

MEMORANDUM

DATE: November 29, 2000

TO: The Board of Supervisors

FROM: Benjamin A. Thompson, Planner

SUBJECT: FY 2001 - 2006 Six-Year Secondary Road Plan

Overview

Each year the Virginia Department of Transportation (VDOT) requests the County to review its secondary roads (those roads with Route Numbers 600 and above) and make recommendations on the priority for allocation of State funds to those roads with the greatest need for improvement. The County is expected to receive between \$1,789,898. and \$2,234,350 million each year for the next six years for secondary road improvements. The funding schedule does not assume any State revenue sharing funds that, if used by the County, could accelerate projects after 2001. These revenue sharing funds, if requested and matched by the County, will be allocated by VDOT later to eligible projects chosen by the County.

Attachment 1 lists the roads that have been considered and their proposed priority rankings. Staff identified these roads as needing improvement based on traffic count data, road conditions, and the Comprehensive Plan. Staff further analyzed and ranked these secondary roads in terms of traffic volumes, accident data, road condition, and geometrics. Attachment 2 lists the roads that are recommended to be included in this year's FY 2001 Six-Year Secondary Road Plan.

In evaluating the State Police accident data, it was evident that the overwhelming majority of accidents were caused by driver error and not by the condition of the road. For this reason, staff believes that accidents should not be assigned a large weighted value in the ranking formula. Staff does believe, however, that it is important to analyze accident data each year in order to identify any "trouble spots" that may not necessarily show up in the other ranking criteria. In most cases, the number of accidents is directly correlated with a road's traffic volumes. For example, the number of traffic accidents on primary and interstate highways greatly outweighs the number of accidents on secondary roads.

In ranking the projects, four-lane improvements were ranked separately from the two-lane improvements. The roads included in the four-lane improvement category are roads that are of standard two-lane design for which the only significant improvement alternative to increase level of service is to widen these roads from two to four lanes. It is very important to note that listing these roads in this category does not necessarily mean that these roads will be widened to four-lanes in the future. We will continue to monitor all of these roads and annually evaluate their need for improvement. We are hopeful that with the completion of Route 199 and Monticello Avenue, further four-lane improvements will not be warranted for Longhill Road (north of Olde Towne Road) and Ironbound Road (south of Mid-County Park).

The roads in the two-lane improvement category are those roads that are of substandard design and construction. These two-lane roads have traffic volumes that do not warrant an upgrade from two to four lanes; however, due to their condition many of these roads are candidates for intermediate improvements. The County's goal in the past and in this year's staff recommendation is to balance road improvement projects between costly four-lane upgrades and the intermediate two-lane improvements. To accomplish this, staff recommends a continuation of the two highest-ranking four-lane improvements from last year and the five highest-ranking two-lane improvement projects of this year to be included in this fiscal year's Six-Year Plan.

Staff has concern about making significant improvements to roads outside the County's Primary Service Area (PSA) due to the financial costs of substantial upgrades, potential negative impact on the rural character of rural roads, and the possibility of encouraging additional residential development outside the PSA. As an alternative, staff recommends that, where possible, "spot" improvements be made in an effort to address major road deficiencies. These "spot" improvements would allow the costs to be kept at a reasonable level and better preserve the rural character of the road. The proposed improvements to Barnes Road and Mount Laurel Road are examples of such improvements.

Please notice that several roadways were evaluated and, using the ranking criteria and evaluation, did not require the degree of repair constituting placement on this list. Ron Springs Road and Church Lane were two such roads evaluated for necessary improvement. Drainage is one of the main concerns on Ron Springs Road. VDOT has surveyed the right of way and determined that if requested by the community and County they would be able to replace drainage ditches within the current right of way. However, a large portion of the drainage problem occurs near the entrance to Ron Springs Road on private property outside of VDOT right of way. Ron Springs Road is currently on VDOT's annual maintenance program to be repaved this year. If the County desired further repair, such as regrading and widening/ recutting the drainage ditches, they would have to place Ron Springs Road on the Six-Year Secondary Plan for repair. Staff and VDOT have concluded that with a recently completed ditch cleaning, and a repaving of the road scheduled for the upcoming year, Ron Springs Road should not be placed on the Six-Year Plan. On a related matter, County staff is evaluating the priority of a sidewalk between Magruder Avenue and Pocahontas Trail on Ron Springs Road.

Church Lane is another road which staff was requested to consider. It was determined that this roadway was in good condition. Given its low traffic volumes and the good condition (adequate width and good repair), staff chose not to consider this road for improvements at this time. To place either road on the Six-Year Secondary Road Plan, the Board of Supervisors would need to take action to include it on the County's priority ranking sheet.

Description of Projects - In Priority Order

The following is a listing of proposed projects for the Six-Year Secondary Road Plan. With the exception of Old Towne Road, this list contains the same projects that were on last year's plan.

Ironbound Road – Tewning Road to Strawberry Plains Road

Ironbound Road is planned to be widened from two to four lanes from Tewning Road to the Virginia Power office on Ironbound Road. The four-lanes will actually end in the vicinity of Strawberry Plains Road, but the project will include tapers that will extend down approximately to the Virginia Power office. The section of Ironbound Road between Tewning Road and Longhill Connector Road is in the City of Williamsburg. It is expected that this section will also be upgraded to four-lanes to link the County's section of Ironbound Road to the four-lane improvement of Longhill Connector Road. This segment of Ironbound Road had an average traffic count of 10,002 vehicle trips per day (vtpd). It is expected that the traffic volumes on this road will continue to grow particularly with the undeveloped Casey Property to the west, undeveloped property on the east side of Ironbound Road, and future development/redevelopment along Monticello Avenue. The estimated completion date of this improvement is July 2005.

Longhill Road and Longhill Connector Road

All of Longhill Connector Road and the portion of Longhill Road from Route 199 to Longhill Connector Road are planned to be widened from two to four lanes. The 1999 traffic volume on Longhill Connector Road is 10,018 vtpd. VDOT considers this four-lane project and the Ironbound Road and Longhill Road projects as one project. Without this upgrade, the level-of-service on all of Longhill Road and Ironbound Road would likely suffer. Like the Ironbound Road project, the

estimated completion date of this improvement is July 2005.

Ironbound Road - between Sandy Bay Road and Jamestown Road

This two-lane improvement would occur on the short segment of Ironbound Road between Sandy Bay Road and Jamestown Road. This segment of Ironbound Road is in poor condition and has poor geometrics (curvature, alignment, elevation, etc.). While a traffic count was not available for this portion of Ironbound Road, the 7,227 count for the portion of Ironbound Road between Hickory Signpost (Rt. 629) and Route 5 was used to estimate its volume. Staff estimates that roughly 40 percent of this traffic volume (2,890 vtpd) would use this short segment of Ironbound Road. The estimated completion date of this improvement is July 2008.

Croaker Road- Route 607

This planned two-lane improvement, which is outside the PSA, will occur between Woodland Farms Drive and Croaker Landing Road. This road provides access to Woodland Farms, Sycamore Landing, Ivey Dell, Ware Creek Manor, and the York River Park boat ramp at the end of Croaker Landing Drive. Citizens in this area have voiced support for this planned road improvement. The estimated completion date of this improvement is June 2002.

Barnes Road - Route 601

This project, which is outside the PSA, will address portions of Barnes Road which have poor curves and failing road pavement. VDOT has recommended that this road project be included in the Six-Year Plan. These "spot" improvements will address the road's major deficiencies while at the same time keeping costs to a minimum, preserve the road's rural character, and thus not enhance the area's attractiveness for residential development. The estimated completion date for this project is August 2005.

Mount Laurel Road - Route 608

This project will involve improving a segment of Mount Laurel Road from Ware Creek Road (Route 606) to 0.3 miles west of Ware Creek Road. Like Barnes Road, this project will involve improving several bad curves in the road and will not constitute a full upgrading for the reasons mentioned above and because of its location outside the PSA. The estimated completion date for this project is August 2005.

Monticello Avenue Extended (formerly known as Alternate Route 5)

For financing reasons, this road improvement is included in the proposed FY 2001 Six-Year Secondary Plan. Any Secondary Road Funds used on the project will be replaced with federal STP Funds allocated by the Hampton Roads Metropolitan Planning Organization. Monticello Avenue Extended is a new two-lane facility to be constructed on a four-lane right-of-way from Governor's Land and linking up to existing Monticello Avenue at Ironbound Road. The portion of this road from Ironbound Road to Mid-County Park was constructed as part of the Route 199 project. The remaining section of the road (from Mid-County Park to Governor's Land) will be privately funded by taxes generated through a Transportation Improvement District (T.I.D.).

A great deal of the initial funding for construction has come from private sources and loans to the T.I.D. from developers and the state revenue sharing program. Staff suggests that this project continue to be placed in the Plan to allow for future funding, if necessary.

Olde Towne Road - Route 658

Olde Towne Road has been considered for inclusion onto the Six-Year Road Plan for the past several years. Last year it was determined by staff and VDOT, that Olde Towne Road should be placed on

the 2001 priority list. This project, which is inside the PSA, will address portions of Olde Towne Road which have a poor curve and failing road pavement on several shoulders. These places are to be handled through spot improvements. Several of these improvements have already been handled with the construction of a bridge crossing Route 199. This section of Olde Towne Road was regraded and paved making a better transition and lengthy improvement. Additionally, spot improvements will continue to bring the road to more acceptable geometrics and conditions while keeping costs to a minimum. The estimated completion date for this project is 2007.

Priority Projects Number 9 and 10 on the Six-Year Plan are two bikeway projects.

Bikeway Projects- Longhill Road and Ironbound Road

1. *Longhill Road from Olde Towne to Longhill Road Connector*
2. *Ironbound Road from Strawberry Plains to Eastern State*

Since the County has elected to go forward with the widening of Ironbound Road, the Ironbound Road Bikeway will be done in conjunction with that project. This secondary road category is essentially an account that includes all secondary road bikeways that are part of the Regional Bikeways Plan and include bikeways on Strawberry Plains Road and other sections of Ironbound Road and Longhill Road. The majority (80 percent) of funding for all of the bikeway projects listed was provided by the federal Government's Intermodal Surface Transportation Act (ISTEA) funding. The balance of funding is provided by the State Secondary Road Fund and Revenue Sharing or the County's Capital Improvement Fund. The Longhill Road and Ironbound Road Bikeway projects have already received some Secondary Road funding.

Additional Road/Unpaved Road Project.

Racefield Road - Route 622

The portion of Racefield Road from Route 1040 to 0.90 kilometers (KM) west of Route 1040 is planned to be paved. Each year a portion of the County's Six-Year Secondary Road funding is specifically dedicated to improving unpaved streets. Racefield Road has been accumulating these funds over the last several years. While this project remains in the "unpaved" road category, staff, and VDOT are recommending that small amounts of secondary funds be applied to the project in an effort to accelerate its construction. The fact that this road is unpaved and serves quite a large number of homes make it a candidate for secondary road funds. Because only a relatively small amount of money will be committed to this project each year, its inclusion will not affect the funding schedule for the higher priority projects. The estimated completion date for this project is June 2007.

The Board of Supervisors will hold a public hearing on the Six-Year Secondary Road Plan during the December 19, 2000, Board meeting.

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Attachments:

1. Roads recommended for inclusion in the FY 2001 Six-Year Plan VDOT Spreadsheet
2. FY 2001-2006 Priority Ranking Spreadsheet