

An aerial photograph of a highway interchange with multiple overpasses and ramps, set against a backdrop of rolling hills and some buildings. The image is faded and serves as a background for the text.

CHAPTER 5

TRANSPORTATION

GOAL

Create and sustain a transportation system that meets the demands for existing and future traffic; skillfully integrates existing and planned development; and provides a safe and cost-efficient transportation network. Investment in the County's transportation network should promote the following:

- ❖ Safety (including pedestrian safety)
 - ❖ Coordination between transportation and land use planning
 - ❖ Economic development efforts
 - ❖ Accessibility and interconnectivity of different travel modes
 - ❖ Congestion reduction
 - ❖ Minimizing impacts to environmental and cultural resources
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CHAPTER 5 TRANSPORTATION

The design and location of roads strongly influences the pattern and location of land uses. A well-functioning transportation system in Goochland County is essential for the efficient movement of vehicles, people, and freight; maintaining the quality of life; and facilitating economic growth. As population and commercial growth continue in both the County and the region, it is essential for the County to proactively plan for managing traffic movement throughout the County.

The County has both a large *publicly* maintained road system that includes an interstate highway, a limited access highway, State primary and secondary roads, and neighborhood streets as well as a number of *privately* maintained roads. Public roads are under the jurisdiction of the Virginia Department of Transportation (VDOT), which builds, operates, and maintains most public roads. The VDOT road network consists of different systems (Interstate, Primary and Secondary), each having distinct funding, maintenance, and planning mechanisms.

TRANSPORTATION PLANNING AND FUNDING

In the County, transportation planning and funding occurs at the state, regional, and local levels. Chief components of the County's transportation funding efforts include the Six Year Secondary Plan

(state/local), the Long Range Transportation Plan (federal/regional/local), and the County's Capital Improvement Program (local).

State

Under the leadership of the Commonwealth Transportation Board, the State employs VDOT to develop transportation plans (Statewide Long-Range Transportation Plan) and allocates funds (annual Six Year Improvement Program (SYIP)). The SYIP also funds the urban highway system (towns and cities) and other transportation modes such as ports, airports, and rail and public transportation.

In the County, VDOT administers and distributes funds for construction and maintenance on interstate, primary, and secondary highway systems. Most public roads in the County are part of the secondary road system. The County includes one interstate (I-64) and six primary roads:

- | | |
|--------------|--------------------------------|
| 1) Route 6 | Patterson Ave./River Road West |
| 2) Route 45 | Cartersville Rd. |
| 3) Route 250 | Broad Street Road |
| 4) Route 271 | Pouncey Tract Road |
| 5) Route 288 | WW II Veterans Memorial Hwy |
| 6) Route 522 | Sandy Hook Road |

Regional

The amended Federal Highway Act of 1962 established that Federal, State, and Local officials create a “cooperative, continuing, and comprehensive transportation planning process” for distributing Federal transportation funds. The Richmond area is served by the Richmond Area Transportation Planning Organization (TPO) which serves as the principal body for regional transportation planning and

disbursement of Federal funds. Goochland County is represented on the TPO governing body by two elected officials. The Regional Long Range Transportation Plan (plan2035) approved in 2012 established the following projects as regional priorities for Goochland County (The projects in gray have been completed or are in progress):

Regional Long Range Transportation Plan (July 2012)

Roadway Type	Project	Description	Status
Primary	Broad Street Rd	4-lane from Rte 621 to Rte 632	Complete
Primary	Broad Street Rd	4-lane from Rte 621 to Rte 623 (ARRA)	Complete
Primary	Broad Street Rd / Fairground Rd	Acceleration lane	Complete
Primary	Rte 288	2 new lanes north of James River	Not yet funded
Secondary	Manakin Rd	Improve area around Three Chopt Rd	Design complete
Secondary	Lee Rd (<i>*reallocated to Ange Rd</i>)	Rural Rustic Road program	Complete
Bridge	Tuckahoe Creek Bridge	Road and bridge study	Not yet funded
Interstate	Ashland Rd / I-64 interchange	Interchange modification report	AMP recommendation
Primary	Rte 288 / Rte 250 interchange	Interchange modification report	AMP recommendation
Secondary	Ashland Rd	4-lane from Broad Street Rd to I-64	AMP recommendation
Secondary	Wilkes Ridge Parkway	New facility, 4-lane divided	Phase I complete
Interstate	Oilville Rd / I-64 interchange	Interchange modification report	Not yet funded
Primary	Hockett Rd / Broad Street Rd	Improve intersection	Traffic signal installed
Secondary	Hockett Rd (Existing)	Redesign from Broad Street Rd to Holly Ln	AMP recommendation
Primary	River Rd West / Patterson Ave	Improve intersection	Not yet funded
Secondary	Oilville Rd	Widen to 4 lanes from Rte 250 to I-64	Not yet funded
Secondary	Blair Rd Improvements	Reconstruct from Rte 6 to River Rd	Not yet funded

Local

Although VDOT has authority for the construction and maintenance of the secondary road system, State law creates a partnership between VDOT and the County’s Board of Supervisors for new secondary road construction. This is accomplished via the Secondary Six-Year Plan (SSYP). The Board is responsible for establishing priorities for the SSYP and VDOT allocates the funding. The County and VDOT schedule an annual public hearing in the second quarter of each calendar year to update the SSYP. The following projects were approved in May 2015 for the FY 2016-2022 SSYP:

Goochland County SSYP Projects

	Project	Type	Status	Cost (\$)
1	River Road W	Sidewalks	Ad 5/26/15	\$353,000
2	Valley View Ln	Rural Addition	Complete	70,880
3	Manakin Rd/ Three Chopt Rd	Safety/ Drainage	Right-of-way acquisition	1,070,000
4	Fairground Rd/ Sandy Hook Rd	PE only	Not underway	313,000
5	Old Stage Rd	Pave-in-place	Not underway	34,500
6	Patterson Ave/ River Rd.	Intersection Safety	Not fully funded	120,000
7	Bulldog Way	Turn lanes	Not underway	250,000
8	Hockett Rd	PE only	AMP Study	400,000
	Rural Additions	VDoT Cost Center	Funds accruing	2,400
	Bridge	VDoT Cost Center	Funds accruing	132,000

PE= Preliminary Engineering

ROADWAY DESIGN AND FUNCTION

Functional Classification

Functional classification categorizes roadways into classes, or systems, according to: 1) the degree of property access desired, and 2) the purpose of the traffic (local vs. thru traffic). There are three functional classifications - arterial, collector, local - and all roadways are grouped into one of these classes. Functional classification is important for establishing design characteristics such as design speed, lane width, access management, bike/pedestrian accommodation, etc. Each classification has specific purposes or functions, as defined by Goochland County as follows:

Arterial Roads

- Provide a high “level of service” (LOS) at the greatest speed
- Move large volumes of traffic
- Property access is limited and highly managed
- Carry the bulk of truck and bus traffic
- Design speeds are higher
- Right-of-way widths vary greatly depending on capacity needs:
 - From a 50 ft. right-of-way w/ 18 ft. pavement to 200 ft. right-of-way (or more)
- May include median strips or parallel service roads
- Planting strip to physically separate pedestrians from vehicular traffic and provide room for utilities, streetlights, and street trees
- Border rather than traverse residential neighborhoods

The following roads are designated Arterial Roads in the County:

- Route 6 Patterson Ave./River Road West
- Route 250 Broad Street Road
- Route 271 Pouncey Tract Road
- Route 288 WW II Veterans Memorial Hwy
- Route 522 Sandy Hook Road
- Route 623 Ashland Road
- Route 632 Fairground Road

Collector Roads

- Provides a high level of service at a lower speed
- Collect traffic from local roads before volumes get too high and carry traffic to arterials or to traffic generating uses such as schools, shopping centers, or event centers
- Carry some bus and truck traffic
- Property access is somewhat limited and managed
- Moving traffic emphasized in road design:
- Generally, should not be narrower than connecting local roads:
- May serve as an easement for utilities or as a design element in a residential community (parkway)
- Planting strip to physically separate pedestrians vehicular traffic and provide room for utilities, streetlights, and street trees

The following roads are designated as Collector Roads in the County:

- Route 605 Shannon Hill Road
- Route 606 Hadensville Fife Road

- Route 617 Oilville Road
- Route 621 Manakin Road
- Route 622 Rockville Road
- Route 623 Hockett Road
- Route 629 Old Fredericksburg Road
- Route 634 Maidens Road
- Route 644 Millers Lane
- Route 649 Blair Road
- Route 650 River Road
- Route 654 Shallow Well Road
- Route 670 Cardwell Road
- Route 673 Whitehall Road
- Route 676 Hermitage Road
- Route 740 Tuckahoe Creek Parkway
- Route 1250 West Creek Parkway
- Route 1263 Wilkes Ridge Parkway

Local Roads

- Generally, roads not defined as arterials or collectors are classified as local roads
- The primary purpose of local roads is to provide access to property
- Provide driveway access, lower speeds, and little or no through traffic
- Local roads usually link to a Collector:
 - In commercial areas, where Collectors do not function efficiently or there are too few Collectors, local roads may connect directly to an arterial
- In residential areas, local roads should facilitate circulation within the neighborhood and discourage through traffic
- Lower traffic volumes should allow for narrower

streets

- Pedestrian and vehicular traffic should be safe and integrated, and sidewalks or other pathways should link to sidewalks on the Collector roadways
- Traffic volumes should be kept low
- Bus and heavy truck traffic should be minimal

Road Design - Villages

The design and location of roadways is an integral consideration for village areas. Varying building setbacks and street widths can create different impressions in a community. Small setbacks and narrow streets can contribute to a sense of place and intimacy as opposed to the openness and detachment associated with large setbacks and wide streets. Narrow streets offer safety advantages by encouraging slower speeds, which is more comfortable for pedestrians and cyclists. Less pavement and right-of-way also reduces construction and maintenance costs. One trade-off for narrower streets, however, is losing flexibility, which may include inhibiting on-street parking as an option and making future road improvements more difficult.

Centerville Arterial Management Plan

The County recently adopted an Arterial Management Plan (AMP) in cooperation with the Virginia Department of Transportation for selected areas in Centerville Village, specifically along U.S. Route 250 (Broad Street Rd.) and St. Route 623 (Ashland Rd.). The AMP study reviewed existing conditions and provided analysis for future road conditions based on land uses proposed in the Comprehensive Plan. A

number of new roadways and road improvements are recommended and conceptual road locations are shown on the Centerville Land Use Map. In addition, the AMP study provided guidance on managing access points. As Centerville Village develops, it is essential that land developers work with the County to implement the Arterial Management Plan.

Transportation Existing Trends

- County recently completed an Arterial Management Plan for Broad Street Rd and Ashland Rd, focusing on the Rte. 288 and I-64 interchanges.
- Significant projects since 2012: Broad Street Rd in Centerville, Broad Street Rd/Fairground Rd intersection, Sandy Hook Rd/Whitehall Rd intersection, Leakes Mill Park entrance, Ange Road, and Valley View Lane.
- Large new segments of sidewalks constructed along Broad Street Rd.
- First segment of Wilkes Ridge Parkway opened
- New traffic signals installed at Broad Street Rd/Hockett Rd and Patterson Ave/Blair Rd intersections
- County secured \$1 Million in TPO funds for Hockett Rd realignment project
- Reorganization of the TPO includes two elected County officials

Road Design – Rural Enhancement Area

One transportation objective is to preserve rural character while improving rural road safety. In some situations it may be more appropriate to retain rural roads in their current condition, focusing on road safety improvements such as shoulders and guardrails, straightening curves, and increasing regular maintenance rather than widening the road. Rural road improvements should not encourage growth outside of the Development Areas, but should provide access to farms, markets, and other approved rural activities. Rural roads benefit from designs that keep drivers moving at speeds appropriate to react safely to slower moving farm equipment, bicyclists, people checking mail, children walking to a bus stop, etc.

Bike/Pedestrian Facilities

Often thought of as a recreational activity, bicycling as a mode of transportation is gradually growing in use and acceptance. A complete local transportation system includes bikeways, sidewalks, and other pathways.

The County features many rural roads with minimal or no shoulders. Providing dedicated bike lanes for a majority of roads in the County is not feasible due to the rural nature of the roads.

TRANSPORTATION IMPLEMENTATION STRATEGIES

Transportation Planning

Type*	Implementation Strategies	Responsible Department	On-Going	Short Term	Mid Term
A	Implement the Arterial Management Plan	Planning & VDOT	✓		
P	Ensure County policies and ordinances are consistent with or exceed VDOT standards	Planning & VDOT	✓		
P	Review transportation impacts of new development	Planning & VDOT	✓		
P	Encourage stub street connections where appropriate	Planning & VDOT	✓		
A	Implement recommendations of the Arterial Management Plan	Planning & VDOT		✓	
P	Incorporate pedestrian and bicycle pathways into plans when appropriate	Planning & VDOT	✓		
P	Encourage safe and convenient crosswalks, street lighting, and streetscape landscaping where appropriate	Planning & VDOT	✓		
A	<i>River Road West (Rte. 6):</i> Undertake a detailed corridor planning process from the Henrico Co. line to Rte. 288.	Planning & VDOT			✓
A	<i>Park-and-Ride Lots:</i> Identify suitable locations for additional Park-and-Ride lots. These facilities should be considered within villages and along the Goochland-Henrico lines at Broad St. and Patterson Ave.	Planning & VDOT			✓
P	<i>Bus Service:</i> Explore the expansion of GRTC service to West Creek Business Park and Centerville Village.	Planning & VDOT			✓

*P: Policy, A: Action

Roadway Improvements

Type	Implementation Strategies	Responsible Department	On-Going	Short Term	Mid Term
P	Ensure that roadway access points, designs, improvements, and locations are consistent with the Arterial Management Plan	Planning & VDOT	✓		
A	Study the feasibility of I-64 interchange at Rte. 623 as a full cloverleaf. If feasible and desirable, reserve the right-of-way for this cloverleaf in proposed development plans.	Planning & VDOT			✓
A	Study the feasibility of I-64 interchange at Rte. 617 as a full cloverleaf. If feasible and desirable, reserve the right-of-way for this cloverleaf in proposed development plans.	Planning & VDOT			✓
A	<i>River Road West (Rte. 6)</i> : Widen the bridge over Genito Creek.	Planning & VDOT			✓
A	<i>West Creek Area East-West Collectors</i> : Support an additional east-west collector road south of Tuckahoe Creek Parkway between Hockett Rd. and West Creek Parkway.	Planning & VDOT			✓
P	<i>Tuckahoe Creek Parkway Bridge</i> : Continue to endorse the need for this connection.	Planning	✓		
A	<i>Service Roads</i> : Provide service roads along Broad Street to facilitate business development, divert traffic, distribute traffic volumes, and maintain the efficiency of Rte. 250.	Planning & VDOT	✓		
A	Fairground Rd. (Rte. 632) / Sandy Hook Rd. (Rte. 522) intersection: Pursue a roundabout or signalization and extension of Fairground Road to Route 6	Planning & VDOT		✓	

*P: Policy, A: Action