

# NW/NE 36TH STREET

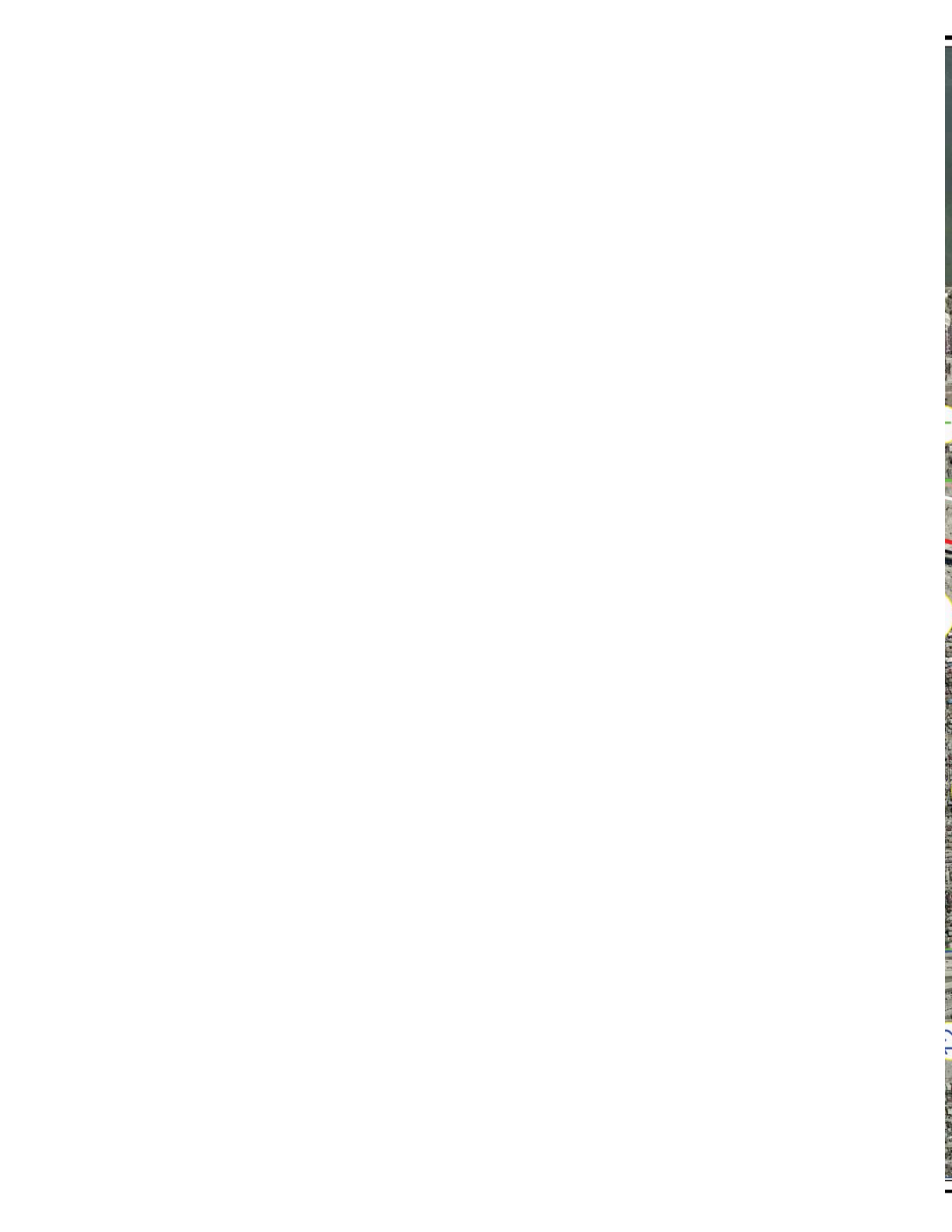
*Study*

EXECUTIVE SUMMARY



Kimley-Horn  
and Associates, Inc.





# EXECUTIVE SUMMARY

## Introduction

NW/NE 36th Street is an important east-west mobility corridor in the City of Miami. The corridor is designated as SR 25 and US 27. This corridor and the adjacent areas have experienced unprecedented growth over the past few years, which is expected to continue over the next several years as large projects, such as Midtown Miami, become occupied. However, the positive aspects of redevelopment come with challenges as well. Maintaining mobility at an acceptable level is critical to the surrounding residential communities, employment areas, businesses, and activity centers.

The objective of this study was to develop and evaluate mobility enhancement alternatives along the NW/NE 36th Street corridor in the study area bound by NW/NE 54th Street to the north, NW/NE 20th Street to the south, I-95 to the west, and Biscayne Bay to the east. The NW/NE 36th Street Study performs a review of existing and future traffic conditions and makes recommendations on how to enhance mobility in the study area. A primary purpose of this study was to evaluate the impact of increased demand on the area's transportation network and to make recommendations on how to accommodate the increase in future traffic.

## Study Area

The boundaries of the NW/NE 36th Street Study are defined as NW/NE 54th Street to the north, NW/NE 20th Street to the south, NW 7th Avenue/S.R. 7/US 441 to the west, and Biscayne Bay to the east. The study area is located between dense residential areas, such as communities on the barrier island including Miami Beach and mainland communities in the northeastern part of the county including Aventura, and major employment centers such as Downtown Miami, Brickell, and the Health District. As a result of its location in the middle of these dense residential areas and major employment centers, travel through the study area puts excessive demand on the transportation network. In particular, heavy directional flows result from traffic traveling to and from the employment centers in the morning and afternoon, respectively. The intense development presently occurring within the study area will place additional demand on the transportation network in the near future.

## Background Research

Background research was performed by reviewing a number of studies, plans and programs. Recommendations and strategies were identified, and they provided a foundation of improvements that could be built upon. The following were examined as part of the background research.

- **I-195 Project Development and Environment (PD&E) Study**
- **Miami 21**
- **Miami Streetcar Study**
- **South Florida East Coast Corridor Study**
- **Major Use Special Permit (MUSP) Traffic Studies**
- **Midtown Miami Project**
- **36th Street RRR Project**
- **N Miami Avenue Improvements**
- **State Road 7 (NW 7th Avenue) Reversible Lane Project**
- **City of Miami Capital Improvement Program**
- **Miami Downtown Transportation Master Plan**
- **Miami Downtown Development Authority Master Plan**
- **Miami-Dade Transportation Improvement Program (TIP)**
- **Miami-Dade Long Range Transportation Plan (LRTP)**
- **Miami-Dade Transit Development Program**
- **Miami-Dade County Comprehensive Development Master Plan**

## Existing Traffic Conditions

The existing traffic conditions were assessed within the NW/NE 36th Street study area to establish a baseline for future transportation needs. Included in the analysis was identification of the primary transportation network, accumulation of traffic volumes, level of service analysis, and safety analysis. Right-of-way data was obtained and it was determined that most of the major roadways within the study area are constrained from widening by the existing available right-of-way. Accordingly, the mobility strategies subsequently developed in this study generally consisted of solutions to increase person movement capacity through means other than traditional roadway widening.

Results of level of service (LOS) analysis demonstrated that traffic conditions along the east-west roadway segments analyzed are generally acceptable, operating at LOS C or LOS D. The AM peak direction of travel for the east-west corridors was predominately the eastbound direction and the PM peak direction was largely the westbound direction. The results of the LOS analysis along the north-south corridors indicate that several of the roadway segments analyzed are operating at poor LOS. Segments of NW 7th Avenue, NW 2nd Avenue, N Miami Avenue, Federal Highway, and Biscayne Boulevard are experiencing LOS E and LOS F conditions. The AM peak direction of travel for the north-south corridors was predominately the southbound direction and the PM peak direction of travel was largely northbound.

A volume to capacity analysis was conducted for the major north-south surface streets that traverse the study area. The purpose of conducting the overall capacity volume to capacity analysis was to determine the ability of the overall surface street network to accommodate the directional travel demand and to determine if excess capacity may be available along some of the surface streets that could potentially relieve some of the streets experiencing heavier traffic demand. The north-south surface streets were found to be carrying volumes approaching their overall capacity. With the expected increase in travel demand, strategies will need to be developed to increase the person movement capacity in these corridors. The lack of overall excess capacity demonstrates the need to preserve the existing north-south capacity along the major north-south surface streets.

Crash data was obtained from the Florida Department of Transportation (FDOT). Most of the major intersections within the study area were considered high crash intersections. The high incidence of crashes within the study area is reflective of the deficient conditions which include traffic signals that lack pedestrian features and often do not provide protected left-turn phases, a lack of turn lanes with sufficient deceleration and storage lengths, and other constraints. Recommendations developed in this study included strategies to address these deficiencies.

## Existing Transit Service

Existing transit service in the NW/NE 36th Street study area was inventoried to gauge current transit service levels, operating characteristics, and ridership. Transit service in the study area is provided by Miami-Dade Transit (MDT) Metrobus routes and three private jitney services. Extensive bus transit service exists within the NW/NE 36th Street study area. Several routes run along Biscayne Boulevard, NW/NE 36th Street, NE 2nd Avenue, and NW 7th Avenue/SR 7. The routes within the NW/NE 36th Street corridor are among the most successful routes in MDT's system in terms of ridership.

## Determination of Mobility Needs

Based on analysis of transportation data and land use patterns, mobility needs and deficiencies in the areas of traffic operations, transit, bicycle and pedestrian facilities, and neighborhood traffic management were identified. Additionally, input was obtained from the study advisory committee (SAC) to further develop the list of transportation mobility needs. Issues that were identified included traffic impacts associated with redevelopment, limited available capacity along north-south roadways, intersection capacity constraints at the intersections of NE 36th Street at NE 2nd Avenue/Federal Highway and NE 36th Street at Biscayne Boulevard, constrained right-of-way limits opportunities for roadway widening, safety, speeding, and cut through traffic.



The majority of the bus routes within the study area are located along Biscayne Boulevard and primarily serve north-south mobility needs. The Little Haiti Connector is the only route that provides localized service and primarily travels north-south following an indirect route, winding through neighborhoods, connecting Little Haiti with the Design District. East-west transit service is mostly limited to the NW/NE 36th Street corridor, which can be largely attributed to the limited crossings along the Florida East Coast (FEC) rail corridor. The overall lack of infrastructure and amenities such as benches and shelters at bus stops contribute to low transit ridership. The lack of bus stop amenities exposes those who ride transit to the elements, such as rain and the sun, and makes transit less desirable for potential riders.

There is a general lack of bicycle facilities and continuous routes within the study area. Most streets within the study area are primarily designed for motorized vehicles at the expense of non-motorized modes of travel. Currently, the lack of convenient and appropriate bicycle facilities in the area often leads to bicyclists riding in mixed traffic conditions, which may discourage some people who would like to bicycle as a means of transportation or recreation.

In general, there are large gaps in pedestrian facilities. Examples include lack of sidewalks, discontinuous sidewalks, lack of crosswalks, and excessive driveway curb cuts. In addition, pedestrian facilities at intersections have been noted as not satisfying ADA requirements, providing deficient crossings and lacking pedestrian signal heads and push buttons.

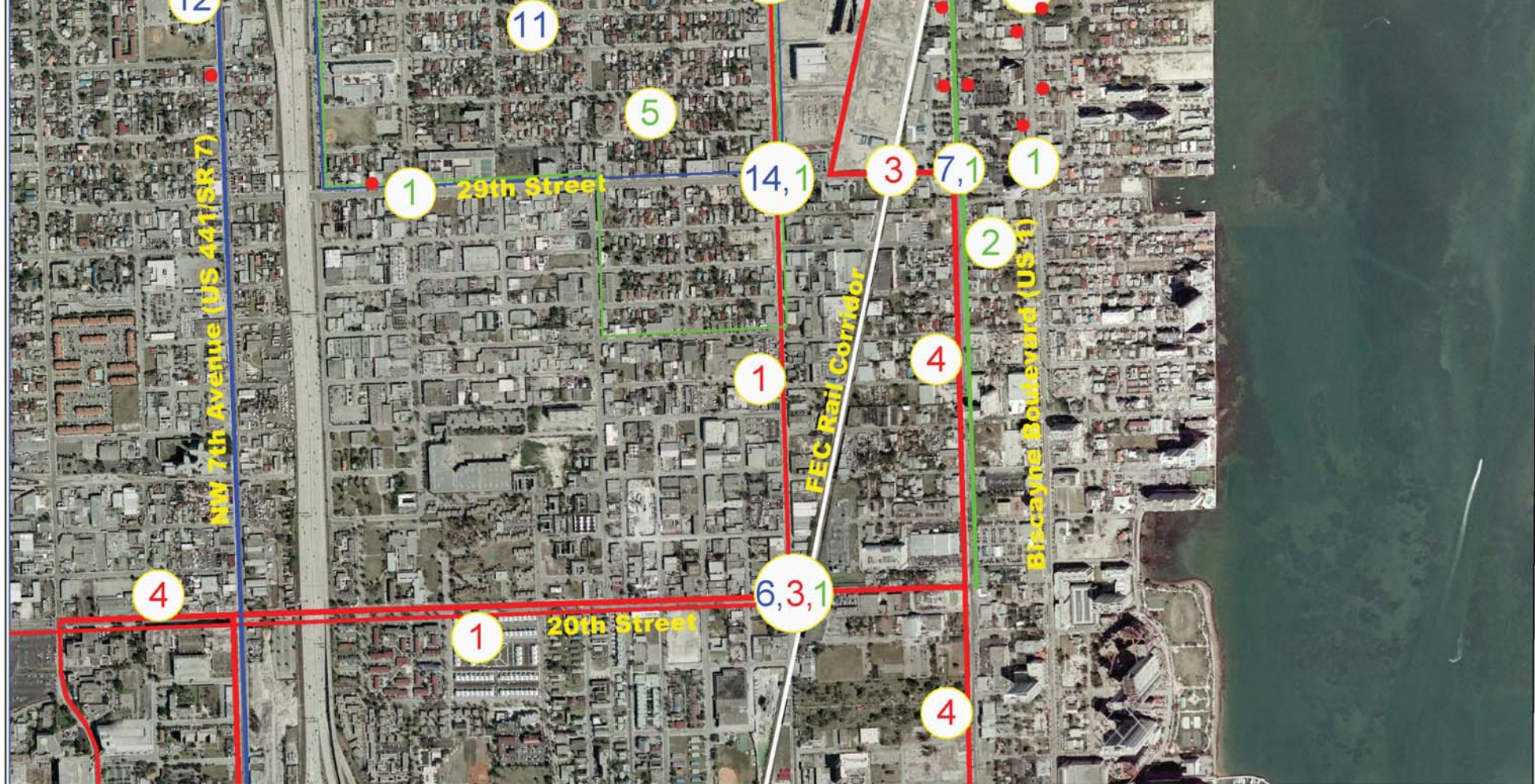
### **Transportation Mobility Strategies**

Based on the transportation data analysis and identification of transportation needs, a program of transportation strategies was developed to accommodate local mobility needs for the NW/NE 36th Street study area. The strategies are intended to address transportation system deficiencies while also enhancing the character of the community and improving the quality of life for its residents. The transportation mobility strategies were divided into sections based on transportation mode. The strategies that specifically address traffic and roadway needs were further divided into two sections: transportation system management (TSM) and neighborhood traffic management. Sections addressing mobility strategies for alternative transportation modes include transit, bicycle, and pedestrian. Table ES-1 and Figure ES-1 present the recommended improvements.

### **Summary and Next Steps**

A number of transportation issues were identified during the course of this study and a program of transportation strategies was developed to address transportation system deficiencies. The recommended improvements range from specific intersection improvements to new fixed guideway transit lines. The NW/NE 36th Street Study provides the framework to assist in the programming of transportation improvements. Agencies have been identified for implementing the improvements based on jurisdictional responsibility. The improvements should be adopted into the appropriate plans and programs of the specified agencies. The study may also be used as a tool to seek funding to implement transportation improvements, as the plan demonstrates that there is a comprehensive vision toward providing multi-modal transportation opportunities to reduce reliance on the single occupant automobile. Finally, the study should be examined periodically to assess the status of the implementation of the identified improvements.





**POTENTIAL PROJECT REFERENCE NUMBER AND DESCRIPTION**

**TRAFFIC:**

RECOMMENDED IMPROVEMENTS

1. N 36TH ST & N MIAMI AVE (SIGNAL IMPROVEMENTS)
2. NE 36TH ST & FEDERAL HWY/NE 2ND ST (SIGNAL IMPROVEMENTS)
3. NE 36TH ST & BISCAYNE BLVD (SIGNAL IMPROVEMENTS)
4. NE 54TH ST & FEDERAL HWY (SIGNAL/INTERSECTION IMPROVEMENTS)
5. NE 54TH ST & BISCAYNE BLVD (SIGNAL/INTERSECTION IMPROVEMENTS)
6. N 20TH ST & N MIAMI AVE (INTERSECTION REALIGNMENT)
7. NE 29TH ST & NE 2ND AVE (INTERSECTION REALIGNMENT)
8. FEDERAL HWY AND BISCAYNE BLVD CONNECTOR (CONNECT SOUTHBOUND BISCAYNE BLVD TO SOUTHBOUND FEDERAL HWY)
9. I-195 RAMPS & N MIAMI AVE (INTERSECTION IMPROVEMENTS)
10. N MIAMI AVE MEDIAN IMPROVEMENTS (N 38TH STREET TO N 54TH STREET)

11. NEIGHBORHOOD TRAFFIC MANAGEMENT (TRAFFIC CALMING AND CUT THROUGH TRAFFIC DETERRENTS) (AREA OUTLINED IN BLUE)
12. SR 7 REVERSIBLE LANE PROJECT
13. NEW SIGNAL
14. UPGRADE EXISTING SIGNAL INFRASTRUCTURE

**TRANSIT:**

RECOMMENDED IMPROVEMENTS

1. REROUTE LITTLE HAITI CONNECTION
2. BUS STOP IMPROVEMENTS (LOCATIONS WITH SPACE FOR IMPROVEMENTS REPRESENTED BY RED DOTS ON MAP)
3. FEC CORRIDOR (POTENTIAL COMMUTER RAIL STATION LOCATIONS)
4. MIAMI STREETCAR

**BICYCLE-PEDESTRIAN:**

RECOMMENDED IMPROVEMENTS

1. PEDESTRIAN SIGNAL FEATURES/ADA IMPROVEMENTS
2. BICYCLE FACILITIES
3. BUENA VISTA EAST HISTORIC DISTRICT (STREETSCAPE IMPROVEMENTS, EXTEND TO NE 50TH STREET)
4. NE 39TH STREET (STREETSCAPE IMPROVEMENTS)
5. IMPROVE PEDESTRIAN CONNECTIONS BETWEEN I-95 AND N MIAMI AVENUE (INCLUDING TEXTURED CROSSWALKS ALONG N MIAMI AVENUE)
6. IMPROVE PEDESTRIAN CONNECTIONS BETWEEN SCHOOLS AND AGED HOME



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## Summary of Existing Conditions

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Intersection level of service deficiencies identified:

- Biscayne Boulevard @ NE 36th Street
- NE 2nd Avenue/Federal Highway @ NE 36th Street

Roadway segment level of service deficiencies identified:

- NW 2nd Avenue
- Federal Highway
- Biscayne Boulevard
- NE 2nd Avenue

Transit Service Gaps

- N Miami Avenue
- Lack of Bus Stop Amenities

Lack of Bicycle/Pedestrian Facilities

- No Continuous Routes/Paths
- Inadequate Pedestrian Crossings
- Widespread ADA Deficiencies

## Transportation Issues

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- Intersection of NW 2nd Ave/36th Street/Federal Highway
- Capacity on I-95 and Biscayne Boulevard
- North-South Mobility
- Impacts of Development
- Constrained Right-of-Way for Roadway Widening
- Poor Maintenance
- Lack of Bus Shelters
- Bike/Pedestrian Access to Future Rail
- Parking Constraints

## General Improvements

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Traffic

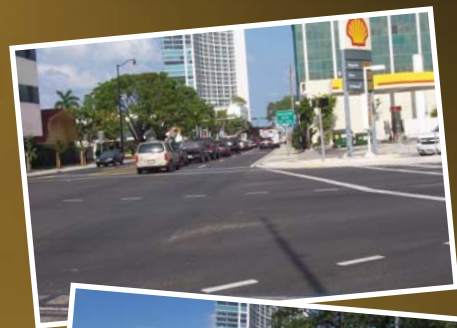
- Intersection
  - Timing/Phasing
  - Alignment
  - Signalization
- Neighborhood Traffic Management
- Frontage/Connector Roads

Transit

- Reroute Transit Service
- Bus stop Improvements
- Commuter Rail Service along FEC
- Miami Streetcar

Bicycle/Pedestrian

- Bike Lanes
- ADA Improvements
- Pedestrian Push Button and Signal Heads
- Streetscape Improvements
- Pedestrian Corridor Improvements



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