

**BOARD OF SUPERVISORS  
TRANSPORTATION AND LAND USE COMMITTEE  
ACTION ITEM**

**SUBJECT:** Unpaved Roads Program

**ELECTION DISTRICT(S):** Countywide

**STAFF CONTACT(S):** Susan Glass, Transportation and Capital Infrastructure  
Nancy Boyd, Transportation and Capital Infrastructure

**PURPOSE:** To present development of a proposed Unpaved Roads Program, which is a data driven approach to identify which unpaved roads should be recommended for improvement, and to obtain funding authorization to develop the Unpaved Roads Program.

**RECOMMENDATION(S):**

**Staff:** Staff recommends that the Transportation and Land Use Committee (TLUC) recommend that the Board of Supervisors (Board) approve establishing the Unpaved Roads Program and authorize the amendment of the Fiscal Year (FY) 2024 Capital Improvement Program (CIP) by directing staff to execute a budget adjustment of \$401,000 from the Project Management Consulting Services account to the Unpaved Roads Program project in the Capital Projects Fund for the development of the program.

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**BACKGROUND:** At its June 20, 2024<sup>1</sup>, meeting, TLUC voted (5-0) to defer this item to the July 17, 2024, TLUC meeting to allow time for meetings between Board offices, staff, and representatives from the Virginia Department of Transportation (VDOT,) to understand the ramifications of how to proceed with the item. Assuming those meetings occur before July 17, 2024, a verbal update will be provided to the TLUC.

VDOT is responsible for maintaining all public roads in unincorporated areas of Loudoun County, using funds allocated through the state’s annual budget. Loudoun County currently has 252 miles of unpaved public roads, which is the fourth highest total of any jurisdiction in the state. The state’s budget also provides funding from the highway construction district grant program (state funds) which have historically been allocated to pave unpaved roads through the Secondary Road Six-Year Plan in accordance with §33.2-359<sup>2</sup> of the Code of Virginia. VDOT’s FY 2025 – FY 2030 Secondary Road-Six Year Plan and FY 2025 Construction Improvement Budget Priority List is expected to be presented to the Board at the September 11, 2024, Public Hearing. Section 33.2-

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<sup>1</sup> [June 20, 2024, TLUC Item 08 Unpaved Roads Program](#)

<sup>2</sup> [§33.2-359 of the Code of Virginia](#)

331<sup>3</sup> of the Code of Virginia requires that VDOT and the Board conduct a joint public hearing on the annual Secondary Road Six-Year Plan. Typically, unpaved roads that are selected for hard surfacing are improved by VDOT pursuant to its Rural Rustic Road Program<sup>4</sup>, which is a practical approach to paving unpaved roads because the road is hard surfaced on the same horizontal and vertical alignment, and it usually avoids disturbing trees, vegetation, and side slopes.

Two identical bills were approved in the 2024 Session of the Virginia General Assembly, House Bill 74<sup>5</sup> and Senate Bill 644<sup>6</sup>, to amend §33.2-359 of the Code of Virginia which governs how the state funds can be spent to improve unpaved secondary roads. Both bills were signed by the Governor on March 26, 2024, and took effect on July 1, 2024. The amendments to §33.2-359 will allow the state funds to be used by VDOT to perform improvements that were previously considered roadway maintenance, rather than strictly limiting the funds to capital improvements. VDOT has not yet identified the potential improvements and techniques that would be eligible to receive district grant funds, nor have they determined the process that will be used to recommend and prioritize which roads and/or road segments should receive such treatment. Paragraph B of the amended state code requires the local governing body of the county to select the highways or highway segments to be improved, after consulting with VDOT. The proposed Unpaved Roads Program would assist the County in selecting the unpaved roads that are recommended for improvement.

The Virginia Transportation Research Council (VTRC), which conducts applied research for VDOT, recently initiated a project, titled Maintenance and Management of Unpaved Roads in Virginia, which will develop a statewide unpaved road condition rating system that is intended to assist VDOT in prioritizing its maintenance efforts. VTRC's work product is a technical research effort and is intended to define the maintenance options and surface treatments for unpaved roads that are to remain unpaved, based on characteristics of those roads. Additionally, VTRC's analysis will develop cost estimates for current and recommended unpaved road maintenance activities and will also recommend updated maintenance practices for VDOT's consideration. This project will take two years to complete; findings from this effort are not expected until late calendar year 2025 or early 2026.

The *Loudoun County 2019 Countywide Transportation Plan* (2019 CTP) includes policies regarding the County's rural roads. With respect to potential improvements to these roads, the 2019 CTP includes the following policy guidance related to potential improvements along unpaved roads:

- 2019 CTP Policy 3-4.10, Necessary Improvements: The County will seek to make only essential safety improvements on unpaved rural roads based on volumes, the nature of the road users (local vs. regional traffic), and crash data.

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<sup>3</sup> [§33.2-331 of the Code of Virginia](#)

<sup>4</sup> [VDOT web page for the Rural Rustic Road Program](#)

<sup>5</sup> [2024 Session House Bill 74](#)

<sup>6</sup> [2024 Session Senate Bill 644](#)

- 2019 CTP Policy 3-4.12, Low-Impact Improvements: The County supports maintaining the unpaved roads as feasible. In cases where unpaved roads must be paved, the VDOT Pave-in-Place and Rural Rustic Road programs will be used to the maximum extent possible. The County will work with VDOT to expand opportunities and refine application of these standards through legislation.
- 2019 CTP Policy 3-4.13, Unpaved Roads: The County's commitment to maintain unpaved rural roads is a de facto recognition of the traffic calming effect of these roads on local traffic. Other traffic calming measures along rural roads will be designed with considerations of rural context and character.

The decision to pave unpaved roads is often controversial because there are strong public views in support of and in opposition to hard surfacing gravel roads. The County and VDOT receive paving requests from residents who travel on gravel roads. There has been an informal process for handling these requests and moving them forward to the proposed paving list. When the annual Secondary Road Six-Year Plan is presented at a joint VDOT and Board Public Hearing, there is usually considerable public input about the proposed project list.<sup>7</sup>

To improve the process, the Board previously directed staff (8-0-1: Letourneau absent)<sup>8</sup> to work with stakeholders and the Board to develop criteria to determine which unpaved roads should be improved with hard surface treatment. In May and June 2018, staff conducted some initial stakeholder meetings for this project but criteria were not finalized.

Several data elements should be evaluated to determine which unpaved roads should be recommended for improvement, which includes enhanced maintenance practices or paving. Data to be considered includes traffic counts, crash counts, maintenance frequency, number of homes served by the road, and equity considerations. While this information is maintained by VDOT and other agencies, there is no single repository of available data for unpaved roads. Consultant support is needed to obtain data, create a database, and develop criteria to identify which unpaved roads should be improved.

The Department of Transportation and Capital Infrastructure asked one of its task order transportation planning and preliminary engineering consultants, Vanasse Hangen Brustlin, Inc. (VHB), to provide a proposal for establishing an Unpaved Roadway Program for the County; a summary of the approach and cost is provided as Attachment 1. This initiative would develop an inventory of all public unpaved roads in the County, collaborate with partner agencies to identify issues they encounter with unpaved roads, obtain and evaluate data and engage the public in the development of a transparent data-driven planning process for unpaved roads. It is anticipated this process would result in a maintenance and preservation planning strategy for all segments of the unpaved public road network in Loudoun County. Assuming the Board approves this Unpaved Roads Program in September 2024, it will take approximately one year to develop the program

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<sup>7</sup> [Video of September 13, 2023 Amended FY 2024 to FY 2029 Secondary Road Six-Year Plan and FY 2024 Construction Improvement Budget Priority List](#)

<sup>8</sup> [November 8, 2017, Copy Teste Item 12a TLUC Criteria for Unpaved Road Prioritization](#)

data and methodology and present it to the Board for approval in summer of calendar year 2025, which should be in time to inform the FY 2026 – FY 2031 Secondary Road Six-Year Plan in September 2025.

**ISSUES:** VTRC’s Maintenance and Management of Unpaved Roads in Virginia is likely to result in recommendations for VDOT to implement, that may change how unpaved roads are evaluated and maintained; however, those findings are not expected to be available until late 2025 or early 2026. There could be a variety of treatment options that may be appropriate for unpaved roads depending on physical characteristics, traffic volumes and other factors. The database of unpaved roads in Loudoun County that will be developed in the proposed Unpaved Roads Program should include attributes which will assist in identifying those features. VTRC’s guidance may result in a future revision to the Unpaved Roads Program to incorporate the findings from their study.

VDOT has not yet established administrative guidelines to implement the amendments to §33.2-359 of the Code of Virginia, which would identify maintenance enhancements and techniques that will be eligible to receive district grant funds, nor have they published the process that will be used to recommend and prioritize which roads should receive such treatment. The proposed Unpaved Roads Program would help to identify the unpaved roads that are recommended for improvement.

**FISCAL IMPACT:** The cost to develop the Unpaved Road Program is \$401,000; funding has been identified in the Capital Project Fund Project Management Consulting Services account (C02011).

**ALTERNATIVES:**

1. The TLUC may recommend that the Board approve the Unpaved Roads Program and funding as presented in this item.
2. The TLUC may direct staff to change the scope of the Unpaved Roads Program by adding, reducing, or modifying certain elements and return to the Committee.
3. The TLUC may not recommend that the Board approve the Unpaved Roads Program.

**DRAFT MOTIONS:**

1. I move that the Transportation and Land Use Committee recommend that the Board of Supervisors approve establishing the Unpaved Roadway Program as presented in Attachment 1 of the July 17, 2024, Transportation and Land Use Committee Action Item.

AND

I further move that the Transportation and Land Use Committee recommend that the Board of Supervisors authorize the amendment of the FY 2024 CIP by directing staff to execute a budget adjustment of \$401,000 from the Project Management Consulting Services account to the

Unpaved Roads Program project in the Capital Projects Fund for the development of the program.

OR

2. I move an alternate motion.

**ATTACHMENT(S):**

1. Establishing an Unpaved Roadway Program Executive Summary

# **Establishing an Unpaved Roads Program**

## **Executive Summary of Proposed Study Approach and Funding Needs**

**Consultant Services**  
**July 10, 2024**

### **SCOPE OF WORK**

The purpose this study is to develop a methodology that will provide data-driven decision support for investments in unpaved roads, and to establish a formal program for unpaved roads in Loudoun County.

The study will create a set of data, criteria, and methodology for categorizing and prioritizing investments for unpaved rural roads in the county, through a transparent process that includes evaluation of available data and public input. The general categorization outcome from applying the methodology would be:

- 1) Roads that may not be recommended for paving and may receive enhanced maintenance or alternative improvements.
- 2) Roads that should be monitored for future consideration and may receive enhanced maintenance or alternative improvements (TBD).
- 3) Roads that may be recommended for paving.

Due to a bill recently passed in the General Assembly, unpaved secondary highway funds may be used for maintenance upgrades other than paving. Unpaved roads would be eligible for such maintenance upgrades after the [Amended Virginia Code § 33.2-359](#) becomes effective on July 1, 2024. With the establishment of the Loudoun County Unpaved Roads Program, the prioritization of roadways to pave would inform the annual Secondary Roadway Six-Year Plan. A defined and repeatable process will be established to capture public input and determine the level of support for improvements.

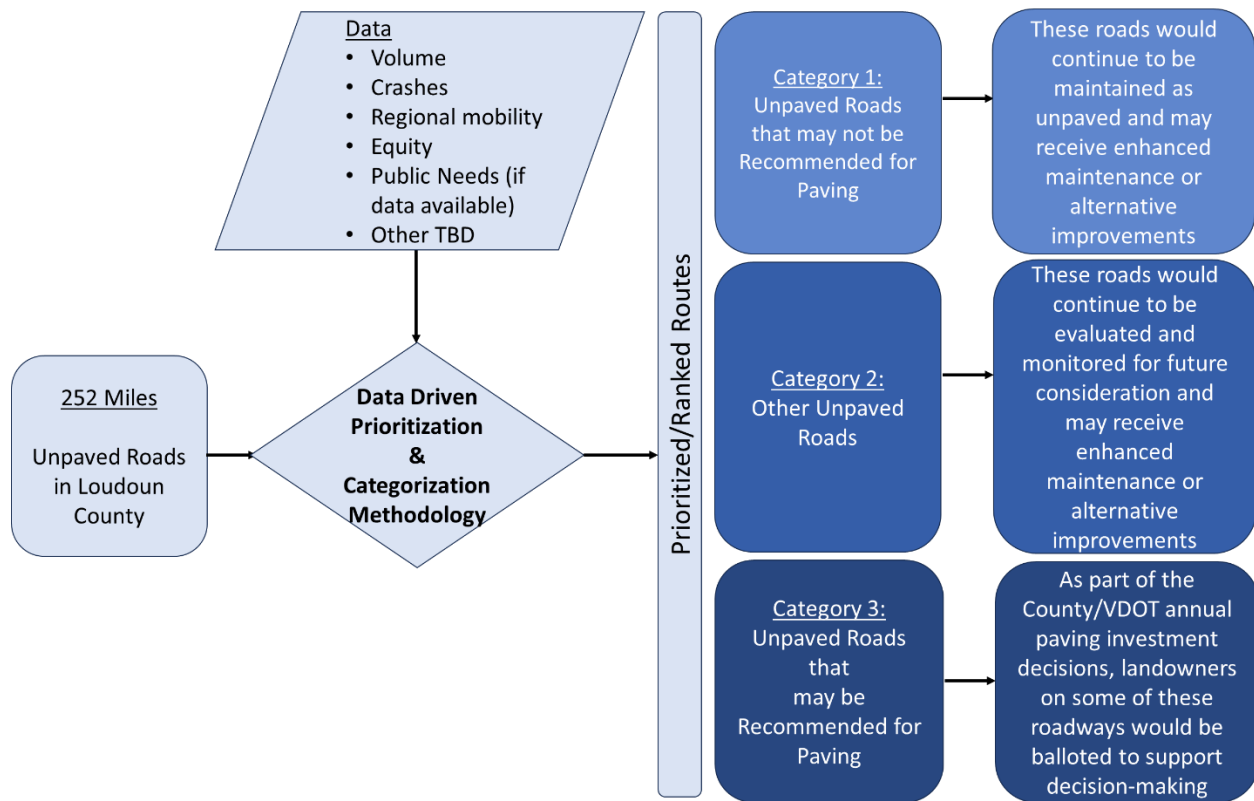
The study will also include collaboration with partner agencies to understand the impact of unpaved roadways on the services those agencies provide to the community, as well as what readily available data may be relevant to the process. A public involvement process will provide input into the criteria used in the methodology, and landowners along roadways identified for improvements will receive ballots to provide input specific to their roadways.

#### *Schedule-Related Scope Constraints*

The intent is to apply this methodology and have the findings available to support the FY 2026 paving schedule for unpaved roads, thereby presenting the annual proposed roadways to be improved to the Board of Supervisors no later than September 2025. Given this schedule target, the methodology for this first year will be limited to only simple and predefined data. At minimum that data will include volumes, crashes, regional connectivity, and equity. Any other data from partner agencies will be applied if it can be accomplished within the proposed schedule. In a subsequent and separate follow-on assignment, other more complex data may be considered and added to the methodology, along with any findings from an ongoing Virginia Transportation Research Council (VTRC) study of unpaved rural roads.

Shown in Figure 1 is a preliminary framework for the Unpaved Rural Roadway Program concept.

## **Attachment 1**



NOTE: Draft provided for enhanced understanding of the proposed process. Some aspects may change as data is reviewed and processes are further considered.

**Figure 1. Preliminary Draft Concept for Unpaved Rural Roadway Program**

## TASKS

Following is a summary of key activities to achieve the objectives of this study:

- 1) Kickoff and Progress Meetings
- 2) Best Practices Review
- 3) Partner Agency Meetings
- 4) Data Gathering and Evaluation
- 5) Public Input Meeting
- 6) Refine and Estimate Next Steps
- 7) Developing Methodology and Performing Testing
- 8) Present Methodology for Approval - Board of Supervisors Business Meeting
- 9) Ballot Landowners Adjacent to Category 3 Roadways Considered for Paving
- 10) Finalize Methodology and Program Needs
- 11) Final Report and Electronic Products
- 12) Meeting Support for Presenting FY 2026 Roads to be Paved

**SCHEDULE**

Assuming the consultant is given notice-to-proceed in September 2024, the estimated schedule indicates the methodology would be presented to the Board of Supervisors for approval in spring 2025 and the overall study would be complete in summer 2025.

**COSTS**

The estimated cost for the proposed study approach is \$401,000.