

FEASIBILITY STUDY

Thomasville

**NC 109 (Randolph Street)
from existing five lanes at Royal Oaks Street
to SR 2123 (Main Street)**

Davidson County

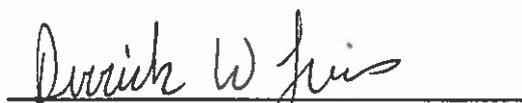
Division 9

FS-9909F

Prepared by
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FEASIBILITY STUDY

NC 109 (Randolph Street) from existing five lanes at Royal Oaks Street to SR 2123 (Main Street) in Thomasville

Davidson County

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I. GENERAL DESCRIPTION

This feasibility study evaluates the potential for the widening of NC 109 (Randolph Street) from the existing five lanes at Royal Oaks Street to SR 2123 (Main Street). See Figure 1 for the location of the project. The project is approximately 0.8 miles (1.3 km) in length.

The studied typical section is a five-lane, 64-foot (19.5-m) wide face-to-face, curb and gutter with 10-foot (3.0-m) berms on 100-foot (30.5-m) wide right-of-way with no control of access. The estimated cost of the project is \$5,400,000 (\$2,200,000 for right-of-way and \$3,200,000 for construction).

This study is not a detailed planning/environmental investigation. A feasibility study presents studied cross-sections for improvements, general corridors of improvements, and estimated costs of construction and right-of-way. This study attempts to identify any potential environmental, permitting, or other observed issues that deserve consideration in the planning and construction stages.

II. NEED FOR PROJECT

This project was requested by the City of Thomasville and High Point Urban Area Transportation Advisory Committee.

Randolph Street is classified as a Principal Arterial on the Statewide Functional Classification System. On the High Point Urban Area Thoroughfare Plan, it is classified as a Major Thoroughfare.

The project corridor lies in a commercial area. Existing Randolph Street within the project limits is generally a three-lane curb and gutter facility with sidewalk on both sides.

Estimated 2000 average daily traffic (ADT) on Randolph Street within the scope of this study was 14,600 vehicles per day (vpd). In the design year 2025,

the traffic volume is estimated to be 18,400 vpd. The existing Randolph Street is operating at a level of service (LOS) between D and E, and is anticipated to operate at a LOS E in the design year 2025. If widened to multi-lanes, this facility should operate at a LOS B through the design year 2025.

During the period from August, 1995, through July, 1998, there were 55 accidents reported along Randolph Street within the project limits. This resulted in an accident rate of 540 accidents per 100 million vehicle miles (acc/100mvm) compared to a statewide average of 320 acc/100mvm for this type of facility. No fatalities and 17 injuries were reported during this period. The rear-end slow or stop type of accidents accounted for one-third of all the accidents. If widened to multi-lanes, the accident rate on Randolph Street is expected to reduce.

III. STUDIED IMPROVEMENTS

It is proposed to widen NC 109 (Randolph Street) from the existing five lanes at Royal Oaks Street to SR 2123 (Main Street). See Figure 1 for the location of the project. The project is approximately 0.8 miles (1.3 km) in length. The studied typical section is a five-lane, 64-foot (19.5-m) wide (face-to-face) curb and gutter section with 10-foot (3.0-m) wide berms on 100-foot (30.5-m) wide right-of-way. There would be two 12-foot (3.7-m) wide lanes in each direction and a 12-foot (3.7-m) wide center turn lane. A 5-foot (1.5-m) wide sidewalk would be provided on both sides of the street. Widening would be mostly symmetrical to the existing roadway, except for the section between Second Avenue and Main Street where asymmetrical widening would be necessary to avoid impacting properties with historic/architectural significance (see Figure 1).

It is estimated that this project would require the relocation of 1 residence and 5 businesses. The cost of the project is estimated as follows:

Right-of-Way	\$ 2,200,000
Construction	<u>\$ 3,200,000</u>
Total Cost	\$ 5,400,000

A transportation benefit analysis was also completed for this project. For the period between 2000 and design year 2025, it is estimated that the total transportation benefits for the project are \$44,000,000 with an average of \$1,760,000 per year. The total benefits include accident cost savings, time cost savings, and operating cost savings.

IV. OTHER COMMENTS AND CONCERNS

A historic site known as the "Smith Clinic" on the National Register of Historic Places has been identified in the project corridor. NCDOT Historic Architectural Resources Section has found that the Anne Queen House at the southwest corner of Randolph Street and West Colonial Drive may be eligible for listing in the National Register. The house located beside Anne Queen House, and the Memorial United Methodist Church across the street from it, may also be eligible. However, further studies will be needed to determine the significance of the buildings. If these buildings are found to be eligible for the National Register, Section 4(f) evaluation will be required for this project.

Based on maps available at the Department of Environment, Health, and Natural Resources - Natural Heritage Section, no threatened or endangered species were identified in the project corridor.

The NCDOT Division of Bicycle and Pedestrian Transportation confirmed that NC 109 within the project limits is not a designated bicycle route.

