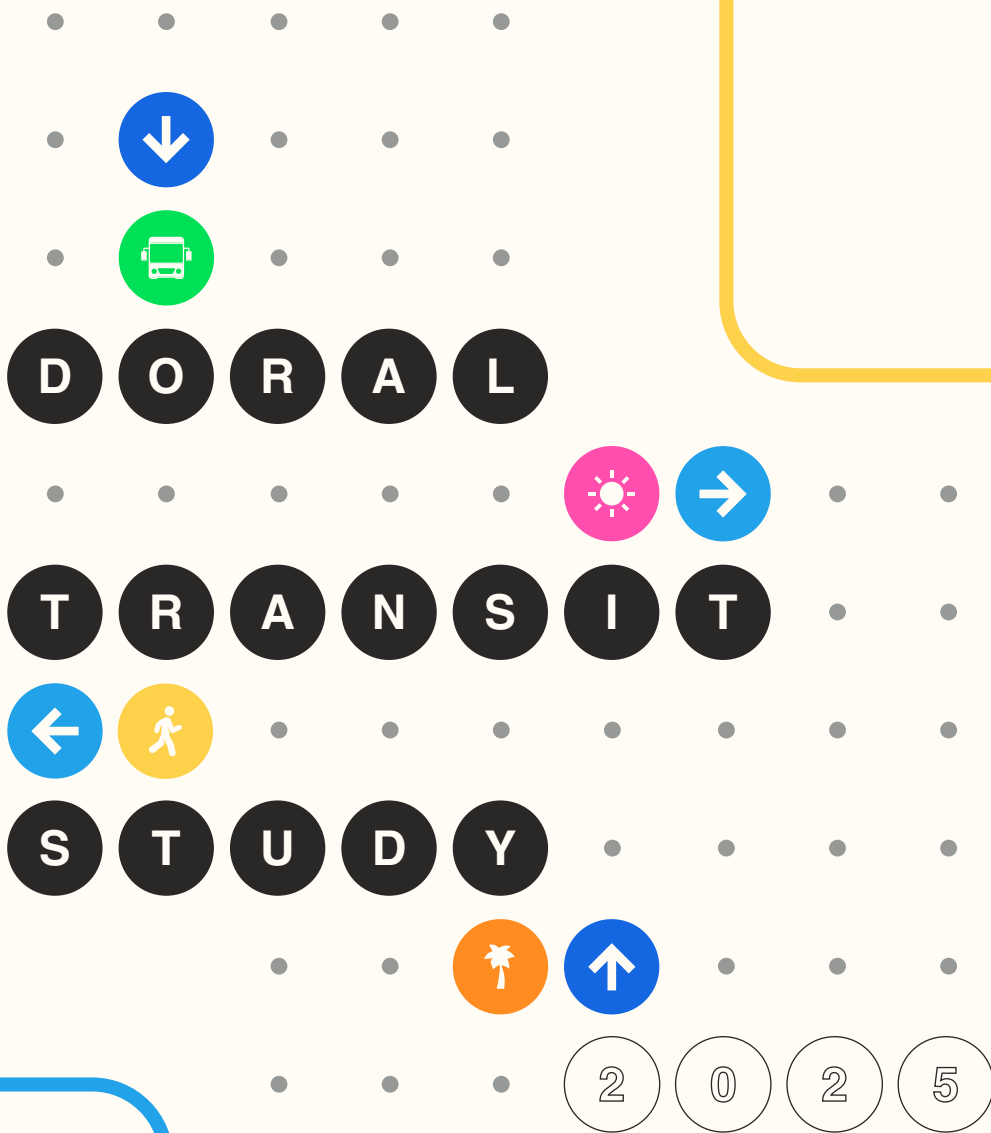
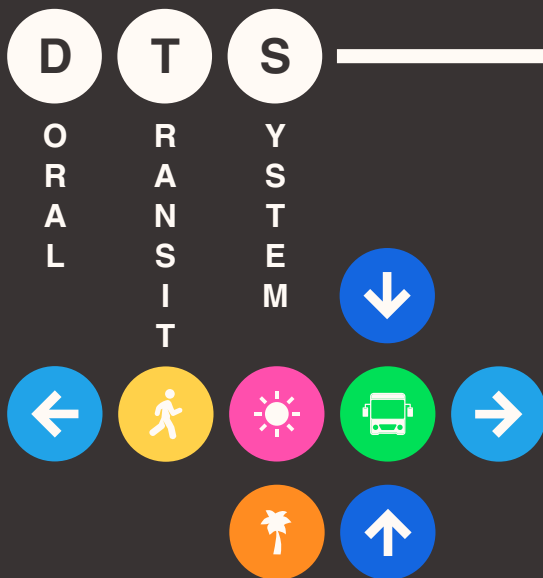




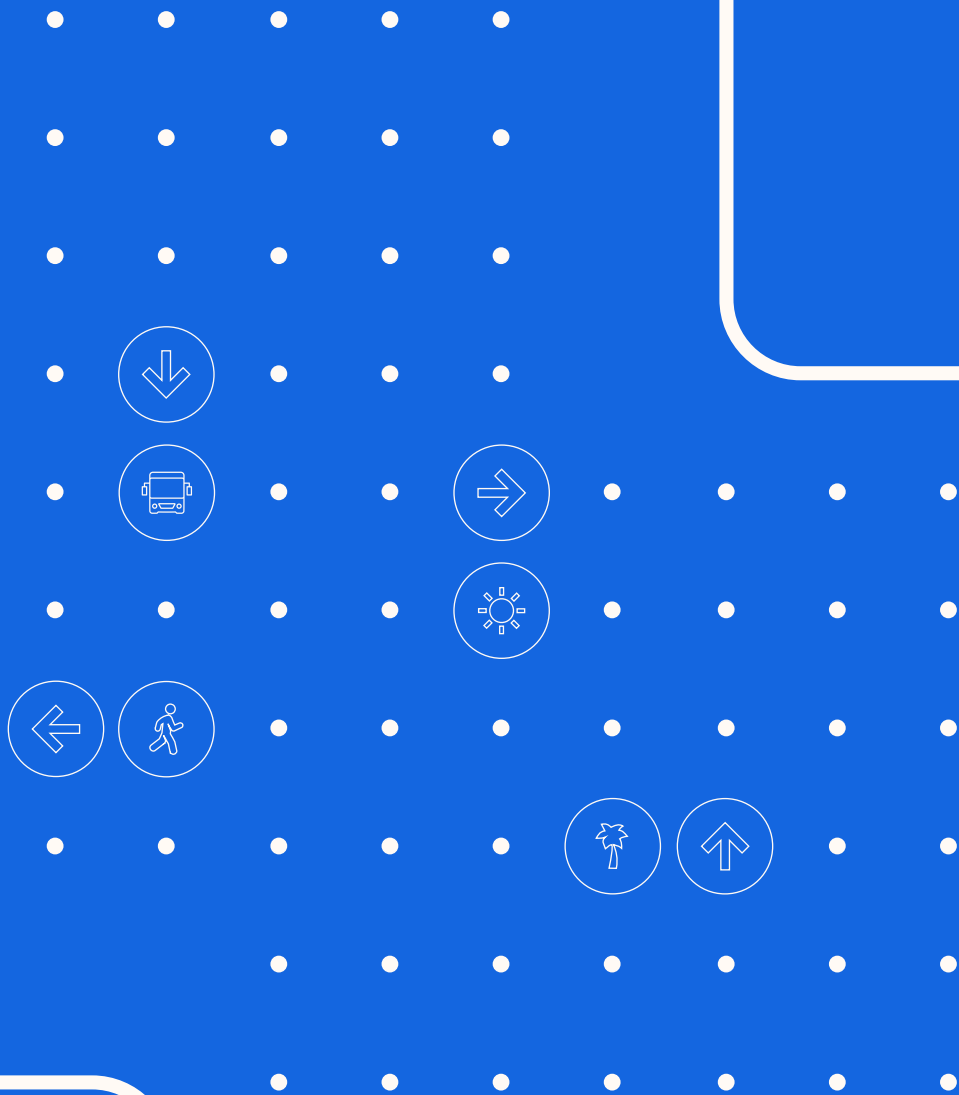
CITY OF DORAL TRANSIT STUDY 2025 UPDATE

A More Mobile and
Accessible Future
for the City of



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1

INTRODUCTION

This study evaluates the future of the Doral Transit System (DTS) in light of regional and local changes. Building on the 2020 Doral Trolley SMART Plan Coordination Study, which introduced the Hub-and-Spoke concept, the analysis considers the impacts of Miami-Dade County's Better Bus Network (BBN), launched in November 2023, along with the City of Doral's continued growth in housing, employment, and medical facilities. It identifies service gaps created by countywide route modifications and refines the DTS to maintain and enhance accessibility. Key recommendations include expanded coverage in underserved areas, a new Health Route, evaluation of fleet and fuel options, and distributed small-scale mobility hubs to strengthen regional connectivity. Together, these refinements aim to ensure the DTS remains efficient, resilient, and responsive to the community's evolving mobility needs.

1

INTRODUCTION

The City of Doral's vibrant community and robust transportation initiatives have long relied on its trolley system to provide residents and visitors with accessible, efficient, and cost-effective transit options. With the launch of Miami-Dade County's Better Bus Network (BBN) in November 2023, significant changes have been introduced to the region's public transit framework, directly impacting Doral's connectivity and accessibility.

This study builds on the foundation established in the 2020 Doral Trolley SMART Plan Coordination Study, which recommended a Hub-and-Spoke network to improve operational efficiency, expand coverage, and integrate the Doral Transit System (DTS) with the broader county transit network. Since that time, both regional transit and the City of Doral itself have experienced substantial change. The implementation of the BBN altered routes, stops, and transfer opportunities, while the City's continued growth has added new residential neighborhoods, employment centers, roadway links, and major medical facilities.

Against this backdrop, the current study examines the interaction between the Better Bus Network and the Doral Trolley, identifying where regional changes have left service gaps and how the DTS can adapt to maintain seamless mobility. The assessment reviews modifications to regional routes within Doral, highlighting those that were altered, discontinued, or newly established. These changes, while designed to optimize transit at the county level, risk reducing accessibility in certain parts of the city.

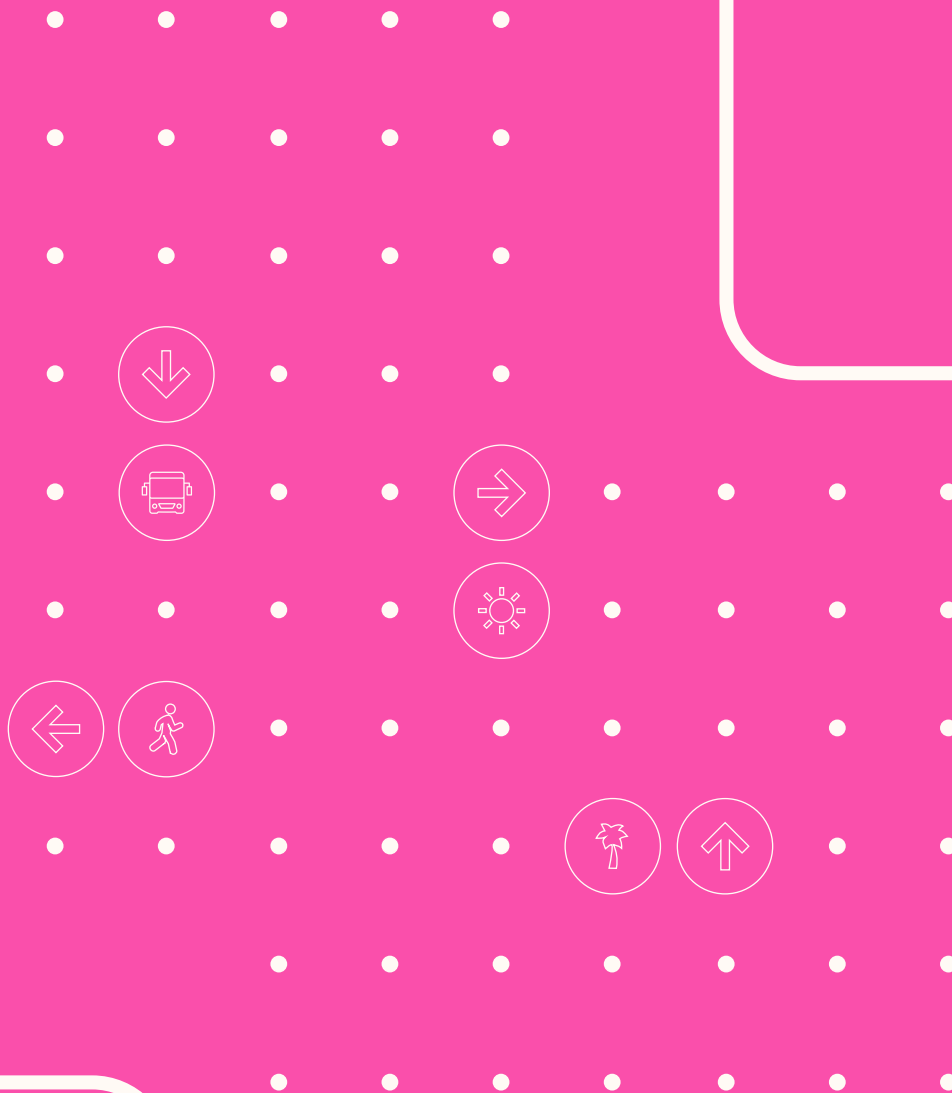


To respond effectively, this study refines the Hub-and-Spoke concept and introduces several enhancements to the DTS:

- ➞ Coverage for underserved areas where BBN route eliminations or adjustments reduced transit access.
- ➞ A new "Health Route" to serve medical institutions and related destinations.
- ➞ Fleet and fuel evaluation to improve operational efficiency, environmental sustainability, and service flexibility.
- ➞ Integration with micro-mobility services and the creation of distributed small-scale mobility hubs rather than a single central transfer facility.



Through this updated analysis, the report highlights both the challenges and opportunities presented by the integration of the Better Bus Network and the Doral Trolley, offering insights into the effectiveness, resilience, and sustainability of this evolving transit system. To build these insights, the study followed a structured process: reviewing existing conditions and the impacts of the BBN on local service; engaging the community through public workshops to capture rider needs and priorities; and developing and evaluating alternative route structures, mobility hub concepts, and fleet strategies. This process ensures that the recommendations are both data-driven and community-informed, positioning the City of Doral to implement a transit system that reflects local priorities while strengthening regional connectivity.



2

LITERATURE REVIEW

The purpose of this literature review is to synthesize findings from prior planning efforts that inform the current Doral Transit Study Update. Two key sources serve as the foundation for this analysis: the Doral Trolley SMART Plan Coordination Study (2020) and the Miami-Dade Department of Transportation and Public Works' (DTPW) Better Bus Network Implementation (2023–2024). Together, these references provide critical insights into how Doral's local transit system has evolved and how it must adapt to a shifting regional mobility landscape.

2

LITERATURE REVIEW

DORAL TROLLEY SMART PLAN COORDINATION STUDY (2020)

Overview

This study developed six (6) alternative trolley routing scenarios designed to address existing service challenges and take advantage of emerging opportunities. Each alternative was evaluated using a comprehensive set of performance metrics, including total walkshed coverage, average route length, number of major origin-destination pairs connected, average accessible destinations per route, intersystem transfer points, connecting regional routes, projected annual ridership (based on 15-minute headways, seven days a week), and projected annual operating cost for the opening year. Based on this comparative analysis of benefits and trade-offs, a single preferred alternative was identified for recommendation.

Beyond the routing analysis, the study also provides broader policy, systemwide, and programmatic recommendations. These strategies are organized into an Action Plan, which prioritizes initiatives based on ease of implementation and logical sequencing. The Action Plan serves as a roadmap for the City of Doral, outlining the steps required for implementation, including coordination with partner agencies, development of intergovernmental agreements or amendments, phased project development, and the formal approvals needed by elected officials and relevant committees.

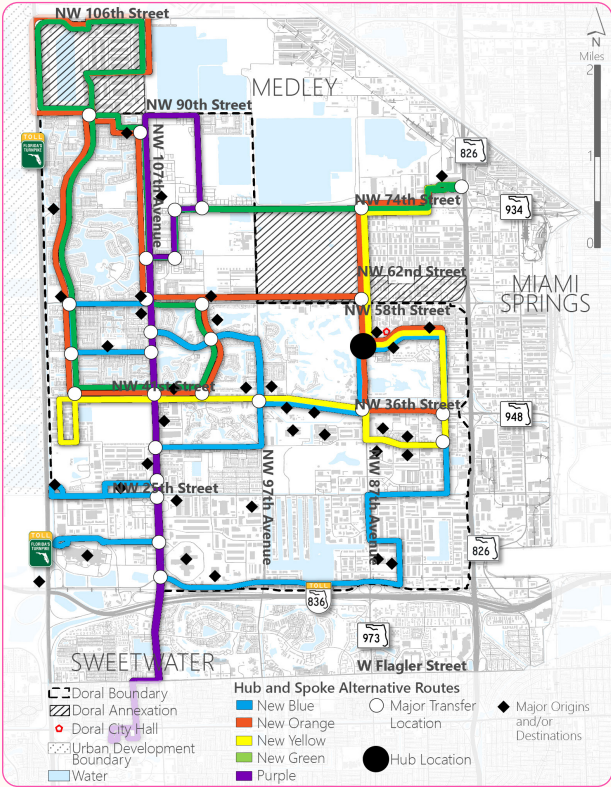


Study Recommendations

The recommended routing alternative is modeled on the Hub-and-Spoke system, a concept popularized by Delta Airlines in 1955, which revolutionized the efficiency of networked travel. This approach restructures Doral's trolley service to improve efficiency, expand coverage, and strengthen connectivity across the City. Below are the route descriptions of the recommended Hub& Spoke alternative from the 2020 study which is displayed in Figure 1.

- ➡ Route 1 is shortened and realigned to focus service exclusively in the southern portion of Doral, improving efficiency and reducing redundancy.
- ➡ Route 2 is redesigned into a more linear east-west corridor, enhancing access to major commercial and retail centers along Doral Boulevard and NW 87th Avenue. It is anchored at two logical terminals: Miami-Dade College West Campus and the Palmetto Metrorail Station, providing stronger regional connectivity.
- ➡ Route 3 remains largely unchanged, except for an extension to serve the City's annexed area at Lest Tern Lake (Section 6, Township 53 South, Range 40 East).
- ➡ Route 4 (FIU Route) is retained in its existing form.
- ➡ Two new one-way circulator routes supplement Routes 1 and 3, operating in opposite directions. The Light Blue Route travels counterclockwise while the Dark Blue Route operates clockwise, mirroring the existing Green and Orange Routes.
- ➡ The Yellow Route and Purple Route operate as linear, one-way services designed to increase directional coverage and reduce travel times.

● Figure 1. 2020 Study Hub & Spoke Alternative



The most significant feature of the Hub-and-Spoke alternative is the creation of a centralized hub near Downtown Doral, where four trolley routes converge. This hub provides a single, highly visible transfer location where passengers can easily access any route in the system. By consolidating transfers into one central location, the network simplifies trip planning, increases reliability, and strengthens the overall user experience.

In addition to enhancing local connectivity, the Downtown Doral hub also has the potential to serve as a multimodal access point. Features such as designated drop-off and pick-up zones, extended parking opportunities, and enhanced bicycle and pedestrian facilities will support seamless integration between modes. This allows transfers to occur in an active, accessible, and well-designed environment rather than at dispersed intersections or along congested corridors.

BETTER BUS NETWORK IMPLEMENTATION (2023-2024)

Overview

The Miami-Dade Better Bus Network (BBN) is the most significant restructuring of the county’s bus system in decades. Officially launched on November 13, 2023, the BBN was designed to create a transit system that is simpler, more reliable, and more frequent, addressing long-standing concerns about service inefficiency and outdated routing. The initiative was led by the Miami-Dade Department of Transportation and Public Works (DTPW) in partnership with community stakeholders, advocacy groups, and planning experts, representing years of data-driven analysis and public engagement.

The BBN aims to shift Miami-Dade’s transit system toward a high-frequency grid, allowing riders to travel more quickly and efficiently across the county, with a focus on major corridors and activity centers. For Doral, this transformation has direct implications on local mobility, since several legacy county routes within the city were eliminated, consolidated, or realigned.

Figure 2 showcases the Miami-Dade overall BBN Network.



BBN Key Features

More Frequent Service

Core routes now operate every 10 to 15 minutes during peak hours, greatly reducing wait times.

Frequency is concentrated on high-demand corridors, allowing riders to rely on buses without consulting schedules.

Simplified Routes

The number of countywide routes was reduced, with an emphasis on direct and streamlined paths.

Older meandering routes were replaced with clear, linear services, making the system easier to understand and navigate.

Improved Regional Connectivity

Stronger integration with Metrorail, major transfer hubs, and cross-town corridors.

Expanded north-south and east-west services provide new travel options beyond Downtown Miami, improving suburb-to-suburb access.

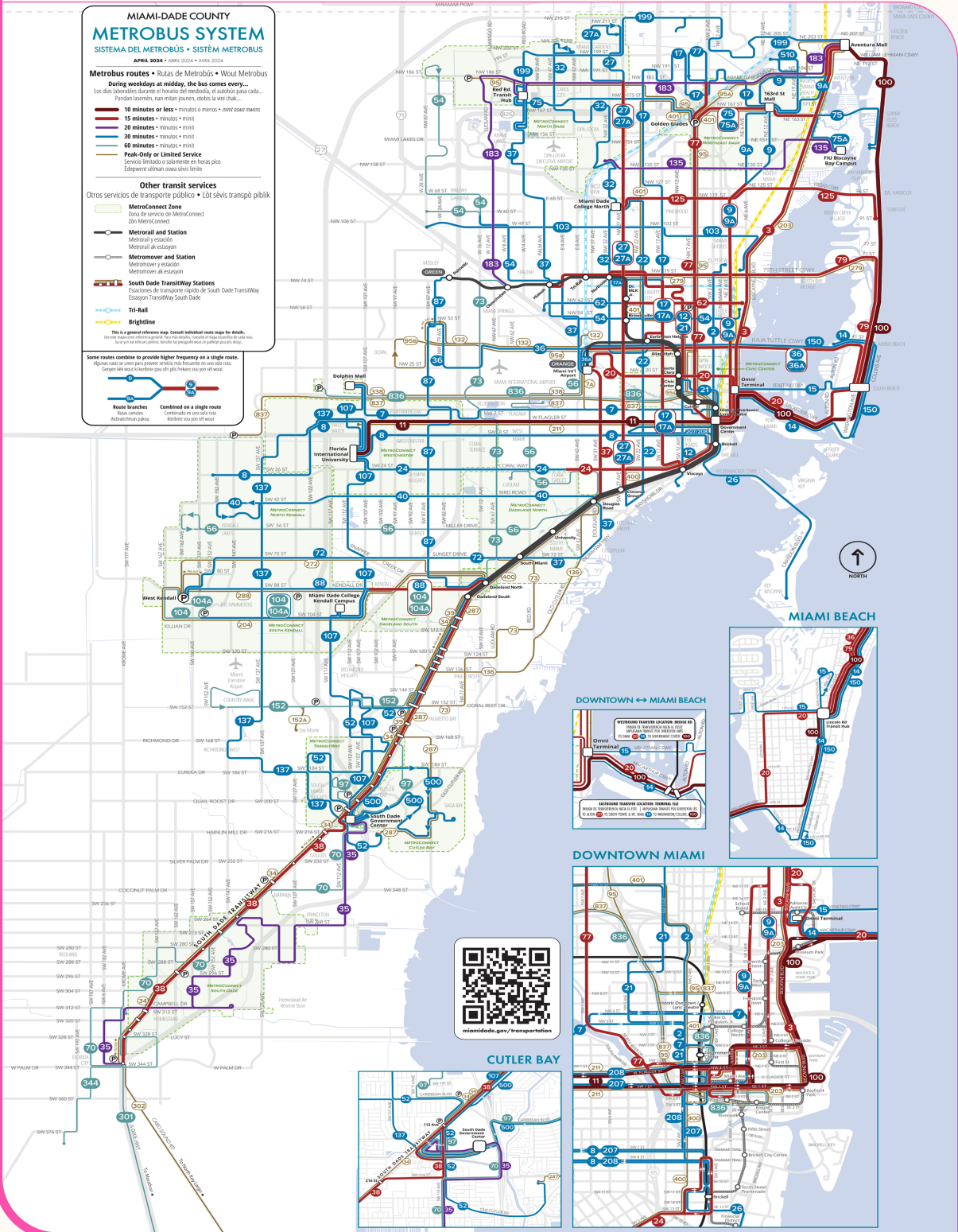
Extended Service Hours

Many routes now begin earlier in the morning and operate later at night, increasing usefulness for shift workers and late-night riders.

Enhanced Weekend Service

Bus frequencies on Saturdays and Sundays were significantly improved, making transit a more viable seven-day-a-week option.

● Figure 2. Miami-Dade County Better Bus Network Route Map



Reasoning for BBN Implementation

Prior to the BBN, Miami-Dade's bus system had become slow, infrequent, and overly complex. Many routes had not been updated in decades and were no longer aligned with changing travel patterns, new development areas, or modern commuting needs. The BBN sought to:

- ➞ Increase ridership by focusing on high-frequency service.
- ➞ Reduce traffic congestion by offering a viable transit alternative.
- ➞ Improve equity by ensuring frequent service to areas with high transit dependency.
- ➞ Simplify travel through a more legible and predictable system design.

BBN Implementation Challenges

While the BBN represents a major improvement in regional transit efficiency, its rollout has not been without challenges:

- ➞ Some neighborhoods lost direct service because of route consolidations.
- ➞ Riders accustomed to one-seat rides had to adjust to transfers, which are now more common in the grid-based design.
- ➞ The transition period saw confusion and delays, as long-time riders adapted to new routes and schedules.
- ➞ Community discussions continue regarding the balance between frequency and coverage, particularly in areas like Doral that rely on a combination of county and city-operated services.

BBN Implications for Doral

For the City of Doral, the BBN has both benefits and drawbacks:

- Opportunities**
- Improved regional frequency and connectivity at key hubs (e.g., Palmetto Metrorail Station) create stronger linkages for trolley riders transferring to the county system.
- Challenges**
- Consolidation of county bus service has reduced coverage in parts of Doral, creating service voids that the trolley must now address to ensure equitable access.

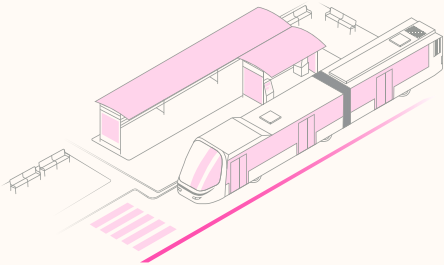
Integration Needs

The trolley system is uniquely positioned to complement the BBN by bridging local first- and last-mile gaps, connecting neighborhoods and employment centers to high-frequency regional routes.

Overall BBN Impact

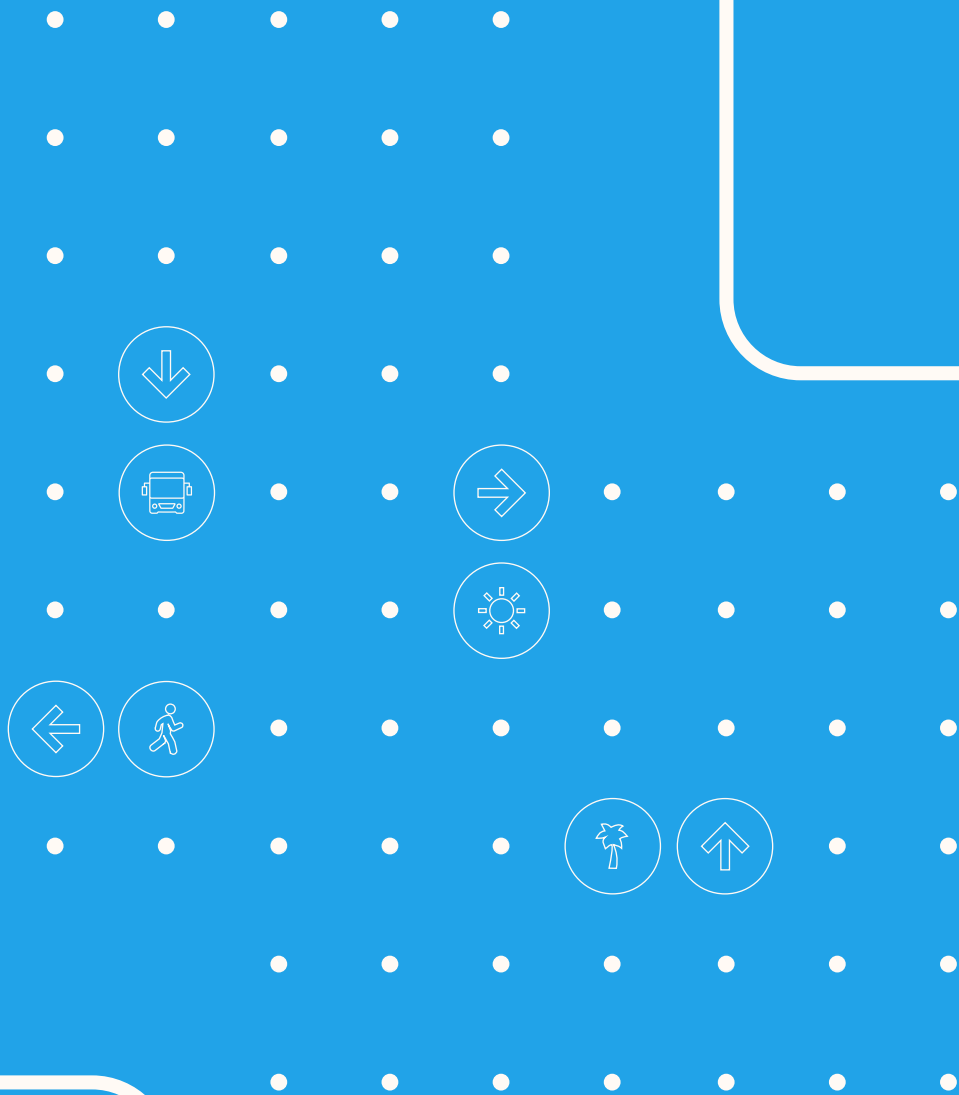
The BBN marks a paradigm shift in Miami-Dade transit planning, positioning the system to attract new riders, improve mobility, and serve as a backbone for future investments in rail and bus rapid transit. For Doral, the challenge will be adapting the local trolley system to function as a feeder and complement to the countywide network, ensuring that residents continue to enjoy seamless, reliable, and equitable mobility in the evolving regional landscape.

The following table provides a side-by-side comparison of the 2020 Doral Trolley SMART Plan Study and the 2023 Miami-Dade Better Bus Network (BBN). It highlights how assumptions and recommendations from the earlier study align, or diverge, from the outcomes of the BBN implementation, underscoring key implications for Doral's transit system moving forward.



● **Table 1.** Comparison of 2020 Doral Trolley Study vs. 2023 Better Bus Network Outcomes

CATEGORY	2020 DORAL TROLLEY SMART PLAN STUDY	2023 BETTER BUS NETWORK (BBN) OUTCOMES FOR DORAL
System Vision	Recommended a Hub-and-Spoke network with a central transfer hub in Downtown Doral.	Implemented a countywide high-frequency grid with simplified east–west and north–south corridors.
Coverage	Sought to expand trolley coverage to underserved areas while consolidating redundant service.	Reduced overall route coverage; some neighborhoods in Doral lost direct county bus service, creating coverage gaps.
Frequency	Trolley frequency assumed at 15–20 minutes, focused on improving reliability within city limits.	Core county routes now run every 10–15 minutes during peak hours, but DoraWI coverage depends on trolley feeders.
Connectivity	Proposed strong integration with county transit hubs, especially the Palmetto Metrorail Station and regional bus corridors.	Palmetto Metrorail Station remains a key hub, but local connections to eliminated county routes now depend heavily on Doral's trolley system.
Routing Approach	Hub-and-Spoke design intended to simplify transfers and concentrate activity at a single central hub.	BBN reduced redundant, circuitous routes, emphasizing direct, high-demand corridors across the county.
Service Hours	Proposed extension of trolley hours to better serve evening and weekend riders.	Countywide routes now operate earlier mornings, later nights, and stronger weekend service; trolley must align locally.
Equity Focus	Recognized importance of serving transit-dependent populations in residential neighborhoods.	Countywide equity goals maintained, but Doral-specific equity concerns arise due to loss of local county service.
Integration Needs	Emphasized the role of the trolley in supporting regional mobility.	Doral trolley now plays a larger role as a feeder and connector, filling gaps left by county route consolidations.



3

EXISTING NETWORK ASSESSMENT

This section provides a detailed evaluation of the Doral Transit System (DTS) as it operates today. This review examines the four active trolley routes, their connectivity to Miami-Dade's Better Bus Network, and their role in linking residents, workers, and visitors to schools, employment centers, medical facilities, and regional destinations. In addition to route structure, the assessment explores community characteristics, ridership patterns, and transit amenities to understand how effectively the current system meets mobility needs. By establishing this baseline, the study identifies both strengths and gaps that frame the path toward system refinement.

3

EXISTING NETWORK ASSESSMENT

EXISTING DORAL TRANSIT SYSTEM

The City of Doral currently operates four active trolley routes, which serve as the backbone of local transit by connecting residential neighborhoods, employment centers, schools, and retail destinations. These routes provide residents and visitors with a fare-free, reliable, and accessible mobility option, reducing dependence on private vehicles and improving circulation within the city.

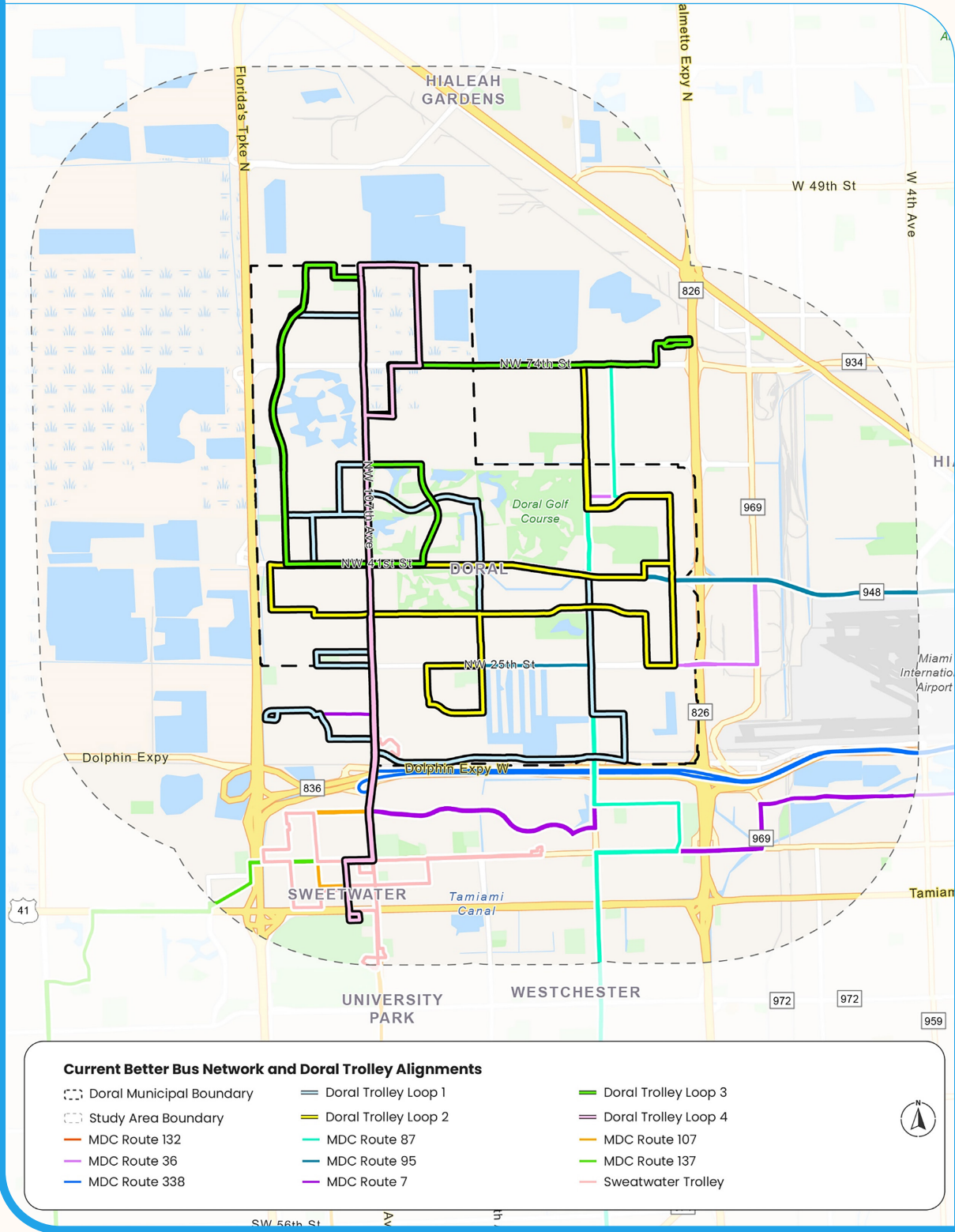
Beyond the city-operated trolley, Miami-Dade County's Better Bus Network (BBN) extends eight county bus routes into Doral's municipal boundaries, strengthening regional connectivity. These routes provide critical links to the broader transit system, including the Palmetto Metrorail Station, Miami International Airport, and major countywide bus corridors. With the launch of the BBN in November 2023, frequency and reliability on these regional routes have improved significantly, though some coverage gaps emerged in areas where older county routes were consolidated or discontinued.

In addition, the neighboring City of Sweetwater operates its own trolley service, which briefly enters Doral to serve key regional destinations. This includes access to the Miami International Mall

and Dolphin Mall, two of the largest shopping and employment hubs in the area. The presence of overlapping municipal services highlights the interconnected nature of transit provision in western Miami-Dade and underscores the importance of Doral's trolley system in complementing both county and neighboring city services.

Overall, the existing Doral Transit System functions as both a local circulator and a regional connector, filling critical first- and last-mile gaps left by the Better Bus Network while supporting the city's economic growth and mobility objectives. This section not only documents the current system but also examines its performance to identify opportunities for improvement, such as expanding coverage, enhancing efficiency, and strengthening regional integration. These insights directly inform the overarching purpose of this study: refining the Hub-and-Spoke concept introduced in 2020 and introducing various enhancements to the Doral Transit System (DTS). Figure 4 depicts the existing DTS, including local and regional routes.

● Figure 3. Existing Doral Trolley and Better Bus Network Alignments



EXISTING DORAL TROLLEY ROUTES ANALYSIS

Overview

The Doral Trolley System currently operates four active routes, each designed to connect residential, educational, commercial, and institutional destinations across the city:

Route 1 (Crosstown Connector) runs weekdays from 6:00 am to 10:00 pm, and weekends from 7:00 am to 8:00 pm. It serves as the most comprehensive circulator, traversing neighborhoods and commercial zones from Miami International Mall through central Doral and into southwestern corridors.

Route 2 (Commercial–Metrorail Connector) operates weekdays from approximately 6:10 am to 9:20 pm, with Saturday service from 7:00 am to 7:30 pm (no Sunday service). This line focuses on linking Doral's commercial and employment centers along Doral Boulevard and NW 87th Avenue to the Palmetto Metrorail Station, enhancing regional access.

Route 3 (Residential–Metrorail Connector) begins early around 5:50 am—and runs until 9:30 pm on weekdays; Saturdays operate from approximately 6:50 am to 7:00 pm, with no service on Sundays. Route 3 primarily serves northern residential areas, providing an essential commuter link to mass transit.

Route 4 (FIU Connector) offers weekday service from 6:00 am to 11:00 pm, with no weekend operations. This route provides critical access to Florida International University's Doral campus, supporting student and faculty travel needs across the city.

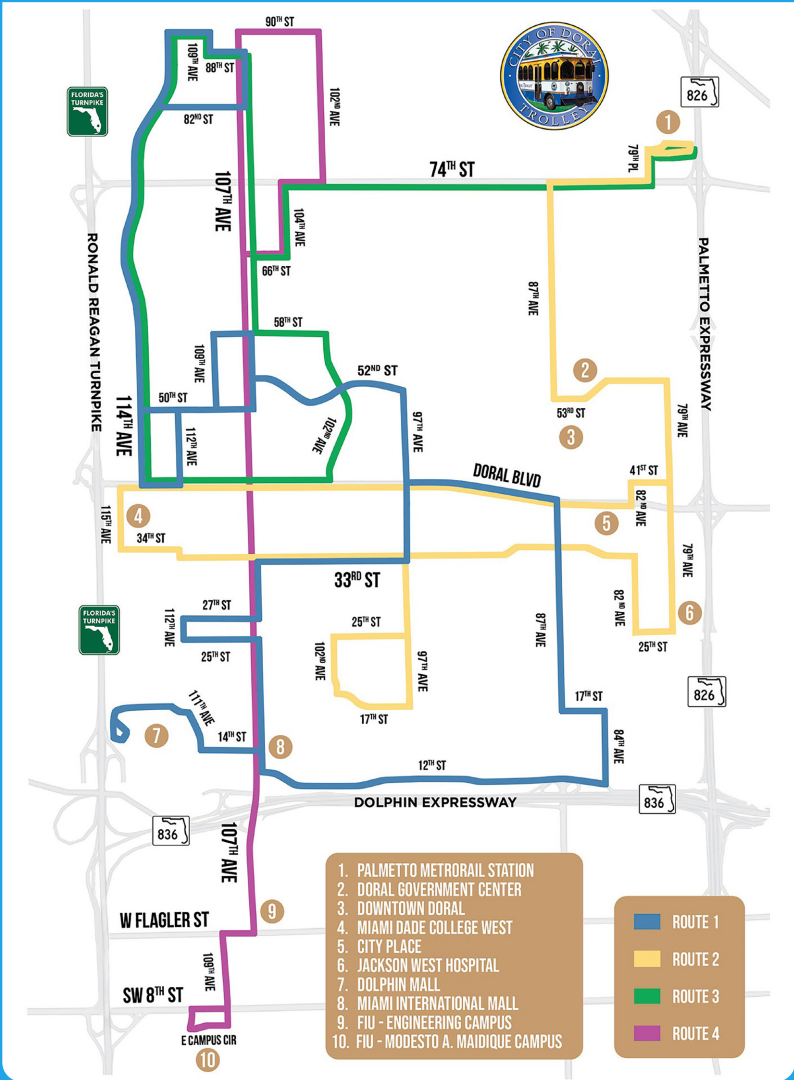
Figure 4 displays a map of the existing Doral Trolley routes and the major destinations they serve within the city and its vicinity.



To further enhance passenger convenience and reliability, the Doral Trolley Tracker provides real-time arrival and operational information, enabling riders to plan their trips efficiently and minimizing wait times at stops.



● Figure 4. Existing Doral Trolley Routes and Major Destinations

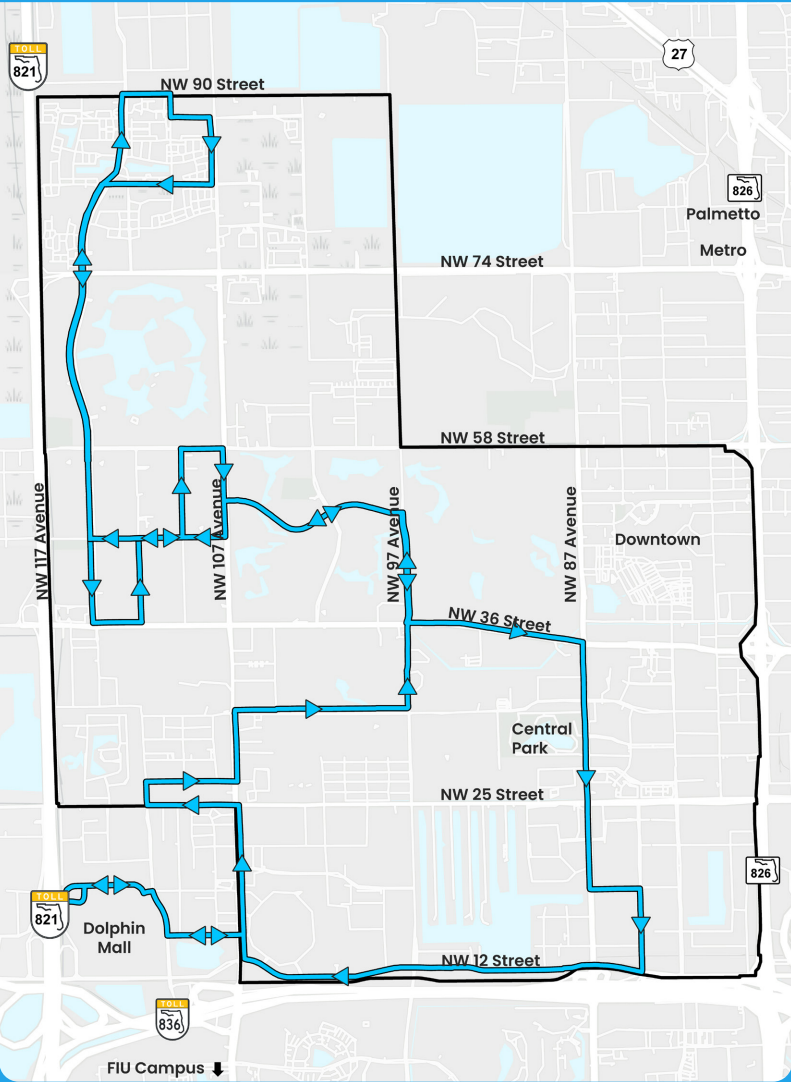


The existing four distinct trolley routes collectively form the backbone of the city's local transit network. Designed to connect residential neighborhoods with major employment centers, educational institutions, retail corridors, and regional transit hubs, the system provides fare-free, reliable mobility for both residents and visitors. Each route plays a unique role, ensuring that the network supports daily commuting, student travel, and discretionary trips while also bridging first- and last-mile gaps to Miami-Dade County's regional transit services.

This section provides a comprehensive analysis of the current Doral Trolley system, serving as the foundation for evaluating service strengths, identifying gaps, and guiding refinements in alignment with the City's broader mobility goals. The analysis reviews the system from multiple perspectives: a spatial overview of existing routes, demographic and community characteristics, ridership patterns, and the availability of transit stop amenities. Together, these elements provide a snapshot of how well the trolley system currently meets community needs and where targeted improvements can deliver the most impact.

Existing Individual Route Overview

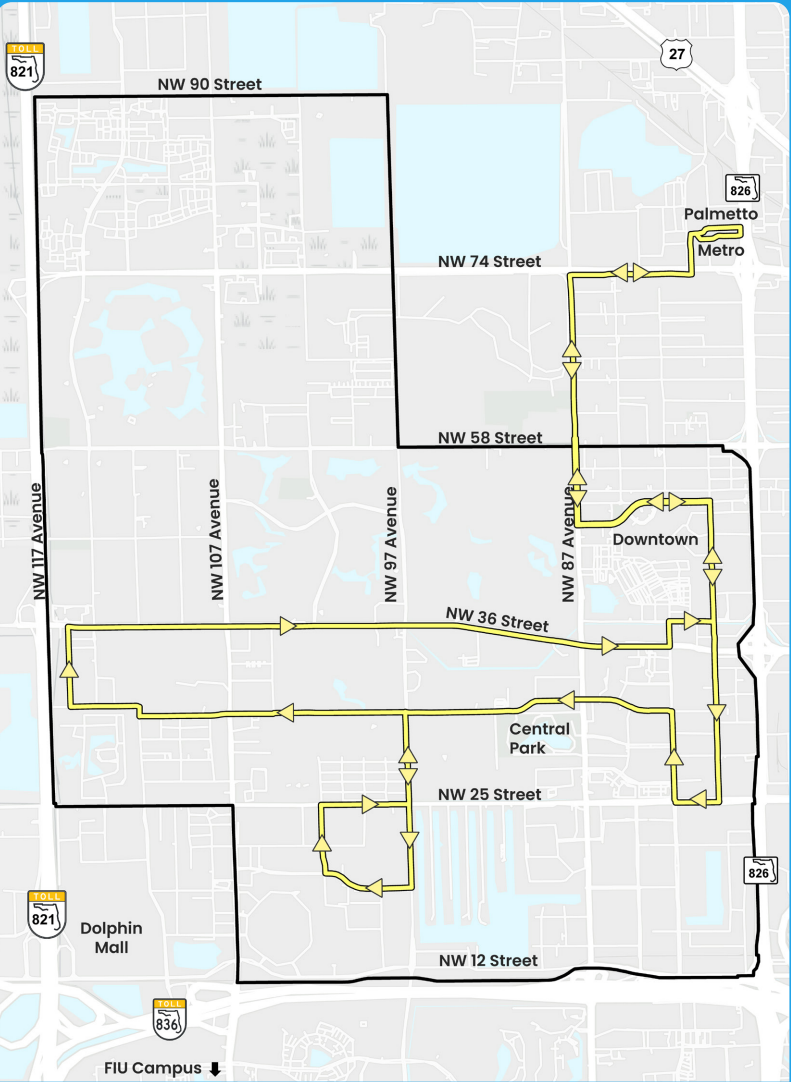
● Figure 5. Existing Route 1 Crosstown Connector



Existing Route 1 Crosstown Connector

The most comprehensive circulator in the system, linking diverse residential areas to commercial and institutional destinations across central and southern Doral. Operating on weekdays from 6:00 am to 10:00 pm and weekends from 7:00 am to 8:00 pm, this route ensures all-day connectivity. Key destinations include Miami International Mall, community parks, and civic facilities, making Route 1 essential for local trips. Its coverage is the only one truly supporting intra-city mobility, enabling access to daily needs without reliance on personal vehicles.

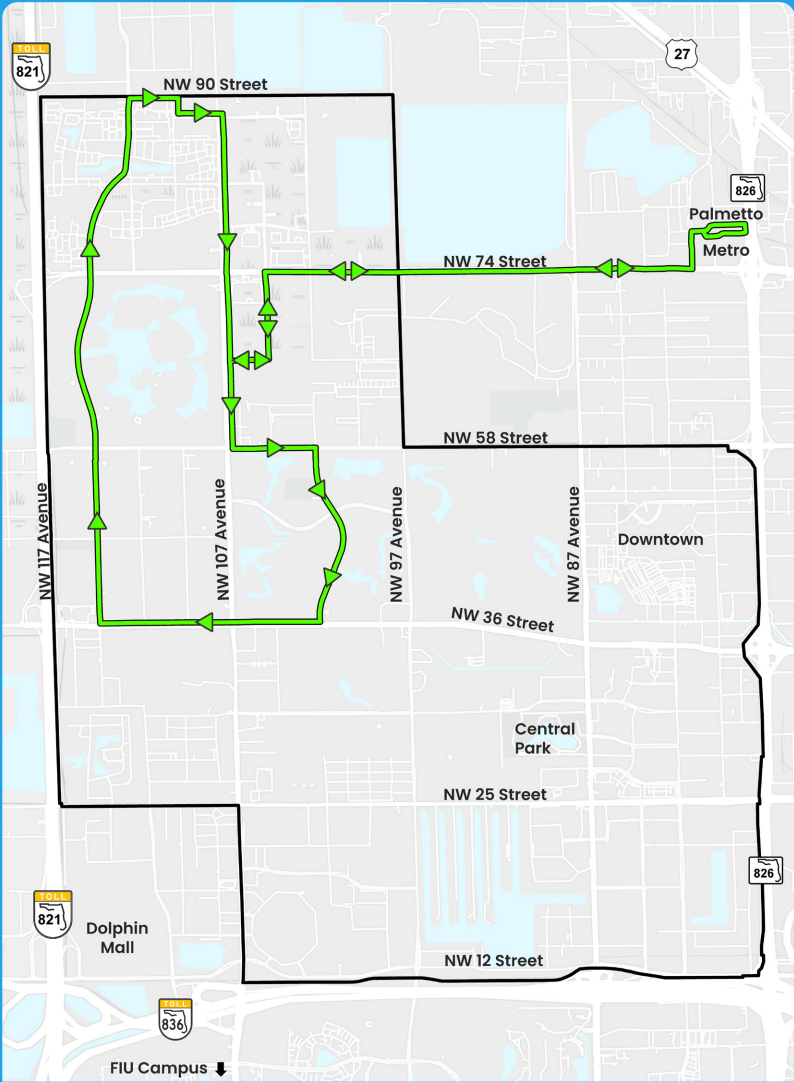
● Figure 6. Existing Route 2 Commercial-Metrorail Connector



Existing Route 2 Commercial-Metrorail Connector

Functions as a critical east-west corridor, enhancing regional access by directly linking Doral's employment and retail centers to the Palmetto Metrorail Station. Service runs weekdays from approximately 6:10 am to 9:20 pm and on Saturdays from 7:00 am to 7:30 pm (no Sunday service). Anchored by Miami-Dade College West Campus on one end and the Palmetto Metrorail Station on the other, the route follows Doral Boulevard and NW 87th Avenue, two of the city's busiest commercial corridors. This makes Route 2 especially valuable for commuters and students who rely on seamless connections between Doral and the broader Miami-Dade transit network.

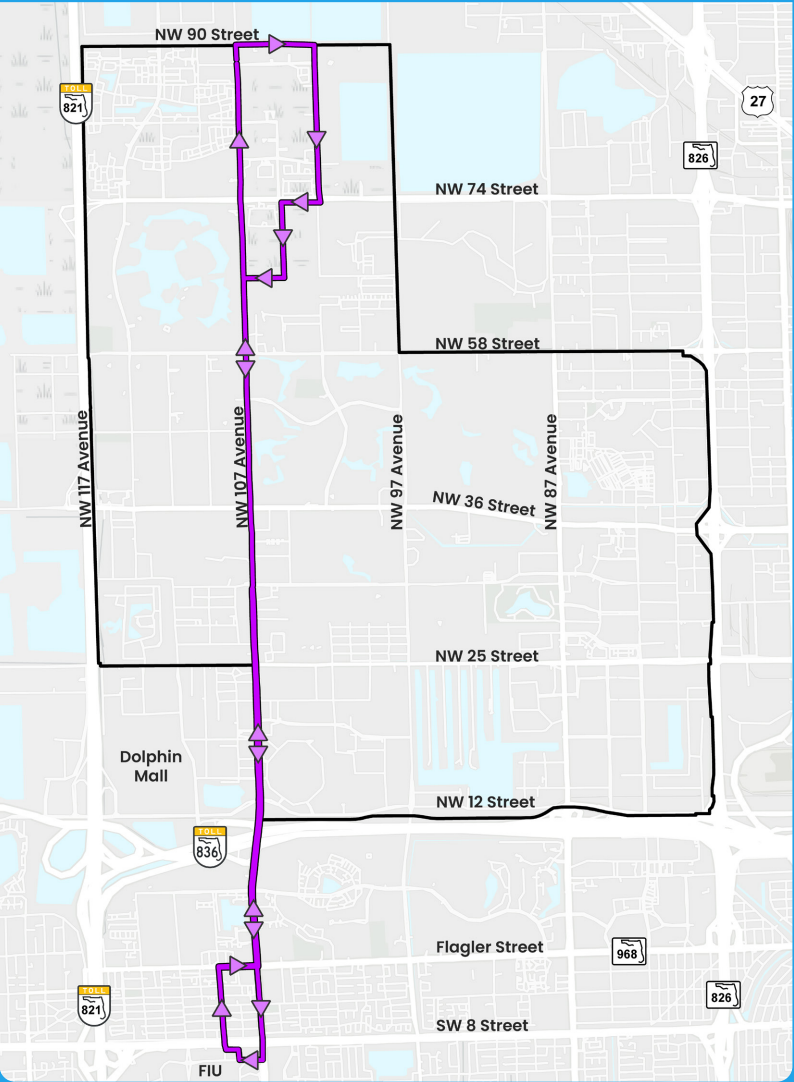
● Figure 7. Existing Route 3 Residential-Metrorail Connector



Existing Route 3
Residential–Metrorail Connector

Route 3 serves primarily northern Doral neighborhoods, extending to newly annexed areas and providing another direct commuter link to the Palmetto Metrorail Station. Its operating hours are weekdays from 5:50 am to 9:30 pm and Saturdays from 6:50 am to 7:00 pm, with no Sunday service. By covering residential areas not directly served by other routes, Route 3 plays an essential role in maintaining equitable mobility across the city. Its ridership reflects a mix of commuter demand and local circulation, reinforcing its dual purpose within the network.

● Figure 8. Existing Route 4 FIU Connector

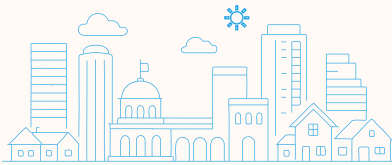


Existing Route 4
FIU Connector

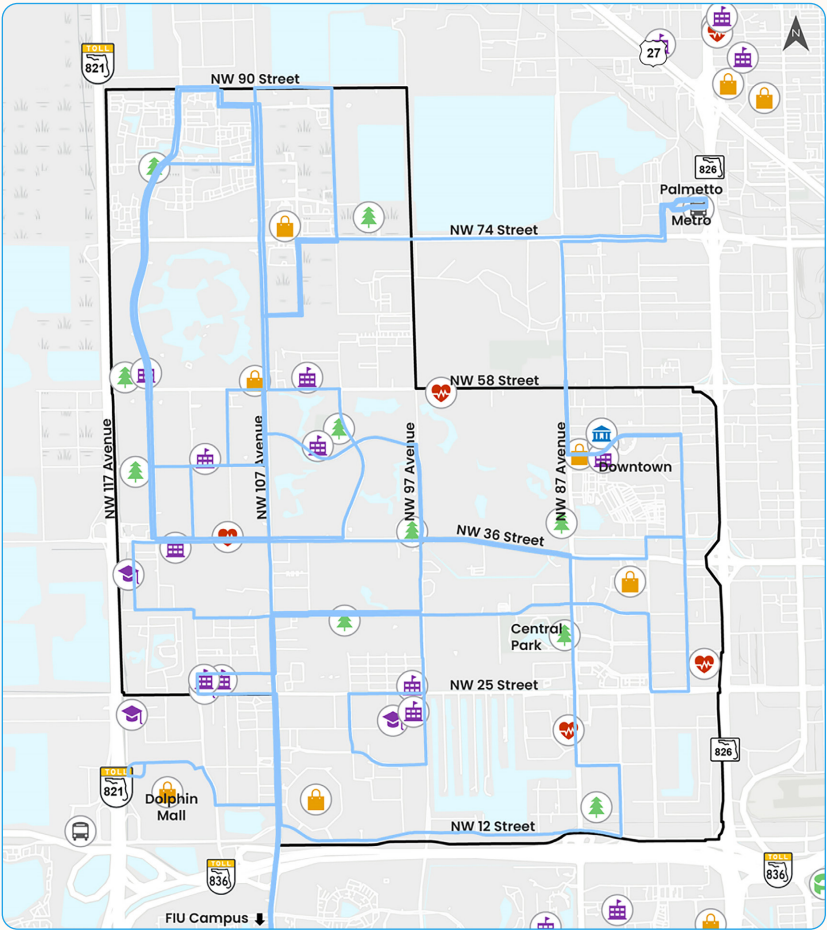
Route 4 is a specialized service providing direct connections to Florida International University (FIU), one of the region's largest educational and employment hubs. It operates only on weekdays from 6:00 am to 11:00 pm, with no weekend service. In addition to serving FIU students, faculty, and staff, this route benefits adjacent residential and retail areas, creating a vital educational and economic link between Doral and the university. Its extended evening service hours ensure accessibility for both day and evening classes, as well as extracurricular activities.

Critical Community Characteristics

A detailed examination of community demographics and land use patterns underscores the importance of tailoring transit service to local needs. The analysis maps population density, employment centers, schools, medical facilities, parks, and shopping destinations, providing insight into where demand for transit service is most concentrated. It also highlights the distribution of transit-dependent populations, such as older adults, youth, and households without access to a private vehicle. These characteristics reveal areas of high latent demand where transit service is critical for equitable mobility, guiding opportunities for expanding trolley coverage and prioritizing future infrastructure investments.



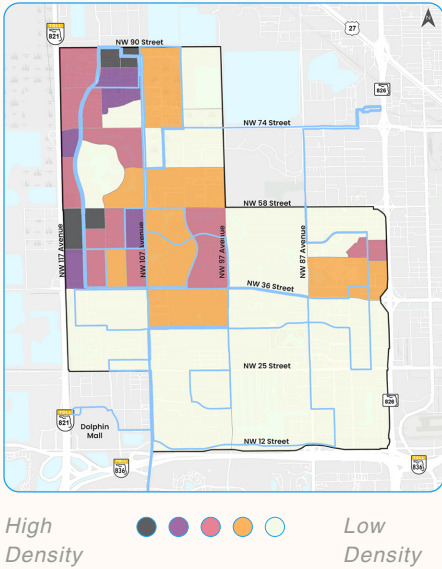
● Figure 9. Doral's Points of Interests



The map highlights key trip-generating locations in Doral, including schools, parks, medical centers, cultural sites, and commercial hubs. These destinations are among the most common reasons residents and visitors travel within the city, and they play a critical role in shaping transit demand. Locations such as Miami International Mall, CityPlace Doral, Downtown Doral, Jackson West Medical Center, and multiple public schools stand out as priority areas for trolley service. Ensuring reliable connections to these sites supports daily needs, enhances access to education and healthcare, and strengthens Doral's economic vitality.

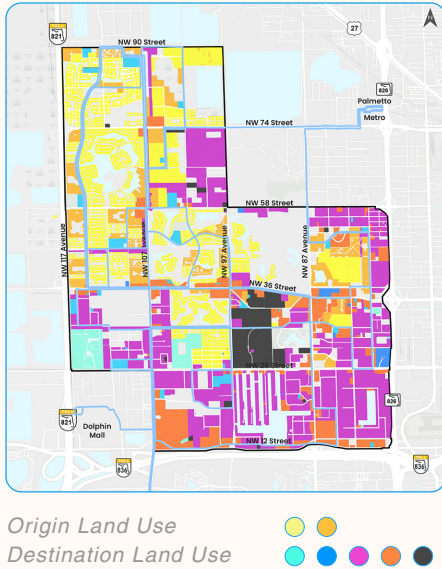
- Outdoor Parks
- Educational
- Medical
- Commercial

● Figure 10. Doral's Transit Dependent Populations



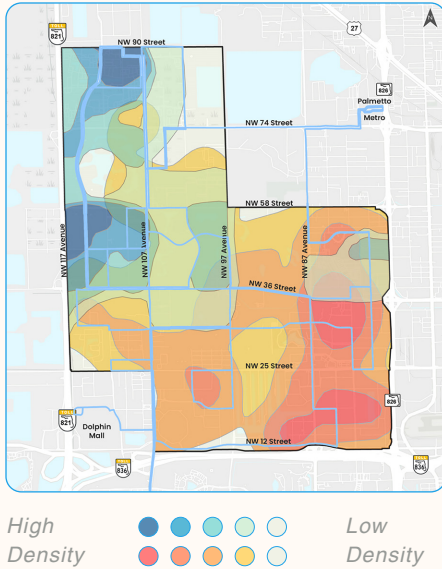
This map highlights areas with higher shares of youth, elderly residents, and households without access to a vehicle groups who are most reliant on public transportation. Clusters of transit-dependent populations are found across central and southern neighborhoods, as well as emerging northern areas. By linking these communities to jobs, schools, and shopping centers, the Doral Trolley helps ensure that mobility is equitable and inclusive. Targeted service improvements in these areas will have a disproportionate benefit, expanding opportunities for those who depend most on transit.

● Figure 11. Doral's Existing Land Use



The land use map provides insight into the spatial relationship between trip origins and destinations. Residential areas (shown in yellow and orange) represent the majority of trip origins, while commercial, institutional, and recreational areas (depicted in other colors) represent key destinations. Notably, corridors such as Doral Boulevard and NW 87th Avenue emerge as critical activity centers where residential and non-residential uses converge. This mix underscores the importance of trolley service as both a commuter link and a local circulator, bridging daily life activities from home to work, school, shopping, and recreation.

● Figure 12. Doral's Population vs Job Densities

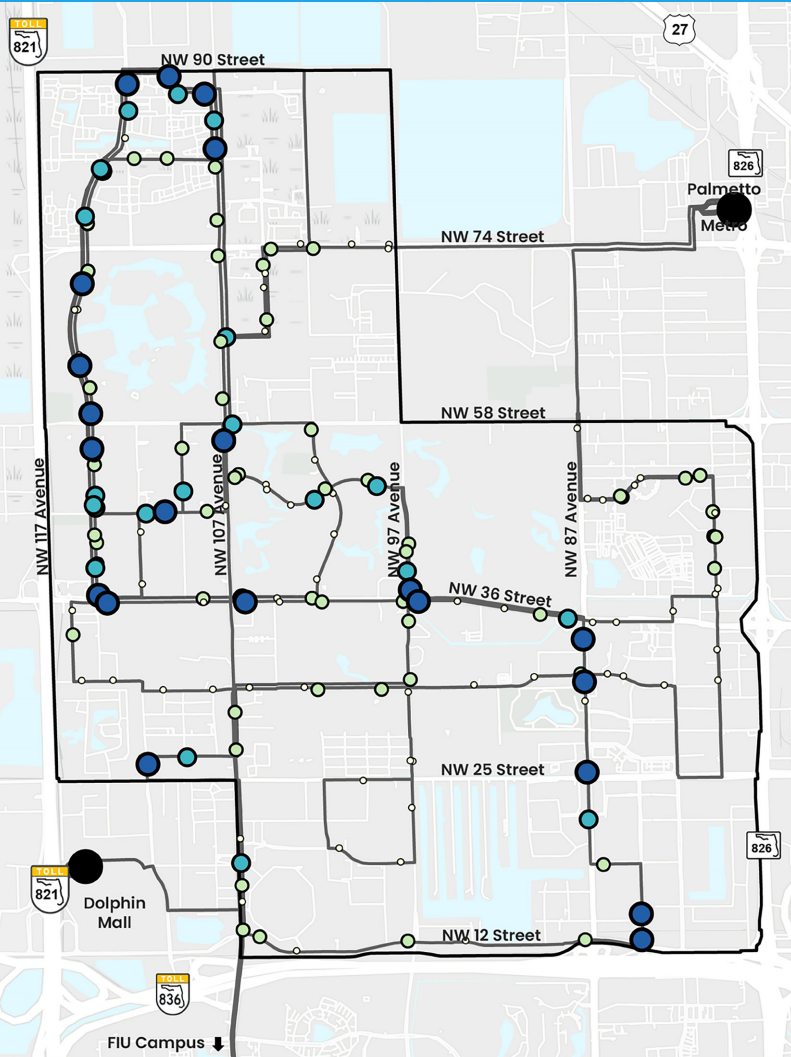


The comparison of population (blue) and job densities (red) provides a clear view of where people live versus where they work. While residential concentrations are distributed across multiple neighborhoods, job density is strongly concentrated along Doral Boulevard, NW 87th Avenue, and the western industrial areas. This imbalance highlights the importance of east-west connectivity and efficient commuter links to regional transit. It also points to a strong directional demand pattern during peak travel times, where residents commute toward concentrated job centers. Aligning trolley service to these travel flows enhances its effectiveness as both a local and regional connector.



Together, these maps illustrate how Doral's population, jobs, land uses, and destinations generate travel demand. The current trolley system already covers many of the city's critical corridors, serving dense residential areas, major employers, and destinations like schools, retail, and medical centers. Still, gaps remain in new neighborhoods, industrial districts, and some institutional sites. Addressing these areas creates an opportunity to refine the Hub-and-Spoke concept strengthening east-west links, extending service to underserved areas, and enhancing stop-level amenities so the DTS continues to meet the needs of a growing community while maintaining its role as a key connector to the regional transit network.

● Figure 13. Doral's Trolley Stops Daily Boardings (2023)



● Higher Activity
● Lower Activity



Existing Ridership Activity

Analyzing boardings and alightings helps identify where riders are entering the system and the highest demand destinations, and reveals strengths of the current network and areas where adjustments may enhance efficiency and coverage.

Boardings

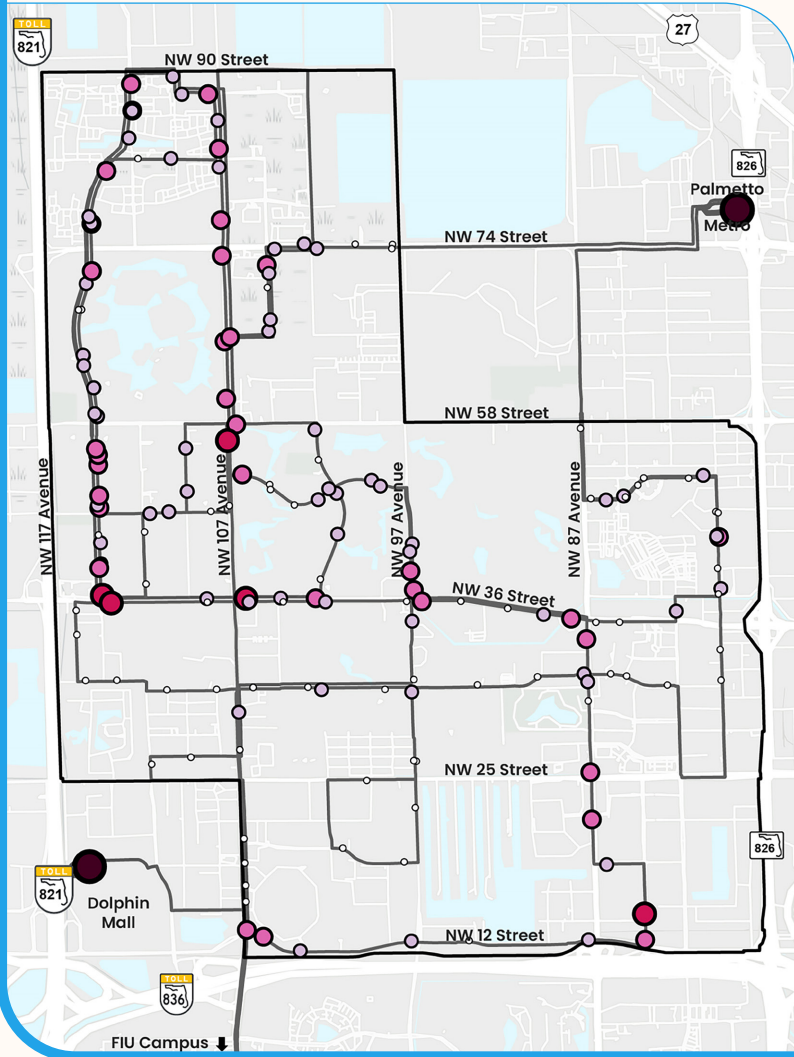
Boarding activity is highly concentrated at regional transit connections and major commercial centers. The Palmetto Metrorail Station emerges as one of the busiest boarding points, underscoring the trolley's importance as a feeder service to the countywide transit system. Other high-boarding locations include Miami International Mall, major shopping plazas along Doral Boulevard, and employment clusters near Downtown Doral. Residential neighborhood stops, while less intense, also demonstrate consistent usage, reflecting the trolley's role in providing everyday local trips.

Key Takeaways

- ⇒ Highest boarding volumes occur at Palmetto Metrorail Station, confirming the trolley's critical role as a feeder to regional transit.
- ⇒ Miami International Mall and CityPlace Doral are major boarding activity centers, reflecting strong demand for shopping and leisure trips.
- ⇒ Consistent but lower-intensity boardings occur in residential neighborhoods, highlighting the system's role in local accessibility.

● Figure 14. Doral's Trolley Stops Daily Alightings (2023)

● Higher Activity
● Lower Activity



Alightings

Alighting activity mirrors boarding trends but highlights distinct destination-driven demand. High alighting volumes are recorded at retail centers such as Miami International Mall, CityPlace Doral, and areas along NW 87th Avenue, suggesting the system plays a central role in supporting shopping and recreational trips. The Palmetto Metrorail Station also records substantial alightings, further emphasizing its role as a critical transfer hub. Additionally, stops near Florida International University demonstrate steady alightings, reflecting the significance of Route 4 in serving students and faculty travel demand.

Key Takeaways

- ⇒ Strong alighting demand at retail destinations (Miami International Mall, CityPlace Doral, NW 87th Avenue) shows the trolley supports discretionary travel.
- ⇒ Palmetto Metrorail Station also records significant alightings, reinforcing its role as a primary hub for regional connectivity.
- ⇒ Steady alightings near Florida International University (Route 4) demonstrate the importance of educational access.

ANALYSIS OF BBN IMPLEMENTATION IMPACT ON DORAL

Overview

The implementation of Miami-Dade County's Better Bus Network (BBN) in November 2023 has reshaped regional transit, streamlining service and improving frequencies across key corridors. Within Doral, however, these changes have altered coverage patterns, consolidating some routes and leaving gaps in areas that previously had direct access. As a result, the City's trolley system has taken on an even greater role in ensuring residents and visitors maintain reliable connections to workplaces, schools, shopping centers, and medical facilities.

These impacts underscore the need to modify the structure of the Doral Trolley system. By adjusting its routes and operations, the trolley can complement the BBN, fill emerging service voids, and continue to provide localized, community-focused mobility. This analysis identifies where the BBN has shifted service and frames how the trolley can evolve to meet new travel demands, strengthen intermodal connectivity, and advance the City's long-term transit vision.

Figure 15 showcases the existing BBN routes within Doral and its vicinity.

Within Doral's municipal boundaries, the **eight Better Bus Network routes** can be categorized into two distinct groups based on their service areas.



The **first group primarily serves the east portion** of Doral, focusing on the downtown area and nearby destinations.



The **second group operates in the southwest**, providing vital connections to major attractions like the International and Dolphin Malls.



● Figure 15. Existing Better Bus Network Routes within Doral

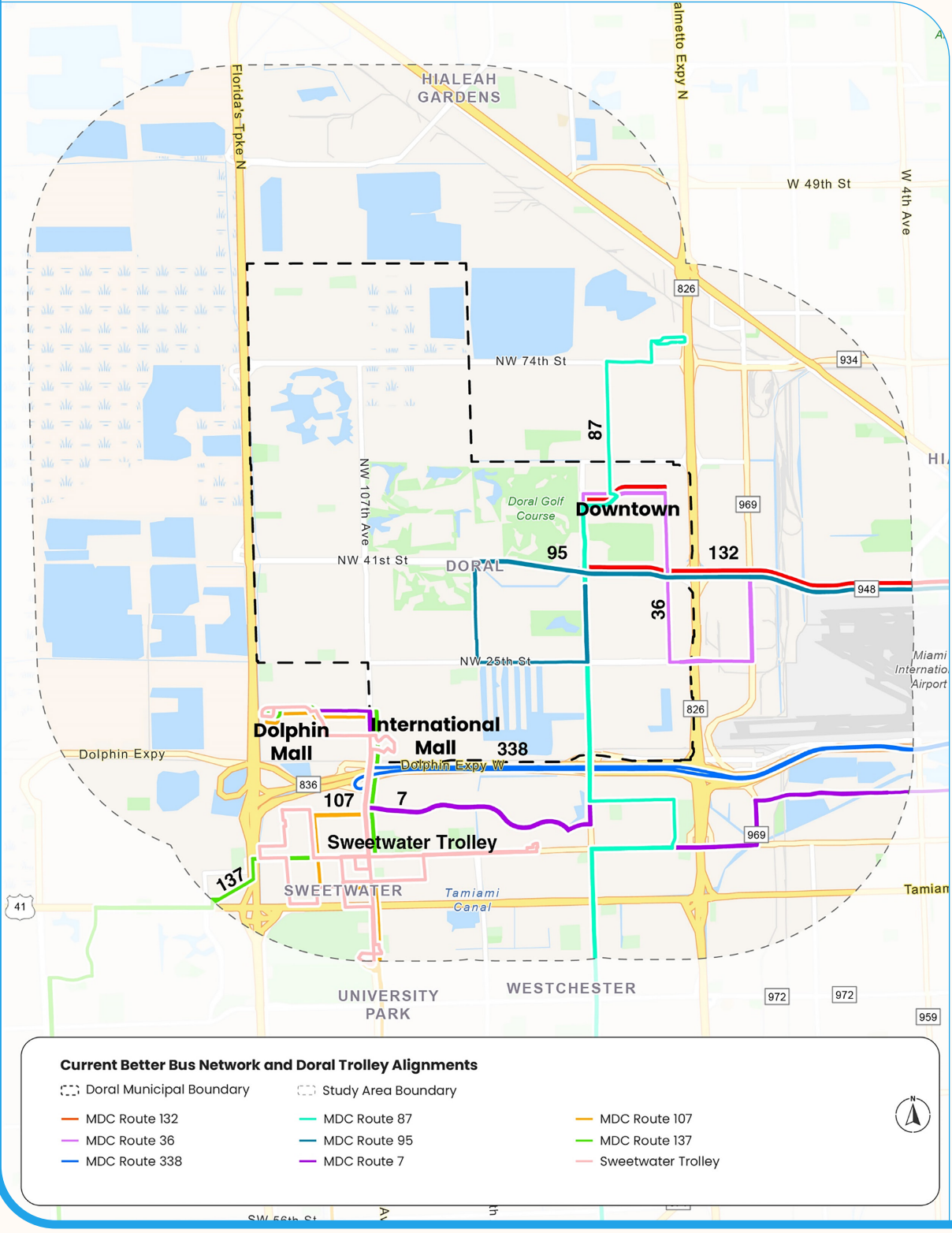


Table 2 describes the Better Bus Network Routes within Doral by their service areas and operating times.

DTPW Route Modifications per BBN

As part of the implementation of the Better Bus Network, adjustments and discontinuations of bus routes were made across Miami-Dade County. Notably, Routes 36 and 87 were adjusted to improve efficiency, while Route 238 was discontinued (Figure 16).

Table 2. Better Bus Network Routes within Doral by Service Area

MDC Route Group	Route Number	Route Description	AM/PM Peak Headways (Minutes)	Saturday Headways (Minutes)	Sunday Headways (Minutes)
East / Downtown Doral Area	132	Local service, weekday mornings and afternoons. Travels from Hialeah Market Tri-Rail station to Downtown Doral along NW 42 Ave, NW 36 St, NW 79 Ave and NW 87 Ave.	N/A	60	60
East / Downtown Doral Area	36	Local service seven days a week. Travels from Downtown Doral to South Beach along NW/NE 36 St, the Julia Tuttle Causeway and Collins Ave. Route 36A travels from Miami International Airport station. Stops include Allapattah Metrorail station.	15	30	40
East / Downtown Doral Area	87	Local service seven days a week. Travels from Palmetto Metrorail station to Dadeland North Metrorail station along NW/SW 87 Ave.	30	30	60
East / Downtown Doral Area	95	Express weekday rush hour service. Travels from the Golden Glades Terminal to Downtown Miami along I-95 Express Lanes. Route 95A travels to Civic Center. Select trips begin in Aventura and Carol City and end in Doral. Stops include the Government Center Metrorail / Metromover station, Historic Overtown / Lyric Theatre Metrorail station, Wilkie D. Ferguson, Jr. Metromover station, the Downtown Metrobus terminal, and the Civic Center Metrorail station.	10	N/A	N/A
Southwest / Malls Area	107	Local service seven days a week. Travels from Cutler Bay to the Dolphin Mall Terminal through Richmond Heights along the South Dade TransitWay, SW 117 Ave, and SW/NW 107 Ave. Stops include Miami Dade College South Campus and FIU Maidique Campus.	30	30	30
Southwest / Malls Area	137	Local service seven days a week. Travels from South Dade Government Center to FIU Maidique Campus along SW 137 Ave.	30	60	60
Southwest / Malls Area	338	Express service on weekends. Travels from Miami International Airport Metrorail station to Miami International Mall and Dolphin Mall Metrobus terminal along SR 836.	N/A	60	60
Southwest / Malls Area	7	Local service seven days a week. Travels from Dolphin Mall terminal to Miami-Dade College Wolfson campus via NW 7 St. Some trips (Route 7A) travel from the Miami International Airport Metrorail station. Stops include the Downtown Metrobus terminal, the College North Metromover station, and the Historic Overtown / Lyric Theatre Metrorail station.	15	60	60
Southwest / Malls Area	Sweetwater Route A	Sweetwater Trolley A Route bus serves 62 bus stops in the Miami area departing from SW 4 St / SW 109 Av and ending at SW 4 St / SW 107 Av.	90	90	90
Southwest / Malls Area	Sweetwater Route B	Sweetwater Trolley B Loop bus serves 61 bus stops in the Miami area departing from W Flagler St / #9301 and ending at W Flagler St / #9250.	90	90	90

Figure 16. MDC Route Modifications per BBN

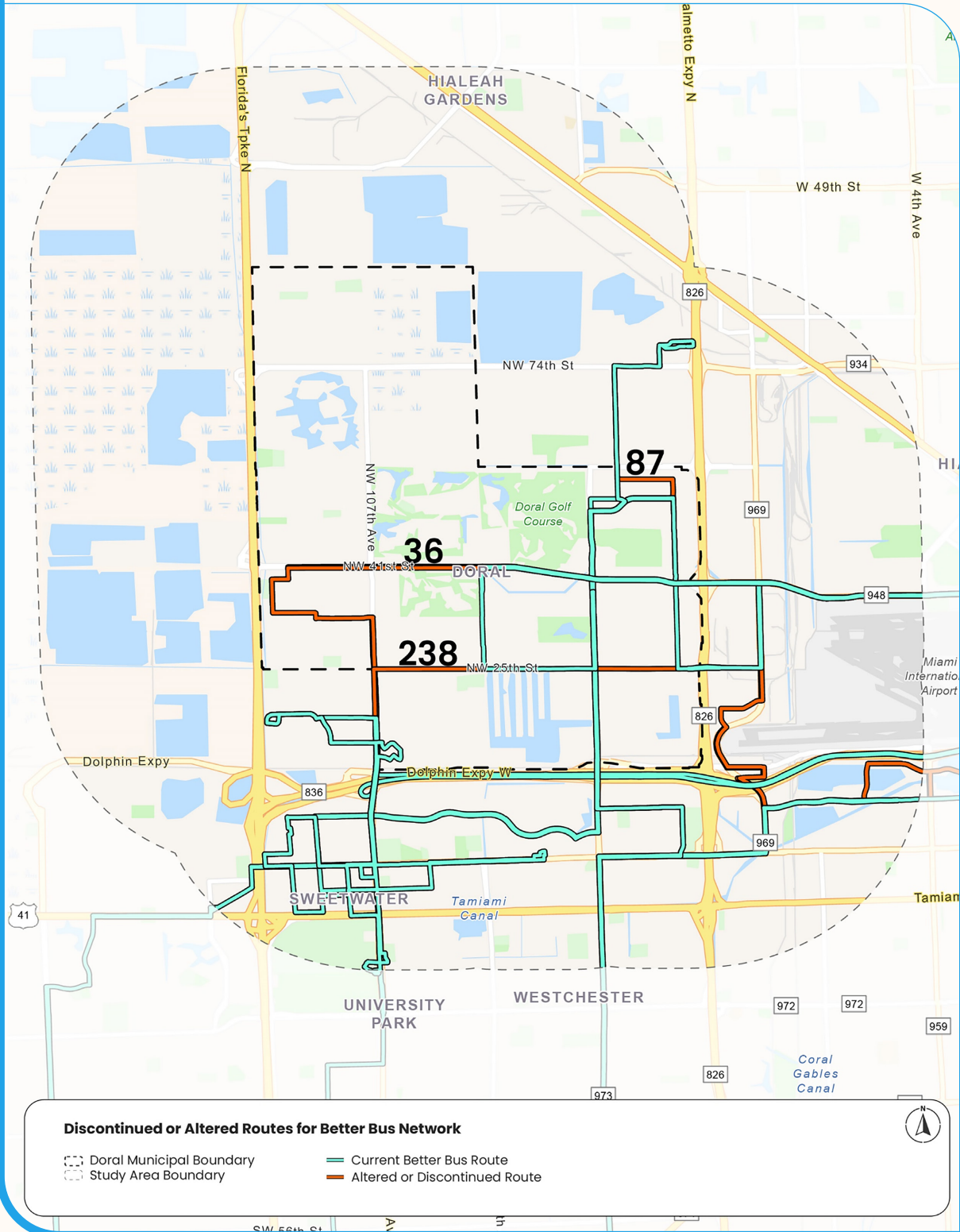


Table 3. MDC Route Modifications per BBN

Status	Route Number	Route Description	AM/PM Peak Headways (Minutes)	Saturday Headways (Minutes)	Sunday Headways (Minutes)	No. of Stops in Doral
Adjusted	36 / 36A	Local service seven days a week. Travels from Downtown Doral to South Beach along NW/NE 36 St, the Julia Tuttle Causeway and Collins Ave. Route 36A travels from Miami International Airport station. Stops include Allapattah Metrorail station.	15	30	40	30
Adjusted	87	Local service seven days a week. Travels from Palmetto Metrorail station to Dadeland North Metrorail station along NW/SW 87 Ave.	30	30	60	30
Discontinued	238	Local service during weekdays. Travels from Dolphin Mall near Doral and Sweetwater to the Miami International Airport station Along NW 25 St and NW 7 St.	15	N/A	N/A	31

Figure 17. Adjusted MDC Route 36

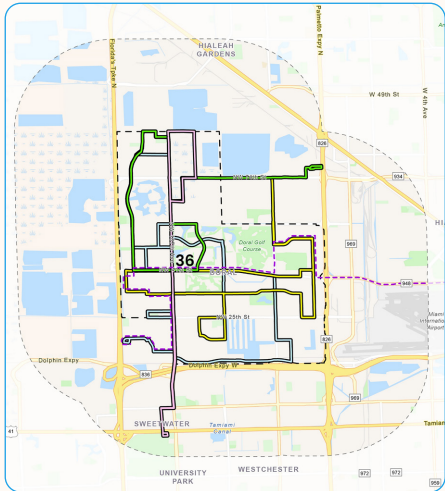


Figure 18. Adjusted MDC Route 87

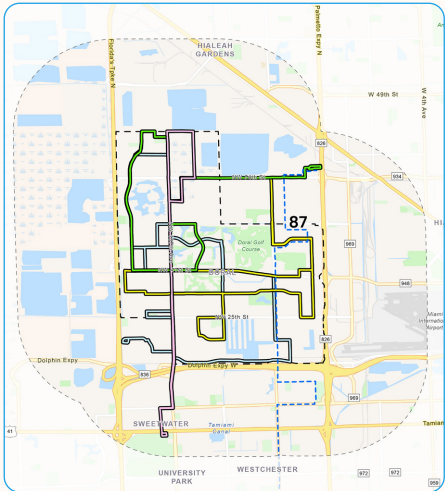
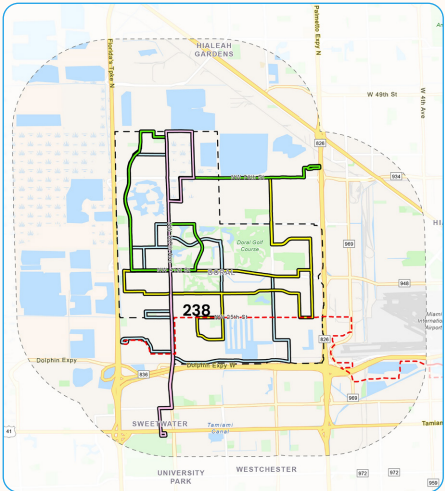


Figure 19. Discontinued MDC Route 238



Doral Trolley Parallel Routes

Route 1 (Crosstown Connector)
Weekdays: 6:00 am to 10:00 pm
Saturdays: 7:00 am to 8:00 pm
Sundays: 7:00 am to 8:00 pm

Route 3 (Residential – Metrorail Connector)
Weekdays: 5:50 am to 9:30 pm
Saturdays: 6:50 am to 7:00 pm
No Service on Sundays

Route 4 (FIU Connector)
Weekdays: 6:00 am to 11:00 pm
No Service on Weekends

Route 1 (Crosstown Connector)
Weekdays: 6:00 am to 10:00 pm
Saturdays: 7:00 am to 8:00 pm
Sundays: 7:00 am to 8:00 pm

Route 2 (Commercial – Metrorail Connector)
Weekdays: 6:10 am to 9:20 pm
Saturdays: 7:00 am to 7:30 pm
No Service on Sundays

Route 2 (Commercial – Metrorail Connector)
Weekdays: 6:10 am to 9:20 pm
Saturdays: 7:00 am to 7:30 pm
No Service on Sundays

Route 4 (FIU Connector)
Weekdays: 6:00 am to 11:00 pm
No Service on Weekends

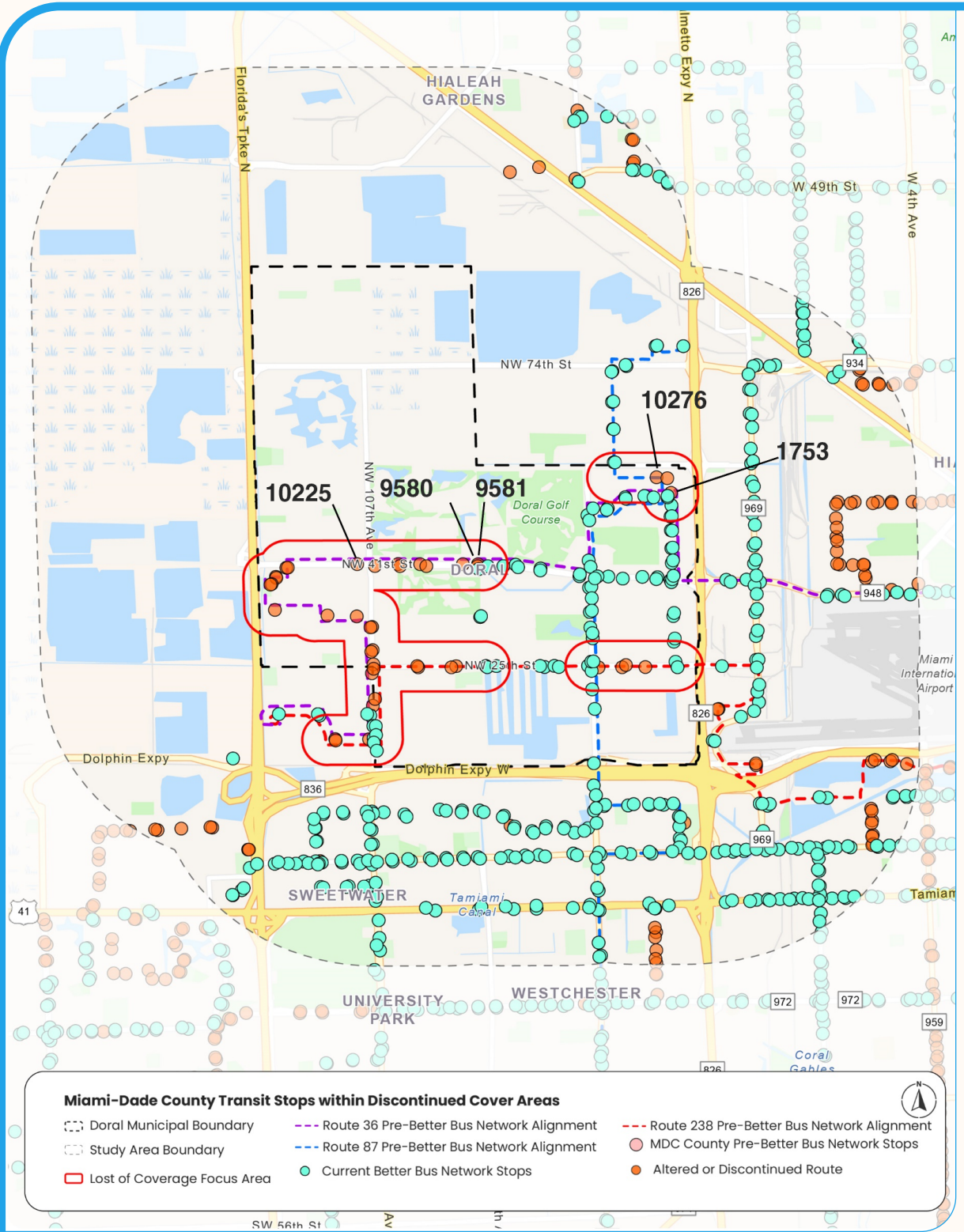


Figure 17. MDC Discontinued Stops (Top 5 Highlighted) and Cover Areas per BBN

The transition to the Better Bus Network in Doral impacted three routes, resulting in the discontinuation of 41 stops within the area. These changes were implemented to streamline services and enhance the efficiency of the overall transit system.

By analyzing the coverage areas lost due to the adjustment or discontinuation of Routes 36, 87, and 238 under the Better Bus Network, we can evaluate the impact on transit accessibility. Comparing the City's Trolley ridership performance before and after these changes will help determine if the local service is effectively capturing riders previously served by County transit. These specific locations of interest will be identified as Areas of Focus for the assessment.

Table 4. MDC Discontinued Stops with Top 5 Highest Ridership Activity

Bus Stop ID	Stop Address / Name	Average Total Weekday Boarding Per Month	Average Total Weekday Alighting Per Month	Average Total Weekday Activity Per Month	Total Boarding in 2023	Total Alighting in 2023	Total Activity in 2023
1753	NW 79 AVE & NW 53 ST	6	16	22	119	314	433
9581	NW 41 ST & NW 97 AVE (W/F)	6	16	21	118	311	429
10276	NW 56 ST & # 8115	3	14	17	56	287	343
10225	NW 41 ST & 107 AVE	3	13	16	62	256	318
9580	NW 41 ST & NW 97 AVE (E/N)	14	2	16	278	39	317

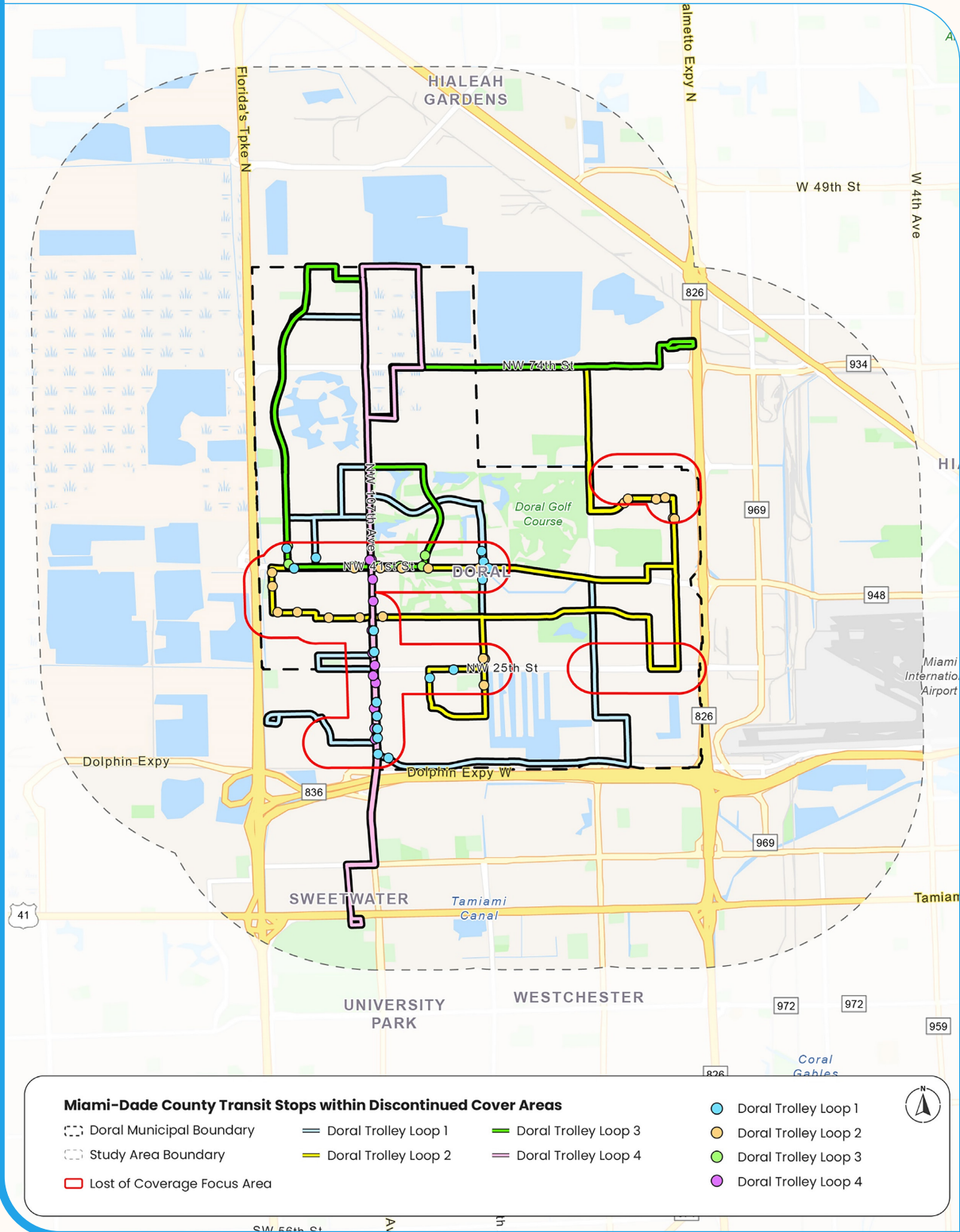
The map shown in Figure 18 illustrates the existing Doral trolley routes, and their stops located within a 1/4-mile buffer of the discontinued Miami-Dade County Transit stops. These identified stops will serve as the initial focus for evaluating performance during 2023 and 2024.



- 41 Total Number of MDC Discontinued Stops within Doral
- 95 Total Number of Remaining Better Bus Network Stops within Doral
- 74 Combined Average Boarding Total in 2023 for Discontinued Stops
- 85 Combined Average Alighting Total in 2023 for Discontinued Stops

- 15 Number of stops from Route 1 (Crosstown Connector)
- 24 Number of stops from Route 2 (Commercial – Metrorail Connector)
- 7 Number of stops from Route 3 (Residential – Metrorail Connector)
- 19 Number of stops from Route 4 (FIU Connector)

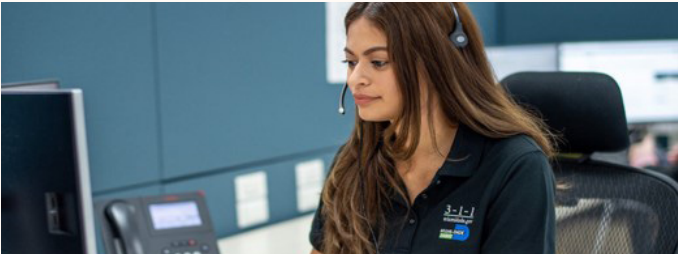
Figure 18. Doral Trolley Stops within MDC Discontinued Cover Areas per BBN



Trolley ridership at transit stops in the focus area has decreased from 2023 to 2024, highlighting a decline in usage despite the potential influx of displaced MDC riders from discontinued stops. This suggests the current trolley system is not effectively meeting the needs of these riders or capturing their demand. Tables 5 and 6 show the effects on trolley ridership at the stops for Route 1 and Route 2 within the MDC discontinued cover areas.

● Table 5. Doral Trolley Route 1 Ridership Effects per BBN

R1 Stops in Focus Area	R1 2023 Total Activity	R1 2024 Total Activity	Percent Change in Ridership
1005	4345	3111	-28%
1006	6219	4517	-27%
1007	732	365	-50%
1008	3146	2362	-25%
1009	986	634	-36%
1012	1692	877	-48%
1013	3001	1902	-37%
1017	3772	2770	-27%
1018	11079	6353	-43%
1065	6956	4195	-40%
1066	6883	4335	-37%
1078	1697	847	-50%
1081	5450	3048	-44%
1082	14710	9094	-38%
1083	1164	610	-48%



● Table 6. Doral Trolley Route 2 Ridership Effects per BBN

R2 Stops in Focus Area	R2 2023 Total Activity	R1 2024 Total Activity	Percent Change in Ridership
2005	363	212	-42%
2006	1644	981	-40%
2007	1601	1238	-23%
2074	264	246	-7%
2067	713	530	-26%
2068	392	136	-65%
2022	1362	725	-47%
2023	481	348	-28%
2024	996	630	-37%
2025	424	322	-24%
2026	357	325	-9%
2027	2381	2353	-1%
2028	1226	1030	-16%
2029	5069	3060	-40%
2030	338	286	-15%
2031	5470	3691	-33%
2032	659	372	-44%
2033	2395	1778	-26%
2034	1881	1299	-31%
2035	3161	2144	-32%
2057	1021	822	-19%
2058	2224	1270	-43%
2073	309	251	-19%
2059	400	297	-26%

Between October 2023 and July 2024, the County received over 5,000 comments related to the Better Bus Network (BBN) implementation through 311, the DTPW call center, an online survey, emails, and phone calls.

Among these, comments related to the City of Doral specifically about routes 36, 87, and 238 were extracted to assess the impact of these changes on Doral riders. The key highlights are as follows.



Route 36 – 64%* of the comments focused on this route and its branches, particularly the removal of the 36B. This change has made it more difficult for riders to reach Dolphin Mall and has left Miami Dade College West Campus without direct transportation. Riders now rely on additional buses and the Doral Trolley, which operates less frequently. One rider also noted the shortening of Route 36, which now ends at NW 87 Avenue and NW 53 Terrace. Previously, it extended to the Miami-Dade Fire Rescue headquarters at 9300 NW 41st Street, Doral, Florida 33178.



Route 87 – 9%* of the comments were about changes to this route, specifically the removal of a bus stop at NW 79 Avenue and NW 53 Street.



Route 238 – 27%* of the comments highlighted the impact of removing this route, with one rider noting that senior citizens were particularly affected as they used it regularly.



**Percentages were calculated exclusively from comments related to the City of Doral.*

EXISTING NETWORK ASSESSMENT CONCLUSION

The existing network assessment confirms that the Doral Trolley is a vital community asset, linking neighborhoods to jobs, schools, retail hubs in Doral and beyond via the Palmetto Metrorail Station. Route 1 serves as the city’s only full circulator, Route 2 anchors east–west access, Route 3 covers northern neighborhoods, and Route 4 connects to FIU. While these routes fill critical first- and last-mile gaps, coverage remains limited in new residential areas, industrial corridors, and some institutional sites.

Community characteristics analysis shows strong service to high-density housing, employment clusters, and key destinations like Dolphin Mall, Miami International Mall, and Downtown Doral. Yet emerging neighborhoods and transit-dependent areas still lack coverage, highlighting equity and expansion needs. Ridership trends emphasize the role

of commercial and regional hubs, with high activity at Palmetto Station and retail centers, but also reflect declines after the BBN, especially where MDC routes were cut.

Overall, the findings show both the strengths and gaps of the current system. The DTS delivers meaningful service but needs refinements to capture new demand, improve equity, and adjust to BBN impacts. These conclusions set the stage for the next section: Community Engagement, where public feedback supplements technical findings and shapes targeted recommendations for Doral’s transit future.

4

COMMUNITY ENGAGEMENT

FIRST PUBLIC WORKSHOP

The first public workshop was held on March 5, 2025, as part of the Doral Transit Study to gather community input on the integration of the City's trolley system with Miami-Dade County's Better Bus Network (BBN). The workshop aimed to engage residents, workers, and stakeholders in identifying how the Doral Trolley system can adapt to recent changes in the regional bus network and better serve the needs of the community.



Workshop Format and Engagement

The event opened with a presentation explaining the purpose of the study, the impacts of the BBN on existing bus services in Doral, and the opportunities to enhance local transit coverage. Following this overview, participants were invited to engage directly through interactive tools designed to capture their feedback. Large, printed maps of the city were provided, allowing attendees to physically mark areas where they believed new trolley services, adjustments, or improved connections were needed. This hands-on activity encouraged participants to share localized insights, highlighting gaps in coverage and suggesting important destinations.



Key Outcomes

The workshop successfully combined technical information with opportunities for public dialogue. Residents emphasized the importance of ensuring that trolley service addressed gaps left by discontinued County routes and requested more reliable service during peak travel times. Participants also made clear that the Doral Transit System needed to evolve to better serve community needs.

Survey Questions



Participants were also asked to respond to a structured survey to provide more detailed feedback. The questions covered a wide range of topics, including:

- ⇒ Whether they live in Doral and if they are regular trolley riders.
- ⇒ Locations where trolley routes should converge or transfer.
- ⇒ Neglected areas of Doral that would benefit from service adjustments.
- ⇒ Desired destinations outside the City limits (beyond Dolphin Mall, FIU, or Palmetto Metrorail Station).
- ⇒ Perceptions of the clarity of current trolley branding and wayfinding.
- ⇒ Preferred times and locations where more frequent service is needed.
- ⇒ The usefulness of trolley arrival information at stops and opinions on the current Doral Trolley Tracker app.



Main Feedback, Requests, and Comments from Participants included:

- Higher frequency of service to reduce wait times.
- Greater geographic coverage to reach underserved neighborhoods.
- A more effective method for collecting rider comments and feedback.
- More direct routes to key locations.
- Expanded bilingual services to improve accessibility for non-English speakers.
- Service improvements to Freebee for better first-mile/last-mile connectivity.
- Enhanced bus stop amenities to improve passenger comfort and safety.



Feedback from the maps and surveys was instrumental in clarifying what the community expected from a modernized Doral Transit System. Participants engaged with large-format maps of existing routes, land use, and regional transit connections, marking service gaps and opportunities based on their daily travel patterns. Surveys reinforced these observations, citing concerns about long headways, limited weekend service, and the need for stronger connections to schools, shopping centers, and medical facilities. These insights identified clear priorities that guided the development of targeted improvements in the next phase of the study.

SECOND PUBLIC WORKSHOP

The second public workshop for the Doral Transit Study was held on July 9, 2025. Its primary purpose was to present preliminary recommendations for the evolution of the Doral Trolley system in light of the Miami-Dade County Better Bus Network (BBN) and to gather input directly from community members through an open dialogue. Building on insights from the first workshop, this session highlighted draft recommendations for route modifications, mobility hubs, vehicle upgrades, and transit stop improvements, with participants encouraged to share feedback in an interactive discussion format.



Workshop Format and Engagement

Unlike the first workshop, which included structured surveys, this session was designed to foster direct dialogue with participants. Attendees were invited to ask questions, share concerns, and provide suggestions in real time. Large-format maps of the city were displayed, allowing participants to point out locations they believed the Doral Trolley should serve, areas needing better coverage, and opportunities to improve stop amenities or vehicle operations. This conversational format provided valuable context and nuanced feedback that complemented the technical recommendations presented.

Presentation Content

The workshop reaffirmed the study's key objectives:

- ➡ Adapt the Doral Transit System to changes created by the BBN.
- ➡ Expand and refine trolley coverage within the city.
- ➡ Introduce new mobility hubs and improve integration with Miami-Dade Transit.
- ➡ Modernize the vehicle fleet and stop amenities.
- ➡ Collect participant input to validate and refine draft proposals.

The City presented a revised network including:

- ➡ Modified Route 1 split into 1A (Downtown focus) and 1B (Jobs focus).
- ➡ Revised Route 2, maintaining regional connectivity.
- ➡ Continuation of Routes 3 and 4, ensuring service to Metrorail and FIU.
- ➡ New Route 5, linking Downtown Doral, medical facilities, and Metrorail.

The updated network expanded coverage from 72.4 miles to 106.3 miles, offering stronger connectivity and filling gaps left by BBN changes.



Six mobility hubs were introduced at strategic locations, designed to improve connections between trolley routes, regional transit, and micro-mobility services. Enhanced stop amenities, including over 100 new shelters and 30 mid-block crossings, were proposed to improve safety and comfort.

Fleet modernization options were also discussed. The Hometown Manufacturing View model was highlighted as a preferred replacement vehicle, offering ADA accessibility, larger capacity, and operational compatibility with the current system while avoiding the need for new fueling infrastructure.



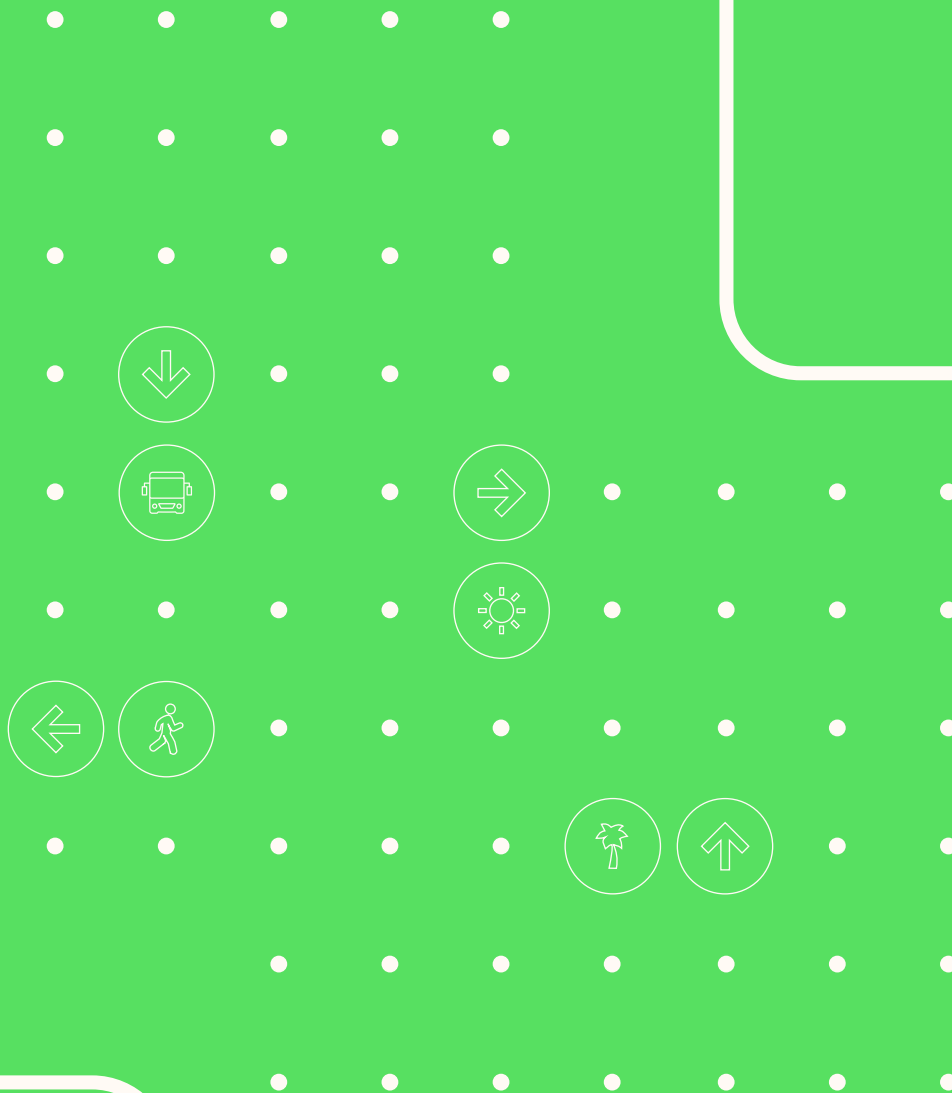
Key Outcomes

Key Outcomes

The open discussion revealed broad community support for:

- ➡ Higher frequency service and greater coverage.
- ➡ More direct routes to Downtown Doral, employment centers, and medical facilities.
- ➡ Bus stop amenity improvements, particularly shaded shelters and ADA accessibility.
- ➡ Enhanced bilingual services and better communication with riders.
- ➡ Integration with Freebee for first-mile/last-mile connections.

The second public workshop was a pivotal moment in shaping the study's recommendations. By presenting draft proposals and engaging participants in open dialogue, the City validated key priorities, identified service gaps, and strengthened support for the hub-and-spoke refinements to the Doral Transit System. This step ensured that the final Action Plan will reflect the lived experiences and priorities of the community.

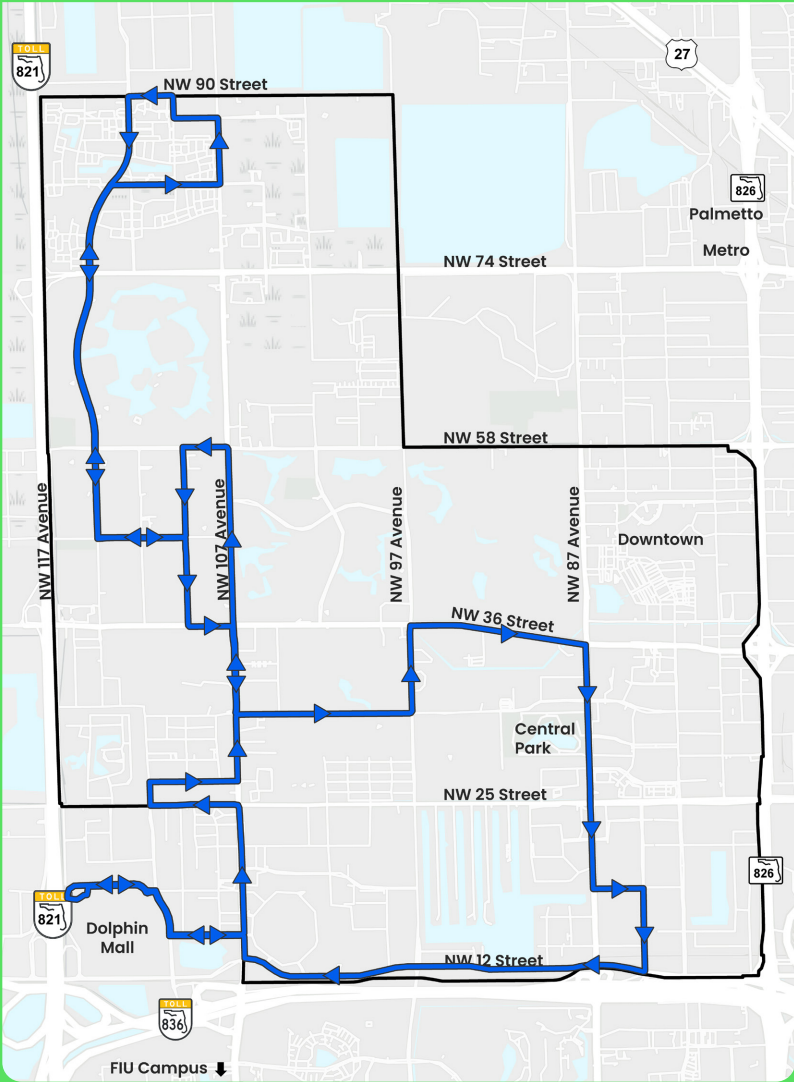


3

RECOMMENDATIONS

This section outlines the proposed modifications to the network, evaluates associated costs, considers potential ridership and market opportunities, and analyzes the major impacts of the recommendations. It also reviews vehicle replacement and fuel source strategies to ensure operational sustainability, culminating in a phased action plan for implementation. Together, these recommendations provide a roadmap for strengthening local mobility, improving connectivity to regional transit, and ensuring the DTS continues to meet community needs well into the future.

● Figure 20. Proposed Route 1B - Jobs Connector

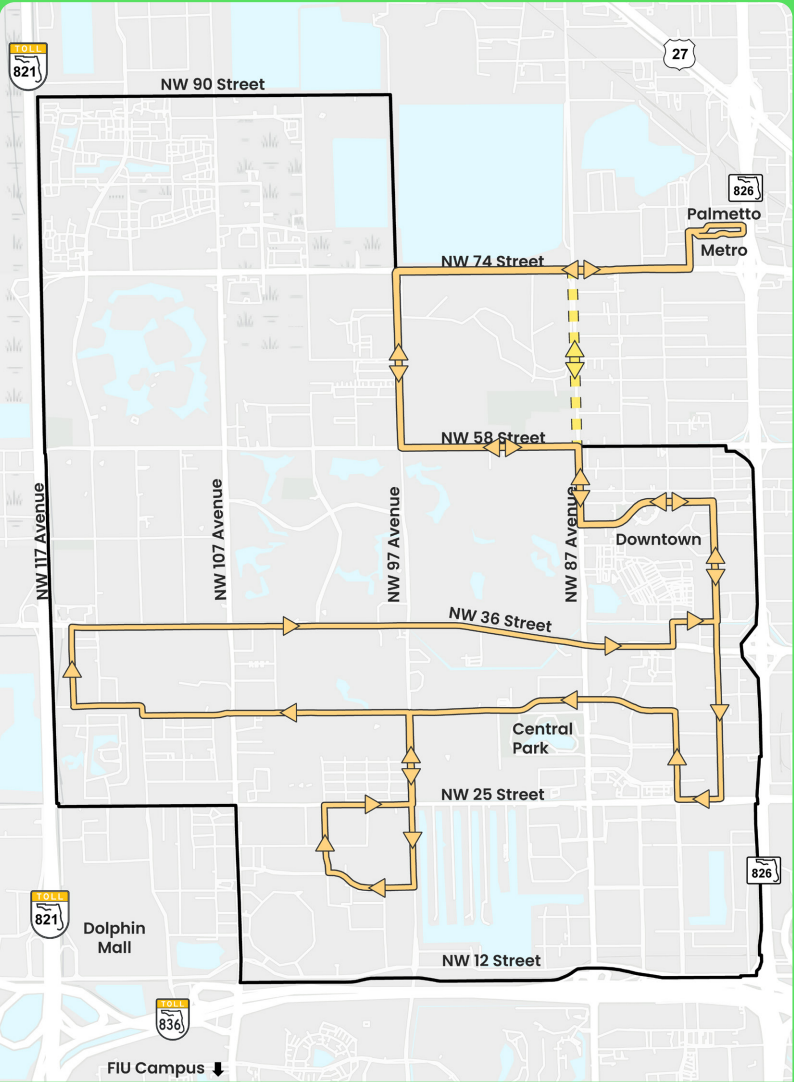


Proposed
Route 1B (Jobs Connector)

22.5 miles (roundtrip)

Route 1B redefines commuter access to Doral's southern employment corridor, an area characterized by concentrated industrial and office activity. The alignment prioritizes streamlined north-south movement, reducing travel times during peak hours and easing congestion along heavily trafficked corridors. This route supports workforce mobility by directly connecting residential clusters in the northwest with employment nodes along NW 25th Street and NW 12th Street, areas where large numbers of daily commutes originate or terminate. The improved alignment strengthens the system's ability to respond to job-based travel demand while preserving flexibility for interconnections with other trolley routes.

● Figure 21. Proposed Route 2 - Regional Connector

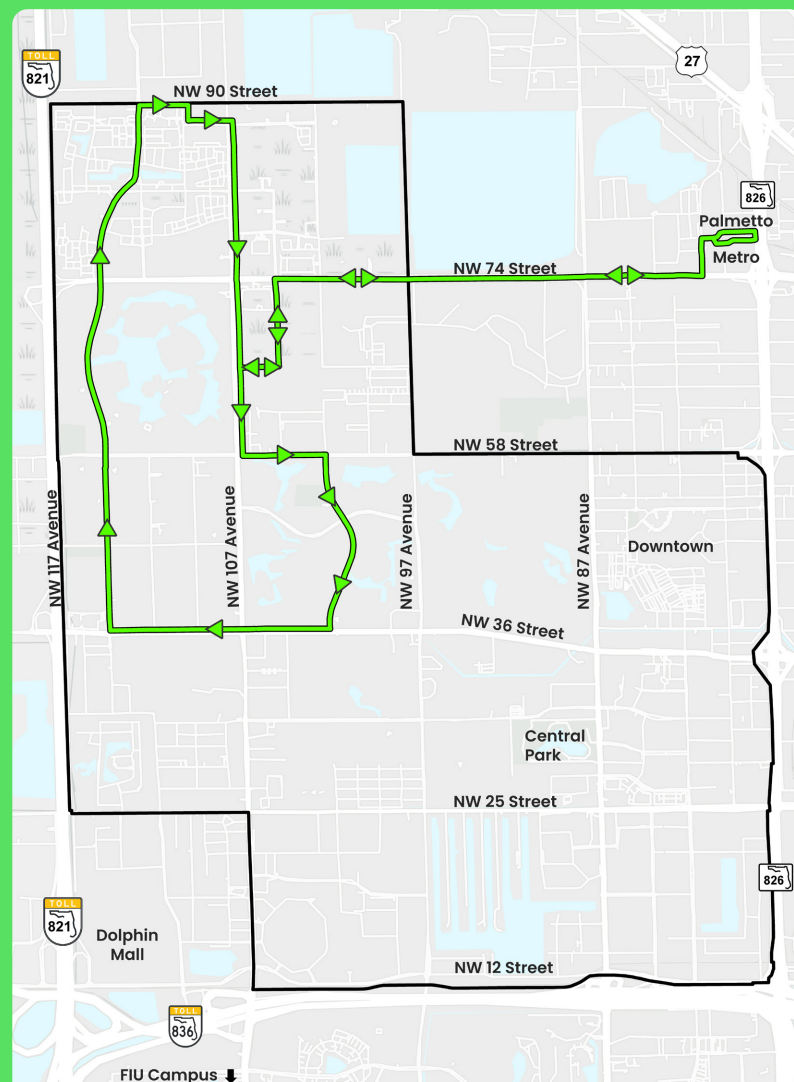


Proposed
Route 2 (Regional Connector)

22.5 miles (roundtrip)

Route 2 remains a critical east-west lifeline for the Doral Trolley, sustaining its role in linking the city to the broader Miami-Dade regional network. By maintaining connections to Palmetto Metrorail Station, this route supports regional commuter flows while adjusting to capture demand from planned residential and commercial developments along NW 74th Street and NW 58th Street. The alignment is designed to intercept riders who may otherwise rely exclusively on automobiles, particularly those traveling from outside Doral for employment in industrial and office hubs. As a Regional Connector, Route 2 advances Doral's broader goals of reducing congestion, encouraging transit ridership, and improving sustainability.

● Figure 22. Proposed Route 3 - MetroRail Connector

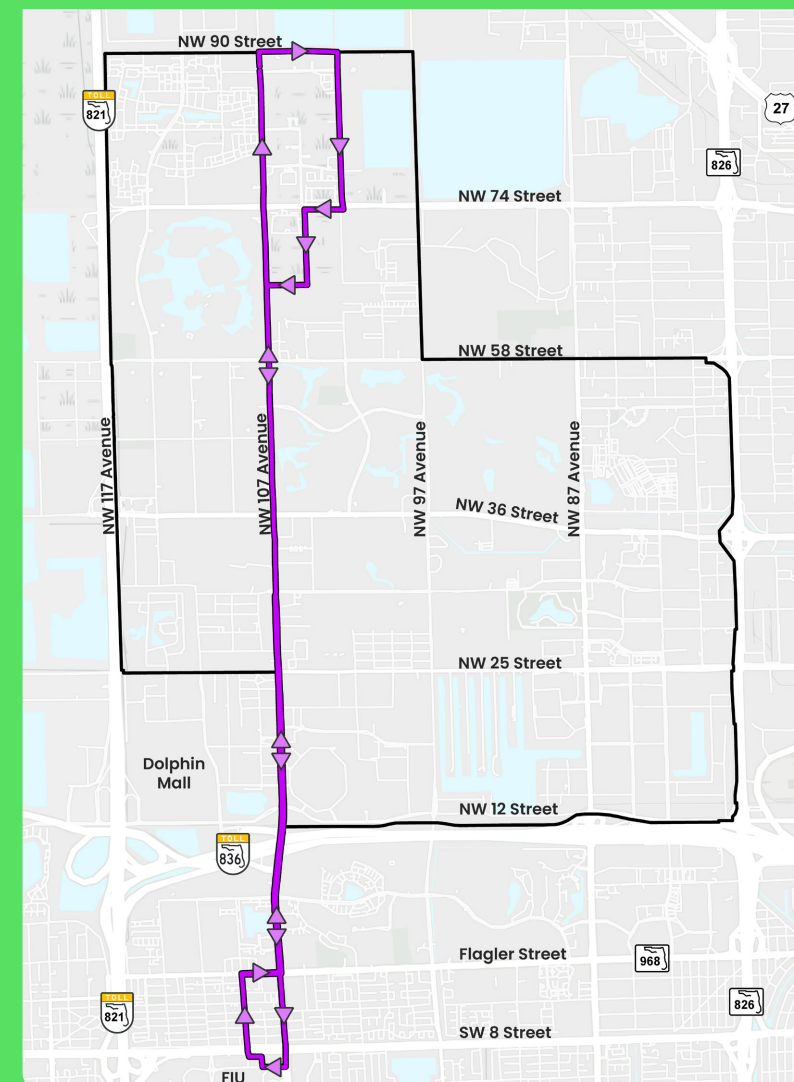


Proposed Route 3 (Metrorail Connector)

15.8 miles (roundtrip)

Route 3 enhances first-/last-mile connectivity by directly linking Doral neighborhoods with Metrorail, reinforcing the city's role as a regional commuter gateway. The alignment remains compact and adjustments to it will strategically focus on improving frequency and reliability, making it an attractive option for residents who depend on transit for access to jobs in Downtown Miami and beyond. With its shorter roundtrip mileage, Route 3 is well-suited to achieve higher service frequencies, complementing regional transit investments and alleviating pressure on parking at Metrorail stations.

● Figure 23. Proposed Route 4 - FIU Connector

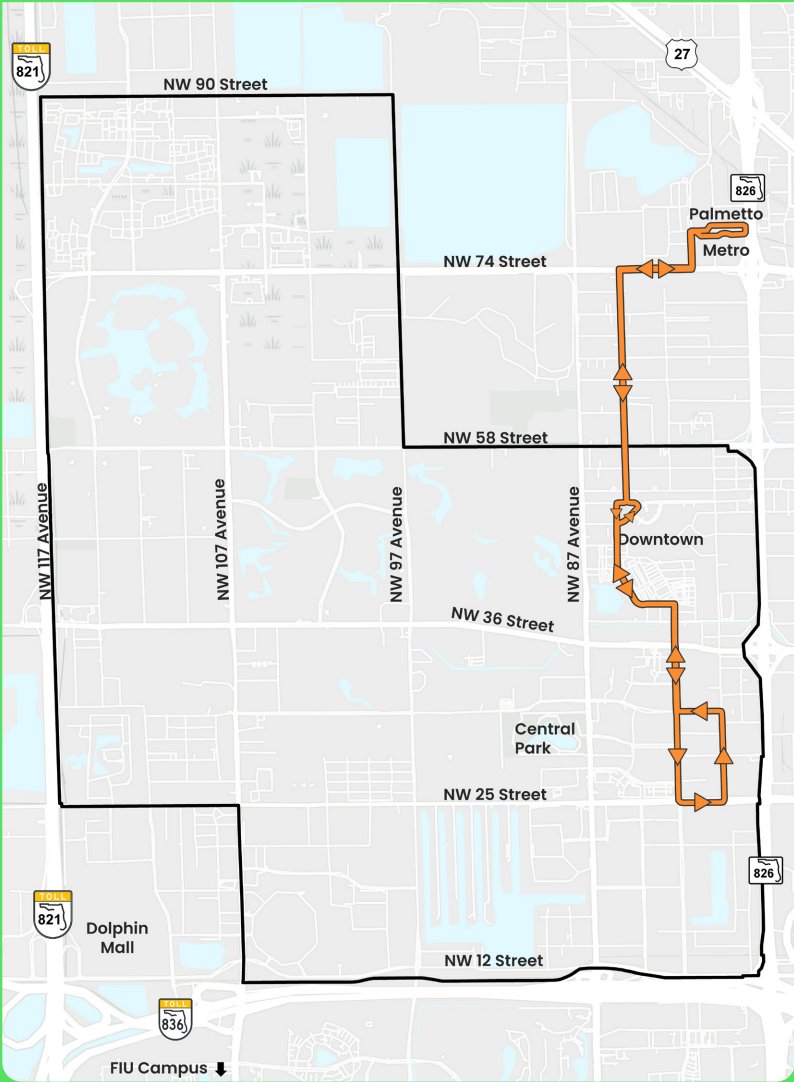


Proposed Route 4 (FIU Connector)

14.6 miles (roundtrip)

Route 4 continues to connect students and staff living in northwest Doral to Florida International University (FIU). The refined alignment balances demand from both student populations and neighborhood riders, ensuring a dedicated education-focused link. The alignment is now streamlined to enter the FIU campus via NW 107th Ave bypassing two previous left turns at intersections of high traffic volumes, thus improving reliability during peak periods. The FIU Connector illustrates how targeted adjustments can enhance system efficiency while maintaining a strong focus on education access.

● Figure 24. Proposed Route 5 - Medical Connector

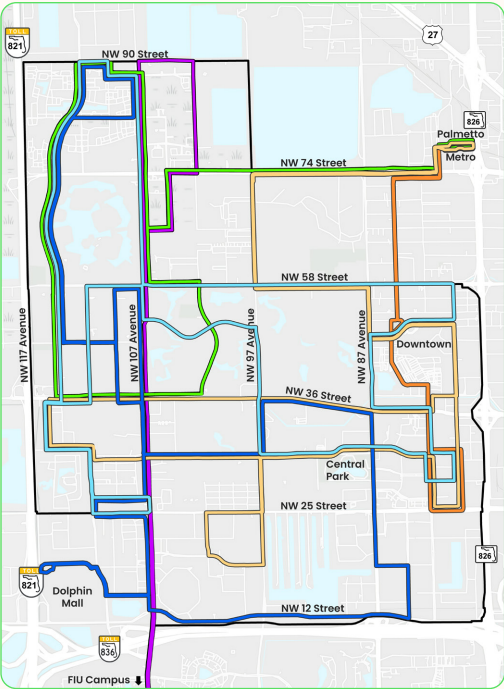


Proposed
Route 5 (Health Connector)

9.1 miles (roundtrip)

As the newest addition to the network, Route 5 offers a high-efficiency alignment that focuses on health, civic, and regional access. The route connects the Palmetto Metrorail Station with Downtown Doral, extending further to serve major medical facilities like UHealth Doral Medical Center and Jackson West Medical Center. With its relatively short mileage, Route 5 is designed for high reliability and frequency, supporting essential trip purposes such as medical appointments, civic engagement, and regional transfers. This alignment fills a critical service gap by providing a specialized, short-haul connection that complements the longer circulator and connector routes, broadening the overall system's appeal and resilience.

● Figure 25. Proposed Doral Transit Network



The proposed Doral Transit Network builds upon the strengths of the existing trolley system while addressing identified gaps in coverage, connectivity, and efficiency. The six refined and new routes: Route 1A (Downtown Connector), Route 1B (Jobs Connector), Route 2 (Regional Connector), Route 3 (Metrorail Connector), Route 4 (FIU Connector), and Route 5 (Medical Connector) form a comprehensive framework that balances local circulation with regional access. Together, the routes strengthen east-west connectivity, expand service to emerging residential and employment areas, and enhance direct links to key regional anchors such as the Palmetto Metrorail Station, FIU, and Miami Dade College – West Campus. The resulting network not only improves first- and last-mile connections but also provides more direct and reliable access to schools, medical centers, retail hubs, and major job corridors, positioning the Doral Transit System as both a neighborhood circulator and a regional connector.

The table below summarizes the key characteristics of each proposed route, highlighting their length, primary markets served, and intended role within the overall network.

● Table 7. Proposed Doral Transit Network Routes – Summary Comparison

Route	Mileage (Roundtrip)	Purpose / Strategic Role	Key Destinations Served	Notable Features
1A	21.8	Central circulator linking residential areas with civic, cultural, and recreational hubs	Downtown Doral, City Place, Doral Central Park, Miami Dade College–West Campus	Adds missing connection to MDC–West; enhances east–west coverage
1B	22.5	Workforce mobility link from northwest Doral to southern employment clusters	NW 25th Street, NW 12th Street employment & industrial areas	Prioritizes peak-hour commuter demand; reduces travel times
2	22.5	Regional access and commuter link via Metrorail	Palmetto Metrorail Station, NW 74th & 58th Streets developments, major job hubs	Sustains critical east–west lifeline; supports sustainable commuting
3	15.8	First-/last-mile connector for regional commuters	Palmetto Metrorail Station, residential neighborhoods	Compact alignment for higher frequency; improves reliability
4	14.6	Dedicated education-focused link to FIU	FIU Campus, NW 107th Avenue neighborhoods	Streamlined to bypass congestion; balances student & local demand
5	9.1	Short, high-efficiency route for civic and healthcare access	Palmetto Metrorail Station, Downtown Doral, UHealth Doral Medical Center, and Jackson West Medical Center	New alignment; short mileage supports frequent, reliable service

Strategic Role of Mobility Hubs



As part of the updated Doral Transit System, small-scale mobility hubs are recommended at key transfer points throughout the network. These hubs are intended to serve as strategic connection nodes where multiple trolley routes intersect and where integration with regional Miami-Dade Transit services, micro-mobility options, and local pedestrian/bicycle access can be facilitated. Unlike the single centralized hub proposed in the 2020 study, the current approach distributes connectivity across several locations, making transfers more efficient and spreading the benefits of improved accessibility across the city.

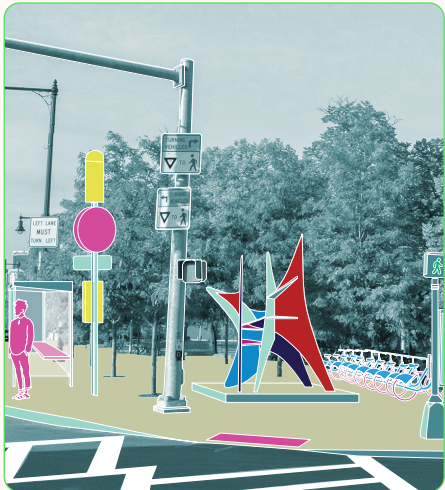
Each hub will be positioned to align with high-ridership corridors, community destinations, and opportunities to connect with county bus routes under the Better Bus Network. By placing hubs where travel demand naturally concentrates, the system can maximize convenience for riders while minimizing unnecessary detours in routing.

It is important to note that final siting and design of mobility hubs will require further feasibility analyses during future implementation phases. Considerations such as available right-of-way, adjacent land uses, safety, and cost will all influence the final locations and scope of hub facilities.



Corner Hubs

These are smaller-scale hubs generally located at key intersections or transfer points between routes. They feature enhanced shelters, improved wayfinding, and connections to micro-mobility services such as bike racks or scooter parking. Corner hubs prioritize efficient passenger transfers in constrained urban settings. The image above shows a schematic representation of a Corner Mobility Hub (source: Transit Matters-Mobility Hubs Toolkit).



Center Hubs

These are medium-scale hubs situated in activity centers, typically near major destinations or clusters of demand. They support multiple trolley route connections, provide expanded amenities, and serve as strong anchors for local circulation within a concentrated area of activity. The image above shows a schematic representation of a Center Mobility Hub (source: Transit Matters-Mobility Hubs Toolkit).



Gateway Hubs

These are higher-capacity hubs located at the city's major entry points. They emphasize connections to regional transit systems such as the Miami-Dade Better Bus Network or Metrorail and often include enhanced passenger facilities to accommodate larger volumes of transfers and longer waiting times. The image above shows a schematic representation of a Gateway Mobility Hub (source: Transit Matters-Mobility Hubs Toolkit).

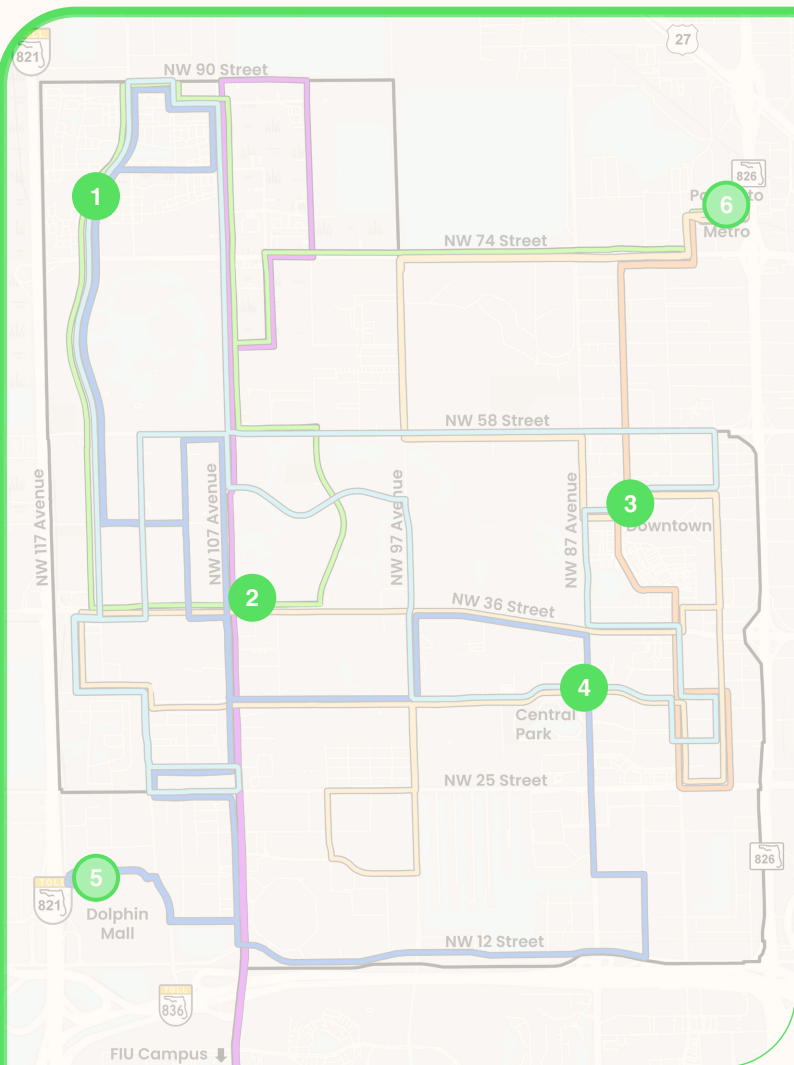


Figure 26. Mobility Hub Locations

Proposed Hub Locations

The proposed mobility hubs are distributed throughout the city to maximize connectivity and accessibility. Rather than concentrating activity at a single central terminal, the recommended hub network provides multiple transfer opportunities aligned with ridership demand and key land use nodes. The map portrays potential locations for proposed mobility hubs and existing ones. These locations illustrate how mobility hubs would support both local access and regional connectivity. Final location, hub quantity, and design will be determined in future phases, with feasibility analyses to assess right-of-way, adjacent land uses, safety, and cost considerations.

- X Proposed Hub Location
- X Existing Hub Location

1

Doral Legacy Park Proposed Corner Hub

Positioned within one of Doral's largest recreational facilities and surrounded by residential neighborhoods, this hub functions as a localized transfer point. Its Corner Hub designation reflects its role in improving route coverage and providing a practical connection node without requiring a larger, centralized facility.

Proposed Connecting Routes

- 1A
- 1B
- 3



2



NW 107th Ave and NW 41st St

Proposed Corner Hub

Strategically located at a high-traffic corridor, this hub enhances access to surrounding residential and commercial developments. It provides a simple yet effective transfer point between intersecting routes.

Proposed Connecting Routes

- 1B
- 2
- 3
- 4

3



Downtown Doral

Proposed Center Hub

Serving as a central connection point, this hub accommodates intersecting trolley routes and provides access to civic, commercial, and residential destinations. It is positioned to support frequent transfers in one of the city's highest-demand corridors while improving walkability and multimodal access.

Proposed Connecting Routes

- 1A
- 2
- 5

DTPW Routes: 36 87 132

4



Doral Central Park

Proposed Center Hub

Located adjacent to one of the city's most significant recreational and civic areas, this hub supports nearby employment and residential clusters while serving as a natural midpoint along key routes.

Proposed Connecting Routes

- 1A
- 1B
- 2

DTPW Routes: 87 95

5



Dolphin Mall

Existing Gateway Hub

A major transfer location anchoring one of the region's strongest retail and employment generators. This hub also integrates with the neighboring Sweetwater trolley service, reinforcing regional connectivity.

Proposed Connecting Routes

- 1B

DTPW Routes: 36 87 132

Sweetwater Trolley: 1

6



Palmetto Metrorail Station

Existing Gateway Hub

A critical regional connection point, ensuring seamless integration with the county's rapid transit system and improving access to downtown Miami and the broader metropolitan area.

Proposed Connecting Routes

- 2
- 3
- 5

DTPW Routes: 87 GREEN
Metrorail Line

Enhanced Mobility Hub Shelter Concept

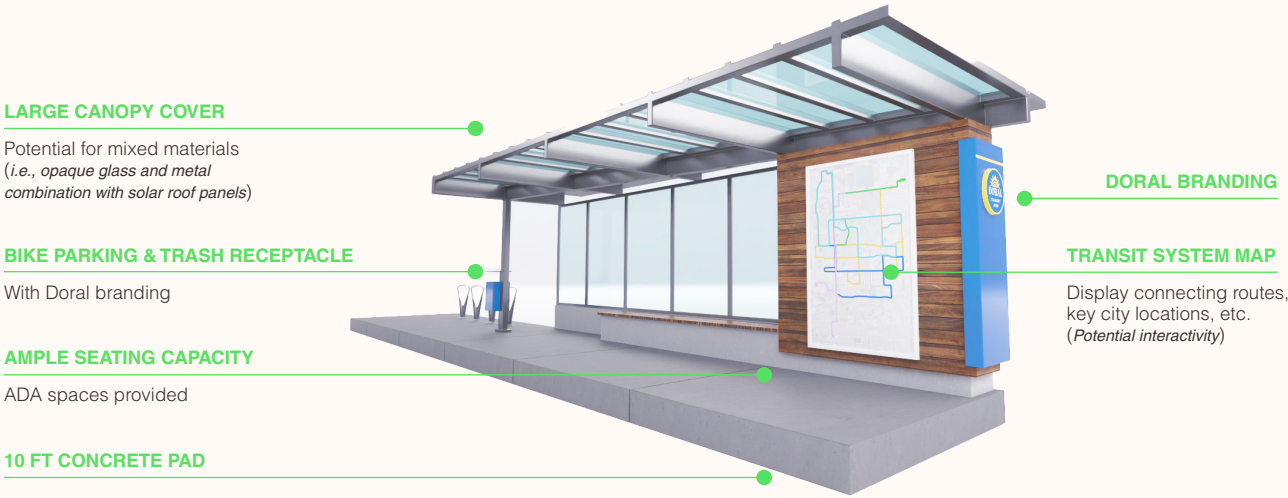
Complementing the distributed hub strategy, the study proposes a typical enhanced shelter prototype to upgrade the rider experience across the network. The conceptual design includes a shaded canopy with durable materials suited for South Florida's climate, integrated seating, ADA-accessible boarding pads, improved lighting, and clear signage. Where feasible, shelters could also include digital real-time arrival information, bicycle racks, and space for scooter docking.

The following images depict the conceptual shelter prototype and renderings of it in context within some of the recommended hub locations. This shelter typology is presented as a conceptual model

to be refined during subsequent design and implementation phases. Future refinements should reflect both community input and engineering constraints, ensuring that shelter designs balance function, aesthetics, and maintainability.

By incorporating these amenities in a high-demand area, the shelter supports smoother transfers between Doral Transit routes and Miami-Dade County services, while creating a safer, more comfortable, and more connected environment for riders. This investment not only addresses existing gaps but also reinforces Downtown Doral's role as a key Center Hub within the network.

● Figure 27. Conceptual Mobility Hub Shelter Prototype



Shelter at Doral Legacy Park
Conceptual Corner Hub
The rendering illustrates a proposed enhanced shelter at Doral Legacy Park, envisioned as a Corner Hub within the updated Doral Transit System. Compared to existing conditions, currently limited to a bench and signpost on the sidewalk, the conceptual design offers a covered waiting area, seating, real-time information, wayfinding, and bicycle parking. This upgraded facility would improve comfort, safety, and connectivity for riders while supporting the park's role as a major community destination and transfer point.

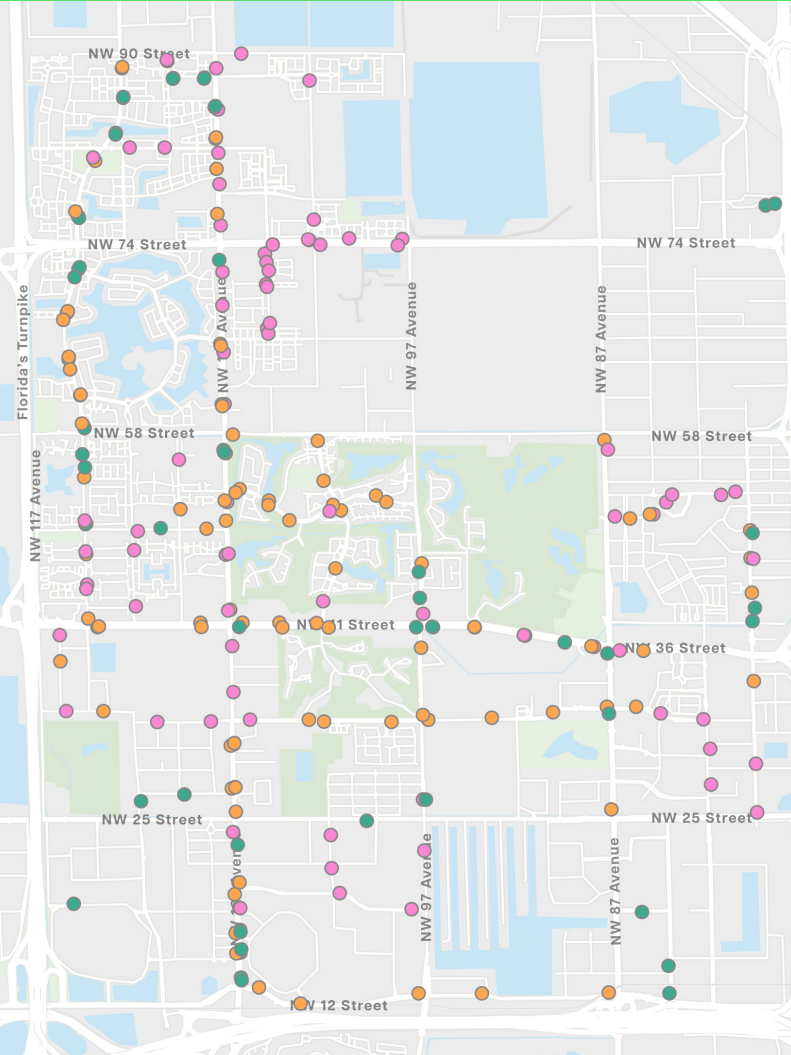


Enhanced Shelter at Doral Central Park
Conceptual Center Hub
This rendering illustrates the proposed mobility hub shelter at Doral Central Park, designed to provide riders with a shaded, comfortable, and safe waiting area compared to the current minimal stop conditions. Equipped with seating, weather protection, bicycle parking, and a system map for wayfinding, the enhanced shelter improves accessibility for families and park users while better integrating transit into one of the city's most important recreational destinations.



Enhanced Shelter at Downtown Doral
Conceptual Center Hub
The conceptual rendering for the Downtown Doral Hub illustrates a modern enhanced shelter that replaces today's minimal infrastructure of a simple bench and signpost. Situated within one of the city's most active districts, the upgraded facility provides expanded shaded seating, bicycle parking, ADA-accessible features, and a digital kiosk with real-time information and wayfinding.

● Figure 28. Doral's Transit Stop Amenities - Existing



- Sign Post
- Bench
- Shelter

Doral Transit Stop Amenities

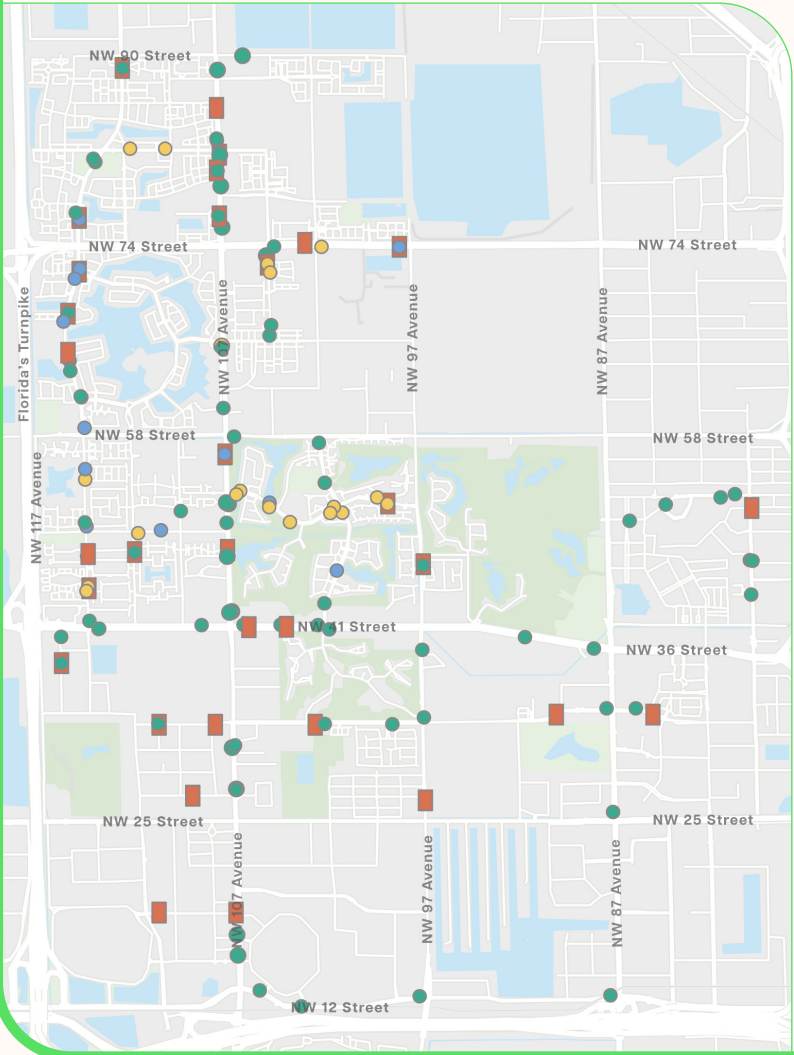
A comprehensive review of transit stop amenities was completed as part of the recently adopted Doral Transportation Master Plan (TMP). This inventory now serves as a foundation for integrating the proposed route modifications and mobility hub concepts outlined in this study. By combining both efforts, the city can systematically enhance the rider experience, ensuring that infrastructure keeps pace with service expansions and restructuring.

The proposed improvements focus on equipping existing trolley stops with standardized, accessible, and user-friendly amenities. These include enhanced shelters with weather protection, ADA-compliant boarding areas, seating, bicycle racks, real-time passenger information, and trash receptacles. The inclusion of these features directly addresses community feedback that emphasized the importance of greater comfort, safety, and usability at transit stops.

It should be noted that the final number, type, and placement of stop amenities will depend on the ultimate configuration of the proposed network. Route restructuring may consolidate certain stops, shift stop spacing or introduce new locations. As such, a future phase of feasibility analysis, design, and implementation will be required to determine final siting, amenity types, and funding priorities.

● Figure 29. Doral's Transit Stop Amenities - Proposed

- Shelter
- Bike Rack
- Bike Rack & Shelter
- Midblock Crossing



The recommended upgrades as shown in Figure 29 are as follows:

➡ **Over 100 New or Upgraded Shelters** – Strategically placed at high-ridership locations and transfer points to improve passenger comfort, weather protection, and visibility. These would replace or supplement existing benches and signpost-only stops.

➡ **Over 30 Midblock Crossings** – Recommended near major destinations and along corridors where high demand and safety concerns warrant safe pedestrian access to stops. These improvements would help reduce jaywalking and improve ADA accessibility.

➡ **Bicycle Parking and Shelter Integration** – Bike racks and combined bike-and-shelter installations are recommended at select locations, particularly at or near mobility hubs, to strengthen first-/last-mile connections.

➡ **Wayfinding and Branding Elements** – Incorporation of consistent signage, system maps, and Doral-branded features to strengthen system identity while providing clearer rider information.

Network Recommendations Summary

The proposed modifications position the Doral Transit System (DTS) as a flexible, future-ready network that adapts to the city's evolving needs. By strategically combining enhanced neighborhood coverage, direct medical access through a new Health Route, and stronger regional integration with Miami-Dade's Better Bus Network, the updated system addresses critical service gaps while reinforcing the trolley's role as the backbone of Doral's local mobility framework. These refinements not only respond to community requests for higher frequency and expanded reach but also ensure

that the DTS continues to connect residents, workers, and visitors to the city's most important destinations. In doing so, the recommendations create a network that is more efficient, equitable, and resilient, providing a solid foundation for long-term growth and adaptability as travel demand and land use patterns continue to evolve.

To better illustrate the system-wide benefits, Table 8 summarizes the key outcomes of the proposed recommendations.

● Table 8. Summary of Proposed Network Recommendations

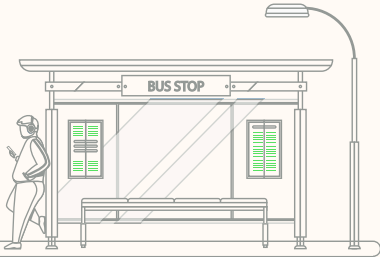
Category	Key Recommendations	Quantities	Purpose / Impact
Network Modifications	Route restructuring (5 updated routes, including Health Route), clockwise/counterclockwise loops	34 new miles of roundtrip service	Improves coverage, efficiency, and direct access to medical and employment centers
Mobility Hubs	Three hub types (Corner, Center, Gateway) at key transfer points (Downtown Doral, Doral Central Park, Doral Legacy Park, etc.) New conceptual enhanced shelters with shade, seating, ADA features, lighting, and bike racks	4 proposed hubs and 2 enhanced existing hubs	Strategic transfer points enhancing connectivity to BBN and within DTS, and improving comfort, safety, and multimodal access
Stop Amenities	New Doral standard shelters, trash receptacles, bike racks, ADA upgrades, and improved signage combined with proposed mid-block crossings for improved stop accessibility	120 stops upgraded	Creates consistency in rider experience and elevates overall system image
Regional Integration	Hubs and route restructuring enhance connectivity with Miami-Dade County's Better Bus Network and other regional transit services	8 BBN routes crossing Doral	Ensures local–regional transit integration and coverage
Community Priorities	Higher frequency, bilingual services, Freebee coordination, improved rider feedback process	Systemwide	Aligns DTS directly with expressed public needs

POTENTIAL RIDERSHIP AND POTENTIAL MARKETS SERVED

This section provides ridership estimates for both the existing Doral Transit System (DTS) and the recommended network, and identifies the key rider markets each system would serve. The analysis draws on observed passenger counts from the City's 2023–2024 counter reports, incorporating actual boarding activity to anchor projections in current travel behavior. It also factors in the operating characteristics of each route such as average headways, service span, and weekend availability along with projected service changes under the proposed network scenarios.

Ridership forecasts are further informed by demand drivers including walk access to stops, proximity to major origins and destinations, and opportunities to connect with regional Miami-Dade Transit services under the Better Bus Network. By combining these data sources, the study estimates how changes to service levels, route design, and system coverage would influence both daily and annual passenger volumes. Beyond the numbers, the section highlights the types of riders and trip purposes most likely to benefit from the proposed refinements, ensuring that the DTS continues to meet the evolving needs of residents, employees, students, and visitors.

The following subsections: Methodology, Ridership Estimates, and Potential Markets Served provide additional detail on the data inputs, estimation process, and the community benefits that each scenario is projected to deliver.



Methodology & Terminology

The analytical framework used to develop ridership projections for the Doral Transit System (DTS) combines observed boarding counts, schedule-based operating patterns, headway elasticity factors, and weekday/weekend distribution parameters. The projections draw on baseline passenger counts, operating assumptions, and scenario design choices to ensure consistency and transparency. Together, these elements establish a clear basis for understanding how ridership outcomes were derived.

- ⇒

Observed Baseline: 2023–2024 boarding totals were compiled from the City’s automated “Counter Reports” for Routes 1–3; Route 4 currently lacks recent counters and is represented by a planning placeholder extrapolated from Route 3.
- ⇒

Operating Patterns: Current weekday headways and concurrent bus counts were inferred from the Doral Trolley service hours tables provided by the city (columns labeled B-1, B-2, etc., and peak inserts where shown). These headways anchor the “existing” scenario.
- ⇒

Scenario Design: Three scenarios were analyzed for both the existing and proposed networks: Existing Fleet, 20-minute headways, and 15-minute headways. For proposed routes, weekend service was mapped to existing route patterns (e.g., 1A/1B/5 mirror Route 1; Route 2 mirrors Route 2; Route 3 mirrors Route 3; Route 4 mirrors Route 4).

- ⇒

Ridership Response to Frequency: Following the 2020 study, ridership is modeled as a function of generalized travel time (in-vehicle time $\approx$ 24.2 minutes for a typical 5-mile trip at 12.4 mph plus average wait = headway/2). A travel-time elasticity of -1.5 converts changes in headway into proportional changes in demand.
- ⇒

Weekday/Weekend Distribution: Daily ridership by day type is disaggregated using established systemwide factors from the 2020 analysis: Saturday $\approx$ 44.4% of weekday daily demand; Sunday $\approx$ 17.0% of weekday daily demand. These factors are applied only for routes that operate on the given day; routes without Saturday or Sunday service show zeros for those days.

Ridership Estimates

The results of the ridership modeling span three scenarios—Existing Fleet, 20-minute headways, and 15-minute headways—applied to both the current and proposed DTS networks. The estimates illustrate the scale of potential growth tied to frequency improvements

and network restructuring. They also highlight how weekend service contributes significantly to total annual boardings, offering insights into both daily commuter demand and broader community mobility needs.

A

Existing Network — Baseline (Observed/Annualized) by Day Type

The baseline ridership profile reflects observed boardings from the 2023–2024 counter reports, disaggregated into weekday, Saturday, and Sunday volumes based on current service patterns.

Baseline demand totals approximately 374,000 annual boardings, with the majority concentrated on weekdays and Route 1 contributing the only significant Sunday ridership.

● **Table 9.** Existing Network - Baseline (Observed/Annualized) by Day Type

Route	Annual Weekday	Annual Saturday	Annual Sunday	Avg Weekday Daily	Avg Saturday Daily	Avg Sunday Daily	Total Annual
R1	145,245	28,782	3,085	574.3	575.6	61.7	177,112
R2	40,765	13,550	0	161.1	322.9	0.0	54,315
R3	57,774	19,157	0	228.3	383.1	0.0	76,931
R4*	65,391	0	0	258.5	0.0	0.0	65,391
Total	309,175	61,488	3,085	1,223.6	1,229.8	61.7	373,749

*R4 baseline was extrapolated from R3 since R4 counter data was not available.

B

Existing Network — Projections for 20-min Headways (by Day Type)

Applying a 20-minute headway across the existing routes increases projected demand by reducing wait times and improving service reliability.

The system grows to roughly 482,000 annual boardings under this scenario, with Route 1 showing the largest gains due to its seven-day operation.

● Table 10. Existing Network - Projections for 20-min Headways (by Day Type)

Route	Annual Weekday	Annual Saturday	Annual Sunday	Avg Weekday Daily	Avg Saturday Daily	Avg Sunday Daily	Total Annual
R1	173,796	34,437	5,694	686.3	688.7	113.9	213,927
R2	57,053	19,074	0	225.5	450.9	0.0	76,127
R3	77,289	25,756	0	305.5	515.1	0.0	103,045
R4*	88,437	0	0	349.5	0.0	0.0	88,437
Total	396,575	79,267	5,694	1,566.9	1,585.3	113.9	481,536

*R4 baseline was extrapolated from R3 since R4 counter data was not available.

C

Existing Network — Projections for 15-min Headways (by Day Type)

Further reducing headways to 15 minutes enhances convenience and accessibility, particularly for weekday commuters and Saturday riders.

Total ridership rises to approximately 515,000 annual boardings, with improvements spread across all routes and the strongest weekend impacts again observed on Route 1.

● Table 11. Existing Network - Projections for 15-min Headways (by Day Type)

Route	Annual Weekday	Annual Saturday	Annual Sunday	Avg Weekday Daily	Avg Saturday Daily	Avg Sunday Daily	Total Annual
R1	187,985	37,235	5,441	743.5	744.7	108.8	230,661
R2	60,384	20,106	0	238.6	477.7	0.0	80,490
R3	82,186	27,387	0	324.9	547.7	0.0	109,573
R4*	93,924	0	0	371.2	0.0	0.0	93,924
Total	424,479	84,728	5,441	1,678.3	1,694.6	108.8	514,648

*R4 baseline was extrapolated from R3 since R4 counter data was not available.

D

Proposed Network — Projections for Existing Fleet (23 vehicles) (by Day Type)

Distributing the current 23-vehicle fleet across the six recommended routes provides a baseline estimate for the proposed network without adding new resources.

Even under this constrained scenario, ridership nearly doubles compared to the existing system, reaching about 834,000 annual boardings, driven by expanded coverage and new weekend markets.

● Table 12. Proposed Network - Projections for Existing Fleet (23 vehicles) (by Day Type)

Route	Annual Weekday	Annual Saturday	Annual Sunday	Avg Weekday Daily	Avg Saturday Daily	Avg Sunday Daily	Total Annual
1A (Downtown)	140,991	27,914	667	557.8	558.4	11.3	169,629
1B (Jobs)	145,591	28,815	718	576.1	576.5	12.0	175,123
2 (Doral Blvd/ NW 87 Ave <-> Palmetto Metrorail)	154,528	31,333	0	610.2	626.6	0.0	185,861
3 (NW Quadrant Connector)	93,657	19,087	0	370.3	381.0	0.0	112,744
4 (FIU Connector)	97,572	0	0	385.7	0.0	0.0	97,572
5 (Health Route)	77,940	15,882	739	308.1	308.4	12.3	93,561
Total	710,279	123,030	2,124	2,808.3	2,450.9	35.9	834,490

E

Proposed Network — Projections for 20-min Headways (by Day Type)

Expanding the fleet to achieve 20-minute headways enables more consistent service and stronger integration between routes and regional connections.

Annual boardings are projected to surpass 1.09 million, with Downtown Doral, the Jobs corridor, and the Health Route showing the most significant weekend growth.

● Table 13. Proposed Network - Projections for 20-min Headways (by Day Type)

Route	Annual Weekday	Annual Saturday	Annual Sunday	Avg Weekday Daily	Avg Saturday Daily	Avg Sunday Daily	Total Annual
1A (Downtown)	186,743	36,964	738	738.4	739.0	12.3	224,445
1B (Jobs)	192,563	38,112	978	760.4	761.0	19.6	231,652
2 (Doral Blvd/ NW 87 Ave <-> Palmetto Metrorail)	201,964	40,719	0	798.3	814.4	0.0	242,683
3 (NW Quadrant Connector)	122,541	24,637	0	484.4	492.6	0.0	147,178
4 (FIU Connector)	128,843	0	0	509.7	0.0	0.0	128,843
5 (Health Route)	91,616	18,412	1,969	361.9	362.4	39.4	115,997
Total	924,270	158,843	3,685	3,652.9	3,176.9	73.7	1,090,798

F

Proposed Network — Projections for 15-min Headways (44 vehicles) (by Day Type)

The full build-out scenario envisions 44 vehicles providing 15-minute service across all routes, maximizing frequency and coverage.

Under this scenario, ridership is expected to reach approximately 1.24 million annual boardings, establishing the DTS as a high-frequency, citywide system with robust weekday and weekend performance.

● Table 14. Proposed Network - Projections for 15-min Headways (44 vehicles) (by Day Type)

Route	Annual Weekday	Annual Saturday	Annual Sunday	Avg Weekday Daily	Avg Saturday Daily	Avg Sunday Daily	Total Annual
1A (Downtown)	211,661	41,907	1,001	836.9	837.6	20.0	254,569
1B (Jobs)	218,363	43,240	1,140	863.3	864.0	22.8	262,743
2 (Doral Blvd/ NW 87 Ave <-> Palmetto Metrorail)	229,203	46,052	0	906.3	921.0	0.0	275,255
3 (NW Quadrant Connector)	138,996	27,936	0	549.4	558.2	0.0	166,932
4 (FIU Connector)	146,136	0	0	577.5	0.0	0.0	146,136
5 (Health Route)	109,046	21,657	864	430.9	432.0	17.3	131,566
Total	1,053,405	180,792	3,005	4,164.3	3,615.8	60.1	1,237,201

Across all scenarios, the projections show that frequency improvements and network restructuring deliver substantial ridership growth for the Doral Transit System. The existing four-route network grows from a baseline of about 374,000 annual boardings to roughly 482,000 with 20-minute headways and 515,000 with 15-minute headways, with the largest weekend gains concentrated on Route 1. By contrast, the proposed six-route network nearly doubles ridership even with the existing 23-vehicle fleet, reaching 834,000 annual

boardings, and climbs to more than 1.09 million at 20-minute headways and about 1.24 million at 15-minute headways. Weekend service contributes significantly to these increases, especially on the Downtown (1A), Jobs (1B), and Health (5) routes. Taken together, the comparison illustrates how the updated network not only closes service gaps left by the Better Bus Network but also positions the trolley as a high-frequency, citywide system capable of serving over a million trips annually.

Potential Markets Served

The analysis highlights rider groups, trip purposes, and community markets that will benefit most from the proposed DTS refinements. Beyond ridership projections, it is vital to understand who these changes serve and how they improve access. By adding routes, expanding weekend service, and strengthening regional connections, the updated network supports broader mobility needs. Key markets include healthcare, Downtown and civic destinations, employment corridors, residential growth, educational institutions, and regional integration.

Medical Access

The new Health Route directly addresses one of the most consistent requests from the community—better access to healthcare facilities. By linking major hospitals, clinics, and medical office clusters, the route creates reliable connections not only for weekday appointments but also for weekend care needs. Saturday and Sunday operations ensure caregivers, shift workers, and residents without access to a car can reach essential medical destinations. This expansion strengthens equity by reducing barriers for seniors and transit-dependent riders who rely heavily on accessible and frequent service to health-related destinations.

Downtown Doral & Civic Core

Downtown Doral, the city's civic, cultural, and commercial hub, generates strong weekday and weekend demand. The proposed enhancements add two-way coverage, improving access for residents, employees, and visitors. Frequent weekday service ensures reliable connections to offices, schools, and civic institutions, while weekend service supports dining, retail, and entertainment trips, reducing parking pressures and congestion.

Employment Corridors

Doral's economy relies on corridors like Doral Boulevard, NW 87 Avenue, and the northwest industrial quadrant, home to logistics, offices, and retail. Weekday frequency upgrades support shift-based workers, while Saturday service aids retail and service employees. The proposed network better connects job centers to the Palmetto Metrorail and regional transfers, reducing dependence on private vehicles.

Residential Growth Areas

The City of Doral has seen significant new residential development, particularly multifamily communities north and west of Downtown. The extended weekend coverage on proposed Routes 1A, 1B, and 5 increases mobility for households traveling to schools, shopping areas, and recreational facilities. Family-oriented trips—such as errands, dining, and weekend activities—benefit from this expanded coverage, while weekday commutes remain well-served by direct access to employment corridors and regional transit. The dual focus ensures that the DTS provides value across all resident trip types.

Education & FIU

Educational institutions remain a critical ridership market for the DTS. The FIU Connector continues to provide weekday-focused service tailored to the needs of students, faculty, and staff. By maintaining reliable links to Florida International University's Doral campus, as well as adjacent schools and learning centers, the DTS ensures access to education remains a priority. While this route operates only on weekdays, its schedule matches academic and workday demands, maximizing utility for one of the city's most important trip generators.

Regional Integration

Perhaps the most transformative element of the proposed network lies in its strengthened regional integration. By restructuring routes around distributed mobility hubs and ensuring direct connections to Miami-Dade Transit's Better Bus Network, the system increases opportunities for seamless transfers across the county. Key locations such as the Palmetto Metrorail Station and Downtown Doral serve as critical transfer points, anchoring citywide and regional mobility. This integration not only makes longer, cross-jurisdictional trips more viable but also helps position the DTS as the first/last-mile solution for countywide transit, expanding its role beyond a purely local circulator.

VEHICLE TYPE AND FUEL SOURCE ANALYSIS

First-Tier Review of Vehicle Options

As part of this study, transit vehicle options were evaluated to identify candidates that could replace the City of Doral's current trolley-style fleet. As a first tier, the project team conducted a broad review focused on vehicles that matched the size and operating profile of the existing fleet while introducing modern characteristics in vehicle design, passenger comfort, and operational efficiency.

Manufacturers evaluated included:

- ➞ Hometown Manufacturing (View and Streetcar series)
- ➞ New Flyer (Xcelsior line)
- ➞ Gillig
- ➞ ENC (EIDorado National)
- ➞ Proterra and other electric bus suppliers

Each option was assessed against key criteria such as overall length, seating capacity, fuel compatibility, accessibility features, and cost. The objective was to identify vehicles that could maintain the City's desired scale and maneuverability while advancing the fleet toward a more modern, sustainable standard.

In-Depth Review of Top Manufacturer Candidates

From this first-tier review, Hometown Manufacturing and New Flyer emerged as the most promising candidates, offering vehicle models that align closely with Doral's current operating needs while providing pathways for long-term modernization. From the first-tier review, Hometown Manufacturing and New Flyer offer vehicle options that match Doral's midsize operating profile while advancing rider comfort, accessibility, and long-term flexibility.

The following is an in-depth summary of the leading models: Hometown's View and Low Floor Urban, and New Flyer's Xcelsior (35-ft class). Together they frame a practical near-term path that preserves maneuverability and cost control, with a credible long-term transition to more advanced platforms.

Hometown Manufacturing

Hometown Manufacturing has supplied vehicles to Doral in the past, making it a familiar and proven partner for the City's transit system. Its product line offers compact, maneuverable vehicles designed specifically for community circulators and municipal transit systems.

View Model

The View represents a compact, modern design with a sleek, streamlined profile suited for community circulators. It balances maneuverability with passenger comfort and maintains dimensions similar to Doral's existing fleet, allowing for smooth integration into the current operating environment.

Length (typical options): 28–40 ft

Seating capacity (typical range): 30–42 passengers

Fuel types available: Gasoline, CNG, LPG, Battery-Electric

Indicative cost range (by variant):

- Gasoline: \$220k–\$230k
- CNG: \$260k–\$270k
- LPG: \$255k–\$265k
- Battery-electric (excl. charger): \$485k–\$515k

Strengths: Lower up-front cost in gasoline configuration; broad fuel flexibility; strong continuity with Doral's existing operations; good fit for neighborhood-scale service.

Considerations: Higher floor design reduces interior standee space compared to low-floor alternatives; aesthetics less contemporary than some competitors.



Low Floor Urban Model

The Low Floor Urban emphasizes accessibility and a more contemporary transit style. Its low-floor design allows faster boarding and alighting, improving efficiency and making the vehicle more user-friendly for seniors, passengers with disabilities, and riders with strollers or luggage. Seating capacity remains slightly lower than the View, but its configuration supports a more open interior with improved circulation and standing room.

Length (typical options): 30–40 ft

Seating capacity (typical range): 24–34 passengers

Fuel types available: Diesel (ISB/ISL), CNG (ISL)

Indicative cost range (by variant):

- Diesel (ISB): \$525k–\$560k
- Diesel (ISL): \$545k–\$580k
- CNG (ISL): \$605k–\$625k

Strengths: Low-floor accessibility; modern aesthetic; improved standing capacity and passenger flow; sized for urban operations with strong ADA performance.

Considerations: Higher capital cost than the View model; CNG option requires significant fueling infrastructure investments.



New Flyer

New Flyer is one of North America’s leading transit bus manufacturers, widely popular for its innovation, reliability, and service support. Its product line offers a proven platform with modern, low-floor designs that enhance accessibility and passenger experience.

Xcelsior (35-ft class) Model

The Xcelsior line is a widely adopted platform across North America, recognized for its reliability and modern styling. Its 35-ft configuration aligns with Doral’s needs, offering a balance of seating, accessibility, and future-ready propulsion technologies.

Length (typical options): 35 ft (~36 ft over bumpers)

Seating capacity (typical range): 32–33 passengers

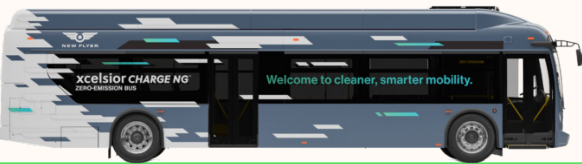
Fuel types available: Clean Diesel, CNG, Hybrid-Electric, Battery-Electric

Indicative cost range (by variant):

- Diesel: \$650k–\$700k
- CNG: \$695k–\$745k
- Hybrid: \$825k–\$875k
- Battery-electric (excl. charger): \$900k–\$950k

Strengths: Contemporary low-floor design with strong ADA accessibility; multiple propulsion pathways including zero-emission; proven reliability across large U.S. fleets; strong resale and service support.

Considerations: Higher upfront costs across all variants; hybrid and battery-electric options require substantial new infrastructure investment.



Comparative Summary of Vehicle Candidates

The review identified three strong candidates that best fit Doral’s fleet replacement needs: the Hometown Manufacturing View, the Hometown Manufacturing Low Floor Urban, and the New Flyer Xcelsior. Each offers a vehicle size compatible with the City’s operating environment while providing modern features that improve comfort, accessibility, and efficiency.

Table 15 summarizes their key specifications, fuel options, costs, and performance considerations to support a balanced evaluation of near-term and long-term options.

Vehicle Candidates Summary

The evaluation shows that each vehicle option offers clear advantages at different points in Doral’s fleet modernization timeline. In the near term, the Hometown View presents the most practical choice, offering low capital cost, broad fuel flexibility, and compatibility with existing fueling infrastructure. In the mid term, the Hometown Low Floor Urban provides an opportunity to adopt a more contemporary, fully low-floor vehicle that improves ADA accessibility and better supports

higher-volume corridors. In the long term, the New Flyer Xcelsior line positions the City to transition into advanced propulsion technologies—including hybrid and battery-electric options—once supporting infrastructure and funding become available. This phased approach allows the Doral Transit System to address current operational realities while building a clear pathway toward a modern, sustainable, and resilient fleet.

Table 15. Comparison of Vehicle Summaries

Attribute	Hometown – View	Hometown – Low Floor Urban	New Flyer – Xcelsior (35-ft)
Model Description (Profile and Fit)	Compact, modern design; strong maneuverability; suited for circulator service with passenger comfort upgrades.	Low-floor design emphasizing accessibility and interior circulation; contemporary appearance; suited for higher-demand urban corridors.	Proven low-floor platform widely used in U.S. fleets; modern aesthetic and strong support network.
Length (typical options)	28–40 ft	30–40 ft	35 ft (~36 ft over bumpers)
Seating capacity (typical range)	30–42 passengers	24–34 passengers	32–33 passengers
Fuel types available	Gasoline, CNG, LPG, Battery-Electric	Diesel (ISB/ISL), CNG (ISL)	Clean Diesel, CNG, Hybrid-Electric, Battery-Electric
Indicative cost range (by variant)	Gasoline: \$220k–\$230k CNG: \$260k–\$270k LPG: \$255k–\$265k Battery-Electric: \$485k–\$515k (excl. chargers)	Diesel (ISB): \$525k–\$560k Diesel (ISL): \$545k–\$580k CNG (ISL): \$605k–\$625k	Diesel: \$650k–\$700k CNG: \$695k–\$745k Hybrid: \$825k–\$875k Battery-Electric: \$900k–\$950k (excl. chargers)
Strengths	Lowest near-term cost; fuel flexibility; continuity with current fleet; good fit for neighborhood-scale service.	Modern low-floor access; ADA-friendly; supports greater standing capacity; updated branding image.	Robust national platform; multiple advanced propulsion options; strong reliability; contemporary branding.
Considerations	Higher floor reduces standee space; less contemporary than low-floor models.	Higher cost than View; CNG requires fueling infrastructure.	Highest capital costs; infrastructure required for CNG/BEV; better suited to agencies with larger support capacity.

Fuel Source Alternatives

The evaluation of vehicle candidates for Doral's fleet modernization highlights that multiple propulsion technologies are available across the Hometown Manufacturing and New Flyer models. Each manufacturer offers configurations ranging from conventional gasoline and diesel to CNG, LPG, hybrid-electric, and battery-electric options. While these choices provide flexibility and a pathway toward sustainability, they also introduce trade-offs in terms of cost, infrastructure requirements, and operational feasibility. This section discusses the relative advantages and limitations of each fuel type to guide near-term and long-term decisions.

Gasoline

Gasoline remains the most practical option for the near term. It aligns directly with Doral's existing fueling practices, requires no new infrastructure, and allows the City to refresh its fleet at the lowest capital cost. Vehicles like the Hometown View model in gasoline configuration can be integrated immediately, providing service continuity while extending the system's modernization. The main limitation is that gasoline offers fewer environmental benefits compared to other fuels, and over time, the City will need to transition to cleaner alternatives.

Compressed Natural Gas (CNG)

CNG buses reduce emissions relative to gasoline and diesel and are widely used in U.S. transit systems. For Doral, the challenge lies in the significant investment required to install and operate CNG fueling infrastructure. Space limitations within the City further complicate this option, making it less feasible in the short term. While CNG may be a good option for larger agencies with established facilities, it poses substantial logistical barriers for Doral.

Liquefied Petroleum Gas (LPG)

LPG provides emissions reductions comparable to CNG and can be used in smaller transit fleets. However, it suffers from similar drawbacks: the need for new fueling infrastructure and limited availability of large-scale suppliers. Given these constraints, LPG offers little practical advantage for Doral compared to the easier integration of gasoline vehicles or the long-term benefits of electric vehicles.

Hybrid-Electric and Battery-Electric

Hybrid-electric and battery-electric buses are the most sustainable long-term option, with New Flyer's Xcelsior line offering models that cut emissions and support regional goals. Battery-electric vehicles provide zero tailpipe emissions and enhance Doral's image but come with high costs, charging needs, and facility constraints. For a city like Doral, with limited real estate for new facilities, adopting electric buses in the near term is not operationally feasible without external funding or regional partnerships.

Fuel Source Comparison

Fuel source plays a critical role in shaping both the short-term feasibility and long-term sustainability of the Doral Transit System. Table 16 compares the primary fuel options—gasoline, compressed natural gas (CNG), liquefied petroleum gas (LPG), and hybrid/electric—across relative cost, sustainability, key advantages, and major limitations. This comparison highlights the practical reasons for maintaining gasoline as the City's short-term solution while recognizing the clear long-term benefits of transitioning to electric propulsion when funding and infrastructure allow.

● Table 16. Comparison of Fuel Sources

Fuel Source	Relative Cost	Sustainability	Key Advantages	Key Limitations
Gasoline	Low (1)	Low–Moderate (2)	Lowest upfront cost; compatible with existing infrastructure; immediately deployable.	Higher emissions compared to other fuels; less aligned with long-term sustainability goals.
Compressed Natural Gas (CNG)	Moderate (3)	Moderate (3)	Cleaner than gasoline/diesel; widely used in U.S. fleets; proven technology.	Requires major fueling infrastructure investment; space constraints in Doral.
Liquefied Petroleum Gas (LPG)	Moderate (3)	Moderate (3)	Lower emissions than gasoline; adaptable for smaller fleets.	Limited supplier availability; new infrastructure required; less scalable.
Hybrid/Electric	High (5)	High (5)	Zero or near-zero tailpipe emissions; strong branding for sustainability; aligns with regional climate goals.	Highest capital cost; requires charging infrastructure and depot upgrades; limited feasibility in short term.

Fuel Source Conclusion

The comparison of fuel options underscores the importance of balancing immediate operational needs with long-term sustainability goals. Gasoline remains the most practical short-term solution for Doral, offering cost-effectiveness, compatibility with the existing fleet, and the ability to modernize service without additional infrastructure investment. In this context, the Hometown View model provides the clearest near-term replacement path, leveraging gasoline availability and low capital cost to refresh the fleet quickly.

Looking further ahead, the Hometown Low Floor Urban offers a mid-term option that introduces a modern low-floor design with diesel or CNG propulsion, aligning with growing accessibility needs and preparing the system for higher-capacity corridors. In the long term, the New

Flyer Xcelsior line positions Doral to take advantage of advanced propulsion technologies, including hybrid and battery-electric models, once supporting infrastructure and funding are in place.

By linking fuel source selection to vehicle choices, the City establishes a phased strategy: adopt gasoline-powered vehicles now, integrate low-floor diesel/CNG units in the mid term, and transition into hybrid and electric models in the long term. This approach ensures that the Doral Transit System remains reliable and cost-effective today, while steadily progressing toward a modern, sustainable, and resilient fleet.

CAPITAL & OPERATING AND MAINTENANCE COSTS



Overview

The costs associated with implementing the updated Doral Transit System (DTS) reflect the recommendations and refinements discussed in prior sections. The system improvements expanded route coverage, mobility hubs, upgraded shelters and crossings, and modern vehicle replacements require both upfront capital investment and recurring operating and maintenance (O&M) commitments. These expenditures not only address immediate service gaps left by the Better Bus Network (BBN), but also establish the infrastructure, fleet, and service levels necessary to support long-term growth.

Capital costs encompass new fleet procurement, construction of distributed mobility hubs, stop-level amenities, and pedestrian safety enhancements. O&M costs reflect adjustments in service hours, vehicle allocations, driver requirements, and fuel use. By comparing existing costs with projections under the updated network, this section highlights the incremental financial impact of transitioning toward a modernized, more resilient DTS.

Estimated Capital Costs

Implementing the proposed refinements to the Doral Transit System (DTS) requires significant upfront investment across vehicles, passenger infrastructure, safety facilities, and supporting systems. Cost ranges reflect the variety of options available—vehicle models differ by propulsion and amenities; mobility hubs may be built at different scales; and shelters, crossings, and technology enhancements can be designed with varying levels of complexity. Presenting costs as ranges allows flexibility so the City can scale improvements according to available funding, partnerships, and phasing priorities.

In addition to the core categories of fleet replacement, hubs, shelters, and crossings, several additional capital cost considerations are relevant. If electric vehicles are introduced, charging infrastructure would be required, representing a notable cost driver. Over the longer term, if Doral transitions away from third-party storage of its fleet, a dedicated operations and maintenance depot could involve a major investment. Finally, branding, wayfinding, and systemwide identity upgrades would ensure that the new network is legible, consistent, and accessible to all users.

Capital Cost Category Descriptions

Fleet Replacement

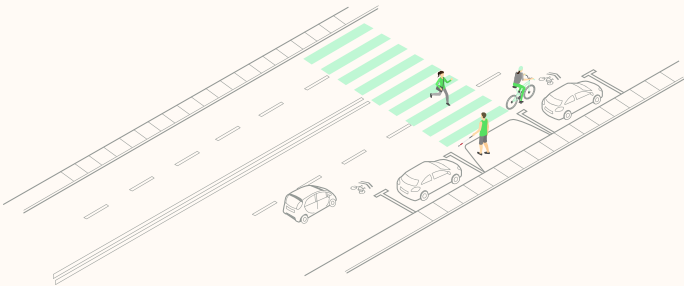
Replacing the current 23-vehicle fleet is one of the largest cost elements. Unit costs vary by manufacturer and propulsion technology, with biodiesel/gasoline being the lowest and electric the highest. The unit ranges were drawn from the vehicle review in this study and validated against recent procurement benchmarks. Fleet replacement costs include the three different scenarios discussed under Ridership Estimates: Existing Fleet, 20-minute headways, and 15-minute headways.

Mobility Hubs

Four small-scale hubs are proposed to serve as key transfer points, integrating multiple trolley routes with Miami-Dade Transit services. Costs are adapted from planning-level estimates in the 2020 SMART Plan Study, with adjustments to reflect inflation and enhancements in hub amenities (shelters, bike parking, digital boards).

Transit Shelters

Approximately 120 trolley stops are recommended for upgrades. Costs reflect the City of Doral's standard transit shelter design, with unit cost data provided through recent local installations and planning benchmarks. Enhancements include shade, ADA accessibility, lighting, and real-time information.



Pedestrian Mid-Block Crossings

Ten priority crossings are included to improve pedestrian safety and access. Costs are based on 2020 study unit costs for ADA upgrades, striping, and basic signage, with allowances for higher-cost treatments (signalization/refuge islands) informed by recent FDOT and Miami-Dade County pedestrian improvement projects.

Other Infrastructure

A lump sum is included for supporting technologies such as vehicle tracking, real-time stop information, and integration with Freebee. Costs build on the technology investments identified in the 2020 study and expanded to reflect modern digital platforms.

Operations/Storage Facility

While the City currently contracts third-party fleet storage, future in-house storage and maintenance could require a dedicated facility. Costs are informed by regional transit facility development benchmarks and were not part of the 2020 study scope, representing a long-term planning consideration.

Branding & Wayfinding

Costs for systemwide signage, mapping, and digital tools are drawn from recent municipal wayfinding and branding programs of similar scale. Investment ensures a cohesive DTS identity, easier navigation, and increased visibility for riders.

Charging Infrastructure

If the City selects electric vehicles, charging equipment and installation will be required. Unit cost assumptions come from current planning-level estimates for transit depot chargers, with ranges reflecting standard vs. fast charging options. Charging needs scale with fleet size, as described in the Vehicle Type and Fuel Source Analysis.

Transitioning to an electric fleet would require investment in charging infrastructure, and the scope of that investment depends directly on the number of vehicles the City elects to electrify. Because this study evaluates three fleet scenarios, Existing Fleet (23 vehicles), 20-minute headways (33 vehicles), and 15-minute headways (44 vehicles), charging requirements vary accordingly.

For each fleet size, two levels of adoption can be envisioned:

Partial Electrification (25% of the fleet): This scenario would allow the City to pilot electric vehicles on select routes while maintaining the majority of the fleet on gasoline or other conventional fuels. It offers a measured entry point into electrification, giving staff experience with charging logistics, scheduling, and vehicle performance without requiring systemwide infrastructure.

Full Electrification (100% of the fleet): This scenario represents a long-term, transformative investment in sustainability. Under this approach, all vehicles would be electric, and the City would need to implement comprehensive charging facilities to support weekday and weekend operations across all routes.

The choice between partial and full adoption will depend on multiple factors, including available funding, depot/storage capacity, operational readiness, and the City's broader environmental and policy objectives. Regardless of the scale, electrification introduces considerations for siting chargers, scheduling vehicle downtime for recharging, and coordinating with local utilities to ensure sufficient electrical capacity.

Fleet Scenario Cost Comparison

Upfront fleet replacement represents the largest driver of variation between scenarios. Transitioning from the baseline (23 vehicles) to a 20-minute headway network (33 vehicles) adds approximately \$3.5M–\$5.0M in capital cost. Expanding further to the 15-minute headway network (44 vehicles) increases costs by another \$3.8M–\$5.5M compared to the 20-minute scenario, or \$7.3M–\$10.5M above the baseline.

These differences shown in Table 17 underscore the importance of balancing service frequency goals with available funding for capital investment.

The following table summarizes estimated capital costs for the categories previously described and serves to present the consolidated cost ranges across the key investment areas.

● **Table 17.** *Estimated Capital Costs by Category*

Category	Unit Cost (Low)	Unit Cost (High)	Quantity/Assumption	Total Cost Range
Fleet Replacement	\$350,000	\$500,000	23 vehicles (<i>Existing Fleet scenario</i>)	\$8.1M – \$11.5M
			33 vehicles (<i>20-min headways scenario</i>)	\$11.6M – \$16.5M
			44 vehicles (<i>15-min headways scenario</i>)	\$15.4M – \$22.0M
Mobility Hubs	\$400,000	\$600,000	4 hubs	\$1.6M – \$2.4M
Shelters	\$50,000	\$70,000	120 recommended upgrades	\$6.0M – \$8.4M
Pedestrian Mid-Block Crossings	\$150,000	\$200,000	10 priority crossings	\$1.5M – \$2.0M
Other Infrastructure	—	—	Technology, wayfinding, micro-mobility	\$1.0M – \$2.0M
Charging Infrastructure	\$40,000	\$80,000	6 chargers (<i>25% of 23-vehicle fleet</i>)	\$0.24M – \$0.48M
			8 chargers (<i>25% of 33-vehicle fleet</i>)	\$0.32M – \$0.64M
			11 chargers (<i>25% of 44-vehicle fleet</i>)	\$0.44M – \$0.88M
			23 chargers (<i>100% of 23-vehicle fleet</i>)	\$0.92M – \$1.84M
			33 chargers (<i>100% of 33-vehicle fleet</i>)	\$1.32M – \$2.64M
			44 chargers (<i>100% of 44-vehicle fleet</i>)	\$1.76M – \$3.52M
Operations/Storage Facility	—	—	Dedicated facility (<i>long-term</i>)	\$10.0M – \$15.0M
Branding & Wayfinding	—	—	Citywide cohesive system	\$0.25M – \$0.50M
Total Estimated Range	—	—	Existing Fleet (<i>23 vehicles</i>)	\$28.8M – \$41.9M + charging
			20-Min Headways (<i>33 vehicles</i>)	\$32.3M – \$46.9M + charging
			15-Min Headways (<i>44 vehicles</i>)	\$36.1M – \$52.4M + charging

Estimated Annual Operating & Maintenance Costs

The City of Doral currently outsources its trolley operations and maintenance to Limousines of South Florida (LSF). According to the 2020 SMART Plan Study, the cost of trolley operations and maintenance at that time was \$59.90 per service hour, covering vehicle operations, fueling, maintenance, and storage. This figure was based on 31,109.9 service hours and a total annual payment of \$1.86 million (2018–2019). In addition, the City contracted with TSO Mobile to provide technology services such as GPS tracking, automated passenger counters, and onboard Wi-Fi, at an additional cost of approximately \$194.89 per month per vehicle.

When updated to 2024 dollars (adjusting for inflation of ~20% since 2019), the effective service-hour cost is now estimated at approximately \$72 per service hour. This updated rate serves as the basis for calculating annual O&M costs across the current and proposed system scenarios, with adjustments to account for varying fleet sizes, service frequencies, and fuel types.

Annual O&M Costs by Fuel Type and Operating Scenario

Building on the baseline cost framework outlined in the 2020 SMART Plan Study and updated with today's service assumptions, the following analysis presents operating and maintenance costs by scenario. These estimates reflect variations in fleet size, fuel type, and service frequency, with costs broken down into vehicle operations, driver hours, and maintenance. Together, they provide a side-by-side comparison of how different operating strategies baseline service, 20-minute headways, and 15-minute headways affect the City's annual budget commitments.

● Table 18. Annual O&M Costs by Fuel Type and Operating Scenario

Scenario	Fleet Size	Fuel Type	Service Hours (Annual)	Driver Hours (Annual)	Maintenance & Storage	Annual O&M Cost (Estimated)
Existing Network – Existing Fleet	23	Biodiesel (baseline)	31,000	31,000	Included in hourly cost	\$2.2M
Proposed Network – Existing Fleet	23	Biodiesel	36,000	36,000	Included	\$2.6M
Proposed Network – 20-min Headways	33	Biodiesel	49,000	49,000	Included	\$3.5M
Proposed Network – 15-min Headways	44	Biodiesel	64,000	64,000	Included	\$4.6M
Proposed Network – 20-min Headways	33	CNG	49,000	49,000	Fuel/maintenance +10%	\$3.9M
Proposed Network – 15-min Headways	44	CNG	64,000	64,000	Fuel/maintenance +10%	\$5.1M
Proposed Network – 20-min Headways	33	Electric	49,000	49,000	Reduced fuel cost, higher capex	\$3.3M
Proposed Network – 15-min Headways	44	Electric	64,000	64,000	Reduced fuel cost, higher capex	\$4.0M

● Table 19. Annual O&M Costs, Ridership, and Cost per Rider by Scenario

Scenario	Fleet Size	Fuel Type	Annual O&M Cost (Estimated)	Annual Ridership (Estimated)	Cost per Rider
Existing Network – Existing Fleet	23	Biodiesel	\$2.2M	374,000	\$5.88
Proposed Network – Existing Fleet	23	Biodiesel	\$2.6M	834,000	\$3.12
Proposed Network – 20-min Headways	33	Biodiesel	\$3.5M	1,090,000	\$3.21
Proposed Network – 15-min Headways	44	Biodiesel	\$4.6M	1,240,000	\$3.71
Proposed Network – 20-min Headways	33	CNG	\$3.9M	1,090,000	\$3.58
Proposed Network – 15-min Headways	44	CNG	\$5.1M	1,240,000	\$4.11
Proposed Network – 20-min Headways	33	Electric	\$3.3M	1,090,000	\$3.03
Proposed Network – 15-min Headways	44	Electric	\$4.0M	1,240,000	\$3.23

Annual O&M Costs Observations

- ⇒

Operating costs are primarily driven by vehicle fleet size, service hours, and driver wages, with fuel and maintenance as significant secondary factors.
- ⇒

Biodiesel currently serves as the main fuel source for Doral's fleet, anchoring cost assumptions in the baseline scenario.
- ⇒

Electric vehicles offer potential long-term savings in fuel and maintenance, though upfront capital investments remain substantially higher.
- ⇒

CNG and LPG represent transitional alternatives, though both require infrastructure investments not currently available within the City.
- ⇒

Weekend service patterns vary by route, shaping both operating costs and ridership demand.
- ⇒

Baseline efficiency is modest, with cost per rider at ~\$5.88 under current operations.
- ⇒

Network restructuring with the existing 23-vehicle fleet nearly doubles ridership while lowering cost per rider to ~\$3.12 — a strong efficiency gain without expanding the fleet.
- ⇒

At 20-minute headways, costs rise but efficiency remains strong, holding cost per rider close to ~\$3.20 across biodiesel and CNG options.
- ⇒

15-minute headways improve frequency and coverage but deliver diminishing returns, with cost per rider rising toward ~\$3.70–\$4.10 depending on fuel type.
- ⇒

Electric scenarios yield the lowest cost per rider in the long term (~\$3.00–\$3.25), underscoring their efficiency potential if capital barriers are addressed.
- Overall, the analysis confirms that the 20-minute headway scenario offers the best balance between affordability, efficiency, and expanded mobility benefits, while partial or full electrification presents opportunities for future sustainability goals.

Funding Opportunities



Implementing the proposed improvements to the Doral Transit System (DTS) will require a combination of local, state, and federal funding sources. Given the scale of capital needs (fleet replacement, mobility hubs, shelters, crossings, and potential electrification) as well as ongoing operating commitments, it is important to align each investment with the most appropriate programs. The following summarizes key funding opportunities:

Local

- ⇒

City of Doral General Funds & Mobility Fees: Local revenues may support smaller-scale capital items (e.g., stop amenities, branding, wayfinding) and provide the required match for state and federal programs.
- ⇒

Miami-Dade County Coordination: Because the DTS connects with the Better Bus Network (BBN), joint projects—such as mobility hubs or shared shelters—could benefit from county cost-sharing.
- ⇒

Public–Private Partnerships (P3s): Opportunities may exist with major employers, retail centers, or developers to co-fund stop amenities, shelters, or mobility hubs near their properties.

State

- ⇒

FDOT Transit Block Grant Program: Provides formula funding to support eligible transit operating costs.
- ⇒

FDOT Transit Corridor Program: Supports services that relieve congestion on state highways; Route 2 (Regional Connector) may be a strong candidate.

- ⇒

FDOT Service Development Program: Funds new services or demonstration projects for up to three years. This could apply to the Health Route (Route 5).
- ⇒

FDOT Section 5339 State Management: Florida administers Section 5339 funds for bus and bus facility capital improvements, with project prioritization based on state and district needs assessments.

Federal

- ⇒

FTA Section 5307 Urbanized Area Formula Funds: Miami-Dade County is the designated recipient; sub-allocations can support Doral's operating or capital needs if coordinated regionally.
- ⇒

FTA Section 5339 Bus and Bus Facilities Program: Provides capital funding to replace, rehabilitate, and purchase buses, as well as construct bus-related facilities. Both competitive and formula allocations are available.
- ⇒

FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities: Could support accessibility upgrades such as ADA-compliant shelters and crossings.
- ⇒

Low or No Emission Vehicle Program (Low-No): Provides competitive funding for zero-emission and low-emission vehicles and supporting facilities—relevant if Doral pursues gradual electrification.

Table 20 organizes funding programs by scale and source so the City can match projects to opportunities. For example, short-term needs like shelters and branding can rely heavily on local/ P3 support, while large-scale investments such as hubs, fleet replacement, or electrification are best pursued through FDOT and FTA capital programs. Mid-term enhancements like the Health Route or Service Development pilots are strong candidates for FDOT demonstration funding.

● Table 20. Funding Programs by Scale and Source

Program	Eligible Uses	Potential Application to DTS	Match Requirement
Local – City of Doral General Funds & Mobility Fees	Small-scale capital projects, local match for grants	Stop amenities, shelters, branding/ wayfinding, partial match for federal/ state funds	0–50% depending on paired program
Miami-Dade County Coordination	Joint projects, regional integration	Cost-sharing on hubs, shelters, transfers with BBN routes	Negotiated
Public–Private Partnerships (P3s)	Co-investment in transit facilities	Shelters/hubs near retail, employer facilities, and private developments	Negotiated
FDOT Transit Block Grant Program	Eligible transit operating expenses	Supports DTS O&M costs across all routes	Typically requires match
FDOT Transit Corridor Program	Services that relieve congestion on state roads	Route 2 (Regional Connector), potentially Route 1B	Up to 50% local match
FDOT Service Development Program	New/demonstration routes (up to 3 years)	Health Route (Route 5) pilot	Up to 50% local match
FDOT Section 5339 (State-Managed)	Bus and facility capital purchases	Fleet replacement, shelters, hubs	Match (usually 20%)
FTA Section 5307 (Urbanized Area Formula)	Operating, preventive maintenance, capital	Distributed regionally through Miami-Dade, could support DTS O&M or fleet	20% capital, 50% operating
FTA Section 5339 (Bus & Bus Facilities)	Replace/rehabilitate buses, build facilities	Vehicle replacement, storage facility, hubs	20% capital
FTA Section 5310 (Enhanced Mobility of Seniors & Individuals with Disabilities)	Accessibility-focused capital	ADA shelters, crossings, paratransit support	20% capital, 50% operating
FTA Low/No Emission Program (Low-No)	Zero-/low-emission vehicles & infrastructure	Electric fleet pilots, charging infrastructure	15–20% local match
Charging Infrastructure (DOE/FTA Joint Programs)	EV chargers, utility upgrades	Phased electrification scenarios	15–20% local match
Long-Term Facility Investments	Depot/storage, operations hubs	Dedicated maintenance/storage facility if Doral moves in-house	Project-specific, often 20%+
Branding & Wayfinding (Local/State)	Citywide signage, maps, digital kiosks	System identity, rider experience	Fully local or bundled with other capital

By leveraging this layered approach, Doral can align short-term needs (shelters, service adjustments, fleet replacement) with local and state support, while pursuing mid- and long-term investments (mobility hubs, electrification, new facilities) through federal discretionary programs. Importantly, many federal programs require local or state matches making it critical for the City to plan its funding strategy as part of the overall implementation roadmap.

Estimated Capital and O&M Costs Conclusion

The combined capital and operating cost analysis demonstrates the full financial picture of implementing the proposed Doral Transit System refinements. Capital investments covering fleet replacement, mobility hubs, shelters, crossings, and supporting infrastructure represent a substantial but necessary foundation for modernizing the system and expanding its reach. At the same time, projected operating and maintenance costs reveal how different fleet sizes, headway scenarios, and fuel choices affect long-term affordability and efficiency.

Together, these analyses underscore the trade-offs decision-makers face between upfront investment, service frequency, and sustainability goals. While baseline improvements already deliver strong efficiency gains, expanded headways and eventual electrification present opportunities to further enhance service and align with broader policy objectives. This financial framework provides the City with a clear roadmap for balancing cost, service quality, and long-term resilience as it advances the Doral Transit System into its next phase.

Equally important are the funding opportunities from local, state, and federal programs available to help finance these investments. From FDOT service development and corridor grants to FTA Section 5339 Bus & Bus Facilities and Low/No Emission programs, the City has multiple pathways to offset costs, leverage matching funds, and phase implementation in alignment with available resources. Integrating these opportunities into the capital and O&M framework provides Doral with a balanced roadmap—one that matches financial feasibility with service improvements while positioning the system for long-term resilience and sustainability.

MAJOR IMPACTS

The proposed refinements to the Doral Transit System (DTS) produce a range of benefits while also introducing challenges that require consideration. By combining the technical assessment with input from the two public workshops, this section summarizes both the positive and negative impacts of the updated network.

Positive Impacts

Expanded Coverage

The proposed six-route network significantly increases the geographic reach of the DTS. Underserved residential areas in northwest and east Doral, as well as employment clusters in the southern corridor, gain direct trolley service for the first time. This directly addresses community requests for greater coverage voiced during the first workshop.

Improved BBN Integration

Integration with the Miami-Dade County Better Bus Network (BBN) strengthens regional mobility. New transfer opportunities at Downtown Doral, Palmetto Metrorail Station, and other mobility hubs shorten overall trip times for residents commuting outside the city. For example, boardings and alightings analysis indicates that over 20% of current trips are tied to regional connectors; improved integration reduces transfers and waiting time.

Higher Accessibility to Jobs and Healthcare

The addition of the Health Route creates direct access to major medical centers, serving both weekday and weekend travel needs. Employment access is improved along Doral Boulevard and NW 84th Avenue, where increased frequency reduces average wait times by up to 5 minutes compared to existing service. Collectively, these changes expand access to more than 10,000 jobs and multiple healthcare providers within the city.

Improved Stop Amenities and ADA Compliance

With an estimated 120 upgraded shelters, riders benefit from shaded seating, lighting, ADA accessibility, and real-time information. Public feedback specifically emphasized bus stop comfort and safety, making this a high-visibility improvement.

Multimodal Hubs

The distributed hub concept shifts the system away from a single central terminal, spreading benefits across four strategic locations. These hubs will enhance transfers between trolley routes, BBN buses, Freebee micro-mobility, and pedestrian/bicycle connections.

Negative Impacts

Potential Increased Operating Costs

Expanded service coverage and increased frequency require additional drivers, vehicles, and maintenance, raising annual O&M costs by an estimated \$1.3–\$2.4 million above current levels, depending on the headway scenario.

Reliance on Transfers

While the distributed hub model improves regional integration, it introduces new transfer requirements for certain trips that were previously one-seat rides. Workshop participants noted concern about the inconvenience of transfers, particularly for older riders and those traveling with children.

Contracted Driver Requirements

Because vehicle operations are subcontracted to Limousines of South Florida (LSF), the city itself does not directly manage driver recruitment or retention. However, expanded service under the proposed network, especially in the 20- and 15-minute headway scenarios, would still require LSF to scale its staffing levels to cover up to 44 vehicles in peak operation. While this arrangement reduces administrative burden for the city, it also emphasizes the need for coordination with LSF to ensure that labor capacity keeps pace with the city's desired service levels.

Risk of Underutilization on Extended Corridors

Some new segments, particularly in lower-density industrial zones, may initially experience lower ridership. Workshop feedback flagged concerns about trolleys “running empty” on the edges of the city. While these extensions serve long-term growth areas, near-term demand may be modest.

Freebee Service Overlap

Participants also raised concerns about potential overlap between trolley service and Freebee micro-mobility coverage. Without careful coordination, this could create inefficiencies or confusion for riders.

Table 21. Summary of Major Impacts

Positive Impacts	Negative Impacts
Expanded Coverage New service reaches underserved residential neighborhoods, employment clusters, and medical facilities.	Increased Operating Costs Expanded service and higher frequency increase O&M costs by \$1.3–\$2.4M depending on headway scenario.
Improved BBN Integration Stronger connections to Miami-Dade’s Better Bus Network at Palmetto Station, Downtown Doral, and other hubs.	Reliance on Transfers Some trips that were formerly one-seat rides now require transfers, raising convenience concerns for seniors and families.
Higher Accessibility to Jobs & Healthcare Over 10,000 jobs and key medical institutions gain improved direct access, including weekend service.	Contracted Driver Requirements LSF (operations subcontractor) will need to scale staffing for up to 44 vehicles in 15-minute headway scenario.
Improved Stop Amenities 120 upgraded shelters with shade, ADA access, seating, lighting, and real-time information.	Risk of Underutilization New service in low-density industrial areas may see limited short-term demand before growth materializes.
Multimodal Hubs Four distributed hubs integrate trolleys with Freebee, bikes, pedestrians, and BBN routes for better transfers.	Freebee Service Overlap Some overlap with Freebee coverage may cause inefficiencies if coordination is not carefully managed.

Overall, the updated network provides measurable benefits in coverage, frequency, and regional integration, directly addressing community-identified priorities. However, these gains come with trade-offs in operating cost, reliance on transfers, and the risk of low ridership in new areas. The study’s recommendations are designed to balance these impacts—ensuring that the DTS grows more accessible, resilient, and efficient, while remaining financially and operationally sustainable.

RECOMMENDATIONS FOR IMPLEMENTATION

The Doral Transit System (DTS) has proven itself as both a community lifeline and a key connector to Miami-Dade's broader network. This study confirms that the system must now evolve to respond to regional changes introduced by the Better Bus Network (BBN), while also addressing community feedback, growing demand, and equity needs.

The findings from the Existing Network Assessment and two rounds of Community Engagement point to a balanced path forward: one that expands coverage, improves reliability, and integrates multimodal services while also being mindful of costs and operational realities. The recommendations presented here are phased to ensure that improvements are both financially sustainable and operationally feasible.

Phased Action Plan

Short-Term Actions (0–3 years)

Route Adjustments: Realign routes (1A, 1B, 2, 3, 4, and 5) to improve coverage and strengthen BBN connections.

- Finalize alignments for Routes 1A, 1B, 2, 3, 4, and 5.
- Update stop inventory to reflect rerouting and eliminate redundant stops.
- Publish revised timetables and bilingual rider guides.

Stop Shelters: Upgrade priority stops with Doral standard shelters (~120 locations), improving ADA compliance, shade, seating, and lighting.

- Prioritize 120 shelters for replacement or installation, focusing on high-ridership and transit-dependent areas.

- Coordinate with Public Works to standardize design and streamline permitting.
- Pilot real-time information screens at 5 priority shelters.

Fleet Adoption: Begin replacement of older trolleys with gasoline-powered Hometown View consistent with current fueling infrastructure.

- Procure first tranche of replacement vehicles using gasoline propulsion.
- Train LSF-contracted operators and maintenance staff on new vehicle features.
- Retire high-mileage legacy vehicles from the fleet.

Community Priorities: Address key workshop requests—higher frequency, more direct routes, and improved bilingual information—where feasible within the existing fleet.

Mid-Term Actions (3–7 years)

Mobility Hubs: Construct four distributed hubs (Downtown Doral, Doral Central Park, Doral Legacy Park, NW 107 Ave/NW 41 St) as multimodal transfer points.

- Conduct feasibility studies and design development for the 4 proposed hubs.
- Implement phased construction starting with Downtown Doral and Central Park hubs.
- Integrate bike racks, Freebee pickup/drop-off points, and digital kiosks.

Stop Amenities Expansion: Continue phased upgrades to shelters and pedestrian crossings, with priority given to underserved areas and high-demand corridors.

- Install additional shelters and lighting in underserved residential and industrial areas. Add 10 priority pedestrian mid-block crossings with ADA and safety upgrades.
- Expand branding/wayfinding elements citywide.

Freebee Integration: Strengthen coordination with Freebee to reduce service overlap and maximize first-/last-mile coverage.

- Adjust service zones to reduce duplication with trolley routes.
- Create joint marketing and wayfinding materials for seamless transfers.
- Pilot shared booking/information platform across trolley and Freebee.

Technology Enhancements: Deploy real-time arrival information, upgraded vehicle tracking, and improved system branding/wayfinding.

- Expand real-time arrival displays to 25–30 high-volume stops.
- Upgrade vehicle tracking systems for better schedule adherence.
- Launch an integrated DTS mobile application.

Long-Term Actions (7+ years)

Fleet Electrification: Transition progressively to electric propulsion, supported by dedicated charging infrastructure and potential depot facility.

- Develop phased electrification plan tied to facility upgrades.
- Acquire first tranche of electric vehicles (25% of fleet) as a pilot program.
- Partner with FPL and Miami-Dade County for charging infrastructure support.

Coverage Expansion: Extend routes to future growth areas (e.g., new residential zones, expanded employment centers, and institutional sites).

- Extend routes to future residential developments in northwest and southwest Doral.
- Add connections to new employment centers and institutional destinations.
- Evaluate demand-responsive service for lower-density areas.

Resiliency and Equity: Ensure that DTS remains accessible to transit-dependent populations and resilient to long-term changes in travel demand.

- Monitor service gaps affecting vulnerable populations and adjust alignments.
- Build operational redundancy for service continuity during emergencies.
- Adopt equity-focused service performance metrics.

Regional Leadership: Position DTS as a model suburban transit system integrated with BBN, supporting sustainability and reduced auto dependency.

- Formalize DTS participation in Miami-Dade's regional transit planning efforts.
- Pursue state and federal sustainability funding for fleet transition.
- Promote Doral's distributed hub model as a best practice for suburban transit.

Translating this framework into actionable steps, the following table organizes recommended actions by phase, identifies responsible stakeholders, and highlights potential funding sources.

This structured view provides decision-makers with a practical roadmap for advancing improvements in a logical, coordinated manner while ensuring financial and operational feasibility.

● Table 21. Implementation Matrix

Phase	Action Area	Key Actions	Stakeholders	Potential Funding Sources
Short-Term (0–3 years)	Route Adjustments	Implement revised alignments (Routes 1A, 1B, 2, 3, 4, 5); coordinate transfers with BBN	City of Doral, LSF (operations), Miami-Dade DTPW	Local operating funds; FDOT Service Development; CMAQ
	Shelters	Install additional standard shelters at priority stops	City of Doral Public Works, Contractors	Local funds; FDOT Transit Corridor Program; FTA 5339 (Bus & Bus Facilities)
	Fleet Procurement	Begin replacement with Hometown Manufacturing “View” vehicles (gasoline)	City of Doral, Vehicle Vendor, FDOT (funding)	FTA 5339(a) Formula; FTA 5339(b) Competitive; FDOT Transit Block Grant
Mid-Term (3–7 years)	Mobility Hubs	Construct 4 small-scale hubs with ADA amenities, bike racks, real-time info	City of Doral, Miami-Dade DTPW, Developers	FTA 5339; FDOT Strategic Intermodal System (SIS); Developer contributions
	Stop Amenities Expansion	Upgrade ~120 stops with lighting, ADA pads, benches, real-time information	City of Doral, Contractors, FDOT (grant support)	FDOT Transit Corridor Program; Local funds; FTA 5307 (Urbanized Area Formula)
	Micro-mobility Integration	Formalize Freebee integration and shared branding with DTS hubs	City of Doral, Freebee, Miami-Dade DTPW	Local funds; FDOT Innovative Service Development; Public-Private Partnerships
Long-Term (7–15 years)	Fleet Transition	Phase in electric vehicles and install charging infrastructure	City of Doral, Utility Providers, Vehicle Vendors	FTA Low/No Emission Program (5339(c)); FDOT Transit Block Grant; Federal infrastructure bills
	Coverage Expansion	Extend routes to future residential/employment growth areas	City of Doral, LSF, Miami-Dade DTPW	Local impact fees; FDOT Service Development; CMAQ
	Storage Facility	Evaluate and develop in-house operations/storage facility	City of Doral, Consultants, FDOT/FTA (funding)	FTA 5339(b); FDOT Transit Corridor Program; Local bonds
	Branding & Wayfinding	Develop systemwide signage, maps, and digital tools for cohesive DTS identity	City of Doral, Public Works, Consultants	Local funds; FDOT Transit Corridor Program



CONCLUSION

The Doral Transit Study Update builds upon the foundation of the 2020 SMART Plan Coordination Study while responding to the transformative effects of Miami-Dade County’s Better Bus Network and the City’s continued growth. The analysis confirmed that the Doral Trolley remains a vital community and regional connector, but also revealed service gaps, equity challenges, and operational inefficiencies that must be addressed to maintain relevance and reliability in a changing mobility landscape.

Through a combination of technical analysis, ridership modeling, community engagement, and peer review of transit best practices, this study developed a set of actionable recommendations that balance expanded coverage, improved regional integration, and enhanced passenger experience with fiscal and operational realities. Proposed modifications—including new routes, mobility hubs, upgraded shelters, and expanded stop amenities—directly address community priorities identified in two public workshops, such as higher frequency, greater coverage, and improved accessibility to jobs, healthcare, and educational institutions.

The capital and operating cost analyses provide decision-makers with a clear understanding of the financial trade-offs tied to fleet replacement, service frequency, and long-term electrification. Importantly, the inclusion of funding opportunities highlights viable paths to secure local, state, and federal resources, ensuring that implementation can be pursued in a financially sustainable manner.

Ultimately, this report charts a phased, adaptable roadmap for advancing the Doral Transit System. Short-term actions prioritize near-term efficiency gains through adjusted routes and shelter upgrades; mid-term actions focus on mobility hubs, stop amenity expansion, and service integration; and long-term actions look toward electrification and strategic network growth. Together, these steps create a flexible, resilient, and future-ready system that strengthens Doral’s position as a leader in local and regional mobility.



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