

FEASIBILITY STUDY

Franklin
SR 1659 (Depot Street)
from US 441 Bus. (Main Street)
to SR 1323 (Riverview Street)
Macon County

U-2929

Prepared by
Program Development Branch
Division of Highways
N.C. Department of Transportation



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Date

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I. GENERAL DESCRIPTION

This is a feasibility study for the extension of SR 1659 (Depot Street) on a new location, from its current intersection with US 441 Business (Main Street) to SR 1323 (Riverview Street) in the Town of Franklin, Macon County (see figure 1). Estimated project length is 0.7 mile. The recommended typical cross-section is a two-lane, 28-foot pavement with two 12-foot travel lanes and 8-foot usable shoulders (including 2-foot paved shoulders). Minimum recommended right-of-way is 100 feet with no control of access. The estimated cost of this project is \$1,400,000 (\$300,000 for right-of-way and \$1,100,000 for construction).

This study is not a detailed planning/environmental investigation. A feasibility study presents recommended typical cross sections, general alignments, and estimated cost of the improvement. The study also attempts to provide an early identification of potential environmental, permitting, or other issues which deserve consideration in the planning and construction stages.

II. EXISTING CONDITIONS & NEED FOR PROJECT

This project was requested by the Town of Franklin. The SR 1659 (Depot Street) extension is included on the mutually adopted thoroughfare plan for the Town of Franklin as a proposed major thoroughfare. The extension of Depot Street is needed to provide a direct north-south route for traffic in east Franklin. This would also separate traffic on SR 1462 (Riverview Street) from traffic generated by Angel Community Hospital. Angel Community Hospital is located at White Oak Street and SR 1462.

The southern terminal of the recommended improvement is the signalized intersection of US 441 Business (Main Street) and SR 1659 (Depot Street). At this location SR 1659 consists of a 3-lane, 40-foot face-to-face curb and gutter section (a northbound left turn lane, and two southbound lanes). US 441 Business consists of a one-way (west bound), 3-lane, 40-foot face-to-face curb and gutter section (a left-turn lane and two through, west bound lanes).

The north terminal of the recommended improvement is located approximately 500 feet northeast of the SR 1323 (Iotla Street)/SR 1462 (Riverview Street) intersection. At this location SR 1323 consists of a two-lane, 20-foot pavement with 2 to 4-foot usable shoulders.

SR 1659 (Depot Street) is classified as a rural minor collector in the statewide functional classification system. Land use along SR 1659 is mostly commercial and business development. Currently, SR 1659 forms the southern approach to a "T" intersection with US 441 Business (Main Street). The proposed extension of SR 1659 would provide a continuous route running north-south, parallel to the Little Tennessee River and to SR 1462 (Riverview Street).

SR 1462 (Riverview Street) is classified as a rural minor collector in the statewide functional classification system. The existing SR 1462 is a two-lane, 20-foot pavement with curbs from US 441 Business to White Oak Street (this section is in front of the hospital). North of White Oak Street, SR 1462 is a two-lane, 20-foot pavement with 2 to 4-foot usable shoulders. Land use along SR 1462 is mainly residential development to the west, and vacant land to the east.

The proposed Depot Street extension would route through traffic between the center and the north of Franklin, away from Angel Community Hospital, thereby providing it with a safer and more convenient access.

Estimated current traffic demand for the proposed roadway is 2,400 vehicles per day (vpd). Traffic demand is estimated to increase to 5,600 vpd by the year 2012.

At the estimated 1992 traffic volume of 2400 vpd, the proposed extension would operate at a level-of-service (LOS) B during the peak hour. With the estimated increase in traffic demand, the proposed roadway would operate at a LOS C by the year 2012.

From June 1989 to May 1992, one accident was reported in the vicinity of the proposed project. This accident occurred approximately 100 feet south of White Oak Street on SR 1462 (Riverview Street).

III. RECOMMENDATIONS

It is recommended that SR 1659 (Depot Street) be extended 0.7 miles on a new location (identified as Alternative 1 on the attached location map). The recommended corridor (Alternative 1), would extend SR 1659 (Depot Street) from its current terminal at US 441 Business (Main Street) to intersect SR 1462 (Riverview Street) approximately 500 feet north of the SR 1462/SR 1323 (Iotla Street) intersection. The recommended corridor is located along an escarpment, parallel to, and between the Little Tennessee River and SR 1462.

The recommended typical cross-section consists of a two-lane, 28-foot pavement with two 12-foot travel lanes and 8-foot usable shoulders (including 2-foot paved shoulders). The new roadway is to be constructed on 100-foot wide right-of-way with no control of access.

The signalized intersection of SR 1659/US 441 would remain signalized. At the northern terminal, SR 1323 would be stop sign controlled at its new intersection with the proposed roadway.

Project cost is estimated as follows:

Right-of-Way	\$ 300,000
Construction	\$1,100,000
Total Project Cost	\$1,400,000

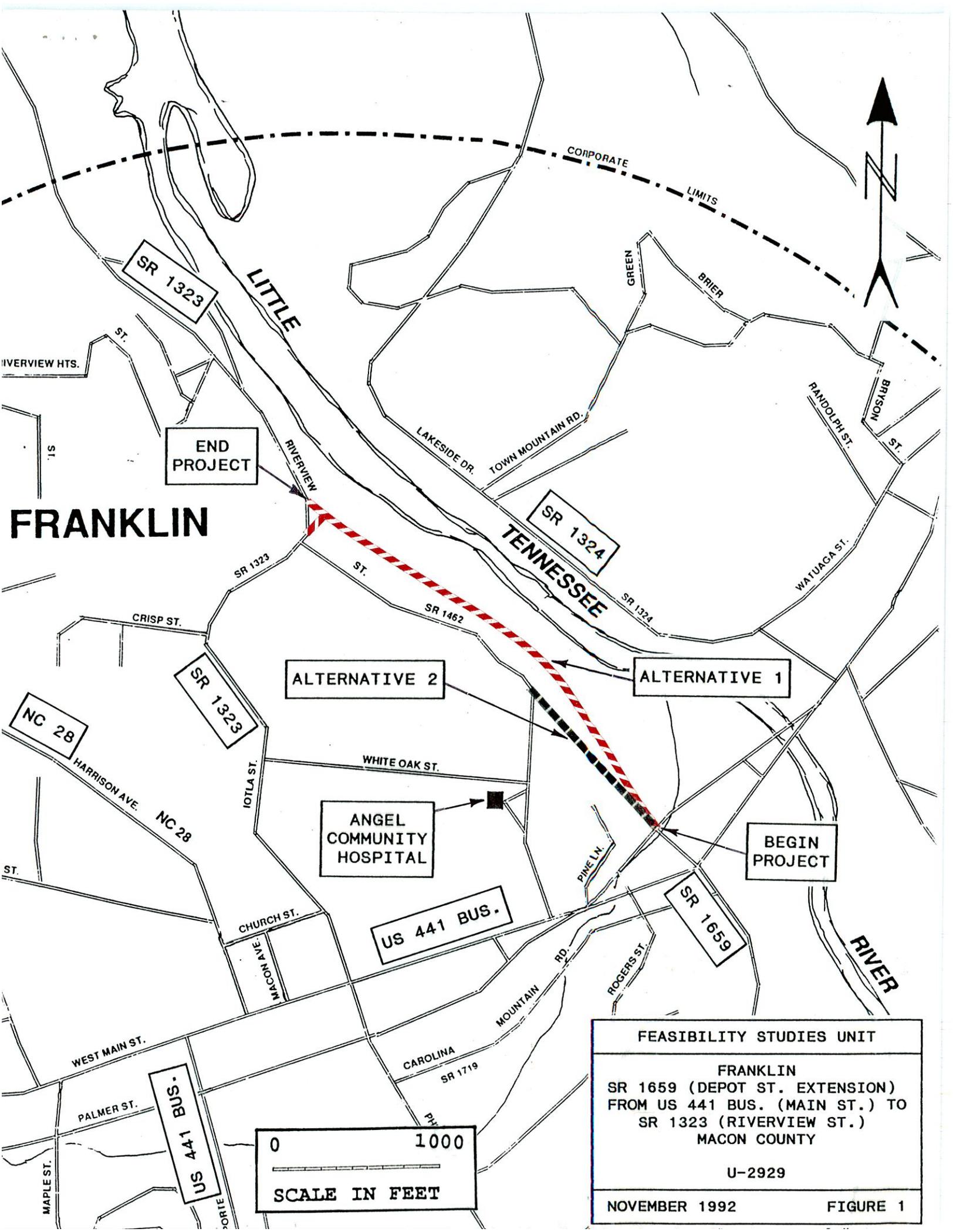
IV. ALTERNATIVE IMPROVEMENTS

Extending SR 1659 (Depot Street) from US 441 to SR 1462 (Riverview Street) a distance of 0.3 miles was also considered but not recommended. This corridor is identified as Alternative 2 on the attached map. Alternative 2 is not recommended due to the steep grade it would offer. The cost of alternative 2 is \$900,000 (\$200,000 for right-of-way and \$700,000 for construction).

V. OTHER COMMENTS & CONCERNS

It is anticipated that the proposed project will not require any residential or business relocations.

An environmental screening was not conducted for this study. The proposed extension corridor may be located in the 100-year flood plain of the Little Tennessee River.



FRANKLIN

END PROJECT

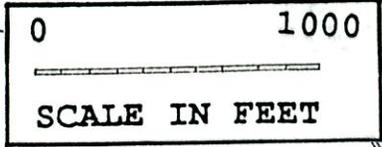
ALTERNATIVE 2

ALTERNATIVE 1

ANGEL COMMUNITY HOSPITAL

US 441 BUS.

BEGIN PROJECT



FEASIBILITY STUDIES UNIT	
FRANKLIN SR 1659 (DEPOT ST. EXTENSION) FROM US 441 BUS. (MAIN ST.) TO SR 1323 (RIVERVIEW ST.) MACON COUNTY	
U-2929	
NOVEMBER 1992	FIGURE 1