

BLACKSTONE 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

&

THE TOWN OF BLACKSTONE**

February 2002

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

INTRODUCTION

The Blackstone 2020 Transportation Plan was developed as a joint effort between the Virginia Department of Transportation and the Town of Blackstone. The purpose of the study was to evaluate the transportation system in the Blackstone area and to recommend a set of transportation improvements that could best satisfy existing and future transportation needs. This study identified needs which are based upon capacity, roadway safety, geometric conditions, and land use and presents a set of recommendations that addresses these needs.

Improved transportation systems remain vital to Virginia's, as well as the local area's, continued economic growth and development. The provision for the effective, safe and efficient movement of people and goods is a basic goal of all transportation programs in the Commonwealth of Virginia. It is with this basic goal in mind, and with further consideration of environmental issues and local desires, that this transportation plan has been developed.

The Virginia Department of Transportation will use this plan when evaluating requests from the local governments for specific transportation projects and/or for implementing projects that the Department initiates. The list of recommendations will also be used in the statewide transportation planning process in order that the statewide magnitude of needs can be better quantified.

STUDY AREA THOROUGHFARE SYSTEM

The Town of Blackstone is located in southeast Nottoway County along US Route 460. Fort Pickett, an Army National Guard maneuver-training center, is located east of Blackstone, Norfolk Southern railway runs parallel to Business Route 460 from the eastern corporate limits to the northern corporate limits. A finite urban area was established for purposes of this transportation study, which followed the corporate limits of the Town of Blackstone.

Inside the study area limits, a specific set of highways that have been approved by the Virginia Department of Transportation, the Federal Highway Administration, and the Town of Blackstone have been selected and designated as the area's urban thoroughfares. The urban thoroughfare system is identified as roads that are functionally classified as collectors or arterials. The subsequent analysis and recommendations were limited to those designated roadways, with the exception of any recommended facility on new location and those improvements that have been requested by representatives of Blackstone on the local unclassified street system. In addition, improvements to the following other modes of transportation have been evaluated: bicycle/pedestrian facilities, intercity rail, bus and air travel, transit, paratransit, and taxi and goods movement.

DEMOGRAPHIC OVERVIEW

Between 1990 and 2000, the population of the Town of Blackstone increased from about 3,500 to 3,675, a five percent increase. Nottoway County also had five percent growth in population between 1990 and 2000.

PHASE ONE: BASE YEAR ROADWAY RECOMMENDATIONS

Brown Street

Widen Brown Street from Elm Street to Division Street to a standard two-lane urban roadway and re-align sections with inadequate geometry. This section of Brown Street currently has a pavement width of approximately 20 feet and is approximately 0.42 miles in length. The estimated cost of this recommendation is \$1,762,200 (\$1,101,600 for construction and \$660,600 for right-of-way).

Intersection of Main Street & Church Street

Improve turning radii at the signalized intersection of Main Street and Church Street. This will improve the movement of trucks and vehicles turning from Church Street to Main Street southbound. The estimated cost of this improvement is \$100,000.

Intersection of Brown Street & Church Street

Improve turning radii at the intersection of Brown Street and Church Street, and provide a traffic signal. This will improve the movement of trucks and vehicles to and from Brown Street. The signal at Brown Street will need to be coordinated with the signal at Main Street so that northbound trucks turning from South Main Street to Brown Street clear both intersections in a single phase. The estimated cost of this recommendation is \$289,000.

Intersection of Main Street & Division Street

Improve turning radii at the unsignalized intersection of Main Street and Division Street, thus improving movements for vehicles using Brown Street as an alternative to Main. The estimated cost of this recommendation is \$100,000.

Intersection of Brown Street & Division Street

Improve turning radii at the unsignalized intersection of Brown Street and Division Street in conjunction with the Brown Street reconstruction. This recommended improvement is necessary for trucks using Brown Street. The estimated cost of this recommendation is \$100,000.

Division Street

Widen Division Street from Brown Street to Main Street to a standard two-lane urban roadway. This roadway currently has a pavement width of 18 feet. This improvement should be done in conjunction with the Brown Street improvements. The total estimated cost of this recommendation is \$202,700 (\$126,000 for construction, \$74,900 for right-of-way, and \$1,800 for signage).

Church Street

Restripe pavement to provide turn channelization within existing right-of-way on Church Street between Amelia Avenue and Brown Street to address operating deficiencies. The total construction cost of this improvement is estimated at \$31,800. Since this recommendation is within existing right-of-way, there are no estimated right-of-way costs.

South Main Street

Coordinate the traffic signals at the Main Street intersections at Tenth Street and West Entrance Road. In addition, re-stripe roadway from Tenth Street to Church Street to provide a center left-turn lane. Curb cuts for driveways would be provided where on-street parking is eliminated. The recommendation is being made to address capacity and operating deficiencies on South Main Street. The total length of the improvement is 0.7 miles. The total cost of this improvement is estimated at \$200,000. Since this recommendation is within existing right-of-way, there are no estimated right-of-way costs.

N. West Avenue Railroad Crossing

Install warning lights at the spur railroad crossing on N. West Avenue. While this line currently does not carry significant train traffic, the lack of warning lights is a potential safety hazard. The estimated cost of this recommendation is \$25,000.

PHASE TWO: INTERIM YEAR (2010) ROADWAY RECOMMENDATIONS

Dinwiddie Street Extension

Extend Dinwiddie Street from Main Street to Brown Street. Dinwiddie Street would connect to Brown Street approximately 0.17 miles south of Division Street. This roadway on new location would be a two-lane urban roadway approximately 0.07 miles in length. The total estimated cost of this recommendation is \$536,700 (\$294,000 for construction and \$242,700 for right-of-way).

South Main Street

Widen South Main Street from Tenth Street to the southern corporate limits to a standard two-lane urban roadway with a minimum pavement width of 24 feet, curb, gutter, and sidewalks. This improvement, which addresses geometric deficiencies, is 0.7 miles in length. The total estimated cost of this project is \$2,406,600, including \$1,604,400 for construction and \$802,200 for right-of-way.

PHASE THREE: STUDY YEAR (2020) ROADWAY RECOMMENDATIONS

North Main Street

Provide continuous sidewalks on North Main Street between Division Street and the eastern corporate limits of Blackstone. The total length of this recommendation is 1.0 mile. The total cost of this improvement is estimated at \$97,300 (\$60,800 for construction and \$36,500 for right-of-way).

Church Street

Restripe Church Street between Amelia Avenue and Brown Street to a four-lane undivided roadway. The total length of this capacity and operating conditions improvement is 0.6 miles. This project is estimated to be within existing right-of-way, therefore the total cost of this improvement, based on restriping, is estimated at \$63,600.

S. Amelia Avenue, Fourth Street, & S. Freeman Street

Widen S. Amelia Avenue, Fourth Street, and S. Freeman Street (from Church Street to the southern corporate limits) to a standard two-lane urban roadway with a minimum pavement width of 24 feet, curb, gutter, and sidewalks. This improvement, which addresses geometric deficiencies, is a total of 0.5 miles in length. The total estimated cost of this project is \$1,543,500, including \$1,029,000 for construction and \$514,500 for right-of-way.

Courthouse Road

Widen Courthouse Road from Adams Street to the corporate limits to a standard two-lane urban roadway with sidewalks. The existing pavement width is 18 feet and the length of this segment is approximately 0.7 miles. The total estimated cost of this recommendation is \$2,016,000 (\$1,344,000 for construction and \$672,000 for right-of-way).

College Avenue

Widen College Avenue from Beach Cliff Road to Tenth Street to a standard two-lane roadway. The length of this roadway is approximately 0.3 miles and the existing average pavement width is 16 feet. The total estimated cost of this recommendation is \$540,000 (\$360,000 for construction and \$180,000 for right-of-way).

OTHER MODES OF TRANSPORTATION***Parking***

Throughout the Town of Blackstone, most parking needs are met through on-street parallel parking and off-street parking facilities. Parallel parking is provided on Main Street in the business district. The only recommendation that affects parking is of local initiative and is to remove the parking on Main Street at Broad Street to improve safety and traffic flow.

Bicycle / Pedestrian

There are no recommendations associated with bicycle access. Sidewalks are provided along Main Street in the business district and other locations throughout the Town. Pedestrian access will be improved at those roadway locations where widening to an urban cross-section is recommended since sidewalks are to be included in the widening. This includes Main Street near the northern corporate limits, Main Street near the southern corporate limits, South Amelia Avenue, Fourth Street, and Freeman Street.

Transit, Paratransit, and Taxi

At present, no transit or paratransit services are available in the study area. However, related to the plan recommendation for a transit shuttle serving downtown Blackstone and the National Guard facilities at Fort Pickett, the Piedmont Planning District Commission (PDC) conducted a study in 2000-2001 of the feasibility of such a service.

Goods Movement

Goods movement needs are addressed through recommendations to the existing infrastructure, for instance, improvements to the turning radii of a number of intersections.

Intercity Rail, Bus and Air Travel

Currently, Greyhound Bus Lines offer limited service to the Town of Blackstone. The Blackstone A.C. Perkinson Municipal Airport offers air travel services to civilian and military aircraft and is located at Fort Pickett along US 40. The airport services Nottoway and Dinwiddie Counties. Amtrak offers passenger rail service in Petersburg, Virginia, which is located approximately 30 miles northeast of Blackstone. No improvements relating to intercity rail, bus or air travel are recommended at this time.

LOCAL PROJECTS

Shuttle Service

A local project recommended for the base year by the Town is to provide shuttle service between Fort Pickett and the Main Street business district. The purpose of this recommendation is to provide more convenient access to the services that the downtown business district offers. The cost of this recommendation is estimated to be \$600,000.

Main Street Improvement

To ease the narrow “feel” of Main Street at the south end of the downtown area, elimination of some on-street parking and narrowing of the sidewalk is recommended at Main Street in the vicinity of Broad Street. This would be a locally-funded improvement. Estimated cost is \$50,000.

Barco Street (Access Road) Traffic Signal

A local recommendation for a traffic signal, either in flashing mode or fully operational, at Barco Street (Access Road) and North West Avenue is included to address safety concerns. This is not a thoroughfare deficiency, but addresses a local concern. Estimated cost is \$180,000.

Tavern Street

Improve Tavern Street from Main Street to Brown Street to a standard two-lane, two-way urban roadway for the interim year, 2010. Another recommendation exists in the base year to improve and re-align Brown Street. The improved Tavern Street would connect to re-aligned Brown Street. The estimated cost of this recommendation is \$168,000.

ENVIRONMENTAL OVERVIEW

An environmental overview has been conducted for the roadway recommendations that included widening (providing additional travel lanes) or development of new roadway facilities for the Town of Blackstone. The results of the environmental overview are included in the analysis of the recommended improvements for the Blackstone 2020 Transportation Plan.

LOCAL COORDINATION & CITIZEN PARTICIPATION

The development of the Blackstone 2020 Transportation Plan included several coordination meetings with local staff members of the Town and a will include a public meeting to be held with VDOT representatives, PDC representatives, Town officials, and residents of Blackstone. For information for all thoroughfare roadways, contact the Town of Blackstone or visit the project web site at <http://www.vdoturbanplans.com>.

The coordination meetings consisted of a kick-off meeting, an existing conditions meeting, and a draft recommendations meeting. The kick-off meeting, held in June, 1999, enabled the project team to discuss with local staff the purpose and scope of the study, the schedule for data collection and plan preparation, and the coordination process. The second meeting (existing conditions), held in November, 1999, allowed the project team to present the results of baseline and horizon year traffic analysis and also allowed local staff to communicate desired transportation needs. Finally, at the draft recommendations meeting, held in August, 2000, the project team presented and discussed with Town officials the draft 2020 Transportation recommendations. An additional meeting was held in April, 2001, to discuss truck route options and revised recommendations. Input was provided by Town staff and the Town Council that was used to draft the final recommendations.

A public meeting was held at the Blackstone Municipal Building on Elm Street on October 22, 2001. The purpose of this meeting was to present the recommendations to Town officials, citizens, and other interested parties, and to receive comments on the plan.

PLAN ADOPTION

The Blackstone Town Council adopted the Blackstone 2020 Transportation Plan at the Council meeting on November 19, 2001.

ADDITIONAL INFORMATION

More details on the development of the Blackstone 2020 Transportation Plan and the study recommendations are available in the Blackstone 2020 Transportation Plan Technical Report, which is available from the Town of Blackstone or the VDOT Residency Office.

In addition to this 2020 transportation plan for the Town of Blackstone, the Virginia Transportation Development Plan (VTDP) also addresses transportation needs. The VTDP is a comprehensive listing of transportation projects scheduled for construction or improvement over the next six fiscal years, as well as anticipated funding allocations. Projects included in the Virginia Transportation Development Plan (VTDP) are not part of this recommendations package. The VTDP can be reviewed online at VDOT's website, <http://virginiadot.org/>. Information on VTDP projects for the Town of Blackstone can also be found by contacting the VDOT Resident Engineer at the Residency Office in Amelia, Virginia (804) 561-2411.

BLACKSTONE TRANSPORTATION RECOMMENDATIONS

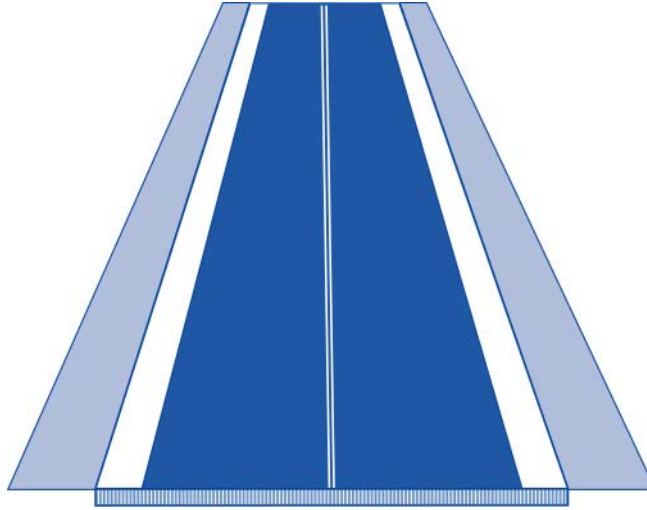
Route	Facility Name	From	To	Road Segment Length (miles)	Recommendation	Existing Typical Section (Width)	Recom. Typical Section (Width)	Total Cost (Year 2000 \$)	Average Daily Traffic	
									Year 1999	Year 2020
VA 40	S Main Street	SCL Blackstone	Route 46	0.20	Widen to a standard two-lane urban roadway (year 2010)	R2 (20')	U2 (30')	525,000	4,470	6,940
VA 40	S Main Street	Route 46	Tenth Street	0.56	Widen to a standard two-lane urban roadway (year 2010)	R2 (22')	U2 (30')	1,881,600	10,000	15,530
VA 40	S Main Street	Tenth Street	West Entrance Road	0.20	Coordinate traffic signals and restripe roadway to provide center left-turn lane (base year)	U2 (41')	U3 (41')	100,000	10,490	16,280
VA 40	S Main Street	West Entrance Road	Church Street	0.48	Restripe to a three-lane urban roadway within existing right-of-way (base year)	U2 (40')	U3 (40')	100,000	9,900	15,370
US 460 Bus	Church Street	Amelia Ave	Brown Street	0.53	Provide turn channelization within existing right-of-way (base year), Re-stripe to four-lane roadway within existing right-of-way (year 2020)	U2 (46')	U4 (46')	95,400	9,150	12,280
US 460 Bus	N Main Street	Division Street	Barco Street (Access Road)	0.32	Provide continuous sidewalks (year 2020)	U2 (40')	U2 (40')	32,800	7,180	9,640
US 460 Bus	N Main Street	Barco Street (Access Road)	ECL Blackstone	0.63	Provide continuous sidewalks (year 2020)	U2 (40')	U2 (40')	64,500	4,930	6,620
	S Amelia Avenue	Church Street	Fourth Street	0.19	Widen to standard two-lane urban roadway (year 2020)	R2 (18')	U2 (30')	598,500	610	820
	Brown Street	Elm Street	Broad Street	0.07	Widen to standard two-lane urban roadway (base year),	R2 (20')	U2 (30')	318,700	3,210	4,310
	Brown Street	Broad Street	0.17 miles south of Division Street	0.15	Widen to standard two-lane urban roadway (base year)	R2 (20')	U2 (30')	682,900	1,580	2,120
	Brown Street	0.17 miles south of Division Street	Division Street	0.17	Widen to standard two-lane urban roadway (base year)	R2 (20')	U2 (30')	760,600	1,580	2,120
	Courthouse Road	NCL Blackstone	Adams Street	0.64	Widen to standard urban two-lane roadway (year 2020)	R2 (18')	U2 (30')	2,016,000	500	680
	Division Street	Brown Street	N Main Street	0.06	Widen to standard urban two-lane roadway (base year)	R2 (18')	U2 (30')	202,700	1,930	2,590
	Fourth Street	S Freeman Street	S Amelia Avenue	0.11	Widen to standard two-lane urban roadway (year 2020)	R2 (18')	U2 (30')	346,500	1,060	1,420
	S Freeman Street	SCL Blackstone	Fourth Street	0.19	Widen to standard two-lane urban roadway (year 2020)	R2 (18')	U2 (30')	598,500	1,060	1,420
	College Avenue	Beach Cliff Road	Tenth Street	0.36	Widen to standard two-lane rural roadway (year 2020)	R2 (16')	R2 (24')	540,000	300	440
		Fort Pickett	Main Street business district	N/A	Establish shuttle service (base year)	N/A	N/A	600,000	N/A	N/A
	Railroad Crossing	N West Avenue	Rail Spur Crossing	N/A	Install warning lights at railroad crossing (base year)	N/A	N/A	25,000	N/A	N/A
	Intersection	S Main Street	Church Street	N/A	Improve turning radii at intersection (base year)	N/A	N/A	100,000	N/A	N/A
	Intersection	Brown Street	Church Street	N/A	Improve turning radii and provide traffic signal at intersection (base year)	N/A	N/A	289,000	N/A	N/A
	Intersection	N Main Street	Division Street	N/A	Improve turning radii at intersection (base year)	N/A	N/A	100,000	N/A	N/A
	Intersection	Brown Street	Division Street	N/A	Improve turning radii at intersection (base year)	N/A	N/A	100,000	N/A	N/A
Roadway on New Location	Dinwiddie Street	Main Street	Brown Street	0.07	Extend Dinwiddie Street to Brown Street, construct as two-lane roadway (year 2010)	N/A	U2 (30')	536,700	N/A	N/A
Local Recommendation	Intersection	North West Ave	Barco Street (Access Road)	N/A	Install a traffic signal with flashing lights (base year)	N/A	N/A	\$180,000	N/A	N/A
Local Recommendation	North Main Street	Broad Street	Main Street	0.02	Streetscape Improvement: narrow sidewalk and remove parking just north of the intersection of Main Street and Broad Street to provide better lane width for trucks (base year)	N/A	N/A	\$50,000	N/A	N/A
Local Recommendation	Tavern St	Main Street	Brown Street	0.05	Reconstruct to standard two-lane urban roadway (year 2010)	N/A	U2 (30')	168,000	N/A	N/A
Total Cost *								\$10,077,700		

* Does not include any of the local improvements, including the shuttle service.

TYPICAL SECTIONS¹

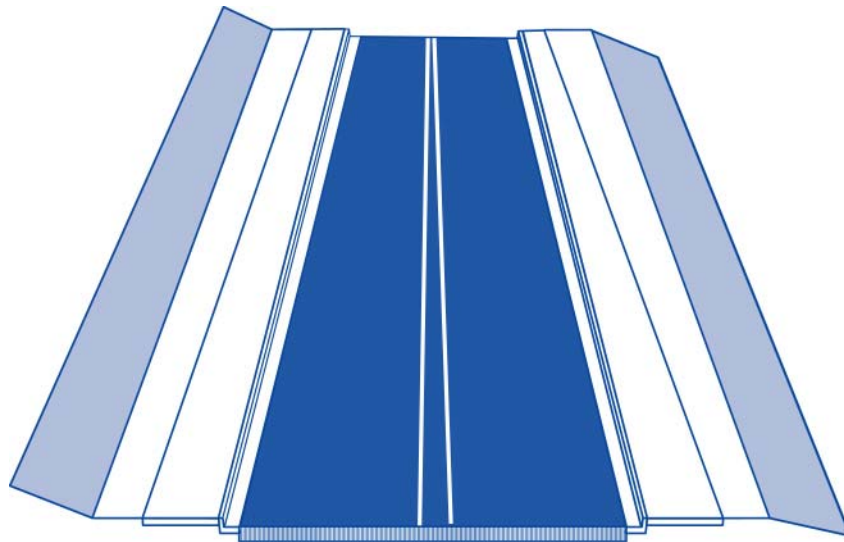
R2

Rural two-lane roadway with standard shoulders and ditches



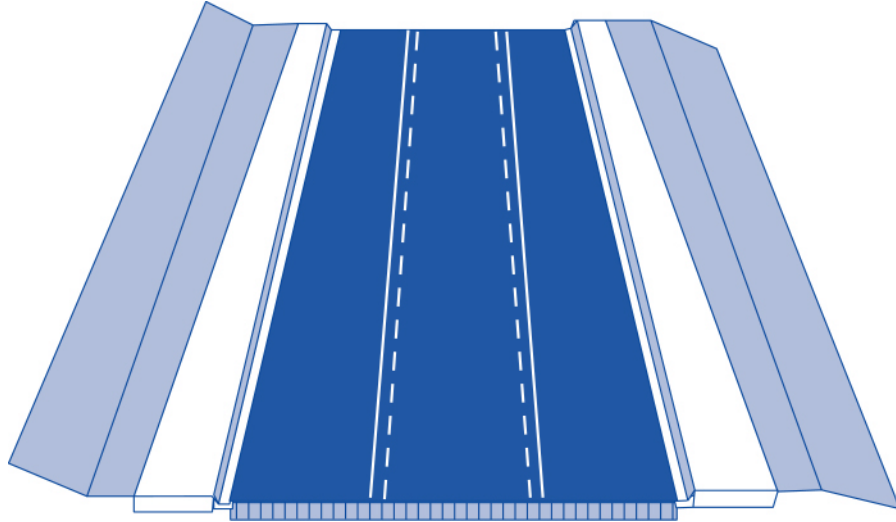
U2

Urban two-lane roadway with curb and gutter



¹ Recommended typical sections assume 12' wide travel lanes.

U3
Urban two-lane roadway with curb and gutter and center turn-lane



U4
Urban four-lane roadway with curb and gutter

