



South Hill 2020 Transportation Plan

Developed by the
Transportation Planning Division

of the

Virginia Department of Transportation

in cooperation with the

U.S. Department of Transportation, Federal Highway Administration

and the

Town of South Hill

October 2002

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INTRODUCTION

The *South Hill 2020 Transportation Plan* (the Plan) was developed as a cooperative effort between the Federal Highway Administration, the Virginia Department of Transportation (VDOT), and the Town of South Hill. The Plan is the product of a study that evaluated the transportation system in South Hill and recommended a set of transportation improvements to best satisfy existing and future transportation needs. The study identified needs based on capacity, safety and engineering aspects of the transportation system.

Effective transportation systems are essential to continued local and statewide economic growth and development. Providing safe, effective, and efficient movement of people and goods is a basic goal of all transportation programs in Virginia. It is with this basic goal in mind, and with further consideration of environmental issues and local government transportation objectives, that this Plan was developed.

VDOT will use this Plan when evaluating requests from the South Hill local government for specific transportation projects, and when implementing projects on the VDOT-maintained roadway system. The recommendations in this *South Hill 2020 Transportation Plan* will also be used as part of the VDOT statewide transportation planning process to ensure that local transportation projects are compatible with and support transportation improvements both statewide and in neighboring localities.

STUDY AREA AND THOROUGHFARE SYSTEM

South Hill is located in south-central Virginia near the North Carolina state line. It lies approximately halfway between the state capitals of Richmond, Virginia, and Raleigh, North Carolina. The town covers an area of approximately 4,100 acres and is easily accessible by a highway network consisting of Interstate 85, U.S. Route 58, U.S. Route 1 and Virginia Primary Route 47.

South Hill was incorporated in 1901. The town has always been known for its tobacco industry, and the town is presently the third largest flue-cured market in Virginia. However, significant recent growth in manufacturing and trade has diversified the town's economy.

The study area for the Plan coincides with the corporate limits of the Town of South Hill. As part of the analysis of transportation operations and needs performed for the study, however, connectivity to facilities in surrounding Mecklenburg County and potential extension of improvements into the County were also investigated.

A subset of the town's roadway network is designated as the urban thoroughfare system. The thoroughfare system includes roads that are functionally classified as collectors or arterials. Arterial roads serve as the major traffic-carrying facilities in the area. Collector roads carry a lesser volume of traffic and feed traffic to the arterial roadways. The focus of the *South Hill 2020 Transportation Plan* is the thoroughfare system, but local streets were analyzed as well. Also, in addition to roadways, improvements to the following other modes of transportation have been evaluated as part of this study: parking; bicycle and pedestrian facilities; intercity rail, bus, and air travel; transit and paratransit; taxi; and the movement of goods.

DEMOGRAPHIC OVERVIEW

The recent 2000 U.S. Census reports South Hill to have a population of 4,403. According to the 1990 census,

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the population of the town was 4,217. The 2000 Census count represents a slight increase from the 1990 count. Based on historic trends, as well as input from local officials, the town's population is expected to grow slightly over the 20-year horizon of this study.

The town's growth has been enhanced by its proximity to two nearby lakes, Kerr Lake and Lake Gaston. With more than 1,100 combined miles of shoreline, the tourist trade and a booming real estate market fuel the town's economic growth. Companies in the town include W.S. Peebles, International Veneer, Jones Apparel, and BGF Industries. As with the population, employment in South Hill is expected to grow slowly over the 20-year horizon of this study.

SUMMARY OF APPROACH AND ANALYSIS METHODS

This transportation plan was developed using a process that included:

- Data Collection
- Forecasting of Future Traffic Demands
- Development of Recommendations to Meet Existing and Future Transportation Needs
- Coordination with South Hill Government Officials and the Public
- Environmental Overview and Plan Documentation

Recommendations for the *South Hill 2020 Transportation Plan* are based on a comprehensive review of the capacity, safety, and geometry of the existing roadway system, as well as other issues that affect the area's transportation system, such as parking, other modes of transportation, and goods movement.

The recommendations were divided into three phases. Phase One recommendations apply to existing deficiencies and the most immediate transportation needs of the area. Phase Two recommendations apply to an interim year of 2010, and Phase Three recommendations are long-term projects (year 2020). Projects in all three phases are intended to accommodate travel demands to the horizon year of 2020.

PHASE ONE: BASE YEAR (1999) RECOMMENDATIONS

This study identified current deficiencies in the South Hill transportation system. Aspects of potential deficiencies in the existing transportation system included traffic flow and safety concerns, parking, and goods movement by truck. One project was identified as a short-term, immediate improvement and is described below.

Atlantic Street (Route 58 Business) at Hammer Street

Traffic volumes at this intersection make it difficult for pedestrians to cross. As a remedy, a pedestrian phase at the intersection should be added to the traffic signal operation by installing pedestrian signal heads.

PHASE TWO: INTERIM YEAR (2010) RECOMMENDATIONS

The interim year recommendations for the *South Hill 2020 Transportation Plan* include projects that are intended to correct existing deficiencies but, based on projected costs and potential impacts, would require a number of years to plan and fund. One project was identified as an interim improvement.

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Raleigh Avenue Extended from West Atlantic Street to West Danville Street

To divert traffic around the downtown area, extend Raleigh Avenue from West Atlantic Street to West Danville Street as an urban two-lane facility.

PHASE THREE: FUTURE YEAR (2020) RECOMMENDATIONS

No Phase Three improvements are recommended in the *South Hill 2020 Transportation Plan*.

OTHER MODES

In developing the *South Hill 2020 Transportation Plan*, all modes of travel were considered. This included an assessment of the availability of modes of transportation other than private automobiles.

South Hill has a number of other modes options for its residents, especially given its small size. The town is directly served by paratransit service by the Lake Country Area Agency on Aging, which provides transit for senior and disabled residents. The town is also served by the Lake Area Bus (LAB), which provides demand-responsive transportation for the general public for a small fee. South Hill has a taxi company, and is served directly by intercity bus service (Greyhound).

The town does not have fixed-route bus service, and is not served by intercity passenger rail service (Amtrak). Also, it also does not have commercial air service in the immediate area. The nearest passenger rail and commercial air service are in the Richmond area. This report makes no recommendations regarding other modes of transportation.

Most goods and raw materials are shipped into and out of the town by truck. The existence of bypass routes around the downtown area for both north-south and east-west travel, and the proximity of local companies to these routes expedites truck movement. Very little use of air and rail freight transport was reported by the major industries in South Hill. This report makes no recommendations regarding goods movement.

LOCAL PROJECTS

The Town of South Hill identifies, plans, and implements transportation projects as part of its capital improvement process. Three local projects were identified by the Town for inclusion in the Plan.

Atlantic Street at Shaw Street

To accommodate increased traffic near the shopping centers, the recommendation is to install a traffic signal at this intersection. The signal would be installed when warranted, based on standard traffic engineering criteria.

Mecklenburg Avenue at Ferrell Street

A traffic signal was requested by Town officials to meet future capacity needs at the intersection. The signal would be installed when warranted, based on standard traffic engineering criteria.

Raleigh Avenue Extended from West Danville Street to Goodes Ferry Road

The extension of Raleigh Avenue from West Danville Street to Goodes Ferry Road as an urban two-lane facility is an extension of the Phase Two Raleigh Avenue project. The recommendation will further aid in the diversion of traffic around the downtown intersections.

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ENVIRONMENTAL OVERVIEW

An environmental overview was conducted for the projects in the *South Hill 2020 Transportation Plan*. No environmental features were identified in South Hill that would preclude the implementation of any of the Plan's recommendations.

LOCAL COORDINATION AND CITIZEN PARTICIPATION

The development of the *South Hill 2020 Transportation Plan* included coordination meetings with Town officials and VDOT representatives and a public meeting with citizens, local officials, and VDOT representatives.

The three coordination meetings held for this study were: (1) a kick-off meeting, (2) an existing conditions meeting, and (3) a draft recommendations meeting. The kick-off meeting, held in July 1999, enabled the project team to discuss the purpose and scope of the study, the schedule for data collection and plan preparation, and the coordination process. At the second meeting (existing conditions), held in July 2001, the project team presented the results of the base year and horizon year traffic analysis and discussed potential projects to satisfy projected transportation needs. In November 2001, a draft set of transportation improvements was sent to Town officials and VDOT representatives for review.

A public meeting was held April 8, 2002, to present the draft Plan to Town officials, citizens and other interested parties. Meeting participants were invited to provide comments that were considered in the development of the final *South Hill 2020 Transportation Plan*.

PLAN ADOPTION

The South Hill Town Council voted to adopt the *South Hill 2020 Transportation Plan* on October 15, 2002.

ADDITIONAL INFORMATION

Detailed information on the development of the *South Hill 2020 Transportation Plan* and the plan's recommendations will be included in the *South Hill 2020 Transportation Plan Technical Report*. This document will be available for review at the South Hill Town Hall and the local library. The technical report will also be available in Richmond at the central office of VDOT's Transportation Planning Division, the VDOT Richmond District office in Richmond, and the VDOT residency office in South Hill.

Ongoing projects included in the Virginia Transportation Six-Year Program (FY 2003 - 2008) are not part of the South Hill 2020 Transportation Plan. The Six-Year Program can be reviewed online at www.VirginiaDOT.org.

Information on Six-Year Program projects for the Town of South Hill can also be found by contacting the VDOT Resident Engineer at the South Hill Residency Office at (434) 774-2300.

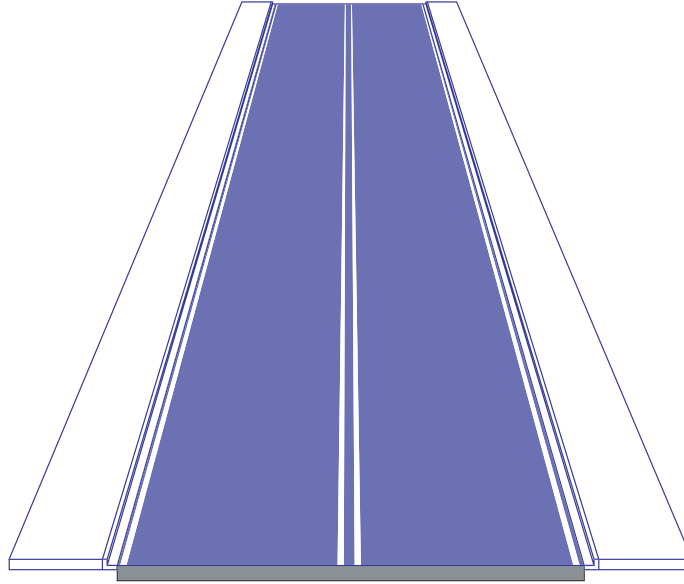
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Route	Facility Name	From	To	Road Segment Length	Recommendation	Estimated Cost [1]	Existing Typical Section	Recommended Typical Section	Average Daily Traffic		
									Year 1999	Year 2010	Year 2020
58	Atlantic Street	Hammer Street	N/A	N/A	Add pedestrian phase at intersection of Atlantic Street and Hammer Street	\$24,000 [2]	U4	U4	N/A	N/A	N/A
	Raleigh Avenue Extended	West Atlantic Street	West Danville Street	1.00	Extend Raleigh Avenue to West Danville Street to divert traffic around downtown	\$3,150,000 [3]	N/A	U2	6,668	7,688	8,615
58	Atlantic Street	Shaw Street	N/A	N/A	Install traffic signal when warranted	\$180,000 [4][5]	N/A	N/A	N/A	N/A	N/A
1	Mecklenburg Avenue	Ferrell Street	N/A	N/A	Install traffic signal when warranted	\$180,000 [4][5]	N/A	N/A	N/A	N/A	N/A
	Raleigh Avenue Extended	West Danville Street	Goodes Ferry Road	1.10	Extend Raleigh Avenue	\$3,465,000 [5]	N/A	U2	N/A	N/A	N/A
ESTIMATED TOTAL THOROUGHFARE SYSTEM COST						\$3,174,000 [5]					

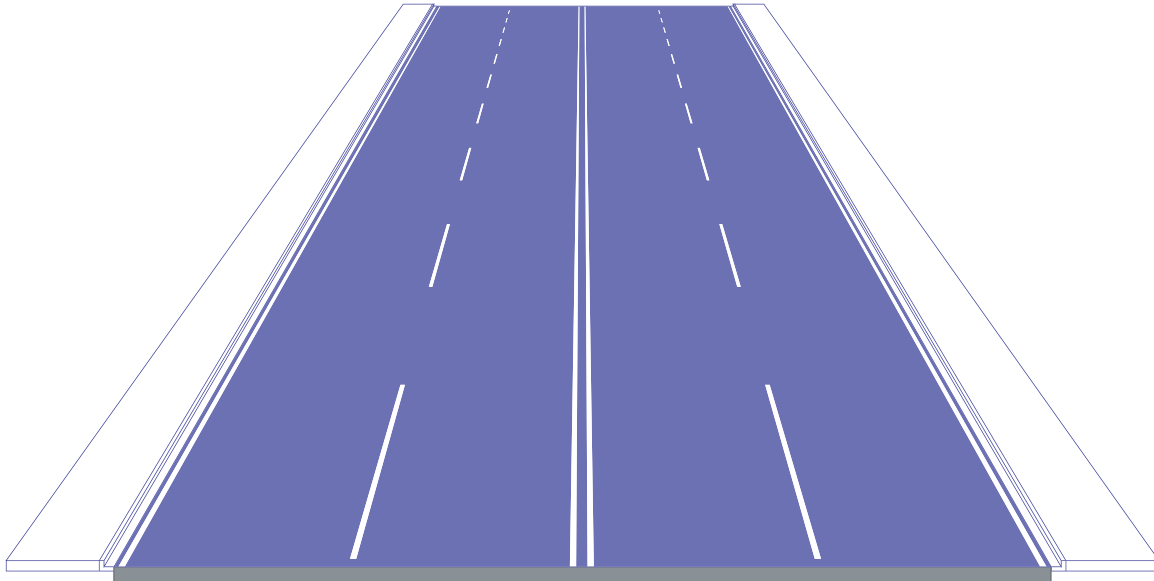
Notes:

- [1] The cost estimates included in this table are planning-level costs in year 2000 dollars. These cost estimates are based on statewide unit averages and should be used for planning purposes only. Actual construction and right-of-way costs may vary based on local conditions.
- [2] Assumes \$24,000 for providing pedestrian signal phase.
- [3] Assumes \$2,100,000 per mile for new or reconstructed roadway plus 50 percent for right of way and utilities.
- [4] Assumes unit cost of \$180,000 for installation of signal.
- [5] Local projects are listed for informational purposes only and are not included in total cost.
- N/A -- Not Applicable

TYPICAL SECTIONS



U2
Urban two-lane roadway with curb and gutter



U4
Urban four-lane roadway with curb and gutter

Unless right-of-way considerations preclude their inclusion, sidewalks are recommended on both sides of these urban roadways.