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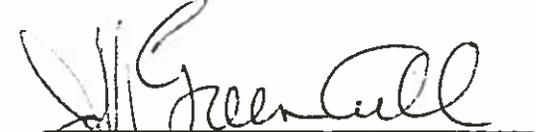
FEASIBILITY STUDY

US 74, Anson County
Relocation Around Wadesboro
R-2411

Prepared by
Planning and Research Branch
Division of Highways
N. C. Department of Transportation


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I. DESCRIPTION

This report covers a preliminary study of a proposed relocation of US 74 around the Town of Wadesboro. A vicinity map of the Wadesboro area is shown on Figure 1. This project is included in the 1988-1996 Transportation Improvement Program for feasibility study and/or right of way protection. It is not currently funded.

II. PURPOSE OF PROJECT

Existing Road Characteristics

The Wadesboro portion of US 74 is part of the strategic corridor extending between Charlotte and Wilmington. This east-west corridor connects the state's largest city with its largest port, and, thus, carries a significant volume of commercial traffic. US 74 also serves as a tourist route, because it links Charlotte and many communities of the southern Piedmont to the southeastern coastal areas.

US 74 through Wadesboro is a multi-lane facility of varying widths. Outside the corporate limits where the speed limit is 55 mph, the existing highway has 4-lane divided sections with variable grassed median widths of up to 44 feet. Within the corporate limits, the existing cross section is, for the most part, five lanes undivided with curbing or shoulders. Short 4-lane sections with some parallel parking exist near downtown Wadesboro. Speed limits in Wadesboro are reduced to 45 and 35 mph. Adjacent land is heavily developed with strip commercial and residential uses.

Average daily traffic volumes along US 74 during 1988 ranged from 13,000 vehicles per day west of Wadesboro to over 21,000 vpd in the heart of town. Approximately 15 percent of the total traffic volumes constitutes heavy trucks. Traffic flow through Wadesboro is restrained by numerous signals, low speeds, roadside interference and a sharp curve (25 mph) just west of the NC 109 intersection.

Accident records for a 4-year period of 1985-1988 show that 385 accidents occurred within the urban area of Wadesboro. The resulting accident rate is 3.15 accidents/million vehicle miles, which is slightly less than the statewide average rate of 3.28 acc/mvm for urban multi-lane US routes. Major patterns of accidents were rear-end and angle collisions.

Need for Project

Justification for a rerouting of US 74 around Wadesboro is predicated on a need to provide a higher and safer level of service consistent with the function of a strategic corridor. Relocation of US 74 would

allow through traffic, including a large volume of heavy trucks, to bypass numerous traffic flow restrictions and periods of congestion through the town. It would provide relief to the existing route by alleviating congestion and reducing heavy truck flow which produces undesirable effects on the urban environment such as noise and air pollution.

III. RECOMMENDATIONS AND COSTS

Location

Based on consideration of minimum impact to existing development in the area and relationship to the ultimate thoroughfare system, the recommended corridor for a relocation of US 74 is the north side of Wadesboro as shown on Figure 2. (Note: An aerial mosaic showing the relocation corridor is on file in the Planning and Research Branch.)

The northern corridor would be a logical addition to the Wadesboro Thoroughfare Plan currently being updated. (The latest thoroughfare plan for Wadesboro was approved in 1968 but does not show a long range US 74 bypass of the town.) The new US 74 route would allow US 52 traffic north of Wadesboro to utilize a portion of the US 74 relocation between existing US 52 and a future US 74-US 52 interchange northeast of Wadesboro. US 52 south of Wadesboro would logically be relocated eastward of its present location (see Figure 2) and tie in with the future interchange. US 52 north of Wadesboro to Albemarle is included in the TIP (R-2320) for widening to a multi-lane section, but no schedule has been set at this time.

Design

Initial traffic volumes that would use relocated US 74 are estimated to range up to 7,000 vpd. This volume is estimated to increase to approximately 13,000 vpd by year 2010. Future rerouting of US 52 along US 74 relocation would add approximately 3,000 vpd to the 2010 volume. Based on the potential traffic usage, four lanes would be required initially to provide adequate level of service. Furthermore, the relocation should have full control of access with interchanges to maintain high type traffic operation and protection against encroaching expansion of the urban area. Suggested locations for interchanges and grade separations are shown on Figure 2.

The recommended route is approximately 8 miles long. Travel distance along the new route, which extends up to 2 miles north of downtown Wadesboro, would be approximately half a mile longer than the existing route.

Costs

Total estimated costs of providing a four-lane divided highway (2 @ 24-foot pavements with 46-foot grassed median) with interchanges at five locations, grade separations at 5 locations, and a bridge at one major stream crossing along an estimated 300-foot right of way are as follows:

Construction	\$ 54,000,000
Right of Way	\$ 4,900,000
TOTAL	\$ 58,900,000

These costs estimates were furnished by the Preliminary Construction Cost Estimate Engineer and the Right of Way Branch.

IV. ALTERNATIVES

Without the benefit of a preliminary design investigation, no other corridor was found to be more feasible from traffic service, environmental, development, and cost considerations.

Consideration was given to an alternate location closer to Wadesboro (see Figure 2). Because of its proximity to developed areas, this route would attract more traffic and require less travel distance. However, it would impact more development in the area of US 52, encounter rougher terrain, and more importantly, may be disruptive to a County park located on SR 1645. The alternate route would pass close to a major high school on US 52 as well as the park and may take of some of the approximate 150-acre County-owned property surrounding the 40-acre park. In addition, it would cross a 45 MPH speed limit section of US 52 where future widening to a five-lane urban section has been recommended. In contrast, the recommended location for US 74 would cross a 55 MPH section of US 52 where widening to a four-lane divided section has been recommended. Another advantage of the recommended corridor is better accessibility to the Anson County Airport located off US 52 approximately a mile and half to the north.

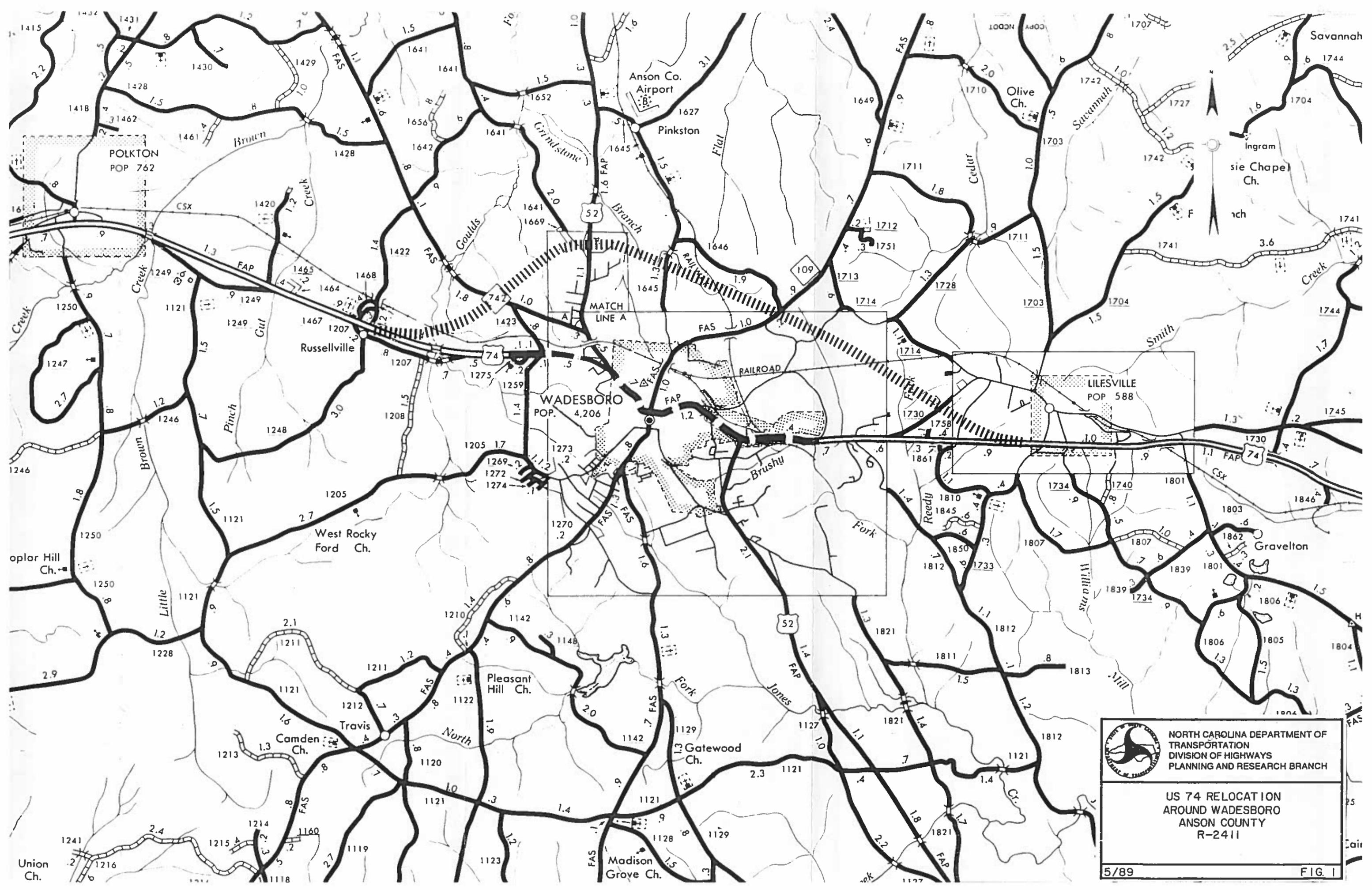
Consideration was also given to rerouting US 74 along the south side of Wadesboro. However, it would require approximately two miles of additional construction to bypass the spreading development and would not provide as good traffic service as the northern location.

V. OTHER MATTERS

No known areas of environmental concern are anticipated to be crossed by the recommended location. Major possible negative impacts would be the loss of forested land and wildlife habitat, increased noise levels to nearby development, and displacement of approximately 43 residences and 3 businesses.

If the project is to be implemented at a future date, all feasible alternatives and their associated impacts will have to be evaluated in a detailed planning/environmental document prior to that time, and a final decision made as to the most appropriate location and improvement.

GRD/rm




NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLANNING AND RESEARCH BRANCH

US 74 RELOCATION
AROUND WADESBORO
ANSON COUNTY
R-2411

5/89 FIG. 1



35°00' 35°07'30" ANSONVILLE 7.4 MI. PINKSTON 1.5 MI. (ANSONVILLE) MANGUM 9.4 MI.



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