

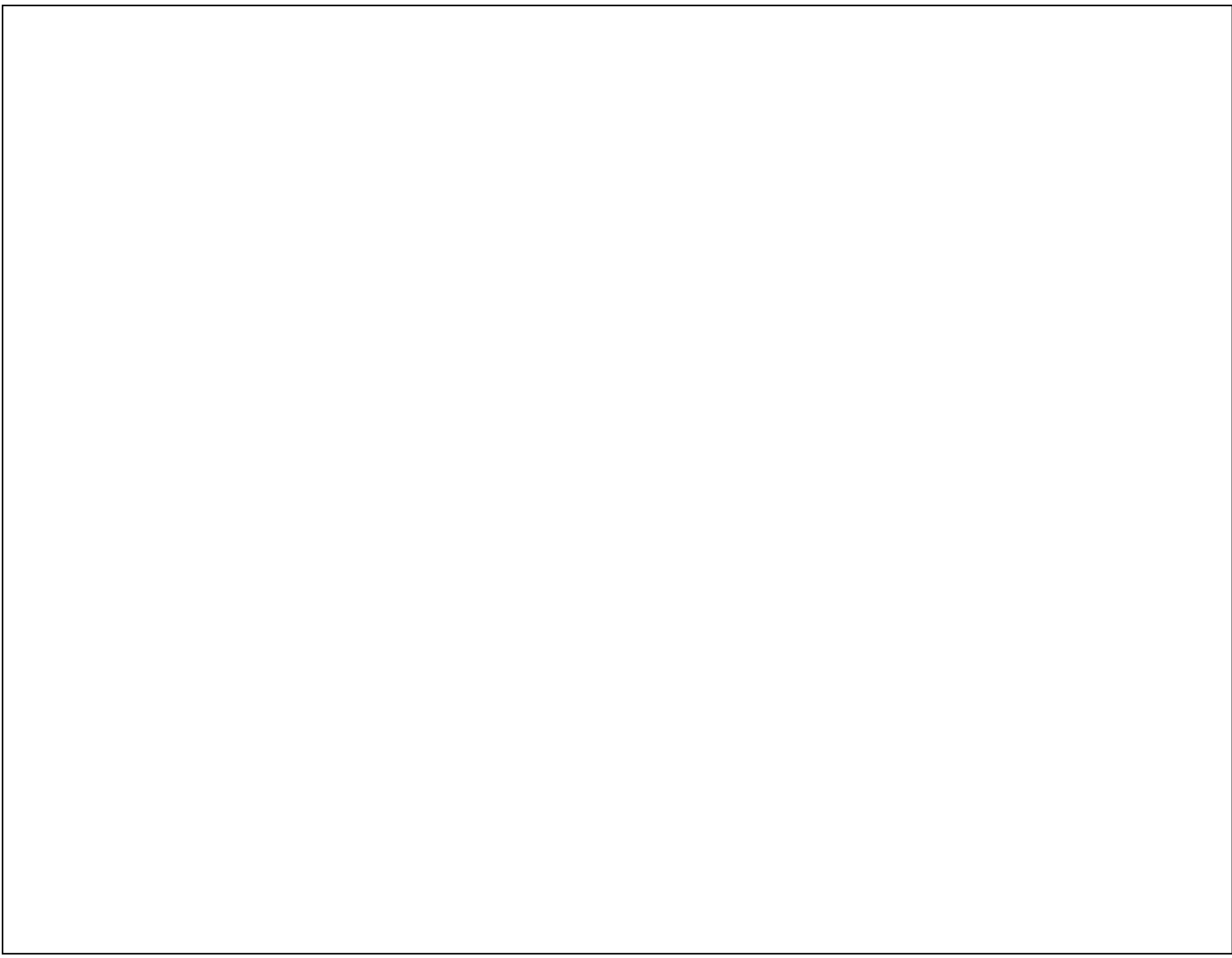


Summary of the Final Report



*A long-range statewide multimodal
planning initiative that includes
state agencies involved with
transportation and a
strong public
involvement
effort.*







Virginia is facing a transportation crisis due to a multi-billion dollar under-investment in transportation funding. Virginians are grappling with mounting congestion on the roads, dramatic increases in freight movement, under-funded transit systems and missed opportunities for rail, yet resources are inadequate to meet even current infrastructure and service needs.

VTrans2025 goals

- Goal 1** Safety and Security
- Goal 2** Preservation and Management
- Goal 3** Mobility, Accessibility, and Connectivity
- Goal 4** Economic Vitality
- Goal 5** Quality of Life and Environmental Stewardship
- Goal 6** Fiscal Responsibility

Annual hours of sitting in traffic have increased substantially in the state's large urban areas in the last 10 years – more than tripling in the Washington D.C. region, almost quadrupling in Richmond, and more than doubling in Hampton Roads.

VTrans2025 Report

In this stressed environment, the General Assembly mandated development of a comprehensive long-range multimodal plan. This plan, called VTrans2025, is a blueprint for shaping the transportation future. It establishes a commonly held vision to guide and direct decision-making across transportation modes.

A Policy Committee, composed of the heads of each transportation agency, and members from each of the agency boards, and representatives from the Secretary of Transportation's office guided the work of a Technical Committee, made up of experts from each of the agencies, as well as the Federal Highway Administration and the state's Planning District Commissions. Stakeholder groups and the public were invited to participate in developing the plan, and a series of forums and focus groups were held around the state. Values and perspectives were obtained from these meetings and a statistically valid telephone survey was conducted to determine the opinions of Virginians.

Transportation of the future

Participants in the planning process say they want a safe, strategic, and seamless network of transportation facilities and services that provides reliable travel; encourages economic development; respects the environment; and, enhances the quality of life in Virginia. They believe investments need to be strategic, focusing on relieving congested conditions and improving mode connectivity. The public also expects full accountability and efficient use of taxpayer dollars.

Safety is a top concern and won't be traded for greater system efficiency, mobility, economic competitiveness, or any other goal. Furthermore, Virginians do not want to sacrifice the environment for transportation improvements. Yet, congestion is a major concern, particularly in urban areas.

Virginians want travel modes to be better connected, trips to be seamless, and links between existing systems and services improved. Virginians support increasing taxes and fees as long as they have greater involvement in transportation planning and assurances that revenues raised for transportation would be used only for transportation purposes.

Virginians envision a multimodal transportation system that is safe, strategic and seamless.

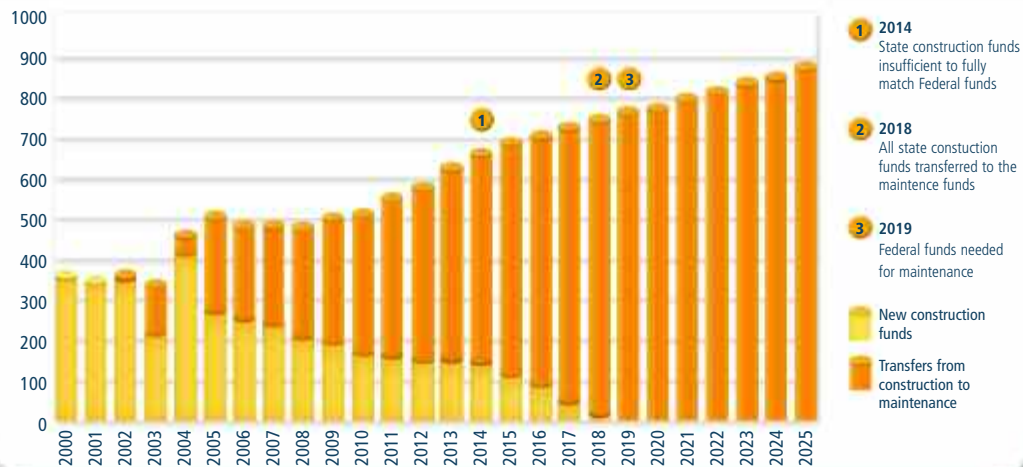
Maintenance trumps construction

Maintenance costs of the aging highway infrastructure are increasing by approximately 4 percent a year, consuming all maintenance funds. Additionally, maintaining the current infrastructure of highways and bridges must come before planning or building new projects, according to state law.

As a result, monies from the highway construction fund were shifted to maintenance in 2003. More and more, highway construction funds will be required to address



State construction dollars transferred to maintenance (in millions)



system maintenance. By 2014, state highway funds will be insufficient to match federal highway funds, preventing the state from obtaining all the federal funds for which it is eligible and reducing the overall amount of funds. By 2018, there will be no state highway funds for construction. Federal highway funds will have to be used for maintenance beginning in 2019, further decreasing the funds available for construction. Worse still, only about 20 percent of urban and secondary road lane miles are eligible for federal funds.

VTrans2025 Report

Total estimated revenues available for highway construction projects over the next 20 years (billions)

Total estimated 20-year highway revenues	\$71.7
Debt service	-3.4
Maintenance	-38.7
Administration and other activities	-18.9
Total available for highway construction over 20 years	\$10.7

Highway projects in the Six-Year Improvement Program	5.3
Cost to complete existing highway projects	8.2
Total needed to complete projects identified in the Six-Year Improvement Program	\$13.5

Estimated shortfall \$2.8 billion

Under-investing in transportation

By 2025, capital and maintenance needs across all modes will exceed \$203 billion. Best estimates of available revenues are less than half that figure at \$95 billion. This is an under-investment of over \$108 billion.

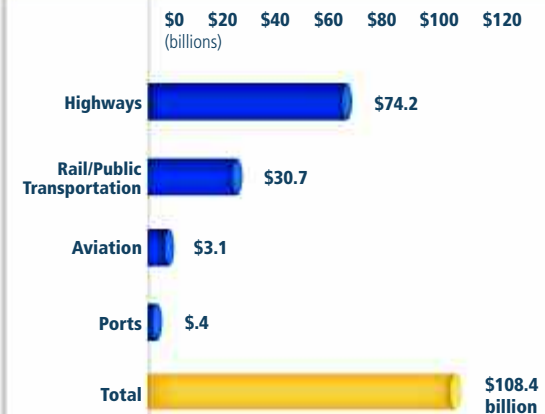
Without additional funds, there would be no new highway projects in the next 20 years. Funding levels are insufficient even to complete the highway projects identified in the current Six-Year Improvement Program.

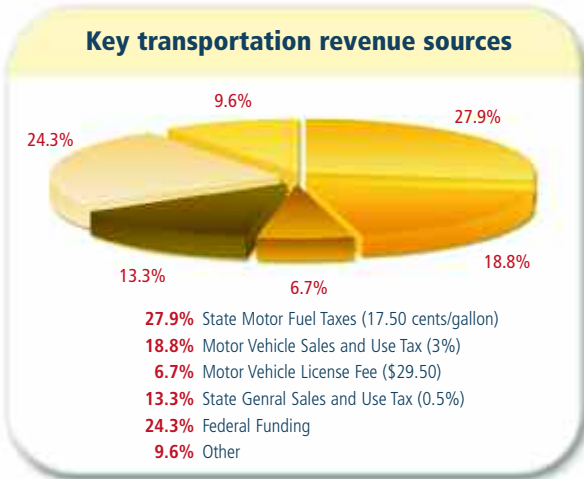
At a minimum, an additional investment of \$925 million per year for highways alone is required to enable the state to fully match federal revenues and keep the highway construction fund whole.

Higher maintenance costs and additional federal funding that would require increased state matching funds would push investment needs higher.

The situation is similarly bleak for transit, rail, aviation and ports. Funding levels are inadequate to maintain even the existing transit and rail programs and many aviation improvement projects will not be completed. Funding levels are also inadequate to finance the significant dredging and expansion projects that are necessary at the Port of Virginia to maintain market share and ensure that the port continues to be an economic engine for the Commonwealth.

Unmet needs by mode 2005-2025





Investment options and strategies

A critical factor contributing to the gap between needs and revenues is transportation's reliance on the 17.5 cents per gallon tax on gasoline. This tax has not been adjusted since 1986 and revenues generated have not kept pace with the increasing costs of constructing, operating, and maintaining transportation facilities and services.

Examples of investment options and strategies

- *Expand use of tolls and public/private partnerships*
- *Increase traditional taxes and fees*
- *Index motor fuel tax*
- *Apply retail sales tax to motor fuel*
- *Utilize the General Fund*
- *Encourage operational improvements*
- *Encourage use of demand management*



VTrans2025 Strategies

Congestion strategies

- Increase system capacity (e.g., more transit, expanding roads)
- Operate the system more efficiently (e.g., signal system synchronization)
- Reduce system demand (e.g., teleworking)

Congestion

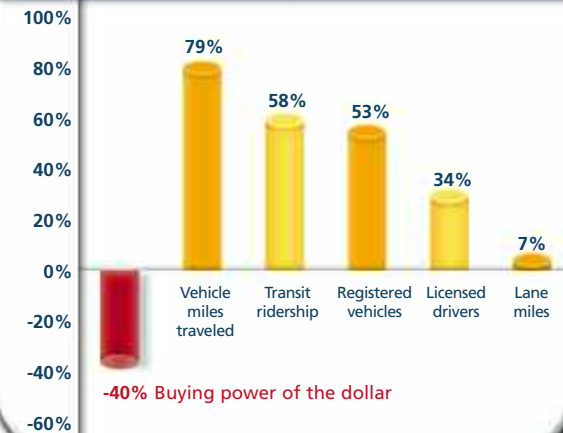
It is no surprise that survey respondents identified congestion as a top concern. In 2003, motorists in Virginia's large urban areas experienced almost 157 million hours of travel delay and wasted 254 million gallons of gasoline idling in traffic. But congestion is not confined to the state's large urban areas. Increased demand, as well as heightened security make congestion an issue for airline travelers, rail and transit passengers, and freight movers alike.

However, investment in transportation facilities and services is not keeping pace with increased demand, and Virginians are spending more and more time in congested conditions.

Transportation demand is expected to continue to grow throughout the state. By 2025, 2 million more people will live in Virginia, mostly in heavily populated areas, and freight movements are expected to double.

Congestion not only affects highways. The Virginia Railway Express (VRE), running from Washington DC to Manassas and Fredericksburg, is the second fastest growing commuter rail system in the nation, with ridership increases averaging between 15 and 20 percent annually. But, freight movements on the corridors and storage restrictions limit its ability to expand. Approximately 42 percent of Washington D.C. area Metrobus riders have difficulty obtaining a seat every day. Ridership is forecast to double by 2025.

Change in transportation indicators since 1986





Land use strategies

- Encourage evaluation of transportation impacts associated with various land use scenarios, both through pilot programs and coordinated efforts with localities
- Provide incentives that encourage the protection of transportation investments from the negative impacts of incompatible land uses

Technology strategies

- Bundle technological and capacity improvements
- Consider technological improvements to address transportation issues
- Support and invest in technologies and innovation

Land Use

Coordinating transportation and land use is an important and extremely complex issue. In Virginia, responsibility for transportation typically rests with the state, while localities determine land use. This separation of responsibilities presents a fundamental problem and until the governance structure is addressed, no transportation plan can completely deal with the issue. Land use and quality of life issues ranked high among survey respondents. Public comments on the draft plan also reflected this concern.

Technology

Virginia continues to be a leader in researching and deploying the latest technologies to address transportation congestion, systems operations, and safety issues.

Incident management programs can reduce delay associated with congestion caused by traffic incidents by 10 to 45 percent.

Rural transportation issues

Almost one-third of Virginians live in rural areas. Some 70 percent of state-maintained roads are in rural areas. The many curves, hills, and narrow lanes contribute to the disproportionate number of traffic fatalities. In the VTrans2025 survey, rural residents expressed a desire for more road improvements to increase safety and support economic development.

Rural transportation strategies

- Expand travel choices
- Address safety issues
- Encourage local governments to provide enough detail in the transportation element of their local comprehensive plan to support identification of transportation priorities at the state level.

VTrans2025 Strategies

Security strategies

- Continue to build effective partnerships with the Department of Emergency Management and other state and federal agencies, as well as military, public, private, and other emergency responders
- Provide security at critical transportation facilities

Safety strategies

- Identify and address critical safety issues and corridors
- Increase education and enforcement

Security

The events of September 11, 2001 highlighted the importance of security and transportation planning. It is essential to ensure the security of critical transportation facilities, such as the Port of Virginia, which serves as a gateway to the international community, and highway, rail, and aviation infrastructure, which provide critical movement in the event of emergencies.

Safety

There can be no more basic concern of transportation agencies than the safety of the public. The VTrans2025 survey showed that safety is a top priority for Virginians. Planners must recognize changes in the population that impact transportation safety and take measures to ensure safe travel and transport.

- Seniors and teens have the highest crash rates of any age group
- Mixing large trucks with vehicular traffic may result in conflicts
- Many roadways and intersections do not address pedestrian and bicycle need



Percent of statewide lane miles considered deficient

System	2004	2025
Interstate	29	79
Primary	32	49
Secondary	30	44
Urban	11	22

Aging infrastructure

Virginia has the third-largest state-maintained highway system in the nation. This system is aging and requires increased maintenance.

- Most of the state's 19,383 bridges are more than 25 years old and thousands are structurally deficient and/or functionally obsolete.
- One in five transit buses and all VRE locomotives are past the federally recommended replacement age.
- About one-third of the state's interstate, primary, and secondary lane miles are classified as deficient.
- Unless there is significant modernization and expansion, the Port of Virginia will reach full operating capacity by 2010.
- There are numerous "choke points" along Virginia's rail lines that challenge the ability of the state's rail system to handle anticipated increases in freight movements and higher speed trains.

Aging infrastructure strategies

- Continuation of a maintenance first policy
- Increase the use of new materials, technologies, and strategies that reduce long-term maintenance costs
- Support development of needs-based asset management systems for all modes
- Reduce disruption due to maintenance

Special needs populations

Of particular concern is transportation accessibility for special needs populations, such as the elderly, lower socioeconomic groups, and the disabled. Accessibility to transportation ensures access to jobs, childcare, health care, shopping, goods, and other services.

Special needs populations strategies

- Increase transportation choices for special needs populations
- Consider special needs in planning, design, and construction of transportation facilities and services.

VTrans2025 Strategies



Intermodal connectivity strategies

- Encourage development of infrastructure that facilitates seamless connectivity
- Evaluate transportation alternatives and alternative mode accommodations in the early stages of planning

Natural/human environment strategies

- Increase collaboration with environmental agencies
- Seek opportunities to exceed environmental requirements
- Improve the link between planning and environmental processes
- Balance state and local needs
- Consider community impacts

Intermodal connectivity

All too often, there are physical and institutional barriers to intermodal connections in the state. Physical barriers include lack of adequate park-and-ride facilities adjacent to high occupancy vehicle (HOV) lanes, insufficient clearance for double-stacked trains, and lack of bicycle and pedestrian facilities at transit stations. Institutional barriers include policies that discourage intermodal projects.

Natural/human environment

The VTrans2025 survey indicated that continued protection of natural resources and quality of life remains a top priority. Air quality is a key issue, but several areas of the state do not meet federal air quality standards. The protection of the Chesapeake Bay watershed, which stretches into western portions of the state, is also critical to the well being of citizens. As transportation accounts for approximately 31 percent of the energy used in Virginia (64 percent of which is used as gasoline) energy consumption, specifically alternatives to the automobile, is an important consideration.



Freight

Located on major north/south cargo routes (Interstates 81 and 95) and home to one of the largest and most successful ports on the East Coast, Virginia receives a tremendous economic benefit from the movement of freight. Safety and capacity issues result from mixing cars and large trucks on already congested highways. Increased rail freight shipments present conflicts with passenger rail service because they operate on the same tracks. Freight movements in Virginia are expected to increase dramatically over the next 20 years – by about 80 percent for trucks, 40 percent for rail, 300 percent for air, and 100 percent through the port – further taxing the capacity of the state's freight terminals and infrastructure.

Freight strategies

- Increase investment in the state's freight infrastructure
- Facilitate coordination among private and public interests on freight issues
- Consider establishment of a Freight Council made up of stakeholders and others
- Establish a Freight Office to increase attention to freight movement

VTrans2025 Recommendations



Blueprint for the future

VTrans2025 is about connecting modes, geographic entities, transportation agencies, and planning partners. Transportation planning must increasingly focus on multimodal solutions to moving people and goods throughout the state.

VTrans2025 ensures that transportation planning and decision-making at the state and agency levels reflect the needs and desires of Virginians. It also increases accountability, informs decision-makers, and ensures that limited funds are spent on projects that will achieve the greatest system benefit.

The VTrans2025 Policy Committee focused on four policy areas: ***funding/investment, land use and transportation, connectivity, and priority setting.*** The committee also made recommendations on how to sustain the vision of VTrans2025.



Funding/Investment

Invest more in transportation

Substantially raise state investment in transportation in order to maintain the existing system in good, safe condition and expand capacity to meet growing needs. Continuing to under-invest in transportation will result in worsening congestion, increased travel unreliability, and diminished economic prosperity. User fees and taxes must be increased, new sources of funding, such as indexing fuel taxes to inflation, and greater use of tolling and General Funds must be considered in order to address investment needs and increase system capacity.

Support transit

As new revenues become available, state support for public transit should be increased to expand service and provide increased mobility and travel choices.

Remove bias

The state should not bias the local choice of transit versus roadways by the way in which it funds the modes. Leveling the playing field between the modes should occur by increasing the state's funding of transit. Additionally, increased use of the existing flexibility for transferring highway funds to transit should be encouraged.

Fund rail

Identify options for a sustainable source of state funding with which to support freight rail capital improvements and capital and operating costs of passenger rail. Additionally, work with the railroad companies to ensure that upgrades are made to track and other equipment that benefit both passenger and freight rail; strongly advocate that the federal government take responsibility for making the necessary investments in rail in Virginia, and the major corridors of which it is a part; and, give consideration to creating a Rail Authority or the greater use of the Rail Preservation and Development Fund.

Protect Transportation Trust Fund revenues

An appropriate mechanism, including the consideration of a constitutional amendment, should be found to require all funds in the Transportation Trust Fund and Highway Maintenance and Operating Fund be expended on transportation projects and services and to prevent their being appropriated for non-transportation purposes.

VTrans2025 Recommendations



Land use

Strengthen planning including modeling land use impacts

Strengthen local and regional planning and enhance the role of the state as a reliable and active partner in those planning efforts. Expand state capabilities and the use of pilot programs to identify and model impacts of different types of development on transportation and vice versa.

Manage access

Implement access management policies that ensure greater compatibility of land use and transportation priorities.

Consider state versus local roles

To better align land use and transportation decision-making, seriously consider restructuring the system for managing local roads in order to give more authority to local governments and make the system uniform for cities, towns, and counties. Any new administrative burdens that this might place on rural jurisdictions must be carefully weighed.

Address the transportation/land use conflict

The General Assembly should address the conflict that arises from the separation of authority for transportation and land use.

Connectivity

Improve connections

Projects that connect travel modes will receive increased consideration in modal plans and funding decisions.

Think multimodally

Transit, pedestrian, bike and rail-friendly design features will be incorporated, as appropriate, whenever there is a major reconstruction or new construction.

Take the lead

Virginia must take a leadership role in working with other states to ensure connectivity of interstate corridors, such as Interstate 81 and the Heartland Rail Freight Corridor (from Norfolk to Chicago).

Invest in technology

Significantly increase investment in advanced technologies and demand management strategies that maximize the efficiency of the existing transportation system and improve travel by managing the system better.

Priority setting

Use objective criteria

Establish objective criteria for all modes in order to measure and compare the merits of proposed projects and to make more informed investment decisions.

Plan multimodally

Continue development of the Multimodal Investment Network(MIN) approach as a framework for planning and prioritizing multimodal projects at the state level, giving particular attention to how this new approach to planning can assist in allocating scarce transportation dollars.

Sustaining VTrans2025

Continue public and stakeholder involvement

Continue to provide increased opportunities for public and stakeholder involvement and ensure transparency in transportation decision-making.

Continue transportation agency head coordination

Each of the directors of the Department of Rail and Public Transportation, the Department of Aviation, and the Virginia Port Authority, and the Commissioner of the Department of Transportation must take responsibility for continuing the statewide multimodal planning effort and dedicate staff and resources to accomplish it.

Review Intermodal Office alignment

Review organizational alignment, staffing, and funding levels for the Intermodal Office and make recommendations to enhance the effectiveness and further institutionalize intermodal and freight planning in the Commonwealth.

Develop action plan

Develop an administrative action plan to implement VTrans2025 objectives and recommendations.

Continue Technical Committee

Continue the VTrans2025 Technical Committee to provide staff coordination.

Establish a commission

Establish a Commission to make specific recommendations on how to meet the Commonwealth's long-term transportation funding needs and address other legislative issues identified in the VTrans2025 Final Report.

Next Steps for VTrans2025

Next Steps

The VTrans2025 Report was approved by the Commonwealth Transportation Board (CTB) on November 18, 2004, and forwarded to the Governor and General Assembly as required by state law. The next step is to develop an action plan to implement the recommendations and strategies contained in the report by April 2005.

Critical elements of the action plan will include steps to:

- Refine the Multimodal Investment Network process
- Use objective criteria as tools for determining transportation priorities
- Secure approval of common goals by the transportation agency boards
- Report progress made toward implementing recommendations
- Work with local and regional planning partners to identify statewide multimodal projects
- Address staffing and funding levels for the Intermodal Office

Effective implementation of the action plan will require the continued coordination and cooperation of the various transportation agencies and stakeholders. A number of the recommendations, particularly those regarding additional investments, will require action by the General Assembly.



Acknowledgements

VTrans2025 benefited from the assistance of a team of technical experts and policy makers, and this plan could not have been developed without their participation.

The following agencies and organizations were represented on the VTrans2025 Technical Committee:

**Federal Highway Administration, Virginia Division
Office of the Secretary of Transportation
Virginia Association of Planning District Commissions
Virginia Department of Aviation
Virginia Department of Rail and Public Transportation
Virginia Department of Transportation
Virginia Port Authority**

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Thanks to the thousands of people who participated in the public and stakeholder involvement efforts and provided essential perspectives on the transportation system.



To get more information or for additional copies of this document, call VTrans2025 toll-free at **(866) 835-6070**

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