79th Street Corridor Redevelopment Plan Transportation Analysis DRAFT REPORT

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TABLE OF CONTENTS

TABLE OF CONTENTS
LIST OF FIGURESii
LIST OF TABLES
INTRODUCTION1
REVIEW OF TRANSPORTATION PLANS 4 Miami-Dade County Comprehensive Development Master Plan 4 Traffic Circulation Subelement 5 Mass Transit Subelement 6 Miami-Dade 2025 Long Range Transportation Plan 7 Miami-Dade Transportation Improvement Program 8 Miami-Dade Transit Development Program 9 Tri-Rail Long Range Master Plan 10
EXISTING TRAFFIC CONDITIONS
EXISTING TRANSIT SERVICE18MDT Metrobus Service18MDT Metrorail Service21Tri-Rail Service24Amtrak Service26Jitney Service27
SUMMARY

LIST OF FIGURES

•

Figure 1.	Project Location Map	.2
•	Aerial View of Study Area	
	Roadway Functional Classification	
Figure 4.	Location of Traffic Signals	6
-	Metrobus Routes	

LIST OF TABLES

Table 1.	Comprehensive Development Master Plan Improvements	6
Table 2.	Long Range Transportation Plan Improvements	8
Table 3.	Transportation Improvement Program Improvements	9
	Transit Development Program Improvements	
	Traffic Data for Major Roadways	
Table 6.	Metrobus Route Information (Year 2001)	21
Table 7.	Metrorail Information (Year 2001)	23
Table 8.	System-wide Metrorail Information (Year 2001)	24
Table 9.	Tri-Rail Daily Boardings and Alightings	25

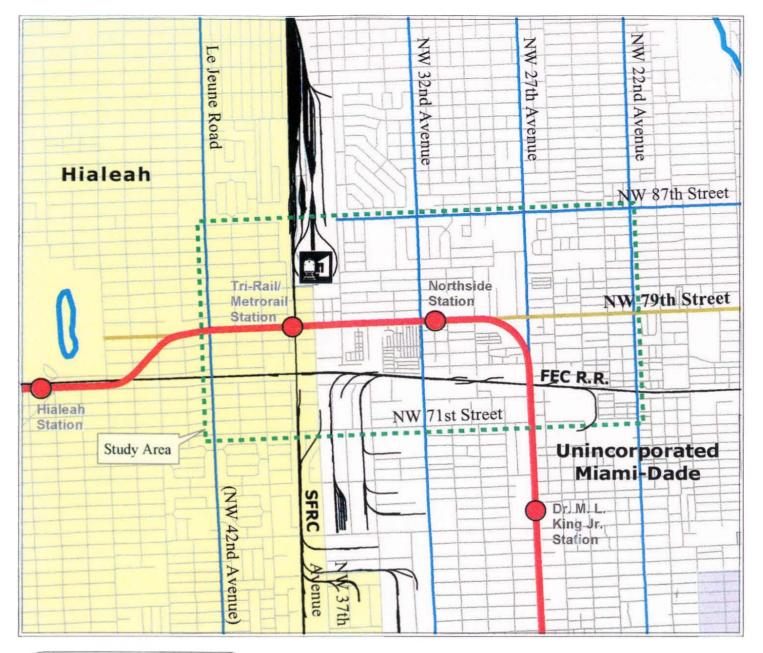
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INTRODUCTION

The 79th Street Corridor Redevelopment Plan seeks to promote transit oriented development (TOD) in the area of NW 79th Street in Miami-Dade County, Florida. The study area for the 79th Street Corridor Redevelopment Plan is bound by Le Jeune Road (NW 42nd Avenue) on the west, NW 22nd Avenue on the east, NW 71st Street on the south, and NW 87th Street on the north. The plan will attempt to spur redevelopment that is compatible with public transit. A major focus of the study is the transit stations located just north of NW 79th Street near NW 37th Avenue that serve Metrorail, Tri-Rail, and Amtrak. The general location of the study area is presented in Figure 1, and Figure 2 presents an aerial view of the study area.

A transit oriented development (TOD) seeks to create a sense of place that enhances community livability and sustainability. A TOD is often developed along an arterial roadway that includes a central transit stop or station. A more compact and diverse community is created by providing a variety of housing types and commercial uses in the TOD area. The design configuration and mix of buildings and activities emphasize pedestrian-oriented environments and encourage the use of public transportation. Urban open spaces and parks within the TOD furnish locations for community activities. Streets provide settings for local interaction with wide sidewalks, street trees, and seating for pedestrians and transit patrons. Public-private partnerships supporting TODs can help revise current patterns of growth and mitigate the effects of urban sprawl.

This report describes the transportation-related analyses provided by Kimley-Horn and Associates, Inc. for the "79th Street Corridor Redevelopment Plan." The report begins by describing a review of previous and ongoing transportation plans conducted for this study. Following this, the existing transportation conditions are inventoried, including existing transit service and existing traffic conditions. Following the review of existing transportation conditions, a summary is provided that includes a description of the next steps of the study to provide direction for the remaining transportation-related tasks.





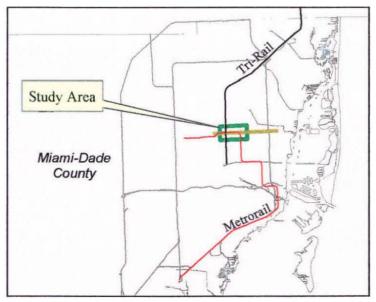


Figure 1. Project Location Map

79th Street Corridor Redevelopment Plan



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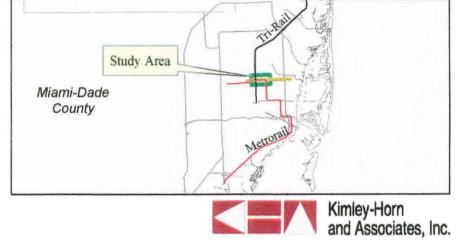


Figure 2. Aerial View of Study Area

79th Street Corridor Redevelopment Plan

REVIEW OF TRANSPORTATION PLANS

Transportation plans were reviewed in order to gather information about planned and programmed transportation improvements in the "79th Street Corridor Redevelopment Plan" study area. This effort represents a key study component so that recommendations and strategies may be developed consistent with improvements that have been identified in these plans.

The review undertaken for this project included the following transportation plans:

- Miami-Dade County Comprehensive Development Master Plan
- Miami-Dade 2025 Long Range Transportation Plan
- Miami-Dade Transportation Improvement Program
- Miami-Dade Transit Development Program
- Tri-Rail Master Plan

The findings of these reports are summarized below.

Miami-Dade County Comprehensive Development Master Plan

The *Miami-Dade Comprehensive Development Master Plan* (CDMP) provides the framework, that guides development within Miami-Dade County. The Plan is organized into the following ten "Plan Elements":

- 1. Land Use Element
- 2. Transportation Element
- 3. Housing Element
- 4. Conservation, Aquifer Recharge and Drainage Element
- 5. Water, Sewer, and Solid Waste Element
- 6. Recreation and Open Space Element
- 7. Coastal Management Element
- 8. Intergovernmental Coordination Element
- 9. Capital Improvements Elements
- 10. Educational Element

The "Transportation Element" was the primary focus of this review for the "79th Street Corridor Redevelopment Plan" study. The purpose of the "Transportation Element" of the CDMP is to plan for an integrated multimodal transportation system providing for the circulation of motorized and non-motorized traffic in Miami-Dade County. The "Transportation Element" is divided into five subelements, two of which are most relevant to this study. The "Traffic Circulation Subelement" addresses the needs of the automobile traffic, bicyclists, and pedestrians. The "Mass Transit Subelement" addresses the need to continue to promote and expand the public transportation system to increase its role as a major component of the County's overall transportation system.

Traffic Circulation Subelement

The "Traffic Circulation Subelement" (1) analyzes current roadway capacity and deficiencies in Miami-Dade County, (2) provides recommendations for improving future highway capacity, and (3) establishes goals, objectives, and policies aimed at meeting future needs. The overall goal of the "Traffic Circulation Subelement" is to develop, operate, and maintain a safe, efficient, and economical traffic circulation system in Miami-Dade County that provides ease of mobility for people and goods, is consistent with desired land use patterns, conserves energy, and protects the natural environment. Specific objectives toward attaining this goal include the following:

- Objective 1 All roadways in Miami-Dade County should operate at level of service (LOS) C or better.
- Objective 2 Right-of-way and corridors needed for existing and future transportation facilities should be designated and reserved.
- Objective 3 The County's transportation system should emphasize safe and efficient management of traffic flow.
- Objective 4 The "Traffic Circulation Subelement" should continue to be coordinated with the goals, objectives and policies of the "Land Use Element," including the land uses, "Urban Development Boundary," and "Urban Expansion Area" designated on the Land Use Plan map. The "Traffic Circulation Subelement" should also be coordinated with the goals, objectives, and policies of all other Elements of the CDMP.
- Objective 5 The traffic circulation system should protect community and neighborhood integrity.

- Objective 6 The transportation system should preserve environmentally sensitive areas, conserve energy and natural resources, and promote community aesthetic values.
- Objective 7 Miami-Dade County's "Traffic Circulation Subelement," and the plans and programs of the State, region and local jurisdiction, should continue to be coordinated.

The CDMP and the *Miami-Dade Long-Range Transportation Plan* (LRTP) are consistent in presenting the planned improvements to the transportation system. However, the improvements identified in the CDMP are based on the 2015 LRTP, which was the adopted transportation plan at the time the CDMP was developed. Nevertheless, the projects presented in Table 1 are listed as improvements in the CDMP and would affect the study area of the "79th Street Corridor Redevelopment Plan."

Priority Project / Facility From То Project Description **Golden Glades** Unfunded Central Parkway SR 112 6 Lanes Interchange NW 103rd Street Widen 4 to 6 Lanes Unfunded Le Jeune Road SR 112

Table 1. Comprehensive Development Master Plan Improvements

According to the CDMP, the Central Parkway would follow the NW 37th Avenue / CSX Railroad corridor through the study area of the "79th Street Corridor Redevelopment Plan." In addition, Le Jeune Road (NW 42nd Avenue) is currently a four-lane facility that is proposed by the CDMP to be widened to six lanes.

Mass Transit Subelement

The purpose of the "Mass Transit Subelement" is to provide a basis for the development of mass transit facilities to enhance mobility as a major component of the overall transportation system in Miami-Dade County. The Adopted Components of this subelement contain the mass transit goal, objectives and policies, a series of mass transit maps showing planned future facilities and service areas, and procedures for monitoring and evaluating conditions. The overall goal of the "Mass Transit Subelement" is to maintain, operate, and develop a mass transit system in Miami-Dade County that provides efficient, convenient, accessible, and affordable service to all residents and tourists.

The existing rapid transit corridor (Metrorail) passes through the "79th Street Corridor Redevelopment Plan" study area along NW 27th Avenue and NW 79th Street. The CDMP identifies a proposed rapid transit corridor extension beginning at the Dr. Martin Luther King, Jr. Metrorail Station (just south of the curve in the Metrorail alignment near the intersection of NW 27th Avenue and NW 79th Street). The proposed rapid transit corridor extends north along NW 27th Avenue into Broward County. The use of the term rapid transit in the CDMP refers to any heavy rail, light rail, or express buses operating on exclusive rights-of-way.

The CDMP also identifies Transit Centers, such as Metrobus terminals, rapid transit stations, and transit transfer facilities. These centers are locations where several routes or lines, or different modes, converge. They are designed to handle the movement of transit vehicles and the boarding, alighting, and transferring of passengers between transit routes, lines, or transit modes. Despite the presence of commuter rail, heavy rail, and bus routes within the study area for the "79th Street Corridor Redevelopment Plan," no Transit Centers are identified by the CDMP within the study area for this project.

Miami-Dade 2025 Long Range Transportation Plan

The *Miami-Dade 2025 Long Range Transportation Plan* (LRTP), adopted by the Miami-Dade County Metropolitan Planning Organization (MPO), was developed to guide long-term transportation investments in Miami-Dade County. The LRTP focuses on the County's transportation infrastructure needs including connections to major activity centers. The LRTP also addresses transit facilities, bicycle facilities, pedestrian facilities, and other modes of transportation.

The LRTP lists a number of improvements and these improvements are categorized based on priority and project description. The improvements were selected and prioritized based on goals and objectives approved by the MPO. The LRTP divides Miami-Dade County into six analysis areas; the majority of the "79th Street Corridor Redevelopment Plan" study area is part of the "North Area," although west of the South Florida Rail Corridor (SFRC), the study area is part of the "Northwest Area" and the "Central Area." The projects presented in Table 2 were listed as improvements in the LRTP and would affect the study area of the "79th Street Corridor Redevelopment Plan."

Priority	Time	Project / Facility	From	То	Project Description
11	2011 - 2015	North Miami-Dade Transit Corridor	Dr. M. L. King, Jr. Metrorail Station	Broward County	Premium Transit
HI	2016 - 2020	Central Parkway	SR 112	SR 924	New Expressway
	2016 - 2020	NW 37 th Avenue	NW North River Drive	NW 79 th St	Widen 2 to 5 Lanes
111	2016 - 2020	Le Jeune Road	NW 62 nd St	NW 79 th St	On-road Bicycle Facility
IV - Unfunded	2021 - 2025	NW 37 th Avenue	NW 71 st St	NW 79 th St	Pedestrian Facility

Table 2. Long Range Transportation Plan Improvements

The North Miami-Dade Transit Corridor premium transit project is the same project described in the "Mass Transit Subelement" of the CDMP.

The Central Parkway project would be a new expressway toll road operated by the Miami-Dade Expressway Authority (MDX). The Central Parkway would connect SR 112 (Airport Expressway) with SR 924 (Gratigny Parkway). A Central Parkway interchange is planned at NW 79th Street, one of only three interchanges between SR 112 and SR 924. Two potential design alternatives include an elevated expressway alignment above the existing CSX Railroad and an alignment adjacent to the CSX Railroad right-of-way. Additional alternatives are likely to be developed as planning efforts for the Central Parkway progress.

NW 37th Avenue extends south from the Miami Amtrak Station through the "79th Street Corridor Redevelopment Plan" study area. This street is programmed to be widened from two to five lanes south of NW 79th Street and to include enhanced pedestrian facilities, although the pedestrian improvements are currently unfunded.

Miami-Dade Transportation Improvement Program

The *Miami-Dade Transportation Improvement Program* (TIP) was approved by the MPO in May 2002 for Fiscal Years 2003-2007. The TIP specifies proposed improvements to be implemented in Miami-Dade County over the next five years. The TIP is organized into the following three parts:

- 1. Three-Year Federal Funded Project Listing. As required by federal regulations, projects receiving federal funding must be chosen from this list.
- 2. Five-Year Project Listing. Projects beyond the third year are included as proposed so they will be periodically evaluated by the MPO.
- 3. Unfunded Priority Needs. This category includes MPO priorities not included in the other two sections.

Improvements included in the TIP are characterized as Intermodal, Highway, Transit, Aviation, Seaport and Non-Motorized.

Projects programmed for the "79th Street Corridor Redevelopment Plan" study area are presented in Table 3.

Year	Project / Facility	From	То	Project Description
2005	NW 79 th Street	@ NW 22 nd 4	Venue	Add Turn Lane(s). Reposition NB and SB left-turn lanes.

Table 3. Transportation Improvement Program Improvements

Miami-Dade Transit Development Program

The *Miami-Dade Transit Development Program* (TDP) was completed by Miami-Dade Transit (MDT). The 2002 Update to the TDP presents the operating environment, committed improvements, an amended 5-year Recommended Service Plan (RSP), and financial analysis of proposed transit improvements for the period ending in 2007. The "Committed Improvements" are projects that affect the delivery of transit services and are expected to be implemented during the next five years. These improvements, in conjunction with the 2002 TDP's existing conditions, form the baseline conditions from which the "2007 Recommended Service Plan" is developed. The "Recommended Service Plan" addresses unmet community transit needs and prioritizes these needs. The "Committed Improvements" shown are projects that are funded and are expected to be implemented; however, projects in the "Recommended Service Plan" are unfunded.

Route	Committed Bus Service Improvements	2007 Recommended Service Plan
12	Weekday afternoon rush-hour and evening trips will be adjusted	Improve peak headways from 30 to 20 minutes
21	No planned improvements	Extend route from Bunche Park to the future Golden Glades Intermodal Terminal
22	No planned improvements	No planned improvements
27	No planned improvements	No planned improvements
27 MAX	No planned improvements	No planned improvements
32	No planned improvements	No planned improvements
42	No planned improvements	Improve daily headways from 60 to 30 minutes
L	No planned improvements	Implement earlier weekday morning service
Night Owl	No planned improvements	No planned improvements

Table 4.	Transit De	velopment	Program	Improvements

Tri-Rail Long Range Master Plan

Tri-Rail, the only commuter rail system in Florida, operates trains in the South Florida Rail Corridor (SFRC) in Miami-Dade, Broward, and Palm Beach Counties. The line extends 72 miles' from the Miami International Airport to Mangonia Park in Palm Beach County. Tri-Rail service was initiated in January 1989 as part of a major traffic mitigation effort during construction and expansion of I-95. Tri-Rail provides access to the region's three international airports: Miami International Airport, Ft. Lauderdale-Hollywood International Airport, and Palm Beach International Airport. Connecting bus service is available from all 18 Tri-Rail stations and a connection to Miami-Dade's Metrorail is provided at the Tri-Rail / Metrorail Transfer Station, located within the study area for the "79th Street Corridor Redevelopment Plan."

The SFRC is operating at capacity, serving Tri-Rail, Amtrak, and freight trains. To address this restraint, Tri-Rail has undertaken a program of projects to improve the corridor. This program, known as the "Double Track Corridor Improvement Program," consists of laying a second mainline track, upgrading grade crossing and signal systems, and modifying stations to accommodate the double track. The project is scheduled for completion by March 2005. The

double-tracking and related improvements will (1) improve Tri-Rail's schedule reliability, (2) reduce Tri-Rail's peak period headways from 60 minutes to 20 minutes, and (3) improve the safety of train operations along the SFRC. Platform improvements are planned for the Tri-Rail / Metrorail Transfer Station as part of the project. These improvements are likely to require the acquisition of properties in the vicinity of the station.

In addition to the "Double Track Corridor Improvement Program," Tri-Rail has developed a midand long-term infrastructure investment strategy called the Tri-Rail Long Range Master Plan. As part of this ongoing master planning process, Tri-Rail is considering the following five projects:

- Dolphin Extension Extending Tri-Rail service parallel to SR 836 (Dolphin Expressway) from the Miami Intermodal Center (MIC) west approximately 8.8 miles to the Dolphin Mall along an existing CSX rail alignment. Three new stations would be added.
- Jupiter Extension Extending Tri-Rail service from West Palm Beach approximately 15.7 miles north to Jupiter in the Florida East Coast (FEC) rail right-of-way. Six new stations would be added.
- Broward East-West Line Establishing an east-west fixed guideway line between the National Car Rental Center in Sunrise and Downtown Fort Lauderdale. The proposed alignment would operate at-grade along Broward Boulevard and continue south to the Fort Lauderdale-Hollywood International Airport.
- FEC Corridor Establishing commuter rail service in Miami-Dade and Broward Counties in the FEC rail corridor, which is a north-south rail corridor line generally located about 1 to 2 miles east of I-95. Eleven new stations would be constructed.
- Kendall Extension Extending Tri-Rail service southwest from the MIC to the Kendall area. This route would follow SR 874 (Don Shula Expressway) to a terminus at Coral Reef Drive along an existing CSX rail alignment. Five new stations would be added including a station that is also incorporated in the Dolphin Extension.

None of the five improvements identified in the Tri-Rail Long Range Master Plan would directly affect the study area for the "79th Street Corridor Redevelopment Plan." However, system-wide Tri-Rail ridership is expected to increase by varying levels if the five improvements are implemented.

EXISTING TRAFFIC CONDITIONS

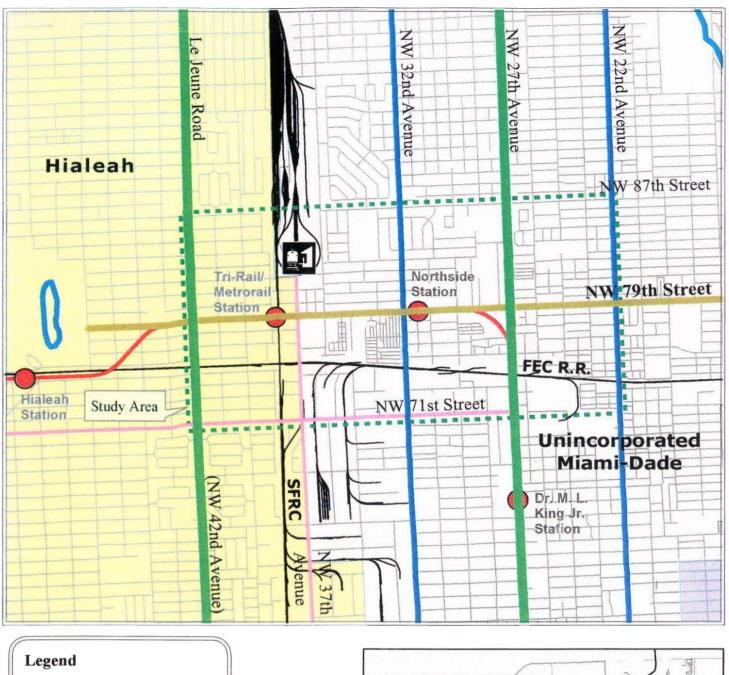
Existing traffic conditions were assessed in the "79th Street Corridor Redevelopment Plan" study area to assess demand on the existing street network and identify deficient roadway segments. Traffic data collected by the Florida Department of Transportation (FDOT) and the Miami-Dade County Public Works Department (PWD) were compiled in a database. Included in the analysis of existing traffic conditions are the identification of the primary roadway network (functional classification and number of lanes), traffic volumes, and level of service measurements. Existing traffic conditions can be used to establish a starting point for comparison with future development scenarios.

Roadway Network

For transportation planning purposes roadway facilities are grouped by functional classification to help define the roadway's character. In urban areas the hierarchy of the functional system consists of principal arterials, minor arterials, collectors and local streets. Principal arterials primarily serve through traffic and carry the highest traffic volumes; minor arterials augment principal arterials at a somewhat lower level of mobility; collector roadways carry lower traffic volumes and provide a connection between high traffic corridors and the local street network; local streets provide access to adjacent land uses.

Figure 3 presents the functional classification of the "79th Street Corridor Redevelopment Plan" study area's roadway network. The *Miami-Dade County Comprehensive Development Master Plan* (CDMP) identifies two principal arterials, three minor arterials, and two collector roadways within the "79th Street Corridor Redevelopment Plan" study area. These facilities are described below.

- State Principal Arterial
 - Le Jeune Road (NW 42nd Avenue) This four-lane divided facility runs north-south through the western edge of the study area. It is also known by its FDOT designation as SR 953 and by its City of Hialeah designation as East 8th Avenue. Le Jeune Road connects to SR 112 and Miami International Airport in the south and to SR 924 (Gratigny Parkway) and Opa Locka to the north.





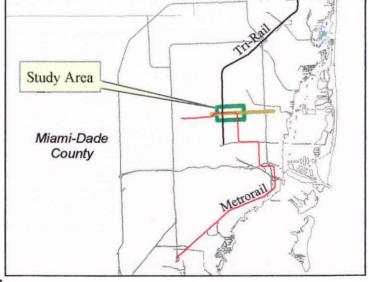


Figure 3. Roadway Functional Classification 79th Street Corridor Redevelopment Plan



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- <u>NW 27th Avenue</u> This four-lane divided facility runs north-south through the study area. It is also known by its FDOT designation as SR 9. NW 27th Avenue is a principal arterial connecting the City of Miami in the south to north-central Miami-Dade and beyond into Broward County.
- State Minor Arterials
 - <u>NW 79th Street</u> This facility provides east-west traffic flow and is the main study corridor for this redevelopment plan. NW 79th Street is a four-lane divided facility west of NW 27th Avenue and is a six-lane divided facility east of NW 27th Avenue. NW 79th Street is also known by its FDOT designation as SR 934. NW 79th Street connects Hialeah in the west to I-95 to the east and beyond to Miami Beach via the John F. Kennedy Causeway.
- County Minor Arterials
 - <u>NW 32nd Avenue</u> This four-lane facility with a two-way left-turn (TWLT) median runs north-south through the study area, approximately one-half mile to the west of NW 27th Avenue.
 - <u>NW 22nd Avenue</u> This six-lane divided facility runs north-south through the eastern edge of the study area, approximately one-half mile east of NW 27th Avenue.
- Collectors
 - <u>NW 71st Street</u> This two-lane undivided facility runs east-west through the southern edge of the study area, approximately one-half mile south of NW 79th Street. NW 71st Street distributes traffic through a residential neighborhood between NW 42nd Avenue and the SFRC and distributes traffic through an industrial area between the SFRC and NW 27th Avenue.
 - <u>NW 37th Avenue</u> This two-lane undivided facility runs north-south between NW 71st Street and the Miami Amtrak Station. NW 37th Avenue passes through an industrial area south of NW 79th Street and feeds traffic into the Miami Amtrak Station north of NW 79th Street.

In addition to these arterials and collectors, the "79th Street Corridor Redevelopment Plan" has a supporting local street system that forms a grid network throughout the area. The configuration of the grid network provides convenient access and circulation alternatives, but also cultivates cut-through traffic in the residential neighborhoods when there is congestion on arterials and collectors.

Traffic Data

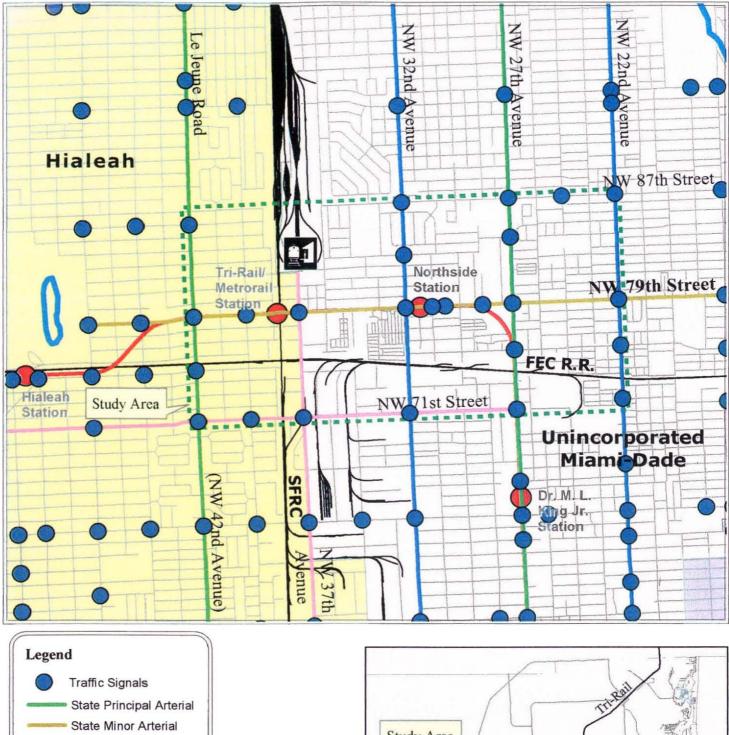
Traffic count data was compiled from information provided by the Florida Department of Transportation (FDOT) and the Miami-Dade County Public Works Department (PWD) for roadways in the "79th Street Corridor Redevelopment Plan" study area. Table 5 presents AADT volumes for the primary roadways in the study area. NW 79th Street carries the majority of the east-west traffic in the study area. North-south traffic volumes are more evenly split between NW 42nd Avenue and NW 27th Avenue, with NW 22nd Avenue carrying slightly less traffic.

Traffic signals were inventoried from data provided by the Miami-Dade County Public Works Department. Figure 4 illustrates the location of the traffic signals in the study area. Traffic signals are necessary components of an urban traffic network, yet represent one of the factors that can constrict the capacity of roadways. Therefore, it was important to collect traffic signal data for calculating level of service (LOS), as described in the next subsection.

Level of Service

Level of service (LOS) is a quality measure describing operational characteristics within a traffic stream generally in terms of such measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. The level of service for a roadway is represented by one of the letters A through F, with LOS A representing the best operating conditions and LOS F the worst. Analytical methods specified in the *Highway Capacity Manual* (HCM 2000) establish methodologies to approximate level of service based upon quantitative measures such as maximum flow rates, volume-to-capacity ratios, and travel speeds.

The existing level of service for the major roadways in the "79th Street Corridor Redevelopment Plan" study area was determined based upon the maximum flow rates provided in FDOT's 2002 Quality / Level of Service Handbook, which provides generalized level of service tables. These service volume tables estimate the number of vehicles a facility can carry at various levels of service for a particular classification and number of lanes. The analysis relied upon "Table 4-1" from FDOT's 2002 Quality / Level of Service Handbook, which provides daily volume thresholds consistent with the data that was readily available for this study.





Metrorail Railroads

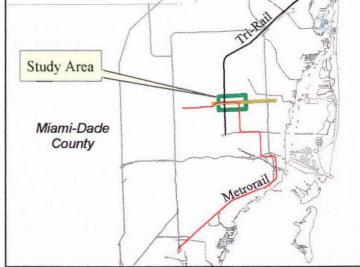


Figure 4. Location of Traffic Signals 79th Street Corridor Redevelopment Plan



Kimley-Horn and Associates, Inc. Table 5 presents the existing AADT volumes and level of service measurement for major roadways within the "79th Street Corridor Redevelopment Plan" study area for which traffic data were available.

Segment	Number of Lanes	Median	Median Functional Classification		LOS
East-West Roads					
<u>NW 79th Street (SR 934)</u>					
NW 42nd Ave to NW 32nd Ave	4	Divided	State Minor Arterial	28,000	D
NW 32nd Ave to NW 27th Ave	4	Divided	State Minor Arterial	30,500	E
NW 27th Ave to NW 22nd Ave	6	Divided	State Minor Arterial	43,000	D
North-South Roads					
Le Jeune Road (SR 953)					
South of NW 79th St	4	Divided	State Principal Arterial	38,000	F
North of NW 79th St	4	Divided	State Principal Arterial	39,000	F
NW 32 nd Avenue					
South of NW 79th St	4	TWLT	County Minor Arterial	27,000	D
NW 27 th Avenue (SR 9)					
South of NW 79th St	4	Divided	State Principal Arterial	38,000	F
North of NW 79th St	4	Divided	State Principal Arterial	38,000	F
NW 22 nd Avenue	i Setter				
South of NW 79th St	6	Divided	County Minor Arterial	33,500	D

Table 5. Traffic Data for Major Roadways

Results of the level of service analysis demonstrate poor traffic conditions on the arterial roadways in the "79th Street Corridor Redevelopment Plan" study area. Le Jeune Road and NW 27th Avenue in particular receive a failing grade of LOS F. The portion of NW 79th Street between NW 32nd Avenue and NW 27th Avenue is operating at LOS E, which means the segment is currently operating at capacity. These arterial facilities play a primary role in the countywide traffic circulation system and carry a high percentage of through trips. The secondary tier of roadways, the county minor arterials and collectors, demonstrate a better level of service. However, mobility within the "79th Street Corridor Redevelopment Plan" study area is limited because of the poor level of service along the principal roadways. This has negative impacts on the quality of life and livability in the entire study area.

EXISTING TRANSIT SERVICE

Existing transit service in the "79th Street Corridor Redevelopment Plan" study area was inventoried to gauge current transit service levels, operating characteristics, and ridership. Transit service in the study area is provided by the following:

- Miami-Dade Transit (MDT)
- Tri-Rail
- Amtrak
- jitney services

In particular, MDT operates the 16th largest public transit system in the United States and the largest transit system in Florida. MDT's transit service in the "79th Street Corridor Redevelopment Plan" study area includes two components: (1) the Metrobus bus system and (2) the Metrorail rapid transit system.

MDT Metrobus Service

The "79th Street Corridor Redevelopment Plan" study area is currently serviced by nine Metrobus routes operated by MDT. The Northside Metrorail Station serves as a hub for several of these Metrobus routes. The alignments of the nine Metrobus routes are illustrated in Figure 5 and each route is described below.

- Metrobus Route 12 enters the study area from the east along NW 79th Street and accesses the Northside Metrorail Station. Route 12 operates Monday through Friday on 30-minute headways during both daytime and evening hours. Weekend service operates on 60-minute headways.
- Metrobus Route 21 enters the study area from the north along NW 27th Avenue and proceeds east along NW 79th Street. Route 21 also accesses the Northside Metrorail Station. Route 21 operates Monday through Friday on 30-minute headways during both daytime and evening hours. Weekend service operates on 60-minute headways.

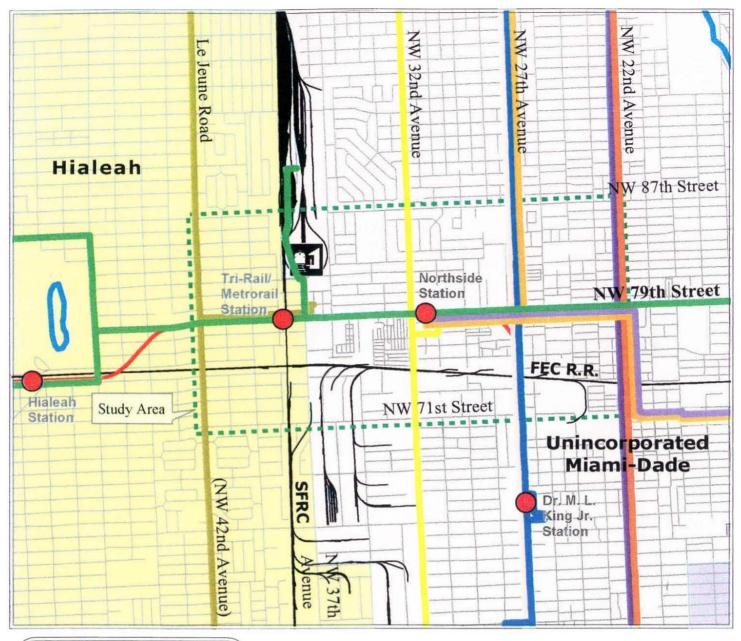
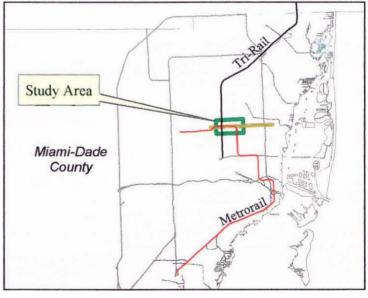




Figure 5. Metrobus Routes 79th Street Corridor Redevelopment Plan





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- Metrobus Route 22 runs north-south through the study area along NW 22nd Avenue. Route 22 operates Monday through Friday on 20-minute headways during peak daytime hours and on 30-minute headways during off-peak and evening hours. Weekend service operates on 60-minute headways.
- Metrobus Route 27 runs north-south through the study area along NW 27th Avenue. Route 27 operates Monday through Friday on 15-minute headways during both daytime and evening hours. Weekend service operates on 30-minute headways.
- Metrobus Route 27 MAX is an express route that runs north-south through the study area along NW 27th Avenue. Route 27 MAX operates only during peak periods and provides service with 15-minute headways.
- Metrobus Route 32 runs north-south through the study area along NW 32nd Avenue and accesses the Northside Metrorail Station. Route 32 operates Monday through Friday on 20-minute headways during peak daytime hours and on 30-minute headways during off-peak and evening hours. Saturday service operates on 40-minute headways and Sunday service operates on 60-minute headways.
- Metrobus Route 42 runs north-south through the study area along Le Jeune Road (NW 42nd Avenue) and accesses both the Tri-Rail / Metrorail Station and the Miami Amtrak Passenger Terminal. Route 42 operates Monday through Friday on 60-minute headways during both daytime and evening hours. Weekend service operates on 60-minute headways.
- Metrobus Route L runs east-west through the study area along NW 79th Street and accesses the Northside Metrorail Station, the Miami Amtrak Passenger Terminal, and the Tri-Rail / Metrorail Station. Route L operates Monday through Friday on 10-minute headways during peak daytime hours and 12-minute headways during off-peak and evening hours. Weekend service operates on 30-minute headways. Route L is the primary east-west Metrobus route in the study area.
- Metrobus Night Owl Route runs north-south through the study area along NW 22nd Avenue. The Night Owl Route operates at night with a 60-minute headway.

Listed in Table 6 are service and performance data for the Metrobus routes serving the "79th Street Corridor Redevelopment Plan" study area. This information was obtained from Metrobus route schedules, the 2002 Transit Development Program prepared by MDT, and Miami-Dade Transit Ridership Technical Reports prepared by MDT for the period from January 2001 to December 2001.

Route	Hours of Operation	Headway (Peak/Off-Peak) (1)	Āverage Weekday Ridership ⁽²⁾	Boardings per Revenue Hour ⁽²⁾
12	5:15 AM - 12:15 AM	30/30	3,269	36.7
21	5:30 AM - 12:15 AM	30/30	2,482	33.0
22	5:15 AM - 11:45 PM	20/30	4,135	32.3
27	5:30 AM - 2:00 AM	15/15	8,619	43.3
27 MAX	6:00 AM - 9:00 AM 4:15 PM - 7:15 PM	15/(n/a)	702	23.8
32	5:45 AM - 12:00 PM	20/30	3,734	27.2
42	5:30 AM - 8:00 PM	60/60	1,047	16.3
L	5:00 AM - 2:15 AM	10/12	10,636	44.6
Night Owl	11:00 PM - 6:00 AM	60 ⁽³⁾	303	8.6

Table 6. Metrobus Route Information (Year 2001)

Notes:

(1) Source: Transit Development Program 2003

(2) Source: Miami-Dade Transit Ridership Technical Report (Jan 2001-Dec 2001)

(3) Night Headway used for Night Owl Route

Data presented in Table 6 indicate that fairly strong bus transit service exists within the "79th Street Corridor Redevelopment Plan" study area. The primary east-west route (Route L) operates on 10 and 12 minute headways throughout most of the day along NW 79th Street. Route L receives high ridership figures (44.6 boardings per revenue hour) and operates for 21 hours of the day. The primary north-south route (Route 27) operates on 15 minute headways along NW 27th Avenue and exhibited 43.3 boardings per revenue hour in 2001. These routes are among the most successful routes in MDT's system in terms of ridership.

MDT Metrorail Service

Metrorail is the heavy rail component of Miami-Dade County's transit system. Metrorail is a 21mile elevated rapid transit system that runs from Kendall to Hialeah. The 21 Metrorail stations are generally spaced about one-mile apart. Metrorail interfaces with the Metromover automated people-mover system that serves Downtown Miami at the Government Center and Brickell

Stations. Metrorail also connects with Tri-Rail, which provides connections to Broward and Palm Beach Counties, at the Tri-Rail / Metrorail Station located within the "79th Street Corridor Redevelopment Plan" study area.

Metrorail operates from 5:00 AM to 12:00 AM seven days a week. Trains arrive every six minutes during weekday peak periods, every 15 minutes during the midday period, and every 20 minutes during the evenings until 8:00 PM, after which trains arrive every 30 minutes. These service hours are extended when special late evening events take place in Downtown Miami.

Two Metrorail Stations are located within the "79th Street Corridor Redevelopment Plan" study area: the Tri-Rail / Metrorail Station and the Northside Station. The locations of these stations are depicted on Figure 1. Both stations are located on NW 79th Street. Additionally, the Hialeah Metrorail Station is located just west of the study area on East 21st Street and the Dr. Martin Luther King, Jr. Station is located just south of the study area on NW 27th Avenue.

The Tri-Rail / Metrorail Station is located at the intersection of NW 79th Street and NW 37th Avenue and also serves the Miami Amtrak Train Station. This station serves as a connection between Tri-Rail, Amtrak, Metrorail, and Metrobus, as connections are also provided to Metrobus Routes L and 42.

The Northside Station is located just east of the intersection of NW 79th Street and NW 32nd Avenue. This station serves as a hub for four Metrobus routes that operate within the "79th Street Corridor Redevelopment Plan" study area. This station is part of MDT's Joint Development Program, but development plans are still under negotiation.

The Tri-Rail / Metrorail Station and the Northside Station are spaced approximately 3,300 feet apart. This station spacing is unusually close for typical heavy rail transit systems. When the original Metrorail system opened in 1983, Tri-Rail did not exist and there was no station at the site of the current Tri-Rail / Metrorail Station. With Tri-Rail's inception in 1989, the Tri-Rail / Metrorail station was built to provide a transfer facility between Tri-Rail and Metrorail.

The Metrorail system carried approximately 48,500 passengers per average weekday in 2001. Data obtained from *Miami-Dade Transit Ridership Technical Reports* indicate that daily boardings at the Tri-Rail / Metrorail and Northside Stations represented approximately 900 and

1,500 passengers respectively, on an average weekday in 2001. Table 7 depicts the schedule and average weekday boardings at the two Metrorail stations located within the study area and the two Metrorail stations located on either side of the study area.

	Sched		
Stations	Northbound ⁽²⁾	Southbound ⁽³⁾	Average Weekday Boardings ⁽⁴⁾
Dr. M. L. King, Jr.	5:32 AM - 12:21 AM	5:18 AM - 12:08 AM	1,002
Northside ⁽⁵⁾	5:34 AM - 12:34 AM	5:16 AM - 12:06 AM	1,478
Tri-Rail ⁽⁵⁾	5:36 AM - 12:36 AM	5:15 AM - 12:05 AM	928
Hialeah	5:38 AM - 12:38 AM	5:12 AM - 12:02 AM	1,385
Total Metrorail			48,515

Table 7. Metrorail Information (Year 2001)

Notes:

(1) Source: http://www.co.miami-dade.fl.us/transit/metrorail/info.htm

(2) Service every six minutes between (6:54 AM - 8:48 AM) & (3:48 PM - 5:48 PM)

(3) Service every six minutes between (6:45 AM - 8:45 AM) & (3:45 PM - 5:45 PM)

(4) Source: Miami-Dade Transit Ridership Technical Report (Jan 2001 -Dec 2001)

(5) Inside study area for "79th Street Corridor Redevelopment Plan"

Data presented in Table 7 indicate that the Northside Metrorail Station receives the highest passenger activity of Metrorail Stations in the area, while the Tri-Rail Metrorail Station receives the lowest passenger activity.

System-wide, the Northside Metrorail Station ranked 10th and the Tri-Rail / Metrorail Station ranked 17th of the 21 Metrorail Stations in average weekday boardings in 2001. The highest level of Metrorail passenger activity tends to occur at the Government Center Station, the Civic Center Station, and the stations located along U.S. 1 in the southern portion of the Metrorail alignment. Table 8 presents a list of the Metrorail stations from south to north along with their average weekday boardings relative to the other stations.

Stations	Average Weekday Boardings ⁽¹⁾	Ranking
Dadeland South	5153	3
Dadeland North	5599	2
South Miami	2931	5
University	1528	9
Douglas	2223	6
Coconut Grove	1266	13
Vizcaya	998	16
Brickell	2177	7
Government Center	8457	1
Overtown / Arena	738	19
Culmer	758	18
Civic Center	4511	4
Santa Clara	429	21
Allapattah	1375	12
Earlington Heights	1025	14
Brownsville	636	20
Dr. M. L. King, Jr.	1002	15
Northside (2)	1478	10
Tri-Rail / Metrorail ⁽²⁾	928	17
Hialeah	1385	- 11
Okeechobee	1920	8

 Table 8. System-wide Metrorail Information (Year 2001)

Notes:

(1) Source: Miami-Dade Transit Ridership Technical Reports (Jan. 2001 – Dec. 2001)

(2) Inside study area for "79th Street Corridor Redevelopment Plan"

Tri-Rail Service

Tri-Rail is a commuter rail service that extends 72 miles from Miami International Airport in Miami-Dade County to Mangonia Park in Palm Beach County. Tri-Rail operates trains in the South Florida Rail Corridor (SFRC). More background information on Tri-Rail can be found in the Tri-Rail Long Range Master Plan subsection of the Review of Transportation Plans section of this report.

Tri-Rail's 72-mile alignment features 18 stations. One Tri-Rail station is located within the "79th Street Corridor Redevelopment Plan" study area: the Tri-Rail / Metrorail Transfer Station. The station is depicted on Figure 1 and is located at the intersection of NW 79th Street and NW 37th

Avenue. This station provides a vital link for Tri-Rail, as it allows its users to access MDT's Metrorail with service to Downtown Miami. Connecting MDT Metrobus service is also provided by Routes L and 42. In addition, the Miami Amtrak Station is located a short distance from the Tri-Rail / Metrorail Station along NW 37th Avenue.

Tri-Rail trains operate on 60-minute headways on weekdays and 120-minute headways on weekends. Northbound trains presently arrive at the Tri-Rail / Metrorail Station between 4:17 AM and 11:17 AM during weekday mornings and between 1:33 PM and 7:33 PM during weekday afternoons. Southbound trains presently arrive at the Tri-Rail / Metrorail Station between 6:05 AM and 12:25 PM during weekday mornings and between 3:41 PM and 9:41 PM during weekday afternoons. The existing mid-day gap in service is necessary to accommodate construction activities associated with the "Double Track Corridor Improvement Program."

The Tri-Rail system carries approximately 8,500 passengers per average weekday and 3,500 daily passengers per average on the weekend. Data obtained from *Tri-Rail Station Usage Reports* indicate daily weekday boardings at the Tri-Rail / Metrorail Station are approximately 1,300. Daily weekday alightings at the Tri-Rail / Metrorail Station are approximately 1,000. Table 9 illustrates that even though the Tri-Rail / Metrorail Station is just one of 18 Tri-Rail stations, the boardings and alightings at this station represent a high percentage of the system-wide Tri-Rail ridership.

Station	Boardings	Boardings – System-wide Percentage	Alightings	Alightings – System-wide Percentage
Tri-Rail / Metrorail Transfer Station	1,300	15.8 %	1,000	12.0 %
System Total	8,500	100 %	8,500	100 %

Table 9. Tri-Rail Daily Boardings and Alightings

The Tri-Rail / Metrorail Station has the highest passenger activity of the 18 Tri-Rail stations. In comparison, the West Palm Beach Station is ranked second with approximately 700 daily boardings and 950 daily alightings.

Amtrak Service

The Miami Amtrak Station is the southern terminus of Amtrak's intercity train passenger service in Florida. Three daily Amtrak trains serve Miami: the Silver Meteor, the Palmetto, and the Silver Star. These three Amtrak trains are part of Amtrak's Atlantic Coast Service.

- The Silver Meteor offers daily service from Miami to New York. The Silver Meteor runs north from Miami through Orlando and Jacksonville before continuing along the Atlantic Coast through Washington to New York. Train Number 97 arrives in Miami at 9:46 PM and Train Number 98 departs Miami at 7:00 AM.
- The Palmetto offers daily service from Miami to New York. The Palmetto runs north from Miami to Tampa, then continues to Jacksonville, Washington, and New York. Train Number 89 arrives in Miami at 12:10 PM and Train Number 90 departs Miami at 5:00 PM.
- The Silver Star offers daily service from Miami to New York. The Silver Star runs north from Miami through Orlando and Jacksonville before continuing along the Atlantic Coast through Washington to New York. Train Number 91 arrives in Miami at 5:20 PM and Train Number 92 departs Miami at 10:35 AM.

Travel times from Miami to Jacksonville are approximately 8 hours and 45 minutes. Connections can be made to westbound trains in Jacksonville serving destination such as New Orleans and Los Angeles. No change of trains is required to travel from Miami to New York, a trip that takes approximately 27 hours.

Ridership for the Miami Amtrak Station in 2001 was 86,270 patrons. Facilities at the Miami Amtrak Station are fully accessible to persons using wheelchairs. Metrobus Routes L and 42 connect to the Miami Amtrak Station. Metrobus Route L is mentioned in the Amtrak Timetable as providing frequent connecting service from the Miami Amtrak Station to Miami Beach.

Jitney Service

Two companies provide official jitney service in the "79th Street Corridor Redevelopment Plan" study area: Sun Jitney and Dade Jitney. These companies are registered with Miami-Dade County to provide official jitney transportation services.

- Sun Jitney operates semi-fixed route jitney service between North Miami-Dade and Downtown Miami. Sun Jitney utilizes 19 vehicles with a maximum passenger capacity of 15. A fare of \$1.25 is charged. The northern terminus of Sun Jitney service is the Calder Race Course and the southern terminus is a loop through Downtown Miami. In the "79th Street Corridor Redevelopment Plan" study area, the Sun Jitney route operates along NW 22nd Avenue. This alignment does not serve the major destinations within the study area, such as Metrorail stations or shopping centers.
- Dade Jitney operates semi-fixed route jitney service between NW 103rd Street at NW 27th Avenue and Downtown Miami. Dade Jitney utilizes two vehicles with a maximum passenger capacity of 15. Dade Jitney charges a fare of \$1.25. In the "79th Street Corridor Redevelopment Plan" study area, the Sun Jitney route operates along NW 27th Avenue. This alignment serves the Northside Shopping Center, located at the intersection of NW 79th Street and NW 27th Avenue. In addition, the alignment is within a one-half mile walking distance of the Northside Metrorail Station.

SUMMARY

This report documents two transportation-related tasks of the "79th Street Corridor Redevelopment Plan:" (1) Review of Previous/Ongoing Transportation Plans/Studies and (2) Existing Transportation Conditions. Five studies were reviewed and relevant findings documented in the Review of Transportation Plans section of the report. The Existing Transportation Conditions included both an Existing Traffic Conditions section and an Existing Transit Service section of the report.

The transportation information collected and documented in this report will be drawn upon during the remaining tasks of the "79th Street Corridor Redevelopment Plan." Meetings will be held with transportation agency stakeholders to introduce them to the concept of the TOD project. In addition, visioning sessions will be held to develop preliminary concepts for the TOD project. Information collected during the Review of Transportation Plans and the Existing Transportation Conditions will provide the base data for developing pedestrian, bicycle, bus, rail, and vehicular connections to the TOD project. As the TOD concept is refined, enhancements to the circulation, connectivity, and accessibility of the area will continue to be incorporated into the design.