercial corridors, as well as local commercial areas. The suburban environment is generally characterized by wide streets, larger block sizes, and limited sidewalk or bicycle infrastructure. Land use is more widespread than in urban areas, resulting in longer distances between homes, schools, jobs, and commercial services. This structure makes walking or biking for daily needs less practical for residents, reinforcing car dependency. However, many suburban areas are served by the Metrobus routes, and some lie within reach of Metrorail stations or regional park-and-ride lots.

Local examples of this typology include Kendall and Fontainebleau, both of which are large unincorporated communities with significant residential populations and expansive commercial corridors. Kendall features suburban subdivisions, shopping centers like The Falls and Dadeland Mall, and access to major roadways such as US-1 and the SR 874/Don Shula Expressway. Despite

Figure 3- 11: Suburban
Residential/Commercial Transit Stop



the presence of Metrorail stations at Dadeland North and South, much of Kendall lacks continuous

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sidewalks or protected bike infrastructure, making non-driving access to transit challenging for many residents. Fontainebleau, located just west of Miami International Airport, is characterized by a mix of multifamily housing, office parks, and commercial centers along Flagler Street and NW 7 Street. The area is served by several Metrobus routes, but like Kendall, it faces significant gaps in pedestrian and bicycle connectivity. Residents may need to travel long distances across wide, high-traffic roadways to reach bus stops or community destinations.

Figure 3-11 illustrates existing and improvement conditions for a typical Suburban residential/commercial typology, including bicycle parking, shelter, concrete pad and landing, sidewalk connectivity, and trash receptacles. Transit stops improvements guidance is summarized in **Table 3-9**.

Table 3- 9: Suburban Residential/Commercial Transit Stop Guidance

Transit Stop Improvements	Guidance
Bicycle Parking	Two or more, consistent with demand bike lockers and bike
bicycle Falking	repair centers should be considered with high bicycle traffic
Shelter	Small to mid-size shelter (cantilever or enclosed), when 20 or
Silettei	more passengers board per day
Exterior Bench	Consistent with demand, typically when 10 or more boarding per
Exterior Belicii	day
Concrete	Connects to sidewalks
Pad/Landings/Walkways	Connects to sidewarks
Sidewalk Connectivity	Close sidewalk gaps within ¼ mile of stop. Construct new
Sidewalk Soffilectivity	sidewalk where no sidewalk exists within ¼ mile of bus stop
Pedestrian Crossings	Consistent with crossing needs, based on Manual of Uniform
r edestriali Olossiligs	Traffic Control Devices criteria and guidance
Bulbouts/Traffic Calming Consider constructing narrow crossing distances	
Street Lighting	Add lighting, as needed
Trach Receptacle	One trash receptacle

Typology Descriptions – Urban Downtown/Campus

Urban downtown/campus represent the densest land uses and consists of mixture of commercial and higher-density residential. This typology is located within the downtown area and campuses. These locations have higher walkability and more frequent transit service.

Downtown Miami, Brickell, and the Central Business District (CBD) represent the densest, most transit-connected neighborhoods in Miami-Dade County. As part of an urban downtown and campus typology, these areas are characterized by a compact and layered mix of high-rise residential towers, Class A office buildings, cultural institutions, government centers, retail destinations, and multimodal transit hubs such as Metrorail, Metromover, and multiple bus lines. This vertical integration of land use supports a vibrant streetscape and facilitates a high degree of walkability, making these neighborhoods essential anchors within the regional transportation network.

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Thanks to this robust infrastructure, a wide range of mobility options is available, including heavy rail, automated people movers, local trolleys, shared micromobility, and pedestrian-oriented infrastructure. The density of services and destinations enables many trips to be made without the need for a private vehicle, reinforcing the area's potential as a model for transit-oriented development in the county.

However, despite these multimodal advantages, challenges persist—particularly regarding first- and last-mile connectivity. While transit services are frequent and destinations are often within close range, the quality and consistency of access to and around transit stations vary significantly across corridors and blocks. Gaps in the pedestrian network, lack of continuous protected bike infrastructure, limited wayfinding, and insufficient shade, lighting, and street furniture can undermine the comfort and safety of users. These factors are especially critical for vulnerable populations such as seniors, people with disabilities, and transit-dependent residents.

Targeted improvements in these areas should focus on enhancing the user experience at and near transit stops. This includes the installation of bicycle parking, to support cycling as a viable connection mode, along with shelters, exterior benches and concrete landing pads to provide comfort and ADA accessibility for waiting passengers. Sidewalk connectivity must be reinforced through the elimination of gaps, proper curb ramps, and seamless connections between blocks, especially around major intersections and buildings.

Figure 3-12 illustrates existing and improvement conditions for a typical urban downtown/campus typology, highlighting bicycle parking, shelters, exterior benches, concrete pads and landings, sidewalk connectivity, pedestrian crossings, bulbouts and traffic calming infrastructure, street lighting, and trash receptacles. Transit stop improvement guidelines are summarized in **Table 3-10**.

Existing Conditions

Improvement Elements

A Bicycle Parking
B Shelter
C Exterior Bench
C Concrete Pad/Landing
Sidewalk Connectivity
Pedestrian Crossing
B Shelter
Exterior Bench
C Sidewalk Connectivity
F Pedestrian Crossing
B Shelter
Trash Receptable

Figure 3- 12: Urban Downtown/Campus Transit Stop

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Table 3- 10: Urban Downtown/Campus Transit Stop Guidance

Transit Stop Improvements	Guidance	
Bicycle Parking	Two or more, consistent with demand bike lockers, and bike	
bicycle i arking	repair centers should be considered with high bicycle traffic	
Shelter	Large shelter(s) consistent with demand	
Exterior Bench	With shelter	
Concrete	Connects to sidewalks and plazas	
Pad/Landings/Walkways	Confidences to sidewarks and plazas	
Cidewell Connectivity	Close sidewalk gaps within ¼ mile of stop, and construct new	
Sidewalk Connectivity	sidewalk where no sidewalk exists within ¼ mile of bus stop	
Pedestrian Crossings	Consistent with Manual of Uniform Traffic Control Devices	
redestriali Ciossiligs	(MUTCD) guidelines	
Bulb-outs/Traffic Calming	Install to narrow crossing distances	
Street Lighting	Add lighting, as needed	
Trach Receptacle	One trash receptacle	

3.4.2 Tool #1: Pedestrian Wayfinding

Pedestrian wayfinding is a critical component of the broader wayfinding system, specifically designed to assist individuals navigating on foot. Within the context of transit infrastructure, pedestrian wayfinding focuses on guiding commuters from the external environment of a station—such as sidewalks, bus stops, bike racks, and drop-off areas—to the station entrances, platforms, ticketing machines, restrooms, and other key amenities. This system includes clear signage, intuitive pathways, lighting, tactile elements for individuals with visual impairments, and real-time information displays.

Effective pedestrian wayfinding not only improves the overall user experience, but also enhances safety, reduces confusion, and encourages greater transit use, particularly among first-time users, tourists, and those with limited mobility. In high-capacity commuter hubs, where multiple modes of transportation converge, thoughtful pedestrian wayfinding is essential to ensure seamless transitions between systems. It helps minimize congestion, improves the flow of foot traffic, and ensures equitable access to all parts of the facility. As such, pedestrian wayfinding should be integrated early in the station design and retrofitting process, coordinated with local sidewalk and street-level improvements to support first and last mile connectivity.

Wayfinding systems should promote walking and transit use by delivering clear, multimodal information and prioritizing the pedestrian experience. By complementing other visual cues in the environment, effective wayfinding helps individuals orient themselves and feel confident navigating through urban spaces. When people can easily understand how close their destination is, they are more likely to choose walking as a viable and comfortable option.

Wayfinding outside of transit stations plays a critical role in connecting riders to nearby points of interest and reinforcing the link between transit and the surrounding community. At the municipal level, clear, well-placed signage and mapping systems can transform station areas into welcoming gateways, guiding transit users on foot to civic destinations, cultural landmarks, parks, retail

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corridors, and other neighborhood assets. Many transit stations in Miami-Dade County are located within or adjacent to dense urban areas, yet without proper pedestrian wayfinding, riders often exit a station without clear direction or context. This lack of information can lead to confusion, reduce

Figure 3- 13: Example of Pedestrian Wayfinding Signage

THEATRE DISTRICT

Inim McIntyre Park

3 min Farmer's Market

Strathcona Public
3 min Library

Light Horse Park &
5 min Anne Frank Memorial

Source: City of Edmonton

walkability, and diminish the overall transit experience—especially for visitors, new residents, or those unfamiliar with the area.

To address this, municipalities can install branded, consistent pedestrian signage outside of stations that highlights key local destinations within a comfortable walking radius—typically a 5- to 10-minute walk, an example of can be found in **Figure 3-13**. These signs should include walking times, intuitive arrows, and icons for common points of interest such as libraries, city halls, museums, shopping streets, and public parks. Maps mounted near station exits or on sidewalk kiosks can provide broader context and support orientation.

Multilingual messaging, ADA-compliant design, and integration with digital tools—such as QR codes linking to local maps or municipal websites—ensure

that wayfinding serves a diverse range of users. These signs also present an opportunity for cities to reinforce their visual identity through custom fonts, colors,

Figure 3- 14: Multilingual

or logos while still following federal guidelines for readability and consistency, as depicted in **Figure 3-14**.

By implementing pedestrian wayfinding outside of transit stations, municipalities help activate station areas, encourage walking, and support local businesses. This investment in navigation infrastructure strengthens the role of transit as a connector—not just between destinations, but within the fabric of the community itself

Key elements involved in pedestrian wayfinding at commuter train stations are described as follows:

- External signage: Wayfinding starts even before passengers enter the station building. Clear and visible signs should be placed along nearby streets, sidewalks, and intersections, directing pedestrians towards the station. These signs may include distance indicators, station names, symbols, and directional arrows.
- Crosswalks and pedestrian paths: Safe and wellmarked pedestrian crossings and pathways should be provided at intersections and roadways leading to the station. Crosswalk signals and traffic calming measures can enhance pedestrian safety.

Figure 3- 14: Multilingual Pedestrian Signage Totems



Source: Better Future

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- Station entrances: Stations may have multiple entrances catering to different access points. Signage should be prominently displayed at each entrance, indicating the ticketing area, platforms, and other station facilities.
- **Pathway indicators:** Once inside the station, clear directional signs and floor markings can guide pedestrians to the appropriate ticketing areas or access points for different train platforms.
- Ticketing area navigation: Wayfinding aids within the ticketing area should help pedestrians locate ticket machines or ticket counters. Signage should also indicate the route to platforms or transit waiting areas.
- **Platform guidance:** Clear signs and visual cues should lead pedestrians from the ticketing area to the correct train platforms. Information about train schedules, platform numbers, and any platform changes should be easily visible.
- **Platform amenities:** Wayfinding elements should also highlight essential facilities on the platform, such as seating areas, restrooms, and emergency exits.
- **Visual landmarks:** Prominent visual landmarks both inside and outside the station can serve as reference points to assist pedestrians in orienting themselves and navigating effectively.
- Accessibility considerations: Ensuring that pedestrian wayfinding is accessible to people with
 disabilities or special needs is essential. Tactile signs, braille, audible information, and barrierfree pathways should be provided.

By implementing a comprehensive pedestrian wayfinding system, commuter train stations can improve the overall experience for passengers arriving on foot and ensure seamless navigation from the station's surroundings to the desired platforms and facilities.

3.4.3 Tool #2: Bicycle Wayfinding

Bicycle wayfinding at the municipal level is an essential strategy for making cycling a more accessible, intuitive, and reliable transportation option—particularly for first and last mile connections to transit, schools, parks, commercial districts, and residential neighborhoods. In Miami-Dade County, where many cities are working to promote active transportation and reduce car dependency, clear and consistent bicycle wayfinding helps cyclists navigate safely and confidently across both local streets and regional corridors.

Figure 3- 15: Example of Pavement Markings for Bicycles



Source: Alta Go, Wayfinding

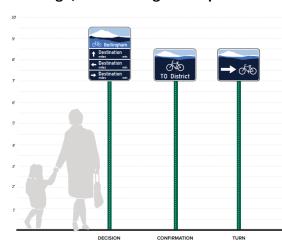
Municipal bicycle wayfinding includes signage, pavement markings, as shown in **Figure 3-15**, and maps that guide riders along designated bike routes, connect them to nearby transit hubs (such as Metrorail, Tri-Rail, Metromover, and Brightline), and point the way to popular destinations within the city. These wayfinding elements not only improve the rider's experience they also reinforce the visibility and legitimacy of cycling as a daily mode of travel.

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At the street level, wayfinding signs for cyclists should indicate:

- Route names or numbers (if part of a designated network)
- Directions to key destinations with distances or estimated travel times
- Connections to transit stations, bike parking, and shared-use paths
- Icons or colors that distinguish bike routes from vehicle traffic routes

Figure 3- 16: Decision Sign, Confirmation Sign, and Turn Sign Examples



Source: Alta Go, Wayfinding

For consistency and accessibility, signage should follow national design standards (such as the MUTCD and FHWA wayfinding guidance), be posted at regular intervals, and be visible from a cyclist's perspective—lower-mounted and larger text when necessary. In addition, pavement markings like bike symbols, route arrows, or color-coded lanes can reinforce routes without requiring riders to stop and read signs, as shown in **Figure 3-16**.

At major intersections, trailheads, or transitadjacent areas, municipalities can install map kiosks showing a citywide bike network, nearby points of interest, safety tips, and first/last mile connections. Integrating this information into mobile apps and online maps further supports multimodal trip planning and encourages ridership.

Bicycle wayfinding is typically organized into a system of sign types or "families," each serving a

distinct purpose in guiding riders along a route. Among these, directional, confirmation, and turn signs form the core of an effective wayfinding strategy—helping cyclists navigate with confidence and clarity, especially when traveling to and from transit stations or across multiple jurisdictions.

Directional signs are placed at decision points—such as intersections, trailheads, or complex urban corridors—to point riders toward major destinations or connections. These signs often include arrows, estimated travel times or distances, and icons for transit, parks, or civic landmarks. Directional signs are essential for orienting riders and helping them choose the correct path before committing to a turn or movement.

Turn signs appear where the route changes direction. For example, if a designated bike route turns left onto another street, a turn sign will indicate that maneuver clearly and in advance. These signs reduce missed turns and help riders stay on a safe, preferred route, especially in areas without continuous bike lanes or clear pavement markings.

Confirmation signs are placed along the route at regular intervals, often mid-block or after an intersection—to reassure cyclists that they are still on the correct path. These are particularly helpful on long stretches without turns, or in areas with multiple route overlaps. Confirmation signs can also provide route branding, encourage riders by reinforcing progress, and help riders verify their location if using a paper or digital map.

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Together, this family of signs, as shown below in **Figure 3-17**, supports intuitive, low-stress bicycle travel. For municipalities and counties like those in Miami-Dade, implementing a consistent wayfinding system using these categories can improve safety, boost cycling rates, and make multimodal travel to and from transit hubs more accessible for all users.

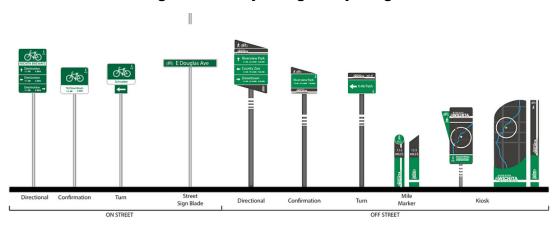


Figure 3-17: Wayfinding Family of Signs

Source: Wichita Wayfinding System Plan

By developing a coherent bicycle wayfinding system, municipalities not only support safer and more efficient cycling—they also create a foundation for more connected, active, and climate-friendly communities. This type of infrastructure complements broader goals around transit integration, revitalization, and equity by making it easier for all residents, regardless of age or ability, to get where they need to go by bike.

Below are the key elements that define a successful bicycle wayfinding system at transit hubs:

- **Bicycle route signage:** Wayfinding for cyclists starts on the streets and roads leading to the train station. Bicycle route signs and directional indicators should be placed along bike paths and roads, guiding cyclists towards the station. These signs may include distance indicators, station names, symbols, and directional arrows specifically tailored for cyclists.
- **Separated bicycle lanes:** If possible, dedicated and separated bicycle lanes leading to the station can enhance the safety and convenience of cycling access. These lanes should be clearly marked and provide a smooth connection to the station.
- Bicycle parking facilities: Train stations should offer secure and ample bicycle parking facilities, such as bike racks, lockers, or bike-sharing stations. Wayfinding signage should guide cyclists to these parking areas, and real-time information about available spaces can be displayed to avoid overcrowding.
- **Bicycle-friendly station access:** The path from the bicycle parking area to the station entrance should be clearly marked and free from obstacles. Bicycle ramps and elevators (where relevant) can make it easier for cyclists to access platforms without dismounting.
- Integration with pedestrian wayfinding: Bicycle wayfinding should be integrated with pedestrian wayfinding to ensure a seamless experience for cyclists who may dismount and walk part of their journey within the station.

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- **Bicycle repair stations:** Some commuter train stations offer bicycle repair stations with basic tools and amenities for cyclists. These areas should be clearly marked and indicated on station maps.
- **Bicycle rental and sharing information:** If the station offers bicycle rental or sharing services, information kiosks or digital screens can display availability and provide instructions on how to access bicycles.
- **Bicycle amenities:** Wayfinding elements can also highlight bicycle-related amenities, such as air pumps and repair tools, that may be available at the station or parking facilities.
- **Bicycle-friendly policies:** Stations can display signage indicating any specific policies or rules regarding bicycles on trains, especially during peak hours or for specific train cars designated for cyclists.

By implementing an effective bicycle wayfinding system, transit hubs can encourage more people to combine cycling with train travel, promoting sustainable and healthy commuting options while ensuring a smooth and user-friendly experience for cyclists.

3.4.4 Tool #3: Bus Wayfinding

Clear and accessible bus wayfinding at the municipal level plays a critical role in enhancing the public transit experience, particularly for first and last mile users. While the operation of bus routes may fall under regional transit agencies, municipalities are uniquely positioned to shape the walking environment around bus stops, improve signage visibility, and guide residents and visitors through local connections to and from key destinations.

Effective municipal bus wayfinding includes both physical signage and informational tools that help riders identify where to catch a bus, understand where it goes, and know how long they might wait. This can involve installing branded bus stop signs, maps, and shelter signage that clearly display route numbers, stop IDs, service frequency, and connections to other modes like rail, micromobility, or park-and-ride facilities. Wayfinding should be consistent, multilingual, and positioned at decision points along key corridors, especially near civic centers, schools, commercial districts, and transit hubs.

Municipalities can enhance the rider experience by placing directional signs or sidewalk decals that guide pedestrians from dense urban areas or parking lots to nearby bus stops. In more complex station environments, wayfinding can include color-coded routes, signage for express or circulator services, and estimated walking times to nearby points of interest. Digital integration also strengthens municipal wayfinding systems. QR codes at stops, interactive kiosks, or local mobility apps can provide real-time arrivals, system maps, and alerts—bridging gaps between static signage and live information. These tools are especially important for tourists, new riders, and those unfamiliar with local routes.

By investing in intuitive, accessible, and multimodal bus wayfinding, municipalities not only make it easier for residents to use public transit—they also help increase ridership, reduce confusion, and support a more equitable and navigable transportation network

Additionally, bus wayfinding at commuter train stations is a critical element in creating an efficient, user-friendly, and accessible multimodal transportation network. It involves a coordinated system of signage, spatial design, and real-time information that enables passengers to easily transfer between

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rail and bus services. As emphasized in the NACTO Transit Street Design Guide, clear and intuitive wayfinding plays a vital role in improving the legibility of transit systems and empowering passengers, especially new or occasional riders, to navigate them confidently.

By making transfers between buses and trains seamless and predictable, well-designed bus wayfinding supports increased ridership, reduces travel times, enhances equity in access to mobility, and contributes to a more sustainable transportation system.

- **Bus stop location:** Clear signage should be placed within transit hub, park-and-ride, or train station premises to direct passengers to the nearest bus stops or bays. The signs should include directional arrows and symbols to distinguish bus-specific signage from train-related signs.
- Clear and consistent signage: According to NACTO principles, signage should be uniform in design across the transit system, using consistent color schemes, icons, and fonts to reduce confusion. Signs should clearly indicate the direction and location of bus stops from within a train station or park-and-ride lot, including distance and walking time.
- Information kiosks or digital displays: Informational kiosks or digital screens can be strategically located within the train station to provide real-time bus schedules, routes, and platform assignments. These displays can be particularly helpful for passengers planning their bus connections.
- **Bus platform indicators:** If there are multiple bus platforms or stops near the train station or park-and-ride lot, numbered or lettered indicators should be used to differentiate them. This helps passengers quickly identify the correct platform for their desired bus route.
- **Bus route maps:** Maps displaying the bus routes that serve the train station or park-and-ride lot can be prominently displayed at key locations, providing an overview of the bus network, and helping passengers plan their onward journeys.
- Real-time bus arrival information: Digital screens can offer real-time information on bus arrivals, departures, and any delays or service disruptions. This ensures passengers are well-informed and can make informed decisions about their trip. Signs should include bus route numbers, final destinations, and peak frequency or service span if applicable.
- Accessibility considerations: Bus wayfinding should be designed with accessibility in mind, ensuring that information is available in formats accessible to people with disabilities or special needs, such as braille or audible announcements.
- Connection time indicators: If there are specific transfer times between arriving trains and departing buses, these should be indicated to help passengers plan their journeys and avoid missing their buses.
- **Multimodal station maps:** Integrated maps that show both train and bus routes can be displayed throughout train stations, making it easier for passengers to understand the connectivity between different modes of transportation.

Providing clear, intuitive, and comprehensive bus wayfinding at Metrorail, Brightline, Tri-Rail, or Amtrak stations or park-and-ride lots is essential to creating a seamless multimodal transit experience. Well-designed signage and navigational aids improve the ease with which passengers can transfer between modes, reducing confusion and waiting times. This not only enhances the overall user experience but also builds public trust in the reliability and efficiency of the transit system. By fostering better integration between buses and trains, transit agencies can promote greater use of public transportation, reduce car dependency, and contribute to a more sustainable, equitable, and accessible urban mobility network. Ultimately, effective wayfinding serves as both a

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rider benefit and a strategic tool for increasing system-wide ridership and supporting long-term transportation goals.

3.4.5 Tool #4: Micromobility Wayfinding

As shared mobility options like electric scooters and dockless bikes become more common, municipalities have a growing need to provide clear, consistent wayfinding that supports micromobility use. Effective micromobility wayfinding helps users, especially first-time or occasional riders, understand where they can ride, park, and connect with other modes of transportation such as transit, biking, or walking. It also helps reduce sidewalk clutter, improves safety, and reinforces local mobility goals.

Municipal micromobility wayfinding should include signage and markings that guide users to designated parking zones, preferred routes, and nearby destinations such as transit hubs, commercial corridors, and civic spaces. Signs can include maps, symbols, and simple directions indicating the locations of scooter corrals, bike racks, or shared mobility hubs. In high-traffic areas, sidewalk decals or pavement markings can reinforce these messages without creating visual clutter.

Wayfinding systems should be designed to support both visual navigation and digital interaction. QR codes or NFC tags on signs can link users to mobile maps, apps, or local micromobility guidelines. Integration with transit apps and mobility-as-a-service (MaaS) platforms ensures that riders can see available vehicles, plan routes, and understand parking rules in real time.

Multilingual messaging, ADA-compliant design, and coordination with local branding are also essential to making wayfinding inclusive and recognizable across neighborhoods. Municipalities can further enhance clarity by co-locating micromobility signage with pedestrian and bicycle wayfinding, creating a seamless experience for people moving between different modes.

Ultimately, micromobility wayfinding empowers users to travel confidently and responsibly while supporting broader goals around safety, connectivity, and sustainable transportation. By investing in thoughtful wayfinding, municipalities can improve the integration of scooters and other shared modes into the urban environment while minimizing conflicts and encouraging active, multimodal travel. Scooter wayfinding at transit hubs entails the strategic placement of signage, maps, and digital information to assist users of e-scooters in navigating to, from, and around train station areas safely and efficiently.

As e-scooters grow in popularity as a first- and last-mile solution, especially in urban environments like Miami-Dade County, integrating dedicated wayfinding elements for micromobility users can significantly improve the functionality and inclusivity of multimodal transportation hubs. Well-implemented scooter wayfinding supports multimodal connectivity by:

- Designated Parking Areas: Clearly marked e-scooter parking areas at the transit hubs encourage users to park their e-scooters in an organized and safe manner. These parking areas should be strategically located near hub entrances and exits.
- **Wayfinding Signage:** Signage should be placed at key points within the transit hub premises to guide e-scooter users to the designated parking areas, rental stations (if available), and nearby bike lanes or paths.

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- Guiding Users to Safe Routes: Directional signs and route maps can highlight preferred escooter paths that connect key station access points to surrounding neighborhoods, greenways, and mobility corridors.
- **E-Scooter Rental Information:** If e-scooter rental services are available at or near a transit hub, clear signage should indicate the location and steps to access these services.
- Map Display: Maps can be installed at transit hubs to show the location of e-scooter parking areas, nearby bicycle lanes, and suggested routes to popular destinations.
- **Safety Information:** Signage should include safety information, such as speed limits for escooters within transit hubs area and reminders to yield to pedestrians.
- Accessibility Considerations: Wayfinding elements should be designed to be accessible to all users, including those with disabilities or mobility challenges.
- **Bike Lane and Path Markings:** Clear markings should be placed on bike lanes or paths leading to and from transit hubs to indicate the route for e-scooters and other micromobility vehicles.
- **Educational Material:** Brochures or digital displays can provide educational material on safe escooter usage and rules for riding in transit hub areas.
- **Battery Charging Stations:** If applicable, information about battery charging stations for escooters can be provided to users.

By implementing e-scooter wayfinding at transit hubs, transportation agencies can actively promote e-scooters as a practical, efficient, and sustainable first- and last-mile transportation solution. Well-designed wayfinding systems should be intuitive, user-friendly, and seamlessly integrated with the overall station navigation environment. This ensures that e-scooter users can easily locate docking zones, identify safe riding paths, and transition smoothly between e-scooter use and transit services. By simplifying access and improving the overall experience for micromobility users, transit authorities can reduce dependency on single-occupancy vehicles, alleviate congestion transit hubs, and enhance the accessibility and appeal of multimodal transit networks.

3.4.6 Wayfinding Guidelines

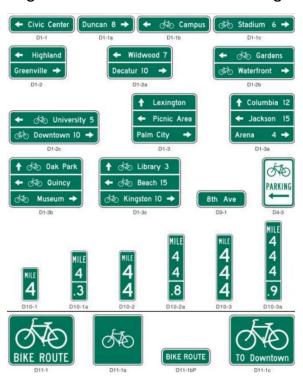
The MUTCD establishes national standards for wayfinding signage and pavement markings related to bicycle facilities²¹. These standards ensure consistency, visibility, and safety across jurisdictions by specifying requirements for sign placement, including vertical and horizontal clearances, sign design and layout, and pavement marking dimensions. When implementing bicycle signage, agencies must adhere to MUTCD regulations to maintain uniformity and compliance, a sample provided in **Figure 3-18**. However, if a jurisdiction identifies a need for innovative or non-standard signage to address specific local conditions, it may submit a request to the Federal Highway Administration (FHWA)—which oversees the MUTCD—to conduct an experiment using alternative signage.

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²¹ Manual on Uniform Traffic Control Devices

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Figure 3- 18: MUTCD C-Series Guide Signs This process supports innovation while ensuring that



new approaches are properly evaluated for safety and effectiveness. Additionally, the National Association of City Transportation Officials (NACTO) provides detailed guidance on the placement and content of bicycle wayfinding signage to maximize clarity and usability. According to NACTO, decision and turn signs should be positioned on the near side of intersections to give cyclists ample time to prepare for maneuvers.

Confirmation signs—which reassure cyclists they are on the correct route—should be installed at regular intervals, approximately every quarter to half mile along off-road trails, and every two to three blocks on on-street bike facilities. Confirmation signs are also recommended immediately after a turn and on the far side of intersections with major streets to enhance navigation confidence.

The Underline and Ludlam trail are two key shareduse paths in Miami-Dade County that support multimodal transportation by providing safe, off-

street corridors for bicyclists and pedestrians. As part of their wayfinding strategy, both trails incorporate confirmation signs to support bicycle navigation and improve the overall user experience. Along The Underline, confirmation signs are placed at regular intervals and near intersections. These signs include route branding (e.g., "The Underline" logo), distance to key destinations like Metrorail stations, parks, or cultural institutions, and icons for bikes, pedestrians and nearby transit options. The signage helps guide users from one segment of The Underline to another, especially in areas where the trail passes under roads or intersects with cross-streets. These confirmations improve legibility for new users and help people plan multimodal trips.

The Ludlam Trail, which will run north-south through central Miami Dade County along a former railroad corridor, is another developing greenway project that integrates confirmation signage into its design. As sections are completed, users will find signs that reinforce the trail's name and alignment, indicate remaining distance to end points or connection neighborhoods, and maintain visual continuity for keeping cyclists oriented in areas with fewer landmarks or turns.

The content of these signs should clearly display destinations, directional arrows, and distances. When travel times are included, NACTO recommends basing these on a standard bicycle speed of 10 mph to provide realistic expectations. For signs listing multiple destinations, the nearest destination should appear at the top, followed by additional destinations arranged below in ascending order by distance, ensuring intuitive and easy-to-read information for cyclists.

Opportunities and Challenges of Signs and Wayfinding

Effective signs and wayfinding systems play a critical role in supporting safe, convenient, and accessible travel for bicycles, pedestrians, and micromobility users in Miami-Dade County. As the

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county continues to expand its multimodal network and promote first- and last-mile connections, clear and consistent wayfinding is essential to guide users through complex urban environments, enhance safety, and encourage active transportation choices. However, despite these opportunities, challenges such as fragmented signage standards across jurisdictions, maintenance issues, and the need to address diverse language and accessibility needs must be carefully managed to create an inclusive and user-friendly mobility ecosystem for all residents and visitors. The opportunities and challenges associated with implementing signage and wayfinding are documented in **Table 3-11** below.

Improvement	Where to Apply It	Opportunities	Challenges
Signs and Wayfinding	At all transit hubs, train stations, or park-and- ride lots	Legible and clear signs are useful in all transit hubs, rain stations, or park-and-ride lots to guide and provide a clear understanding of where to park bicycles or scooters, how to direct the passenger to the platform, where the buses are, and what routes are provided.	The main challenge is the location of each of the signs. They need to be readable and easy to interpret by the passenger/user.

Table 3- 11: Opportunities and Challenges of Wayfinding

3.4.7 Tool #5: Bicycle Parking for Cycling Integration with Train Travel

To strengthen cycling as a viable first and last mile option in Miami-Dade County's transportation network, improving bicycle parking infrastructure is essential. Secure, convenient, and visible bike parking not only encourages more people to cycle to and from transit stations but also enhances the overall experience of multimodal travel.

Currently, inconsistent or inadequate bicycle parking at key transit nodes presents a barrier for potential cyclists. Riders are less likely to use their bicycles for first and last mile connections if they are unsure about where or how to store them safely. Addressing this issue begins with implementing a countywide bicycle parking strategy tailored to high-demand locations such as Metrorail stations, bus transfer points, park-and-rides, and mobility hubs. Each of these areas should be equipped with a mix of short-term racks and long-term, secure options such as bike lockers or bicycle rooms with controlled access.

In addition, bicycle parking should be prioritized in areas identified through equity and access analysis, especially in underserved communities where transit dependence is high, and car ownership is low. Incorporating end-of-trip facilities like bike repair stations and signage further supports users and signals a commitment to bicycle integration. Importantly, all parking facilities must adhere to ADA-compliant design standards and Crime Prevention Through Environmental Design (CPTED) principles to ensure accessibility, comfort, and safety.

A systematic approach to bicycle parking also means aligning policies, such as requiring developers to include bike parking in new mixed-use and transit-oriented developments, and working with

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schools, libraries, and major employers to expand access. Finally, integrating bike parking data into digital trip-planning apps will give riders real-time information, helping them make informed travel decisions.

By embedding these recommendations into Miami-Dade County's First- and Last-Mile Toolkit, the region can unlock the full potential of cycling as a reliable, equitable, and sustainable connection to transit. Some important aspects of bicycle parking at commuter train stations are described as follows:

- **Bicycle racks:** Bicycle racks are the most common form of bicycle parking at transit hubs. These simple and cost-effective structures allow cyclists to lock their bikes securely. Racks should be strategically placed near hub entrances and exits for easy access.
- **Bicycle lockers:** Some transit hubs provide lockable bike lockers, which offer added security and protection from weather conditions. Cyclists can store their bicycles inside these lockers, making them an attractive option for commuters concerned about theft or vandalism.
- **Bicycle shelters:** Bicycle shelters are covered structures that provide protection from rain, sun, and other weather conditions. These shelters often have bike racks inside and are a great option for stations with high bicycle traffic.
- **Bike-sharing stations:** In some cases, bike-sharing programs are integrated into transit hub, train stations, or park-and-ride lots, providing commuters with the option to rent bicycles for short trips to and from these locations.
- **Secure access:** Bicycle parking areas should be designed with security in mind. This may include proper lighting, surveillance cameras, and access control measures to deter theft and ensure the safety of parked bicycles.
- Ample capacity: Transit hubs should provide sufficient bicycle parking capacity to accommodate the growing number of cyclists. As the popularity of cycling increases, additional parking spaces may be needed to meet demand.
- Accessibility: Bicycle parking areas should be accessible to cyclists of all abilities. This includes providing bike racks at a suitable height and considering the needs of cyclists with disabilities.
- **Wayfinding:** Signage and wayfinding elements should guide cyclists to the designated bicycle parking areas within the transit hub premises. Clear and visible signs can help cyclists easily locate the parking facilities.
- **Bike repair stations:** Some transit hubs, train stations, or park-and-ride lots may offer bicycle repair stations equipped with basic tools and amenities, such as air pumps and tire repair kits, to assist cyclists with minor maintenance tasks.
- **Integration with other transit modes:** Bicycle parking should be conveniently located near other transit options, such as bus stops, allowing for seamless multimodal journeys.
- Long-term storage: For commuters who may need to leave their bicycles at transit hubs, train stations, or park-and-ride lots for an extended period (e.g., during work hours), long-term storage options like secure bike lockers can be beneficial.

Effective bicycle parking at these locations encourages more people to combine cycling with public transit, reduces car usage, eases congestion, and contributes to a more sustainable and environmentally friendly transportation system. It also promotes healthier and more active commuting options for passengers. **Figure 3-19**, below, documents an example of a proposed design for bicycle parking at Tri-Rail stations.

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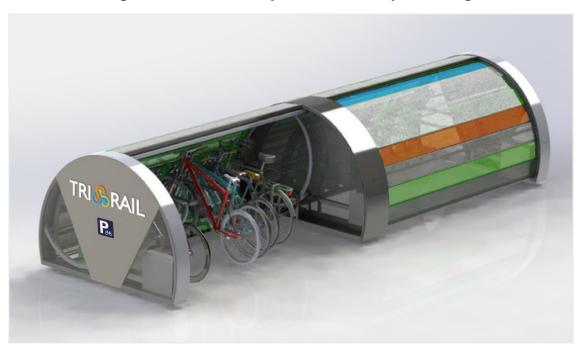


Figure 3- 19: Potential Layout of Tri-Rail Bicycle Parking

Source: Tri-Rail SMART STEP Bicycle & Pedestrian Needs Study

Opportunities and Challenges of Bicycle Parking

Adequate and secure bicycle parking is a fundamental component of encouraging cycling as a viable transportation option in Miami-Dade County. Well-designed bike parking facilities near transit stations, educational campuses, commercial centers, and key destinations increase convenience, reduce theft risk, and support multimodal trips. However, challenges such as limited space, inconsistent design standards, maintenance needs, and lack of awareness about available parking options can deter cyclists. Addressing these issues through strategic placement, adopting best practice designs, and coordinating bicycle parking with broader mobility and land-use planning will enhance cycling's role in first- and last-mile transportation. The opportunities and challenges associated with bicycle parking are identified in **Table 3-12** below.

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Table 3-12: Opportunities and Challenges of Bicycle Parking

Improvement	Where to Apply It	Opportunities	Challenges
Bicycle Parking	At all transit hubs, train stations, and park- and-ride lots	Covered or shaded bicycle parking helps protect bicycles from weather-related damage such as rain and sun exposure, reducing the risk of rust and deterioration. These features can improve the appeal and usability of bicycle parking facilities. Additionally, incorporating attractive colors and consistent branding may enhance visibility and encourage greater usage of these amenities	The main challenge is the location for each of the proposed bicycle parking areas. Depending on demand, some parking locations may occupy a larger space than at other stations. For example, at the Metrorail Transfer station, the only available parking with shade for bicycles is next to Metrorail ticket machines and entrance. Consequently, coordination with Miami-Dade DTPW may be needed to consolidate parking facilities to improve user satisfaction.

3.4.8 Tool #6: High Intensity Pedestrian Crossings for Better Access to Tri-Rail, Metrorail, Metromover, Brightline, and Amtrak Stations

Improving high-intensity pedestrian crossings is a critical component of this First- and Last-Mile Toolkit, especially in enhancing safe and direct access to major regional transit services such as Tri-Rail, Metrorail, Metromover, Brightline, and Amtrak. Many of these stations are located near high-speed, high-volume roadways that act as barriers for pedestrians, particularly in areas with inadequate crossing infrastructure, poor lighting, or low visibility.

To overcome these challenges, the Toolkit promotes the installation and modernization of high-intensity activated crosswalks (HAWK beacons), raised crosswalks, pedestrian refuge islands, and mid-block crossings with pedestrian-first signal timing. These treatments are essential where traditional intersection crossings are too far apart or where pedestrian desire lines do not align with existing infrastructure. Such upgrades not only improve visibility and reduce crossing distances but also slow down vehicles and elevate the status of pedestrians within the street environment.

Proximity to regional rail and intercity stations makes it even more important to ensure that crossings are intuitive, continuous, and comfortable. Many users accessing these stations, whether walking from home, transferring from bus, or arriving by micromobility, experience the final leg of their journey on foot. If crossing the street feels dangerous or confusing, these users may choose to drive instead, undermining multimodal goals.

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Improvements should prioritize pedestrian crossing improvements based on crash data, transit ridership volumes, and demographic equity considerations. Stations serving elderly populations, schools, low-income neighborhoods, or areas with low car ownership should receive urgent attention. Crossings should be well-lit, clearly marked, and supported with curb extensions, leading pedestrian intervals, audible signals, and ADA-compliant ramps to ensure access for all users, including those with disabilities.

Ultimately, high-intensity pedestrian crossings are not just safety improvements, they are essential connectivity tools. By investing in pedestrian-forward infrastructure around regional transit stations, Miami-Dade County can reduce barriers to access, increase transit ridership, and create a more seamless and equitable first and last mile experience. Some features and benefits of high-intensity pedestrian crossings for better train station access are outlined below:

- **Signal Timing:** High-intensity pedestrian crossings typically have optimized signal timing to prioritize pedestrian movements. This may include longer crossing times, leading pedestrian intervals (where pedestrians get a head start before vehicles receive a green signal), and shorter wait times between signal changes.
- **Pedestrian-Only Phases:** In busy areas, these crossings may have dedicated pedestrian-only phases, where all vehicle traffic stops to allow pedestrians to cross in all directions safely.
- **Wide Crosswalks:** To accommodate large crowds of pedestrians, high-intensity crossings often have wider crosswalks, providing ample space for people to cross side-by-side.
- Advanced Crossing Warning Signs: Clear and highly visible warning signs may be installed to alert drivers of approaching pedestrian crossings, giving them ample time to slow down and stop.
- Flashing Beacons or Pedestrian Signals: Flashing beacons or special pedestrian signals may be used at high-intensity crossings to increase visibility and ensure that drivers and pedestrians are aware of the crossing conditions.
- **Pedestrian Islands:** Some crossings may include pedestrian islands or refuge areas in the middle of the road, allowing pedestrians to cross one direction of traffic at a time before proceeding to the other side.
- Accessibility Considerations: High-intensity pedestrian crossings should be designed with accessibility in mind, ensuring that they are compliant with the ADA regulations and other accessibility standards to accommodate people with disabilities or mobility challenges.
- **High Visibility Markings:** Clearly marked crosswalks, zebra stripes, and other pavement markings help guide pedestrians and ensure that drivers recognize the designated crossing areas.
- **Curb Ramps:** Curb ramps at high-intensity crossings facilitate easy movement for pedestrians with strollers, bicycles, or mobility devices.

By implementing high-intensity pedestrian crossings around train stations, a safer, more efficient, and pedestrian-friendly environment for commuters can be created. This encourages more people to choose walking as their mode of access to the train station, promoting sustainable and healthy transportation options, and reducing reliance on private cars. An example of a HAWK signal treatment, a type of high intensity pedestrian signal, is documented in **Figure 3-20**.

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PEDESTRIAN CROSSING

CHESTOR C

Figure 3- 20: Example of HAWK Signal Treatment in Tucson, Arizona

Source: Federal Highway Administration Research and Technology

Opportunities and Challenges of High Intensity Pedestrian Crossings

High-intensity pedestrian crossings, such as signalized mid-block crossings, raised crosswalks, and pedestrian hybrid beacons (HAWK signals), offer critical opportunities to enhance pedestrian safety and access in high-traffic corridors across Miami-Dade County. These crossings can significantly reduce pedestrian-vehicle conflicts near transit stations, school zones, and university campuses, especially in areas with wide roadways or limited signalized intersections. However, implementation presents challenges, including funding constraints, vehicular delay concerns, and the need for coordinated signal timing with existing traffic infrastructure. Balancing pedestrian priority with traffic flow and ensuring maintenance of crossing features are key factors in realizing the full potential of these interventions to support first- and last-mile mobility. A summary of the opportunities and challenges associated with implementing high intensity pedestrian crossings is documented below in **Table 3-13**.

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Table 3-13: Opportunities and Challenges of High Intensity Pedestrian Crossings

Improvement	Where to Apply It	Opportunities	Challenges
High Intensity Pedestrian Crossings	At all transit hubs, train stations, or parkand-ride lots	During peak times, large numbers of passengers disembark from buses or trains, and they need to cross busy streets to reach their destinations. Therefore, safe crossings that include the installation of flashing beacons, may clearly visualize the presence of pedestrians.	The main challenge for this improvement is coordination with the roads' authorities to make these improvements. For example, if the road is owned/managed by FDOT, then the state is responsible for maintaining and adding these pedestrian improvements. Another challenge is funding for implementation, which sometimes requires the development of a warrant analysis to allocate funds.

3.4.9 Tool #7: Bicycle Access Ramps at Stairways to Facilitate Movement Between Platforms at Tri-Rail and Metrorail Stations

Incorporating bicycle access ramps along stairways at Tri-Rail and Metrorail stations is a key recommendation in this First- and Last-Mile Toolkit to support seamless multimodal travel. These simple yet impactful additions—also known as bike gutters or bike channels—allow cyclists to easily roll their bicycles up or down stairs, reducing the need to lift or carry heavy bikes and making vertical circulation between platforms or station levels significantly more accessible.

Many of the county's regional rail stations were built with infrastructure that predates today's emphasis on active transportation integration. As a result, cyclists often encounter barriers when trying to navigate between street level and platforms, or between connecting transit lines. This challenge is especially pronounced at multi-level or elevated stations where elevators are frequently congested or out of service, and escalators prohibit bicycle use. Without dedicated bike channels, these users face frustrating delays or unsafe improvisations.

By retrofitting stairways with bicycle ramps, the county can create more inclusive transit environments that support a wider range of users, including families with children's bikes, delivery workers on e-bikes, and commuters using cargo or folding bikes. The design of these ramps should follow best practices: they must be non-slip, located on the outer edge of stairways, and sloped at an angle that makes pushing or pulling a bike intuitive and stable. Wherever possible, wayfinding signage should be added to guide users to the most direct and bike-friendly station paths.

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Additionally, new station designs or renovations should include bicycle access ramps as a standard element of platform connectivity. For example, the Golden Glades Multimodal Transportation Facility has bicycle ramps as a part of its stair infrastructure. However, future renovation efforts could brand it to make it more noticeable for users. Coordinating these improvements with broader station upgrades—such as ADA enhancements, lighting, and real-time information systems—ensures a cohesive, user-centered experience that supports all first and last mile modes.

Bicycle access ramps are a low-cost, high-benefit strategy that sends a clear message: bikes belong in the transit system. By enabling smooth and dignified access between platforms, Miami-Dade County reinforces its commitment to multimodal connectivity and expands the reach of its regional rail services for everyday riders. Key features and benefits of bike access ramps on stairs at train stations include:

- Accessibility for Cyclists: The ramps provide a dedicated pathway for cyclists, enabling them to
 easily move their bicycles up or downstairs without the need to carry them, reducing physical
 strain and potential injury.
- **Encouraging Bicycle Use:** By providing convenient and accessible bike access ramps, train stations promote the use of bicycles as a viable mode of transportation for commuters, making it more appealing and attractive for cyclists to integrate cycling with train travel.
- **Multimodal Connectivity:** The ramps facilitate seamless multimodal travel, enabling cyclists to transition smoothly between cycling and train journeys without disruptions.
- Improving Station Accessibility: The presence of bike access ramps enhances overall station accessibility, catering to diverse transportation needs and preferences of passengers, including those who rely on bicycles for their daily commute.
- Safety Considerations: Bicycle access ramps help improve safety for both cyclists and pedestrians. Cyclists using the ramps are separated from foot traffic, reducing the risk of collisions, and improving overall pedestrian flow.
- **Design Integration:** The ramps can be integrated into the existing station architecture, blending aesthetically with the surroundings while maintaining functionality.
- Compliance with Accessibility Standards: When designed with accessibility standards in mind, bicycle access ramps ensure that they are usable by people with disabilities or individuals using adaptive bicycles or tricycles.
- Reducing Barrier to Cycling: The presence of bike access ramps removes a physical barrier to cycling, as cyclists no longer need to avoid train stations with stairs, thus encouraging more people to choose bicycles as a mode of transport.
- Integration with Bicycle Facilities: Bicycle access ramps are typically integrated with other bicycle facilities, such as bicycle racks or lockers, making it more convenient for cyclists to park their bicycles and access the train station.

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Bicycle access ramps on stairs demonstrate a commitment by train stations to support and accommodate cyclists, creating a more inclusive and sustainable transportation network. The provision of such ramps, such as the ones illustrated in Figure 3-21 and in Figure 3-22Figure 3- 22: Existing Bicycle Ramp at the Golden Glades Multimodal Transportation Facility, encourages more people to opt for combined cycling and train travel, contributing to improved urban mobility and reduced congestion in urban areas.

Opportunities and Challenges of Bicycle Ramps

Installing bicycle ramps at transit stations and stops within Miami-Dade County presents several opportunities and challenges. These ramps would significantly enhance connectivity and accessibility for cyclists, allowing them to easily switch platform areas before boarding or after disembarking Tri-Rail or Metrorail trains for example.

This improvement could encourage more people to use bicycles as part of their daily commute, promoting a healthier and more sustainable mode of transportation. However, there are challenges to consider. Maintenance of these ramps is crucial, as they must be kept free of debris to ensure safe usage. Additionally, educational efforts, such as videos or tips, may be necessary to instruct passengers on the proper use of the ramps. The opportunities and challenges associated with bicycle ramps are summarized in Table **3-14** below.

Figure 3- 21: Example of a Potential Bicycle Ramp at the Opa-locka Tri-Rail Station



Source: <u>Tri-Rail SMART STEP Bicycle & Pedestrian</u>
Needs Study

Figure 3- 22: Existing Bicycle Ramp at the Golden Glades Multimodal Transportation Facility



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Table 3- 14: Opportunities and Challenges of Bicycle Ramps

Improvement	Where to Apply It	Opportunities	Challenges
Bicycle Ramps	At certain Tri-Rail and Metrorail Stations	Improvement is low-cost and feasible in certain stations, providing enhanced connectivity and accessibility for users with bicycles to switch platform areas prior to embarking or after disembarking Tri-Rail and Metrorail trains.	Maintenance of these ramps may require ensuring they are free of debris. Additionally, educational videos or tips may be needed to explain to passengers how to use these ramps appropriately.

3.4.10 Tool #8: Bicycle Oriented Development (BOD) to complement Transit Oriented Development (TOD) around Tri-Rail, Metrorail, and Brightline Stations as well as Parkand-Ride Lots

Bicycle-Oriented Development (BOD) is a natural and necessary complement to Transit-Oriented Development (TOD), especially around key multimodal hubs like Tri-Rail, Metrorail, Brightline stations, and park-and-ride lots throughout Miami-Dade County. While TOD focuses on creating dense, mixed-use, walkable communities near transit, BOD ensures that cycling is fully integrated into that vision—both as a primary access mode and as a vital connector to surrounding neighborhoods.

To successfully implement Bicycle-Oriented Development, this First-and Last-Mile Toolkit suggests guiding local planning agencies, developers, and transportation partners to design station areas that prioritize safe, direct, and comfortable bicycle access. This includes building protected bike lanes on approach corridors, providing ample secure bicycle parking at station entrances, and incorporating bike share or e-bike charging hubs within developments.

A local example of BOD in practice is the SW 152 Street Transitway Park-and Ride. The South Dade Trail is a regional shared-use path that parallels the South Dade Transitway and is approximately 22-miles long. It begins to the north at the south of Datan Drive at the Dadeland South Metrorail and ends at SW 344 Street in Florida City. The trail travels through the municipalities of Pinecrest, Palmetto Bay, Cutler Bay, Homestead and Florida City, connecting to The Underline, which will allow pedestrians and bicyclists to connect to the Metrorail system and several municipalities further north all the way to the Miami River in Downtown Miami.

This location offers direct and comfortable bike connections to the park-and-ride lot, allowing commuters to cycle along a protected trail and connect seamlessly to the future Metrobus BRT/express bus services. The proximity of the trail to the transit facility, along with existing bike infrastructure, exemplifies how regional investments in trail systems can support and strengthen first- and last- mile connections when paired with thoughtful station area design.

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A well-executed BOD approach makes cycling not just possible, but appealing—even for short trips to grocery stores, schools, workplaces, or other transit lines. At park-and-ride lots, which are often surrounded by low-density development and car-dominated streets, BOD offers an opportunity to reimagine how land is used. Instead of relying exclusively on car parking to serve transit users, a portion of these lots can be retrofitted or redeveloped with bike-friendly infrastructure, multi-use paths, and active ground-floor uses that draw in the local community. In some cases, structured parking can be combined with a bicycle mobility hub—offering amenities such as lockers, repair stations, showers, and bike rental services—to support multimodal behavior.

BOD also strengthens equity by making transit more accessible to residents who live outside of walking distance but may not have access to a car. It empowers communities to reduce transportation costs, lower emissions, and create healthier, more resilient neighborhoods. By integrating BOD into the fabric of TOD, Miami-Dade County can create station areas that truly support all users. This synergy extends the reach of the regional transit network, builds ridership, and delivers on long-term goals for sustainability, connectivity, and economic development. Key features and considerations of BOD adjacent to train stations, transit hubs, and TOD include:

- Bicycle Infrastructure: BOD incorporates a network of safe and well-connected bicycle lanes, paths, and tracks that provide direct access to train stations and other transit hubs. These infrastructure components prioritize cyclist safety and promote the integration of cycling with public transportation.
- Bicycle Parking and Storage: Ample and secure bicycle parking facilities are essential for BOD.
 Well-designed racks, lockers, and shelters should be provided near train stations and transit nodes to encourage cycling as a first- and last-mile solution for commuters.
- **Bicycle Sharing Programs:** Implementing bike-sharing programs within BOD developments can further facilitate multi-modal commuting, allowing people to easily rent bicycles for short trips between their homes, train stations, and other destinations.
- **Bicycle Amenities:** BOD initiatives consider the needs of cyclists by providing amenities such as bicycle repair stations, air pumps, and changing rooms near train stations and transit-oriented areas.
- **Pedestrian-Friendly Design:** BOD is also pedestrian-oriented, creating walkable neighborhoods and ensuring easy connectivity between cycling infrastructure, train stations, and other public transportation facilities.
- Mixed-Use Development: TOD principles often incorporate mixed-use development, combining
 residential, commercial, and recreational spaces near transit hubs. Integrating BOD with TOD
 ensures that residents and workers have convenient access to cycling options for daily
 commuting and local travel.
- **Urban Design and Placemaking:** BOD adjacent to transit-oriented areas emphasizes humanscale urban design, creating inviting public spaces, green areas, and attractive streetscapes to encourage cycling and pedestrian activities.
- Community Engagement: BOD initiatives involve community engagement to understand the needs and preferences of residents and stakeholders. This helps ensure that cycling infrastructure and amenities are well-suited to the local context.
- Safety and Accessibility: BOD focuses on designing infrastructure that accommodates cyclists
 of all ages and abilities, including children, seniors, and people with disabilities. Safety measures

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such as traffic calming and separated bike lanes are incorporated to enhance cycling comfort and security.

 Promoting Sustainability: By encouraging cycling and promoting the use of public transportation, BOD adjacent to train stations, transit hubs, park-and-ride lots, and TOD helps reduce greenhouse gas emissions, traffic congestion, and the overall environmental impact of urban mobility.

Overall, combining BOD with TOD creates a synergistic approach that leverages the strengths of both cycling and public transportation to foster sustainable, vibrant, and accessible urban environments. This integrated approach supports active transportation choices, enhances transit ridership, and contributes to a healthier, more livable, and environmentally friendly communities. The City of Hialeah's "Hialine Redevelopment Proposal" is an excellent example of BOD and TOD combination. As depicted in **Figure 3-23** through **Figure 3-26**, the amenities surrounding the Metrorail/Tri-Rail Transfer Station include an outdoor gym, recreational courts, domino parks, event and gathering spaces while adding residential and mixed-use development along E 25 Street.



Figure 3- 23: "Hialine" Vision Map

Source: City of Hialeah

Corridor Park + Outdoor Gym

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Figure 3- 24: Corridor Park and Outdoor Gym

Source: City of Hialeah

Figure 3- 25: "Hialine" Recreational Park and Mixed-Use Lawn



Source: City of Hialeah

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T.O.D. + Bike Lanes

Figure 3- 26: "Hialine" Transit Oriented Development and Bike Lanes on E 25th Street

Source: City of Hialeah

3.4.11 Tool #9: Bikesharing Stations at Metrorail, Metromover, Brightline, Amtrak, and Tri-Rail Stations

Integrating bike-sharing stations at key regional transit nodes, including Metrorail, Metromover, Brightline, Amtrak, and Tri-Rail stations, is a pivotal strategy in this First- and Last-Mile Toolkit. Bike-sharing systems offer a convenient, low-cost, and flexible option for users to complete the first or last segment of their journey, bridging the critical gap between transit stops and final destinations.

By co-locating bike-share docks directly at station entrances or within immediate walking distance, Miami-Dade County can ensure a seamless modal transfer experience. This convenience is particularly valuable in areas where fixed-route bus service may not meet every rider's needs, or where dense urban development makes cycling the fastest way to reach offices, shops, or residential buildings. Bikeshare availability empowers users with more choices, making the entire regional transit system more responsive, dynamic, and attractive—especially to younger riders, tourists, and occasional users.

To maximize impact, this Toolkit recommends that bikesharing infrastructure be prioritized at high-ridership and high-connectivity stations, including downtown hubs, employment centers, universities, and park-and-ride lots. Equity should also be a central consideration—ensuring that stations in historically underserved areas are not left behind in the deployment of bikeshare services.

Beyond hardware placement, integration with fare systems, such as through EASY Card or a unified mobility app, can further enhance user experience. Real-time availability, smart bike technology, and flexible rental zones can help reduce friction and encourage ridership.

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Importantly, bikeshare programs should be supported by a safe and connected bike network around the stations. Without protected bike lanes, secure crossings, and traffic-calmed corridors, users may feel unsafe and opt for less sustainable modes. As such, bikeshare station deployment must go hand in hand with investments in cycling infrastructure and public awareness.

Incorporating bikesharing into the core design of Miami-Dade County's regional transit strategy positions the system to meet the demands of a modern, multimodal future. It reduces dependence on private vehicles, expands the reach of transit, and makes sustainable travel practical, accessible, and appealing for everyone.

Below are the key features and benefits of bike-sharing at train stations:

- Last-Mile Connectivity: Bikesharing fills the last-mile gap between train stations and final destinations, enabling commuters to cover short distances quickly and efficiently. It reduces the need for other transportation modes, like walking or taking a bus, for short trips.
- **Convenience:** Bikesharing systems at train stations provide a convenient mode of transportation for passengers, especially those who prefer not to bring their bicycles on trains or do not own a bike.
- **Timesaving:** Using shared bicycles allows commuters to bypass traffic congestion and reach their destinations faster, especially during peak commuting hours.
- **Flexibility:** Bikesharing offers flexibility in travel choices. Passengers can easily pick up a bike at one station and drop it off at another near their destination.
- **Reduced Parking Demand:** By offering an alternative to driving to the station, bikesharing helps reduce the demand for parking spaces, making efficient use of station parking areas.
- **Accessibility:** Bikesharing at train stations is often designed to be accessible to a wide range of users, including people with disabilities or those who may not own personal bicycles.
- **Enhanced Transit Ridership:** By providing a seamless connection between train travel and short-distance cycling, bike-sharing can attract more people to use public transportation, leading to increased transit ridership.

Bikesharing at train stations plays a vital role in creating a well-integrated and sustainable urban transportation network. It improves access to public transit, reduces car usage, and supports healthier and more eco-friendly commuting options for passengers. An excellent existing example of bikesharing is the current CitiBike²² bikesharing service at MiamiCentral, documented in **Figure 3-27**. Currently, Brightline and Tri-Rail passengers that disembark at MiamiCentral can rent a bike and use it in Downtown Miami. There are eight (8) CitiBike stations that can be found within a 0.5-mile buffer from this station, where visitors can rent a bike for 30 minutes access pass for only \$5.39 or residents/locals can obtain a monthly membership for \$20 for either unlimited 30 minutes access, or \$25 for unlimited 60-minute rides.

²² CitiBike Miami

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Figure 3- 27: Example of Micromobility at the MiamiCentral Station



Opportunities and Challenges of Bikesharing Stations

Bikesharing stations provide a convenient, ondemand way for residents and visitors to complete short trips and connect with public transit in Miami-Dade County. These systems help fill critical gaps in the transportation network by offering flexible access to bicycles without the need for ownership. These systems encourage active transportation and reduce reliance on private vehicles. However, challenges such as uneven station distribution, maintenance and operational costs, equitable access across diverse communities, and integration with existing transit services can limit their effectiveness. To maximize benefits, bike-sharing programs should be carefully planned with community input, supported by reliable infrastructure, and integrated into a comprehensive multimodal network. The opportunities and challenges are highlighted below in Table 3-**15**.

Table 3- 15: Opportunities and Challenges for Bike-Sharing Stations

Improvement	Where to Apply It	Opportunities	Challenges
Bike-Sharing Stations	At Tri-Rail and Metrorail Stations with adequate cycling infrastructure nearby	Several municipalities within the county have shown interest in integrating bikesharing stations as part of their local transportation strategies. Preliminary discussions indicate a positive outlook toward implementation, with some areas exploring the possibility of launching pilot programs to introduce bikesharing as a viable mobility option.	Bicycle maintenance and repair are needed continuously to expand this service to all applicable stations. Potential vandalism, graffiti or damage to bicycles may happen. Coordination with DTPW and SFRTA is required for the installation of bikesharing stations.

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3.4.12 Tool #10: Outreach and Educational Campaigns

Outreach and educational campaigns are essential strategies for building public understanding and confidence in using bicycles as a first and last mile solution in Miami-Dade County. While expanding infrastructure—such as protected bike lanes, secure parking, and station access ramps—creates the physical conditions for cycling, sustained behavior change depends on equipping residents with the knowledge and motivation to use these resources effectively.

As part of this First- and Last-Mile Toolkit, Miami-Dade County and the municipalities should implement a coordinated and multilingual outreach effort focused on the practical benefits of biking to transit. These include saving time and money, improving health, and expanding access to regional services like Tri-Rail, Metrorail, Metromover, Brightline, and Amtrak. Campaigns should target communities with high transit reliance, schools, and neighborhoods with low car ownership to ensure equitable engagement and participation.

Educational programming should highlight how to safely bike to and from stations, use bike-share systems, navigate new bike infrastructure, and access amenities such as lockers or repair stations. These efforts can be reinforced through partnerships with local advocacy groups, community organizations, and employers to deliver workshops, station tours, and group rides that build confidence and familiarity with bike-transit connections.

Digital platforms can extend the reach of these campaigns. Interactive maps, social media posts, and short videos can showcase trip-planning tools, demonstrate how to transfer from a bike to transit, and feature real-life stories from residents who regularly bike to stations. Incentives such as free bike-share minutes, transit fare discounts for cyclists, or participation-based reward programs can further motivate new users.

Through clear, consistent outreach and hands-on education, Miami-Dade County and the municipalities can foster a stronger culture of multimodal travel. These campaigns not only promote the use of bicycles for first and last mile access, but they also help bridge gaps in mobility knowledge, making the transportation system more accessible, efficient, and people centered. The primary goal is to increase the number of cyclists using bicycles as a first- and last-mile solution, enhancing overall access to public transit, and promoting active transportation options, as shown in the sample in **Figure 3-28** and **Figure 3-29**. Outreach and campaigns for bicycle usage at commuter transit stations are typically conducted as follows:

- **Public Awareness Campaigns:** Public awareness campaigns use various communication channels, such as social media, websites, posters, and advertisements, to inform the community about the availability and benefits of cycling to and from train stations.
- **Educational Programs:** Educational initiatives may include workshops, seminars, and informational materials that provide guidance on safe cycling practices, traffic rules, and the use of bike-sharing systems.
- Partnerships with Bicycle Advocacy Groups: Transit agencies and local governments often
 collaborate with bicycle advocacy groups to leverage their expertise and outreach networks in
 promoting cycling as a transportation mode.
- **Cycling Events:** Organizing cycling events, such as bike rides or bike-to-work days, can create a sense of community around cycling and attract new riders to try cycling as a commuting option.

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- Incentive Programs: Offering incentives, such as discounted transit fares, free bike rentals, or rewards for regular cyclists, can encourage more people to choose bicycles as part of their commute.
- Mapping and Wayfinding: Providing detailed bike route maps and wayfinding information around train stations helps cyclists plan their routes more effectively and feel confident in navigating the area.
- **Bike Parking Improvements:** Ensuring that train stations have ample and secure bike parking facilities, such as bike racks and lockers, is essential to support cycling access.
- **Engaging Local Businesses:** Working with local businesses to promote cycling and offer benefits to cyclists, such as bike-friendly workplaces or bicycle-friendly business districts, can further incentivize bike usage.
- Collaborating with Schools and Universities: Partnering with educational institutions to promote cycling among students and staff can encourage a culture of biking from a young age.
- **Mobile Apps and Technology:** Developing user-friendly mobile apps or online tools that provide real-time information on bike-sharing availability, train schedules, and bicycle routes can enhance the convenience and appeal of bicycle-transit integration.
- **Community Events and Outreach:** Engaging with the local community through events, outreach booths, and neighborhood meetings help build support for cycling initiatives and gather feedback from potential cyclists.
- Evaluation and Feedback: Regularly evaluating the success of outreach and campaigns is crucial to understand their effectiveness and make necessary improvements. Collecting feedback from cyclists and potential users can provide valuable insights into future strategies.

By implementing outreach and campaigns for bicycle usage at transit stations, communities and transit agencies can foster a bike-friendly culture, increase ridership on public transportation, and contribute to a more sustainable and active urban environment.

Figure 3- 28: Hook Your Bike on Link Educational Campaign from Sound Transit



Source: "Hook Your Bike on Link"

Figure 3- 29: Loading Your Bike on Sounder Educational Campaign from Sound Transit



Source: "Loading Your Bike on Sounder"

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Opportunities and Challenges of Outreach and Educational Campaigns

Outreach and educational campaigns play a vital role in promoting safe and sustainable first- and last-mile travel options, particularly for walking, biking, and micromobility in Miami-Dade County. These initiatives offer the opportunity to raise public awareness about available infrastructure, encourage mode shift, and foster a culture of multimodal transportation, especially near transit hubs and educational institutions. However, challenges include reaching diverse populations across languages and socioeconomic backgrounds, maintaining consistent engagement, and evaluating campaign effectiveness over time. Successful programs require strong partnerships with local governments, schools, community organizations, and transit agencies to ensure messaging is inclusive, accessible, and aligned with broader mobility goals. The opportunities and challenges associated with outreach and educational campaigns are documented below in **Table 3-16**.

Table 3- 16: Opportunities and Challenges of Outreach and Educational Campaigns

Improvement	Where to Apply It	Opportunities	Challenges
Outreach and Educational Campaigns	At all Tri-Rail, Metrorail, Metromover, Brightline, and Amtrak Stations	Improvements may be linked to safety campaigns, which could potentially receive state or federal funding.	Educational campaigns need to be translated into Spanish and Créole, since these are the second and third most-spoken languages, after English, in South Florida. In addition, volunteers and other public outreach staff from different agencies may need to attend workshops to assist passengers once these educational campaigns are implemented.

3.4.13 Tool #11: Bicycles and Metrobus at Tri-Rail, Metrorail, Brightline, and Metromover Stations

Integrating bicycles with Metrobus service at Tri-Rail, Metrorail, Brightline, and Metromover stations is a key strategy in enhancing first- and last-mile connectivity across Miami-Dade County. While regional rail and intercity services provide the backbone for long-distance travel, the ability to seamlessly connect by bike or bus to and from stations ensures that the system is accessible to a broader population, especially in areas not directly served by rail.

To support this integration, stations should be designed with clear, direct, and safe connections between bicycle facilities and Metrobus stops. This includes installing protected bike lanes that lead to station entrances, providing ample secure bike parking near bus bays, and ensuring that bus boarding areas are accessible without forcing cyclists to dismount or navigate unsafe crossings. Bike racks on buses also play an important role, allowing riders to bring their bicycles on board and continue their trip after transferring from rail.

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At major transit hubs—such as Government Center, Miami Intermodal Center (MIC), MiamiCentral, and Dadeland South stations—the convergence of multiple modes presents an opportunity to create well-organized, multimodal mobility hubs. These should include signage that guides cyclists to bus connections, designated bike drop-off zones, and shaded waiting areas that accommodate both cyclists and bus riders.

Metrobus service can also extend the reach of cycling infrastructure by connecting underserved neighborhoods to station areas where biking the full distance may not be practical. Coordination between Metrobus schedules and station arrival times helps reduce transfer friction and supports trip planning for those combining buses, bikes, and rail.

Incorporating this multimodal design into this First- and Last-Mile Toolkit ensures that bicycles and buses are not treated as separate systems, but as mutually reinforcing modes. By planning for the movement of people, not just vehicles, Miami-Dade County can build a more flexible, inclusive, and resilient transportation network where cyclists, bus riders, and rail passengers all benefit from stronger connections and better access.

This connectivity enhances overall accessibility, provides more flexible travel options, and encourages sustainable transportation choices, as shown in **Figure 3-30**. Key aspects of connectivity between bicycles and buses at commuter train stations are depicted below:

- Bicycle Parking at Bus Stops: Train stations with bus stops nearby should provide secure and
 convenient bicycle parking facilities at the bus stops as well. This allows cyclists to safely park
 their bicycles while they board the bus for the next leg of their journey.
- **Bus Racks:** Some buses are equipped with bicycle racks on the front, allowing cyclists to load and unload their bicycles quickly and easily. Train stations should inform cyclists about buses with bicycle racks and encourage their use.
- **Bicycle Repair Stations:** Installing bicycle repair stations near bus stops or at the train station allows cyclists to perform minor maintenance tasks on their bikes before boarding the bus.
- **Wayfinding:** Wayfinding elements at the train station should guide cyclists to nearby bus stops, making it easy for them to find the right bus route for their onward journey.
- Bicycle-Friendly Buses: Transit agencies can consider adding more bicycle-friendly buses to their fleet or retrofitting existing buses to accommodate more bicycles, increasing capacity and appeal for cyclists.
- Collaboration with Transit Agencies: Close collaboration between transit agencies, bikesharing operators, and local governments is essential to ensure that cycling and bus services are well-integrated and userfriendly.
- Promotion and Awareness: Publicizing the benefits of combining cycling and bus travel through marketing campaigns and educational initiatives can encourage more people to try multimodal commuting.

Figure 3- 30: Bicycle Parked on the Bus Rack at the Opa-locka Tri-Rail Station



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By enhancing connectivity between bicycles and buses at commuter train stations, transportation authorities can provide commuters with more flexible and sustainable transportation options. This integration promotes active transportation, reduces car usage, and contributes to a more efficient and eco-friendly urban mobility system.

Opportunities and Challenges of Bicycles and Metrobus

Bicycles and Metrobus services together present a valuable opportunity to improve first- and last-mile connectivity, especially in areas where walking to transit is impractical. By allowing riders to extend their reach beyond fixed transit routes, bicycles can serve as a flexible, affordable complement to Metrobus. However, several challenges limit the effectiveness of this integration. A key barrier is the limited availability of bike racks on buses. This constraint often leaves riders stranded or forces them to alter their travel plans, especially during peak hours. In addition, inconsistent bike infrastructure near Metrobus stops and a lack of secure bike parking further discourage cyclists from relying on transit. Despite these challenges, there is significant potential to improve multimodal access through expanded bike rack capacity, better infrastructure at transit nodes, and policies that support seamless bike–bus connections. The opportunities and challenges associated with integrating bicycles and Metrobus are detailed below in **Table 3-17**.

Table 3- 17: Opportunities and Challenges of Bicycles and Metrobus

Improvement	Where to Apply It	Opportunities	Challenges
Bicycles and Metrobus	At all Tri-Rail, Metrorail, Metromover, Brightline, and Amtrak Stations	Passengers that complete their first- and last-mile by connecting with buses are more eager to finalize their trip using their own bicycle.	Buses have a limited amount of space in their bike racks, and passengers may need to wait for another bus to take them.

3.4.14 Tool #12: Pedestrian and Bicycle Crossings at Adjacent Railroad Tracks

Improving safety for pedestrians and bicyclists at railroad crossings is critical for reducing crash risks and protecting vulnerable road users—particularly at locations with conditions similar to those illustrated in **Figure 3-31**. These enhancements play an essential role in ensuring safer, more accessible crossings for all, and represent a necessary step in advancing first- and last-mile connectivity in Miami-Dade County. Many of these crossings, especially those adjacent to the South Florida Rail Corridor (SFRC), the Florida East Coast (FEC) Railway, and other freight corridors, currently lack adequate safety features, clear markings, or accessible infrastructure. As a result, they pose serious risks for people walking or biking to and from nearby transit stations.

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Figure 3-31: NW 135 Street Railroad Crossing







In numerous locations across the county, residents must navigate poorly marked or obstructed crossings that force them to walk on uneven surfaces, cross multiple tracks without protection, or share narrow rights-of-way with vehicles. These conditions not only discourage active travel, but also disproportionately affect communities that rely on walking, biking, and transit for daily mobility.

First-Last-Mile This and Toolkit recommends identifying high-priority railroad crossings in proximity to transit stations, particularly Tri-Rail, Metrorail, Brightline, and key Metrobus corridors, and recommend specific design and safety upgrades. These include installing

pedestrian gates with audible and visual warnings, adding raised and textured crossings, improving lighting, and constructing barrier-separated pathways for pedestrians and cyclists. All treatments should follow federal railroad safety standards and comply with ADA requirements to ensure accessibility for all users.

Grade-separated crossings, such as bike/ped bridges or underpasses, should be considered in high-traffic or high-speed rail areas where at-grade crossings cannot meet safety or capacity needs. In lower-volume areas, midblock crossings with refuge islands and advanced warning signage may be more appropriate and cost-effective. Coordination with rail operators, FDOT, and municipal partners will be critical to streamline approvals and fund improvements. Public outreach should also be part of the process to raise awareness about safe crossing behavior and to gather community input on local mobility needs.

By upgrading pedestrian and bicycle crossings at railroad tracks, Miami-Dade County can eliminate a major barrier to safe, continuous, and equitable travel. These improvements not only protect lives—they also strengthen the connection between neighborhoods and transit, helping to create a more connected and accessible transportation system for all. Some safety improvements commonly employed at railroad crossings are depicted below:

- Crossing Gates and Signals: Install crossing gates and warning signals for pedestrians and bicyclists that automatically activate when a train is approaching. These visible and audible warnings alert pedestrians and cyclists to the presence of an oncoming train.
- **Pedestrian Crossing Islands:** In cases where grade separation is not feasible, consider installing pedestrian crossing islands in the middle of the road at the crossing. This allows pedestrians to cross one direction of traffic at a time, reducing exposure to potential hazards.
- **Bicycle Lanes and Separated Paths:** Provide dedicated bicycle lanes or separated paths that guide cyclists safely through the crossing area, minimizing conflicts with vehicle traffic.

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- Clear Visibility: Ensure that vegetation, structures, and other obstacles do not obstruct the view
 of the crossing. Clear sightlines provide pedestrians and cyclists with ample warning of
 approaching trains.
- Signage and Markings: Install clear and highly visible signage, pavement markings, and tactile
 warning surfaces to indicate the presence of a railroad crossing and remind users to look both
 ways before crossing.
- **Speed Limit Reductions:** Consider lowering the speed limit for vehicular traffic near railroad crossings to provide more reaction time for drivers and reduce the severity of potential collisions.
- Education and Awareness Campaigns: Conduct educational campaigns to raise awareness among pedestrians, cyclists, and drivers about the importance of following safety rules and being cautious at railroad crossings.
- **Safety Audits:** Regularly conduct safety audits of railroad crossings to identify potential hazards and areas for improvement.
- **Proper Lighting: Ensure** adequate lighting at railroad crossings, particularly during nighttime hours, to improve visibility and safety.
- **Enforcement:** Enforce traffic laws related to railroad crossings to deter risky behaviors and ensure compliance with safety regulations.

An example of rail crossing improvements is shown in **Figure 3-32**.

Figure 3- 32: Example of Detectable Warnings and Pedestrian Crossing Enhancements in Los Angeles, California



Source: LA Metro

Implementing a combination of these safety improvements can significantly enhance the safety of pedestrians and bicyclists at railroad crossings, reducing the likelihood of accidents and creating a safer environment for all road users. It is essential for transportation authorities, local governments, and rail operators to work collaboratively to prioritize safety and implement appropriate measures to protect vulnerable road users at these critical points along the transportation network.

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Opportunities and Challenges of Pedestrian and Bicycle Crossings at Adjacent Railroad Tracks

Railroad tracks often create physical and psychological barriers for pedestrians and cyclists, especially in urban areas where tracks run parallel to major roadways or transit corridors. While these crossings offer opportunities to enhance multimodal connectivity—such as linking neighborhoods, schools, and transit hubs—they also pose significant safety and infrastructure challenges. Many existing crossings lack adequate signage, warning systems, lighting, or grade-separated facilities, making them hazardous for non-motorized users. Cyclists, in particular, face risks when crossing tracks at shallow angles, which can lead to wheel slippage or crashes.

Despite these concerns, well-designed crossings can transform mobility. Opportunities include constructing safer, ADA-compliant infrastructure, integrating active warning systems, and improving sightlines and surface materials to accommodate both pedestrians and cyclists. Coordinated efforts between transportation agencies, rail operators, and local government are essential to overcome design limitations and safety concerns. With the right investments, railroad crossings can shift from barriers to gateway connecting communities and supporting a more inclusive transportation network. The opportunities and challenges associated with Pedestrian and Bicycle Crossings are detailed below in **Table 3-18**.

Table 3- 18: Opportunities and Challenges of Pedestrian and Bicycle Crossings

Improvement	Where to Apply It	Opportunities	Challenges
Pedestrian and Bicycle Crossings	At all Tri- Rail and Brightline Stations	Existing ongoing rail safety efforts have been increasing all over the nation as more accidents/fatalities have increased nationwide. Funding may be available through the Safe Streets and Roads for All (SS4A) Program or other federal funding.	Continuous maintenance and repair of detectable warning surfaces tend to be cumbersome. Additionally, coordination with SFRTA/CSX/FEC or other local agencies to install and implement safety measures will be necessary.

3.4.15 Tool #13: Pedestrian crossings with Rectangular Rapid Flashing Beacons (RRFBs) at Tri-Rail, Metrorail, Brightline, Metromover, and Amtrak Stations

Installing pedestrian crossings with Rectangular Rapid Flashing Beacons (RRFBs) near Tri-Rail, Metrorail, Brightline, Metromover, and Amtrak stations is a practical and impactful strategy to enhance first and last mile access in Miami-Dade County. Many of these stations are located near wide, high-traffic roads where pedestrian activity is frequent, but infrastructure is not always designed for safety or visibility. In these environments, crossing the street can be intimidating or dangerous, particularly for seniors, families, and people with disabilities.

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RRFBs offer a proven solution. These high-visibility, user-activated flashing signals alert drivers to the presence of pedestrians, significantly increasing driver yield rates at midblock or uncontrolled crosswalks. When paired with high-visibility striping, advanced warning signage, and pedestrian refuge islands, RRFBs create safer, more predictable crossing conditions that support foot traffic to and from transit hubs.

This First- and Last-Mile Toolkit recommends the installation of RRFB-equipped crossings at strategic locations near station entrances, parking lots, and bus transfer areas. These improvements are especially important where there is no signalized intersection nearby, where pedestrian desire lines do not align with current crossings, or where crash data shows a history of pedestrian-vehicle conflicts. RRFBs also support safer access in areas around school zones, senior housing, and other land uses clustered around transit.

To maximize effectiveness, RRFBs are implemented as part of a broader Complete Streets approach. Crossings are well-lit, ADA-compliant, and often accompanied by curb extensions, lower speed limits, or raised crosswalks where appropriate. Coordination with local municipalities and FDOT helps standardize design and prioritize locations based on need and transit ridership.

Ultimately, RRFBs are more than just a safety device—they signal that walking to transit is expected, encouraged, and respected. By making these crossings a routine feature around regional rail and intercity stations, Miami-Dade County supports a safer and more welcoming pedestrian environment that strengthens multimodal access for all users. Here is how they work and their benefits:

- Activation and Crosswalk Control: RRFBs are typically installed at pedestrian crosswalks near
 train stations. Pedestrians can activate the RRFBs by pushing a button located on a nearby pole
 or post. This activation alerts drivers that someone is waiting to cross the road, and they must
 stop to allow pedestrians to cross safely.
- **Enhanced Visibility:** The key feature of RRFBs is the rapid flashing lights that are highly visible to drivers, even in adverse weather conditions or during nighttime. The flashing lights help grab the attention of drivers and act as an additional warning signal to yield to pedestrians.
- Increased Driver Compliance: Studies have shown that RRFBs are more effective at gaining driver compliance compared to traditional pedestrian crossings without flashing beacons. The attention-grabbing nature of the flashing lights encourages drivers to stop and yield to pedestrians, thereby reducing the risk of accidents.
- Flexibility and Cost-Effectiveness: RRFBs are often installed as a cost-effective measure to improve pedestrian safety. They can be retrofitted onto existing pedestrian crossings, making them a flexible option for enhancing safety at various locations, including train stations.
- **Pedestrian Priority:** Train stations often experience high pedestrian traffic during peak hours. Installing RRFBs at these locations emphasizes the importance of pedestrian safety and ensures that pedestrians have a designated crossing point where drivers are legally required to stop.
- **Pedestrian Education:** RRFBs can also be part of pedestrian education efforts, reminding pedestrians to use designated crosswalks and activate the flashing beacons when crossing the road. This helps reinforce safe pedestrian behavior and raises awareness among both pedestrians and drivers about the importance of following traffic rules.
- Complementary to Other Safety Measures: RRFBs are often used in combination with other pedestrian safety measures, such as pedestrian islands, signalized intersections, or traffic

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calming techniques, to create a comprehensive safety environment around commuter train stations.

Opportunities and Challenges of Pedestrian crossings with RRFBs

RRFBs have emerged as a cost-effective solution to improve pedestrian safety at midblock and unsignalized crossings. These high-intensity, user-activated lights alert drivers to the presence of pedestrians in the crosswalk, significantly increasing yielding rates and drawing attention to crossings that may otherwise be overlooked. RRFBs are particularly valuable in areas with high foot traffic near schools, transit stops, and commercial corridors, where traditional traffic signals may not be feasible due to cost or traffic flow concerns.

However, RRFBs also present several challenges. Their effectiveness relies heavily on driver awareness and compliance, which can vary depending on roadway design, speed limits, and visibility. Inconsistencies in placement and maintenance across jurisdictions may reduce their impact, especially in areas with poor lighting or obstructions. Additionally, some crossings may require more robust interventions—such as raised medians or curb extensions—in combination with RRFBs to truly enhance pedestrian safety. The opportunities and challenges associated with the implementation of high intensity pedestrian crossings are summarized below in **Table 3-19**.

Table 3-19: Opportunities and Challenges of High Intensity Pedestrian Crossings

Improvement	Where to Apply It	Opportunities	Challenges
High Intensity Pedestrian Crossings	At Tri-Rail, Metrorail, Brightline, Metromover, and Amtrak Stations:	During peak times, large numbers of passengers disembark from buses or trains, and they need to cross busy streets to reach their destinations. Therefore, safe crossings that include the installation of flashing beacons, may clearly visualize the presence of pedestrians.	Coordination with the maintaining agencies is crucial to implement these improvements. However, they often require a warrant analysis to justify the installation. Another challenge is funding for implementation. For instance, funding sources such as the SS4A program may be pursued for this type of work to take place.

Overall, pedestrian crossings with RRFBs at train stations, an example provided in **Figure 3-33**, play a crucial role in reducing accidents, enhancing pedestrian safety, and promoting responsible behavior among both pedestrians and drivers. When properly designed, installed, and maintained, RRFBs can significantly improve the safety and overall experience for all users at these busy locations.

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Figure 3- 33: Example of Rectangular Rapid Flashing Beacon (RRFB) in Lincoln, Nebraska



Source: City of Lincoln, Nebraska

3.4.16 Tool #14: Micromobility Parking for Scooting Integration with Train Travel

Designating micromobility parking zones for electric scooters is a key strategy in supporting first and last mile integration with train travel across Miami-Dade County. As electric scooters grow in popularity, particularly for short, urban trips, have become a valuable tool for connecting people to regional transit services such as Metrorail, Metromover, Tri-Rail, Brightline, and Amtrak. However, without clear and consistent parking infrastructure, scooters can clutter sidewalks, obstruct access, and deter other users from safely reaching transit stations.

This First- and Last-Mile Toolkit recommends establishing dedicated micromobility parking areas at and around major transit stations. These zones, marked with signage, pavement markings, or corrals, create an orderly, accessible space for users to begin or end their scooter trips while keeping pedestrian paths and ADA routes clear. Placement is critical: parking should be located near station entrances, bike racks, or bus bays to make transfers intuitive and efficient.

In high-demand areas, larger corrals or geofenced scooter drop zones can be implemented, supported by coordination with scooter vendors to ensure vehicles are properly distributed and maintained. In areas with limited sidewalk space, repurposing a few curbside parking spots into micromobility hubs can reduce clutter and improve access without compromising pedestrian flow. These hubs can also support other shared modes, such as bike-share and e-bikes, creating flexible, multimodal nodes.

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Digital integration further enhances the experience. Transit apps and mobility platforms should display real-time scooter availability and designated parking locations, allowing users to plan their trips in advance and avoid fines or confusion about where to leave their devices. Additionally, educational signage on scooter etiquette and local parking regulations can support responsible use.

By formalizing micromobility parking at train stations, Miami-Dade County ensures that electric scooters are not just tolerated but fully integrated into the region's transportation system. This approach improves station area management, enhances safety and accessibility, and supports a wider range of sustainable travel options for residents and visitors alike. E-scooter parking at commuter train stations typically works as predicted below:

- **Designated parking areas:** Train stations may allocate specific zones or spaces for e-scooter parking. These areas are clearly marked and easily accessible for riders.
- Parking racks or docks: Some stations may install dedicated parking racks or docks specifically designed to secure e-scooters. These racks may have slots or clamps where riders can park and lock their scooters to prevent theft or unauthorized use.
- **Mobile apps:** Some e-scooter sharing companies provide smartphone apps that help riders find nearby parking locations. The app may use GPS to guide users to the nearest designated parking area at the train station.
- Rules and regulations: Train stations may have specific guidelines and rules for e-scooter parking. These regulations may include designated parking hours, no-parking zones, and fines for improper parking.
- Integration with public transportation: Some train stations may work with e-scooter sharing companies to integrate their services seamlessly with public transportation systems. This integration could involve having e-scooter parking areas close to the station entrance or providing discounts for train commuters using e-scooters.
- Safety measures: Stations should ensure that e-scooter parking areas are well-lit, monitored by security cameras, and located in visible and accessible locations to enhance safety and discourage theft or vandalism.
- **Education and awareness:** Train station authorities can conduct awareness campaigns and provide information to commuters about the importance of proper e-scooter parking. This helps promote responsible parking practices among riders.

The availability and implementation of e-scooter parking at train stations can vary depending on the city or region. It often requires collaboration between local governments, train station authorities, and micromobility providers such as Bird currently operating in Coral Gables and South Miami to create a cohesive and efficient system that encourages sustainable commuting options for the public.

Opportunities and Challenges of Scooter-sharing Stations

Scooter-sharing stations offer a flexible, low-emission mobility option that can enhance first- and last-mile connections to transit, reduce reliance on cars, and increase access in urban areas. When placed strategically near transit hubs, commercial centers, and campuses, scooter stations can expand the reach of existing transportation networks, especially in areas underserved by traditional public transit. Their compact footprint also makes them a space-efficient solution for dense city

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environments, as documented in **Figure 3-34**. However, scooter-sharing systems come with notable challenges. Without designated parking areas or docks, scooters are often left blocking sidewalks, driveways, or ADA access points, raising safety and accessibility concerns. Vandalism, inconsistent maintenance, and user compliance with traffic rules can further undermine the system's effectiveness. Additionally, scooter usage may be limited by infrastructure gaps, such as a lack of protected bike lanes or safe crossings.

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Figure 3- 34: Example of Micromobility in Train Stations in Nottingham, United Kingdom

Source: Department of Transportation from Nottingham City Council

To fully realize the potential of scooter-sharing stations, municipalities and cities in Miami-Dade must invest in clear regulations, infrastructure improvements, and equitable station placement. A summary of the opportunities and challenges associated with the implementation of scooter-sharing stations is outlined below in **Table 3-20**.

Table 3- 20: Opportunities and Challenges of Scooter-Sharing Stations

| Improvement | Where to | Apply It | Opportunities | Challenges |

Improvement	Apply It	Opportunities	Challenges
Scooter- Sharing Stations	At Tri-Rail, Metrorail, Brightline, and Metromover Stations	Several municipalities within the county have shown interest in integrating scooter-sharing stations as part of their local transportation strategies. Preliminary discussions indicate a positive outlook toward implementation with some areas exploring the possibility of launching pilot programs to introduce scootersharing as a viable mobility option.	scooter maintenance and repair are needed continuously to expand this service to all applicable stations. Potential vandalism, graffiti or damage to scooters may happen. Coordination between Miami-Dade DTPW, SFRTA, and micromobility providers will be needed to install scooter sharing stations at the train stations.

3.4.17 Tool #15: Bicycle Centers or Bicycle Repair Stations at Tri-Rail, Metrorail, Metromover, Brightline, and Amtrak Stations as well as at Park-and-Ride Lots

Bicycle centers at train stations are facilities designed to cater specifically to cyclists who use bicycles as part of their daily commute, a local example documented in **Figure 3-35**. These centers aim to promote cycling as a sustainable and efficient mode of transportation, providing cyclists with convenient services and amenities that encourage more people to choose bicycles for their first- and last-mile travel to and from train stations. Key features of bicycle centers at commuter train stations typically include:

Figure 3- 35: Bicycle Repair Station at the Golden Glades Multimodal Transportation



- Secure bike parking: The centers offer secure bike racks, bike lockers, or even indoor bike storage facilities to protect bicycles from theft, vandalism, and weather elements. Some centers may have monitored bike parking areas to enhance security.
- Repair and maintenance facilities: Bicycle centers often provide basic repair and maintenance tools such as air pumps, tire repair kits, and bike stands for small repairs and adjustments. More comprehensive centers may have professional mechanics on hand to offer bike repair services.
- Rental and bike-sharing services: Some centers may offer bike rental or bike-sharing services, allowing commuters to rent a bike for short-term use, especially if they don't have their own bicycle.
- Changing rooms and showers: To encourage cycling among commuters, bicycle centers may include changing rooms, showers, and lockers where cyclists can freshen up before starting their workday.
- Cycling information and resources: The centers may have maps, brochures, and other resources related to cycling routes, safety tips, and local cycling events to help cyclists navigate their way around the area.
- **Educational programs:** Bicycle centers may host workshops, training sessions, and safety programs to

promote cycling awareness and ensure cyclists are well-informed about road safety and bike maintenance.

- Integration with public transport: Ideally, bicycle centers are near the train station platforms, making it easy for commuters to transition between cycling and taking the train.
- Accessibility and inclusivity: The centers are designed to accommodate a variety of bicycles, including traditional bicycles, e-bikes, and cargo bikes. They are also usually wheelchairaccessible to be inclusive to all commuters.

Bicycle centers at commuter train stations play a vital role in encouraging sustainable and active transportation options, reducing traffic congestion, and contributing to environmental conservation.

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They provide a safe and convenient space for cyclists to park their bikes, access amenities, and seamlessly connect with other modes of public transportation like trains, making the entire commuting journey more efficient and enjoyable.

Opportunities and Challenges of Bicycle Center or Bicycle Repair Stations

Bicycle centers and repair stations present valuable opportunities to support cycling as a reliable first- and last-mile mode of transportation in Miami-Dade County. Strategically placed near transit hubs, educational institutions, and within bikeable campus areas, these facilities offer essential amenities such as tire pumps, tools, secure bike parking, and maintenance services that enhance rider confidence and convenience. However, challenges include funding for installation and upkeep, securing space in high-demand areas, and ensuring equitable access across communities. **Figure 3-36** depicts a potential layout of a bicycle storage for the proposed bicycle centers. To maximize their impact, these stations should be integrated into broader multimodal infrastructure plans and promoted through public outreach, wayfinding, and partnerships with local universities and transportation agencies. The opportunities and challenges associated with bicycle repair and storage stations are summarized below in **Table 3-21**.



Figure 3- 36: Layout of a Potential Tri-Rail Bicycle Storage for the Bicycle Center

Source: Tri-Rail SMART STEP Bicycle & Pedestrian Needs Study

Table 3-21: Opportunities and Challenges of Bicycle Repair and Storage Stations

Improvement	Where to Apply It	Opportunities	Challenges
	For the Bicycle Center,	Municipalities and transit	There is potential for
	this includes activating	agencies are encouraged	vandalism, graffiti, or
Bicycle	the existing (but never	to assess opportunities to	damage to the bicycle
Repair and	opened to the public)	revitalize existing bicycle	center. Activation of
Storage	bicycle center at the	centers or plan new ones	this area will require
Center	Miami International	in strategic locations.	coordination with the
Center	Airport Tri-Rail Station.	Enhancements may	Miami-Dade County
	Regarding the bicycle	include updated	Aviation Department
	repair stations, these	wayfinding, improved	since this agency

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can be implemented at	lighting and security,	oversees maintenance
all Tri-Rail, Metrorail,	integration with	of the facility.
Brightline, Metromover,	micromobility services,	Maintenance and
and Amtrak Stations	and access to repair	replacement of the
adjacent to the bicycle	stations or air pumps.	bicycle storage will be
parking areas.	These investments not	required, in addition to
	only improve the biking	providing more
	experience but also	shade/roof cover for the
	support a higher transit	existing facility, as well
	ridership by removing	as additional security or
	common barriers to	a special lock to protect
	active transportation.	the facility from
	·	vandalism. Additional
		funding to reactivate
		this facility may also be
		needed.

FIRST- AND LAST-MILE BICYCLE-PEDESTRIAN MOBILITY
IMPROVEMENTS IN
MUNICIPALITIES IN MIAMI-DADE

SECTION 4

Budgeting and Identified Projects for First- and Last-Mile



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4 Budgeting and Identified Projects for First- and Last-Mile

As part of its ongoing commitment to enhancing mobility and accessibility, Miami-Dade DTPW has identified several key initiatives in its FY 2024–2025 Proposed Budget and Multi-Year Capital Plan that directly address first- and last-mile connectivity. These projects are designed to bridge the critical gaps between residents and transit services, particularly for pedestrians, bicyclists, and micromobility users.

In FY 2024–25, the Countywide General Fund Maintenance of Effort (MOE) for transit services is set to increase to \$246.635 million, representing a 3.5% increase over the FY 2023–24 MOE of \$238.294 million. This upward adjustment reflects Miami-Dade County's growing commitment to maintaining and expanding critical transit operations and infrastructure, including initiatives that support first-and last-mile connectivity.

This funding increase is not only essential for sustaining core transit services, but also instrumental in enabling targeted investments in projects that enhance multimodal access. As first- and last-mile barriers continue to impact transit ridership and accessibility, allocating additional resources allows Miami-Dade DTPW to implement infrastructure improvements that close these gaps—such as pedestrian crossings, bikeway enhancements, and safer connections to transit hubs.

By bolstering the MOE allocation, the County signals its dedication to supporting equitable and efficient mobility, particularly in underserved areas where first- and last-mile improvements can dramatically improve residents' access to opportunity. **Table 4-1** summarizes the first- and last-mile that are slated for investment in the current fiscal year (FY 2024–2025), as outlined in Miami-Dade County's Proposed Budget and Multi-Year Capital Plan.

This section also highlights the **FY 2024–2029 Five-Year Municipal Implementation Plans** developed by each municipality to outline their transit-related priorities, capital projects, and multimodal improvements. These plans serve as roadmaps for aligning local investments with regional mobility goals, focusing on first-last-mile enhancements, safety upgrades, active transportation integration, and service coordination with countywide transit providers. By identifying and phasing specific projects over a five-year horizon, municipalities can better position themselves for funding opportunities, foster interagency collaboration, and ensure that infrastructure improvements respond directly to community needs and anticipated growth. **Tabel 4-2** summarizes the FY 2024-2025 Five Year Municipal Implementation Plans by local agency.

Table 4-1: Miami-Dade County's FY 24-25 Budget's Multimodal Improvements

FY 2024-25 Adopted Budget Highlights Multimodal Improvements Enhancing First-Last-Mile Initiatives

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan for Miami-Dade DTPW includes a Vision Zero Network strategy program to provide safety improvements with the goal of eliminating all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all by redesigning streets to include pedestrian features, intersection improvements, signal improvements, sidewalks, pedestrian crossings, curb extensions, curb ramps, speed feedback signs, green paint for bike lanes, bike facilities, parking restrictions, and raised curb medians; the capital program is funded with General Government Improvement Funds (\$500,000) and through the PTP Bond Program (\$13.244 million)

During FY 2023-24, Miami-Dade DTPW developed the first version of the Countywide Transportation Master Plan (CTMP) that detailed an **implementation plan for transit, pedestrian, bicycle, freight, roadway, and other transportation infrastructure projects** being carried out by Miami-Dade County over the next 20 years. This document is anticipated to be adopted by Fall 2025.

In FY 2024-25, Miami-Dade DTPW will continue to utilize the FTA 5307 - Urbanized Area Formula Grant, the FTA 5337 - State of Good Repair Formula Grant, and the FTA 5339 - Bus and Bus Facility Formula Grant to support the capitalization of major preventive maintenance expenses in the operating budget and miscellaneous capital improvement projects

Included in the Miami-Dade DTPW's FY 2024-25 Adopted Budget and Multi-Year Capital Plan is the continuation of various countywide arterial roadway improvements such as the resurfacing roadways, the installation and repairing of sidewalks and drainage infrastructure improvements; these projects include roadway improvements on NE 2 Avenue from NE 20 Street to West Little River Canal and SW 344 Street from US-1 to SW 172 Avenue. The Department anticipates minimal operating impacts, which will be absorbed using existing resources.

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan includes **funding for improvements to roadways and other transit related neighborhood improvements**; this capital program is included as part of the non-departmental capital projects. The capital program is funded with General Government Improvement Funds (\$8.154 million)

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan includes funding for the East-West corridor (SMART Plan) which would be a 15-mile BRT solution that runs along SR 836/Dolphin Expressway from the Miami Intermedal Center (MIC) adjacent to the Miami International Airport (MIA) to the Tamiami Terminal; the project is expected to have an operational impact of \$28 million in FY 2026-27 to include 75 FTEs

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan includes funding for the North Corridor (SMART Plan) which would extend Metrorail from the Martin Luther King, Jr. (MLK) Metrorail Station to the Broward County Line along NW 27 Avenue. This includes construction of 9.5 miles of elevated guideway, eight new Metrorail stations, and parking facilities. The project is expected to have an operational impact of \$71.970 million in FY 2029-30 to include 300 FTEs

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan includes funding for the **Northeast Corridor (SMART Plan)** which would establish a commuter rail service from Downtown Miami starting from MiamiCentral to the existing Brightline Aventura Station, along Florida East Coast (FEC) railway, **adding five new stations along 13.5 miles of existing tracks**; the project is expected to have an operational impact of \$25.5 million in FY 2029-30 to include 150 FTEs.

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan includes Metrorail improvements that will refurbish the 23 stations, complete a condition assessment of Metrorail Station elevators and escalators to create a prioritized implementation schedule to overhaul, replace, or refurbish the existing equipment inventory, and upgrade the Tri-Rail Station power sub-station. These improvements and upgrades will enhance the current Metrorail stations and improve system reliability and safety as well as reduce maintenance costs. The project is expected to have an operational impact of \$75,000 in FY 2024-25.

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan includes the **South Dade Transitway Corridor**, a premium transit service in the southern part of the County. The South Corridor is one of six rapid transit corridors in the SMART Plan, running along the existing South Dade Transitway for approximately 20 miles from SW 344 Street/West Palm Drive in Florida City to the Dadeland South Metrorail station to connect the communities along the corridor to the existing rapid transit system and Downtown Miami. **The Bus Rapid Transit (BRT) was adopted as the locally preferred alternative for the South Corridor, and the project will include several improvements to the corridor to provide passengers with a reliable and comfortable travel option with rail-like travel times, iconic stations, and enhanced safety features.**

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan includes the design and **development of ten miles of The Underline corridor** running below the Metrorail guideway from the Miami River to Dadeland South Station. This multimodal corridor and linear park will **enhance connectivity, mobility, and biking safety** for Miami-Dade County residents and visitors. Phase One extends from the Miami River to SW 13 Street, Phase Two extends from SW 13 Street to SW 19 Avenue, and Phase Three extends from SW 19 Avenue to the "kiss and ride" at the Dadeland South Metrorail Station. The capital program is expected to be completed by the close of FY 2024-25.

The FY 2024-25 Adopted Budget and Multi-Year Capital Plan will continue PTP funding to replace and upgrade transit's physical assets to include buses, facilities, and equipment according to normal replacement cycles as part of the Infrastructure Renewal Plan (IRP).

The FY 2024-25 Adopted Budget continues additional outside contractual security commitments at 14 additional stations along the South Dade BRT Corridor as well as security commitments at 23 Metrorail stations.

The FY 2024-25 Adopted Budget continues support of 12 NEAT teams (\$2.4 million) that specialize in roadway and neighborhood maintenance activities and four NEAT teams (\$500,000) that specialize in graffiti abatement and guardrail vegetation maintenance.

The FY 2024-25 Adopted Budget will continue to provide transit passes to both City Year (\$80,550) and the Greater Miami Service Corps (\$54,000) in exchange for a total of 7,000 hours of volunteer service.

The FY 2024-25 Adopted Budget will continue with the funding of **four pothole repair crews** serving UMSA (\$1.2 million).

FY 2024-25 Adopted Budget Highlights Multimodal Improvements Enhancing First-Last-Mile Initiatives

The FY 2024-25 Adopted Budget will continue to support the **South Dade BRT corridor** that covers 20 miles of roadway with a combined total of 46 stops (14 BRT and 32 local stops) with each stop requiring coordination of traffic gate arms, signal and bus transponder syncing, as well as peripheral syncing with other traffic signals along the US 1 corridor (\$4.233 million funded out of the PTP).

By the end of FY 2023-24, the Miami-Dade DTPW will have planted more than **8,000** trees in support of the county's urban tree canopy and will have given 2,500 trees to Miami-Dade County residents. The Community Forestry and Beautification unit, which houses the Neat Streets Miami-Dade County board and leads the Million Trees Miami-Dade County initiative, will have planted approximately 3,937 trees in county parks and on public lands, with greater than 92% of the trees planted are in areas of the county with existing tree canopy coverage of 20% or less (targeted tree deserts). Through the 2023 cycle of the County's Growing Roots for Environmentally Equitable Neighborhoods (GREEN) Miami-Dade County Matching Grant program, another 1,504 trees were planted by municipalities within Miami-Dade County. Additionally, the Rights-of-Way Assets and Aesthetics Management (RAAM) unit will have planted 2,449 trees along County and State-maintained rights-of-way by the end of the fiscal year.

The FY 2024-25 Adopted Budget includes funding for park improvements to **include signage, lighting along walkway, benches, and trees** at Country Lake Park funded through the Countywide Infrastructure Investment Fund Program (CIIP) (\$172,000).

The FY 2024-25 Adopted Budget includes funding of \$500,000 annually for the next five years to **support tree canopy enhancement**, targeting low-income areas with less than 20% tree canopy coverage. In addition, there is continued funding for countywide and UMSA tree canopy enhancement (\$1.5 million).

The FY 2024-25 Adopted Budget includes \$15,000 to conduct 5,000 engagement touchpoints with residents and other community stakeholders via surveys, meetings, and events to design and promote strategies and create safer neighborhoods.

Table 4- 2: FY 2024-2029 Five-Year Municipal Implementation Plans

	FY 2024-2029 5-Year Municipal Implementation Plan
Local Agency/Municipality	Implementation Plan Description
City of Aventura	Aventura is set to significantly increase its investment in transportation services over the coming years. Annual funding for the citywide bikesharing program will grow from \$8,500 in FY 2024–2025 to \$10,100 by FY 2028–2029. Meanwhile, operating costs for the program will rise from \$95,000 to \$105,000. More substantial growth is planned for other mobility options. On-demand transportation services will expand from \$55,000 to \$1.4 million, while enhanced transit services will see funding increase from \$40,000 to over \$1.3 million during the same period. These investments highlight Aventura's commitment to expanding flexible, accessible, and sustainable transportation choices for its community.
Village of Bal Harbour	Bal Harbour is steadily reshaping its transportation landscape through a series of thoughtful infrastructure and mobility projects. Since December 2022, the town's Sensi-On-Demand Program has offered residents a convenient, flexible way to get around, all backed by a dedicated \$133,285 budget. This initiative reflects the community's growing demand for accessible, on-demand ride-sharing options that align with modern mobility trends. At the same time, Bal Harbour has invested in improving its transit infrastructure, starting with bus shelter repairs and maintenance launched in October 2024 under a \$23,810 budget. These repairs ensure that residents and visitors have clean, safe, and comfortable access points for public transportation. Beyond transit, the town has taken a comprehensive approach to infrastructure upkeep. Streetlight repairs and maintenance have helped enhance safety after dark, while sidewalk power washing ensures that walking remains both pleasant and hygienic. Meanwhile, regular street sweeper maintenance keeps roadways clean and inviting, improving not just aesthetics but also road safety. Together, these projects demonstrate Bal Harbour's commitment to maintaining a cleaner, safer, and more accessible environment, supporting a higher quality of life for its residents and a welcoming atmosphere for visitors
Town of Bay Harbor Islands	Bay Harbor Islands is actively investing in projects that strengthen both mobility and infrastructure resilience. At the center of its efforts is the citywide Freebee on-demand service, which provides residents and visitors with flexible transportation options. With a \$1.33 million budget, this service not only supports intra-town travel but also extends connectivity beyond Bay Harbor Islands, reaching areas up to US 1, thereby improving access and regional integration. Complementing this service is the Roadway and Drainage Improvement Project, supported by a \$10.3 million allocation. This initiative addresses critical infrastructure needs through road resurfacing, targeted repairs, and roadway expansion, while also enhancing drainage systems to reduce flood risk and reinforce long-term durability. Together, these projects demonstrate the town's commitment to modernizing its transportation network while building climate-resilient infrastructure that serves all users.
Village of Biscayne Park	At this time, there is no Five-Year Municipal Implementation Plan
City of Coral Gables	Coral Gables is embarking on a sweeping transformation of its transportation and infrastructure landscape, guided by a clear commitment to connectivity, accessibility, and modernization. At the heart of this effort is a robust investment in trolley operations, with \$13.36 million dedicated over five years to maintain and enhance the city's signature transit service. This includes expanding routes (\$2.3 million) and extending service into evenings and weekends (\$1.69 million), making the system more convenient and responsive to resident needs. Innovative mobility solutions are also taking shape through the Freebee Electric Mobility Services, an on-demand ride service backed by \$2.49 million, offering an eco-friendly alternative for local travel. Upgrades to trolley infrastructure continue with a focused \$40,006 allocation to modernize existing vehicles and improve rider experience. Infrastructure investments reinforce these mobility enhancements. A new trolley depot generator (\$725,000) will ensure service reliability, while \$91,000 in concrete slab replacements addresses aging sidewalk conditions. Nearly \$550,000 is being funneled into expanding the city's bicycle infrastructure, further supporting active, sustainable transportation. Meanwhile, Coral Gables is investing heavily in its pedestrian environment. The Sidewalk Repair and Replacement Program—a key initiative—commands \$5.6 million, ensuring safe and accessible walkways across the city. Complementary efforts include \$1.76 million for last-mile transit stop improvements and a \$94,870 initiative to install CCTV along key roadways, enhancing both safety and traffic monitoring capabilities. Together, these projects form a comprehensive blueprint for a smarter, safer, and more connected Coral Gables—one where people can move efficiently, whether by foot, bike, trolley, or car, and where infrastructure supports both present needs and future growth
Town of Cutler Bay	Cutler Bay is laying the groundwork for a more connected, resilient, and community-friendly future through a comprehensive five-year capital investment strategy. Anchoring the town's mobility efforts is a \$1.64 million commitment to the Municipal Circulator Service, ensuring residents can travel easily and affordably. Enhancements to the transit experience continue with new and upgraded shelters, including \$240,000 for Marlin Road, \$812,000 for wider bus stop improvements, and \$665,000 for 12 shelters along Franjo Road. The town is also embracing flexible, on-demand travel, with \$900,000 allocated to a MetroConnect pilot program. Cutler Bay's investment in road infrastructure is equally robust. A \$5.85 million reconstruction of Franjo Road headlines the effort, supported by \$1 million for Caribbean Boulevard upgrades, \$2.66 million to enhance SW 82 Avenue, and \$5.8 million allocated across multiple phases of resurfacing. A \$345,920 roundabout project and \$95,000 for multimodal design on Marlin Road reflect the town's commitment to safe, well-integrated street design. The plan also accounts for long-term resiliency and livability. Drainage improvements along SW 187 Terrace (\$33,545), the installation of Victorian-style street furniture on Old Cutler Road (\$20,000), and intersection safety upgrades at SW 92 Avenue and SW 215 Terrace (\$55,500) enhance both functionality and neighborhood charm. Oversight and project coordination are supported by a \$140,000 annual administrative fee, ensuring accountability throughout implementation. Together, these projects represent a thoughtful and forward-looking approach to multimodal connectivity, infrastructure renewal, and community safety—setting the stage for a more vibrant and accessible Cutler Bay

	FY 2024-2029 5-Year Municipal Implementation Plan
Local Agency/Municipality	Implementation Plan Description
City of Doral	Doral is reinforcing its commitment to accessible, multimodal mobility through a series of well-funded initiatives. Leading the way is a \$26.29 million investment in the Doral Trolley System (DTS), which operates four routes linking neighborhoods to key transit connections, including Miami-Dade Transit stops and the Palmetto Metrorail station. This investment ensures that residents have a reliable, cost-free option for daily travel across the city. To complement fixed-route transit, Doral is also expanding on-demand mobility through a \$2.67 million allocation for Freebee services, offering flexible transportation that adapts to users' schedules and locations. On the infrastructure front, a \$1 million commitment to the Citywide Roadway Rehabilitation Program will support essential improvements—milling, resurfacing, sidewalk enhancements, and new striping—ensuring that streets and pedestrian areas remain safe, navigable, and well-maintained. Collectively, these investments highlight Doral's vision for a transportation system that meets evolving community needs, encourages transit use, and fosters safer streets for all.
Village of El Portal	El Portal is taking meaningful steps to modernize its transportation network with an eye toward sustainability, safety, and long-term resilience. At the forefront is a \$270,000 investment in an Electric Shuttle Service Program, offering eco-friendly, local transit options that aim to reduce congestion while promoting clean mobility. Safety remains a clear priority, with dedicated funding for speed limit reductions (\$85,000), street lighting enhancements (\$200,000), and traffic calming installations (\$300,000)—all designed to create safer streets for all users. In support of multimodal access, the village is also advancing the NE 2nd Avenue "road diet," a \$155,000 initiative to reduce lane widths and encourage safer shared use among vehicles, cyclists, and pedestrians. To build climate resilience, El Portal is committing \$400,000 to upgrade stormwater infrastructure, helping to mitigate flooding and improve overall infrastructure performance during extreme weather events. These projects reflect a holistic and forward-thinking approach to urban planning, aligning environmental responsibility with improved mobility and public safety.
City of Florida City	Florida City is moving forward with a slate of transportation investments aimed at improving mobility, safety, and public infrastructure—all supported by a total funding allocation of \$165,000. At the heart of these efforts is the Freebee On-Demand Service, providing eco-friendly, app-based rides that help reduce congestion while expanding local travel options. To enhance the rider experience and transit accessibility, the city is installing new bus shelters and shaded benches, ensuring comfortable and weather-protected waiting areas. At the same time, fleet enhancements—including the acquisition of a crew cab, dump truck, and backhoe/front loader—will boost the capacity and efficiency of municipal services, especially for public works and road maintenance. The city has also prioritized light pole maintenance and sidewalk repairs to improve visibility and pedestrian safety during evening hours. Additionally, targeted roadway resurfacing projects will improve driving conditions and help extend the longevity of key roadway segments. Together, these projects reflect Florida City's proactive approach to modernizing local infrastructure.
Town of Golden Beach	Golden Beach is making strategic investments to enhance the town's infrastructure and promote safer, more accessible transportation. Among these efforts is a \$25,000 investment in bus bay maintenance along the A1A corridor, reinforcing key transit access points. To boost first and last mile connectivity, the town has allocated \$30,000 for upgrades at 399 Ocean Boulevard, enhancing linkages between residential areas and transportation hubs. Ongoing street sweeping ensures clean and navigable roadways, while \$30,000 for curb and gutter repairs supports effective stormwater management. In parallel, \$80,000 has been dedicated to road milling and resurfacing, addressing wear and extending roadway lifespan. The town is also prioritizing pedestrian safety and accessibility with \$80,000 for parking bays and \$120,000 for traffic calming measures such as speed humps and improved signage. Altogether, these projects reflect Golden Beach's thoughtful approach to modernizing mobility systems and strengthening community infrastructure.
City of Hialeah	Hialeah is making bold strides toward a more connected and resilient transportation network, with \$27 million dedicated to enhancing the Hialeah Transit System, including upgrades to the Flamingo and Marlin routes. These investments are focused on improving service reliability, expanding connectivity, and ensuring that public transit remains a convenient and dependable option for residents and visitors alike. Beyond transit, the city has earmarked an impressive \$106.15 million through FY2029 for roadway and drainage improvements. This wide-ranging investment includes street resurfacing, drainage upgrades to mitigate flooding, and the installation of new street lighting, all of which aim to strengthen infrastructure while promoting safer, more efficient travel throughout the community. Together, these projects reflect Hialeah's commitment to modern mobility, climate resilience, and an enhanced quality of life for its growing population.
City of Hialeah Gardens	Hialeah Gardens is advancing a comprehensive set of transit and infrastructure projects aimed at creating a safer, more connected, and resilient community. A key initiative is the \$210,000 investment in the Marlin Route, which strengthens public transit access by linking residents to the broader regional transportation network. The city is also directing significant resources toward infrastructure upgrades. This includes \$700,000 for intersection improvements at NW 108 Street, NW 87 Court, and NW 89 Avenue, which are designed to enhance traffic flow and safety. An additional \$800,000 has been set aside for citywide roadway maintenance, supporting smoother, more reliable travel conditions across town. Focused improvements along NW 122 Street will boost safety and drainage capacity, reducing flood risks and enhancing road durability. To further improve nighttime visibility and community safety, the city has allocated \$90,000 for new street lighting. And with the purchase of street sweeper trucks for \$85,000, Hialeah Gardens is reinforcing its commitment to maintaining clean, well-kept roads that benefit both residents and visitors. Altogether, these targeted investments reflect the city's strategic approach to sustainable growth, mobility enhancement, and quality-of-life improvements.

	FY 2024-2029 5-Year Municipal Implementation Plan
Local Agency/Municipality	Implementation Plan Description
City of Homestead	Homestead is making a bold and coordinated push to enhance its transportation network, investing across a wide spectrum of projects that prioritize mobility, safety, and long-term planning. A key part of this strategy is the city's transit expansion, with \$550,000 allocated for new trolley vehicles—modernizing local transit—and \$85,000 for street sweeper trucks to maintain cleaner and safer streets. Infrastructure modernization continues with a \$749,203 traffic signalization project at SW 152 Avenue and Alex Muro Jr. Boulevard, improving intersection safety and traffic flow. To increase walkability, the city is dedicating \$200,000 toward designing and constructing pedestrian walkways, expanding accessibility for all users. Long-range planning is also underway with \$296,754 earmarked for the 20-Year Transportation Master Plan, while more immediate needs are addressed with an \$88,337 investment in a new Ford F350 for maintenance operations. Substantial annual investments, including \$4.6 million for roadway improvements, \$1 million for sidewalk enhancements, and \$400,000 for guardrail maintenance, reinforce the city's commitment to infrastructure upkeep. Additional priorities include \$600,000 for bridge upgrades, \$2.2 million to widen NE 2 Drive, and \$450,000 to enhance Washington Avenue. A \$250,000 allocation for traffic calming devices supports neighborhood safety, while a \$50,000 survey will guide data-driven improvements in sidewalk and roadway conditions.
Indian Creek Village	At this time, there is no Five-Year Municipal Implementation Plan, there is no transportation service offered.
Village of Key Biscayne	At this time, there is no Five-Year Municipal Implementation Plan.
Town of Medley	Medley is focusing its transportation strategy on reliability and functionality, ensuring that its infrastructure meets the demands of its industrial character. Investments in shuttle and circulator services include essential elements such as insurance coverage, routine maintenance, vehicle repairs, and the hiring of qualified drivers—steps that are crucial for delivering consistent transit in a community where workforce mobility plays a central role. To expand flexibility and coverage, the town also offers Freebee on-demand transit service during peak hours, giving riders a modern, app-based mobility option that reduces reliance on personal vehicles and helps manage congestion. Recognizing the importance of well-maintained roads for freight movement and commuting, Medley is also prioritizing roadway maintenance and repair. These improvements support smoother travel for heavy-duty vehicles and everyday traffic alike, reinforcing the town's role as a key logistics and industrial hub.
City of Miami	The city is advancing a comprehensive slate of initiatives aimed at strengthening first- and last-mile mobility, with an emphasis on pedestrian, bicycle, and mass transit infrastructure. These efforts are designed to make local travel safer, more accessible, and more comfortable for all users, especially in the crucial zones between homes, transit stops, and key destinations. Projects underway include the installation of traffic-calming devices, pedestrian priority zones, and traffic flow modifications, all aimed at slowing vehicles and creating safer shared spaces. Speed reduction signage and enhanced lighting improvements further increase roadway visibility and pedestrian security. To promote walkability and inclusivity, the city is investing in sidewalk repairs and ADA-compliant upgrades, as well as new crosswalks and parks that enrich neighborhood connectivity. For transit users, improvements include new benches at key trolley stops, updated trolley signage, and the addition of buffered bicycle lanes, supporting seamless integration between cycling, walking, and public transit. Together, these projects reflect the city's commitment to building a more connected, accessible, and multimodal transportation system that serves diverse mobility needs while enhancing public safety and community livability.
City of Miami Beach	Miami Beach is taking a bold, forward-looking approach to transportation, combining free, accessible transit with transformative infrastructure upgrades. At the core is the daily-operating Miami Beach Trolley System, which includes four loops—South Beach, Mid-Beach, North Beach, and Collins Express—ensuring seamless movement through key districts. Expanding reach even further, specialized options like the Mount Sinai Link and Freebee's on-demand, eco-friendly service enhance convenience for healthcare access and flexible commuting. On the infrastructure side, the city is investing heavily to support multimodal mobility. The West Avenue Phase II upgrade, backed by more than \$100 million, represents a major commitment to resilience and improved traffic flow. Complementing this is the Hawthorne Avenue Neighborhood Greenway, a \$1.37 million project encouraging non-motorized travel in a safer, more inviting environment. Smaller-scale, high-impact projects like the Prairie Avenue Traffic Circle and protected bike lanes on 72 nd Street and 73 rd Street round out the vision, boosting cycling safety and easing vehicular congestion. These efforts, combined with citywide bike improvements and smart traffic technologies, show Miami Beach's dedication to creating a connected, sustainable, and people-centered urban transportation ecosystem
City of Miami Gardens	Miami Gardens is charting a path toward greater accessibility, safety, and neighborhood connectivity through a diverse portfolio of transit and infrastructure upgrades. At the core of these improvements are ADA Transit Enhancements and the installation of modernized bus shelters, designed to ensure that public transportation is both inclusive and comfortable for all users. Across the city, sidewalk and roadway improvement projects are underway, targeting critical corridors to improve pedestrian and vehicular flow. These upgrades not only enhance mobility but also contribute to stronger neighborhood links and overall walkability. Forward-looking trail development adds another layer to this strategy. The planned Biscayne Blueway Trail and Betty T. Ferguson Shared Use Path will offer residents new options for recreation and non-motorized travel, promoting health and sustainability while boosting local connectivity. To round out the city's efforts, traffic calming and lighting enhancements are in progress, aiming to reduce speeding, improve visibility, and make streets safer for everyone—from drivers to cyclists and pedestrians.

	FY 2024-2029 5-Year Municipal Implementation Plan
Local Agency/Municipality	Implementation Plan Description
Town of Miami Lakes	Miami Lakes is taking a thoughtful, community-centered approach to transportation planning, blending accessibility, sustainability, and aesthetics. At the forefront is the Freebee On-Demand Service, which offers flexible, eco-friendly travel options aimed at easing congestion and increasing mobility for residents. To support a well-connected and inclusive transit network, the town maintains 23 bus shelters and 43 bus stops, ensuring they remain ADA-compliant, clean, and safe through consistent maintenance and upgrades. Infrastructure improvements extend to key corridors like NW 59 Avenue, where a roadway extension project will enhance connectivity across the region. Active transportation is also a major focus, with bike lane and crosswalk enhancements along Fairway Drive, and pedestrian and cycling upgrades in Miami Lakes Park West promoting healthier, more walkable neighborhoods. Complementing these efforts, the town is developing scenic greenway trails along NW 77 Court and undertaking beautification at the SR 826/NW 154 Street intersection, contributing to both mobility and visual appeal. In addition, dedicated funding for program management and transportation studies highlights Miami Lakes' commitment to long-term, data-informed planning for an efficient, sustainable infrastructure system.
Village of Miami Shores	At this time, there is no Five-Year Municipal Implementation Plan
City of Miami Springs	At this time, there is no Five-Year Municipal Implementation Plan
City of North Bay Village	North Bay Village is moving forward with a thoughtful blend of mobility and infrastructure enhancements designed to strengthen local connectivity and elevate the day-to-day experience for residents and visitors alike. The introduction of the Freebee On-Demand Service offers a sustainable, app-based transportation option, reducing reliance on personal vehicles while increasing access across the community. Supporting this is the Downtown Express circulator, a vital transit link that connects neighborhood destinations with key Miami-Dade transit stops, making multimodal travel more seamless. The addition of new branded bus shelters will not only improve transit visibility but also enhance passenger comfort and safety at key boarding locations. On the infrastructure front, the village is investing heavily in improvements that promote durability, accessibility, and safety. Projects include \$2.2 million for roadway resurfacing on Treasure Island, \$162,000 for sealcoating and striping on Harbor Island, and \$175,000 for streetlight repairs, helping to ensure well-lit and well-maintained streets. Meanwhile, a \$750,000 allocation for sidewalk connectivity upgrades will enhance walkability and ADA access across the community.
City of North Miami	North Miami is making strategic strides to strengthen its mobility and infrastructure, blending accessible public transit with a focus on livability and long-term resilience. The city's transit network is anchored by the NoMi Express, a free trolley system with four routes that offer easy, equitable access across key destinations. Complementing this is Freebee, an on-demand, eco-friendly ride service that provides flexible transportation options tailored to individual needs. To make transit more affordable and inclusive, the Transportation Options Program subsidizes monthly transit passes, easing the financial burden for frequent riders. Meanwhile, regular maintenance of bus shelters ensures transit hubs are clean, safe, and welcoming. Overseeing these efforts is a dedicated transit planner, whose role is to coordinate services and streamline operations. On the infrastructure front, North Miami is upgrading street lighting, sidewalks, and roadways while actively maintaining urban greenery through tree trimming and care. A transportation manager leads these efforts, reinforcing the city's commitment to thoughtful planning and delivery. Notable capital projects include the construction of a bridge over the Biscayne Canal at NE 131 Street, aimed at improving local connectivity, and the installation of traffic calming devices, which enhance neighborhood safety and walkability.
City of North Miami Beach	North Miami Beach is rolling out a range of forward-looking transit and infrastructure improvements, focused on building a more accessible, safer, and community-friendly city. Central to this initiative is the continued operation of the NMB Line, a fixed-route transit service providing dependable local travel, and a robust \$1.2 million investment in Freebee, the city's eco-friendly, on-demand transportation option, which brings convenience and flexibility to residents' daily commutes. To enhance the rider experience and increase visibility, new bus shelters are being installed across the city, supported by a \$131,660 budget. On the ground, pedestrian and traffic safety are being prioritized with sidewalk upgrades to meet ADA standards and traffic calming improvements totaling \$650,640, targeting speed and flow issues in key locations. In parallel, citywide roadway resurfacing—backed by a \$493,220 allocation—is set to improve driving conditions and extend the life of essential corridors. Altogether, these projects underscore North Miami Beach's ongoing efforts to create a more integrated, sustainable, and user-focused transportation network that serves both current and future community needs.
City of Opa-Locka	Opa-locka is taking a decisive step forward in reimagining its transportation landscape, with a clear focus on connectivity, safety, and infrastructure resilience. At the center of this vision is a \$650,000 investment in the Shuttle Bus and Rideshare Service, designed to strengthen regional mobility and offer residents more accessible travel options. Pedestrian accessibility is receiving notable attention through projects like Sidewalk Phase V (\$258,000) and Sidewalk Phase VI, part of a larger \$800,000 combined allocation with Resurfacing Phase IX. These initiatives target high-priority corridors to improve walkability, ADA access, and community safety. Roadway improvements are equally central, with \$263,526 allocated for Maintenance and Resurfacing Phase VII, reinforcing smoother and safer travel. An additional \$500,000 supports roadway upgrades citywide, while \$300,000 is dedicated specifically to sidewalk construction and repair, strengthening the town's walkable environment. Together, these projects underscore Opa-locka's strategic commitment to building a more connected, people-first infrastructure network—one that supports both everyday transit and long-term community development.

	FY 2024-2029 5-Year Municipal Implementation Plan
Local Agency/Municipality	Implementation Plan Description
Village of Palmetto Bay	Palmetto Bay is advancing a well-rounded vision for mobility and infrastructure that blends modern transit solutions with community-centered enhancements. At the heart of the village's transit strategy is a series of investments designed to improve operations and accessibility: \$656,000 supports administrative operations, \$69,000 funds transit operations, and additional resources are being directed toward leasing a park-and-ride facility—an essential step toward regional connectivity. Most notably, \$1.8 million is allocated for on-demand transit services, giving residents flexible, app-based options for getting around. On the infrastructure side, the village is taking meaningful steps to improve safety and road quality. Traffic calming measures—backed by \$1.12 million—will help slow vehicle speeds and foster pedestrian-friendly environments. Roadway resurfacing and improvements, with a \$1.25 million budget, will tackle long-term maintenance needs. To guide these efforts, \$500,000 has been committed to engineering and architectural services, ensuring each project is professionally designed and executed. A \$925,000 transfer toward public transit services further underscores Palmetto Bay's commitment to long-term transportation improvements. Together, these initiatives reflect a thoughtful push toward a smarter, safer, and more connected community.
Village of Pinecrest	Pinecrest is taking a forward-thinking, community-first approach to mobility by weaving together sustainable transit and targeted infrastructure upgrades. At the center is the Pinecrest People Mover, a free circulator bus system with three routes that ease local travel and reduce reliance on personal vehicles. Supporting this is a GPS-based Trolley Tracker, giving riders real-time updates, and Freebee's electric, on-demand rideshare service, which—thanks to a partnership with Florida Power & Light—is powered by clean energy. These enhancements are not only practical but also supported by trolley branding initiatives aimed at raising public awareness and boosting ridership. On the infrastructure side, the village is investing in road paving and resurfacing, traffic calming features, and school zone upgrades to create safer corridors for all users. Intersection improvements outlined in the 2018 Master Plan are also being implemented, reflecting long-term planning in action. Meanwhile, sidewalk upgrades—with a focus on ADA compliance—are making streets more accessible, and new street signage enhances visibility and navigation. Behind the scenes, Pinecrest is backing these improvements with professional design and engineering services, along with administrative resources to ensure smooth execution. Altogether, these initiatives reflect a bold commitment to safe, sustainable, and community-oriented transportation.
City of South Miami	South Miami is embracing a well-rounded approach to modern mobility, weaving together transit innovation and infrastructure upgrades to improve safety, accessibility, and flow throughout the city. At the heart of its transit plan is the MetroConnect SoMi program, offering free, electric on-demand rides that help residents reach regional transit hubs with ease—an eco-conscious nod to convenience and sustainability. Complementing this are a range of street-level investments designed to elevate the urban experience. Citywide traffic calming measures and the creation of new traffic circles at key intersections are being introduced to smooth vehicle movement and reduce speeding. Simultaneously, sidewalk repairs with ADA-compliant upgrades near schools and transit stops ensure that pedestrians—especially students and mobility-impaired individuals—have safe and accessible pathways. To further enhance roadway safety and visibility, the city is investing in street resurfacing, improved pavement markings, and updated signage, along with internally illuminated pavement markers in high-traffic zones to support safer nighttime travel. Targeted road restriping in school zones and commercial corridors rounds out the plan, promoting safer crossings and more organized traffic patterns where they're needed most. Altogether, these initiatives reflect South Miami's commitment to fostering a connected, inclusive, and future-ready transportation network.
City of Sunny Isles Beach	Sunny Isles Beach is propelling its transit and infrastructure network into the future with a comprehensive blend of service expansion and community-focused enhancements. At the heart of its efforts is a nearly \$1.9 million investment in community shuttle operations, keeping the city's free and accessible transit options reliable and efficient. Bolstering this are plans for fleet expansion (\$215,000), ensuring greater capacity and coverage across routes. To elevate the rider experience, the city is installing new bus shelters (\$37,500) and equipping stops with ETA Solar Powered Trackers and bus tracking hardware (\$40,000 each)—a smart step toward real-time transit transparency. Behind the scenes, administrative support amounting to 5% of overall transit costs ensures that these programs run smoothly and effectively. On the infrastructure front, Sunny Isles Beach is committing to visual and functional upgrades. A significant \$2.66 million is allocated to Collins Avenue streetscape improvements, which will enhance both aesthetics and walkability along this key corridor. Meanwhile, \$306,000 in citywide street maintenance will help maintain smooth, safe roadways for all users.
Town of Surfside	The Town of Surfside has not generated the Five-Year Municipal Implementation Plan for FY 2024
City of Sweetwater	Sweetwater is taking a strategic, multi-layered approach to modernizing its transportation system, with a clear focus on connectivity, reliability, and pedestrian safety. At the core is the city's trolley service, a vital link connecting residential neighborhoods to schools, government centers, and commercial hubs. Regular maintenance ensures that these vehicles stay dependable for everyday riders. To further improve service quality, a ridership study and real-time tracking app—integrated with Miami-Dade Transit GO—are being rolled out, enhancing accessibility and allowing commuters to plan with confidence. On-the-ground improvements like shaded bus shelters, benches, and active administrative oversight reflect a rider-first mindset. Infrastructure upgrades are equally robust: the city is investing over \$1.4 million in street and sidewalk improvements, including repaving, curb repairs, and ADA-compliant enhancements that make sidewalks safer and more inclusive. These efforts are bolstered by plans to replace outdated signage, conduct a citywide parking study, and supply maintenance teams with the equipment they need—including a new service vehicle. Looking ahead, Sweetwater is also planning a pedestrian bridge to increase safety in high-traffic areas, further underscoring its commitment to smarter, more connected urban design.

FY 2024-2029 5-Year Municipal Implementation Plan			
Local Agency/Municipality	Implementation Plan Description		
Village of Virginia Gardens	Virginia Gardens is making meaningful investments in its infrastructure and mobility systems, with a strong emphasis on inter-municipal collaboration, sustainability, and safety. Although the village does not operate its own transit system, it maintains essential regional connectivity by partnering with Miami Springs to co-fund the MSVG Circulator Shuttle, a shared-service solution that benefits local residents without duplicating resources. Administrative support ensures this partnership runs smoothly, with oversight of operations and compliance reporting. To support safer and more efficient travel, the village is upgrading street lighting along bus routes, ensuring better visibility and pedestrian safety. In tandem, routine street sweeping and drain cleaning efforts contribute to both roadway cleanliness and stormwater management, reinforcing climate resilience across the community. Green infrastructure is also a priority. A newly funded Tree Inventory and Master Plan will guide urban forestry decisions, helping the village balance aesthetics with environmental benefits. Ongoing tree maintenance supports shade, storm resilience, and neighborhood beauty. Finally, pedestrian pathway upgrades near schools and transit stops emphasize Virginia Gardens' dedication to walkability and multimodal access, ensuring safe and inviting routes for everyone—from students to seniors		
City of West Miami	West Miami is actively advancing a slate of transportation and infrastructure initiatives designed to make the city safer, more accessible, and forward-looking. At the heart of its mobility efforts is Freebee, the free electric, on-demand rideshare service that provides residents—especially those with limited mobility—a sustainable, car-free alternative. With over \$500,000 allocated to support its operation, the city ensures the service remains well-maintained, staffed, and reliably delivered. On the ground, West Miami is investing in a wide-ranging set of improvements aimed at enhancing neighborhood livability. These include roadway construction, resurfacing, and general maintenance, as well as lighting upgrades and landscaping enhancements near high-use areas like parks and schools. Street sweeping and speed humps work hand-in-hand to improve safety and cleanliness, while drainage upgrades target flood mitigation in vulnerable zones. To further reinforce safety and efficiency, the city is replacing outdated speed limit signs, upgrading traffic signal poles, and constructing a chicane on SW 65 Avenue—a design element that slows traffic through natural curvature. Meanwhile, sidewalk repairs with ADA upgrades and a new midblock crosswalk on SW 62 Avenue are making the city's pedestrian network more inclusive and user-friendly.		

FIRST- AND LAST-MILE BICYCLE-PEDESTRIAN MOBILITY
IMPROVEMENTS IN
MUNICIPALITIES IN MIAMI-DADE

SECTION 5

Summary and Next Steps



Task Work Order No. EVN0000308-02: First- and Last-Mile Bicycle-Pedestrian Mobility Improvements in Municipalities in Miami-Dade County

5 Summary and Next Steps

This document provides a series of comprehensive recommendations, toolboxes, and best practices to aid municipalities and transit agencies with improving access to mobility hubs within Miami-Dade County. It dives into various strategies aimed at optimizing connectivity and fostering sustainable mobility solutions. This report seeks to empower communities to adopt more efficient and wide-ranging transit system solutions by addressing key challenges and proposed targeted solutions.

The recommendations outlined in the report are designed to enhance infrastructure and facilitate seamless integration of walking, bicycling, and other travel modes. These strategies aim to ensure that residents can conveniently access nearby transit stations, bus stops, and transportation hubs. The inclusion of modal toolboxes offers practical resources and frameworks that municipalities can utilize to address specific transportation challenges. These toolboxes provide detailed guidelines on implementing multimodal solutions, ensuring that the proposed actions are both effective and adaptable to local contexts.

Adhering to national best practices like NACTO and FHWA, the document ensures that the proposed solutions are widely recognized and proven to be effective. These best practices serve as benchmarks for municipalities and transit agencies, guiding them in the development and implementation of improved transit infrastructure. The targeted recommendations offer actionable next steps to enhance first- and last-mile connectivity, focusing on the integration of various travel modes to create a more cohesive and efficient transportation network. Ultimately, these efforts are designed to promote a more integrated and sustainable transportation network, benefiting all residents and fostering a more connected and accessible community.

FIRST- AND LAST-MILE BICYCLE-PEDESTRIAN MOBILITY IMPROVEMENTS IN MUNICIPALITIES IN MIAMI-DADE

APPENDIX A



TRANSPORTATION TRUST

CITY OF AVENTURA

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

Aventura Express

The free local circulator previously operated six routes; however, three were discontinued at the end of FY 2022 to streamline operations. The remaining Green, Purple, and Yellow lines continue to connect residents to major destinations, with the Green Line showing remarkable growth—its ridership increased by 76% between 2022 and 2024.

Brightline

Aventura's Brightline station, strategically located near the Aventura Mall is one of two Brightline stations in Miami-Dade. Monthly ridership for both the Aventura and Miami stations increased by an average of 36% from 2023 to 2024.

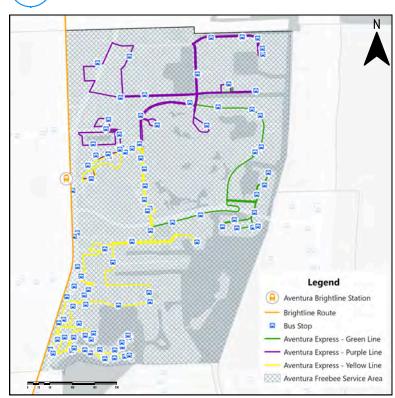
Aventura Freebee

On-demand free ride service to key destinations. Ridership increased 77% in 2023, showing strong public demand for flexible, local transportation.

Annual Ridership in Aventura



96 MDT-Operated Bus Stops



BCycle

Aventura BCycle Bike-sharing system operating at four key locations offering convenient first/last-mile transit connections.*
*Ridership information is currently unavailable for inclusion in the fact sheet.

PLANNING AND POLICIES

Legend Comprehensive Development Master Plan BUSINESS AND OFFICE MEDIUM DENSITY RESIDENTIAL (MDR) 13-25 DUI/AC MEDIUM-HIGH DENSITY RESIDENTIAL MEDIUM-HIGH D

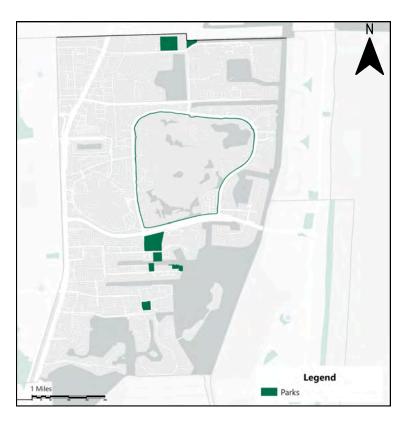
Comprehensive Development Master Plan Aventura is mainly comprised of two future land use classifications "Business and Office" and "Medium-High Density Residential". The "Business and Office" designation allows spaces for offices and retail establishments that contribute to economic growth. A prime example in is the Aventura Mall, which is one of the largest shopping centers in the United States.

FY 2024-2029 5-Year Municipal Implementation Plan Aventura's citywide bicycle-sharing program will receive annual funding, increasing from \$8,500 in FY 2024–2025 to \$10,100 in FY 2028–2029. In the

same period, funding for On-Demand Services will grow from \$55,000 to \$1.4 million, while Enhanced Transit Services will rise from \$40,000 to over \$1.3 million. Additionally, operating expenditures for bike-sharing will expand from \$95,000 to \$105,000.



■ ● ● ● COMMUNITY FACILITIES ● ● ● ●





9 Parks



OPublic Schools



O Colleges and Universities

BIKE-PED INFRASTRUCTURE



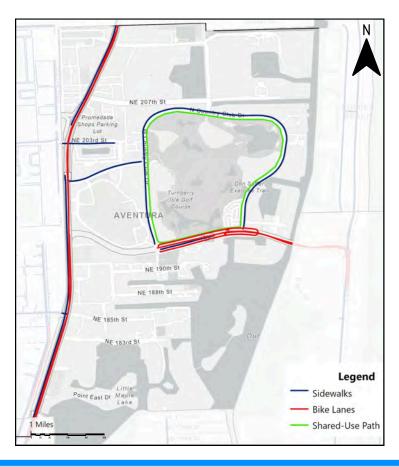
22.03% sidewalk coverage in existing road network



3.43 miles



2.80 miles of shared-use paths



TRUST

VILLAGE OF BAL HARBOUR

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

Bal Harbour Freebee

A free, on-demand electric rideshare service that started in 2022, connecting residents to key destinations, including Bal Harbour Shops. Ridership in Q4 2024 grew by approximately 20%, highlighting its increasing popularity.

Village of Bal Harbour Freebee Ridership

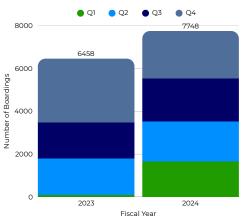
Annual Boardings

Quarterly Boardings



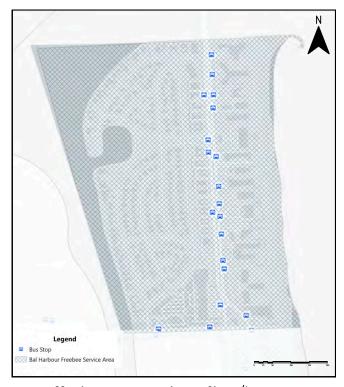








MDT-Operated Bus Stops





Bal Harbour CitiBike Bike-sharing system offering convenient first/last-CITIOI (@ mile transit connections at key locations throughout the village.* *Ridership information is currently unavailable for inclusion in the fact sheet.

PLANNING AND POLICIES

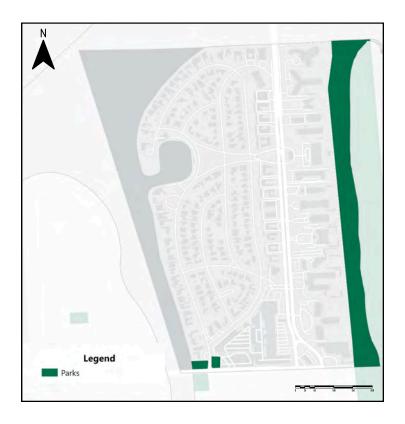


Comprehensive Development Master Plan Bal Harbour is mainly comprised of two future land use classifications "Low Density Residential" and "Business and Office". It also contains the "Medium Density Residential" classification to provide diverse housing options. The "Business and Office" classification features the Bal Harbour Shops. The Village also features a "Parks and Recreation" classification for the beach.

FY 2024-2029 5-Year Municipal Implementation Plan Bal Harbour features projects aimed at enhancing mobility and infrastructure. The Sensi-On-Demand Program, operational since December 2022 with a \$133,285 budget, provides on-demand ride-sharing services. Other projects include Bus Shelter Repairs/Maintenance, which started in October 2024 with a \$23,810 budget. Transportation projects focus on Streetlight Repairs/Maintenance for improved visibility, Sidewalk Power Washing to boost walkability, and Street Sweeper Maintenance for cleaner streets, reflecting a comprehensive approach to infrastructure improvement.



COMMUNITY FACILITIES





3 Parks



OPublic Schools



O Colleges and Universities

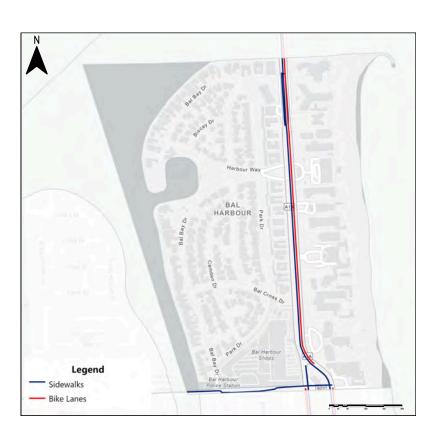
BIKE-PED INFRASTRUCTURE



41.90% sidewalk coverage in existing road network



0.79 miles of bike lanes



TRANSPORTATION TRUST

TOWN OF BAY HARBOR ISLANDS

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

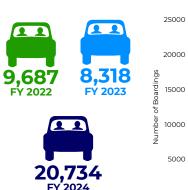
● ● ● ● TRANSIT

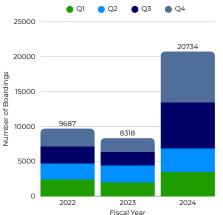
Bay Harbor Islands Freebee

Free, on-demand electric rideshare service connecting residents and visitors to key destinations, including Bal Harbour Shops. Between 2022 and 2023, ridership declined by 16%. However, 2024 marked a significant recovery, with ridership increasing by 149% compared to 2023, reflecting renewed popularity and demand.

Town of Bay Harbor Freebee Ridership

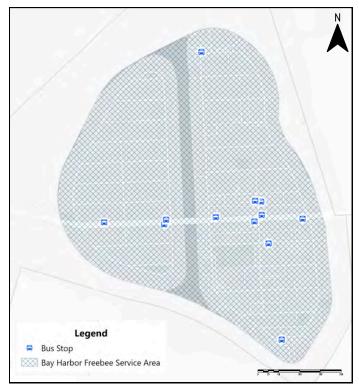
Annual Boardings Quarterly Boardings







MDT-Operated Bus Stops





Bay Harbor Islands CitiBike Bike-sharing system operating at two stations at key locations offering convenient first/last-mile transit connections.*

*Ridership information is currently unavailable for inclusion in the fact sheet.

PLANNING AND POLICIES

Comprehensive Development Master Plan
Bay Harbor Islands is mainly composed of two
future land use classifications "Low Density
Residential" and "Medium-High Density
Residential", ensuring diverse housing options.
It also includes a Business and Office
classification along the main thoroughfare,
Kane Concourse, to support commercial and
professional activities.

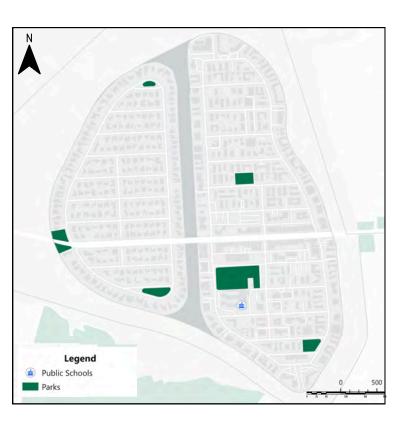
FY 2024-2029 5-Year Municipal Implementation Plan

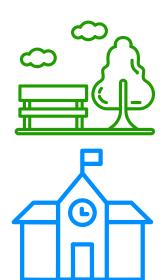
Legend Comprehensive Development Master Plan Business AND OFFICE LOW DENSITY RESIDENTIAL LUDIS 25-6 DU/AC MEDIUM-HIGH DENSITY RESIDENTIAL (HAPR) 25-60 DU/AC WATER

Bay Harbor Islands feature projects aimed at enhancing mobility and infrastructure. The citywide Freebee on-demand service is backed by a \$1,330,000 budget. This service offers flexible transportation within the service area, which extends outside of Bay Harbor Islands to US-1 to further increase connectivity and functionality. Additionally, a \$10,312,482 budget supports the Roadway and Drainage Improvement Project, a key transportation project focusing on road resurfacing, repairs, expansion, and drainage enhancements to mitigate flooding and bolster infrastructure.



● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●





9 Parks

1 Public Schools



O Colleges and Universities

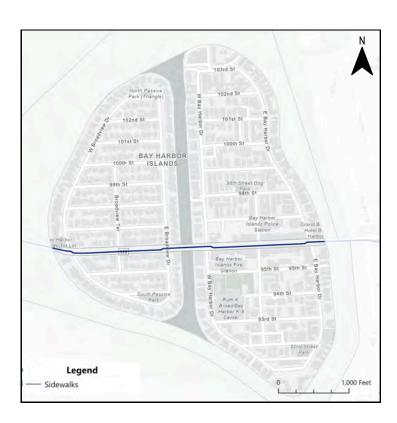




15.82% sidewalk coverage in existing road network



O miles of bike lanes



TRANSPORTATION TRUST

VILLAGE OF BISCAYNE PARK

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

• • • • • TRANSIT

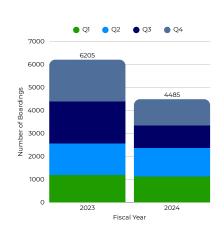
Village of Biscayne Park Freebee

The Freebee service has been connecting Biscayne Park residents to key destinations, such as the Museum of Contemporary Art North Miami, since November 2022. Ridership declined significantly from 6,205 in 2023 to 4,485 in 2024, reflecting a 28% decrease. Factors causing this trend are not able to be determined at this time.

Village of Biscayne Park FreeBee Ridership Annual Boardings Quarterly Boardings



FY 2024







PLANNING AND POLICIES

Legend Comprehensive Development Master Plan Business AND OFFICE LOW DENSITY RESIDENTIAL (LOR) 2.5-6 DU/AC LOW-MEDIUM DENSITY RESIDENTIAL (LMDR) 6-13 DU/ AC 0 1.000 2.000 Feet

Comprehensive Development Master Plan

Biscayne Park is almost entirely comprised of two future land use classifications "Low Density Residential" and "Low-Medium Density Residential". These classifications emphasize a suburban atmosphere with single-family homes and small-scale residential developments, fostering a strong sense of community. Additionally, a small section of the "Business and Office" classification is located along Dixie Highway at the northwest corner of the municipality. This classification provides space for offices and local businesses, with the boundaries of the classification extending beyond of Biscayne Park south along Dixie Highway.

FY 2024-2029 5-Year Municipal Implementation Plan*

*At this time, there is no Five-Year Municipal Implementation Plan, and the information is currently unavailable for inclusion in the fact sheet.



● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●









OPublic Schools



OColleges and Universities

BIKE-PED INFRASTRUCTURE



0.17% sidewalk coverage in existing road network



0.00 miles of bike lanes



TRUST

CITY OF CORAL GABLES

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

City of Coral Gables Freebee

This service provides users essential mobility in key areas throughout the city. For example, it connects many shoppers and employees to Miracle Mile, demonstrating the vital role of public transit in the city's local economy. Despite an initial increase in ridership from 2022-2023, there has been a significant decline in ridership from 2024.

City of Coral Gables Trolley

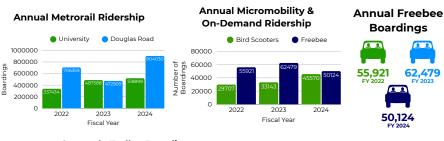
Operated since 2003, the city's trolley moves approximately 1 million passengers annually along the Ponce De León and Grand Avenue lines. These two lines provide connections to Metrorail, Metrobus, and the City of Miami's Trolley service. Both lines witnessed an increase in ridership from 2022-2023, however, Grand Avenue had a more significant increase in boardings which continued into 2024 while the Ponce De León Line declined in ridership.

There are two Metrorail stations that serve Coral Gables, the University and Douglas Road Stations.

Bird

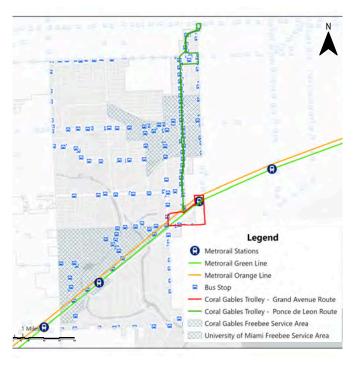
The city has a fleet of shared micromobility scooters scattered throughout the municipal

boundaries. Users are able to complete first- and last-mile trips with ease.



Quarterly Trolley Boardings Annual Trolley Boardings 1000000 800000 866,625 927,189 60000 1,033,966 2023 Fiscal Ye





PLANNING AND POLICIES

Legend Master Plan BUSINESS AND OFFICE ESTATE DENSITY RESIDENTIAL (EDR. HIGH DENSITY RESIDENTIAL (HDR 60-125 DU/AC INDUSTRIAL AND OFFICE INSTITUTIONS, UTILITIES AND COMMUNICATION LOW DENSITY RESIDENTIAL (LDR) 2.5-6 MEDIUM DENSITY RESIDENTIAL (MDR) 13-25 DU/AC OFFICE/RESIDENTIAL PARKS AND RECREATION TRANSPORTATION (ROW, RAIL WATER

Coral Gables is predominantly "Low Density Residential," with sections of "Business and Office" and "Medium-High Density Residential" concentrated along Ponce de León Boulevard, the vibrant downtown area. A "Transportation" classification runs

Comprehensive Development Master Plan

along the FEC Railway corridor, flanked by "Office/Residential" classification and the University of Miami, classified under "Institutions, Utilities, and Communication." Sections of "Estate Density Residential," as well as small pockets of "Low-Medium" and "Medium Density Residential" add housing variety, while "Parks and Recreation" classifications, mainly golf courses, enhance green spaces.

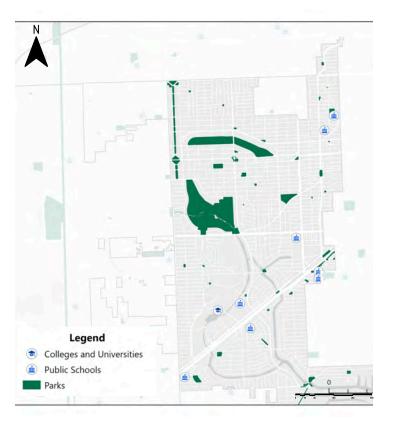
FY 2024-2029 5-Year Municipal Implementation Plan

Coral Gables' plans allocate \$13.36M for TS1 – Trolley Operations (FY 2024–2029), \$2.3M for TS2 – Route Improvements, and \$1.69M for TS3 – Extended Evening and Saturday Service. TS4 – Freebee Electric Mobility Services, providing on-demand service, is funded at \$2.49M, while \$40,006 is allocated for TS5 – Trolley Upgrades. Infrastructure projects include \$725,000 for a Trolley Depot Generator, \$91,000 for concrete slab replacement, and \$548,456 for bicycle infrastructure. The Sidewalk Repair/Replacement Program receives \$5.6M, Last Mile Transit Stop Improvements \$1.76M, and a CCTV Roadway Installation \$94,870.





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62 Parks



8 Public Schools



TColleges and
Universities





26.06% sidewalk coverage in existing road network



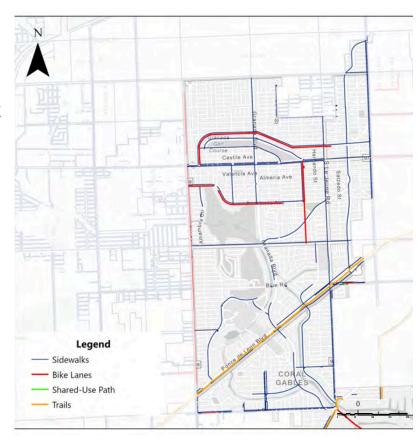
5.12 miles



1.20 miles of shared-use paths



6.37 miles



TRANSPORTATION TRUST

TOWN OF CUTLER BAY

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

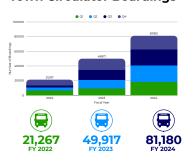
Town of Cutler Bay Local Circulator

The Town's local circulator (MetroBus Local Route 200) provides complimentary transportation services seven days a week, with service hours varying. The circulator received a notable 57% increase in ridership from 2022-2023. Recent data also demonstrate a significant increase in ridership from 2023-2924.

MetroConnect by Via

MetroConnect is a free, on-demand public transit service that provides rides to and from the South Dade Transitway within the Town of Cutler Bay's city limits. The services are provided Monday through Friday. According to recent figures, it appears that ridership is on decline; ridership appears to have peaked in 2023, with in noticeable decline in boardings in 2024.

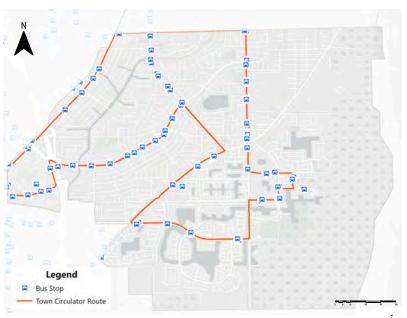
Annual and Quarterly Town Circulator Boardings



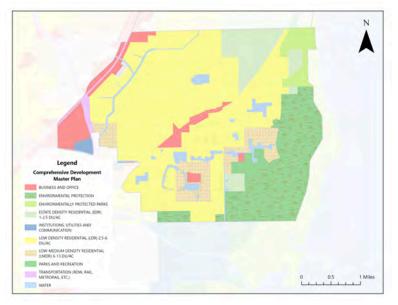
Annual and Quarterly MetroConnect Boardings







PLANNING AND POLICIES



Comprehensive Development Master Plan

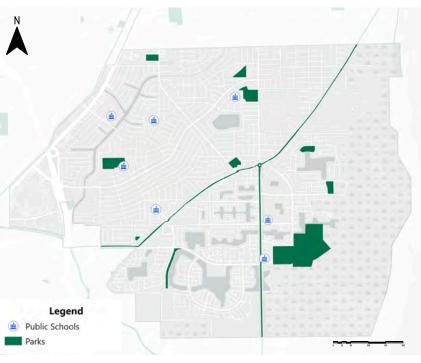
Cutler Bay is mainly comprised of "Low Density Residential", fostering a suburban atmosphere. To enhance the housing variety, the city also includes pockets of "Low-Medium Density Residential" and "Estate Density Residential." "Business and Office" classifications are concentrated along Dixie Highway and Old Cutler Road, featuring the Southland Mall as a key commercial hub. Adjacent to the mall, the "Institutions, Utilities, and Communication" classification includes the South Dade Government Center, serving as an important administrative and community resource. The city also features "Environmentally Protected Parks" and a large section of "Environmental Protection" land, safeguarding its natural beauty and biodiversity.

FY 2024-2029 5-Year Municipal Implementation Plan

Cutler Bay's five-year plan includes \$1.64M for the Municipal Circulator Service, \$240K for Marlin Road bus shelters, \$900K for the MetroConnect on-demand pilot, \$812K for bus stop upgrades, and \$665K for 12 Franjo Road shelters. Transportation projects feature \$5.85M for Franjo Road reconstruction, \$1M for Caribbean Boulevard upgrades, \$2.66M for SW 82 Avenue improvements, \$5.8M for road resurfacing phases, \$345,920 for a roundabout, and \$95K for Marlin Road multimodal design. Additional efforts include \$33,545 for SW 187 Terrace drainage and \$20K for Victorian-style street furniture on Old Cutler Road. Intersection updates at SW 92 Avenue and SW 215 Terrace are budgeted at \$55,500, and an annual administrative fee of \$140K supports oversight. These projects reflect a holistic approach to improving multimodal infrastructure, mobility, and community safety.



COMMUNITY FACILITIES





13 Parks



7 Public Schools



O Colleges and Universities





2.38% sidewalk coverage in existing road network



3.59 miles



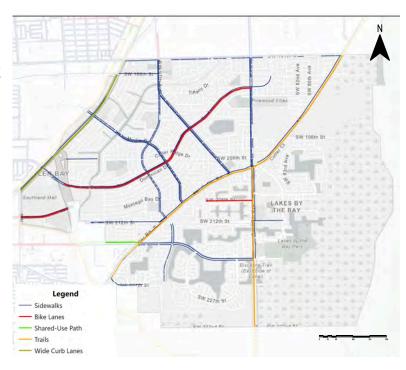
0.37 miles of shared-use paths



5.70 miles



1.77 miles of wide curb lanes



CITY OF DORAL



CITIZENS' INDEPENDENT TRANSPORTATION TRUST

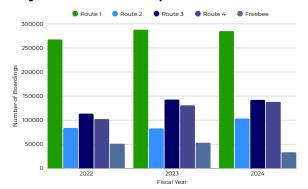
TRANSIT

City of Doral Freebee

Free, on-demand electric rideshare service connecting residents and visitors to key destinations, such as Downtown Doral and the Doral Government Center. After a slight increase in ridership from 2022 to 2023, 2024 data reveals a significant decline in usage, highlighting a notable drop in demand for the service. City of Doral Trolley

The trolleys feature bike racks on the front, encouraging multimodal transportation. Ridership grew by 27% from FY 2022 to FY 2023 and increased by 4% in FY 2024, highlighting their rising popularity.

Trolley & FreeBee Ridership in Doral 2022-2024



Annual FreeBee Boardings











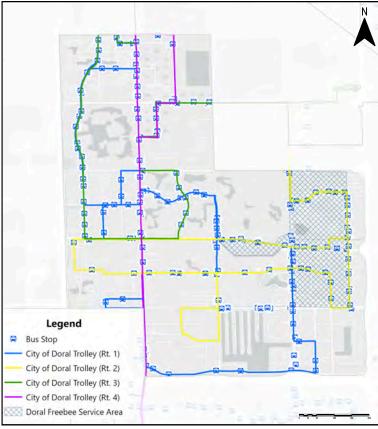


Annual Trolley Boardings





MDT-Operated Bus Stops



PLANNING AND POLICIES



Comprehensive Development Master Plan

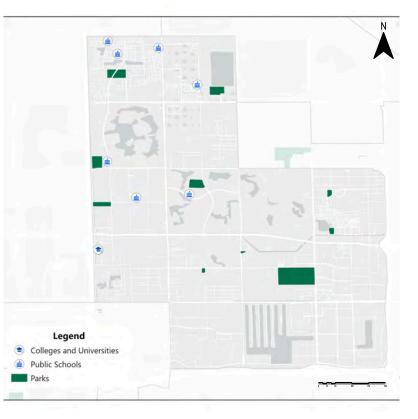
Doral is primarily characterized by "Industrial and Office" classifications, reflecting its role as a hub for commerce and industry. "Business and Office" pockets are distributed throughout the city, with a notable concentration of "Business and Office" and "Office/Residential" classifications along Doral Boulevard, supporting economic activity and mixed-use development. The city also includes sections of "Institutions, Utilities, and Communication" such as waste management facilities and the Dolphin VOR, a navigation aid for aviation. Residential classifications in Doral are diverse, featuring "Low-Medium Density Residential," "Medium Density Residential," and "Low Density Residential with Density Increase" to accommodate growth. Additionally, Doral contains "Parks and Recreation classifications, primarily composed of golf courses, which enhance the city's green spaces and recreational offerings.

FY 2024-2029 5-Year Municipal Implementation Plan Doral's plans include investing \$26.29M in maintaining and operating the Doral Trolley System (DTS), which features four routes connecting residents to MDT stops and the Palmetto Metrorail station, ensuring accessible public transit.

Additionally, \$2.67M supports on-demand transit services through Freebee, offering flexible mobility options. To improve infrastructure, the city has allocated \$1M to the Citywide Roadway Rehabilitation Program, covering milling, resurfacing, sidewalk upgrades, and striping improvements. These investments reflect Doral's commitment to enhancing transit accessibility, roadway quality, and multimodal mobility for its community.



COMMUNITY FACILITIES





10 Parks



8 Public Schools



Colleges and Universities

BIKE-PED INFRASTRUCTURE



30.38% sidewalk coverage in existing road network



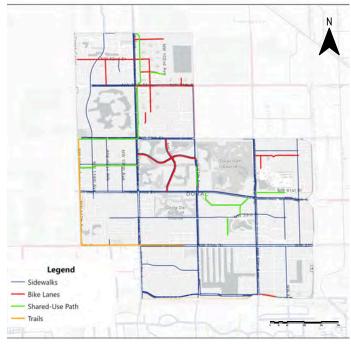
7.98 miles



6.61 miles of shared-use paths



3.84 miles





0.74 miles of wide curb lanes



VILLAGE OF EL PORTAL

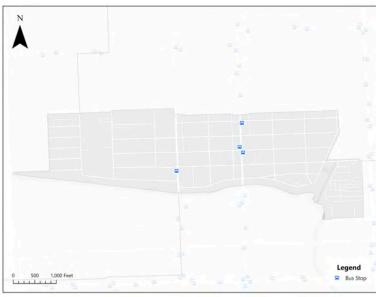
CITIZENS' INDEPENDENT TRANSPORTATION TRUST





MDT-Operated Bus Stops

N/A*



PLANNING AND POLICIES

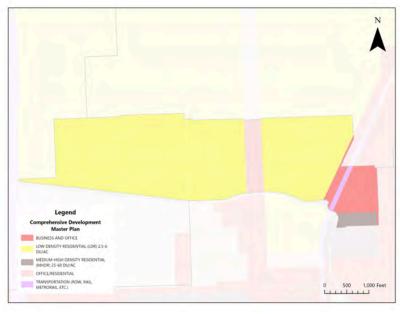
Comprehensive Development Master Plan

El Portal is primarily comprised of "Low Density Residential," fostering a suburban atmosphere with single-family homes. Along NE 2nd Avenue, a section of

"Office/Residential" classification allows for a blend of residential and commercial uses. On the east side, two sections of "Business and Office" classifications flank a "Transportation" classification for the FEC Railway. In the same area, a small section of "Medium-High Density Residential" adding housing diversity to the community.

FY 2024-2029 5-Year Municipal Implementation Plan

El Portal's plans include \$270,000 for an Electric Shuttle Service Program to provide eco-friendly local transit and reduce congestion. Safety projects allocate \$85,000 for speed limit reductions, \$200,000 for street light enhancements, and \$300,000 for traffic calming installations. The NE 2nd Avenue "road diet" reduces lanes to improve safety and multimodal access, budgeted at \$155,000. Climate resilience efforts include \$400,000 to upgrade stormwater infrastructure. These initiatives reflect El Portal's focus on sustainability, safety, and modernizing its transportation systems.





● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●









2 Public Schools



O Colleges and Universities

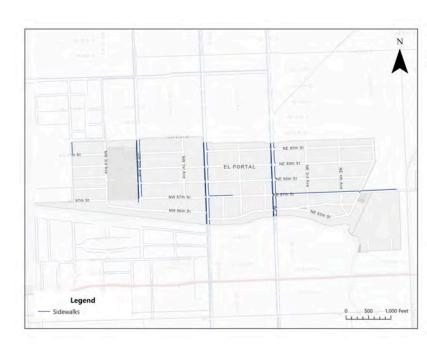




28.96% sidewalk coverage in existing road network



0.00 miles



CITY OF FLORIDA CITY

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

City of Florida City Freebee

Since 2022, Florida City's Freebee service has provided mobility for visitors and residents between shopping centers, City Hall, and other public transit connections. After an impressive 27% increase in annual ridership from 2022 to 2023, the service experienced a significant decline of 31% from 2023 to 2024

City of Florida City Freebee Ridership Annual Boardings Quarterly Boardings 28,282 38,794 FY 2023 Quarterly Boardings 26,861





● ● ● ● ● ● ● ● PLANNING AND POLICIES

2023

2024

2022

Legend Comprehensive Development Master Plan ADQUITING BISHNESS AND OFFICE ENVIRONMENTALLY PROTECTED PARIS INCUSTRIAL AND OFFICE UNW ROMATIVE SEDENTIAL GRR 2.5 6 DUAC UNW AUTOMA DEVISTY RESEDENTIAL ADQUITING ADQUITING SEDENTIAL GROW, AND, MERIORAGE ERC) TEANSPORTATION (ROW, AND, MERIORAGE, ERC) WANTER 0 1,000 2,000 Feet

Comprehensive Development Master Plan

Florida City is primarily comprised of "Low Density Residential" and "Low-Medium Density Residential" classifications, offering a range of single-family housing and small-scale residential developments. Large sections of "Business and Office" and "Industrial and Office" classifications are flanked by "Transportation" zones for the Florida Turnpike and the South Miami-Dade Busway, ensuring strong connectivity. Additionally, there are sections of "Business and Office" classifications along Palm Drive, supporting local commerce and services. The city also includes "Environmentally Protected Parks" and significant section of "Agricultural" and "Open Land" classifications, supporting local agriculture.

FY 2024-2029 5-Year Municipal Implementation Plan With a total of \$165,000 in funding, Florida City plans contain several transportation projects to

enhance mobility and infrastructure. The Freebee On-Demand Service offers eco-friendly, app-based rides to improve accessibility and reduce congestion. New Bus Shelters and Bench Shades are being installed. Fleet Enhancements, including a crew cab, dump truck, and backhoe/front loader, will support efficient public works. Funding is also allocated for Light Pole Maintenance and Sidewalk Repairs, which aim to improve nighttime visibility, safety, accessibility. Roadway Resurfacing will ensure safer driving conditions and extend the lifespan of the roadways. These initiatives reflect Florida City's commitment to meeting the evolving transportation needs of its community.



● ● ● ● ● COMMUNITY FACILITIES ● ● ●





8 Parks



O Public Schools



O Colleges and Universities





21.65% sidewalk coverage in existing road network



3.08 miles of bike lanes



1.58 miles



0.07 miles of paved shoulders





TOWN OF GOLDEN BEACH

CITIZENS' INDEPENDENT TRANSPORTATION TRUST







MDT-Operated Bus Stops





PLANNING AND POLICIES



Comprehensive Development Master Plan Golden Beach is primarily comprised of the "Low Density Residential" classification, creating a serene and exclusive residential community. The beach area is designated as "Parks and Recreation", offering a scenic and tranquil space for outdoor activities and relaxation.

FY 2024-2029 5-Year Municipal Implementation Plan

The Town of Golden Beach is investing in transit and infrastructure improvements to enhance mobility, safety, and community systems. Projects include \$25,000 for maintaining bus bays along the AlA corridor and \$30,000 for first and last mile connectivity upgrades at 399 Ocean Boulevard. Key transportation initiatives include regular street sweeping, \$30,000 for curb and gutter repairs

to support stormwater management, \$80,000 for road milling and resurfacing, \$80,000 for parking bays to improve pedestrian safety and provide convenient parking, and \$120,000 for traffic calming measures like speed humps and signage. These efforts reflect the town's commitment to improving transportation and infrastructure for residents.

*At this time, there is no transportation service offered by the municipality, and the information is currently unavailable for inclusion in the fact sheet.





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OPublic Schools



OColleges and
Universities

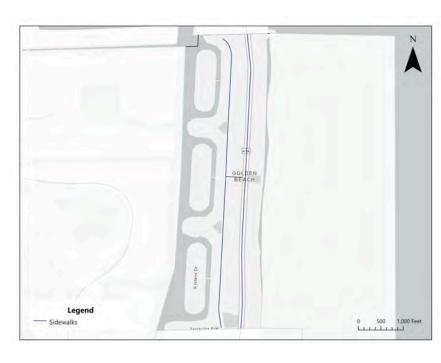
BIKE-PED INFRASTRUCTURE



50.05% sidewalk coverage in existing road network



0.00 miles of bike lanes



TRUST

CITY OF HIALEAH

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

City of Hialeah Freebee

Since 2022, the City of Hialeah's Freebee service has connected various points of interest throughout the city, such as Westland Mall, Amelia Earhart Park, and various transit hubs like the Metrorail and Tri-Rail stations. Similar to many other municipalities, ridership increased significantly from 2022-2023 but recently declined from 2023-2024

City of Hialeah Flamingo/Marlin Routes

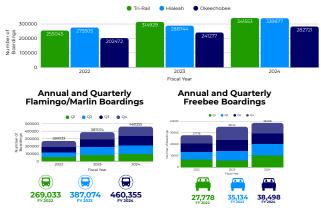
The City of Hialeah provides two bus routes throughout its municipality, connecting multiple points of interest such as City Hall, various hospitals, and some Metrorail stations. However, it does lack direct connectivity with the Tri-Rail

There are three Metrorail stations that serve Hialeah, Tri-Rail, Hialeah, and Okeechobee stations.

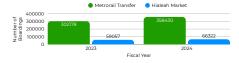
Tri-Pail

Hialeah has two Tri-Rail commuter stations that experienced significant growth in 2024. Metrorail Transfer ridership increased by 19% to 358,430 riders, while Hialeah Market grew by 12%, reaching 66,322 riders.

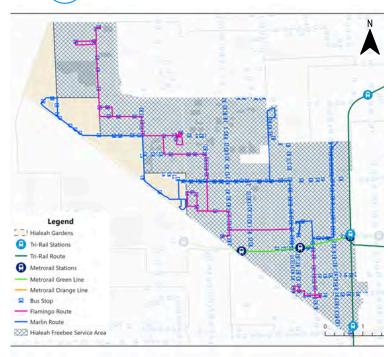
Annual Metrorail Boardings Per Station



Annual Tri-Rail Boardings Per Station



390MDT-Operated Bus Stops



PLANNING AND POLICIES

Legend BUSINESS AND OFFICE INSTITUTIONS, UTILITIES AND CI LOW DENSITY RESIDENTIAL (LDR) 2.5-6 DU/A MEDIUM DENSITY RESIDENTIAL (MDR) 13-25 DU/AC MEDIUM HIGH DENSITY RESIDENTIAL (MHDR) 25-60 D RESTRICTED INDUSTRIAL AND OFFICE

Comprehensive Development Master Plan

Hialeah is mainly comprised of "Low Density Residential", "Low-Medium Density Residential", and "Medium Density Residential" classifications, with a few sections of "Medium-High Density Residential" providing housing options. "Transportation" zones include major corridors such as I-75 and the Palmetto Expressway. There are many sections of "Business and Office" classifications, including the historic Hialeah Park Casino. "Industrial and Office" classifications are distributed throughout, with two areas of "Restricted Industrial and Office". Additionally, there are multiple "Institutions, Utilities, and Communications" classifications, supporting essential services and infrastructure.

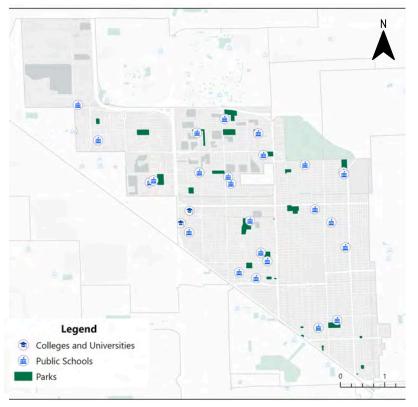
FY 2024-2029 5-Year Municipal Implementation Plan

Hialeah is investing a total of \$27M to upgrade the Hialeah Transit System, including the Flamingo and Marlin routes, to improve connectivity and service. Furthermore, An additional \$106.15M is allocated through FY2029 for roadway and drainage improvements, including resurfacing, drainage upgrades, and new street lighting, enhancing safety, mobility, and quality of life.





● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●





29 Parks



25
Public Schools



2Colleges and Universities

BIKE-PED INFRASTRUCTURE



31.66% sidewalk coverage in existing road network



3.43 miles of bike lanes



CITY OF HIALEAH GARDENS

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

City of Hialeah Flamingo/Marlin Routes

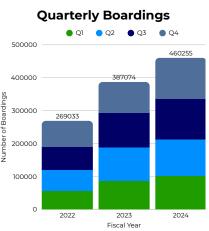
Through an ILA with Hialeah and Hialeah Gardens, a free fixed-route local circulator connects residents to key destinations. In 2022 and 2023, ridership totaled 656,107, reflecting a 30% increase across two routes.



Flamingo/Marlin Routes Ridership









• • • • • • • • PLANNING AND POLICIES • • • • • • • •



Comprehensive Development Master Plan

Hialeah Gardens is mainly composed of "Low-Medium Density Residential" and "Medium Density Residential" classifications, with a section of "Estate Density Residential" and an adjacent area of "Low Density Residential". The city features "Business and Office" and "Industrial and Office" classifications throughout, particularly along Okeechobee Road, which, along with the Florida's Turnpike, are key "Transportation" classifications.

FY 2024-2029 5-Year Municipal Implementation Plan

Hialeah Gardens has transit and transportation plans to improve mobility, safety, and infrastructure. The city has allocated \$210,000 to operate the Marlin Route, connecting residents to the broader transit network. Infrastructure investments include \$700,000 for intersection improvements at NW 108 Street, NW 87

Court, and NW 89 Avenue, and \$800,000 for citywide roadway maintenance. Enhancements to NW 122 Street will improve safety and drainage, while \$90,000 is allocated for street lighting to increase visibility and safety. The city also purchased street sweeper trucks for \$85,000 to maintain clean and safe roads. These initiatives reflect a commitment to growth and improved living conditions for residents.



● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●





7 Parks



4 Public Schools



O Colleges and Universities

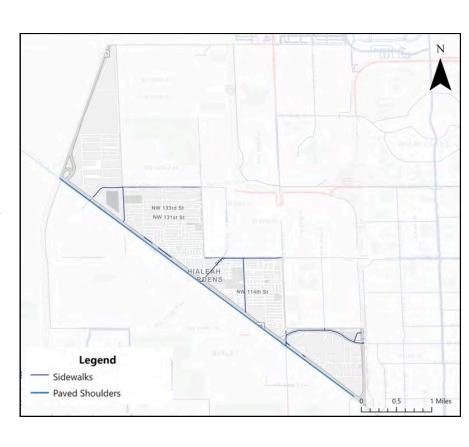




14.21% Sidewalk coverage in existing road network



4.86 miles of paved shoulders



CITY OF HOMESTEAD

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

City of Homestead Freebee

Since early 2024, the Freebee service in Homestead has connected people to commercial centers, municipal services, and other public transit connections. For FY2024, the service attained an annual ridership of 16,754 boardings.

City of Homestead Trolley

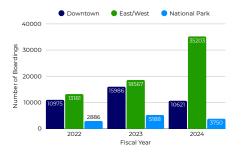
The trolley service provides free mobility along three lines. The Downtown and East/West lines are the primary services offered year-round, and the National Parks line is offered seasonally. Notably, ridership has increased across all three lines from 2022-2023 and has continued growing.

Homestead Trolley Ridership Annual Boardings Annual Trolley Boardings Per Line

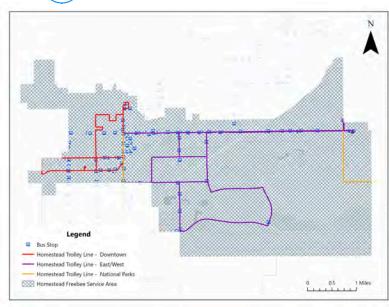








113 MDT-Operated Bus Stops



PLANNING AND POLICIES

Legend Comprehensive Development Master Plan AGRICULTURE BUSINESS AND OFFICE DIMONOMENTALLY PROTECTIO PARKS ESTATE DURSTY WISCENTIAL (SIDE 9-1-2-5 DUACE REGISTRAL AND OFFICE WISTITUTIONS, UTILITIES AND COMMANICATION LOW DENEMOR REGISTRAL (SIDE 9-1-5 DUACE MISTITUTIONS, UTILITIES AND COMMANICATION LOW MORNAU REGISTRAL SECRETAL (SIDE 1-1 DUACE MISTITUTIONS, UTILITIES AND COMMANICATION LOW MORNAU REGISTRAL (SIDE 1-1 DUACE MISTITUTIONS, ORDINAL (SIDE) 13-25 DUACE OFFICIAL/SIDENTIAL PARKS AND RECREATION TRANSPORTANO, BOW, XAM, METRICAM, ETC.) UNITER WINTER

Comprehensive Development Master Plan

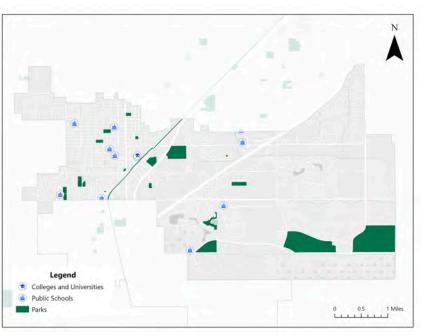
Homestead is primarily composed of "Low Density Residential", "Low-Medium Density Residential", and "Medium Density Residential" classifications, with sections of "Office/Residential" and "Estate Density Residential", promoting housing diversity. "Transportation" zones include the Florida Turnpike, Homestead Boulevard, and the South Miami-Dade Busway, ensuring strong connectivity. The city features "Business and Office" classifications throughout including the Homestead-Miami Speedway, which is adjacent to sections of "Industrial and Office", "Agricultural" and "Environmentally Protected Parks". There are multiple "Parks and Recreation" classifications, supporting outdoor activities and preserving natural spaces.

FY 2024-2029 5-Year Municipal Implementation Plan

Homestead is advancing its transportation infrastructure with strategic investments across multiple projects. Transit initiatives include \$550,000 for new trolley vehicles, \$85,000 for street sweeper trucks, \$749,203 for traffic signalization at SW 152 Avenue and Alex Muro Jr. Boulevard, and \$200,000 for pedestrian walkway design and construction. Additional funds include \$88,337 for a new Ford F350 and \$296,754 for the 20-Year Transportation Master Plan. Annual allocations comprise \$4.6M for roadway improvements, \$1M for sidewalk enhancements, and \$400,000 for guardrail maintenance. Further investments include \$600,000 for bridge upgrades, \$2.2M for widening NE 2 Drive, \$450,000 for Washington Avenue improvements, and \$250,000 for traffic calming devices. A \$50,000 survey is also funded to assess sidewalk and roadway conditions. Collectively, these projects display Homestead's commitment to enhancing mobility, safety, and infrastructure across the city.



● ● ● ● ● COMMUNITY FACILITIES ● ● ● ●





19 Parks



10
Public Schools



Colleges and Universities





20.30% Sidewalk coverage in existing road network



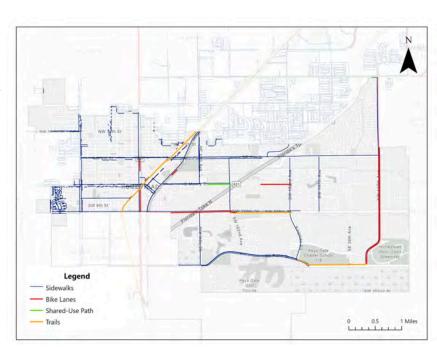
6.35 miles



0.51 miles of shared-use paths



4.30 miles of shared-use paths





INDIAN CREEK VILLAGE

CITIZENS' INDEPENDENT TRANSPORTATION TRUST







MDT-Operated Bus Stops

N/A*



● ● ● ● ● ● ● ● PLANNING AND POLICIES



Comprehensive Development Master Plan Indian Creek Village is primarily classified as "Parks and Recreation", centered around the golf course at the Indian Creek Country Club, a key feature of the community. This is complemented by "Low Density Residential" classifications throughout, supporting a serene and exclusive residential environment.

FY 2024-2029 5-Year Municipal Implementation Plan*

*At this time, there is no Five-Year Municipal Implementation Plan, there is no transportation service offered by the municipality, and the information is currently unavailable for inclusion in the fact sheet.



● ● ● ● ● COMMUNITY FACILITIES ● ● ●









OPublic Schools



OColleges and
Universities





0.00% sidewalk coverage in existing road network



0.06 miles



VILLAGE OF KEY BISCAYNE

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

• • • • TRANSIT

Village of Key Biscayne Freebee

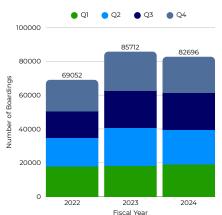
Since 2022, the Freebee service has provided free mobility services around Key Biscayne, delivering a critical first- and last-mile transportation alternative to those who live, work, and play on the island. Recent figures indicate a continued demand for the service.

17 MDT-Operated Bus Stops

Village of Key Biscayne Freebee Ridership

Annual Boardings Quarterly Boardings







PLANNING AND POLICIES • • • •

Legend Comprehensive Development Master Plan Business AND OFFICE LOW CHRIST REDORMAL BDNG 23-45 DUIAC FARSS AND BECREATION WATER O 1.000 2,000 Feet

Comprehensive Development Master Plan

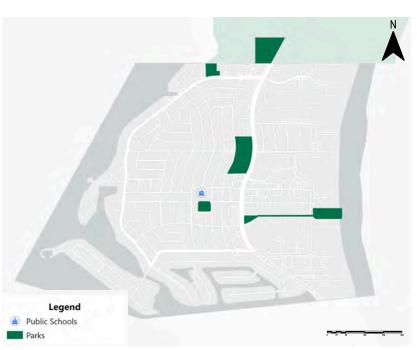
Key Biscayne features a "Business and Office" classification along Crandon Boulevard, supporting local commerce and services. To the west, the area is exclusively "Low Density Residential", characterized by single-family homes that preserve a quiet and spacious environment. In contrast, the eastern side contains "Medium Density Residential"), offering more diverse housing options such as townhomes and condominiums. At the northernmost part of the city, a "Parks and Recreation" classification encompasses Calusa Park, providing green space and recreational opportunities.

FY 2024-2029 5-Year Municipal Implementation Plan*

*At this time, there is no Five-Year Municipal Implementation Plan, and the information is currently unavailable for inclusion in the fact sheet.



● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●









1 Public Schools



OColleges and Universities

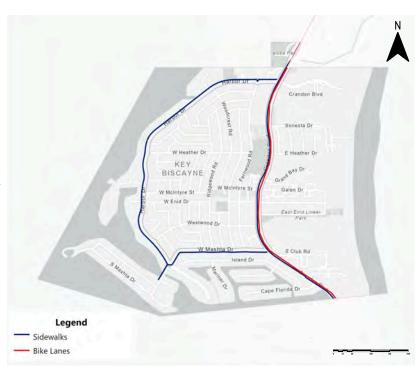




25.44% Sidewalk coverage in existing road network



2.78 miles of bike lanes



TOWN OF MEDLEY

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

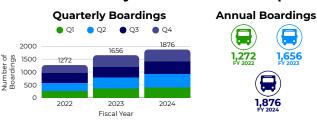
Metrorail

The Town of Medley features the terminus for the Miami-Dade Metrorail; the Palmetto Metrorail station is the northernmost station at the end of the green line.

Medley Shuttle Bus

The Town of Medley provides a fixed circulator every Wednesday. The bus provides transportation services to residents to and from pre-specified grocery stores.

Medley Shuttle Bus Ridership







PLANNING AND POLICIES

Comprehensive Development Master Plan Medley is mainly classified as "Industrial and Office," with some areas designated as "Restricted Industrial and Office". There are small pockets of "Low-Medium Density Residential" and "Medium Density Residential," adding limited residential options. "Transportation" classifications include the Palmetto Expressway and the Florida East Coast (FEC) Railway, which support connectivity and logistics.

FY 2024-2029 5-Year Municipal Implementation Plan Medley, a predominantly industrial area, has key investments to improve transit services and maintain infrastructure. This includes insurance, repairs, and maintenance for shuttle and circulator vehicles, as well as hiring qualified drivers. There is Freebee on-demand transit service, operating during peak hours. Additionally, Medley is prioritizing roadway maintenance and repairs to support industrial activity and daily commuting. These efforts reflect the town's commitment to improving mobility and supporting economic growth.





● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●



1 Parks

O Public Schools

OColleges and
Universities

BIKE-PED INFRASTRUCTURE



19.18%
Sidewalk coverage in existing road network



4.13 miles of bike lanes



CITY OF MIAMI CITIZENS' INDEPENDENT TRANSPORTATION TRUST



Brightline: MiamiCentral has connectivity with Tri-Rail, Metrorail, and Metromover stations. The ridership for this inter-city services increased by an average of 36% from 2023 to 2024.

Tri-Rail: MiamiCentral is a station shared with Brightline and operational since January 2024 and has a direct connection with Metrorail. In FY 2024, this station served 32,096 passengers.

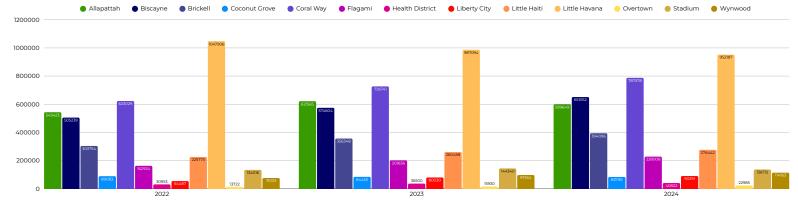
Metrorail: The Metrorail is one of the most crucial rapid transit systems in the county, which has experienced substantial ridership growth. In 2022, it served 11,446,854 riders, which increased to 13,261,255 riders in 2023, marking a 16% rise.

Metromover: This autonomous transit system circulates throughout the Brickell, Downtown, and Overtown districts of Miami. It significantly facilitates mobility in the county's urban core.

Trolley: The City of Miami offers a free, accessible trolley service throughout numerous lines. They serve various neighborhoods; and almost all of the lines, with exceptions Coconut Grove and Little Havana, have been growing significantly the past 3 years.

Freebee: Miami has a system of fixed Freebee routes, such as the Brickell, Coconut Grove, and Downtown routes. Funding is provided by different stakeholders; hence, ridership is not required to be reported to CITT, as it is not funded with PTP funds.

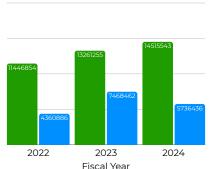
Trolley Ridership





Metrorail

Metromover





City of Miami CitiBike

Bike-sharing system offering convenient first/last-mile transit connections at key locations throughout the city.*



*Ridership information is currently unavailable for inclusion in the fact sheet.





PLANNING AND POLICIES • (

Comprehensive Development Master Plan

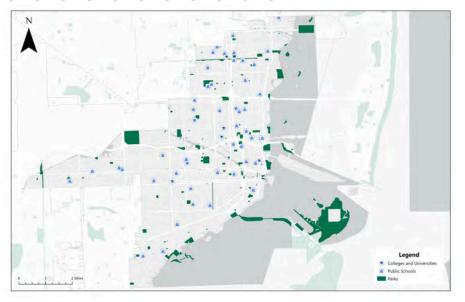
Miami is a large and diverse city with numerous classifications. "Business and Office" areas are concentrated along major thoroughfares and downtown. The city also includes "Institutions, Utilities, and Communications" classifications throughout, encompassing colleges, universities, and essential services such as public utilities. Residential areas include "Low-Medium Density Residential" and "Medium Density Residential" citywide, with "Low Density Residential" along the coast and "High Density Residential" in select areas. Miami contains multiple "Parks and Recreation" classifications offering recreational amenities. Additionally, "Transportation" zones include key corridors, railways, and Metrorail system. "Terminal" classifications at the Port of Miami and Miami International Airport, serve as hubs for trade and travel.

FY 2024-2029 Five-Year Municipal Implementation Plan

FY 2024-2029 Five-Year Municipal Implementation Plan
The city has committed to multiple projects towards improving first- and
last-mile mobility. These projects mainly improve upon pedestrian
infrastructure, bicycle infrastructure, and mass transit. Such projects
include the installation of traffic-calming devices, implementing
pedestrian priority zones, traffic flow modifications, speed reduction
signage, sidewalk repairs and maintenance, lighting improvements,
installation of new parks and crosswalks, ADA compliance-related
sidewalk upgrades, new trolley signs, buffered bicycle lanes, and new
benches at select trolley stops benches at select trolley stops.



COMMUNITY FACILITIES





Parks



Public Schools



Colleges and Universities

BIKE-PED INFRASTRUCTURE



25.44% sidewalk coverage of existing road network



30.20 miles of bike lanes



3.20 miles of shared-use paths



19.11 miles of trails



0.93 miles of paved shoulders



CITY OF MIAMI BEACH

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

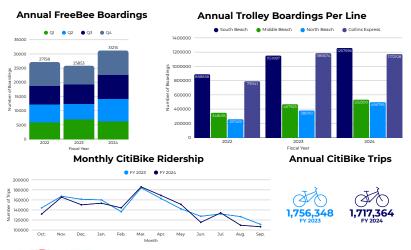
TRANSIT

City of Miami Beach Freebee

The complementary Freebee services in the Mid-Beach and South-Beach coverage zones connect numerous points of interest such as Collins Avenue and Miami Beach Senior High School. Despite a slight decline from 2022-2023, recent trends indicate an increase in overall ridership from 2023-2024.

City of Miami Beach Trolley

The city's trolley system provides excellent integration for first- and last-mile connections. There are four lines, all indicating strong growth in ridership from 2023-2023 and forecasting continued ridership from 2023-2024.









Miami Beach CitiBike Bike-sharing system offering convenient first/last-mile transit connections at key locations throughout the city.



Legend Comprehensive Development Master Plan BUSINESS AND OFFICE WIGH DENOTY RESIDENTIAL (MOR) 1-35 GUARZ NOTISTUDORS, UTULTUS AND COMMARGINE LOW DENOTY RESIDENTIAL (MOR) 1-35 GUARZ NOTISTUDORS OF THE STAND COMMARGINE LOW DENOTY MEDICATIVE RESIDENTIAL (MOR) 1-35 GUARZ MEDIAN MIGH DENOTY RESIDENTIAL MEDIA

Comprehensive Development Master Plan

Residential areas in Miami Beach are primarily classified as "Low Density Residential", and "High Density Residential" with small pockets of "Medium Density Residential". "Business and Office" classifications are concentrated along Collins Avenue, supporting commercial activities. The city also includes "Parks and Recreation" classifications for beaches and golf courses, offering ample recreational opportunities. Additionally, there are "Institutions, Utilities, and Communications" classifications for key facilities such as Mount Sinai Hospital and the Miami Beach Convention Center.

FY 2024-2029 5-Year Municipal Implementation Plan

Miami Beach has plans to enhance its transit services and infrastructure, focusing on mobility, safety, and sustainability. The free Miami Beach Trolley System, operating daily, includes routes like the South Beach Loop, Mid-Beach Loop, Collins Express, and North Beach Loop, covering key areas. Specialized services include the Mount Sinai Link, providing healthcare access, and the Freebee on-demand transit service, offering flexible and eco-friendly transportation. The city is also investing in infrastructure projects, such as the West Avenue Phase II upgrade with a budget of \$100,140,819, and the Hawthorne Avenue Neighborhood Greenway, which received \$1,376,239 to promote non-motorized travel. Other investments include the Prairie Avenue Traffic Circle and 72nd & 73rd Street Protected Bike Lanes, with funding allocated to improve traffic flow and cycling safety. These initiatives, along with citywide bicycle improvements and intelligent transportation systems, reflect the commitment to reducing congestion, encouraging alternative travel modes, and enhancing connectivity.



COMMUNITY FACILITIES





40 Parks



6 Public Schools



O Colleges and Universities





58.95%Sidewalk coverage in existing road network



15.22 miles



1.71 miles of shared-use paths



8.84 miles



TRUST

CITY OF MIAMI GARDENS

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

Miami Gardens Express

Initially launched in 2013, the city's free trolley service provides four fixed routes and seven transfer stations every day of the week. It links crucial locations like Miami Gardens City Hall and North Dade Regional Library. Notably, ridership has increased across all routes

Tri-Rail

The municipality also features a Golden Glades Tri-Rail Station. This station is part of the regional commuter transit system.

Miami Gardens Express Ridership **Annual Boardings Per Line** Annual Boardings



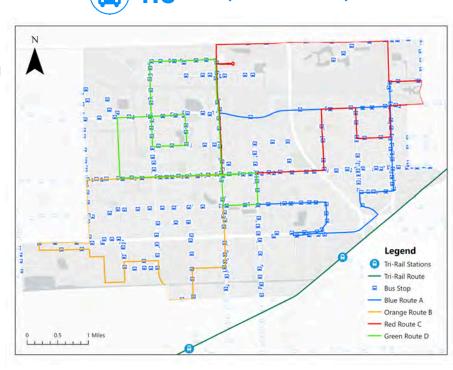
Golden Glades Tri-Rail Station Ridership **Annual Boardings**







MDT-Operated Bus Stops



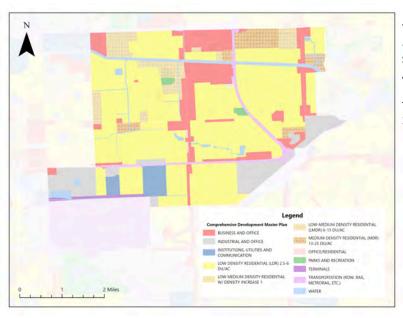
PLANNING AND POLICIES

Miami Gardens is mainly classified as "Low Density Residential", with pockets of "Low-Medium Density Residential" and "Medium Density Residential" throughout. The city also has "Business and Office" and "Industrial and Office classifications," supporting commercial and industrial activities. Additionally, there is a classification for "Institutions, Utilities, and Communications," which includes facilities like the Florida Memorial University and Saint Thomas University.

Comprehensive Development Master Plan

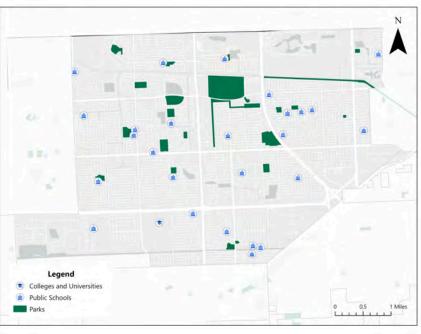
FY 2024-2029 5-Year Municipal Implementation Plan

Miami Gardens is enhancing transit and infrastructure with ADA Transit Improvements and modernized bus shelters. Notable neighborhood upgrades include multiple sidewalk and roadway improvements projects. The city is also developing multi-use trails, including the Biscayne Blueway Trail and Betty T. Ferguson Shared Use Path, to boost connectivity. Proposed traffic calming and lighting enhancements further improve safety and reduce speeding. These projects reflect Miami Gardens' commitment to creating a safer and more accessible community.





COMMUNITY FACILITIES





24 Parks



26Public Schools



TColleges and
Universities

BIKE-PED INFRASTRUCTURE



28.30% sidewalk coverage in existing road network



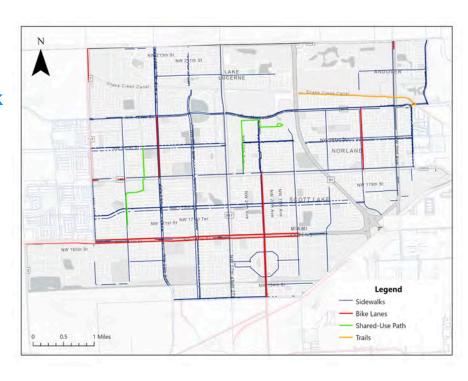
11.79 miles



3.15 miles of shared-use paths



1.91 miles



TRUST

TOWN OF MIAMI LAKES

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

Town of Miami Lakes Freebee

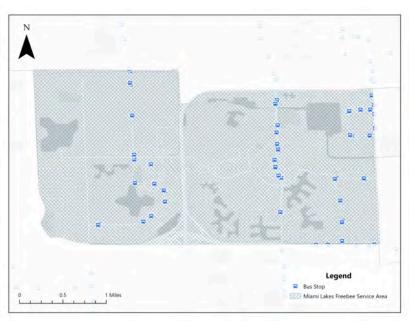
The town's Freebee service offers complementary transportation services throughout the week (with hours varying) within municipal boundaries, and it connects various points of interest. Despite a slight growth in ridership from 2022-2023, recent figures from 2024 indicate a decline in overall ridership.

Town of Miami Lakes FreeBee Ridership **Annual Ridership Quarterly Ridership** 35000 $\Omega\Omega$ 30000 ရ္ဌ 25000 29,969 34,060 20000 FY 2022 FY 2023

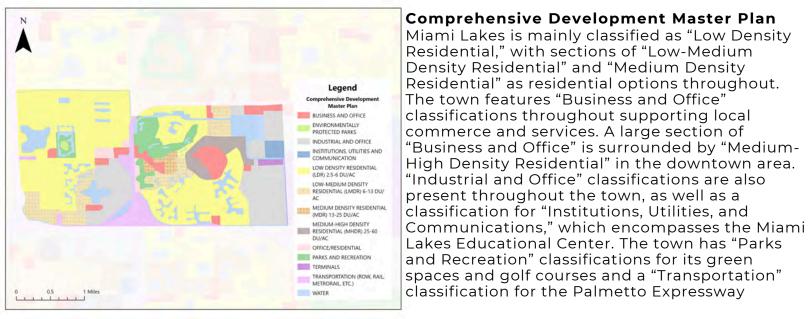
15000

5000





PLANNING AND POLICIES



Miami Lakes is mainly classified as "Low Density Residential," with sections of "Low-Medium Density Residential" and "Medium Density Residential" as residential options throughout. The town features "Business and Office" classifications throughout supporting local commerce and services. A large section of "Business and Office" is surrounded by "Medium-High Density Residential" in the downtown area. "Industrial and Office" classifications are also present throughout the town, as well as a classification for "Institutions, Utilities, and

FY 2024-2029 5-Year Municipal Implementation Plan

Miami Lakes' plans include Freebee On-Demand Service to improve accessibility and reduce congestion. Miami Lakes also maintains 23 bus shelters and 43 bus stops, ensuring they are safe, clean, and ADA-compliant through regular maintenance and upgrades. Key transportation projects include the NW 59 Avenue Roadway Extension to improve connectivity, bike lanes and crosswalk improvements along Fairway Drive, and bicycle and pedestrian upgrades in Miami Lakes Park West. Additional initiatives involve developing scenic greenway trails along NW 77 Court and beautifying the SR 826/NW 154 Street intersection. Funding is allocated for program management and transportation studies, reflecting the commitment to sustainability and enhanced infrastructure.



● ● ● ● ● COMMUNITY FACILITIES ● ● ●





94 Parks



5 Public Schools



OColleges and Universities

BIKE-PED INFRASTRUCTURE



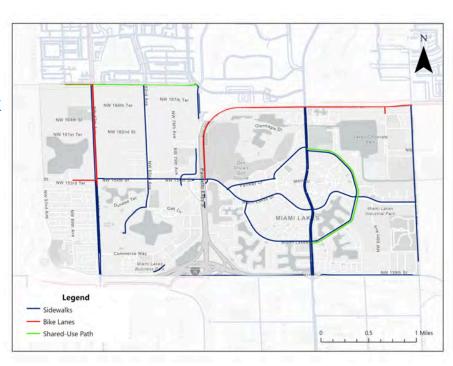
23.49% sidewalk coverage in existing road network



3.89 miles



2.77 miles of shared-use paths



VILLAGE OF MIAMI SHORES

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

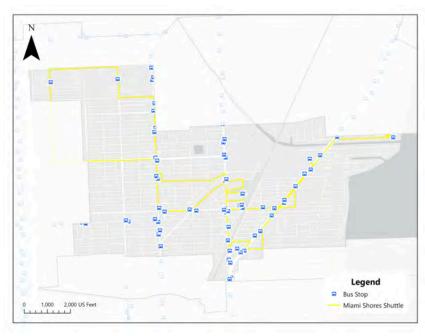


The free village-wide shuttle operates Mondays through Fridays along fixed routes from 2:00 p.m. to 6:00 p.m. A significant 153 percent decline in ridership was recorded from 2022-2023, however, recent data from 2024 indicate a gradual rebound.

65 MDT-Operated Bus Stops

Miami Shores Shuttle Ridership





PLANNING AND POLICIES

Legend Comprehensive Development Master Plan BURDING DENGELY RESIDENTIAL, (MDR) 13-5 DUAC 13-5

Comprehensive Development Master Plan

Miami Shores is mainly classified as "Low Density Residential", with small pockets of "Low-Medium Density Residential" and "Medium Density Residential", offering a mix of housing options. There is a "Transportation" classification for the FEC Railway, which is surrounded by "Business and Office" zones to promote local commerce and services, as well as "Parks and Recreation" classifications for the Miami Shores Country Club golf course. Along NE 2 Avenue, a section of "Office/Residential" classification allows a blend of housing and office spaces. The area also includes an "Institutions, Utilities, and Communications" classification for Barry University, an important educational hub.

FY 2024-2029 5-Year Municipal Implementation Plan*

*At this time, there is no Five-Year Municipal Implementation Plan, and the information is currently unavailable for inclusion in the fact sheet.



● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●





8 Parks





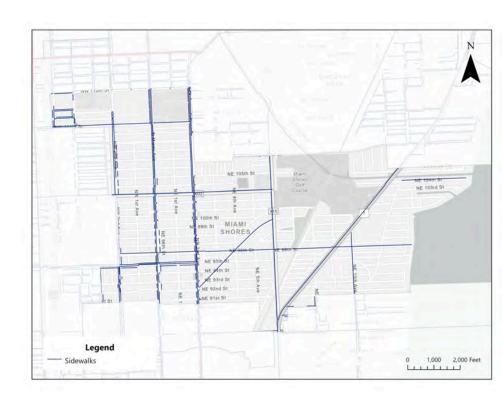
BIKE-PED INFRASTRUCTURE



44.10%
Sidewalk coverage in existing road network



0.00 miles



CITY OF MIAMI SPRINGS

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

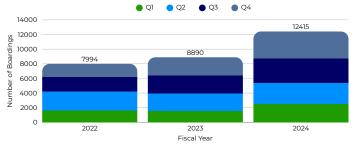
TRANSIT

Miami Springs/Virgina Gardens (MSVG) Shuttle

Through an ILA with Miami Springs and Virginia Gardens, a free fixed-route local circulator connects residents to key destinations. In 2022 and 2023, ridership reached 16,884, reflecting a 10% increase. In 2024, ridership rose to 12,415, a 38% increase compared to the previous year.

Miami Springs/Virginia Gardens Shuttle Ridership

Quarterly Boardings



Annual Boardings



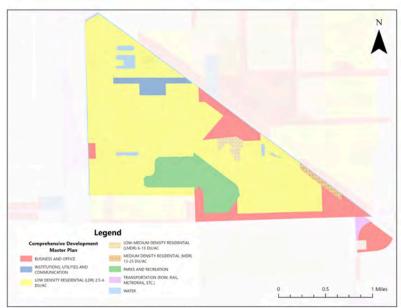








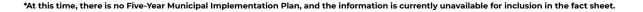
PLANNING AND POLICIES •



Comprehensive Development Master Plan

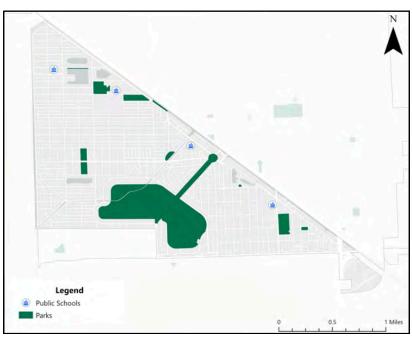
Miami Springs is mainly classified as "Low Density Residential," fostering a suburban atmosphere with single-family homes. There is a pocket of "Low-Medium Density Residential" and "Medium Density Residential," providing some housing diversity. "Business and Office" classifications are located around the edges of the city, supporting local commerce and services. The city also includes a section for "Institutions, Utilities, and Communications," as well as a "Parks and Recreation" classification for the golf course at Miami Springs Golf and Country Club.

FY 2024-2029 5-Year Municipal Implementation Plan*





COMMUNITY FACILITIES





12 Parks



4
Public Schools



OColleges and Universities





34.6% sidewalk coverage in existing road network



0.40 miles



5.56 miles of shared use paths



CITY OF NORTH BAY VILLAGE

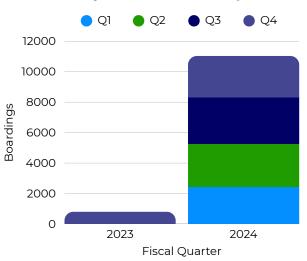
CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

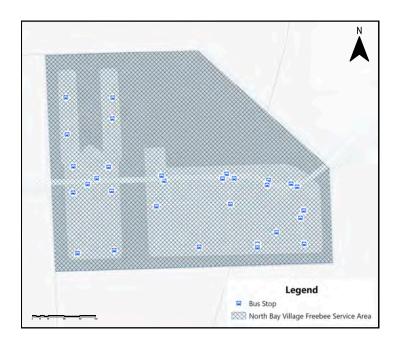
North Bay Village Freebee

The free on-demand ride service is geo-fenced to the municipality's boundaries. It services important points of interest like the City of North Bay Village City Hall along a fixed route. Introduced in late 2023, the service has attained a surge in demand, suggesting a continued growth into 2025.

Quarterly Freebee Ridership





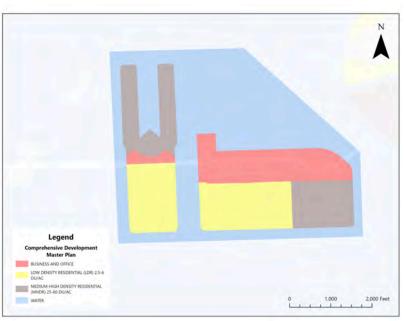


PLANNING AND POLICIES

Comprehensive Development Master Plan North Bay Village features "Business and Office" classifications along the John F. Kennedy Causeway, supporting commercial activities and services. Residential areas are divided between "Low Density Residential," offering single-family homes, and "Medium-High Density Residential," providing options like apartments and condominiums for greater housing diversity.

FY 2024-2029 5-Year Municipal Implementation Plan North Bay Village is enhancing transit accessibility, roadway conditions, and pedestrian safety through strategic initiatives. The Freebee On-Demand Service provides sustainable, convenient transportation, while the Downtown Express circulator* connects key village locations and Miami-Dade transit stops. New branded shelters are planned to improve passenger comfort and transit visibility. Infrastructure projects include \$2.2M for Treasure Island roadway resurfacing, \$162,000 for Harbor Island sealcoating and striping, \$175,000 for streetlight repairs, and \$750,000 for sidewalk connectivity improvements. These efforts reflect the village's commitment to creating a safer

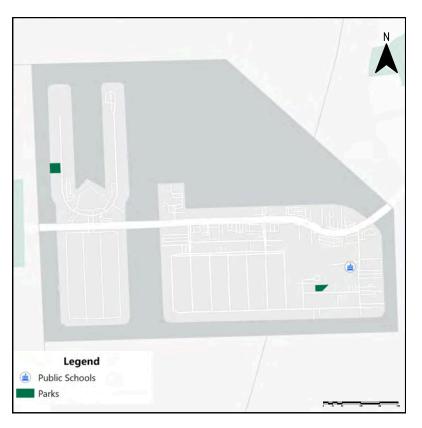
and more connected community.



*This service was discontinued as of FY 2023 due to a lack of vehicles, and the information is currently unavailable for inclusion in the fact sheet.



● ● ● ● ● COMMUNITY FACILITIES ● ● ● ● ●





2 Parks



1 Public Schools



O Colleges and Universities

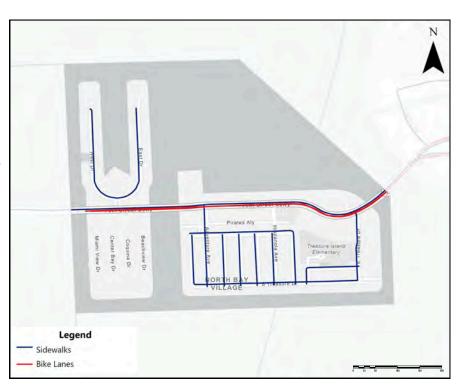
BIKE-PED INFRASTRUCTURE



61.3% sidewalk coverage in existing road network



1.05 miles of bike lanes



CITY OF NORTH MIAMI

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

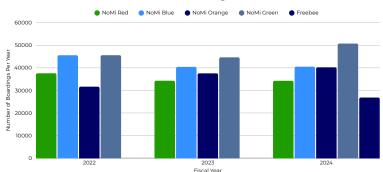
North Miami Express Trolley

This free trolley service runs services on weekdays from 7:00 a.m. to 7:00 p.m. The service has four lines and has maintained steady ridership since 2023.

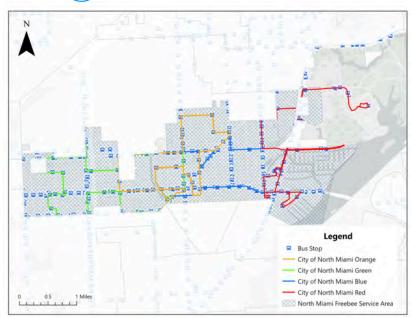
North Miami Freebee

The free shuttle service was deployed in North Miami in 2024. Data across FY 2024 demonstrate a consistent usage of the mobility service, facilitating critical first- and last-mile trips across North Miami.

Annual Transit Boardings Per Service







PLANNING AND POLICIES

Legend Comprehensive Development Master Plan Brainess and orfice Demonstrating Month Protection Paris Reductional Comprehensive Development Month - 13 Dulac Demonstrating Month Protection Paris Reductional Fraction Office Reductional Fractional Fractional

Comprehensive Development Master Plan

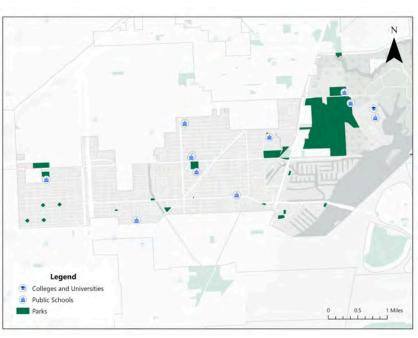
North Miami is primarily classified as "Low Density Residential," with sections of "Medium Density Residential" throughout and small areas of "Low-Medium Density Residential" and "Office/Residential" classification. "Business and Office" classifications are concentrated along Biscayne Boulevard, Dixie Highway, and NE 6 Avenue, supporting commercial activities. The city also includes "Institutions, Utilities, and Communication" classifications for Florida International University's Biscayne Bay Campus and utility services like the wastewater treatment plant. Additionally, there are "Parks and Recreation" and "Environmentally Protected Parks" classifications, such as Oleta River State Park.

FY 2024-2029 5-Year Municipal Implementation Plan

North Miami is improving its infrastructure through multiple projects. Transit enhancements include the NoMi Express, a free trolley service with four routes, and Freebee, an eco-friendly, on-demand transportation option. The Transportation Options Program subsidizes monthly transit passes, while ongoing shelter maintenance ensures safe and comfortable waiting areas. A designated transit planner oversees these programs to ensure efficient operations. Infrastructure initiatives include street lighting upgrades, roadway and sidewalk improvements, and tree maintenance. The city also appointed a transportation manager to oversee planning and execution. Key projects include a bridge over the Biscayne Canal at NE 131 Street and traffic calming devices to improve safety. These efforts reflect North Miami's commitment to mobility, accessibility, and sustainability



● ● ● ● ● COMMUNITY FACILITIES ● ● ●





20 Parks



12
Public Schools



Colleges and Universities

BIKE-PED INFRASTRUCTURE

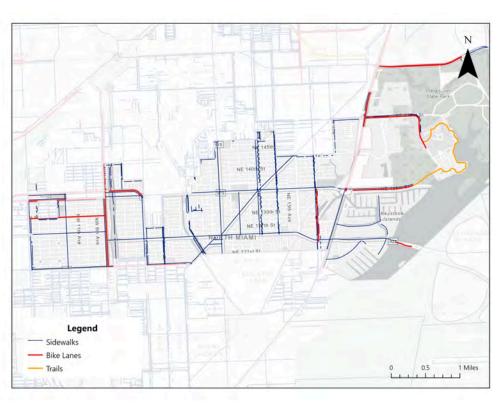




9.74 miles of bike lanes



2.17 miles





CITY OF NORTH MIAMI BEACH

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

NMB Line

The NMB Line is a local circulator serving North Miami Beach, connecting residents to key destinations. Ridership grew steadily, with an overall increase of 7% from 2022 to 2023 and a further 3% rise in 2024. Notably, the introduction of Route E in 2023 expanded the system's reach.

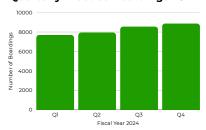
North Miami Beach Freebee

On-demand free ride service to key destinations. Started at the beginning of 2024, the service has seen ridership increase every quarter.

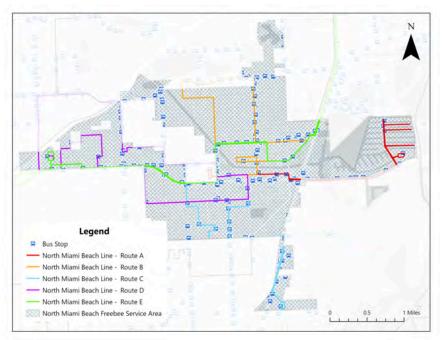
Annual NBM Boardings Per Route



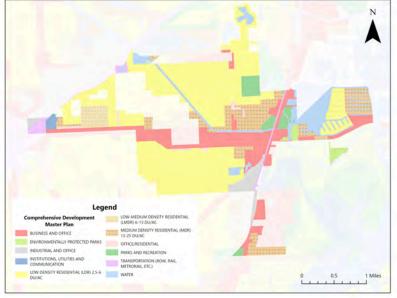
Quarterly Freebee Boardings 2024



141 MDT-Operated Bus Stops



PLANNING AND POLICIES



Comprehensive Development Master Plan

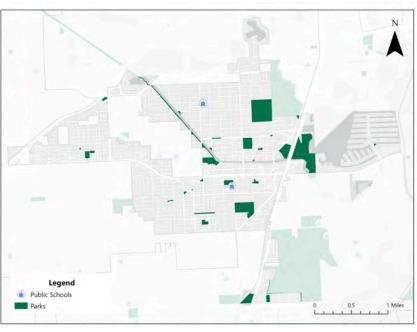
North Miami Beach is primarily classified as "Low Density Residential," with sections of "Low-Medium Density Residential" and "Medium Density Residential" throughout, offering diverse housing options. "Business and Office" classifications are distributed across the city, primarily concentrated along NE 163 Street and Biscayne Boulevard. The city also includes a "Transportation" classification for the FEC Railway, as well as sections of "Industrial and Office." Additionally, there is a classification for "Institutions, Utilities, and Communications" for Jackson North Medical Center, and "Parks and Recreation" classifications for green spaces and recreational facilities.

FY 2024-2029 5-Year Municipal Implementation Plan

North Miami Beach has plans to enhance its transit system and infrastructure. Key projects include installing new bus shelters with a budget of \$131,660, operating the NMB Line fixed-route service, and supporting Freebee, an eco-friendly on-demand transit option with \$1.2 million allocated exclusively for its operation. These initiatives improve accessibility and convenience for residents. The city is investing in annual sidewalk upgrades to meet ADA standards, traffic calming measures totaling \$650,640 across various locations, and citywide roadway resurfacing with a budget of \$493,220. These efforts aim to improve pedestrian safety and roadway quality. Together, these projects reflect North Miami Beach's commitment to creating a connected, safe, and sustainable community.



COMMUNITY FACILITIES





30 Parks



2 Public Schools



O Colleges and Universities

BIKE-PED INFRASTRUCTURE



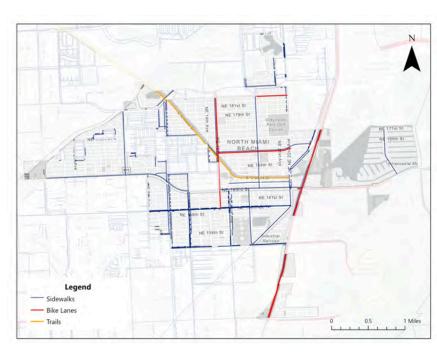
30.00% sidewalk coverage in existing road network



7.86 miles of bike lanes



2.22 miles



TRUST

CITY OF OPA-LOCKA

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

Tri-Rail

The station experienced steady ridership growth, increasing by 16% from 2023 to 2024.

Opa-Locka Express Circulator

12,531

13,087

A local fixed-route circulator that serves the Opa-locka community, providing reliable transportation for residents. Ridership decreased by 11% in 2023 and rebounded by 4% in 2024, reflecting changing community usage trends.

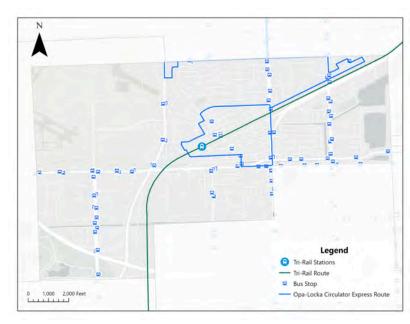
Tri-Rail Ridership **Annual Boardings Quarterly Boardings** ● Q1 • Q2 • Q3 Q4 150000 126956 Number of Boardings 20000 20000 C 109,656 126,956 2023 2024 Fiscal Year **Opa-Locka Express Circulator Ridership Annual Boardings Quarterly Boardings** Q1Q2 Q3

15000

5000

rdings 10000

MDT-Operated Bus Stops

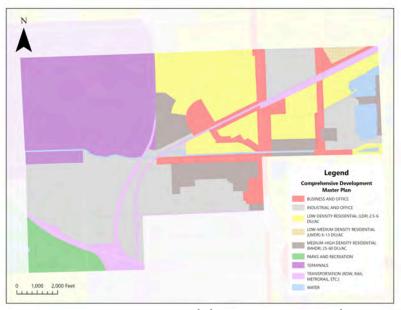


PLANNING AND POLICIES

14131

12531

2023 Fiscal Year 13087



Comprehensive Development Master Plan

Opa-locka is primarily classified as "Industrial and Office" and "Business and Office," supporting a mix of commercial activities and industrial operations throughout the city. Residential options include "Low Density Residential" and "Medium-High Density Residential," with one section of "Low-Medium Density Residential" to provide housing diversity. The city also has a "Parks and Recreation" classification for Amelia Earhart Aquatic Park, offering green space and recreational opportunities. "Transportation" classifications are prominent throughout Opalocka, supporting major thoroughfares, highways, and the Tri-Rail railway, which enhance regional connectivity. Additionally, there is a "Terminals" classification for Miami - Opa-locka Executive Airport.

FY 2024-2029 5-Year Municipal Implementation Plan

Opa-locka has plans to enhance its transit system and infrastructure. The city has allocated \$650,000 for the Opa-locka Shuttle Bus and Rideshare Service to improve regional connectivity. Several projects are focused on improving safety, accessibility, and roadway conditions. Sidewalk Phase V, with a budget of \$258,000, enhances pedestrian pathways across key streets. Maintenance and Resurfacing Phase VII is allocated \$263,526 to improve road conditions, while Phase IX and Sidewalk Phase VI, with a combined budget of \$800,000, continue infrastructure upgrades. Additional roadway projects are supported by \$500,000, and sidewalk construction and repairs have a \$300,000 allocation. These initiatives highlight Opa-locka's dedication to fostering safer and more accessible mobility options.











2 Public Schools



O Colleges and Universities

BIKE-PED INFRASTRUCTURE



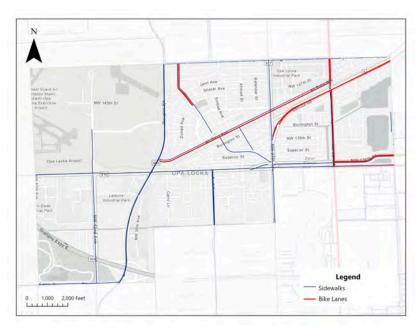
32.07% sidewalk coverage in existing road network



5.26 miles of bike lanes



1.14 miles of wide curb lanes



VILLAGE OF PALMETTO BAY

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

• • • • • TRANSIT

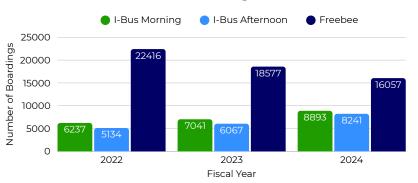
Palmetto I-Bus

The Palmetto IBus is a free transit service that connects neighborhoods and schools in the Palmetto Bay area. Morning ridership grew by 13% in 2023 and 26% in 2024, while afternoon ridership increased by 18% in 2023 and 36% in 2024, showcasing its rising popularity within the community.

Palmetto Bay Freebee

On-demand free ride service to key destinations. The Freebee service experienced a steady decline in ridership, dropping by 17% in 2023 and an additional 14% in 2024, indicating reduced utilization.

Annual Transit Boardings Per Service







PLANNING AND POLICIES

Legend Comprehensive Development Master Plan BUSINESS AND OFFICE INVIRONMENTALLY PROPIECTED PARKS ESTATE DENSITY MESONITHAL, (RDR) 1-2.5 DUJAC. MINISTRUCTURES, AND COMMANDALIVE RESIDENTIAL (RDR) 2-3-5 DUJAC. DOWN AMEDIAN DENSITY MESONITHAL AMORIO, 6-1 SUJAC. MINISTRUCTURES DENSITAL AMANDO RESIDENTIAL AMANDO RESIDENTIAL MAKES AND RECHARION THAN PORTAL DENSITY MESONITHAL MAKES AND RECHARION THAN PORTAL DEN

Comprehensive Development Master Plan

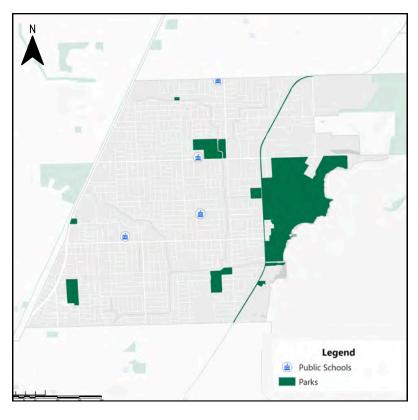
Palmetto Bay is mainly classified as "Estate Density Residential," offering spacious homes and a tranquil living environment. There are sections of "Low Density Residential," "Low-Medium Density Residential," and "Medium Density Residential" throughout, providing a variety of housing options. Along Dixie Highway, the village features "Business and Office" classifications, as well as some "Office/Residential," supporting commercial activities and mixed-use spaces. Additionally, Palmetto Bay includes "Parks and Recreation" classifications spread across the area, along with "Environmentally Protected Parks" that preserve natural habitats and provide recreational opportunities.

FY 2024-2029 5-Year Municipal Implementation Plan

The Village of Palmetto Bay has plans to enhance its transit system and infrastructure. Key transit initiatives include \$656,000 for administrative operations, \$69,000 for transit operations, the leasing of a park-and-ride facility, and \$1.8 million for village-wide on-demand transit services to provide flexible transportation options. The village is also investing in infrastructure projects to improve safety and accessibility. This includes \$1,120,000 for traffic calming measures, \$1,250,000 for roadway resurfacing and improvements, \$500,000 for engineering and architectural services, and a \$925,000 transfer to enhance public transit services. These efforts highlight Palmetto Bay's commitment to creating safer and more efficient mobility for its residents and visitors.



COMMUNITY FACILITIES





10 Parks



4
Public Schools



O Colleges and Universities





27.93% sidewalk coverage in existing road network



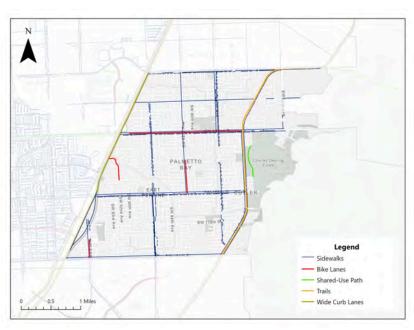
3.00 miles



3.19 miles of wide curb lanes



3.54 miles





0.54 miles of shared use paths

VILLAGE OF PINECREST

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

Pinecrest People Mover

A free local circulator that connects neighborhoods and schools within the village. Ridership has seen notable changes, decreasing by approximately 26% from 2022 to 2023, before rebounding with a 25% increase in 2024.

Metrorail

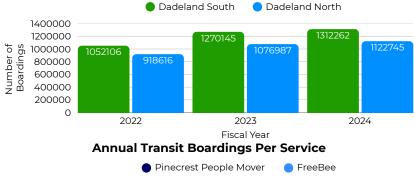
Number of

There are two Metrorail stations that serve Pinecrest, the Dadeland South and North stations; however, neither of these stations are within the village of Pinecrest.

Pinecrest Freebee

On-demand free ride service to key destinations. Ridership grew in 2023 and saw a decline in 2024.

Annual Metrorail Boardings Per Station









Comprehensive Development Ma

Legend Comprehensive Development Master Plan USMISS AND OFFICE STATE ENRIFY PRESONTIAL (LDR) 1-25 DULKC. LOW DEBSTY PESCONTIAL (LDR) 25-4 DULKC. LOW DEBSTY PESCONTIAL (LDR) 1-35 DULKC. LOW DEBSTY PESCONTIAL (LDR) 1-35 DULKC. MEDIAN DEBSTY

Comprehensive Development Master Plan
Pinecrest is predominantly classified as "Estate
Density Residential," offering spacious homes
and a serene suburban environment. Along
Dixie Highway, there are sections of "Low
Density Residential," "Low-Medium Density
Residential," and "Medium Density Residential,"
providing housing diversity. Dixie Highway also
features "Business and Office" classifications,
supporting commercial activities and services.

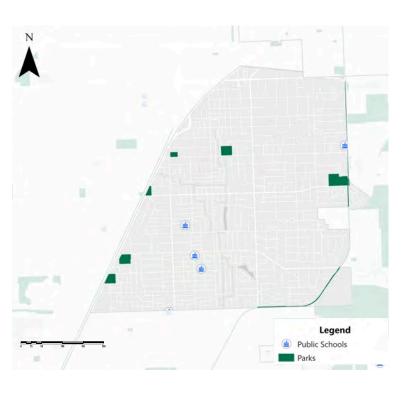
FY 2024-2029 5-Year Municipal Implementation Plan Pinecrest has plans to enhance its transit system and infrastructure. Key transit projects include the Pinecrest People Mover, a free circulator bus

with three routes, a GPS-based Trolley Tracker system, Freebee on-demand electric rideshare services, trolley branding to boost public awareness, and a partnership with Florida Power

& Light to power Freebee vehicles sustainably. Infrastructure projects include road paving and resurfacing, traffic calming measures, school zone upgrades, and new intersections from the 2018 Master Plan. The village is improving sidewalks with ADA-compliant upgrades, investing in professional design and engineering services, updating street signs for better visibility, and covering administrative expenses to ensure smooth project execution. These efforts support safer, more efficient, and sustainable mobility for all.



COMMUNITY FACILITIES





9 Parks



4 Public Schools



O Colleges and Universities

BIKE-PED INFRASTRUCTURE







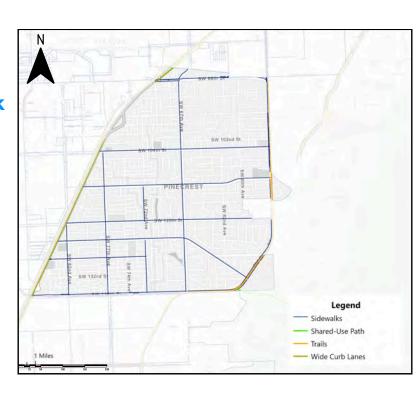


27.69% sidewalk coverage in existing road network

2.76 miles of wide curb lanes

2.90 miles

0.07 miles of shared use paths



CITY OF SOUTH MIAMI

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

Metrorail

The South Miami Station, situated along US-1 and Sunset Drive, provides a critical link for residents and visitors. It offers connectivity to various Metrobus routes and will soon be connected with the pedestrian-bicycle Underline path. The ridership has steadily increased over the past two years, with an 11% increase in boardings from 2023-2024.

South Miami Freebee

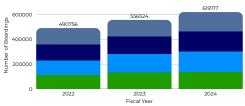
The Freebee service provides mobility throughout South Miami and facilitates critical first- and last-mile trips, since its inception in December 2020. Connecting transit services, shopping centers, and residences, the service has had a slight decline in ridership since 2023. However, total annual ridership figures from 2024 are still higher than 2022.

South Miami Bird Scooters

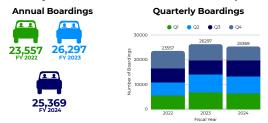
Bird's micromobility service launched in January 2024, providing first- and last-mile connectivity across the city. Since its introduction, ridership has begun to grow, reflecting increasing adoption by users. However, data for FY 2025 remain incomplete, requiring further analysis to capture full-year trends.

• • • TRANSIT

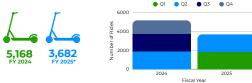




City of South Miami FreeBee Ridership



City of South Miami Bird Ridership Annual Rides Quarterly Rides









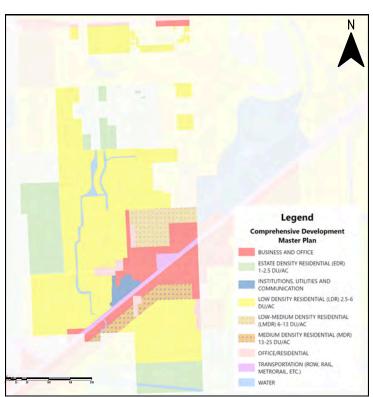
PLANNING AND POLICIES

Comprehensive Development Master Plan South Miami is primarily classified as "Low Density

Residential," with sections of "Estate Density Residential" and "Low-Medium Density Residential" throughout, offering a variety of housing options. In Downtown South Miami, there are "Medium Density Residential" and "Office/Residential" classifications, alongside "Business and Office" that surround a "Transportation" classification for the Metrorail and Dixie Highway. Additionally, the city includes an "Institutions, Utilities, and Communications" classification for Baptist Health South Miami Hospital

FY 2024-2029 5-Year Municipal Implementation Plan

South Miami has plans to enhance its transit system and infrastructure. The MetroConnect SoMi program offers free electric on-demand rides, connecting residents to regional transit. Infrastructure projects include citywide traffic calming measures, new traffic circles at key intersections to improve flow, and sidewalk repairs with ADA upgrades near schools and transit stops. The city is investing in street resurfacing, improved pavement markings, updated street signs for better visibility, and internally illuminated pavement markers in high-traffic areas for nighttime safety. Funds are also allocated for road restriping in school zones and commercial areas. These efforts aim to create safer and more connected mobility options









13 Parks



4
Public Schools



O Colleges and Universities





33.53% sidewalk coverage in existing road network



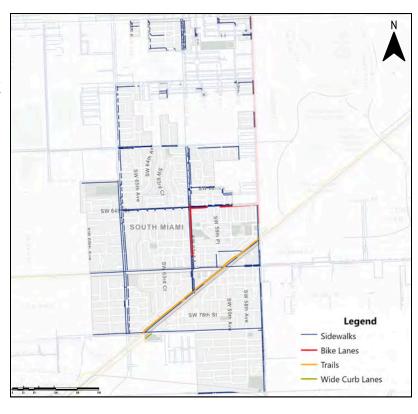
0.88 miles



0.06 miles of wide curb lanes



1.19 miles



Sunny Isles Beach Shuttle

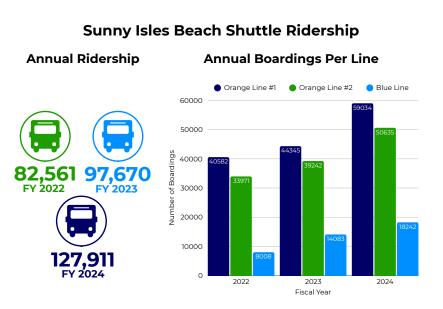
CITY OF SUNNY ISLES BEACH

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

TRANSIT

Free shuttle service to popular destinations like Aventura Mall and Sunny Isles Beach Government Center, with three daily routes: Orange Line #1, Orange Line #2, and Blue Line. Ridership rose from 82,561 in 2022 to 97,670 in 2023, an 18% increase, driven largely by a 76% rise in Blue Line passengers.

70 MDT-Operated Bus Stops





PLANNING AND POLICIES

Legend Comprehensive Development Master Plan Business and office Low density residential, (LDR) 2.5-6 DUJAC LOW-MEDIUM DENSITY RESIDENTIAL (MDR) 13-25 DUJAC MEDIUM AIGH DENSITY RESIDENTIAL (MDR) 13-25 DUJAC MEDIUM-HIGH DENSITY RESIDENTIAL (MMDR) 25-60 DUJAC MEDIUM-HIGH DENSITY RESIDENTIAL (MDR) 25-80 DUJAC MEDIUM-HIGH DUJAC MEDIUM-HIGH DUJAC M

Comprehensive Development Master Plan

Sunny Isles Beach is mainly classified as "Business and Office," concentrated along Collins Avenue, supporting commercial activities. Residential options are mainly "Medium-High Density Residential," with additional areas of "Medium Density Residential," "Low-Medium Density Residential," and "Low Density Residential," offering diverse housing options. The city also features a "Parks and Recreation" classification for the beach.

FY 2024-2029 5-Year Municipal Implementation Plan

Sunny Isles Beach is improving transit and transportation infrastructure. Key transit projects include \$1,911,656 for community shuttle operations, \$215,000 for fleet expansion, \$37,500 for bus shelters, \$40,000 each for ETA Solar Powered Trackers and bus tracking hardware, and administrative support for 5% of total transit costs. Infrastructure projects allocate \$2,663,993 for Collins Avenue streetscape improvements and \$306,000 for citywide street maintenance. These investments enhance mobility, safety, and quality of life.







12 Parks



1 Public Schools



O Colleges and Universities

BIKE-PED INFRASTRUCTURE



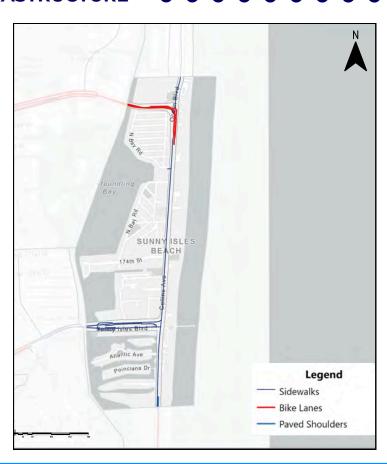
39.93% sidewalk coverage in existing road network



1.04 miles



0.08 miles of wide curb lanes



TOWN OF SURFSIDE

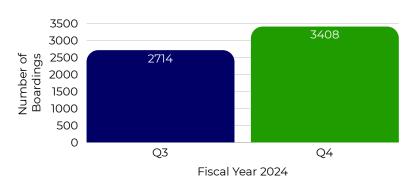
CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

Surfside Freebee

Free, on-demand electric rideshare service connecting residents and visitors to key destinations such as Bal Harbour Shops. The service started in Spring 2024, it covers the town of limits, as well as a small section of Bay Harbor Islands and Bal Harbour. The town discontinued its fixed-route circulator in May 2024 when this service began. Then, in Q3 of FY 2024, the municipality introduced the service, which it is currently gaining traction with residents and visitors alike.

Quarterly FreeBee Boardings





Town of Surfside CitiBike

Bike-sharing system offering convenient first/last-mile transit connections at key locations throughout the city.*

*Ridership information is currently unavailable for inclusion in the fact sheet.





• • • • • • • PLANNING AND POLICIES • • • •

Legend Comprehensive Development Master Plan BUSINESS AND OFFICE LOW GENETIT RESIDENTIAL ECREZ 25-6 DOWN DESITY RESIDENTIAL ECREZ 25-6 DOWN DEVELOPMENT WANTER D 1,000 2,000 Feet

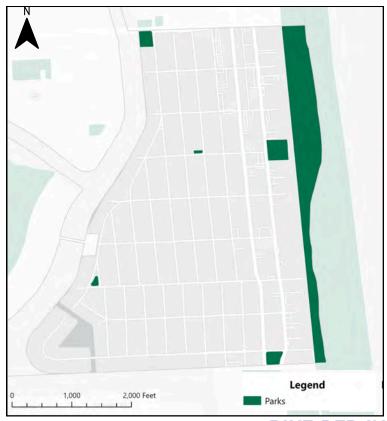
Comprehensive Development Master Plan

Surfside is primarily classified as "Low Density Residential," offering a peaceful residential environment. Along Collins Avenue, Harding Avenue, and 96th Street, there are "Business and Office" classifications, supporting commercial activities and services. Additionally, the town features "Parks and Recreation" classifications for the beach, emphasizing outdoor leisure and community spaces.

FY 2024-2029 Five-Year Municipal Implementation Plan*

^{*}The Town of Surfside has not generated the Five-Year Municipal Implementation Plan for FY 2024, and the information is currently unavailable for inclusion in the fact sheet.







6 Parks



OPublic Schools



O Colleges and Universities

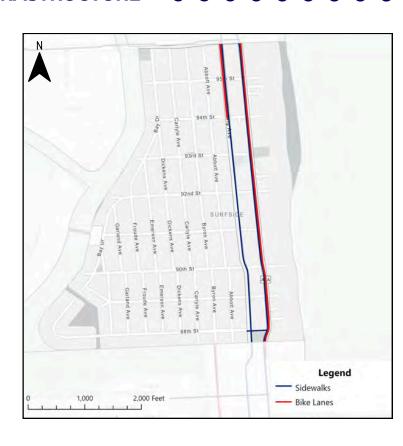
BIKE-PED INFRASTRUCTURE



35.03% sidewalk coverage in existing road network



1.25 miles of bike lanes



CITY OF SWEETWATER

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

● ● ● ● TRANSIT

FIU Freebee

Free, on-demand electric rideshare service connecting FIU to key destinations. Funding is provided by FIU; hence, ridership is not required to be reported to CITT, as it is not funded with PTP funds.

Sweetwater Trolley

Free fixed roue trolley service connecting key destinations, such as Dolphin Mall and FIU. In 2022 and 2023, it provided 68,550 rides, reflecting a 31% increase. In 2024, ridership surged to 54,225, marking a remarkable 39% increase from the previous year.

Sweetwater Trolley Ridership

Annual Boardings Quarterly Boardings Quarterly Boardings Quarterly Boardings Quarterly Boardings 40000 54225 29653 38897 FY 2022 FY 2023 29653 2022 2023 2024





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Legend Comprehensive Development Master Plan BUSINESS AND OFFICE INDUSTRIAL AND OFFICE OULKE OFFICERSPORTIAL INDUSTRIAL SEQUENTIAL (ANDR) 13-25 DUAC OFFICERSPORTIAL RESTRICTED PRODUSTRIAL AND OFFICE TRANSPORTATION OFFICE TRANSPORTIAL OFFICE TRANSPORTATION METEROPAL (ETC.) WATER

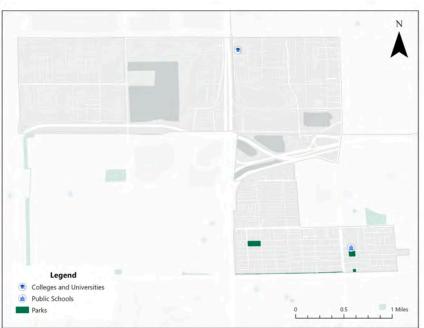
Comprehensive Development Master Plan

Sweetwater is mainly classified as "Restricted Industrial and Office" and "Industrial and Office," supporting a range of commercial and industrial activities. The city includes "Business and Office" classifications, prominently highlighted by the Dolphin Mall. "Transportation" classifications for the Dolphin Expressway and Florida's Turnpike, enhance regional connectivity. Residential options include "Low Density Residential", "Low-Medium Density Residential", and "Medium Density Residential", offering diverse housing choices.

FY 2024-2029 5-Year Municipal Implementation Plan Sweetwater has plans to enhance its transit system and infrastructure. Its trolley system links neighborhoods to schools, government centers, and commercial areas, with regular maintenance ensuring reliability. A ridership study and a new real-time tracking app integrated with Miami-Dade Transit GO improve coverage and accessibility are

also included. Enhancements like shaded bus shelters and benches further support riders, while administrative oversight ensures efficient program management. The city is investing over \$1.4 million in street and sidewalk improvements, including repaving, curb repairs, and ADA-compliant upgrades. It is also replacing outdated street signage, conducting a parking study, equipping maintenance crews with tools and a service vehicle, and planning a pedestrian bridge to improve safety in high-traffic areas. These initiatives aim to enhance mobility, accessibility, and safety.











1Public Schools



Colleges and Universities

BIKE-PED INFRASTRUCTURE



23.43%
Sidewalk coverage in existing road network



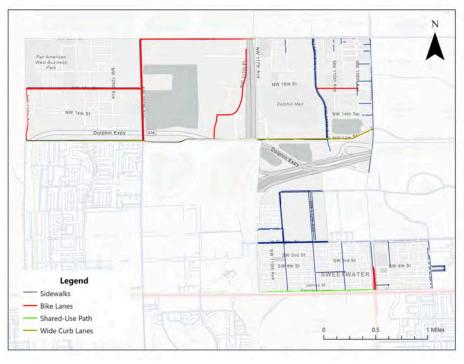
5.82 miles



2.18 miles of wide curb lanes



0.93 miles of shared use paths



VILLAGE OF VIRGINIA GARDENS

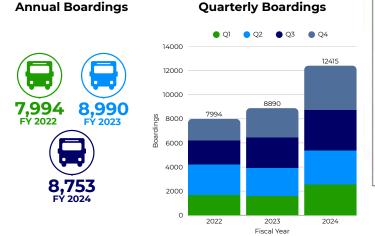
TRANSIT

CITIZENS' INDEPENDENT TRANSPORTATION TRUST

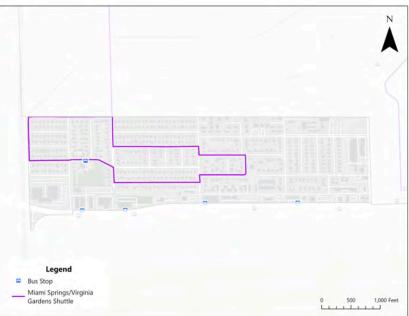
Miami Springs/Virgina Gardens (MSVG) Shuttle

Through an ILA with Miami Springs and Virginia Gardens, a free fixed-route local circulator connects residents to key destinations. In 2022 and 2023, ridership reached 16,884, reflecting a 10% increase. In 2024, ridership rose to 12,415, a 38% increase compared to the previous year.

Miami Springs/Virginia Gardens Shuttle Ridership







PLANNING AND POLICIES

Legend Comprehensive Development Master Plan BUSNESS AND OFFICE LOW DENETY RESIDENTIAL (DR) 2.5-6 DUAC MEDIAN DENETY RESIDENTIAL (DR) 2.5-6 DUAC TEMMALS TEMMALS TEMMALS TEMMALS TEMBORAL (TC) 0 1.000 2.000 Feet

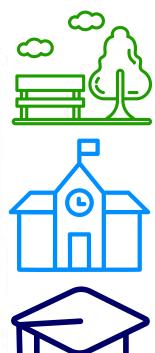
Comprehensive Development Master Plan
Virginia Gardens is mainly classified as "Low
Density Residential," providing suburban living
environment. There is also a section of "Medium
Density Residential" to offer additional housing
options. The village features "Business and Office"
classifications along NE 36 Street and Curtis
Parkway, supporting commercial activities and
services.

FY 2024-2025 5-Year Municipal Implementation Plan Virginia Gardens has plans to enhance its transit system and infrastructure. While the village does not operate its own transit system, it partners with Miami Springs to co-fund the MSVG Circulator Shuttle, providing shared shuttle services for residents. Administrative support ensures coordination of transit partnerships and reporting compliance. Key infrastructure projects

include street lighting upgrades near bus routes to enhance safety, routine street sweeping for cleanliness and stormwater drainage, and drain cleaning for flood mitigation. The village is investing in a Tree Inventory and Master Plan to guide urban forestry efforts, alongside tree maintenance for climate resilience and aesthetic improvements. Pedestrian pathway upgrades near bus stops and schools prioritize walkability and multimodal transportation. These initiatives reflect Virginia Gardens' commitment to fostering a clean, connected, and sustainable community.









O Public Schools

O Colleges and Universities

BIKE-PED INFRASTRUCTURE



23.66% sidewalk coverage of existing road network



0.00 miles



0.13 miles of wide curb lanes



CITY OF WEST MIAMI

CITIZENS' INDEPENDENT TRANSPORTATION TRUST



TRANSIT



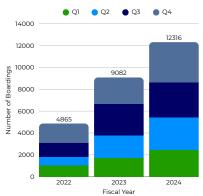
West Miami Freebee

Free, on-demand electric rideshare service connecting residents and visitors to key destinations, such as the Miami Medical Center. Between 2022 and 2023, ridership increased by a substantial 16%. In 2024, ridership further increased to 12,316 rides, surpassing the previous year's total by approximately 36%.

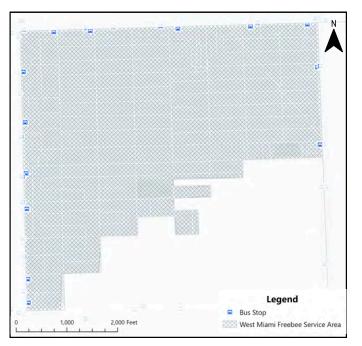
City of West Miami FreeBee Ridership



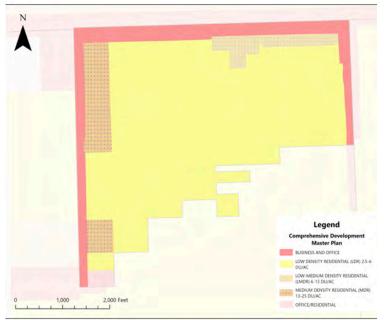




MDT-Operated Bus Stops



PLANNING AND POLICIES



Comprehensive Development Master Plan

West Miami is mainly classified as "Low Density Residential," offering a suburban living environment. There are sections of "Low-Medium Density Residential" and "Medium Density Residential" throughout, providing housing diversity. Along SW 8 Street, SW 57 Avenue, and SW 67 Avenue, the city features "Business and Office" classifications, as well as a portion of "Office/Residential" zoning, supporting mixed-use spaces and commercial activities.

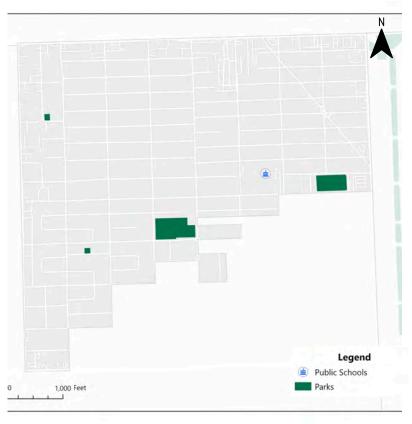
FY 2024-2029 5-Year Municipal Implementation Plan

West Miami has plans to enhance its transit system and infrastructure. The city operates Freebee, a free, electric, on-demand rideshare service that reduces car reliance and supports residents with limited mobility. Over half a million dollars fund its operations, covering vehicle maintenance, driver wages, and service delivery. Infrastructure initiatives include roadway construction, resurfacing, and

maintenance, along with improved lighting and landscaping near key areas such as schools and parks. Regular street sweeping and traffic calming measures like speed humps enhance pedestrian safety, while drainage upgrades address flood-prone areas. The city is replacing outdated speed limit signs, upgrading traffic signal poles, and constructing a chicane on SW 65 Avenue to naturally slow traffic. Additional projects include sidewalk repairs to meet ADA standards and a new midblock crosswalk on SW 62 Avenue for safer pedestrian access. Administrative costs ensure efficient execution of all transit and transportation initiatives, reflecting West Miami's commitment to proactive community improvements.



COMMUNITY FACILITIES









1 Public Schools



O Colleges and Universities





23.15% sidewalk coverage in existing road network



0.35 miles of bike lanes

