

SMART PLAN CORRIDOR INVENTORY NORTHEAST CORRIDOR



FINAL REPORT OCTOBER 2017





FINAL DRAFT

SMART PLAN CORRIDOR INVENTORY

NORTHEAST CORRIDOR

Prepared for

Miami-Dade Transportation Planning Organization



Prepared by

MARLIN ENGINEERING, INC

October 2017

The Miami-Dade TPO complies with the provisions of Title VI of the Civil Rights Act of 1964, which states: No person in the United States shall, on grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. It is also the policy of the Miami-Dade TPO to comply with all of the requirements of the Americans with Disabilities Act (ADA). For materials in accessible format please call 305-375-1888.

The preparation of this report has been financed in part from the U.S. Department of Transportation (USDOT) through the Federal Highway Administration (FHWA) and / or the Federal Transit Administration (FTA), the State Planning and Research Program (Section 505 of Title 23, U.S. Code) and Miami-Dade County, Florida. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.



Miami-Dade TPO

SMART Plan Inventory Analysis

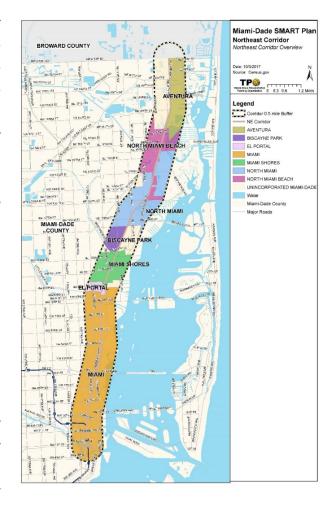
NE Corridor Executive Summary

Study Area

The Miami-Dade County Northeast Corridor extends from the City of Miami's urban core north to the City of Aventura's northern edge of Miami-Dade County. The length of the corridor is approximately 14.5 miles long. The center of the Northeast Corridor approximately follows US 1 / N Federal Highway / Biscayne Boulevard on its south end, and West Dixie Highway on its north end. The corridor and its half-mile buffer passes through numerous municipalities and unincorporated areas in Miami-Dade County.

NE Corridor Background

Of the six total SMART Corridors, the NE Corridor is the only corridor to possess an active heavy-rail line. The rail line is owned and operated by Florida East Coast Railway (FECR). The rail line was first founded by Henry Flagler, the founder of FECR. The rail line used to extend as far south as Key West, but now



terminates in downtown Miami. Since 1963 the FECR rail line has been exclusive to freight usage. However, in early 2018, FECR's All Aboard Florida Brightline train will reintroduce passenger rail service to the FECR rail line. When completed, the Brightline train will provide high-speed passenger rail service from downtown Miami, to downtown Fort Lauderdale, downtown West Palm Beach, and Orlando.

In addition, negotiations are currently taking place between FECR and the South Florida Regional Transit Authority (SFRTA) to share the rail line between Brightline and Tri-Rail. While Brightline will provide regional connectivity to four major cities within the state of Florida, the proposed



Tri-Rail Coastal Link will provide inter-local connectivity to numerous proposed stations within South Florida.

There are a number of cities that have successfully and unsuccessfully implemented commuter rail service. Many common challenges exist in the initiation or expansion of a commuter rail service, including guaranteed ridership, subsidy costs, and securing agreements with other rail stakeholders. Details regarding sharing capital, operating costs, safety and liability concerns, and freight coordination are still under negotiation.





Transit Facilities

NE Corridor transit facilities include heavy-rail commuter trains (Tri-Rail), heavy-rail rapid transit (Metrorail). automated guideway transit (Metromover), countywide bus networks, and city circulators/trolleys. existing FECR rail way corridor in Miami-Dade traverses through the full-extent of the NE Corridor. Census and ridership data show that Miami-Dade County has the highest public transportation usage in Florida with 17% of people in Miami-Dade using public transportation on a regular basis.

In an effort to increase localized connectivity and provide more transit access to residents, some cities have created open access to local trolleys and circulators to help their residents get around and connect to larger public transportation networks at minimal or no cost.





Non-Motorized Facilities

The City of Miami offers multi-modal options in addition to the trolley, Metrorail and Metromover. There is a county-wide network of trails and greenways that connect many major destinations in Miami to the downtown / Northeast Corridor area. Baywalk is a publicly accessible corridor available for walking or biking along Biscayne Bay. The Miami River Greenway is a development initiative aimed at beautifying the Miami River's edge from the mouth of Biscayne Bay through downtown Miami toward the Miami Intermodal Center (MIC). With its central location to downtown Miami, the Greenway provides safe non-motorized connectivity for thousands of potential users who are using the greenway to connect to home, work, transit, employment, entertainment and more.

Miami also has Citi-Bike Bike sharing available, with over one hundred bike share stations spread throughout downtown Miami and Miami Beach. The City of Aventura provides a smaller scale bike share service with 5 stations currently servicing Aventura residents and visitors. Between City of Miami and Aventura, no other bike-share services were identified along the NE Corridor.

Land Use

Much of the future growth within the Northeast Corridor will take place in the downtown Miami area. The Miami DDA 2025 Vision Statement states that "Downtown Miami is the business, social and cultural epicenter of the Americas, which capitalizes on its unique position as a major world city in a tropical waterfront environment." Northeast Corridor transportation improvements will be key to helping the DDA achieve its goals (Figure 6 - Miami DDA 2025 Goals).

Much of the land use along the Northeast Corridor is Low Density Residential, with the next most common use being business and office. There is currently not much high-density development outside of the Downtown Miami area except for the City of Aventura at the north end of the study area.

While most of the land value along the Northeast Corridor is average, there are a substantial number of high-value parcels within the study area. Many of these locations are already sites for major development projects.

Northeast Corridor Land Value

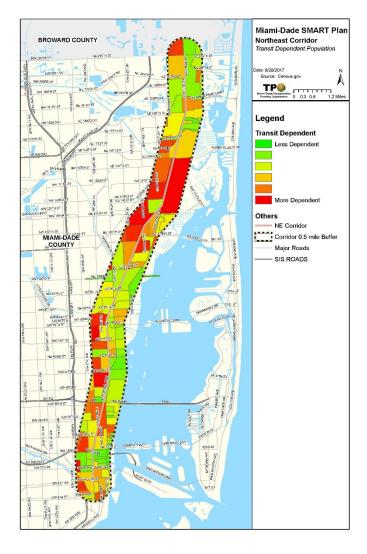
Туре	Average Size in Acres	Average AssessedValue
Public - Vacant	0.77	\$ 470,712.90
Residential - Vacant	0.47	\$ 165,276.03
Commercial - Vacant	0.33	\$ 898,178.10
Industrial - Vacant	0.26	\$ 391,378.11
Mixed Use	0.31	\$ 1,483,172.64
Parking Lots	0.41	\$ 1,193,189.46
Transit Related	0.13	NA



Demographics

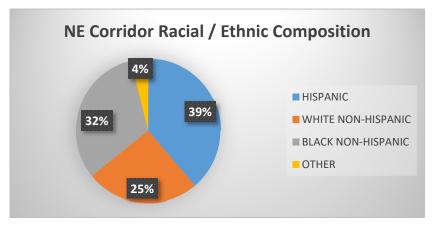
The Northeast Corridor is comprised of a diverse population that is nearly an even split among White, Black, and Hispanic residents. The total population in the NE Corridor influence area in 2010 was 238,028. The Northeast Corridor area has a more even split among races as compared to Miami-Dade County as a whole.

Northeast Corridor demographics reveal Median Household Income \$42,968.00. Thirty eight percent (38%) of the population owns their homes, and 62% are renters. There is a concentration of Zero Car Households in the Overtown neighborhood. Areas around Overtown and Little Havana also have some of the lowest household incomes within the study area. North Miami Beach and the Aventura area are where concentrations of residents over the age of 65 reside. Twenty one percent (21%) or less of the population in the corridor is older than 65 vears old.



The whole corridor is generally uniform, 29% or less of the population is making less than \$25,000 / year. Miami to Biscayne Park is closer to 10% or less where the rest of the corridor is closer to

21% with some very small parts that have over 40% of the population over the age of 65. An overlay was performed of Zero Car Households, Households with an income under \$25,000 / year, minority race residents, and residents over the age of 65.





Traffic

In general, the centerline of the Northeast Corridor is SR 5 / US 1 / West Dixie Highway. The corridor is segmented by several major streets that run east-west and carry traffic to and from I-95. These arterials carry anywhere from 30,000 to 70,000 vehicles per day and facilitate movement to and from the eastern communities on the mainland and over to barrier-island communities such as Sunny Isles Beach, Surfside and Miami Beach.

This segment of SR 5 / US 1 / Biscayne Boulevard is categorized as Access Class 05 from north of NE 207th Street to NE 146th Street and Access Class 07 from NE 146th Street to the south end of the study corridor. **Table 6 – Access Management Standards from Rule 14-97** provides the minimum spacing requirements for Access Class 05 and 07 roadways with a posted speed less than or equal to 45 miles per hour.

Annual Average Daily Traffic (AADT) volumes along the SR 5 / US 1 / Biscayne Boulevard corridor stations were extracted from FDOT 2016 traffic data. Detailed traffic count data for streets in the influence area of the Northeast Corridor are provided in **Table 7 - Historical AADT Data**. The table shows FDOT's traffic count information indicating AADT volumes along SR 5 / US 1 / Biscayne Boulevard ranged from a high of 67,500 vehicles per day (200 feet south NE 192nd Street) to a low of 35,500 vehicles per day near (200 feet south NE 53rd Street). Truck percentages along SR 5/US 1/Biscayne Boulevard ranged approximately from to 16.8% to 1.7%. Further evaluation of truck volumes will be important to determine the frequency of truck traffic and impacts to freight operations in the Northeast Corridor influence area.



Existing Rail Activity

The existing NE Corridor railroad track is a segment of the greater 351-mile continuous rail system known as the Florida East Coast Railway (FECR). The rail line is active from Miami to Jacksonville and today is utilized for the transport of freight products only. The FECR provides a direct route through South Florida's heavily congested urban development making it a viable option for vendors and distributors seeking efficient ways to ensure timely transport of goods. According to the American Association Railroads, one train can carry a load equal to 280 trucks, and are considered to be four times more fuel efficient than trucks. According to FECR's available Annual Report, in 2013, FECR serviced over 500 customers and transported over 501,000 units. The majority of materials transported were: intermodal containers and trailers, crushed rock (aggregate), automobiles, food products, chemicals and other industrial products.



The FECR includes a rail spur that heads west along NW/NE 36th Street. Train traffic along the NE Corridor railway experiences different levels of activity north and south of NW 36th Street. Existing train traffic south of NW/NE 36th Street currently experiences four freights trains per day, with a max speed averaging 15 mph to 25 mph. North of NW/NE 36th Street, the number of trains increases to 18 to 32 trains per day with a max speed of 15 mph to 45 mph. **Figure 26 - Miami-Dade County Existing Rail Network**

Tri-Rail Coastal Link Proposed Station Locations

The literature review of the NE Corridor included the Tri-Rail Coastal Link Station Area Opportunity Plan. In the document, the SFRTA proposes a series of potential locations for Coastal Link transit stations along the tri-county area adjacent to the FEC railway. For Miami-Dade



County, the majority of the railway lies parallel to Biscayne Boulevard. The station areas proposed for Miami-Dade County are the following:

- Government Center Downtown Miami
- NE 11th Street @ Biscayne Blvd
- NE 36th Street @ Biscayne Blvd
- NE 55th Street @ Biscayne Blvd

- NE 79th Street @ Biscayne Blvd
- NE 125th Street @ Biscayne Blvd
- NE 163rd Street @ Biscayne Blvd
- NE 192nd Street @ Biscayne Blvd

Conclusion and Needs Assessment

One of the major challenges facing the South Florida region is the cost of housing and transportation. As development continues and jobs are created, there is a need to fill those jobs with workers that can either live close to work, or efficiently commute to work with reasonable out-of-pocket costs. The redevelopment of many low income or blighted areas brings jobs and economic development to areas, but may also prohibit the attraction of the appropriate work force due to transportation cost.

Research along the corridor identified over 3000 parking spaces in surface lots and onstreet parking. The count does not include parking garages within the Northeast Corridor study area. A majority of the parking identified was in parking lots. Modifications to local parking ordinances and regulations can allow for the redevelopment and reallocation of parking to accommodate a Transit Oriented Development pattern.



The Miami-Dade County Land Use Element of the Comprehensive Plan has provisions for Transit-Oriented Development. Objective LU-7 states:

"Miami-Dade County shall require all new development and redevelopment in existing and planned transit corridors and urban centers to be planned and designed to promote transit-oriented development (TOD), and transit use, which mixes residential, retail, office, open space and public uses in a pedestrian-friendly environment that promotes the use of rapid transit services."



SMART PLAN CORRIDOR INVENTORY - NORTHEAST CORRIDOR

Finally, data displays that there are significant pedestrian / bicycle safety issues in the corridor. The FDOT Pedestrian and Bicycle Crash Cluster maps show that there are crash clusters along the entire corridor and that the areas at and around 185th Street, 123rd Street, 79th / 81st Street, and Downtown are some of the most significant in the County. Improvements to pedestrian and bicycle connectivity and accessibility to appropriate facilities will be crucial towards attracting more non-motorized travel throughout the corridor.



Table of Contents

1	Introduction	n	1
	1.1 Project	Limits	1
	1.2 Historic	al Background	1
2	Literature R	eview	2
	2.1 Transpo	ortation Planning and Land Use Initiatives-Lessons Learned and Best Practices	2
	2.1.1	National Cooperative Highway Research Program (NCHRP): Guidebook for Implementing Rail Service on Shared Passenger and Freight Corridors	3
	2.1.2	Best Practices: Minneapolis, MN - Hiawatha Light-Rail Transit (LRT)	4
	2.1.3	Lessons Learned: Austin, TX - MetroRail	4
	2.1.4	Lessons Learned: Tri-Rail / CSX	5
	2.2 Smart G	rowth America Model Ordinances	5
	2.2.1	Model Transit-Oriented Development Overlay District Ordinance	6
	2.2.2	Model Town Center Zoning Ordinance	6
	2.2.3	Model Pedestrian Overlay District (POD) Ordinance	7
	2.2.4	Model On-Site Access, Parking and Circulation Ordinance	7
	2.2.5	Model Shared Parking Ordinance	7
	2.2.6	Form-Based Code Overview and Model Approach	8
	2.3 Center f	for Neighborhood Technology Toolbox	8
	2.3.1	AllTransit	9
	2.3.2	eTOD Social Impact Calculator	9
	2.3.3	Housing + Transportation Affordability Index (H+T®)	10
	2.3.4	Total Driving Costs	10
	2.3.5	Transit-Oriented Development (TOD) Database	11
	2.3.6	Location Affordability Index (LAI)	11
	2.3.7	Other CNT Tools	11
3	Existing Cor	nditions Assessment and Analysis	12
	3.1 Corrido	r Overview	12
	3.1.1	Street Network and Transit System	14
	3.1.2	Other Transportation Options	22
	3.1.3	City Plans for Transportation and Development	22
	3.1.4	Population Demographics	33



SMART PLAN CORRIDOR INVENTORY - NORTHEAST CORRIDOR

		3.1.5	Land Use and Land Value	43
		3.1.6	Zoning	47
		3.1.7	Roadway Characteristics	52
		3.1.8	Existing Rail Conditions	58
		3.1.9	Tri-Rail Station Area Opportunities Site Review	61
4	Nee	ds Assess	sment	89
	4.1	Housing.		89
		_	nd The Transportation Network	
		4.2.1	Transit	
		4.2.2	Roadway Network	
		4.2.4	Transit Oriented Development	
		4.2.5	Non-Motorized	
List	of F	igures		
Figu	re 1 -	Northeas	t Corridor Overview	13
Figu	re 2 -	Northeas	t Corridor Transit Map	15
Figu	re 3 -	2016 TIP	Projects	24
Figu	re 4 -	2022 Mia	mi-Dade Priorities List	25
Figu	re 5 -	Brightline	e Service Areas	26
_			DA 2025 Goals	
_			t Corridor vs. Miami-Dade Race Demographics	
_		_	Demographics	
_			ck Group Population	
_			ock Group Population	
_		•	ion with Less than \$25,000 Income	
_		-	ion Older than 65 Years Old	
_			nority Population	
_			r Households	
_			Dependent Population	
_			st Corridor Land Use	
_			st Corridor Land Value (A)	
_			sst Corridor Land Value (B)	
Figu	re 19	- Northea	st Corridor Residential Parcels Section A	48
_			st Corridor Residential Parcels Section B	
_			ection A	
_			ection B	
_			otorized Facilities	
Figu	re 24	- 2016 AA	ADT Section A	55
Figu	re 25	- 2016 AA	ADT Section B	56



SMART PLAN CORRIDOR INVENTORY - NORTHEAST CORRIDOR

Figure 26 - Miami-Dade County Rail Network in Relation to NE Corridor	59
Figure 27 - Government Center – Downtown Miami	63
Figure 28 - SR 5 / US 1 / Biscayne Boulevard and NE 11th Street	67
Figure 29 - SR 5 / US 1 / Biscayne Boulevard and NE 36th Street	70
Figure 30 - SR 5 / US 1 / Biscayne Boulevard and NE 55th Street	73
Figure 31 - SR 5 / US 1 / Biscayne Boulevard and SR 934 / NE 79th Street	77
Figure 32 - SR 5 / US 1 / Biscayne Boulevard and NE 125th Street	
Figure 33 - SR 5 / US 1 / Biscayne Boulevard and SR 826 / NE 163rd Street	
Figure 34 - SR 5 / US 1 / Biscayne Blvd and SR 856 / William Lehman Causeway / 192nd Street	87
Figure 35 - Miami-Dade Housing + Transportation Overview	90
Figure 36 - Biscayne Park Housing + Transportation Overview	
Figure 37 - Aventura Housing + Transportation Overview	91
Figure 38 - Miami Housing + Transportation Overview	
Figure 39 - El Portal Housing + Transportation Overview	92
Figure 40 - Miami Shores Housing + Transportation Overview	92
Figure 41 - North Miami Housing + Transportation Overview	93
Figure 42 - North Miami Beach Housing + Transportation Overview	93
Figure 43 - Transit Performance Score for Northeast Corridor Cities	94
Figure 44 - SFRTA TOD Policy Outline	96
Figure 45 - 2014 - 2017 Pedestrian and Bicycle Crashes Section A	98
Figure 46 - 2014 - 2017 Pedestrian and Bicycle Crashes Section B	99
List of Tables	
Table 1 - Local Trolleys and Shuttles	21
Table 2 - Review of Local Plans	29
Table 3 - DDA Future Development	31
Table 4 - Future Development Project List	32
Table 5 - Northeast Corridor Land Value	43
Table 6 - Access Management Standards from Rule 14-97	52
Table 7 - Historical AADT Data	57
Table 8 - NE Corridor – Crossing Information	60
Table 9 - Northeast Corridor City Rankings for Job Accessibility and Transit Ridership	94



1 Introduction

1.1 Project Limits

The Miami-Dade County Northeast Corridor spans from the City of Miami north to the City of Aventura. The length of the corridor is approximately 14.5 miles. The center of the Northeast Corridor approximately follows US 1 / N Federal Highway / Biscayne Boulevard on its south end, and West Dixie Highway on its north end. The corridor and its half mile buffer travels through numerous municipalities and unincorporated areas in Miami-Dade County. The southern terminus of the corridor ends in the county's urban core. The northernmost point of the influence area extends into the City of Hallandale Beach in Broward County.

1.2 Historical Background

The NE Corridor is the only corridor of the six Strategic Miami Area Rapid Transit (SMART) Corridors with an active existing railway. This railway corridor is owned and operated by the Florida East Coast Railway (FECR). On December 31, 1885, Henry M. Flagler, founder of FECR, purchased the Jacksonville, St. Augustine & Halifax River Railway. The railway went through a series of name changes until 1895 when the railway was officially named the Florida East Coast Railway (FECR). The railway originally served as a passenger train which offered a unique opportunity for tourists and investors to travel to the far-south and begin urban development.

Due to the successful implementation of the train service, Henry Flagler is given much credit for his influence on the development of the Florida coast, which includes founding some of Florida's major cities such as Palm Beach, Miami, and Key West. The original railway extended as far south as Key West, however today terminates in downtown Miami's urban core.



Regular passenger train service continued until the 1960's. Due to work stoppage by non-operating unions which began on January 22, 1963, the last regularly scheduled passenger train ran on July 31, 1968. Since then, the railway has remained as freight corridor only. Heavy-rail commuter trains no longer serviced South Florida until a 1983 Florida Department of Transportation (FDOT) feasibility study recommended commuter rail as a temporary traffic



mitigation measure to pursue during the Interstate 95 reconstruction. In 1989, the first Tri-Rail passenger train serviced passengers along the newly acquired CSX freight line that lies a few miles west of the NE Corridor. Tri-Rail provides regional connectivity as it services passengers from Miami International Airport (MIA) to Jupiter in Palm Beach County. Tri-Rail continues to serve as South Florida's only regional heavy-rail commuter train.

Over the past five years, FECR has been working to retrofit their existing railway to once again provide passenger service along the NE Corridor and beyond. Known as the All Aboard Florida's Brightline, this high-speed train will connect downtown Miami to Orlando with two stops in between, Fort Lauderdale and Palm Beach. Train stations are currently being constructed at all four stops.

In addition to FECR's Brightline, the South Florida Regional Transportation Authority (SFRTA), which operates the existing Tri-Rail passenger train service, are in negotiations to provide interlocal service along the railway. Referred to today as Tri-Rail Coastal Link, the incoming service will offer numerous stops in between the major Brightline stations. Station locations for the Tri-Rail Coastal Link have not been finalized. The *Tri-Rail Station Area Opportunities Study* offers recommendations for potentially suitable locations for Coastal Link stations (see page 64 for a review of existing conditions at each proposed station location).





2 Literature Review

2.1 Transportation Planning and Land Use Initiatives-Lessons Learned and Best Practices

There are a number of cities that have successfully and unsuccessfully implemented commuter rail service. Many common challenges exist in the initiation or expansion of a commuter rail service, including guaranteed ridership, subsidy costs, and securing agreements with other rail stakeholders. The following literature and case studies outline some of those challenges and successes.



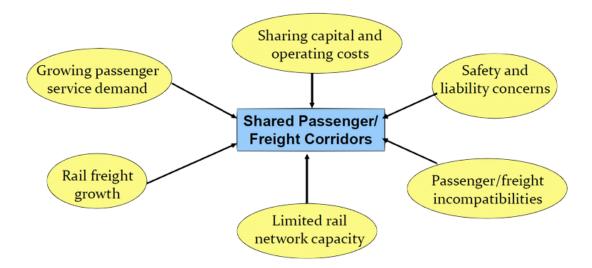
2.1.1 National Cooperative Highway Research Program (NCHRP): Guidebook for Implementing Rail Service on Shared Passenger and Freight Corridors

New Starts funding from the Federal Transit Authority (FTA) helped establish systems in: Virginia suburbs of Washington, D.C; Miami / Fort Lauderdale, Florida (Tri-Rail); Seattle, Washington; Albuquerque, New Mexico; San Diego and San Jose, California; Nashville, Tennessee; and Dallas, Texas. Several other systems of service are in the planning stages.

There are numerous commuter / intercity passenger rail initiatives underway across the country, with the majority utilizing existing freight corridors and / or tracks. Many states have partnered to plan improved regional transit on existing railroad rights-of-way, including Midwestern states, Virginia and the Carolinas, Florida, and California.

Building new rights-of-way to accommodate passenger rail is not considered realistic in most cases. With small exceptions, the investment costs simply do not match anticipated ridership, revenue, and available capital funds to construct the system. The only practical option to consider is implementing shared use agreements with existing freight corridors. Past and anticipated future growth in freight traffic means that passenger-rail interests will face increasingly difficult negotiations and higher costs for access to freight lines for new and expanded transit service. http://www.trb.org/Publications/Blurbs/163514.aspx

Developers of new shared-track passenger rail services face many challenges





2.1.2 Best Practices: Minneapolis, MN - Hiawatha Light-Rail Transit (LRT)

Since the Hiawatha LRT opened in June 2004, 65 million passengers have boarded the train. "In 2010, customers boarded Hiawatha 10.5 million times, the highest annual ridership on the line to date. This represents more than 13% of Metro Transit's total ridership – and exceeds by nearly 30% the preconstruction ridership projections for Hiawatha LRT for the year 2020 (Metrocouncil.org Hiawatha LRT Facts).

A 2010 Metro Transit customer survey indicated that 80% of Hiawatha LRT riders had an automobile available that they could have used as an alternative for their trip. Approximately eight in 10 customers ride Hiawatha for school or work.

Prior to construction, planners had forecasted the areas surrounding Hiawatha LRT would attract 7,000 new housing units by 2020. By December 2010, 8,100 new housing units were built or under construction along the line, with another 7,700 proposed by developers.

Mixed-use development is also spurred by transit way investments. Recent examples in the Hiawatha Corridor include the American Academy of Neurology, Cowles Center for Dance and the Performing Arts, and the East Phillips Park Cultural and Community Center.

Hiawatha LRT played a major role in the success of the Minnesota Twins' 2010 opening season. Approximately one in five Twins fans arrived at Target Field via transit. Although most used LRT, others chose commuter rail or bus service, significantly reducing congestion in downtown Minneapolis during these popular events.



2.1.3 Lessons Learned: Austin, TX - MetroRail

The highly expensive proposed project endured controversy since its inception. According to Politifact.com, the projected \$90 million cost to construct the system escalated to \$148 million.

In the new line's opening months, the line received just 800 riders per weekday. This figure increased to 2,900 passenger trips per weekday in 2016. The increase is still less than 1% of the metro population, which was slightly over 2 million at the time. The line accounts for 2.6% of Austin's total transit ridership, while utilizing 8.5% of the annual operating expenses for transit.

According to data provided by Capitol Metro, in 2014, the rail line had an operating deficit of \$12.6 million. "The upfront capital costs of \$140 million, when amortized at 2% over 30 years, creates an additional \$6.2 million annual cost to taxpayers. Add these two sums up, and then



divide them by the line's number of annual unlinked trips—763,551—and the per-trip subsidy works out to \$24.62. Another commentator estimated that this figure is \$18, compared to \$3 for every bus boarding."

The high cost per trip also hurts transit availability in Austin for the rest of the transit system because the Metrorail's high capital costs exhausted the transit agency's reserves,



leading to service cuts on major bus lines. This has reduced Austin's overall transit ridership.

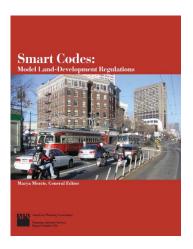
2.1.4 Lessons Learned: Tri-Rail / CSX

Tri-Rail moves approximately the same number of people per day as one lane on I-95 does, and provides more than a lane's capacity during the peak hours. Additionally, in 2011, Tri-Rail entered into a contract with Brookville Equipment Company for new trains that meet the EPA's tier III emissions standards. According to SFRTA, Tri-Rail currently eliminates 16k tons of greenhouse gasses, 1,200 tons of carbon monoxide, and 122 tons of NOx every year.

There are currently 60,000 jobs within a half-mile of a Tri-Rail station. Capital investments over the next five years are projected to draw another 48k in jobs to the region. Each trip on Tri-Rail saves passengers an average of \$16.50 compared to driving. Tri-Rail service translates into annual savings of \$70 million in total driving expenses.

2.2 Smart Growth America Model Ordinances

Smart Growth America references a set of smart growth model codes drafted by the American Planning Association. According to the Planning Advisory Service (PAS) Report 556, Smart Codes serves as a guide to the development of smart growth ordinances. These ordinances can be considered for station-area planning of SMART corridors to maximize the positive aspects of placing transit hubs and stations. The report summarizes a number of model codes, including comprehensive and non-comprehensive codes, which cover a variety of topics. A total of 21 model smart growth ordinances are reviewed with commentary with the following possibly being of interest to the advance of SMART Corridor projects.





2.2.1 Model Transit-Oriented Development Overlay District Ordinance

Primary Smart Growth Principles Addressed:

- Provide a variety of transportation choices
- Mix land uses

"A transit-oriented development (TOD) zoning overlay district ordinance is adopted by a community to reinforce the use of public transportation by locating higher-density mixed use development, including employment oriented businesses and higher density residential uses, adjacent to transit stops. The effect of concentrating more compact development around transit stops is to reduce automobile dependency and roadway congestion by combining trips and locating destinations within walking and biking distances—all interconnected with transit."

2.2.2 Model Town Center Zoning Ordinance

Primary Smart Growth Principles Addressed:

- Mix land uses
- Create walkable neighborhoods
- Foster distinctive and attractive places

Some "generic" purpose statements for a town center district include:

- (a) Promote development of a compact, pedestrian-oriented town center consisting of a high-intensity employment center, vibrant and dynamic mixed-use areas, and residential living environments that provide a broad range of housing types for an array of housing needs;
- (b) Promote a diverse mix of residential, business, commercial, office, institutional, educational, cultural, and entertainment activities for workers, visitors, and residents;
- (c) Encourage pedestrian-oriented development within walking distance of transit opportunities at densities and intensities that will help to support transit usage and town center businesses;
- (d) Promote the health and well-being of residents by encouraging physical activity, alternative transportation, and greater social interaction;
- (e) Create a place that represents a unique, attractive, and memorable destination for visitors and residents; and
- (f) Enhance the community's character through the promotion of high quality urban design.



2.2.3 Model Pedestrian Overlay District (POD) Ordinance

Primary Smart Growth Principles Addressed:

- Mix land uses
- Create walkable neighborhoods

"The model pedestrian overlay district is to be superimposed on a zoning district map and incorporates additional requirements to those of the underlying zone. The ordinance addresses a specific mix of uses that generally work well in a pedestrian environment. In addition, it prohibits setbacks of principal buildings, contains standards for the inset of entrances in order to protect pedestrian movement, requires that ground floors of buildings are chiefly transparent and do not present blank walls, and mandates that the ground floors of parking garages contain commercial or service uses. The overlay includes standards for the installation of canopies over building entrances."

2.2.4 Model On-Site Access, Parking and Circulation Ordinance

Primary Smart Growth Principles Addressed:

- Provide a variety of transportation choices
- Create walkable neighborhoods

"This model establishes standards for on-site pedestrian access. It is intended to be integrated with a local government's existing procedures for reviewing a variety of development types; consequently, it does not include new procedures in Section 102. It does emphasize the design of the site and the linkage of pedestrian and bicycle systems on the site to ensure that bicyclists and pedestrians are able to cross the site safely."

2.2.5 Model Shared Parking Ordinance

Primary Smart Growth Principles Addressed:

- Provide a variety of transportation choices
- · Compact building design

Communities can use a shared parking ordinance to minimize the amount of surface parking in neighborhoods, downtowns, and commercial areas.



2.2.6 Form-Based Code Overview and Model Approach

Smart Growth America points out that in addition to developing codes, planning agencies and departments should publicize the code and train local governments in their use.

The National League of Cities Sustainable Cities Institute has a report entitled *Model Ordinances* and Guidelines for Sustainable Development. This report should be of interest to Miami-Dade County to support the GreenPrint initiative. The sustainable development ordinances include guidelines for Water Supply Planning, Conservation Subdivisions, and Significant Environmental Areas Overlay. Complimentary to these types of ordinances, would be a landscaping ordinance. A landscaping ordinance can regulate and utilize landscaping to preserve the visual environment of a community and help maintain an appearance that screens unattractive features and highlights scenic aspects. There are three types of landscaping ordinances:

- 1. **Comprehensive landscape ordinances** focus on big-picture topics including environmental, wildlife, and tree issues.
- Post-construction ordinances focus on individual site plans and provide for visually screening unsightly aspects of a location such as dumpsters and loading zones. These ordinances can also require for landscape buffers between uses and may have requirements for controlling storm water runoff.
- 3. Tree ordinances are the most common type of landscape ordinance. Miami-Dade County has rules regarding the removal and relocation of trees, outlined in the Environmental Code of Miami-Dade County. A tree ordinance can regulate removal, relocation, and planting requirements for trees, as well as dictate the type and size of trees that may be planted on a property.

All of these types of ordinances can be particularly helpful for shaping aesthetics in station areas and should be adhered to provide the green livability factor that Miami-Dade and South Florida are progressing toward.

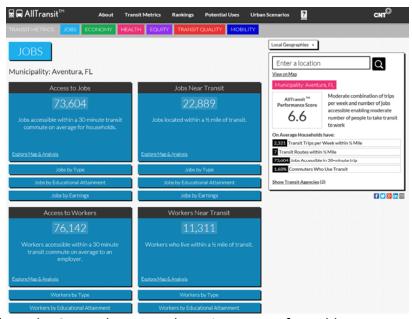
2.3 Center for Neighborhood Technology Toolbox

The Center for Neighborhood Technology (CNT) established in 1978 is "a nonprofit research and advocacy organization committed to improving urban economies and environments across the United States." CNT has a history of developing innovative solutions to promote sustainable development. The CNT Interactive Tools are available to assist planners and community leaders in making data-driven decisions.



2.3.1 AllTransit

CNT states that AllTransit is the largest source of transit connectivity, access, and frequency data in the country. It is an interactive tool that provides measures for transit access including Transit Access Score, Trips Available per Week, and Jobs Available in a 30 Minute Transit Ride. The tool has data from over 500 agencies, and includes station, stop, and frequency data for bus, rail and ferry service. The



tool can be launched directly from the CNT webpage, and requires entry of an address or city. Once the location is entered by the user, a summary page is generated with information about jobs, economy, health, transit equity, transit quality, and the mobility network. Data is available in a quick summary, with a detailed map and analysis available for each category.

http://alltransit.cnt.org/

2.3.2 eTOD Social Impact Calculator

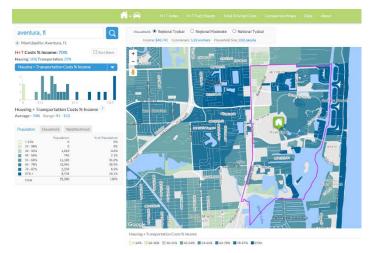
The Equitable Transit-Oriented Development tool provides information to allow developers and neighborhoods to know the impacts that a housing development could have at a specific location. The purpose of the tool is to provide information to allow for the development of affordable housing near transit stops, which gives low and moderate-income residents access to amenities such as transportation, schools, and jobs. Users can enter an address or "drop a pin" and input information about the living units such as the number of bedrooms, market rate, rent price, parking spaces, and square-footage. The tool provides an output with information about transportation costs per household, vehicle ownership per household, nearby schools and amenities and other demographic information. This tool is currently only available for the Chicago area.

http://www.cnt.org/tools/etod-social-impact-calculator



2.3.3 Housing + Transportation Affordability Index (H+T®)

and The Housing **Transportation** Affordability Index provides information on general community affordability by accounting for the cost of housing as well as the cost of transportation in a neighborhood. Data can be viewed by US Census Block Group, Census Tract, Census Place, Core Based Statistical Area (CBSA), County, Congressional District, or Metropolitan Planning Organization

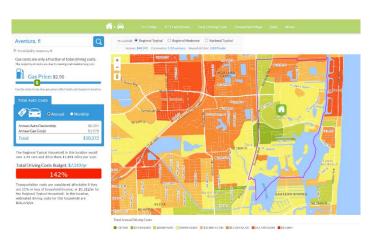


(MPO). In addition to displaying information on housing and transportation costs as a percentage of income, other measures such as transit access, vehicle miles traveled, and auto ownership are available. Cost variations can be viewed by household income, size, and household type. The tool also includes a Total Driving Costs Calculator, and provides data output in a map or a summary fact sheet with extensive information on the H+T metrics.

https://htaindex.cnt.org/map/

2.3.4 Total Driving Costs

A user enters a location and the tool measures the cost of driving for an average household in the area. Similar to the Housing + Transportation Affordability Index, data can be broken down by US Census Block Group, Census Tract, Census Place, Core Based Statistical Area (CBSA), County, Congressional District, or MPO. Users can toggle



gas prices to see the impact on the overall cost of driving, and there are annual and monthly cost calculations for auto ownership. Data output comes in a summary of driving cost per year, cost of auto ownership, and a map displaying total annual driving costs.

https://htaindex.cnt.org/total-driving-costs/



2.3.5 Transit-Oriented Development (TOD) Database

The National Transit-Oriented Development (TOD) Database is a tool that provides economic and demographic information for every existing and proposed fixed guideway transit station in the US. The database includes over 4,417 existing stations and 1,583 proposed stations in 54 metropolitan areas around the country. Data is broken down to three levels; the transit zone (within 1/2 - 1/4 of the station), the transit shed (a combination of the transit zones), and the transit region, which aligns with the Metropolitan Statistical Area boundary.

https://toddata.cnt.org/

2.3.6 Location Affordability Index (LAI)

Developed through collaboration between the US Department of Housing and Urban Development (HUD) and the Department of Transportation, the Location Affordability Index (LAI) is a source of data on the combined cost of housing and transportation based on residential location. The tool was formerly available through a Location Affordability Portal, but information on the Portal website indicates that due to resource constraints, the tool is no longer supported. HUD will continue to update the LAI annually.

2.3.7 Other CNT Tools

The following resources represent the latest in interactive web-based data analysis tools. The following tools are still in their pilot stages and do not provide data for the South Florida region at this time, however should be noted and revisited periodically for updates.

2.3.7.1 Park Right DC

Park Right DC provides information on parking utilization in multi-family residential buildings in the District of Columbia. The tool weighs factors that affect parking use and considers the amount of parking needed to support different types of development. To use the tool, the user selects a parcel and builds a scenario with estimated parking utilization. The tool then has options for optimizing the supply and price of parking. The output includes estimated parking space utilization. *This tool is only available for the Washington DC area.*

http://parkrightdc.org/



2.3.7.2 GreenTRIP Parking Database

Similar to the Park Right DC tool, GreenTRIP Parking Database helps planners and developers in the San Francisco Bay Area calculate parking usage and the cost of parking oversupply. *This tool is only available for the San Francisco Bay area.*

http://www.transformca.org/greentrip/parking-database

2.3.7.3 GreenTRIP Connect

GreenTRIP Connect is a tool that can be used to calculate how location, housing and traffic reduction can reduce driving and greenhouse gas emissions from residential development. The user identifies a parcel of land being considered for development and the tool calculates the transportation benefits of having a walkable, transit-connected development. This tool is only available for California.

http://www.transformca.org/greentrip/connect

2.3.7.4 Right Size Parking Calculator

Developed for King County, Washington, this calculator provides an estimate of the parking-to-unit ratio needed for multi-family developments in the county. *This tool is only available for King County, Washington.*

http://www.rightsizeparking.org/

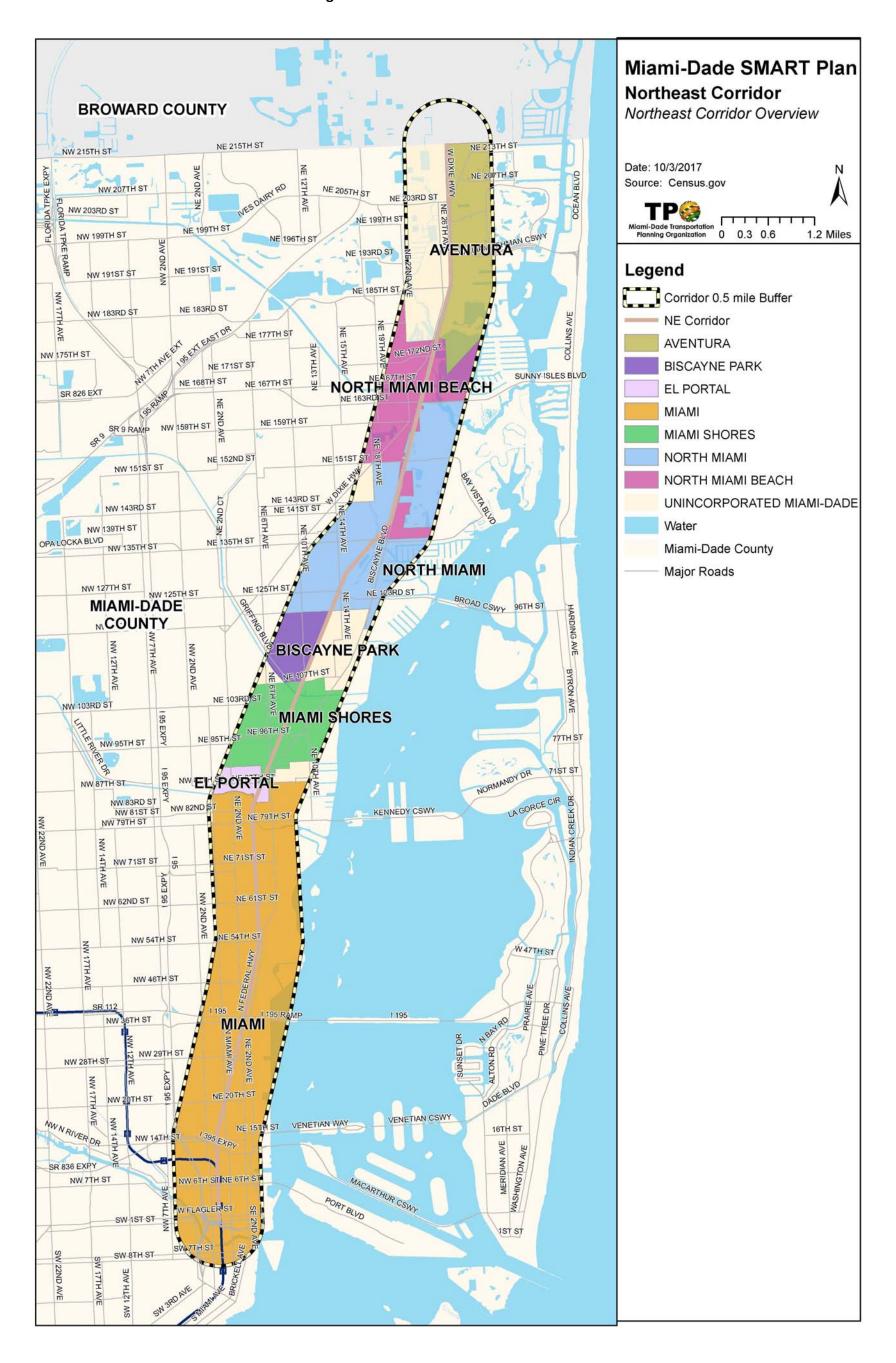
3 Existing Conditions Assessment and Analysis

3.1 Corridor Overview

The corridor and its half mile buffer pass through the cities / villages of Aventura, North Miami Beach, North Miami, Biscayne Park, Miami Shores, El Portal, City of Miami, and areas of Unincorporated Miami-Dade County. A map of the corridor depicting the half a mile buffer of the cities is provided below in **Figure 1 – Northeast Corridor Overview.**



Figure 1 - Northeast Corridor Overview





3.1.1 Street Network and Transit System

South Florida is home to a variety of transit systems. These systems include heavy rail commuter trains (Tri-Rail), heavy-rail rapid transit (Metrorail), automated guideway transit (Metromover), countywide bus networks, and city circulators / trolleys. The existing FECR railway corridor in Miami-Dade traverses through the full-extent of the NE Corridor.

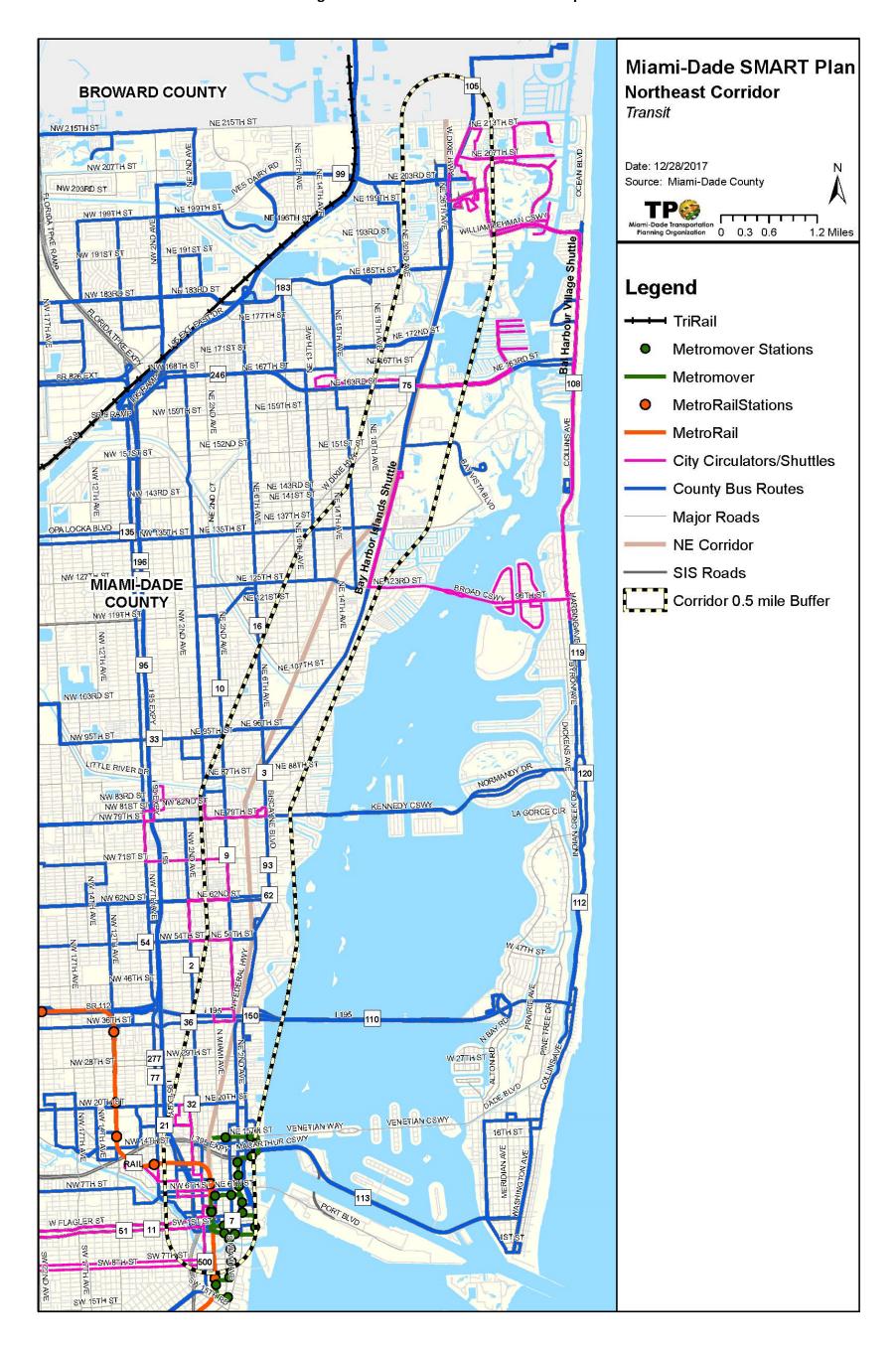
Census and ridership data show that Miami-Dade County has the highest public transportation usage in Florida with 17% of people in Miami-Dade using public transportation on a regular basis. In comparison, only about 4% of commuters in the South Florida metropolitan area (Miami-Dade, Broward, and Palm Beach counties) regularly use public transportation. The majority of public transportation in Miami-Dade is operated by the Miami-Dade Department of Transportation and Public Works (DTPW), which is currently the largest transit system in Florida and the 14th largest transit system in the United States (APTA 2016 Fact Book).

Compared to other United States cities, Miami is relatively a young city and is still very automobile dependent. The major problem with the transit system and providing access to public transit in Miami-Dade are the negative effects of sprawl. Connectivity to the beach along the NE Corridor are limited to seven Causeways. Miami-Dade County bus services utilize these causeways to connect commuters to and from the mainland. Transit buses share travel lanes with vehicular traffic on all causeways with none offering dedicated lanes.

In an effort to increase localized connectivity and provide more transit access to residents, some cities have created open access to local trolleys and circulators to help their residents get around and connect to larger public transportation networks at no cost. **Figure 2 – Northeast Corridor Transit Map** shows the transit systems in the Miami Dade area



Figure 2 – Northeast Corridor Transit Map





3.1.1.1 Local Trolleys and Shuttles

The City of Miami (**Miami Trolley**) has 10 trolley routes: Allapattah, Biscayne, Coral Way, Wynwood, Brickell, Coconut Grove, Health District, Little Havana, Overtown and Stadium. These routes connect riders to the Coral Gables trolley and Miami-Dade DTPW transit. Locations accessible by these routes include employment centers, schools, hospitals, entertainment districts, popular parks, and the consulates of many countries.



Miami Trolley				
Route	e Weekdays		Sunday	
Allapattah	6:30 AM to 7:00 PM	6:30 AM to 7:00 PM	No Service	
Biscayne	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	8:00 AM to 8:00 PM	
Brickell	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	8:00 AM to 8:00 PM	
Coconut Grove	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	8:00 AM to 8:00 PM	
Coral Way	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	8:00 AM to 8:00 PM	
Health District	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	No Service	
Little Havana	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	8:00 AM to 8:00 PM	
Overtown	6:30 AM to 7:00 PM	No Service	No Service	
Stadium	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	No Service	
Wynwood	6:30 AM to 11:00 PM	6:30 AM to 11:00 PM	No Service	

http://www.miamigov.com/trolley/

The Village of Miami Shores (**Shores Shuttle**) has four trolley routes: West, Return Only, East Route and the Weekend Only Route. These routes connect riders to Barry University, Miami Shores Village Hall, a community center, country club and Aventura mall.

Miami Shores Shuttle					
Mond	Monday – Friday from 1:50 pm to 5:44 pm				
Publix NE 96 th St. & NE 2 nd Ave. Aquatic Center					
Community Center	Brockway Library	Publix			
Field house (9825 Park Drive)	NE 96th St. & 10 th Ave.				
Tot Lot (10015 Park Drive) Field House		Biscayne and 96 th St.			
Doctors Charter School Community Center NE 105 th Street Condos					

https://www.miamishoresvillage.com/miami-shores-village/shores-shuttle-information.html



The City of North Miami (**NOMI Express**) has four trolley routes: NOMI Express Green, NOMI Express Orange, NOMI Express Blue and NOMI Express Red. These routes connect riders to schools, parks, shopping, and community centers.



NOMI Express					
	Monday – Friday from 7 am to 7 pm				
GREEN ROUTE	BLUE ROUTE	ORANGE ROUTE	RED ROUTE		
Griffing Center	Griffing Center	Griffing Center	Biscayne BLVD / NE128 ST		
W Dixie HWY & NE119th	NE125 ST & NE4 CT	NE125 ST & NE2 AVE	NE127 ST / NE17 AVE		
ST					
NW119 ST & N Miami AVE	Publix (NE6 AVE / NE127 ST)	NE125 ST & N Miami AVE	NE16 AVE & NE125 ST		
NW2nd AVE & NW119 ST	NE6 AVE & NE135 ST	NW2 AVE & NW125 ST	NE123 ST & NE16 AVE		
NW2 AVE & NW125 ST	NE135 ST & NE7 AVE	NW2 AVE & NW128 ST	NE123 ST / NE18 AVE		
NW125 ST & NW4 AVE	NE8 AVE / NE133 ST	NW2 AVE & NW135 ST	Sans Souci Tennis Center		
NW7 AVE & NW125 ST	W Dixie HWY & NE132 ST	NE135 ST & N Miami AVE	Sans Souci BLVD & NE121 ST		
NW7 AVE & NW120 ST	W Dixie HWY & NE135 ST	NE135 ST & Memorial HWY	NE123 ST / NE18 AVE		
NW119 ST & NW10 AVE	W Dixie HWY & NE139 ST	NE135 ST & NE 5 AVE	Biscayne BLVD & NE128 ST		
NW119 ST & NW12 AVE	NE135 ST & NE12 AVE	NE6 AVE & 136 ST	Biscayne BLVD & NE131 ST		
NW13 AVE & NW121 ST	NE135 ST & NE134 Rd	NE6 AVE & 140 ST	Biscayne BLVD & NE135 ST		
Sunkist Grove Center	NE135 ST & NE16 AVE	NE6 AVE / NE145 ST	NE135 ST & NE20 AVE		
Thomas Sasso Pool	NE135 & Arch Creek Rd	NE10 AVE & NE145 ST	NE135 ST & NE25 AVE		
NW11 AVE & NW131 ST	Biscayne BLVD & NE135 ST	NE10 AVE & NE140 ST	NE135 ST & NE24 CT		
NW131 ST & NW13 AVE	Biscayne BLVD / NE140 ST	NE12 AVE & NE140 ST	Biscayne BLVD / NE135 ST		
Joe Celestin Center	Biscayne BLVD & NE137 ST	W Dixie HWY & NE11 AVE	Target - Post Office		
NW135 ST & NW12 AVE	Biscayne BLVD & NE135 ST	W Dixie HWY & NE136 ST	Biscayne BLVD / NE145 ST		
NW135 ST & NW7 AVE	Biscayne BLVD & NE130 ST	NE135 ST & NE9 AVE	NE151 ST & Biscayne BLVD		
NW7 AVE / NW139 ST	Biscayne BLVD / NE128 ST	NE8 AVE / NE133 ST	FIU Library		
NW7 AVE & NW135 ST	Johnson & Wales (NE127 ST)	NE8 AVE & NE129 ST	Alonzo Mourning HS		
NW131 ST & NW6 AVE	NE16 AVE & NE125 ST	City Hall (NE8 AVE /	Biscayne BLVD at Total Wine		
		NE125 ST)	/ Chipotle		
NW131 ST & NW2 AVE	NE123 ST & NE16 AVE	NE7 AVE & NE127 ST	NE146 ST & NE18 AVE		
NW135 ST & N Miami AVE	NE123 ST & NE14 AVE	Publix (NE6 AVE / 128 ST)	NE16 AVE & NE143 ST		
NE135 ST & Memorial HWY	NE125 ST & NE13 AVE	NE131 ST & NE5 AVE	NE16 AVE & NE139 ST		
NW135 ST & NE6 AVE	NE125 ST & NE12 AVE	NE131 ST & Griffing BLVD	NE135 ST & NE 16 AVE		
NE6 AVE & NW133 ST	NE125 ST & NE10 AVE	NE125 ST & Griffing BLVD	Biscayne BLVD & NE135 ST		
Publix (NE6 AVE / NW128 ST)	City Hall (NE8 AVE / NE125 ST)	NE125 ST & NE4 CT	Biscayne BLVD & NE130 ST		

http://www.northmiamifl.gov/docs/NomiScheduleMap2016Temp.pdf



The City of North Miami Beach (**NMB Line**) has three trolley routes: A, B, and C. These routes have major destinations such as Nova University, North Miami Beach City Hall, local schools, and shopping centers. The NMB routes connect to DTPW & B-Line, City of North Miami's NOMI Express, and Sunny Isles' Shuttle service (**SIBshuttle**).



NBM Line				
Monday – Saturday from 7:30 am to 7:30 pm				
Route A Route B Route C				
Intracoastal Mall	Walmart	Walmart		
NE35 AVE & NE166 ST	NE170 ST & NE15 AVE	NMB Public Library		
NE35 AVE & NE169 ST	NE175 ST & NE15 AVE	Fulford Elem Allen Park		
NE35 AVE & NE170 ST	Greynolds Park Elem	NE157 ST & NE18 AVE		
NE35 AVE & NE171 ST	NE181 ST & NE12 AVE	NE153 Terr & NE16 AVE		
Intracoastal Mall	NE185 ST 1700 Block	W Dixie HWY & NE151 ST		
Stratford House	Skylake Shops	NE151 ST & W Dixie HWY		
NMB Library / Three Seasons	NE183 ST & NE19 AVE	David Lawrence Jr		
Walmart	NE117 ST & NE19 AVE	FIU North Campus		
NMB Library / Three Seasons	Victory Pool and City Hall	ATM High School		
Inland Towers	NE171 ST & NE23 AVE	NE151 ST & US1		
NE22 AVE & NE164 ST	Tennis Center / Monastery	NE146 ST & US1		
Stratford House	NE167 ST & NE22 AVE	Highland Park		
Intracoastal Mall	Nova SE University	NE141 ST & US1		
	NE167 ST & NE19 AVE	NE164 ST & US1		
	NE164 ST & NE19 AVE	W Dixie HWY & NE18 ST		
	NMB Public Library	NE152 Terr & NE18 AVE		
	NE164 ST & NE115 AVE	NE154 ST & NE13 AVE		
	NE163 ST Mall Main Entrance	NE158 ST & NE12 AVE		
	NMB High & JFK Middle	NMB High & JFK Middle		

http://www.citynmb.com



The City of Aventura (Aventura Express) has six regular weekday trolley routes: Blue, Green, Purple, Red, Silver, and Yellow; and two Saturday night routes: Saturday Night Express North and Saturday Night Express South. These routes connect to all DTPW routes that are in the Aventura Mall Transit Terminal. The express routes also connect to Broward County Transit. Locations accessible by these routes



include residential buildings, Aventura Mall, and shopping centers.

Aventura Express					
Monday – Friday 6:45 am to 6:45 pm Saturday from 7:45 am to 6:45 pm					
Blue Express Route	Green Express Route Red Express Route				
Aventura Mall Transit Terminal	Aventura Mall Transit Terminal	Aventura Mall Transit Terminal			
Publix	Publix	Publix			
NE 29 PL / Walgreens	E. Country Club DR / Yacht Club	Coronado			
Promenade Shops	Porta Vita	Del Vista			
NE 34th Ave Mariner Way	Turnberry Village	Waterways Shoppes			
Yacht Club DR / Harbor Village	Landmark / Terraces	NE207 ST / Aventura Lakes			
Portsview	West Hamptons	Aventura Commons / Target			
The Point North Tower	Waterview	NE213 ST / Waterways Park			
The Point	Flamenco	Bonavista			
One Island Place	Eldorado	Bravura			
Waterways Shoppes	Ensenada	Biscaya			
NE 207 ST / Aventura Lakes	Waterways Shoppes	Villa Dorada			
Aventura Commons / Target	NE119 ST / Walgreens	NE199 ST / Walgreens			
Aventura Hospital	Promenade Shops	Promenade Shoppes			
Library No Friday Service	Mount Sinai	Mount Sinai			
Publix	Library No Friday Service	Wells Fargo Bank			
Aventura Mall Transit Terminal	Publix	Library No Friday Service			
	Aventura Mall Transit Terminal	Publix			
		Aventura Mall Transit Terminal			
Silver Express Route	Purple Express Route	Yellow Express Route at 7:45 am			
Aventura Mall Transit Terminal	Aventura Mall Transit Terminal	Aventura Mall Transit Terminal			
Aventura Mall Transit Terminal	Aventura Government Center	Town Center Aventura / Publix			
North Camden Town Center Aventura / Publix Walgreens / Pier I		Walgreens / Pier I			
Town Center Aventura / Publix	Venture at Aventura	Fresh Market			
Walgreens / Pier I	NE 31 Ave / Village by the Bay	M, N, and P			
Community Center	Lincoln Pointe	R, S, and T			
Founders Park	Biscayne Cove	E, D, C, B, and A			

SMART PLAN CORRIDOR INVENTORY - NORTHEAST CORRIDOR

Hidden Bay	Williams Island	L, K, and Clubhouse
Parc Central	Admiral's Port	J, H, G, and F
Mystic Pointe	Commodore Plaza	Aventura Plaza
Turnberry Towers	Fresh Market	Del Prado
Turnberry Isle South / North	Imperial Club	Fresh Market
Turnberry Gatehouse	Sterling	NE 185 ST / NE 28 Ct
NE 199 ST / Walgreens	Walgreens / Pier I	Walgreens / Pier I
Mount Sinai	Town Center Aventura / Publix	Town Center Aventura / Publix
Library No Friday Service	Vi at Aventura	Library No Friday Service
Publix	Turnberry on the Green	Aventura Mall Transit Terminal
Aventura Mall Transit Terminal	Library No Friday Service	
	Aventura Mall Transit Terminal	

Saturday Night Express North Route		Saturday Night Express South Route	
6:45 am – 9:30 pm		6:45 am – 9:30 pm	
Aventura Mall Transit	One Island Place	Aventura Mall Transit	Admiral's Port
Terminal		Terminal	
Publix	Waterways Shoppes	North Camden	Imperial Club
Mystic Pointe	34th and Mariner Way	Town Center Aventura	Sterling
Turnberry Gatehouse	Harbor Village	Walgreens / Pier I	Walgreens / Pier I
Yacht Club	Portsview	M, N, and P	Hidden Bay
Porta Vita	The Point North Tower	R, S, and T	Parc Central
Turnberry Village	The Point	E, D, C, B, and A	Mystic Point 600
Landmark / Terraces	Aventura Lakes	L, K and Clubhouse	Vi at Aventura
West Hamptons	Biscayne Lake Gardens	J, H, G, and F	Turnberry on the Green
Waterview	Aventura Com / Target	Del Prado	Coronado
Flamenco	Bonavista	Fresh Market	Del Vista
Eldorado	Bravura	Commodore Plaza	Waterways Shoppes
Ensenada	Biscaya	Biscayne Cove	Aventura Mall Trans. Term.
	Bonavida	Williams Island	
	Walgreens		
	Aventura Mall Trans. Term.		

http://www.cityofaventura.com/modules/showdocument.aspx

There are additional transportation options for the elderly and disabled in Miami-Dade. Special Transportation Services (STS) is for disabled individuals who are not able to use a fixed route transportation service. DTPW bus service is available free of charge for individuals who are either senior citizens 65 years of age or over, or Social Security recipients under the age of 64. Local trolleys and shuttles are summarized in **Table 1 – Local Trolleys and Shuttles**.



Table 1 - Local Trolleys and Shuttles

CITY NAME	TRANSIT SYSTEM	ROUTE NAME	MAJOR DESTINATIONS	OTHER TRANSIT CONNECTIONS
CITTIVALVIE	TIVATOSTI STSTEIVI	NOOTE WAIVE	Miami Dade Public Schools, Omni, Overtown NET, Culmer	OTHER HARSH CONNECTIONS
		Allapattah Route	Center, Carrie P Meek Manor, Overtown Gateway, Lindsey Hopkins & Curtis Park	Adrienne Arsht Center Metromover Station
		Biscayne Route	Consulate General of Mexico, Consulate General of Guatemala, Consulate General of France, Tourveyor, Brickell Park Path, Bayfront Park Path, Miami Passport	Brickell Metromover Station, Financial District Metromover Station, Eighth Street Station, Bayfront Park Station, & Adrienne Arsht Center
			Agency, ART Miami Pavilion Mammet, & Design District Coral Gables Museum, Museo Historico Cubano, Consulado	Metromover Station.
		Coral Way Route	Del Uruguay, Village Montessori School, Consulate General of Costa Rica, General Consulate of Haiti, Cuban Exile History Museum, Inc, Miami Dade College- Wolfson Campus, & Port Miami	Brickell MetroRail Station
		Wynwood Route	Roberto Clemente Park, Biscayne Park, Dorsey Park, &	School Board Metromover Station
Miami	MDTPW		School Board Mercy Hospital, Rickanbacker Causeway, Vizcaya Museum	Prickall Pail Tonth Street Promanade
		Brickell Route	and Gardens, Burlingame Island, Consulate General of Mexico, Consulate General of France, and Consulate General of Guatemala	Brickell Rail, Tenth Street Promanade Metromover Station, Brickell Metromover Station, Financial District Metromever Station.
		Coconut Grove Route	Mercy Hospital, David T Kennedy Park and Ransom Everglades School	Douglas Road Rail Station, and Coconut Grove MetroRail Station
		Health District Route	Jackson Memorial Hospital, University of Miami Miller	Civic Center MetroRail Station
		Little Havana Route	School of Medicine, and University of Miami Hospital Maximo Gomez Park, Lincoln-Marti Charter Schools, and	Brickell MetroRail Station
			Jose Marti Park	Culmer Rail Station, and Historic Overtown/ Lyric
		Overtown Route	Reeves Park	Theatre MetroRail Station
		Stadium Route	University of Miami Hospital, University of Miami Miller School of Medicine, Jackson Memorial Hospital and Miami Parks & Recreation Division	Santa Clara Rail Station, and Civic Station Rail Station.
		West Route	Doctors Charter School, Student Union; BU, Village Hall, Library, Grand Concourse, Community Center & Publix	N/A
Miami Shores	Shores Shuttle	Return Only	Library	N/A
		East Route	Aquatic Center, Country Club Aventura Mall, Aquatic Center, Country Club, Community	N/A
		Weekend Route Only	Center, & Barry University Student Union Griffing Center Park, Gratigny Elementary, Oleander Park,	Aventura
	NOMI Express	Green Route	Sunkist Grove Community Center, Thomas Sasso Pool, Ben Franklin Elementary & Park, Joe Celestin Center, Claude Pepper Park, & 7th Avenue Flea Market	North Miami Beach Line
		Orange Route	Griffing Center Park, North Miami Middle/Arch creek Elem, North Miami Elementary, North Miami Senior High, City Hall/MOCA Plaza/Police, Publix, & Presidente Supermarket	North Miami Beach Line
North Miami		Blue Route	Griffing Center Park, Presidente Supermarket, Publix, North Miami Middle School, Library, St Paul's Church, First Church of North Miami, Enchanted Forest Park, Johnson & Wales University, William Jennings Bryan Elemantary, & City Hall/MOCA/Police	North Miami Beach Line
		Red Route	Publix, Johnson & Wales University, Gwen Margolis Center/Wholefoods, Besade Park/Tennis Center at Sans Souci, Florida International Library, Natural Bridge Elementary, & Enchanted Forest Park	North Miami Beach Line
	each NMB Line	Route A	Walmart, NMB Library, Stratford, Inland Tower, Post Office/ Laurenzo's, & Intracoastal Mall	Miami Dade Transit & B-Line, Sunny Isles SIBshuttle, & City of North Miami's NOMI Express
North Miami Beach		Route B	NMB High-JFK Middle, 163 Mall Main Entrance, NMB Library, Nova South University, Skylake Shops, Greynolds P. Elementary School, & Walmart	Miami Dade Transit & B-Line, Sunny Isles SIBshuttle, & City of North Miami's NOMI Express
		Route C	NMB High-JFK Middle, Highland Park, ATM High School, FIU North Campus, David Lawrence Jr. K-8 Center, Fulford Elementary School, NMB Library, & Walmart	Miami Dade Transit & B-Line, Sunny Isles SIBshuttle, & City of North Miami's NOMI Express
		Blue Route	Aventura mall-Transit Terminal, Promenade Shops, The Point, Aventura Commons/Target, Aventura Hospital, & Aventura Branch Library	Transfers to any Miami-Dade or Broward County Transit route at the Aventura Mall
		Green Route	Aventura Mall-Transit Terminal, Turnberry Village, Landmark, Waterview,Flamenco, Mount Sinai, & Aventura Branch Library	Transfers to any Miami-Dade or Broward County Transit route at the Aventura Mall
		Purple Route	Aventura Mall-Transit Terminal, Aventura Government Center, Lincoln Pointe, Commodore Plaza, Vi at Aventura, & Aventura Branch Library	Transfers to any Miami-Dade or Broward County Transit route at the Aventura Mall
Aventura	Aventura Express	Red Route	Aventura Mall-Transit Terminal, Waterways Shoppes, Promenade Shops, Mount Sinai, & Aventura Branch Library	Transfers to any Miami-Dade or Broward County Transit route at the Aventura Mall
		Silver Route	Aventura Mall-Transit Terminal, Founders Park, Hidden Bay, Mystic Pointe, Turnberry Towers, & Aventura Branch Library	Transfers to any Miami-Dade or Broward County Transit route at the Aventura Mall
		Yellow Route	Aventura Mall-Transit Terminal, Venture at Aventura, Point East, Aventura Plaza, Fresh Market, & Aventura Branch Library	Transfers to any Miami-Dade or Broward County Transit route at the Aventura Mall
		Saturday Night North Route	Aventura Mall-Transit Terminal, Mystic Pointe, Flamenco, Waterways Shoppes, The Point, & Bonavista	Transfers to any Miami-Dade or Broward County Transit route at the Aventura Mall
		Saturday Night South Route	Aventura Mall- Transit Terminal, Point East Bldg,	Transfers to any Miami-Dade or Broward County
			Commodore Plaza, Admirals Port, Sterling, & Coronado	Transit route at the Aventura Mall



3.1.2 Other Transportation Options

The City of Miami offers other multi-modal options in addition to the trolley, Metrorail and Metromover. There is a county-wide network of trails and greenways that connect many major destinations in Miami to the downtown / Northeast Corridor area. Baywalk is a publicly accessible corridor available for walking or biking along Biscayne Bay. The Miami River Greenway is a development initiative aimed at beautifying the Miami River's edge from the mouth of Biscayne Bay through downtown Miami to the Miami Intermodal Center (MIC). With its central location to downtown Miami, the Greenway provides safe non-motorized connectivity for thousands of potential users who are using the greenway to connect to home, work, transit, employment, entertainment and more.

Miami also has Citi-Bike Bike sharing available, with over one hundred bike share stations spread throughout Miami and Miami Beach. The City of Aventura provides a smaller scale bike-share service with 5 stations servicing Aventura residents and visitors. Between City of Miami and Aventura, no other bike-share services were identified along the NE Corridor.

3.1.3 City Plans for Transportation and Development

3.1.3.1 Countywide

The following plans and relevant documents were reviewed: Miami-Dade Comprehensive Development Master Plan, Miami-Dade Parks, Recreation, and Open Spaces Master Plan, Miami-Dade Long Range Transportation Plan, and Tri-Rail Coastal Link Station Area Opportunities.

The Miami-Dade County Parks and Open Space Master plan displays the county's existing and planned green spaces. In addition to traditional park spaces, the master plan demonstrates a new approach to park planning which now views greenways and public spaces as an extension of parks. The US 1 / Federal Highway corridor extends along the entire Northeast Corridor and hosts a number of land uses, transit facilities, employment hubs, learning centers, and connections to existing greenways. The 2020 and 2030 Comprehensive Development Master Plan shows the predominant land use types for the Northeast Corridor as Business and Office, Industrial and Office, Medium-High Density Residential, Low-Medium Density Residential, and Low Density Residential and Institutional. The incoming FECR All Aboard Florida Brightline train shows one Miami-Dade station located at the existing Overtown Metrorail Station. Brightline will then connect to stations in Fort Lauderdale, Palm Beach, and Orlando. Complementing the incoming Brightline will be the incoming Tri-Rail Coastal Link which will introduce numerous additional stations in between the four main Brightline stops. (see Figure 5 - Brightline Service Areas of existing conditions at each proposed station location).



3.1.3.2 2016 Transportation Improvement Plan

The Transportation Improvement Plan (TIP) outlines transportation improvements planned for the next five years. A map of the transit projects from the 2016 TIP in the vicinity of the Northeast Corridor is provided in **Figure 3 – 2016 TIP Projects**. Priorities have already been set through the year 2022. The 2022 Priorities List includes the SMART Corridors as a number 1 priority with funding allocation requests for the study and implementation of the plan as shown in **Figure 4 – 2022 Miami-Dade Priorities List**.



Figure 3 - 2016 TIP Projects

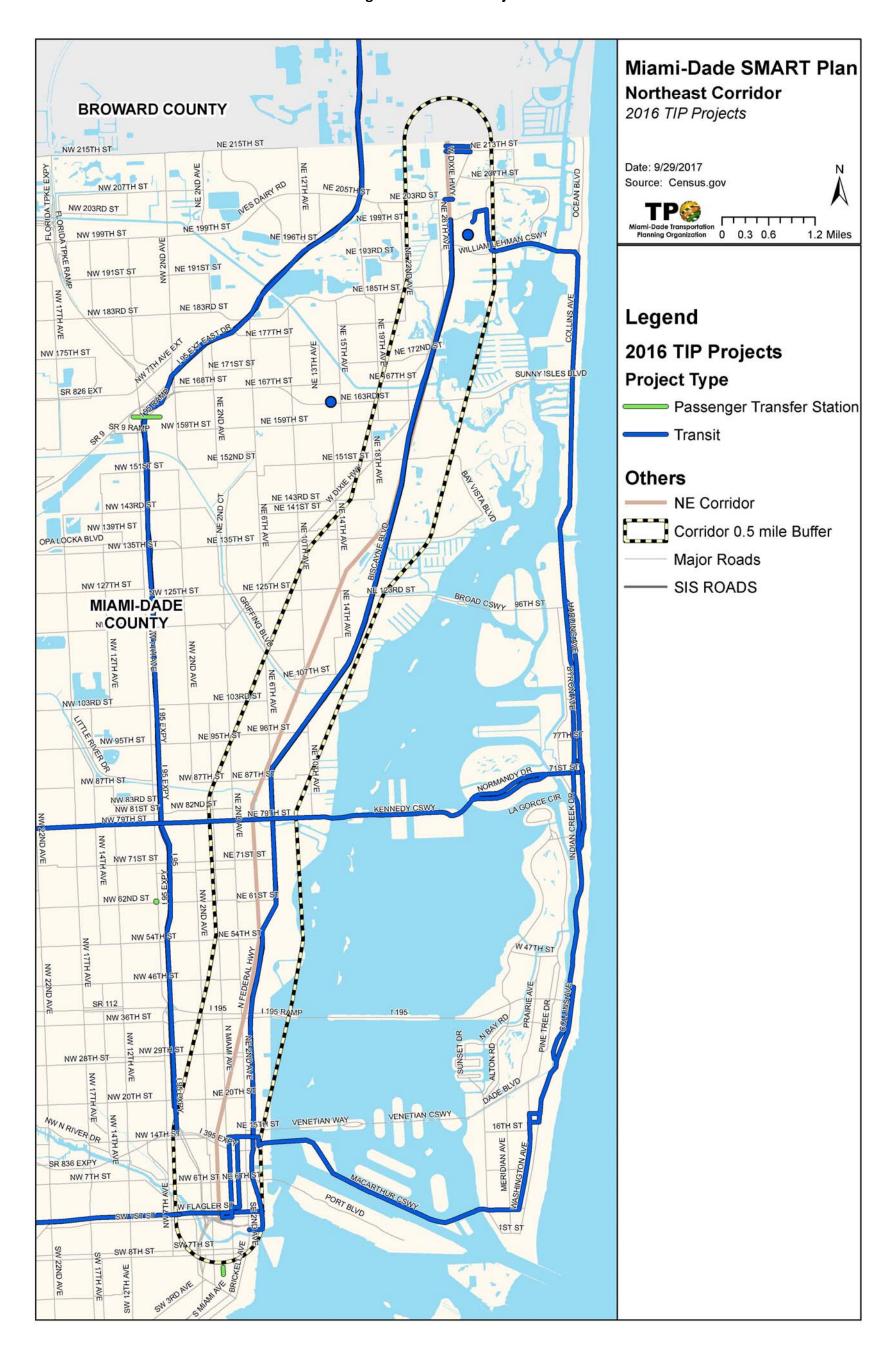




Figure 4 - 2022 Miami-Dade Priorities List

ID #	Project Name	From	То	Description	Request				
		Beach Corrid	or	As per MPO Board, Planning and Environment Phase to be amended to LRTP in order to commence Project Development Phase It is anticipated that project development and environmental studies will commence in Fiscal Year 2017 City of Miami Beach is moving forward with state environmental study for the South Beach segment to Convention Center	Funding Source FDOT-6 (\$5.0M) CITT (\$3.75M) MDC (\$417,000) City of Miami (\$417,000) City of Miami Beach (\$417,000) Environmental Document Cost: \$10.0M SMART Implementation Plan Support Efforts: \$2.0M (*)				
1	Strategic Miami Area Rapid Transit (SMART) Plan – Rapid Transit Corridors	East-West Co	orridor	As per MPO Board, Planning and Environment Phase to be amended to LRTP in order to commence Project Development Phase It is anticipated that project development and environmental studies will commence in Fiscal Year 2017	Environmental Document Cost: \$9.0M SMART Implementation Plan Support Efforts: \$1.2M (*)				
1	MPO Governing Board Resolution #26-16 (attached)	South Miami	Dade TransitWay	As per MPO Board, Planning and Environment Phase to be amended to LRTP in order to commence Project Development Phase It is anticipated that project development and environmental studies will commence in Fiscal Year 2017	Environmental Document Cost: \$10.0M SMART Implementation Plan Support Efforts: \$1.2M (*)				
		Environmental Stage FDOT - 6 Lead Agency Start Date: March 2016	Funding Source: 100% State Environmental Document Cost: \$4.2M SMART Implementation Plan Support Efforts: \$840,000 (*)						
		Northeast Co	rridor	In Planning and Environmental Stage FDOT - 4 Lead Agency All Aboard Florida (AAF) project is under construction (private sector) DTPW is improving transit services along Biscayne Blvd.	Environmental Document Cost: \$5.7M SMART Implementation Plan Support Efforts: \$1.14M (*)				

Transit projects in the 2016 TIP in proximity to the Northeast Corridor include an I-95 Express project and Miami-Dade DTPW projects on existing transit routes that provide connectivity to Downtown Miami, the beach and north into Broward County.



3.1.3.3 City of Miami

The following plans and documents were reviewed for the City of Miami: Capital Improvement Plan, Miami Comprehensive Neighborhood Plan, Miami Bicycle Master Plan, Omni Area Community Redevelopment Plan, City of Miami Smart Code, Overtown Greenway Master Plan, Miami DDA Downtown Master Plan, Brightline / Tri-Rail Miami Central Station, and Miami Downtown Development Authority (DDA) Pedestrian Priority Zone Plan. In addition, a literature review was conducted on any other documents that allude to future development along the Northeast Corridor.

In summary, major incoming / planned developments include a proposed Street Car, Complete Streets enhancements to numerous roadways, and a pedestrian priority zone in the DDA area. Overall, Miami is progressively seeking opportunities to retrofit its downtown infrastructure to

be more accommodating to multimodal travel. The City of Miami Streetcar is a proposed fixed guideway transit system that would service the downtown area of Miami and connect to the beach. The proposed route for the Street Car is still in the planning stages and will be incorporated into the SMART Plan Beach Corridor. Numerous bike lanes and pedestrian upgrades are occurring within the city's urban core. Most recent was the implementation of Miami's first complete streets project along SE / SW 1st Street. The complete street treatment involved the repurposing of two lanes to a dedicated bus lane and protected bike lane. Miami-Dade DTPW and the TPO are investigating other roadways that can be retrofitted with complete streets treatments. The Tri-Rail Station Area Opportunity Plan proposes City of Miami stations located

at 79th Street, 55th Street, 36th Street, and 11th Street.

The Miami Central Station will connect All Aboard Florida's Brightline train and the Downtown Tri-Rail connection to the existing Metrorail and Metromover system. The station will also be a 24-hour activity hub with retail, entertainment, business, and residential uses.

Brightline is a privately owned and maintained highspeed rail service currently planned to connect Miami and Orlando with stops in Fort Lauderdale and West Palm Beach.

Figure 5 - Brightline Service Areas



From a development standpoint, the Miami City Commission approved developer incentives for workforce housing, providing substantial increases in density for projects which set aside condos or apartments for working class residents.



Miami's current zoning code allows a maximum density of 36 dwelling units per acre for projects designated low-density multifamily residential. If a developer submits a project that sets aside 10% of the units for workforce, affordable and low-income housing, the city would increase the maximum density from 36 units per acre to 72 dwelling units per acre. If the developer sets aside 5%, the maximum density would increase to 54 units per acre. Miami has a goal to set aside 40% of housing built in the next five years for mixed-income units.

3.1.3.4 Miami Shores

The following plans and documents were reviewed for the Village of Miami Shores: Capital Improvement Plan, Comprehensive Master Plan and Traffic Calming Master Plan. In summary, the Village is implementing projects that enhance its downtown main street to be more accommodating to multimodal access and adding more streetscape amenities to make the strip more urban. Aside from the downtown area, the community is seeking to calm motor vehicle traffic village-wide by deterring speeding and cut-through traffic on neighborhood streets.

3.1.3.5 North Miami

The following plans and documents were reviewed for the City of North Miami: Capital Improvement Plan, Comprehensive Master Plan, Transportation Master Plan, North Miami Community Redevelopment Agency Downtown Concept Plan. In summary, the City is strengthening its multi-modal network with the addition of new bike lanes, greenways, and transit shelters. There is also a proposed Transit Hub, however a location has not yet been defined. The Tri-Rail Station Area Opportunity Plan proposes a station at NW 125th Street.

3.1.3.6 North Miami Beach

The following plans and documents were reviewed for the City of North Miami Beach: Capital Improvement Plan, Comprehensive Master Plan, Transportation Plan, Complete Streets Plan, and Community Redevelopment Plan. In summary, the City is currently retrofitting its infrastructure to increase affordable housing and implement mixed-use districts, and improve walkability. Numerous bikeway routes are being implemented including a connection to Oleta River State Park. The Tri-Rail Station Area Opportunity Plan proposes a station at NW 163rd Street.

3.1.3.7 Sunny Isles

The City of Sunny Isles falls outside of the Northeast Corridor buffer; however, the coastal location of the city means that residents and visitors of Sunny Isles will mostly be utilizing the

Planning Organization

SMART PLAN CORRIDOR INVENTORY - NORTHEAST CORRIDOR

Northeast Corridor for commuting. The following plans and documents were reviewed for the City of Sunny Isles: Comprehensive Master Plan and Transportation Master Plan. In summary, the Transportation Master Plan proposes pedestrian bridges along Collins Avenue at 180th Street and 174th Street. In addition, the City is currently studying possibilities of a water-taxi that would travel across the intracoastal and pick up travelers to and from the mainland. A proposed location for the water-taxi was not identified.

3.1.3.8 Aventura

The following plans and documents were reviewed for the City of Aventura: Capital Improvement Plan, Comprehensive Master Plan, and Bicycle and Pedestrian Master Plan. In summary, the City is emphasizing more density and mixed-use development and is in the process of developing a series of mixed-use districts. In addition, the City is implementing efforts to become more bicycle and pedestrian friendly. Aventura promotes a robust transit circulator system which takes riders to major destinations within the city limits. The system includes a remarkable transit hub located at Aventura Mall. Funds for the circulator system stem from a citywide transportation mitigation impact fee. The plans also allude to the need for improved regional connectivity and reference areas such as the Golden Glades Tri-Rail station and connections into Broward County. The Tri-Rail Station Area Opportunity Plan proposes a station at 192nd Street.

Table 2 – Review of Local Plans is a summary of the plans reviewed for each city.



Table 2 - Review of Local Plans

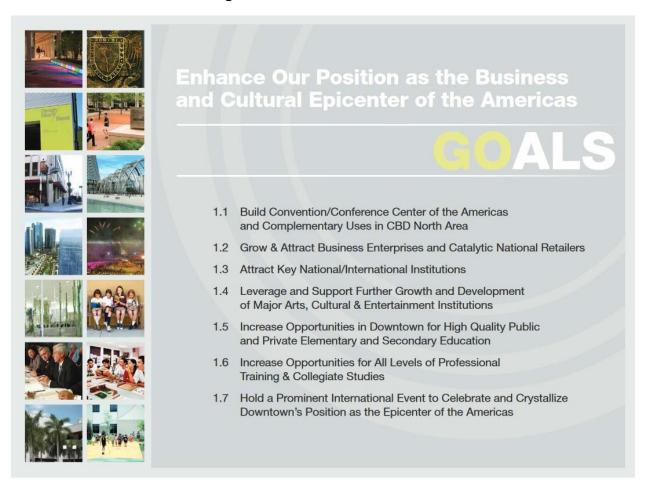
			SMART Plan - NE Corridor Inventory Analysis	ı - NE Corrid	or Inventor	y Analysis		
Entity	CIP plan	Comp plan	Trans plan	Complete Streets	Bike Ped plan		Other plan	Other plans / Documents
Miami-Dade County	Miami-Dade Capital Improvements Plan	Miami-Dade Comprehensive Master Plan	Miami-Dade TPO Long Range Transportation Pian	Miami-Dade Complete Streets Guidelines	Miami-Dade TPO 2040 Bicycle and Pedestrian Master Plan	Tri-Rail Coastal Link Station Area Opportunities Plan	FEC Brightline	Liberty City Martin Luther King Jr. Boulevard Street Beautification Pian
Miami	Capital Improvements Plan	Miami Comprehensive Neighborhood Master Plan		SW/SE 1st Street Complete City of Miami Bicycle and Streets Pilot Project Pedestrian Master Plan	City of Miami Bicycle and Pedestrian Master Plan	Omni Community Redeveloprnent Plan	Overtown Greenway Master Plan	Overtown Greenway Miami Downtown Development Authority 2025 Master Pian Downtown Master Pian
Miami Shores	Capital Improvements Plan	Miami Shores Comprehensive Master Plan			,	ì		
North Miami	Capital Improvements Plan	Miami Shores Comprehensive Master Plan	City of North Miami Transportation Master Plan		,	City of North Miami Downtown Concept Plan	City of North Miami Downtown Development and Major Corridor Master Pian	÷
North Miami Beach	Capital Improvements Plan	City of North Miami Beach Comprehensive Master Plan			City of North Miami beach Pedestrian and Bicycle Safety Analysis	North Miami Beach CRA Redevelopment Plan	City of North Miami Beach Circulator Routes	NACTO Guidelines Update
Sunny Isles	16	City of Sunny Isles Comprehensive Master Plan	Sunny Isles Beach Transportation Master Plan			3		
Aventura	Capital Improvements Plan	The City of Aventura Comprehensive Plan			Aventura Unified Master Plan for Pedestrian and Bicycle Connectivity	Aventura Transportation Impact fee (Jrdinance		



3.1.3.9 Planned Major Development Projects

Much of the future growth within the Northeast Corridor will take place in the Downtown Miami area. The Miami DDA 2025 Vision Statement states that "Downtown Miami is the business, social and cultural epicenter of the Americas, which capitalizes on its unique position as a major world city in a tropical waterfront environment." Northeast Corridor transportation improvements will be key to helping the DDA achieve its goals (Figure 6 - Miami DDA 2025 Goals.

Figure 6 - Miami DDA 2025 Goals



Data from the 2017 DDA Market Insights report is summarized in **Table 3 - DDA Future Development.**



Table 3 - DDA Future Development

Туре	Completed in 2016	Currently Under Construction	Planned
Office	260,000 SF	415,000 SF	-
Retail	510,000 SF	1,132,438 SF	424,340 SF
Hotel Units	988	558	2,400
Apartments	1,693	4,136	-
Condos	2,209	10,038	1,716

Note: **SF** = square feet

As part of the analysis, data was collected on several development sites from South Florida Crane Watch for the City of Miami for future developments for the study corridor. The following future major development projects were identified and are listed in **Table 4 – Future Development Project List**.



Table 4 - Future Development Project List

Name	Type of Development	Location						
Bentley	207 Condo Hotel Rooms and	Southside of NE 35 th Terrace, approximately						
Edgewater	4,488 SF of Retail	300' east from SR 5 / US 1 / Biscayne Blvd						
Vine Residential	124 Residential Units & 1,075 SF	Southside of NE 35 th Street, approximately						
Tower	of Retail	600' east from SR 5 / US 1 / Biscayne Blvd						
Naranza	137 Condos, 20,560 SF of Office	Southside of NE 35 th Street, approximately						
INdidiiZd	& 10,020 SF of Retail	500' east from SR 5 / US 1 / Biscayne Blvd						
2000 Bissayna	180,000 SF of Office Space and	Northwest corner of SR 5 / US 1 / Biscayne						
3000 Biscayne	343, SF of Retail	Blvd and NE 30 th Street						
Lima	206 Condos, 30,430 SF Office &	Northeast corner of SR 5 / US 1 / Biscayne						
Lima	16,873 SF of Retail	Blvd and NE 29 Street						
Disease 27	330 Apartments with 9,567 SF of	Northeast corner of SR 5 / US 1 / Biscayne						
Biscayne 27	Retail	Blvd and NE 27 th Street						
26 Edgawatar	96 Candas	Northeast corner of SR 5 / US 1 / Biscayne						
26 Edgewater	86 Condos	Blvd and NE 26 th Street						
2500 Diago.	156 Apartments & 10,000 SF of	Northwest corner of SR 5 / US 1 / Biscayne						
2500 Biscayne	Retail	Blvd and NE 25 th Street						
2000 Bissayna	393 Apartments, 7,980 SF of	Northside of NE 20 th Street, approximately						
2000 Biscayne	Retail & 455 Parking Spaces	330 feet west of SR 5 / US 1 / Biscayne Blvd						
1000 Bissoums	420 Apartmonts	Northwest corner of SR 5 / US 1 / Biscayne						
1900 Biscayne	429 Apartments	Blvd and NE 19 th Street						
Fifteen Group	350 Apartments	Southwest corner of SR 5 / US 1 / Biscayne						
Filteen Group	330 Apartments	Blvd and NE 19 th Street						
16EO Bissayna	1.8 million SF or Residential,	Northwest corner of SR 5 / US 1 / Biscayne						
1650 Biscayne	Office & Retail	Blvd and NE 16 th Street						
Redevelopment of								
Adrienne Arsht	300 Hotels Rooms, Apartments,							
Center	5,000 SF of Retail &	Southwest corner of SR 5 / US 1 / Biscayne						
Metromover	Redevelopment of Public Transit	Blvd and NE 15 th Street						
Station & Omni	Station							
Bus Terminal								
Auberge	1,430 Units, 13,280 SF or Retail,	Northwest corner of SR 5 / US 1 / Biscayne						
Residences Miami	1,629 Parking Spaces in 60	Blvd and NE 14 th Street						
Nesidefices wildill	Stories	DIVU ANU INC 14 SUREC						
One Thousand	83 Condos	Northwest corner of SR 5 / US 1 / Biscayne						
Museum	83 CONGOS	Blvd and NE 10 th Street						

Note: **SF** = square feet



3.1.4 Population Demographics

The Northeast Corridor is comprised of a diverse population that is nearly an even split among Hispanic, White, and Black residents. The total population in the NE Corridor influence area in 2010 was 238,028. The Northeast Corridor area has a more even split among races as compared to Miami-Dade County as a whole. See **Figure 7 - Northeast Corridor vs. Miami-Dade Race Demographics**

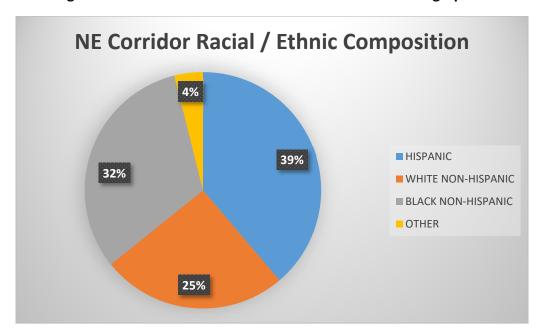
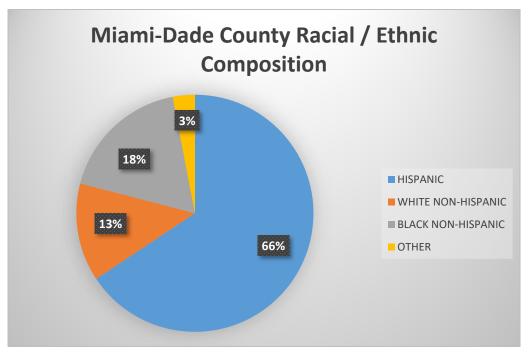


Figure 7 - Northeast Corridor vs. Miami-Dade Race Demographics





Northeast Corridor demographics reveal that most Median Households have income of \$42,968.00. Thirty eight percent (38%) of the population are Homeowners; 62% are renters. There is a concentration of Zero Car Households in the areas around Overtown and Little Havana also have some of the lowest household incomes in the study area. The North Miami Beach and the Aventura areas are where concentrations of residents are over the age of 65. See **Figure 8** - **Regional Demographics.**

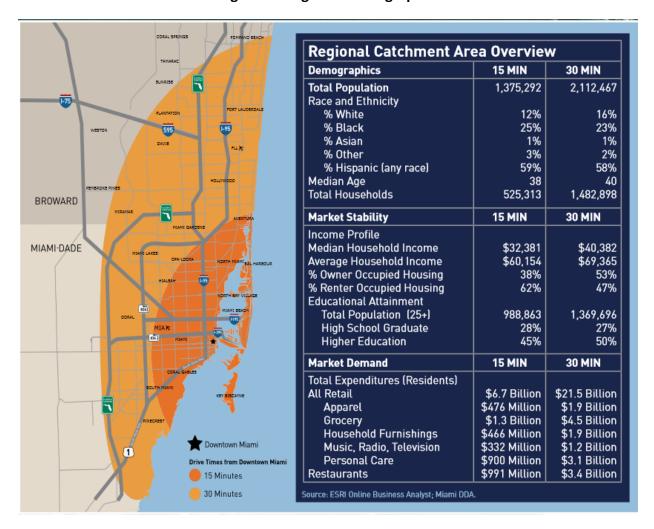


Figure 8 - Regional Demographics

3.1.4.1 Population Map

The Population along the Northeast Corridor of Miami-Dade County varies along the corridor and has changed over the past 5 years as shown in **Figure 9 – 2010 Block Group Population** and **Figure 10 – 2015 Block Group Population**. The half mile buffer around the corridor is shown consisting of four population groups. The map is based upon on a per United States Census Bureau Census Block. Census blocks are based on the population of a particular areas and the amount of people living in these areas. Commercial areas will have a lower density than neighborhoods or



apartment communities that have a much higher density of people. Each of these groups are based upon the United States Census Bureau.

3.1.4.2 Income < \$25,000 / Year

The whole corridor is generally uniform, 29% or less of the population is making less than \$25,000 / year. The only part in the corridor who had the majority of their population making less than \$25,000 annually is at the end of the corridor in Miami in the neighborhood of Overtown which is considered as one of Miami's most economically challenged areas, as depicted in **Figure 11** – **Population Less than \$25,000 Income.**

3.1.4.3 Population > 65 Years of Ave

Twenty one percent (21%) or less of the population in the corridor is older than 65 years old. Miami to Biscayne Park is closer to 10% or less where the rest of the corridor is closer to 21% with some very small parts that have over 40% of the population over the age of 65. It's showing that the location that makes less than \$25,000 a year also seems to have a greater percentage of those who are over 65 years old, as depicted in **Figure 12 – Population Older than 65 Years Old**.

3.1.4.4 Race / Minority Population

The corridor is mostly composed of about 95% of minorities. Minorities in this case are non-Hispanic non-whites. White non-Hispanics represent the majority as depicted in **Figure 13 – Race Minority Population**.

3.1.4.5 Population with Zero Car Households

About 90% of the corridor represents 0-10% of the population that has no vehicles meaning majority of the people in the corridor have at least one vehicle as depicted in **Figure 14** – **Population with No Vehicles**.

3.1.4.6 Transit Dependent Areas

An overlay was performed of Zero Car Households, Households with an income under \$25,000 / year, minority race residents, and residents over the age of 65. The result of this overlay is the Transit Dependent Areas, depicted in **Figure 15 – Transit Dependent Population.**



Figure 9 - 2010 Block Group Population

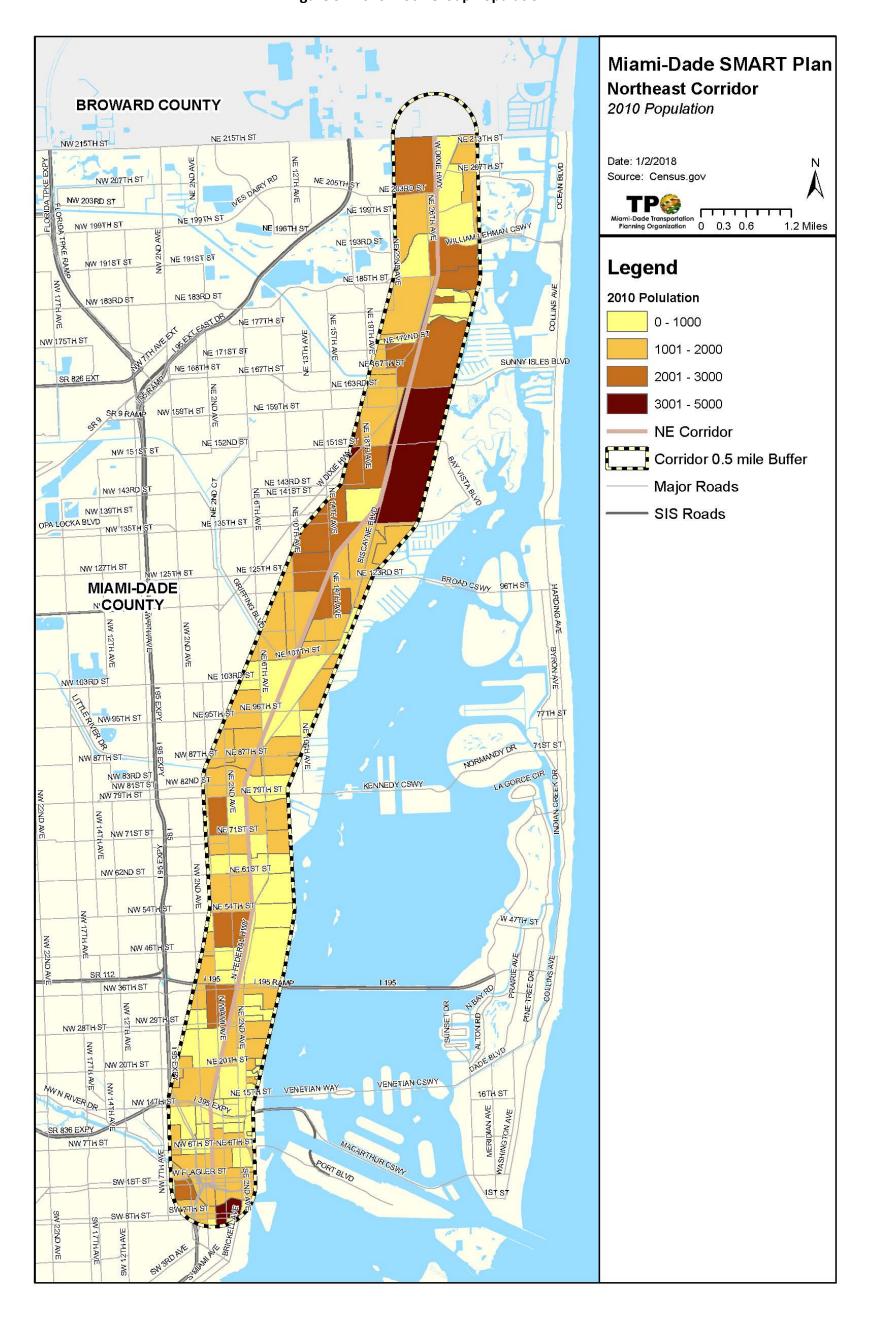




Figure 7 - 2015 Block Group Population

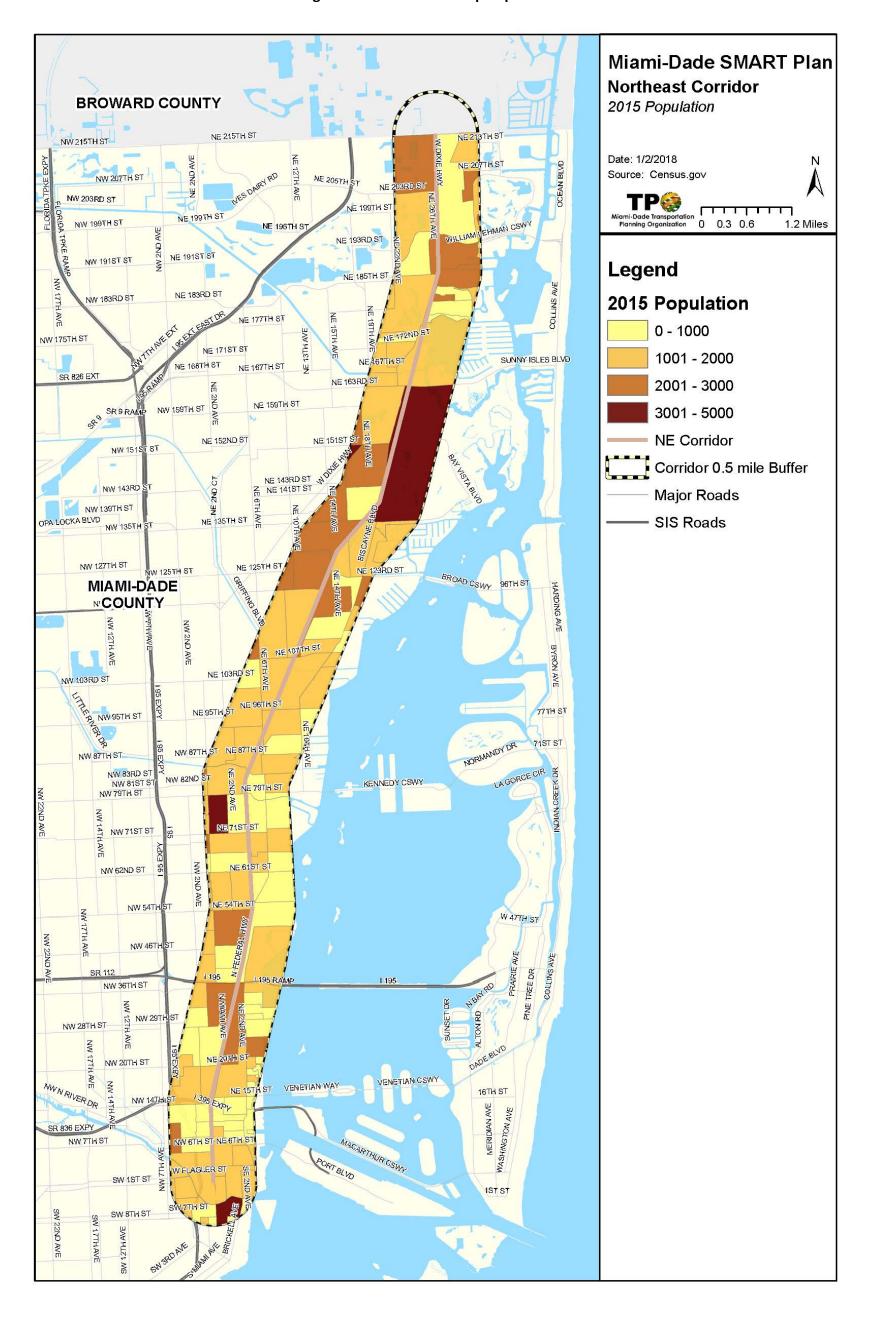




Figure 11 - Population with Less than \$25,000 Income

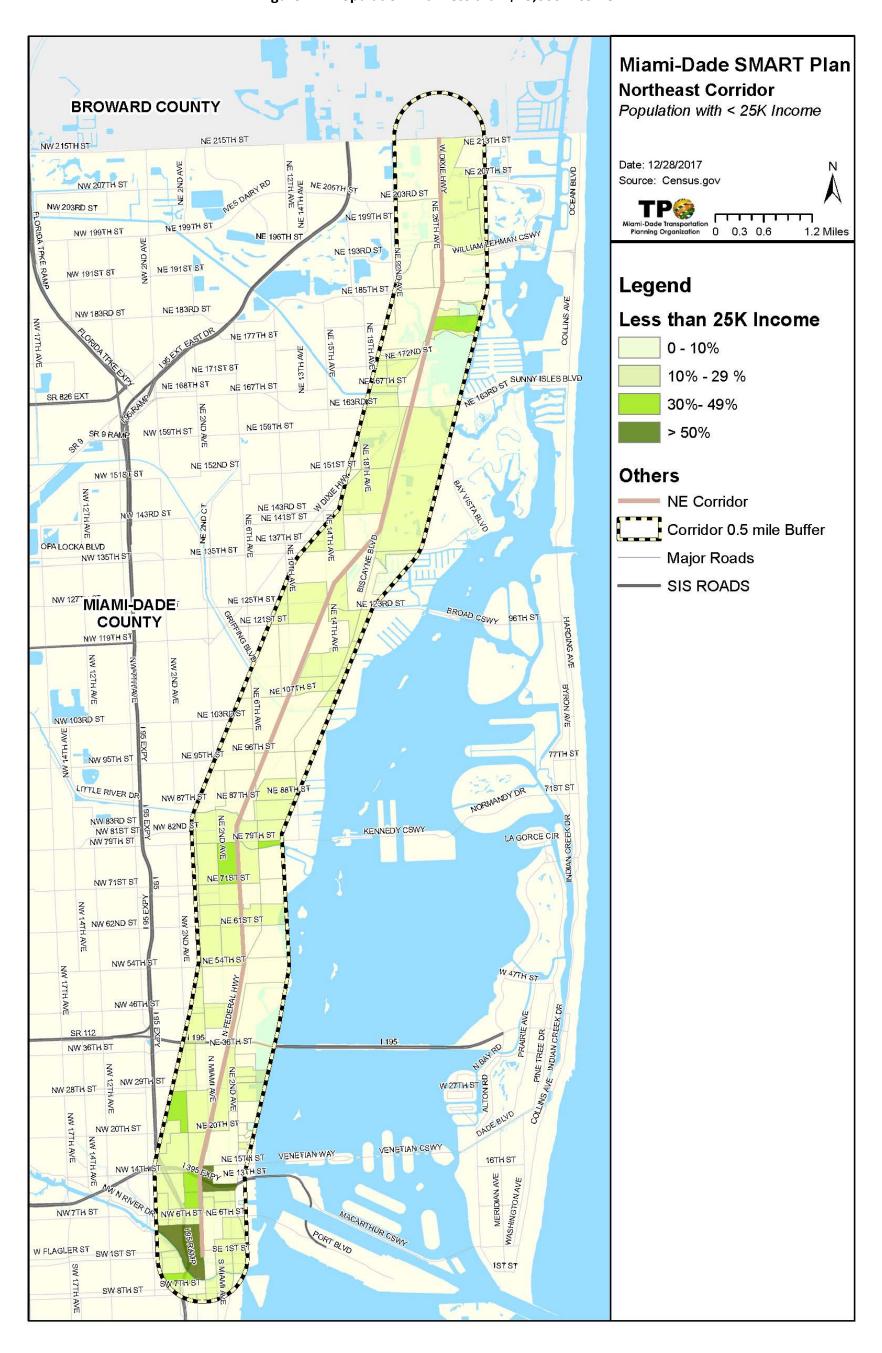




Figure 12 - Population Older than 65 Years Old

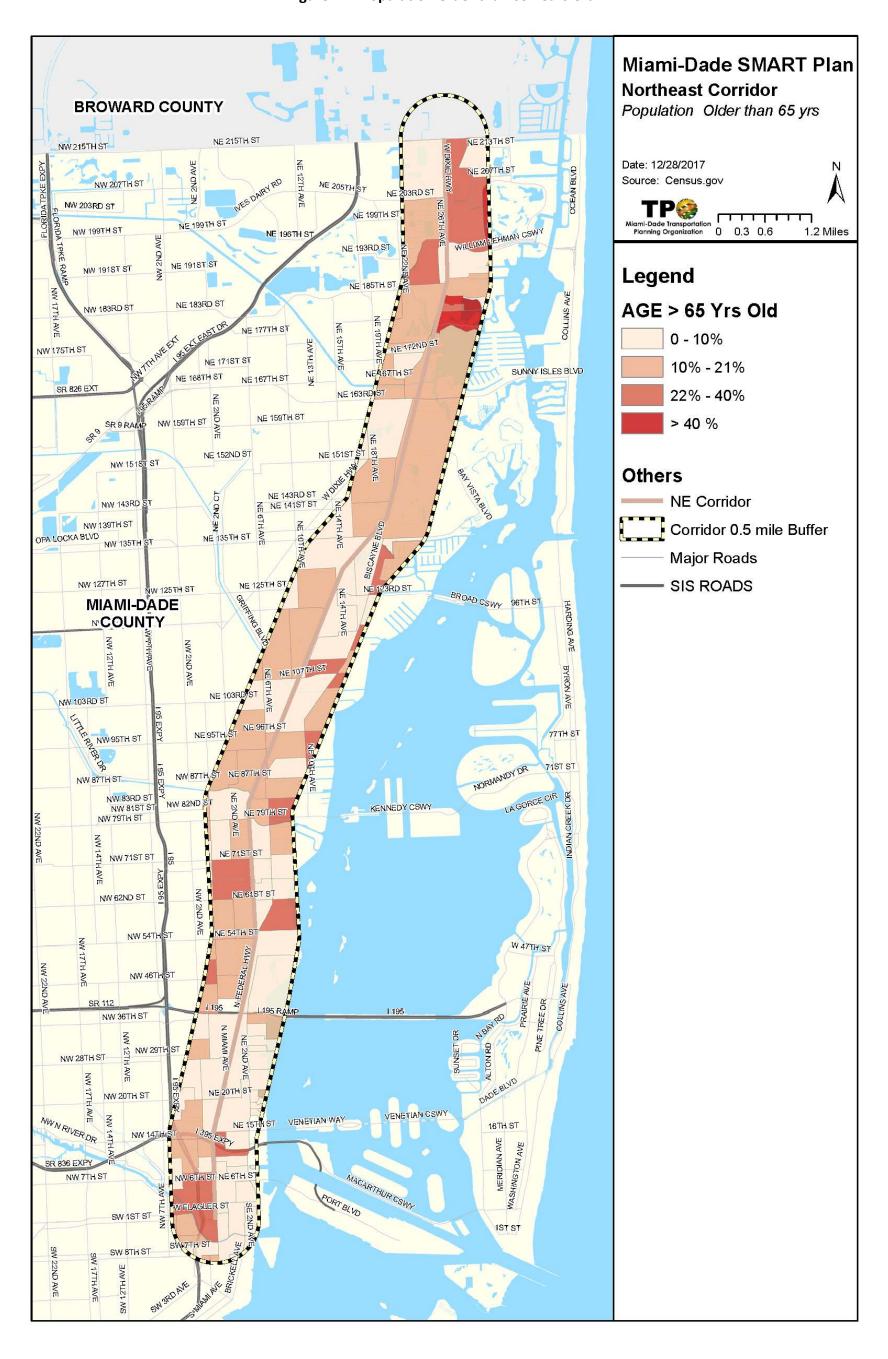




Figure 13 - Race Minority Population

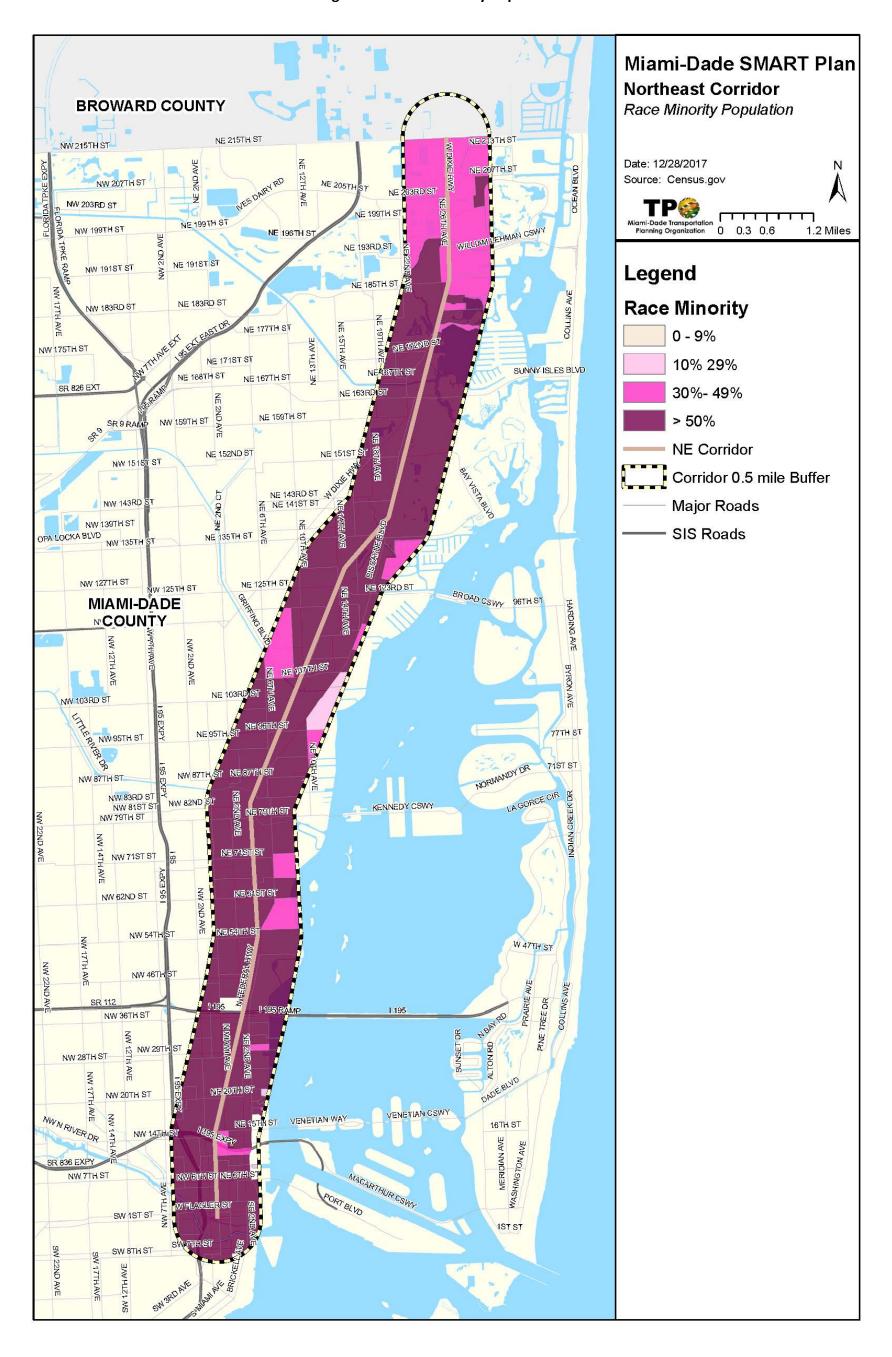




Figure 14 - Zero Car Households

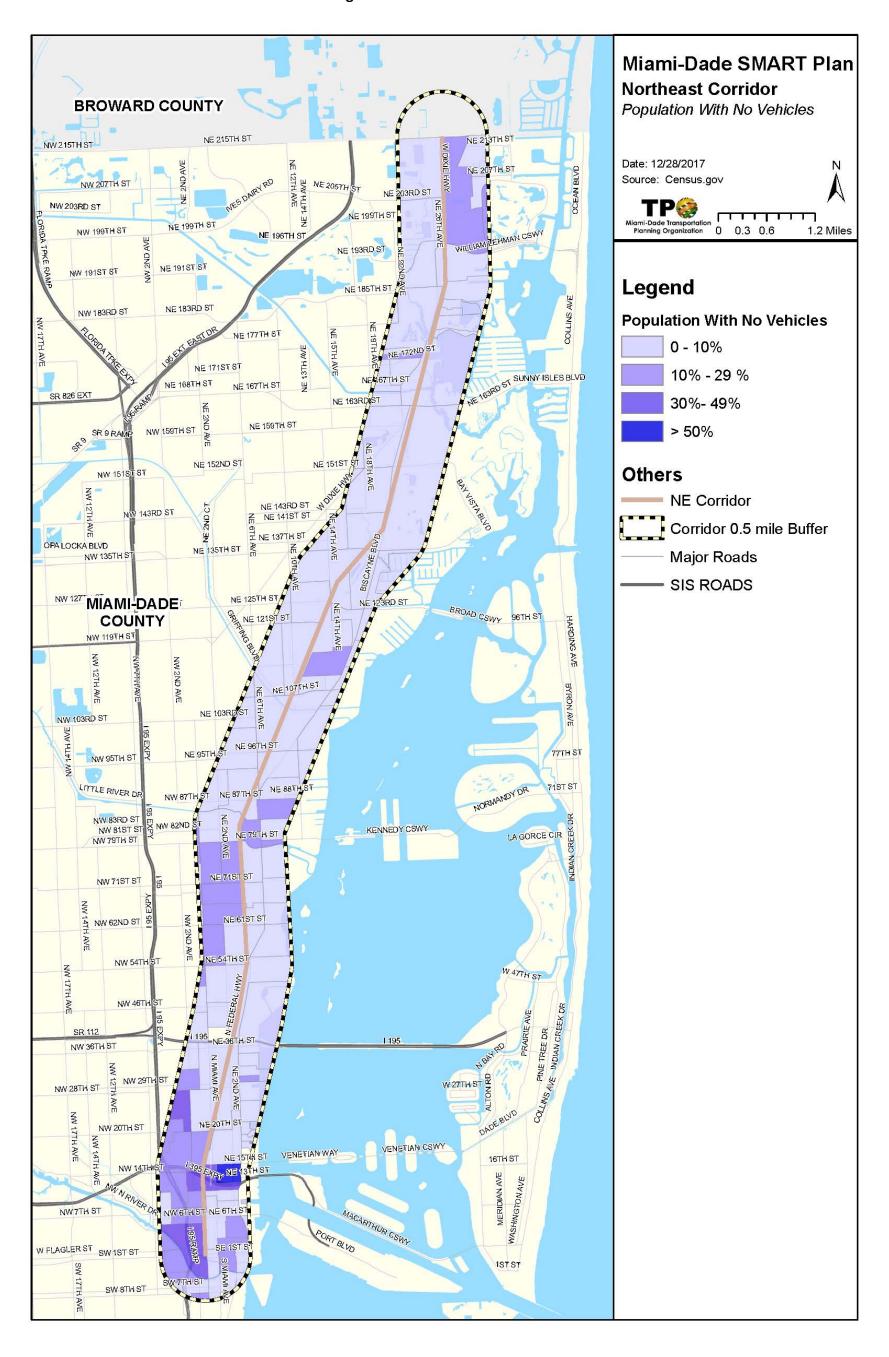
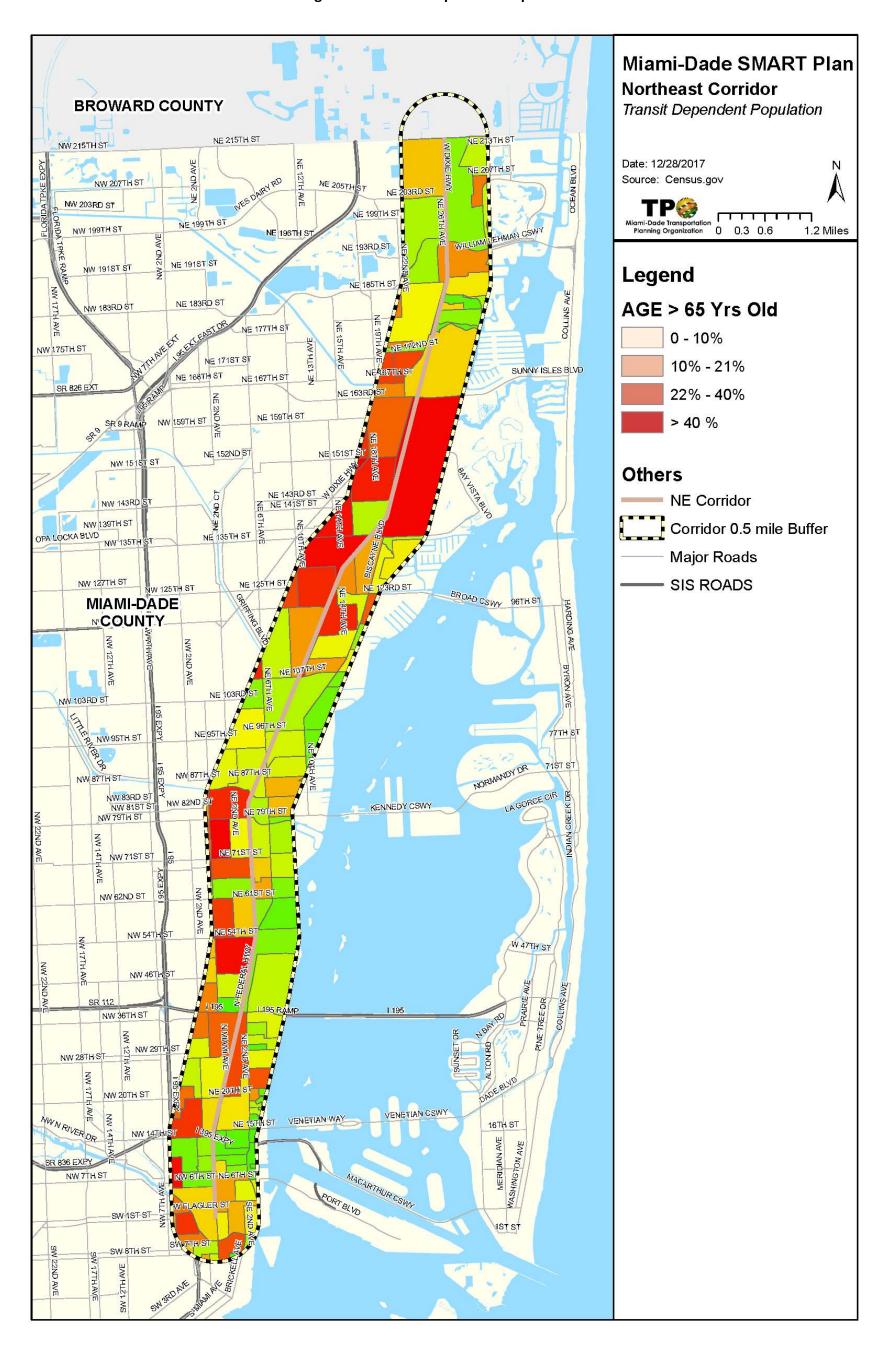




Figure 15 - Transit Dependent Population





3.1.5 Land Use and Land Value

Land use plays a significant role in shaping the SR 5 / US 1 / Biscayne Blvd study corridor. **Figure 16 – Northeast Corridor Land Use** summarizes the existing land use in the study area. Overall, **Table 5 – Northeast Corridor Land Value** shows existing development along and in close proximity to SR 5 / US 1 / Biscayne Blvd has not changed substantially over the years.

Much of the land use along the Northeast Corridor is Low Density Residential, with the next most common use being business and office. There is currently not much high-density development outside of the Downtown Miami area.

Figure 17 - Northeast Corridor Land Value (A) and 18 - Northeast Corridor Land Value (B) displays existing land value for the corridor. While most of the land value along the Northeast Corridor is average, there are a substantial number of high-value parcels within the study area. Many of these locations are already sites for major development projects.

Table 5 - Northeast Corridor Land Value

Туре	Average Size in Acres	Average AssessedValue
Public - Vacant	0.77	\$ 470,712.90
Residential - Vacant	0.47	\$ 165,276.03
Commercial - Vacant	0.33	\$ 898,178.10
Industrial - Vacant	0.26	\$ 391,378.11
Mixed Use	0.31	\$ 1,483,172.64
Parking Lots	0.41	\$ 1,193,189.46
Transit Related	0.13	NA



Figure 16 - Northeast Corridor Land Use

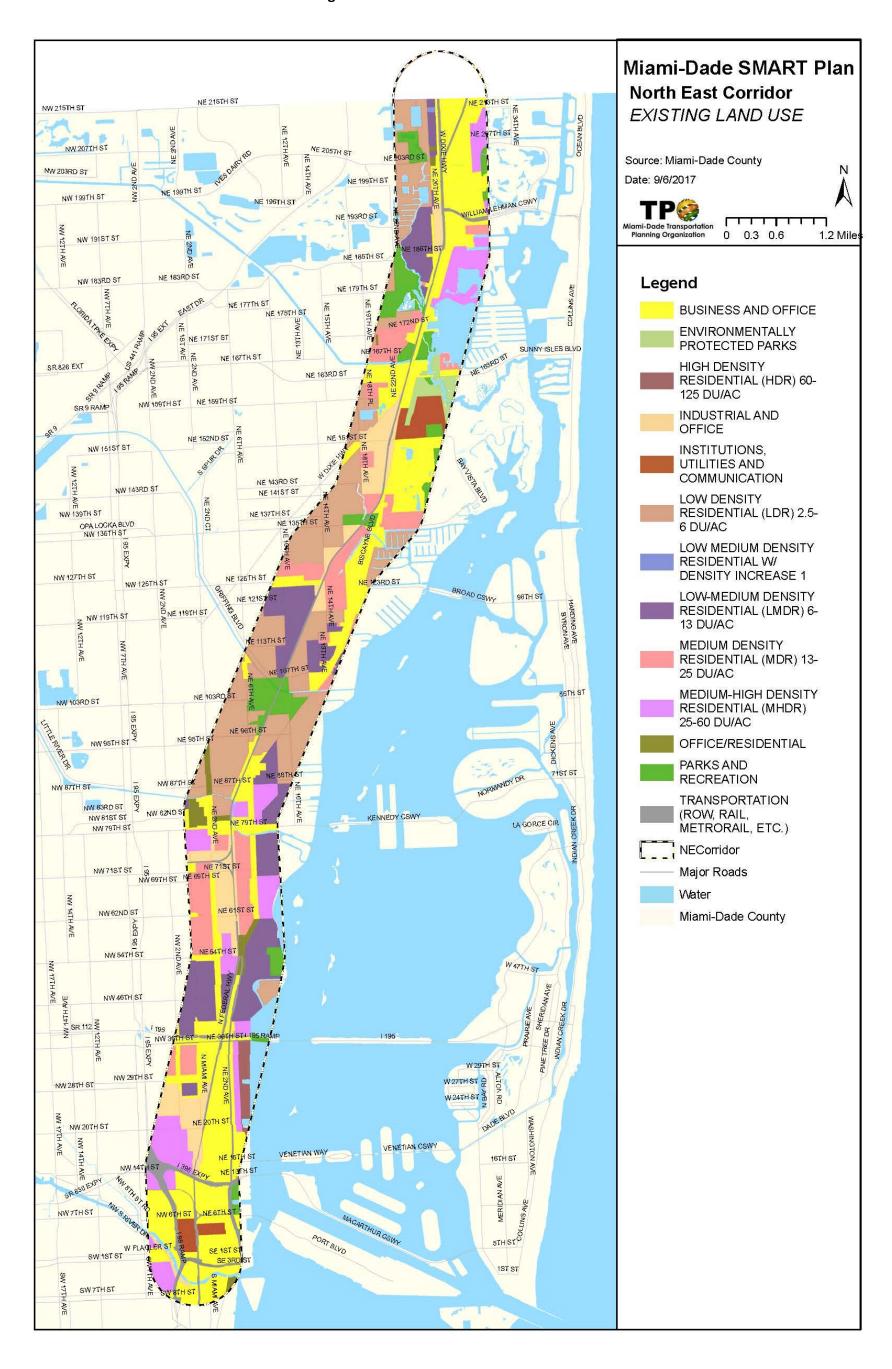




Figure 17 – Northeast Corridor Land Value (A)

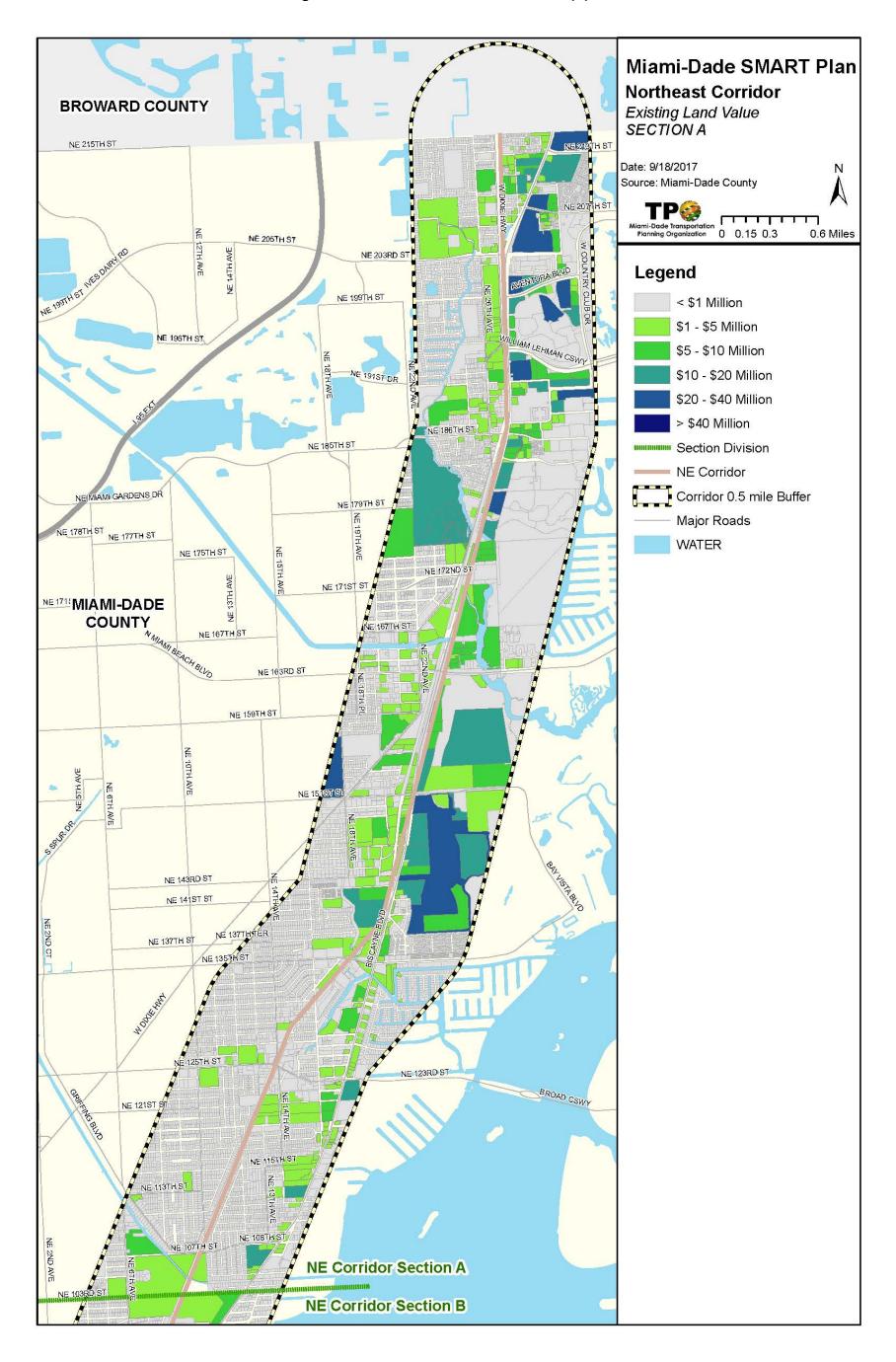
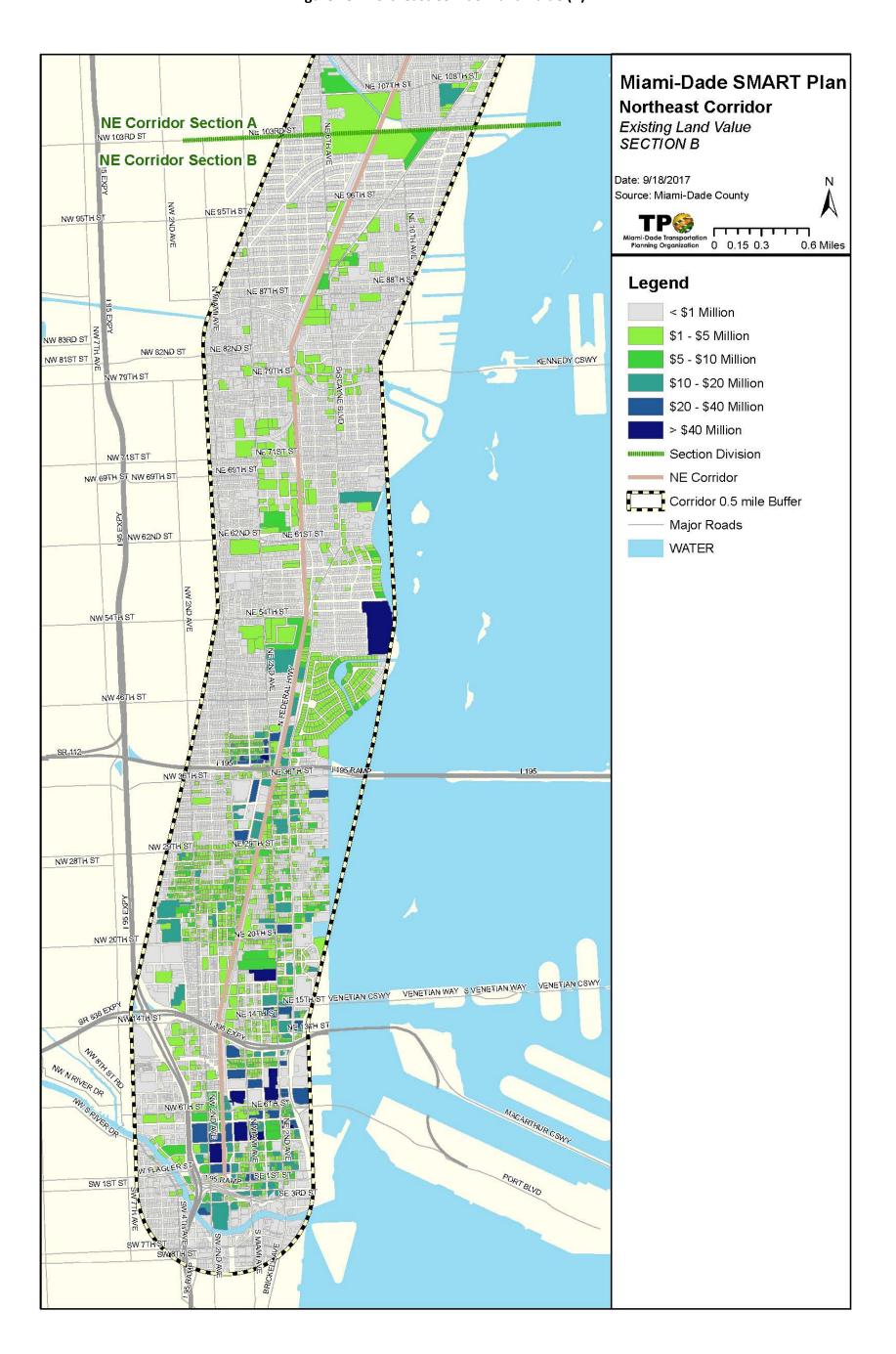




Figure 18 - Northeast Corridor Land Value (B)





3.1.6 **Zoning**

One component to a successful transit system is the system's proximity to residents. The Northeast Corridor has a mix of zoning and land uses that can be maximized to attract transit riders. The number of existing local trolley routes and services is a testament to the demand for transit in the area and the opportunity to connect various communities along the corridor for work, recreation, and entertainment. Residential Zoning parcels can be viewed in **Figure 19 – Northeast Corridor Residential Parcels.**

3.1.6.1 Parks

There is one state park, eight county parks and 56 municipal parks within the corridor. Parks are environmentally sensitive areas which needs to be taken into consideration when new developments are being considered. **Figure 21 – Parks Section A** and **Figure 22 – Parks Section B** shows the different locations where the National State Park Preserve, Municipal Park, and County Park boundaries are located. There is only one National State Park Preserve within the corridor; Oleta River State Park. A part of this park runs alongside the corridor. In the border that separates section A from section B, the corridor runs through the middle of a Municipal Park.



Figure 19 - Northeast Corridor Residential Parcels Section A

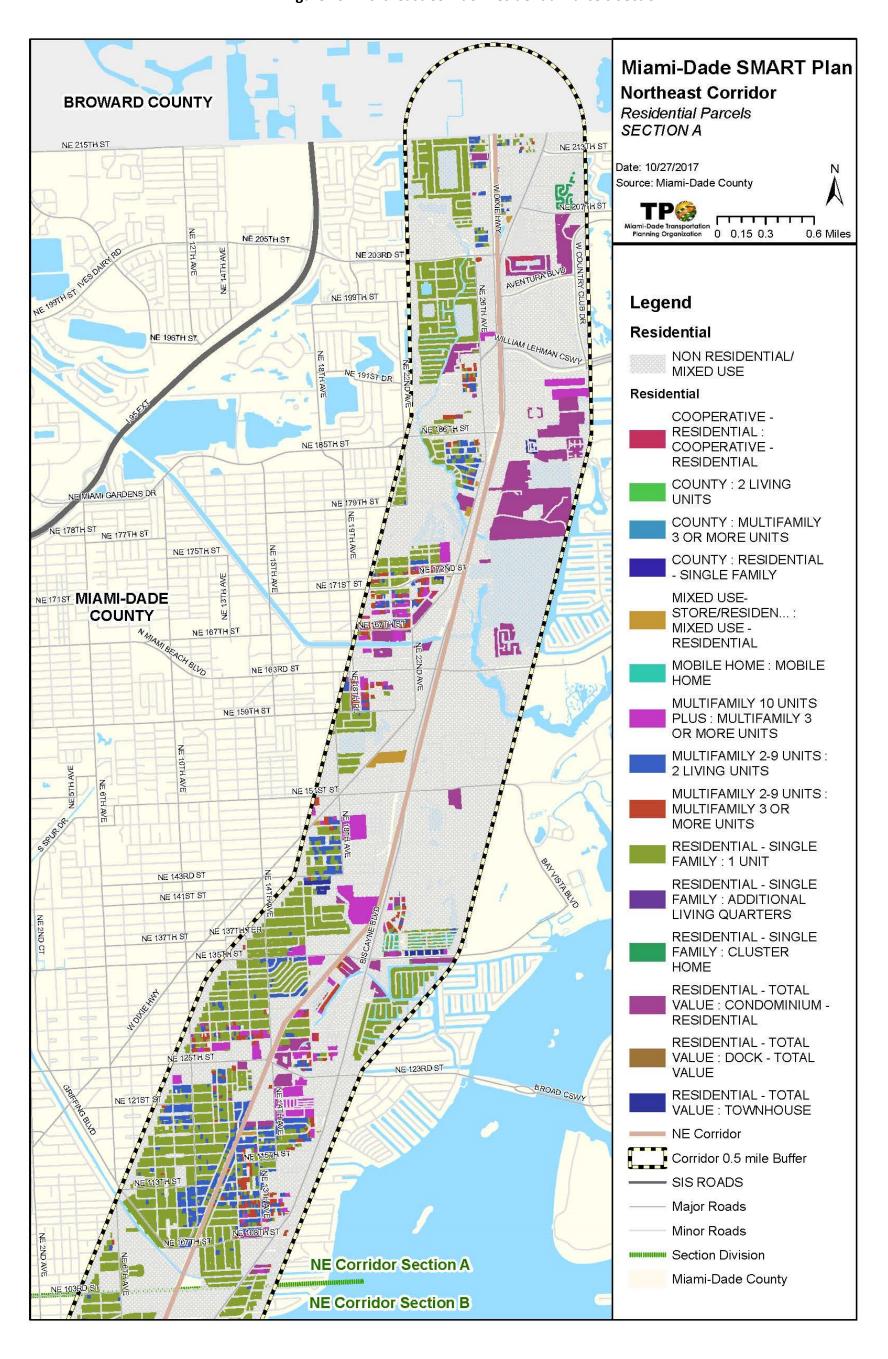




Figure 20 - Northeast Corridor Residential Parcels Section B

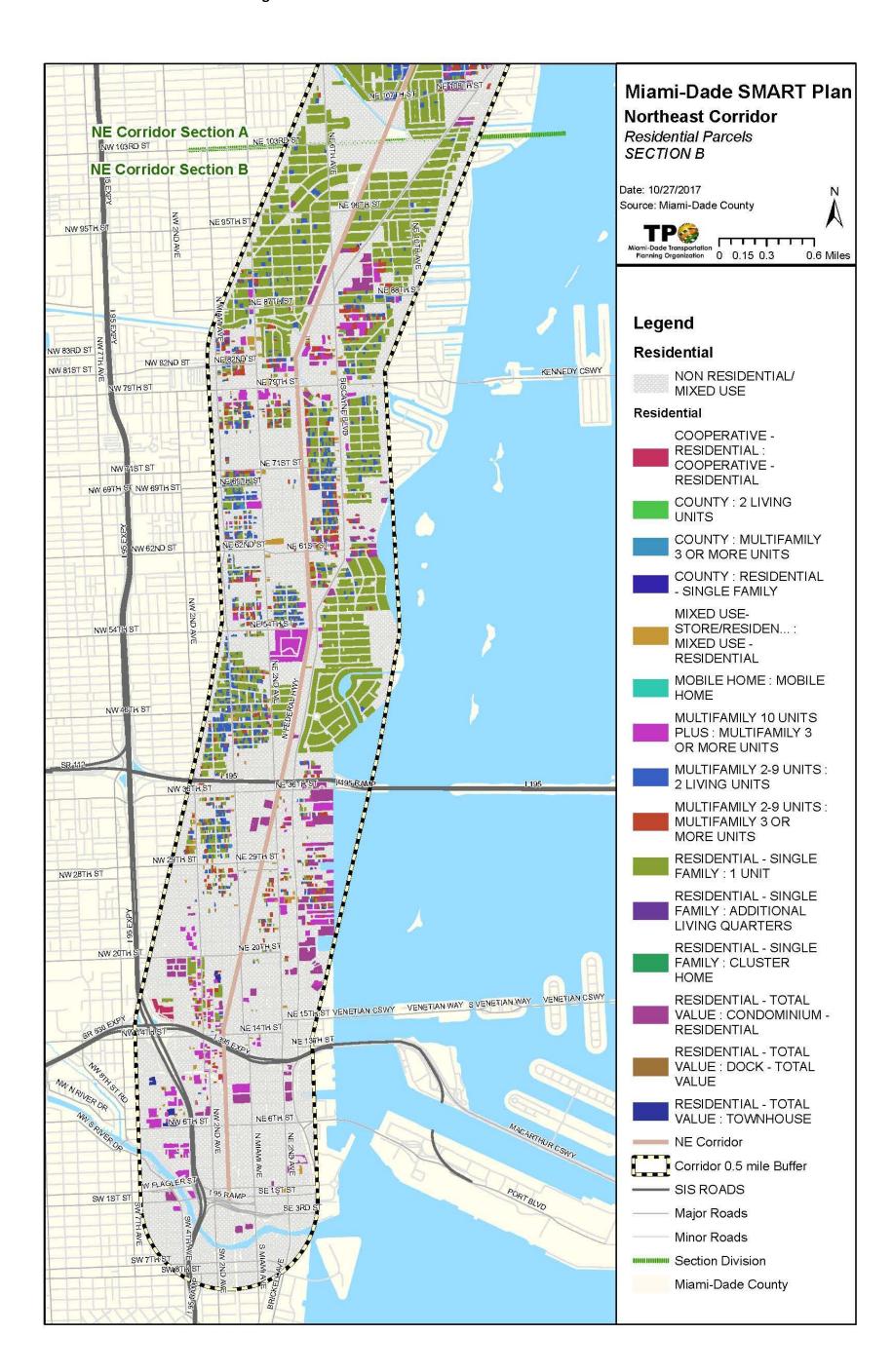




Figure 21 – Parks Section A

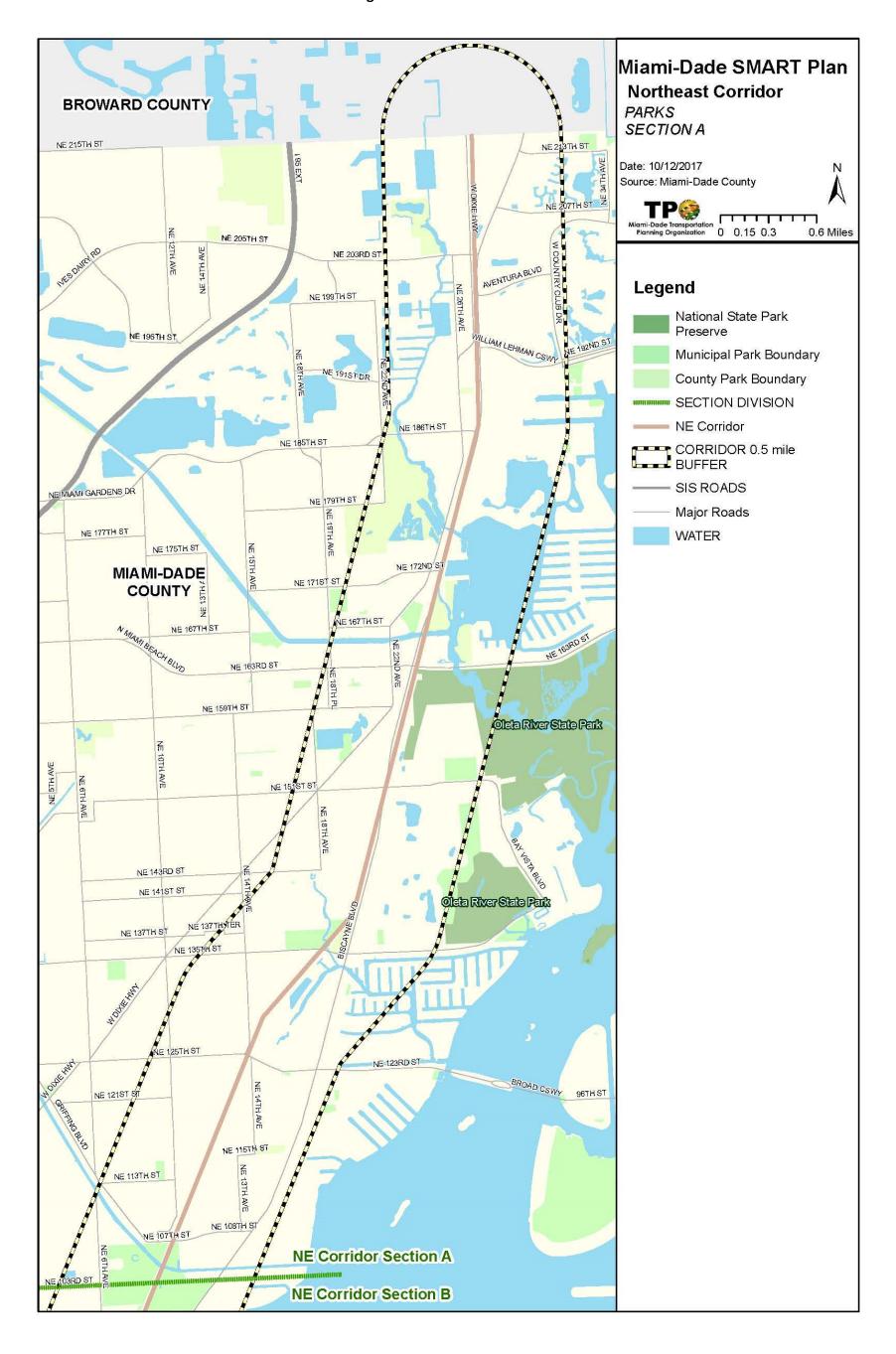
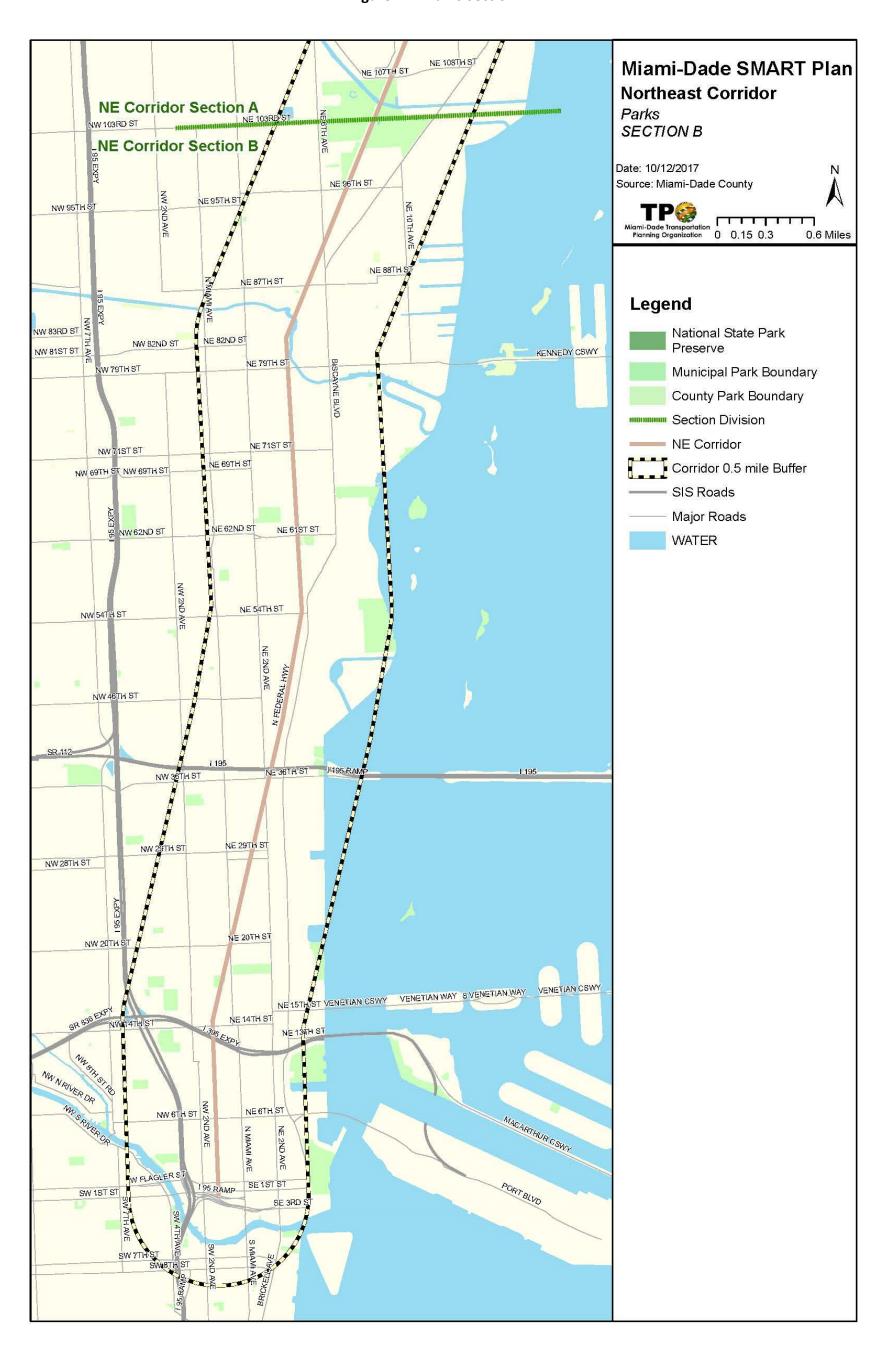




Figure 22 - Parks Section B





3.1.7 Roadway Characteristics

In general, the centerline of the Northeast Corridor is SR 5 / US 1 / West Dixie Highway. The corridor is segmented by several major streets that run east-west and carry traffic to and from I-95:

- Ives Dairy Road
- Miami Gardens Drive / NE 186th Street
- NE 163rd Street
- NE 135th Street
- NE 125th Street
- NE 79th / NE 82nd Street
- NE 62nd Street
- I-195
- I-395

These arterials carry anywhere from 30,000 to 70,000 vehicles per day and facilitate movement to and from the eastern communities on the mainland and over to barrier-island communities such as Sunny Isles Beach, Surfside and Miami Beach.

3.1.7.1 US 1 Access Management

This segment of SR 5 / US 1 / Biscayne Blvd. is categorized as Access Class 05 from north of NE 207th Street to NE 146th Street and Access Class 07 from NE 146th Street to the south end of the study corridor. **Table 6 – Access Management Standards from Rule 14-97** provides the minimum spacing requirements for Access Class 05 and 07 roadways with a posted speed less than or equal to 45 miles per hour.

Table 6 - Access Management Standards from Rule 14-97

Class	Medians	Medi	an Openings (feet)	Signal	Connection (feet)
Class	MCGIGIIS	Full	Directional	(feet)	45 MPH and less Posted Speed
05	Restrictive	strictive 1,320 600		2,640	245
07	7 Restrictive / Non-Restrictive		330	1,320	125



3.1.7.2 US 1 Traffic Volumes

Annual Average Daily Traffic (AADT) volumes along the SR 5 / US 1 / Biscayne Blvd. corridor stations were extracted from FDOT 2016 traffic data. Detailed traffic count data for streets in the influence area of the Northeast Corridor are provided in **Table 7 - Historical AADT Data**. The table shows FDOT's traffic count information indicating AADT volumes along SR 5 / US 1 / Biscayne Blvd. ranged from a high of 67,500 vehicles per day (200 feet south NE 192nd Street) to a low of 35,500 vehicles per day near (200 feet south NE 53rd Street). Truck percentages along SR 5 / US 1 / Biscayne Blvd. ranged approximately from to 16.8% to 1.7%. Further evaluation of truck volumes will be important to determine the frequency of truck traffic and impacts to freight operations in the Northeast Corridor influence area.

3.1.7.3 Non-Motorized Transportation

Non-motorized transportation is human powered transportation mainly done by bikes or walking. There are sporadic bike lanes within the corridor and the ½ mile buffer. A few of the bike paths run along the NE corridor. There are also a few paths that can be used for walking that are paved. See **Figure 23 – Non-Motorized Facilities.**

3.1.7.4 AADT

Portable Traffic Monitoring Sites (PTMS) are permanent count locations that record and transmit every day of the year and provide the data used for adjusting short-term traffic counts to Annual Average Daily Traffic (AADT). There are 10 sites in Section A (Figure 24 – 2016 AADT Section A) that shows what the average traffic is like within half a mile of the corridor. This section AADT falls in the range of 50,001-110,000. There are 29 sites in Section B (Figure 25 – 2016 AADT Section B) of the corridor. Most of this section fall in the AADT ranges of 0-15,000 and 30,001-50,000.



Figure 23 – Non-Motorized Facilities





Figure 24 - 2016 AADT Section A

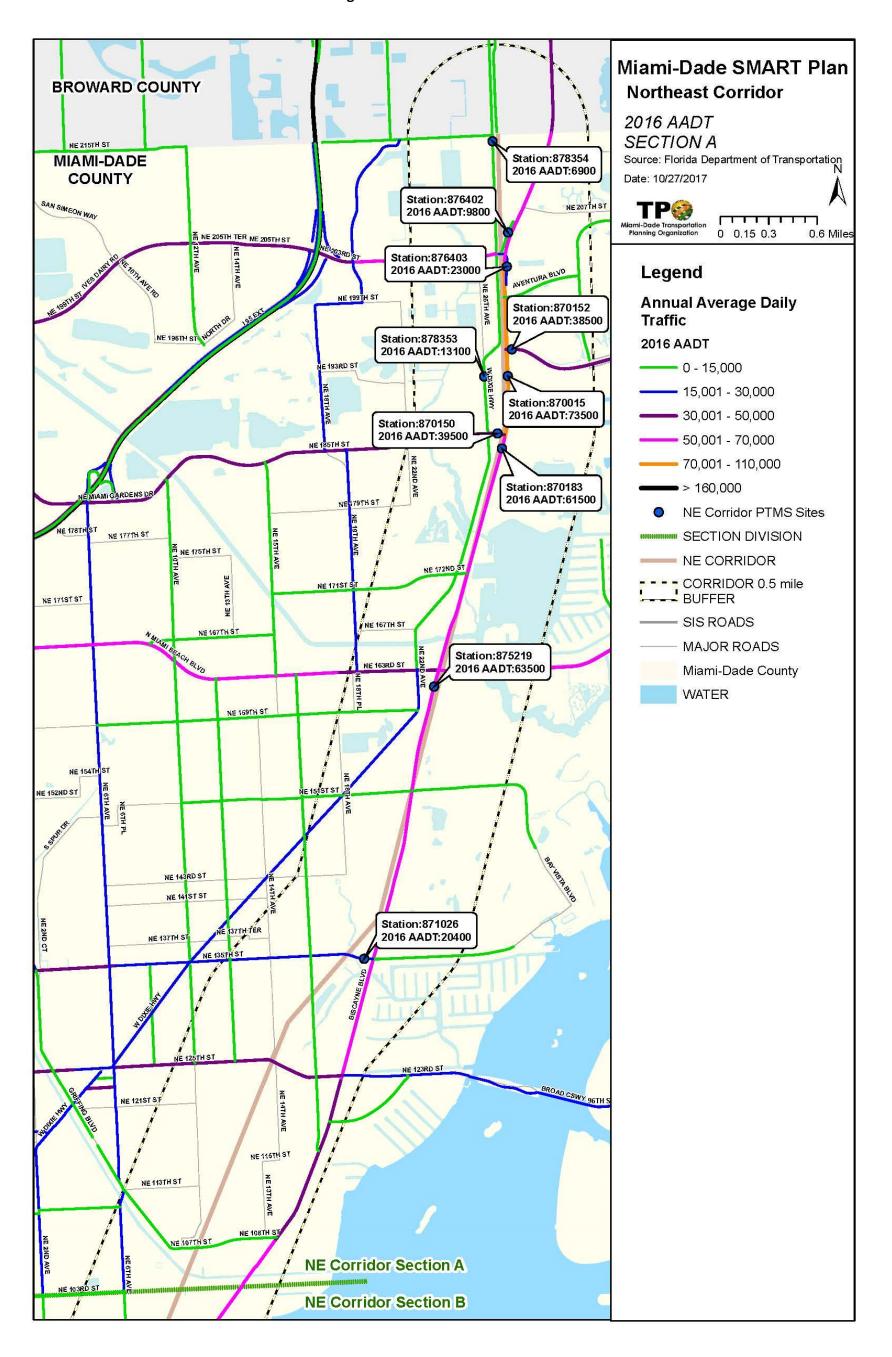




Figure 25 - 2016 AADT Section B

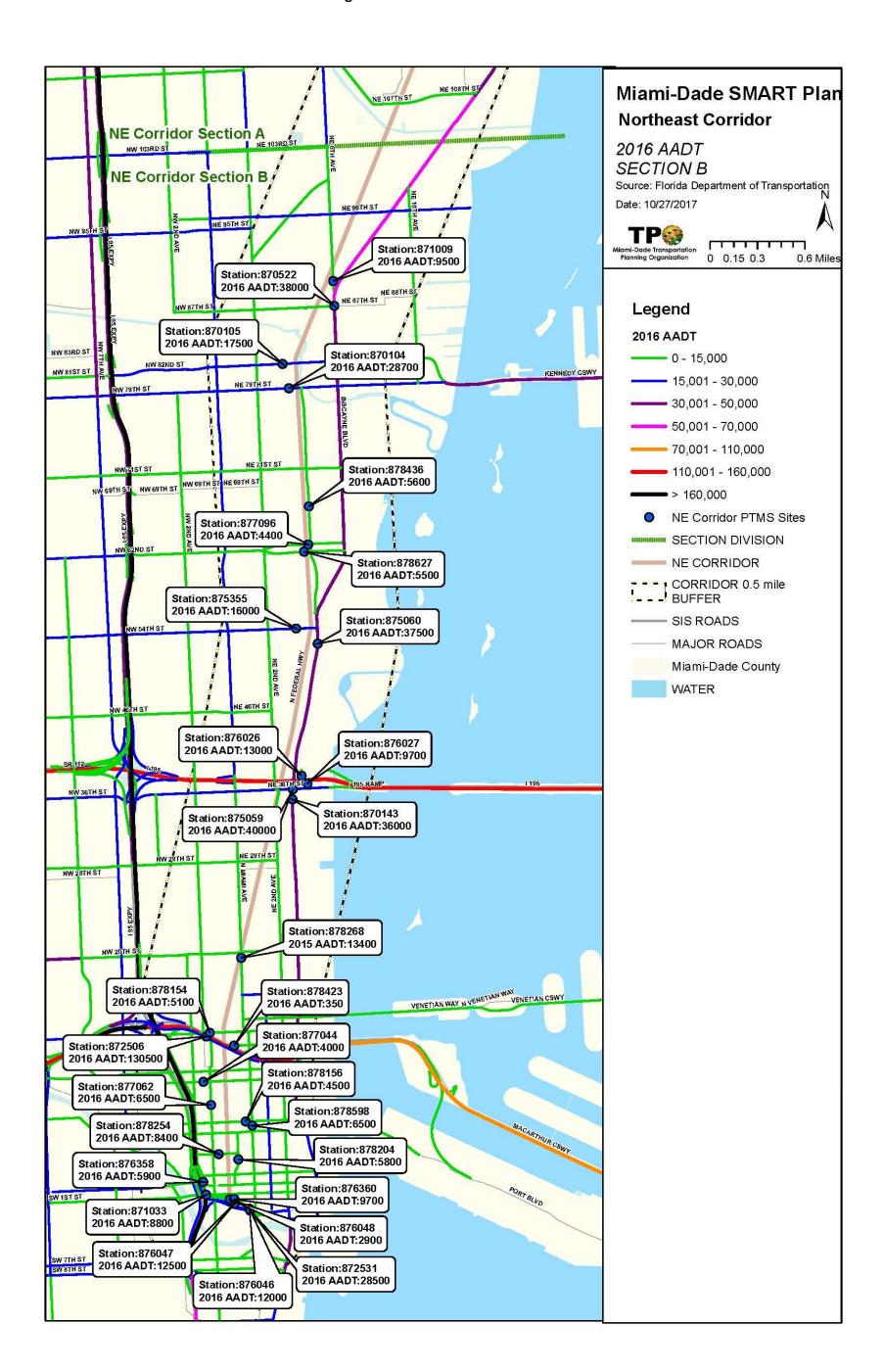




Table 7 - Historical AADT Data

						TRAFFIC DATA ANALYSIS																							
						20:				201	1			201	12			201	13			20	14			20	15		
#	ROADWAY	COUNT STATION	DESCRIPTION	SECTION	AADT	K Factor	D Factor	T Factor	AADT	K Factor	D Factor	T Factor	AADT	K Factor	D Factor	T Factor	AADT	K Factor	D Factor	T Factor	AADT	K Factor	D Factor	T Factor	AADT	K Factor	D Factor	T Factor	Growth
1	BISCAYNE BLVD	870015	SR 5/US-1, 200' S NE 192 ST	87030000	70500	8.98	54.08	4.40	76500	8.89	55.10	4.50	81000	9.00	55.70	5.80	74500	9.00	52.40	5.20	67500	9.00	54.50	5.10	67500	9.00	54.70	4.20	1 -4%
2	NE 79 ST	870104	SR 934/ NE 79 ST/ ONE WAY PAIR EB, 200' W NE 4 CT	87080900	22500	8.98	99.99	9.50	23000	9.00	99.90	10.50	18000	9.00	99.90	10.50	26400	9.00	52.40	9.00	30900	9.00	54.50	10.40	28800	9.00	54.70	11.80	1 28%
3	NE 82 ST	870105	SR 934/NE 82 ST/ONE-WAY PAIR WB, 200' W NE 3 PL	87080001	14000	8.98	99.99	9.50	17500	9.00	99.90	10.50	23500	9.00	99.90	10.50	15500	9.00	99.90	9.00	17500	9.00	99.90	10.40	17000	9.00	99.90	11.80	1 21%
4	BISCAYNE BLVD	870143	SR 5/US-1, 200' S NE 36 ST	87030000	29000	8.98	54.08	8.60	28500	9.00	55.10	8.60	29500	9.00	55.70	10.60	36500	9.00	52.40	4.60	29500	9.00	54.50	2.50	31500	9.00	54.70	2.50	1 9%
5	NE 186 ST/MIA GDNS D	870150	SR 860/MIAMI GARDENS DR, 200' E W DIXIE HWY	87026000	52000	8.98	54.08	1.30	48500	9.00	55.10	1.30	48500	9.00	55.70	7.40	35500	9.00	52.40	7.30	40500	9.00	54.50	6.30	45500	9.00	54.70	6.10	" 13%
6	WILLIAM LEHMAN CSWY	870152	SR 856/NE 192 ST, 200' E SR 5/US-1	87210000	33500	8.98	54.08	3.40	36500	9.00	55.10	3.40	34000	9.00	55.10	2.40	32500	9.00	52.40	2.70	32500	9.00	54.50	2.70	35500	9.00	54.70	2.60	1 6%
7	BISCAYNE BLVD	870183	SR 5/US-1, 200' S SR 860/NE 186 ST	87030000	61000	8.98	54.08	4.40	65000	9.00	55.10	4.50	67000	9.00	55.70	5.80	58500	9.00	52.40	5.20	60000	9.00	54.50	5.10	51500	9.00	54.70	4.20	1 6%
8	BISCAYNE BLVD	870522	SR 5/US-1, 200' S NE 6 AV/SR 915	87030000	44000	8.98	54.08	4.40	44000	9.00	55.10	4.50	42500	9.00	55.70	5.80	58500	9.00	52.40	5.20	36500	9.00	54.50	5.10	42000	9.00	54.70	4.20	- 5%
9	NE 6 AVE	871009	SR 915/NE 6 AV, 400' N SR 5/US-1	87034000	8100	8.98	54.08	2.10	8500	9.00	55.10	2.00	8400	9.00	55.70	7.70	7700	9.00	52.40	3.00	7400	9.00	54.50	10.80	9300	9.00	54.70	2.50	1 15%
10	NE 135 ST	871026	SR 916/OPA-LOCKA BLVD/NW 135-138ST,200'W SR 5/US-1	87008000	24500	8.98	54.08	3.00	19200	9.00	55.10	3.00	18700	9.00	55.70	2.20	21200	9.00	52.40	6.90	22000	9.00	54.50	3.80	23000	9.00	54.70	6.80	* -6%
11	SW 1 ST	871033	SR 968/EB SW 1 ST, 200' E MIAMI RIVER BRIDG	87053001	11000	7.87	99.99	1.90	8400	9.00	99.90	1.90	8500	9.00	99.90	4.30	8300	9.00	99.90	2.80	8100	9.00	99.90	6.80	8100	9.00	99.90	14.60	1 26%
12	DOLPHIN EXPRESSWAY	872506	I-395/SR 836, 100' E NW 2 AV	87200000	124500	7.16	52.27	3.20	129000	8.00	51.90	2.50	128500	8.00	53.40	3.30	132000	8.00	54.10	2.70	130000	8.00	54.30	3.30	129500	8.00	55.10	3.40	1 4%
13	DOWNTOWN DISTRIBUTOR	872531	SR 970/DOWNTOWN DISTRIBUTOR, 200' E OFF RAMP I-95	87006000	27500	11.38	74.34	6.20	30000	9.00	76.00	5.00	26000	9.00	78.20	4.90	32000	9.00	63.90	5.20	34500	9.00	65.30	4.40	38500	9.00	66.80	4.40	1 40%
14	BISCAYNE BLVD	875059	SR 5/US-1, 200' N NE 36 ST	87030000	35500	8.98	54.08	4.40	39000	9.00	55.10	4.50	47000	9.00	55.70	5.80	43500	9.00	52.40	5.20	38000	9.00	54.50	5.10	42500	9.00	54.70	4.20	" 20%
15	BISCAYNE BLVD	875060	SR 5/US-1, 200' S NE 53 ST	87030000	37500	8.98	54.08	4.40	30500	9.00	55.10	4.50	38000	9.00	55.70	5.80	37500	9.00	52.40	5.20	35500	9.00	54.50	5.10	35500	9.00	54.70	4.20	→ -5%
16	BISCAYNE BLVD	875219	SR 5/US-1, 300' S NE 163 ST/SUNNY ISLES CSWY	87030000	60000	8.98	54.08	3.90	61500	9.00	55.10	3.90	64000	9.00	55.70	4.80	54000	9.00	52.40	3.50	55000	9.00	54.50	4.90	60000	9.00	54.70	2.00	> 0%
17	NE 54 ST	875355	SR 944/NW 54 ST, 200' W SR 5/US-1	87250000	15400	8.98	54.08	1.80	13500	9.00	55.10	1.80	13900	9.00	55.70	2.90	13200	9.00	52.40	2.60	13300	9.00	54.50	2.70	14600	9.00	54.70	2.40	* -5%
18	NE 38 ST TO WB I-195	876026	RAMP 87004020 FROM EB NE 38 ST TO WB I-195, 200' S OF NE 38 ST	87004020	9300	7.59	99.99	5.30	9200	9.00	99.90	5.30	11000	9.00	99.90	4.60	11000	9.00	99.90	4.60	12000	9.00	99.90	3.70	12500	9.00	99.90	3.70	1 34%
19	SR112 TO NE 36 ST	876027	RAMP 87004021 FROM EB I-195 TO WB NW 36 ST, 100' S OF I-195	87004021	7800	7.59	99.99	6.50	7700	9.00	99.90	6.50	8700	9.00	99.90	10.10	8800	9.00	99.90	10.10	2800	9.00	99.90	16.80	2900	9.00	99.90	16.80	- 63%
20	TO SB S MIAMI AVE	876046	RAMP 87006048 FROM EB SR 970 TO S MIAMI AVE, 250' E OF SR 970	87006048	8600	11.38	99.99	2.20	7900	9.00	99.90	2.20	10000	9.00	99.90	6.70	9800	9.00	99.90	6.70	10500	9.00	99.90	6.70	10500	9.00	99.90	6.70	1 22%
21	WB SR970 TO RP270506	876047	RAMP 87006049 FROM SR 970 TO SE 2 AVE, 100' W OF SR 970	87006049	6600	11.38	99.99	2.20	8800	9.00	99.90	6.00	8500	9.00	99.90	49.00	8300	9.00	99.90	49.00	9400	9.00	99.90	3.60	9400	9.00	99.90	3.60	1 42%
22	87270506 TO WB DIST	876048	87006050 FROM S MIAMI AVE TO RAMP 87006800, 200' W OF RAMP 872	87006050	2400	11.38	99.99	1.50	2200	9.00	99.90	1.50	2500	9.00	99.90	3.40	2500	9.00	99.90	3.40	2600	9.00	99.90	10.40	2600	9.00	99.90	10.40	1 8%
23	I-95 TO NB NW 3 AVE	876358	RAMP 87270504 FROM NB I-95 TO NB NW 3 AVE, 200' N OF I-95	87270504	5100	7.79	99.99	3.50	4700	9.00	99.90	3.50	4700	9.00	99.90	8.60	4300	9.00	99.90	4.70	4300	9.00	99.90	4.70	5800	9.00	99.90	1.70	1 14%
24	S MIAMI AV TO N I-95	876360	RAMP 87270506 FROM SB MIAMI AVE TO NB I-95, 700' E OF MIAMI AVE	87270506	9800	7.79	99.99	5.20	9700	9.00	99.90	5.20	9700	9.00	99.90	8.60	9700	9.00	99.90	4.90	9800	9.00	99.90	4.90	9500	9.00	99.90	2.80	1 -3%
25	SB US1 TO WB 203 ST	876402	RAMP 87030003 FROM SB US-1 TO WB NE 203 ST, 400' S OF US-1	87030003	8900	8.99	99.99	2.10	8900	8.98	99.99	2.10	8800	9.00	99.90	4.70	7900	9.00	99.90	11.10	8000	9.00	99.90	11.10	9300	9.00	99.90	1.90	→ 4%
26	NB US1TO WB NE 203	876403	RAMP 87030004 FROM NB US-1 TO WB NE 203 ST, 600' N OF US-1	87030004	19000	8.98	99.99	2.30	22000	9.00	99.90	2.30	21500	9.00	99.90	2.30	18000	9.00	99.90	4.70	18000	9.00	99.90	5.40	22000	9.00	99.90	5.40	^ 16%
27	NW 10 ST	877044	NW 10TH ST (EB), 350 FT E OF NW 3RD AVE	87000404	5000	8.98	99.99	7.10	4900	9.00	99.90	7.80	4100	9.00	99.90	7.10	4000	9.00	99.90	7.10	3700	9.00	99.90	9.70	3800	9.00	99.90	9.70	- 24%
28	NW 2 AVE	877062	NW 2ND AVE 100 FT SOUTH OF NW 8TH ST	87068501	7200	8.98	54.08	7.10	7200	9.00	55.10	7.80	4600	9.00	55.70	8.10	4600	9.00	52.40	8.10	4600	9.00	54.50	8.10	6200	9.00	54.70	6.70	4 14%
29	NE 62 ST	877096	NE 62 ST, 200 FEET EAST NE 4 CT	87000516	-	-	-	-	-	-	-	-	-	-	-	-	-]	-	-		-	-	-	-	4500	9.00	99.90	3.50	n/a
30	NW & NE 14 STREET	878154	NW & NE 14TH STREET, 200' EAST OF NW 2ND AVENUE	87000161	-	-	-	-	3100	9.00	55.10	14.70	3100	9.00	55.70	16.00	4700	9.00	52.40	16.20	4700	9.00	54.50	10.70	4900	9.00	54.70	5.00	* 58%
31	D14	878156	NE/NW 6TH ST, 200' EAST OF N MIAMI AVE	87000163	-	-	-	-	3900	9.00	99.90	14.70	3900	9.00	99.90	16.00	4700	9.00	99.90	16.20	4700	9.00	99.90	19.10	4600	9.00	99.90	7.30	→18%
32	NW 1 AV	878204	NW 1ST AVE, 200' SOUTH OF NW 3RD STREET	87000449	-	-	-	-	6200	9.00	58.20	14.70	6200	9.00	59.70	16.00	5900	9.00	58.90	16.20	5900	9.00	59.30	19.10	5900	9.00	57.40	7.30	- -5%
33	NW 3RD STREET	878254	NW 3RD ST, 200' EAST OF NW 2ND AVENUE	87000634	-	-	-	-	7000	9.00	58.20	14.70	8200	9.00	59.70	3.50	8700	9.00	58.90	3.50	8700	9.00	59.30	3.50	8600	9.00	57.40	7.30	→23%
34	N MIAMI AVENUE	878268	NORTH MIAMI AVENUE, 200' SOUTH OF NW 20TH STREET	87032501	-	-	-	-	-	-	-	-	31500	9.00	55.70	16.00	31000	9.00	52.40	16.20	31000	9.00	54.50	17.40	32000	9.00	54.70	13.70	* 2%
35	WEST DIXIE HWY	878353	WEST DIXIE HWY, 200' SOUTH OF NE 192ND STREET	87550504	-	-	-	-	-	-	-	-	-	-	-	-	11900	9.00	52.40	16.20	12100	9.00	54.50	6.70	12500	9.00	54.70	4.10	→5%
36	W DIXIE HWY	878354	WEST DIXIE HWY, 200' SOUTH OF NE 215 ST	87550505	-	-	-	-	-	-	-	-	5000	9.00	55.70	16.00	5000	9.00	52.40	16.20	5000	9.00	54.50	17.40	5200	9.00	54.70	13.70	→ 4%
37	NW/NE 13TH STREET	878423	NW/NE 13 ST, 200 FT W OF NW MIAMI CT (2011 OFF SYSTEM CYCLE)	87000172	-	-	-	-	-	-	-	-	400	9.00	59.70	16.00	400	9.00	58.90	16.20	350	9.00	59.30	19.10	350	9.00	57.40	7.30	- 13%
38	NE 4 CT	878436	NE 4 CT, 200 FT S OF NE 67 ST (2011 OFF SYSTEM CYCLE)	87000207	-	-	-	-	-	-	-	-	5200	9.00	59.70	16.00	5200	9.00	58.90	16.20	5700	9.00	59.30	10.70	5700	9.00	57.40	5.00	1 0%
39	NORTH MIAMI AVE	878598	N MIAMI AVE, 150 FT N OF NE 5 ST	87032500	-	-	-	-	-	-	-	-	4400	9.00	99.90	16.00	4400	9.00	99.90	16.20	4400	9.00	99.90	19.10	6600	9.00	99.90	7.30	1 50%
40	NE 61 ST/DR MLK JR B	878627	NW 62 ST/DR MLK JR B, 100' EAST OF NE 4 AV (2011 OFF SYSTEM CYCLE)	87000211	-	-	-	-	-	-	-	-	4100	9.00	99.90	16.00	4100	9.00	99.90	16.20	4100	9.00	99.90	10.70	4100	9.00	99.90	5.00	₽ 0%



3.1.8 Existing Rail Activity

The existing NE Corridor railroad track is a segment of the greater 351-mile continuous rail system known as the Florida East Coast Railway (FECR). The rail line is active from Miami to Jacksonville and today is utilized for the transport of freight products only. The American Association of Railroads (AAR) classifies railroads operating in the United States into one of three categories based on the amount of revenue-and track miles. Class I railroads represent a vast majority of total rail revenues and track mileage. Regional railroads generally provide service to selected areas of the country, mainly connecting neighboring states and/or economic centers (including intrastate). Generally, a Class I railroad will transport the freight the majority of the distance, with the short line providing the final step of service directly to the customer. Most short line railroads depend on Class I traffic for a substantial portion of their revenue. The FECR is classified as a Regional Railroad.

The FECR provides a direct route through South Florida's heavily congested urban areas making it a viable option for vendors and distributors seeking efficient ways to ensure timely transport of goods. According to the AAR, one train can carry a load equal to 280 trucks, and are considered to be four times more fuel efficient than trucks. The FECR maintains direct access to Port of Miami, Port Everglades (Fort Lauderdale), and Port of Palm Beach. According to FECR's available Annual Report, in 2013, FECR serviced over 500 customers and transported over 501,000 units. The majority of materials transported were: intermodal containers and trailers, crushed rock (aggregate), automobiles, food products, chemicals and other industrial products.

Aspects that enhance rail's competitive advantage over trucking include:

- Capability to transport larger shipment sizes than trucks
- Capability to transport product over longer distances than trucks
- Less dependent on return haul requirements compared to trucking
- Reduced environmental impact

Aspects that enhance rail's competitiveness over water options include:

- Capability for rail to transport larger shipments, with higher density as water vessels are limited by water depth and size of shipment
- Railroads have a more direct route between origin and destination compared to water vessels
- Rail benefits from lower loading and unloading costs



Figure 26 - Miami-Dade County Existing Rail Network





Table 8 – NE Corridor – Crossing Information

Map Index#	RR Street Crossing	Primary Operating Railroad	Crossing number	Position	Туре	Rail Crash History (2012- 2016)	Roadway	Non- Motorized	Total Fatalities	Total Serious Injuries	Prediction	FDOT Ranking	# of trains	Max Speed	AADT	#Trains* AADT
1	Pedestrian Arena	FEC	273133V	At Grade	NA	NA	0	0	0	0	N/A	N/A	1	25		
2	NE 36th St	FEC	272633P	At Grade	Public	0	0	0	0	0	1.09%	1	4	15	15500	62,000
3	NE 125th ST	FEC	272612W	At Grade	Public	1	0	0	0	0	0.09%	1	18	45	33350	600,300
4	NE 163rd St	FEC	272604E	At Grade	Public	0	0	0	0	0	5.68%	1	18	45	44500	801,000
5	NE 203rd St	FEC	272596P	At Grade	Public	0	1	0	0	0	6.3%	1	34	50	49600	1,686,400

Figure 26 Miami-Dade County Existing Rail Network above displays a total of twenty-nine rail crossings along the NE Corridor between Aventura to Port Miami. **Table 8 NE Corridor – Crossing Information** represents five NE Corridor rail crossings along the corridor. According to the Federal Rail Administration (FRA), between 2012 – 2016, the NE Corridor experienced one Rail Crash at the NE 125th Street crossing. No fatalities or serious injuries were reported. In addition, within the same timeframe, one automobile crash was reported at the crossing of NE 203rd Street. No fatalities or serious injuries were reported. Based on the FRA's Rail Crossing Crash Prediction Index, there is a 6.32% probability of a future crash this year at NE 203rd Street and 5.68% probability at NE 163rd Street respectively. These predictions do not include future train traffic from Brightline and Tri-Rail Coastal Link.

The FECR includes a rail spur that heads west along NW/NE 36th Street connecting to existing Trirail to the west and CSX rail line. Train traffic along the NE Corridor railway will experience different levels of activity north and south of NW 36th Street as the corridor south of the 36th Street Tracks will experience Tri-rail and Brightline trains and the segment north of the 36th Street tracks will only experience the Brightline trains. Existing train traffic south of NW/NE 36th Street currently experiences four freights trains per day, with a max speed averaging 15 mph to 25 mph and is expected to experience 25 new Tri-rail trains and 32 new Brightline trains in 2018. North of NW/NE 36th Street, the number of trains increases to 18 to 32 trains per day with a max speed of 15mph to 45mph and will experience 32 new Brightline trains in 2018.



3.1.9 Tri- Rail Station Area Opportunities Site Review

The literature review of the NE Corridor included the Tri-Rail Coastal Link Station Area Opportunity Plan. In the document, the SFRTA proposes a series of potential locations for Coastal Link transit stations along the tri-county area adjacent to the FEC railway. For Miami-Dade County, the majority of the railway lies parallel to Biscayne Boulevard. The station areas proposed for Miami-Dade County are the following:

- Government Center Downtown Miami
- NE 11th Street @ Biscayne Blvd
- NE 36th Street @ Biscayne Blvd
- NE 55th Street @ Biscayne Blvd
- NE 79th Street @ Biscayne Blvd
- NE 125th Street @ Biscayne Blvd
- NE 163rd Street @ Biscayne Blvd
- NE 192nd Street @ Biscayne Blvd

The study corridor SR 5 / US 1 / Biscayne Blvd is served by two major Interstate Highways, a variety of State Roads arterial and collector roadways. For example, the two major interstates serve by the study corridor are Interstate 195 / Julia Tuttle Causeway and Interstate 395 / MacArthur Causeway followed by many arterial roadways SR 856 / William Lehman Causeway, SR 826 / NE 163rd Street, SR 860 / NE 185th Street / Miami Gardens Drive and SR 934 / NW 79th Street etc. Other roadways in the study corridor include NE 203rd Street / Ives Dairy Road, Aventura Boulevard, NE 183rd Street, NE 151st Street, NE 125th Street, NE 107th Street, NE 96th Street and NE 15th Street.

Within the study limits, SR 5 / US 1 / Biscayne Blvd is a divided, eight, six and four lanes facility with a mixture of raised landscaping and non-landscaping medians with a small portion containing painted medians. South of NE 38th Street at the study corridor is an un-divided four lane roadway.

The following images and descriptions summarize existing conditions of proposed locations along the NE Corridor.

3.1.9.1 Government Center – Downtown Miami

The proposed Tri-Rail Government Center Station encompasses three existing rapid transit stations; Government Center Metrorail, Overtown / Arena Metrorail, and the Wilkie D. Ferguson Metromover Station and falls within the City of Miami. These stations represent the urban core of Miami-Dade County with surrounding land uses including a wide array of high density



SMART PLAN CORRIDOR INVENTORY - NORTHEAST CORRIDOR

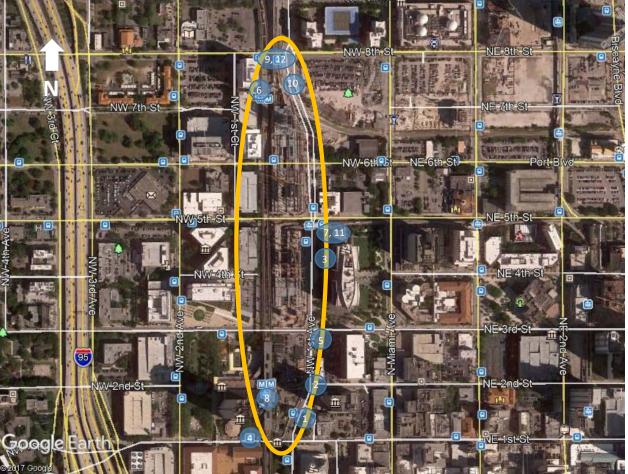
residential, commercial, mixed-use. Metrorail provides passengers with metropolitan connectivity with stations as far south as Dadeland, Miami Intermodal Station to the west, and Palmetto Station to the north.

The Metromover station provides passengers with urban connectivity with stations connecting to Brickell in the south and the Omni Center to the north. The land surrounding the Overtown Metrorail station is undergoing significant redevelopment as the incoming Miami Central building is constructed adjacent to the existing Metrorail. The All Aboard Florida's Brightline and Tri-Rail Coastal Link will begin and terminate at this point. Once completed the Miami Central Station will provide passengers with heavy rail commuter services offering regional connectivity heading as far north as Orlando for Brightline; and Jupiter for Tri-Rail.

Intersecting roadways for this station include NE 1st Street to NE 8th Street. The Government Center Plaza services numerous Miami-County Bus and City of Miami Trolley routes. Bike share stations and bike parking are located near the station. The configuration of the station has the incoming commuter trains traveling from at-grade to above grade as it terminates at the Overtown station. An aerial image is provided in **Figure 27 - Government Center - Downtown Miami**.







- 1. Government Center Metrorail station. The adjacent building is the headquarters of Miami-Dade County Government services.
- 2. Government Center Metrorail station pedestrian access along Biscayne Boulevard.
- 3. Miami Central construction facing south.
- Government Center pedestrian plaza. The plaza offers pedestrian and bicycle access to Metrorail and Metromover stations. The plaza is utilized as an activation space for community programs and pop-u markets.
- Overtown Metrorail station undergoing redevelopment for Miami Central Building and Brightline / Tri-Rail station.
- 6. Overtown Transit Village adjacent to Metrorail station. The building includes headquarters for Miami-Dade Department of Transportation and Public Works.
- 7. Wilkie D. Ferguson Metromover station platform.
- 8. Government Center Metromover station platform.
- 9. Existing Overtown Metrorail station with incoming Miami Central Building construction on top.
- 10. Brightline / Tri-Rail Coastal Link above grade connection to downtown Miami.
- 11. Wilkie D. Ferguson Metromover station platform direct connection to Miami Central.
- 12. Existing pedestrian plaza on north side of Overtown station and parallel to FEC railway.



1. Government Center Metrorail station. The adjacent building is the headquarters of Miami-Dade County Government services.



2. Government Center Metrorail station pedestrian access along Biscayne Boulevard.



3. Miami Central construction facing south



4. Government Center pedestrian plaza. The plaza offers pedestrian and bicycle access to Metrorail and Metromover stations. The plaza is utilized as an activation space for community programs and pop-u markets.



5. Overtown Metrorail station undergoing redevelopment for Miami Central Building and Brightline / Tri-Rail station.



6. Overtown Transit Village adjacent to Metrorail station. The building includes headquarters for Miami-Dade Department of Transportation and Public Works.



7. Wilkie D. Ferguson Metromover station platform



8. Government Center station Metromover platform



9. Existing Overtown Metrorail station with incoming Miami Central Building construction on top.



10. Brightline / Tri-Rail Coastal Link above grade connection to downtown Miami.



11. Wilkie D. Ferguson Metromover station platform direct connection to Miami Central.



12. Existing pedestrian plaza on north side of Overtown station and parallel to FEC railway.



3.1.9.2 NE 11th Street @ Biscayne Blvd.

Existing Conditions

The proposed Tri-Rail NW 11th Street Station is located a few blocks north of the Government Center Station and falls within the City of Miami. The current site appears constrained considering that the train tracks are at an angle as the train is traveling to an above grade station.

Existing land use shows large parcels of vacant land on the east side of the tracks. Sidewalk connections exist on both sides of 11th Street. The newly constructed berm supporting the elevated tracks form a large scale physical barrier bisecting both ends of NE 11th Street. There are currently no bicycle facilities existing along NE 11th Street.

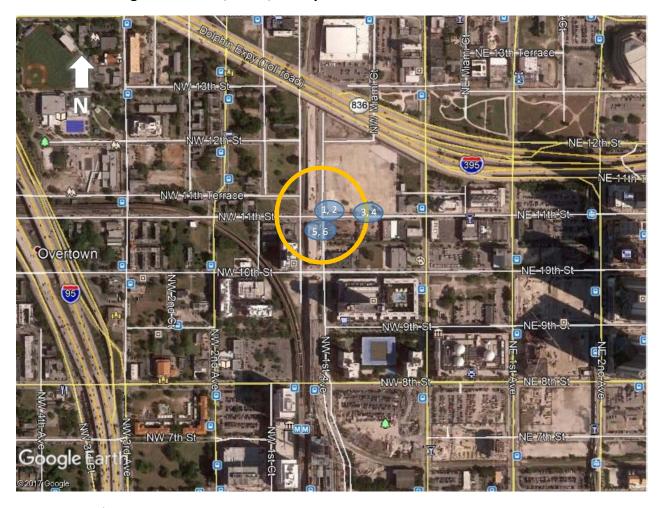
Existing development surrounding the proposed station location shows high-density mixed-use and residential development.

SR 5 / US 1 / Biscayne Boulevard and NE 11th Street

The intersection is a signalized four-legged intersection. NE 11th Street is an east-west two-lane, undivided roadway classified as urban minor arterial within the study limits. Standard crosswalks exist on all approaches of the intersection. The pedestrian signal heads (Countdown type) at the intersection are equipped with pedestrian actuated push buttons. All signal displays at the intersection appear to be in good condition. An aerial image of the signalized intersection is provided in Figure 28 - SR 5 / US 1 / Biscayne Boulevard and NE 11th Street.



Figure 28 - SR 5 / US 1 / Biscayne Boulevard and NE 11th Street



- 1. NE 11th Street facing east. High density development can be seen along Biscayne Blvd.
- 2. NE 11th Street, north side shows existing sidewalks and vacant land.
- 3. *NE* 11th Street, north side shows existing high-density development.
- 4. NE 11th Street facing west. Notice the above grade rail crossing.
- 5. NE 11th Street, south side shows existing sidewalks and vacant land.
- 6. NE 11th Street, south side shows above grade construction of rail line heading toward Government Center.



1. NE 11th Street facing east. High density development can be seen along Biscayne Blvd.



2. NE 11th Street, north side shows existing sidewalks and vacant land.



3. NE 11th Street, north side shows existing high-density development.



4. NE 11^{th} Street facing west. Notice the above grade rail crossing.



5. NE 11th Street, south side shows existing sidewalks and vacant land.



6. NE 11th Street, south side shows above grade construction of rail line heading toward Government Center.



3.1.9.3 NE 36th Street @ Biscayne Blvd.

Existing Conditions

The proposed NE 36th Street station location is located within the Midtown / Wynwood community and falls within the City of Miami. The Midtown development is a large scale mixed use development that would lie directly adjacent to the proposed station. The development provides an array of retail shops and personal care services. NE 36th Street is also a popular corridor for the arts community. Numerous art galleries extend along the corridor and continue north of NE 36th Street into the Design District, a popular destination serving customers with highend retail shops. The Julia Tuttle Causeway exists parallel to NE 36th Street and is a popular connection to Miami Beach.

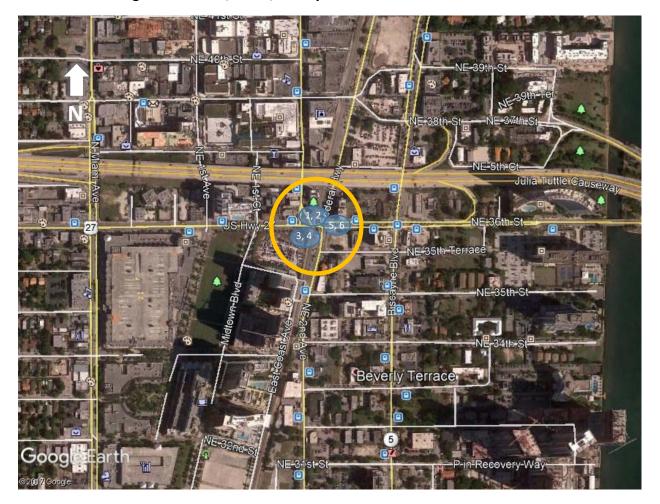
SR 5 / US 1 / Biscayne Boulevard and NE 36th Street

The intersection is a signalized four-legged intersection. NE 36th Street is an east-west two-lane, undivided roadway classified as urban minor arterial within the study limits. Emphasis crosswalks exist on all approaches of the intersection. The pedestrian signal heads (countdown type) at the intersection are equipped with pedestrian actuated push buttons. All signal displays at the intersection appear to be in good condition.

The Midtown development provides wide sidewalks, on-street parking, parking garages and bicycle parking. Bus stops are located at the NE 36th Street and SR 5 / US 1 / Biscayne Blvd. intersection. An aerial image of the signalized intersection is provided in **Figure 29 – SR 5 / US 1** / **Biscayne Boulevard and NE 36th Street**.



Figure 29 - SR 5 / US 1 / Biscayne Boulevard and NE 36th Street



- 1. NE 36th Street tracks facing north.
- 2. NE 36th Street @ Federal Highway facing west.
- 3. Federal Highway facing north.
- 4. NE 36th Street tracks facing south.
- 5. NE 36th Street facing east.
- 6. Federal Highway facing south.



1. NE 36th Street tracks facing north



4. NE 36th Street tracks facing south



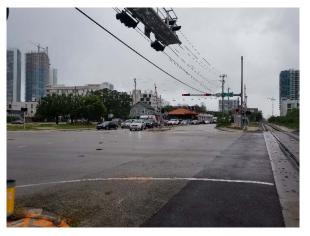
2. NE 36th Street @ Federal Hwy facing west



5. NE 36th Street facing east



3. Federal Hwy facing north



6. Federal Hwy facing south



3.1.9.4 NE 55th Street @ Biscayne Blvd.

Existing Conditions

The proposed Tri-Rail NE 55th Street station is positioned at the intersection of NE 55th Street and Federal Hwy, and is located within the City of Miami.

Surrounding land use is mix of low density residential and commercial development. There is a parcel(s) present along Biscayne Boulevard approximately 300 feet east of the proposed station location. This proposed location does not provide connection to the beach as the closest causeways are Julia Tuttle Causeway to the south and 123rd Street's Broad Causeway to the north.

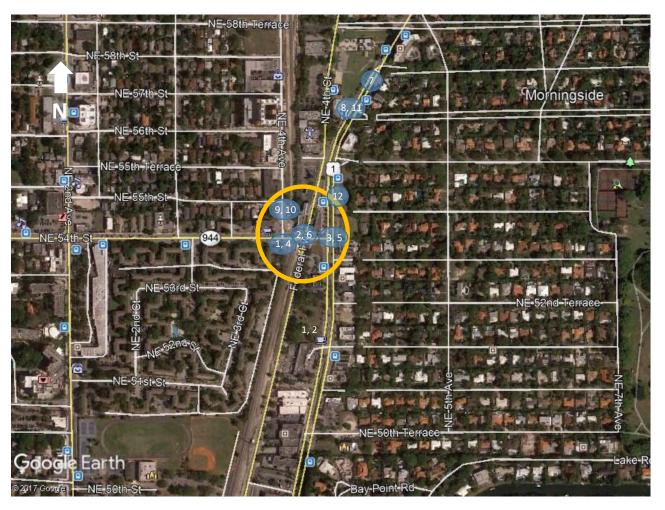
SR 5 / US 1 / Biscayne Boulevard and NE 55th Street

The intersection is an un-signalized three-legged intersection. NE 55th Street is an east-west two-lane, undivided roadway classified as urban minor arterial within the study limits. Standard crosswalk exists on the east leg of the intersection.

This particular location is a complex intersection as other north south corridor lie in close proximity to each other including SR 5 / US 1 / Biscayne Boulevard Federal Highway, the FEC Railway and NE 4th Avenue with NE 55th Street intersecting with each within approximately 300 feet of each other. Bus stops are located approximately 300 feet away along the north and south legs of Biscayne Blvd. There are no designated bicycle facilities at the intersection; however, there are wide sidewalks present on both sides of Biscayne Blvd. A bike share station is located approximately 650 feet away from the proposed station location. Crosswalks are present on all four corners NE 54th Street and Federal Hwy, and a high visibility crosswalk connects Federal Hwy to Biscayne Blvd. An aerial image of the un-signalized intersection is provided in **Figure 30 - SR 5** / **US 1 / Biscayne Boulevard and NE 55th Street.**



Figure 30 - SR 5 / US 1 / Biscayne Boulevard and NE 55th Street



- 1. Railway facing north.
- 2. NE 55th Street @ Federal Hwy intersection facing west.
- 3. Biscayne Blvd facing south.
- 4. Railway facing south.
- 5. NE 55th Street @ Biscayne Blvd facing west.
- 6. Biscayne Blvd facing east.
- 7. Nearby bike share station on northside of proposed station location.
- 8. Biscayne Blvd and Federal Hwy running parallel to each other facing south.
- 9. Federal Hwy @ NE 54th Street facing east.
- 10. 4th Avenue facing north.
- 11. Biscayne Blvd and Federal Hwy running parallel to each other facing north.
- 12. Vacant land adjacent to Biscayne Blvd facing north.





2. NE 55th Street @ Federal Hwy intersection facing west



3. Biscayne Blvd facing south



4. Railway facing south



5. NE 55th Street @ Biscayne Blvd facing west



6. Biscayne Blvd facing east



7. Nearby bike share station on northside of proposed station location



8. Biscayne Blvd. and Federal Hwy running parallel to each other facing south



9. Federal Hwy @ NE 54th Street facing east



10. 4th Avenue facing north



11. Biscayne Blvd. and Federal Hwy running parallel to each other facing north



12. Vacant land adjacent to Biscayne Blvd. facing north



3.1.9.5 NE 79th Street @ Biscayne Blvd

Existing Conditions

The proposed Tri-Rail NE 79th Street station location is positioned at the intersection of NE 79th Street and 4th Avenue, and is located in the City of Miami.

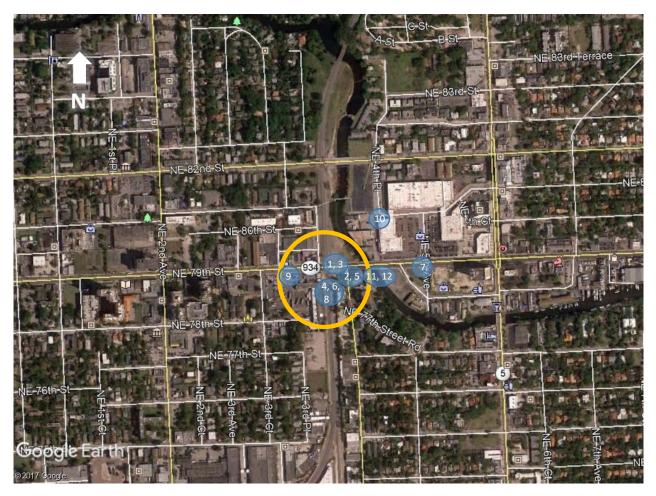
Surrounding land use is mix of light industrial and commercial development. Directly NE of the rail's adjacent right-of-way is a large parcel of open space. The proposed station location connects to the North Bay Causeway providing connection to North Bay Village and the City of Miami Beach.

SR 5 / US 1 / Biscayne Boulevard and NE 79th Street

The intersection is a signalized four-legged intersection. SR 934 / NE 79th Street is an east-west four-lane, divided roadway classified as urban minor arterial within the study limits. Emphasis crosswalks exist on all approaches of the intersection. One bus stop is located on the north side of NE 79th Street. Bike sharrow markings are visible on east and westbound approach of NE 79th Street. Sidewalks exist on all four corners of the intersection that extend further into the commercial corridor. An aerial image of the signalized intersection is provided in **Figure 31 - SR 5** / **US 1** / **Biscayne Boulevard and SR 934** / **NE 79th Street**.



Figure 31 - SR 5 / US 1 / Biscayne Boulevard and SR 934 / NE 79th Street



- 1. Railway facing north.
- 2. NE 4th Avenue @ 79th Street intersection facing west.
- 3. Vacant land on north side of tracks.
- 4. Railway facing south.
- 5. NE 4th Avenue @ 79th Street intersection facing east.
- 6. Waterway adjacent to rail line facing north.
- 7. Nearby shopping center on east side of proposed station location.
- 8. 4th Avenue @ 79th Street intersection facing south.
- 9. NE 79th Street facing west.
- 10. Nearby parking lot on east side of proposed station location.
- 11. Nearby shopping center of proposed station location with adjacent 79th Street facing east.
- 12. Existing pedestrian connection to proposed 79th Street station location.



1. Railway facing north





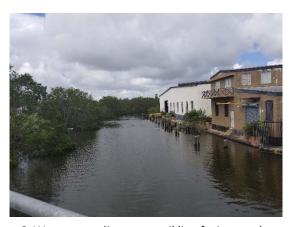
2. NE 4th Avenue @ 79th Street intersection facing west



5. NE 4^{th} Avenue @ 79^{th} Street intersection facing east



3. Vacant land on north side of tracks



6. Waterway adjacent to rail line facing north



7. Nearby shopping center on east side of proposed station location



8. 4th Avenue @ 79th Street intersection facing south



9. NE 79th Street facing west



10. Nearby parking lot on east side of proposed station location



11. Nearby shopping center of proposed station location with adjacent 79th Street facing east



12. Existing pedestrian connection to proposed 79th Street station location



3.1.9.6 NE 125th Street @ Biscayne Blvd

Existing Conditions

The proposed Tri-Rail 125th Street station is positioned at the intersection of NE 125th Street and 13th Place, and is located within the City of North Miami. Moving east of the intersection, NE 125th Street becomes NE 123rd Street.

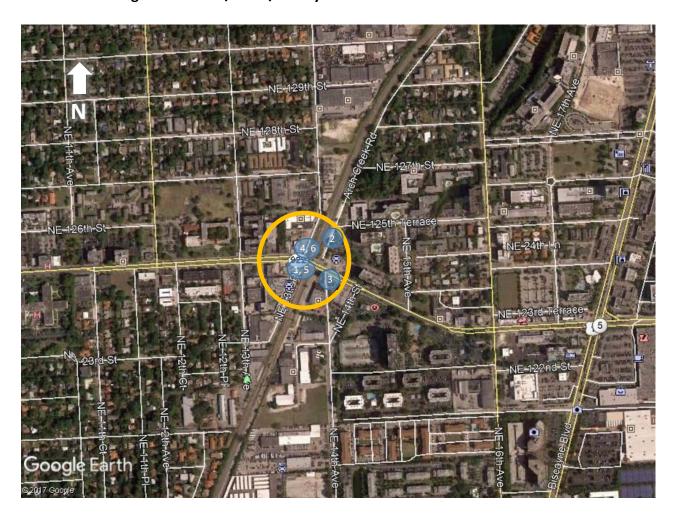
Surrounding land use is mix of light industrial, commercial and residential development. Directly adjacent to the rail's right-of-way is a large amount of open space with a dirt road that currently provides parking and connection to nearby residences on the east side of the tracks. The proposed station location connects to the Broadway Causeway providing connection to Bay Harbor Islands, Bal Harbor, Surfside and Indian Creek Village.

SR 5 / US 1 / Biscayne Boulevard and NE 125th Street

The intersection is an un-signalized three-legged intersection. NE 125th Street is an east-west two-lane, undivided roadway classified as urban minor arterial within the study limits. Standard crosswalks exist on the west leg of the intersection. Bus stops are located on the north and south sides of the NE 125th Street. Bike sharrow markings are visible on east and westbound approach of NE 125th Street. Sidewalks exist on all four corners of the intersection that extend further into the commercial corridor. An aerial image of the un-signalized intersection is provided in **Figure 32 - SR 5 / US 1 / Biscayne Boulevard and NE 125th Street**.



Figure 32 - SR 5 / US 1 / Biscayne Boulevard and NE 125th Street



- 1. Existing rail line facing south.
- 2. Vacant land adjacent to proposed station location.
- 3. NE 125th Street facing east.
- 4. Existing rail line facing north.
- 5. Existing NE 125th Street @ Biscayne Blvd. intersection.
- 6. NE 125th Street facing west.



1. Existing rail line facing south



4. Existing rail line facing north



2. Vacant land adjacent to proposed station location



5. Exiting NE 125th Street @ Biscayne Blvd intersection



3. NE 125th Street facing east



6. NE 125th Street facing west



3.1.9.7 NE 163rd Street @ Biscayne Blvd

Existing Conditions

The proposed Tri-Rail 163rd Street station is positioned at the intersection of NE 163rd Street and Biscayne Blvd, and is located within the City of North Miami Beach.

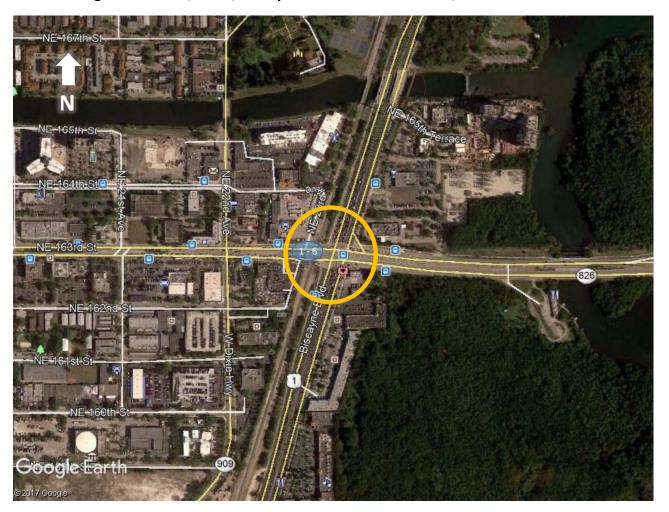
Surrounding land use is mix of light industrial, commercial development, and green space. Moving east of the intersection is Oleta River State Park, and two blocks north of the intersection is East Greynolds Park. Nearby major developments include Florida International University's Biscayne Bay Campus and a water treatment plant. NE 163rd Street extends into the beach connecting to Bella Vista Island and eventually terminating at Sunny Isles Beach.

SR 5 / US 1 / Biscayne Boulevard and SR 826 / NE 163rd Street

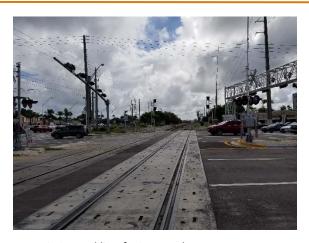
The intersection is a signalized four-legged intersection. SR 826 / NE 163rd Street is an east-west six-lane, divided roadway classified as urban minor arterial within the study limits. Standard crosswalks exist on all approaches of the intersection. The pedestrian signal heads (countdown type) at the intersection are equipped with pedestrian actuated push buttons. All signal displays at the intersection appear to be in good condition. Bus stops are located on all four corners of the intersection. There are no existing bicycle facilities present along NE 163rd Street or Biscayne Blvd. Sidewalks exist on all four corners of the intersection. An aerial image of the signalized intersection is provided in **Figure 33 - SR 5 / US 1 / Biscayne Boulevard and SR 826 / NE 163rd Street**.



Figure 33 - SR 5 / US 1 / Biscayne Boulevard and SR 826 / NE 163rd Street



- 1. Existing rail line facing south.
- 2. Existing NE 163rd Street @ Biscayne Blvd intersection.
- 3. NE 163rd Street facing west.
- 4. Existing rail line facing north.
- 5. Biscayne Blvd facing north.
- 6. NE 163rd Street facing east.



1. Existing rail line facing south



2. Existing NE 163^{rd} Street @ Biscayne Blvd intersection



3. NE 163rd Street facing west



4. Existing rail line facing north



5. Biscayne Blvd. facing north



6. NE 163rd Street facing east



3.1.9.8 NE 192nd Street @ Biscayne Blvd.

Existing Conditions

The proposed Tri-Rail SR 856 / William Lehman Causeway / 192nd Street station is positioned at the T-intersection of SR 856 / William Lehman Causeway / 192nd Street and Biscayne Blvd., and is bisected by the City of Aventura and unincorporated Miami-Dade County.

Surrounding land use is mixed with light industrial, office, and commercial space. Nearby major development includes Aventura Mall, a regional shopping destination. Buildings on the west side of the rail line appear to be condemned. SR 856 / William Lehman Causeway / 192nd Street extends into the beach providing direct connection to the City of Sunny Isles Beach and Golden Beach.

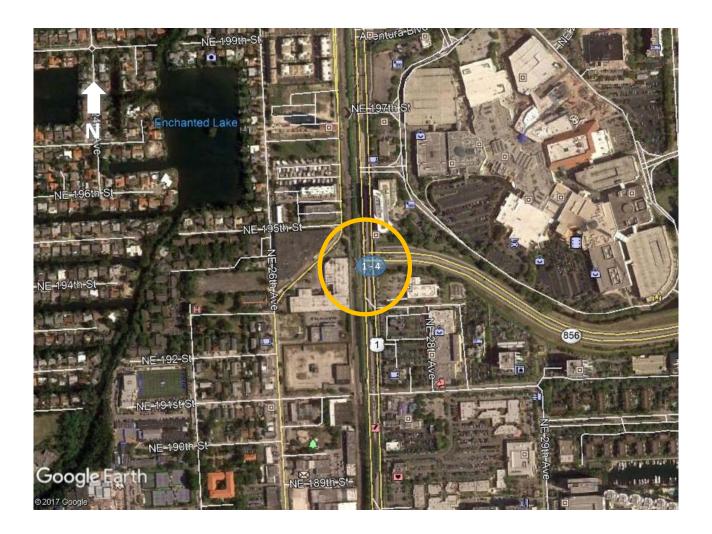
SR 5 / US 1 / Biscayne Boulevard and NE 192nd Street

The intersection is a signalized three-legged intersection. SR 856 / William Lehman Causeway / 192nd Street is an east-west six-lane, divided roadway classified as urban minor arterial within the study limits. Standard crosswalk exists on the east leg of the intersection providing pedestrian connection to the north side of SR 856 / William Lehman Causeway / 192nd Street. The pedestrian signal heads (countdown type) at the intersection are equipped with pedestrian actuated push buttons. All signal displays at the intersection appear to be in good condition.

The existing T-intersection does not provide access or direct connection to the railway. The railway is currently blocked off by foliage and fencing. There are no bus stops located at the T-intersection of NE 192nd Street and Biscayne Blvd. There are no designated bicycle facilities present along NE 192nd Street or Biscayne Blvd, however a paved shoulder does exist along NE 192nd Street as it moves east. Sidewalks exist on the east side of Biscayne Boulevard only. Sidewalks terminate at the T-intersection of NE 192nd Street. An aerial image of the signalized intersection is provided in Figure 34 - SR 5 / US 1 / Biscayne Blvd and SR 856 / William Lehman Causeway / 192nd Street.



Figure 34 - SR 5 / US 1 / Biscayne Blvd and SR 856 / William Lehman Causeway / 192nd Street



- 1. Facing west, existing T-intersection where NE 192nd Street adjoins to Biscayne Blvd. The existing rail line lies on the other side of the vegetation.
- 2. Existing NE 192nd Street @ Biscayne Blvd. intersection facing north.
- 3. NE 192nd Street @ Biscayne Blvd. facing east.
- 4. Existing NE 192nd Street @ Biscayne Blvd. intersection facing south.



1. Facing west, existing T-intersection where NE 192nd Street adjoins to Biscayne Blvd. The existing rail line lies on the other side of the vegetation



3. NE 192nd Street @ Biscayne Blvd. facing east



2. Existing NE 192^{nd} Street @ Biscayne Blvd. intersection facing north



4. Existing NE 192nd Street @ Biscayne Blvd. intersection facing south



4 Needs Assessment

4.1 Housing

One of the major challenges facing the south Florida region is the cost of housing and transportation. As development continues and jobs are created, there is a need to fill those jobs with workers that can either: live close to work or efficiently commute to work with reasonable out-of-pocket costs. The redevelopment of many low income or blighted areas brings jobs and economic development to areas, but may also prohibit the attraction of the appropriate work force due to transportation cost. As displayed in **Figures 35 – 42 Miami-Dade Housing + Transportation Overview**, Miami-Dade County scores very low in the Housing + Transportation Location Efficiency metrics, which evaluates proximity of jobs and services to various places and also evaluates the cost and effort of using transportation.

The City of Miami has implemented a density bonus for developers that set aside a portion of their residential developments. This type of initiative will need to continue to ensure equity in the corridor so that it does not become an exclusive, high-dollar corridor that is not accessible for working class residents to live.

Of all the cities in the Northeast Corridor influence area, only the City of Miami has a Location Efficiency metric greater than zero. Housing and transportation need to become more affordable in the Northeast Corridor area in order to facilitate the desired outcome of mode-shift.

Data from the US Bureau of Labor and Statistics indicates a general increase in retail, Service, and Hospitality jobs in Miami-Dade County. This trend in the Northeast Corridor is magnified due to the predominant types of jobs in the corridor. Existing and planned development are primarily for service, hospitality and retail-oriented uses. As mentioned previously, Miami is attempting to capture residents that work in these industries in the same areas of new development in order to facilitate better live-work balance in terms of commuting.



Figure 35 - Miami-Dade Housing + Transportation Overview

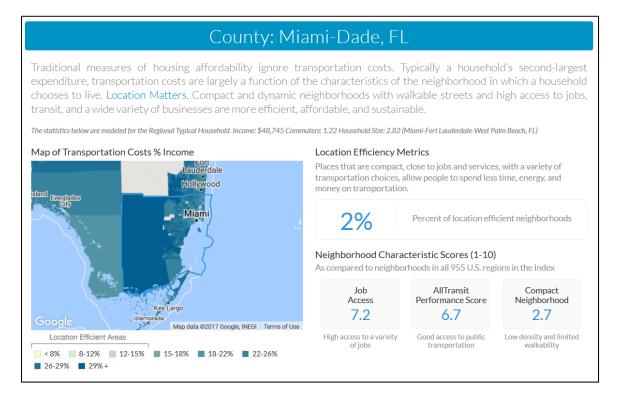


Figure 36 - Biscayne Park Housing + Transportation Overview

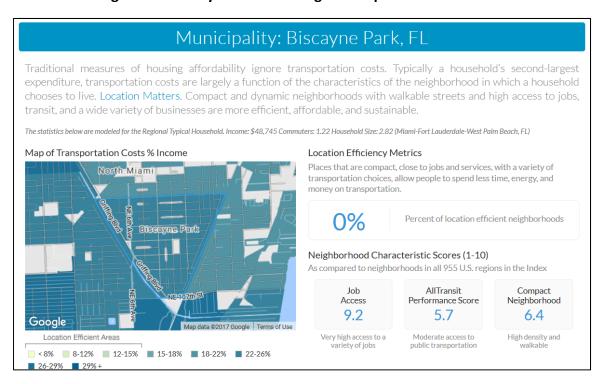




Figure 37 - Aventura Housing + Transportation Overview

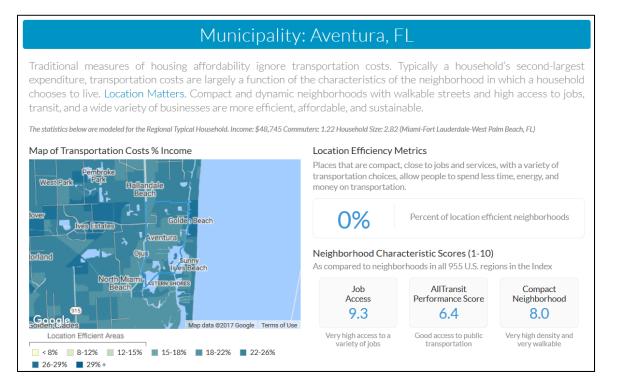


Figure 38 - Miami Housing + Transportation Overview

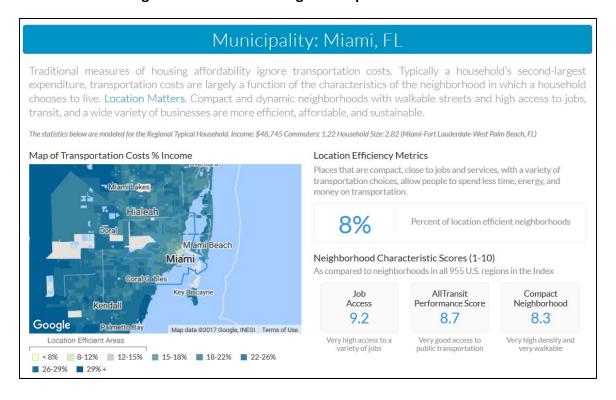




Figure 39 - El Portal Housing + Transportation Overview

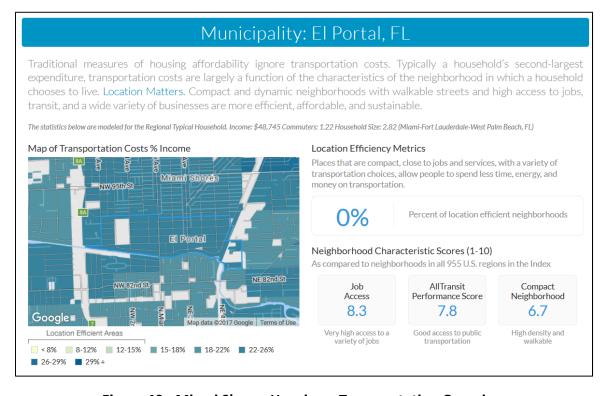


Figure 40 - Miami Shores Housing + Transportation Overview

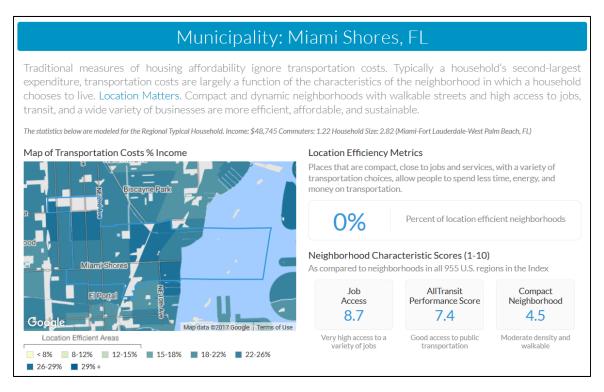




Figure 41 - North Miami Housing + Transportation Overview

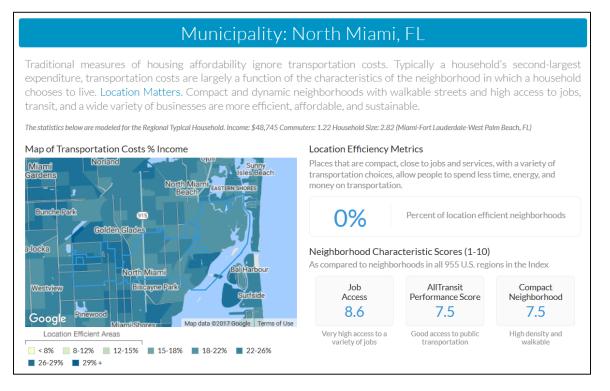
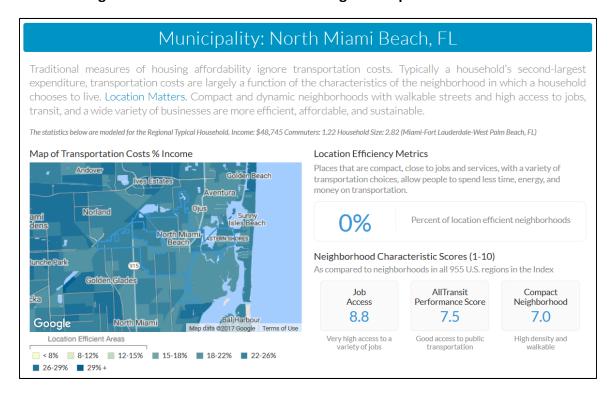


Figure 42 - North Miami Beach Housing + Transportation Overview





4.2 Transit and The Transportation Network

4.2.1 Transit

Overall, existing transit in the Northeast Corridor is respectable. Nearly every city in the corridor has circulator systems that connect to the major county and regional transit network. Improved, more reliable connections can be established through the creation of transit hubs and connections to facilitate travel over longer distances within the county. The CNT Toolbox shows the transit performance score for each of the cities along the corridor. The results are shown in Figure 42 - Transit Performance Score for Northeast Corridor Cities and Table 8 - Northeast Corridor City Rankings for Job Accessibility and Transit Ridership.



Figure 43 - Transit Performance Score for Northeast Corridor Cities

Table 9 - Northeast Corridor City Rankings for Job Accessibility and Transit Ridership

Location	Jobs Accessible in 30 minute trip Rank	% Commuters Who Use Transit Rank
North Miami Beach	1	8
Aventura	2	5
Biscayne Park	3	1
Miami-Dade County	4	4
North Miami	5	6
Miami Shores	6	2
El Portal	7	3
Miami	8	7

The need for these areas is to increase transit connectivity and ridership by residents in these cities. The City of North Miami Beach has the most jobs accessible in a 30-minute transit trip, yet ranks last in the percentage of commuters that use transit. Improving first-mile / last-mile connections are key to correcting this dynamic.



4.2.2 Roadway Network

The Northeast Corridor roadway network includes some of the busiest, most critical roads in Miami-Dade County. The east-west arterials provide access between I-95 and the business, residential and beach areas on the east side of the county. Downtown Miami endures a significant amount of traffic and congestion due to the fact that it is an employment, entertainment, and residential center for the county and region. Downtown Miami also provides access to Port of Miami to the east, and to major east-west highways (SR 836 and SR 112) to the west that connect to Miami International Airport and other destinations in western Miami-Dade. The historical traffic data indicates steady growth in traffic volumes, with future volumes forecasted to continue to increase.

Research along the corridor identified over 3000 parking spaces in surface lots and on-street parking. The count does not include parking garages within the Northeast Corridor study area. A majority of the parking identified was in parking lots. Modifications to local parking ordinances and regulations can allow for the redevelopment and reallocation of parking to accommodate a Transit Oriented Development pattern.

4.2.4 Transit Oriented Development

The Miami-Dade County Land Use Element of the Comprehensive Plan has provisions for Transit-Oriented Development. Objective LU-7 states:

"Miami-Dade County shall require all new development and redevelopment in existing and planned transit corridors and urban centers to be planned and designed to promote transit-oriented development (TOD), and transit use, which mixes residential, retail, office, open space and public uses in a pedestrian-friendly environment that promotes the use of rapid transit services."



The South Florida Regional Transit Authority (SFRTA) also initiated efforts this year to adopt TOD Policy. Resolution 17-01 was passed in support of this initiative.

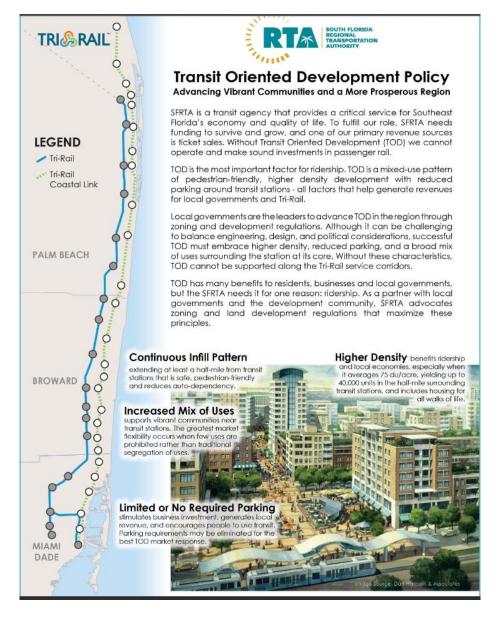


Figure 44 - SFRTA TOD Policy Outline

Most TOD guidance and regulation appears to be most refined at the county and regional level. The CNT Toolbox provides background demographic area on all existing and proposed transit sheds in Miami, but does not provide information on any specific regulations regarding requirements for TOD projects.



4.2.5 Non-Motorized

Finally, data displays that there are significant pedestrian / bicycle safety issues in the corridor. The FDOT Pedestrian and Bicycle Crash Cluster maps show that there are crash clusters along the entire corridor and that the areas at and around 185th Street, 123rd Street, 79th / 81st Street, and Downtown are some of the most significant in the County. Improvements to pedestrian and bicycle connectivity and accessibility to appropriate facilities will be crucial towards attracting more non-motorized travel throughout the corridor.



Figure 45 – 2014 – 2017 Pedestrian and Bicycle Crashes Section A

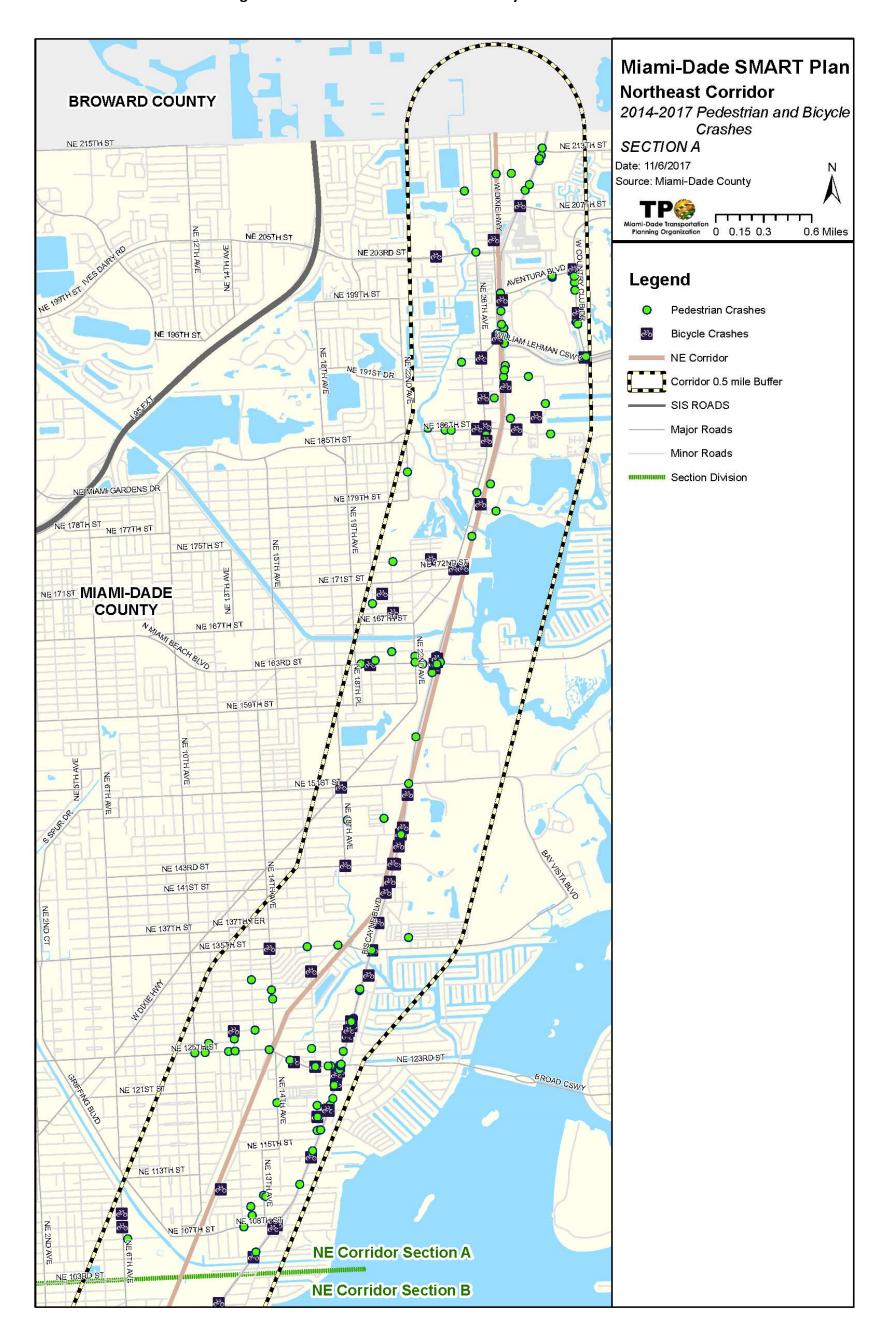
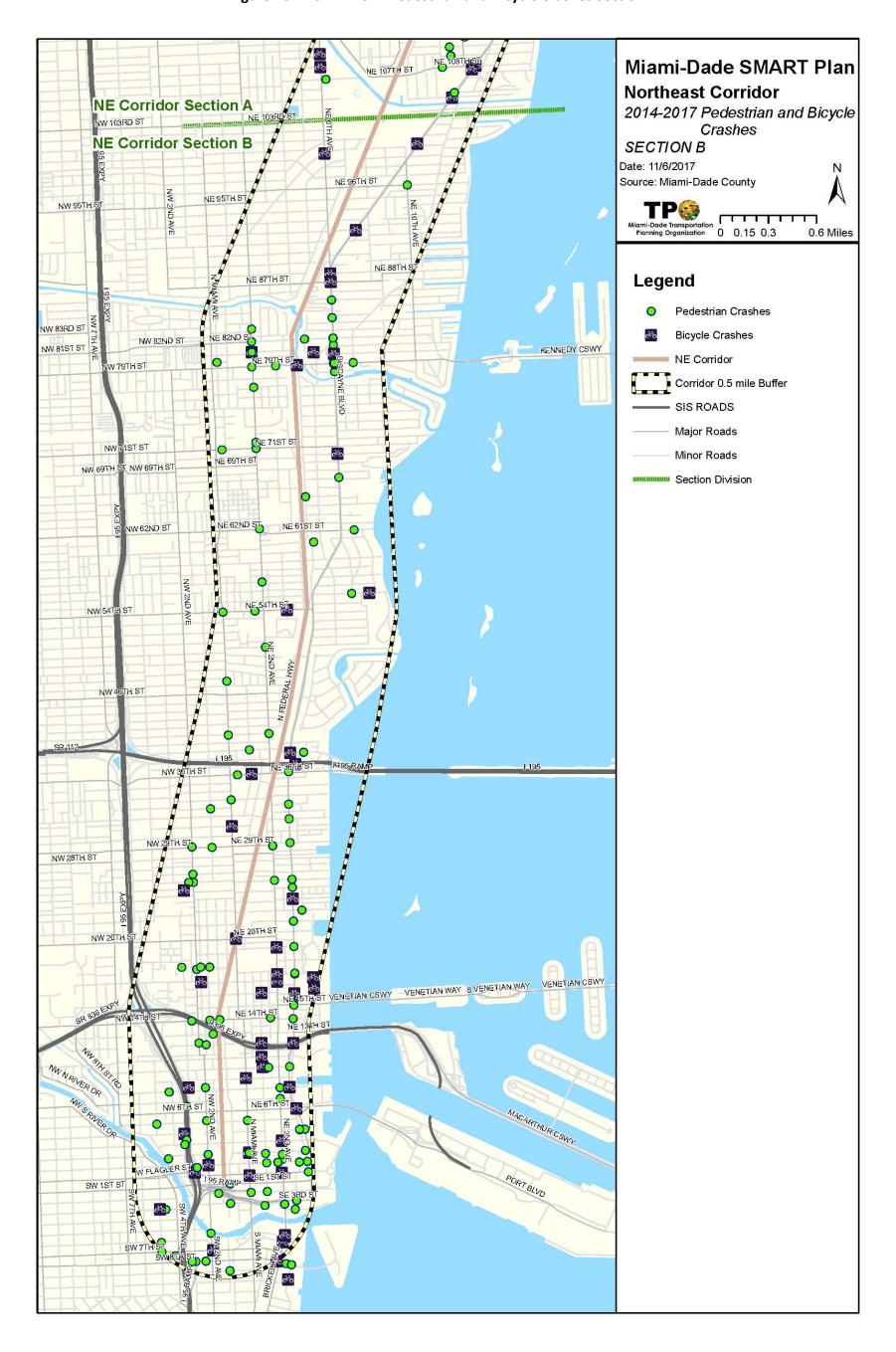




Figure 46 – 2014 – 2017 Pedestrian and Bicycle Crashes Section B





Conclusion

The NE Corridor Inventory report was focused on collecting all available demographic and socioeconomic data to prepare a preliminary inventory of the current transportation and land use along the corridor. As the greater SMART Plan study transitions to its next phase, planners, city officials, and the public will utilize the NE Corridor Inventory report as a reference to understand how the NE Corridor currently affects Miami-Dade County, before significant infrastructure and land use decisions are made. The NE Corridor Inventory report provides a starting point that applies context to an environment that currently harbors a considerable range of Miami-Dade communities, transportation facilities, urban land uses, natural areas, and major cultural destinations.

With additional future rapid transit infrastructure, the NE Corridor is likely to experience increased redevelopment and densification for several reasons: the corridor is already undergoing a surge in redevelopment activity, investment in fixed rapid transit has been proven across the country to attract developers and investment and fixed rapid transit will provide a great opportunity for commuters to move to the corridor providing very significant travel time benefits. Transit Oriented Development will be a necessary development approach to sustain growth and offer an improved quality of life to current and future constituents who will be living, working, learning, and playing along the corridor. Finally, as more people begin to utilize the corridor, safety for all modes from train to car to bike to foot must be reevaluated with a complete streets approach to ensure improved mobility for all travelers no matter the mode of choice.