

Rural Rustic Roads Improvement Program

**Virginia Department of Transportation
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**This presentation was presented at the
Virginia Association of Counties Fall Meeting,
November 11, 2002.**

**Following the presentation is a handout regarding the
Rural Rustic Road Pilot Program.**

Concept Goal

To pave more miles of roads with the limited funds available, doing so with no or minimal encroachment beyond existing ditches and without compromising the safety of the road.

Demonstration Program

- ❑ Initiated in response to legislation introduced during the 2002 session.
- ❑ Modeled on a similar program in Montgomery County, Maryland
- ❑ Intended to pave roads with minimal improvements

Candidate Roads

- **Part of secondary system of state highways**
- **Have ADT 50 to 500 (max)**
- **Be a priority in the County Six-Year Plan**
- **Local roads that are familiar to most drivers and serve low density land uses**

Candidate Roads

County Board pledges to

- Designate road as a rural rustic road
- Limit growth along the road through comprehensive planning and zoning
- Pass resolution for each candidate road

Improvement Process

Resident Engineer (Transportation Manager)

- Serves as VDOT's project representative to the County
- Concurs with Rural Rustic designation and fit to concept
- Involves other VDOT disciplines to include review of signing needs consistent with topography and features along the road

BOS May Appeal RE's Decision

Initial Appeal via RE to
District Administrator

Final Appeal via RE and DA to
Chief Engineer & Commissioner

Project Development Steps

- ❖ Normal Project Scoping
- ❖ Normal State Environmental Review Process (SERP)
- ❖ Normal Permit Determination

Route 617, Augusta County



Conventional
Estimate: **\$814,248**



Rural Rustic
Cost: **\$70,624**

Rte 721, Augusta County



Conventional
Estimate: **\$471,000**



Rural Rustic
Cost: **\$55,500**

Route 742, Augusta County



**Conventional
Estimate: \$655,000**



**Rural Rustic
Cost: \$58,900**

CAUTION

There is a reduction in expenditures but cost differences do not reflect a complete savings.

The finished Rural Rustic Road product is not the equivalent of what was proposed for the original project.

However, the Rural Rustic Road improvement meets the more immediate needs of the community.

**Contact your resident engineer
for more information about
the Rural Rustic Road initiative.**



Rural Rustic Roads

Pilot Program

A low-impact, low-cost approach to improving certain unpaved roads.

James S. Givens
Director
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Virginia Department of Transportation

Foreword

Prompted by a program in Montgomery County, Maryland, legislation was introduced by Delegates Joe May and Steve Landes during the 2002 session of the General Assembly, providing a potential means for VDOT to finance the initial paving of certain low traffic volume unpaved roads while minimizing impact on abutting land. This legislation caused VDOT to implement a pilot program to investigate the feasibility of paving unpaved roads within existing rights-of-way and either between the existing ditch lines or with minimal impact beyond existing ditches.

This report presents an overview of:

- The pilot program,
- The cost savings potential of the Rural Rustic Road approach,
- The Statutory Authority, and
- The Proposed Guidelines for Rural Rustic Roads
 - Criteria
 - VDOT Review
 - Approval Process
 - Environmental Requirements
- Executive Summary of each Augusta County pilot project

Pilot Projects

There are additional pilot projects in various stages of development across the Commonwealth. However, the six pilot projects completed in Augusta County during the 2002 construction season are reported in this document. The cost of the Augusta pilot projects, when compared to the original estimated cost for a regular improvement project, were as follows:

Route	Maintenance Expenditures	Engineering & Construction Expenditures	TOTAL COSTS	Original Estimate for Normal Improvements	Savings	Miles
721	\$6,745	\$55,494	\$62,239	\$471,000	\$408,761	1.25
781	\$20,995	\$61,882	\$82,877	\$491,120	\$408,244	1.30
742	\$10,645	\$58,896	\$69,541	\$655,000	\$585,459	1.70
724	\$1,679	\$31,503	\$33,181	\$300,000	\$266,819	0.60
617	\$28,681	\$70,624	\$99,305	\$814,248	\$714,943	1.80
742	\$10,645	\$47,420	\$58,065	\$549,120	\$491,055	1.20
Totals	\$79,389	\$325,818	\$405,207	\$3,280,488	\$2,875,281	7.85

Note: Costs identified as maintenance expenditures represent the part of the Total Cost that would normally have been incurred for routine maintenance on the project but an otherwise necessary part of the overall construction project.

The Authority

§ 33.1-70.1. Requesting Department to hard-surface secondary roads; paving of certain secondary roads within existing rights-of-way; designation as Rural Rustic Road.

A. Whenever the governing body of any county, after consultation with personnel of the Department of Transportation, adopts a resolution requesting the Department of Transportation to hard-surface any secondary road in such county that carries fifty or more vehicles per day with a hard surface of width and strength adequate for such traffic volume, the Department of Transportation shall give consideration to such resolution in establishing priority in expending the funds allocated to such county. The Department shall consider the paving of roads with a right-of-way width of less than forty feet under this subsection when land is, has been, or can be acquired by gift for the purpose of constructing a hard-surface road.

B. Notwithstanding the provisions of subsection A of this section, any unpaved secondary road that carries at least fifty but no more than 750 vehicles per day may be paved or improved and paved within its existing right-of-way or within a wider right-of-way that is less than forty feet wide if the following conditions are met:

1. The governing body of the county in which the road is located has requested paving of such road as part of the six-year plan for the county under § 33.1-70.01 and transmitted that request to the Commonwealth Transportation Commissioner.

2. The Commonwealth Transportation Commissioner, after having considered only (i) the safety of such road in its current condition and in its paved or improved condition, including the desirability of reduced speed limits and installation of other warning signs or devices, (ii) the views of the residents and owners of property adjacent to or served by such road, (iii) the views of the governing body making the request, (iv) the historical and aesthetic significance of such road and its surroundings, (v) the availability of any additional land that has been or may be acquired by gift or other means for the purpose of paving such road within its existing right-of-way or within a wider right-of-way that is less than forty feet wide, and (vi) environmental considerations, shall grant or deny the request for the paving of such road under this subsection.

C. Notwithstanding the provisions of subsections A and B, the governing body of any county, in consultation with the Department, may designate a road or road segment as a Rural Rustic Road provided such road or road segment (i) is located in a low-density development area and has an average daily traffic volume of no more than 500 vehicles per day and (ii) has a posted speed limit consistent with the topography and features along the road. For a road or road segment so designated, improvements shall utilize a paved surface width based on reduced and flexible standards that leave trees, vegetation, side slopes and open drainage abutting the roadway undisturbed to the maximum extent possible without compromising public safety. The provisions of this subsection shall become effective July 1, 2003.

D. The Commonwealth, its agencies, instrumentalities, departments, officers, and employees acting within the scope of their duties and authority shall be immune for damages by reason of actions taken in conformity with the provisions of this section. Immunity for the governing body of any political subdivision requesting paving under this section and the officers and employees of any such political subdivision shall be limited to that immunity provided pursuant to § 15.2-1405.

PROPOSED GUIDELINES FOR RURAL RUSTIC ROADS

(In accordance with HB659 of 2002 Virginia General Assembly Session Effective July 1, 2003)

Criteria

- Must be an unpaved road already within the State Secondary System.
- Must carry at least 50 but no more than 500 vehicles per day.
- Must be a priority (line item) in an approved Secondary Six-Year Plan, even if funding is not from Secondary allocations.
- Governing body of County, in consultation with VDOT's Resident Engineer or designee, must designate a road or road segment as a Rural Rustic Road.
- Road must be in area that is low-density, and should be evaluated for appropriate warning signs or posted speed limit that is consistent with topography and features of the road.
- Roadway or roadway section must be predominately for local traffic use.
- The local nature of the road means that most motorists using the road have traveled it before and are familiar with its features.
- County Board of Supervisors will endeavor to limit growth on roads improved under the Rural Rustic Road program and cooperate with the Department through its comprehensive planning process to develop lands consistent with rural rustic road concepts.
- Requires a special Resolution by County Board of Supervisors for each individual road.

VDOT Review

- Consider the views of the governing body making the request and of the residents and owners of the adjacent property.
- Consider the historical and aesthetic significance of such road and its surroundings.
- Leave trees, vegetation, side slopes, and open drainage abutting the roadway undisturbed to the maximum extent possible.
- Improvements along Rural Rustic Roads may be less than minimum design standards, as outlined in the Chief Engineer's memorandum dated June 11, 2002. **AASHTO's Guidelines For Geometric Design of Very Low-Volume Local Roads (ADT <= 400)** may be used as a guide for roads up to 500 vpd.
- Encouraged to look for evidence of site-specific safety problems and to focus safety expenditures on those sites where a site-specific safety problem exists.
- Low volume local roads have very few crashes. Even when 5 – 10 year crash data are available, this data will often be so sparse that other indicators of safety problems should be considered as well.
- Such other indicators may include field reviews to note skid marks or roadside damage, speed data (which may indicate whether speeds are substantially higher than the intended design speed), or concerns raised by police or local residents.

Approval Process

- Resident Engineer shall be VDOT's designated representative in dealing with County Boards of Supervisors regarding Rural Rustic Roads.
- The Board of Supervisors requests the Resident Engineer to evaluate a section of road as a candidate for the Rural Rustic Roads program.
- Resident Engineer evaluates the request and agrees or disagrees with the approach.
- Resident Engineer determines if improvements can be made according to Rural Rustic criteria
- Board of Supervisors designates road as Rural Rustic Road by resolution or determines if it should appeal the determination of the Resident Engineer.
- If the Board of Supervisors does not agree with the Resident Engineer's position, it may request the District Administrator to review that position and may appeal the District Administrator's decision to the Chief Engineer for a final determination by the Commissioner.
- Resident Engineer requests assistance from other divisions, as needed.
- Requires State Environmental Review Process.
- Requires permit determination by Environmental staff of VDOT.
- Requires scoping documentation (either LD-430 package or other documentation as established by Committee and approved by VDOT Management).

Note: (In Northern Virginia, the Transportation Manager will be the designated representative)

Environmental Requirements for Rural Rustic Road Projects

All projects being considered for this program should be reviewed by the Residency Environmental Specialist or District Environmental Staff for consideration of the following:

1. **SERP** (Requires 60-90 days)
 - Is not required if there are:
 - i. No improvements (no earth moving activity)
 - ii. No horizontal/vertical realignments
 - iii. No widening
 - iv. No acquisition of right of way
2. **Water Quality Permits** (Requires 1-135 days)
 - Are not required if there are:
 - i. No streams
 - ii. No waterbodies
 - iii. No wetlands
 - iv. No water in pipes/culverts/ditches
3. **Cultural Resources** (Requires 7-30 days)
 - No coordination is required if there are:
 - i. No water quality permits
 - ii. Project is not located within a Rural Historic District listed in the Virginia Landmarks Register and/or the National Register of Historic Places. Such districts include, but may not be limited to, the Green Springs Historic District (Louisa Counties), the Catoctin Rural Historic District (Loudoun and Fauquier Counties), and the Madison-Barbour Rural Historic District (Madison and Orange Counties).
4. **Threatened and Endangered Species** (Requires 30-135 days)
 - A database search on the Department of Game and Inland Fisheries website must be conducted by the Residency Environmental Specialist for all projects.
 - No further coordination is required if there are:
 - i. No water quality permits
 - ii. No threatened and endangered species identified in collections on the DGIF database.
5. **Agricultural and Forestal Districts** (Requires 30-60 days)
 - No coordination is required if there will be:
 - i. No purchase of right of way
 - ii. No exchange of right of way for work performed by VDOT
 1. Straight donation of right of way is acceptable
6. **VPDES Permit** (Requires 14 days)
 - Is not required if there is:
 - i. No clearing, grading, or excavating (earthwork or manipulation of subgrade and shoulders) that results in land disturbance equal to or greater than 1 acre on one project or any combination of adjacent projects
7. **Hazardous Materials** (Requires variable amount of time)
 - No coordination is required if there is:
 - i. No obvious signs of contamination within the project vicinity

Pilot Projects

Round Hill School Road (Route 617)

Project 0617-007-P18, N501



Before Project



After Project

- Length of improvements:
- Existing right of way width:
- Existing geometrics:

- Traffic Count:
- Scope of work:

- Cost for Rural Rustic Improvement:
- Original Estimated Cost:
- Original Advertisement Date:
- Project duration

1.80 miles
30 feet prescriptive easement
2@ 7 – 8 feet lanes, no shoulder to variable width,
variable width ditch
100 ADT in 2001
Pull ditches and machine road, add 2-3” of stone to
restore typical section – roll to compact surface and
surface treat (prime and double seal) existing road.
\$99,305
\$814,248
December 2006
Start Date: August 21, 2002
End Date: September 9, 2002

Eagle Rock Lane (Route 721)

Project 0721-007-P16, N501



Before Project



After Project

- Length of improvements:
- Existing right of way width:
- Existing geometrics:
- Traffic Count:
- Scope of work:

From 1.50 miles south of Route 250 to .025 mile south of Route 250. Length is 1.25 miles.
50 feet deeded right of way; no additional right of way required.

20 feet wide travel surface with variable shoulder width and variable ditch width.

170 ADT in 2001

Pull ditches and machine road, add 2-3" of stone to restore typical section – roll to compact surface and surface treat (prime and double seal) existing road.

- Cost for Rural Rustic Improvement:
- Original Estimated Cost:
- Original Advertisement Date
- Project duration

\$62,239

\$471,000

February 2005

Start date: August 5, 2002

End date: August 13, 2002



Before Project



After Project

Heizers Tanyard Road (Route 724)

Project 0724-007-P19, N501



Before Project

- Length of improvements:
- Existing right of way width:
- Existing geometrics:
- Traffic Count:
- Scope of work:

- Cost for Rural Rustic Improvement:
- Original Estimated Cost:
- Original Advertisement Date:
- Project duration



After Project

From Route 723 to Route 720. Length is 0.60 mile.
30 feet prescriptive easement; no additional right of way required.
18 feet wide travel surface with variable width shoulders and variable width ditches.
220 ADT in 2001.
Pull ditches and machine road, add 2-3" of stone to restore typical section – roll to compact surface and surface treat (prime and double seal) existing road.
\$33,181
\$300,000
July 2008
Start date: August 12, 2002
End date: August 19, 2002



Before Project



After Project

Bailey Road (Route 742)

Project 0742-007-P15, N501



Before Project



After Project

- Length of improvements:
- Existing right of way width:
- Existing geometrics:
- Traffic Count:
- Scope of work:

From Route 11 to 1.20 miles east of Route 11.
Length is 1.20 miles.
30 feet prescriptive easement; no additional right of way required.

16 feet wide travel surface with variable width shoulders and variable width ditches.

170 ADT in 2001.

Pull ditches and machine road, add 2-3" of stone to restore typical section – roll to compact surface and surface treat (prime and double seal) existing road.

- Cost for Rural Rustic Improvement:
- Original Estimated Cost:
- Original Advertisement Date:
- Project duration

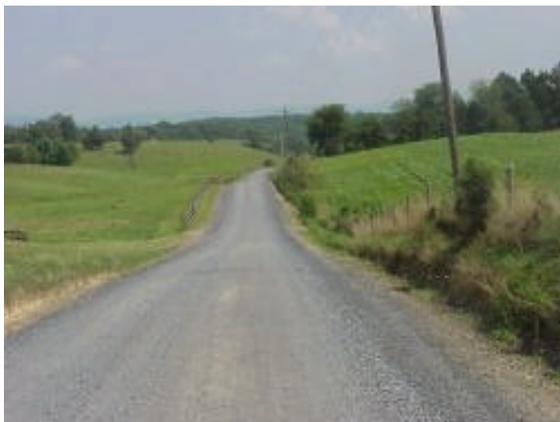
\$69,541

\$655,000

Nov. 2009

Start date: August 12, 2002

End date: August 20, 2002



Before Project



After Project

Lebanon Church Road (Route 742)

Project 0742-007-P09, N502



Before Project

- Length of improvements:
- Existing right of way width:
- Existing geometrics:

- Traffic Count:
- Scope of work:

- Cost for Rural Rustic Improvement:
- Original Estimated Cost:
- Original Advertisement Date:
- Project duration



After Project

- 1.70 mile
- 30 feet prescriptive easement
- 2 @ 8 feet lanes, no shoulder to variable width, variable width ditch
- 260 ADT in 2001
- Pull ditches and machine road, add 2-3" of stone to restore typical section – roll to compact surface and surface treat (prime and double seal) existing road.
- \$58,064
- \$549,120
- September 2006
- Start Date: August 14, 2002
- End Date: August 28, 2002



Before Project



After Project

Mill Race Road (Route 781)

Project 0781-007-P17, N501



Before Project

- Length of improvements:
- Existing right of way width:
- Existing geometrics:
- Traffic Count:
- Scope of work:

- Cost for Rural Rustic Improvement:
- Original Estimated Cost:
- Original Advertisement Date:
- Project duration



After Project

From Route 780 to 1.30 miles east of Route 780.
Length is 1.30 miles.
30 feet prescriptive easement; no additional right of way required.
16 feet wide travel surface with variable shoulder width and variable ditch width.
190 ADT in 2001.
Pull ditches and machine road, add 2-3" of stone to restore typical section – roll to compact surface and surface treat (prime and double seal) existing road.
\$82,877
\$491,120
February 2005
Start date: August 5, 2002
End date: August 13, 2002



Before Project



After Project