

Board of Supervisors Manual

*A quick reference guide to
common VDOT activities*



Local Assistance

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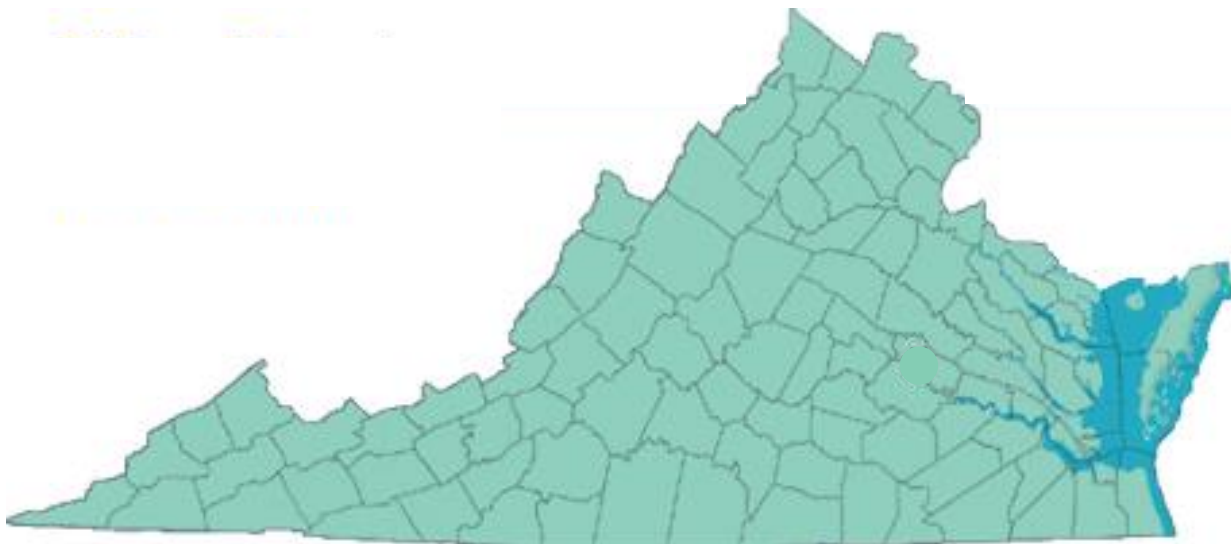


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PREFACE

This manual was developed as a quick reference guide to the more common activities associated with the Virginia Department of Transportation (VDOT).

The purpose of this manual is to provide new members of the County Board of Supervisors, or other public officials, with a better understanding of the Department. The topics cover the activities most commonly performed by the residency and district offices, and may assist in answering questions generated from constituents.

In all cases, the information is a broad overview of policy or guidelines. Each residency and district office has unique characteristics that may require that they perform some functions beyond what is stated in this manual. For more detailed information, always contact the local residency or district office of VDOT. Residency office contact information may be found [here](#). Also, VDOT's Customer Service Center is designed to provide the public with one number (1-800-367-7623) to remember for any transportation related question or request they might have.

We hope that this manual is a useful and productive tool in understanding and working with VDOT.

This manual is prepared and periodically reviewed and revised by VDOT's Local Assistance Division in consultation with other VDOT staff and the Residency Administrator/Engineer Committee.

MAINTENANCE

Adopt a highway

The Virginia Department of Transportation's (VDOT) Adopt-a-Highway Program is one of several initiatives* in the Commonwealth that is focused on cleaning, enhancing, and preserving the state's environment.

There are currently over 1084 volunteer groups totaling 13,720 participants around the state that have agreed to pick up litter on selected sections of highway two times each year for three years. The sections of highway average two miles each and have saved the taxpayers of Virginia an estimated \$3 million dollars each year. The program began in 1988 and is one of the largest programs in the country. From January 1, 2016 to December 31, 2016, volunteers contributed over 35,318 hours of time and collected over 25,589 bags of trash from 1,586 miles of roads. VDOT acknowledges the efforts of families, civic groups, and businesses by erecting an Adopt-a-Highway sign imprinted with the name of the organization at the beginning of their adopted highway.

For additional information on the Adopt-a-Highway Program, see VDOT's website:
<http://www.virginiadot.org/programs/prog-aah-default.asp>

* Other programs supported by VDOT are Offender Community Service Landscape Program, Volunteer Roadside Management Program, and Offender Labor.

Dams

The Virginia Department of Transportation does not accept dams as part of the secondary system of state highways, nor does it accept the responsibilities and liabilities associated with any dam as the owner is always responsible for the dam and for performing periodic inspections of dams. An agreement with the county is required as a prerequisite for the Department's acceptance of a street that crosses a dam or an extrinsic structure.

The need for an agreement must be considered on the merits of each case. However, all such agreements are to be submitted to the local designated VDOT contact who will coordinate final negotiation, review, approval, and execution before a related addition assembly is submitted. Ideally, to avoid last minute problems, local VDOT officials notify the staff of the locality during preliminary plat reviews that such an agreement will be required before the related facilities are constructed. Dam agreement forms may be obtained at the local VDOT office and requires two documents with original signatures (one for the locality and one for VDOT's Central Office).

In addition, VDOT will not typically approve the use of highway embankments as dams. When there are extraordinary circumstances based on unique site and roadway conditions; however, requests for approval should be submitted to the VDOT State Hydraulics Engineer. The State Maintenance Division Administrator should also be contacted on all such requests.

Drainage and drainage easements

Adequate drainage conveyances and facilities are integral components of a safe and structurally sound roadway infrastructure. Inadequate or improperly maintained drainage facilities are responsible for most pavement failures and soil erosion. A road may have its serviceability seriously curtailed, or may even be made impassable as a result of improper drainage maintenance, or inadequate facilities. One of the most important duties of maintenance personnel is the repair and maintenance of the highway drainage system and the importance of this activity cannot be over-emphasized.

The highway drainage system includes open channels (paved and unpaved), underdrains, gutters, inlet and outlet structures, catch basins, drop inlets, manholes, storm sewers, and stormwater management facilities.

Preventive Maintenance (PM) is any planned cyclical activity performed in advance of a critical need for repair, to reduce or arrest the rate of future deterioration. The activities may correct minor defects as a secondary benefit, but are not initiated based upon an observed deterioration. The goals of a PM program are to extend the useful life of VDOT's maintainable assets and to preserve their investment. Example of the types of PM activities for drainage items include:

- Clean soil, debris, and vegetation from the underdrain outlet (yearly)
- Clean cross pipe inlet and outlet to allow proper flow (1-2 years)
- Application of herbicide to prevent vegetation growth on unpaved shoulders (yearly)

VDOT should maintain an easement to protect the roadway and its drainage system, when Department personnel deem it appropriate and necessary. Generally there are two types of easements. The first is recorded in the name of the Department and is usually obtained by Department personnel to resolve individual drainage problems, or as a part of highway improvement projects. The second is dedicated to the County for public use, as a part of subdivisions developed under County ordinances.

The Department's responsibility regarding the two different types of easements is as follows:

Drainage Easements Acquired by the Department

The Department assumes full maintenance responsibility within the limits of the drainage easement.

Drainage Easements Dedicated to a County as Part of a Subdivision Plat

The Department will maintain only that portion of the drainage easement, which falls within the right of way limits accepted by the Department when the street is added to the State-maintained system of highways. The Department will not maintain easements dedicated to a County as part of a subdivision plat. Work within the easement, but outside of the right of way will only be performed when obstructions, etc., create problems within the right of way.

Maintenance Budget

Beginning in 2002, the Department adopted an asset management approach to planning, budgeting, and execution of maintenance and operations. Under this approach, maintenance and operations budgets are developed and distributed based on the quantity and cost of work needed to preserve, maintain, and operate at a target condition or level of service for roadway assets VDOT is responsible for. Data on asset inventory (counts and total quantities) are collected by contractors and VDOT staff either on an annual or on-going basis. Statistical extrapolation is used to fill gaps where data has not been collected.

VDOT performs maintenance work on assets and provides services which it groups into five categories based on functional similarity:

<u>Work Category</u>	<u>Example assets and services</u>
Roadway	Pavement, bridges, shoulders, tunnels
Traffic and Safety	Guardrail, signs, markings, signals, lighting
Emergency Response	ITS assets, snow and ice removal, incident response
Roadside	Vegetation, drainage, barriers
Facility, Equip, and Other Services	Rest areas, ferries, equipment, administration

Maintenance activities can be described as:

- Ordinary Maintenance—work that preserves roadway assets, corrects minor defects or problems, and extends the life of the asset.
- Planned Preventive Maintenance—any planned activity performed in advance of a need or repair or in advance of accumulated deterioration. PM is planned, cyclical, not condition-based, and does not add structural capacity to the pavement structure.
- Repair/Corrective Maintenance—work that is required to return a damaged or deteriorated asset to design functionality and capability.
- Restore/Replace Activities—the replacement or complete restoration of assets that cannot be repaired.
- Major Rehabilitation—applies to bridges and pavement only. This work includes full depth reconstruction where the entire pavement asset is removed and replaced. The work may also include restoring structural integrity or correcting major safety defects for bridges and pavements.

VDOT uses inventory and condition data, as well as unit cost of maintenance, replacement, operations activities, and performance targets to determine the quantity and cost of activities needed to reach and maintain the network of assets at a targeted level of condition or level of service. The Statewide maintenance and operations allocation is then distributed to the nine construction districts using district level information from the needs assessment. District allocations are distributed at the program level. Districts then distribute funds from their allocation to their residencies, area headquarters, and district offices. Once each organizational unit in the maintenance and operations program receives their budget, they develop more detailed plans for where the money will be spent over the course of the fiscal year. The detailed budgets are then uploaded to the financial management system where they are managed against expenditures.

Mowing

Mowing practices are shown in of VDOT's Maintenance Best Practices Manual. These practices provide the minimum requirements for all mowing operations on roadsides. Practices include those mowing activities that are initiated based on the following primary business needs.

1. Ensuring all related highway safety requirements are met, including but not limited to clear zone, sight distance and guardrail deflection angle requirements, and proper and adequate drainage.
2. Protecting the traveled roadway and to enable the visual inspection of and access to roadside assets and other highway infrastructure including but not limited to ditches, culverts, stormwater basins, pipes, and under drains so that other maintenance needs can be identified and planned for.
3. Ensuring efficient management of woody vegetation within the right of way.

Any permissible modifications in the application of these practices must be approved by the District Administrator with documented justification. Copies of this approval are to be sent to the State Maintenance Engineer prior to implementing such changes.

Volunteer Roadside Management Program

This program provides entities such as a local government, private business, community, individual, or civic organization an opportunity to improve the appearance of the right of way by participating in the sponsorship of maintaining existing turf and ornamental plants. Participation in this program can be coordinated through the Residency office and will be formalized with a Land use Permit.

Community Service Landscape Program

This program, established in accordance with Code of Virginia [33.2.231](#), allows persons convicted of nonviolent misdemeanors who have received a suspended sentence or probation to fulfill their community service requirements by mowing rights-of-way and performing other landscaping maintenance tasks for roads and highways that the Department has the responsibility to maintain. This program is only available in locations where the Local Probation Agency has entered into an agreement with VDOT.

Offender Labor

VDOT utilizes Offender labor for maintenance activities along roadways in select areas statewide. Supervised Offenders are authorized to perform such work based on a joint Memorandum of Agreement between VDOT and the Virginia Department of Corrections (DOC). VDOT employs DOC's Offenders on manual, labor-intensive, unskilled activities such as litter pick-up, brush cutting, tree pruning, hand mowing, and culvert cleaning in rural areas. Because of security and safety issues, DOC Offender labor is not allowed in urban areas such as Richmond, Northern Virginia, Williamsburg, Virginia Beach, etc. Inmates must also be in a "trustee" status; that is, not convicted of a serious crime. VDOT has been partnering with DOC in using Offender labor to reduce VDOT costs and help maintain roads for over 100 years.

VDOT's Maintenance Best Practices Manual contains work areas in which Offenders cannot and can be used. These restrictions are listed below.

Prohibited Work Areas for Offender Crews

- A. Within the political boundaries of any city or town unless specifically exempted per DOC Regulations and in accordance with DOC Operation Procedures Nos. 462 and 463.
- B. Within any outlying part of a city or town, to include any smaller adjacent community, residential neighborhoods or subdivisions, and shopping centers on the outskirts of a city or town.
- C. In rural areas, Offender labor shall not be used in the following locations:
 1. Interstate highway rest areas, unless closed to the public
 2. Within 50 yards of businesses or homes at interchanges
 3. Within villages and subdivisions along highways and roads
 4. Within 50 yards of businesses at intersections and along highways and roads
 5. Within 200 yards of a school that is in session
 6. VDOT facilities, except as specifically authorized by the Department of Corrections

Approved Work Areas for Offender Crews

- A. Rural portions of Interstate highways, including access ramps, except rest areas open to the public, and within 50 yards of commercial facilities (such as, gas stations, motels, stores) and/or homes at interchanges.
- B. Along rural portions of primary and secondary highways and roads except in villages, subdivisions or within 50 yards of any built-up area(s) (for example, crossroads or intersections with gas stations, convenience stores, homes).
- C. Any other state-maintained road that meets the requirements of items A and B above and does not otherwise violate the provision of the section on prohibited work areas and does not jeopardize public safety.
- D. Within rural areas of the cities of Chesapeake and Suffolk, and other approved towns and cities, subject to the same restrictions as in item B & C above.

Private Streets

Private streets are those where the use is permissive or privileged by right of ownership/membership. For the purposes of this manual, "private streets" refers to streets that are not maintained by VDOT, whether or not such streets are actually "private."

VDOT's involvement in the review of private street subdivision plans is limited to their impact on the existing public roadway network in terms of traffic generation, access, and drainage. However, VDOT may review private street subdivision street plans in detail if requested by the local government, which agrees to reimburse VDOT costs on an accounts receivable basis provided the VDOT District agrees to provide those services.

Localities can establish in their subdivision ordinance construction standards for private subdivision streets and require that a street maintenance agreement be established. However, if lot owners on a private subdivision street do not maintain the street over time, it can fall into a state of disrepair, becoming an emergency services response issue.

Section 15.2-2242 of the Code allows localities to require that the related plat and deeds contain a statement advising the lot purchaser that the streets in the subdivision do not meet state standards and will not be maintained by VDOT or the locality. Furthermore, § 33.2-336 requires locality subdivision ordinances that allow streets below state standards to include a statement that such streets shall not be accepted into the state system unless improved to current VDOT standards and the improvement costs cannot be funded with money allocated by the Commonwealth Transportation Board.

Private street connections to state maintained roadways must meet all VDOT criteria for subdivision street connections, such as sight distance, pavement structure, auxiliary lanes, signalization, and permits. The Road Design Manual, Appendix F contains geometric design criteria for the construction of private street connections (entrances) to a public road. Private street connections made to existing VDOT maintained roadways without first obtaining a Land Use Permit for the connection are illegal, may create safety issues and the connection may be removed.

Streets are eligible to be accepted into the state's system if they are built to VDOT standards, the required right of way is dedicated to public use, and the street meets all applicable requirements and regulations governing VDOT acceptance.

Some older residential streets may be eligible as a rural addition if they are either brought up to standards by others or the street is otherwise eligible for addition and improvement under the rural addition program as mentioned in the section on additions.

A VDOT Commissioner's Directive titled "Road Signs and Speed Limits on Private Roads" provides for the certification of road signs and speed limits on certain private roads as provided for in [§46.2-1307](#) and [§46.2-1307.1](#) in the *Code of Virginia*, for law enforcement purposes.

Snow Removal

The Department will provide snow and ice control services at a level of service consistent with local jurisdictional needs including, but not limited to, emergency access, customer input, commuter and educational systems, economic movement of goods, average daily traffic, industrial access, and other traffic data.

Highway needs for snow and ice control overlap highway systems and, as a result, are separated and identified by functional classifications of the highway rather than by roadway systems. Highways and roads are classified into categories of priority routes to ensure the optimal and safe movement of goods and traffic along Virginia's highways during snow and icy conditions.

For example, priority one highways include all interstate routes, most primary routes, and a few very high-service secondary routes. These routes should be kept free of ice and snow so that traffic can proceed in safety without severe delays, except during periods of heavy falling or drifting snow and ice storms. Generally, this is accomplished within 24 hours after the storm ends.

All routes receive progressive and continuous effort to meet the snow removal goals. Routes not designated as priority one highways will receive attention as soon as practical and will have appropriate chemical treatment and plowing generally no later than 48 hours after the end of the storm. Dependent upon the forecast, VDOT may apply chemical deicing abrasive to bridges and select routes at the beginning of a storm or possibly prior to the onset of precipitation. On residential streets, sanding is performed as needed and plowing is performed when feasible.

Each year the local residency revises snow removal plans for the coming snow season based on local needs and available resources. Contractor supplied hired equipment is used to complement state forces.

VDOT does not remove snow from private or commercial roads or entrances. Upon written request VDOT will assist the cleaning of entrances for fire departments, emergency squads, and other emergency providers as operations allow.

VDOT provides snow removal service in most incorporated towns of less than 3,500 populations, and on primary roads in some towns with populations over 3,500 depending on which section of the *Code of Virginia* by which the town is operating.

VDOT does not remove snow or ice on sidewalks.

VDOT does not remove snow off railroad grade crossings. The railroad has the responsibility to remove snow from the grade crossings. If the railroad company does not remove the snow then the Residency Administrator will contact the railroad company official regarding removal.

Visit the VDOT web site at: <http://www.virginiadot.org/travel/eoc-main.asp>

CONSTRUCTION

County Standards

For streets that are intended to become part of the state highway systems or for improvements to existing state highways, counties may develop their own design standards and construction specifications, which meet or exceed VDOT and AASHTO. However, they must be reviewed and approved by VDOT for projects off the National Highway System, and also by FHWA for projects on the National Highway System. Local governments are expected to notify the VDOT Project Coordinator or other local designated VDOT liaison whenever alternative designs and specifications are being utilized.

If a county proposes use of a recognized acceptable concept or material not previously approved for VDOT use, a request shall be submitted to the local designated VDOT liaison for review. The local designated VDOT manager, through consultation with appropriate divisions, will determine if the request will be approved for a VDOT maintained street. If it is determined that the non-standard item may be installed within the dedicated right of way and should be maintained by others, a permit will be required.

Donated Right of Way

For purposes of this section, Right of Way includes fee acquisitions, and easements, both permanent and temporary.

Donated right of way is a means of quickly obtaining right of way for constructing those roads listed on the approved Secondary Six-Year Plan. These roads usually do not have any major environmental, historical, or citizen opposition associated with them. If all property owners on the road agree with the proposed construction, and right of way can be negotiated through donation, the time and cost of preliminary engineering can be reduced.

Roads on which donated right of way is obtained can be constructed at a much lower cost. Much of the costs associated with design, title search, appraisal, soils investigation, attorneys' fees and right of way agents are reduced or eliminated. However, sufficient title research must be performed to ensure that the Commonwealth obtains clear and indefeasible title. The Regional Right of Way and Utilities Manager should be consulted for advice and guidance.

When a road is included in the Secondary Six-Year Plan and comes within approximately two years of construction, typically, the residency sends letters to all property owners adjacent to the road advising them that we are beginning our right of way process. If a project is being administered by VDOT, then VDOT personnel will contact affected property owners, explain the work necessary to improve the road, and negotiate for donated right of way. If the project is locally administered, local personnel will contact the property owners. For locally administered projects, personnel may reference their Locally Administered Projects Manual, and also VDOT's Right of Way Manual of Instructions, as a reference for completing the property donation process.

Although it is called donated right of way, the property owner does have the right to receive just compensation for their property or any property interest to be donated... Items such as fences, shrubs or trees can be replaced or owners may be paid for the loss.

The Code of Federal Regulations (CFR 24.108) require that the landowner be informed of their right to compensation, and their right to have a determination of the value of the donated property provided to them. If, after being fully informed, they decide to waive the right to compensation and/or to receive a determination of the value of the donated property, VDOT requires that a "Donation of Land Acknowledgement" be signed by the owner(s). This document must be recorded with the deed of conveyance.

There are several standard deeds that may be used depending on the requirements of the roadway and the property. These deeds are signed by all property owners before a notary public and are recorded in the Circuit Court Clerk's Office of the affected county.

Board of Supervisors members can assist in the acquisition of donated rights of way by informing the interested parties of this process and encouraging their cooperation with VDOT representatives.

The administrating agency is responsible for the appropriate environmental review processes.

Locally Administered Projects

Various sections of the *Code of Virginia* provide localities the opportunity to administer transportation projects financed by the Virginia Department of Transportation (VDOT) and to supplement the funding of projects within their jurisdictions.

[§33.2-228](#) allows the Commissioner of Highways to enter into agreements with localities, authorities, and other organizations in order to improve and maintain Virginia's transportation system.

[§33.2-357](#) allows localities to administer Revenue Sharing projects.

[§33.2-338](#) allows counties to administer primary highway and secondary highway projects.

A project administration agreement is required between the locality and VDOT for any locally administered project. This agreement spells out the terms for a locality to administer a specific project and must be finalized before the locality starts work on the project. For projects that will be developed as federally eligible, federal authorization is required before starting each phase of the project (preliminary engineering, right of way, or construction). Any expenditure made prior to Federal Highway Administration approval of a project phase will not be reimbursed.

The Locally Administered Project process is initiated by the locality by completing and submitting a Request to Administer Project Form to the Residency Administrator or other designated local VDOT liaison.

When a locality decides to take advantage of this opportunity it must adhere to applicable Commonwealth Transportation Board (CTB) policies and procedures as well as federal regulations, if using federal funding. Assistance regarding this process can be found on the VDOT web site at: <http://www.virginia.gov/business/local-assistance-locally%20administered.asp>.

A reference guide titled "Locally Administered Projects Manual" is also available on this web site.

Locally Funded – VDOT administered projects

[§33.2-338](#) of the Code of Virginia allows the Department to agree to administer projects funded by counties.

Generally, VDOT expects that local governments administer construction projects developed outside VDOT's six-year program. However, the *Code of Virginia* also provides for VDOT administration of projects funded entirely from local revenue sources. This most often occurs when local governments sell bonds for transportation improvement projects, but revenue can be provided with any local revenue source. When a locality wishes to take advantage of this opportunity, it should first coordinate with the Residency Administrator or other designated local VDOT liaison who will, in turn, coordinate with the VDOT District staff to ensure adequate VDOT workload capacity exists to meet the locality's performance expectations. When agreeing to administer a locally funded project, VDOT may require that the project be entered into the appropriate six-year program and that the project be administered in accordance with VDOT policies and procedures. Project funding is required in advance in accordance with the agreed upon payment schedule documented on the Appendix A of the Project Administration Agreement. Once both parties agree that VDOT will administer the project, an agreement outlining administration and funding responsibilities is prepared.

Noise Abatement

The Federal Highway Administration (FHWA) regulates highway traffic noise impact analysis, abatement procedures, criteria, coordination requirements, and reporting guidance in Title 23 Code of Federal Regulations, Part 772, and published guidance. Per Virginia Noise Abatement Policy, all transportation improvement projects developed in conformance with the Virginia Department of Transportation's (VDOT's) guidelines shall be in conformance with those federal highway traffic noise impact analysis and abatement procedures and guidance mandated by FHWA. The Commonwealth Transportation Board also approved a companion document developed by VDOT titled "Highway Traffic Noise Impact Analysis Guidance Manual" which was last amended July 14, 2015, and is available at <http://www.virginiadot.org/projects/pr-noise-walls-about.asp>.

A noise wall is a specially designed structure built to reduce noise levels created by nearby highway traffic. It is built only after noise impact studies are conducted and certain conditions are met. VDOT conducts studies and looks into options for reducing noise levels along proposed federally funded highway improvement projects. Projects must meet one of the following conditions to be considered for noise abatement:

- (1) The construction of a highway on new location; or,
- (2) The physical alteration of an existing highway where there is either:
 - (i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - (ii) Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor;
- (3) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane;
- (4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane;
- (5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange;
- (6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane;
- (7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

Noise Abatement, continued

Noise Abatement Specialists use computer models to analyze and predict noise levels based on the anticipated loudest hour of the day for future conditions. They also measure existing noise levels in various locations along the proposed highway corridor for projects on new location. Along with the road's design, they must consider topography, distance between the road and nearby properties, traffic speeds, and noise generated by different types of vehicles. The computer model uses that data to predict the future noise level, which is then compared with Federal Highway Administration (FHWA) and VDOT noise abatement criteria. If this comparison identifies an impact, VDOT noise abatement specialists must investigate noise reduction options.

Several options for noise mitigation are available. Noise abatement specialists evaluate the feasibility of shifting the road away from the affected properties, reducing the speed limit, restricting heavy truck traffic on the road, or lowering the road through the affected area to create a natural sound barrier. Another option is to use earthen berms to mitigate noise impacts. If design changes will not reduce noise impacts, VDOT engineers will then consider the installation of noise barriers. Noise barriers can substantially reduce traffic noise impacts, however they must be found to be both feasible and reasonable to construct at each impacted location.

To determine feasibility of a highway traffic noise barrier, the following two conditions shall be considered:

(1) fifty percent (50%) or more of the impacted receptors must experience 5 decibels (dB) or more of insertion loss, and;

(2) it must be possible to design and construct the noise abatement measure in the proposed location. The factors related to the design and construction include: safety, barrier height, topography, drainage, utilities, maintenance of the abatement measure, maintenance access to adjacent properties, and general access to adjacent properties (i.e. arterial widening projects).

Additionally, all of the reasonableness factors listed below must collectively be achieved in order for a noise abatement measure to be deemed reasonable to construct:

(1) the viewpoints of the affected citizens shall be obtained through surveys. Fifty percent (50%) or more of the respondents must favor the noise abatement measure, and;

(2) the total area of the noise barrier must be 1,600 square feet or less per benefited receptor to be considered cost-effective, and;

(3) the noise barrier shall reduce noise levels by 7 dB(A) for at least one (1) noise impacted receptor.

For noise barriers determined to be feasible and reasonable to construct, VDOT will determine the color, façade, and texture (absorptive or reflective) of the proposed barrier unless there is third-party funding specifically for aesthetics.

Paving a Road

When the secondary system of highways was established in 1932, VDOT accepted nearly 34,000 miles of unpaved roads. Today, nearly 6,850 miles of state maintained unpaved roads still exist and are an important part of each county's Secondary Six-Year Plan in addressing the unpaved road needs.

The process of revising the Secondary Six-Year Plan includes an advertised public hearing to provide all citizens an opportunity to ask that their road be included in the plan. If all these requirements are met, a road will be improved and paved when funding reserved in the plan becomes available for spending.

Design Options available for paving unpaved roads.

The General Assembly has provided additional options in paving unpaved roads in recent years. This has provided increased flexibility and allowed more unpaved roads to be paved than previously possible. The options currently available include the Rural Rustic Road approach, the Pave-In Place approach and the traditional reconstruction approach when greater improvements and additional right of way are necessary.

Rural Rustic Road Program

In 2003, the "Rural Rustic Road" Program was implemented allowing a flexible approach to paving many unpaved roads. For a road to qualify for rural rustic road treatment, several criteria must be met:

1. The county's Board of Supervisors must pass a resolution declaring the road to be a "Rural Rustic Road";
2. The Board of Supervisors indicates that expected growth and traffic increase along the road in the near future is minimal;
3. The curves along the road should be generally adequate for the traffic and any increase in speeds expected after the improvement;
4. Roadway drainage must currently be sufficient or require only minor improvements;
5. The daily traffic volume must not exceed 1500 vehicles.

Paving a Road, continued

Roads that are good candidates are paved with minimum disruption beyond the ditches and usually result in a significant cost savings. For roads with traffic volumes greater than 400 vehicles per day, 18 foot pavement width is desirable and some typical section improvements may be necessary. The Residency Administrator or other designated local VDOT manager will determine whether this approach is suitable for a requested unpaved road. The Rural Rustic Road approach should be considered first when paving a road but it should be recognized that not all roads are good candidates for this concept.

Additional information is available on VDOT's website at <http://www.virginia-dot.org/business/local-assistance-programs.asp>

Pave-In-Place Program

If the rural rustic road approach is not a good option for a road, the pave-in-place approach might be considered if:

1. The traffic is under 750 vehicles per day;
2. Only minor improvements are needed to accommodate traffic; and
3. Needed improvements can be made within the available, existing right of way. Easements might be necessary for spot improvements.

Under the pave-in-place option, the road is improved to a minimum standard of 18 feet of pavement with 2-foot shoulders.

Traditional Reconstruction with Additional Right of Way

If significant improvements are needed or if significant development is proposed along the road, a more traditional approach is used to reconstruct the unpaved road and improve the alignment. A minimum 40 foot right of way is usually required for these projects with additional right of way or easements acquired based on the proposed improvement.

The residents along the road are usually asked to donate any additional right of way needed. If that is done, the funds otherwise required to buy right of way can be used for construction. If additional right of way is needed and will be donated, the donated right of way should be acquired before the project is added to the Secondary Six-Year Plan.

Funding Options for Paving Unpaved Roads

There are designated funds allocated specifically for unpaved roads as noted below. In addition, Counties may use regular secondary construction funds and supplement these funds with other state or local funds to hard-surface their existing unpaved roads and the funding source will dictate whether restrictions apply. The Secondary Six-Year Plan information on page 24 describes the allocation process and any unpaved road funds designated under § [33.2.358](#) B or § [33.2-359](#) are added to the county's six year plan for distribution.

Paving a Road, continued

- **CTB Formula – Unpaved Road Funds – § 33.2-358.**

This statute provides for funding unpaved roads carrying more than 50 vehicles per day. These funds cannot be used for any purpose other than hard-surfacing existing unpaved roads. Up to 5 percent of the funds set aside under this statute are available for unpaved roads distributed based on the pro rata share of unpaved roads meeting this criteria. Allocations under this statute will cease beginning July 1, 2020 unless otherwise extended.

 - **High Volume Unpaved Road Program**

These funds are a subset of any funding available under § 33.2-358. To provide some additional funding for the higher volume roads, 10 percent of the unpaved road funding available under this Code Section will be available for high volume unpaved roads (over 500 vpd). The CTB approved this new program effective July 1, 2014 and an application process has been initiated to allow counties to apply for this supplemental funding for qualifying unpaved road projects.
- **Unpaved Road Secondary Funds – § 33.2-359.**

This statute provides that the CTB will allocate up to \$25 million annually from the Construction District Grant Program for the hard-surfacing of unpaved roads which carry 50 vehicles or more per day. Funds allocated to the county under this statute can be added to the county's regular secondary system construction funds and used for other projects but a mileage adjustment of one mile will be made for each \$250,000 diverted and not used for unpaved roads. Funds are not allocated to Unpaved Road Secondary Funds if there are insufficient funds for distribution through the Systems Construction formula.
- **Revenue Sharing**

Counties also have the option of applying for Revenue Sharing funds to address the hard-surfacing of unpaved roads in the secondary system pursuant to § 33.2-357. There are no minimum traffic volume requirements and the normal Revenue Sharing Program guidelines apply. Additional information about application deadlines, eligibility requirements and the transfer process are in the Revenue Sharing Program Guidelines available at the following link: <http://www.virginiadot.org/business/local-assistance-access-programs.asp>
- **Supplemental Funding – Third Party Funding/Accounts Receivable**

Additional funding may be provided by localities to supplement programmed allocations on eligible secondary unpaved road projects. A standard Project Administration Agreement (PAA) for Locally Funded/VDOT Administered projects identifying Third Party funds and outlining payment schedules is required. Guidance for developing the PAA is provided by the Local Assistance Division and documented in the Locally Administered Projects Manual in Chapter 10 and is available at: http://www.virginiadot.org/business/locally_administered_projects_manual.asp

Project Development Timeline

The following outlines major phases of the road building process. Many of the tasks included within each phase occur concurrently. Each project's unique circumstances, requirements, risks, and complexities tailor the project development process to the individual project. VDOT projects are reflected in Virginia's Six-Year Improvement Program, which is updated annually. Public comment is solicited and welcome at many points throughout the process. It is best to become involved as early as possible in the transportation decision-making process.

1. The Planning Phase may last from 1-24 months.

- a) Often acting upon requests for road improvements from local governments, VDOT planners work with federal and other state agencies, local governments, regional planning organizations, and residents to develop short- and long-range plans for improving the highway system. How long the planning and programming process takes depends on factors relating to the significance of a recommended transportation improvement. Factors include the functional role of a roadway proposal (with respect to regional travel, mobility and/or access), costs and availability of revenues, environmental and/or economic impact, and the support of the affected agencies, regional planning organizations, jurisdictions and the public. Participating regional planning organizations include urbanized area Metropolitan Planning Organizations and Planning District Commissions, as well as Virginia's non-urbanized area Planning District Commissions.
- b) Virginia's statewide long range transportation plan (VTrans) contains Virginia's strategic highway and transit goals, and top corridors of statewide significance.
- c) VDOT and DRPT develop a long range Virginia Surface Transportation Plan (VSTP) that identifies recommendations based on state transportation need-based assessments and the plans of metropolitan areas' Constrained Long Range Plans and non-metropolitan areas' Rural Regional Long Range Plans. The recommendations are prioritized and provided to the Commonwealth Transportation Board (CTB) citizen panel appointed by the Governor for consideration during the annual updates to Virginia's six year improvement program. The CTB also considers projects based on technical information and the input received from government agencies, regional planning organizations, local governments and the public.

2. The Scoping Phase may last between 1-8 months depending on project complexity and includes: confirming the project purpose and need, initiating the environmental review process (ERP) which identifies if the State Environmental Review Process is required, determining the level of environmental document (if required) and the need for water quality permits, identifying stakeholders, establishing the project team, holding the initial scoping team meeting, performing the survey, developing the initial design, considering context sensitive solutions, and evaluating public involvement strategies. The initial step is to refine project goals and objectives, determine the location and/or the typical section of a roadway. This is based on anticipated traffic volume, the roadway's functional classification (arterial, collector, local), and terrain (level, mountainous, rolling).

3. Preliminary Design Phase may range from 1-18 months and includes: design of roadway, structures and bridges, traffic control devices/intelligent transportation systems, and landscaping; determining right of way and utility impacts, performing constructability and work zone reviews,

Project Development Timeline, continued

completing the environmental document for NEPA, holding the public hearing team meeting and public hearing, and obtaining design approval.

- a) A preliminary design is prepared and reviewed by all stakeholders in the project, such as affected property owners and local governments.
- b) Sometimes offering two or more possible proposals, VDOT conducts information meetings and/or public hearings to involve citizens before making a final decision on the location of the roadway and details such as right-of-way width, type of intersections and interchanges, and materials needed. Information meetings and public hearings are advertised in the newspaper and other media, and citizens have 10 days to offer comments or documents about the proposed location and/or design after the information meeting or public hearing.
- c) The CTB must approve the location and major design features before final design and right of way acquisition can begin.

4. The Detailed Design Phase may last between 1-12 months and includes: design of roadway, structures and bridges, traffic control devices/intelligent transportation systems, and landscaping; determining right of way and utility impacts, developing erosion and sedimentation/hydraulic plans, performing utility design, holding the utility field inspection, authorizing right of way (total takes), performing constructability and work zone reviews, and holding the field inspection team meeting.

5. The Final Design and Right of Way Acquisition Phase may range from 1-24 months and includes: finalizing the design of roadways, structures and bridges, traffic control devices/intelligent transportation systems, and landscaping; finalizing right of way and utility impacts, erosion and sedimentation plans, and utility design; obtaining environmental permits, holding the utility field inspection, authorizing right of way and utilities (partial takes), performing constructability, work zone, maintenance of traffic/transportation management plan reviews, and holding the pre-advertisement conference team meeting.

6. The Advertisement Phase may last from 1-5 months and includes: finalizing plans, specifications, and estimates; completing the bidability review, securing environmental and right of way certifications, and verifying funding,.

7. The Construction Phase may range from 1 to over 36 months.

- a) Based upon an engineering estimate of what will be required to build a road, VDOT invites contractors to bid on a project, and the Commonwealth awards a contract to the lowest qualified bidder, stipulating cost and length of time for completion.
- b) Overseeing every step of the work, VDOT inspects for quality, conformity to project requirements, and environmental protection.
- c) VDOT inspectors manage traffic flow through the project, keeping affected property owners informed and ensuring that work zone safety guidelines are met.
- d) Once a project is completed, a road is opened only after a satisfactory inspection. Completion delays can occur due to inclement weather, late delivery of materials, and unforeseen discoveries such as underground utilities or unstable soil.

Secondary Construction Budget

VDOT's construction is a pay-as-you-go program. Authorization to initiate different phases of a project is based on a spending plan that demonstrates funding will be available to cover expenses for that phase. 100 percent of the construction costs must be fully funded within 12 months of construction completion. When the Secondary Six-Year Plan is produced, the Department is dealing with approximations and projections in funding. The Board of Supervisors typically approves the Secondary Six-Year Plan and Construction Priority List in the first quarter of each calendar year based on those funding projections. The Department uses the approved priority list to apply the funds in the Secondary Construction Budget for the upcoming fiscal year.

Occasionally, project costs exceed the funds programmed in previous budgets for that project. This creates deficits that must be addressed. Generally the first priority in the Secondary Six-Year Plan and Secondary Construction Budget is to finance deficits. Allocations are then made available for county wide or incidental improvements such as traffic and safety services and rural additions. Allocations may be made for the unpaved roads, major reconstruction, and bridge replacement projects based on priorities.

Normally construction projects in the first year of the Secondary Six-Year Plan are financed in the Secondary Construction Budget. After holding a public hearing on the proposed projects and considering citizen comments, the Board of Supervisors, with the concurrence of the Residency Administrator or other designated local VDOT manager, must adopt an official construction budget priority list for the first fiscal year, usually along with the resolution approving the updated Secondary Six-Year Plan. If the construction budget was not approved along with the Secondary Six Year Plan it must be adopted in a separate public hearing and along with a resolution approving budget priority list prior to June 30 each year. However, it is recommended to have it approved in the March/April time frame.

The secondary construction budget is included in VDOT's Annual Fiscal Year Budget which is usually approved by the Commonwealth Transportation Board with the SYIP. Until the secondary construction budget is approved by the Board of Supervisors and the Department's budget is approved by the CTB, the allocations are not posted as indicated in the approved Secondary Six-Year Plan and/or the final Secondary Construction Budget.

The allocations included in the budget are part of the approved Secondary Six-Year Plan and the Department's Six-Year Improvement Program. The allocations are not posted in the Department's Financial System until the Board of Supervisors has approved the secondary construction budget. This may delay the authorization for a project to begin PE, RW, or CN activities.

Secondary Six-Year Plan

Although the Department of Transportation has authority for the construction and maintenance of the secondary road system, Virginia laws create a partnership between the Department and the County Board of Supervisors in improving local transportation. The Board of Supervisors has the responsibility for establishing priorities for the Secondary Six-Year Plan. Typically in the fall of each year, workshops are held with the Board of Supervisors to develop a list of project priorities for the updated Secondary Six Year Plan. Once a draft is established, the county and VDOT will schedule the annual Secondary Six-Year Plan public hearing usually in the first quarter of the calendar year. These hearings gather information from the public to consider projects in the county to be added in the Secondary Six-Year Plan.

Over the last several years the distribution of transportation dollars has transformed. Fiscal Year 2010 was the last year in which available funds were distributed through the original construction formula – 40% to the primary system, 30% to the secondary system, and 30% to the urban system. Even though it has been years since funds were distributed in this manner, many localities have unspent and/or uncommitted formula funds. The 2016 Appropriations Act included language pertaining to the balance of funds provided by the previous Primary, Secondary and Urban construction formulas. The language provides an opportunity for localities to work with the Department to use these funds to advance priority transportation projects. Any remaining formula funds as of January 1, 2018 will be transferred to the new State of Good Repair program unless they are allocated to a fully funded and active project.

There are two designated unpaved road funds specified in the Code of Virginia. Distribution of Unpaved Secondary Roads Funds for unpaved roads carrying more than 50 VPD is based on the ratio of unpaved secondary roads in the county serving 50 or more vehicles per day to the total number of such roads in the Commonwealth as indicated in [§33.2-359](#), of the *Code of Virginia*. The Unpaved Secondary Roads Fund was created by the General Assembly to address the need for paving secondary unpaved roads.

Distribution of available revenue for Telecommunications Fees (Public Right of Ways Use Fee) based on [Section 56-468.1](#), of the *Code of Virginia*, and the revenues from the sale of Residue Parcels on the secondary system in the county are included in the annual Secondary Six-Year Plan revenue projections each year.

The predictability of funding amounts is greatly dictated by the financial climate of the times and changes of funding levels by the federal government. Therefore, in dealing with construction funds, especially in the Secondary Six-Year Plan, the Department is dealing with approximations or projections. The Secondary Six-Year Plan is based on estimated funding which is provided by the Financial Planning Division.

Updating the Secondary Six-Year Plans on an annual basis allows the department to provide an update on schedules and estimates of current projects in the plan. The process gives citizens a chance to request new improvements annually; facilitates Metropolitan Planning Organization (MPO) planning process required by MAP-21; allows the Board of Supervisors to evaluate their program annually and update it to address any changes in county priorities; and it allows the Residency Administrator or other designated local VDOT manager to review projects included in

Secondary Six-Year Plan, continued

the plan to obligate federal funds as part of VDOT's annual Federal Fiscal Year Strategy. It should be noted however that changes in priority can impact the ability to fully utilize federal funds. Close coordination with VDOT is essential when considering shifts in priority to ensure federal funds can still be obligated and utilized efficiently.

SMART SCALE and HB1887 Funding Formula

SMART Scale - Statewide Prioritization Process for project selection- § 33.2-214.1 of the Code of Virginia

Beginning with the FY2017-2022 Six-Year Improvement Program (SYIP) update, a new prioritization process will be used to evaluate certain projects considered for funding. Projects will be evaluated according to several factors, including Congestion, Environment, Accessibility, Safety, Economic Development, and Land Use, for consideration by the CTB, allowing them to make informed funding decisions for development of the SYIP. More information on the SMART Scale Statewide Prioritization Process can be found at <http://vasmartscale.org>. The application period for projects to be considered for funding is generally August through September. Beginning in FY2018, the process will occur every other year. Early coordination with VDOT district staff is encouraged.

Allocation Distribution Process

Each year the CTB updates the Six-Year Improvement Program that distributes funds available for construction on the interstate, primary, and urban highway systems, as well as funds available for the secondary system and the other transportation modes; ports, airports, and rail and public transportation. The allocation of state construction funds is distributed per the *Code of Virginia*, [§33.2-358](#), generally.

The allocation distribution process requires funding to be made available first for the maintenance of highway systems including maintenance payments to localities maintaining their highway system. Through FY2020, after maintenance, funds are set aside for administrative, general expenses and other provisions are addressed, including an amount not to exceed \$500 million in any given year to six categories, which include 25 percent to bridge reconstruction and rehabilitation; 25 percent to advancing high priority projects statewide; 25 percent to reconstructing deteriorated interstate, primary and municipality-maintained primary extension pavements; 15 percent to project undertaken pursuant to the Public Private Partnership Act; 5 percent to pave certain unpaved roads; and 5 percent to the Innovation and Technology Transportation Fund.

HB1887 Funding Formula - § 33.2-358 of the Code of Virginia

House Bill 1887 established a new transportation funding formula to begin in FY2021, specifically the State of Good Repair Program pursuant to § 33.2-369, the High-Priority Projects Program pursuant to § 33.2-370, and the Construction District Grant Program pursuant to § 33.2-371. Funding available through the High-Priority Projects Program and the Construction District Grant Program will be directed by the statewide prioritization process adopted by the CTB pursuant to § 33.2-214.1. Policy guidance regarding prioritization and funding of projects through the State of Good Repair Program approved by the CTB may be found with the CTB resolution here: [State of Good Repair Prioritization Process Methodology](#).

SMART SCALE and HB1187, continued

To seek the maximum input from the Commonwealth's citizens, public meetings are typically held during the fall in each of the state's nine construction districts. Input is solicited from members of the General Assembly, County Boards of Supervisors, City and Town Council Members, Planning District Commissions, Metropolitan Planning Organizations, other public officials, and the general public.

The working draft of the SYIP is released in the early spring followed by public hearings. After the public hearings, the CTB will adopt the final SYIP for the next fiscal year that begins July 1. The SYIP contains projects selected for funding through the statewide prioritization process, as well as projects funded through other programs including bridge, paving, safety, and other special federal and state programs.

In general, it is the intent of the CTB that projects included in the SYIP are to be fully funded through construction and delivered according to the established budget and schedule. If a locality or metropolitan planning organization requests the termination of a project or fails to advance a project to the next phase, then the locality or localities within the metropolitan planning organization may be required to reimburse the Department for all funds expended on the project.

PLANNING

Comprehensive Plan Consistency with State Plans and Programs

Consistency between local, regional, and state plans is desirable for the orderly development of infrastructure. When plans and programs are not consistent, resources are expended for questionable benefit.

Chapter 729 of the 2012 Acts of Assembly included elements intended to promote consistency between the transportation plan portion of the local comprehensive plan and the Commonwealth Transportation Board's (CTB) VTrans (statewide transportation planning document), Six-Year Improvement Program, and the location of state routes chosen by the CTB. The *Code of Virginia* at [§15.2-2223](#) requires a locality's transportation plan to be consistent with these state documents. Information on Chapter 729 can be found on VDOT's website at: http://www.virginiadot.org/info/local-state_plan_and_program_consistency.asp.

The law requires a locality to send draft changes to its transportation plan to VDOT, which shall review the submitted changes and provide comments to the locality within 90 days. Once a locality's plan (or change to the plan) is adopted, it must provide a copy to VDOT.

VDOT staff reviewing local transportation plans will consider a plan consistent if it includes the projects set out in the above listed documents and does not include recommendations that would prevent those projects from advancing. Not all projects contained in the Six-Year Improvement Program need be incorporated into local transportation plans in order for those plans to be consistent; only those projects that are "significant new, improved, or relocated" highway projects need be included, which means projects on Major Collector (or higher classification) roadways that are:

- i) On new location;
- ii) Relocate a roadway; or
- iii) Add one or more through lanes or an interchange.

If VDOT determines that a comprehensive plan's transportation plan is inconsistent with VTrans, the Six-Year Improvement Program, or route locations as noted above, VDOT must notify the Commonwealth Transportation Board of such inconsistency and the Board may take action to try and encourage consistency between the state plans and the local transportation plan.

Comprehensive plan reviews are routinely conducted by the District Office planning staff serving that particular locality.

Corridor and Feasibility Studies

VDOT's Transportation and Mobility Planning Division, in coordination with each district's planning staff, conducts both corridor and feasibility studies throughout the state. Corridor studies seek to identify the mix of transportation improvements that would be most effective in moving people and goods in specific travel corridors and balancing those improvements with available funding and neighborhood and community concerns.

Feasibility studies on a proposed strategy are conducted to determine the degree to which: (a) the design or location is economically justified, (b) an alternative is considered preferable from an environmental or social perspective, or (c) eventual construction and operation can be financed and managed. For more information on corridor and feasibility studies, visit: <http://www.virginiadot.org/projects/pr-studiescorridor.asp>.

Federal Functional Classification

Functional usage of a roadway is based upon its mobility and accessibility. Choice of a travel route can be logically related to the roadway's ability to access land and the mobility through an area. The Federal Highway Administration (FHWA) has set up functional classification guidelines. The Federal Functional Classification Guidelines contain a list of classifications and descriptions given for each class of roadway. Roads may be classified as local, collector or arterial roads.

- Local roads function to provide a higher degree of access but lower travel mobility-flow,
- Collectors provide a mixture of access and mobility, for through movement and access, and
- Arterials, with two sub-classes "minor" and "principal," provide lower access and higher mobility with the functional standards for minor and principal arterials being relatively high for through traffic.

Functional classification is based on road-service features, and impacts several factors including:

- A project road improvement's design horizon year date (This affects the time span over which the facility must be minimally adequate: generally 11 years after advertisement for lesser functional classifications, or 22 years after advertisement for higher functional classifications)
- Applicable geometric design standards of the VDOT Road Design Manual (which adopts the AASHTO Green Book's design LOS guidance on pages 84-85), as well as local and/or [Subdivision Street Acceptance Requirements](#), collector or arterial standards. Also, rural, urban, or urbanized area classification is a related consideration especially from possible changes from annexations, and/or population census updates with respect to urban or urbanized areas)
- The allocations of transportation funds to Districts of the state, such as for state primary roads (with respect to arterials).
- Development and/or maintenance of local roads are ineligible for federal funding and responsibilities for this class of roads are private, local and/or state government concerns.
- Access management features (spacing-frequency and/or type of access such as interchanges, intersections, and roadside entrance, exit and/or driveway points)
- Eligibility for [traffic calming measures](#)

A comprehensive update to Virginia's federal functional classification system was approved by FHWA in November, 2014. The current functional classification maps may be viewed at: http://www.virginiadot.org/projects/fxn_class/home.asp.

A County or City can request the classification or reclassification of a particular road segment under the system by working with their local VDOT office. The request of a metropolitan locality should be accompanied with a supporting Metropolitan Planning Organization resolution. Rural localities should obtain a supporting resolution from their elected board. [Information on performing an interim classification or reclassification is also available on VDOT's functional classification website](#). Additional information on Federal Functional Classification can be found at: http://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/.

MPO Transportation Plans and Programs

Virginia's Metropolitan Planning Organizations (MPOs) work to address the transportation issues of each of Virginia's urbanized areas (areas of 50,000 population or more) through their long-range plan, short-range program, transit planning, rideshare programs, Park & Ride efforts, and corridor studies. The membership of an MPO board typically consists of representatives of the metropolitan area's locally elected government along with representatives of the area's public transportation operators and state and local transportation officials. A VDOT official is usually the designated state transportation representative on an MPO board. Each MPO in Virginia utilizes various analytical techniques to identify current and future congestion problems and to test the effectiveness of proposed alternatives. The MPOs are required to develop and maintain a fiscally Constrained Long-Range Transportation Plan (CLRP) for transportation in the MPO area. Each CLRP is updated every five years in air quality attainment areas and every four years in air quality non-attainment areas. These plans cover at least a 20 year planning horizon and include project recommendations for:

- Regionally significant capital improvements such as major widening, new location facilities, bridges and bridge replacements, etc.
- Operational Improvement for congestion management and safety – turn lanes, closing cross-overs, signal coordination, access management, etc.
- Transit and Travel Demand Management (TDM) – bus routes, transit improvements, Park-and-Ride lots, ride-sharing, bicycle and/or pedestrian facilities, etc.

MPOs are also required to develop a listing/program identifying all transportation projects (highway, passenger rail, freight, public transit, bicycle, and pedestrian) that will utilize federal funding or for which federal approval will be required, known as Transportation Improvement Programs (TIPs). TIPs cover a minimum four year time period and are required to be financially constrained and consistent with the MPO's CLRP.

A State law was passed in 2011 under Chapter 554 (S 1112, affecting [§ 33.2-3202](#) and creating [§ 33.2-3201](#)) that reflects the regional transportation planning duties and responsibilities of MPOs, and specifies that the state is to provide meaningful opportunity to MPOs for obtaining their inputs, communicate proposed state priorities and consider the regional priorities identified by the MPOs.

State laws passed in 2012 under Chapter 729 (HB 1248, affecting [§15.2-2223](#), [33.2-214](#), etc.) direct that the metropolitan regional CLRP and Transportation Improvement Program of a MPO is to be consistent with Virginia's Six-Year Improvement Program, the statewide transportation plan (known as VTrans), and the route locations decided by the Commonwealth Transportation Board.

Multimodal Needs Assessment (MNA)

The Multimodal Needs Assessment (MNA) is used to develop the Virginia Multimodal Transportation Plan (VMTP) and VTrans. Each state modal agency reviews the needs of their respective transportation systems.

As indicated in the Code of Virginia [§ 33.2-353](#):

The Commonwealth Transportation Board shall, with the assistance of the Office of Intermodal Planning and Investment, conduct a comprehensive review of statewide transportation needs in a Statewide Transportation Plan setting forth assessment of capacity needs for all corridors of statewide significance, regional networks, and improvements to promote urban development areas established pursuant to [§ 15.2-2223.1](#). The assessment shall consider all modes of transportation. Such corridors shall be planned to include multimodal transportation improvements, and the plan shall consider corridor location in planning for any major transportation infrastructure, including environmental impacts and the comprehensive land use plan of the locality in which the corridor is planned. In the designation of such corridors, the Commonwealth Transportation Board shall not be constrained by local, district, regional, or modal plans....

VDOT's assessment of highway needs addresses the highway portion of the requirement for a comprehensive review of all transportation construction capacity needs. VDOT's assessment is comprised of objective, system-generated improvements (based largely on TRB's Highway Capacity Methodology) for all functionally classified highway systems across Virginia, with human input limited to highway inventory (pavement width, number of lanes, etc.) and the review of traffic forecasts. The capacity threshold for the assessment was defined as: LOS C for Rural Areas, LOS D for Urban Areas, and LOS D for Urbanized Areas. The system generates improvements needed for highways (including Transportation Systems Management Strategies, pavement widening, and additional lanes) to meet the capacity thresholds, and develops cost estimates for these improvements.

The Multimodal Needs Assessment examines the State's transportation needs at three scales, listed below, and includes a statewide assessment of safety needs:

- Corridor of Statewide Significance (COSS) - Interregional travel market
- Regional Networks - Intraregional travel market
- Urban Development Areas (UDA) - Local activity center market

The Transportation and Mobility Planning Division is responsible for conducting the assessment of highway needs, which is used in the development of the statewide plans, corridor studies, the VTrans Multimodal Transportation Plan (VMTP), and the statewide multimodal policy plan, [VTrans](#). All of these plans are on a four year cycle to coordinate with legislatively required updates to VTrans. The next VTrans update is to be completed by the end of 2017.

National Highway System

Virginia's National Highway System (NHS) is comprised of highways of national significance that are important to the nation's economy, defense, and mobility Federal functional classification. This system includes the Interstate System and other principal arterials, the Strategic Highway Network with major strategic highway connectors to support defense or emergency response, and major intermodal facility connectors that provide access to major ports, airports, public transportation facilities, and other major facilities.

In June 2012 Virginia had a total of 3,441 NHS miles. Virginia's NHS mileage was capped by federal targets. However, in July 2012, a federal transportation law, Moving Ahead for Progress in the 21st Century, removed the cap and significantly expanded the NHS network to include certain principal arterials. VDOT coordinated with localities and regional planning organizations regarding the expansion of the system for Virginia, and received federal approval on the additional routes and mileage for Virginia's NHS network. VDOT has requested and received conditional approval on additional routes to the National Highway System network. As of October 2015, the Virginia NHS network is estimated to be 4,690 miles. NHS designation of a highway facility allows the use of more sources of federal funding and requires additional design considerations.

For additional information on the National Highway System, including a map of NHS routes in Virginia, please see: http://www.fhwa.dot.gov/planning/national_highway_system/index.cfm.

Regional Long-Range Plans for Transportation (Rural RLRPs)

This initiative is aimed at creating regional transportation plans in rural areas that complement those in the metropolitan areas of the state. VDOT works with each region to evaluate the transportation system in the rural areas and to recommend a range of transportation improvements that could best satisfy existing and future transportation needs through partnerships with Virginia's Planning District Commissions and local governments. The regional plan identifies needs based upon the Goals and Objectives established by the region.

The Virginia Department of Transportation uses these regional plans as a foundation for identifying Interstate and Primary system priorities for the Six-Year Improvement Plan. The plans are also useful to counties and their respective Residency Administrator or other designated local VDOT manager when developing the Secondary Six-Year Program. While this plan covers functionally classified secondary roadways, it is important to note that each county has authority over the recommendations on the secondary system within their jurisdiction. The list of recommendations from the regional long range plans is used in the statewide transportation planning process to better quantify the statewide magnitude of needs. The analysis and plan recommendations are limited to those transportation facilities within the PDC's boundaries that are outside of established metropolitan study areas. The transportation system that was evaluated is limited to federal functionally classified routes of minor collector and above.

Each RLRP has been developed as a vision plan and will be reviewed every five years. It is VDOT's goal that each region will be able to use these plans to identify regional priorities for transportation funding. The RLRP process will be used to vet recommendations on the interstate and primary highway systems from both the VMTP and STARS initiatives.

RLRP information is accessible on the web at - http://www.virginiadot.org/projects/rural_regional_long-range_plans.asp.

Strategically Targeted Affordable Roadway Solutions (STARS)

The objective of the VDOT STARS III (Strategically Targeted Affordable Roadway Solutions) Program is to develop comprehensive, innovative transportation solutions to relieve congested bottlenecks and solve critical traffic and safety challenges throughout the Commonwealth. The STARS III Program, which is led by the VDOT Transportation and Mobility Planning Division brings together planners, traffic engineers, safety engineers and roadway design engineers to jointly identify cost-effective measures aimed at improving safety and reducing congestion. These transportation solutions can typically be designed and implemented and funded in phases that have independent utility. . Additionally, project deliverables are intended to support grant program applications (e.g. SMART SCALE) and provide information to inform local stakeholders. Candidate STARS III projects are often identified as facilities with a convergence of congestions and safety issues. Potential projects also focus on solving multimodal challenges for pedestrians, bicycles, passenger cars, and transit vehicles, where applicable.

STARS III Process

Annually, the STARS program maps and overlays the latest congestion and safety information to identify potential project development corridors. This provides an objective analysis that quickly:

- Identifies corridors where innovative roadway solutions could provide a benefit to both congestion and safety; and
- Identifies projects that may compete well in current funding programs.

Once these project development corridors have been identified, each district ranks and identifies the highest priority corridors for study. In collaboration with the districts, the STARS team determines which projects will be studied in the upcoming year.

STARS III studies generally include an existing conditions assessment, a future no-build scenario assessment, and assessments for future build scenarios. Future build scenarios generally consist of interim year analyses (to identify targeted improvements to existing challenges or project phasing options) and horizon year analyses (to identify longer-term corridor needs). The STARS III program emphasizes innovative solutions such as alternative intersections.

Preferred alternatives identified from STARS III studies are then further refined in conceptual design to determine project costs, right-of-way impacts, utility impacts, environmental impacts, and schedule.. The conceptual design phase supports grant applications and allows for the identification of potential project challenges and formation of creative and constructible solutions in the early stages of project development.

For more information on the STARS program, contact the your local VDOT District Planner.

Transportation Improvement Programs (TIPs/ Statewide TIP)

A Transportation Improvement Program (TIP) is a listing/program that identifies all transit and highway construction and maintenance projects in a Metropolitan Planning Area (MPA) area that will utilize federal funding or for which federal approval will be required over a minimum four year time period. This includes projects requiring federal approval, even if no federal funds are planned to be used on the project. TIPs are also required to include regionally significant projects, generally defined as projects which serve regional transportation needs or may affect air quality conformity. Each TIP, which is developed by a Metropolitan Planning Organization (MPO), must include public participation in its development and demonstrate fiscal constraint. An MPO approves a financially constrained TIP as well as a financially constrained long-range transportation plan for its MPA.

The Statewide Transportation Improvement Program (STIP) is Virginia's federally required four-year transportation improvement program that identifies those transit and highway construction and maintenance projects that will utilize federal funding or for which federal approval will be required. This includes projects requiring federal approval, even if no federal funds are planned to be used on the project. The STIP includes all federally funded and all regionally significant transportation projects (highway, passenger rail, freight, public transit, bicycle and pedestrian) and projects on roadways in Virginia's National Parks and National Forests. The STIP includes all TIPs, without change, as well as projects in non-MPO areas.

The STIP identifies planned federal obligations and where applicable, other revenue sources. The STIP must demonstrate fiscal constraint to show that a state is not scheduling more transportation projects for construction than it has funding to support. The STIP must also certify that a state's transportation program conforms to federal air quality regulations.

Projects contained in the STIP should be consistent with the statewide transportation plan and planning processes, MPO plans, TIPs, and processes. The state must submit a new STIP to FHWA and FTA at least every four years for approval. Amendments or administrative modifications (adjustments) to the STIP can be processed and submitted at any time for FHWA and FTA approval.

Projects must be financially constrained and have been through a public involvement process.

Federal planning laws (23 USC 134 and 135) and regulations (23 CFR 450 and 420) govern TIP and STIP development.

VTrans Multimodal Transportation Plan (VMTP)

The VTrans Multimodal Transportation Plan (VMTP), a 20-year or more long-range plan, is updated in concert with the VTrans Vision. It outlines needed highway, pedestrian and bike infrastructure, public transit and rail improvements, as well as improvements needed for marine and air travel. The improvements focus on the Corridors of Statewide Significance, regional transportation networks (area networks of Virginia's MPOs or Planning District Commissions), and locally designated Urban Development Areas. The plan provides information for potential long-term and short-term projects and policies based on the goals and needs identified in VTrans, as well as the goals and needs of regions and localities. This input is gained through a series of in-person regional forums and continuing online engagement. The purpose of the VMTP is to recommend transportation system improvements that are needed to accommodate existing and future travel demand, and/or to address geometric and safety deficiencies. It focuses on tying the inter-regional and intra-regional good movement and passenger travel needs with the future economic needs of the various regions in the Commonwealth. The VMTP is used to implement VTrans policies and identify projects that warrant consideration for funding within the Six-Year Improvement Program. It also serves to highlight those projects that would be suitable for SMART SCALE applications, and is used to screen SMART SCALE applications.

The VTrans Multimodal Transportation Plan (VMTP 2040) is superseding and updating the Virginia Surface Transportation Plan (VSTP 2035). VMTP 2040 is scheduled to be completed by the spring of 2017. The scope of the VMTP is broader than the scope of the VSTP, in that the VMTP shall include planning for key projects and programs concerning additional modes of transportation, such as airports and marine ports. For information updates and upcoming events on the development of the VMTP visit <http://www.vtrans.org/vtrans2040.asp>.

VTrans – Virginia’s Statewide Multimodal Transportation Plan

VTrans is the Commonwealth of Virginia’s statewide multimodal transportation plan, which identifies goals, strategies and policies to address multimodal transportation needs over a 20-year planning horizon in accordance with requirements set forth in 23 U.S.C. 135 and VA Code [33.2-353](#). VTrans serves as the “umbrella” planning document for the state, establishing the direction from the Transportation Secretariat for all transportation planning initiatives.

The legislative requirements for the statewide multimodal transportation plan include: carrying out a continuing, comprehensive, and coordinated statewide multimodal transportation planning process, in the development of a statewide multimodal transportation plan that advances Virginia businesses and attracts a 21st century workforce by improving goods movement and supporting strategic place making.

VTrans also identifies Corridors of Statewide Significance, Regional Networks and Urban Development Areas that are critical to the multimodal transportation system across and within the state, and identifies recommendations for improvements to those areas based on seven VTrans Guiding Principles to ensure future mobility:

- Optimize Return on Investments
- Ensure Safety, Security, and Resiliency
- Efficiently Deliver Programs
- Consider Operational Improvements and Demand Management First
- Provide Transparency and Accountability through Performance Management
- Improve Coordination between Transportation and Land Use
- Ensure Efficient Intermodal Connections

The goals of VTrans include: Economic Competitiveness and Prosperity; Accessible and Connected Places; Safety for All Users; Proactive System Management; and Healthy and Sustainable Communities.

The development of VTrans is the responsibility of the Office of Intermodal Planning and Investment, supported by seven transportation agencies within the Transportation Secretariat and must be updated at least once every four years. Additional information about VTrans can be found at www.vtrans.org.

FUNDING PROGRAMS

Airport Access Program

The airport access road program is used to provide access roads to licensed public use airports. The Commonwealth Transportation Board administers the program in cooperation with the Department of Aviation. Funding for airport access projects, as provided under the authority of [Section 33.2.1509](#) of the *Code of Virginia*, is allocated from the Economic Development, Airport, and Rail Access Fund.

Prior to the allocation, the governing body of the county, city, or town must, by resolution, request the access funds. Airport access funding may not be used for the acquisition of rights of way or adjustments of utilities, and the governing body must state in its resolution that these items will be provided at no cost to the program. A maximum allocation of \$650,000 (\$500,000, unmatched and up to \$150,000 matched dollar for dollar) may be awarded within a fiscal year to provide access for any one airport.

The locality requesting the access funding will be responsible for the appropriate environmental studies and permits, if applicable.

Additional information is available on VDOT's website at <http://www.virginiadot.org/business/local-assistance-access-programs.asp>

Appalachian Regional Commission

Local Access Road Program

The Appalachian Regional Commission (ARC) Access Road Program aims to better link the Region's businesses, communities, and residents to the Appalachian Development Highway System (ADHS) and to other key parts of the Region's transportation network. This program offers a flexible approach designed to meet the local needs and provide a financing mechanism to support a variety of economic development opportunities throughout the Region.

The Region includes 410 counties in 13 states. It extends more than 200,000 miles from southern New York to northeast Mississippi and is home to nearly 23 million people. Virginia has 23 counties and seven independent cities that are eligible for participation in the ARC program. The following is a list of Virginia's localities: the counties of Alleghany, Bath, Bland, Botetourt, Carroll, Craig, Buchanan, Dickenson, Floyd, Giles, Grayson, Highland, Lee, Montgomery, Pulaski, Rockbridge, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe; and including the cities of Bristol, Buena Vista, Clifton Forge, Covington, Galax, Lexington, Norton, and Radford.

Funding for this program is provided from a qualifying State's ADHS allocation. No new funds are authorized for the ADHS Program under MAP-21. However, Virginia is authorized to use up to \$3 million annually for local access roads from balances of funds that have been allocated to it for the Appalachian Development Highway Program, except funds specifically designated by Congress for Corridor construction.

Eligible criteria for local access road projects are roads which serve industrial and commercial developments, residential developments, recreational areas, and educational areas. The project eligibility will be determined by the ARC Board.

ARC local access road funds can be used for preliminary engineering, right of way and/or construction of new roads. Local access road funding is not allowed for resurfacing/rehabilitation, upgrading and/or safety improvements on roads previously built with ARC local access road funds.

Approved Projects need to be included in the STIP and must follow FHWA and State requirements.

For additional information on the Appalachian Regional Commission, counties are encouraged to visit www.arc.gov.

Economic Development Access Program

The Economic Development Access Program is administered by the Commonwealth Transportation Board, which allocates funds, as provided under the authority of [Section 33.2.1509](#) of the *Code of Virginia*, for eligible projects from the Economic Development, Airport, and Rail Access Fund. The purpose of the program is to finance the construction or improvement of roads, with the exception of primaries, to new or expanding qualifying economic development sites. These roads will provide access from the nearest adequate publicly maintained road to the primary entrance of the qualifying site. Qualifying establishments are determined by the Commonwealth Transportation Board in consultation with the Virginia Economic Development Partnership and the Virginia Department of Small Business and Supplier Diversity.

An initial request must be made to the local governing body by a qualifying establishment desiring financial assistance. A letter of request to the appropriate local governing body must include the following:

- A.** Intent to build or expand on a designated site
- B.** Description and location of the site
- C.** Target date for building construction
- D.** Target date for beginning operation
- E.** Private capital investment planned on the site, itemized
- F.** Products to be manufactured
- G.** The number of new jobs to be created
- H.** Access road improvements requested
- I.** Estimates of the numbers of additional employee vehicles and truck traffic which will use the access road on an average business day

The locality should ensure that the qualifying establishment submits a copy of this letter to the Residency Administrator or other designated local VDOT manager, along with a preliminary road plan showing the entire parcel of land and the locations of: the building, major site features, the proposed entrance, the proposed access road, and existing public roads in the vicinity of the site. It is also advisable to forward a copy of this letter to the Virginia Economic Development Partnership and the Virginia Department of Small Business and Supplier Diversity.

If the local governing body supports the request, it should prepare and approve a resolution formally requesting the allocation of Economic Development Access Program funds.

If a new road is to be constructed, the resolution should state that right of way and utility adjustments will be provided at no cost to VDOT, and that the road will be added to the secondary system or to the local road system as appropriate.

Economic Development Access Program, continued

If the project involves improvement of an existing road, the resolution should state that right of way and utility adjustments will be provided at no cost to the Economic Development, Airport and Rail Access Fund.

Economic Development Access projects may be either regular (where an existing qualifying establishment is expanding, or a new qualifying establishment is under firm contract) or bonded (where no qualifying establishment is under contract to build).

The maximum allocation for any project is limited to the lesser of: the reasonable cost of an adequate road or 20 percent of the qualifying private investment made by the private qualifying establishment to be served exclusively by the access road project. The maximum unmatched allocation to a locality within any one fiscal year is \$500,000. Where the cost is estimated to exceed \$500,000, the governing body may request up to \$150,000 in supplemental funds, which must be matched on a dollar-for-dollar basis from the locality. Any ineligible project costs and all costs exceeding the maximum allocation must be borne by the locality. The Residency Administrator or other designated local VDOT manager will assist the locality in preparing sketches and cost estimates for the requested road improvements. Certain developments meeting the criteria of Major Employment and Investment (MEI) sites as designated by the Virginia Economic Development Partnership may be considered for separate allocations for a design-only project and for successive allocations to accomplish the construction project.

Qualifying private investment includes the cost of land, the cost of site preparation and building construction, and the cost of newly purchased equipment essential to the operation of the establishment.

Eligible capital investment requires documentation by copies of deeds, executed construction contracts, checks, and purchase orders, and this documentation is subject to verification by VDOT. Capital costs incurred more than six months prior to the date of the resolution of the governing body will normally be disallowed.

If a locality desires road access for a possible site development, it is necessary that the governing body guarantee that a bond or other acceptable surety will be provided to cover the cost of the road that is not justified by qualifying development. The time period for a bonded project is five years from the date of the CTB resolution approving the project and allocation. As of July 2006, the CTB policy also allows consideration of investment established within twenty-four months following the termination of the original five-year period for a partial reimbursement of any returned funds. The locality requesting the access funding will be responsible for the appropriate environmental studies and permits, if applicable.

Additional information is available in the Economic Development Access Program Guide and on the VDOT website at <http://www.virginiadot.org/business/local-assistance-access-programs.asp>

Federal Lands Access Program

Under MAP-21, the core Federal Lands Highway Programs were restructured. With this new transportation bill, the Forest Highway Program (FHP) and Public Lands Highways Discretionary Program (PLHD) came to an end.

The new Federal Lands Access Program (Access Program), which is administered by Eastern Federal Lands (EFL), builds upon the structure of the former programs. The goal of the Access Program is to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands.

Similar to the FHP, the statute requires a Tri-party committee to make programming decisions and develop a multi-year program of projects. This committee will be known as the Programming Decision Committee (PDC). The PDC is comprised of a representative of the Federal Highway Administration (FHWA), a representative of the Virginia Department of Transportation, and a representative of a county or other local governments within that State. Projects will be selected through an application process. The PDC will consider the selection criteria and Federal Land Management Agency input to optimize the use of the statewide Federal Lands Access Program funds.

The funds available to Virginia from this program vary from year to year and are subject to being reduced each year by applicable rescissions, set-asides, or any other limitations cited in law. Unlike the FHP and PLHD, a local match of 20 percent is now required for the Federal Lands Access Program.

Highway Safety Improvement Program

Federal transportation legislation, Moving Ahead for Progress in the 21st Century Act (MAP-21), was signed into law July 2012; and, increases funding for the Highway Safety Improvement Program (HSIP). The HSIP is structured to make significant progress in reducing highway fatalities and severe injuries. The HSIP requires a Strategic Highway Safety Plan (SHSP) to identify the targeted safety emphasis areas and key strategies and actions to reduce severe crashes. Virginia's SHSP through 2016 provides strategies using the 4E approach of engineering, education, enforcement and emergency response. The HSIP funding implements the engineering (infrastructure) improvements to address highway crashes related to roadway departures, intersections and speeding, and bicycle and pedestrian safety under § 23 USC Section 148. Set-aside funds for Highway-Rail Grade Crossing Safety Program are defined under § 23 USC Section 130.

VDOT has developed a Highway Safety Improvement Program (HSIP) for the Commonwealth of Virginia that involves the identification of high crash locations, an analysis of crash trends, a safety assessment of existing conditions and feasible countermeasures, and the prioritization and scheduling of improvement projects. This program includes the **Highway Safety Program (HSP)**, the **Bicycle and Pedestrian Safety (BPS) Program**, and the **Highway-Rail Grade Crossing (H-RGC) Program**.

The VDOT Traffic Engineering Division (TED) serves as the focal point for administration of the safety programs (HSIP) within the Commonwealth of Virginia. VDOT Districts identify safety problems and prioritize improvements to mitigate crashes. Local governments should submit and coordinate safety improvement proposals for locations they recommend for improvement to local District liaisons. The proposals are evaluated on a statewide basis or district basis to ensure that locations in need of improvement have a better opportunity to be selected and funded. The candidate projects are selected based on an economic analysis (Benefit/Cost ratio), number and type of target crashes, project cost and schedule or based on documented risk assessments for non-motorized and highway-rail grade crossing improvements.

The intent of the HSIP is to expend federal funds on safety improvements that can be designed and constructed within three years. Projects should not require acquisition of significant rights of way, nor should they require extensive environmental review and mitigation. Federal funds must be authorized within two months of the STIP approval. Selected projects failing to get funds authorized within two months must request a time extension from TED. Projects are subject to removal if the extension is not granted by TED.

Details on HSIP application guidelines, deadlines and project selection can be found on the VDOT TED website at <http://www.virginiadot.org/business/trafficeng-default.asp>

Recreational Access Program

The purpose of the Recreational Access Program is to provide adequate access to recreational areas or historic sites operated by the Commonwealth of Virginia, a local government, or authority. Both roads and bikeways are eligible for program funding.

The program is administered by the Commonwealth Transportation Board, and funding is provided under the authority of [Section 33.2-1510](#) of the *Code of Virginia*, with the appropriate designation and recommendation by the Director of the Department of Conservation and Recreation for access to recreational areas or by the Director of the Department of Historic Resources for access to historical sites. Roads constructed under this program become a part of the appropriate highway system. Separate bikeways constructed outside the right of way of the road become the responsibility of the locality, authority, or agency maintaining the site, which they serve.

Prior to the allocation, the governing body of the county, city, or town must, by resolution, request the access funds. Recreational Access Program funding may not be used for the acquisition of rights of way or adjustments of utilities, and the governing body must state in its resolution that these items will be provided at no cost to the program. The road or bikeway should be located to provide the most direct, cost-effective, access to the site. The access project should end either at the entrance to the area or at an internal parking lot serving the park facility or historical area.

Recreational access roads and bikeways are expected to be open to the public at all times; however, they may be closed during specific hours for security purposes. No fee may be charged for the use of these roads or bikeways.

A maximum of \$400,000 may be allocated for an access road to a facility operated by a state agency. For a bikeway to a facility operated by a state agency, the maximum allocation is \$75,000. These funds are intended for eligible costs associated with design and construction of access roads and bikeways. For an access road to a facility operated by a locality or authority, the maximum unmatched allocation is \$250,000. Up to an additional \$100,000 may be allocated if matched dollar-for-dollar from other than highway sources. An unmatched maximum of \$60,000 may be allocated for a bikeway to a facility operated by a locality or authority. Up to an additional \$15,000 may be requested if matched on a dollar-for-dollar basis by the locality or authority.

There is no annual limit on the number of recreational access projects per jurisdiction. The funding maximums apply only to individual projects. Also, if the appropriate criteria are met, both an access road and a bikeway may be funded separately to serve the same facility.

The agency, locality, or authority operating the facility will be responsible for the appropriate environmental studies and permits, if applicable. Additional information is available in the current guide for the Recreational Access Program and on the VDOT website at <http://www.virginiadot.org/business/local-assistance-access-programs.asp>

Revenue Sharing Program

The purpose of the Revenue Sharing Program is to provide additional funding for use by a county, city, or town to construct, reconstruct, improve, or maintain the highway systems within such county, city, or town, and for eligible additions in certain counties of the Commonwealth. Locality funds are matched with state funds with statutory limitations on the amount of state funds authorized per locality. The program is administered by VDOT in cooperation with participating localities under the authority of [Section 33.2.357](#) of the *Code of Virginia*. An annual allocation of funds for this program is designated by the Commonwealth Transportation Board.

Application for program funding must be made by resolution of the governing body of the jurisdiction requesting the funds. The application package must include the resolution and the detailed application for funds form. If a locality is requesting funds for a project outside its jurisdiction, concurrence from the affected jurisdiction must be provided. Towns not maintaining their own streets are not eligible to receive revenue sharing funds directly; their requests must be included in the application of the county in which they are located. Project funding is allocated by resolution of the Commonwealth Transportation Board. Construction may be accomplished by VDOT or by the locality under agreement with VDOT.

The Revenue Sharing Program is typically used to provide funding for immediately needed highway systems projects or to supplement existing projects. Projects receiving Revenue Sharing funds are to be initiated utilizing at least a portion of the funds within one year of the allocation. Funds may be de-allocated if the project is not initiated within three years.

Below is a list of work that could be considered eligible for Revenue Sharing financing:

- Deficits on completed VDOT administered construction or improvement projects
- Supplemental funding for projects listed in the adopted Six-Year Plan and ongoing construction or improvement projects
- Construction or improvements included in either the adopted Six-Year Plan or the locality's capital plan
- Improvements necessary for the acceptance of specific subdivision streets otherwise eligible for acceptance into the system for maintenance
- New hard surfacing
- Certain new roadways that meet the qualifications outlined in the Revenue Sharing Guidelines
- Maintenance on highway systems consistent with the Department's operating policies

Details on application deadlines and project selection can be found on the VDOT website at <http://www.virginiadot.org/business/local-assistance-access-programs.asp>

Safe Routes to School

The Federal-aid Safe Routes to School (SRTS) Program was created by the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users Act* (SAFETEA-LU Section 1404) in 2005. Under SAFETEA-LU, SRTS funds were made available for infrastructure and non-infrastructure projects that promote walking and biking as a safe and convenient travel option for elementary and middle school children in grades K-8. Recent federal-aid highway and transit reauthorization acts, the latest being Fixing America's Surface Transportation Act (FAST Act), has changed the funding structure for SRTS activities, shifting funding from the SRTS program to a Surface Transportation Block Grant Program (STBG) set-aside. VDOT distributes the STBG funds for local projects, including SRTS projects, through a competitive grant process for the Transportation Alternatives Program. .

The purposes of the SRTS program are:

1. *to enable and encourage children, including those with disabilities, to walk and bicycle to school;*
2. *to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and*
3. *to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.*

Applying for funding for SRTS activities is a competitive process. VDOT administers two types of funds:

- Non-infrastructure funds are for education, encouragement, enforcement (law), and evaluation activities which further the stated purposes of SRTS
- Infrastructure project funds are for improvements that provide bicycle and pedestrian accommodations or safety enhancements

All SRTS projects will be implemented using the Transportation Alternatives Program selection process.

All non-infrastructure projects are administered directly by the SRTS program through a competitive annual application process, which requires applicants to create an Activities and Programs Plan for the affected school(s). The plan is a written document stating the school community's intentions for making walking and bicycling to school(s) sustainable and safe and must include a formal endorsement by a school or school division representative. The plan must be submitted to VDOT and approved in advance of the submittal of applications for funding.

Information about non-infrastructure applications and other SRTS materials can be found on the VDOT SRTS website at: www.virginiadot.org/saferoutes

Transportation Alternatives Program

On June 29, 2012 Congress passed "Moving Ahead for Progress in the 21st Century" (MAP-21) which became effective October 1, 2012. In the new legislation the former Transportation Enhancement (TE) Program as set forth in SAFETEA-LU, was replaced with the Transportation Alternatives Program (TAP). The newly created TAP combines several programs including many of the former Transportation Enhancement (TE) activities – now referred to as "Transportation Alternatives Eligibilities" – the Recreational Trails program and the Safe Routes to School program.

As set forth in MAP-21, funds for the Recreational Trails Program (administered by the Department of Conservation and Recreation) will be taken off the top before any additional sub-allocations occur. The remaining TAP funds will be split, with 50 percent of these remaining funds being distributed based on population and 50 percent being distributed anywhere statewide. In addition, MAP-21 established that Metropolitan Planning Organizations (MPOs) in the four identified Transportation Management Areas (TMAs) which are urbanized areas with a population over 200,000 will make project selections with the population based allocations in their TMA. The Commonwealth Transportation Board (CTB) will make project selections with the remaining allocations.

Several activities previously eligible under the Transportation Enhancement program are no longer eligible and some eligible activities have been modified. Below are the 10 transportation alternatives eligibilities as outlined in MAP-21:

1. Construction, planning and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation.
2. Construction, planning, and design of infrastructure related projects and systems that provide safe routes for non-drivers.
3. Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users.
4. Construction of turnouts, overlooks, and viewing areas.
5. Inventory, control, or removal of outdoor advertising.
6. Historic preservation and rehabilitation of historic transportation facilities.
7. Vegetation management practices in transportation rights-of-way.
8. Archeological activities relating to impacts from the implementation of a transportation project eligible under Title 23.
9. Environmental mitigation activities including abatement and prevention activities to address water pollution related to highway runoff.
10. Environmental mitigation activities to reduce vehicle-caused wildlife mortality or to restore and maintain habitat connectivity.

Additional information about the Transportation Alternatives Program, the application process and eligible projects is available at <http://www.virginiadot.org/business/prehancegrants.asp>.

Urban Development Grant Program

As enabled by Virginia Code § 2.2-229, the Office of Intermodal Planning and Investment (OIP) in the Office of the Secretary of Transportation offers grants for professional planning consultant assistance to local governments and regional entities to establish and support Urban Development Areas.

Urban Development Areas (UDAs) can cover a wide variety of community types, ranging from small town or village centers to suburban activity areas to urban downtowns. UDAs can help local governments and regional entities to focus investments and create places that attract businesses and workers alike.

The technical assistance, in the form of direct on-call consultant support, assists local governments in one or more of the following:

- plan for and designate at least one urban/village development area in their comprehensive plan,
- revise as appropriate applicable land use ordinances (including appropriate zoning classifications and subdivision ordinances) to incorporate the principles of traditional neighborhood design (see §[15.2-2223.1](#) of the *Code of Virginia*),
- assist with public participation processes, and other related tasks.

The grant program began in 2015 and will be extended through 2016. More information on this transportation-efficiency related planning grant is available online at http://www.vtrans.org/urban_development_area_technical_assistance_grant_program.asp.

OPERATIONS

Memorial/Dedication Bridges, Highways and Interchanges

Bridges highways and interchanges in Virginia can be named by the Commonwealth Transportation Board (CTB) or by action of the General Assembly. The naming of a facility by the CTB occurs at the request of a local jurisdiction, which must agree to bear the costs of providing and erecting appropriate signs. Maintenance of signs, once erected, will be performed by VDOT through its normal sign maintenance budget.



Under Section [33.2-213](#) of the Code of Virginia, the CTB can name a bridge, highway or interchange to honor a deceased person. The General Assembly may name a bridge or highway or interchange for any purpose or person (deceased or alive) through a bill that is enacted into law. The CTB may not name a bridge, highway, or interchange that has previously been named by the General Assembly.

The procedure to request the CTB to designate a bridge highway or interchange in memorial or dedication is:

1. A request, in the form of a formal resolution from the local government, must be provided to the Residency Administrator or other designated local VDOT manager. The resolution must indicate that the local jurisdiction will pay all costs for the sign, though funding may come in part or in full from the family or a support group. The most current version of [Traffic Engineering Division Memorandum TE-278 Memorial/Dedication Signs for Bridges, Highways, and Highway Segments](#) and the most current revision to the "[Virginia Supplement to the Manual on Uniform Traffic Control Devices \(MUTCD\)](#)" shall be used by local governments as a guide in selecting the text for the proposed sign. All new signs will be erected with brown background sign size, exact location, and other display details will be at VDOT discretion.
2. VDOT's Maintenance Division will review the request and prepare all necessary documents for action by the CTB.
3. If approved by the CTB, VDOT will install the signs and bill the locality for all associated costs.

Neighborhood Traffic Programs

VDOT offers various options under its Residential Traffic Management Program (RTMP), which neighborhoods and subdivisions, acting through their local governing bodies, are encouraged to address certain traffic problems on their streets. The programs include "Additional \$200 Fine" Signs Traffic Calming "Watch for Children" Signs and the (Through Truck Restriction program. See ["Neighborhood Traffic Programs"](#) for further details

Additional \$200 Fine Sign

The Additional \$200 Fine Sign Program Policy, established in accordance with [§ 46.2-878.2](#) of the *Code of Virginia* and the associated policy adopted by the Commonwealth Transportation Board on "Installation of Signs advising of Maximum Penalty for Exceeding Posted Maximum Speed Limit in Certain Residence Districts," allows a county or town to request that VDOT install signs on certain streets where there is a documented speeding problem prescribing an additional fine of \$200, in addition to other penalties provided by laws, for exceeding the speed limit. The street must meet the definition in the policy for a local residential, collector, or minor arterial street and have a posted speed limit of 35 miles per hour or less.

The VDOT District Administrator has approval authority for these signs.

The county or town requests, the sign installation through a resolution of the local governing body. This request will be submitted to the local Residency Administrator except in Fairfax, Prince William and Loudoun Counties where requests are submitted to the Regional Traffic Engineer. The request should include the supporting data stipulated in the policy including notification that a speeding problem exists and that the increased penalty has community support

After VDOT staff reviews the field locations and upon approval of the District Administrator the requested signs will be installed within 60 days of the date the request is approved. Signs installed in accordance with this program may be fully funded with countywide traffic services funding from the secondary or primary road allocations for the respective counties.



Neighborhood Traffic Programs, continued

Neighborhood Traffic Programs, continued

Traffic Calming

The traffic calming program provides communities with a traffic management tool to address speeding on neighborhood streets where there is frequent and significant pedestrian activity, rather than to restrict access.

VDOT's "[Traffic Calming Guide for Residential Streets](#)," provides comprehensive guidance on the process and requirements for



implementing traffic calming on VDOT-maintained streets as well as various measures that can be installed. The various measures in the guide can also serve to alleviate other neighborhood traffic issues, such as cut-through traffic or through trucks

Requests for traffic calming are initiated by the Home Owners Association (HOA), Civic Association (CA) or group of homeowners through the Board of Supervisors (BOS) or Town Council member and are conveyed to the local VDOT office. For the traffic calming process, VDOT is represented by the local Resident Administrator (RA), except in Fairfax, Prince William, and Loudoun Counties where it is the Regional Traffic Engineer. The VDOT traffic calming process provides flexibility for the locality in implementing traffic calming, where the County or Town, acting through the Board of Supervisors (BOS) or the Town Council, respectively, initiates and conducts the overall traffic calming process, including scheduling and facilitating meetings, developing and documenting community support, and the proposed traffic calming plan etc. VDOT's involvement occurs much later, at the evaluation & implementation phase to confirm the appropriateness of the street(s) for traffic calming measures, provide technical support, approve, and implement the traffic calming plan.

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To be eligible for VDOT's traffic calming program the street must be in the state system of highways, in an area with residential or mixed-use (residential, business) development and have a posted speed limit of 25 mph or less. Generally these streets will be functionally classified as "local" streets, or be functioning as such. For streets meeting these initial qualifications, an engineering study is initiated to document that there is a speeding problem (operating speed is 10 mph or more above the speed limit) and that the physical (number of lanes, pavement widths, geometry, etc.), and operational (extent and nature of traffic, traffic control devices, operating speed) characteristics of the street are appropriate for traffic calming. For streets meeting all of these requirements, the locality then develops a traffic calming plan which details the types of measures to be implemented, their locations, etc.

The proposed plan developed by the locality is presented to the community at a public meeting and must be approved by 60 percent or more of the affected households, in accordance with the process described in the revised Guide. If the proposed plan is approved by the community and endorsed by the BOS or Town Council, the locality then notifies VDOT of the BOS action and requests installation of the devices. The notification to VDOT conveys the proposed plan, the streets identified as part of the voting area, the results of the vote, and the source of funding for implementation.

Neighborhood Traffic Programs, continued

Funding may be drawn from 100 percent county-generated or other non-VDOT funds Revenue sharing funds with 50 percent county-generated or other funds and 50 percent VDOT funds or Secondary road construction funds.

In cases where the traffic calming measures are being considered for streets developed subject to the Secondary Street Acceptance Requirements (SSAR), VDOT may not fund additional costs necessary to accommodate street widths that exceed those prescribed in Appendix B(1) of VDOT's Road Design Manual.

Through Truck Restrictions

[§ 46.2-809](#) of the *Code of Virginia* and the related policy adopted by the Commonwealth Transportation Board on October 16, 2003 "[Guidelines for Considering Requests to Restrict Through Trucks on Primary and Secondary Highways,](#)" provides that a locality may request that VDOT restrict through trucks (pickups or panel trucks are exempted) on certain VDOT-maintained highways after holding a public hearing conducted in accordance with the specific procedures outlined in the Policy. The key procedures and requirements for initiating and implementing these measures as stipulated by the policy are outlined below.



Through truck restrictions are intended for the limited number of cases where doing so will promote the health, safety, and welfare of the public without creating an undue hardship on any transportation users. For a request to be considered by VDOT, and in order to insure that all concerned parties have an opportunity to provide input concerning the proposed restriction and alternate route, the Board of Supervisors must hold a public hearing and make a formal request of the Department.

The town or county makes its formal request by a resolution passed by the governing body according to local VDOT District / Regional policy, generally through the local Resident Administrator (RA). In Fairfax, Prince William, and Loudoun Counties the request is made to the Regional Traffic Engineer (RTE). It is recommended that Town's work with and through the County where a proposed alternative route may affect roads that are not within the Town limits and that fall within the County. [§ 46.2-809](#) of the *Code of Virginia* requires action upon any such formal request within nine months of its receipt.

Neighborhood Traffic Programs, continued

VDOT will evaluate the request in accordance with the CTB policy guidelines, which has specific requirements for (1) requesting a restriction as well as (2) where a restriction is appropriate. Requests that do not meet the CTB requirements for requesting a restriction will be returned to the LGB for revision and resubmittal. A common issue is the failure by the locality to accurately describe the limits of a proposed restriction or the alternate route in either the public notice or the formal resolution presented to VDOT. Where an identified alternate routing for a proposed restriction uses a road in another jurisdiction the affected locality must be notified and documentation from the affected locality indicating their concurrence with the proposed alternate routing must be included with the request.

Submittals are further evaluated according to the four criteria specified in the CTB policy. The criteria stipulate that the proposed restriction must be on a local or residential roadway where there is a safety or incompatibility issue in regard to trucks and where there is a viable alternate

route as good or better than the proposed restricted route. The CTB policy further states that failure to satisfy these criteria will normally result in rejection of the requested restriction. Viable requests will be further studied by VDOT and the appropriate consideration of public comments. VDOT will make its recommendation to approve or deny the proposed restriction to the Commissioner of VDOT (for secondary roads) and to the Commonwealth Transportation Board (for a primary road).

VDOT will inform the locality of the decision to approve or deny the request and post the appropriate signs if the restriction is approved.

Watch for Children Signs

“Watch for Children” Signs are warning signs placed on the roadway to warn motorists that children may be at play nearby § 33.2-251 of the Code of Virginia provides that a county or town may enter into an agreement with the Commissioner of Highways (VDOT) to install and maintain these signs. VDOT does not initiate the installation of these signs on its roads or on behalf of a county or town.



VDOT’s [Traffic Engineering Division Memorandum TE-280](http://www.virginiadot.org/business/traffic_engineering_memoranda.asp) (available at http://www.virginiadot.org/business/traffic_engineering_memoranda.asp) describes the requirements and procedures to be used by the county or town to install and maintain the signs according to the Code of Virginia and VDOT requirements pertaining to its highways.

Primary requirements and stipulations are

1. A County or Town may initiate the installation of these signs only by entering into an agreement with VDOT (see TE-280 for template) that specifies the locations of the signs.
2. The county or town is solely responsible for all costs associated with the signs including the purchase, installation, and maintenance.
3. Secondary roadway construction or maintenance funds or any other VDOT monies may not be used to pay for such signs.
4. The signs may be installed only where the speed limit is 35 mph or less.
5. Signs may only be installed at major entry points within to a subdivision or at the major approach(s) to a residential development not within a subdivision.
6. The VDOT District Administrator approves the agreement with a county or town for the initial sign installations. Subsequent installations may be approved by VDOT’s Land Development Engineer.

Neighborhood Traffic Programs, continued

Park and Ride Lots

Park and Ride lots are parking lots used by commuters who prefer to drive only part of the way to their destination and either carpool, vanpool or use transit or another mode (i.e. bicycling or walking) for the other portion of their trip. Commuters often choose to take advantage of Park

and Ride lots in order to reduce congestion on the roads, reduce adverse impacts to air quality and save money on gas and vehicle maintenance. Typically, the lots are signed to indicate their purpose, and in most cases, parking is free (some transit/metro stations may charge a fee to park; all VDOT-owned lots are free to the public). Overnight parking is allowed at most lots; however, certain lots have been identified as being too busy to allow overnight parking. Those lots are signed at the location.

VDOT keeps an inventory of approximately 300 Park and Ride lots, statewide. Of those lots, VDOT owns and maintains approximately 110. Other entities such as jurisdictions, private owners, local rail or transit agencies, etc. own and maintain the remaining lots. Additionally, there are “unofficial” lots; meaning commuters use them regularly, but the site has never been officially established as a Park and Ride lot location.

The Park and Ride lot inventory was last audited on a statewide level in 2016. The audit results were used to update the Park and Ride inventory which will be updated annually, in order to ensure the information provided is as detailed and comprehensive as possible, as well as to collect data for planning future facilities.

VDOT’s external website contains a section dedicated to Park and Ride lots. Within that section, there is an interactive map to assist commuters in locating Virginia Park and Ride lots that can be utilized in their commute. A link to the interactive map is available at:
<http://www.virginiadot.org/travel/parkride/home.asp>

Commuters can click on a Park and Ride lot location shown on the map and be presented with information regarding the lot such as: name, address or intersection, route number, number of spaces (including handicap), if bus service is available, if the lot is lighted and/or paved, and what other amenities may be available (bike racks/lockers/bus shelter, etc). Updates to this map can be suggested by [contacting](#) your local VDOT District planner

In addition to the interactive map, the VDOT external website provides detailed information and additional links regarding parking and services available from some local metro and bus facilities, car/van pool opportunities, HOV lane updates, resources available in Maryland, Smart Tag, Slug Lines, etc. The website also contains information for rideshare agencies or localities in need of Park and Ride resources.

In 2014, VDOT completed the Park and Ride Lot Investment Strategies wherein potential P&R lot locations were analyzed using commuter and traffic data. Up to 10 potential locations have been ranked in order of priority. As a result of this effort, a website was developed to house the Park and Ride recommendations;
<http://www.arcgis.com/apps/MapTour/index.html?appid=e1350a00284e46428a535a18d4451aaf>. This process will be updated in 2017 and conducted annually thereafter, in order to maintain an up-to-date, prioritized list of P&R needs across the state.

Public Landings

Upon request by the Virginia Department of Game and Inland Fisheries (DGIF), VDOT will assume the responsibility for the maintenance of launching ramps located at public landings, which are

under permit and have been constructed by others. The maintenance of boat ramps will be in accordance with the general practices and specifications established by VDOT. VDOT will also maintain the road leading to the ramp.

VDOT will be responsible for the maintenance of launching ramps, based on the following conditions:

- A. The sponsor shall submit to the VDOT District Administrator (DA) a plan for the ramp in accordance with the minimum requirements as shown on standard plan LR-1 (found in VDOT's Road and Bridge Standards) and the Joint Memorandum of Understanding. Evidence of the concurrence of the Board of Supervisors shall accompany the submission. The DA shall review the proposed plan and make such suggested changes as he/she finds appropriate. The DA is authorized to approve the plan.
- B. The ramp shall be constructed in accordance with the approved plans and supplemental specifications for launching ramps.
- C. Upon the request of the Board of Supervisor, VDOT will take over the completed ramp for maintenance.

Boat launching ramps should be maintained in as near their original constructed condition or subsequently improved condition as possible. Launching ramps shall be inspected after each flood, storm or excessive high tide. Inspections should include a check for erosion or scour under or around the slab, and for deposits of sand or other debris on the ramp, which might affect its service. Any erosion or debris should be corrected as soon as practical.

Trail Blazers and "Public Boat Landings"

An agreement has been secured between VDOT and the DGIF for the erection of trailblazers within VDOT right of way bearing the message "PUBLIC BOAT LANDING". The procedure for the erection of these signs is as follows:

- A. The DGIF Boating Access Program Manager will contact the Residency Administrator, who will contact the Regional Traffic Engineer and arrange for a joint inspection of the intersections where trailblazers are required. The exact location of each trailblazer is to be staked on the ground.
- B. The trailblazer will begin at the nearest intersection primary route and follow the most direct routing to the boat landing.
- C. DGIF will furnish the trailblazers, posts, hardware, labor, and equipment necessary to complete the sign installation at the approved locations. The signs will be erected in accordance with Department specifications for sign placement as shown in the [Manual on Uniform Traffic Control Devices](#).
- D. DGIF is responsible for all maintenance of the signs. Should a sign need maintenance or replacement, contact the Facilities Director, DGIF, 804-367-1000 or dgifweb@dgif.virginia.gov.

Red Light Running Cameras (Photo Enforcement)

The 2007 General Assembly added [§ 15.2-968.1](#) to the *Code of Virginia* allowing the use of cameras in Virginia counties, cities, and towns to enforce compliance with traffic signals. The legislation allows localities by ordinance to install and operate red light running camera systems at no more than one intersection for every 10,000 residents within the locality. In Planning District 8 (area served by the Northern Virginia Regional Commission), localities may install and operate red light running cameras at no more than 10 intersections or one intersection for every 10,000 residents, whichever is greater.



During the 2012 Legislative Session, additional changes were made to [§ 15.2-968.1](#) which removed VDOT from the process for approving red light running camera systems at intersections. This legislation also removed VDOT from the process where signals are owned, operated and maintained by VDOT. In order to fulfill our responsibility regarding our signals, VDOT will use authority granted under the Land Use Permit process to manage those requests for installations of RLC systems on VDOT's right of way, regardless of who owns maintains and operates the signals. The legislation requires both an engineering safety analysis and annual system monitoring. When selecting potential intersections for installation of red light running cameras, the legislation states localities shall consider the following factors:

- The accident rate for the intersection.
- The rate of red light violations occurring at the intersection.
- The difficulty experienced by law-enforcement officers to apprehend violators.
- The ability of law-enforcement officers to apprehend violators safely within a reasonable distance from the violation.

The engineering study should document the current signal's clearance intervals (yellow and all-red), whether the signal is coordinated with other signals along the corridor, and the current condition of other safety features (i.e., lane markings, median control, speed limits, signing, etc.). The engineering safety analysis is required to be stamped and signed by a licensed professional engineer.

The legislation also contains additional requirements for a minimum 0.5 second grace period between the time the signal turns red and the time the first violation is recorded by the camera; a public awareness campaign prior to implementation or expansion of a red light running camera program; placement of conspicuous signs within 500 feet of the intersection approach at which a red light running camera is installed; monthly system evaluations and annual program certifications.

Information detailing the engineering safety analysis, the request process for localities to install RLR cameras on VDOT maintained facilities and other information on red light running cameras can be found on VDOT's website at www.virginiadot.org/info/photored.asp.

Roadside Memorials

VDOT's Roadside Memorial Program serves to maintain a safe highway system. At the site of fatal crashes or other fatal incidents, grieving families or friends often wish for a roadside memorial to be placed within the highway right of way.

The Department is sensitive to families and friends who have lost loved ones in crashes, or other incidents on the highways of the Commonwealth of Virginia.

- The establishment of the Roadside Memorial Program will serve to provide the families a formal remembrance of a loved one who lost his or her life on the highway.
- The Program fosters a healing process and a way for people to begin to feel closure on a very tragic event and provides a visual reminder to others to drive safely.

Both major goals — safe highway systems and roadside remembrance — should be met in order for the Roadside Memorial Program to be successful.

Eligibility

Any human fatality that occurs on the state highway system is eligible for a Memorial Marker.

Family members of the victim may file a land use permit request for a Memorial Marker. If any member of the immediate family objects to the marker, the permit will be denied. If an adjacent property owner objects, the marker must be moved.

Procedures

No state funds shall be utilized for the design, production, installation or maintenance of roadside memorials, plaques, and other devices placed within the right of way that commemorate the memory of persons killed in vehicle crashes within the right of way of any state highway. VDOT will only provide support in a very limited way by coordinating the specific location of the marker to ensure highway safety.

The program will be paid for entirely by the person(s) requesting the marker.

Requests for a memorial marker within the state highway right of way shall be submitted to the local VDOT Residency Administrator by completing a VDOT land use permit. The permit fee and the bond are to be waived.

The permit is to be issued through VDOT's Land Use Permit System, so that the installation date can be tracked. VDOT personnel will assist the permittee(s) to identify a safe location where the sign is to be erected and provide guidance as to other procedural requirements.

Roadway Lighting

Roadway lighting on Virginia roadways is provided by VDOT when it is determined that it will assist the traveling public in its safe passage. VDOT policy covers the conditions when VDOT may pay for the construction and maintenance of roadway lighting, or when costs should be borne by others.

In part, this policy states:

VDOT may construct, maintain, and operate roadway lighting on highway systems which are maintained by it, where such lighting is deemed necessary for traffic safety by VDOT engineers. The cost of the installation of the lighting shall be funded from annual construction allocations to the system. The cost of maintenance and operation of lighting will be borne by the appropriate system maintenance funds.

Where roadway lighting on highway systems is requested by other entities for their benefit and convenience, and is not deemed necessary for traffic safety by the engineers of VDOT, the installation, maintenance, and operation of the lighting shall be provided by and at the sole expense of those other entities, provided all necessary permits and agreements have been secured. Where approved lighting plans exist, VDOT may provide conduit and other roadway lighting amenities, at project cost, to avoid future disruptions to traffic.

Roadway, pedestrian, and decorative lighting included on a road by a land development project, where that road will become a part of the State System of Highways, will not necessarily become a part of the VDOT road inventory. Permits for the continued operation of that lighting by others may be necessary.

Any request for a roadway lighting system or a modification to an existing system should be made in a formal written request submitted to the Residency Administrator or other designated local VDOT manager.

In order to qualify for VDOT installation of conduits and other amenities necessary to avoid traffic interruption during the installation of roadway, pedestrian, decorative or security lighting by others, post VDOT construction, a full plan of such lighting must be submitted for approval and the follow-on construction of the lighting must be planned within a reasonable amount of time, such that the conduits, etc. will remain in a serviceable condition.

In accordance with § 2.2-111 of the *Code of Virginia*, all lighting systems installed by public agencies, including VDOT, shall be designed in accordance with current Illumination Engineering Society of North America (IESNA) standards and shall use fixtures that minimize glare, night trespass, and skyglow as defined by IESNA. VDOT's most current specifications for energy efficient lighting, with the appropriate broad spectrum illumination, shall be used.

Roundabouts

Roundabouts have proven to be a safe and efficient geometric design to reduce delays and improve traffic operations. The Virginia Department of Transportation, supported by House Joint Resolution 594 from the 2003 Virginia Legislature, has implemented the procedure for comparing a roundabout with a traditional signal / stop condition on construction projects. This procedure also includes reviewing and approving roundabout designs which best serve safety and operational needs at existing intersections planned for upgrades and proposed locations planned for development by Localities.

VDOT has developed a well-defined roundabout selection process that includes planning level screening criteria to determine if a roundabout is a feasible alternative and a comparison tool for evaluating and comparing various intersection control alternatives to a roundabout. Roundabout designs are based on NCHRP Report 672, *Roundabouts: An Informational Guide*, Second Edition. See the following link: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_672.pdf.

During the preliminary plan development stages, all turning movements and applicable volumes for present day and design year are compared. If the comparison results indicate a roundabout would serve a specific intersection better than a traffic signal, a roundabout should be the Designer's first priority of intersection control. The approval process for roundabouts is as follows:

Secondary System- The VDOT Districts may approve up to a traffic design volume of 10,000 vehicles per day (VPD). Roundabout designs in which the counts are beyond this volume should be submitted to the VDOT Central Office Roundabout Review Committee for review. The committee will make recommendations to the State Location and Design Engineer for approval or disapproval. Appeals of the State Location and Design Engineer's decision will go to the Chief Engineer for resolution.

When a VDOT District receives a request for a roundabout from an outside entity, with a design volume under 10,000 VPD but desires Roundabout Committee review and input, the submittal may be sent to the State Location and Design Engineer. It will be reviewed and comments and/or recommendations will be returned in a timely manner.

Primary or Urban Systems- The VDOT Districts will submit roundabout designs to the VDOT Central Office Roundabout Committee for review. The approval and appeals will be the same as used above for these roadway systems with one exception, urban systems will require approval of the Local Assistance Division Administrator as well as the State Location and Design Engineer.

The process listed above applies to:

- Roundabouts proposed through new construction projects
- Roundabouts proposed during road safety improvements and/or upgrades
- Roundabouts proposed by Counties, Localities, Consultants and Developers

For more information, click on:

http://www.extranet.vdot.state.va.us/locdes/Electronic_Pubs/2005%20RDM/AppendF.pdf
and www.VirginiaDOT.org/Roundabouts

Signs

Flashing School Zone Speed Limit Signs

VDOT has established a process that allows a Local School Board, to enter into a formal agreement with VDOT to install, operate and maintain flashing school zone speed limit signs on state maintained highways.

The complete process and requirements are laid out in VDOT's Traffic Engineering Memorandum TE-183 (see

http://www.virginiadot.org/business/traffic_engineering_memoranda.asp), in accordance with the stipulations, of the *Code of Virginia* §§ 46.2.873-46.2-878 , as well as other industry standards and VDOT requirements. This memorandum was substantially revised in 2016 to provide much more comprehensive guidance on the considerations and requirements for establishing, operating, and maintaining a school zone speed limit including guidance for whether a "special warning" is warranted, the appropriate type of warning (e.g. warning signage or a reduced school zone speed limit), the proper school zone speed limit (e.g. 25 MPH), the operational aspects (e.g. allowable hours of day/days of week/months of year when the signs will be operational) etc. as well as the appropriate signs and their placement.)



The TE-183 memorandum includes a template for the formal agreement between the School Board in order for the School Board to install, operate, and maintain flashing school zone speed limit signs on state maintained highways. The agreement specifies that the School Board will bear all costs in connection with the purchase, installation and maintenance of the flashing school zone signs necessary for proper and efficient operation, plus the cost of operations (electric current). The agreement also stipulates that VDOT may remove signs not installed, operated or maintained in accordance with the agreement.

To initiate the consideration for the installation of flashing school zone speed limit signs, the School Board requesting such sign(s) shall submit a completed agreement to the Residency Administrator (RA). In Fairfax, Prince William, and Loudoun Counties the request is made to the Regional Traffic Engineer (RTE). VDOT will review the proposed school zone speed limit, and where appropriate conduct an engineering study/review to determine any appropriate action such as a reduced school zone speed limit, warning signage or any other associated signage. Where the determination that a reduced school zone speed limit is warranted and prudent, VDOT will enter into an agreement with the School Board. For requests on state-maintained roads within any town or; a county within Planning District 8, the locality may determine the school zone speed limit and proposed signing plan in accordance with §46.2.873 (Sections D & E). In those cases the locality submits their engineering study and signing plan (signed and sealed by a Professional Engineer) along with the agreement to VDOT.

Note that a Land Use Permit is also required for installation of these signs by a locality on VDOT right-of-way (see section on Land Use permits in this document for more information). § 46.2-873 of the *Code of Virginia* specifies the times of operations of the signs as thirty minutes preceding and following regular school opening and closing hours, or at any time that reasonably requires a special warning to motorists of children going or coming from a school. Per the definition of "school" in the MUTCD (see section on Traffic Signal, Sign or Pavement Marking Requests in this

document), these signs shall only be used for public or private schools that serve one or more of grades K-12; they shall not be used for day cares, preschools, or colleges.

Signs, continued

Bicycle on Road sign



The department maintains over 55,000 miles of roadway that is unrestricted with regard to use by bicyclist. It is incumbent on both motor vehicle operator and the bicycles alike, to use wisely the rights authority given them. It is both impractical and unnecessary to sign and every roadway or roadway section open to bicyclist, to advise that bicycles are “on the road”. However, on certain roadways, where the volume, the density, and/or the frequency of bicyclists warrants a sign as a reminder to all road users, the department may install a limited number of warning signs with the “On Road” sign in accordance with the provisions of the latest revision to the Manual on Uniform Traffic Control Devices (MUTCD) and the latest [Virginia Supplement to the MUTCD](#). Warranting of such sign shall be through an engineering study. Previously VDOT would post a “Share the Road” plaque beneath the bicycle sign, however new installations will use the “On Road” plaque based on concerns that the “Share the Road” sign may be misleading to motorists and based on feedback from statewide cycling advocacy organizations

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Any individual, group, or local government may request such signage through a written request submitted to the Residency Administrator or other designated local VDOT manager.

Within towns, such signs may be erected by the local government on roads maintained by the Department through a formal permitting process. Request for such an engineering study of the location and a permit shall be submitted to the Residency Administrator or other designated local VDOT manager.

Street name sign

Section, § [33.2-328](#), reads as follows:

Whenever so requested by the governing body of a county, the Department of Transportation shall install a system of street name signs on state-maintained highways at such time and upon such terms and conditions as may be mutually agreed to between the county and the Commissioner of Highways.

The Department shall install, using state forces or contract, the initial signing system and the county shall be responsible for continuing maintenance of the signs. Supply of the signs by the Department, either by manufacture or purchase, and initial installation can be paid for from appropriate secondary construction funds allocated to the county or from primary construction funds available to the Department.

No highway funds shall be used by the county for the cost of maintaining the signing system.

In that the Department has now completed the initial installation of street name signs statewide, maintenance of said street name signs is the responsibility of the individual county government.

This responsibility shall be interpreted to include replacement signs and new signs on roads constructed by the county or under the authority of the county that will be submitted to the Department for inclusion into the state system of roads.

Signs, continued

New street name signs, replacement or on new locations, shall be in conformance with the provisions of the latest revision to the Manual on Uniform Traffic Control Devices (MUTCD) and the latest [Virginia Supplement to the MUTCD](#).

Supplemental Guide Signs

Supplemental Guide Signs are a special sub-set of guide signs. Typical or standard guide signs reference cities, towns, counties, or regions as destinations that may be found by choosing a certain route, or give reference to the mileage, upon a route, to these destinations.

Supplemental Guide signs can be used to provide information regarding destinations accessible from an interchange, other than places displayed on the standard interchange or intersection signing. However, such Supplemental Guide signing can reduce the effectiveness of other more important guide signing because of the possibility of overloading the road user's capacity to receive visual messages and make appropriate decisions.

The US Department of Transportation, Federal Highway Administration, through endorsement of the MUTCD states:

States and other agencies should adopt an appropriate policy for installing supplemental signs.

In developing policies for such signing, such items as population, amount of traffic generated, distance from the route, and the significance of the destination should be taken into account.

VDOT has developed a program for many of the business or specific services facilities such as gas food and lodging where a brand name is used, cultural sites or businesses of particular interest to the touring public. In addition, VDOT has policy in place regarding non-business, general services types of facilities such as hospitals, or the generic gas/food/lodging reference.

The Integrated Directional Signing Program, or IDSP as it is referenced, is the program that governs signs for businesses or specific services. Information regarding the IDSP can be accessed at: <http://www.virginia-dot.org/programs/sign-faqs.asp>

Speed Limits

The black and white numbered (regulatory) speed limit signs are posted for public safety. Speed regulations and speed limits are intended to supplement motorists' judgment in determining speeds that are reasonable and proper for particular road conditions. Speed Limits are imposed to indicate and promote vehicle speeds that are safe and appropriate for the roadway conditions and to assist law enforcement personnel in enforcing the speed limit. It is important to know that posting a reduced speed limit does not of itself automatically reduce or limit vehicle operating speeds to the posted speed limit.. Enforcement is usually needed to achieve compliance. Motorists tend to drive at speeds they deem appropriate for the roadway conditions (e.g. regardless of the posted speed limit.



The *Code of Virginia* establishes statutory maximum speed limits and grants authority to the Commissioner of Highways(on state maintained roads) and, to cities and certain counties and towns (on roads they maintain and have authority over) to increase or decrease certain speed limits after a traffic engineering investigation. The engineering investigation considers the physical roadway features (e.g. alignment, lanes, pavement / lane width), the nature and extent of traffic and roadside development, vehicle speeds, as well as , historical crash data in order to determine the appropriate speed limit.

Requests for a speed limit change on a VDOT maintained road are made to the Residency Administrator or other designated local VDOT Office who will review the request for appropriate action. Where a speed limit change is warranted, the county will be notified prior to a speed limit change being implemented and posted on the roadway.

The criteria used by VDOT in determining whether a speed limit change or posting is warranted depend on the type of road. A secondary gravel road, or a road with a low level of traffic and crashes, will generally be reviewed only for warning signage. Roadways with a history of crashes or with a higher density of development will be reviewed for any further action as deemed appropriate by VDOT staff. Roadways with unposted speed limits are governed by the statutory speed limit. Statutory speed limits are not generally posted on secondary roads except for Rural Rustic Roads where the applicable 35 mph statutory speed limit or other speed limit determined by VDOT is posted.

For roadways where there has been no significant change (e.g. no substantial development) or improvement (e.g., no project completed to reconstruct or realign the roadway) since the last review or study was conducted, a review or study of the governing speed limit will not generally be initiated.

Traffic Counts

Traffic counts are a basis for safety, economic, and engineering considerations in guiding administrators and engineers for the development, operations, and management of highway systems.

The Department has a traffic count program that collects traffic data at over 100,000 locations across the Commonwealth. All roads that are functionally classified higher than local are to be counted once during that three-year period. Roads that are functionally classified as local will be counted once every six years (if there is growth potential for the area) or once every twelve years (if they serve fully occupied housing subdivisions).

However, local roads that are unpaved with traffic counts below 50 VPD are to be counted once every three years.

A primary product of the Department's traffic count program is the publication of Annual Average Daily Traffic (AADT) estimates for the roadways. The AADT estimates are used to create Vehicle Miles of Travel reports. All of these publications and reports are available on the VDOT website at: <http://www.virginiadot.org/info/ct-TrafficCounts.asp> or by contacting your Residency Administrator or other designated local VDOT manager.

Traffic Signal, Sign or Pavement Marking Requests

To request a traffic signal, sign or pavement marking, (including any changes to existing traffic signals, signs, or pavement markings) contact your Residency Administrator or other designated local VDOT manager, who will forward the request to the Regional or District Traffic Engineer for evaluation of location, traffic volume, accidents, and other factors. As part of the evaluation, VDOT staff will consider the underlying basis that initiated the request as well as the expected outcomes to determine the most appropriate and effective solution. The findings of that evaluation will be used as the basis for determining whether to install or change the requested device(s).

Transportation agencies across the United States follow uniform guidelines to determine when these traffic control devices are appropriate to ensure consistency and provide for safe travel. The primary guidelines are found in the most recent revision to the Manual on Uniform Traffic Control Devices (MUTCD) adopted by the Code of Federal Regulations and administered by the Federal Highway Administration and the [Virginia Supplement to the MUTCD](#), adopted by the Commonwealth Transportation Board which provides for additional flexibility and Virginia specific requirements consistent with Virginia Code. In jurisdictions that maintain their own street systems, requests should go to the appropriate local officials.

Some sign requests have additional requirements. Detailed information on these special requests can be found in the sign section in this manual.

LAND DEVELOPMENT

Access Management

Roads are a critical public resource and constitute a major investment of the public's money. To reduce the need for new roads and road widening projects, greater emphasis is being placed on maximizing the performance of Virginia's existing highway network.

Access management focuses on the location, spacing, design and operation of entrances, street intersections, median openings, and traffic signals. Each of these creates conflict points where vehicles have to stop or slow down, disrupting the flow of traffic. As the number of conflict points increase, so does traffic congestion and traffic crashes affecting the vehicular carrying capacity of the road. The benefits that can accrue from managing access include:

- Less traffic congestion.
- Lower fuel consumption and air pollution.
- Fewer and less severe traffic crashes.
- More efficient movement of people and goods that promotes economic development by expanding the market area and labor market for businesses.
- Preserving highway traffic carrying capacity to avoid having to widen them or build new ones.

Access management regulations and standards became effective July 1, 2008 for the network of state principal arterial highways and October 14, 2009 for minor arterials, collectors, and local streets. All roads have been classified according to their primary function: arterials for moving traffic and collectors and local streets for providing access to property.

The regulations and standards were designed to balance the right of property owners to reasonable access to the highway with the right of users of the roads to mobility, safety, and efficient expenditure of public funds. Key elements include: spacing standards for entrances, intersections, median openings, and traffic signals; shared entrances; vehicular/pedestrian connections to adjacent properties; locating entrances a safe distance from interchange ramps; and entrance design.

A number of exceptions are identified in the regulations to accommodate those cases where a requirement could cause a hardship or prevent a property owner from using the highway.

The enabling legislation, regulations and standards, exception forms, highway functional classification maps, guidance documents, and general information on access management is available on VDOT's web site at www.virginiadot.org/projects/accessmgt.

Additions to the Secondary System of State Highways

Within counties, certain public roads exist that are not part of the secondary system of state highways maintained by VDOT. To become state maintained, the Board of Supervisors must request these roads be accepted by VDOT for maintenance and identify any funds necessary to improve those roads to minimum standards.

Additions to the secondary system of state highways generally result from:

- ◆ **Development** - These streets are usually the result of a subdivision or development of land and must meet the provisions of the Secondary Street Acceptance Requirements (SSAR), a part of the Administrative Code of Virginia and a regulation of the Commonwealth Transportation Board.

Streets developed under the Recreational Access, Economic Development Access, and Airport Access programs are subject to additional prerequisites that are set forth in other documents specific to the individual access program.

- ◆ **Rural Additions** - Streets added under this program may exist as a result of past development but were not initially proposed for maintenance by the Department as a part of the secondary system of state highways. Qualifying streets may be considered for acceptance if sufficient funding is made available by the Board of Supervisors as part of the resolution requesting addition.

The Board of Supervisor's resolution requesting the addition is expected to certify that the county's subdivision ordinance is in compliance with [§33.2-335](#) and [§33.2-336](#) of the *Code of Virginia*. Additional information about Rural Additions is summarized on page 75.

- ◆ **School Roads** - Roads used by school buses that are located on school property and lead from the primary system or the secondary system of state highways to the entrance of the school parking lot are eligible for state maintenance as part of the secondary system of state highways.
- ◆ **Streets in Towns (Population under 3,500)** - In most towns with a population less than 3,500, qualifying streets may be added to the secondary system of state highways. However, the authority under which the town operates ([§33.2-339](#) or [§33.2-340](#)) may restrict annual mileage additions to no more than one-fourth mile. Project-related changes to the secondary system of state highways frequently include abandonments, additions, and discontinuances.
- ◆ Project-related changes to the secondary system of state highways frequently include abandonments, additions, and discontinuances

Guide to Transportation Efficient Land Use Planning and Design

VDOT, in conjunction with the State Office of Intermodal Planning and Investment, produced an informational guide for local governments to assist them in planning for and accommodating higher density mixed use development following Traditional Neighborhood Development (TND) design concepts.

This development design creates transportation efficient mixed-use communities that replicate the qualities of a small town, places uses close enough to each other to allow walking and bicycling, provides a range of housing choices, and results in more efficient use of local infrastructure and capital facilities. It offers an alternative to the suburban pattern of single family home subdivisions and separate shopping centers.

Transportation Benefits

The more compact and interconnected nature of TND development, in addition to its mix of uses, means that residents travel less often, travel shorter distances when they do, and have greater opportunities to travel by foot, bicycle, or transit. The result is reduced costs for right of way, road widening, secondary street maintenance, and travel for commuters.

Local Government Infrastructure Benefits

The compactness brings solutions to the growing costs of providing water, sewer, and other infrastructures over the longer distances associated with suburban development. Higher density mixed use communities require less road building, fewer miles of utility systems, and less plentiful and better designed parking facilities.

Local Fiscal and Housing Market Benefits

Close proximity of neighborhoods to public services and facilities translates into lower public operating costs and energy expenditures. Shorter school bus routes and emergency response times are a result. Growing market preference for TND real estate produces better project sales and higher assessment valuations. The housing consumer gains expanded housing choice in terms of type, ownership vs. rental, and cost.

The Guide is available at

http://www.virginiadot.org/projects/transportation_efficient_land_use_and_design_guide.asp on the VDOT web site.

Land Development/Site Plans

The Virginia Department of Transportation (VDOT) works with local jurisdictions to review rezoning requests, subdivision plats, construction plans, and site plans to evaluate traffic impacts, and to identify and recommend roadway improvements needed to serve proposed development sites. This ensures items on VDOT R/W, or R/W intended to be taken over for maintenance, meets VDOT standards.

Chapter 527 of the 2006 Acts of Assembly ([§ 15.2-2222.1](#) of the Code and the resulting Traffic Impact Analysis Regulations require localities to submit to VDOT proposed comprehensive plans plan amendments, and rezoning requests, if they are expected to have a significant impact on state highways. Information on Chapter 527 can be found on VDOT's website at http://www.virginiadot.org/info/traffic_impact_analysis_regulations.asp

Even if a development proposal does not meet the thresholds that would require submission to VDOT, localities should include the Department in the various stages of the development review process. Careful reviews of proposed development plans are important because traffic impacts caused by new developments can be costly for both VDOT and the local jurisdictions. Since existing transportation needs exceed available funding, VDOT's limited funds cannot be relied upon to correct transportation problems created by new developments.

The Department's review of development plans includes a thorough analysis of traffic impacts and identifies improvements required to mitigate those impacts. VDOT personnel examine the site plan or subdivision plat to determine if development plans provide designs adequate to accommodate traffic generated by the proposed site without adversely affecting state-maintained roads. VDOT's comments and recommendations are shared with the local jurisdiction.

A traffic impact study may be required, by either the local jurisdiction or VDOT, to describe how the traffic generated by the site will be served by the existing or future road network. This study must analyze a forecast of the traffic impacts of the fully developed site and identify solutions that will be implemented to accommodate the site traffic. VDOT's review of the study will also evaluate the development's compliance with VDOT's access management regulations and standards and any obvious issues with street acceptance. VDOT is responsible for regulating the location, design, construction, and maintenance of street and driveway connections on the State Highway System. Incumbent with this is the obligation to ensure protection of the transportation infrastructure, economy of maintenance, preservation of proper drainage, safe and efficient movement of vehicles and pedestrians thereon, and full accountability for the transportation investments bestowed by the citizens of Virginia upon VDOT.

VDOT participation early in the land development process can help ensure proper access is provided while the reliability of the road system is preserved.

Permits (Land Use)

A land use permit is a requirement of the General Rules and Regulations of the Commonwealth Transportation Board ([24 VAC 30-21](#)). This ensures that all work performed in the right of way of any highway in the state highway system meets VDOT standards and policies, complies with highway laws and regulations, preserves the integrity and functionality of the highway, and provides for the safety of the traveling public.

Anyone who plans to work or perform an activity on or crossing any right of way under the jurisdiction of the Department must first obtain a land use permit. A land use permit is also required when modifications are planned for an existing entrance due to change in land use, traffic volume, or type of traffic. A land use permit is a written document, signed and issued by an agent of VDOT, which regulates and approves work or activities to be performed in the right of way of a highway in the state highway system. It describes and defines the scope of work, and specifies conditions and provisions for performing the work.

Land use permits for work in a locality are typically obtained at the VDOT District office serving that locality. Regional and District-wide permits are obtained from the Office of Land Use in Richmond. The Land Use Section in each District is responsible for reviewing plans for utilities, land development, private entrances, commercial entrances, logging entrances, surveying operations, and activities that require access to VDOT's right of way. The review of land use permits for commercial and private entrances will be based on VDOT's access management regulations and standards that establish criteria for the design and location of proposed entrances.

Rural Additions

Some public streets may qualify for addition to the secondary system of state highways, and subsequent improvement, as a rural addition. Such roads must be formally added to the system prior to improvements. State law prohibits expenditures of funds administered by the Department on roads that are not in the system.

Rural additions to the Secondary System of State Highways will be considered when requested by resolution of the Boards of Supervisors of the county where the proposed road(s) provide sufficient public service to warrant the expenditure of highway funds for maintenance and improvement thereof. A minimum 40 feet unrestricted right of way plus additional widths for cuts and fills where necessary, along with adequate drainage easements, must be established and recorded in the deed books of the county at no cost to the Commonwealth; except that a lesser right of way width, but not less than 30 feet, may be considered where buildings or permanent structures (not including fences) were in place prior to December 31, 1961 (date of the Transportation Board's policy on right of way for the Secondary System). Further, the resolution of the Board of Supervisors shall specifically guarantee the necessary right of way and easements for the proposed road addition. Where a county has a policy requiring greater widths of right of way, its policy becomes the policy of the Commonwealth Transportation Board in that county. A certified copy of the plat indicating street right of way, drainage easements, and place of recordation and a detailed record of lot ownership, along with the required donation, shall be furnished with the submission of the resolution requesting the addition.

Limitations

Rural additions to the Secondary System will be limited during any one fiscal year to not more than 1.25 percent of each county's Secondary mileage at the end of the preceding calendar year. In order to improve rural additions to the established minimum standard for rural roads, the Department of Transportation may expend not more than a sum equal to 5 percent of the allocation of construction funds for use on the Secondary System in that county.

Right of Way and Utilities

Rural addition funds administered by the Department are reserved for construction and engineering costs only. Costs for providing a clear, unencumbered right of way and any relocation of utilities, mail boxes, etc., are not eligible expenses covered by rural addition funds administered by the Department. Ineligible costs must be borne by others and assured by the county.

Speculative Interests

If property abutting a proposed rural addition is owned by speculative interests, its addition is not eligible under the authority of the CTB's Rural Addition Policy. Ownership or partnership in two or more parcels, or equivalent frontage, abutting such streets shall constitute a speculative interest for the purposes of this policy. However, proposed additions that serve speculative interest property may qualify for addition under [§33.2-335](#), *Code of Virginia*. Speculative interests are assessed a pro rata share of the improvement costs, pursuant to [§33.2-335](#), which share must be assured and provided by the county.

Rural Additions, continued

Stormwater management

A formal agreement(s) with the county is required if a stormwater management facility receives runoff from the road and/or the road crosses an impoundment dam and/or extrinsic structure. The agreement(s) must be in force before the road is accepted as part of the system.

Additional information regarding rural additions can be found at:

<http://www.virginiadot.org/business/resources/additionsabandonmentsanddiscontinuances.pdf>

Secondary/ Subdivision Street Standards

VDOT's Secondary Street Acceptance Requirements (SSAR) became effective in March 2009. The SSAR replaced the 2005 edition of the Subdivision Street Requirements (SSR). These establish the minimum requirements that new streets must meet to be considered for acceptance as part of the secondary system of state highways maintained by the Department. These requirements provide all necessary references related to planning, design, development, and regulation of streets serving residential, mixed-use, commercial, and industrial developments.

The SSAR constitutes a regulation of the Commonwealth Transportation Board and is part of the Virginia Administrative Code.

The CTB approved changes to the SSAR in 2011 that became effective January 1, 2012. The newly revised SSAR regulation contains a number of situations for which pending projects may be "grandfathered" to comply with the previous SSAR or the SSR standards.

All plats and plans initially submitted to VDOT after January 31, 2012 must comply with the revised SSAR.

Plans for new streets are initially submitted by the developer to the local government. Following the local government review of the submitted plans, county staff forwards the plans to the designated VDOT District or Residency Office through the county in which the subdivision is located. VDOT will determine if the plans comply with applicable standards and related requirements.

If the streets are designed and built according to the approved plans and all other prerequisites are met, the County Board of Supervisors adopts a resolution requesting VDOT's acceptance of the streets.

If it is determined that acceptance is appropriate, the street will be officially accepted for maintenance as part of the secondary system of state highways. Additional information concerning the SSAR can be found at the following VDOT website:

<http://www.virginiadot.org/projects/ssar/>

MISCELLANEOUS

Abandonment of Secondary Roads

There are two circumstances for abandoning a road that is a part of the secondary system of state highways.

1. When the Board of Supervisors decide that:
 - (a) "No public necessity exists for the continuance of the secondary road as a public road" (i.e., lack of public use), or
 - (b) "The safety and welfare of the public would be served best by abandoning the section of road."
2. When a new road "which serves the same citizens as the old road" has been constructed to Department standards and accepted into the secondary system. The abandonment is enacted by the Commissioner of Highways in relations to project related changes.

The first circumstance requires the Board of Supervisors to announce its intent to abandon a road, including providing formal notice to the Commissioner, and posting of a Willingness Notice to hold a public hearing.

Following a public hearing, assuming one is requested and properly held, the Board of Supervisors acts to either dismiss the abandonment or to abandon the road within a prescribed time frame.

For roads that have only a prescriptive easement for right of way, a lawful abandonment, under either of the above circumstances, extinguishes the prescriptive easement and the road ceases to be a public road.

For roads that have right of way dedicated to public use, abandonment has the effect of closing the road to public use, but interests in the real property dedicated for right of way may only be transferred by a separate conveyance; right of way dedicated to a county government may be conveyed by the county after the Commissioner certifies that the right of way is no longer necessary for transportation purposes; right of way dedicated to the Commonwealth may be conveyed only by the Department. The conveyance of right of way may follow abandonment, but may not precede abandonment.

If the intent is to cease VDOT maintenance and responsibility but retain public road status, discontinuance should be considered.

Bicycle and Pedestrian Accommodation

VDOT is committed to accommodating bicyclists and pedestrians, including pedestrians with disabilities, along with motorized transportation modes in the planning, funding, design, construction, operation, and maintenance of Virginia's transportation network in order to achieve a safe, effective, and balanced multimodal transportation system.

The Commonwealth Transportation Board (CTB) Policy for Integrating Bicycle and Pedestrian Accommodations states that VDOT will initiate all projects with the presumption that the projects will accommodate bicycling and walking. Project development for bicycle and pedestrian accommodations will follow VDOT's project development process and concurrent engineering process. VDOT will encourage the participation of localities in concurrent engineering activities that guide the project development. Local and regional bicycle and pedestrian plans will be the primary resource for project managers and the starting point for discussions with localities regarding what bicycle and/or pedestrian accommodations are desired.

Through the project scoping process, which determines what the project will include, the project manager and local representatives will develop a recommendation on how and whether to accommodate bicyclists and pedestrians in a project prior to the public hearing. Following scoping, the locality must submit a letter of agreement or disagreement with the recommendation. After the public hearing, public involvement comments will be reviewed and incorporated into project development prior to the preparation of the design approval recommendation. If the locality disagrees with the bicycle and pedestrian design features as proposed, the District Administrator will meet with the locality and make a decision regarding the final direction for the project. Formal appeals by the locality of decisions made by the District Administrator will be made to the Chief Engineer by means of a resolution adopted by the local governing body. The resolution must be submitted to the District Administrator to be reviewed and considered prior to the submission of the design approval recommendation to the Chief Engineer. Local resolutions must be forwarded to the Chief Engineer for consideration during the project design approval or to the CTB for consideration during location and design approval, if needed for a project. The resolution and supporting information related to the recommendation must be included in the project documentation. The decisions made by VDOT and localities for the provision of bicycle and pedestrian travel must be consistent with state and federal laws regarding accommodations and access for bicycling and walking.

As indicated in the Secondary Street Acceptance Requirements, certain new secondary streets are required to provide pedestrian accommodations. Details regarding these requirements can be found at <http://www.virginiadot.org/projects/ssar/>. If separate facilities are deemed appropriate, they should be included in the initial construction, prior to VDOT acceptance. VDOT will accept the maintenance of sidewalks, bicycle facilities, and shared use paths located within the dedicated right of way when their construction is in compliance with the criteria and standards set out in VDOT's Road Design Manual. Any sidewalks, bicycle facilities or shared use paths located on the right of way but not constructed to VDOT standards may be allowed under a land use permit.

More information on bicycle and pedestrian accommodations is available on the web at: <http://www.virginiadot.org/programs/bk-default.asp>.

Devolution

Devolution is the process in which counties assume responsibility for all or a portion of their secondary road system. VDOT has been responsible for the construction and maintenance of all secondary roads in the Commonwealth, except those in Henrico and Arlington counties, since 1932. For more than 70 years VDOT has maintained the secondary system and, the County Boards of Supervisors and VDOT have cooperatively established priority lists of secondary construction projects within each county, with VDOT subsequently designing and constructing a majority of the roads. It is often noted that Virginia is one of few states where the state Department of Transportation has responsibility for nearly all local roads.

In 2001, The General Assembly added [§ 33.2-342](#) to the *Code of Virginia*, allowing counties to assume responsibility for planning, constructing, maintaining, or operating all or a portion of their secondary system. In 2009, the General Assembly amended [§33.2-342](#) of the *Code of Virginia* to clarify that any county that resumes full responsibility for all of the secondary system within the county's boundaries shall be deemed to have withdrawn from the state secondary system of highways, shall have full authority and control over the secondary system of highways within its boundaries, and shall receive payments in accordance with [§33.2-366](#).

To have more control over construction project delivery, many counties already administer some of their improvement projects and use bond referendums to generate funds for transportation projects. Taking over responsibility for an individual construction project is addressed through VDOT's locally administered project program referenced on page 16. Any locality interested in assuming responsibility for some or all of the secondary system should discuss this with the Residency Administrator or other designated local VDOT manager. Devolution is voluntary and will include a programmatic agreement and a transition period to ensure no disruption of service.

VDOT's Local Assistance Division has prepared extensive guidance for counties considering Devolution and it may be found at: http://www.virginiadot.org/business/LAD_devolution.asp.

Discontinuance of a Secondary Road

Discontinuance is an act reserved for the Commonwealth Transportation Board (CTB) that terminates VDOT's maintenance responsibility and jurisdiction for a road, returning the road to the jurisdiction of the local government. The basis for discontinuance is a determination by the CTB that the road no longer provides a public service warranting its maintenance at public expense.

Non-project related discontinuances procedures:

The Department or the CTB may, in response to a petition of the local governing body or on its own motion, initiate the discontinuance of a section of roadway as part of the secondary system of state highways maintained by the Department.

VDOT will either issue a public notice of intent to discontinue maintenance and advise the County Board of Supervisors and all adjacent property owners of its willingness to hold a public hearing or skip the willingness step and go directly to a public hearing. A public hearing will be conducted if requested by the local governing body, an affected property owner, a citizen at large, or as a Department option in lieu of a willingness in order to expedite the process.

Following the willingness period or public hearing if one is requested, the Residency Administrator or other designated local VDOT manager prepares a discontinuance report with a recommendation and submits it to the Office of Land Use for a final recommendation and submission to the Commonwealth Transportation Board for approval.

The public involvement process associated with project development is considered to satisfy the public involvement needs for project related discontinuances and a public involvement process is not normally held after a project is completed.

Golf Carts and Utility Vehicles

Golf cart as defined in [§46.2-100](#) of the *Code of Virginia* refers to a self-propelled vehicle designed to transport persons playing golf and their equipment on a golf course. A utility vehicle refers to a motor vehicle that is powered by an engine of no more than 25 horsepower and is designed for off-road use for general maintenance, security, agricultural, or horticultural purposes and does not include all-terrain vehicles or riding lawn mowers.

§§ [46.2-916.1](#), [46.2-916.2](#), and [46.2-916.3](#) of the *Code of Virginia* govern the use of golf carts on Virginia highways and provide that the governing body of any county or city or; any town that has established their own police force (the towns of Claremont, Irvington, Saxis, Urbanna, and Wachapreague are excepted from this requirement) may authorize the operation of golf carts and utility vehicles on any public highway within their boundaries (regardless of whether the locality or VDOT owns/maintains the road) within certain limitations stipulated by the various Code sections. § 46.2-916.2(B) requires a consideration of the speed, volume, and character of motor vehicle traffic using such highways, and a determination that golf cart and utility vehicle operations are compatible with state and local transportation plans and consistent with the Commonwealth's Statewide Pedestrian Policy. § 46.2-916.2(B) further states that no highway shall be designated if golf cart and utility vehicle operations will impede the safe and efficient flow of motor vehicle traffic, which VDOT is responsible to ensure on highways they maintain. §[46.2-916.3](#) prescribes additional limitations on the operations of Golf Carts and Utility Vehicles that must be considered when designating a highway that (i) the Speed Limit of the highway must be 25 mph or lower and that a proposed designated highway may not cross a roadway where the speed limit is greater than 25 mph except under certain circumstances as described in the Code.

VDOT's "Guidelines for the Designation of highways for Golf Cart and Utility Vehicles" lays out the complete requirements and procedures that should be followed by the locality for the appropriate designation of highways within the constraints of the Code of Virginia and VDOT processes. Generally the locality submits a completed Land Use Permit for Golf Cart & Utility Vehicle Accommodation (LUP-GC) along with the documentation of its consideration of the various criteria for a designation as spelled out in the permit and the VDOT Guidelines. Generally, these include evidence of its consideration of the speed, volume, and character of motor vehicle traffic for proposed designations, local law enforcement comments, and the indication that golf cart and utility vehicle operation is compatible with state and local transportation plans and consistent with the Commonwealth's Statewide Pedestrian Policy. Locality should also provide an overall golf cart route plan to show connectivity to and from specific origins and destinations. For example, residences to a local park, ball field, community center, etc.

It is preferred that coordination with VDOT through the Residency land use staff occur prior to the passage of any ordinance authorizing the operation of such vehicles on any state-maintained facilities so that any concerns can be identified early in the process.

Note that §[46.2-916.2\(E\)](#) stipulates that VDOT shall not pay costs for sign installation or maintenance.

For further provisions & additional details, see VA Code Sections [46.2-676](#), [46.2-916.1](#), [46.2-916.2](#) & [46.2-916.3](#) that govern the use of golf carts & utility vehicles.

Highway Rail Grade Crossings

By federal mandate, VDOT is responsible for providing safety and keeping a current inventory of all at public highway-rail crossings (approximately 2,975) to include VDOT maintained and urban maintained roads. Approximately 1,858 of these are at grade locations. The following addresses policy and procedure as it relates to maintenance and safety at highway-rail grade crossings of public highways in the Commonwealth of Virginia.

Grade Crossing Surfaces

- [§ 56-405](#) of the *Code of Virginia* requires railroad companies and/or crossing owners to maintain grade crossings of public highways and approaches.
- Each VDOT Regional, District or Residency offices will contact the crossing owner to resolve crossing surface maintenance issues for roadway maintained by VDOT. For roadways operated by local Jurisdiction, the local jurisdiction must contact the crossing owner.
- VDOT will provide ownership and contact information to the local jurisdiction upon request.

Automatic Warning Devices

- [§ 56-406.1](#) of the *Code of Virginia* requires railroads to cooperate with VDOT or the public road authority (local jurisdiction) as it pertains to the installation and maintenance of automatic warning devices at any at grade rail crossing on a public highway in the Commonwealth.
- Federal funds are available as part of VDOT Highway Safety Improvement Program / Rail Crossing Safety. Funding is to be primarily used for the upgrade or installation of automatic warning devices and crossing closure. Crossing elimination by grade separation at any public at grade highway-railroad crossing within the Commonwealth may also be partially funded.
- VDOT Traffic Engineering Division will provide non-emergency assistance for installation and maintenance of warning devices on VDOT maintained roadways.
- VDOT Traffic Engineering Division will provide ownership and contact information to the local jurisdiction upon request.

RR Structures

- For potential projects or other concerns regarding structures over or under rail lines, VDOT should be contacted, seeking assistance, before any work is performed.

Quiet Zones

- Quiet Zones are the direct responsibility of the [Federal Railroad Administration \(FRA\) Office of Railroad Safety](#)

Towns with Populations Under 3,500

VDOT is responsible for the maintenance and improvement of streets in most incorporated towns of less than 3,500 population. However, there are a limited number of towns of less than 3,500 population that maintain their own streets. Towns that request VDOT to maintain their streets operate under [§33.2-339](#) of the *Code of Virginia* and are limited to two miles of secondary system streets initially and are allowed to add up to 0.25 mile of additional streets annually to the secondary system. Streets established prior to January 1, 1962, must have a minimum 30 feet of right of way, and those established on or after January 1, 1962, must have 40 feet right of way. These streets must be in accessible for travel under normal conditions.

Towns that do not request VDOT to maintain their roads under [§33.2-339](#) operate under [§33.2-340](#), are not subject to the same 0.25 mile limitation and may add streets if the following requirements are met:

- Minimum 30 feet right of way with 12 feet of hard surface if established prior to July 1, 1950.
- Minimum 50 feet right of way with 20 feet of hard surface if established on or after July 1, 1950.
- Minimum subdivision street requirements if constructed as a local street after July 1, 1996.

Improvement of secondary system streets within towns of less than 3,500 population is considered along with all other roads in the secondary system of the county in which the town is located.

Virginia Byways

The Virginia Byway program recognizes road corridors possessing aesthetic or cultural value near areas of historical, natural or recreational significance. By designating certain roads as Virginia Byways and widely distributing "A Map of Scenic Roads in Virginia," the program encourages travel to interesting destinations and away from high-traffic corridors. Byways also stimulate local economies by attracting visitors to lesser-known destinations. Virginia Byway designation limits the placement of outdoor advertising signs on National Highway System (NHS) and Federal Aid Primary (FAP) routes, but it does not affect land use controls or limit road improvements.

To be considered for the Virginia Byway program, a segment of road must substantially meet the following criteria:

- The route provides important scenic values and experiences.
- The route proposed for designation should be at least 10 miles in length, or providing a connection to current designated Virginia Byways.
- There is a diversity of experiences, as in transition from one landscape scene to another.
- The route links together or provides access to scenic, historic, recreational, cultural, natural and archeological elements.
- The route bypasses major roads or provides opportunity to leave high-speed routes for variety and leisure in motoring. Landscape control or management along the route is feasible.
- The route allows for additional features that will enhance the motorist's experience and improve safety.
- Local government(s) has/have initiated zoning or other land-use controls, so as to reasonably protect the aesthetic and cultural value of the highway.

In order to request a Virginia Byway designation, local governments must adopt a resolution of support. They must also provide documentation identifying all historical and/or cultural resources along the proposed designated route. Upon receipt of a request from an interested party/local government, along with a map showing the beginning and ending termini and historical/cultural resource documentation, VDOT and the Department of Conservation (DCR) collect information on local zoning laws, traffic volumes and accident reports before evaluating the roads according to the criteria. Local governments are also given an opportunity to hold a public hearing to consider designation. Based on a joint review according to the criteria, VDOT and DCR recommend qualifying roads for consideration by the (CTB). The CTB officially designates the Byways. Subsequently, signs are posted, and changes are made to the appropriate maps.

Under the National Scenic Byway Program, Virginia has five National Scenic Byways: the Blue Ridge Parkway, Skyline Drive, Colonial Parkway, George Washington Memorial Parkway, and Journey Through Hallowed Ground. While the National Scenic Byway Program is not funded in MAP-21, additional information about the program can be found at www.bywaysonline.org.