



Altavista 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 Altavista

August 2002

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INTRODUCTION

The *Altavista 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 Altavista. The Plan is the product of a study that evaluated the transportation system in Altavista and recommended a set of transportation improvements to best satisfy existing and future transportation needs. The study identified needs based on the engineering analysis, capacity, and safety of the transportation system.

Effective transportation systems are essential to continued economic growth and development in the Altavista region as well as the Commonwealth of Virginia as a whole. Providing for the 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 Altavista local government for specific transportation projects, and when implementing projects on the VDOT-maintained roadway system. The recommendations in this *Altavista 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

The Town of Altavista is located on the southern border of Campbell County, just across the Roanoke River from the Town of Hurt in Pittsylvania County. The Town is approximately 20 miles south of Lynchburg along U.S. Route 29. Altavista is located in the fertile Piedmont region to the east of the Blue Ridge Mountains, and has historically been a commercial hub for the surrounding agricultural community. More recently, the Town's economy has been sustained by manufacturing, with the Town functioning as a major employment center for the surrounding area. As an employment center, Altavista experiences commuting flows (into town in the morning, and out of town in the evening) that are substantial relative to the size of its resident population.

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 these arterial roadways. The focus of the *Altavista 2020 Transportation Plan* is this 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

Population figures from the U.S. Census indicate that there were 3,425 residents of the Town in 2000, down from 3,686 in 1990. Based upon a review of historical population data, as well as input from local officials, the town's population is expected to remain relatively stable through the 20-year horizon of the study.

The primary industries in Altavista relate to manufacturing. Companies have included Lane Furniture, Abbott

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Laboratories/Ross Products Division, and Shrader-Bridgeport International. Spokesmen for the latter two companies expect the number of jobs with their companies to remain generally steady for the foreseeable future. Lane Furniture, however, has closed its Altavista plant. Town officials expect the Lane site to be occupied by another tenant, and expect employment in the Town to remain stable over the long term.

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 Altavista Government Officials and the Public
- Environmental Overview and Plan Documentation

Recommendations for the *Altavista 2020 Transportation Plan* are based on a comprehensive review of the capacity, safety, and geometry of the roadway system, as well as, a review of 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 correct existing deficiencies and meet 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

Projects that address immediate transportation needs in the study area and have relatively low costs and potential impacts are candidates for inclusion as Phase One projects. One project in the *Altavista 2020 Transportation Plan* is included in Phase One.

Main Street (Route 29 Business) and Lynch Mill Road

Increase the turning radius in the northwest and southwest quadrants of the intersection to improve conditions for turning movements, particularly for trucks. The estimated cost for this improvement is \$150,000, including necessary modifications to box culverts over Hall Branch.

PHASE TWO: INTERIM YEAR (2010) RECOMMENDATIONS

The interim year recommendations for the *Altavista 2020 Transportation Plan* include projects that are intended to address existing deficiencies but, based on projected costs and potential impacts, would require a number of years to plan and fund. Three projects were identified as interim improvements for Altavista.

Pittsylvania Avenue from Main Street to the South Corporate Limits

To accommodate expected traffic volumes in excess of 10,000 vehicles per day on Pittsylvania Avenue in 2010 and 2020, Pittsylvania Avenue is recommended to be widened to four lanes. As part of this project, the intersection of Pittsylvania Avenue and Main Street would be improved. The estimated cost for this 0.4 mile improvement is \$2.88 million, including the cost of improving the intersection.

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Main Street Bridge over Roanoke (Staunton) River

Based on the age and condition of the Main Street Bridge over the Roanoke River (the current span was built in 1929), this bridge is recommended to be replaced. In conjunction with improvements to Main Street at Bedford Avenue and 7th Street, the new structure is recommended to be four lanes. This would provide for lane continuity and reserve capacity for Main Street in this area of Altavista. The estimated cost for the replacement bridge is \$9.56 million.

Bedford Avenue at Main Street and 7th Street

The intersections of Bedford Avenue/Main Street and Bedford Avenue/7th Street are located in close proximity to each other and are both signalized. The configuration, close proximity, and traffic demands at these intersections result in traffic operations that will be deficient by 2020. In addition, the tight turning radii at the intersections create potential safety problems, particularly for trucks. The recommendation for improving these intersections is to consolidate the two into a single four-leg intersection. This recommendation also includes widening Main Street to four lanes from this new consolidated intersection to the new four-lane bridge over the Roanoke River (see above). The total estimated cost for this improvement is \$1.92 million.

PHASE THREE: FUTURE YEAR (2020) RECOMMENDATIONS

The Phase Three recommendations in the *Altavista 2020 Transportation Plan* are intended to support the economic and business needs of the community while enhancing both the appeal and traffic operations of the Altavista downtown area. Three projects fit in this category for Altavista.

Bedford Avenue from the West Corporate Limits to Main Street

Based on projected traffic volumes in excess of 10,000 vehicles per day in 2020, Bedford Avenue is recommended to be widened to four lanes. The estimated cost for this 1.7 mile improvement is \$12.24 million.

Main Street from 7th Street to North Corporate Limits (at Route 29 Bypass)

In order to accommodate projected traffic volumes of over 14,000 vehicles per day, Main Street (Route 29 Business) is recommended to be widened to four lanes. The estimated cost for this 1.9 mile improvement is \$13.68 million.

Main Street at 7th Street

By the year 2020, traffic volumes on Main Street through Altavista's central business district are expected to increase. The built environment along Main Street and the need to maintain on-street parking to support downtown business preclude the addition of travel lanes to accommodate this increased traffic. As a result, traffic on 7th Street, which runs parallel to Main Street, is expected to increase. In order to support overall mobility and efficient use of the roadway network, improvements to the intersection of Main Street and 7th Street are recommended. This will allow traffic flow at this intersection to remain acceptable as increasing amounts of traffic divert from Main Street to 7th Street. The recommended improvements at this intersection would allow for free-flow movements from southbound Main Street onto southbound 7th Street and additional capacity (increased left turn lane storage and signal modifications) to accommodate the northbound 7th Street to northbound Main Street traffic. In addition, the 90 degree turn on 7th Street just to the west of Main Street is recommended to be reconstructed to facilitate traffic flow. The estimated cost for this improvement is \$200,000.

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OTHER MODES AND GOODS MOVEMENT

All modes of travel were considered in the development of the *Altavista 2020 Transportation Plan*. As is typical for a town of its size, however, Altavista has a limited number of other modes of travel available. Paratransit service (call-up, or on-demand transit) and taxi service are the only other modes of travel directly available in Altavista itself. Intercity bus service, intercity passenger rail service, and commercial air service are all available in Lynchburg, about 20 miles north of Altavista.

The relatively low population size and density of Altavista make the provision of many alternative modes of travel cost-prohibitive. The provision of intercity bus service, however, may be feasible since the Greyhound service operates on Route 29. Further investigation of developing an intercity bus stop at Main Street (Route 29 Business) at its interchange with Route 29 at the north limits of the town is recommended.

Altavista has no dedicated bicycle lanes on its streets. The town has a path that is approximately seven-tenths of a mile long in a park near the Roanoke River that is used by walkers, joggers, and bicyclists. It is surface-treated with asphalt. There have been some discussions in the past about extending this pathway outside the limits of the town park, but nothing has yet been done, according to the Town Manager. The town should monitor usage levels of this trail, and make expansions as the usage demands.

Most goods movement in and through Altavista is accomplished by truck. While truck flow through the Town is generally adequate, several of the proposed roadway recommendations will assist truck access to shippers by reducing congestion and making turning movements easier.

LOCAL PROJECTS

Local planning goals and efforts often result in the identification of projects that are either not located on the designated thoroughfare system, or reflect improvements that are intended to support future development or affect the way that a locality is intending to grow. The improvements that result from or support these local planning initiatives are included in the transportation plan as local projects. One local project is included in the *Altavista 2020 Transportation Plan*.

Clarion Road Connector from Bedford Avenue to Lynch Mill Road

The railroad tracks that run parallel to Bedford Avenue and Lynch Creek divide Altavista in two, and the existing road system provides no crossings for north-south traffic between the Route 29 Bypass and Altavista's central business district. In order to provide for greater connectivity within Altavista, the extension of Clarion Road from its intersection at Lynch Mill Road to Bedford Avenue is recommended. This recommendation also extends Altavista's grid system and provides improved access to Route 29. The estimated cost for this improvement is \$7.20 million, which includes an estimated \$2.0 million for a new bridge over the railroad.

ENVIRONMENTAL OVERVIEW

An environmental overview was conducted for the projects in the *Altavista 2020 Transportation Plan*. There were no environmental features identified in Altavista that would preclude the implementation of any of the included recommendations.

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LOCAL COORDINATION AND CITIZEN PARTICIPATION

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

The three coordination meetings held for this study were as follows: 1) a kick-off meeting, (2) an existing conditions meeting, and (3) a draft recommendations meeting. The kick-off meeting, held in June 1999, enabled the study 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, held in July 2001, the project team presented the results of the base year and horizon year traffic analysis and discussed potential projects to address projected transportation needs. During a third meeting, held in December 2001, a draft set of transportation improvements was discussed among the study team, Town officials, and VDOT representatives.

A public meeting was held on March 12, 2002 to present the Draft Transportation 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 *Altavista 2020 Transportation Plan*.

PLAN ADOPTION

The Altavista Town Council adopted the *Altavista 2020 Transportation Plan* by resolution on April 9, 2002.

ADDITIONAL INFORMATION

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

Projects included in the Virginia Transportation Six-Year Program (2003-2008) are not part of the *Altavista 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 Altavista can also be found by contacting the VDOT Resident Engineer at the Appomattox Residency Office (804-352-7135).

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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
29 BUS	Main Street (bridge)	South Corporate Limits	North end of bridge	0.05	Construct new four lane bridge over Roanoke (Staunton) River	\$9,555,000 [2]	U2	U4	13,900	17,000	19,800
29 BUS	Main Street	At 7th Street	N/A	N/A	Improve intersection to provide increased capacity from southbound Main Street on to southbound 7th Street and vice versa. Includes improvement to the 90 degree curve on 7th Street which is approximately 400 feet west of Main Street.	\$200,000 [3]	N/A	N/A	N/A	N/A	N/A
29 BUS	Main Street	At Lynch Mill Road	N/A	N/A	Widen corners of intersection on Lynch Mill Road to improve turning radius.	\$150,000 [4]	N/A	N/A	N/A	N/A	N/A
29 BUS	Main Street	7th Street	North Corporate Limits	1.90	Widen Main Street to four lanes	\$13,680,000 [5]	U2	U4	10,000	12,000	14,200
43	Bedford Avenue	West Corporate Limits	Main Street	1.70	Widen Bedford Avenue to four lanes	\$12,240,000 [5]	U2	U4	6,700	8,600	10,200
43	Bedford Avenue	At Main Street and 7th Street	N/A	0.25	Consolidate intersections; includes realignment and widening of Main Street between Roanoke River bridge and Bedford Avenue.	\$1,915,000 [4] [5] [6]	U2	U4	13,900	17,000	19,800
	Pittsylvania Avenue	Main Street	South Corporate Limits	0.40	Widen Pittsylvania Avenue to four lanes; includes intersection improvement at Main Street	\$2,880,000 [5]	U2	U4	8,400	11,200	11,900
711	Clarion Road Connector	Bedford Avenue	Lynch Mill Road at Clarion Road	1.65	Construct a new roadway from Bedford Avenue to Lynch Mill Road at Clarion Road; includes a new bridge over the railroad.	\$7,197,500 [7] [8] [9]	N/A	U2	N/A	N/A	N/A
ESTIMATED TOTAL THOROUGHFARE SYSTEM COST						\$39,900,000 [9]					

[1] 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 used for planning purposes only. Actual construction and right-of-way costs may vary based on local conditions.

[2] Cost estimate covers a 1,400-foot long bridge with four 12-foot travel lanes, two 6-foot shoulders, and one 5-foot sidewalk.

[3] Assumes a unit cost of \$25,000 for widening the turning radius per corner. Includes cost of modifications to box culvert over Hall Branch.

[4] Assumes a unit cost of \$25,000 for widening the turning radius per corner, plus 50 percent of total construction for right-of-way acquisition and utilities.

[5] Assumes a unit cost of \$4,800,000 per mile plus 50 percent of total construction cost for right-of-way acquisition and utilities.

[6] Assumes cost of \$90,000 for signal modifications at intersection.

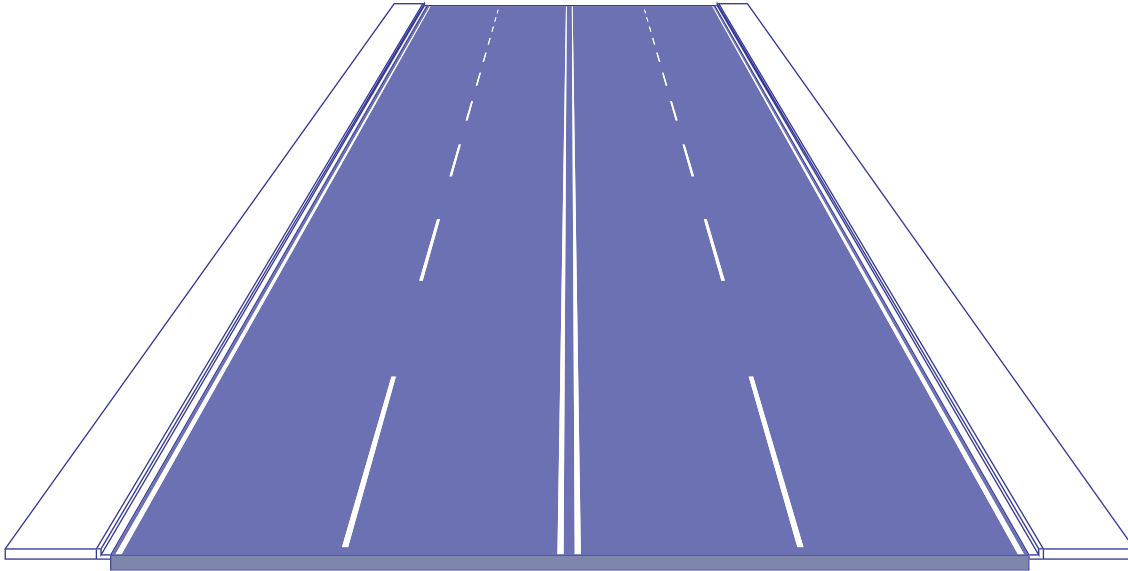
[7] Assumes a unit cost of \$2,100,000 per mile plus 50 percent of total construction cost for right-of-way acquisition and utilities.

[8] Assumes cost of \$2,000,000 for bridge over railroad.

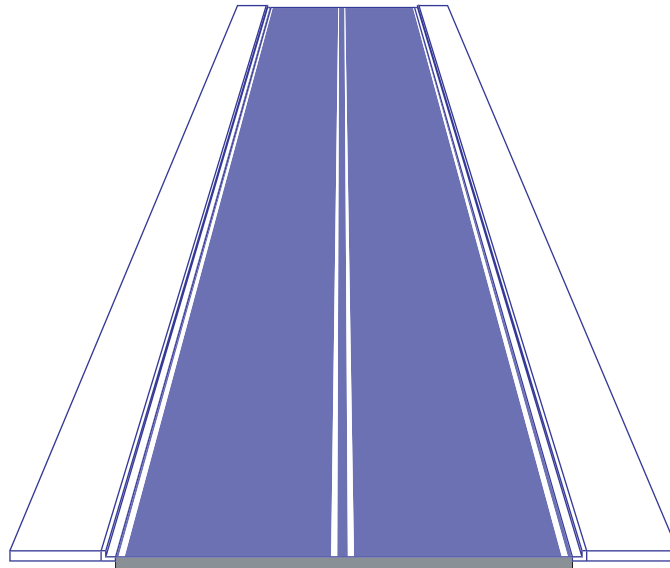
[9] Local projects not included in total estimated cost.

N/A = Not Applicable

TYPICAL SECTIONS



U4
Urban four-lane roadway with curb and gutter.



U2
Urban two-lane roadway with curb and gutter.

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