Traffic Analysis

North-South Expressway Corridor Study
I.H. 220 in Shreveport to Arkansas State Line

State Project No. 700-24-0072

prepared for

Demopulos and Ferguson
Consulting Engineers

prepared by

Wilbur Smith Associates
Consulting Engineers and Planners

October 25, 1995

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October 25, 1995

Mr. Chris Demopulos, P.E.
President
Demopulos & Ferguson, Inc.
401 Edwards, Suite 1600
Shreveport, Louisiana 71101-6141

Dear Mr. Demopulos:

We are pleased to submit this final report, which documents the findings of our Traffic Analysis conducted for the North-South Expressway Corridor Study. This traffic analysis was performed in accordance with our Subconsultant Agreement with Demopulos & Ferguson, dated April 4, 1994.

This report documents the analysis of existing traffic, roadway and land use conditions in the study corridor; estimates future (years 2005 and 2020) traffic volumes on alternative highway alignments; and, reports the traffic impacts associated with the proposed North-South Expressway between Interstate 220 in Shreveport and the Arkansas State Line.

We appreciate the opportunity to undertake this traffic analysis for the North-South Expressway Corridor Study. Should you have any questions regarding our findings, please advise us.

Respectfully submitted,

WILBUR SMITH ASSOCIATES

Robert P. Babineaux, Jr., P.E.
Project Manager

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Introduction

This report documents an analysis of existing and future traffic conditions within the corridor of the proposed North-South Expressway between Interstate 220 in Shreveport, Louisiana and the Arkansas State Line. This traffic analysis was conducted by Wilbur Smith Associates as part of the North-South Expressway Corridor Study, which was undertaken for the Louisiana Department of Transportation and Development (LaDOTD). Professional engineering and planning services for the corridor study were provided by the Consultant Team of Demopulos and Ferguson in professional association with Wilbur Smith Associates and Geo-Marine.

Study Background

Interstate 49 extends in a north-south direction from Interstate 10 in Lafayette, Louisiana, to Interstate 20 in Shreveport, Louisiana. The proposed North-South Expressway, which would function as an extension of Interstate 49, has long been discussed between Shreveport and Kansas City, Missouri. Construction of the proposed highway would result in a continuous north-south freeway route through the central United States between the Gulf of Mexico and Canada (via Interstate 49 in Louisiana; the proposed highway between Shreveport and Kansas City; and, Interstates 29 and 35 between Kansas City and Canada).

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) calls for the development of "High Priority Corridors" on the National Highway System (NHS). ISTEA states that the development of these designated transportation corridors is the most efficient and effective way of integrating regions; improving efficiency, and safety of commerce and travel; and, further promoting economic development.

The proposed North-South Expressway between Shreveport and Kansas City is a designated High Priority Corridor project. ISTEA provides LaDOTD with approximately $29 million for the planning, design and partial construction of the North-South Expressway between Shreveport and the Arkansas State Line. ISTEA funding is also provided for the sections of this new highway facility within the States of Arkansas and Missouri, which are currently in various stages of planning and design.

Study Purpose

The purpose of this traffic analysis element of the North-South Expressway Corridor Study is to evaluate the traffic impacts of the proposed highway between Interstate 220 in Shreveport and the Arkansas State Line. This traffic study analyzes existing traffic, roadway and land use conditions in the study corridor; estimates future (years 2005 and 2020) traffic volumes on alternative highway alignments; and, evaluates the traffic impacts associated with the proposed North-South Expressway on the area transportation system.

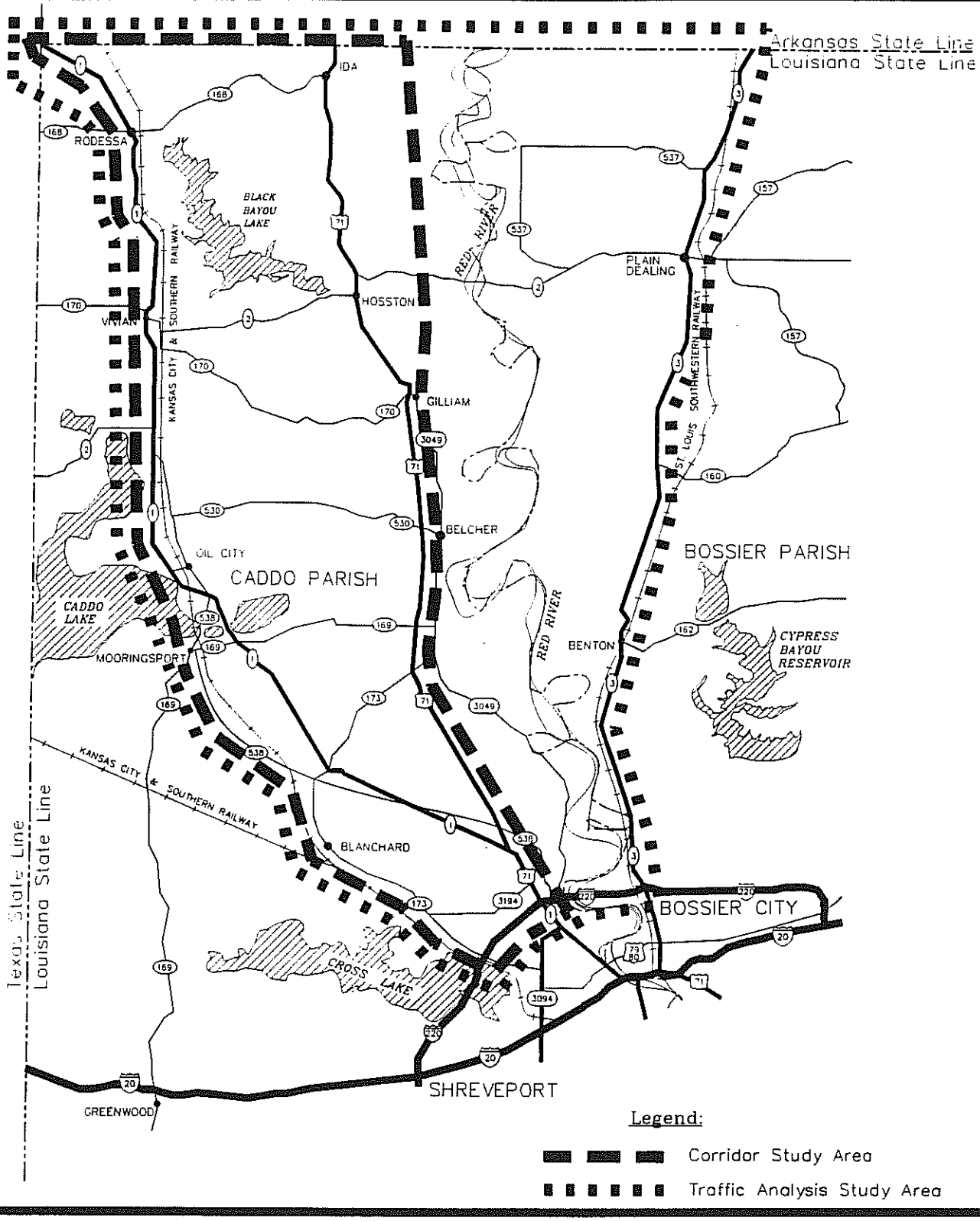
Study Area

The study area selected for the North-South Expressway Corridor Study, shown in **Figure 1**, is located in north Caddo Parish in northwest Louisiana. It is generally bounded by the Arkansas State Line on the north, US 71 on the east, Interstate 220 on the south, and LA 1/LA 173 on the west. The study corridor is approximately 48 kilometers (30 miles) in length and has an average width of approximately 10 kilometers (six miles). For this traffic analysis, the corridor study area as well as the area located further east across the Red River to LA 3 was considered, recognizing the likelihood that some of the through traffic currently utilizing LA 3 will divert to the proposed North-South Expressway.

Study Coordination and Development

This traffic study was conducted in close coordination with staff of the Design and Planning Divisions of LaDOTD. A Technical Advisory Committee was also established for the study, which served in a technical advisory role and provided input and review of study elements. The Technical Advisory Committee includes the following members:

- Mr. Richard Savoie, P.E., Project Coordinator, LaDOTD;
- Mr. Bruce Easterly, P.E., District Administrator, LaDOTD;
- Mr. Tom Dark, Director of Public Works, City of Shreveport;
- Mr. Gary Neathery, Director of Public Works, Caddo Parish;
- Mr. Andrew Kohl, P.E., Parish Engineer, Caddo Parish;
- Mr. Charles Kirkland, Director, Metropolitan Planning Commission; and,
- Mr. Kent Rogers, Executive Director, Northwest Louisiana Council of Governments.



Study Area

North-South Expressway Corridor Study

Shreveport to Arkansas State Line

3 2 1 0 3M

SCALE IN MILES

Wilbur Smith Associates

Figure 1

Additionally, meetings were held with area public agencies, elected officials and organizations to obtain available information regarding existing and planned roadway, traffic and land use conditions and to discuss highway improvement needs. LaDOTD and Consultant Team staff also met with the Arkansas State Highway and Transportation Department (ASHTD) for coordination purposes and to discuss the status and findings of their study efforts regarding alternative highway alignments within the State of Arkansas.

Finally, a total of four public meetings were held during the project to provide citizens with an opportunity to state their comments, concerns and suggestions regarding study findings and alternative highway alignments. Two meetings, one in Gilliam and the other in North Shreveport, were conducted near the beginning of the study on August 22 and 23, 1994, respectively. Additional public meetings were held in Hosston and North Shreveport near the end of the project on June 27 and 28, 1995, to present the study findings regarding alternative alignments of the proposed North-South Expressway.

Available Data and Previous Studies

This study made maximum use of available data and previous studies obtained from area agencies and organizations. Special consideration was given to the findings included in the following previous studies:

- Shreveport - Bossier Metropolitan Area Transportation Plan (1990 - 2010), Wilbur Smith Associates in association with Demopulos and Ferguson, November 1989;
- Kansas City, Missouri to Shreveport, Louisiana Highway Feasibility Study, Arkansas State Highway and Transportation Department, April 1988;
- U.S. Highway 71 Draft Environmental Impact Statement - Texarkana, Arkansas to Louisiana State Line, Arkansas State Highway and Transportation Department, 1994.
- U.S. 71 Alternatives Study, Carter Burgess, May 1994; and,
- North-South Expressway Corridor Location Study, HNTB, 1973.
- Population Projections to 2010 of Louisiana Parishes, Michael D. Irwin, Louisiana State University, 1992.