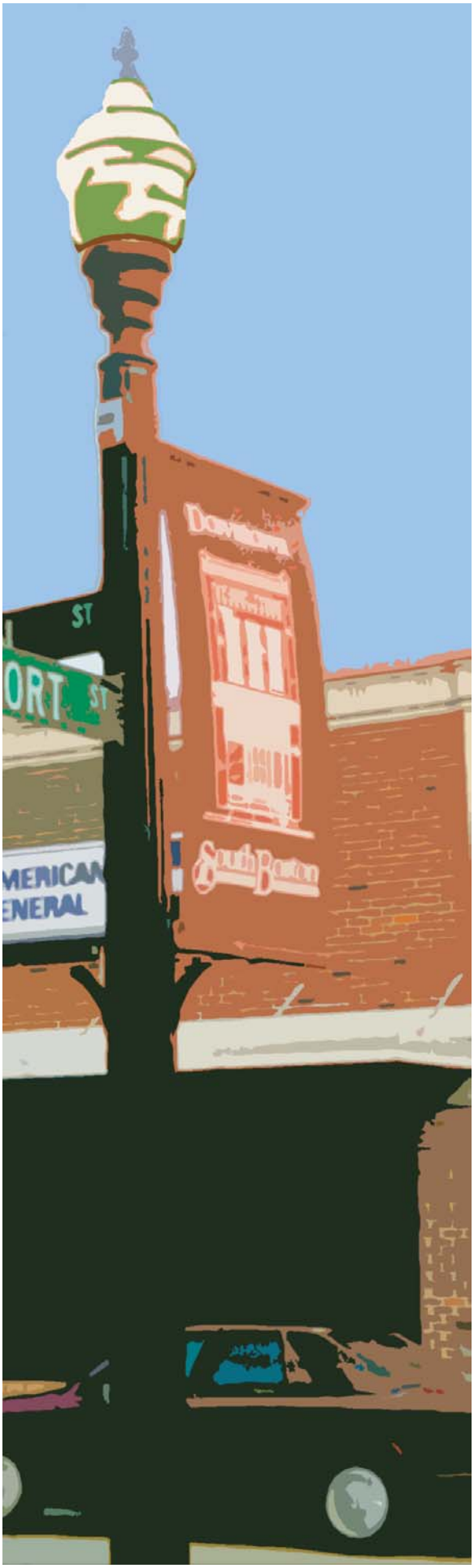


South Boston 2020 Transportation Plan

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 Boston

September 2002

This report does not constitute a standard, specification, regulation or provide a funding mechanism for the included transportation recommendations.

South Boston 2020 Transportation Plan

INTRODUCTION

The *South Boston 2020 Transportation Plan* (the Plan) was developed as a cooperative effort between the Federal Highway Administration, Virginia Department of Transportation (VDOT), and the Town of South Boston. The Plan is the product of a study that evaluated the transportation system in South Boston 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 Town for specific transportation projects, and when implementing projects on the VDOT-maintained roadway system. The recommendations in the *South Boston 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 Boston is located on the banks of the Dan River in south-central Virginia, on the eastern edge of the state's Piedmont region. The area was first settled in the 1700s, but did not grow quickly until the construction of two railroads in the 1850s. After this, South Boston developed into an active trading hub for tobacco and other crops, and the area incorporated as a town in 1884. The town continued to grow during the early and middle 1900s as a center for textile manufacturing, and incorporated as a city in 1960. However, as textile manufacturing declined through the rest of the 1900s, the City took the unusual step of reverting to status as a town in 1995 under the state guidelines for doing so.

The study area for this Plan coincides with the corporate limits of South Boston. As part of the analysis of transportation operations and needs performed for the study, however, connectivity to facilities in surrounding Halifax 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 Boston 2020 Transportation Plan* is the thoroughfare system. 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 Boston to have a population of 8,491. According to the 1990 census, the population of the town was 6,997. The 2000 census count represents significant growth from the

1990 count, but it is important to note that this increase represents population gained through an annexation, as well as "natural" growth. Based on historic trends, as well as input from local officials, the town's population is expected to grow slowly over the 20-year horizon of this study.

Industries in South Boston are in the areas of lumber, distribution, and textiles. Major companies include Dollar General, ABB Power T&D, Lasco Bathware, O'Sullivan Industries, and Presto Products. Spokespersons for each company expect the number of jobs with each of these local employers to remain steady for the foreseeable future.

SUMMARY OF APPROACH AND ANALYSIS METHODS

This transportation plan was developed as part of a structured approach with five basic components:

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

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

The transportation system recommendations for South Boston are 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 transportation improvements needed by the interim year 2010, and Phase Three recommendations are long-term projects needed by 2020.

PHASE ONE: BASE YEAR (1999) RECOMMENDATIONS

This study identified current deficiencies in the South Boston transportation system. These include traffic flow and safety concerns, parking, and goods movement by truck. Six projects were identified as short-term, immediate improvements and are described below.

Wilborn Avenue at Edmunds Street

Enhance intersection safety by prohibiting right turns on red. Also, close the two driveways on the southwest quadrant of the intersection.

Main Street at Hamilton Boulevard

Enhance intersection safety by adjusting the signal phasing to provide a separate phase for eastbound traffic. Additionally, right turns on red will be prohibited.

Halifax Road at Hamilton Boulevard

Enhance intersection safety by installing signs warning motorists of the upcoming traffic signal. Warning signs should be installed on each approach.

Wilborn Avenue at Webster Street

Enhance intersection safety by installing traffic signal warning signs on the Wilborn Avenue intersection approaches. Signal phasing would be modified for northbound left turns, allowing protected lefts only.

Main Street at Seymour Drive

Enhance intersection safety by prohibiting right turns on red on the Seymour Drive approaches.

Halifax Road at Cherry Street

Improve safety in the vicinity of the intersection by prohibiting left turns into and out of Cherry Street. This would be accomplished by installing 'no left turn' signs.

PHASE TWO: INTERIM YEAR (2010) RECOMMENDATIONS

The interim year recommendations for the *South Boston 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. Three projects were identified in this category.

Old Halifax Road at Halifax Road

Improve capacity and enhance intersection safety by reconstructing the intersection to current VDOT standards.

Old Halifax Road at Senior High School Entrance

Improve high school traffic flow. Adjust the traffic signal phasing at Wal-Mart entrance to encourage high school traffic to use both entrances.

Factory Street from Main Street to Broad Street

Close Factory Street at Main and Broad Streets. Traffic will be diverted to Seymour Drive, increasing the reserve intersection capacity.

PHASE THREE: FUTURE YEAR (2020) RECOMMENDATIONS

The Phase Three recommendations in the *South Boston 2020 Transportation Plan* are intended to support the economic and business needs of the community while enhancing both the appeal and traffic operations of South Boston's Main Street areas. One project was identified in this phase.

Main Street from Hamilton Boulevard to Route 716

To accommodate projected traffic volumes of 13,000 vehicles per day, widen roadway to four lanes.

OTHER MODES AND GOODS MOVEMENT

In developing the *South Boston 2020 Transportation Plan*, all modes of travel were considered. The Plan also considered the quality of the local transportation system for the movement of goods for commercial purposes.

South Boston residents have a number of other travel options. The town is directly provided with paratransit service by the Lake Country Area Agency on Aging, which furnishes transit for senior and disabled residents.

South Boston also has three taxi companies, 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. Commercial air service is not available in the immediate area. The nearest passenger rail service is in Danville and the nearest commercial air service is in the Lynchburg area. The Plan makes no recommendations regarding other modes of transportation.

Most goods and raw materials are shipped into and out of the town by truck. While the flow of truck traffic through town is generally adequate, several of the proposed roadway recommendations will improve truck access for shippers by reducing congestion and making turning movements easier. Very little use of air and rail freight transport was reported by the major industries in South Boston.

LOCAL PROJECTS

The Town of South Boston identifies, plans, and implements transportation projects as part of its capital improvement process. Town officials identified four local projects for inclusion in the Plan.

Watkins Avenue at Webster Street

Install signs on all approaches warning motorists of the intersection, thereby enhancing safety.

Hamilton Boulevard Extended

Extend existing Hamilton Boulevard on new alignment south to Route 58 to improve general traffic circulation in town.

Edmunds Connector

Construct a connector road and bicycle trail from Edmunds Recreation Area to Cage Trail. This will connect Dixie Baseball fields, Edmunds Recreation Area, and a future recreation area at the town landfill.

Halifax Road at Middle School Entrance

The line of vehicles waiting in the middle school parking lot often backs up onto Halifax Road. The recommendation is to increase storage space on school grounds to avoid blocking through traffic on Halifax Road.

ENVIRONMENTAL OVERVIEW

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

LOCAL COORDINATION AND CITIZEN PARTICIPATION

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

The two coordination meetings held for the study were: (1) a kick-off meeting, (2) an existing conditions and

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/draft recommendations), 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 December 2001, a draft set of transportation improvements was sent to Town officials and VDOT representatives for review.

A public meeting was held on Monday, May 13, 2002, where the draft Plan was presented to Town officials, citizens, and other interested parties. Meeting participants were invited to provide comments on the Plan that were considered in the development of the final *South Boston 2020 Transportation Plan*.

PLAN ADOPTION

The South Boston Town Council voted to adopt the *South Boston 2020 Transportation Plan* on July 8, 2002.

VIRGINIA TRANSPORTATION SIX-YEAR PROGRAM (FY 2003 - 2008) PROJECTS

Detailed information on the development of the *South Boston 2020 Transportation Plan* and the study recommendations will be included in the *South Boston 2020 Transportation Plan Technical Report*. This document will be available for review at the South Boston 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 Lynchburg, and the VDOT residency office in Halifax.

Projects included in the Virginia Transportation Six-Year Program (FY 2003 - 2008) are not part of the *South Boston 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 Boston can also be found by contacting the Resident Engineer at the VDOT Halifax Residency (434-476-6342).

South Boston 2020 Transportation Plan

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
501	Old Halifax Road	Halifax Road	N/A	N/A	Reconstruct intersection	$1,500,000 [2]	N/A	N/A	N/A	N/A	N/A
501	Wilborn Avenue	Edmunds Street	N/A	N/A	Disallow right on red, close driveways in two corners of property on southwest quadrant of intersection	$123,000 [3][4]	N/A	N/A	N/A	N/A	N/A
	Main Street	Hamilton Boulevard	N/A	N/A	Adjust phasing to provide separate phase for east leg, disallow right turn on red	$123,000 [3][4]	N/A	N/A	N/A	N/A	N/A
	Halifax Road	Hamilton Boulevard	N/A	N/A	Install signal warning signage	$12,000 [4]	N/A	N/A	N/A	N/A	N/A
501	Wilborn Avenue	Webster Street	N/A	N/A	Add signal warning signage on Wilborn; adjust signal phasing for northbound left to make it protected only	$126,000 [3][4]	N/A	N/A	N/A	N/A	N/A
501	Main Street	Seymour Drive	N/A	N/A	Disallow right on red on Seymour approaches	$3,000 [4]	N/A	N/A	N/A	N/A	N/A
927	Watkins Avenue	Webster Street	N/A	N/A	Add intersection warning signage on all approaches	$12,000 [4][5]	N/A	N/A	N/A	N/A	N/A
501	Halifax Road	Cherry Street	N/A	N/A	Allow only right-in and right-out on Cherry Street	$3,000 [4]	N/A	N/A	N/A	N/A	N/A
	Old Halifax Road	Senior High School Entrance	N/A	N/A	Reconfigure High School Circle and traffic signal at Wal-Mart	$120,000 [3]	N/A	N/A	N/A	N/A	N/A
501	Halifax Road	Middle School Entrance	N/A	N/A	Increase storage space on school grounds to avoid spillover onto Halifax Road	Local School Board Cost [5]	N/A	N/A	N/A	N/A	N/A
	Factory Street	Main Street	Broad Street	0.10	Close Factory Street at Main and Broad Streets; divert traffic to Seymour Drive	$315,000 [6]	U2	U2	N/A	N/A	N/A
	Main Street	Hamilton Boulevard	Route 716	0.90	Widen Main Street to 4 lanes	$6,480,000 [7]	U2	U4	9,350	11,400	13,300
	Hamilton Boulevard Extended	Route 58	Hamilton Boulevard	3.50	Extend existing Hamilton Boulevard south to Route 58	$11,025,000 [5][6]	N/A	U2	N/A	N/A	N/A
	Edmunds Connector	Edmunds Recreation Area	Cage Trail	0.47	Construct connector road and bicycle trails to Dixie Baseball fields, Edmunds Recreation Area, and future recreation area at landfill	$1,552,000 [5][6][8]	N/A	U2	N/A	N/A	2,000
			ESTIMATED TOTAL THOROUGHFARE SYSTEM COST			$8,805,000 [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 cost averages and should be should be used for planning purposes only. Actual construction and right-of-way costs may vary based on local conditions.

[2] Assumes reconstruction of 1200 feet of urban four-lane divided roadway at $5.3 million per mile plus 25 percent for maintenance of traffic at intersection.

[3] Assumes a unit cost to improve phasing of system for a signalized intersection is $120,000.

[4] Assumes a unit cost of $3,000 for signage.

[5] Local projects are not included in the total thoroughfare system cost.

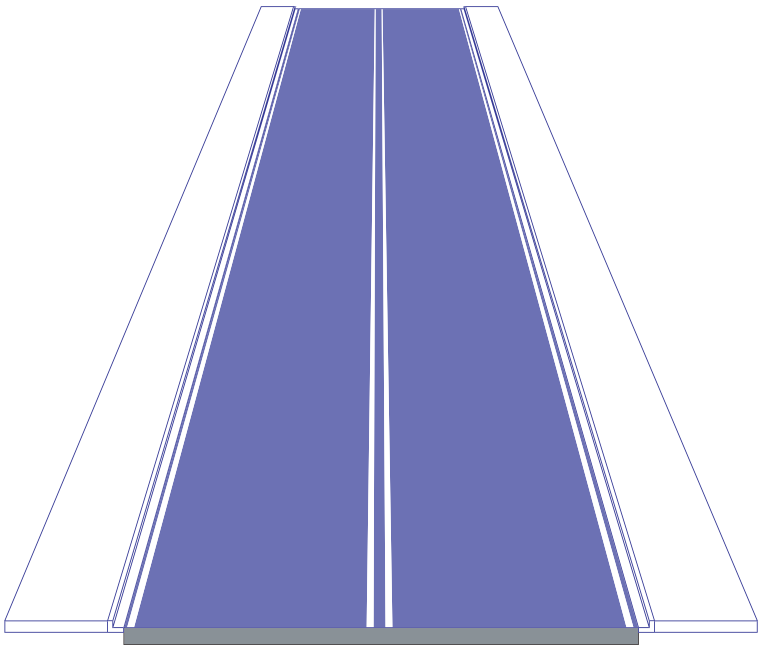
[6] Assumes a unit cost for an urban 2-lane roadway of $2.1 million per mile plus 50 percent for right of way and utilities.

[7] Assumes a unit cost for an urban 4-lane roadway of $4.8 million per mile plus 50 percent for right of way and utilities.

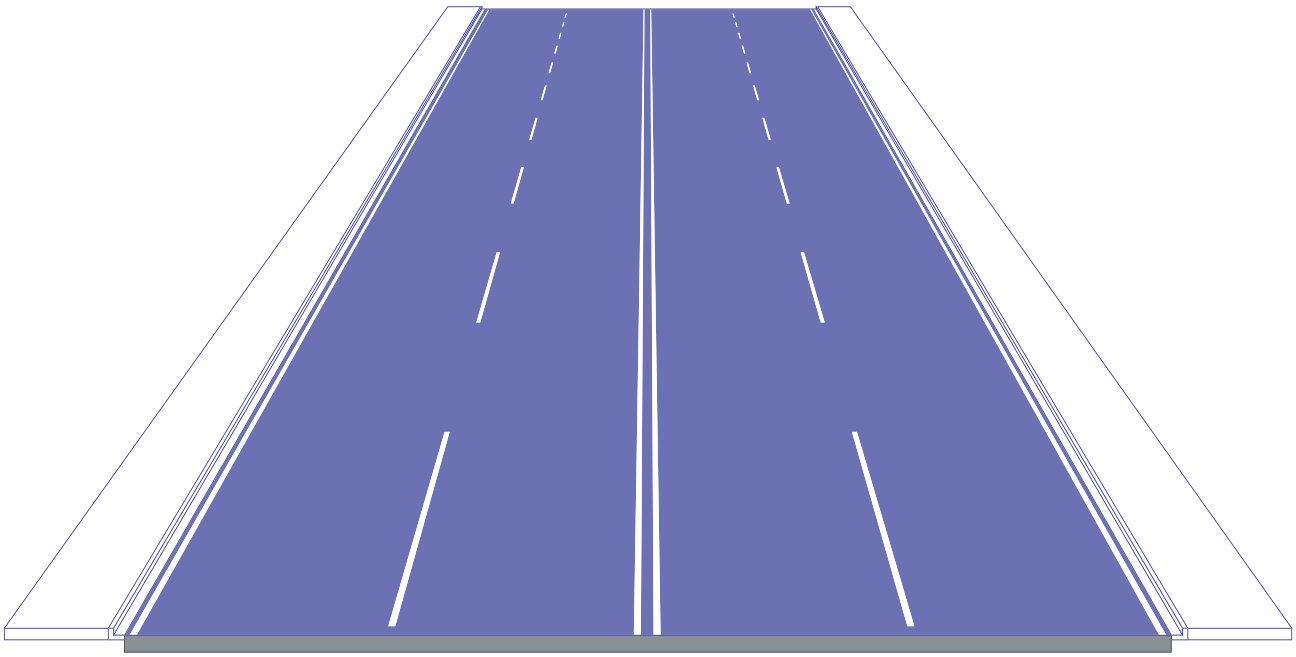
[8] Assumes a unit cost for the construction of new 8' bicycle trail of $101,00 per mile.

N/A -- Not applicable

TYPICAL SECTIONS



U2
Urban two-lane roadway with curb, gutter, and sidewalk



U4
Urban four-lane roadway with curb, gutter, and sidewalk