

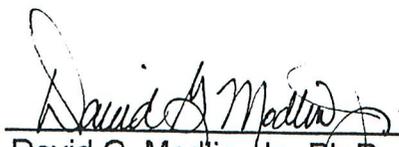
# FEASIBILITY STUDY

High Point  
Surrett Drive (SR 1216)  
From Eden Terrace to Market Center Drive  
Guilford and Randolph Counties

U-3432

Prepared by  
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**I. General Description**

This feasibility study describes proposed improvements to Surrett Drive (SR 1216) in High Point. It is proposed to widen Surrett Drive from Eden Terrace to Davidson Street. The total project length is 1.5 miles (2.4 km). The location of the recommended improvements is shown on Figure 1.

The recommended cross section is a 5-lane, 64-foot (19.5-m) wide (face-to-face), curb-and-gutter section, with 8-foot (2.4-m) wide berms, throughout the project length.

The required right-of-way width is 100 feet (30.5 m) from Eden Terrace to approximately 2,400 feet (731.5 m) north of West Fairfield Road, 110 feet (33.5 m) from approximately 2,400 feet (731.5 m) north of West Fairfield Road to approximately 1,000 feet (304.8 m) south of Market Center Drive, and 100 feet (30.5 m) from approximately 1,000 feet (304.8 m) south of Market Center Drive to Davidson Street.

The total cost, including right-of-way and construction, is estimated to be \$14,425,000 as follows:

Right-of-Way	.....	\$ 7,825,000
Construction	.....	<u>6,600,000</u>
Total	.....	\$14,425,000

It is anticipated that 6 businesses and no residences will be relocated as a result of this project.

This study is the initial step in the planning and design process for this project and is not to be considered the product of exhaustive environmental or design investigations. The purpose of this study is to describe the alternative treatments including costs, and identify potential problem areas that deserve consideration in the planning and design phases.

## II. Existing Conditions

The purpose of this project is to provide increased capacity in a heavily industrialized area of High Point and to provide for a better mix of passenger vehicles and the high percentage (20%) of trucks using the roadway.

Surrett Drive is designated as a minor arterial in the North Carolina Statewide Functional Classification System and as a major thoroughfare on the High Point Thoroughfare Plan.

From Davidson Avenue to Market Center Drive, existing Surrett Drive is a 5-lane, 64-foot (19.5-m) wide (face-to-face), curb-and-gutter section. The remainder of the studied roadway (Eden Terrace to Davidson Avenue) is generally a 2-lane shoulder section with 24-foot (7.3-m) wide pavement and soil shoulders.

Development along the project corridor is heavily industrialized and includes furniture manufacturing, bus manufacturing, insulation manufacturing, construction companies, car washes, and automotive service facilities.

Between Eden Terrace and Fraley Road, Southern Railroad runs parallel to Surrett Drive and is located immediately adjacent to the eastern shoulder of the roadway. The railroad carries two trains per day and has spurs to the industrial areas on the east side of the railroad.

At the southern project terminal, Surrett Drive intersects Eden Terrace/Corporation Drive. Eden Terrace runs to the east from Surrett Drive and serves numerous residential areas. Corporation Drive runs to the west from Surrett Drive and serves a highly developed industrial area.

At the northern project terminal, Surrett Drive intersects Market Center Drive. Market Center Drive is a 5-lane, curb-and-gutter facility west of Surrett Drive and a 6-lane median divided facility east of Surrett Drive. The intersection is controlled by a traffic signal.

In addition to the Market Center Drive intersection, the intersections with Fairfield Road and Fraley Road are signalized.

There is one bridge along the project route. Bridge #77 over I-85 Business Loop/US 29-70 is located approximately 0.4 miles (0.6 km) south of Market Center Drive. The bridge is 180 feet (54.9 m) long and has a clear deck width of 26 feet (7.9 m). It was constructed in 1953 and has a sufficiency rating of 30.9 out of a possible 100 points.

The current (1995) Average Daily Traffic (ADT) volume on Surrett Drive is estimated to range from approximately 9,600 vehicles per day near the southern project terminal to approximately 12,200 vehicles per day at the I-85 Business Loop/US 29-70

interchange. The projected design year (2020) volumes are expected to reach approximately 18,800 to 23,600 vehicles per day respectively. Truck percentages are estimated to be approximately 20% of the traffic volumes.

Based on traffic projections, it is estimated that Surrett Drive is currently operating at a Level of Service E and without upgrading, it is anticipated to be operating at a Level of Service F by the Design year. Construction of a 5-lane facility will improve the operation to a Level of Service A which will deteriorate to a Level C by the design year.

During the three-year period from May 1, 1992 through April 30, 1995, there were 104 accidents reported on Surrett Drive within the project limits. There were no fatalities reported; however, the accidents resulted in 84 injuries. These accidents resulted in an accident rate of 1012.6 accidents per 100 million vehicle miles (Acc/100 MVM), compared to a 1994 statewide average of 589.0 Acc/100MVM for all urban routes in North Carolina. The most prevalent accident types were rear-end (35%), angle (25%), and left-turn (25%). The recommended cross sections will offer the potential for reduction of these types of accidents.

### III. Recommendations

This feasibility study describes proposed improvements to Surrett Drive (SR 1216) in High Point. It is proposed to widen Surrett Drive from Eden Terrace to Davidson Street. The total project length is 1.5 miles (2.4 km). The location of the recommended improvements is shown on Figure 1.

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Finch Avenue should be realigned to connect to Fraley Road.

A new bridge should be constructed over I-85 Business Loop/US 29-70. The bridge should have a clear deck width of 64 feet (19.5 m) and should be approximately 200 feet (61.0 m) long.

The eastbound on-ramp of I-85 Business Loop/US 29-70, should be extended approximately 700 feet (213.4 m).

The existing traffic signals at Fairfield Road, Fraley Road, and Market Center Drive should be upgraded. A new signal should be installed at Eden Terrace/Corporation Drive.

The total cost, including right-of-way and construction, is estimated to be \$14,425,000 as follows:

Right-of-Way	.....	\$ 7,825,000
Construction	.....	<u>6,600,000</u>
Total	.....	\$14,425,000

It is anticipated that 6 businesses and no residences will be relocated as a result of this project.

#### IV. Other Comments

No wetlands or historic properties are anticipated on this project; however, an environmental screening was not conducted.

