

*Montross*

5

TRANSPORTATION



## 5. TRANSPORTATION

Given Montross's unique location on the path of major traffic on State Route 3, this section focuses entirely on transportation-related issues, in good part to provide the Virginia Department of Transportation (VDOT) with an opportunity to review the Town's future land-use plans and thus be able to prepare for the Town's future transportation needs.

### 5.1 Existing Transportation Conditions

Traffic-safety concerns were clear in residents' responses to the Town's survey. In particular: the need to enforce the speed limit and to minimize the circulation of large trucks through Town. Many residents also mentioned the current lack of safe pedestrian crosswalks.

State Route 3, a VDOT "Primary Arterial Thoroughfare," bisects the Town from east to west. It is a four-lane roadway from the eastern boundary of the Town to the village center, where it narrows to two lanes.

To the east of Montross, Route 3 connects with Route 360 at Warsaw, where 360 goes on across the Rappahannock River to Tappahannock and the City of Richmond.

To the west, Route 3 connects with U.S. Route 301, twenty-five miles from Montross, and it also connects with U.S. Route 1 and Interstate 95 at Fredericksburg, at a distance of fifty miles from the Town.

The Town of Montross is located along a major corridor that realizes large increases in the flow of traffic beginning in the time of late Spring and continuing through late Fall.

The seasonal increase in traffic is linked to certain days of the week, usually from Thursday evenings through noontime on Mondays, during the season. The peaks of this traffic occur on Friday afternoons or evenings, and again on Sunday afternoons or evenings.

The impact of seasonal traffic on local road conditions cannot be underestimated, and it has to be further studied in order to properly assess future transportation needs in the Town.

A number of secondary (or collector) roads are based on older paths to nearby communities. The local road network serving the Town is based on the pre-automotive layout of the village.

Most streets and roads within Montross are maintained by VDOT. State law requires VDOT to assume operation and maintenance responsibility for up to one-quarter mile of new road in each locality per year, provided the roads are constructed to VDOT specifications.

This provides an effective mechanism to encourage developers to construct high-standard roads for subdivisions and other projects, to turn them over to the Town when completed, and to then have VDOT assume responsibility for maintenance and safety.

However, this approach creates problems sometimes for localities that find that VDOT standards apply more to large urban areas, like Richmond, than to rural communities.

The Town should work with VDOT to bring non-conforming elements as close to compliance as possible. The Northern Neck Planning District Commission is currently working on a model ordinance that will set specific standards for retrofit projects. To improve existing access deficiencies, the Town should use this model to develop and adopt such standards.

### 5.2 Future Transportation Conditions

While long-term development is difficult to predict, some assessment of potential growth is necessary to assess future transportation needs. The Town should work with VDOT to conduct additional traffic counts, especially at key intersections.

A review of historical traffic trends—as well as population forecasts for the Montross and Westmoreland County area—is one tool to predict future needs.

#### Historical Traffic Trends

The Virginia Department of Transportation conducts traffic counts with the use of sensors in or along a street or highway.

From the data collected, VDOT estimates the average number of vehicles that travel a given segment of road.

Data collected in 2001 and 2005 produced the following average daily traffic estimates on State Route 3:

Segment (in Town)	2001	2005
East of Peach Grove Lane	8,800	8,600
West of Peach Grove Lane	5,000	5,400

Based on Westmoreland County’s 3.2% growth in population from 2000 to 2005, along with the potential for additional growth due to Enterprise Zone activity, a 5% increase in traffic volume is estimated for the next two five-year periods. This results in the following average daily traffic projections:

Segment (in Town)	2010	2015
East of Peach Grove Lane	9,030	9,481
West of Peach Grove Lane	5,670	5,953

The implications on roadway Level of Service (LOS) cannot be determined without additional data. Generally, the capacity of a four-lane, undivided highway can be in the 40,000-to-60,000 average daily range. However, this number decreases at signals or at locations with significant turning movements.

### 5.3 Access Management

Managing access along Route 3 might help avoid undesirable modifications such as widening of roadways through the center of Town.

Access-management techniques include a broad range of roadway treatments, but given the variety of roadway conditions in Montross, not all of these will apply throughout the Town.

These access-management techniques tend to be highway-oriented and will have broader application on Route 3 outside the Town. In addition, some standards will only be applicable above certain speeds limits.

Nevertheless, a few of these provisions may have application within the Town core. Local officials should coordinate with VDOT to determine the most appropriate use of the general standards.

The Northern Neck Planning District Commission is currently developing a Model Overlay District to address such things as setbacks, signage, landscaping, and lighting. The Town should use this model—perhaps by adopting an access-management ordinance—for its major thoroughfare.

The following include both Standard VDOT access-management techniques and additional ideas tailored to the Town’s needs.

#### Turn Lanes

##### VDOT Standards

By separating turning vehicles and through traffic, turn lanes can improve highway safety and efficiency. In general, left-turn lanes should be required at median crossovers, and right-turn lanes should be required at all commercial entrances and side streets. In some cases, the use of a paved shoulder can substitute for a right-turn lane.

##### Recommendations

The Town should adhere to VDOT standards.

#### Driveway Spacing and Consolidation

##### VDOT Standards

Because driveways introduce conflict between turning and through vehicles, their spacing is a critical part of highway planning. Generally, a minimum separation of 400 feet should be required. This can be accomplished by means of shared access, indirect access from side streets, and driveway closure and consolidation. New residential subdivisions should include a system of internal roads, with no direct driveway access on the major thoroughfare.

##### Recommendations

The Town should adhere to VDOT standards.

## Corner Clearance

### VDOT Standards

This technique is related to driveway spacing. It addresses the distance from roadway intersections to the nearest driveway. On the primary road (such as Route 3), clearances should be 400 feet upstream of the intersection and 250 feet downstream. On the interesting street, the clearances should be 250 feet upstream and 100 feet downstream.

### Recommendations

The Town should adhere to VDOT standards.

## Sight Distance (Visibility)

### Recommendations

The Town should work with VDOT to ensure adequate sight distances for new development and redevelopment. Signage, landscaping, and setback requirements can help maintain sight distances, and the Town should adopt an ordinance addressing each of these issues.

## Crossover Spacing and Consolidation

### VDOT Standards

Like driveways, median crossovers require adequate spacing for efficient highway function. In general, full-access crossovers should have a minimum spacing of 0.5 miles, while directional crossovers should be a minimum of 0.25 miles apart. In some cases, attaining this standard may require closure of existing crossovers.

### Recommendations

The Town should manage new development to avoid the need for crossovers that violate these standards. Where development occurs at existing crossovers, access to adjacent parcels should be considered.

## Median and Crossover Width

### VDOT Standards

The width of a median affects the ability

of vehicles to pause in the median while turning or crossing the roadway.

Crossover width is the actual size of the opening in the median, and it affects the ability of large vehicles to navigate the opening safely and efficiently. Standards vary depending on use.

### Recommendations

At major traffic generators and cross streets, the Town should seek a minimum of 50 feet median width, which may require roadway widening or flaring. At locations where buses or tractor-trailers make frequent turns, crossovers should be widened to accommodate these users. Where median and crossover widening is not possible, consideration should be given to converting full access crossovers to directional crossovers, thereby prohibiting certain turning movements.

## Signal Spacing and Timing

### Recommendations

In order to accommodate pedestrian crossing, and as development continues, certain locations along Route 3 might require new traffic signals. Because the spacing of signals dramatically affects roadway function, a spacing of 0.5 miles should be maintained in developing areas, and a spacing of 0.25 miles in developed areas near the Town center. The need for timing coordination of any new signal with the existing signal at the east end of Town should be investigated.

## Inter-Parcel Connection

### VDOT Standards

Connecting adjacent parcels by means of an access drive can eliminate short local trips on the main road.

### Recommendations

Where new commercial development occurs, the Town should require connection to adjacent commercial uses or “stubbing” of connector roads to adjacent, vacant, commercial parcels.

## Local Road Connections

### VDOT Standards

Like inter-parcel connections, a connected system of local roads can reduce demand on the major thoroughfare.

### Recommendations

The Town should require that new residential subdivisions connect to the existing road system and make provisions for future connections to land that is currently undeveloped.

## Crosswalks and Pedestrian Safety

### Recommendations

Crosswalk enhancements are needed at various locations where Route 3 intersects key points of commercial interest in the Town. These enhancements could take a variety of forms, such as traffic control devices (e.g. stop lights, flashing lights, etc.), marked pavement, stamped pavement, or streetscape enhancements designed to cue drivers that they have entered a pedestrian area.

Locations where safe crosswalks are most needed include the Town's post office and various intersections (Polk Street, Porter Lane, Opal Lane, Lyells Street, Peach Grove Lane, Zacata Road, etc.)

To assist in planning these enhancements, and as a first step toward obtaining implementation funding, the Town should develop a master pedestrian and bicycle plan.

Such a plan would identify specific improvements at these locations, and would develop a Town-wide program for improving access. Implementation priorities, timeframes, and cost opinions would poise the Town to obtain grant funding.

Immediate Action (2007-2008): Seek funding to develop a master plan.

Short Term (2008-2010): Seek funding to design and construct enhancements.

## Future Paths and Bike Routes

### Recommendations

The Town should work with developers to provide bicycle and pedestrian facilities as new development occurs. In all cases, possible pedestrian connections to the existing sidewalk network should be encouraged. To assist in identifying and prioritizing such facilities and connections, the Town should develop a master pedestrian and bicycle plan.

Immediate Action (2007-2008): Seek funding to develop a master plan.

Short Term (2008-2010): Seek funding to design and construct priority plan elements.

Long Term (2007-2020): Work with developers to implement plan in incremental fashion.

## Sidewalk Connections

### Recommendations

A continuous sidewalk from the west end to the east end of the Town should be the goal, as well as a sidewalk that meets standard features and is consistent throughout its length.

To assist in planning these connections, the Town should develop a master pedestrian and bicycle plan.

Immediate Action (2007-2008): Seek funding to develop a master plan.

Short Term (2008-2010): Seek funding to design and construct enhancements.

Long Term (2007-2020): Based on the master plan, seek funding to develop additional segments as the town is developed.

## Local Road Connections

### Recommendations

To provide alternative means for local trips, the Town should work with VDOT

through its transportation planning and programming process to evaluate potential future improvements.

### Intersection Improvements

#### Recommendations

Safe pedestrian crosswalks at intersections have a high priority to Town residents.

### One Way Street

#### Recommendations

No recommendations at this time.

### Gateways

#### Recommendations

Montross has two gateways through which rural traffic enters the Town: Route 3 east and west. As entrances into the Town, these areas provide visitors with their first impression of Montross. As such, their appearance, traffic flow, and character are extremely important.

The Town's access-management policies should preserve and enhance the function and character of the Town's gateways. In addition, the Town should pursue signage and streetscape enhancements to denote these entrances and welcome travelers to Montross.

Immediate Action (2007-2008): Seek funding to develop a streetscape master plan and construct gateway enhancements. Adopt overlay zoning to protect corridors.

### Transition Areas

#### Recommendations

Transition areas are those where road uses are predominantly highway-oriented, but also where speed limits begin to come down and the highway's rural character shifts to suburban and commercial.

Having entered through one of the Town's gateways, motorists now begin to experience the fabric of Montross.

Elements such as access management, commercial signage, streetscaping, traffic calming, and pedestrian access define this area.

Currently, this area corresponds to Route 3 from the gateway at Zacata Road to Porter Lane.

Immediate Action (2007-2008): Seek funding to develop a streetscape master plan.

Short Term (2008-2010): Seek funding to construct streetscape enhancements.

Long Term (2007-2020): Implement signage and access guidelines, work with developers and VDOT to retrofit non-conforming sites, and develop traffic-calming and pedestrian measures.

### Town Core

#### Recommendations

The town core, with its shallow setbacks and mixed uses, forms a compact, small-town environment. To preserve and enhance this character, the Town should ensure adequate vehicular and pedestrian access, along with parking to accommodate residential, commercial, and public uses.

Specifically, sidewalks and crosswalks should promote safe and efficient access for pedestrians throughout the Town core. Adequate parking should be provided, and should be placed behind buildings and not next to the sidewalk and street.

The need for public parking within the Town core should be analyzed in conjunction with a streetscape master plan.

Immediate Action (2007-2008): Seek funding to develop a streetscape master plan.

Short Term (2008-2010): Seek funding to construct priority streetscape enhancements.

Long Term (2007-2020): Work with developers and VDOT to retrofit non-conforming access and parking. Identify infill sites and develop public parking on them. Implement signage and access guidelines.

