

Route 29 must meet the needs of those who live, work, and travel along its 219 mile span from the North Carolina border to Gainesville, Virginia. As such, a vision has been developed for the corridor that revolves around a set of themes that gained broad consensus during the series of workshops and local jurisdiction meetings that were held starting in March of 2009 and extended into the summer of 2009. Achieving this vision will require not only improvements to address safety and capacity needs, but also changes in the way that localities and the Commonwealth view and manage the corridor. Long-term goals such as mobility, safety, and the preservation of values such as rural character, scenic vistas, and historic features should be the benchmarks against which proposed developments are measured. Strip development, the proliferation of driveways and traffic signals, and the overloading of traffic on a single roadway are all symptoms of a past approach that has emphasized exploitation rather



than management of Central Virginia's most important north-south transportation corridor. This trend cannot be allowed to continue. It's time to move forward, building upon the consensus reached during this study that land use and transportation planning should tie together to support the roadway's functionality.

The consensus themes developed as part of the workshops, as well as local government and public information meetings, address issues related to congestion and lack of capacity, safety, access control, corridor-wide planning for both land use and transportation, an increased VDOT role in preserving the functionality of Route 29 as a corridor of statewide significance, modal choice, as well as efforts to preserve the scenic and rural values in the corridor and to develop context-sensitive solutions. These themes inform the overall vision for Route 29, which is broken down into seven components. These components, listed below and described more fully in the remainder of this chapter, collectively describe a vision for the corridor, but also serve as broad strategies for a planning framework and corresponding specific actions that are then described more fully in the Chapters 4 through 6.

- **Access Point Control**
- **Access/Connection Type**
- **Enhance Overall Mobility and Reduce Congestion**
- **Expand Travel Mode Choices**
- **Corridor Planning for Land Use and Transportation**
- **Enhanced Stewardship Role for VDOT to Preserve Transportation Investment**
- **Preserve the Integrity of Corridor as a Statewide Scenic Resource**

**Access Point Control:** The rural portions of Route 29 generally have a limited number of entrances, whether from entering primary and secondary roads, or from private roads and driveways. The development of properties close to Route 29, particularly in the portions of the corridor that have experienced high growth pressures, has resulted in the proliferation of access points. While serving the access needs for adjacent properties, the proliferation of driveways degrades both the operations and safety of the roadway itself, and localized "strip" development adversely affects the visual and rural quality that many citizens believe should be retained. In terms of access control, therefore, the vision for the Route 29 Corridor is one of an access-controlled roadway. While in some areas, this may



result in what is commonly described as a freeway (such as an interstate highway), the vision aims to develop a roadway that, at a minimum, includes access only at designated and appropriately spaced locations and does not include full-access driveways between these designated points. This aspect of the vision could be achieved through a number of actions, including growth management, such as:

- Local zoning changes to reduce growth pressures or to shift growth pressures away from properties immediately adjacent to Route 29
- Requirements for new development to access Route 29 only at designated points
- Transfer of development rights to shift growth from parcels directly adjacent to Route 29 to parcels that could develop along secondary roads that access Route 29 at designated points
- Introducing lands into conservation easements – these lands would therefore not support development that would require new access points
- Purchase by VDOT of limited access rights-of-way in the corridor
- Construction by VDOT of portions of new roadway that connect parcels within growth areas to designated access points on Route 29, or the provision of incentives to the private sector to construct such roads

In addition, the vision does not suggest that one solution is appropriate for the entire corridor; this component of the vision can be achieved through a variety of roadway types.

**Access/Connection Type:** The second component of the Route 29 vision relates to type of access. Access on to Route 29 that requires stopping traffic on Route 29 itself (as traffic signals do) reduces the capacity of the roadway and can often be an incentive to further develop properties that degrades the visual environment and detracts from the rural character. The reduction in mainline capacity that results from a traffic signal also often accelerates the need for roadway widening. In addition, while traffic signals can enhance safety in some respects (generally by reducing angle crashes), they can sometimes decrease safety with increases in rear-end

crashes. While traffic signals are usually relatively cheap and create limited impacts in the short term, they do create delays to mainline traffic that continue year after year and affect local,



regional, and corridor-wide traffic. The vision for Route 29 is also to significantly reduce the number of traffic signals on the roadway with an ultimate long-term goal of eliminating signals entirely (this would be done in concert with local circulation and land use plans). The goal of achieving this vision can stimulate creative thinking on a wide range of context- and area-sensitive solutions, including:

- U-turn and jug-handle treatments, as well as roundabouts (these are illustrated in Chapter 4)
- Construction of various interchange types, including relatively small footprint diamond interchanges, as well as quadrant intersections that make use of local roads to serve as access ramps (also illustrated in Chapter 4)
- Development of a parallel road system that not only promotes nodal growth patterns rather than strip development patterns, but also limits access to one or two locations that can be constructed with the the various u-turn, roundabout, and interchange concepts
- Solutions and changes in requirements that adjust current thinking that results in traffic signals being installed before all other possible approaches have been identified and explored

- Requirements that plans for any new traffic signal include an ultimate “exit” strategy that allows for the signal to be removed at some time in the future (including requirements that right-of-way be reserved for an interchange, that access via future roads be included in plans, etc.) – this provides a mechanism for the true cost of a traffic signal to be more effectively captured at the time of signal installation

### **Enhance Overall Mobility and Reduce Congestion:**

The third component of the Route 29 vision relates to a consistent corridor-wide focus on continuing to address the congestion that affects local, regional, and corridor-wide traffic. This component is related to the first two to the extent that most of the areas in the corridor that have significant levels of congestion are areas with traffic signals. In order to address the fact that Route 29 is a corridor of statewide significance that serves more than local and regional traffic, the performance measure for congestion mitigation is not simply delay at a single intersection, but rather travel time on segments of several miles or more. Ultimately, this component of the vision is to achieve travel at approximately 50 miles per hour or better throughout the corridor. There are a number of ways that can be used to address this component of the vision, including many already



cited such as growth management, control of access points, and reduction in traffic signals (or, at a minimum, reducing the number of new signals). Other key tools to achieve this component of the vision include:

- Interconnection of traffic signals and re-timing of signals within arterial corridors on a regular cycle
- Increased use of video detection and traveler information in the corridor
- Coordination between regional transportation operations centers and local emergency response services to enhance cooperation and timely response to emergencies that affect roadways and other travel modes

**Expand Travel Mode Choices:** Solving existing transportation problems in the Route 29 Corridor, and addressing future problems, will require solutions across all modes of travel. In many cases, additional travel lanes would not be the appropriate solution and, where they would be, they should be accompanied by measures to ensure that new capacity is used efficiently by including provisions for travel by carpools, commuter bus, and, where appropriate, bicycle in the designs for expanded capacity. In general, the population densities and diffuse trip origins and destinations within



the Route 29 Corridor are most supportive of transit by bus and high-occupant vehicles (carpools); a key aspect of this component of the Route 29 Corridor vision is to enhance the competitive advantage of these modes through such actions as:

- Develop and implement an aggressive park-and-ride program to serve commuter bus and carpools
- Identify and implement cost-effective ways to support enhanced mobility by commuter bus such as traffic signal priority and/or preemption, construction of bus lanes to bypass recurring roadway congestion, improved traveler information for bus service, as well as potential services such as guaranteed ride home programs
- Promote land use patterns that support travel by transit (discussed more below)

Over the long term, areas of the corridor that prove to be viable transit corridors based on efficient bus service should be shifted to bus rapid transit (BRT service on separate travel lanes) or to commuter rail (such as extension of VRE service). The vision for the Route 29 Corridor also includes increased

use of the railroad line for additional passenger rail service and to increase track capacity over the long term in order to improve on-time performance for such service. The vision includes maintaining the recently introduced passenger service from Lynchburg to Washington DC and the Northeast Corridor beyond its current trial period, providing for bus service to connect Danville residents to Lynchburg in order to take advantage of the service, and double-tracking portions of the Norfolk Southern railroad lines that parallel Route 29.

**Corridor Planning for Land Use and Transportation:**

Both the initial impetus for this study and the feedback gained over the course of the study indicates a need for consistent and ongoing planning that, at a minimum, crosses jurisdictional boundaries and, more ideally, encompasses the entire corridor. All of the transportation features, both existing and future, in the Route 29 Corridor are a shared resource of the communities in the corridor, and it is important that these communities coordinate with each other and VDOT both in terms of the roadway itself, but also with respect to land use plans that directly and indirectly have an effect on roadway transportation as well as transit, rail, bicycle, and pedestrian transportation.

Actions to support this component of the vision include:

- Adoption of the Route 29 Corridor Study by all localities and planning organizations (Metropolitan Planning Organizations and Planning District Commissions)
- Cross-jurisdictional



planning efforts coordinated through the corridor's planning districts to refine and begin to implement in ways that reflect local conditions and sensitivity context

- Ultimate evolution to a corridor-wide implementation plan that provides additional specifics on both transportation and land use plans that support the Study
- Modification of locality Comprehensive Plans to support both the Study as well as cross-jurisdictional implementation plans

### **Enhanced Stewardship Role for VDOT to Preserve Transportation Investment:**

Route 29 represents a substantial capital and ongoing maintenance investment by the Commonwealth of Virginia through VDOT. With current fiscal conditions in particular, it is imperative that VDOT take a bigger role in reducing the extent to which various actions, including increases in the number of access points on Route 29, continue to degrade the functionality and safety of this important investment. Some of the possible actions to support this component of the vision include:

- Further strengthening of access management regulations
- Increased partnering by VDOT with local governments in land use planning in order to minimize pressures for new access points, to consolidate access points, ensure that access points do not include traffic signals unless absolutely necessary, and that any new signalized access points include provisions to ultimately remove the traffic signal
- Provision of incentives to local governments to develop and implement land use and land access plans that minimize new access and/or require appropriate types of access

### **Preserve the Integrity of Corridor as a Statewide Scenic, Historic, and Environmental Resource:**

Much of Route 29 through Central Virginia passes through rural areas, areas that have a tremendous scenic value that is accented, in many areas, by rolling terrain and mountain views. In addition, much of the corridor traverses areas with important historic and environmental resources. All of the components of the

vision described above will play a key part in the realization of this final component. Transportation improvements that seek to accommodate demand but seek to maximize the use of non-auto modes is a key first step. Accommodating remaining demand with roadway improvements that are sensitive to the



surrounding context, and that seek to limit the demands for strip development through access management and control, are a second step. Limiting the negative impacts of traffic signals on roadway capacity by seeking to limit and ultimately remove traffic signals is a third step that relates to both scenic values and historic context. Nodal development patterns resulting from effective coordination between land use and transportation planning, and between VDOT and local governments, is a fourth step. Finally, this last component of the vision also stands on its own as a guiding principle for continuing to emphasize the high degree of importance in preserving the corridor's irreplaceable scenic, historic, and environmental resources.

It is the intent of this vision for the Route 29 Corridor to pinpoint general actions and desired outcomes based on input provided over the course of this study while recognizing that the process of getting to the desired outcome requires flexibility across jurisdictions. This flexibility allows for variability in context across the corridor to be taken into consideration. The vision also recognizes that some changes to current policies and procedures are needed in order to succeed in achieving many of the goals cited by corridor citizens and leaders such as preservation of rural areas and scenic values, and reducing the direct effects of growth on Route 29 in terms of travel times and safety. As with specific projects, there are a range of options to change policies and procedures ranging from new legislation and regulation to more gradual changes combined with incentives. Chapter Four provides details on prototypes and options that can effect needed changes to achieve the vision while preserving the need for flexibility across a corridor as diverse as Route 29.