



Review of Virginia's Transportation Planning and Programming

COMMISSION DRAFT — NOT APPROVED



In Brief

The 2010 General Assembly passed House Bill 42 and Senate Bill 201, both of which direct staff of the Joint Legislative Audit and Review Commission (JLARC) to assess Virginia's approach to transportation planning and programming.

JLARC staff found the minimal role of the State's 14 Metropolitan Planning Organizations (MPOs) in allocation decisions is a missed opportunity for more informed decision-making. Stakeholders raise concerns about the priorities being addressed in the State's current Six-Year Improvement Program (SYIP), in part because of factors that limit the State's ability to consistently apply performance-driven prioritization.

JLARC staff also found the need for more written processes governing programming, and more clarity and communication on the roles and responsibilities of the VDOT central office and its districts in the programming process. Additional aspects of programming documentation are confusing and should be addressed.

VDOT's projections indicate funding available for new systems construction is likely to continue to decline. This future fiscal environment necessitates a more transparent, communicative, and collaborative approach to transportation planning and programming.

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JLARC Staff for This Report

Hal Greer, Deputy Director
Justin Brown, Project Leader
Janice Baab

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Commission Draft

This document is a Commission draft of the JLARC Report *Review of Virginia's Transportation Planning and Programming*. The draft has been assembled for discussion and factual review. Do not publish or release any material contained in this document because it is subject to additional verification and editorial review.

Joint Legislative Audit and Review Commission

December 13, 2010

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ABBREVIATIONS USED FREQUENTLY IN THIS REPORT

CMAQ	Congestion Mitigation and Air Quality Improvement Program
CTB	Commonwealth Transportation Board
DRPT	Department of Rail and Public Transportation
FHWA	Federal Highway Administration
HMOF	Highway Maintenance and Operating Fund
MPO	Metropolitan Planning Organization
PDC	Planning District Commission
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
SYIP	Six-Year Improvement Program
TIP	Transportation Improvement Program
TTF	Transportation Trust Fund
VAMPO	Virginia Association of Metropolitan Planning Organizations
VDOT	Virginia Department of Transportation

JLARC Report Summary:

Review of Virginia's Transportation Planning and Programming

Key Findings

- The Virginia Department of Transportation (VDOT) central office staff and Metropolitan Planning Organizations (MPO) differ on the role of MPO input in the State allocation process. (Chapter 2)
- The minimal role that MPOs have in the State's allocation process is a missed opportunity for more informed decision-making. (Chapter 2)
- Performance-driven prioritization of projects and funding plays a limited role in selecting projects. This raises concerns among stakeholders about what priorities are currently being addressed in the Six-Year Improvement Program (SYIP). (Chapter 3)
- VDOT's programming staff lack written processes to guide decisions and there is a lack of clarity around VDOT central office and district roles in terms of programming. (Chapter 4)
- Virginia produces a SYIP, in addition to the federally-required Statewide Transportation Improvement Program (STIP). Several other states have consolidated their federal and state programming documents. (Chapter 4)
- VDOT projects that funding available for systems construction will continue to decline. The fiscally-constrained environment underscores the need for prioritization, transparency, and further embracing the metropolitan perspective. (Chapter 5)

The 2010 General Assembly passed House Bill 42 and Senate Bill 201, which direct staff of the Joint Legislative Audit and Review Commission (JLARC) to assess Virginia's approach to transportation planning and programming. The mandate requires that staff address the alignment of Virginia's processes with federal requirements, collaboration between the State and Metropolitan Planning Organizations (MPO), and staffing issues.

Long-range transportation planning consists of a variety of activities, such as assessing future transportation problems and needs, conducting detailed corridor and environmental studies, and producing long-range planning documents. Transportation programming consists of allocating funds to projects and periodically making adjustments based on changes in factors such as project costs and revenue.

Transportation Funding Declined During Recession

Total available revenue has dropped from \$4.1 billion in FY 2006 to \$3.7 billion in FY 2011. During this time, maintenance costs have increased by 24 percent, from \$1.4 billion annually to \$1.7 billion. The *Code of Virginia* stipulates that maintenance be funded prior to new systems construction. This, along with the decline in total revenue, means that systems construction funding has fallen from \$1.1 billion in FY 2006 to \$657 million in FY 2011 and is now comprised almost exclusively of federal funds.

Systems construction now receives a smaller piece of a smaller pie.

The decline in available revenue, when coupled with the concurrent increase in maintenance costs, resulted in substantial decreases in the amount of funding left for items lower in the statutory hierarchy—namely systems construction. Stated otherwise, systems construction now receives a smaller piece of a smaller pie. While total available revenue dropped ten percent, maintenance costs increased from one-third to 45 percent of all spending. Systems construction contracted from 27 percent to 18 percent of total funding. Earmarks and special financing, also used for construction projects, similarly fell from 13 percent to eight percent of total funding. This reduction of available revenue has translated into lower funding for the State’s Six-Year Improvement Program (SYIP).

Minimal MPO Role in State Allocation Process Is Missed Opportunity for More Informed Decision-making

In FY 2011, Virginia’s five largest MPOs allocated about \$123 million in funding, which was ten percent of total Six-Year Improvement Program (SYIP) funding. For the remaining 90 percent, MPOs are to work with local governments through their MPO boards to help set priorities for secondary and urban road systems, and work with VDOT and the Commonwealth Transportation Board to help determine priorities for the primary and interstate system.

VDOT central office staff indicate there is cooperation with MPOs on decisions made about how to allocate funds. VDOT central office staff reported that MPO priorities are considered and communicated during the SYIP development process, and that VDOT district staff are to work with MPOs to identify regional priorities to be submitted to the central office. VDOT central office staff also noted that district staff and CTB members often are on MPO boards and participate in MPO committees.

MPOs, however, believe their input plays a minimal role in interstate and primary road allocation decisions. All 14 MPOs perceive that their input plays either no role, a very minor role, or a minor

role in interstate and primary road allocation decisions (see table). All 14 MPOs also believe the State’s use of the SYIP, which is not envisioned in federal regulations, minimizes the role that MPOs play in State allocation decisions.

Collectively, the State’s 14 MPOs have 109 full-time equivalent staff. These 14 MPOs employ dozens of staff with relevant credentials, including 23 American Institute of Certified Planners or urban planners. To more fully capitalize on the capabilities of MPOs, it is recommended that VDOT work with MPOs to determine the most effective way to more fully capitalize on MPO capabilities, in particular regarding MPO input in State allocation decisions. It is also recommended that the General Assembly may wish to amend the *Code of Virginia* to further specify the role of MPO input in State decision-making. The recommendation is not, however, intended to suggest a change in the State’s current authority to allocate interstate and primary road funding.

MPOs Perceive Having a Minimal Role in Allocation Decisions

Survey Respondent	No Role	Very Minor Role	Minor Role	Major Role	Very Major Role
<i>What is your perception about the role that input about project prioritization from MPOs plays in decisions to allocate interstate and primary road funding ...</i>					
MPO Directors	4	6	4	0	0

Source: JLARC staff surveys of MPOs and VDOT District Administrators, 2010.

Performance-Driven Prioritization Plays Limited Role in Selecting Projects

In its 2001 review, JLARC described the highway needs assessment aspect of VDOT’s long-range planning as inadequate. The JLARC report recommended that the General Assembly require VDOT to develop and use an objective, measurable tool to identify needs and select projects. In response, in 2004 VDOT updated its needs assessment process and developed a performance-driven approach to prioritizing new interstate and primary roads projects. The prioritization criteria were organized around five weighted performance goals and included performance data, such as level of service to measure congestion and the number of crashes. VDOT used this process in 2005 and 2006 to select several new capacity projects. By 2008, however, the above prioritization process was not being applied due to projected revenue shortfalls.

The historical lack of a consistently applied performance-driven approach to placing projects in the SYIP creates a variety of problems. Among these are concerns by stakeholders about what priorities the projects currently approved in the SYIP will collectively

**“... no one is asking
are the right projects
in the program to-
day?”**

address. For example, according to one VDOT central office programming official, “There is always a lot of discussion around [prioritization] at the board meetings; about what gets added, but no one is asking are the right projects in the program today?” One CTB member noted that the allocation “process is too political and too often the ‘squeaky wheel’ gets more attention. We should prioritize our constrained monies on projects that are most needed and can actually be built.”

VDOT central office planning division staff have indicated the prioritization process discussed above has been updated for potential use moving forward. Applying VDOT’s performance-driven prioritization process would provide:

1. Guidance for the application of funding to new capacity projects to the extent it is available in the future;
2. Supplemental information to help decision-makers understand the impact on performance goals, in particular related to congestion, economic development, and safety, if allocations must be reduced when revenue declines; and
3. Supplemental information to help decision-makers understand the impact when statutory and formula requirements dictate different funding decisions than would objective, performance-driven analysis.

Therefore, it is recommended that the General Assembly may wish to amend the *Code of Virginia* to require VDOT and the CTB to update and continually use VDOT’s performance-driven prioritization process regardless of the financial circumstances. The process should be applied, albeit in different ways, during times of increasing and decreasing revenue. To facilitate accountability, VDOT should develop and report a timeline for when it will have the prioritization process updated and begin using it. VDOT should also create specific procedures for how the data used in the process will be applied in different revenue environments.

Programming Lacks Written Processes and There Is A Lack of Clarity Around VDOT Central Office and District Roles

Programming is a complex task, which was made more complex by the recent revenue decline. There were minimal written processes detailing how VDOT central office programming staff were to engage experts in the VDOT structure and bridge and maintenance divisions when making these difficult decisions. Given that programming staff do not have transportation expertise themselves, at least some of these decisions appear to have been made primarily based on financial criteria rather than transportation considera-

tions. The lack of documented, written programming processes exacerbated the already complex task of programming funds.

It is recommended that VDOT develop a standardized process that is triggered when there is a ten percent or more variation between previously-budgeted and actual and/or projected revenue. The process should clarify how programming staff should involve VDOT professional staff in the engineering, system operations, and planning divisions, with particular attention to programming decisions that fundamentally alter the scope or expected timeframe of a project. VDOT central office programming staff should also better document the reasoning behind programming decisions so that when the CTB, VDOT district administrators, MPOs, and other interested parties question certain programming decisions, the basis for the decisions can be provided.

VDOT reports communicating programming changes resulting from budget reductions, CTB policies, and direction from the SYIP Executive Committee through numerous e-mails, letters, video conferences, and presentations. However, despite these efforts by VDOT central office staff, many MPOs and some VDOT district administrators express concern about the understandability, transparency, and communication of allocation and/or programming decisions. For example, eight of the State’s 14 MPOs disagreed or strongly disagreed that the process and criteria used to allocate interstate and primary road funding was understandable (see table). Even three of the nine VDOT district administrators also disagreed or strongly disagreed, with one noting, “How money is allocated and shifts around beats the heck out of me.”

“How money is allocated and shifts around beats the heck out of me.”

The need for more clear communication is at least partly driven by a lack of clarity around the relationship between VDOT’s central office and its districts. For example, four of the nine VDOT district administrators strongly disagreed or disagreed that their purpose and role in programming was clearly defined (see table). Furthermore, eight of the nine strongly disagreed or disagreed that the relationship between their districts and the VDOT central office in

Some VDOT District Administrators Report Unclear and Ineffective Relationships With VDOT Central Office in Terms of Programming

	Strongly Disagree	Disagree	Partially Agree	Agree	Strongly Agree
<i>The purpose and role of VDOT districts in programming is clearly defined ...</i>					
VDOT District Administrators	1	3	2	3	0
<i>The relationship between VDOT districts and VDOT central office in terms of programming is efficient and effective ...</i>					
VDOT District Administrators	3	5	1	0	0

Source: JLARC staff survey of VDOT District Administrators, 2010.

terms of programming was efficient and effective. The interplay between the communication problems and role clarity were characterized by a district administrator, who noted the “effectiveness and efficiency of the relationship between central office programming and district programming could be greatly improved by clear documentation of processes and procedures.”

VDOT indicated that it believes that the additional planning and programming capacity it is creating in each district office, known as the Planning and Investment Management (PIM) groups, will address some of the communication issues noted above. This may eventually prove to be true. However, the fact that the VDOT central office believes it is the districts who are responsible for communicating with MPOs, when combined with the lack of clarity district administrators report about their relationship with VDOT central office programming staff, indicate changes are needed. To address this, it is recommended that VDOT identify the cause of the confusion between its central office and districts in terms of roles and responsibilities for programming. VDOT should also develop specific communication strategies to improve district administrators’ and MPOs’ understanding of the programming process once it is more clearly defined.

Other States Have Consolidated Their Federal and State Programming Documents, Virginia Uses Two Separate Documents

Virginia uses its SYIP to allocate funds, but also produces a Statewide Transportation Improvement Program (STIP). Federal regulations require each state to provide the Federal Highway Administration (FHWA) a STIP that includes any project expected to obligate federal funds. These documents share data elements, though there are differences between the two documents. FHWA also noted the general confusion surrounding Virginia’s use of the SYIP as its primary decision-making document. Other states have found a way to produce a single document, while still addressing the different state and federal fiscal years.

VDOT indicates there would be challenges associated with producing a consolidated document, including that environmental conformity determinations must be made each time a new TIP is produced. VDOT notes it would also still be necessary to process federal agreements, prepare modifications to agreements, process TIP/STIP actions, monitor inactive projects, and develop its federal strategy throughout the year. However, given that other states have consolidated their documents and that FHWA believes there is confusion surrounding Virginia’s use of the SYIP, it is recommended that VDOT more fully assess consolidating Virginia’s SYIP and STIP. This assessment should center around speaking

with other states that have consolidated their programming documents, as well as obtaining approval from FHWA.

Prioritization, Transparency, and Metropolitan Perspective Critical in Constrained Environment

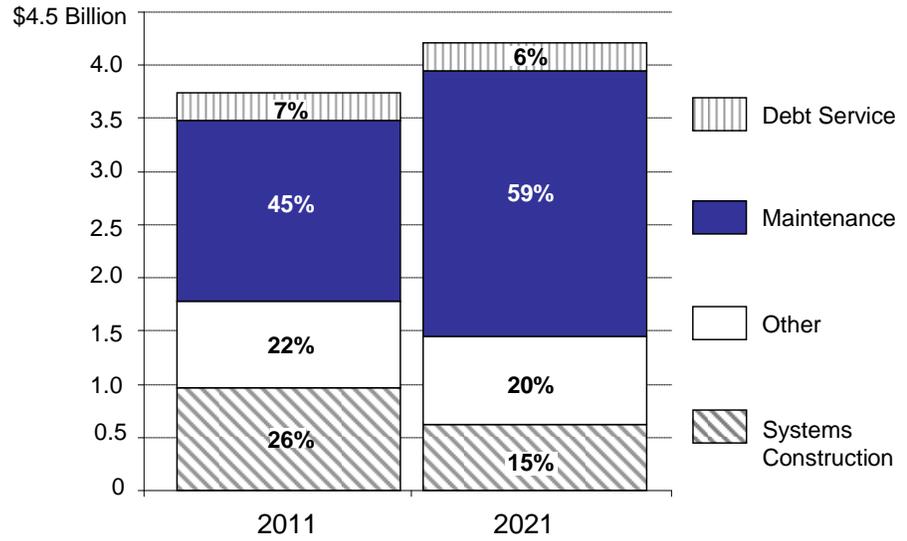
VDOT projects transportation revenues will increase by 13 percent between FY 2011 and FY 2021. However, during this same time period, VDOT projects maintenance costs will increase 47 percent from \$1.7 billion to \$2.5 billion. Because the *Code of Virginia* requires that maintenance be funded before systems construction, VDOT projects that funds available annually for new projects will fall by \$342 million by 2021 (see figure next page). This would represent a 36 percent decline, in addition to the substantial reductions experienced during the last several years. By 2021, VDOT projects that maintenance will account for 59 percent of its total available revenues. Available funds for systems construction will fall from 26 percent of available revenue to 15 percent by 2021.

The projects currently included in the FY 2011 - 2016 SYIP will have balances after FY 2011 totaling more than \$12 billion. Assuming the State maintains its current allocations schedule, these projects will still have balances totaling more than \$7 billion after FY 2016. Assuming that SYIP funding remains stable and maintenance costs remain constant from this point forward, which is optimistic when considering the above projections, it will take until 2022 to fund the post-2016 balances of current SYIP projects. This suggests that many projects not currently in the SYIP, in particular those in MPO and State long-range plans, cannot expect to receive any appreciable funding for more than a decade.

Many projects not currently in the SYIP... cannot expect to receive any appreciable funding for more than a decade.

This likely continuation of the currently-constrained fiscal environment makes it essential to prioritize among projects, be transparent about how and why decisions are made, and further embrace a metropolitan and multi-modal perspective. The newly-created Virginia Association of MPOs and several initiatives VDOT has underway have the potential to help in certain respects. However, the concerns raised throughout this report underscore the need for a more transparent, communicative, and collaborative approach to planning and programming.

VDOT Projects Maintenance Will Continue to Grow, Further Reducing Funds for Systems Construction Projects



Source: JLARC staff analysis of Commonwealth Transportation Fund Budget, approved in June 2010, and VDOT allocation projections for 2021.

Chapter 1

Overview of Transportation Planning, Programming, and Funding

In Summary

Long-range transportation planning consists of a variety of activities, such as assessing future transportation problems and needs, conducting detailed corridor and environmental studies, and producing long-range planning documents. Transportation programming consists of allocating funds to projects and periodically making adjustments based on changes in factors such as project costs and revenue. Virginia's total transportation revenue has dropped ten percent, from \$4.1 billion in FY 2006 to \$3.7 billion in FY 2011. During this time, maintenance costs have increased 24 percent, from \$1.4 billion to \$1.7 billion. As a result, funding allocated to projects through Virginia's Six-Year Improvement Program (SYIP) dropped considerably as the recent recession took hold. Funding for the first year of the SYIP was \$379 million less this year than in FY 2006, and now stands at \$1.19 billion. Total funding for the SYIP declined by \$456 million during the same period, and the current SYIP (FY 2011–2016) is now allocated \$6.5 billion.

The 2010 General Assembly passed House Bill 42 and Senate Bill 201, both of which direct staff of the Joint Legislative Audit and Review Commission (JLARC) to assess Virginia's approach to transportation planning and programming. The study mandate requires that JLARC staff address the alignment of Virginia's transportation processes with federal requirements, collaboration between the State and Metropolitan Planning Organizations (MPO), and staffing issues (Appendix A). Given the broad language in the mandate to also examine cost-saving initiatives, JLARC staff met with the chief patrons of the two bills to clarify and refine the scope of the study. It was agreed that the study should focus on the relationship of MPOs and the State, federal planning and programming requirements, and related staffing issues.

It is important to note that this review was not intended to address all aspects of transportation planning and programming in Virginia. Specifically, this report does not assess the efficiency or effectiveness of

- transportation planning and programming conducted by each of the State's MPOs;
- the federal planning and programming system;
- transportation planning and programming conducted by each local government for secondary and urban roads; or
- cooperation between MPOs and local governments.

VIRGINIA'S TRANSPORTATION INFRASTRUCTURE

Previous JLARC Review

A 2001 JLARC report *Equity and Efficiency of Highway Construction and Transit Funding* concluded that Virginia's road classification system was antiquated and somewhat arbitrary. The report recommended replacing the system with a functional classification system of statewide, regional, and local roads. The recommendation, however, has not been implemented.

Virginia's transportation infrastructure includes roads, bridges, airports, ports, rail, and public transportation. Virginia has 57,867 miles of State-maintained highways, the third highest in the country. These State-maintained roads include interstate, primary, and secondary roads. Interstates comprise 1,118 miles of four to ten lane highways that connect major cities within and outside of Virginia. These interstates, along with some primary roads, are part of the National Highway System. Primary roads consist of 8,111 miles of two to six lane roads that connect cities and towns with each other and with interstates. The majority of the State's roads are secondary roads; there are 48,305 miles of secondary roads that are local connector or county roads. Virginia's road infrastructure also includes 20,842 bridges.

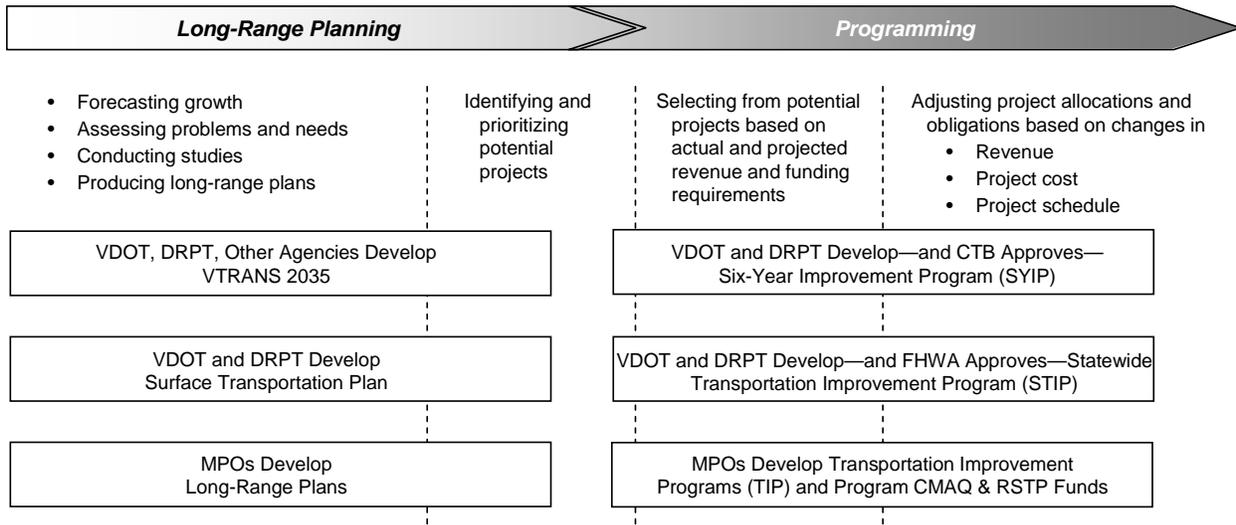
A separate system of roads includes 10,561 miles of urban streets that are maintained by cities and towns with the assistance of State funds. Henrico and Arlington counties maintain their own roads using State and federal funds.

The major focus of this report is planning and programming for roads projects. However, rail and public transit are selectively addressed throughout the report, especially in Chapter 5. There are more than a dozen railroad companies that operate in Virginia, including Norfolk Southern, CSX, and Amtrak. Virginia also has 60 public transportation systems, which range from two bus programs in small towns to much larger regional systems like Metrorail in Northern Virginia and Hampton Roads Transit.

VIRGINIA'S TRANSPORTATION PLANNING AND PROGRAMMING PROCESSES

For the purposes of this report, JLARC staff are defining transportation long-range planning and programming in Virginia as the activities, organizations, and documents shown in Figure 1. There is a general progression of specificity when moving from long-range planning to programming. For example, long-range planning includes forecasting and assessing problems and needs that may need to be addressed sometime in the future. In contrast, programming includes allocating anticipated revenues to specific transportation projects. The activities and roles the key organizations in Virginia play reflect this progression.

Figure 1: Key Activities, Organizations, Roles, and Documents in Virginia's Planning and Programming



Note: VDOT, Virginia Department of Transportation; DRPT, Department of Rail and Public Transportation; CTB, Commonwealth Transportation Board; FHWA, Federal Highway Administration.

Note: Non-metropolitan planning is coordinated through Virginia's 20 Planning District Commissions, which have historically produced long-range plans. Project selection at the State level is also guided by CTB and Executive Committee guidance.

Source: JLARC staff analysis of various federal and Virginia documentation.

Key Transportation Planning and Programming Organizations

No single entity is responsible for Virginia's entire transportation system. The organizations that play the most central roles in transportation long-range planning and programming are the Commonwealth Transportation Board (CTB), Virginia Department of Transportation (VDOT)—including its central and district offices—Department of Rail and Public Transportation (DRPT), and MPOs. Each locality also plays a substantial role by allocating funding it is provided for secondary and urban road projects. Rural planning is conducted through VDOT and the State's 20 Planning District Commissions (PDC), which plan for transportation along with other economic development issues outside urban areas.

The CTB is a 17-member board that establishes administrative policies for the State's transportation system, locates transportation routes, and allocates funding. The CTB is chaired by the Secretary of Transportation and the Transportation Commissioner is the vice chair. The DRPT director is a non-voting member of the board. The other 14 CTB members are citizens appointed by the Governor and confirmed by the General Assembly. Nine citizen members represent specific construction districts and the others are at-large members.

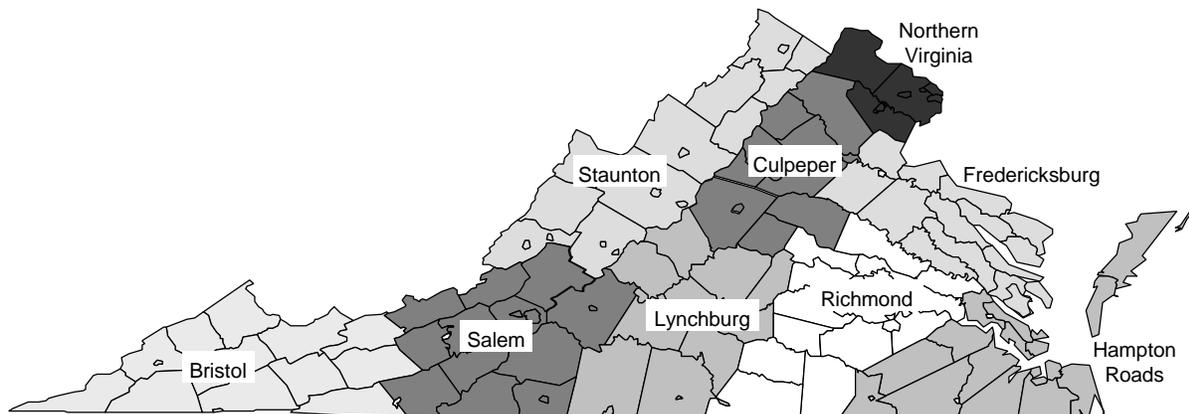
In Virginia, the agency with the most central role in transportation planning and programming is VDOT. VDOT has this role primarily because of Virginia’s historically centralized approach to highway planning and programming, and because the bulk of the State’s transportation funding is spent on highways. The VDOT central office includes a planning division and a programming division that are responsible for most of the State’s planning and programming activities. There are also nine VDOT district offices, one in each of the nine VDOT construction districts (Figure 2). The district offices interact with the central office, the CTB, MPOs, and others on issues within the district.

Public transit and rail planning and programming at the State level is conducted by DRPT. DRPT’s primary role is working with public transit operators in the State’s localities, especially by providing grant funding. DRPT also works with rail operators through coordinating rail operations and planning future rail projects.

MPOs represent urbanized areas with populations greater than 50,000. As shown in Figure 3, Virginia has 14 such MPOs, which are transportation policy-making organizations comprised of professional staff and a board, usually consisting of representatives from local government and transportation authorities. MPOs are directly allocated funding for certain projects, but otherwise are to be engaged cooperatively by the State and local governments to plan and program projects being conducted within MPO boundaries. Chapter 2 addresses the role of MPOs in transportation decision-making in more detail.

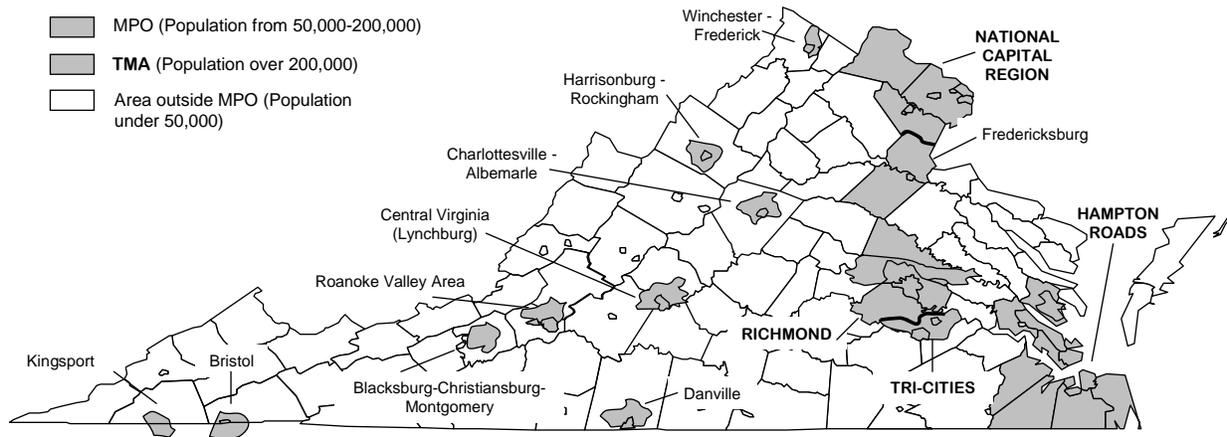
MPOs serving areas with more than 200,000 people, known as transportation management areas (TMA), have additional planning requirements, such as developing strategies to reduce conges-

Figure 2: VDOT Has Nine Construction Districts



Source: JLARC staff analysis of Commonwealth Transportation Board handbook.

Figure 3: Virginia Has 14 MPOs, Including Four TMAs



Note: National Capital Region is also responsible for metropolitan planning for the District of Columbia and portions of Maryland.
 Source: JLARC staff analysis of 2025 State Highway Plan.

tion or improve air quality. Virginia has four TMAs: the National Capital Region Transportation Planning Board (Northern Virginia), Hampton Roads, Richmond, and Tri-Cities.

Long-Range Planning Activities and Documents

Long-range transportation planning consists of a variety of activities, such as forecasting growth in population and other economic trends, assessing future transportation problems and needs, conducting detailed corridor and environmental studies, and producing long-range planning documents. The central objective of these activities is to anticipate future transportation needs and begin to identify potential solutions. The scale and complexity of major transportation projects require a long-term perspective that looks 20 to 30 years into the future.

VDOT, MPOs, and PDCs contribute to two primary statewide long-range plans, while each of Virginia’s 14 MPOs develops one for their region (Table 1). VTrans 2035 is Virginia’s multi-modal, long-range planning document, which outlines goals and serves as the policy foundation for transportation investments over 25 years. The plan builds on the prior long-range multi-modal plan (VTrans 2025) and identifies priorities in four areas: making strategic infrastructure investment; addressing environmental, safety, and maintenance issues or concerns; enhancing economic competitiveness; and minimizing congestion.

The 2035 Virginia Surface Transportation Plan identifies potential long-term project development and investments based on VTrans 2035 goals. It includes possible improvements to transit, rail,

Fiscal Constraint

Fiscal constraint requirements for federally-funded transportation projects were enacted in 1991 with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA). These provisions apply to MPO long-range plans and short-term programs. Fiscal constraint requires identifying revenues that are reasonably expected to be available to implement any proposed projects.

freight, and highway systems. The plan represents the first time VDOT and DRPT have organized multi-modal proposals in a single plan. This replaces the State Highway, Transit, and Rail plans that were previously produced separately. There are additional modal plans that are the primary responsibility of the other modal agencies.

An MPO’s Long-Range Transportation Plan (LRTP) is a 20-year planning document that includes long-term regional strategies to develop a multi-modal transportation system within a metropolitan area. Each MPO develops an LRTP which, unlike the State long-range plans discussed above, must be fiscally-constrained (see sidebar). LRTPs are required to be updated at least every four years in air quality non-attainment and maintenance areas, and at least every five years in other areas. The plans, at a minimum, are required to include projected transportation demand (for people and goods), existing and proposed transportation facilities that should function as an integrated metropolitan transportation system, and a financial plan.

Table 1: Key State and MPO Long-Range Transportation Plans

Plan	Development / Approval	Time horizon (Years)	Update Cycle (Years)	Fiscal Constraint Required?
VTrans 2035	Office of Intermodal Planning and Investment / Secretary	25 ^a	5	No
Virginia Surface Transportation Plan	VDOT & DRPT	25	5	No
MPO Long-range Transportation Plan	MPO	20	5 ^b	Yes

^a §33.1-23.03 and 23 CFR 450.214 require a statewide long-range plan that covers at least a 20-year planning horizon.

^b Every four years for non-attainment and maintenance areas.

Source: JLARC staff analysis of VDOT and DRPT plans and planning materials, *Code of Virginia*, and U.S. Code.

Programming Activities and Documents

Transportation programming consists of matching project schedules, estimates, and eligibility criteria to available funding. Most programming decisions involve determining whether to fund the next phase in a project that has already been allocated funding for one or more phases. Decisions must also be made regarding which new projects to begin funding. New project phases may be identified from long-range plans (when funding is available), by engineering staff based on CTB priorities (such as bridge and paving projects), and by MPOs and localities. Once projects are part of an approved program, planned allocations of State and federal dollars must be adjusted throughout the year based on changes in (1) revenue, (2) project costs, and (3) project schedules. Because of the long-term nature of many transportation projects, programming

for a project is rarely a one-time event, but rather an ongoing effort to allocate funding to facilitate progress on many projects at once.

Obligated Funds

According to guidance developed by the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA), an obligation is the federal government's legal commitment to pay the federal share of a project's cost. An obligated project is one that has been authorized by the federal agency and for which funds have been obligated. For FHWA projects, obligation occurs when a project agreement is executed and the State / grantee requests that the funds be obligated.

Programming decisions can be made for the current fiscal year, upcoming fiscal year, and subsequent fiscal years. The federal government obligates funding (through project agreements) for projects that expect to use federal funds. These obligations are the federal government's agreement to reimburse the State for project expenditures up to the obligated amount. The State allocates both state and federal funds to projects. Importantly, these allocations as articulated through the State's program documents reflect how the State *plans* to allocate or obligate funds.

The State develops two primary programming documents, while each of Virginia's 14 MPOs develops one (Table 2). The Six-Year Improvement Program (SYIP) is the CTB's program for allocating funding for rail, public transit, and highway projects for the next six years. Projects programmed directly by localities (secondary and urban roads) and MPOs are also included in the SYIP. A new SYIP is released each year. Road projects included in the SYIP begin in the preliminary engineering phase, which includes environmental and engineering studies. A project then moves to the right-of-way phase and, once fully funded and designed, moves into the construction phase. Highway maintenance funding is typically not allocated through the SYIP.

The Statewide Transportation Improvement Program (STIP) and MPO Transportation Improvement Program (TIP) collectively document the highway construction, operations and maintenance, and transit projects that will use federal funding, or require federal approval over the next four years. For each project, an MPO TIP is to include the total estimated cost, the amount of federal funds proposed for obligation during each program year, and which agency or organization is responsible for which phase of the project. The STIP incorporates the TIPs from the 14 MPOs, as well as any federally-funded highway projects located outside the MPO

Table 2: Key State and MPO Transportation Programming Documents

Program	Development / Approval	Time Horizon (Years)	Update Cycle (Years)	Fiscal Constraint Required?
Six-Year Improvement Program (SYIP)	VDOT & DRPT / CTB	6	Annual	Yes
Statewide Transportation Improvement Program (STIP)	VDOT & DRPT / U.S. DOT	4	4	Yes
MPO Transportation Improvement Program (TIP)	MPO / Governor	4	4	Yes

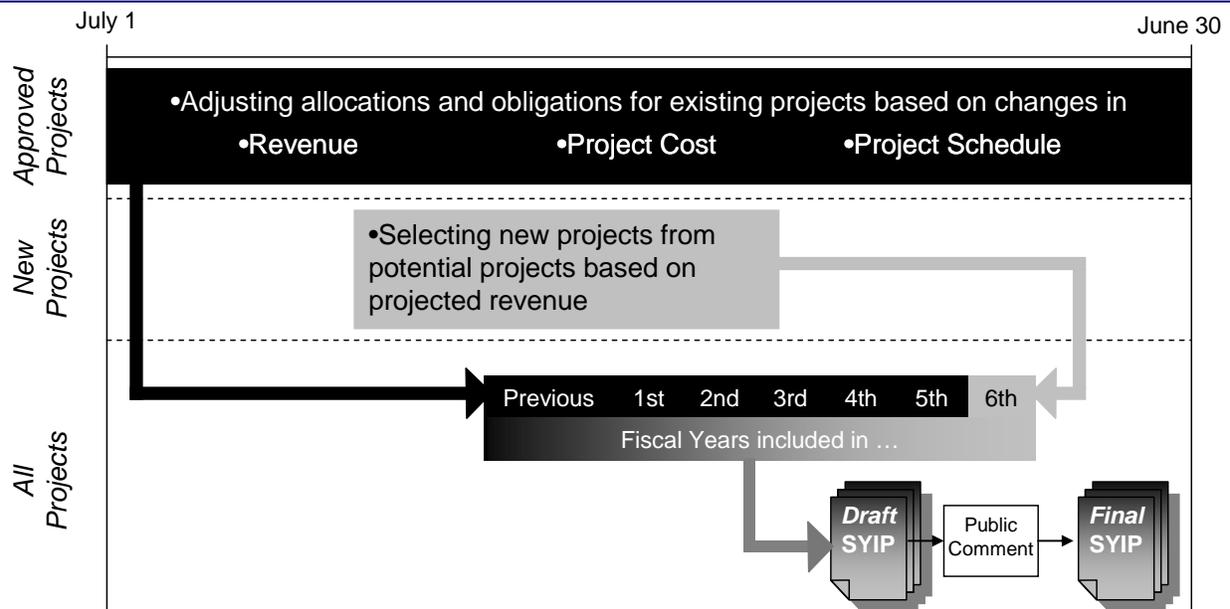
Source: JLARC staff analysis of VDOT and DRPT plans and planning materials, *Code of Virginia*, and U.S. Code.

boundaries. The TIP and STIP are to be fiscally-constrained plans that demonstrate planned future obligations.

The SYIP is the State’s primary programming document. Virginia’s current SYIP covers fiscal years 2011 to 2016. Allocations can be made in each of the six years, with the first year serving as the project budget for the upcoming year. The last five years of the program represent planned allocations for approved projects based on anticipated revenues, and may change with each update of the program to reflect revised revenue estimates. Previous allocations to these projects are also shown in the SYIP. Allocations for new projects are typically added to the sixth and final year of the SYIP (Figure 4).

Allocations for all approved and new projects are included in a draft SYIP that is usually released in the spring of each year. The CTB holds meetings in various regions of the State to collect public comments on the draft SYIP. The CTB is then required to approve a final SYIP reflecting any changes by June 30, prior to the beginning of the next fiscal year.

Figure 4: Programming Through SYIP Is for Already Approved and New Projects



Source: JLARC staff analysis of VDOT documentation.

TRANSPORTATION FUNDING DECLINED DURING RECESSION

Virginia’s transportation revenue comes primarily from three sources: the Highway Maintenance and Operating Fund, the Transportation Trust Fund, and federal funds.

Transportation Funding Priorities

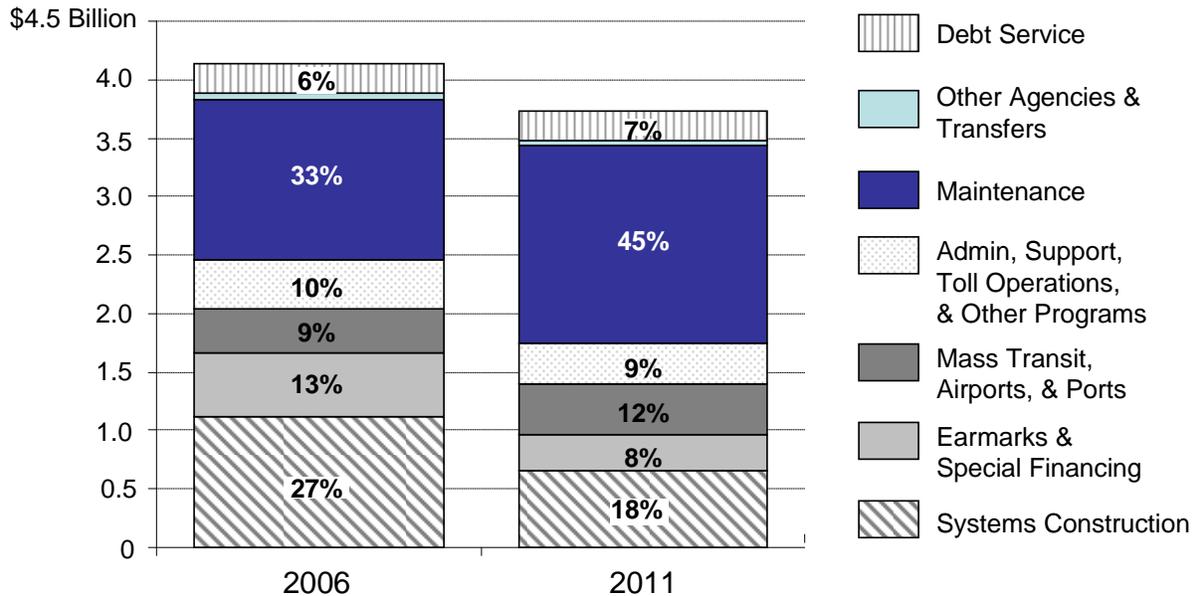
The *Code of Virginia* and Appropriation Act dictate how the Commonwealth Transportation Board should prioritize transportation funding. Funding is to be allocated in the following order of priority: Debt service; support to other state agencies and the general fund; maintenance; operations and administration; other modes; earmarks and special financing programs; interstate construction projects; and primary, secondary, and urban construction projects.

- **Highway Maintenance and Operating Fund (HMOF)** - The HMOF includes all transportation revenue sources imposed prior to 1986, the largest of which are the gasoline tax, motor vehicle sales and use tax, and vehicle registration fees. The HMOF is primarily used for operations and maintenance of existing transportation infrastructure.
- **Transportation Trust Fund (TTF)** - The TTF was created by a special session of the General Assembly in 1986. The TTF includes revenues from increases in pre-1986 taxes and fees, including a half-cent increase in the sales and use tax, one percent increase in motor vehicle sales tax, \$0.025 increase in the gasoline tax, and \$3 increase in the vehicle registration fee. The TTF is primarily used for construction of new transportation infrastructure. Importantly, most of the revenue streams that fund the TTF (and HMOF) are in fixed dollar amounts, rather than percentages—and not indexed to any measure of inflation or economic growth.
- **Federal funds** - The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) provide federal funds to Virginia for transportation. In most years, the majority of federal funding comes from FHWA. Federal funds are the largest source of funding for the highway construction program.

The *Code of Virginia* creates a statutory hierarchy of how this revenue is to be used (see sidebar). New systems construction projects, in particular interstate, primary, secondary, and urban construction projects, have the lowest priority in this statutory hierarchy. Debt service and maintenance, among other items, are of higher priority. Furthermore, according to CTB policy, “If there is a deficit of funds in the HMOF, funds from the TTF are directed to the HMOF.” Because of this prioritization, funding available for systems construction has dropped considerably in recent years. Total available revenue has dropped from \$4.1 billion in FY 2006 to \$3.7 billion in FY 2011. During this time, maintenance costs have increased by 24 percent, from \$1.4 billion annually to \$1.7 billion. The result, with some TTF funding being used to cover a deficit in the HMOF, is that systems construction funding has fallen from \$1.1 billion in FY 2006 to \$657 million in FY 2011 and is now comprised almost exclusively of federal funds (Figure 5).

The decline in available revenue, when coupled with the concurrent increase in maintenance costs, resulted in substantial decreases in the amount of funding left for items lower in the statutory hierarchy—namely systems construction. Stated otherwise, systems construction now receives a smaller piece of a smaller pie. While total available revenue dropped ten percent, maintenance costs increased from one-third to 45 percent of all spending.

Figure 5: Maintenance Costs Increased While Total Funding Declined, Substantially Decreasing Systems Construction and Earmarks and Special Financing



Source: JLARC staff analysis of Commonwealth Transportation Board documentation.

Systems construction contracted from 27 percent to 18 percent of total funding. Earmarks and special financing, also used for construction projects, similarly fell from 13 percent to eight percent of total funding.

This reduction of available revenue has translated into lower funding for the State’s SYIP. Total SYIP allocations dropped considerably as the combined impact of the recession and increased maintenance costs forced cuts in systems construction allocations. Funding for the first year of the SYIP was reduced by \$379 million, nearly one-quarter, from FY 2006 to FY 2011 (Table 3). Total funding for the six-year plan declined by \$456 million from the FY 2006–2011 plan to the FY 2011–FY 2016 plan.

Table 3: SYIP Allocations Dropped Substantially as Recession Deepened and Maintenance Costs Increased (000s)

Program	First Year	Annual Change	Six-Year Total	Annual Change
FY 2006 - 2011	\$1,572,800	N/A	\$7,003,270	N/A
FY 2007 - 2012	1,507,589	-4%	6,244,903	-11%
FY 2008 - 2013	1,449,639	-4	8,857,222	42
FY 2009 - 2014	1,523,759	5	6,699,475	-24
FY 2010 - 2015	1,152,981	-24	6,271,213	-6
FY 2011 - 2016	1,194,323	4	6,546,791	4
<i>FY 06 to FY 11 Change</i>	<i>-\$378,477</i>	<i>-24%</i>	<i>-\$456,479</i>	<i>-7%</i>

Note: Multiple revisions made in FY 2009 and 2010. Figures shown are for last revision for that fiscal year.
 Source: JLARC staff analysis of VDOT Six-Year Improvement Program database, September 28, 2010 extract.

Report Focus on State and Regional Relationship

The study mandate directs JLARC to focus on statewide and regional transportation planning and coordination. Consequently, this report focuses on coordination between the State and MPOs during planning and programming of interstate and primary road funds, which occur at the State level.

In terms of highway funding specifically, the statutory hierarchy of funding places interstate funding above primary, secondary, and urban. Interstate funding is largely at the discretion of the CTB. Primary funding is allocated by formula across the nine VDOT construction districts, and then projects are selected within each district with CTB approval. Formulas also dictate how much secondary and urban roads funding each locality receives. Allocation decisions for these road systems are made at the local level. This hierarchy of road funding meant the brunt of the decline in highway funding was absorbed by urban, secondary, and primary road projects. While total systems construction has dropped 42 percent since FY 2006, interstate funding declined by only 12 percent (Table 4). Secondary and urban roads funding, in contrast, dropped by over two-thirds. Primary roads allocations dropped 42 percent.

Finally, the FY 2011 – 2016 SYIP is scheduled to allocate 58 percent of total funding to projects outside MPO boundaries. The remaining 42 percent of projected funding over this period is allocated to projects across the 14 MPOs (Figure 6). Projects conducted within the Northern Virginia, Hampton Roads, and Richmond MPO boundaries are scheduled to receive 37 percent. The remaining 11 MPOs are scheduled to receive the other five percent.

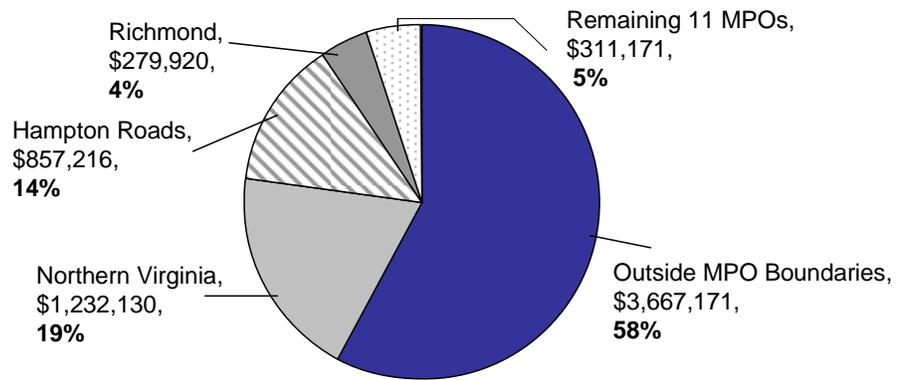
Importantly, these amounts represent the projected allocations to projects within each MPO boundary—not funding allocated directly to MPOs. The only funds allocated directly to MPOs are Congestion Mitigation and Air Quality Improvement Program (CMAQ) and regional Surface Transportation Program (STP) funding, which total about \$109 million in FY 2011 and are discussed in more detail in Chapter 2.

Table 4: Secondary and Urban Road Systems Absorbed Bulk of Revenue Decline

	FY 2006 Allocated	FY 2011 Allocated	% Change
Interstate	\$349,570,102	\$306,041,330	-12%
Primary	378,704,033	221,458,401	-42
Secondary	206,097,091	64,669,474	-69
Urban	190,435,790	64,646,250	-66
<i>Total</i>	<i>\$1,124,807,016</i>	<i>\$656,815,455</i>	<i>-42%</i>

Source: JLARC staff analysis of CTB documentation.

Figure 6: About 58 Percent of FY 2011-2016 SYIP Funding Is Allocated to Projects Outside MPO Boundaries (000s)



Source: JLARC staff analysis of VDOT Six-Year Improvement Program database.

Chapter 2

Minimal MPO Role in Allocations Is Missed Opportunity for More Informed Decision-making

In Summary

In FY 2011, Virginia's largest Metropolitan Planning Organizations (MPO) allocated about \$123 million, which was ten percent of total Six-Year Improvement Program (SYIP) funding. For the remaining 90 percent, MPOs are to work with local governments through their MPO boards to help set priorities for secondary and urban road systems, and work with VDOT and the Commonwealth Transportation Board to help determine priorities for the primary and interstate system. VDOT central office staff indicate there is cooperation with MPOs on these State allocated funds. MPOs, however, believe their input plays a minimal role in interstate and primary road allocation decisions. MPOs also believe the State's use of the SYIP, which is not envisioned in federal regulations, contributes to this minimal role. VDOT should work with MPOs to determine the most effective way to more fully capitalize on MPO capabilities, in particular regarding the role of MPO input into State allocation decisions. The General Assembly may also wish to amend the *Code of Virginia* to provide MPOs with an opportunity to give more meaningful input on priorities.

The mandate for this study directs JLARC staff to assess several aspects of the role that Virginia's Metropolitan Planning Organizations (MPO) play in the State's long-range planning and programming process. As noted in Chapter 1, Virginia has 14 MPOs, the largest four of which are classified as Transportation Management Areas (TMA) by the Federal Highway Administration (FHWA).

FEDERAL GOVERNMENT CREATED MPOs TO ADDRESS METROPOLITAN TRANSPORTATION NEEDS

Metropolitan areas often present complex transportation challenges which may require solutions that differ from rural areas. In large part, these challenges stem from population density, heavily-travelled roadways, reliance on other modes of transportation, and the need to balance mobility with land use and pollution concerns. The federal government created MPOs to provide an additional entity to work with state and local governments to identify solutions to address these challenges.

MPOs Were Created To Foster a More Regional, Multi-Modal Approach to Transportation

Many of the items identified in the study mandate concern the relationship between the State and its 14 MPOs. The federal Highway Act of 1973 created MPOs. Reports about MPOs cite various

reasons for their creation, as well as their continued role and expanded responsibilities, including

- providing a regional perspective for metropolitan areas that cross local government and state boundaries;
- challenging the authority of state highway departments that historically favored highway and rural transportation projects; and
- realigning the focus of transportation planning toward a more inclusive, environmentally sensitive, and multi-modal approach to addressing transportation problems.

Federal legislation over the last few decades has steadily expanded the role of MPOs in transportation planning and programming. The most significant expansion of MPO authority occurred in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. ISTEA increased administrative funding for MPO planning activities and required MPOs to evaluate a variety of multi-modal solutions to roadway congestion. ISTEA also gave TMAs authority to select projects for certain categories of federal funds in consultation with the State. State and MPO cooperation was required on use of the remaining funding. As noted earlier, ISTEA also provided TMAs with primary authority over STP and, to a lesser extent, CMAQ funds. These programs offer flexible multi-modal funding aimed at reducing congestion and improving air quality.

Especially since ISTEA expanded the role of MPOs, they have been the flashpoint in the debate over state versus regional transportation interests. As noted in the scholarly publication, the *Berkeley Planning Journal*,

Almost from the time of ISTEA's passage, its overall approach and especially its reliance on MPOs were heavily contested by some states and other interests, who challenged the regional agencies' competence and legitimacy.

MPOs were heavily contested by some states ... who challenged the regional agencies' competence and legitimacy.

The most recent comprehensive transportation legislation, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was passed in 2005 and continued the basic planning and programming framework outlined in ISTEA. According to the FTA, SAFETEA-LU "continue(d) the tradition of extending the reach of the metropolitan planning process and the MPO sphere of influence."

SAFETEA-LU expired in 2009, and the federal government has yet to pass a new comprehensive transportation bill. Currently, draft federal legislation suggests the trend toward sustained or enhanced MPO authority is likely to continue. A draft bill, the Sur-

face Transportation Assistance Act of 2009, would provide funding and financing authority directly to MPOs in areas of 500,000 or more. According to the Congressional Research Service, providing federal highway funding directly to MPOs could represent a “major shift in authority from the states to MPOs.”

Majority of Transportation Needs and Challenges Are Within MPO Boundaries

Virginia’s MPOs reported that more than six million people live within their boundaries (Table 5). This represents more than 75 percent of the State’s total population. The MPOs representing Northern Virginia and Hampton Roads alone include 3.8 million people, just less than half the entire State population.

Table 5: MPO Boundaries Include Most of Virginia’s Population

MPO	Estimated Population	% of Virginia’s Total Population
Northern Virginia (part of National Capital Region Transportation Planning Board) ^a	2,162,000 ^b	27%
Hampton Roads ^a	1,620,000	21
Richmond ^a	950,000	12
Fredericksburg	225,000	3
Roanoke Valley Area	224,000	3
Tri-Cities ^a	158,000	2
Central Virginia (Lynchburg)	150,000	2
Charlottesville-Albemarle	110,000	1
Kingsport	96,000	1
Bristol	89,700	1
Blacksburg-Christiansburg-Montgomery	83,500	1
Winchester-Frederick	80,000	1
Harrisonburg-Rockingham	76,000	1
Danville	72,000	1
Total MPO	6,096,200	77%
Non-MPO	1,786,390	23%

^a TMA (Note: Populations based on survey responses are more recent than 2000 U.S. Census Bureau data federal government uses to designate Transportation Management Areas.)

^b Estimate based on U.S. Census Bureau data and excludes areas of MPO outside of Virginia.

Source: JLARC staff survey of Virginia MPOs, 2010; U.S. Census Bureau data.

MPO boundaries contain the majority of the State’s total interstate road length and vehicle miles traveled (Table 6). For example, 60 percent of the State’s total interstate road length, and 78 percent of the State’s total vehicle miles traveled on interstates, are in localities within boundaries of the State’s 14 MPOs. Forty-three percent of the State’s primary road length, and 69 percent of total vehicle miles traveled on primary roads, are in localities within MPOs.

Table 6: Majority of Virginia’s Interstate Road Length and Interstate and Primary Vehicle Miles Traveled Are Inside MPO Boundaries

	Secondary	Primary	Interstate	Total
Road Length				
Localities entirely or partially within MPO Boundaries ^a	52%	43%	60%	51%
Localities entirely within MPO Boundaries	31	22	34	30
Vehicle Miles Traveled				
Localities entirely or partially within MPO Boundaries	80 ^a	69	78	74
Localities entirely within MPO Boundaries	61	49	55	54

^a Remaining percentages for this row entirely outside MPO boundaries.

Note: Some localities are only partially located within MPO boundaries. Calculations including these localities provides the upper bound of estimates of road length and vehicle miles travelled; and calculations excluding these localities provides the lower bound.

Source: JLARC staff analysis of Virginia Department of Transportation and U.S. Census Bureau data, 2010.

The large proportion of Virginians living in metropolitan areas and utilizing the road systems contributes to congestion problems in these areas. VDOT data indicates that districts including the State’s largest MPOs also have the most extreme congestion problems. For example, 23 percent of the interstates monitored by VDOT in Northern Virginia receive a congestion score of “F” between 3:30 and 6:30 p.m. Richmond, Hampton Roads, and Fredericksburg are the only other districts with roads that received a congestion score of “F” for any of their road segments (Table 7). Most crashes in the State also occur in and around metropolitan areas (Table 7). More than 60 percent of the crashes in Virginia over the last three years were in the Northern Virginia, Richmond, and Hampton Roads VDOT construction districts.

Table 7: Congestion and Crash Data by VDOT District

VDOT District	Extreme Congestion ^a	Crashes ^b
Northern Virginia	23%	23%
Richmond	2	18
Hampton Roads	1	21
Fredericksburg	1	5
Salem	0	9
Staunton	0	7
Culpeper	0	5
Lynchburg	0	5
Bristol	0	5
<i>Statewide</i>	<i>5%</i>	<i>100%</i>

^a Congestion is shown as level of service “F” on an “A” through “F” scale. Level of service “F” is defined as “breakdown in flow, queues forming behind breakdown points, and demand greater than capacity” as measured at various interstate locations by VDOT between 3:30 and 6:30 over 13 months from July 2009 to August 2010.

^b Crashes shown is the percentage of statewide total. Data shown represent a three-year, annualized average of percentage of crashes reported within district boundaries on all road systems.

Source: Virginia Department of Transportation.

Federal Regulations Articulate MPO Role in State Transportation Planning and Programming

The Code of Federal Regulations (23 C.F.R. 450) stipulate metropolitan and statewide planning responsibilities for MPOs and states. MPOs must develop a long-range plan for their planning areas and update that plan at least every four years. State DOTs are charged with developing a long-range plan for the entire state—in cooperation with MPOs for metropolitan areas and in consultation with local officials in non-metropolitan areas. Cooperation is defined as “parties involved in carrying out the transportation planning and programming processes work together to achieve a common goal or objective.”

MPOs and the State must also cooperate in developing transportation improvement programs and selecting projects for federal funds. In order for a project within a metropolitan area to receive federal funding, it must be included in the respective MPO’s long-range plan and Transportation Improvement Program (TIP). Two important provisions included in 23 C.F.R 450.330 relate to how the State and MPOs should interact when selecting projects:

(a) In metropolitan areas not designated as TMAs, projects to be implemented using title 23 U.S.C. funds ... or funds under title 49 U.S.C. Chapter 53, shall be selected by the State ... in cooperation with the MPO from the approved metropolitan TIP. [emphasis added]

(b) In areas designated as TMAs, all 23 U.S.C. and 49 U.S.C. Chapter 53 funded projects (excluding projects on the National Highway System (NHS) and projects funded under the Bridge, Interstate Maintenance, and Federal Lands Highway Programs) shall be selected by the MPO in consultation with the State ... from the approved TIP and in accordance with the priorities in the approved TIP. [emphasis added]

These regulatory citations suggest a cooperative process between the State and MPOs. The State should cooperate with MPOs when selecting interstate and primary roads projects. The issue of MPOs taking the lead in selecting these projects is less relevant in Virginia because all of Virginia’s interstates are on the NHS and only about one-quarter of the State’s primary road mileage is outside the NHS.

MPOs CITE A MINIMAL ROLE IN PROJECT SELECTION AND ALLOCATION PROCESS

CMAQ and Regional STP Funds

In general, CMAQ and STP funds are flexible funds that can be used for projects, of any mode, to reduce traffic congestion and improve—or not degrade—air quality. These funds are programmed in the MPO TIP and must also be included in the SYIP.

According to federal law, the largest MPOs, classified as TMAs, have project selection authority for regional Surface Transportation Program (STP) funds, in consultation with the State. Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds have also been distributed by the CTB to MPOs for programming, though this is not required by federal law. In FY 2011, these CMAQ and STP funds totaled about \$123 million, or roughly ten percent of the \$1.19 billion in total SYIP funding for FY 2011.

Beyond CMAQ and regional STP funds, MPOs do not directly allocate funding but rather work with local governments through their MPO boards to help set priorities for secondary and urban road systems, and work with VDOT and the CTB to help determine priorities for the primary and interstate system. As noted in Chapter 1, funding for each of these road systems has declined during the last few years, with secondary and urban road funding allocated by local governments declining substantially. Approximately 12 percent of FY 2011 SYIP funding was allocated by local governments for secondary and urban roads. The remainder was allocated by the CTB for interstate (23 percent), primary road (19 percent), and miscellaneous and enhancement projects (35 percent), including bridge and paving projects which were funding priorities for the CTB.

VDOT Indicates Cooperation on MPO Long-Range Planning, but MPOs Report Long-Range Plans Play Minimal Role

According to VDOT central office staff, statewide multimodal plans are developed by the State with MPOs and Planning District Commissions. Recommendations for projects within MPO boundaries are developed using MPO long-range plans as a base. VDOT also noted that it provides 11 MPOs with travel demand models, and offers to provide geographic information system data and environmental analyses.

Most MPOs believe that these long-range plans through which they cooperate with the State play only a minimal role in the funding that is ultimately allocated. Ten of the 14 MPOs reported that MPO long range plans play either no role or a very minor role in allocation decisions (Table 8).

VDOT's district administrators are more divided on this question. In response to the same survey question, four VDOT district administrators reported MPO long-range plans play a minor role, while five reported they play either a major or very major role.

Table 8: MPOs Perceive Long Range Plans Play Minimal Role in Allocation Decisions; VDOT District Administrators Report Mixed Perceptions

	No Role	Very Minor Role	Minor Role	Major Role	Very Major Role
<i>What is your perception about the role that MPO long range plans play in allocation decisions as reflected in the SYIP ...</i>					
MPO Directors	4	6	2	2	0
VDOT District Administrators	0	0	4	4	1

Source: JLARC staff surveys of MPOs and VDOT District Administrators, 2010.

VDOT central office staff noted its interactions with MPOs on long-range planning satisfy the federal requirement to cooperate with MPOs during long-range planning. VDOT district administrators concurred with this view, with eight of nine agreeing or strongly agreeing. MPOs had a split opinion on the consistency of long-range planning with federal requirements to cooperate, with five strongly disagreeing or disagreeing, five partially agreeing, and four either agreeing or strongly agreeing.

MPOs Report Their Priorities Play Minimal Role in Allocation Decisions; VDOT Central Office and District Perceptions Vary

With regard to project selection and allocation decisions, VDOT central office staff report that MPO priorities are considered and communicated during SYIP development through MPO interactions with VDOT district staff. At the beginning of the SYIP development process, each VDOT district submits regional priorities for interstate and primary road systems to the central office. VDOT districts are to work with MPOs to identify these priorities, and then communicate them through the VDOT central office and to the CTB. VDOT central office staff also noted that district staff and CTB members often sit on MPO boards and participate in MPO committees, thereby gaining knowledge about MPO priorities. VDOT staff also provide information to MPOs to help them develop their TIP, in the form of a draft TIP.

Despite the above characterization of how the process is supposed to work, MPOs and even some district administrators believe that MPO input plays only a minor role in influencing interstate and primary road allocation decisions. Ten of the 14 MPOs perceived their input plays either no role or a very minor role, while another four reported a minor role (Table 9). As one MPO explained, “Although the MPO develops long-range plans and approves program funds (TIP), the MPO does not have much of a role in selecting projects and priorities.” VDOT district administrators supported this perception, with seven of the nine reporting MPOs play a very minor or minor role.

Table 9: MPOs Perceive Having a Minimal Role in Allocation Decisions

Survey Respondent	No Role	Very Minor Role	Minor Role	Major Role	Very Major Role
<i>What is your perception about the role that input about project prioritization from MPOs plays in decisions to allocate interstate and primary road funding ...</i>					
MPO Directors	4	6	4	0	0
VDOT District Administrators	0	3	4	2	0
<i>What is your perception about the role that MPO Transportation Improvement Programs play in allocation decisions as reflected in the SYIP ...</i>					
MPO Directors	2	5	6	1	0
VDOT District Administrators	0	0	4	4	1

Source: JLARC staff surveys of MPOs and VDOT District Administrators, 2010.

VDOT indicates that MPOs do, in fact, play a significant role in determining whether a project advances through their inclusion of the project in their long-range plan and TIP. Without this approval, the project cannot be funded. District administrators are split on the role of TIP in allocations through the SYIP, with five indicating that TIPs play a major or very major role in allocation decisions. The other four reported that TIPs play a minor role. In contrast, 13 of the 14 MPOs reported that their TIPs play a minor or no role in allocation decisions. This may be because while MPOs have the ability to prevent a project from advancing by excluding it from their TIP, a project will not advance due to its inclusion in a TIP if it is not allocated sufficient funds through the SYIP process.

VDOT central office staff noted that its interactions with MPOs are consistent with the federal requirement to cooperate with MPOs in developing transportation improvement programs. VDOT district administrators generally concurred with this view, with seven of the nine either agreeing or strongly agreeing. However, 11 out of 14 MPOs disagreed or strongly disagreed that Virginia’s approach is consistent with federal requirements. As one MPO stated, “Currently, VDOT and DRPT tell the MPOs what the projects will be and then expect the MPO Policy Board to approve a TIP consistent with that list of projects.” Another MPO stated, “The State’s projects are forwarded for inclusion in the federally required documents but there is no discussion of what projects should be programmed or what the priorities are.”

VDOT also indicated that MPOs have the opportunity to provide input on allocation decisions during the public comment period for the draft SYIP. One MPO director characterized this channel as less than sufficient:

At the big public hearings, MPOs get their three minutes to speak about regional transportation priorities, and these remarks are recorded the same as the general citizen who

shows up to ask VDOT to mow the grass in the median of a road or pave a gravel road.

Similarly, a VDOT district administrator said that MPOs have to try to influence decisions “at the bully pulpit like all the others.”

OPPORTUNITIES EXIST TO MORE FULLY CAPITALIZE UPON MPO CAPABILITIES

The federal government created MPOs to provide an additional perspective for addressing transportation problems within metropolitan areas, and provided them with staff to accomplish this objective. More fully capitalizing upon the expertise and planning work of dozens of credentialed professionals employed by MPOs should be viewed as an opportunity to improve the quality of planning and programming decisions.

Other states have more structured approaches to capitalize on the work of their MPOs. The newly-created Virginia Association of Metropolitan Planning Organizations can serve as a forum through which to determine how to more fully capitalize on what MPOs can provide.

State Is Not Fully Capitalizing on Knowledge and Expertise of MPO Staff

As discussed earlier in this chapter, the federal government created MPOs to provide a regional perspective and balance the historically highway-dominated transportation decision-making process. To ensure some capacity in this respect, the federal government provides MPOs with administrative funding. In FY 2010, MPOs reported receiving about \$18 million in administrative funding from the federal government and \$4.9 million in matching funds from the State and localities (roughly ten percent each). In total, the 14 MPOs reported receiving \$22.9 million in administrative funding.

Collectively, the State’s 14 MPOs have 109 full-time equivalent staff (Table 10). This is roughly equivalent to the number of planning and programming staff at VDOT central and district offices. The Northern Virginia MPO has nearly half of this total staffing, while the Hampton Roads MPO has an additional 17 percent. These 14 MPOs employ dozens of staff with relevant credentials (as identified by FHWA), including 23 American Institute of Certified Planners or urban planners.

Most MPOs report spending substantial amounts of time developing and maintaining their long-range plans (including conducting corridor studies), TIPs, and other planning documents. These plan-

Table 10: MPOs Employ Credentialed Staff

MPO	FTEs	Total Credentials	American Institute of Certified Planners (AICP) / Urban Planning Ph.D	Professional Transportation Planner (PTP)	Geographic Information Sys- tems Professional (GISP)	Professional Engineer	Professional Traffic Operations Engineer (PTOE)	Information Technology	Accounting (CPA)
Northern Virginia	52.0	9	5	4					
Hampton Roads	19.0	9	2	1		4	1	1	
Richmond	9.0	3	2	1					
Fredericksburg	5.5	11	2	1	5		3		
Roanoke Valley Area	4.0	4	3						
Central Virginia (Lynchburg)	3.5	2	2						
Charlottesville-Albemarle	2.5	7	2	1		1	1		1
Kingsport	2.5	1	1						
Bristol	2.5	3			2		1		
Winchester-Frederick	2.5	2	1		1				
Danville	1.6	1	1						
Tri-Cities	1.5	2	2						
Harrisonburg-Rockingham	1.5	0							
Blacksburg-Christiansburg- Montgomery	1.0	0							
Totals	108.6	54	23	8	7	6	5	3	1

Note: Credential list based on 2010 FHWA survey of MPOs.
Source: JLARC staff survey of Virginia MPOs, 2010.

ning documents are managed, and in many cases directly developed by, MPO’s professionally-trained staff. In other cases, MPOs use consultants, especially to conduct more detailed environmental or other specialized studies. MPOs also reported spending substantial time facilitating public input and participation regarding regional transportation priorities.

“MPOs should be ... looked at as a partner and not a barrier.”

As discussed earlier in this chapter, MPOs and VDOT district administrators report that MPOs have a minor role in allocating interstate and primary roads funding. Not capitalizing on MPOs’ efforts by more fully defining the role of MPO input is a waste of resources and a missed opportunity to have more informed debate around how to allocate primary and interstate roads funding. As one MPO concluded, “The MPOs should be a part of the planning and programming process . . . by being looked at as a partner and not a barrier.”

Other States Have More Structured Approaches for Incorporating Input of Their MPOs

Some states have a more structured approach to incorporating the input of their MPOs into state-level decision-making. For example, North Carolina uses a roads project prioritization process that factors in MPO input to varying degrees, depending on the road sys-

tem. Their process includes both quantitative and qualitative scoring of projects. The quantitative portion is based on state-level data analysis of road conditions. The qualitative portion is comprised of district and MPO project rankings. MPOs use their local prioritization methodology, while the state-level district staff use their own.

These rankings are then weighted in various proportions depending on the goal being addressed and type of road. For example, when addressing North Carolina’s safety goal, the MPO weighting is between 10 and 30 percent (Table 11). The state-level district perspective is weighted twice the MPO perspective for statewide

Table 11: North Carolina Formally Incorporates MPOs’ Input Into Prioritization of Road Projects

Road System	Quantitative Weighting	Qualitative Weighting	
		District	MPO
Statewide	70%	20%	10%
Regional	70	15	15
Subregional (local)	50	20	30

Note: Example shown is for safety goal. Weightings differ for other goals.
 Source: North Carolina Department of Transportation.

roads. The MPO perspective is 50 percent more than the state’s for subregional roads, which are local.

North Carolina indicates that it will continue to refine this relatively new process, but it has received positive feedback from MPOs. Even though some would like to see minor changes, MPOs have told North Carolina Department of Transportation staff that they like the objectivity and transparency of the approach. It also gives MPOs a structured, more formalized role in the process.

Some states take the approach of actually allocating a higher portion of their total funding directly to MPOs, allowing MPOs to decide how to allocate those funds. New York and Pennsylvania are among the states with the most decentralized decision-making, allocating almost all highway funds to their regions and/or MPOs so they can program and select projects. The states set policy and determine how funds will be allocated across MPOs (in some cases with MPO input), but MPOs directly make project-specific allocation decisions.

However, devolving substantial allocation authority to MPOs can have both positive and negative consequences. Pennsylvania, which provides MPOs a substantial role in allocating funding, cited both positive and negative outcomes of having a strong regional role in decision-making. They noted that as revenues declined dur-

ing the recent recession, their shared approach made it easier to make adjustments. Because all state-level, regional, and local officials were together at the table, it was easier for them to collectively recognize the gravity of the situation and how quickly funding needed to be cut.

In Pennsylvania ... the state needs to use objective facts to make a strong, credible argument to sway an MPO.

On the other hand, Pennsylvania officials noted that strong regional authority can make it more difficult for the state to achieve its desired outcomes. They noted that the state needs to use objective facts to make a strong, credible argument to sway an MPO if they want to advance certain projects. Though from the State perspective this may seem challenging, it likely strengthens the process and ultimately results in more informed decisions that can be justified using objective facts.

VDOT Should Work With MPOs to Determine the Most Effective Way to More Fully Capitalize on MPO Capabilities

The Virginia Association of Metropolitan Planning Organizations (VAMPO) was recently created to provide a forum for State and federal agencies to exchange information with MPOs. This forum can be used as a vehicle through which to determine the best way to more fully capitalize on the capabilities and regional perspectives of MPO staff. The different perception between the State and MPOs, along with a lack of clarity around roles and responsibilities (Chapter 4), suggest that VDOT and MPOs should coordinate on the best way to more fully leverage MPO capabilities.

According to VDOT central office staff, giving MPOs more input into the State's decision-making process rests, in part, on MPOs effectively prioritizing among projects within their boundaries. While MPOs and VDOT district administrators reported most MPOs were able to do this, VDOT central office staff and DRPT both cited examples illustrating the need for continued improvement in MPOs' abilities to prioritize.

A recent example noted by VDOT was the comparatively high number of projects funded by the Hampton Roads MPO with its American Recovery and Reinvestment Act (ARRA) funding. ARRA funding was provided to states to create and sustain jobs and contribute to the nation's economic growth through the development of transportation projects.

The State is managing 73 American Recovery and Reinvestment Act (ARRA) projects totaling \$577 million, which is an average of \$7.9 million per project. The Hampton Roads MPO is managing 30 ARRA projects totaling \$41 million, for an average of \$1.4 million per project. VDOT cited this relatively high number of projects (given the total funds allocated) selected by the MPO to underscore

its concern about the MPO’s inability to prioritize funding among localities.

Recommendation (1). The Virginia Department of Transportation should work with the Virginia Association of Metropolitan Planning Organizations to determine how to more effectively capitalize on the capabilities of Virginia’s 14 Metropolitan Planning Organizations (MPO), in particular on MPO input in State allocation decisions. The department should report to the Joint Commission on Transportation Accountability its plan to more effectively incorporate MPO input by June 30, 2011.

LACK OF CLARITY IN CODE OF VIRGINIA LEADS TO DIFFERENT EXPECTATIONS FOR STATE AND MPO ROLES

Cooperation

The Code of Federal Regulations defines cooperation as: “Parties involved in carrying out the transportation planning and programming processes work together to achieve a common goal or objective.”

A major factor in the different VDOT and MPO perspectives discussed above is that the federal definition of cooperation (see sidebar) is subject to interpretation. The State has chosen to interpret this federal definition narrowly, particularly as it pertains to allocation decisions, while MPOs use it as the basis for asserting that they are entitled to a more prominent role in decisions made by the State for projects within MPO boundaries.

The *Code of Virginia* (§33.1-23.03:01) currently stipulates that MPOs

shall be authorized to issue contracts for studies and to develop and approve transportation plans and improvement programs to the full extent permitted by federal law.

This language gives MPOs authority to produce long-range plans and TIPs, but does not provide them with clear roles and responsibilities in the State’s transportation planning and programming process. This is largely because the federal process requiring long-range plans and TIPs does not envision the State’s use of a SYIP. In fact, all 14 MPOs agreed or strongly agreed that the State’s use of the SYIP to allocate funds minimizes the role that MPOs play in the process (Table 12). Taken together, the lack of clarity in the *Code of Virginia* and the State’s use of the SYIP not envisioned in

Table 12: MPOs Report State’s Use of SYIP Minimizes Role of MPOs

	Strongly Disagree	Disagree	Partially Agree	Agree	Strongly Agree
<i>The CTB’s use of the SYIP to allocate funds minimizes the role that MPOs play in the process ...</i>					
MPOs	0	0	0	6	8

Source: JLARC staff survey of MPOs, 2010.

federal requirements have allowed the State to narrowly interpret the role of MPOs without technically violating federal requirements or the *Code of Virginia*.

Some States Have More Detailed Statutory Language Defining the State and MPO Relationship

Process to Select Other States for Comparison

JLARC staff selected states for comparison because they either (1) like Virginia, had a high number of state-controlled highway mileage; or (2) were identified by others as having effective coordination with MPOs.

Unlike Virginia, other states have used the federal regulations as the basis from which to cooperate more substantively with their MPOs when selecting projects. Other states have also, to varying degrees, further defined in statute the state and MPO relationship, including the role and responsibilities of MPOs and the State with regard to MPOs. Appendix C includes examples of direct statutory provisions from five other states. These examples are included to illustrate the range of statutory amendments that could be considered to further clarify the role of MPOs in Virginia.

New York, for example, is similar to Virginia in that its statutory language authorizes the activities of an MPO. While New York has slightly more specific provisions than does Virginia, the scope of the language addresses only what MPOs do, not what the state should do with the plans produced by the MPO.

In contrast, South Carolina, North Carolina, and Florida each have specific provisions addressing not only MPO responsibilities, but the role that MPO plans and other information should play in state transportation decision-making. Each of the three states, in slightly different ways, specifically articulates the role that MPO TIPs are to play in state decision-making.

Florida's statute also stipulates the process that the state should use to notify MPOs of changes to projects. Florida requires a written explanation to MPOs for any project that was included in the MPO TIP, but will not be included in the state program. As noted earlier in this chapter, MPO TIPs are an output of Virginia's SYIP, so justification for projects being selected that differ from MPO-expressed priorities is not systematically provided. The lack of rationales provided to MPOs for allocation decisions is further discussed in Chapter 4.

Code of Virginia Should Clarify Role of MPO Input in Decision-Making

The first step in addressing the gap in expectations between MPOs and the State about the role of MPOs in decision-making is to further clarify the *Code of Virginia*. To this end, 11 of the State's 14 MPOs reported that additional or different language in the *Code of Virginia* defining the roles and responsibilities of MPOs would be either a substantial improvement or an improvement. The other

three MPOs reported this additional statutory clarity would be a marginal improvement.

Absent additional clarification, it is likely that as long as the State uses the SYIP—which is not envisioned in federal regulations—as its primary decision-making document, it will continue to narrowly interpret the requirement to cooperate with MPOs. Virginia’s increased reliance on federal funding for systems construction would seem to underscore the need to more clearly articulate how the MPOs are to interact with the State. The need to not only clarify MPOs’ role in statute, but also make it more meaningful, additionally stems from the need to more fully capitalize on the expertise and planning work of dozens of credentialed professionals currently employed by MPOs as noted in the previous section.

Consequently, the General Assembly may wish to consider amending §33.1-23.03:01 of the *Code of Virginia* to further specify the role of MPO input in State decision-making processes. The amendment should require VDOT and the CTB to (1) provide MPOs a structured opportunity to provide meaningful input on priorities, (2) demonstrate that MPO input on priorities has been sufficiently considered prior to the draft SYIP being released, and (3) explain to MPOs, when requested, why State decisions differ substantially from MPO priorities. This recommendation is not, however, intended to suggest a change in the current authority that the State has to allocate interstate and primary road funding.

The recommendation is not, however, intended to suggest a change in the current authority ...

Recommendation (2). The General Assembly may wish to amend §33.1-23.03:01 of the *Code of Virginia* to require the Virginia Department of Transportation and the Commonwealth Transportation Board to (1) provide Metropolitan Planning Organizations (MPO) a structured opportunity to provide meaningful input on priorities, (2) demonstrate that MPO input on priorities has been sufficiently considered prior to the draft SYIP being released, and (3) explain to MPOs, when requested, why State decisions differ substantially from MPO priorities.

Chapter 3

Performance-driven Prioritization Plays Limited Role in Selecting Projects

In Summary

In 2004, VDOT updated its needs assessment process and developed a performance-driven approach to prioritizing new interstate and primary roads projects. The prioritization criteria were organized around five weighted performance goals and included performance data, such as level of service to measure congestion and the number of crashes. VDOT used this process in 2005 and 2006 to select several new capacity projects. By 2008, however, this prioritization process was not being applied due to projected revenue shortfalls. This historical lack of a consistently applied performance-driven approach to placing projects in the Six-Year Improvement Program (SYIP) has created concerns among stakeholders about what priorities the projects currently approved in the SYIP will address. Statutory and formula requirements, in concert with the recession, limit the ability of VDOT staff and the CTB to allocate funds based on a performance-driven process. However, the General Assembly may wish to require VDOT and the CTB to update and continually use a performance-driven prioritization process regardless of the financial circumstances.

The mandate for this study directs JLARC staff to assess, generally, the State's approach to long-range transportation planning. The mandate also specifically directs staff to address any statewide planning procedures that may be improved. As noted in Chapter 1, long-range planning consists of a variety of activities, including identifying current and projected transportation problems and needs, and developing long-range planning documents to guide project selection.

VDOT DEVELOPED A PERFORMANCE-DRIVEN PRIORITIZATION PROCESS

In its 2001 review, JLARC described the highway needs assessment aspect of VDOT's long-range planning as inadequate. JLARC staff found the needs assessment used old data and relied too heavily on subjective decision-making to guide project selection. The review also found that the needs assessment was a low priority for VDOT, was sporadically given resources, and lacked executive-level management support. The JLARC report recommended that the General Assembly require VDOT to develop and use an objective, measurable tool to identify needs and select projects.

In response, VDOT developed a more rigorous long-range planning process in 2004. The process was designed to evaluate recommendations for potential new capacity expansion projects on the interstate and primary systems for addition to the last year of the

The needs assessment ... lacked executive level management support.

SYIP. Funding streams and programs for uses other than new capacity expansion have their own data driven prioritization processes, in particular for paving and bridges.

As the Auditor of Public Accounts (APA) noted in 2004, the *Code of Virginia* prescribes the allocation formula and the specific order in which VDOT must allocate transportation funds. As noted in Chapter 1, debt service and maintenance must be funded prior to new capacity expansion projects. As funding is available for new capacity expansion, interstates are funded first, then primary, secondary, and urban roads.

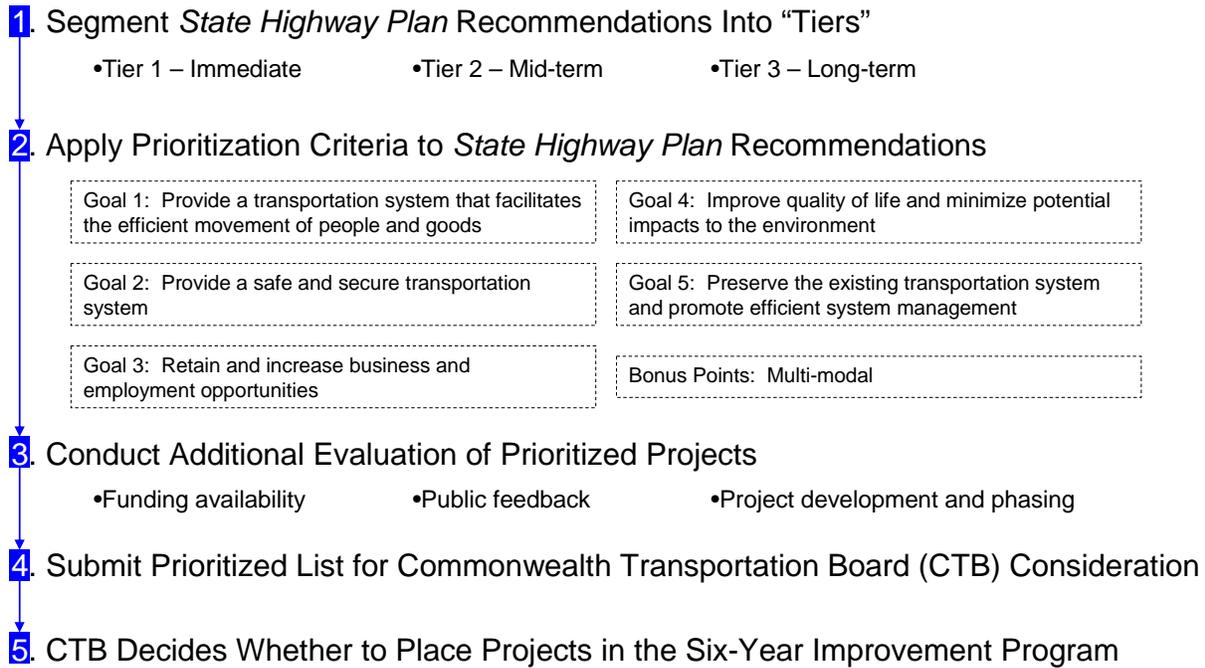
The CTB has greatest discretion over how available interstate funding will be applied. Primary roads funding is allocated by formula across the nine VDOT construction districts, and projects within the districts are selected by the CTB. Formulas also dictate how much secondary and urban roads funding each locality receives. While the hierarchy of funding in the *Code* and the allocation formulas are a constraint for how funds flow and may affect project eligibility, neither dictates which projects are selected for funding.

The prioritization process that VDOT developed included an updated needs assessment and performance-driven approach to prioritizing new interstate and primary roads projects. The needs assessment generated potential project recommendations that formed the basis for the 2025 State Highway Plan. That plan also incorporated project recommendations from corridor studies, MPO long-range plans, and other sources. The plan, however, was not financially constrained and did not prioritize among the recommended projects. Consequently, VDOT planning staff also developed a prioritization process to apply criteria to the projects recommended in the State Highway Plan, creating a prioritized list of “candidate projects” for the State’s Six-Year Improvement Program (SYIP). The prioritization criteria were organized around five weighted performance goals, including efficient movement of people and goods and providing a safe and secure transportation system.

According to VDOT, the prioritization process it developed in 2004 consisted of five steps (Figure 7):

1. State Highway Plan recommendations were segmented into “tiers” based on their timeframe. For example, tier 1 recommendations were categorized as immediate, and were those that would address a capacity deficiency through 2011.
2. VDOT planning staff applied prioritization criteria to tier 1 recommendations included in the State Highway Plan. The

Figure 7: Process VDOT Developed in 2004 to Prioritize New Capacity Interstate and Primary Roads Projects to Include in the Six-Year Improvement Program



Source: JLARC staff analysis of VDOT documentation.

criteria assessed each project against each of the five weighted performance goals using data, such as the level of service for a given roadway, which measures road congestion. A prioritization score was then generated.

3. Additional, more subjective evaluation was then conducted on the prioritized list of potential projects by a review team consisting of several staff from district offices. The evaluation considered several factors, including the availability of funding for the project and the extent of local support based on public feedback.
4. The data-driven prioritization in step 2 was blended with the more subjective evaluation in step 3 to submit a list of potential new capacity interstate and primary road projects to CTB for consideration.
5. The CTB then used the prioritized list, along with other information such as feedback received through public comments, to decide which projects to place into the sixth (and final) year of the SYIP.

VDOT staff report the above five-step process was used in 2005 and 2006, and that several—but not all—of the new capacity pro-

jects included by the CTB during those years were the result of the process. VDOT staff recalled that CTB members expressed satisfaction with the process because it was performance information-driven.

The prioritization process that VDOT planning staff developed in 2004 and used in 2005 and 2006 appears to address concerns raised in the 2001 JLARC report and improve upon the more subjective and ad-hoc process that VDOT used previously. The approach was developed based on several models already in use by other states and metropolitan areas. It relied on quantitative performance data where possible, but still allowed for the judgment of knowledgeable individuals to be applied after the quantitative scoring was conducted. The performance goals and measures used attempted to incorporate and balance congestion and capacity issues, safety concerns, economic development, environmental issues, maintenance, and multi-modal considerations.

VDOT STOPPED APPLYING ITS PERFORMANCE-DRIVEN PRIORITIZATION PROCESS AS FUNDING FOR NEW CAPACITY EXPANSION DECLINED

VDOT staff noted that in the fall of 2007, the focus started to shift away from expanding capacity through new projects, and more to completing projects already approved in the SYIP. By 2008, due to the projected revenue shortfalls—and the resultant implications that there would be limited funds available for new projects—the planning process discussed above to identify candidate projects to include in the sixth year of the SYIP was not applied. According to VDOT staff, the Secretary of Transportation and Executive Committee decided that the projects to receive cuts would be determined by giving priority to projects underway or scheduled to be underway so that contracts would not be cancelled. Any remaining funds were to be used for deficient bridge and paving projects.

Planning Staff Role in Decisions Was Reduced As Funds Declined

The planning and prioritization process used in 2005 and 2006 was developed primarily by the VDOT central office planning division. That division reports having 25 classified staff, two wage staff, and ten vacancies. Together, these 27 employees spend over one-third of their time developing and maintaining the State's long-range plans. They also spend significant portions of time coordinating and interacting with VDOT district staff (20 percent) coordinating and interacting with MPO and PDC staff (15 percent), and coordinating and interacting with DRPT staff (10 percent).

According to VDOT, these 27 planning staff have played little or no role in any allocation decisions since 2007. The time period since then has seen both drastic funding reductions during the recession and a major funding increase through the American Recovery and Reinvestment Act (ARRA). Indeed, when asked what percentage of time central office planning staff spent helping to develop and maintain the SYIP, including prioritizing projects based on available funds, VDOT responded that “planning has not applied the prioritization model for three-plus years due to lack of funding for new projects.”

Planning Staff Developed a Streamlined Prioritization Approach to Inform SYIP Reductions, but It Was Not Used

Involving Planning Staff When Cutting Funding

Georgia’s Department of Transportation indicated that it heavily involved planning staff when cutting funds during the recession. In fact, officials indicated that when revenue declined and projects had to be removed from their four-year program, it was their planning staff that made these decisions.

During the winter of 2008 as the recession took hold, the VDOT central office planning staff developed a methodology using geographic information system (GIS) analysis to overlay projects currently in the SYIP with a streamlined version of performance information from the prioritization process used in 2005 and 2006. This streamlined version utilized data on congestion, deficient bridge structures, locations with a high number of crashes, and pavement deficiencies. According to VDOT central office planning staff, this streamlined prioritization process was developed to prioritize among the existing SYIP projects, which would provide insight about what projects should be spared the bulk of allocation reductions.

VDOT staff indicated that though this streamlined version had promise, it was not used as hundreds of millions of dollars were cut from the existing SYIP by VDOT central office programming staff. This leads to at least two fundamental questions that cannot be answered:

1. Were the most important projects spared the bulk of the cuts?

For example, which projects that were cut would have played a substantial role in reducing congestion or improving safety? Conversely, which projects that were cut, or not reduced by as much, are playing a less substantial role in reducing congestion or improving safety?

2. How much further from realizing its transportation goals is Virginia after the cuts have been made?

For example, after the reductions, how much further is the State from reducing congestion where it is the biggest problem? Which unsafe roads will continue to be unsafe, resulting in continually high numbers of crashes in the foreseeable future?

Though these considerations were not explicitly addressed as allocation reductions were made during the recession, the VDOT cen-

tral office programming staff did use criteria while making the reductions. These are discussed in Chapter 4.

Federal Stimulus Requirements Meant Performance-driven Prioritization Process Not Used

ARRA Requirements

From February 17, 2009, states had 45 days to claim funds allocated by ARRA. There were several requirements for ARRA infrastructure projects:

- 50 percent of funds obligated within 120 days of ARRA's enactment;
- Goal of being completed within a three-year time period; and
- Located in economically distressed areas.

Amid projections for continued revenue shortfalls in 2009, the U.S. Congress passed the American Recovery and Reinvestment Act (ARRA), and the President signed it into law on February 17, 2009, making \$64 billion available for transportation infrastructure investment. Ultimately, the CTB received approval for \$695 million in ARRA funding. The five largest MPOs were allocated \$118 million. As of September 2010, an additional \$143 million was designated for repaving or overlaying roads, and \$165 million is being used to advance congestion-relief projects, including building new roadways (Table 13). Out of 125 projects selected, 20 were reported to be complete as of September 2010.

According to VDOT staff, while it was selecting the \$165 million in congestion relief projects, construction bids were coming in lower than anticipated. This released additional funding that could be allocated to new projects. While VDOT consulted a variety of stakeholders in developing these new ARRA projects, including the public, MPOs, and localities, it apparently did not use information available from its own planning division. VDOT central office planning staff said they were not asked to update their prioritization process and are unsure whether the results of the streamlined prioritization approach they developed in the winter of 2008 played any role in identifying ARRA projects. VDOT noted that the elements of the prioritization process for new capacity expansion projects were not used because of the unique nature of ARRA's requirements. VDOT also indicated that MPOs did not use a data-

Table 13: VDOT Reports \$165 Million in ARRA Funds Is for Congestion Relief Projects

Type of ARRA Project	Funding (\$ millions)
Congestion relief projects	\$165
Various projects selected by five largest MPOs	118
Repaving or overlaying road projects	125
Improvements or replacements of structurally-deficient bridges	82
Contingency projects ^a	81
Improvements near military installations	74
Rail and enhancement projects	50
<i>Total</i>	<i>\$695</i>

^a Includes two rail projects, one paving, and two safety/traffic operations projects. Source: JLARC staff analysis of VDOT information as of September, 2010.

driven prioritization process to identify their ARRA projects either, and instead split the funds among localities in their boundaries.

RESULTS OF ALLOCATION PROCESS RAISES QUESTIONS AND FACILITATES INACTIVE PROJECTS

The historical lack of a consistently applied performance-driven approach to placing projects in the SYIP creates a variety of problems. Among these are concerns by stakeholders about what priorities the projects currently approved in the SYIP will collectively address. Another is that the insufficient linkage between planning and programming can contribute to initial funding being allocated to a project, but then no subsequent allocations in the SYIP. The insufficient linkage can also contribute to lengthy delays in obligating funds and building the road. This lack of progress after a project is placed in the SYIP raises the questions of how important the project could actually be.

Some CTB Members, VDOT Staff, and MPOs Express Skepticism About The Defensibility of, and Justification for, Allocation Decisions

The APA noted in 2004 that many of the decisions to start or add projects to the SYIP appeared to have been motivated more by a project’s popularity or the desire to begin as many projects as possible, than the development of a realistic, deliverable project plan. Since that time, several factors have created an environment in which many transportation decision makers and stakeholders remain skeptical about the defensibility of, and justification for, allocation decisions made through the SYIP:

- statutory requirements and funding formulas, rather than performance data, dictating the flow of available revenue;
- a performance-driven prioritization process for new capacity expansion projects no longer being applied due to the revenue decline; and
- substantial allocation reductions to existing projects being necessitated by the recession.

Some MPOs and VDOT district administrators have questioned whether interstate and primary road allocations in the SYIP are defensible and justifiable. As shown in Table 14, five MPOs disagreed that interstate and primary roads allocation decisions were defensible and could be justified after the fact, while another five only partially agreed. District administrators were evenly split, with four either strongly disagreeing or disagreeing that allocation decisions were defensible, and four others agreeing.

Survey of CTB, MPO Boards, and PDCs

JLARC staff surveyed the CTB, board members from all 14 MPOs, and the 12 Planning District Commissions that are outside MPO boundaries. Surveys were used rather than structured interviews to provide more opportunities for input. The survey allowed any CTB members, MPO board members, and PDC directors that wanted to provide feedback to do so. No response rate was calculated for these surveys, and the information used from these surveys is presented qualitatively throughout this report. Appendix B includes more information about these surveys.

Table 14: Some MPOs and VDOT District Administrators Disagree That Interstate and Primary Roads Allocation Decisions Are Defensible and Justifiable After the Fact

	Strongly Disagree	Disagree	Partially Agree	Agree	Strongly Agree
MPOs ^a	0	5	5	1	0
VDOT District Administrators	2	2	1	4	0

^a Three MPO directors responded “no opinion.”
 Source: JLARC staff surveys of Virginia MPOs and VDOT District Administrators, 2010.

“... no one is asking are the right projects in the program today?”

Even VDOT central office staff expressed concern about the lack of an applied prioritization process for projects that are currently in the SYIP. According to one VDOT central office programming official, “There is always a lot of discussion around [prioritization] at the board meetings; about what gets added, but no one is asking are the right projects in the program today?” Another VDOT central office planning official indicated that when considering the bulk of projects that are currently in the SYIP, “A lot of them got in there from a purely political standpoint.” VDOT staff further commented that using the prioritization approach developed by the VDOT central office planning division would allow them to remove some lower priority projects from the program. They quickly cautioned, however, that many projects in the SYIP have already received significant funding, and removing them at this point would result in a substantial loss of investment.

One CTB member noted that the allocation “process is too political and too often the ‘squeaky wheel’ gets more attention. We should prioritize our constrained monies on projects that are most needed and can actually be built.” Another CTB member commented that “despite serious efforts to rationalize, prioritize, and forecast alternative strategies via the VTRANS process, little of it affects or is incorporated into the annual six-year plan.”

Insufficient Linkage Between Planning and Programming Contributes to Minimal Activity After Placing a Project in SYIP

Without a performance information-driven prioritization process governing which projects are placed into the SYIP, the cumulative effect over the years is that some projects are placed in the SYIP without allocations. Others are placed in the SYIP, receive allocations, but then sit inactive for long periods of time. In some cases this is necessitated by a lack of funding to move forward with the next project phase. However, in certain instances, the lack of progress after a project is placed into the SYIP can reflect the low priority of the project—at least in the near term.

Similar to the concerns APA identified in 2004, state and regional officials during this review expressed concern about projects being selected for inclusion in the SYIP merely to pacify a project stakeholder. These projects could be included in the SYIP, but not allocated any appreciable funding. To this end, analysis of SYIP data suggests that there are 15 projects first included in the FY 2008 SYIP that have received no allocations as of FY 2011. Another 37 projects that have been programmed in the SYIP since FY 2007 or earlier have been allocated ten percent or less of their estimated costs.

Recent VDOT Audit

In September 2010, Cherry, Bekaert, and Holland completed a comprehensive audit of VDOT at the direction of the Governor. Among numerous findings, the audit found weaknesses in VDOT's monitoring of inactive projects and obligation of federal funding.

Another measure of the poor linkage between planning and programming is the number of projects classified as "inactive," or having funds obligated, but then not being spent for extended periods of time. The Federal Highway Administration (FHWA) tracks Virginia's project activity, and expressed concern to JLARC staff about both the number and dollar magnitude of inactive projects. According to FHWA staff, Virginia had 572 projects with unexpended balances less than \$50,000 that had no activity for the three years prior to June 30, 2010. This represented about one-quarter of the total number of projects (or project phases) included in the SYIP for FY 2010. At the other end of the spectrum, there were 75 projects with balances of more than \$500,000 that had no activity for the nine months prior to June 20, 2010. These large projects represented \$286 million of unexpended balances.

VDOT noted that many inactive projects are MPO or local projects ...

VDOT noted that many inactive projects are MPO or local projects, though the September 2010 Cherry, Bekaert, and Holland audit indicated these projects are still ultimately the State's responsibility. VDOT emphasized that this inactivity on MPO or local projects can make it very difficult to maximize federal dollars or meet the State's federal strategy.

FHWA staff reported that Virginia's unexpended balance for a 12-month period has recently fluctuated between four and 13 percent of Virginia's total federal apportionment, depending on the quarter. This is outside of FHWA's national performance goal for the unexpended balance of inactive projects, which is four percent or less. There are various reasons why a project may be inactive, including right-of-way for projects being disputed through litigation, incorrect project coding, or a project not being closed out properly. Nonetheless, FHWA staff expressed concern that a lack of effective prioritization, if left unchanged, will continue to contribute to relatively high numbers of inactive transportation projects in Virginia.

PERFORMANCE-DRIVEN PRIORITIZATION NECESSARY MOVING FORWARD

The problems described above with the current allocation process, in particular as it relates to interstate and primary roads, are the result of a variety of factors. In particular, VDOT staff and the CTB's ability to allocate funds based on a performance-driven prioritization process is limited by statutory and formula requirements. Their ability to use a prioritization process is further limited by the impact of the recession on funds available for new capacity projects.

Applying VDOT's performance-driven prioritization process would provide

1. Guidance for the application of funding to new capacity projects to the extent it is available in the future;
2. Supplemental information to help decision-makers understand the impact on performance goals, in particular related to congestion, economic development, and safety, if allocations must be reduced when revenue declines; and
3. Supplemental information to help decision-makers understand the impact when statutory and formula requirements dictate different funding decisions than would objective, performance-driven analysis.

The principles of planning and project prioritization are as important, and perhaps more important, during times of both substantial increases and decreases in available revenue. Consequently, the General Assembly may wish to amend the *Code of Virginia* to require VDOT and the CTB to update and continually use VDOT's performance-driven prioritization process regardless of the financial circumstances. The process should be applied, albeit in different ways, during times of increasing and decreasing revenue. To facilitate accountability, VDOT should develop and report a timeline for when the prioritization process will be updated and used. VDOT should also create specific procedures for how the data used in the process will be applied in different revenue environments.

... the prioritization process discussed earlier in this chapter has been updated for potential use moving forward.

To this end, VDOT central office planning division staff have indicated the prioritization process discussed earlier in this chapter has been updated for potential use moving forward. It appears that the five-step process, which identifies potential projects using objective data, then further evaluates the potential projects using more subjective factors, could be used to fulfill the intent of this recommendation. Important changes, however, will be needed including: (1) more meaningful MPO input as discussed in Chapter

2; (2) creating a way to identify the impact on performance goals when revenues decline; and (3) creating a way to identify instances in which performance information would suggest a different allocation of funds than what is dictated in statutory or formula requirements.

Successfully implementing this recommendation requires striking a balance between facilitating the necessary coordination between planning and programming, while also giving planning sufficient independence from programming as well as political perspectives. As an example of how this organizational change could be accomplished, Georgia recently separated its planning and programming functions, and now the director of planning reports directly to the Governor. This was done through a statutory change, Senate Bill 200, during its 2009 General Assembly. This is one way to place greater emphasis on the planning function; however, such a change could also make it even more difficult to sufficiently insulate project prioritization from political influences.

Another approach would be to elevate the planning function but keep it within the VDOT organizational structure. This is a similar rationale for inspector general and audit functions that report directly to the VDOT commissioner. This would elevate the function, but make it more likely that planning is sufficiently insulated from pressures to alter a data-driven approach to prioritization. The downside would be that without strictly followed standard operating procedures, there may not be sufficient interaction with the programming staff and other key VDOT divisions.

In the fall of 2010, VDOT separated the chief financial office (CFO) and planning and programming functions. There is now a directorate of planning and programming with two divisions: transportation and mobility planning, and programming. This change was made, according to VDOT staff, primarily because the workload associated with the CFO role was enough to justify separating the positions. This separation of responsibilities could potentially give planning greater influence simply because it does not now have to directly compete with the financial-oriented CFO function. It could also, however, have the undesired effect of further removing the planning perspective from decision-making.

Regardless of any organizational changes that may occur, achieving a greater emphasis on performance information-driven transportation planning and programming will depend in part on persons and organizations outside VDOT. There will need to be sufficient demand from the General Assembly, Governor, CTB, and the numerous other transportation stakeholders for more performance information-driven and defensible project prioritization. Strong leadership from the Transportation Commissioner and Sec-

retary of Transportation—which was cited as lacking in the 2001 JLARC staff review recommending improvements in planning—will also be needed.

Recommendation (3). The General Assembly may wish to amend §33.1-23 of the *Code of Virginia* to require the Virginia Department of Transportation (VDOT), and the Commonwealth Transportation Board, to continually apply a performance-driven project prioritization process. The process should be applied in all financial circumstances. VDOT should develop a written plan detailing the proposed process that includes an implementation timeline and description of how the process will be applied in different financial circumstances. The department should submit the written plan to the Joint Commission on Transportation Accountability by June 30, 2011.

Chapter 4

Programming Lacks Standardized Processes and Two Programming Documents Are Confusing

In Summary

Transportation programming is a complex task, which was made more complex by the recent revenue decline. VDOT should develop standardized, written processes to be used by programming staff when Six-Year Improvement Program (SYIP) allocations vary by ten percent or more from previous estimates. There is also lack of clarity around the roles and relationships between the VDOT central office and VDOT districts. This lack of documentation and role clarity contributed to an environment in which the VDOT central office believed it communicated its programming guidelines and decisions, yet VDOT districts and MPOs did not perceive this to be the case. VDOT should assess whether these roles are sufficiently defined, and take necessary steps to address the lack of role clarity and improve communication. In addition, VDOT should assess how to consolidate the SYIP and the federally-required Statewide Transportation Improvement Program, and examine how other states have achieved this consolidation. VDOT should also provide a way for the public to more easily identify projects scheduled for future allocations through the SYIP.

House Bill 42 and Senate Bill 201 direct JLARC staff to assess the State's approach to transportation programming. The mandate also specifically directs staff to address any statewide programming procedures that may be improved. As noted in Chapter 1, programming consists of aligning the numerous federal, State, and other revenue streams with project schedules and costs. Because of the long-term nature of many transportation projects, programming for a project is rarely a one-time event, but rather an ongoing effort to allocate funding in a way that facilitates progress on many projects at once. The result of programming decisions in Virginia is the draft and final Six-Year Improvement Program (SYIP) that is released each year and approved by the Commonwealth Transportation Board (CTB). The State also produces a Statewide Transportation Improvement Program (STIP) and JLARC staff were also directed to assess the merits of maintaining two different transportation program documents.

RECESSION INCREASED WORKLOAD FOR VDOT CENTRAL OFFICE PROGRAMMING STAFF

Once a project is approved and placed in the SYIP, the VDOT central office programming division is responsible for adjusting planned allocations based on changes in (1) available revenue, (2) project schedule, and (3) project costs. Historically, projected revenues have rarely equaled what ultimately is available. However, during the last recession, revenue dropped more substantially and

more quickly than virtually any entity, including VDOT, could have envisioned.

Preliminary and Revised SYIPs

Because of the magnitude of the revenue shortfall during the last recession, the FY 2009 and FY 2010 SYIPs were revised multiple times in a single year. The SYIP during these years were titled to reflect these revisions, using terms like “preliminary final,” and “revised.”

This substantial revenue decline had major implications for the projects already approved for inclusion in the SYIP. After an initial SYIP was developed for FY 2009, VDOT staff were directed to develop a second SYIP with \$750 million less in allocations. VDOT staff were then again directed to develop a third SYIP for that same year, with an additional \$1.45 billion in allocations cut from the plan. Just in this one fiscal year, more than \$2 billion in allocations were removed from the SYIP.

As of September 2010, the VDOT central office programming division reported having 33 full-time equivalent (FTE) staff (including 26 classified, five temporary, one wage, and one contract position) and five vacant classified positions. Prior to the revenue decline in 2007, the VDOT programming division reported 28 FTE staff (including 26 classified, one wage, and one contract position) and one vacant classified position. This net increase of five temporary staff between 2007 and 2010 did little to mitigate the effect of the increased workload resulting from the revenue decline. Typically, the programming division manages the workload of producing a draft SYIP, then changing it based on any comments provided prior to the CTB approving the final SYIP. However, both the FY 2009 and FY 2010 SYIPs were revised twice. This effectively tripled the annual programming workload usually associated with the SYIP.

Beyond the number of SYIP revisions, the dollar amounts being programmed, or re-programmed, as revenue dropped, then stabilized, were larger than was typical in prior years (Table 15). The dollar amount of programming changes processed from the FY

Table 15: VDOT Programming Staff Programmed or Approved Substantially More Changes in FY 2008 and FY 2009

SYIP	Magnitude of Programming Changes From Previous SYIP^a (\$ millions)	Changes Per VDOT Central Office Programming Staff^b (\$ millions)
FY 2007	\$758	\$24.9
FY 2008	2,612	85.7
FY 2009	2,238	73.4
FY 2010	920	30.2
FY 2011	276	9.0

^a Magnitude calculated by combining the dollar value of changes made from previous year SYIP and/or previous draft or final that was revised. Positive and negative dollar changes were calculated as positive changes to obtain total magnitude figure.

^b Assumes average of 30.5 available VDOT central office programming staff, which is the midpoint between 28 FTEs reported for 2007 and 33 FTEs reported in 2010.

Source: JLARC staff analysis of the VDOT Six-Year Improvement Program database.

2008 and FY 2009 SYIPs were two to three times what was processed for FY 2007, and then again in FY 2010. This represented a substantial increase in programming decisions made directly, or approved, by VDOT's central office programming division staff. According to VDOT, the workload increase can be measured beyond the financial magnitude of changes, including the number of cost or schedule estimate revisions.

VDOT reports that the high workload over the last few years has contributed to programming staff feeling over-worked, causing some staff to leave (the programming division reported five vacancies as of September 2010). However, now that the workload may be normalizing, it does not appear the central office needs additional programming staff. To this end, one VDOT official made the following observation about central office programming staff:

The number of staff at central office is more than adequate. The management of that staff is unable to take a global and strategic view and provide simplified guidance for execution. It results in constant fire drills that make an easy task—that is repeated annually—very difficult.

PROGRAMMING LACKS SUFFICIENT WRITTEN PROCESSES, ROLE CLARITY, AND COMMUNICATION

Programming is a complex task, which was made more complex by the recent revenue decline. A lack of documented programming processes exacerbated this complexity. There is also lack of clarity around the roles and relationships between the VDOT central office and VDOT districts. This lack of documentation and role clarity contributed to an environment in which the VDOT central office believed it communicated its programming guidelines and decisions, yet VDOT districts and MPOs did not perceive this to be the case.

Revenue Decline Underscored the Complexity of Programming Decisions

Amid the revenue decline, the 2009 Acts of Assembly directed the CTB to maximize federal funds and reduce State funding as much as possible for projects, by “tak(ing) all actions necessary to ensure that federal transportation funds are allocated and utilized for the maximum benefit of the Commonwealth” (Item 436, A.4). VDOT central office programming staff and the CTB took a series of actions in response, including

- restricting funding to deficits on completed projects, cost increases on underway project phases, project phases under-

way or scheduled to be underway in the coming federal fiscal year, and deficient bridges and paving;

- eliminating State formula distributions for primary, secondary, and urban systems; and
- eliminating federal surface transportation program formula distribution to localities and regions.

VDOT characterizes the programming process as a complicated one that requires experience and knowledge of many factors. It is the responsibility of central office programming staff to implement CTB programming policies while matching project eligibility to specific fund types, meeting State and federal eligibility requirements and time constraints, and pairing funds with individual project schedules and estimates. VDOT noted that its programming staff also consider changes in scope, cost, or schedule provided by project managers. Programming staff also noted that they used project prioritization lists given to them by VDOT's structure and bridge or maintenance divisions regarding bridge and maintenance or paving projects when adjusting planned allocations.

However, VDOT central office programming staff explained that when considering how to re-allocate funds as needed across interstate or primary road projects, such as a widening project, they looked to see which projects could be slowed or accelerated to try to balance funds. When funding was insufficient to fund phases of all underway projects, programming staff noted that "we do the best we can but I'm not really sure I can give you an answer" as to how those decisions were ultimately made. There were minimal written processes detailing how VDOT central office programming staff were to engage experts in the VDOT structure and bridge and maintenance divisions when making these difficult decisions. Given that programming staff do not have this expertise themselves, at least some of these decisions appear to have been made primarily based on financial criteria rather than transportation considerations.

MPOs and even VDOT district administrators have expressed concern about the prominent role that programming has had in recent years. For example, one MPO noted that "in the last several years, priorities seem to have been dictated pretty much by financial criteria ... There needs to be a better balance between fiscal considerations and sound transportation considerations." A VDOT district administrator observed, "Programming in Virginia is focused more on balancing numbers versus addressing transportation needs."

Complexity of Programming During Periods of Major Revenue Fluctuations Requires Written Processes and Documentation

The September 2010 audit of VDOT conducted by Cherry, Bekaert, & Holland noted:

There is general consensus among staff that there is a lack of written guidance documenting the programming process and defining roles, responsibilities, schedules, and timelines for program development.

The audit further reported that a 2007 internal review by VDOT found that states with effective programming processes have written guidance that documents their processes, defines roles and responsibilities, and establishes timelines for program development.

Discussions with VDOT central office programming staff have led JLARC staff to reach a similar conclusion. While the Cherry, Bekaert, & Holland audit focused primarily on the process of obligating federal funds, the same issues applies to managing the SYIP process of allocating funds. The complexity of programming decisions, especially during periods of substantial revenue increases or decreases as seen during the last few years, necessitates clearly documenting programming processes and the results of programming decisions.

Since FY 2006, reductions or increases in the first year of the SYIP were between four and five percent. The exception is the 24 percent reduction in allocations that were necessitated by the recession in the FY 2010 SYIP. Concurrent to these reductions, \$695 million in federal American Recovery and Reinvestment Act (ARRA) funds were made available to be spent over a three-year period. This was equivalent, on an annualized basis, to an increase of about 21 percent of the SYIP's total funding.

Both of these circumstances would seem to warrant clear processes for when and how to engage VDOT staff who have planning and construction expertise. These processes would be in addition to any general process clarifications that may be necessary, including those recommended by Cherry, Bekaert, & Holland. Even in circumstances where revenue varies less than the recent examples above, it seems reasonable to have more clear programming processes. Currently, programming staff are required to obtain CTB approval to transfer more than ten percent of the funds allocated to a project. While this is for a specific project, the ten percent threshold would seem applicable to total allocations for all projects as well. Therefore, variations between previously-budgeted and actual and/or projected revenue of ten percent or more are a reasonable trigger for when—at a minimum—to develop more standard-

ized processes for programming, including when to involve VDOT professionals outside of the VDOT central office programming division.

Moving forward, VDOT should develop a standardized process that is triggered when there is a ten percent or more variation between previously-budgeted and actual and/or projected revenue. The process should clarify how programming staff should involve VDOT professional staff in the engineering, system operations, and planning divisions, with particular attention to programming decisions that fundamentally alter the scope or expected timeframe of a project.

VDOT central office programming staff should also better document the reasoning behind programming decisions so that when the CTB, VDOT district administrators, MPOs, and other interested parties question certain programming decisions, the basis for the decisions can be provided. This lack of a standardized process and documentation makes it difficult for VDOT central office programming staff to effectively demonstrate that the decisions were made on a reasonable basis and considered the appropriate perspectives.

Recommendation (4). The Virginia Department of Transportation (VDOT) should develop a standardized, written process to be used—at minimum—when there is a ten percent or more variation between previously-budgeted and actual and/or projected revenue. The written process should specifically define, during these periods of ten percent variation, the role that VDOT central office or district staff with planning and construction expertise, and others as necessary, should play when making programming decisions that fundamentally alter the expected progress of a project. The written process should also articulate how the reasons for programming decisions that fundamentally alter the expected progress of a project will be documented.

Many MPOs and VDOT District Administrators Report Not Understanding Allocation and Programming

VDOT reported it has communicated programming changes resulting from budget reductions, CTB policies, and direction from the SYIP Executive Committee through numerous e-mails, letters, video conferences, and presentations. However, despite these efforts by VDOT central office staff, many MPOs and some VDOT district administrators express concern about the understandability, transparency, and communication of allocation and/or programming decisions. For example, eight of the State's 14 MPOs disagreed or strongly disagreed that the process and criteria used to allocate interstate and primary road funding were understanda-

“How money is allocated and shifts around beats the heck out of me.”

ble (Table 16). Even three of the nine VDOT district administrators also disagreed or strongly disagreed, with one noting, “How money is allocated and shifts around beats the heck out of me.”

Similarly, MPOs and VDOT district administrators reported that transparency and communication from central office programming staff has been insufficient:

- Twelve of the State’s 14 MPOs disagreed or strongly disagreed that allocation decisions were transparent and sufficiently communicated. Similarly, five of the nine VDOT districts disagreed or strongly disagreed.
- Four of the nine VDOT district administrators either disagreed or strongly disagreed that communication from the VDOT central office programming staff was effective.

The need for more clear communication is at least partly driven by a lack of clarity around the relationship between VDOT’s central office and its districts. For example, four of the nine VDOT district administrators strongly disagreed or disagreed that their purpose and role in programming was clearly defined (Table 17). Furthermore, eight of the nine strongly disagreed or disagreed that the relationship between their districts and the VDOT central office in terms of programming was efficient and effective. The interplay between the communication problems and role clarity was characterized by a district administrator, who noted the “effectiveness and efficiency of the relationship between central office programming and district programming could be greatly improved by clear documentation of processes and procedures.”

Table 16: MPO and VDOT District Administrators Express Concern About Understandability, Transparency, and Communication

	Strongly Disagree	Disagree	Partially Agree	Agree	Strongly Agree
<i>Process and criteria used to allocate funding is understandable ...</i>					
MPO Directors ^a	1	7	4	0	0
VDOT District Administrators	2	1	5	1	0
<i>Allocation decisions are transparent and sufficiently communicated ...</i>					
MPO Directors	2	10	1	1	0
VDOT District Administrators	2	3	3	1	0
<i>Communication from the VDOT central office programming staff is effective ...</i>					
MPO Directors ^b	2	7	4	0	0
VDOT District Administrators	1	3	4	1	0

^a Two MPO directors responded “no opinion.”

^bVDOT indicated that the central office programming staff is not responsible for communicating directly with MPOs, but that it is the responsibility of district staff.

Source: JLARC staff surveys of MPOs and VDOT District Administrators, 2010.

Table 17: Some VDOT District Administrators Report Unclear and Ineffective Relationships With VDOT Central Office in Terms of Programming

	Strongly Disagree	Disagree	Partially Agree	Agree	Strongly Agree
<i>The purpose and role of VDOT districts in programming is clearly defined ...</i>					
VDOT District Administrators	1	3	2	3	0
<i>The relationship between VDOT districts and VDOT central office in terms of programming is efficient and effective ...</i>					
VDOT District Administrators	3	5	1	0	0

Source: JLARC staff survey of VDOT District Administrators, 2010.

VDOT indicates that it believes that the additional planning and programming capacity it is creating in each district office, known as the Planning and Investment Management (PIM), will address some of the communication issues noted above. This may eventually prove to be true. However, the fact that the VDOT central office believes it is the districts who are responsible for communicating with MPOs, when combined with the lack of clarity district administrators report about their relationship with VDOT central office programming staff, indicate changes are needed. To address this, VDOT should identify the cause of the confusion between its central office and districts in terms of roles and responsibilities for programming. VDOT should also develop specific communication strategies to improve district administrators’ and MPOs’ understanding of programming process once it is more clearly defined.

Recommendation (5). The Virginia Department of Transportation (VDOT) should assess whether the roles and responsibilities for programming between its central office and districts are sufficiently defined. VDOT should also take necessary steps to address any issues between its districts and central office in terms of programming, including improving communication.

VIRGINIA USES A SEPARATE SYIP AND STIP, WHILE SEVERAL OTHER STATES USE A CONSOLIDATED PROGRAMMING DOCUMENT

As discussed in Chapters 1 and 2, the State uses the SYIP to allocate funds, but also produces a Statewide Transportation Improvement Program (STIP). Federal regulations require each state to provide the Federal Highway Administration (FHWA) a STIP that includes any project expected to obligate federal funds.

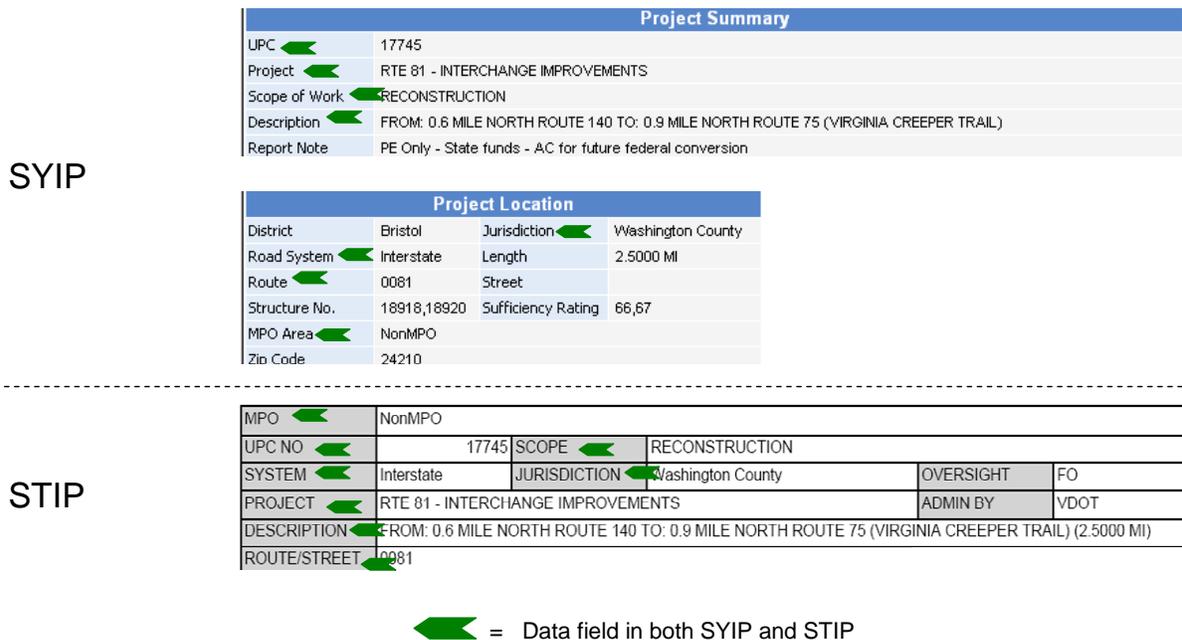
SYIP and STIP Include Similar Descriptive Fields, but Are Based on Different Financial Information, Fiscal Years, and Time Horizons

Similarities and differences between the SYIP and STIP, and whether they are duplicative can be examined through a comparison of the (1) descriptive information each includes about a given project, (2) financial information each includes about a given project, and (3) fiscal year and time horizon associated with each document.

(1) Descriptive Information - When viewing the same project in the SYIP and the STIP, the SYIP includes all but two descriptive data fields also included in the STIP (Figure 8). For each of these shared fields, the information included in the SYIP and STIP is nearly identical. The SYIP does not include the two data fields labeled “oversight” and “admin by.” The SYIP includes a “report note” field and several other fields, such as “length,” not included in the STIP.

(2) Financial Information - When viewing financial information about a given project, there is more of a difference in both the data fields included, as well as the information the data fields contain. For example, the STIP includes “fund source,” and “match” fields. The SYIP includes a “total funding field,” but

Figure 8: SYIP and STIP Include Much of the Same Descriptive Information About a Project



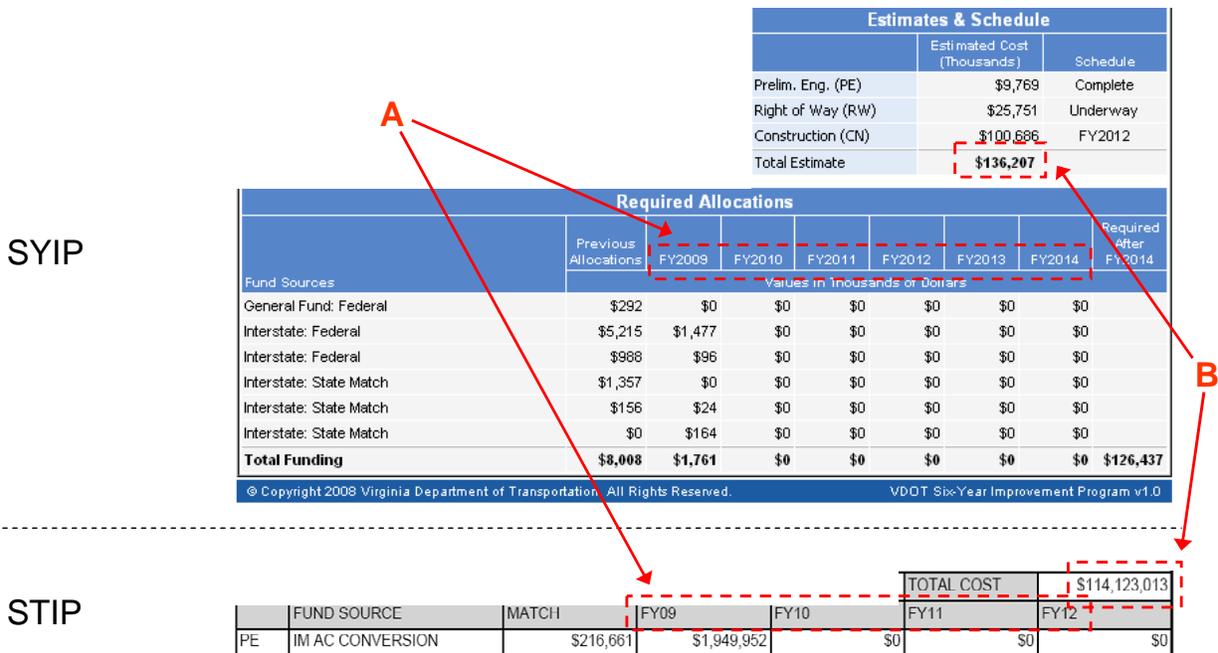
Source: JLARC staff analysis of SYIP and STIP.

then breaks down total funding by fund source using multiple fields. The SYIP includes fields for six fiscal years, while the STIP includes fields for four fiscal years (Figure 9, reference point A). The SYIP includes a “total estimate” field, and the STIP includes a “total cost” field. The dollar amounts included in these fields do not match (Figure 10, reference point B).

(3) Fiscal Year and Time Horizon - Some of the differences in the above financial information reflect the programs’ varying time horizons and fiscal years. The SYIP and STIP are based on the State and federal fiscal years, respectively (Table 18). The SYIP covers a six-year time horizon, while the STIP only covers a four-year time horizon. The SYIP is updated and approved annually by the CTB, while the STIP is only required by FHWA to be updated once every four years.

While the SYIP and STIP share similar data elements, there are differences. For example, both documents show a project estimate. However, the estimate and description shown in the SYIP is updated annually while the estimate shown in the STIP is updated only as the result of a TIP action or at least every four years when the STIP is updated.

Figure 9: SYIP and STIP Include Different Financial Information About a Project



Source: JLARC analysis of SYIP and STIP.

Table 18: SYIP and STIP Have Different Fiscal Years and Time Horizons

Program	Fiscal Year	Time Horizon	Approval
SYIP	State: July 1 to June 30	6 years	Annual
STIP	Federal: October 1 to September 30	4 years (minimum) ^a	Every 4 years (minimum)

^a Projects beyond four years considered “informational” by FHWA and FTA. Source: JLARC staff analysis of SYIP and STIP requirements.

Three Other States With Same Fiscal Year as Virginia Produce a Consolidated Programming Document

Even though there are differences in the SYIP and STIP, there are enough similarities that a consolidated document is feasible. However, as long as State funds are used for systems construction, a process for allocating these funds on a State fiscal year is still necessary. Still, other states have found a way to produce a single document, while still addressing the different state and federal fiscal years. For example, West Virginia, Pennsylvania, and Florida each have a July 1 to June 30 fiscal year like Virginia. Each of these states takes slightly differing approaches, but commits state and federal funds using a single programming document.

For example, officials from the West Virginia Department of Transportation indicated that, like Virginia, they previously maintained two separate program documents. However, they reported that maintaining two program documents became so confusing that they decided to streamline the process. Now West Virginia produces a Six-Year Transportation Improvement Program, which is the result of merging its old state six-year program document and the federally-required STIP. The first version of this consolidated document was approved by FHWA in 2008. The first four years of the document serve as West Virginia’s official STIP, while the remaining two years are provided for informational purposes. The consolidated programming document lists

- all federal-aid projects by federal fiscal year, including any state matching funds; and
- any state-funded projects by state fiscal year.

Pennsylvania takes a similar approach. It produces a Twelve-Year Program, in which the first four years are the federally-required STIP. Florida produces a Five-Year Work Program, the first four years of which serve as the STIP. Both Pennsylvania and Florida’s consolidated documents, like West Virginia’s, list projects and show both federal and state funds. Appendix D includes an exam-

ple of the consolidated programming document used by West Virginia.

FHWA also noted the general confusion surrounding Virginia's use of the SYIP as its primary decision-making document. The use of two documents has the effect of minimizing the role that the STIP plays and causes confusion about how decisions are made. This concern has been documented in the form of published reports dating back nearly a decade, and was also expressed by FHWA during a meeting with JLARC staff.

VDOT has indicated there would be challenges associated with producing a consolidated document, including that environmental conformity determinations must be made each time a new TIP is produced. VDOT also noted that if the documents were combined it would still be necessary to process federal agreements, prepare modifications to agreements, process TIP/STIP actions, monitor inactive projects, and develop its federal strategy throughout the year.

However, given that other states have consolidated their documents and that FHWA believes there is confusion surrounding Virginia's use of the SYIP, VDOT should more fully assess consolidating Virginia's SYIP and STIP. This assessment should center around speaking with other states that have consolidated their programming documents, as well as obtaining FHWA approval.

Recommendation (6). The Virginia Department of Transportation (VDOT) should assess how to consolidate the Six-Year Improvement Program and Statewide Transportation Improvement Program documents. The assessment should include an examination of how other states have consolidated their state and federal programming documents. VDOT should report its findings to the Joint Commission on Transportation Accountability by June 30, 2011.

MAJORITY OF PROJECTS IN SYIP DATABASE ARE NOT SCHEDULED FOR FUTURE ALLOCATIONS

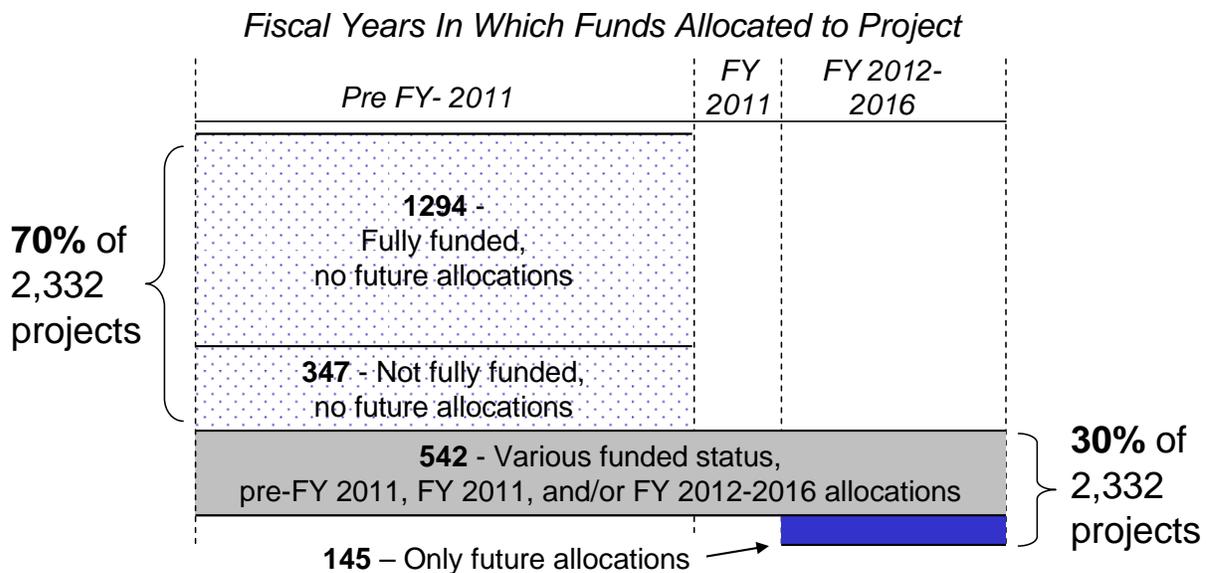
Section 33.1-12 of the *Code of Virginia* directs the CTB to allocate funds by adopting “a Six-Year Improvement Program of anticipated projects and programs by July 1 of each year.” This implies that most fundamentally, the purpose of the SYIP is to allocate funds for projects anticipated to receive funding allocations over the next six years. The projects currently included in the SYIP, however, reveal that the SYIP is being used for broader purposes. In fact, in 2004, the Auditor of Public Accounts found that VDOT “originally created the SYIP as a project list and a revenue distribution plan.

However, in order to manage resources and track costs the SYIP must become a program and project management tool.”

The majority of projects in the SYIP database are not anticipated to be allocated any funds during the next six years. Of the 2,332 projects or phases in the database, 1,294 show no expected allocations for the entire six-year period between FY 2011 and FY 2016. These 1,294 projects are fully funded according to the database. The database includes an additional 347 projects that are not fully funded, but that also show no allocations for the six years between FY 2011 and 2016. Taken together, these projects represent 70 percent of all projects or phases in the database (Figure 10). The remaining 30 percent of the projects in the database are comprised of 542 with various funding statuses, along with 145 that are scheduled for allocations after FY 2011.

According to VDOT, many of the 70 percent of projects with no planned future allocations are still active, and it is important to keep them in the database. Others are inactive projects such as those described in Chapter 3. Given that VDOT uses the SYIP database for a variety of purposes beyond future allocations as articulated in the *Code*, they retain these projects in the database. However, co-mingling projects not scheduled for future allocations with those that are scheduled for future allocations obfuscates the already complex task of understanding the State’s plans for future funding as articulated through the SYIP.

Figure 10: Only 30 Percent of Projects in SYIP Database Are Scheduled for Allocations in FY 2011 or FY 2012 - 2016



Note: The database also includes four projects with no previous, current, or future allocations.
 Source: JLARC staff analysis of VDOT six year improvement program database.

To improve transparency and reduce confusion, VDOT should provide a way for the public to produce a report from the SYIP database that only includes projects scheduled for future allocations. Regardless of how VDOT chooses to accomplish this, stakeholders should be able to more easily distinguish between projects (1) *scheduled* for future allocations and (2) *not* scheduled for future allocations. Such a report may also help address the issue discussed in Chapter 3 of projects being included in the SYIP for political purposes, but then not ever being allocated any appreciable funding.

Recommendation (7). The Virginia Department of Transportation should provide a way for the public to produce a report that identifies only projects scheduled for future allocations.

Chapter 5

Prioritization, Transparency, and Metropolitan Perspective Critical in Constrained Environment

In Summary

Absent substantial policy changes, VDOT projects future revenue available for new systems construction will continue to decline. Even assuming the current level of funding, it would take until 2022 to fund the remaining balances of projects in the Six-Year Improvement Program. Consequently, projects currently not scheduled for funding cannot expect to be allocated any appreciable revenue for more than a decade. This likely continuation of the currently-constrained fiscal environment makes it essential to prioritize among projects, be transparent about how and why decisions are made, and further embrace a metropolitan and multi-modal perspective. The newly created Virginia Association of MPOs and several initiatives VDOT has underway have the potential to help in certain respects. However, the concerns raised throughout this report underscore the need for a more transparent, communicative, and collaborative approach to transportation planning and programming.

The financial impact of the recession discussed throughout this report continues to be felt. The magnitude and duration of any recovery from this point forward are difficult to accurately project. Amid this uncertainty, prioritizing scarce resources and improving transparency about how decisions are made to allocate those scarce resources will be essential.

CURRENT CONSTRAINED ENVIRONMENT FOR NEW SYSTEMS CONSTRUCTION COULD WORSEN

Despite two recent proposals addressing transportation funding, VDOT's long-term projections show steadily declining revenue available for systems construction. Over the next 10 years, though total available revenue is projected to increase, maintenance is expected to increase at a faster rate. This dynamic has negative implications in general for systems construction, and in particular for projects within certain MPO boundaries that have a higher percentage of their estimated costs yet to be funded.

The ABC Privatization Proposal and VDOT Audit Re-allocation Plan Do Not Materially Change Long-Term Funding

Two developments during the fall of 2010 have been characterized as resulting in additional revenues being available for transportation. The first development has been the Governor's proposal to privatize the State's Alcoholic Beverage Control (ABC) operations. The proposal featured using the revenue generated from the auc-

tion of retail and wholesale liquor licenses to fund a transportation infrastructure bank. JLARC staff recently reviewed the initial proposal and cited a variety of instances in which the actual revenue raised could vary substantially from the Governor’s estimate.

The second development was the Governor’s plan to re-allocate funds identified in the September 2010 VDOT audit conducted by Cherry, Bekeart, and Holland. The plan identifies various amounts of funding for re-allocation, including: \$524 million of revenues previously reserved to prevent over-programming of federal funds to projects in the event that federal revenues were decreased through reauthorization; \$200 million in excess construction funds identified by lowering the State’s cash reserve for transportation projects; and \$130 million in inactive federal project balances that will be re-obligated to other projects.

Whether or not the ABC function is privatized, and how much one-time revenue is ultimately raised for transportation is still in question. Furthermore, VDOT has characterized the bulk of the funds identified by Cherry, Bekeart, and Holland as funds that could be spent more efficiently, rather than new funds. While these two developments may result in some appreciable amount of additional, one-time funding being allocated by the CTB in the near-term, neither materially changes the dynamics of the State’s long-term, on-going transportation funding situation.

Uncertainty In Revenue Projections and Future Allocations

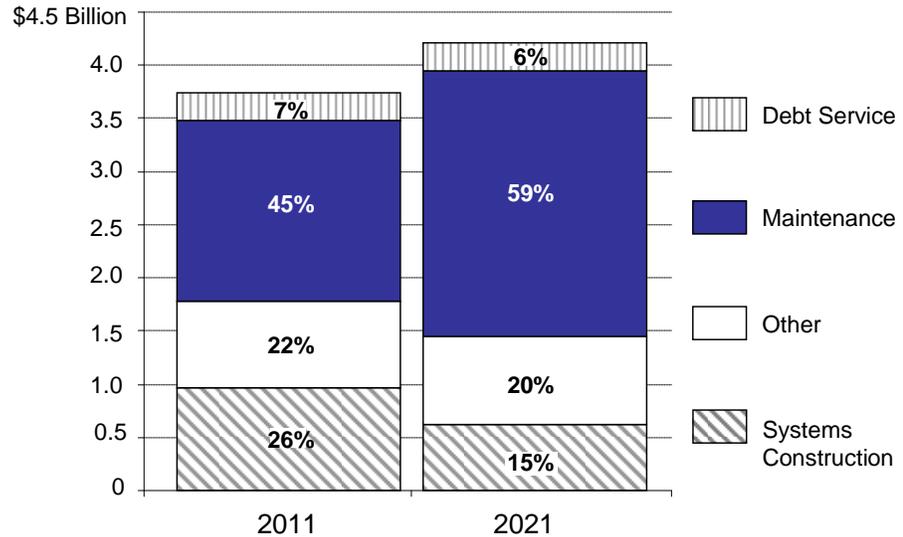
The revenue projections and future SYIP allocation figures used in this section could vary substantially from what will actually occur. Indeed, in terms of future SYIP allocations, the CTB handbook characterizes years two through six of the SYIP as “estimates of future allocations” which are “subject to change in each subsequent update of the program to reflect revenue forecasts, cost estimates, changed priorities, or changes to federal and state laws.”

VDOT Projects Maintenance Costs Will Continue to Increase, Further Reducing Funding for New Systems Construction

VDOT projects transportation revenues will increase by 13 percent between FY 2011 and FY 2021. However, during this same time period, VDOT projects maintenance costs will increase 47 percent from \$1.7 billion to \$2.5 billion. Because the *Code of Virginia* requires that maintenance be funded before systems construction, VDOT projects that funds available for new projects will fall by \$342 million by 2021 (Figure 11). This would represent a 36 percent decline, in addition to the substantial reductions experienced during the last several years. By 2021, VDOT projects that maintenance will account for 59 percent of its total available revenues. Available funds for systems construction will fall from 26 percent of available revenue to 15 percent by 2021.

The projects currently included in the FY 2011 - 2016 SYIP will have balances after FY 2011 totaling more than \$12 billion. Assuming the State maintains its current allocations schedule, these projects will still have balances totaling more than \$7 billion after FY 2016. Assuming that SYIP funding remains stable from this

Figure 11: VDOT Projects Maintenance Will Continue to Grow, Further Reducing Funds for Systems Construction Projects



Source: JLARC staff analysis of Commonwealth Transportation Fund Budget, approved in June 2010, and VDOT allocation projections for 2021.

Many projects not currently in the SYIP... cannot expect to receive any appreciable funding for more than a decade.

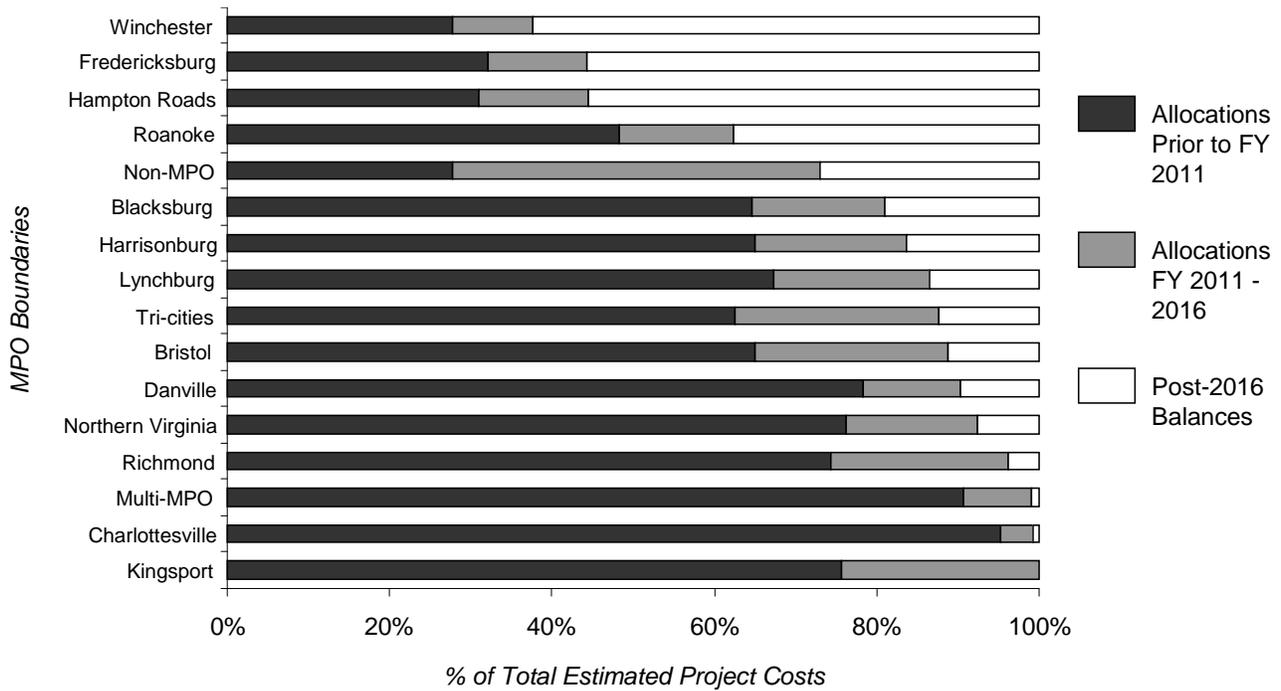
point forward, which is optimistic when considering the above projections, it will take until 2022 to fund the post-2016 balances of current SYIP projects. This suggests that many projects not currently in the SYIP, in particular those in MPO and State long-range plans, cannot expect to receive any appreciable funding for more than a decade.

Declining Future Revenue for New Systems Construction Is More Daunting Challenge for Some Regions Than Others

As shown in Figure 12, amid these fiscal realities, some regions can take solace that they have had a higher percentage of the projects within their boundaries funded over the last decade. For example, the projects within the Richmond, National Capital Region (Northern Virginia), Charlottesville, and Bristol MPO boundaries have remaining balances after the FY 2011-2016 SYIP of less than ten percent of their estimated total costs. Projects included in the current SYIP within Northern Virginia MPO boundaries have received more than \$7.6 billion in funding previously, though still estimate needing \$575 million more to be completed.

In contrast, projects within the Winchester, Fredericksburg, and Hampton Roads MPO boundaries have balances after the FY 2011-2016 SYIP of more than 50 percent. Projects within the Hampton Roads MPO boundaries, in particular, despite receiving \$6.3 billion

Figure 12: Projects Within MPO Boundaries Funded at Varying Rates, Resulting in Differences in Post-2016 Balances



Source: JLARC staff analysis of VDOT Six-Year Improvement Program database.

in funding previously, still estimate needing nearly \$3.5 billion to be completed. This balance for projects within Hampton Roads comprises roughly half of the entire remaining SYIP balance after FY 2016 (Table 19). To put this in perspective, even if all available State funding was used in that region, it would take three years to fund those balances. Stated otherwise, if the State halted progress on all projects outside Hampton Roads during FY 2017, 2018, and 2019, it would then have sufficient available revenue to fund those projects during the three-year period.

Expressing a lack of faith in the prescribed process, some MPO board members have expressed to JLARC staff that an appropriate response in this environment is to rely more on directly lobbying members of the CTB, the Secretary of Transportation, the Governor, or the General Assembly. Given the minimal role of MPOs discussed in Chapter 2, this may seem understandable. Such an approach, however, is inconsistent with the recommendations in Chapters 3 and 4 to conduct performance information-driven project prioritization and have a more process-oriented and transparent approach to making programming decisions.

Table 19: Hampton Roads Comprises Half of State’s Total Remaining Project Balances Beyond 2016 (000’s)

	\$ Amount of Remaining Balance Beyond 2016	% of Total Remaining Balance Beyond 2016
Hampton Roads	\$3,491,335	49.8%
Non-MPO	2,179,791	31.1
Northern Virginia	575,778	8.2
Fredericksburg	345,745	4.9
Roanoke	209,570	3.0
Winchester	62,228	0.9
Richmond	49,724	0.7
Blacksburg	26,653	0.4
Harrisonburg	23,450	0.3
Lynchburg	16,882	0.2
Tri-cities	15,691	0.2
Danville	11,497	0.2
Bristol	5,862	0.1
Charlottesville	1,062	0.0
Multi-MPO	497	0.0
Kingsport	-2,580	0.0
<i>Totals</i>	<i>\$ 7,013,185</i>	<i>100%</i>

Source: JLARC staff analysis of VDOT Six-Year Improvement Program database, 2010.

VDOT noted that many MPOs have not yet updated their long-range plans to reflect revised revenue forecasts provided by VDOT in 2009. As a result, when these plans are updated, in order to be financially constrained as required by federal law, projects will have to be cut. Once these cuts are made, it will bring MPO long-range plans more in line with the State’s SYIP, which has already been adjusted to reflect lower revenue estimates. If these projects are also cut from the SYIP, the remaining balances shown above may be reduced. However, while cutting projects from long-range plans and programs may reduce unfunded balances in the SYIP, it does not diminish the potential need for those projects.

PRIORITIZATION, TRANSPARENCY, COORDINATION, AND COMMUNICATION ESSENTIAL IN CONSTRAINED ENVIRONMENT

The transportation revenue constraints make it essential that the State collectively explore all avenues to be more efficient. Such efficiency can be achieved, in part, through continued and further prioritization across all modes of transportation funding, rather than just highway funds. In addition, improved transparency and communication among VDOT, DRPT, and MPOs will also be important if transportation challenges are going to be addressed in a meaningful way over the next decade.

Prioritize Across All Modes of Transportation, Not Just Roads

The above data, and much of the data presented in this report, has addressed only highway construction. However, the revenue constraints moving forward underscore the importance of not only effectively prioritizing among highway projects—but also across all types of potential projects. Particularly in the more populated and congested parts of the State, such as Northern Virginia and Hampton Roads, using only roads to address transportation challenges is not feasible. To this end, one MPO board member noted:

"... We can't build enough roads to support that way of thinking."

The Commonwealth cannot address transportation in the next 50 years with the same mindset it had over the last 50 years. The sooner we get away from the paradigm that we can live one place, work in another place, and shop in other disparate places ...the better. We can't build enough roads to support that way of thinking.

DRPT cites some important progress on coordination through long-range plans, but laments the minimal connection between these plans and how funding is actually allocated. DRPT officials indicated that the more integrated, multi-modal planning process used for VTRANS 2035 and the 2035 Surface Transportation Plan were improvements compared to previous, more segmented approaches. However, DRPT indicates there is still a long way to go in terms of being able to fund the best investment for the State when comparing roads, public transit, rail, and other modes. This is partly due to the analytical challenge of the comparison, but also due to

Revenue Streams Earmarked in Fixed Proportions

According to the *Code of Virginia*, 14.7 percent of the Transportation Trust Fund (TTF) is set aside as the Commonwealth Mass Transit Fund. Further, after TTF funds cover maintenance costs, the CTB may allocate up to ten percent of the remaining funds for rail projects. Earmarks (funding designated for a particular purpose) are intended to assure some portion of funding is dedicated to modes other than highways, but their fixed proportions can differ from what is actually needed.

- a preponderance of federal and State revenue streams specifically earmarked for either highway or transit and rail funding; and
- the operational nature of public transit funding compared to the capital-intensive nature of highway funding.

DRPT reports that as ridership on existing and new transit and rail systems has grown, so has the need for operational funding. These growing operational needs, which like highway maintenance seem prudent to fund prior to increasing existing capacity, can have the effect of crowding out funding for capital expenditures needed for new capacity.

While the nature of the funding streams and operations is difficult to change, the degree of collaboration among VDOT, MPOs, and DRPT can be improved. Collaboration is the foundation of any efforts moving forward to better integrate multi-modal planning with how projects are selected. Such collaboration requires sufficient staff resources for DRPT to interact with key planning and

programming process participants, including the State’s 14 MPOs and nine VDOT district offices.

As shown in Table 20, eight of the State’s 14 MPOs and four VDOT district administrators reported collaboration with DRPT as mostly effective. The remaining six MPOs rated collaboration as sometimes effective. This somewhat uneven response suggests there are certain regions in which collaboration and coordination with DRPT could be improved.

Enhancing resources available to DRPT could provide part of the solution to improving collaboration on rail and public transit funding, where needed. DRPT is very small in comparison to the counterpart planning and programming staffing within VDOT and collectively at the MPOs. While there are more than 100 planning and programming staff within VDOT (central office and districts), and more than 100 staff at MPOs, DRPT has 8.5 planning and programming FTEs. DRPT reports that about ten percent of its planning staff’s annual time is spent on facilitating MPO input and coordinating and interacting with MPO (and Planning District Commission) staff. When asked, DRPT indicated it needs two additional planning staff, which it would partially devote to having greater capacity to collaborate with MPOs. This may be reasonable, especially given that six of the State’s 14 MPOs reported that, in their opinion, DRPT had inadequate staffing to respond to its workload.

DRPT reports that it holds semi-annual workshops to discuss public transportation planning and programming efforts, and seek feedback from grantees and MPOs. The workshops include discussion on planning and the SYIP and opportunities for grantees and MPOs to comment on public transportation program requirements and funding recommendations. DRPT has also started semi-annual meetings with MPOs to discuss how to improve coordination and better align DRPT public transportation planning with MPO planning.

Table 20: MPO Directors and VDOT District Administrators Report Generally Effective Working Relationship With DRPT

	Never Effective	Rarely Effective	Sometimes Effective	Mostly Effective	Always Effective
<i>How would you characterize the effectiveness of coordination and collaboration with DRPT staff ...</i>					
MPO Directors	0	0	6	8	0
VDOT District Administrators ^a	0	1	2	4	0

^a Two district administrators responded “do not know” to this survey question.
Source: JLARC staff surveys of MPOs and VDOT District Administrators, 2010.

VAMPO Can Help Improve Transparency, Coordination, and Communication

House Joint Resolution 756 from the 2009 General Assembly created the Virginia Association of Metropolitan Planning Organizations (VAMPO). The JLARC study mandate directs staff to list ways that VAMPO can facilitate improved levels of statewide regional coordination. Other states that have associations of MPOs were interviewed regarding the role their associations play in improving transparency, coordination, and communication. Collectively, these states found their MPO associations useful for improving coordination and communication. For example,

VAMPO Status

VDOT and the Secretary of Transportation supported the development of VAMPO. As of October 2010, VAMPO had approved its by-laws. The preamble to the by-laws cites a variety of purposes for VAMPO, including to provide a forum for State and federal agencies to exchange information with MPOs in a collective manner.

- Florida and Texas both noted their MPO associations are a way for the state central office to brief the MPOs on policy issues, funding changes, and other important items. They also indicated their associations are a useful way to collect input from MPOs, such as being a sounding board for potential policy changes or discussing potential best practices that could be helpful to all MPOs.
- North Carolina, Georgia, and Texas reported that their MPO associations are a vehicle to ensure the same information is transmitted to all of its MPOs at the same time. The alternative, they noted, was to have individual meetings or teleconferences with each MPO, which can lead to different versions of issues being communicated at different times.
- New York reported its MPO association holds an annual conference, at which technical issues related to construction and funding are addressed. The state is invited to these conferences and makes presentations about a variety of topics.

According to VDOT, the MPO representing Northern Virginia has declined participation in VAMPO, which could reduce the impact VAMPO may have on improving coordination and communication between the State and MPOs.

The national Association of Metropolitan Planning Organizations (AMPO) also underscored the role that state MPO associations can play in fostering collaboration and communication. AMPO indicated that there are key implementation factors when establishing new MPO associations, such as VAMPO. These include having set meetings scheduled at least twice a year, a chairperson and relevant sub-committees, and a website to communicate information to interested parties. AMPO also indicated that MPO associations can be particularly helpful to smaller MPOs, which do not have the same planning and analytic resources that larger MPOs do.

In addition, a strong VAMPO could serve as an additional mechanism to improve transparency about planning and programming decisions made by the CTB, MPOs, and localities. As such, VAMPO can play a role in asking questions that potentially improve accountability—a central theme in many of the recommendations included in this report.

Several VDOT Initiatives Could Potentially Improve Transparency, Coordination, and Communication With MPOs

This fall, VDOT began to implement a series of initiatives it believes can address some of the concerns raised throughout this report. In addition to separating the chief financial officer and planning and programming functions noted in Chapter 3, VDOT has begun several other initiatives.

For example, starting in 2010, the Secretary of Transportation invited MPOs to make presentations to the CTB. Some MPOs believe these presentations will be at least the start of a process through which they can make their case directly to the CTB about priority projects and other issues. In addition, VDOT is meeting in early December with MPOs. According to VDOT, one of the purposes of this meeting is to discuss the approach and justification used to make the substantial reductions in SYIP allocations during the recession. DRPT will also be participating in this meeting.

VDOT is also finalizing a reorganization that it believes will potentially address some of the concerns raised in this report. This reorganization created Planning and Investment Management (PIM) groups in each of the nine VDOT district offices. VDOT envisions each PIM creating additional planning, programming, and land-use capacity at the district level by having several new staff in each district with specific responsibilities. According to VDOT, most of these staff are not central office staff being devolved to the districts, but will instead be additional staff. VDOT also envisions using each PIM to leverage local knowledge about projects and improve communication and coordination with the MPO(s) in each district.

While the above initiatives are a positive first step, they do not necessarily represent meaningful changes in the working relationship between the State and MPOs. The issues with the minimal role of MPO input, lack of performance-driven decisions, and programming processes and confusion will take time and cooperation among various stakeholders to adequately address. These concerns raised throughout this report underscore the need for a more transparent, communicative, and collaborative approach to planning and programming moving forward.



List of Recommendations: Review of Virginia's Transportation Planning and Programming

1. The Virginia Department of Transportation should work with the Virginia Association of Metropolitan Planning Organizations to determine how to more effectively capitalize upon the capabilities of Virginia's 14 Metropolitan Planning Organizations (MPO), in particular on MPO input in State allocation decisions. The department should report to the Joint Commission on Transportation Accountability its plan to more effectively incorporate MPO input by June 30, 2011.
2. The General Assembly may wish to amend §33.1-23.03:01 of the *Code of Virginia* to require the Virginia Department of Transportation and the Commonwealth Transportation Board to (1) provide Metropolitan Planning Organizations (MPO) a structured opportunity to provide meaningful input on priorities, (2) demonstrate that MPO input on priorities has been sufficiently considered prior to the draft SYIP being released, and (3) explain to MPOs, when requested, why State decisions differ substantially from MPO priorities.
3. The General Assembly may wish to amend §33.1-23 of the *Code of Virginia* to require the Virginia Department of Transportation (VDOT), and the Commonwealth Transportation Board, to continually apply a performance-driven project prioritization process. The process should be applied in all financial circumstances. VDOT should develop a written plan detailing the proposed process that includes an implementation timeline and description of how the process will be applied in different financial circumstances. The department should submit the written plan to the Joint Commission on Transportation Accountability by June 30, 2011.

4. The Virginia Department of Transportation (VDOT) should develop a standardized, written process to be used—at minimum—when there is a ten percent or more variation between previously-budgeted and actual and/or projected revenue. The written process should specifically define, during these periods of ten percent variation, the role that VDOT central office or district staff with planning and construction expertise, and others as necessary, should play when making programming decisions that fundamentally alter the expected progress of a project. The written process should also articulate how the reasons for programming decisions that fundamentally alter the expected progress of a project will be documented.
5. The Virginia Department of Transportation (VDOT) should assess whether the roles and responsibilities for programming between its central office and districts are sufficiently defined. VDOT should also take necessary steps to address any issues between its districts and central office in terms of programming, including improving communication.
6. The Virginia Department of Transportation (VDOT) should assess how to consolidate the Six-Year Improvement Program and Statewide Transportation Improvement Program documents. The assessment should include an examination of how other states have consolidated their state and federal programming documents. VDOT should report its findings to the Joint Commission on Transportation Accountability by June 30, 2011.
7. The Virginia Department of Transportation should provide a way for the public to produce a report that identifies only projects scheduled for future allocations.

Study Mandate

Chapter 786 includes SB 201, which was identical to HB 42 shown below. Together, these two bills comprise the study mandate.

CHAPTER 819

An Act to require the Joint Legislative Audit and Review Commission to administer an audit of transportation programs.

[H 42]

Approved April 21, 2010

Be it enacted by the General Assembly of Virginia:

1. § 1. *That the Joint Legislative Audit and Review Commission shall administer an operational and programmatic performance audit focusing on the agencies within the Transportation Secretariat, with primary emphasis on the transportation planning and programming divisions within the Department of Transportation and the Department of Rail and Public Transportation. The purpose of this audit shall be to provide an objective and independent cost savings assessment of the Commonwealth's organizational structure and the efficiency, level of adherence to federal regulations, and effectiveness of the Commonwealth's transportation planning and programming procedures in order to provide information to the Governor and the General Assembly on ways to reduce duplication of effort and implement cost savings measures and programmatic efficiencies in the operation of state transportation programs. In order to achieve its overall purpose, the audit may consist of a series of concurrent audits concentrating on specified categories or groupings. A final report on the findings of the performance audit shall be submitted to the Joint Commission on Transportation Accountability and the Governor no later than December 31, 2010.*

§ 2. *At a minimum, the report shall identify any deficiencies in the current processes for distributing staffing; in the levels of, and effectiveness of, state and regional collaboration and coordination in the transportation planning and programming process; and in the degree to which statewide and regional processes adhere to and align with federally prescribed transportation planning and programming procedures.*

§ 3. *The report shall consist of detailed findings and recommendations, including but not limited to the following subject areas:*

1. *Improvements that may result in both increased efficiency and cost savings in programs and services, including organization structure and staffing levels;*

2. *Identification and recognition of best practices, to include an assessment of:*
 - a. *The adequacy of statutory language that recognizes, describes, and supports the Commonwealth's 14 Metropolitan Planning Organizations and that codifies at the state level the federally required minimum level of state-metropolitan collaboration and coordination procedures;*
 - b. *The merits of, and effectiveness of, the Commonwealth's development of and sustained maintenance of two different state-level transportation programs, namely the federally required State Transportation Improvement Program (STIP) and the State Six-Year Improvement Program (SYIP);*
 - c. *Statewide transportation planning and programming procedures that may be enhanced, consolidated, reduced, or developed at the regional level, or eliminated;*
 - d. *The validity of the Virginia Department of Transportation organizational structure that places the Commonwealth's transportation planning and programming functions at the division level rather than at the department level; and*
 - e. *A list of recommendations to the newly formed Virginia Association of Metropolitan Planning Organizations (VAMPO) to provide direction in facilitating improved levels of statewide and regional coordination;*
 3. *Funding for programs and services that may be eliminated or reduced;*
 4. *Analysis of current transportation planning and programming management activities that are less financially advantageous to the Commonwealth than maintenance of effort approaches;*
 5. *Programs and services that may be enhanced, consolidated, reduced, eliminated, or transferred to the private sector;*
 6. *Identification of gaps and overlaps in programs and services and suggestions for improving, blending, or separating of functions to correct any identified gaps or overlaps and reduce duplication of effort;*
 7. *Changes to the definition of activities undertaken by the departments, particularly with respect to the definition of maintenance of transportation infrastructure;*
 8. *Methods to verify the reliability and validity of performance data, self-assessments, and performance-measurement systems used by the departments; and*
 9. *Adoption, amendment, or repeal of statutes, regulations, rules, and policy directives necessary to ensure that the departments carry out their statutory responsibilities.*
- § 4. *The audit shall take into consideration results of any prior studies, audits, or reviews conducted by (i) the General Assembly, the Joint Legislative Audit and Review Commission, or the Auditor of Public Accounts; (ii) any Governor-appointed commission or other like entity; or (iii) any other independent entity that addresses the structure and operation of state government and has identified monetary savings, reduced duplication of effort, or efficiencies leading to a reduction in costs.*

Appendix **B**

Research Activities and Methods

JLARC staff conducted the following major research activities during this review:

- structured interviews with State and federal agency staff, Metropolitan Planning Organization (MPO) and Planning District Commission (PDC) staff, and transportation officials from other states;
- surveys of transportation planning participants;
- analysis of Six-Year Improvement Program (SYIP) data; and
- reviews of documentation and transportation literature.

STRUCTURED INTERVIEWS

In order to solicit information about transportation planning and programming, JLARC staff interviewed a number of transportation officials at the State, federal, and regional levels.

State and Federal Agency Staff

JLARC staff interviewed staff from the Virginia Department of Transportation (VDOT) and the Department of Rail and Public Transportation (DRPT). Among VDOT central office staff, JLARC interviewed the chief financial officer (CFO), directors of financial planning and program management, and staff from the planning and programming divisions. These interviews addressed a number of key topics, including

- planning and programming processes used before and during the recession;
- process used to prioritize projects in long-range plans;
- criteria used to guide programming decisions;
- coordination and collaboration with MPOs and DRPT staff; and
- consistency with federal requirements for transportation planning and programming.

JLARC staff also interviewed staff from three of the nine VDOT district offices about collaboration and coordination among process

participants, consistency of Virginia’s approach with federal requirements, statutory language pertaining to MPO involvement, VDOT’s organizational structure, transparency and defensibility of allocation decisions for interstate and primary road systems, staffing, and other issues.

JLARC staff also interviewed the DRPT CFO, as well as the chiefs of rail and public transportation. Topics discussed were similar to those covered during interviews with VDOT staff.

In addition to State agency staff, JLARC staff also interviewed staff from the Federal Highway Administration (FHWA) Richmond division office. The study team was directed by its mandate to examine “the degree to which statewide and regional processes adhere to and align with federally prescribed transportation planning and programming procedures,” and FHWA was interviewed to provide perspective on this issue. Additional topics discussed included the number of inactive projects in Virginia and the efficiency of having two programming documents – the SYIP and the Statewide Transportation Improvement Program (STIP).

Regional Transportation Planning Organizations

The study mandate directed JLARC to identify deficiencies in the “levels of, and effectiveness of, state and regional collaboration and coordination in the transportation planning and programming process.” Consequently, JLARC staff interviewed a number of staff at regional planning organizations, including executive directors and other staff at four MPOs and two PDCs. The information covered was similar to that described for VDOT district office staff above.

Interviews With Transportation Officials in Other States

JLARC staff interviewed officials from departments of transportation in eight other states—Georgia, Florida, North Carolina, New York, Pennsylvania, South Carolina, Texas, and West Virginia. All of the states contacted during this review were responsive to JLARC requests for interviews. The states were selected because they either (1) had a high number of state-controlled highway mileage, or (2) were identified as having effective coordination with MPOs.

Interviews with other state officials addressed a variety of topics, including their decision-making context and structure, size of their transportation program, organizations involved in transportation planning, role of and coordination with MPOs, statutory language regarding MPOs, number and purposes of programming documents they produce, project selection amid revenue decline, and the role, if any, that an association of MPOs plays in their state.

SURVEYS OF STATE PLANNING AND PROGRAMMING PARTICIPANTS

As discussed throughout the report, numerous stakeholders are involved in the process of transportation planning. As such, JLARC staff conducted surveys to provide as many stakeholders as possible an opportunity to provide input for the review. The surveys were developed and administered online, using Checkbox survey software.

Surveys of MPO and PDC Directors and VDOT District Administrators

In August 2010, JLARC staff surveyed the directors of all 14 MPOs, as well as VDOT's nine district administrators, and received a one hundred percent response rate. Those responses have been quantified throughout the report. The surveys covered topics similar to those discussed during interviews. Indeed, some of the interviews with MPO staff and district administrators provided JLARC staff an opportunity to refine survey topics before they were administered. While survey topics were similar to interview topics, surveys served a very important purpose during this review – they helped JLARC staff quantify the extent to which concerns raised during initial interviews were unique to certain regions, or recognized as problems more broadly.

Furthermore, as the conduit between VDOT central office and MPOs, district administrators provided a unique perspective on state and regional coordination. Concerns they expressed about limited communication from central office and a lack of transparency concerning transportation decisions highlighted the extent to which decision-making within the VDOT central office has been a highly insular activity.

JLARC staff also surveyed directors of the 12 PDCs located outside of a metropolitan area (and therefore do not share staff with an MPO). The 12 PDCs surveyed included Accomack-Northampton, Commonwealth Regional Commission, Cumberland Plateau, George Washington Regional Commission, Lenowisco, Mount Rogers, New River Valley, Northern Neck, Rappahannock-Rapidan Regional Commission, Southside, Middle Peninsula, and Northern Virginia Regional Commission. The nine survey responses received from PDC directors, while not quantified, were used to inform the report's findings and conclusions.

Survey of CTB and MPO Board Members

The Commonwealth Transportation Board (CTB) plays a pivotal role in transportation planning and programming through the

SYIP. MPO board members approve MPO long-range transportation plans and Transportation Improvement Programs (TIPs). JLARC staff surveyed CTB and MPO board members to give them an opportunity to provide feedback to JLARC. Rather than quantifying responses, JLARC staff treated information collected from these surveys as interviews. This information was useful to JLARC staff's understanding of issues addressed in the report, and provided qualitative examples used throughout the report.

In total, ten out of 17 CTB members responded, and 59 MPO board members (representing 12 MPOs) provided responses. Information from these surveys provided some context for concerns raised by other stakeholders as well as a unique perspective from those who are charged with making the ultimate decisions about project selection and funding.

ANALYSIS OF SYIP DATA

The study mandate directed JLARC staff to assess the State's use of two programming documents—the SYIP and the federally required STIP. Further, stakeholders expressed a number of concerns related to SYIP data, including concerns that it is confusing, lacks transparency, and provides little accountability for decision-making. As a result, JLARC staff analyzed data in VDOT's external SYIP database.

JLARC staff exported the Final FY 2011 SYIP into Microsoft Excel and uploaded the file into SAS. Each project phase in the SYIP contains the following information: cost estimate, previous allocations, current year allocations (FY 2011), future allocations (FY 2012 to 2016), and balance.

Based on this data, JLARC staff categorized projects according to whether they had previous allocations, current allocations, and/or future allocations. For projects with no current or future allocations, JLARC also analyzed whether the project was fully-funded. To identify the number of projects that were fully-funded, JLARC staff looked at the "balance" variable in the SYIP. If a project had no balance or a negative balance, it was identified as being fully-funded. A balance less than or equal to zero suggested that the previous allocations for the project equaled or exceeded the project's estimated costs.

DOCUMENTATION AND LITERATURE REVIEWS

A review of the literature was conducted to understand the history of MPO authority and the process of metropolitan transportation planning. Documents, primarily those produced by VDOT, were reviewed to understand the process of transportation planning and programming in Virginia.

In addition, JLARC staff reviewed sections of the *Code of Virginia*, U.S. Code, and federal regulations pertaining to MPOs to understand their role in transportation planning, to assess Virginia’s consistency with federal requirements, and to understand the purpose of the SYIP. Key statutes and regulations reviewed during this study are identified in Table B-2. Similar documents were reviewed for other states contacted during this review. Some of the information collected from that review is included in Chapter 2 and Appendix D.

Table B-2: Key State and Federal Statutes and Regulations Pertaining to MPOs

Source	Citation
U.S. Code	Title 23, §134 & 135
U.S. Code of Federal Regulations	Title 23, §450
<i>Code of Virginia</i>	§33.1-12

Source: JLARC staff analysis.

Appendix **C**

Selected Other States’ Statutory Language for MPOs

This appendix includes relevant language that several other states have in their statutory framework relating to Metropolitan Planning Organizations. The five states are shown in order of the degree of specificity regarding the state and MPO relationship in terms of planning and programming transportation projects. The first state listed, Georgia, is shown as an example of comparatively minimal statutory language, while the fifth state listed, Florida, is shown as an example of more extensive language.

State	Relevant Statutory Language Pertaining to MPO Role in Planning and Programming
Georgia	

§32-5-27. Allocation formula development and implementation

(2) A portion of this allocation shall be a specific itemized and prioritized project list and such portion shall be not less than 10 percent nor more than 20 percent of the aggregate allocation from the State Public Transportation Fund, subject to and consistent with the provisions of the state-wide transportation improvement program, for such fiscal year. In developing such project list the division and the director may accept project recommendations from the Transportation Committees of the Senate and the House of Representatives, the Governor, *metropolitan planning organizations*, and nonmetropolitan areas. Such projects shall be prioritized in accordance with the state-wide strategic transportation plan.

New York	
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Article 2, §15-a.3. In addition to its responsibilities stated in subdivision one of this section, the responsibilities of each *metropolitan planning organization* shall be:

- (a) to develop long-range regional transportation plans for submission to the commissioner for consideration for inclusion in the statewide transportation master plan;
- (b) to develop and suggest periodic amendments to the master plan to the commissioner;
- (c) to consult with and cooperate with local officials and representatives of carriers and transportation facilities and systems within their urbanized area;
- (d) to examine the structure, and cost of transit operations;
- (e) to endorse long-range plans assuring maximum utilization and integration of mass transportation facilities and services throughout the State;
- (f) to study the long-range financial needs for improving public transportation systems; and
- (g) to conduct one or more public hearings to carry out the provisions of this subdivision.

State Relevant Statutory Language Pertaining to MPO Role in Planning and Programming

South Carolina

SECTION 57-1-370. Development of long-range Statewide Transportation Plan and plan for preservation and improvement of existing system; federal enhancement grants; hearings.

(A) The commission must develop the long-range Statewide Transportation Plan, with a minimum twenty-year forecast period at the time of adoption, that provides for the development and implementation of the multimodal transportation system for the State. The plan must be developed in a manner consistent with all federal laws or regulations and in consultation with all interested parties, particularly the *metropolitan planning organizations* and the nonmetropolitan planning organization area local officials. The plan may be revised from time to time as permitted by and in the manner required by federal laws or regulations.

(B) Concerning the development, content, and implementation of the Statewide Transportation Improvement Program, the commission must:

(2) approve the Statewide Transportation Improvement Program and ensure that it is developed pursuant to federal laws and regulations and approve an updated Statewide Transportation Improvement Program from time to time as permitted by and in the manner required by federal laws or regulations;

(4) work in consultation with each *metropolitan planning organization* to develop and revise a transportation improvement program for each metropolitan planning area;

(6) select projects to be undertaken, in consultation with each *metropolitan planning organization*, from the *metropolitan planning organization's* approved transportation improvement plan in metropolitan areas not designated as a transportation management area;

(7) consult with each *metropolitan planning organization*, in metropolitan areas designated as transportation management areas, concerning the projects selected to be undertaken from the approved transportation improvement program and in accordance with the priorities approved by the transportation improvement program; and

(8) when selecting projects to be undertaken from nontransportation management area *metropolitan planning organizations'* transportation improvement programs, or selecting the nonmetropolitan area projects to be undertaken that are included in the Statewide Transportation Improvement Program, and when consulting with *metropolitan planning organizations* designated as transportation management areas, the commission shall establish a priority list of projects to the extent permitted by federal laws or regulations, taking into consideration at least the following criteria:

(a) financial viability including a life cycle analysis of estimated maintenance and repair costs over the expected life of the project; (b) public safety; (c) potential for economic development; (d) traffic volume and congestion; (e) truck traffic; (f) the pavement quality index; (g) environmental impact; (h) alternative transportation solutions; and (i) consistency with local land use plans.

North Carolina

§136-66.2. Development of a coordinated transportation system and provisions for streets and highways in and around municipalities.

(a) ...Each *MPO*, with cooperation of the Department of Transportation, shall develop a comprehensive transportation plan in accordance with 23 U.S.C. § 134. In addition, an *MPO* may include projects in its transportation plan that are not included in a financially constrained plan or are anticipated to be needed beyond the horizon year as required by 23 U.S.C. § 134. For municipalities located within an *MPO*, the development of a comprehensive transportation plan will take place through the *metropolitan planning organization*. For purposes of transportation planning and programming, the *MPO* shall represent the municipality's interests to the Department of Transportation.

(b) After completion and analysis of the plan, the plan shall be adopted by both the governing body of the municipality or *MPO* and the Department of Transportation as the basis for future transportation improvements in and around the municipality or within the *MPO*. The governing body of the municipality and the Department of Transportation shall reach agreement as to which of the existing and proposed streets and highways included in the adopted plan will be a part of the State highway system and which streets will be a part of the municipal street system. As used in

State Relevant Statutory Language Pertaining to MPO Role in Planning and Programming

this Article, the State highway system shall mean both the primary highway system of the State and the secondary road system of the State within municipalities.

(b2) The municipality or the *MPO* shall provide opportunity for public comments prior to adoption of the transportation plan.

(b3) Each county, with the cooperation of the Department of Transportation, may develop a comprehensive transportation plan utilizing the procedures specified for municipalities in subsection (a) of this section. This plan may be adopted by both the governing body of the county and the Department of Transportation. For portions of a county located within an *MPO*, the development of a comprehensive transportation plan shall take place through the *metropolitan planning organization*.

(b4) To complement the roadway element of the transportation plan, municipalities and *MPOs* may develop a collector street plan to assist in developing the roadway network. The Department of Transportation may review and provide comments but is not required to provide approval of the collector street plan.

(d) ... For *MPOs*, either the *MPO* or the Department of Transportation may propose changes in the plan at any time by giving notice to the other party, but no change shall be effective until it is adopted by both the Department of Transportation and the *MPO*.

§136-200.3. Additional provisions applicable to consolidated metropolitan planning organizations.

(a) Limit on Basis for Project Objection. – Beginning with the 2004 State Transportation Improvement Program, neither the State nor a consolidated *metropolitan planning organization* shall have a basis to object to a project that is proposed for funding in the Transportation Improvement Program, provided that the project does not affect projects previously programmed, if the project is included in a mutually adopted plan developed pursuant to G.S. 136-66.2, and is consistent with the project selection criteria contained in the memorandum of understanding creating the consolidated *metropolitan planning organization*.

(b) Project Ranking Priorities. – Beginning with the 2004 State Transportation Improvement Program, and subject to the availability of funding, the Department of Transportation, when developing the Transportation Improvement Program, shall abide by the project ranking priorities approved by a:

(1) Consolidated *metropolitan planning organization* for any project within its jurisdiction, if the project is not a National Highway System or bridge and Interstate maintenance program project.

Florida

§339.135, (4) Funding and Developing a Tentative Work Program

(c) 2. The district work program shall be developed cooperatively from the outset with the various *metropolitan planning organizations* of the state and include, to the maximum extent feasible, the project priorities of *metropolitan planning organizations* which have been submitted to the district by October 1 of each year; however, the department and a *metropolitan planning organization* may, in writing, cooperatively agree to vary this submittal date. To assist the *metropolitan planning organizations* in developing their lists of project priorities, the district shall disclose to each *metropolitan planning organization* any anticipated changes in the allocation or programming of state and federal funds which may affect the inclusion of *metropolitan planning organization* project priorities in the district work program.

(c) 3. Prior to submittal of the district work program to the central office, the district shall provide the affected *metropolitan planning organization* with written justification for any project proposed to be rescheduled or deleted from the district work program which project is part of the *metropolitan planning organization's* transportation improvement program and is contained in the last 4 years of the previous adopted work program. By no later than 14 days after submittal of the district work program to the central office, the affected *metropolitan planning organization* may file an objection to such rescheduling or deletion. When an objection is filed with the secretary, the rescheduling or deletion shall not be included in the district work program unless the inclusion of such rescheduling or deletion is specifically approved by the secretary. The Florida Transportation Commission shall include such objections in its evaluation of the tentative work program only when the secretary has approved the rescheduling or deletion.

(d) Prior to the submission of the district work program to the central office, each district office shall hold a

State	Relevant Statutory Language Pertaining to MPO Role in Planning and Programming
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public hearing in at least one urbanized area in the district and shall make a presentation at a meeting of each *metropolitan planning organization* in the district to determine the necessity of making any changes to projects included or to be included in the district work program and to hear requests for new projects to be added to, or existing projects to be deleted from, the district work program. However, the district and *metropolitan planning organization* shall minimize changes to, deletions from, or adjustments to projects or project phases contained in the 4 common years of the previous adopted work program and the district work program. The district shall provide the *metropolitan planning organization* with a written explanation for any project which is contained in the *metropolitan planning organization's* transportation improvement program and which is not included in the district work program. The *metropolitan planning organization* may request in writing to the appropriate district secretary further consideration of any specific project not included or not adequately addressed in the district work program. The district secretary shall acknowledge and review all such requests prior to the submission of the district work program to the central office and shall forward a copy of such requests to the secretary and the Florida Transportation Commission. The commission shall include such requests in its evaluation of the tentative work program.

(f) The central office shall submit a preliminary copy of the tentative work program to the Executive Office of the Governor, the legislative appropriations committees, the Florida Transportation Commission, and the Department of Community Affairs at least 14 days prior to the convening of the regular legislative session. Prior to the statewide public hearing required by paragraph (g), the Department of Community Affairs shall transmit to the Florida Transportation Commission a list of those projects and project phases contained in the tentative work program which are identified as being inconsistent with approved local government comprehensive plans. For urbanized areas of *metropolitan planning organizations*, the list may not contain any project or project phase that is scheduled in a transportation improvement program unless such inconsistency has been previously reported to the affected *metropolitan planning organization*.

§339.135, (7) Amendment of the Adopted Work Program

(f)1. Whenever the department proposes any amendment to the adopted work program, as defined in ⁵subparagraph (c)1. or ⁵subparagraph (c)3., which deletes or defers a construction phase on a capacity project, it shall notify each county affected by the amendment and each municipality within the county. The notification shall be issued in writing to the chief elected official of each affected county, each municipality within the county, and the chair of each affected *metropolitan planning organization*. Each affected county and each municipality in the county is encouraged to coordinate with each other in order to determine how the amendment affects local concurrency management and regional transportation planning efforts.

Source: JLARC staff analysis of other state codes, 2010.

Appendix
D

West Virginia's Consolidated Allocation Document

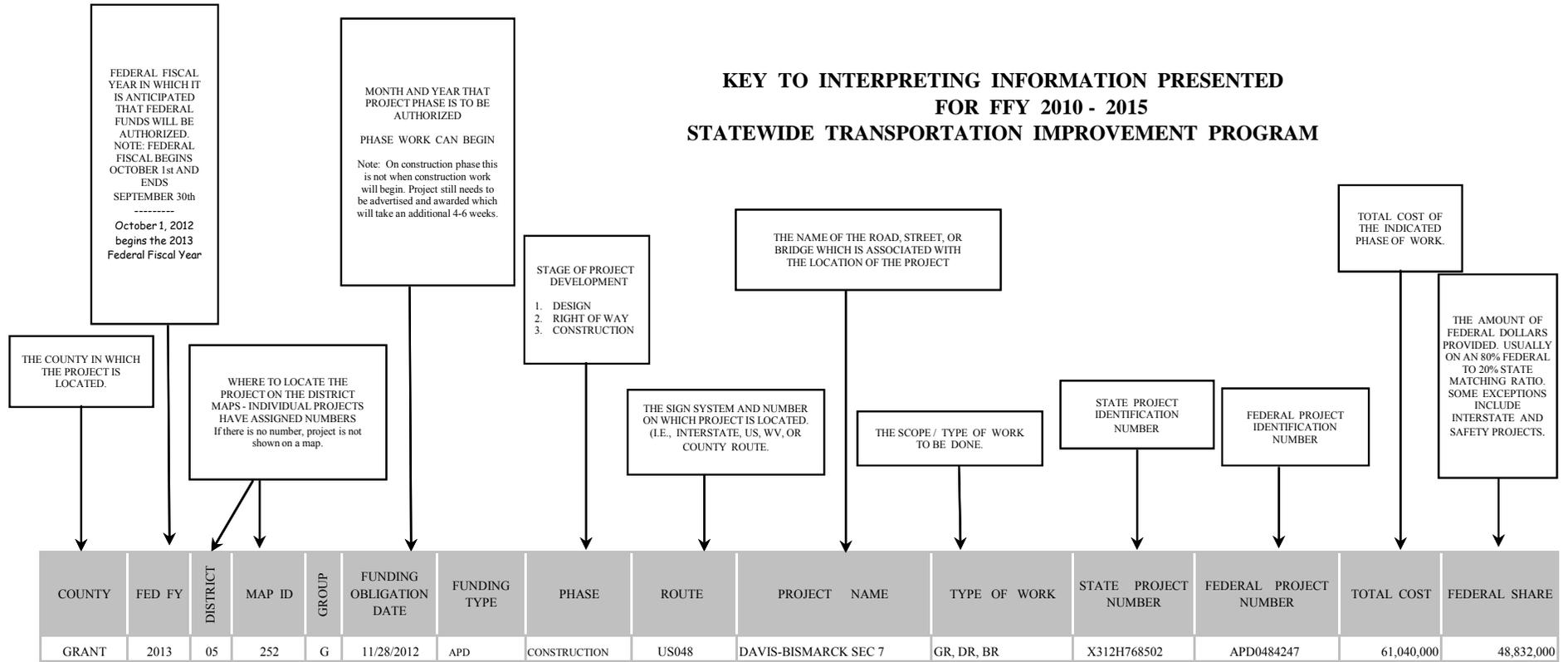
The following three pages include selected pages from West Virginia's consolidated federal obligation and state allocation document. The first page is a key for data fields included on the next two pages. The second page is an example of how information about projects receiving federal and state funds is shown. The third page is an example of how information about projects using only state funds is shown.

An example of the entire document can be found online at:

<http://www.transportation.wv.gov/highways/programplanning/STIP/stipfiles/Pages/default.aspx>

KEY TO INTERPRETING INFORMATION PRESENTED FOR FFY 2010 - 2015 STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

36



- TYPE OF FUNDS TO BE UTILIZED FOR THE PROJECT, ABBREVIATED AS FOLLOWS:
- | | |
|---------|--|
| APD | - APPALACHIAN DEVELOPMENT |
| BR | - BRIDGE REHABILITATION & REPLACEMENT |
| IM | - INTERSTATE MAINTENANCE |
| CMAQ | - CONGESTION MITIGATION & AIR QUALITY |
| NHS | - NATIONAL HIGHWAY SYSTEM |
| STP | - SURFACE TRANSPORTATION PROGRAM (INCLUDES : FLEXIBLE, 5K, 200K) |
| EB | - EQUITY BONUS |
| EARMARK | - EARMARKS, HI PRIORITY, AND OTHER DELEGATED PROJECTS |
| NRT | - NATIONAL RECREATIONAL TRAILS |
| ENH | - ENHANCEMENT PROJECTS |
| SRTS | - SAFE ROUTES TO SCHOOL |
| DF | - DIRECT FEDERAL |
| HSIP | - HIGHWAY SAFETY IMPROVEMENT PROGRAM |
| RR | - R/H CROSSING AND PROTECTIVE DEVICES |
| OAF | - OTHER ALLOCATED FUNDS |
| SPR | - STATEWIDE PLANNING AND RESEARCH |
| OC | - OTHER CORE |

**STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)
FEDERAL AID PROJECT LISTING BY COUNTY - F FY 2010 - 2015**

COUNTY	FY	DISTRICT	MAP ID	GROUP	FUNDING OBLIGATION DATE	FUND TYPE	PHASE	ROUTE	PROJECT NAME	TYPE OF WORK	STATE PROJ. NUMBER	FEDERAL PROJ. NUMBER	TOTAL PHASE \$ AMOUNT	FEDERAL DOLLAR AMOUNT
STATEWIDE	2010	99		G	10/28/2009	NRT	CONSTRUCTION	NA000	HATFIELD McCOY TRAIL DEV	DEV OF MOTORIZED TRAIL SYS & PUR EQUIP	U399HAT/FI140	NRT2009153D	275,000	220,000
STATEWIDE &	2010	99		G	10/28/2009	CMAQ	DESIGN	NA000	STATE TRANSPORTATION MANAGEMENT CENTER	OPERATION/MAINTENANCE BUDGET (2010-2011)	T699ITFC1000	CMAQ2010028	1,200,000	960,000
STATEWIDE &	2010	99		G	11/28/2009	CMAQ	DESIGN	NA999	NEW GENERATION 511 FEASIBILITY STUDY	STATEWIDE FEASIBILITY STUDY	S699511100	CMAQ2009212	225,000	180,000
STATEWIDE &	2010	99		G	12/28/2009	ENH	DESIGN	NA000	ARRA TE DESIGN PROJECT	DESIGN FOR 26 TE ARRA PROJECTS	U399ARRA100	TEA0H22001E	100,000	100,000
STATEWIDE &	2010	99		G	1/28/2010	BR	DESIGN	NA999	FY 10 SF BR INSPECT	INSPECTION BY SF	T699NBIS1000	BRNBIS366D	5,000,000	4,000,000
STATEWIDE &	2010	99		G	1/28/2010	CMAQ	DESIGN	NA000	STRUCTURE TESTING	INSPECT TOWERS AND SIGNS STATEWIDE	T699SIGN100	CMAQ2009068	1,300,000	1,040,000
STATEWIDE &	2010	99		G	3/28/2010	STP	CONSTRUCTION	NA999	OTHER FED PAVING ALLOCATION-STP	3R STP RESURFACING	A399PAVST100	STP00???	17,000,000	13,600,000
STATEWIDE &	2010	99		G	3/28/2010	RR	CONSTRUCTION	NA999	RR SAFETY PLACEHOLDER	INSTALL FLASHING LIGHT SIGNALS	U	STPG	0	0
STATEWIDE &	2010	99		G	3/28/2010	CMAQ	DESIGN	NA000	TRAFFIC SIGNAL SYSTEM	MAINTENANCE AND REP TRAFFIC SIGNALS STATEWIDE	T699SIGNA100	CMAQ2009067	2,400,000	1,920,000
STATEWIDE &	2010	99		G	4/28/2010	CMAQ	DESIGN	NA000	CHARLESTON/HUNTINGTO SIGNAL SYSTEM MONITORING AND SUPPORT	SIGNAL SYSTEM SOFTWARE SUPPORT	S699CBD100	CMAQ2009213	240,000	192,000
STATEWIDE &	2010	99			4/28/2010	RR	CONSTRUCTION	NA	RXR PAVEMENT MARKING REPLACEMENT	REPLACEMENT RR CROSSING MARKINGS AND STOP LINES	T699RXRPA100	RHPG2009213	100,000	100,000
STATEWIDE &	2010	99			5/28/2010	EARMARK	CONSTRUCTION	NA999	DEMONSTRATION FUND PROJEC	PE, RW, CN	A699DEMON10	GSPH9999999	3,750,000	3,000,000
STATEWIDE &	2010	99		G	5/28/2010	ENH	CONSTRUCTION	NA000	ENHAN PROJECT	VARIOUS IMPROVE	A399ENHAN10	TEA2005???	7,500,000	6,000,000
STATEWIDE &	2010	99		G	6/28/2010	IM	DESIGN	NA999	I-4R PE	PE	S6994RPE1100	IM???????	200,000	180,000
STATEWIDE &	2010	99		G	6/28/2010	NHS	CONSTRUCTION	NA999	OTHER FED PAVING ALLOCATION-NHS	3R NHS RESURFACING	A399PAVNH10	NHS00???	13,000,000	10,400,000
STATEWIDE &	2010	99		G	7/28/2010	NHS	CONSTRUCTION	NA999	APD RESURFACING	RESURF APD	A399APDPA100	NHS???????	10,000,000	8,000,000
STATEWIDE &	2010	99		G	7/28/2010	SPR	DESIGN	NA000	SPR PROGRAM	HWY PLANNING & RESEARCH	T699SPR1100	SPR0001045	7,875,000	6,300,000
STATEWIDE &	2010	99		G	8/28/2010	STP	DESIGN	NA999	CAT 10 LMC O/L STATEWIDE DESIGN	PE PHASE FOR STATEWIDE LMC O/L	S699LMCOL100	STP2010???	300,000	240,000
STATEWIDE &	2010	99		G	8/28/2010	OC	CONSTRUCTION	NA999	OTHER CORE FUNDS PLACEHOLDER	MISCELLANEOUS	A399OTHER10	OC2010	0	0
STATEWIDE &	2010	99			9/28/2010	EARMARK	CONSTRUCTION	NA999	DEMONSTRATION FUND PROJEC	PE, RW, CN	A699DEMON10	GSPH9999999	14,375,000	11,500,000
STATEWIDE &	2010	99		G	9/28/2010	OAF	CONSTRUCTION	NA999	OTHER FUNDS PLACEHOLDER		OTHER	OTHER	0	0
STATEWIDE &	2010	99		G	9/28/2010	BR	DESIGN	NA999	SURF TRANS WORKFORCE DEV	TRAIN & EDUCATE WORKFORCE	T699TRAIN110	BR2011027D	2,000,000	2,000,000
STATEWIDE &	2010	99		G	9/28/2010	OC	DESIGN	NA999	USACE INTERAGENCY	USACE INTERAGENCY POSITION	T699USACE100	RCA2010???	156,000	124,800
STATEWIDE &	2011	99		G	10/28/2010	BR	DESIGN	NA999	FY 11 BRIDGE STUDIES	DES STUDY BY SF	S299BRIDG110	BR2011002D	1,000,000	800,000
STATEWIDE &	2011	99		G	10/28/2010	HSIP	CONSTRUCTION	NA999	RWIS INSTALL	INSTALL WEATHER STATIONS	U399RWIS104	HSIP2008036D	650,000	585,000
STATEWIDE &	2011	99		G	10/28/2010	HSIP	CONSTRUCTION	NA999	RWIS INSTALL	INSTALL WEATHER STATIONS	U399RWIS105	HSIP2008038D	685,000	616,500
STATEWIDE &	2011	99			11/28/2010	NHS	CONSTRUCTION	NA999	APD CORRIDOR STRIPING	PAVEMENT MARKINGS	S399STRIP110	NHS2011(027)	3,000,000	2,400,000
STATEWIDE &	2011	99		G	11/28/2010	BR	DESIGN	NA999	FY 11 SF BR INSPECT	INSPECTION BY SF	T699NBIS1100	BRNBIS367D	5,000,000	4,000,000
STATEWIDE &	2011	99			11/28/2010	IM	CONSTRUCTION	NA999	STATEWIDE INTER. STRIPING	PAVEMENT MARKINGS	S399STRIP110	IM2011(026)D	4,000,000	3,600,000
STATEWIDE &	2011	99		G	12/28/2010	IM	CONSTRUCTION	NA999	FAI-4R ALLOCATION	RESURF	A399F111100	IM9999???	0	0
STATEWIDE &	2011	99		G	2/28/2011	IM	DESIGN	NA999	I-4R PE	PE	S6994RPE1200	IM???????	200,000	180,000
STATEWIDE &	2011	99		G	3/28/2011	CMAQ	DESIGN	NA999	511 IMPLEMENTATION	STATEWIDE 511 IMPLEMENTATION	S699511200	CMAQ2011???	500,000	400,000
STATEWIDE &	2011	99		G	4/28/2011	ENH	CONSTRUCTION	NA000	ENHAN PROJECT	VARIOUS IMPROVE	A399ENHAN11	TEA2005???	7,500,000	6,000,000
STATEWIDE &	2011			G	4/28/2011	NRT	CONSTRUCTION	NA	NATIONAL REC TRAIL	VARIOUS IMPROVEMENTS	N1		1,000,000	1,000,000
STATEWIDE &	2011	99		G	5/28/2011	BR	DESIGN	NA999	CAT 4 BR INSPECTION	INSPECT	A399E241100	BRNBIS???	6,250,000	5,000,000

STATUS AS OF DECEMBER 17, 2009

Projects extending into multiple counties are listed as D.W. (District wide project) under the Map ID label.

STATEWIDE & GROUP

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (SSTIP)
LISTING FOR STATE FUNDED PROJECTS BY COUNTY - SFY 2010 - 2015

JANUARY 2010

COUNTY	SFY	DISTRICT	MAP ID	FUNDING OBLIGATION DATE	PROGRAM*	PHASE	ROUTE	PROJECT NAME	TYPE OF WORK	STATE PROJ. NUMBER	TOTAL PHASE COST
BARBOUR	2010	7	4	7/9/2009	B31007	CON	WV076	GALLOWAY TO PHILIPPI RD	CORR SLIDE(PILING)	S3017638800	\$340,000
BARBOUR	2010	7	3	7/23/2009	B12007	CON	CO017	BOY SCOUT CAMP RD BR	REPL	S30117113100	\$65,000
BARBOUR	2010	7	5	8/6/2009	A13007	CON	CO030/02	INDEPENDENCE RD +1	RESURF(DST)	S301SURTR0902	\$17,000
BARBOUR	2010	7	6	8/6/2009	A13007	CON	CO024/01	MORRALL HOLLOW RD	RESURF(DST)	S301SURTR0902	\$0
BARBOUR	2010	7	1509	10/14/2009	A13007	CON	CO040/03	SAND RUN RD	RESURF(1.5")	S30140303300	\$131,500
BARBOUR	2011	7	8	7/28/2010	C28007	CON	CO001	SANDY CREEK DECK GIRDER	C&P	S301138900	\$24,000
BARBOUR	2011	7	1	7/28/2010	B12007	CON	CO002	BIG COVE RUN RD	REPL	S301205200	\$20,000
BARBOUR	2011	7	10	1/28/2011	C28007	CON	CO016/04	BEAR MOUNTAIN W-BEAM BR	C&P	S30116400200	\$6,000
BARBOUR	2011	7	9	1/28/2011	C28007	CON	CO007/10	PARK ST BR	C&P	S30171000900	\$12,000
BARBOUR	2011	7	2	1/28/2011	B12007	CON	CO008	WOLF RUN RD	REP SCOUR	S301804600	\$15,000
BARBOUR	2012	7	1290	7/1/2011	C28007	CON	CO012/03	LAUREL CREEK GIRDER	C&P	S387C&P1200	\$19,000
BARBOUR	2012	7	13	7/1/2011	C28007	CON	CO012/03	LAUREL CREEK GIRDER +5	C&P	S387C&P1200	\$0
BARBOUR	2012	7	11	7/28/2011	C23007	CON	CO012	MITCHELL RUN SLAB +6	REP W/SHOTCRETE	S387BRIDG1100	\$150,000
BARBOUR	2012	7	1257	7/28/2011	C23007	CON	CO012	MITCHELL RUN ARCH	REP W/SHOTCRETE	S387BRIDG1100	\$0
BARBOUR	2012	7	1258	7/28/2011	C23007	CON	US250	BELINGTON ARCH	REP W/SHOTCRETE	S387BRIDG1100	\$0
BARBOUR	2012	7	1252	7/28/2011	C23007	CON	CO012	MITCHELL RUN SLAB	REP W/SHOTCRETE	S387BRIDG1100	\$0

Appendix
E

Agency Responses

As a part of an extensive validation process, State agencies and other entities involved in a JLARC assessment are given the opportunity to comment on an exposure draft of the report. JLARC staff provided exposure drafts of this report to the Secretary of Transportation, Virginia Department of Transportation, Virginia Department of Rail and Public Transportation, and Federal Highway Administration. Appropriate technical corrections resulting from comments provided by these entities have been made in this version of the report. This appendix includes any written response letters that were submitted.

Please note that response letters from the Secretary of Transportation and Virginia Department of Transportation will be provided at the December 13, 2010 Commission meeting.



Joint Legislative Audit and Review Commission

Suite 1100 • General Assembly Building • Capitol Square • Richmond, Virginia 23219
804-786-1258 • Fax 804-371-0101 • <http://jlarc.virginia.gov>