

# Preliminary Engineering Report

NW 7th/9th Connector Project

Florida Department of Transportation, District 4

Fort Lauderdale, Florida

|                           |              |
|---------------------------|--------------|
| State Project Number:     | 86000-1692   |
| Federal Project Number:   | 33C-9040-049 |
| Work Program Number:      | 4120356      |
| Financial Project Number: | 23072612101  |
| State Road Number:        | N/A          |

|                                 |        |
|---------------------------------|--------|
| City of Fort Lauderdale Number: | P-9295 |
| Broward County Number:          | 5027   |

Prepared for:  
City of Fort Lauderdale  
*and*  
Broward County

November 2000

Federal Highway Administration

ADMINISTRATIVE ACTION  
 ENVIRONMENTAL ASSESSMENT

U.S. Department of Transportation

Federal Highway Administration

and

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 NW 7<sup>th</sup>/9<sup>th</sup> Avenue Connector - Broward Blvd. to NW 13<sup>th</sup> St.  
 Broward County, Florida

The proposed project would provide a 1-mile (1.6 km) diagonal connector linking NW 7<sup>th</sup> Avenue at Broward Boulevard (SR 842) with NW 9<sup>th</sup> Avenue at Sunrise Boulevard (SR 838). The new 7<sup>th</sup>/9<sup>th</sup> Connector would be either four or six lanes, with a median, bicycle lanes, curb-and-gutter drainage, sidewalks, and full turn lanes at signalized cross streets. No bridge structures are involved.

Submitted pursuant to 42 U.S.C. 4332 (2)(c).

Approved For Public Availability

01 / 23 / 01  
 Date

*[Signature]*  
 For Division Administrator  
 Federal Highway Administration

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**Prepared for:  
CITY OF FORT LAUDERDALE  
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**Prepared by:  
CARR SMITH CORRADINO**

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## 1. SUMMARY

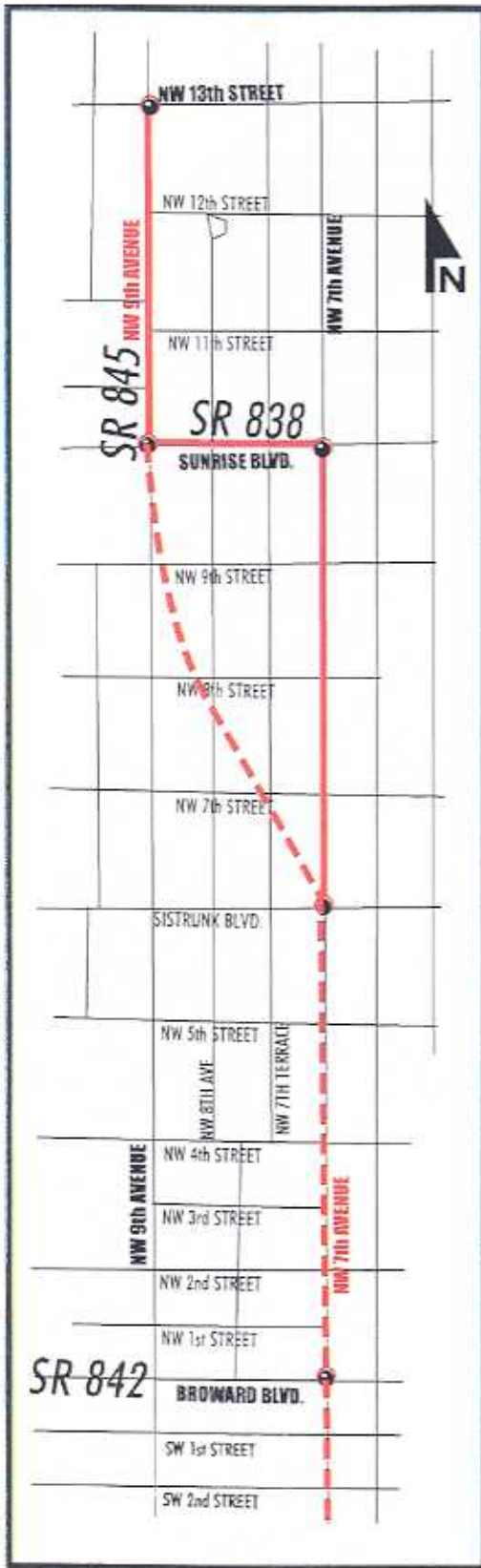
The proposed project is located northwest of downtown Fort Lauderdale in Broward County, Florida (Figure 1-1). It involves a 1.0-mile (1.6-km) section of road that would diagonally connect Broward Boulevard (SR 842) at NW 7<sup>th</sup> Avenue in the south with Sunrise Boulevard (SR 838) at NW 9<sup>th</sup> Avenue (SR 845, known as Powerline Road) in the north. Providing this 7<sup>th</sup>/9<sup>th</sup> Connector will eliminate the "dogleg" at Sunrise Boulevard, wherein northbound travelers must shift from NW 7<sup>th</sup> Avenue over three blocks of Sunrise Boulevard to proceed north on NW 9<sup>th</sup> Avenue. (The converse is true for southbound travelers.) South of Sunrise Boulevard NW 7<sup>th</sup> Avenue now has a five-lane urban section. The center lane is a two-way left-turn lane. North of Sunrise Boulevard it has a two-lane rural section. NW 9<sup>th</sup> Avenue now has a six-lane, median-divided urban section, with a left-turn lane north of Sunrise Boulevard, but a two-lane rural section to the south. The proposed 7<sup>th</sup>/9<sup>th</sup> Connector would provide either four or six lanes (depending on the alternative selected), plus a median and bicycle lanes, all with curb and gutter construction and sidewalks. There are no major drainage or bridge structures involved. To account for intersection improvements, the actual construction limits would be from SW 2<sup>nd</sup> Street to NW 11<sup>th</sup> Street.

The Metropolitan Planning Organization (MPO) of Broward County has developed a transportation plan to address local and regional improvements to the Broward County transportation network. As part of this plan, the Broward County *Transportation Improvement Program* (TIP) for fiscal year (FY) 1999/00 – FY 2003/04 has identified the possible connection of NW 9<sup>th</sup> Avenue and NW 7<sup>th</sup> Avenue within the area bounded by Sunrise Boulevard and Broward Boulevard. As a result, the city of Fort Lauderdale in conjunction with Broward County and the Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study for this corridor in accordance with the National Environmental Policy Act (NEPA) of 1969 and the FDOT's PD&E Manual.

The intent of the PD&E Study is to provide documented information and analyses which will help local governmental agencies reach a decision as to the type and design of the improvements along the 7<sup>th</sup>/9<sup>th</sup> corridor required to accommodate future traffic volumes in a safe and efficient manner. The PD&E Study also satisfies the requirements of the Federal Highway Administration (FHWA) so that the FDOT may be eligible to receive federal funding for the project.

The objective of this Preliminary Engineering Report (PER) is to document the engineering analysis and decisions used to develop alternatives for the connection of NW 9<sup>th</sup> and 7<sup>th</sup> Avenues by various means. This PER summarizes the existing physical deficiencies along the corridor and presents improvement alternatives that will meet future traffic demands. It documents the development of all improvement alternatives together with the consideration of factors such as Level of Service (LOS), socioeconomic impacts, cultural and environmental impacts and project costs.

This report covers improvements north of Broward Boulevard only. Broward Boulevard is the northern boundary of the Sailboat Bend Historic District. Roadway improvements and necessary approvals south of Broward Boulevard will be made by others.



Project Location Map

## 1.1 Commitments

As a preventative measure, the stormwater outfall into the New River will be designed to assure maximum protection of the manatee, so they cannot swim into the outfall pipe. This will include any special requirements needed, such as providing multiple outfalls with a pipe size small enough to avoid problems, "caging" the end of the outfall pipe, or other special construction techniques. This is a standard FDOT operating procedure.

Any additional commitments will be documented following the public hearing.

## 1.2 Recommendations

Recommendations will be made following the public hearing and selection of the preferred alternative.

## 2. INTRODUCTION

### 2.1 Purpose

The purpose of this study is to identify and evaluate alternatives to eliminate the bottleneck created at Sunrise Boulevard as north-south traffic shifts between NW 7<sup>th</sup> Avenue and NW 9<sup>th</sup> Avenue via Sunrise Boulevard. A connection between NW 7<sup>th</sup> and NW 9<sup>th</sup> Avenues somewhere between Broward Boulevard in the south and NW 13th Street in the north has been planned to eliminate this bottleneck. Once the recommended alternative is selected after the Public Hearing, a Master Plan will be developed. This PER has consulted the Broward County Year 2015 Adopted Highway Network, the current Broward County adopted *Transportation Improvement Plan (TIP)*, and the Broward County *Intermodal Transit Needs Assessment*, dated August 1996.

This PER and accompanying Master Plan, together with federally-approved environmental documentation, will provide the general design criteria to be used in the development of the final design plans. Consideration of improvements to intersections, drainage facilities, pedestrian and bicycle facilities, and utility adjustments are included in this project. Twelve at-grade alignments and one grade-separated alignment, as well as the No-Action and Traffic System Management (TSM) alternatives are evaluated within this PER. A recommended corridor is chosen in Section 7. Alignments are discussed and evaluated in Section 8. Variations in the selected alignment, including both four-lane and six-lane alternatives, are addressed in Section 9. At this time no right-of-way acquisition or construction funding has been identified in the FDOT's 5-year work program.

### 2.2 Project Description

The project will consist of roadway improvements along NW 9th Avenue from NW 11th Street south to Sunrise Boulevard, a diagonal connector between there and NW 7th Avenue near Sistrunk Boulevard, and improvements along NW 7th Avenue from Sistrunk south to Broward Boulevard. Improvements south of Broward Boulevard will be made by others.

NW 7th Avenue, south of Sunrise Boulevard, and NW 9th Avenue, north of Sunrise Boulevard, together comprise an important north-south travel path in Fort Lauderdale. As noted in the Summary, providing a connector between these facilities will speed north-south traffic flow and remove traffic from the section of Sunrise Boulevard between NW 7<sup>th</sup> Street and NW 9<sup>th</sup> Street. It will also reduce accident exposure for those traveling north-south from two intersections to one at Sunrise Boulevard. Both four-lane and six-lane connectors are being studied.

The project is designed to provide safer and more efficient service to those traveling both to and through the area. Combined with other infrastructure improvements and the market forces that will come to bear with improved accessibility, the project is expected to stimulate redevelopment in the area. The project will include landscaping, bicycle lanes, and sidewalks, as well as improved drainage. Greater detail is provided in Section 9.