FEASIBILITY STUDY

New Bern
SR 1278 (Trent Road)
from US 17 (Clarendon Blvd.) to SR 1215 (Simmons St.)
Craven County
U-3448

Prepared by
Program Development Branch
Division of Highways
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I. General Description

This feasibility study describes widening SR 1278 (Trent Rd.) from US 17 (Clarendon Blvd.) to SR 1215 (Simmons St.), a distance of 2.0 miles (3.2 km). The project location is shown on Figure 1. The recommended cross-section is a five-lane curb-and-gutter section, 64 feet (19.5 m) wide from face-to-face of curbs with 8-foot (2.4-m) berms, on 100 feet (30.5 m) of right-of-way. It is anticipated that there will be no residences and four businesses relocated due to this project. The total cost of the project, including construction and right-of-way, is estimated to be $8,400,000.

This study is the initial step in the planning and design process for this project and is not the product of exhaustive environmental or design investigations. The purpose of this study is to describe the proposed project including costs, and to identify potential problems that may require consideration in the planning and design phases.

II. Need for Project

The purpose of this project is to alleviate congestion within the project corridor. This project is supported by Craven County, the City of New Bern and the Town of Trent Woods.

SR 1278 is designated as a major thoroughfare in the New Bern Thoroughfare Plan and as a minor urban arterial in the North Carolina Statewide Functional Classification System.

From US 17 to SR 1321 (Highland Ave.), development is a mix of residential and commercial development. There is a new shopping center adjacent to the intersection with SR 1309 (Glenburnie Rd.). From SR 1321 to SR 1215 (Simmons St.), development is primarily commercial. Georgia Pacific operates a small lumber yard adjacent to the intersection with SR 1215. Several of the businesses in this area currently have uncontrolled driveway access onto SR 1278.

SR 1278 is currently a two-lane, two-way roadway with a pavement width of 24 feet (7.3 m) and soil shoulders. From US 17 to SR 1309 (Glenburnie Rd.), the existing right-of-way is 80 feet (24.4 m) wide. From SR 1309 to SR 1215, the existing right-of-way is 60 feet (18.3 m) wide.

Bridges No. 79 and No. 80 carry the US 70 Bypass over SR 1278. These bridges provide 90.5 feet (27.6 m) of under horizontal clearance and 16.8 (5.1 m) of under vertical clearance. These bridges were built in 1977 and have sufficiency ratings of 97.0

There are existing signals at the intersections with US 17, SR 1200 (Chelsea Rd.), SR 1321 (Highland Ave.) and at SR 1215 (Simmons St.). The railroad shown in Figure 1 at the intersection with SR 1215 has been removed.

TIP Project U-2556 will widen US 17 to a six-lane divided highway. This project will also improve the skew of the exiting intersection with SR 1278. This project is scheduled for construction in FY 1997.

The 1995 Average Daily Traffic (ADT) along SR 1278 varies from 4,900 to 10,900 vehicles per day (vpd). For the design year 2020, the estimated traffic volume on SR 1278 will range between 10,700 and 20,000 vpd. Truck traffic is estimated to make up 3% of daily traffic.

Currently SR 1278 is operating at Level of Service (LOS) C. If no improvements are made, it is projected that the roadway will operate at LOS F in the design year 2020. If SR 1278 is widened to a five-lane curb and gutter section, the facility will operate at LOS B in the current year and at LOS C in the design year 2020.

During the three-year period from April 1992 to March 1995, there were 81 accidents reported on SR 1278 within the project limits. There were 50 injuries reported as a result of these accidents, with no fatalities. The accident rate along SR 1278 within the project limits is 455.31 accidents per 100 million vehicle miles (acc/100mvm). This compares with the 1994 statewide rate of 340.50 acc/100mvm for urban secondary routes. Twenty-six percent of the accidents occurred at afternoon rush hour, while thirty-one percent of the accidents within the project limits were rear-end collisions. Widening SR 1278 to a five-lane section will improve safety along the roadway and will help prevent these types of accidents.

III. Recommendations

It is recommended to widen SR 1278 (Trent Rd.) from US 17 (Clarendon Blvd.) to SR 1215 (Simmons St.), a distance of 2.0 miles (3.2 km). The project

location is shown on Figure 1. The recommended cross-section is a five-lane curb-and-gutter section, 64 feet (19.5 m) wide from face-to-face of curbs with 8-foot (2.4-m) berms, on 100 feet (30.5 m) of right-of-way. It is anticipated that there will be no residences and four businesses relocated due to this project.

It is recommended to upgrade the existing signals at the intersections with SR 1200 (Chelsea Rd.), SR 1321 (Highland Ave.) and at SR 1215 (Simmons St.). Additional signals are recommended at the intersections with SR 1309 (Glenburnie Rd.) and SR 1340 (Red Robin Ln.).

It is anticipated that no residences and four businesses will be relocated due to the project.

The total cost is as follows:

Construction	$ 3,700,000
Right-of-way	$ 4,700,000
Total Cost	$ 8,400,000

IV. Other Comments

An environmental screening was not conducted for this study. However, no impacts to historic properties or wetlands are anticipated.

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

Wilson Creek is classified SA NSW and is part of the Trent River Basin.

No special accommodation for bicycles is recommended on this project.