

# **WISE 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 WISE**

**June 2001**

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

## **INTRODUCTION**

The Wise 2020 Transportation Plan was developed as a joint effort between the Virginia Department of Transportation and the Town of Wise. The purpose of the study was to evaluate the transportation system in the Wise 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.

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 Wise is the county seat of Wise County and is located along US Route 23 in southwest Virginia. The Town lies 2,450 feet above sea level and is comprised mostly of rolling terrain. The University of Virginia's College at Wise is located on Darden Drive to the east of the Town of Wise corporate limits. A finite urban area was established for purposes of this transportation study, which followed the corporate limits of the Town of Wise.

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 Wise 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 Wise on the local unclassified street system. In addition, improvements to the following other modes of transportation have been evaluated: bicycle and pedestrian facilities; intercity rail, bus and air travel; transit, paratransit, and taxi; and goods movement.

## **DEMOGRAPHIC OVERVIEW**

Between 1980 and 1998, the population of the Town of Wise declined from about 3,900 to 3,100. Preliminary Census2000 data shows that population has increased in the Town of Wise to approximately 3,300. In the past, residents of Wise tended to be employed in the coal industry; however, this trend has shifted to professional and related services. Wise County had a population drop of approximately one percent per year between 1980 and 1990; however, the population is expected to increase less than one half percent annually in the future.

## PHASE ONE: BASE YEAR ROADWAY RECOMMENDATIONS

### ***Birchfield Road, Main Street, & Park Avenue***

This transportation system management recommendation is to prohibit through trucks on Birchfield Road between Main Street and Lake Street, on Main Street between Norton Road and Park Avenue, and on Park Avenue between Main Street and Darden Drive. Through trucks would be required to avoid the well-traveled downtown area and instead use Lake Street and the Wise Bypass. The estimated cost of this recommendation is \$8,400, which accounts for implementation of the appropriate signage.

### ***Intersections of Main Street & Norton Road and Main Street & Birchfield Road***

Investigate opportunities to align Norton Road and Birchfield Road with Main Street to create a four-way signalized intersection. Currently, both Norton Road and Birchfield Road connect to Main Street at T-intersections at very close proximity to one another. Realigning these intersections would improve the traffic flow through this busy section of Town.

### ***Intersections of US 23 Bypass & Addington Avenue***

Improve the turn lane application at this unsignalized four-way intersection. This improvement would help to facilitate truck movements between the US 23 Bypass and Addington Avenue. Improvements include providing designated left- and right-turn lanes from Addington Avenue to US 23 and lengthening the existing turn lanes on US 23 to Addington Avenue. The total cost of this improvement is estimated at \$522,500 (\$418,000 for construction and \$104,500 for right-of-way).

### ***Intersections of Lake Street & Birchfield Road***

Provide additional turn lanes to improve truck turning conditions and provide pedestrian crosswalks and signage. This recommendation would improve the truck turning movement from Birchfield Road southbound to Lake Street westbound by providing additional lanes for this movement. Currently this movement is hindered by the stop condition at the intersection and the grades of the roadway. This recommendation will also address pedestrian safety at this intersection. The total estimated cost of this improvement is \$263,300 (\$175,500 for construction and \$87,800 for right-of-way).

## PHASE TWO: INTERIM YEAR (2010) ROADWAY RECOMMENDATIONS

### ***Addington Avenue***

Improve roadway geometry of Addington Avenue between the US 23 Bypass and Main Street and reconstruct as a standard two-lane rural roadway with a minimum pavement width of 24 feet. Reconstructing this roadway to a standard cross-section will improve travel conditions for both cars and trucks. The total length of the improvement is 0.3 miles. The total cost of this improvement is estimated at \$450,000 (\$300,000 for construction and \$150,000 for right-of-way).

### ***Lake Street***

Reconstruct Lake Street from Birchfield Road to Hurricane Road to a standard two-lane urban cross-section with sidewalks. The total length of this recommendation is 0.7 miles at an estimated total cost of \$2,205,000 (\$1,470,000 for construction and \$735,000 for right-of-way).

**US 23**

Provide street lighting to improve safety along US 23 from the southern corporate limits of Wise to the intersection of Woodland Drive. The total estimated cost of this recommendation is \$720,000.

**PHASE THREE: STUDY YEAR (2020) ROADWAY RECOMMENDATIONS*****Darden Drive***

Reconstruct Darden Drive from Park Avenue to the eastern corporate limits to a two-lane roadway with center-turn lane. The improvement includes a minimum pavement width of 36 feet for a total length of 0.5 miles. Currently there is a three-lane section of Darden Drive to the east of the corporate limits. Coordination will occur with the developers of the Wise County transportation plan to ensure a consistent cross-section between Darden Drive within and to the east of the Town limits. The total cost of the improvement within the Town limits is \$3,000,000 including \$2,000,000 for construction and \$1,000,000 for right-of-way.

***Norton Road***

Widen Norton Road to four lanes from the US 23 Bypass to Cherry Street. The length of the project is 0.6 miles. The roadway would be widened to an urban four-lane undivided cross-section with a minimum 48-foot pavement width. This improvement is needed to resolve projected capacity problems in the future and would create a consistent cross-section on Norton Road between the US 23 Bypass and Main Street. The total estimated cost of this project is \$4,320,000, including \$2,880,000 for construction and \$1,440,000 for right-of-way.

***Intersection of US 23 Bypass & Norton Road***

Provide additional lanes to improve capacity deficiencies at the intersection of Norton Road and the US 23 Bypass. Improvements include providing one additional left-turn lane on US 23 Bypass northbound, one additional left-turn lane on US 23 Bypass southbound, conversion of right-turn lane to a free-flow conditions and one additional through lane on the eastbound approach, and one additional left-turn lane on Norton Road westbound. This modification would improve operating deficiencies that are projected to occur in the future. The total cost of this improvement is estimated at \$516,000 (\$344,000 for construction and \$172,000 for right-of-way).

**OTHER MODES OF TRANSPORTATION*****Parking***

Throughout the Town of Wise, on-street parallel parking and off-street parking facilities exist. Parallel parking is provided on Main Street in the business district. Numerous parking deficiencies exist in the Town of Wise, particularly in the downtown area. The Town's parking deficiencies need to be addressed and will be addressed in a downtown revitalization study being conducted by K.W. Poore & Associates, Inc. There are no parking recommendations being made as part of the 2020 Wise Transportation Plan.

***Bicycle / Pedestrian***

Currently there are no dedicated bicycle facilities within the corporate limits of Wise. Sidewalks exist on either both or one side of many of the thoroughfare roadways, including Main Street. The Town has expressed interest in evaluating the merits of a multi-use trail (green-way) to accommodate bicycle and pedestrian movements between the downtown business district and the University of Virginia's College at Wise located to the east of the corporate limits on Darden Drive. This proposal created by others is

currently under review by the Town. In addition, pedestrian movements will be improved during the reconstruction of Lake Street at which point sidewalks will be constructed.

### ***Transit, Paratransit, and Taxi***

The Mountain Empire Older Citizens organization offers paratransit service based on demand to the Town of Wise and surrounding areas. Taxi service is also provided by private companies in the Town. No recommendations associated with transit, paratransit, and taxi services are being made as part of this plan.

### ***Goods Movement***

Goods movement needs are addressed in several of the roadway recommendations, including the intersections of Birchfield Road & Lake Street and US 23 Bypass & Addington Avenue. These recommendations address truck movements by improving turn lanes. A recommendation is also being made to prohibit through truck movements in the downtown area. The improvements mentioned previously will work in conjunction with the truck prohibitions to provide alternative ways for through trucks to access US 23 without traveling through more congested areas of Town.

### ***Intercity Rail, Bus and Air Travel***

Currently, there is no passenger rail service, bus service or air service located in the Town of Wise. The nearest passenger bus service is available from Greyhound Bus Lines in Abingdon, Virginia, approximately 50 miles southeast of Wise. Air travel is available at the Lonesome Pine Airport on Route 640, which provides a mix of private and corporate services to Wise, Scott, & Dickerson Counties. There is no passenger rail service located in Southwest Virginia. Due to the lack of intercity rail, bus or air travel in the vicinity of Wise, no improvements are recommended at this time.

## **LOCAL ROADWAY PROJECTS**

There is one local project of interest to the Town of Wise involving a roadway that is not part of the VDOT thoroughfare system. The recommendation is to complete the missing segment of Varner Street and reconstruct the overall roadway to a standard two-lane urban cross-section. This recommendation would improve access to the schools as well as provide an alternative route between the east and southern sections of Town. The total estimated cost of this improvement is \$2,853,000. (\$1,890,000 for construction and \$945,000 for right-of-way). It is also recognized that alternatives of continuing Varner Street to connect directly to Park Avenue or Darden Drive should be explored in the future. This additional connection would help to facilitate a local bypass of the downtown area.

## **OTHER ROADWAY PROJECTS**

A study of the proposed Ramsey Connector was recently completed. The Ramsey Connector would provide a more direct connection between Alternate US 58 & the airport, the University of Virginia's College at Wise, and the proposed industrial center located east of the Town of Wise. Thus, the Ramsey Connector would remove vehicles on Main Street and Park Avenue that would be traveling through the Town of Wise thus improving conditions on these well-traveled thoroughfare roadways.

The Town is also considering a proposal to extend Lake Street from its intersection with Hurricane Road to the east towards the University of Virginia's College at Wise. This concept is at the preliminary level and is currently under consideration. While this project is not a recommendation of this plan, it is expected that further discussion and

study will be conducted in the future to determine the feasibility and details of this proposal.

### **ENVIRONMENTAL OVERVIEW**

An environmental overview was conducted for the roadway recommendations that included widening (providing additional travel lanes) or development of new roadway facilities for the Town of Wise. The results of the environmental overview were included in the analysis of the recommended improvements for the Wise 2020 Transportation Plan Technical Report.

### **LOCAL COORDINATION & CITIZEN PARTICIPATION**

The development of the Wise 2020 Transportation Plan included several coordination meetings with local staff members of the Town and included a public meeting to be held with VDOT representatives, PDC representatives, Town officials, and residents of Wise. For information for all thoroughfare roadways, contact the Town of Wise 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 May, 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 September, 2000, 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 January, 2001, the project team presented and discussed with Town officials the draft 2020 Transportation recommendations. Input was provided by Town staff that was then used to draft the final recommendations.

A public meeting was held at the Wise Municipal Building on West Main Street on May 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 Wise Town Council adopted the Wise 2020 Transportation Plan at the Council meeting on June 26, 2001.

### **ADDITIONAL INFORMATION**

More details on the development of the Wise 2020 Transportation Plan and the study recommendations are available in the Wise 2020 Transportation Plan Technical Report and the Wise 2020 Transportation Plan website, <http://www.vdoturbanplans.com/Wise.htm>.

In addition to this 2020 transportation plan for the Town of Wise, 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. More information regarding the VTDP can be obtained on the Internet at the address <http://www.vdot.state.va.us/proj/projects.html>. VTDP projects in the Town of Wise are found by selecting Volume 1, then selecting 'Urban System' under the Bristol District. Information on VTDP projects for the Town of Wise can also be found by contacting the VDOT Resident Engineer at the Wise Residency Office in Wise, Virginia (540-328-9331).

WISE TRANSPORTATION RECOMMENDATIONS

Route	Facility Name	From	To	Road Segment Length (miles)	Recommendation	Cost * (Year 2000 \$)	Existing Typical Section (Width)	Recommended Typical Section (Width)	Average Daily Traffic Volume	
									Year 2000	Year 2020
BUS 23	Norton Rd	Cherry St	Route 757	0.2	Virginia Transportation Development Plan Project, Widen to a three-lane roadway (base year)	1,845,000	R2 (23')	U3 (36')	12,000	15,600
	Birchfield Rd	Main St	Church St	0.1	Through truck prohibitions (base year)	600	R2 (22')	R2 (22')	3,300	4,290
	Birchfield Rd	Church St	Kelly St	0.3	Through truck prohibitions (base year)	1,800	R2 (22')	R2 (22')	3,300	4,290
	Birchfield Rd	Kelly St	Lake St	0.3	Through truck prohibitions (base year)	1,800	R2 (22')	R2 (22')	3,300	4,290
	Main St	Norton Rd	Birchfield Rd	0.1	Through truck prohibitions (base year) and mitigate capacity problems with proposed Ramsey Connector	600	U2 (46')	U2 (46')	13,700	19,180
	Main St	Birchfield Rd	Park Ave	0.4	Through truck prohibitions (base year) and mitigate capacity problems with proposed Ramsey Connector	2,400	U2 (46')	U2 (46')	12,700	17,780
	Park Ave	Main St	Darden Dr	0.2	Through truck prohibitions (base year) and mitigate capacity problems with proposed Ramsey Connector	1,200	U2 (32')	U2 (32')	9,400	13,160
	Intersection	Main St	Norton Rd/ Birchfield Rd	NA	Investigate realignment of Norton Rd and Birchfield Rd with Main St (base year)	0	NA	NA	NA	NA
	Intersection	US 23 Bypass	Addington Ave	NA	Improve turn lane application at the intersection (base year)	522,500	NA	NA	NA	NA
	Intersection	Lake St	Birchfield Rd	NA	Provide additional turn lanes to improve truck turning conditions and provide pedestrian crosswalks and signage (base year)	263,300	NA	NA	NA	NA
	Addington Ave	Rte 23 Bypass	Rte 23 Business	0.3	Widen to a standard two-lane rural roadway and improve geometric deficiencies (year 2010)	450,000	R2 (22')	R2 (30')	2,280	2,960
	Lake St	Birchfield Rd	Virginia Ave	0.6	Reconstruct roadway to a standard urban two-lane roadway with sidewalks (year 2010)	1,890,000	R2 (24')	U2 (30')	8,290	10,780
	Lake St	Virginia Ave	Hurricane Rd	0.1	Reconstruct roadway to a standard urban two-lane roadway with sidewalks (year 2010)	315,000	R2 (24')	U2 (30')	4,640	6,030
US 23	US 23	SCL Wise	Norton Rd	0.3	Provide street lighting to improve safety (year 2010)	306,000	R4D (48')	R4D (48')	18,000	28,800
US 23	US 23 Bypass	Norton Rd	Woodland Dr	0.4	Provide street lighting to improve safety (year 2010)	414,000	R4D (48')	R4D (48')	13,000	20,800
	Darden Dr	Park Ave	ECL Wise	0.5	Reconstruct roadway to a two-lane roadway with center-turn lane (year 2020)	3,000,000	U2 (24')	U3 (36')	9,200	13,800
BUS 23	Norton Rd	Rte 23 Bypass	Route 757	0.2	Widen to a four-lane undivided roadway (year 2020)	1,440,000	R2 (24')	U4 (48')	11,720	15,240
BUS 23	Norton Rd	Route 757	Cherry St	0.4	Widen to a four-lane undivided roadway (year 2020)	2,880,000	R2 (23')	U4 (48')	12,000	15,600
	Intersection	US 23 Bypass	Norton Rd	NA	Increase number of turn lanes at intersection to address capacity deficiencies (year 2020)	516,000	NA	NA	NA	NA
Local Roadway	Varner St	Norton Rd	Yellow Creek Rd	0.9	Complete missing segment of Varner St and reconstruct the roadway to a standard two-lane urban cross-section (base year)	2,835,000	R2 (16')	U2 (30')	NA	NA
Total **						\$13,850,200				

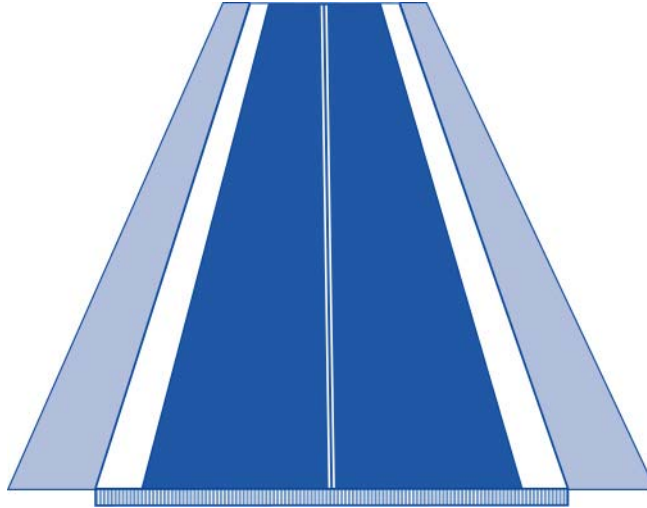
\* Planning level cost estimates are based on statewide averages and include estimated right-of-way costs.

\*\* The total cost does not include the Varner Street improvement since this is a local roadway not included on the thoroughfare system.

TYPICAL SECTIONS<sup>1</sup>

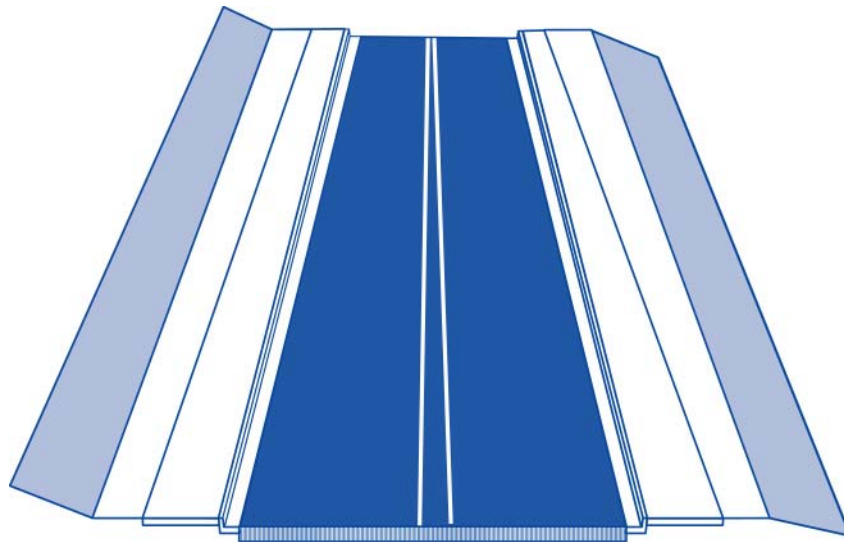
R2

Rural two-lane roadway with standard shoulders and ditches



U2

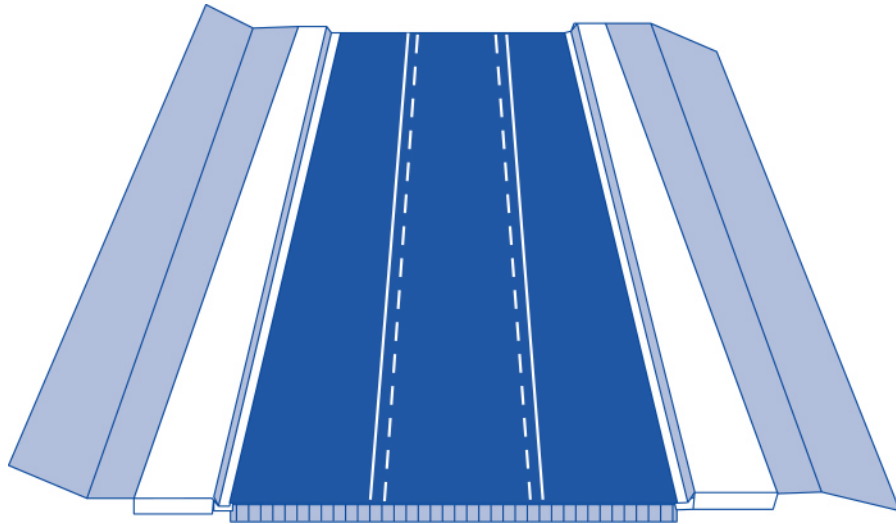
Urban two-lane roadway with curb and gutter



U3

<sup>1</sup> Recommended typical sections assume 12' wide travel lanes.

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



---

U4  
Urban four-lane roadway with curb and gutter

