

Looking Ahead to 2035: A Potential Core Network of Roads

Virginia Transportation Research Council

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The Issue for the Long Term

Virginia lacks a designated core network of roads that

- Connects all parts of the state
- Connects all major public services, such as, fire, rescue, trauma centers, schools, prisons, ports, intermodal connections
- Is not driven by jurisdictional boundaries



Identifying Such a Network of Roads

- Virginia Transportation Research Council
- Transportation & Mobility Planning Division
- Operations & Security Division
- Emergency Operations Staff
- District Planning Staff



Characteristics of the Network

- Interconnected and serving statewide interests without the constraint of existing designations or legislative mandates
- Includes all corridors important for mobility (e.g. NHS)
- Continuous between and through localities without being constrained by jurisdiction boundaries
- Incorporates all functional classes
- Provides redundancy for safety and operations, e.g., Rte. 1 & I-95, Rte. 11 & I-81, etc.
- Includes designated evacuation routes and access to designated and potential evacuation shelters



Characteristics of the Network (cont.)

- Provides for critical connectivity to important locations and facilities including
 - Trauma centers and fire/rescue stations
 - State facilities (VDOT, VDOC, Higher Education)
 - Intermodal transfer terminals (passenger & freight) including future Elliston facility, airports, ferry terminals, train and intercity bus stations, etc.
 - Major Employment Centers
- Approximately 25,000 centerline miles



How Does the Core Network Relate to VTRANS and the National Highway System?

- VTRANS is concerned with multimodal Corridors of Statewide Significance, which include highways and other modal facilities.
- The NHS includes all
 - Interstates
 - Principal Arterials
 - Intermodal Connectors
 - Strategic Highway Network Connectors
- The core network includes all of the highway facilities in the corridors with which VTRANS is concerned and all of the highways in the NHS.



Maps

 The large <u>mounted</u>-map shows the entire network.

 The handouts include individual maps of the network in each district.

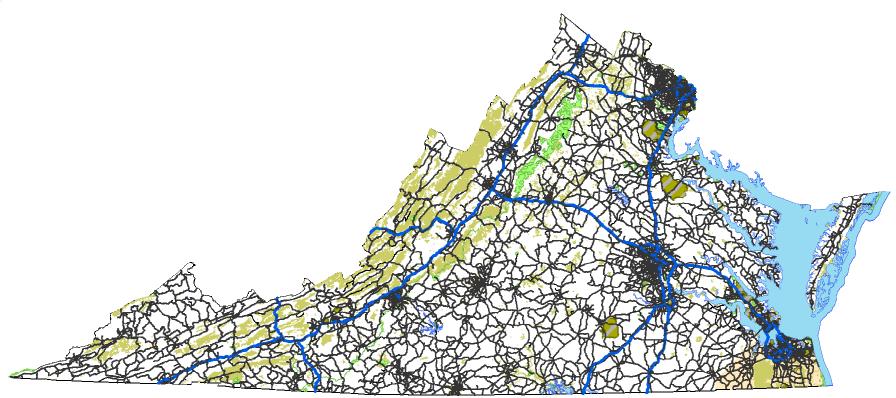


Comparison of Centerline Miles

	Core Network	Administrative Classification
Interstate	1,120	1,120
Interstate Ramps	500	500
Primary	7,920	8,000
Secondary	11,440	48,280
Urban	3,110	11,350
Frontage	330	330
Total	24,420	69,580

VDOT

The 25,000-mile Core Network (wall map and district maps in packet)





Potential Benefits of the Core Network

- It could be a tool for the prioritization of Maintenance, Operations, Planning, and Construction that cuts across the current Primary, Secondary and Urban classifications.
- This network holds potential to link VTRANS direction to roads in the Secondary and Urban Systems as well as in the Primary system.



Potential Benefits of the Core Network (cont.)

The network provides mobility throughout the state and serves all localities

The Network supports

- The mobility of travelers and freight
- Intermodal transfers
- Operational redundancy
- Economic vitality through connections to employment centers
- Emergency response and evacuations



Concluding Remarks

- More work needs to be done to identify the full potential benefits of using the network and to examine ways in which it would be integrated into long range planning
- This is one approach to thinking in a fundamental way about a core network of roads for the future



Concluding Remarks (cont.)

Further study of the network would include (among other things) an examination of

- Ways the network could be used to prioritize maintenance and construction operations
- Ways the network can contribute to VTRANS 2035
- Ways the network could be used in the coordination of land use planning and transportation planning
- Ways the network would function along with other networks, such as NHS and CoSS

