

MIAMIBEACH

Transportation Master Plan Update: First/Last Mile Connections to the SMART Plan Study

Final Report
June 2022



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EXECUTIVE SUMMARY

Purpose

The **First/Last Mile Connections to the SMART Plan Study** was commissioned by the City of Miami Beach, with grant assistance from the Miami-Dade Transportation Planning Organization (TPO), to assess the accessibility of proposed Strategic Miami Area Rapid Transit (SMART) stations within Miami Beach for pedestrians, cyclists, and transit riders. Providing better access to and from SMART stations for multiple transportation modes, rather than focusing on one specific mode, will ultimately lead to better or improved connections to the future SMART Beach Corridor and Bus Express Rapid Transit (BERT) services.

The success of regional transit services outlined in the SMART Plan is key to the City of Miami Beach's broader goals, particularly reducing the driving mode share for travel to, from, and within the City.

Projects identified and described in this study are intended to drive success for Beach Corridor and BERT services in Miami Beach in coordination with regional efforts. Proposed Beach Corridor stations in Miami Beach are scheduled to open in 2026, with BERT services opening earlier in spring 2023.

This is not a standalone document – the strategies listed here are intended to integrate directly into the Miami Beach Transportation Master Plan (TMP) Update, to be completed in the future, which will include a comprehensive assessment of transportation needs throughout Miami Beach. Project concepts included in this document should be viewed as a guide for specific investments leading up to Beach Corridor opening in coordination with broader TMP efforts.

Existing Conditions

Analysis conducted for this report demonstrates that multimodal access throughout the expected service area of future Beach Corridor and BERT services is already quite strong. However, incremental improvements are needed to ensure that the potential of these future services is maximized. This report identified critical challenges to first mile and last mile connections to and from SMART Plan services, including:

- Lower intersection density and more auto-oriented infrastructure in the Mid-Beach area necessitates strong non-pedestrian connections to and from SMART stations located in the area, particularly at Mt. Sinai Medical Center.

- Blocks adjacent to proposed SMART stations do not always feature adequate bicycle facilities or connections to already existing bicycle infrastructure. Providing safe bike connections on these final blocks is key to overall bike access.
- Long-term bike storage and bikeshare facilities are not sufficient at proposed SMART stations.
- Most streets in Miami Beach have posted speeds above 25 mph – streets that do not have bike facilities can be fast and thus unsafe.
- Operating hours of existing and future (Better Bus Network) transit service may not match the proposed operating hours for the Beach Corridor and BERT.
- Reduced frequencies on both Miami-Dade County Department of Transportation and Public Works (DTPW) and Miami Beach Trolley routes due to pandemic conditions limit the potential of transit as a last mile connection – these services need higher frequency, which may come in before the SMART services start operations as pandemic conditions subside.

Project Development Approach

A specific list of both programmatic and infrastructure projects was developed to address the key challenges identified during the existing conditions analysis. These projects address challenges near all proposed SMART stations in Miami Beach. Projects were developed with specific consideration for implementation, cost-effectiveness, and integration with broader TMP objectives.

The following existing plans and programs also directly influenced the recommendations that were developed in this study:

- DTPW's Better Bus Network
- 2015 Miami Beach Bicycle and Pedestrian Master Plan
- 17th Street Bicycle & Transit Lanes Feasibility Study
- 41st Street: Conceptual Streetscape Design
- City of Miami Beach Bus Stop Improvement Program
- Integration of Micromobility Across SMART Corridors

Proposed Projects

The final set of recommended projects is listed in the table below. These projects range from specific street infrastructure interventions intended to improve SMART access to citywide policy changes which can facilitate SMART station access. Projects are organized around specific SMART stations and displayed accordingly.

Table 1 List of Recommended Projects

Station or Program Element	Project Number	Project
5th & Lenox	1	Lenox Ave sharrows (5 th to 6 th)
	2	6 th St greenway (West to Meridian)
	3	West Ave protected bike lane (5 th to 16 th)
	4	Long-term bike storage
5th & Washington	5	5 th St bike lane (Washington to Ocean)
	6	Long-term bike storage
Washington & 10th/14th	7	10 th St greenway
	8	11 th St greenway
Convention Center area	9	17 th St bike lane (West to Beachwalk)
	10	Convention Center Dr sharrows (18 th to 17 th)
	11	Intersection improvements (18 th & Meridian)
	12	Intersection improvements (17 th & Convention Ctr)
	13	Mid-block crossing
28th Street	14	Long-term bike storage
	15	Bike racks
Fontainebleau	16	Collins Ave bike lane (north of 44 th) (44 th to 63 rd)
	17	44 th St bike lane (Indian Creek to Collins)
	18	41 st St bike lane (Indian Creek to Beachwalk)
	19	Collins Ave bike lane (south of 44 th) (26 th to 44 th)
	20	Indian Creek Dr bike lane (41 st to 44 th)
	21	Bike racks
Mid-Beach	22	Pine Tree Dr bike lane (23 rd to 63 rd)
	23	Royal Palm Ave greenway (28 th to 42 nd)
Mount Sinai Medical Ctr	24	Alton Rd bike lane (Bay/Chase to hospital)
	25	N. Bay Rd greenway (Alton to Sunset + Alton to 48 th)
Improve trolley frequency	26	Allocate funding
	27	Pursue electric, low-floor vehicles
	28	Extend service hours
	29	Coordinate with DTPW to complement services
Include Washington & 17th transit hub as a SMART station	30	Collaborate with other regional agencies
	31	Analyze for bus bunching mitigation

Station or Program Element	Project Number	Project
Leverage flexibility of on-demand transit	32	Monitor service efficiency and quality
	33	Expand service area
	34	Match service hours to SMART services
Enhance bikeshare	35	Co-locate bikeshare stations at SMART stations
	36	Monitor bikeshare demand
	37	Consider providing subsidies or joint passes
Implement transportation incentives and marketing campaigns for tourists	38	Transform parking garages into mobility hubs
	39	Market SMART and trolley services to tourists
	40	Coordinate with regional entities
Leverage existing transit access programs	41	Develop an education and outreach campaign to encourage participation in these programs
	42	Develop a timeline aligned with SMART services roll-out

Next Steps

This study is a planning document intended to support the long-term vision for SMART Plan services in Miami Beach. The recommendations in this document will require further vetting and evaluation prior to implementation. The anticipated timeline presented in Figure 1 shows what the next steps should be for the involved stakeholders to bring these first/last mile solutions to fruition in coordination with the SMART routes.

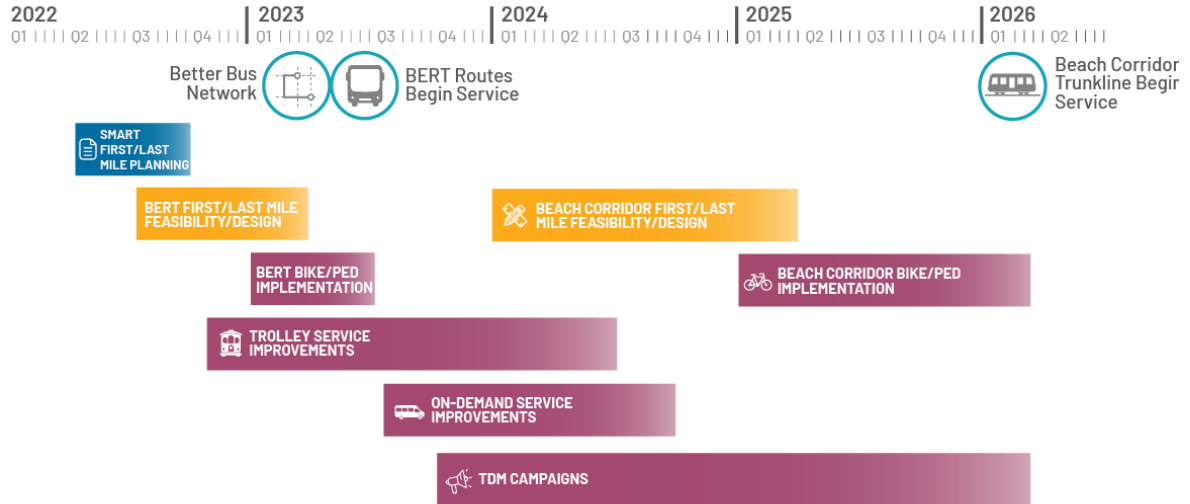


Figure 1 Project Implementation Timeline

Funding

A variety of external funding sources exist to support implementation of specific projects identified in this plan beyond internal City of Miami Beach funding. These include:

- 2021 Bipartisan Infrastructure Law
- 5339 Bus and Bus Facilities
- 5307/5311 Job Access and Reverse Commute (JARC)
- Flexible Funding Programs – Transferring Title 23 Funds from FHWA to FTA
- Surface Transportation (STP) Funds and Transportation Alternatives Program (TAP) for Transit Projects
- Congestion, Mitigation and Air Quality (CMAQ) Funds
- Intermodal Development Program
- Public Transit Block Grant Program
- Transit Corridor Program
- County Incentive Grant Program (CIGP)
- Transportation Regional Incentive Program (TRIP)

Coordination with Partner Agencies

The success of the SMART Plan relies on strong coordination between multiple regional and local agencies. Implementation of projects recommended by this study should be led by the City of Miami Beach in close coordination with the following agencies:

- Florida Department of Transportation (FDOT)
- Miami-Dade County Department of Transportation and Public Works (DTPW)
- The Miami-Dade Transportation Planning Organization (TPO)

1 INTRODUCTION

In April 2016, the Miami-Dade Transportation Planning Organization (TPO) adopted the Strategic Miami Area Rapid Transit (SMART) Plan with the goal of improving mobility choices within Miami-Dade County. The SMART Plan proposed the implementation of six rapid transit corridors across the county, along with a network of Bus Express Rapid Transit (BERT) routes. This investment is expected to result in improved travel times and reliability during peak travel periods, less reliance on automobiles, and better access to major employment centers, major commercial areas, and tourist attractions as well as recreational areas, among other benefits¹.

Four of the routes proposed in the SMART Plan will provide a direct service between the City of Miami Beach and the Greater Miami region:

- The **Beach Corridor**, one of the six proposed rapid transit corridors, will connect Midtown Miami and the Design District with the Miami Beach Convention Center. On January 30, 2020, the TPO Governing Board selected the Locally Preferred Alternative (LPA) as elevated rubber tire technology for the Beach Corridor Trunkline; extension of the Metromover along Miami Avenue to NW 41st Street for the Beach Corridor Design District extension; and dedicated lanes for bus/trolley along Washington Avenue between 5th Street and 17th Street for the Beach Corridor Convention Center extension. The Miami-Dade County Department of Transportation and Public Works (DTPW) is currently refining and finalizing the study analysis on this LPA which includes obtaining conceptual permits from regulatory agencies, finalizing cost estimates, and conducting public outreach.
- **Route f1 or Beach Express North**, a BERT route that will extend from the Miami Beach Convention Center to Golden Glades Multimodal Transportation Facility.
- **Route f2 or Beach Express Central**, a BERT route that will extend from the Miami Beach Convention Center to Civic Center Metrorail Station.
- **Route f3 or Beach Express South**, a BERT route that will extend from the Miami Beach Convention Center to Downtown Miami Intermodal Center (Miami Central Station).

Once implemented, the SMART Plan routes will fundamentally reshape how transit riders move both within Miami Beach and across the County. Miami Beach residents and visitors will have more mobility options or access to many of the region's key employment centers and destinations (the "SMART Routes' Service Area" section of this document provides more detail). A key component to realizing the potential of these new services is ensuring that pedestrians, bicyclists, and other transit users can access them conveniently and safely. To

¹SMART Plan Frequently Asked Questions <http://mdtpo.org/library/smartplan-frequently-asked-questions.pdf>

prepare for the upcoming changes to the transit network and evaluate transit-access conditions for new and existing riders alike, the City of Miami Beach conducted this **First/Last Mile Connections to the SMART Plan Study**.

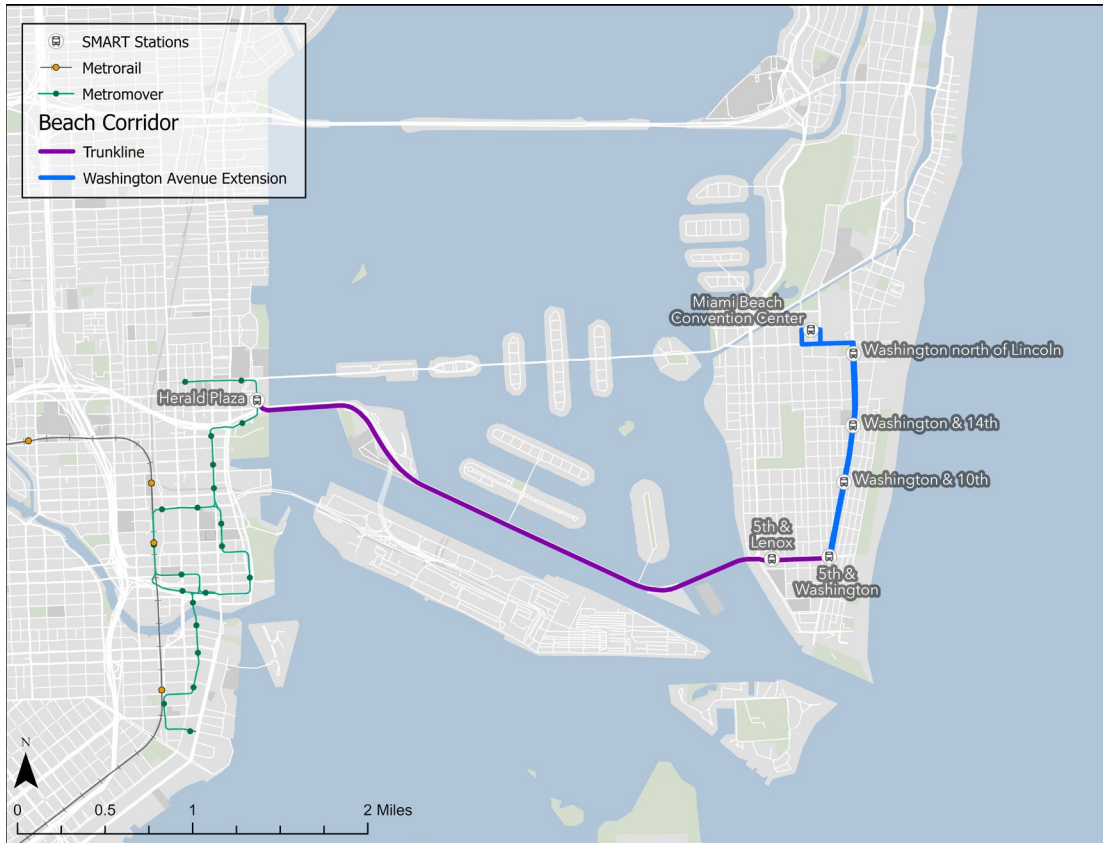


Figure 2 Beach Corridor alignment and stations

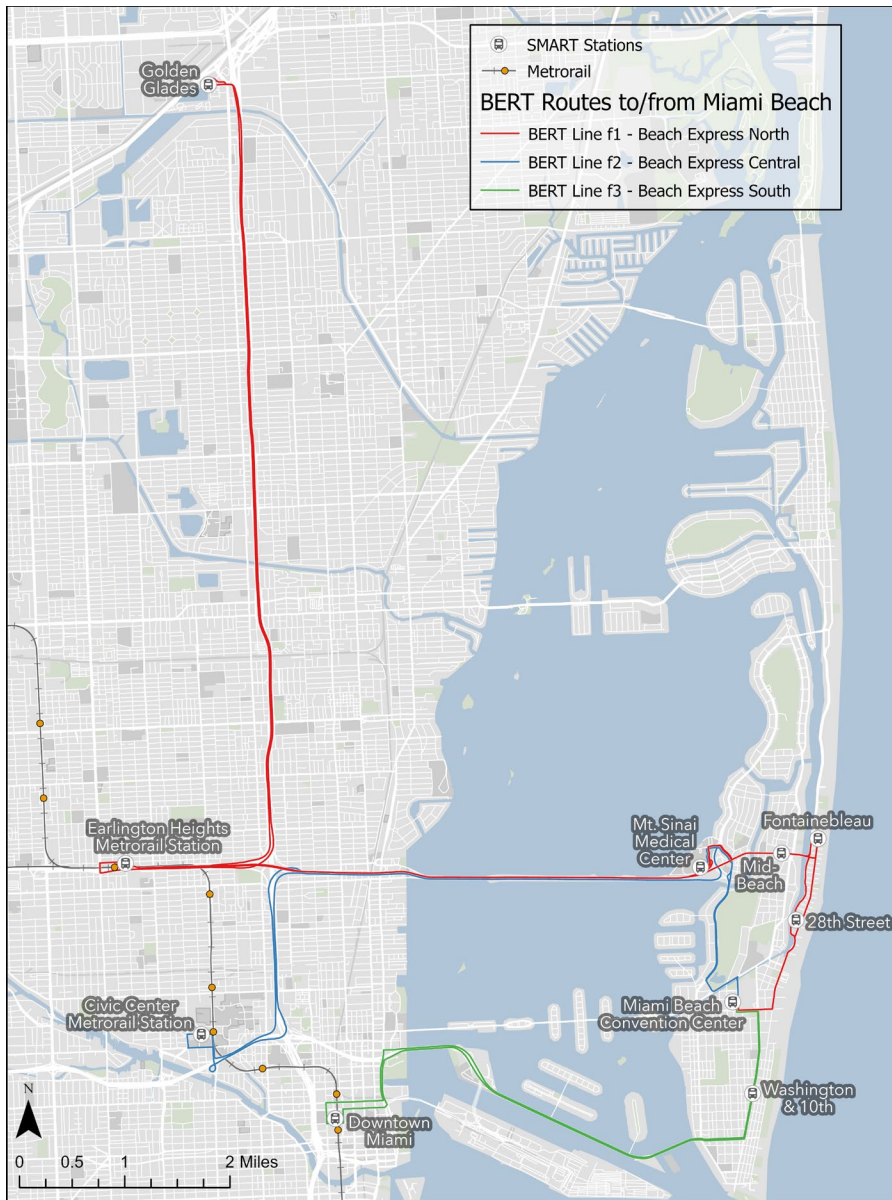


Figure 3 BERT routes alignment and stations

PROJECT PURPOSE

The **First/Last Mile Connections to the SMART Plan Study** was commissioned by the City of Miami Beach, with grant assistance from the TPO, to assess the accessibility of proposed SMART stations within Miami Beach for pedestrians, cyclists, and transit riders. Providing better access to and from transit for multiple transportation modes, rather than focusing on one specific mode, will ultimately lead to better or Improved connections to the future Beach Corridor and BERT services.

The success of regional transit services outlined in the SMART Plan is key to the City of Miami Beach's broader goals²:

- Reducing driving mode share
- Providing options for visitors and workers to reach Miami Beach without a car
- Reducing emissions and adapting to the changing climate
- Providing a livable environment for residents

Projects identified and described in this study are intended to drive success for Beach Corridor and BERT services in Miami Beach in coordination with regional efforts.

This study is a planning document intended to support the long-term vision for SMART Plan services in Miami Beach. The recommendations in this document will require further vetting and evaluation prior to implementation. This is not a standalone document – the strategies listed here are intended to integrate directly into the Miami Beach Transportation Master Plan (TMP) Update, to be completed in the future, which will include a comprehensive assessment of transportation needs throughout Miami Beach.

This study reflects plans and decisions regarding SMART Plan services through May 2022. Station locations and designs are subject to change as the SMART Plan advances. Recommendations provided here may require revisions, updates, or redesigns pending future SMART Plan developments.

The Miami Beach Transportation Master Plan

This First/Last Mile Connections to the SMART Plan Study exists as part of a broader update to the Miami Beach Transportation Master Plan (TMP). The previous TMP was completed in 2016 and laid the foundation for specific transportation mode share goals³. The updated

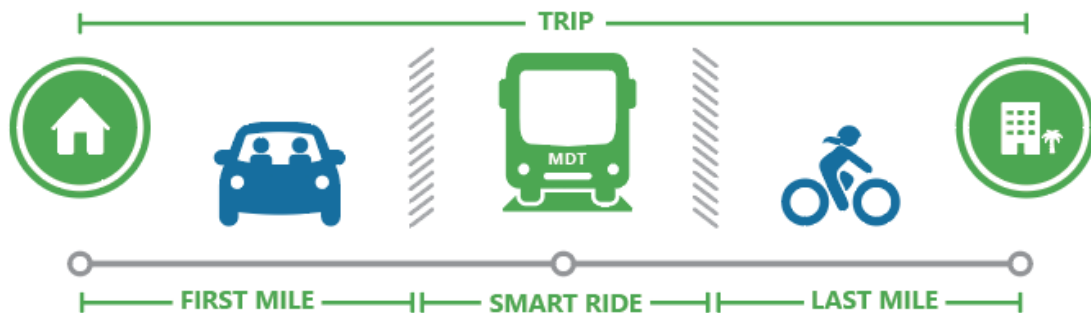
² Goals listed here reflect the previous Miami Beach Transportation Master Plan and Miami Beach Mode Share Analysis.

³ 2017 Miami Beach Transportation Master Plan Final Report <https://www.miamibeachfl.gov/wp-content/uploads/2017/10/Transportation-Master-Plan-Final-Report.pdf>

TMP will reassess transportation infrastructure, program, and policy needs throughout Miami Beach and will incorporate findings from this study. The update to the TMP will:

- Evaluate the performance of existing transportation networks, including bicycle, pedestrian, transit, and vehicular networks
- Define an updated set of goals for transportation in Miami Beach in coordination with stakeholders and the public
- Include a robust public outreach process to gauge the needs of all members of the Miami Beach community
- Coordinate closely with regional agencies to understand the long-term vision for transportation in the region
- Identify challenges and opportunities to be addressed with infrastructure, program, and policy changes
- Define a set of constrained and unconstrained projects that are prioritized and given a clear pathway to implementation. The TMP project list will incorporate projects identified in this First/Last Mile Connections to the SMART Plan Study.

What is First/Last Mile?



First Mile: Getting from your start point (e.g., your home) to a SMART station

Last Mile: Getting from the SMART station to your final destination (e.g., your job)

This study defines strategies, policies and station-area projects to improve multimodal transportation and connectivity to SMART services and facilities with the goal of making them more accessible to more people.

First/Last Mile connectivity means providing safe, equitable, and accessible options for travel to and from key transit hubs, such as those created by proposed SMART Plan services.

First/Last Mile connections are most effective when they provide a variety of transportation mode options to serve as many members of the community as possible.

Project Priorities

This plan is founded on a clear set of priorities defined in close collaboration between the City of Miami Beach and regional transportation agencies responsible for SMART Plan implementation. Following a goal-setting workshop conducted early in the plan process, a set of project priorities was defined and prioritized as follows:

1. **Access:** Recommendations from this study should improve access to SMART services for all members of the Miami Beach community.
2. **Sustainability:** Recommendations should promote transportation mode shift away from driving, reduce emissions, and support climate resilience.
3. **Ridership:** Recommendations will increase choices for riders by lowering barriers to access and synergizing with other transportation options.
4. **Consensus:** Solutions recommended in this plan should generate widespread community support.
5. **Implementation:** Recommendations should be straightforward to implement.
6. **Cost:** Proposed solutions should be cost-efficient and fit within expected budgets and/or available funding sources.

Inter-Agency Coordination

The success of the SMART Plan relies on strong coordination between multiple regional and local agencies. This First/Last Mile Study included outreach to the following agencies to foster a strong relationship between City of Miami Beach and transportation agencies who will implement the SMART Plan:

- Florida Department of Transportation (FDOT)
- Miami-Dade County Department of Transportation and Public Works (DTPW)
- The Miami-Dade Transportation Planning Organization (TPO)

The City of Miami Beach intends to continue close coordination with these agencies to implement the SMART Plan and associated First/Last Mile projects.

PROPOSED SMART STATIONS

Beach Corridor

The Beach Corridor Trunkline, the section of the alignment that is proposed to operate on elevated rubber tire technology, will have two stations in Miami Beach, both along 5th Street, at the intersections with Lenox Avenue and Washington Avenue. Additionally, the Beach Corridor Washington Avenue Extension is proposed to stop at:

- Washington & 10th Street
- Washington & 14th Street
- Washington north of Lincoln Road
- Miami Beach Convention Center (Miami Beach terminus)

BERT Routes

The three BERT routes that serving Miami Beach will all converge at the Miami Beach Convention Center terminal.

- **Route f1 (Beach Express North)** is proposed to stop at 28th Street, the Fontainebleau (44th Street), Mid-Beach (41st Street between Sheridan Avenue and Royal Palm Avenue), and Mount Sinai Medical Center (northwest of Interstate 195 and Alton Road) before heading to the City of Miami.
- **Route f2 (Beach Express Central)** is proposed to stop at Mount Sinai Medical Center before heading for the mainland via Julia Tuttle Causeway.
- **Route f3 (Beach Express South)** is proposed to stop at Washington & 10th before heading to the mainland via MacArthur Causeway, which will be a stop shared with the Beach Corridor.

2 EXISTING CONDITIONS

This study explores existing accessibility to the future SMART stations by assessing how pedestrian- and bicycle-friendly the surroundings of the station locations are, analyzing current levels of transit service within the study area and reviewing the status of micromobility policies in the City. This section also discusses the demographic characteristics of the residents that live in the surroundings of the SMART stations. High-level challenges are pointed out for all modes of access to stations.

Figure 4 provides a map of three specific areas of interest for the study, North Beach, Middle Beach (or Mid-Beach), and South Beach.

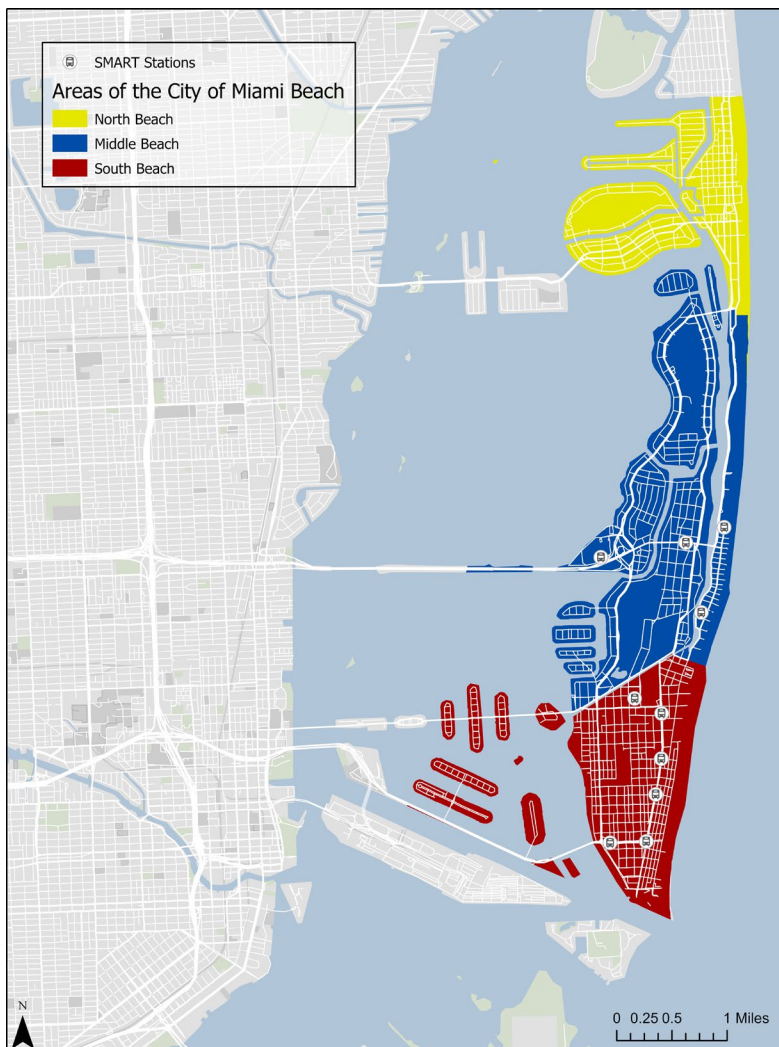


Figure 4 Neighborhoods of the City of Miami Beach

SMART ROUTE SERVICE AREA

As shown in Figure 5 and Figure 6, the proposed Beach Corridor and BERT routes, with a half mile buffer, will serve a large portion of the City. Tables 2 and 3 show that nearly three in every ten Miami Beach residents will be near a Beach Corridor or BERT station. These households will benefit significantly from the future SMART Plan routes since almost 40 percent of served households do not own a vehicle. These households also represent a great percentage of residents below the poverty line (18% to 20%, compared to a 14% citywide average).

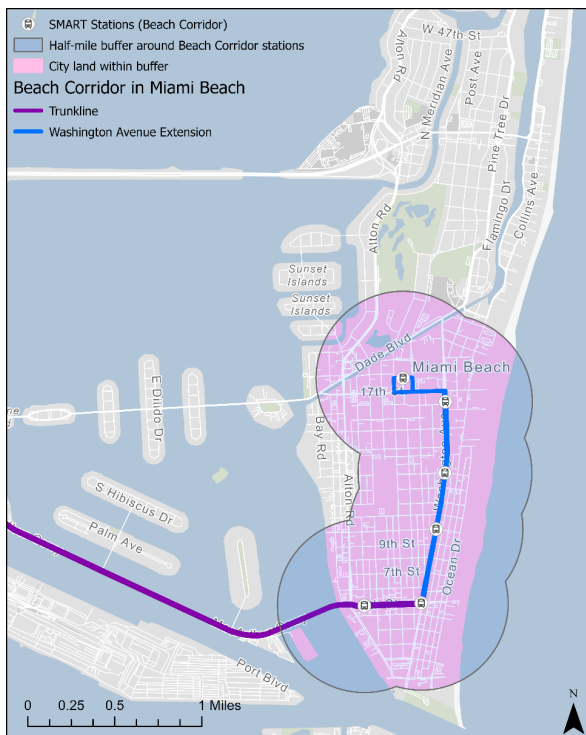


Figure 5 Beach Corridor service area in Miami Beach

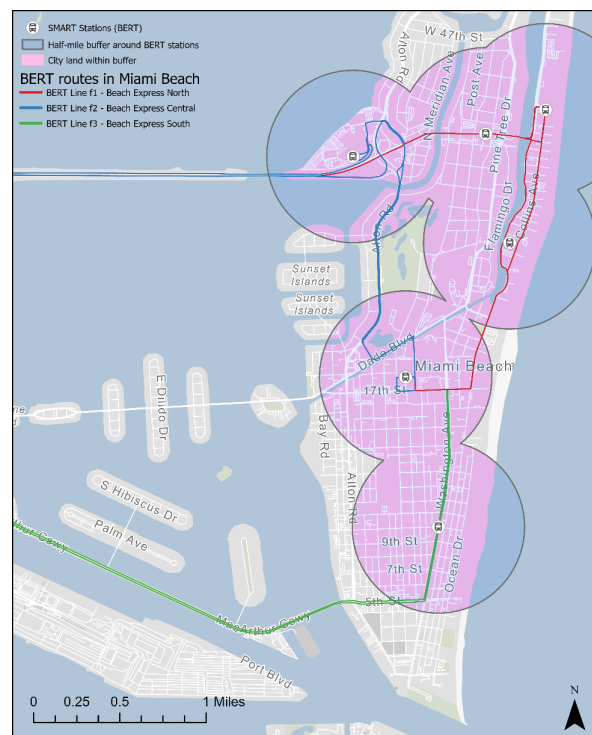


Figure 6 BERT Routes service area in Miami Beach

Table 2 Demographics of population within Beach Corridor buffer

Beach Corridor Buffer⁴ Demographics⁵		
Metric	Citywide	Buffer (as % of City)
Total Population	89,799	27,332 (30%)
Total Households	43,434	14,702 (34%)
Zero-Vehicle Households	24%	38%
BIPOC ⁶ population	66%	67%
Population below poverty line ⁷	14%	20%

Table 3 Demographics of population within BERT buffer

BERT Buffer Demographics⁸		
Metric	Citywide	Buffer (as % of City)
Total Population	89,799	28,376 (32%)
Total Households	43,434	14,640 (34%)
Zero-Vehicle Households	24%	36%
BIPOC ⁹ population	66%	67%
Population below poverty line ¹⁰	14%	18%

⁴ Half-mile radius around stations, as shown in Figures 5 and 6.

⁵ Data source: U.S. Census Bureau, 2020 Census (ACS 5-Year Estimates)

⁶ Black, Indigenous, and People of Color; term used to refer to racial minority groups.

⁷ As defined by the U.S. Census Bureau (<https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>)

⁸ Data source: U.S. Census Bureau, 2020 Census (ACS 5-Year Estimates)

⁹ Black, Indigenous, and People of Color; term used to refer to racial minority groups.

¹⁰ As defined by the U.S. Census Bureau (<https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>)

PEDESTRIAN NETWORK

The City of Miami Beach has a very extensive sidewalk network. As Figure 7 shows, almost all major streets have sidewalks on both sides. Getting around by foot in Miami Beach is generally convenient and comfortable for residents, workers, and visitors alike. There are crosswalks and curb ramps at all approaches near proposed station locations, making it safe for pedestrians to cross intersections. The City of Miami Beach continues to invest in pedestrian amenities, including the construction of the western sidewalk along Indian Creek Drive south of 41st Street and the reconstruction of the Miami Beachwalk.

Walkability in Miami Beach is also bolstered by its intersection density. Places with high intersection density offer pedestrians the benefit of multiple routes to reach a destination and less out-of-direction paths of travel. Most of South Beach and a significant part of North Beach have very high intersection density, shown in shades of green and yellow in Figure 8. In contrast, intersection density at Mt. Sinai and Mid-Beach is much lower, creating more pedestrian barriers.

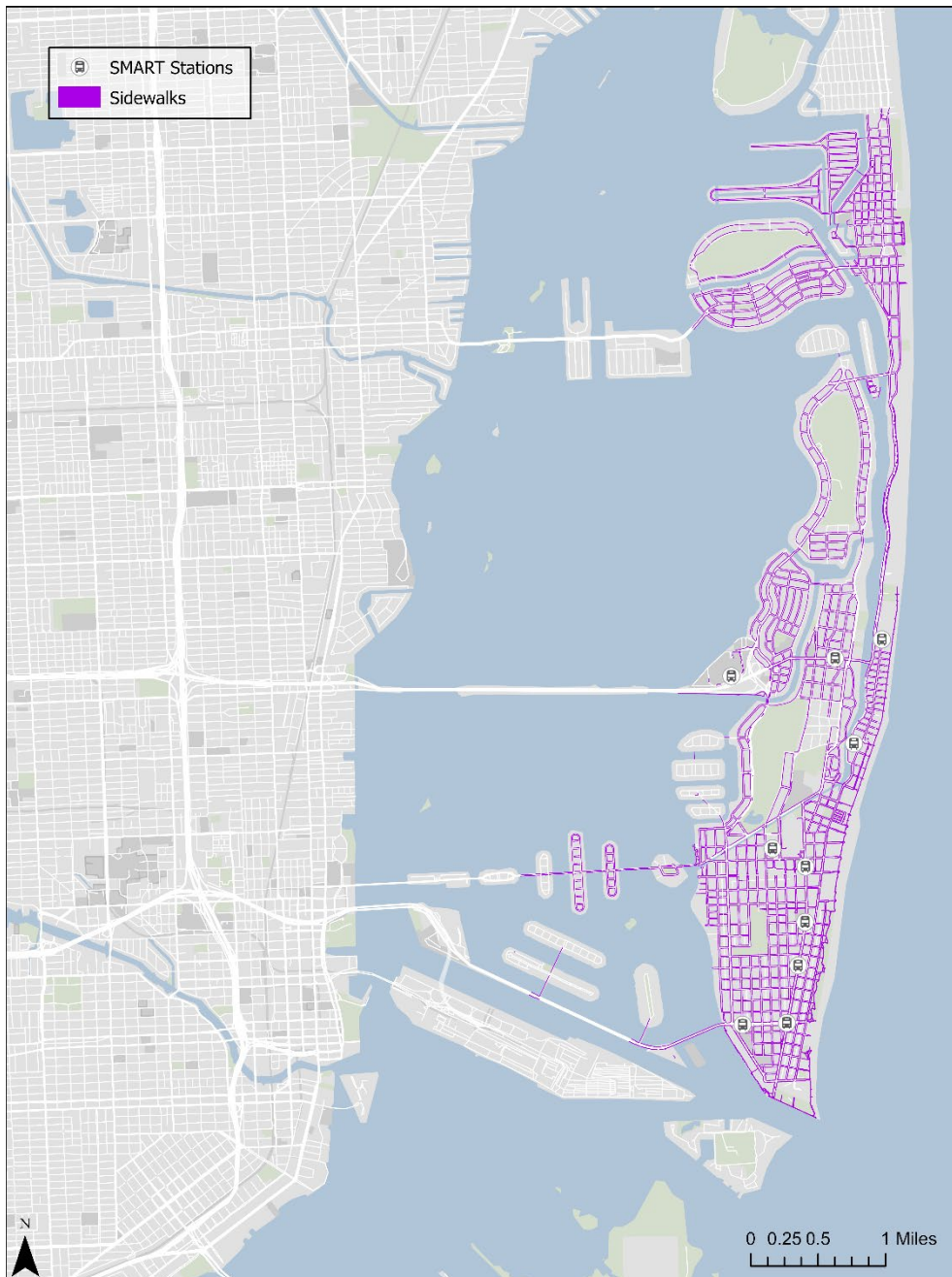


Figure 7 Sidewalk Network in Miami Beach

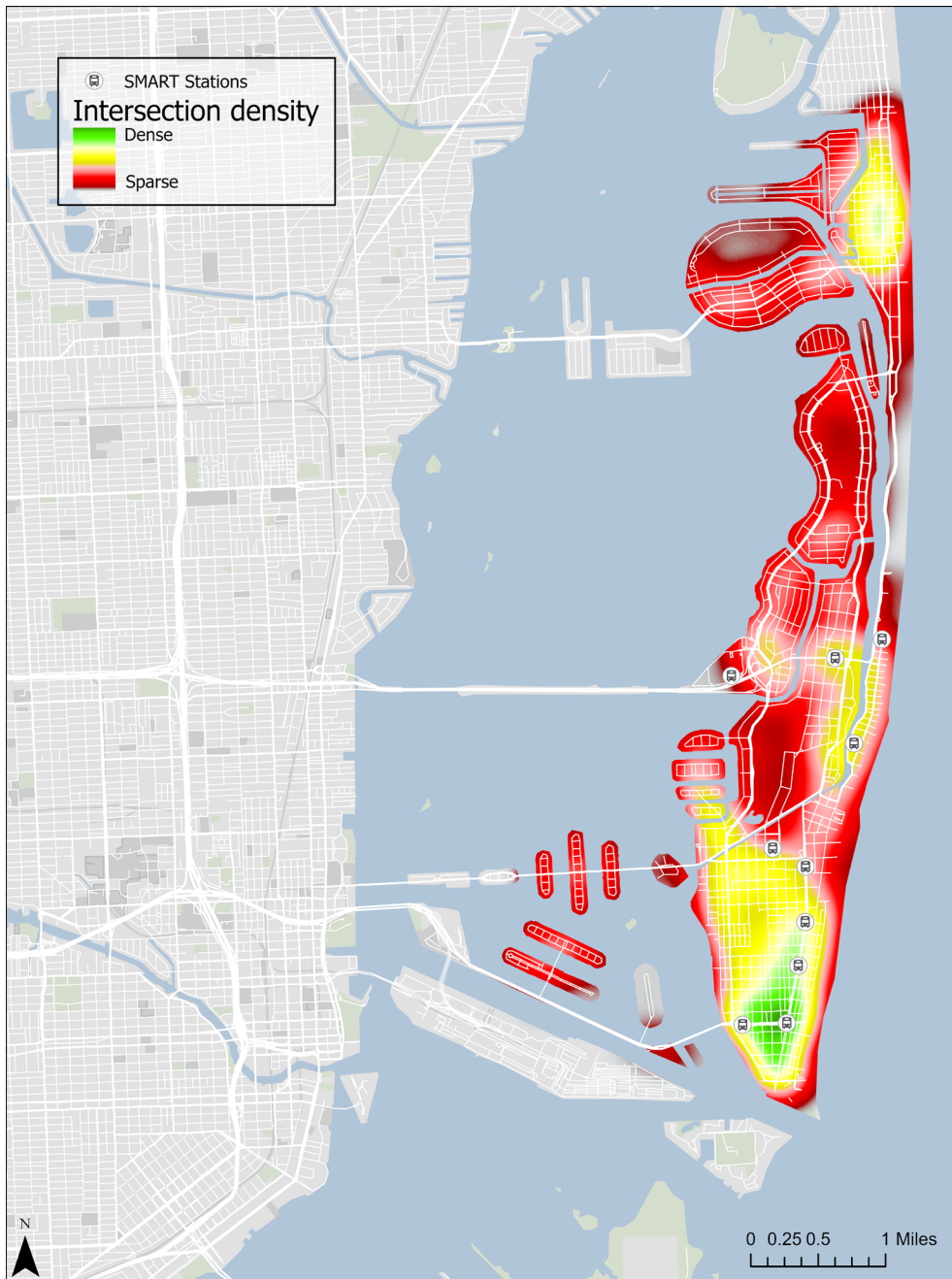


Figure 8 Intersection density in Miami Beach

Challenges

- Proposed bus stations will be close to places that are already heavily frequented by tourists and commuters, which generates high pedestrian demand where there is limited right-of-way available to expand the sidewalk. While sidewalks are present and in good quality, they might not be wide enough to accommodate the influx of SMART riders.
- Given the lower intersection density in Mid-Beach, it might be challenging for riders to get to/from stations at 28th Street, Fontainebleau, Mid-Beach station, and Mount Sinai Medical Center.




BICYCLE NETWORK

Miami Beach also has a vast network of bikeways, including shared-use paths such as the Beachwalk, streets with sharrows, and protected and unprotected bike lanes (see Figure 9). There are approximately 45 miles of bike facilities in Miami Beach (see Table 4) and nearly the entirety of the City is within a 10-minute bike ride (one mile) from a proposed SMART station. The City is working on expanding this network to provide greater access to protected facilities. For this study, the existing conditions analysis focused on identifying gaps in Miami Beach's bike network.

Another important component of a robust bike network is the availability of bike storage facilities. Figure 10 shows that there is a large number of publicly accessible short-term bike racks throughout the City and that many of them are concentrated along proposed SMART corridors. However, as noted in the 2017 Miami Beach Street Design Guidelines, many short-term bike racks do not meet best practice specifications¹¹. Long-term bike storage solutions like bike shelters, bike lockers, bike stations and bike corrals, are particularly important for commuters who will want to park their bikes securely for long durations. Currently, six city-owned parking garages provide for free long-term bicycle parking facility, including bicycle repair stations, for a total of 113 long-term bike parking spaces.

¹¹ Miami Beach Street Design Guidelines (April 2016) [https://www.miamibeachfl.gov/wp-content/uploads/2017/12/Street-Design-Guidelines-\(FINAL\).pdf](https://www.miamibeachfl.gov/wp-content/uploads/2017/12/Street-Design-Guidelines-(FINAL).pdf)

Table 4 Inventory of bike facilities in Miami Beach by type

EXISTING BIKEWAYS			
Type of facility		Miles	% of total
Bike Lane		22.5	51%
Shared Use Path		10.4	23%
Sharrow		11.6	26%
Total		44.5	100%

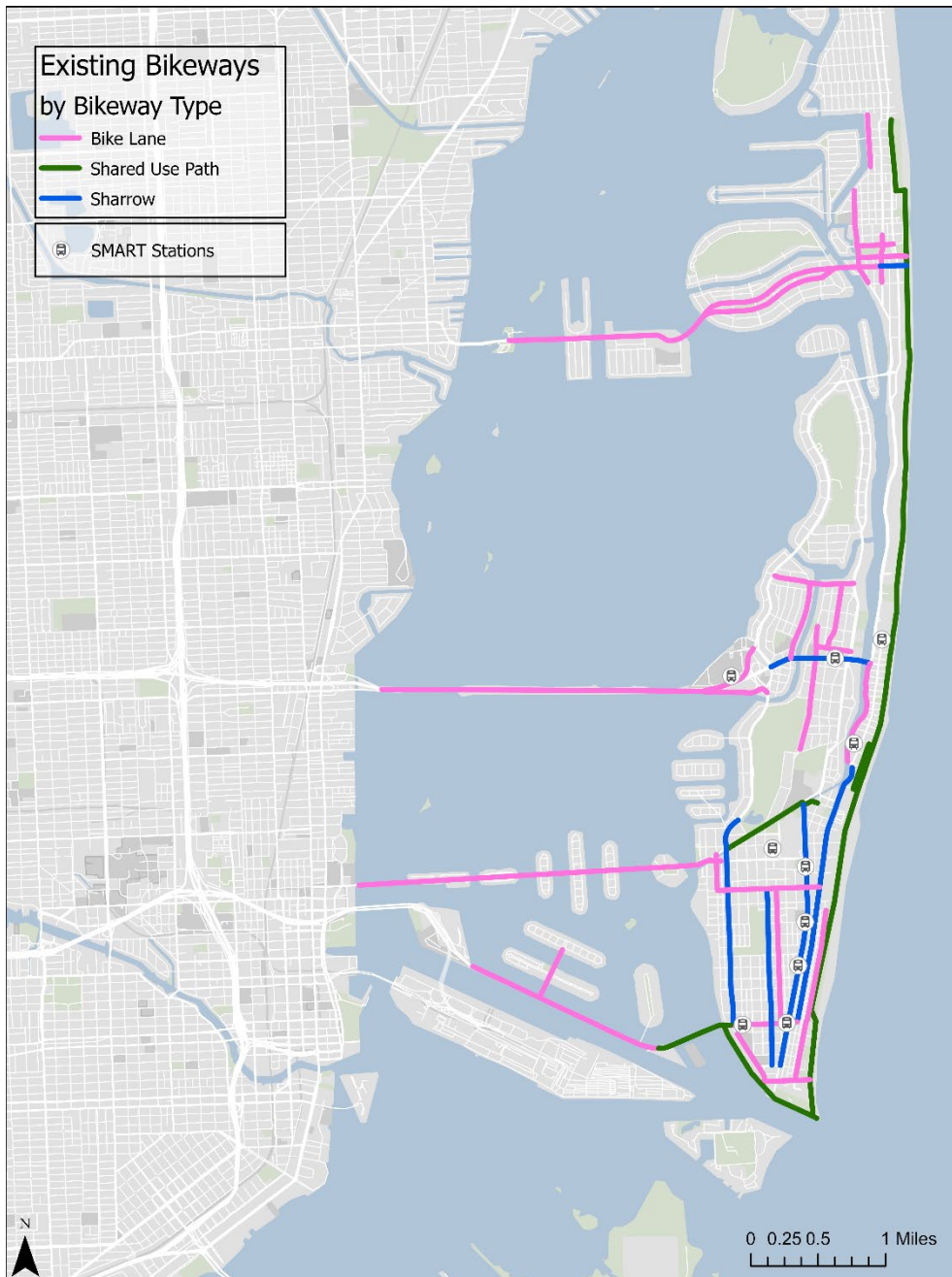


Figure 9 Existing bike network in Miami Beach

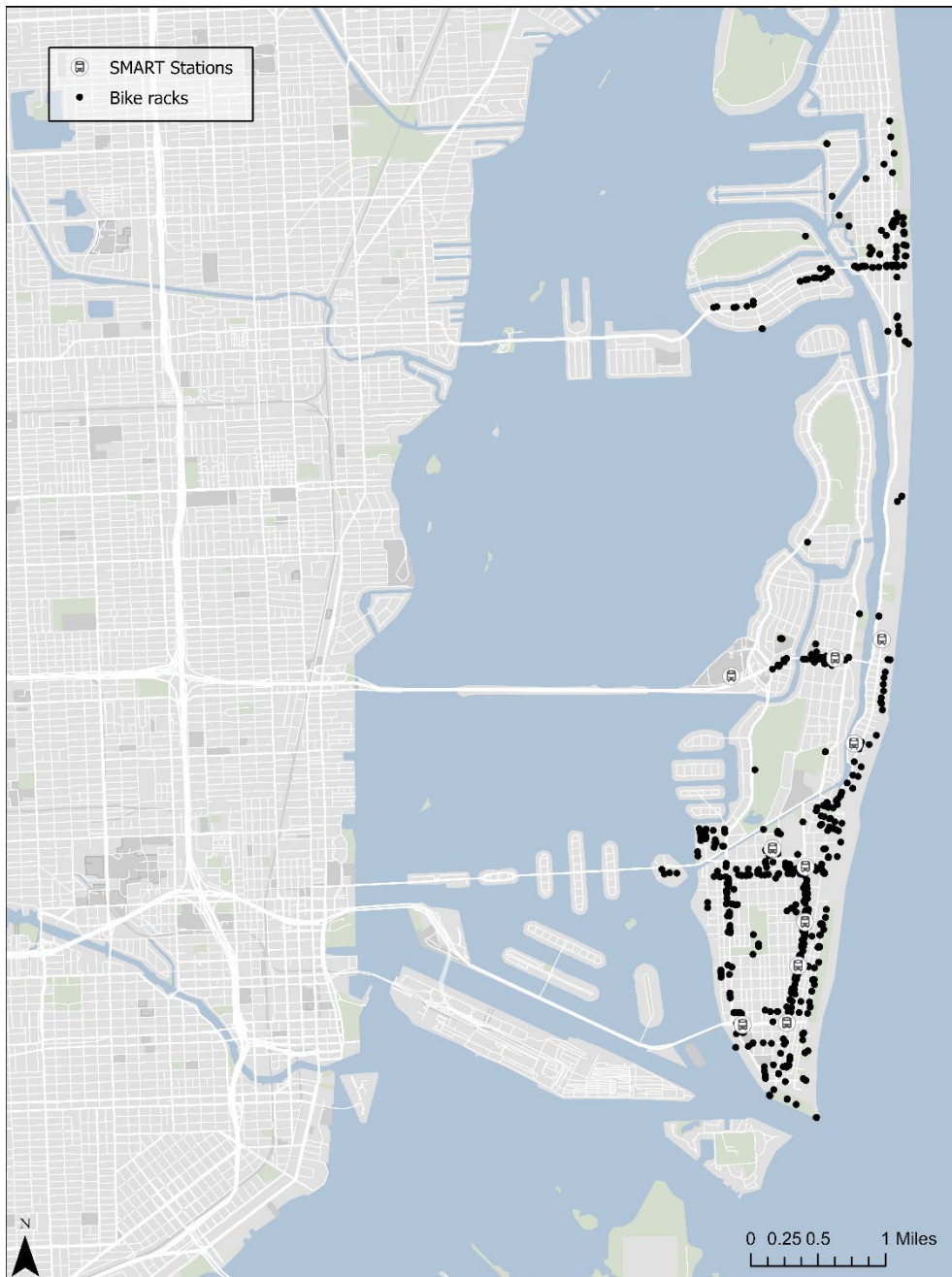


Figure 10 Existing bike racks in Miami Beach

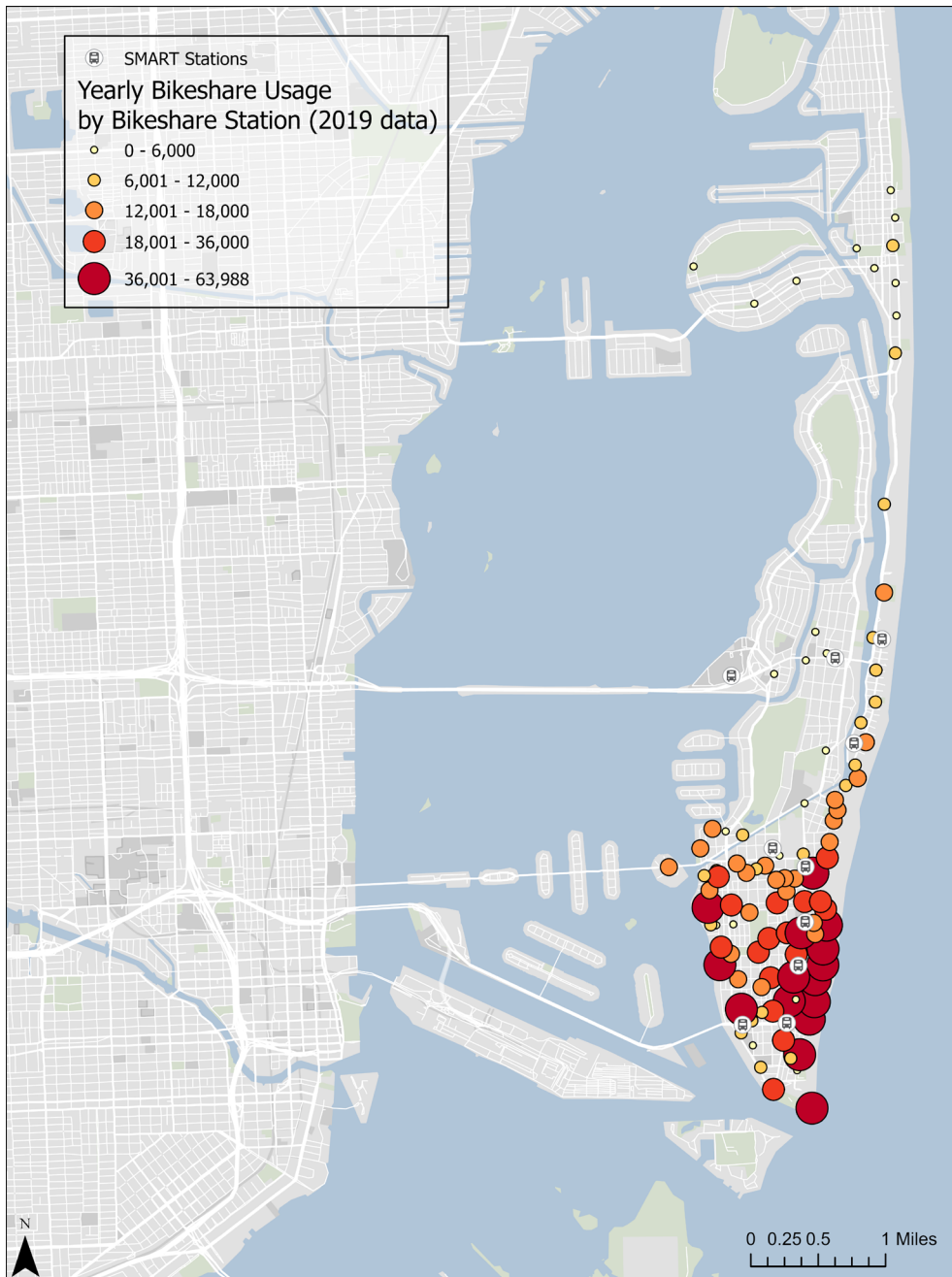


Figure 11 Usage of bikeshare program by bikeshare station (2019 data)

Bikeshare is a popular mode of travel in the City. There are 103 stations in the City and the majority of the stations and bikeshare usage is concentrated along Ocean Drive and Collins Avenue in South Beach. The operator of this service is Citi Bike, who also provides bikeshare services to the City of Miami. Currently, there are no dockless bikeshare providers in the City of Miami Beach.

Challenges

- Limited east-west protected bike lanes and paths across the City. While all 4 causeways have bike lanes, only Venetian Causeway provides for a protected bike lane.
- Limited north-south protected bikeways on the west side of the City, which will be addressed in South Beach by the proposed West Avenue protected bike lanes.
- Long-term bike storage is concentrated in city-owned garages, with limited availability in Mid-Beach and North-Beach.
- Insufficient short-term bike storage near stations in Mid-Beach.
- Most streets in Miami Beach have posted speeds above 25 mph – streets that do not have bike facilities can be fast and thus unsafe. According to the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide, bikeable streets should have a maximum posted speed of 25 mph.

High demand for bikeshare at peak times may lead to re-balancing needs and challenges.

TRANSIT NETWORK

The transit network is served by two major providers: Miami-Dade County DTPW, which is the countywide transit agency, and the City of Miami Beach, which operates the Miami Beach Trolley and Freebee, an on-demand transit service in Mid-Beach.

Miami-Dade County DTPW Buses

DTPW buses connect different parts of the City of Miami Beach with the mainland using the four causeways. There are also the routes that leave the City by travelling north via Collins Avenue and continue along State Road A1A.

There are 10 DTPW routes serving the City of Miami Beach. Three routes (S, L, and 120) offer 15-minute peak service or better., DTPW is preparing to change its service based on a redesign dubbed the Better Bus Network¹², which will be rolled out in Spring 2023. The existing DTPW routes will be replaced by nine new routes, of which five will offer 15-minute peak service or better. Coverage will remain comparable to current levels throughout Miami Beach, except for historically low-ridership segments of Alton Road in Miami Beach.

¹² <https://www.miamidade.gov/global/transportation/better-bus-project.page>

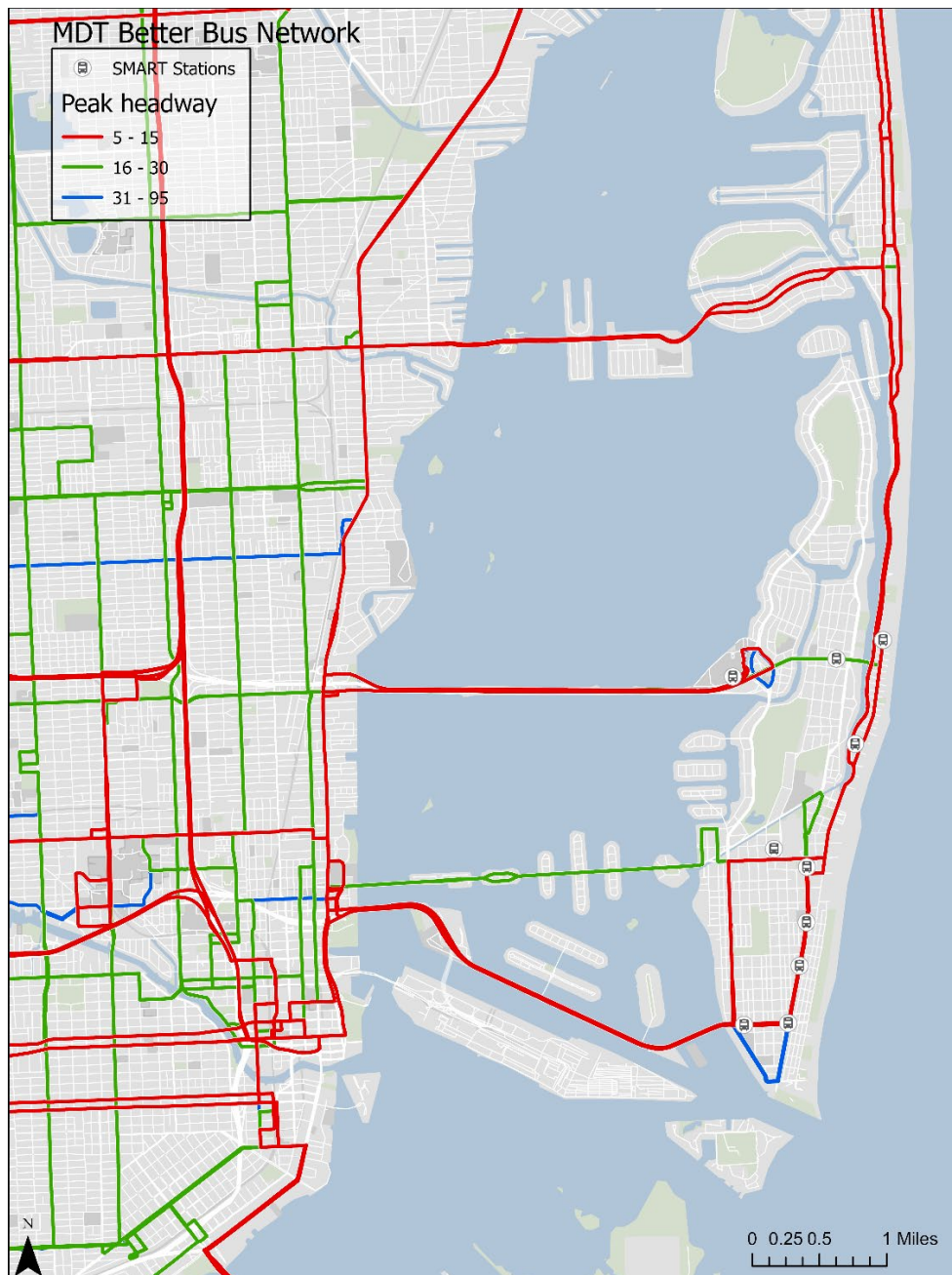


Figure 12 Miami-Dade Transit's Better Bus Network by peak frequency (DTPW, December 2021)

Miami Beach Trolley

The Miami Beach Trolley functions as a local circulator. As shown in Figure 13, there are four routes in the Miami Beach Trolley network, each operating on 30-minute headways. These routes are: North Beach Loop, Collins Express, Middle Beach Loop, and South Beach Loops.

Before the pandemic hit, trolley services ran at higher frequencies, every 15 minutes or better. However, the pandemic forced the City to cut back service to reduce expenses.

The South Beach Loop A (clockwise) and South Beach Loop B (counterclockwise) roughly serve 17th Street, Washington Avenue, South Pointe Drive, and Alton Road. These loops serve all the Beach Corridor stations, except for the Miami Beach Convention Center terminal on 18th Street. However, the South Beach Loop passes close by since it runs on 17th Street east of Meridian Avenue. The trolley stop with the highest historic ridership, not only on the South Beach Loop but also systemwide, is the stop on Washington Avenue north of Lincoln Road, which will also be a Beach Corridor station.

The South Beach Loops connect to Collins Express and Mid-Beach Loop at the Washington & 17th transit hub, which will also be a Beach Corridor station. Collins Express runs all the way to 88th Street, while the Mid-Beach Loop goes up to 41st Street and serves Mount Sinai Medical Center. The North Beach Loop serves the community of North Beach between 65th Street and 88th Street, including Normandy Drive/71st Street and Hawthorne Avenue. The Mid-Beach loop will serve all the proposed BERT stations north of the Convention Center (28th Street, Fontainebleau, Mid-Beach, and Mount Sinai Medical Center). The Collins Express will serve the 28th Street and Fontainebleau BERT stations. The North Beach Loop will funnel riders onto Collins Express to connect them with the remainder of the network and all of the SMART terminals.

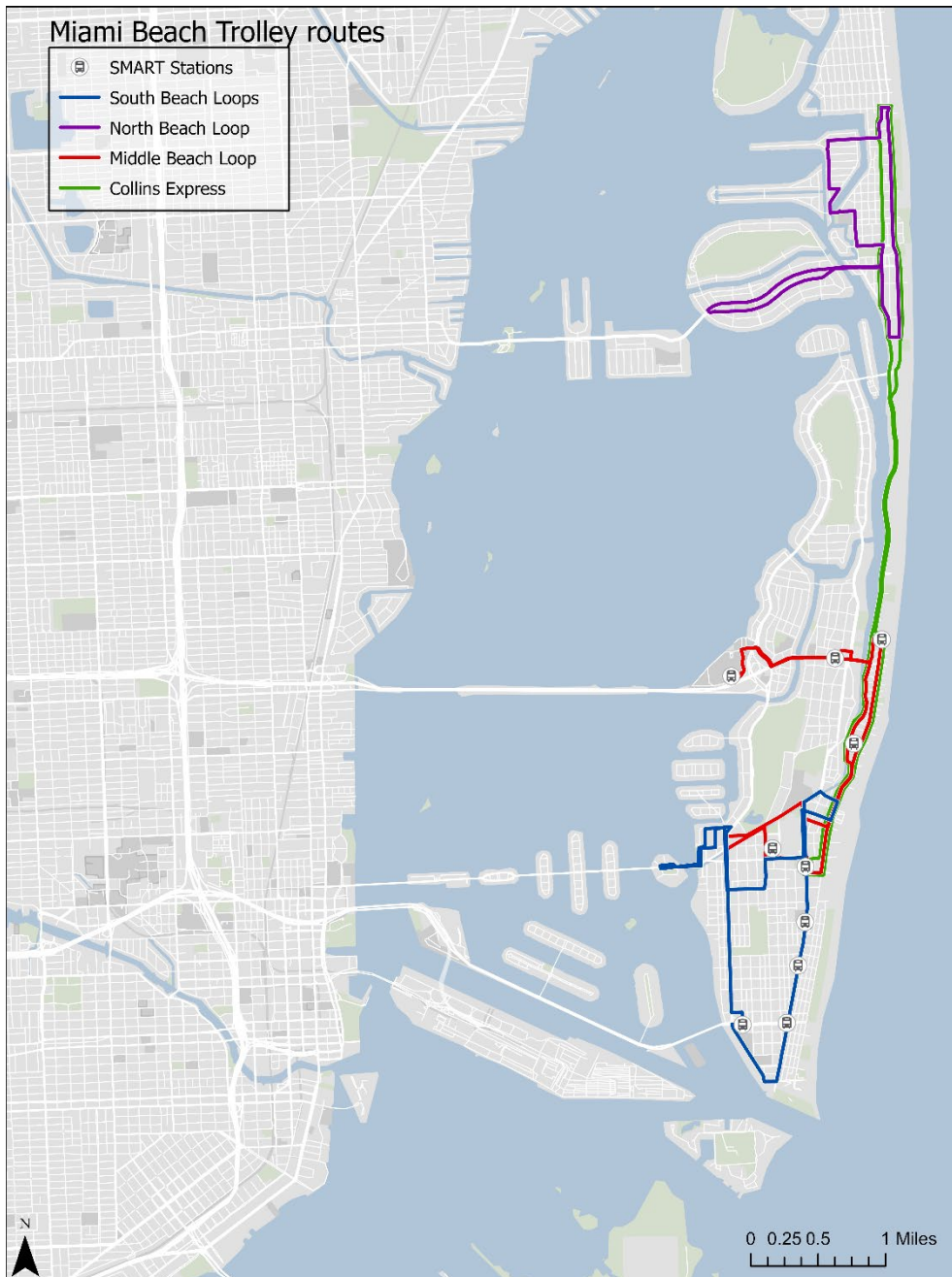


Figure 13 Miami Beach Trolley routes

On-Demand Transit

The City offers on-demand transit service for residents of Mid-Beach. This service is currently operated by a provider called Freebee. Riders summon the service, and a vehicle picks them up at their origin and drops them off at their desired destination. Eligible trips are those that begin, end or have both origin and destination within the service area, shown in green in

Figure 14. There are key destinations outside the main service area that this on-demand transit also serves, including the transit hubs at Washington & 17th Street/Lincoln Road, and Alton Road & Lincoln Road, and bus stops at Sunset Harbour, Indian Creek Drive & 41 Street, Collins Avenue & 63 Street.

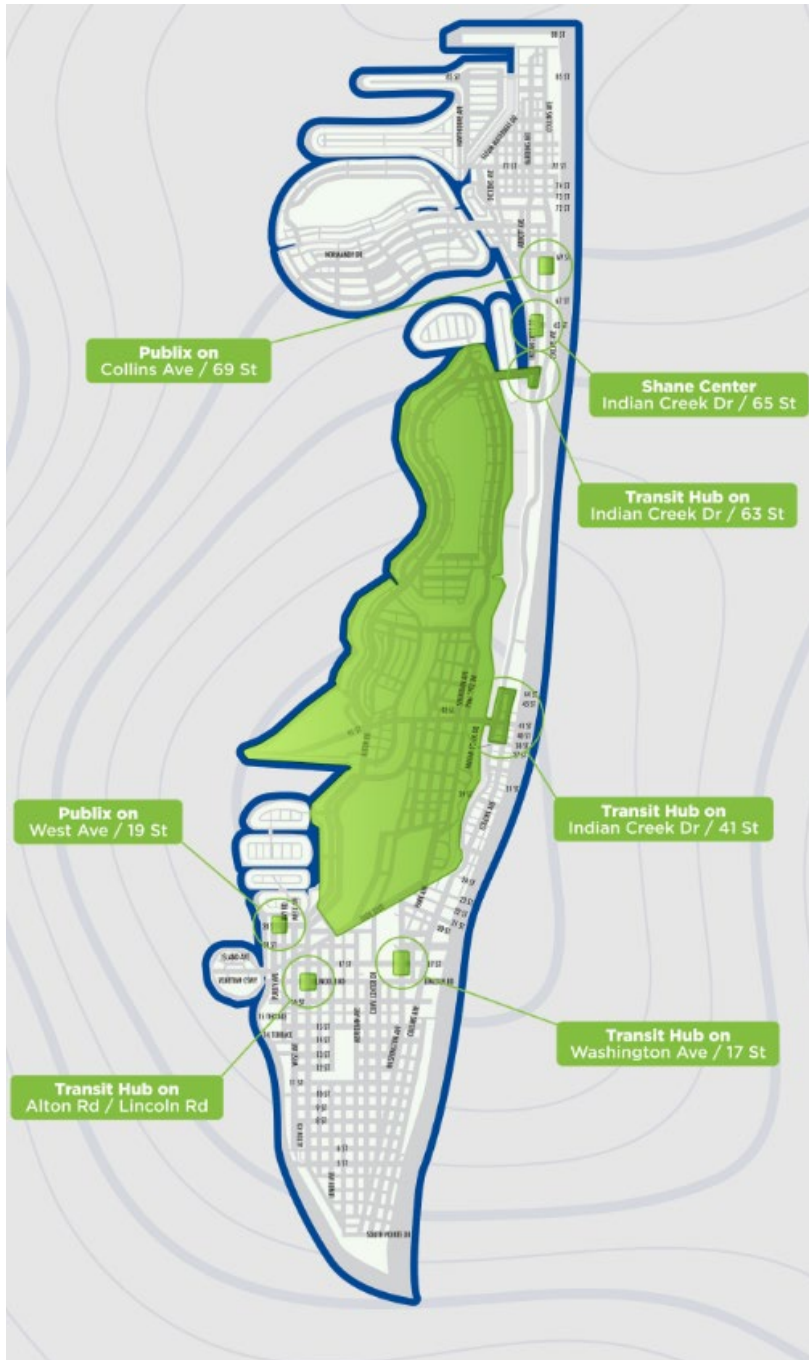


Figure 14 Mid-Beach on-demand transit service area.

Source: City of Miami Beach Transportation and Mobility Department.

Challenges

- Operating do not match the proposed operating hours for the Beach Corridor and BERT.
- Fixed-route services currently run at relatively low frequency, but this will change when the Better Bus Network is implemented.
- Route redundancy between DTPW and Miami Beach Trolley service.
- High-floor trolley present accessibility challenges for users with limited mobility.
- Low ridership during pandemic partly resulting from reduced frequencies on both DTPW and Miami Beach Trolley routes.

MICROMOBILITY

Currently, shared mobility rentals are banned in the City of Miami Beach. In an ordinance passed by the Mayor and the City Commission in December 2020¹³, all public rentals of mopeds, motorcycles or other shared micromobility devices are prohibited within city limits due to public safety concerns. The use of privately-owned micromobility devices is still allowed, but all businesses renting or leasing them were instructed to take them off the market once the ordinance passed. Repealing said ordinance will require an affirmative vote of five out of seven members of the City Commission.

¹³ City of Miami Beach Ordinance No. 2020-4388

3 PROJECT DEVELOPMENT APPROACH

In developing projects, this study takes into consideration feedback from different stakeholders as well as what has been proposed in the past for specific parts of the study area. This section of the document also looks at best practices when it comes to multimodal improvements to inform the project recommendations.

COORDINATION WITH OTHER PLANS

The following plans and programs influenced the recommendations that will be introduced later in this study.

DTPW's Better Bus Network

The Better Bus Network was launched as a community-driven effort in 2018 with the goal of increasing the number of bus routes with frequent service and to create better connections for Miami-Dade Transit riders across the County. Miami-Dade Transit has not undergone a systemwide review and redesign of its Metrobus network since the launch of the Metrorail system in 1984. This re-imagined bus network will improve service across the board, increasing the number of major bus route corridors with 15-minute frequent service during both peak and off-peak service hours.

The network will provide high frequency bus service to 353,000 more Miami-Dade County residents, and provide significant benefits to vulnerable populations, including:

- The number of seniors with access to high-frequency service will more than double, from 11 percent today to 23 percent under the new network.
- The number of people living in poverty with access to high-frequency service will more than double, from 12 percent today to 28 percent under the new network.
- The number of households without cars with access to high-frequency service will increase from 29 percent today to 48 percent under the new network.

The Better Bus Network was originally initiated as a grassroots bus network redesign plan by Miami-Dade County Department of Transportation & Public Works (DTPW)'s partners at Transit Alliance. The new network is expected to launch in Spring of 2023.

2015 Miami Beach Bicycle and Pedestrian Master Plan

The Bicycle and Pedestrian Master Plan envisions a future in which over a fourth of Miami Beach residents get around by walking or biking as their primary means of transportation.

Aside from proposing new protected bike lanes on major throughfares and neighborhood greenways on residential streets, it proposes upgrading existing bike lanes and sharrows to protected bike lanes. It groups improvements in three categories that can be advanced in parallel:

- Category 1: filling in the blanks of the existing system, no improvements to existing facilities are contemplated
- Category 2: improving existing facilities
- Category 3: aspirational facilities, which would require further analysis to study their political and financial feasibility

This adds up to a total of 40 miles of new and improved bikeways and an investment of \$20 million over 20 years. The plan also discusses the creation of Pedestrian Priority Zones, which are streets, corridors, or areas where safety is prioritized, traffic is calmed, and pedestrians receive priority treatment.

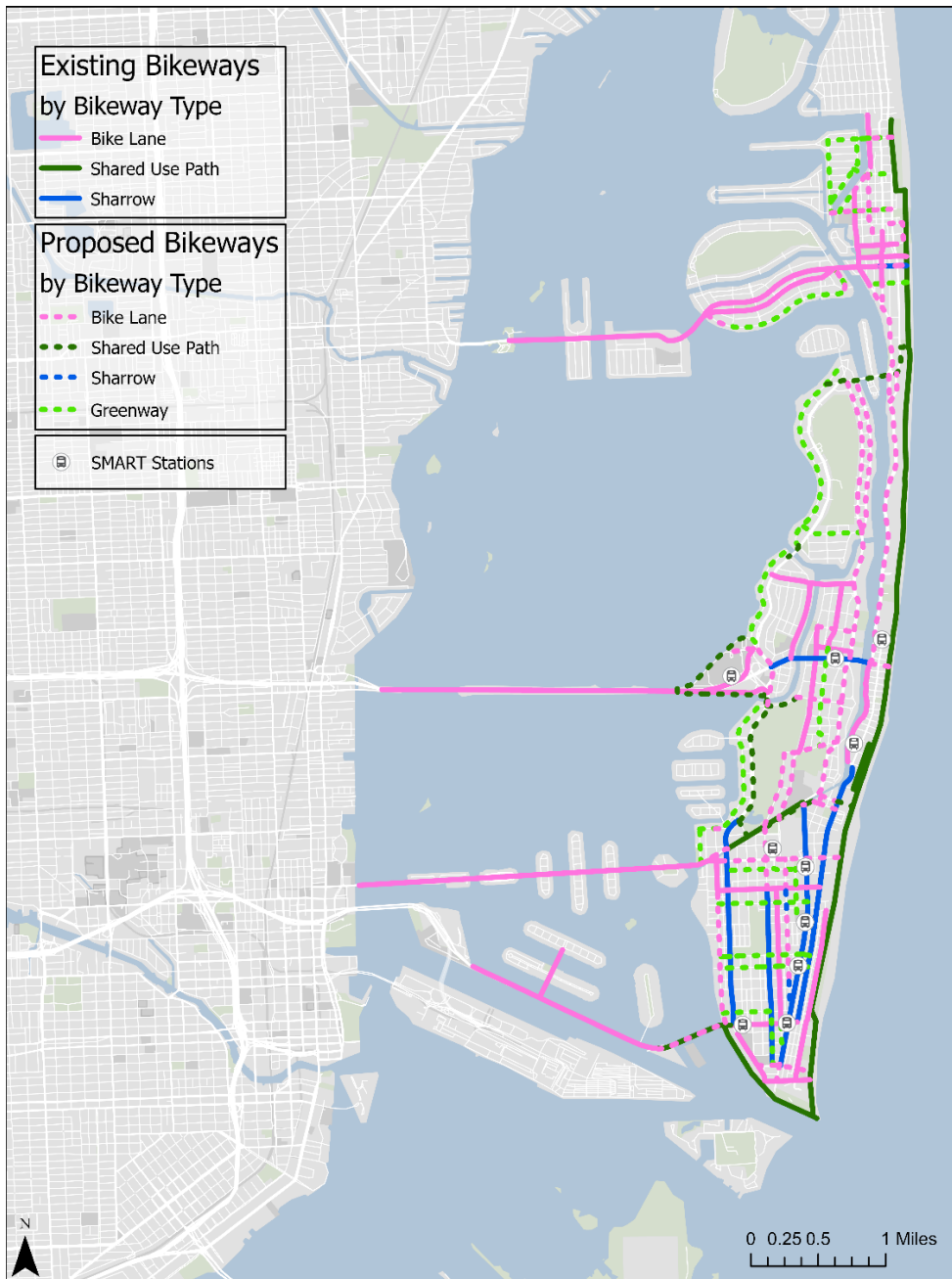


Figure 15 Existing and proposed bike facilities in Miami Beach

17th Street Bicycle & Transit Lanes Feasibility Study

The 17th Street Bicycle & Transit Lanes Feasibility Study looked at the possibility of implementing bike lanes along 17th Street from West Avenue to the Beachwalk. It also looked at combined bus/bike lanes between Meridian Avenue and Collins Avenue. This study assumes that these improvements will be implemented. The 17th Street Study also proposes safety improvements at all intersections, enhancing the pedestrian experience along 17th Street. It also contemplates new pedestrian crossings at Lenox Avenue, Convention Center Drive, and a mid-block crossing at Soundscape Park.

The 17th Street Study informed the proposed enhancements to 17th Street, which are relevant to the Convention Center area stations (18th Street and Washington & 17th/Lincoln).

41st Street: Conceptual Streetscape Design

The 41st Street report proposes widening sidewalks, implementing four mid-block pedestrian crossings, constructing bike lanes on side streets (Prairie Avenue and Royal Palm Avenue), maintaining the sharrows along 41st Street, and enhancing the streetscape along 41st Street overall (better and more shading and seating, more space for pedestrians, etc.). This conceptual streetscape design informed the baseline conditions that were assumed for the area surrounding the Mid-Beach BERT station and guided the recommendations presented in this report.

City of Miami Beach Bus Stop Improvement Program

In October 2021, the City of Miami Beach executed an agreement with OUTFRONT, a private vendor, to update the existing bus shelter design and install new shelters at every bus stop in the City. The new shelters will feature stand-alone digital Estimated Time of Arrival (ETA) signs, advertising (digital or static), security cameras (at key locations), passenger seating, and security lighting. As a result, Miami Beach will have up to 250 new premium bus shelters and ETA signs, 100 bicycle racks, and up to 100 bus benches. This is a significant improvement over the current conditions wherein only one third of all bus stops in the City have a bus shelter.

Integration of Micromobility Across SMART Corridors

The TPO recently concluded a study of Integration of Micromobility Across SMART Corridors. This study assesses the feasibility of integrating micromobility devices into public transportation at SMART corridors.

Miami Beach does not currently allow shared micromobility vendors to operate within the City – the Integration of Micromobility study presents regional policy guidance that might

facilitate or enable Miami Beach and other municipalities to allow micromobility, particularly within a public transportation context. Regional policy guidance emerging from this study includes:

- Implementing a countywide performance-based permitting system and having the county lead all micromobility programs to avoid service disruptions at municipal boundaries
- Defining special operating zones, especially within first/last mile reach of transit
- Establishing parking zones for scooters and other devices and associated pricing and other policies
- Developing consistent open data standards
- Encouraging public-private partnerships, led by DTPW, between the transit agency and micromobility companies
- Providing guidance on micromobility hub siting

TYPES OF MULTIMODAL ACCESS IMPROVEMENTS

There are many ways to increase the safety, comfort, and convenience of walking, biking, and taking the bus. This study looks for opportunities to enhance access to the future Beach Corridor and BERT stations with the following types of improvements.

Potential Transit Improvements



Transit Priority Treatments

Transit treatments and reliability improvements increase the convenience of taking the bus by keeping buses moving. Dedicated bus-only lanes help buses move faster through traffic. Transit Signal Priority (TSP) and queue jumps give buses the green light and allow buses to move through intersections before other vehicles.



Bus Stop Improvements

Bus stops with quality amenities—shelters, lighting, seating, and real-time information—create a safe, secure, and enjoyable experience for people waiting for the bus.



On-Demand Transit

On-demand ride to transit services provide first/last mile connections to SMART stations within a defined area.



Potential Pedestrian Improvements



Sidewalks and Bulb-outs

Sidewalks and bulb-outs improve the safety, comfort, and visibility of people walking by providing dedicated space away from traffic for people of all ages and abilities to walk, bike, play, and pause.



Shared Use Paths

Shared use paths provide off-street facilities for two-way non-motorized travel. People using mobility devices, including bicycles and micromobility devices such as personal scooters are welcome as long as they yield to people walking.



Mid-block Pedestrian Signals and Signalized Crossings

Signalized crossings provide a safer, more comfortable place to cross a busy street. Signals require people driving to stop completely when it is time for a person walking or biking to cross the street. Pedestrian mid-block crossings facilitate crossing for people walking and biking.



Enhanced Crosswalks

A variety of treatments are available to increase the probability that people driving will stop for people crossing the street. These include, but are not limited to, pedestrian refuge islands, Rectangular Rapid Flashing Beacons, and HAWKs (High-Intensity Activated crossWalk beacons). These treatments make crossing the street safer and more comfortable.

Potential Bicycle Improvements



Protected Bike Lanes

Protected bike lanes create dedicated space for people bicycling separated from traffic, sidewalks, and parking lanes.



Neighborhood Greenways

Neighborhood greenways prioritize people walking and biking along safer, calm residential streets.



Intersection Improvements

Intersection improvements provide safer crossings of busy streets by increasing visibility and giving priority to people bicycling. Pavement markings through intersections and across driveways raise awareness of potential conflict areas between through and turning road users.

4 RECOMMENDED PROJECTS

This section details the recommended projects to enhance first/last mile connectivity to the proposed SMART stations in the City of Miami Beach. These projects are split into two groups:

Systemwide, Programmatic, and Policy Projects focus on initiatives that will improve multimodal access to transit across the City and are pertinent to all the SMART stations.

Station-Specific Projects address specific safety and access issues at stations.

SYSTEMWIDE, PROGRAMMATIC, & POLICY PROJECTS

Improve Trolley Frequency

The Miami Beach Trolley is a free circulator that provides service throughout Miami Beach. Existing trolley routes will connect to both the Beach Corridor and the BERT routes at multiple locations, making it an appealing and accessible first/last mile connection for commuters and visitors. It is expected that trolley ridership will increase once the Beach Corridor is in operation.

Prior to the pandemic, the trolley had high of ridership. If frequencies return to pre-pandemic levels, it will be the best circulator option for the City.

The trolley is an iconic service that provides accessibility to visitors of Miami Beach and serves low-income communities in North Beach. For this service to be relevant and useful for its riders, it should be more frequent than every 30 minutes; running at least every 15 minutes. This allows riders to show up to the stop without worrying about a schedule or when the next trolley is coming, since they know it is less than 15 minutes away.

Action Steps

- Determine funding source/allocate City budget to restore pre-COVID service.
- Pursue low-floor buses to improve the accessibility of the trolley service. Low-floor trolleys provides easy access to all via a low floor ramp, allowing disabled and wheelchair-bound passengers to enter the bus with little to no assistance.
- Pursue fleet electrification as part of the City of Miami Beach Trolley zero-emissions transition plan (ZETP)¹⁴.
- Extend service hours to match BERT and Beach Corridor early morning and late evening service. Pre-pandemic, the Miami Beach Trolley operated between 6AM and 12AM. Currently, trolley service is available from 8AM to 11PM. Future BERT routes and the Beach Corridor are expected to operate from earlier hours and later into the night.
- Coordinate with DTPW regarding the deployment of the Better Bus Plan and how the trolley can better complement DTPW service.

¹⁴ City of Miami Beach Zero-Emissions Transition Plan – Evaluation Report, November 2020

Case Studies

While trolley services can be redundant with other established bus services, they are often very popular among tourists. In **Waikiki** (Honolulu, HI), a private company operated four ticketed trolley routes that run parallel to several TheBus (public bus) routes. While they sometimes compete for riders, the trolley is well used by tourists in the area and are permitted in bus-only lanes.

The **Orange County Transit Authority (OCTA)** in Orange County, CA provides funding to several cities and beach communities for trolley services. Several jurisdictions provide seasonal, special event, and/or fixed-route circulators in areas where running all day local bus service is not cost effective. These trolleys are highly popular.

It is also important to note that a free trolley service does not guarantee success. The City should continuously monitor trolley activity and adapt their operations over time as needed. There are places where trolleys run empty, like Fort Worth's Molley the Trolley or the now-defunct Nashville Trolley. The circulators in Downtown Orlando are considered by some to be unsuccessful at carrying significant amounts of people. These are examples of free trolley services that stakeholders love, but riders do not.

Include Washington & 17th Transit Hub as a SMART station

The City of Miami Beach and Miami-Dade DTPW are assessing whether the BERT routes should also stop at Washington & 17th Street/Lincoln Road before terminating at the Convention Center terminal. While the Miami Beach Convention Center terminal offers ample layover and turnaround space, it is only active during major events. The bus stops near Washington & Lincoln and Washington & 17th are active all year round and are where the most transit ridership activity is observed in the City, making them a natural transit hub. The transit hub in the Washington & Lincoln area is also close to the eastern entrance of the Convention Center.

This study proposes to include the transit hub located in the general area of Washington Avenue between Lincoln Road and 17th Street as a station for the BERT routes, in particular f1 and f3. This is already a Beach Corridor station. Most of the ridership activity, for both Miami-Dade Transit and Miami Beach Trolley, is seen around the block formed by 17th Street, Washington Avenue, Lincoln Road, and Collins Avenue. The Convention Center terminal on 18th Street shall remain as the end-of-line for BERT and the Beach Corridor, but it is important to make the connection at Washington & 17th. Not only is it a high-visibility station that hosts the hotspot of ridership in the City, but it also provides direct access to key destinations (e.g., Lincoln Road Mall) and direct transfers or shorter walks to connect with other transit services. The Convention Center station remains a convenient layover location for recovering buses.

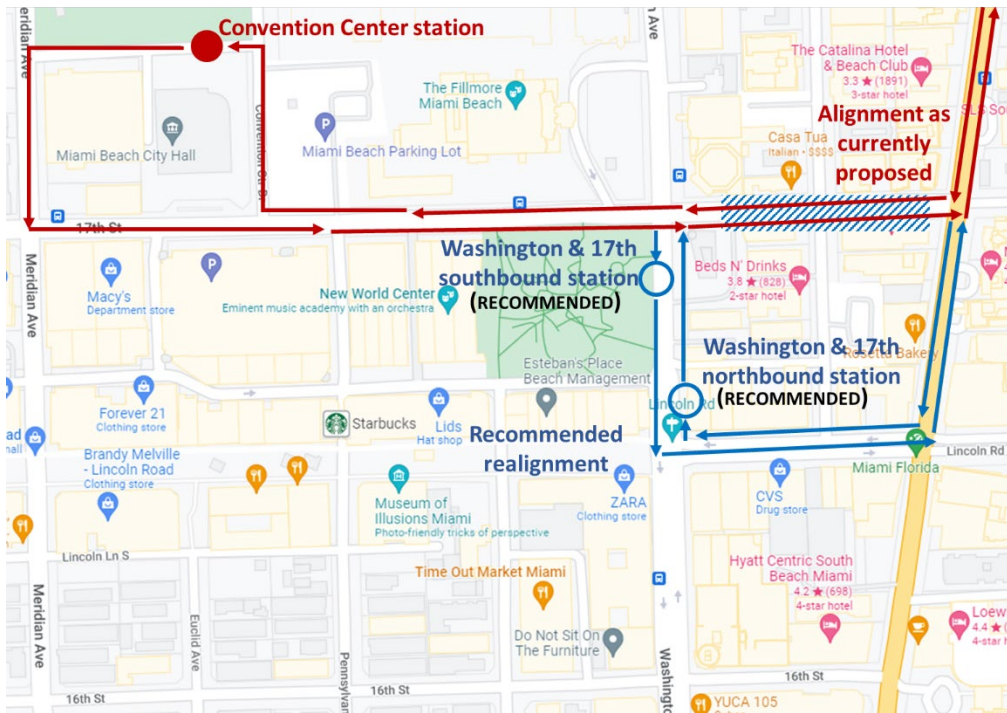


Figure 16 Proposed alignment of the BERT f1 route

Inbound BERT f1, as currently proposed, turns west onto 17th Street and heads straight to the Convention Center station. This study proposes to turn west onto Lincoln Road (one block farther south) to serve the recommended stops along Washington Avenue (see Figure 16). BERT f3 already runs past Washington & 17th, so this study proposes to add those stops to the f3 routing (see Figure 17).

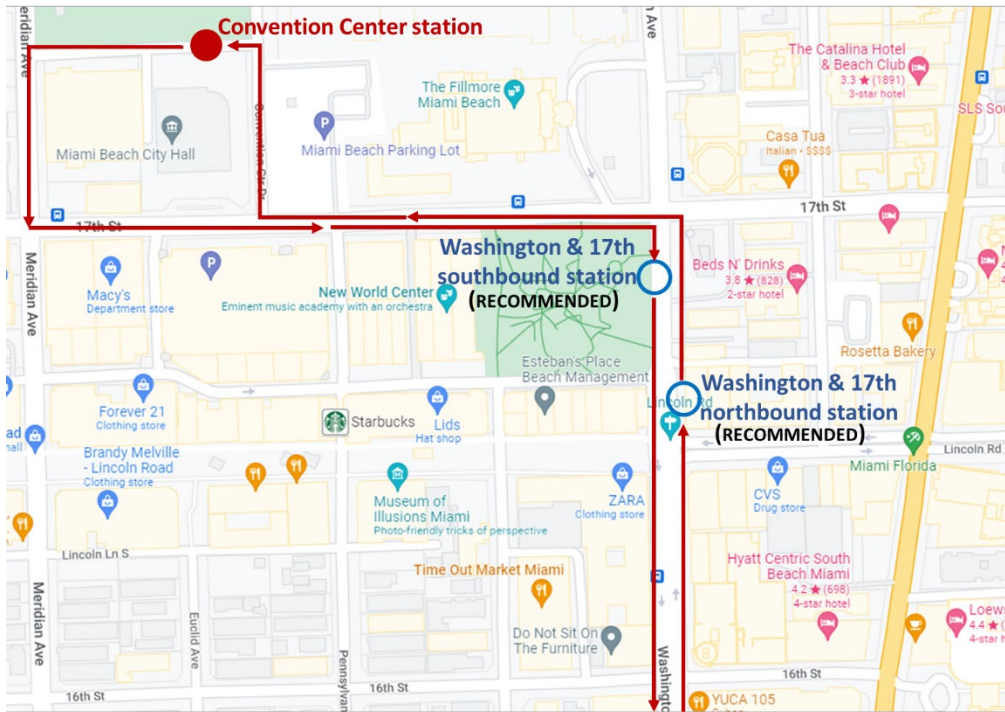


Figure 17 Proposed alignment of the Beach Corridor and the BERT f3 route

Action Steps

- Regional collaboration – Continue discussions between City, TPO, and DTPW to ensure BERT routes stop at the Washington & 17th transit hub.
- Conduct analysis to find out if operations will be constrained at Washington & 17th due to increased bus service, i.e., study whether bus bunching might become a problem.

Leverage Flexibility of On-Demand Transit

Currently, the City of Miami Beach offers an on-demand transit service for Mid-Beach residents through Freebee, a private on-demand shuttle operator. Most of the neighborhoods in Mid-Beach are low-density residential communities, which are not good candidates for fixed-route transit service. Developing a combined service model that supplements fixed-route service with demand-response options for riders can provide a path to address the first/last mile problem while maintaining the benefits of fixed-route transit. For the public to embrace on-demand transit as an attractive mode to access high-capacity transit, the City of Miami Beach should aim to ensure wait times of 15 minutes or better. Furthermore, matching on-demand service hours to fixed-route service hours make the service an all-day first/last mile alternative.

The existing Freebee service area includes the proposed SMART Stations in Mount Sinai, Mid-Beach, and Fontainebleau, as well as the Washington & 17th transit hub, shown in Figure 14.

While providing frequent on-demand transit is typically less cost-effective per rider than fixed route transit, Freebee service is highly accessible for residents who have difficulty getting around, people who rely on mobility devices, and visitors and commuters who are unlikely to use bikeshare or walk long distances and should remain an important part of the SMART Plan connectivity toolbox.

Action Steps

- Monitor ridership and waiting times to assess if extra vehicles are needed to meet demand.
- Expand on-demand service area to include the BERT station at the Miami Beach Convention Center.
- Match on-demand service hours to BERT schedule.

Enhance Bikeshare

Bikeshare is a well-established mode of transportation in Miami Beach – the Citi Bike network is extensive, visible and has high ridership year-round. By co-locating bikeshare stations and transit stations, the City of Miami Beach can help improve first/last mile travel choices for transit riders and reduce first/last mile trip time.

While bikeshare may not be as attractive and accessible as other first/last mile options like the Miami Beach Trolley, it can be an important tool to meet the travel needs of many commuters and tourists in a sustainable way. Eighty-four percent of jobs in Miami Beach are occupied by people who live outside the City,¹⁵ which means there is a heavy inflow of workers into Miami Beach who could potentially end their trip with a shared bike. The Miami Beach employee population is generally younger than its resident population and younger than the county's median worker,¹⁶ hence making bikeshare a more viable means of transportation. Incentivizing bikeshare use for employees may also reduce financial barriers to using both transit and bikeshare as a daily commute option.

For bikeshare to become a viable first/last mile solution for BERT and Beach Corridor riders, reliability will be key – bikeshare stations near SMART stations must have enough bikes available during peak commute hours to serve target users.

While the Station-Specific Projects section addresses the bikeshare infrastructure needs of each station, there are systemwide actions that the City of Miami Beach can take in partnership with Citi Bike to ensure that the bikeshare network is ready for the expected rise in transit-related demand.

Action Steps

- Coordinate with Citi Bike during BERT/Beach Corridor station design process for co-location of services. See next section for station-specific suggestions.
- Once SMART routes and stations come online, coordinate with Citi Bike to study bikeshare demand throughout the day, understand usage patterns in near transit stations, and address balancing issues. Consider changing operator requirements to assure bikes are available at day's end to capture shift changes and introduce incentives to walk further for bikes to mitigate the impacts of increased demand.

¹⁵ U.S. Census Bureau's 2019 Longitudinal Employer-Household Dynamics (LEHD) data

¹⁶ U.S. Census Bureau's 2020 American Community Survey (ACS) 5-Year estimates – the city's workers (median age = 40.6) tend to be younger than county workers (41.7) and also tend to be younger than Miami Beach residents (41.6), who generally tend to be older than county residents (40.2)

- Consider strategies to provide subsidies for service workers. For example, study the possibility of offering free or discounted transit and bikeshare options, such as a joint pass.
- Consider adding bikeshare requirements to development reviews to incentivize developers to provide end-of -trip facilities (bike-share stations).

Case Studies

Brightline and BrightBike, West Palm Beach

Brightline, along with Related Companies, The West Palm Beach Downtown Development Authority (DDA), and Micromobility Management, launched BrightBike, West Palm Beach's new bikeshare program, in Summer 2022. The BrightBike fleet launched with 17 stations for pedal bikes and the fleet will be expanded to include e-bikes. BrightBike's goal is to help Brightline passengers find easier, more convenient ways to get to their destination in West Palm Beach and lower the environmental impact of door-to-door travel.

BrightBike is also part of the new Brightline+ experience that enables customers to book seamless transportation across multiple modes of private and public transportation for the first and last miles of their journeys. The bikes can be rented via a QR code located at BrightBike kiosks across the City and on the BrightBike app. BrightBikes will be available to rent by the hour or day starting at one dollar per 30-minutes. When memberships are introduced later this summer, BrightBike and Citi Bike Miami members will both enjoy membership reciprocity for regional bikeshare access, making it the greenest way to travel between the downtowns.

Move PGH Pittsburgh

In July 2021, the City of Pittsburgh launched Move PGH, a two-year pilot program to improve how people get around. The initiative creates travel hubs where people can access all the City's options: buses, bikes, mopeds, and electric scooters.

Close to 40% of all the trips people make in Pittsburgh cover less than 2 miles. Move PGH aims to provide alternatives that make it easy to travel without driving. That's particularly important for the nearly one-quarter of City residents who don't have access to a car.

Move PGH aims to provide a simple, painless user experience through both digital and physical hubs. The digital hub is provided by TransitApp, which creates multimodal routes for getting around the City: from walking and taking a bus to renting a moped, scooter, or bike. The physical hubs provide access a range of transportation modes and are intentionally clustered around Port Authority's bus and light rail systems, which form the backbone of the entire initiative.

Most recently, Move PGH launched a Universal Basic Mobility pilot, in which 100 residents with low incomes will be provided with paid subscriptions to all of Move PGH's services. The related initiative aims to study how easing access to transportation improves job and health outcomes.

Implement Transportation Incentives and Marketing Campaigns for Tourists

Much of the travel demand to, from, and within Miami Beach is driven by tourism. With over 23 million per year visiting the Greater Miami region, Miami Beach must align transportation investments with the unique needs of tourists to ensure that dollars are well spent.

A “Car-Free, Care-Free!” campaign would promote non-driving modes of transportation as key means of reaching Miami Beach and traversing the City internally. Tourists are often less familiar with the City’s public transportation system than residents and workers – this means that transportation incentives programs and marketing campaigns must include tourists to inform the mobility options.

A “Car-Free, Care-Free!” campaign should:

- Promote and distribute information that hand-holds tourists on how to arrive (and get-around) Miami Beach car-free – with a particular focus on the future SMART routes and connectivity to and from the airport.
- Build on previous advocacy campaigns and coordinate with regional groups which advocate for tourism, including the Greater Miami Convention and Visitors Bureau.
- Promote the Beach Corridor as a tourist-friendly service, offering discounted passes when purchased in daily, weekend, or week-long formats. Transit passes could also enable discounts at key tourist attractions throughout the Miami region.
- Leverage the Miami Beach Trolley as a tourist-friendly (and free!) circulator. Free circulators are more appealing to tourists as there is no barrier to entry – visitors who may be unfamiliar with how to ride local public transit can board without any extra steps.
- Market car-free transportation at parking garages and transform garages into mobility hubs. Offering bike or micromobility services, car sharing, public transportation connections and fare purchasing equipment, and detailed wayfinding at parking garages will incentivize tourists to park once and then rely on other modes for travel throughout Miami Beach.

Case Study

No Car, No Problem – Breckenridge, CO

Breckenridge, CO runs a “No Car, No Problem” campaign that promotes non-driving transportation options for visitors. Breckenridge is a ski resort town and year-round tourist destination in the Rocky Mountains with limited space to accommodate traffic and parking

for tourists. In order to manage congestion and parking impacts from tourist, Breckenridge offers a variety of incentives and marketing for non-driving modes.

The No Car, No Problem campaign includes the following:

- A dedicated website with easy to digest information and promotions for non-driving transportation modes
 - <https://gobreck.com/plan-your-visit/breckenridge-transportation>
- Promotional material for the City's Breck Free Ride bus system that offers free circulator service year-round and includes bike racks for riders who also wish to bike.
- Information on shuttle services tied to local lodging.
- Links to Uber and Lyft services that can supplement public transportation.
- Information on reaching Breckenridge from Denver, the nearby airport hub, without a car.
- An introductory video hosted on YouTube providing summary information on carless transportation for Breckenridge visitors.

Leverage Existing Transit Access Programs

Miami Beach residents and employees currently have access to several transit supportive programs¹⁷. These include:

- Half price transit fares for K-12, college students, and low-income residents
- Up to 15% off for corporate group transit purchases
- Free transit for senior citizens, social security beneficiaries, eligible low-income residents, and eligible veteran residents
- Discounted fares for Medicare recipients
- Free guaranteed ride homes for commuters who carpool, vanpool, ride transit, bike or walk

Shifts in commuting and travel behavior are more likely to happen when there is a change in a person's life: changing jobs, moving, and when there is a major change in infrastructure. When SMART routes roll out, it will be important to remind residents and employees to reconsider their commuting and general travel habits. Not only will they have better service, but they can also take advantage of free or reduced fares. Example transit access programs from other cities are shown in Figure 18.

Action Steps

- Work with DTPW to develop an education and outreach campaign to encourage participation in these programs.
- Develop a campaign timeline aligned with SMART corridors/routes roll-out.
- Develop an outreach strategy to target eligible groups such as schools, major employers, large building tenants, etc.

¹⁷ <https://www.miamidade.gov/global/transportation/transit-pass.page> (accessed May 2022)



ORCA BUSINESS PASSPORT

Unlimited movement

Equip your employees with one of the Puget Sound's most popular workplace benefits: unlimited transit travel. Business Passport is an easy-to-manage annual program only available through employers. It provides an unlimited-trip ORCA pass to all benefits-eligible employees, including vanpool and vanshare options as well as Metro's Home Free Guarantee.

What the program looks like:

- Provide all benefits-eligible employees with an unlimited-use ORCA card
- Annual program with no monthly program administration required
- Reassign cards to new employees as staffing changes
- Option for employee cost-sharing up to 50% cost of unlimited pass
- Cost based on company's location
- [Complete list of what is included with Passport \(PDF\)](#)



ORCA BUSINESS CHOICE

Total flexibility

Business Choice provides the most flexibility in size and scale. You select which employees receive an ORCA card and the dollar value you put on it. Fees can be incorporated into pre-tax employee payroll deductions and you can make changes monthly. Your employees can add additional funds to their ORCA cards.

Business Choice at a glance:

- Purchase ORCA cards and distribute to designated staff
- Load value on cards via online portal
- Change card values month to month as needed
- Employees can supplement value to meet their personal travel needs
- Option to provide employees with a subsidy or pre-tax benefit
- [View the ORCA products list \(PDF\)](#)

Perq is the MBTA's commuter benefits program.

Our system connects Greater Boston with communities across the region, from Bedford and Medford to Saugus and Salem—and as far afield as Whitman, Worcester, and Walpole.



Sign up at
perq.mbta.com



Commuter benefits have never been simpler.

Get pre-tax passes sent right to your office. Fee-free.

Figure 18 ORCA Pass Program (Seattle) and MBTA Perq Program (Boston)

STATION-SPECIFIC PROJECTS

This section breaks down the specific projects that are recommended for each SMART station: either Beach Corridor station, BERT station, or both. This section strongly focuses on bicycle improvements, since the City already has a very good pedestrian environment. Other improvements such as increased trolley frequency and leveraging on-demand transit are already covered as “systemwide” recommendations, so they apply to all stations.

The cost range here presented does not include the SMART station design and construction costs nor any contingencies; these are high-level estimates regarding the cost of building the first/last mile infrastructure herein recommended. There are four tiers used to present the cost range:

- One dollar sign (\$): less than \$50,000
- Two dollar signs (\$\$): \$50,000 to \$100,000
- Three dollar signs (\$\$\$): \$100,000 to \$500,000
- Four dollar signs (\$\$\$\$): \$500,000 to \$1,000,000

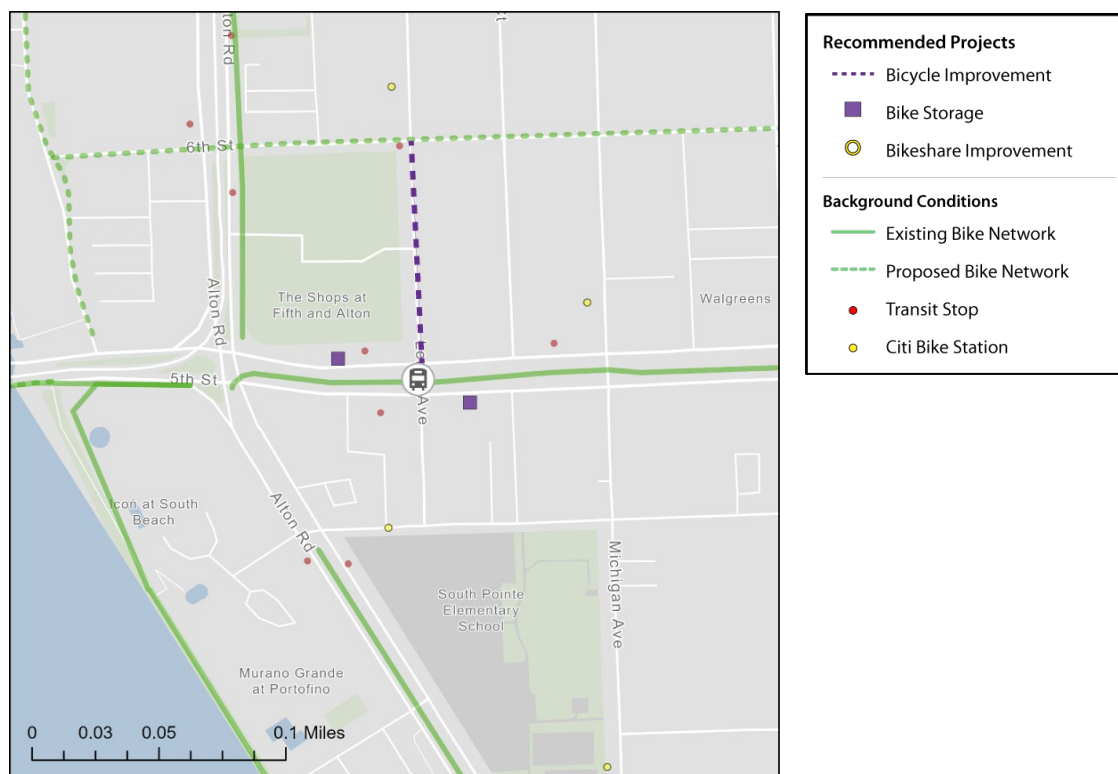
5th & Lenox

Background

5th & Lenox will be the main SMART Beach Corridor station in Miami Beach. Although the terminus of the trunkline portion of the route will be at 5th & Washington, all transit transfers will occur at 5th & Lenox. 5th & Washington will only have walk access. This unleashes the potential for this station to become an even more significant transit destination in the City. 5th and Lenox will connect directly to the South Loop Trolley in the counterclockwise direction and is one block away from the clockwise trolley stops. The area surrounding this intersection has good pedestrian conditions and safe intersection crossings for cyclists and pedestrians.

Recommendations

- Move forward with the proposed protected bike lanes along West Avenue identified in the Miami Beach Bicycle Pedestrian Master Plan.
- Move forward with the proposed neighborhood greenway on 6th Street presented in the Miami Beach Bicycle Pedestrian Master Plan to connect West Avenue east to Meridian Avenue and then to the South of Fifth area.
- Implement sharrows along Lenox Avenue between 5th Street and 6th Street to connect to the 6th Street greenway.
- Install protected, long-term bike storage solutions for commuters into Miami along 5th Street or on Alton Road.
- Assess usage of bikeshare stations at 4th Street & Lenox and 6th Street & Lenox and consider relocating to 5th Street for visibility (or expanding capacity if needed).



Modes Served

- DTPW Bus
- Miami Beach Trolley
- Bike
- Pedestrian
- Bikeshare

Cost Range



Considerations and Next Steps

- Identify funding sources for the proposed improvements.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Coordinate with FDOT to study traffic conditions at Alton Road and 6th Street and assess the impacts of the proposed improvements.

- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from transit, particularly bike connections to West Ave and transfers to the South Loop Trolley.
- Coordinate with the City of Miami Beach design reviews of the proposed 6th Street Neighborhood Greenway.
- Advance improvements to the design phase and conduct a feasibility study.
- Coordinate with adjacent property owners to install additional bike storage facilities.

Station Area Concept

Bike Connections at 6th Street and Lenox Avenue

The below image shows a planning level concept for proposed improvements on Lenox Avenue and 6th Street providing a key bicycle connection to the West Avenue north-south protected bike facility. Key elements of this concept are:

- Medians, and other small traffic calming features to slow speeds on both roadways. These roadways are too narrow to provide protected bike facilities and should function as low-speed bike boulevards, relying on traffic calming to create a safe environment.
- High-visibility crosswalks at the intersection of Lenox Avenue and 6th Street.
- Sharrows and signage denoting these blocks as bike boulevards.

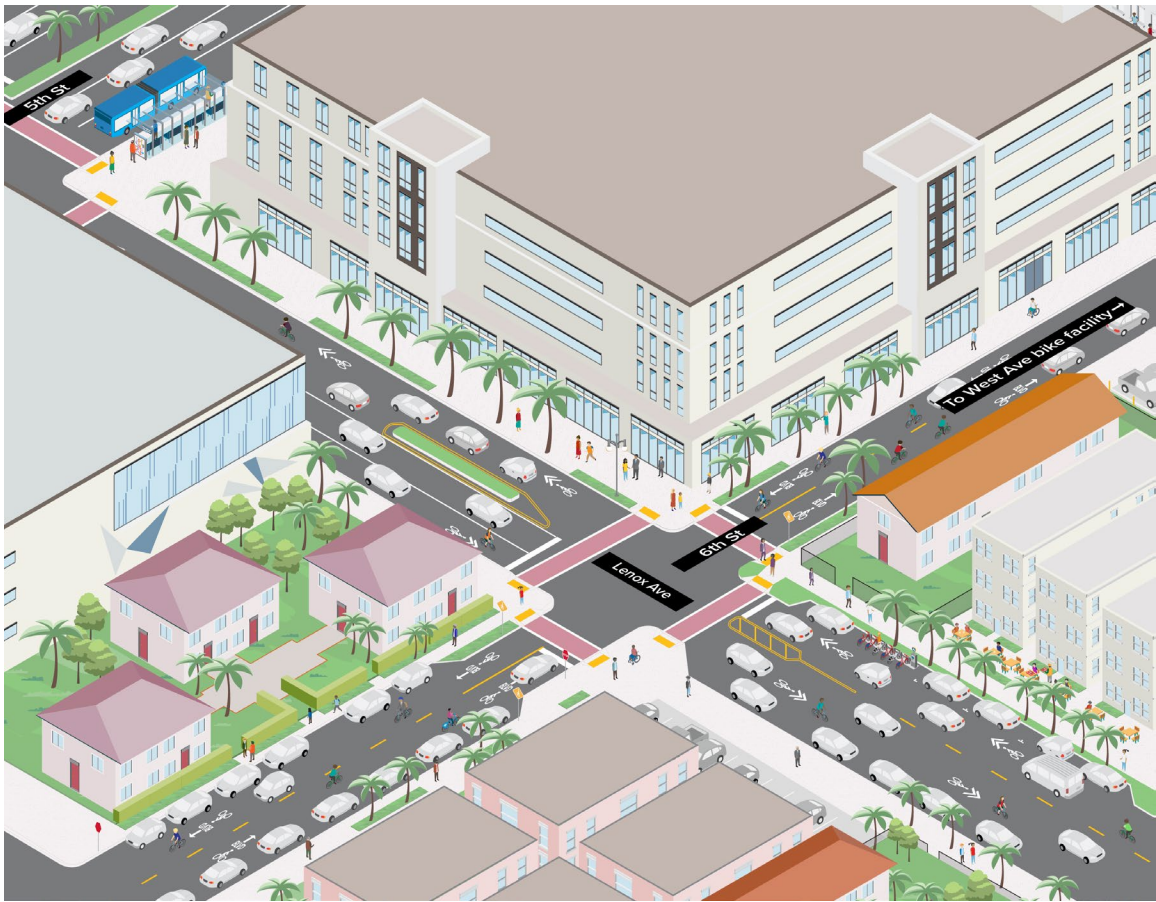


Figure 19 Bicycle and Pedestrian Improvements Concept – 6th Street and Lenox Avenue

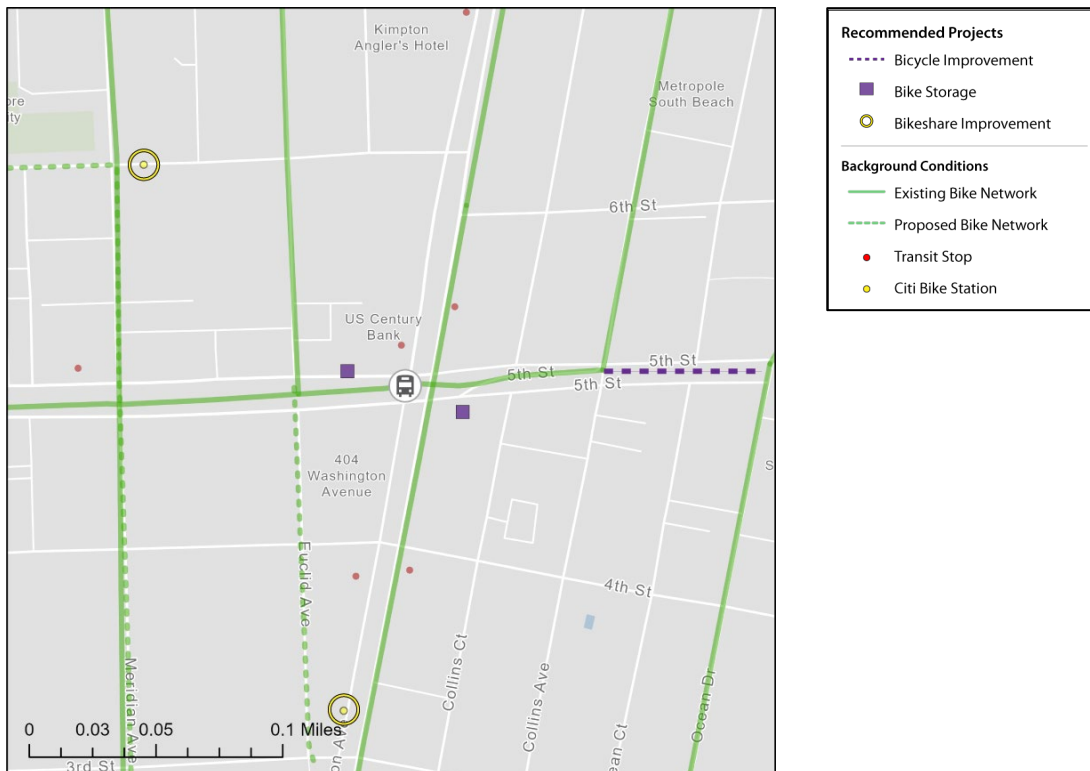
5th & Washington

Background

5th & Washington is the proposed terminus for the SMART Beach Corridor Trunkline segment in Miami Beach. This station is a short walk away from popular destinations like Collins Avenue, Ocean Drive, the Beachwalk and Lummus Park. This location is served by the South Beach Loop trolley and has good pedestrian conditions – wide sidewalks and crosswalks and curb ramps at all corners.

Recommendations

- Extend bike lanes along 5th Street to connect to two-way protected bike lanes on Ocean Drive.
- Install protected, long-term bike storage solutions for commuters into Miami along 5th Street or on Washington Avenue.
- The three closest Citi Bike stations to this intersection– Ocean Drive, Meridian & 6th, Washington & 3rd – all experience very high ridership. Assess the usage and balancing of these bikeshare stations and consider for expansion to meet potential commuter demand.



Modes Served

- DTPW Bus
- Miami Beach Trolley
- Bike
- Pedestrian
- Bikeshare

Cost Range



Considerations and Next Steps

Next steps for this location include:

- Identify funding sources for the proposed improvements.
- Given that this station will provide pedestrian access only to the Beach Corridor Trunkline, prioritize investments that enhance/expand the pedestrian zone. Consider removing parking to allow for wider sidewalks with wide-enough clear zones to accommodate the expected traffic.
- Advance improvements to the design phase and conduct a feasibility study.
- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with adjacent property owners to install additional bike storage facilities.
- Conduct analysis to understand the necessary curb space for expected transit services and to assess impacts of proposed roadway improvements.
- Identify funding sources for the proposed improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

Washington between 10th and 14th

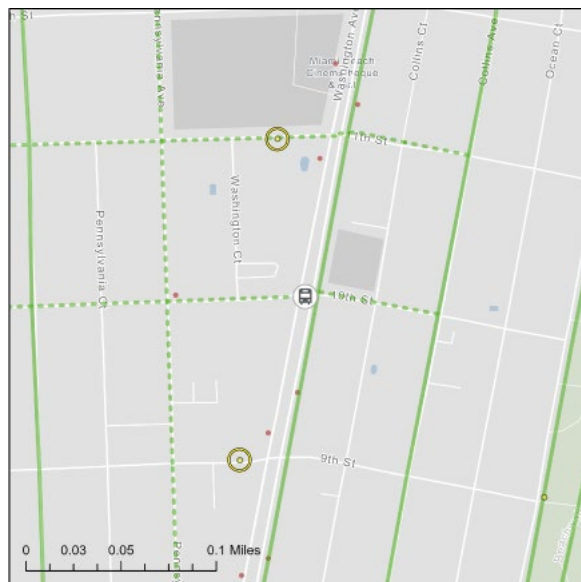
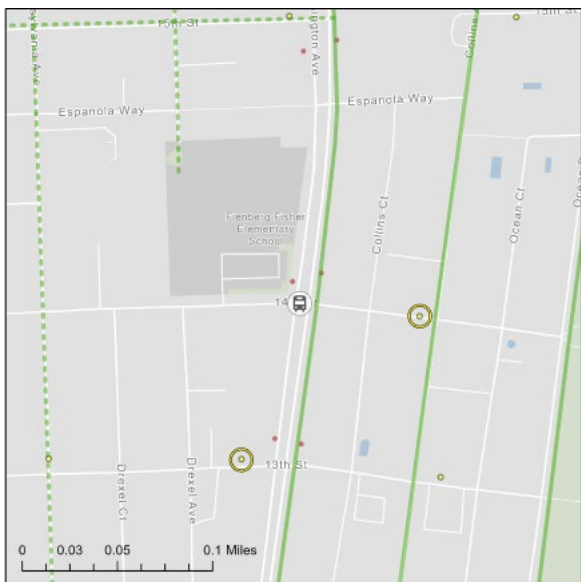
Background

There will be two Beach Corridor stations along this segment of Washington Avenue, one at Washington & 10th and one at Washington & 14th. Washington & 10th will also be a station for BERT route f3.

Washington & 10th will be the first BERT f3 station in Miami Beach, and the only one besides the Convention Center terminal. This station is at the core of the South Beach tourist area, only a short walk or bike ride away from dozens of restaurants and hotels, and local attractions like Lummus Park and South Beach. This station connects to the South Beach Loop trolley and experiences high ridership today. This station has good pedestrian conditions – ample sidewalks, crosswalks, and curb ramps.






Recommendations

- Move forward with the neighborhood greenways along 10th Street and 11th Street proposed in the Miami Beach Bicycle Pedestrian Master Plan
- Assess usage of bikeshare stations at 9th & Collins and 11th & Collins and consider for expansion (both very high ridership stations).



Modes Served

- DTPW Bus
- Miami Beach Trolley
- Bike
- Pedestrian
- Bikeshare

Recommended Projects	
	Bikeshare Improvement
Background Conditions	
	Existing Bike Network
	Proposed Bike Network
	Transit Stop
	Citi Bike Station

Cost Range



Considerations and Next Steps

Next steps for this location include:

- Identify funding sources for the proposed improvements.
- Advance recommendations to the design phase and conduct a feasibility study.
- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with adjacent property owners to install additional bike storage facilities.
- Conduct analysis to understand the necessary curb space for expected transit services and to assess impacts of proposed roadway improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

Miami Beach Convention Center (18th Street/ City Hall)

Background

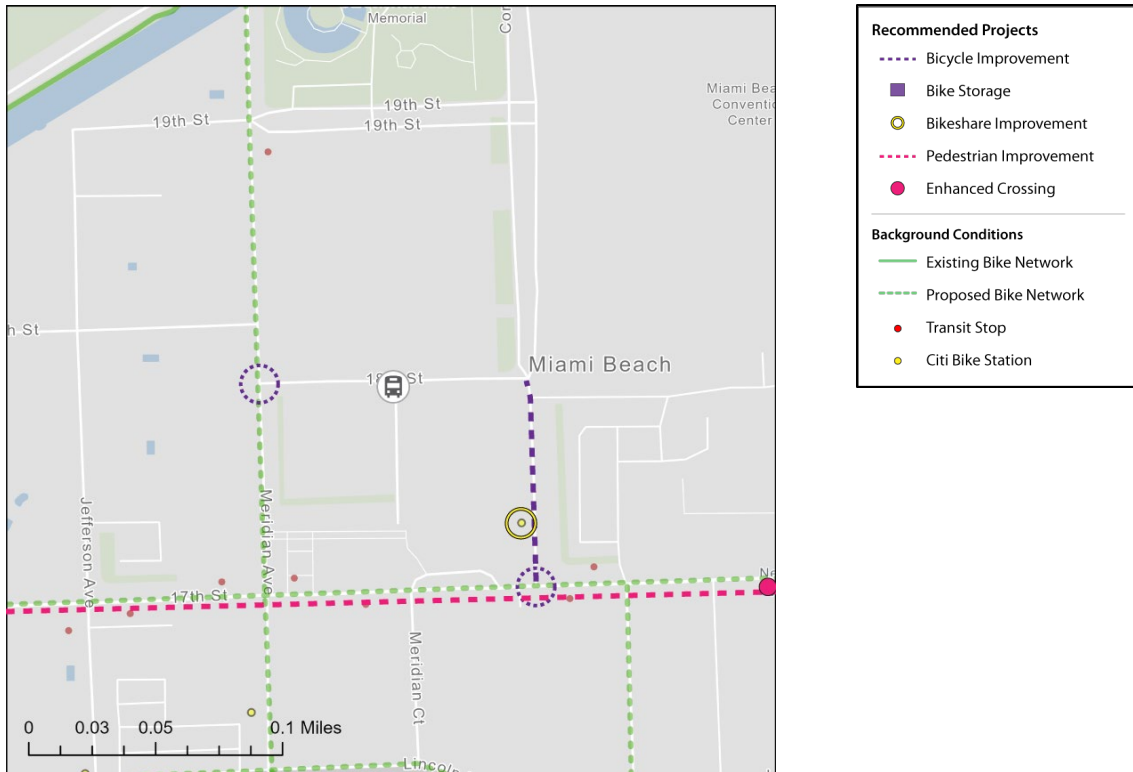
The Miami Beach Convention Center is proposed to be the common terminus for all three BERT routes (f1, f2, and f3) and for the Beach Corridor. The station will be placed on 18th Street behind the Miami Beach City Hall, between Meridian Avenue and Convention Center Drive. The challenge with this location is that most of the existing transit ridership activity is located along Washington Avenue, between 17th Street and Lincoln Road, which is a quarter mile down the road from the proposed terminal location. This Convention Center terminal would be sporadically used, seeing high activity only during major events, while the transit hub near Washington Avenue & 17th Street sees activity all year round.

Nonetheless, this study explored how to make this terminal accessible to bicyclists and pedestrians. Note that the 17th Street Bicycle & Transit Lanes Feasibility Study already proposes some improvements to 17th Street.

Recommendations

- Move forward with the improvements presented in the 17th Street Bicycle & Transit Lanes Feasibility Study, particularly with the bike lanes from West Avenue to the Beachwalk.
- Implement intersection improvements at 18th Street and Meridian Avenue to enable bicyclists getting off transit at the Convention Center terminal to head southbound on the Meridian Avenue bike lanes.
- Implement intersection improvements at 17th Street and Convention Center Drive and sharrows along Convention Center Drive to enable bicyclists getting off transit at the Convention Center terminal to head eastbound on the proposed 17th Street bike lanes.
- Evaluate usage of the Citi Bike station on Convention Center Drive and determine whether an expansion is warranted.
- Implement wayfinding from the terminal to the transit hub near Soundscape Park.
- Calm traffic along 17th Street and Washington Avenue to make for a safer walking environment.
- Evaluate the possibility of implementing a mid-block crossing with rectangular rapid flashing beacons (RRFBs) on 17th Street west of Washington Avenue, connecting

Soundscape Park with The Fillmore. A similar treatment is proposed on the 17th Street Bicycle & Transit Lanes Feasibility Study.



Modes Served

- DTPW Bus
- Bike
- Pedestrian
- Bikeshare

Cost Range



Considerations and Next Steps

As the terminus station for all BERT routes and the Beach Corridor, it is of the utmost importance to serve the Washington & 17th hub with all four of these services. This would be easy with the BERT Route f3, since it mirrors the Beach Corridor, which already serves the Washington & 17th hub. BERT Route f1 could also easily serve this hub by staying on Collins

Avenue and then using Lincoln Road and Washington Avenue to get to 17th Street. The challenge becomes BERT Route f2, which arrives at the Convention Center terminal from the north via Convention Center Drive.

The Convention Center station provides premium access to the Convention Center which frequently hosts large events which may generate substantial ridership. However, non-event trip demand to the Convention Center is expected to be low – this suggests that service to the Washington & 17th hub should be prioritized over service to the Convention Center as SMART Plan implementation becomes further refined.

Next steps for this location include:

- Identify funding sources for the proposed improvements.
- Advance improvements to the design phase and conduct a feasibility study.
- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with adjacent property owners to install additional bike storage facilities.
- Conduct analysis to understand the necessary layover space for expected transit services and to assess impacts of proposed roadway improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

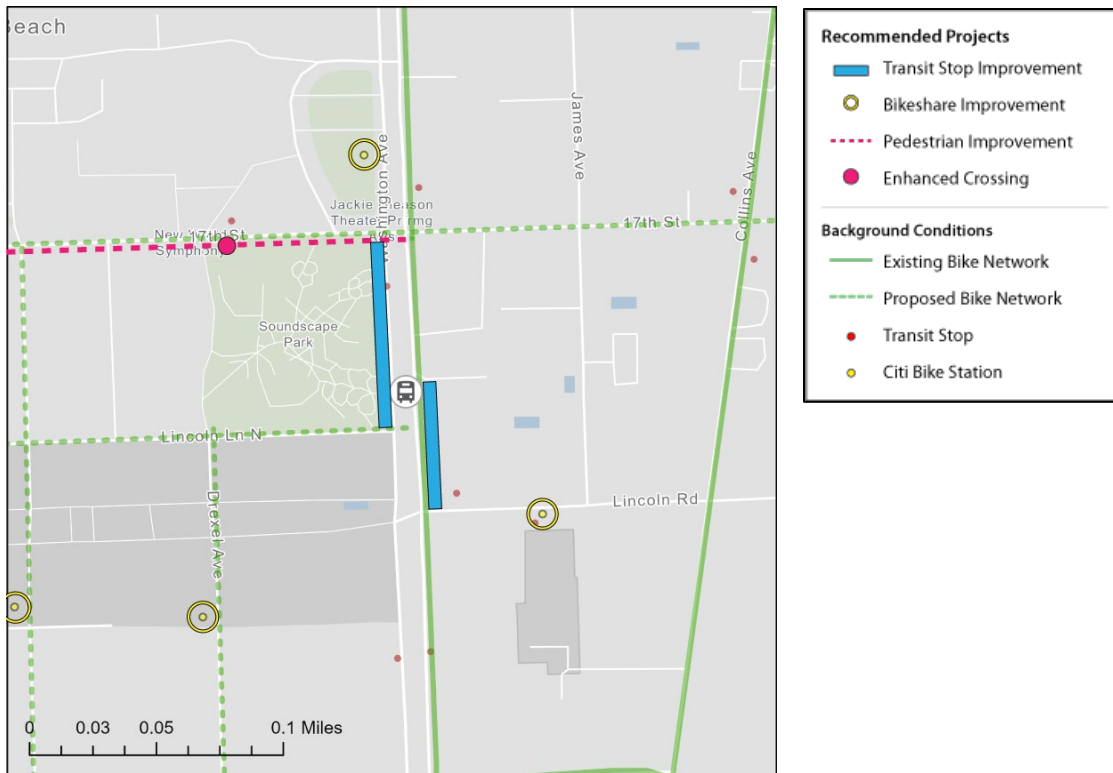
Washington North of Lincoln

Background

This location is slated to become a station for the Beach Corridor Washington Avenue Extension. The general vicinity of this block is where the bus stops with the most ridership in the City are located, making it a natural transit hub with activity all year round and still close enough to the Convention Center itself. With proper wayfinding and traffic calming, people can safely and conveniently make their way to the entrances of the Convention Center. This location is also an existing terminal for the City's on-demand transit service. Given the high concentration of existing and future transit demand in this location, DPTW, FDOT, and TPO should consider providing BERT service at this location in addition to the Convention Center terminal.

Recommendations

- Designate adequate curb space to support frequent bus service and accommodate bus demand.
- Move forward with the improvements presented in the 17th Street Bicycle & Transit Lanes Feasibility Study, particularly with the bike lanes from West Avenue to the Beachwalk.
- Evaluate usage of the Citi Bike stations within a quarter mile of Soundscape Park and determine whether an expansion is warranted.
- Implement wayfinding from the terminal to the Convention Center entrances.
- Calm traffic along 17th Street and Washington Avenue to make for a safer walking environment.
- Evaluate the possibility of implementing a mid-block crossing with rectangular rapid flashing beacons (RRFBs) on 17th Street west of Washington Avenue, connecting Soundscape Park with The Fillmore. A similar treatment is proposed on the 17th Street Bicycle & Transit Lanes Feasibility Study.



Modes Served

- DTPW Bus
- Miami Beach Trolley
- Bike
- Pedestrian
- Bikeshare

Cost Range



Considerations and Next Steps

If it is deemed that this important stop and the Convention Center terminal are too close to each other to both be served by the BERT routes, then this location should be prioritized for improvements and Convention Center (18th Street) should be a seasonal station that BERT routes only serve when there are events at the Convention Center. The Beach Corridor is already slated to serve both locations.

Next steps for this location include:

- Identify funding sources for the proposed improvements.
- Advance improvements to the design phase and conduct a feasibility study.
- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with adjacent property owners to install additional bike storage facilities.
- Prepare a Traffic Study to understand the necessary curb space for expected transit services and to assess impacts of proposed roadway improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

Station Area Concept

The below image shows a planning level concept for the proposed improvements in the vicinity of Washington Avenue north of Lincoln Avenue. Key improvements portrayed here include:

- Bus stop enhancements to support frequent or BRT-level service
- Shared bus-bike lanes on 17th Street to provide a safe and efficient connection to and from the transit hub

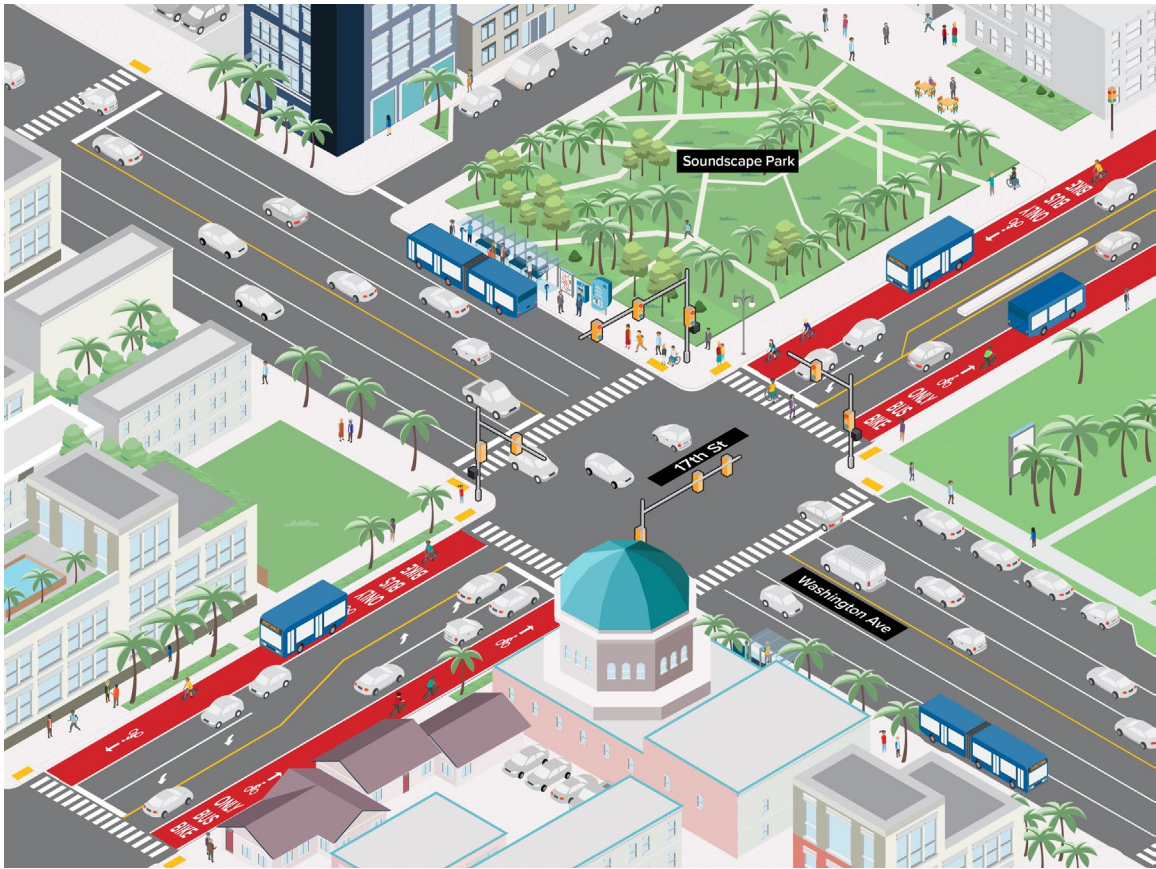


Figure 20 Station Area Concept – Washington Avenue at 17th Street

28th Street

Background

28th Street will be a BERT station for the f1 – Beach Express North route. This will be an important location for workers and visitors of Miami Beach to hop on and off the BERT network as it is close to several large Mid-Beach hotels along Collins Avenue. Given that Collins Avenue is one-way at this location, the 28th Street station will operate as a couplet. The northbound station will be located at Collins Avenue & 28th Street and the southbound station will be located Indian Creek Drive & 28th Street, across from the pedestrian bridge to Mid-Beach. This location currently experiences high Miami Beach trolley ridership.

Recommendations

- Install bike racks on southbound station. Sufficient bike racks already exist on Collins Avenue (northbound).
- Expand on-demand transit service area to include this location.



Modes Served

- DTPW Bus
- Miami Beach Trolley
- Bike
- Pedestrian
- Bikeshare

Cost Range



Considerations and Next Steps

Next steps for this location include:

- Identify funding sources for the proposed improvements.
- Advance improvements to the design phase and conduct a feasibility study.
- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with adjacent property owners to install additional bike storage facilities.
- Conduct analysis to understand the necessary curb space for expected transit services and to assess impacts of proposed roadway improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

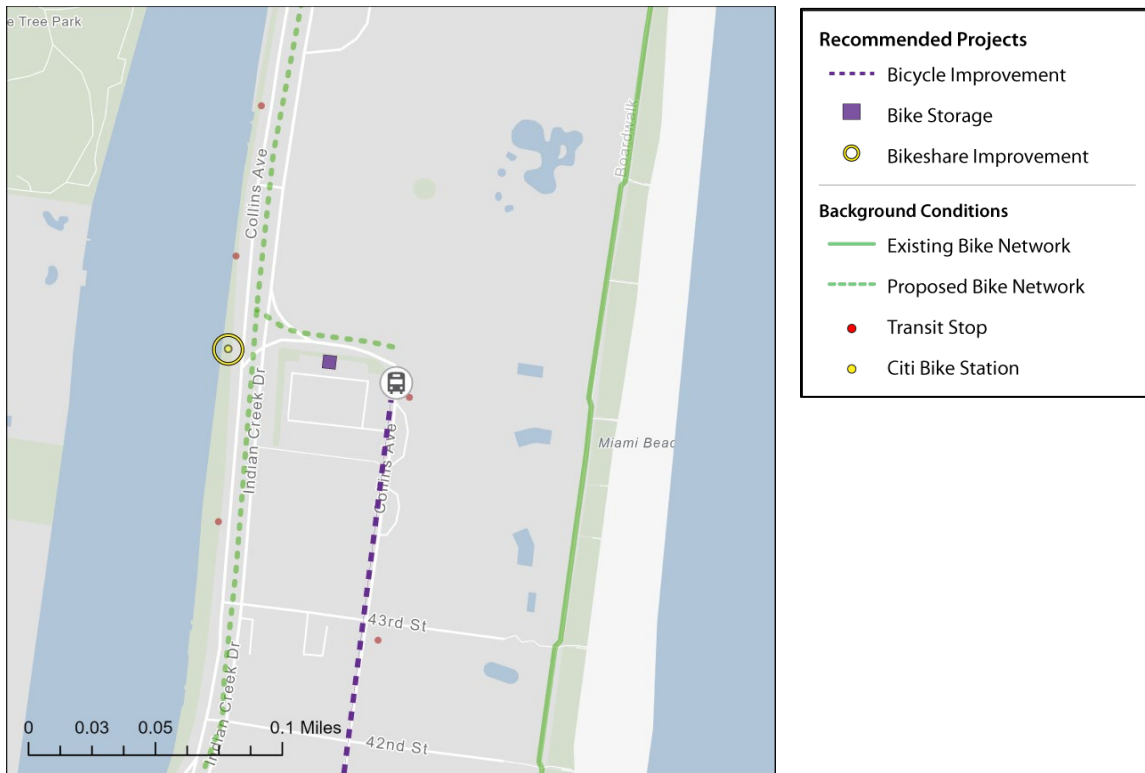
Fontainebleau

Background

The Fontainebleau will be a BERT station for the f1 route. The station will be located along Collins Avenue near the 90-degree curve onto 44th Street, shortly before Collins Avenue merges with Indian Creek Drive and becomes a two-way roadway. This is an important station given that the Fontainebleau is one of the largest employers in the City. BERT buses would stop here in both directions. This station is also a terminal for the City's on-demand transit service.

Recommendations

- Move forward with the proposed bike lanes along 44th Street and 41st Street.
- Move forward with the proposed bike lanes along Collins Avenue (north of 44th) and Indian Creek Drive.
- Consider implementing northbound bike lanes along Collins Avenue (south of 44th) to complement the southbound bike lanes along Indian Creek Drive.
- Evaluate usage of the Citi Bike station on Indian Creek Drive just south of 44th Street and determine whether an expansion is warranted.
- Increase the supply of bicycle parking around the Fontainebleau.



Modes Served

- DTPW Bus
- Miami Beach Trolley
- Bike
- Pedestrian
- Bikeshare

Cost Range

\$\$\$\$

Considerations and Next Steps

Next steps for this location include:

- Identify funding sources for the proposed improvements.
- Advance recommendations to the design phase and conduct a feasibility study.

- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with adjacent property owners to install additional bike storage facilities.
- Conduct analysis to understand the necessary curb space for expected transit services and to assess impacts of proposed roadway improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

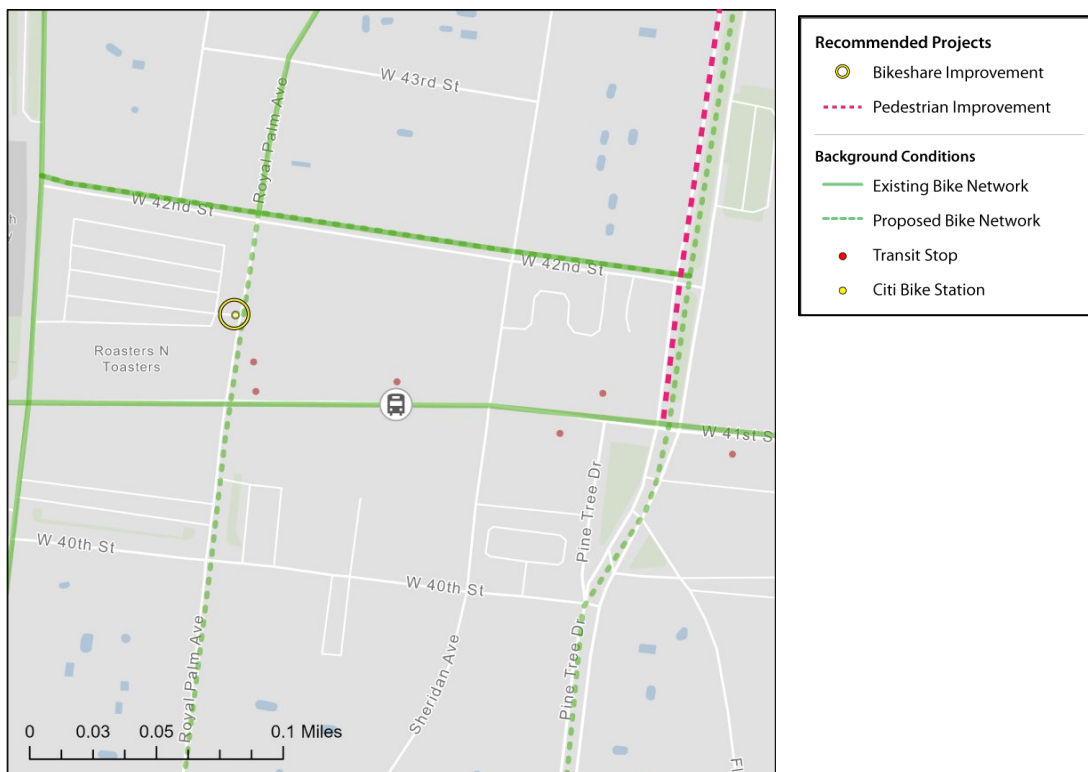
Mid-Beach

Background

This BERT station for the f1 route will be located along 41st Street between Sheridan Avenue and Royal Palm Avenue. This will be an important location for residents of Mid-Beach to hop on and off the BERT network.

Recommendations

- Move forward with the proposed bike lane along Pine Tree Drive.
- Study usage at the Citi Bike station on Royal Palm Avenue to see whether expansion is warranted.
- Move forward with the proposed greenway along Royal Palm Avenue.
- Put wayfinding in place for residents of Mid-Beach to make their way to this station to access the BERT network.
- Complete the sidewalk along the eastern edge of Pine Tree Drive north of 41st Street and along Prairie Avenue.



Modes Served

- DTPW Bus
- Miami Beach Trolley
- Bike
- Pedestrian
- Bikeshare

Cost Range



Considerations and Next Steps

Next steps for this location include:

- Identify funding sources for the proposed improvements.
- Advance improvements to the design phase and conduct a feasibility study.
- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with adjacent property owners to install additional bike storage facilities.
- Conduct analysis to understand the necessary curb space for expected transit services and to assess impacts of proposed roadway improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

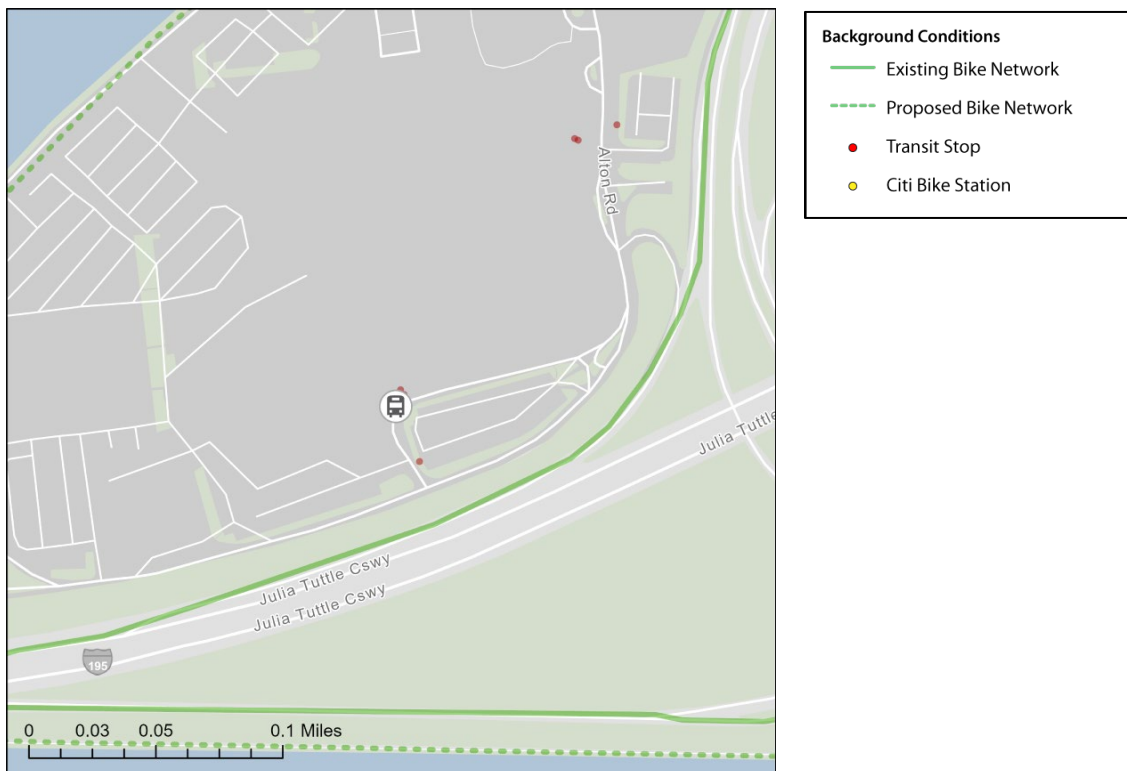
Mount Sinai Medical Center

Background

The hospital will be a BERT station for the f1 and f2 routes. This station is very important given that Mount Sinai is the largest employer in the City, bringing in people from both the city proper and the mainland. The major challenge with this location is pedestrian and bicycle access into and out of Mount Sinai, which may not be as relevant if most expected BERT riders will be hospital employees, patients, and visitors. If the expectation is for the station to be a point of access for residents of Mid-Beach to use the transit network, this recommendation should be revisited, and additional improvements may be warranted.

Recommendations

- Move forward with the proposed bike lanes on Alton Road.
- Move forward with the proposed greenway along N. Bay Road, both north and south of the hospital.



Modes Served

- DTPW Bus
- Pedestrian
- Miami Beach Trolley

Cost Range



Considerations

If the main station for residents of Mid-Beach will be the one along 41st Street between Sheridan Avenue and Royal Palm Avenue, then Mt. Sinai station area may not need enhancements. We would assume riders using Mt. Sinai station are heading directly to the hospital.

5 NEXT STEPS

This study is a planning document intended to support the long-term vision for SMART Plan services in Miami Beach. The recommendations in this document will require further vetting and evaluation prior to implementation. The anticipated timeline presented in Figure 19 shows what the next steps should be for the involved stakeholders to bring these first/last mile solutions to fruition in coordination with the SMART routes.

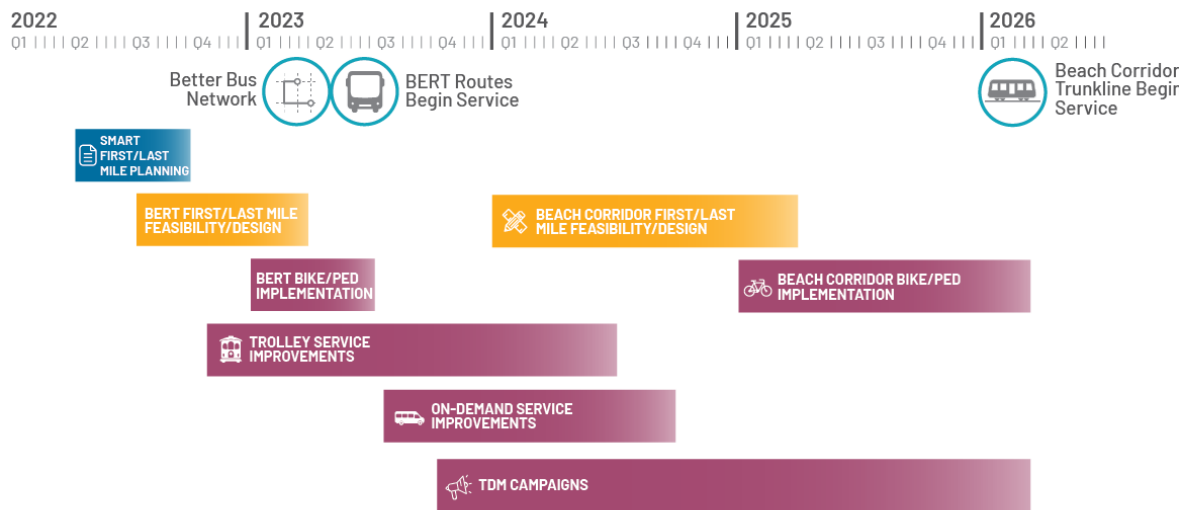


Figure 21 Implementation timeline

Several of the recommendations mentioned in the Station-Specific Projects section of this study have been previously identified as part of other Miami Beach planning studies, and many have already been assigned funding and are being evaluated for implementation. However, The City of Miami Beach will need to identify additional funding sources for most of the recommendations put forth in this study. Appendix A – Federal and State Transit Funding Programs lists potential funding sources for transit improvements that the City can use to best leverage local funds.

In addition to securing funding, the City of Miami Beach should take the following steps to ensure first/last mile accessibility in all proposed SMART stations:

- Create a prioritization framework as part of the upcoming Transportation Master Plan update to rank proposed projects based on their impact, timeline, funding and alignment with city-wide mobility and sustainability goals.
- Advance recommended improvements to the design phase and conduct a feasibility study.

- Coordinate with Citi Bike to explore study of bikeshare usage near stations and potential relocation after the BERT routes are in place.
- Depending on the final project construction schedule, coordinate with DTPW to relocate adjacent bus stops and install upgraded bus shelters.
- Conduct a wayfinding study and consider installing maps, signage and graphic directories to the surrounding area that highlight opportunities to make multimodal connections from this station.
- Coordinate with property owners and state agencies to install additional bike storage facilities either in the public or private right-of way.
- Prepare relevant traffic studies to understand the necessary curb space for expected transit services and to assess impacts of proposed roadway improvements.
- Continue coordination with DTPW, FDOT, and other transportation agencies working on the implementation of the SMART Plan.

6 APPENDIX – FEDERAL AND STATE TRANSIT FUNDING PROGRAMS

The Federal and State funding sources outlined in this appendix are potential funding sources for the transit improvements identified in the First/Last Mile Connections to the SMART Plan Study, that can be used to optimize use of local tax funds. The Federal funds, however, are being pursued by state and transit agencies across the state and nation for corridor improvement projects, while the State sources are being pursued by other major urban areas in Florida. The Federal grant process is very competitive and rigorous, and the funding timeframes and grant amounts may not match up with the expectations of the project sponsors/stakeholders for implementation of the projects within the study. The sources listed here are provided by the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA), and the Florida Department of Transportation (FDOT).

FEDERAL RESOURCES (FTA/FHWA)

- **2021 Bipartisan Infrastructure Law.** Five-year reauthorization of funds for surface transportation programs. The law authorizes up to \$108 billion to support federal public transportation programs, including \$91 billion in guaranteed funding. This legislation will advance public transportation in the U.S. through four key priorities: (1) Safety – making systems safer for transit workers and riders and ensure safe access to transit, (2) Fleet Modernization – reducing the state-of-good-repair backlog by repairing and upgrading aging transit infrastructure, (3) Climate – replacing transit vehicles with cleaner, greener vehicles, and (4) Equity – improving transit service for historically underserved communities and substantially upgrading station accessibility for people with limited mobility.
- **5339 Bus and Bus Facilities.** This Federal source of funding could be used, among other things, for bus facilities, new or refurbished operations and maintenance facility, signage, and associated transit capital equipment. For the most part, this Federal source provides up to 80 percent of the project cost and requires a 20 percent state/local match.
- **5307/5311 Job Access and Reverse Commute (JARC).** Eligible projects include an access-to-jobs project or a reverse-commute project. FTA defines an access-to-jobs project as one relating to the development of transportation services designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment.

- **Flexible Funding Programs – Transferring Title 23 Funds from FHWA to FTA.**
This refers to the transfer of highway funds to FTA for eligible transit projects to be administered under Chapter 53 of Title 49 or the transfer of transit funds to FHWA for eligible highway projects to be administered under Title 23. Section 104 of Title 23 U.S.C. preserves the option for FHWA to transfer funds to FTA for transit capital projects and eligible operating activities that have been designated as part of the metropolitan and statewide planning and programming process. The project must be included in an approved State Transportation Improvement Program (STIP) before the funds can be transferred.
- **Surface Transportation (STP) Funds and Transportation Alternatives Program (TAP) for Transit Projects.** FHWA STP funds are eligible for a variety of highway-related activities and are also available to cover the capital cost of any public transportation projects eligible for assistance under Chapter 53, which may include vehicles and facilities (publicly or privately owned) that are used to provide intercity passenger bus service. In addition, STP funds are available for surface transportation planning projects as well as activities under the newly authorized Transportation Alternatives Program (TAP), at 23 U.S.C. 101. TAP funds may be used to carry out a part of a program or project or used to carry out an independent program or project related to surface transportation.
- **Congestion, Mitigation and Air Quality (CMAQ) Funds.** The CMAQ program continues to provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Transit investments, including transit vehicle acquisitions and construction of new facilities or improvements to facilities that increase transit capacity, are eligible for CMAQ funds. Florida does not currently contain any nonattainment or maintenance areas. This means it has a greater amount of flexibility to use these funds for a wider variety of transportation projects, including mobility and premium high-capacity transit.

STATE RESOURCES (FDOT)

- **Intermodal Development Program.** The Intermodal Development Program was developed to provide funding for major capital investments in fixed-guideway transportation systems; access to airports and other transportation terminals; and construction of intermodal or multimodal terminals. Eligible projects include major capital investments in public rail and fixed-guideway transportation facilities and systems which provide intermodal access; road, rail, intercity bus service, or fixed-guideway access to, from, or between seaports, airports, and other transportation terminals; construction of intermodal or multimodal terminals; development and

construction of dedicated bus lanes; and projects that otherwise facilitate the intermodal or multimodal movement of people and goods.

- **Public Transit Block Grant Program.** The Public Transit Block Grant Program, as indicated in the FDOT Transit Resource Guide, was established by the Florida Legislature to provide a stable source of funding for public transit. Public Transit Block Grant funds may be used for eligible capital and operating costs of providing public transit service. Program funds may also be used for transit service development and transit corridor projects.
- **Transit Corridor Program.** The Transit Corridor Program provides funding to Community Transportation Coordinators or transit agencies to support new services within specific corridors when the services are designed and expected to help reduce or alleviate congestion or other mobility issues within the corridor. Transit Corridor Program funds may be used for capital or operating expenses.
- **County Incentive Grant Program (CIGP).** The purpose of the program is to provide grants to counties to improve a transportation facility (including transit) that is located on the State Highway System or that relieves traffic congestion on the State Highway System. Municipalities are eligible to apply also and can do so by submitting their application through the county. CIGP funds are distributed to each FDOT district office by statutory formula.
- **Transportation Regional Incentive Program (TRIP).** State funds are available throughout Florida to provide incentives for local governments and the private sector to help pay for critically needed projects that benefit regional travel and commerce. FDOT will pay for 50 percent of project costs, or up to 50 percent of the non-Federal share of project costs for public transportation facility projects. This program can be used to leverage investments in regionally significant transportation facilities and must be linked to growth management objectives.