

The Route 29 Corridor Study was initiated at the request of Virginia's Commonwealth Transportation Board in response to requests from members of the General Assembly representing areas in the corridor, as well as local elected officials.

The study covers 219 miles extending north from the Virginia/North Carolina line to Interstate 64 at Gainesville and, as a multi-modal transportation study, covers not only the transportation system, including transit, within the geographic areas served by Route 29, but also the Norfolk-Southern railroad line that parallels much of the corridor. Because roadway congestion has the potential effect of causing motorists to change routes (in addition to changing travel modes and/or times of day for the travel), the study considers an area wider than Route 29, to ensure that diversion potentials are addressed in analysis and discussions. However, the focus of the study remains on travel within the Route 29 transportation corridor. Within the study, concerns have been addressed relating to:

- Overall safety and congestion in the corridor;
- Ability to serve local and longer-distance trips both today and in the future;
- The effects of local traffic and limited levels of access control on travel within the corridor;
- The need for improved integration of land use and transportation planning; and
- Preserving the scenic and historic integrity of the corridor as a statewide scenic resource.

This study also represents an effort to assess and consolidate the findings and recommendations from numerous other studies that have been performed in various sections of the 219-mile long corridor. Some of the studies that have been performed in the corridor since the mid-1990's include:

Study	Completion Date
Rt 29 Corridor Development Study Phase I ( <i>comprised of 10 individual documents</i> )	1996
Route 29 Pedestrian Study for Charlottesville and Albemarle	1998
Route 29 Corridor Development Study Phase II and III	2003
29H250 Study	2004
West Piedmont Regional Bicycle Plan	2005
Route 29 Corridor Management Study -- Campbell County	2005
Route 29 in South-Central Virginia: Transportation and Economic Development Study	2005
Route 29 Corridor Management Study -- Campbell County	2005
Route 29 Corridor Management Study -- Amherst County	2005
Lovingston Safety Study	2005
Central Virginia Regional Action Plan for Coordinated Land Use and Transportation Planning	2005
Buckland/ Gainesville Bypass Study Draft Report	2006
Traffic Impact Overlay Plan For the Ambriar Area	2007

Study	Completion Date
Route 29 North Corridor Transportation Study --Access Management Strategy (Places 29)	2007
Route 29 North Corridor Transportation Study -- Final Report (Places 29)	2008
Route 29/ Ashwood Blvd. Safety Assessment	2008
Route 29 Access Management Study (MPO)	2009
Route 29 Access Management Study (VDOT)	2009
Routes 460 and 29 Corridor "Improving safety through access management"	2009
Route 730 to Route 29 Connector Study	Ongoing
Greene County Multimodal Study	Ongoing
Rappahannock-Rapidan Regional Long Range Transportation Plan	Ongoing

Based partly on the availability of information and recommendations from previous studies, the Route 29 Corridor Study focuses less on detailed quantitative analyses and more on efforts to identify a planning framework for the corridor. The framework functions as the starting point for developing transportation improvements that would serve the wide range of trip types in the corridor, whether short and long in length, local and regional, or focused on motor vehicles, rail, transit, or other modes. The development of this planning framework involved an extensive public and stakeholder participation process as well as ongoing discussions with the more than twenty jurisdictions in and near the study corridor. A key element in developing the planning framework was to identify transportation and land use issues, concerns, and potential changes around which a corridor-wide consensus could be formed. Follow-on activities that focus at a more local level would develop and assess the high-level recommendations from this study. It is these follow-on activities that would identify potential transportation corridors, more refined requirements for rights-of-way, engineering considerations and seek to minimize, avoid, and/or mitigate potential impacts to the natural and man-made environment.

## THE NEED FOR IMPROVEMENTS IN THE ROUTE 29 CORRIDOR

The Route 29 corridor, consisting of the roadway itself, various Route 29 Business routes and other parallel local roads, railroad lines that run roughly parallel to the road, and the services that are provided on each of these facilities (i.e., transit bus service, commuter bus, carpooling, intercity rail, freight, bicycles, pedestrians) represents the single most important north-south transportation asset in Central Virginia. In the majority of the corridor, it is the only north-south roadway; when sections of Route 29 need to be closed emergency reasons, viable detours are severely limited and add many miles to motorist trips. Much of the input received at public meetings for this study reinforced the importance of this transportation corridor. It plays an extremely important part in the daily lives of Central Virginians as well as in the region's economic vitality.

The need for improvements in the Route 29 corridor was identified through several sources. Because

a key aspect of this study was the consolidation of previous studies, the initial identification of need for improvements came from those sources. Other sources used to identify needed improvements included VDOT databases on crash history (the 2005 to 2007 database was used) and traffic data (including existing and year 2035 volumes and projected levels of service), as well as meetings and telephone interviews with VDOT regional operations personnel (to identify traffic operations needs) and staff from the Virginia Department of Rail and Public Transportation (DRPT). Because both traffic operations and safety are affected by the number of access points (such as side roads and driveways) along Route 29, data was also collected and summarized on the number of access points on each segment of Route 29 within the study area.

The final, and most important, source of information on existing needs in the corridor came from those who live and work in the corridor. This information was gleaned through a series of public meetings (eight were held in February and March of 2009), workshops with regional leaders (four workshops were held in March and April of 2009), and team working sessions that were open to the public (held approximately every other week in various locations throughout the entire study process). Detailed information on the entire public involvement process is included in Appendix E.

## ROADWAY SAFETY

As could be expected, crashes on Route 29 occur most frequently on those sections of the road that carry the highest volumes of traffic, and where traffic volumes from side streets are highest. **Exhibits 1 and 2** illustrate the number of crashes both south and north of I-64, respectively.

The following table summarizes the same crash database by jurisdiction. It is important to note that crash data is collected separately for independent cities and the data for the Cities of Danville, Lynchburg, and Charlottesville are not included in the following Exhibits.

### Summary of Crashes at Intersections on Route 29 from North Carolina to the Fauquier/Prince William Line

*Total Crashes from 2005 to 2007*

Jurisdiction	Total Crashes (2005-2007)	Number of Persons Injured or Killed (2005-2007)
Albemarle County	887	383
Amherst County	29	13
Campbell County	185	114
Culpeper County	84	56
Fauquier County	184	71
Greene County	112	67
Madison County	107	63

Exhibit 1: Crashes South of I-64

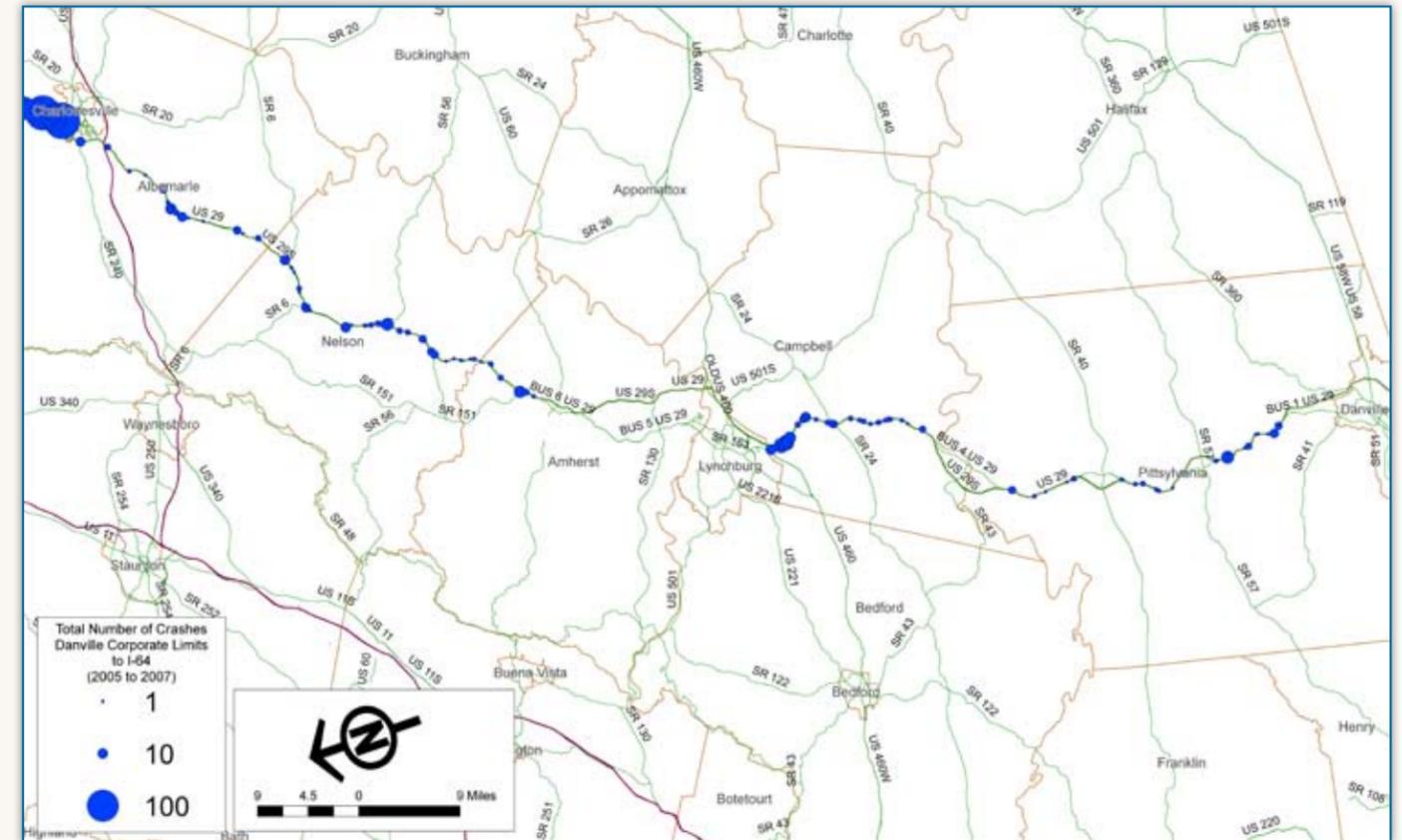
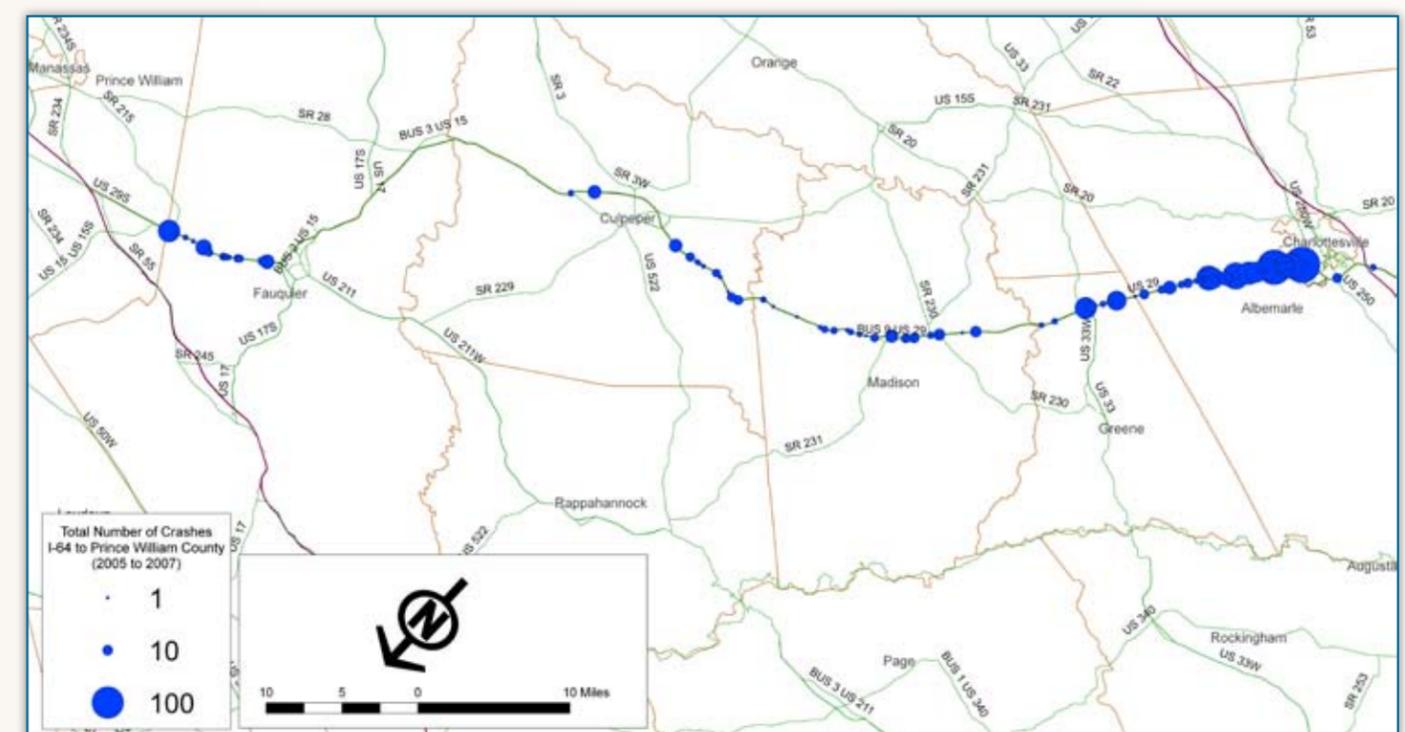


Exhibit 2: Crashes North of I-64



Jurisdiction	Total Crashes (2005-2007)	Number of Persons Injured or Killed (2005-2007)
Nelson County	110	112
Pittsylvania County	82	54
<b>TOTALS</b>	<b>1780</b>	<b>933</b>

Source: VDOT database of crashes between January 1, 2005 and December 31, 2007. The database does not include areas within the independent cities in the corridor. Crashes were tabulated for locations where at least one intersection approach is Route 29.

Overall, the highest number of crashes during the three-year period from 2005 through 2007 occurred in northern Albemarle County with the highest concentration in areas just north of the City of Charlottesville. Overall, close to half of the total crashes in the non-city portions of the corridor occurred in Albemarle County, while approximately 77 percent of the crashes occurred north of I-64. As stated previously, this reflects, to a large extent, the overall higher levels of traffic in these portions of the study corridor (inclusive of traffic both on Route 29 itself as well as higher volumes on intersecting side streets).

Several other concerns and areas of need either specifically or peripherally related to safety were raised by attendees at the study's public meetings. These include levels of truck traffic, high vehicular speeds, and the proliferation of new driveways onto Route 29.

## TRAFFIC VOLUMES

The following traffic volumes were obtained through traffic studies completed by the Virginia Department of Transportation.

### Summary of Traffic Volumes

Area/Jurisdiction	Traffic Volume (Max)	Traffic Volume (Min)
Danville City	35,828	10,341
Pittsylvania County	19,749	2,653
Southern Campbell County	18,851	5,531
Northern Campbell County/ Lynchburg Area	43,939	7,977
Amherst County	24,679	2,683
Nelson County	15,827	2,814
Southern Albemarle County	41,315	11,267

Area/Jurisdiction	Traffic Volume (Max)	Traffic Volume (Min)
Northern Albemarle County/ Charlottesville Area	56,785	13,539
Greene County	28,845	15,841
Madison County	20,482	3,722

**Exhibits 3 and 4** illustrate the relative traffic volumes experiences each day in localities along the Route 29 corridor.

### Exhibit 3: Traffic Volumes South of I-64

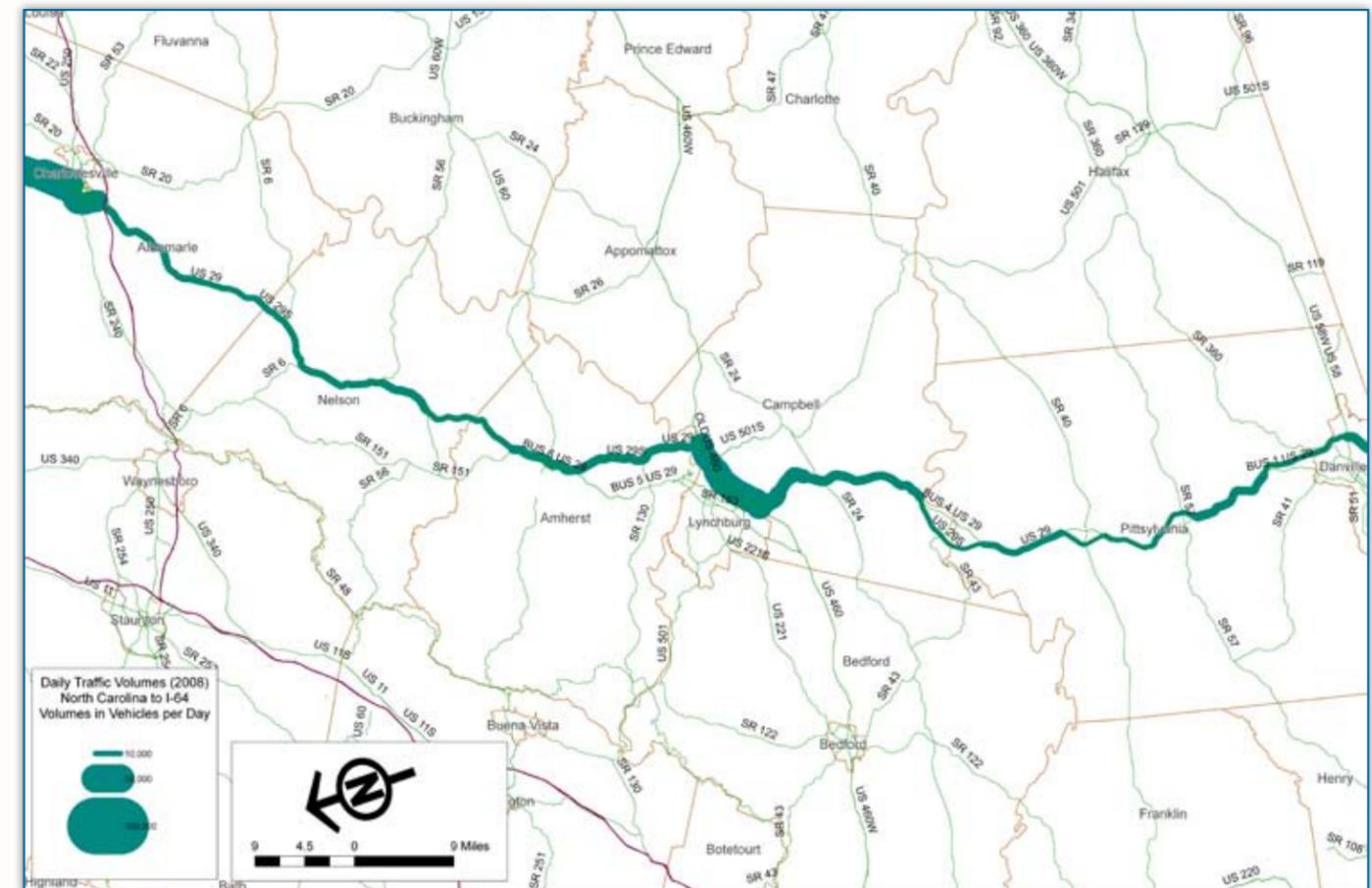


Exhibit 4: Traffic Volumes North of I-64

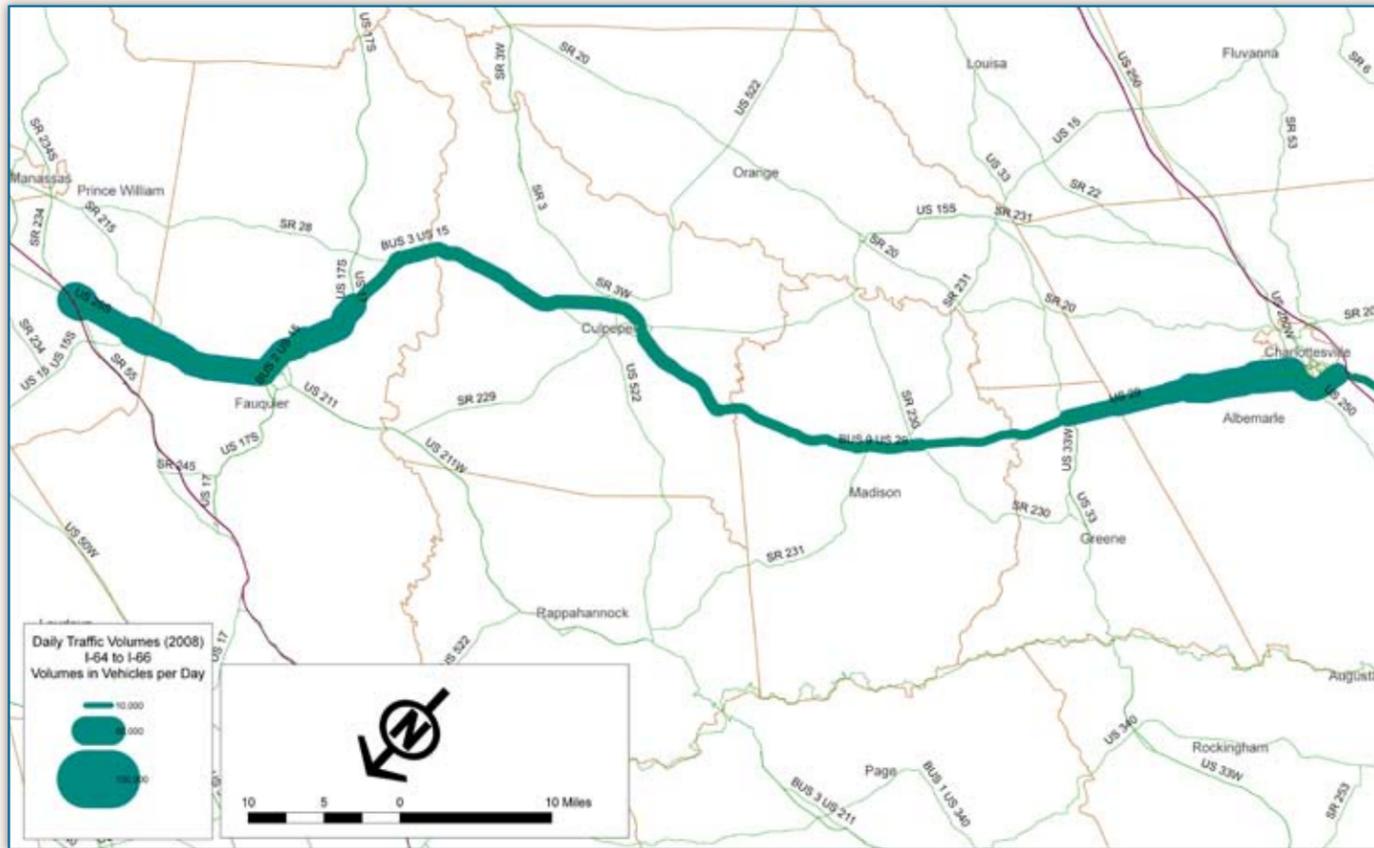


Exhibit 5: Traffic Signals South of I-64

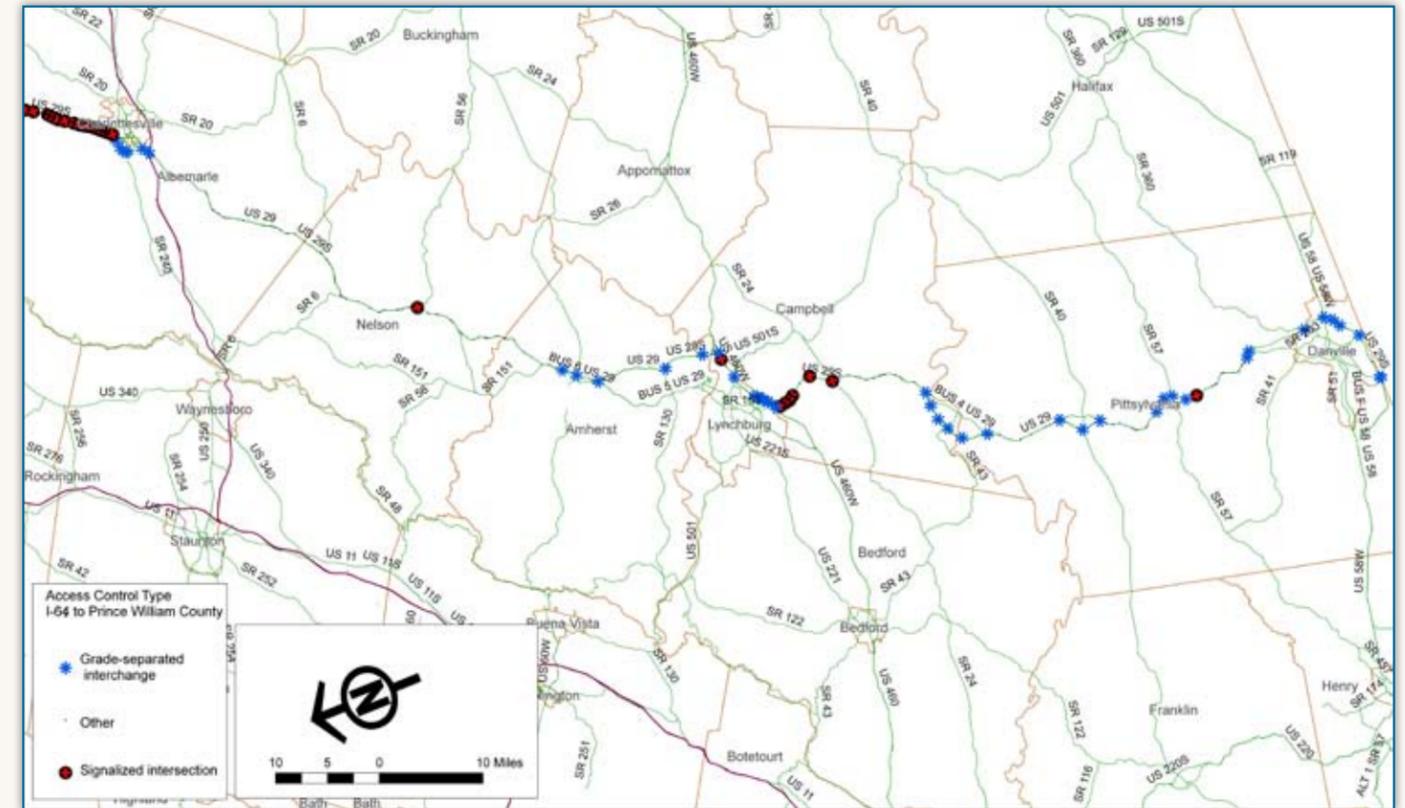
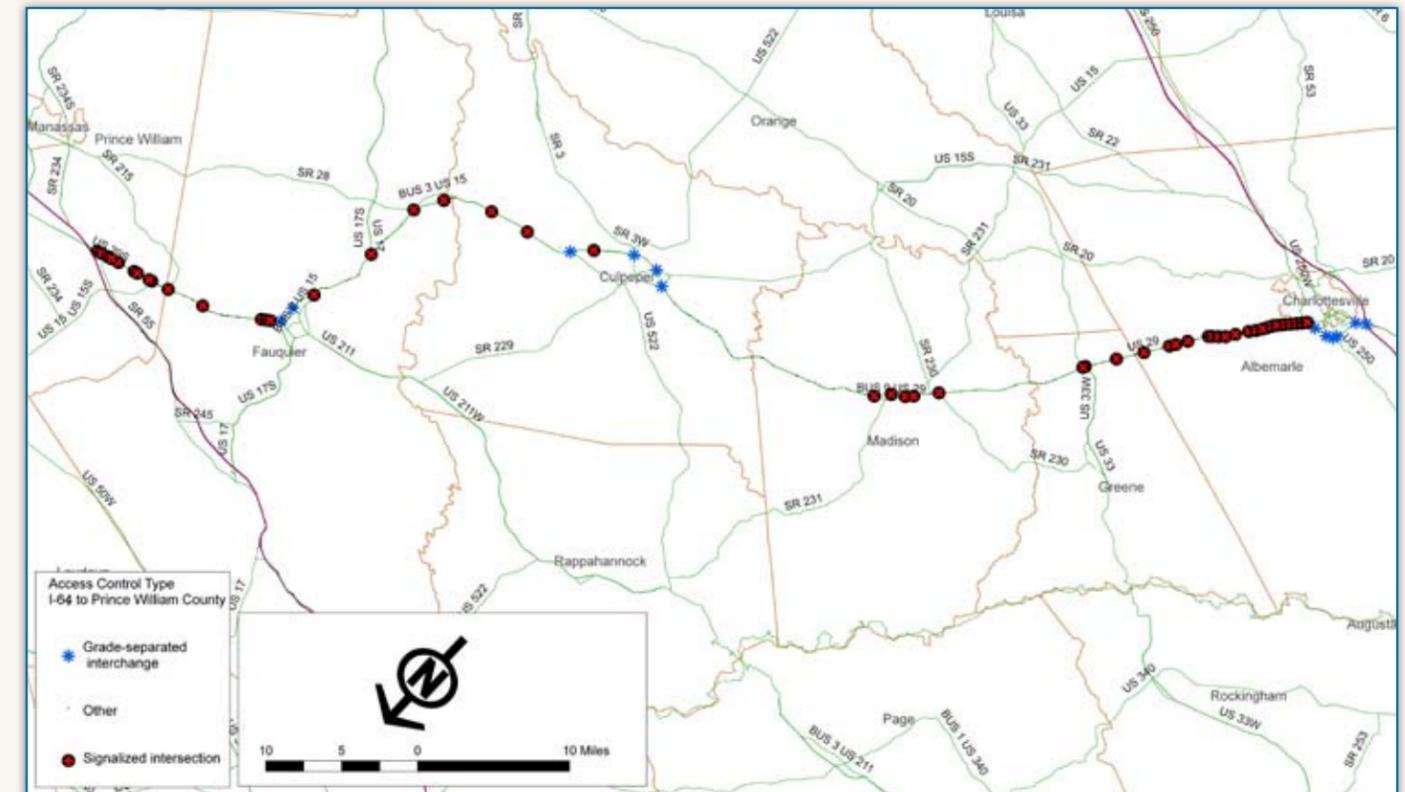


Exhibit 6: Traffic Signals North of I-64



## TRAFFIC SIGNAL PROLIFERATION

Exhibits 5 and 6 show the extent to which traffic signals have become widespread in the Route 29 corridor. In the southern end of the corridor, traffic signals are numerous south of Lynchburg. In the northern end of the corridor, traffic signals are especially prevalent in Northern Albemarle County, Madison County, and Fauquier County. While these signals help to control access to the roadway, they often have a jarring effect on traffic flow when too many are added. This is the current condition experienced by drivers who travel in the areas described and is a particular concern of residents who live in and around these areas.

## LACK OF MODAL CHOICES

Currently, local and regional transit service is interspersed and segmented in the Route 29 corridor. Six transit providers have operations within the corridor, but, as a whole, Route 29 from the North Carolina border to Interstate 66 is not transit rich. The level of local and regional transit is conformant with the mostly rural development pattern along Route 29. Urbanized areas provide more transit services, often in the form of fixed route bus service. Smaller localities are starting to establish bus services to attract large companies seeking to locate facilities in areas where workers can commute to and from work. Otherwise, demand response services are available through most of the corridor.

As population grows and traffic problems worsen along the route 29 corridor, gaps in local and regional transit service- and opportunities to add new service- present themselves. The long range demographic forecasts show a growing population and employment base all along the Route 29 corridor, but especially in the northern end. While the corridor has several defined destinations and employment centers, most trips to them cannot be made conveniently by transit. **Exhibit 7** shows the projected



population change and potential transit service improvements envisioned in the VTrans 2035 Plan, developed by the Office of Intermodal Planning and Investment within VDOT. As shown in the exhibit, where 0-12% population growth is expected, such as in the southern end of the corridor, demand response transit service could be introduced. Where 12-25% population growth is projected, demand response transit service could be increased, fixed route coverage could be expanded, and transportation demand management strategies could be put into place. Where 25-50% population growth is anticipated, particularly in and north of Nelson County, there could be a focused expansion of fixed route coverage and transportation demand management strategies. And, where 50-80% population growth is expected, as in Prince William County, major capacity investments should be planned, in addition to expansion of fixed route coverage and transportation demand management strategies.

In response to a questionnaire available to the public from February 2009 to October 2009, approximately one hundred residents who live near the Route 29 corridor had something to say about the lack of modal choices in their communities and on Route 29. The main purposes for the respondents' travel ranged from commuting to and from work, shopping, recreational and leisure purposes, and medical appointments. The majority of respondents said they do not take public transit. When asked whether they would consider taking transit, should it become available, responses were pretty evenly split. Among those that said "yes," most cited desired use of train and/or bus transit. Those that said "no" cited scheduling/job/family constraints with using transit. When asked if existing transit services are meeting the needs of those traveling the Route 29 corridor, most respondents cited either a lack of knowledge about transit options or felt that the Route 29 corridor should have more public transit options. These responses tell an important story about how most residents perceive transit—that it's not readily available, hard to use, and inconvenient in terms of current destinations. It will be vital, as transit service is expanded in and around the Route 29 corridor that public information campaigns coincide to help better inform the public about how they might utilize transit services.

## NEED FOR GROWTH MANAGEMENT

While development pressures are experienced throughout the Route 29 corridor, growth pressures have been particularly acute in Prince William County. Among the counties in the Washington D.C. metropolitan region, Prince William County was second only to Loudon County in population growth between 2002 and 2006, adding 62,000 jobs and growing, population-wise, by 20%. According to the VTrans 2035 projection, Prince William County is expected to grow by nearly 60% over the next 25 years. Albemarle County is also expected to grow significantly, between 25-50% during that time. In both places, congested segments of Route 29 cannot withstand more automobile trips. Thus, less auto-dependent development typologies are needed to provide for transit alternatives. These development strategies can be reached in urbanized areas, such as those in Prince William and Albemarle Counties, through the implementation of growth management principles. Concentrating and clustering development around transit options will help to alleviate some of the congestion currently experienced on Route 29 and will help to prevent future sprawl.

In more rural areas, where new development tends to create a sprawling land use pattern, growth management strategies are also needed. Because Route 29 has a very scenic quality in its rural stretches, it is important to the residents that live near it to maintain the valuable farm and timberland that fronts on the roadway. The public participation process in this study yielded several ideas for how this preservation could be achieved, including limiting access points on the roadway, expanding rail service rather than adding highway lanes, limiting access by large trucks, and limiting new development. Through the implementation of growth management principles in both planning and development, each of these ideas can be acted upon in a way that maintains the roadway's character and also ensures healthy growth.

Exhibit 7: Projected Population Change and Potential Transit Service Improvements

