



Northern Region Operations (NRO)

FY-09 Strategic Investment
Program Plan (SIPP)

July 2008

NORTHERN REGION OPERATIONS (NRO)

Vision

“Integrated deployment of Intelligent Transportation Systems will help NRO optimize its services, supporting a secure multimodal transportation system that improves quality of life and customer satisfaction by ensuring a safer and less congested transportation network.”

– NOVA Smart Travel Program Plan Update (currently under revision as the NRO Program Plan)

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Director's Message

I am pleased to present the Fiscal Year 2009 (FY-09) Strategic Investment Program Plan (SIPP). The SIPP provides a framework for the effective management and operation of transportation systems in the Virginia Department of Transportation's (VDOT) Northern Region Operations Directorate (NRO). The plan is a product of NRO's annual Planning and Programming Process and demonstrates our commitment to VDOT's organization-wide emphasis on Reshaping the System, Reshaping the Business, Reshaping the Work Force, and Supporting Emergency Response.

The Planning and Programming Process involves developing the annual strategic focus, identifying program and project needs, prioritizing needs based on established goals and objectives, and budgeting across multiple federal and state funds to provide resources for NRO initiatives. The SIPP summarizes the results of planning and programming efforts and lays the foundation for program delivery, evaluation, and future updates.

As it has for other units in VDOT's organization, the 44 percent reduction to primary, secondary, and urban highway construction in VDOT's FY-09 Six-Year Improvement Program (SYIP) presents a serious financial challenge to NRO. Fortunately, our annual prioritization process enables us to selectively and appropriately advance the projects and programs that best meet the goals set forth in our strategic focus:

1. **Improve NRO Mobility and Safety**
2. **Improve NRO Asset Preservation and Maintenance**
3. **Expand NRO Asset Coverage and Functionality**
4. **Improve NRO Emergency Management and Security**
5. **Improve Intelligent Transportation System (ITS) / Operations Coordination and Efficiency**
6. **Improve the NRO Business Process**

FY-09 will be a challenging year for NRO as our Traffic Operations section moves into the new Public Safety Transportation Operations Center (PSTOC), our Advanced Transportation Management System (ATMS) Replacement comes online, and our organization provides operations support to \$6 billion in new construction projects including the High Occupancy Toll (HOT) Lanes. We will continue to advance successful programs like the Traffic Signal Optimization Program and Bottleneck Improvement Program while implementing major projects such as the Internet Protocol (IP) Migration Project, Dynamic Message System (DMS) Upgrade, and Transportation Program Management Support.

NRO will continue to pursue relevant, well-defined, and reliable performance measures to evaluate our activities, and we will identify and pursue regional privatization opportunities to assist with operations needs. In summary, NRO will continue to leverage existing resources and incorporate new technologies to promote safety, reduce congestion, and provide information and choices to Commonwealth travelers. We have ably demonstrated our capability of wisely managing both our 'work' and our money to get the right things done. We will do it again. I appreciate your collective and individual efforts in identifying us as a model in effectively executing and managing transportation operations.



Richard W. "Dick" Steeg, P.E.
Northern Region Operations Director

I. Executive Summary

NRO is tasked with operating one of the busiest surface transportation networks in the country. However, without the financial means to operate the system, little progress can be made. The purpose of the SIPP is to link the Region's FY-09 allocations with strategic goals and objectives to ensure that NRO is getting the best possible use out of existing resources. To put it simply, this document describes who gets what, how, and why.

In FY-09, NRO identified the need for about \$163.7 million to manage its roadway operations system. So far, the Region has received a total allocation of \$88.3 million in state and federal resources (604 and 603 funds) resulting in a \$75.3 million shortfall. NRO will continue to identify and develop efficiencies with existing resources, but the budget shortfall severely limits the Region's ability to move into the next generation of transportation operations.

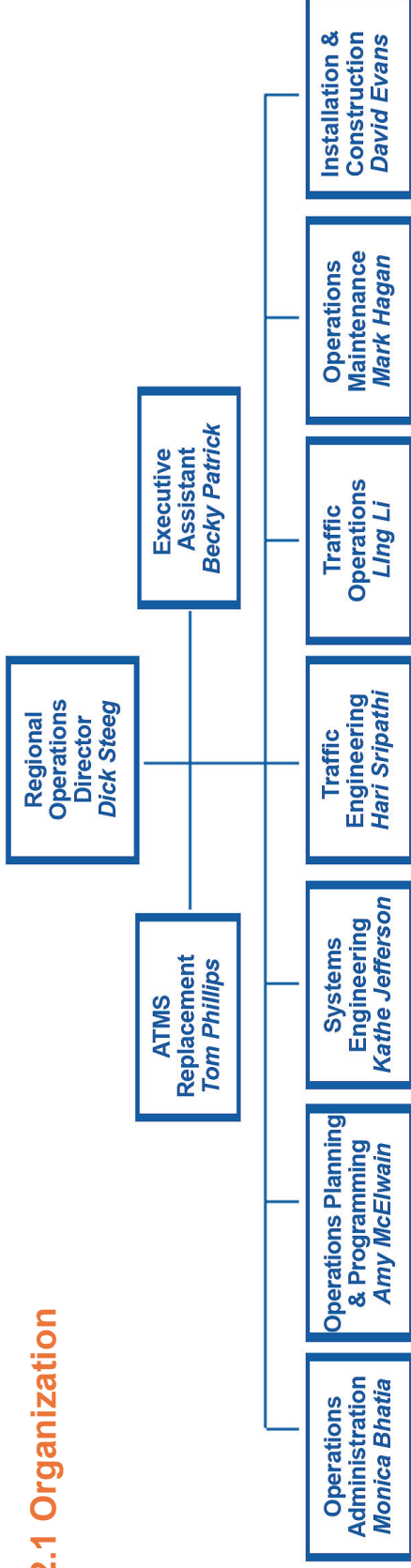
NRO's major capital replacement in FY-09 includes the Advanced Transportation Management System (ATMS) Replacement and the Dynamic Message Sign (DMS) Upgrade. The Region also reserved funding for Travel Time Data Processing and Phase 2 of the Infrastructure Maintenance Management System Upgrade.

Unfortunately, NRO was unable to fund critical Intelligent Transportation System (ITS) efforts such as Integrated Network Management, Interstate-66 Next Generation Traffic Management, and Incident Detection Integration Strategies. The Region also lacked funding for the Safety Service Patrol (SSP) expansion, Quick-Clear Towing Services, and Automatic Vehicle Location (AVL) for SSP Vehicles, all of which are part of the Commissioner's Emergency Response ITS Deployment Plan.

Fiscal programming forces explicit choices among goals, all of which cost money to implement. The FY-09 SIPP captures NRO's plan for advancing its mission of improving safety and mobility, and it implies the limits and constraints of the existing economic environment.

II. Organization & Background

2.1 Organization



Section Descriptions

Regional Operations Director – Management and budget oversight; federal, state, and regional coordination

ATMS Replacement – Planning, coordination, and transitioning of the Advanced Traffic Management System (ATMS)

Operations Administration – Business planning, performance management, contract administration, 604 budgeting, back-office oversight

Operations Planning and Programming – Strategic planning, ITS deployment master planning, architecture / Rule 940 oversight, operations project planning, regional coordination, annual investment planning, project development, TMP support, project programming, earmark project coordination, year-end reporting, outreach

Systems Engineering – Operations engineering analysis, project development; telecommunications master planning, research and evaluation of new technologies; specification development, and project management

Traffic Engineering – Project programming, customer service, assessment studies, safety/operational reviews, project support, planning development and coordination review, signal engineering coordination, constructability review, data collection, strategic improvement / corridor study, operations enhancement

Traffic Operations – Emergency coordination, incident management, traffic management, traveler information, work zone management, freeway and arterial operations, signal operations, roadway flow assessment, IT / network support to operations system

Maintenance – Sign maintenance, pavement markings, lighting, signal maintenance, ITS asset maintenance, telecomm maintenance
Installation and Construction – Install and construct ITS devices; signals, telecomm, and highway lighting; constructability and maintainability review

Figure 1: NRO Organization Chart and Section Descriptions

2.2 Background

NRO was established in 2006 when VDOT consolidated the roadway operations divisions from the Commonwealth's nine transportation districts into five Regional Operations Directorates. The regional structure was based on an integrated approach to operations management and considered the system's geography, operating environment, roadway network, and customer/stakeholder base. NRO included all of the Northern Virginia (NoVA) District and parts of the Fredericksburg and Culpeper¹ Districts.

Table 1: Shift to an Operations Culture

The shift to an operations culture represented a transition from traditional transportation management – which focused primarily on construction and maintenance – to one that included roadway operations as a critical component to enhance mobility, increase safety and security, and improve highway operational performance (See Table 1).

Shift to an Operations Culture	
<u>Then</u>	<u>Now</u>
Public Works (output)	Mobility (outcomes)
Project focused	Customer-oriented
"Our jurisdiction"	"Travel corridor"
8 am to 5 pm	24X7
Reactive	Proactive
Business as Usual	Performance Driven
Single Operator	Partnerships

Prior to the statewide migration, NoVA divided its Maintenance and Operations Division into two separate groups. Traffic Operations was led by an Assistant District Engineer (ADE) for Operations and supported seven key functions: administration, planning, traffic engineering, system engineering, traffic operations, maintenance and inspection, and installation and construction. That organizational design - Regional Operations Director (ROD) and seven "anchor" functions - became the functional model for the agency-wide effort and is mirrored throughout the operations directorates in the state.

While the organizational structure remained largely the same, the geographic expansion was quite significant. The entity went from serving the four counties and five cities in VDOT's NoVA District to serving twelve counties and six cities across Northern Virginia. NRO obtained operations responsibilities – and funding – from two additional construction Districts, and was required to coordinate and communicate individually with three separate District Administrations. Additionally, the less populated areas of the newly added counties had very different needs than the highly congested NoVA District.

Over the past two years, NRO has adapted to meet these challenges and address evolving operational needs. The organization has transformed the way it manages its business, set the standard for fulfilling Rule 940 Systems Engineering requirements, and taken major steps toward updating the Region's operations infrastructure. As the Mega Projects begin to take shape and economic and environmental conditions evolve,

¹ During the course of this process, Central Office announced that the regional boundaries were being redrawn, and the entire Culpeper District would become part of the Northwest Region. However, the I-66 corridor from I-81 to the DC line will still be operated by NRO.

NRO will continue to leverage people, process, and technology to ensure a safer and less congested transportation network.

III. Funding Plan Summary

3.1 Policy and Procedure

VDOT funds are governed, in part, by the Agency's Department Policy Memoranda (DPM) Manual and Project Management Office (PMO) Policies. The policies and procedures provide the framework for consistent application of project management process on a statewide basis and facilitate accountability for Commonwealth resources. Highlights from these policy documents are provided below.

Table 2: VDOT Policy and Procedure

VDOT Policy and Procedure	
DPM 1-21	<p>All VDOT transportation projects are to be delivered in a manner consistent with the principles and practices of VDOT's project management process as defined in the Project Management Policy and Procedures (VDOT PM Policy). This policy includes applicable procedures that outline the guidelines for project managers to follow in development and delivery of transportation projects.</p> <p>Manage Scope, Schedule, and Budget as defined in the Policy and Procedures:</p> <ul style="list-style-type: none"> - Scope changes shall be documented and approved prior to implementation - Schedule progress and key phase dates and milestones shall be kept up-to-date - Project estimates shall be kept up-to-date
PMO-Policy-2008-1	<p>All VDOT transportation projects shall have a project manager assigned from "cradle-to-grave" as part of the project development and delivery process. For the majority of projects, the project manager is not the same person throughout the lifecycle of a project. The lifecycle of a typical project can be separated into four phases: 1) Initiation; 2) Development; 3) Delivery; 4) Closeout.</p> <p>There are eight procedures/actions for which the Project Manager is responsible in the development and delivery of every VDOT transportation project:</p> <ul style="list-style-type: none"> - Project Scope and Team Meeting - Project Schedule - Project Budget and Estimates - Prepare for Advertisement - Pre-Construction Conference - CEI Budget Development and Management - Pre-Ad Construction Development - Construction Schedule Management

Table 2: VDOT Policy and Procedure (cont'd)

PD-1 and PD-24 Guidelines	Establish the protocols for project estimate revisions, ad date revisions, and fund transfers. Prior to adjusting the estimate or schedule on a project, and prior to requesting a fund transfer, the project manager should determine if a PD-1 is required, and if so, the PD-1 will be automatically or manually generated and submitted. The project manager will also determine if a PD-24 needs to be submitted, and if the Commonwealth Transportation Board (CTB) member or CTB approval is required for the fund transfer.
Other important guidelines	<ul style="list-style-type: none"> - Estimates are to be updated at major milestones or if information changes. - Estimates are to be refreshed every ninety days. - Estimates should be uploaded when new versions are initiated. - Progress Reports should be done monthly in Integrated Project Manager (IPM). - Consultant Evaluations are to be done twice a year. - Expenditures are verified as accurate. - Project information is maintained in IPM. - Significant documentation is uploaded into IPM.

Use of federal transportation funds is also governed by the Federal-Aid Policy Guide, which is available on the Federal Highway Administration Web site². NRO closely monitors all state and federal funding to ensure that the region is being a good steward of funds and following all applicable rules and guidelines.

3.2 Process and Schedule

The FY-09 SIPP was developed through the Planning and Programming Process, which integrates planning, implementation, and performance evaluation to help NRO further its vision in the most fiscally responsible manner possible (See Figure 2).

Planning & Programming Process



Figure 2: Planning and Programming Process

FY-09 Key Milestones

Planning

- Develop Annual Strategic Focus – Prior to Oct. 24, 2007
- Conduct Planning Workshop – Oct. 24, 2007
- Conduct Core Workshop – Nov. 27, 2007
- Conduct Prioritization Workshop – Jan. 10, 2008

Programming

- Submit Funding Requests – Dec. 2007 and Jan. 2008
- Receive information on draft funding allocations from Central Office
 - 604 – Feb. 2008
 - 603 – mid April 2008
- Complete Funding and Program Work Plans – June 9, 2008

Program Delivery

- Kickoff Strategic Investment Program Plan – June 9-13, 2008

Program Evaluation

- Evaluate Program and Develop Year-End Report – July through Aug. 2009

Plan Update

- Update Plans – Continuously with emphasis from July through Aug. 2009

² www.fhwa.dot.gov/legregs/directives/fapgtoc.htm

3.2.1 Planning

The FY-09 Planning and Programming process kicked off October 24, 2007 with NRO's first-ever strategic Planning Workshop. The workshop brought together key NRO personnel to build consensus and understanding of the FY-09 Strategic Focus and identify projects and initiatives to support that focus. The process continued November 27, 2007 with the Core Workshop, where managers identified and quantified core funding needs such as labor and overhead, projects required by state or federal mandate, ongoing projects or contracts, and executive management priorities.

Meanwhile, from November to January team leads completed project proposals for each of the Strategic Projects identified at the Planning Workshop. The project proposal templates were mapped to the Strategic Focus and included the project scope, estimated cost, anticipated improvements, and implementation strategies. Completion of the project proposals ensured that the costs, benefits, and potential problems for each project were identified. This allowed NRO leaders to fairly and efficiently rank the proposed projects during the next step of the Planning and Process – the Prioritization Workshop.

The FY-09 Prioritization Workshop took place on January 10, 2008 and allowed NRO leaders to join together in a candid way and collaboratively prioritize the unfunded projects that best support the Region's strategic focus. Because the workshop took place in fiscal FY-08, it had an impact on FY-08 re-allocations. Consequently the I-66 Shoulder Travel Lanes (STL) System Upgrade was funded in FY-08.

To the extent possible, projects were funded based on the prioritization results. Any resources that become available during FY-09 will be allocated to unfunded projects in the order agreed upon at the workshop (See Figure 3).

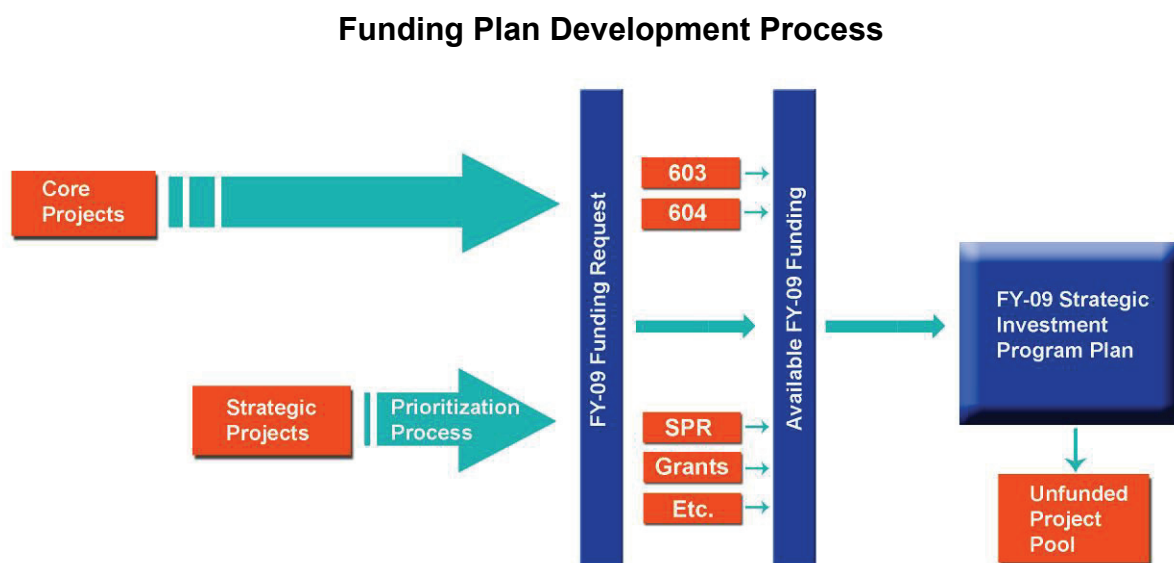


Figure 3: Funding Plan Development Process

3.2.1 Programming

Information from the Core Workshop and Prioritization Workshop was used to generate the FY-09 Funding Request, which mapped NRO needs to the various funding sources (e.g., 603, 604, SPR, grants, etc). From there, individual requests were drafted and submitted for each funding source. The Region received notification of the projected FY-09 funding allocations between February and April 2008, and, based on these notifications, developed the FY-09 Funding Plan.

3.3 Summary of Funds

For FY-09, NRO received a total allocation of \$88.3 million. About \$24.6 million or 28 percent of the allocations will go to the Maintenance Section, \$19.1 million or 22 percent will go to Traffic Engineering, and \$17.2 million or 19 percent will go to Traffic Operations. Another \$18.5 million or 21 percent of the allocations will be split between the Systems Engineering and Installation and Construction sections, and the remaining 10 percent will go to the Regional Operations Director, Operations Administration, and Planning and Programming (See Figure 4). This section provides an overview of FY-09 allocations and discusses funded and unfunded projects.

FY-09 Funding Allocations

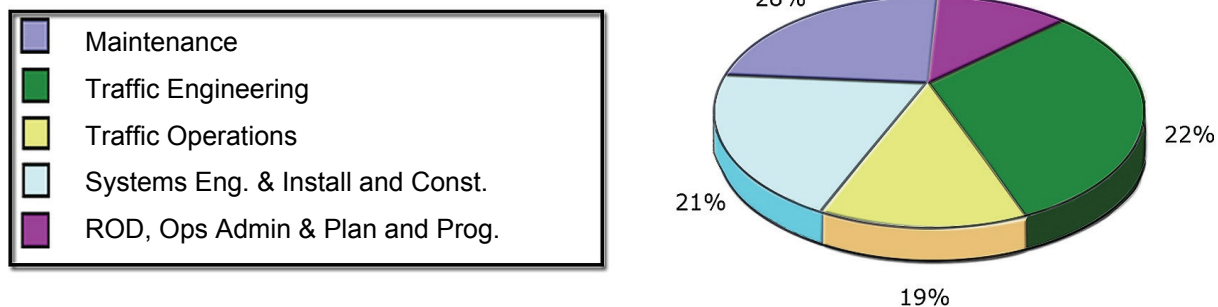


Figure 4: FY-09 Funding Allocations

3.3.1 FY-09 Funding Plan

Overall, NRO identified the need for about \$144.1 million in NoVA and \$19.5 million in Fredericksburg for FY-09. Based on identified needs, the Region requested \$163.7 million from various funding sources (603, 604, grants, etc.) So far, NoVA has been allocated about \$78.7 million and Fredericksburg was allocated \$9.6 million, resulting in a combined shortfall of \$75.3 million. The table below summarizes the total funding

request, the amount funded, and the excess (**shortfall**) in Northern Virginia and Fredericksburg (See Table 3 for a summary and Appendix A for a full Funding Plan.)

Table 3: FY-09 Funding Plan Summary

FY-09 Funding Plan Summary			
Section	Funding Need	Amount Funded	Excess (Shortfall)
Northern Virginia			
Installation and Construction	\$19,379,871	\$9,854,871	(\$9,525,000)
Maintenance	\$28,933,965	\$21,505,927	(\$7,428,038)
Operations Administration	\$1,452,221	\$1,321,452	(\$130,769)
Planning and Programming	\$6,177,283	\$2,805,430	(\$3,371,853)
Regional Operations Director	\$4,815,080	\$4,815,080	\$0
Systems Engineering	\$38,038,422	\$7,643,136	(\$30,395,286)
Traffic Engineering	\$24,916,851	\$16,389,645	(\$8,527,206)
Traffic Operations	\$20,411,453	\$14,391,908	(\$6,019,545)
Sub-total	\$144,125,146	\$78,727,449	(\$65,397,697)
Fredericksburg			
Installation and Construction	\$994,345	\$994,345	\$0
Maintenance	\$3,133,946	\$3,078,946	(\$55,000)
Traffic Engineering	\$4,226,958	\$2,678,476	(\$1,548,482)
Traffic Operations	\$11,182,184	\$2,853,163	(\$8,329,021)
Sub-total	\$19,537,433	\$9,604,930	(\$9,932,503)
TOTAL	\$163,662,579	\$88,332,379	(\$75,330,200)

3.3.2 Strategic Projects

About \$8 million or 9 percent of the FY-09 allocations will go toward new and ongoing strategic projects. The projects include the DMS Phase 1 Upgrade and the Enhancement of Real-time Freeway Performance Monitoring System, which both support the agency's commitment to improving emergency response. A table summarizing the strategic project, priority ranking (for new projects), the strategic goal to which each project is most closely aligned to, and the amount funded for each project in FY-09 is provided below (See Table 4 on the next page). It is important to note that most of the projects support more than one strategic goal, and some of the projects on the funded list will need additional resources before they can be brought to fruition.³

³ Due to administrative priorities, the funded project list may not reflect the results from the annual Prioritization Workshop.

Table 4: FY-09 Strategic Projects

FY-09 Strategic Projects			
Strategic Project	Status / Priority	Goal	Amount Funded
DMS Upgrade, Phase 1 (Interstate) I-66 from Rte. 50 (Fair Lakes) to DC Line	Continued from FY-08	2	\$3,500,000
DMS Upgrade, Phase 1 (Primary, Leading to Interstate) I-66 from US 50 @ Fair Oaks to DC Line	Continued from FY-08	2	\$2,529,714
NRO CCTV Migration Plan to an all IP-Based Video Transport Network	Continued from FY-08	3	\$525,143
I-66 Shoulder Travel Lanes (STL) System Upgrade US 50 to I-495	Moved to FY-08 and Continued in FY-09	3	\$400,000
Enhancement of Real-time Freeway Performance Monitoring System or Travel Time Data Processing ⁴	1	1	\$215,000
Infrastructure Maintenance Management System Upgrade (Phase 2) (IMMS)	2	2	\$172,353
Evaluate Next Generation of Traffic-Signal Control Systems for NRO - Conducted by Research Council	5	3	\$500,000
Ramp Metering Control Optimization and Freeway Bottleneck Analysis	12	1	\$150,000
TOTAL			\$7,992,210

Lack of funding for the improvement of ITS Operations Coordination and Efficiency as well as improvements to the NRO Business Process is expected to result in little achievement toward these strategic goals in FY-09. It should also be noted that the Feasibility Study for the Next Generation of Traffic Control Systems will be conducted by the Research Council and funded by VDOT's Central Office. This demonstrates the value of the Planning Workshop because NRO's efforts to identify and define funding need generated the visibility necessary to appear on the council's radar screen.

3.3.3 Unfunded Projects

The \$75.3 million shortfall leaves critical projects such as DMS Phase 1 Upgrade implementation, Overhead Traffic Sign Structure Replacement, DMS Travel Time implementation, and SSP and TOC Operations partially funded. Several other NRO projects that are consistent with the Commissioner's Emergency Response ITS Deployment Plan are completely unfunded in FY-09. These projects include the SSP Expansion, Quick-Clear Towing Services, and AVL for SSP. The funding shortfall also

⁴ NRO did not get approval from Central Office to continue the current Real-Time Performance Monitoring System, so the scope will need to be changed before the project can move forward.

limits NRO's ability to complete two strategic and systems projects – IP Migration Phase II: DMS and Detection and I-66 Shoulder Lane Control Signal Upgrade implementation. Likewise, NRO will not be able to move forward with several strategic planning efforts that could lead the region to the next generation of traffic operations. These projects include Integrated Network Management, Next Generation Traffic Management, and Incident Detection Integration Strategy development.

Labor and overhead across the directorate was also cut, necessitating additional reductions to line items such as staff augmentation. The Unfunded Project List is detailed in Appendix B. In the event that additional funding becomes available in FY-09, NRO has proposals prepared for 11 strategic projects identified through the Planning and Programming Process. Projects that do not receive funding in FY-09 will be reconsidered and redefined at the FY-10 Planning Workshop.

IV. Workshop Summaries

As described in the Process and Schedule section, the FY-09 Funding Plan development process included three strategic workshops: the Planning Workshop, Core Workshop, and Prioritization Workshop. This section summarizes each workshop and discusses the workshop results.

4.1 Planning Workshop

The Planning and Programming Process for the FY-09 SIPP kicked off October 24-25, 2007 with NRO's first-ever facilitated Planning Workshop. This event, held at Graves Mountain Lodge, brought together NRO first- and second-line managers to build consensus and understanding of the FY-09 Strategic Focus and generate a list of projects and initiatives to support that focus. At the end of the workshop, participants volunteered to take the lead in developing proposals for each of the projects identified for consideration at the Prioritization Workshop.

4.1.1 Strategic Focus Development

NRO is tasked with managing one of the most congested transportation systems in the country. Identification of the strategic focus for the region helps the directorate concentrate limited resources on the projects and programs that best meet the Region's needs. The strategic focus helps leaders tactically plan and prioritize possible projects; promotes consistency among federal, state, and regional visions; and helps NRO make better investment decisions.

For FY-09, the Planning team started the strategic focus development by generating a matrix of goals and objectives from 12 state and local planning documents (e.g., NRO Strategic Plan, Statewide Strategic Focus, Metropolitan Washington Council of Governments (MWCOC) Regional Planning Documents, etc.). The staff analyzed the

matrix to identify common themes and incorporated performance measures to develop SMART (Specific, Measureable, Achievable, Realistic, and Timely) goals and objectives.

At the planning workshop, NRO managers discussed each goal and objective and reached consensus on the FY-09 Strategic Focus (See Figure 5).

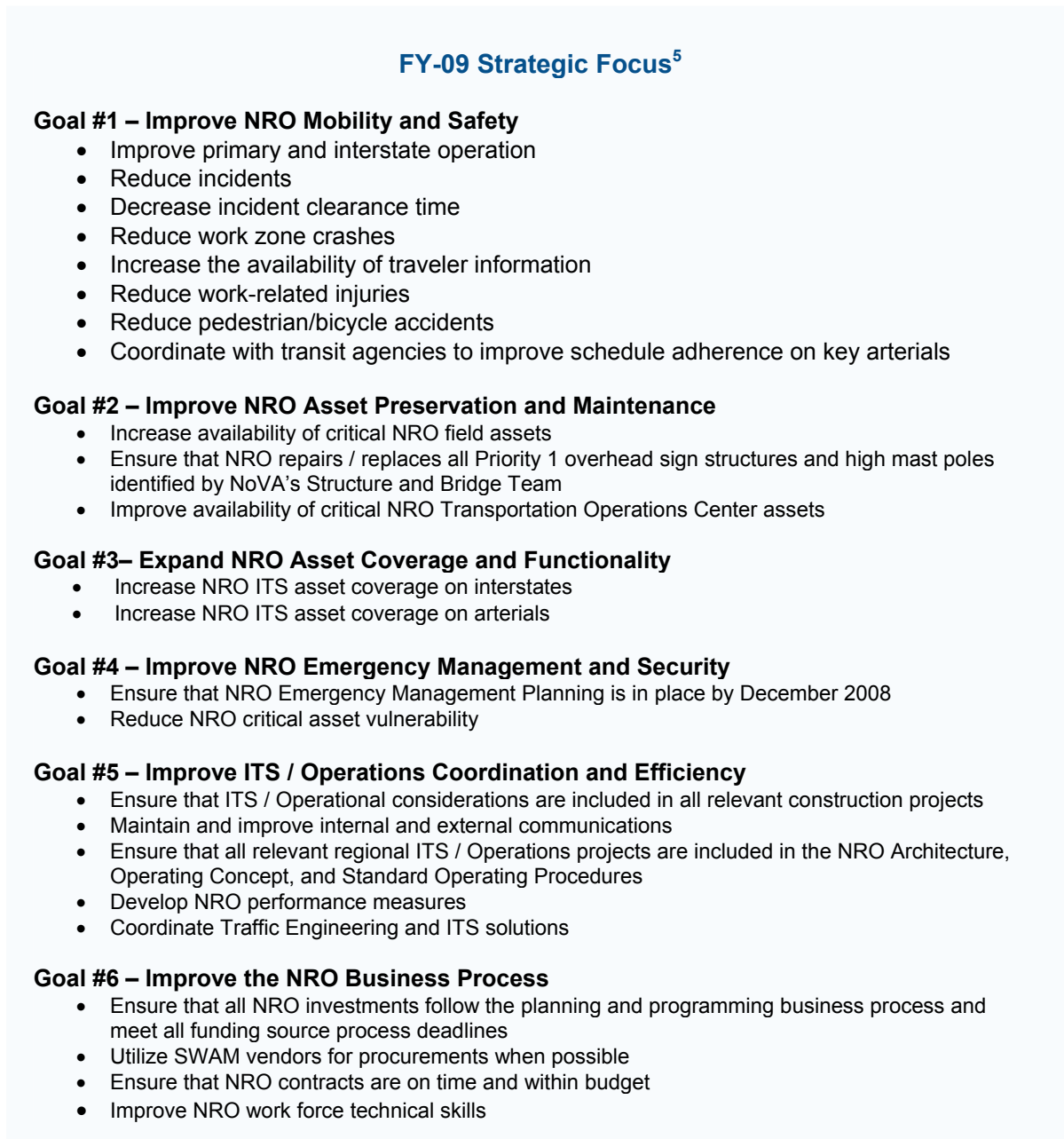


Figure 5: FY-09 Strategic Focus

⁵ The \$75.3 million funding shortfall will severely limit NRO's abilities to meet the strategic goals identified at the Planning Workshop.

4.1.2 Proposed Projects

Setting the annual strategic focus enables NRO managers to discuss ongoing challenges and generate new and exciting ideas to meet those challenges. However, without a list of initiatives and projects to support that focus – and without the resources and processes to carry out those projects – the goals and objectives set forth in the strategic focus would never be accomplished.

Prior to the FY-09 Planning Workshop, Planning and Programming staff reviewed the FY-08 Program Work Plan and gathered information from NRO staff to develop a list of projects that support each strategic goal. The list included projects that had been tabled in FY-08, continuations of current projects, and new projects that could further the goals and objectives identified in the strategic focus. Once NRO managers reached consensus on the strategic focus, they began deliberating on a list of 45 potential projects. Participants made recommendations for changes and/or additions and agreed on a final project list. After the list was finalized, a team lead and support staff were identified for each project to develop proposals.

4.2 Core Workshop

The FY-09 Planning and Programming process continued November 27, 2007 with the Core Workshop. The goal of the workshop was to identify and quantify funding needs, reach consensus on core budget items, and establish minimum funding requirements for FY-09. Prior to the workshop, Section Managers submitted estimates for core budget items such as labor and overhead, ongoing projects, and routine activities. Planning and Programming staff consolidated the information into the proposed Core Plan and presented it at the workshop. Participants discussed the proposed plan and agreed on the minimum funding needs for FY-09 (See Table 5). This information was then transitioned to Operations Administration to develop the 604 budget.

Table 5: Minimum 604 Funding Requirements

Minimum 604 Funding Requirements	
Installation and Construction	\$5,010,014
Maintenance	\$18,070,846
Maintenance – Fredericksburg	\$3,078,946
Operations Administration	\$699,868
Planning & Programming	\$1,577,185
Regional Operations Director	\$1,245,080
Systems Engineering	\$544,982
Traffic Engineering	\$5,948,077
Traffic Engineering – Fredericksburg	\$513,036
Traffic Operations	\$14,990,230
Traffic Operations –Fredericksburg	\$621,952
TOTAL	\$52,300,216

4.3 Prioritization Workshop

The purpose of the FY-09 Prioritization Workshop was to analyze and prioritize projects according to their projected impact on the Region's strategic focus. Prior to the workshop, a Project Prioritization Model (PPM) was developed to reduce subjectivity and facilitate fiscally responsible and objective funding decisions. The PPM included six critical variables.

$$\text{Benefit} * [\text{Cost} + \text{Strategy} + \text{Opportunity}] = (X*Y*Z) * (C+S+O)$$

4.3.1 Strategic Goal Indicator (X)

To determine the Strategic Goal Indicator (X), each NRO manager divided 100 points between the six goals agreed upon at the prioritization workshop. The votes were cast at the beginning of the prioritizations process, and the average points were applied to the strategic goal that best aligned with each project. The appropriate goal was determined by consensus following each project proposal presentation. Table 6 summarizes the results.

Table 6: Strategic Goal Indicator (X)

Strategic Goal Indicator (X)	
Strategic Goal	Weight
Goal #1 – Improve NRO Mobility and Safety	30
Goal #2 – Improve VDOT NRO Asset Preservation and Maintenance	24.44
Goal #3 – Expand NRO Asset Coverage and Functionality	13.89
Goal #4 – Improve NRO Emergency Management and Security	11.67
Goal #5 – Improve Regional ITS / Operations Coordination and Efficiency	11.11
Goal #6 – Improve NRO Business Process	8.89
TOTAL	100

4.3.2 Performance Measure Indicator (Y)

The purpose of the Performance Measure Indicator (Y) is to sustain or improve organizational performance. The indicator was defaulted to 1 this year because the Region did not have any baseline data but kept in the model to stress how important performance measures are for the ultimate success of the organization.

* Project 5.4.1 – Develop and Track Performance Measures was designated as a Core Project during the Prioritization Workshop but it did not receive funding in FY-09.

4.3.3 Projected Impact on Strategic Goal (Z)

Following each proposal presentation, NRO managers voted on the level of impact they believed the project would have on the corresponding strategic goal. Three points were allocated for projects with high impact, two points for medium impact, and one point for low impact. The votes were then averaged to determine the Projected Impact on Strategic Goal (Z).

4.3.4 Cost Indicator (C)

The estimated cost of each project was included in the proposal template, and NRO managers were asked to raise any concerns about the cost estimates at the end of each presentation. Once managers came to a consensus, the estimate was entered into a formula to determine the relative project cost.

$$\frac{\text{Total Project Cost} / \text{Individual Project Cost}}{\text{Total Number of Prioritized Projects}}$$

4.3.5 Strategic Objective Indicator (S)

The Strategic Objective Indicator (S) assesses how relevant each project is in supporting the FY-09 strategic objectives. The objectives were included in the Project Proposal Templates, and the Planning and Programming team analyzed and adjusted the proposals for consistency. NRO managers reviewed the strategic objectives at the end of each presentation to ensure consensus, and five points were allocated for each strategic area of emphasis. For instance, the Next Generation I-66 Lane Control Project mapped to five strategic objectives for 25 points.

4.3.6 Opportunity Indicator (O)

The Opportunity Indicator (O) denotes whether the strategic project is an enabling investment. Opportunities were identified in the Project Proposals, and team leads were asked to describe how the project would impact other projects at the end of each proposal presentation. Five points were assigned to projects determined to enable or increase the success of other projects.

4.3.7 Prioritization Results

Project leads presented proposals for 25 projects, and, after each presentation, the NRO Director and Section Managers voted or reached consensus on the critical variables. Based on the prioritization results, 15 projects were considered for the FY-09 Funding Request (See Figure 6 on the next page), five projects were designated as core, and two were moved to FY-08. Projects that were deemed premature went into the Unfunded Project Pool. If additional resources become available during the fiscal year, that funding will be utilized to implement the strategic projects in prioritized order (to the extent possible).

FY-09 Prioritized Project List

1. Enhancement of Real-time Freeway Performance Monitoring System (real-time traffic monitoring and analysis)
2. Integrated Network Management Concept of Operations
3. Infrastructure Maintenance Management System Upgrade (Phase 2)
4. VDOT NRO Safety Service Patrol Expansion – Interstates and Arterials
5. Next Generation Traffic Control System Feasibility Study
* *Incorporates Alternative Signal Control System*
6. VDOT NRO Rural Intelligent Transportation System (ITS) Program
7. Incident Detection Integration Study
8. Highway Advisory Radio (HAR) Assessment and Deployment Plan Development
9. Next Generation Traffic Management
10. Replacement / Upgrade of Second NRO Incident Management Mobile Command Unit
11. Implement Automatic Vehicle Location (AVL) in Safety Service Patrol Vehicles
12. Ramp Metering Control Optimization and Freeway Bottleneck Analysis
13. Workforce Development Program
14. Critical Infrastructure Protection Study
15. Incident Scenario-Based Sensitivity Analysis of Capacity Changes on the NRO Freeway System

Projects Funded in FY-08

1. Next Generation I-66 Lane Control System
2. Advanced Traffic Management System (ATMS) Hardware and Commercial Off-the-Shelf (COTS) Software Procurement

Projects Designated as Core

1. Lake Variable Message Signs Removal Process
* *Looped into overall Dynamic Message Sign (DMS) Project*
2. Intersection Safety Assessment and Implementation Program
3. Pedestrian Countdown Signal Program
4. Emergency Evacuation Plan Development and Optimization in the NRO Region
5. Develop and Track NRO Performance Measures

Figure 6: FY-09 Prioritized Project List

V. Funding Requests / Allocations

NRO funding is derived from a variety of federal, state, and local resources including state and federal 604 funds (mostly core activities); 603 funds from VDOT's "Six-Year Improvement Program" (SYIP) including districtwide (DW) funds for maintenance and operations; State Planning and Research Federal Funds (SPR); grants; and local funds. Each funding source has its own funding process, and the Planning and Programming team is responsible for ensuring that NRO staff is aware of processes associated with each type of fund.

Development and submission of funding requests is an ongoing activity, but some of the key milestones include:

- **Commonwealth Transportation Board (CTB) Fall Transportation Meetings**
(September – October)
- **District Programming Requests** *(December – January)*
- **Draft Six-Year Improvement Plan (SYIP) published for comment** *(March – April)*
- **District briefings to CTB members prior to SYIP approval** *(January - April)*

5.1 Federal and State 604 Funds

Federal and state 604 funds are allocated in the System Operations Six-Year Plan (SoSYP) and are primarily intended for core activities such as labor, overhead, and supplies. Following the Core Workshop, the Planning and Programming team worked with Operations Administration and the Regional Operations Director to determine the final FY-09 projected needs. The Operations Administration team then submitted the information to the appropriate contacts in Central Office.

NRO identified the need for \$84.4 million in 604 funds and received \$50.3 million resulting in a \$34.1 million shortfall (See Table 7 on the next page). The lack of 604 funds limits resources for salaries and overhead and prevents NRO from implementing projects and activities deemed critical by the Director and Section Managers.

Table 7: Systems Operations Six-Year Plan (604 SoSYP) Funding

Systems Operations Six-Year Plan (604 SoSYP) Funding			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
Installation & Construction	\$5,010,014	\$4,110,014	(\$900,000)
Installation & Construction – Fredericksburg	\$0	\$0	\$0
Maintenance	\$30,944,846	\$19,826,808	(\$11,118,038)
Maintenance – Fredericksburg	\$3,133,946	\$3,078,946	(\$55,000)
Operations Administration	\$1,002,221	\$871,452	(\$130,769)
Operations Programming & Planning	\$3,783,083	\$1,554,343	(\$2,228,740)
Regional Operations Director	\$3,428,413	\$3,345,080	\$83,333
Systems Engineering	\$7,774,982	\$688,279	(\$7,086,703)
Traffic Engineering	\$8,550,241	\$5,486,851	(\$3,063,390)
Traffic Engineering – Fredericksburg	\$513,036	\$513,036	\$0
Traffic Operations	\$19,403,924	\$9,993,239	(\$9,410,685)
Traffic Operations – Fredericksburg	\$901,952	\$871,952	(\$30,000)
TOTAL	\$84,446,658	\$50,340,000	(\$34,106,658)

5.2 Federal and State 603 Funds

Federal and State 603 funds are allocated in the Six-Year Improvement Plan (SYIP) and are primarily intended for capital improvement projects. Based on the Prioritization Workshop results, the Programming team provided project candidate requests to the NoVA, Fredericksburg, and Culpeper districts for inclusion in the SYIP. The proposed project list and funded projects are summarized in Figure 8 (on the next page).

NRO submitted 28 candidate projects for consideration, with 21 in Northern Virginia and seven in Fredericksburg. Projects spanning all three districts include the Sign Inventory and Condition Assessment, the Dynamic Message Sign (DMS) projects, the Closed Circuit Television (CCTV) projects, and the installation and timing of traffic signals.

Project Lists for 603 Six-Year Meetings

Northern Virginia (NoVA) District

1. Sign Inventory and Condition Assessment
2. Dynamic Message Sign (DMS) Upgrades and Installations
3. Dynamic Message Sign (DMS) Travel Time
4. Closed Circuit Television (CCTV) Installation and Distribution
5. Closed Circuit Television (CCTV) Migration to an all IP-Based Video Transport Network
6. Support transition of NoVA Traffic Operations Center (TOC) to the Public Safety Transportation Operations Center (PSTOC)
7. Advanced Traffic Management System (ATMS) Replacement
8. Maintain Intelligent Transportation System (ITS) Field Equipment
9. Telecom Leasing Fees
10. Maintain / Expand VDOT's Fiber Communications Network
11. State Labor at NoVA Traffic Operations Center (TOC)
12. Contract Labor and Support Services at the NoVA Traffic Operations Center (TOC)
13. State Labor for the Safety Service Patrol (SSP)
14. Contract Labor for the Safety Service Patrol (SSP)
15. Install New Traffic Signals
16. Maintain / Rehabilitate Existing Traffic Signals
17. Optimize Signal Timing
18. Bottleneck Mitigation and Safety Improvement Program
19. Install Guardrail Districtwide on Primary System
20. Corridor Safety and Capacity Assessment Program
21. Intersection Safety Review Program

Fredericksburg District

1. Sign Inventory and Condition Assessment
2. Dynamic Message Signs (DMS) Upgrades and Installations
3. Dynamic Message Sign (DMS) Travel Time
4. Closed Circuit Television (CCTV) Installation and Distribution
5. Support / Upgrade Thornburg Traffic Operations Center (TOC)
6. Install New Traffic Signals
7. Optimize Signal Timing

Figure 7: Project Lists for 603 Six-Year Meetings

5.3 Additional Funding Sources

Each year, VDOT receives a federal apportionment of SPR funds and Metropolitan Planning (PL) funds that are allocated in the “SPR Work Plan.” The funds are provided for “Planning and Research Program Administration” and governed by the Federal Highway Administration (FHWA).

For FY-09/10, NRO requested about \$1.8 million in SPR funds for projects such as the annual SIPP development process, ITS Architecture Maintenance and Use Support, and the Corridor Assessment on Capacity and Safety (See Table 8). The Region did not receive any SPR funds so the core items were funded through 604 funds.

Table 8: State Planning and Research Federal Funds (SPR) Request

State Planning and Research Federal Funds (SPR) Request	
Annual NRO Strategic Investment Program Plan (SIPP)	\$800,000
ITS Architecture Maintenance and Use Support	\$150,000
Corridor Assessment on Capacity and Safety	\$800,000
NRO Strategic Program Plan Maintenance	\$80,000
TOTAL	\$1,830,000

VI. Section Summaries

This section summarizes the funding and major initiatives for each NRO Section in FY-09. Each subsection includes the section highlights and a table summarizing the FY-09 funding need, amount funded, and excess/shortfall. The Installation and Construction, Maintenance, Traffic Engineering, and Traffic Operations sections have separate highlights and tables for Fredericksburg District funds. (See Appendix C, NRO FY-09 Work Plan, for a full list of funded activities.)

It should be recognized that projects can span several sections within NRO. For example, the DMS Upgrade project was developed at a high level by Planning and Programming Section, is under design by the Systems Engineering Section, will be constructed by the Installation and Construction Section, and, once constructed, will be operated by the Traffic Operations Section and maintained by the Maintenance Section.

6.1 Installation and Construction

The Installation and Construction Section is responsible for constructing and installing ITS devices, signals, telecommunication systems, and highway lighting as well as constructability and maintainability review. In FY-09, the section will

undertake the massive job of retrofitting and upgrading the overhead signs on the national highway system. The team will also oversee the relocation of fiber optic cable on I-66 inside the Beltway and implement the Vehicle Over-Height Warning System at I-95 and Rte. 17 in the Fredericksburg District.

Installation and Construction Highlights – Northern Virginia:

- Installation and Construction requested \$19.4 million to fund core initiatives, ongoing projects, and candidate programs in the NoVA District.
- About \$5 million of the requested allocation were designated for core projects, including the Traffic Signal Rehabilitation project.⁶ About \$4 million will be received; leaving a \$900,000 shortfall.
- \$14.4 million in needs was identified to fund ongoing projects and candidate programs, including the installation of Uninterrupted Power Supplies (UPS) on the district's ITS field assets. \$5.7 million will be received; leaving an \$8.6 million shortfall.

Table 9: Installation and Construction – Northern Virginia

Installation and Construction – Northern Virginia			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$510,014	\$510,014	\$0
604 Projects			
Technical Inspection	\$100,000	\$100,000	\$0
Traffic Signal Loop Replacement and Installation	\$500,000	\$500,000	\$0
Traffic Signal Rehabilitation / Maintenance	\$3,900,000	\$3,000,000	(\$900,000)
603 Projects	\$14,369,857	\$5,744,857	(\$8,625,000)
TOTAL	\$19,379,871	\$9,854,871	(\$9,525,000)

Installation and Construction Highlights – Fredericksburg:

Installation and Construction requested about \$1 million to fund the ongoing Vehicle Over-Height Warning System in the Fredericksburg District. The project was fully funded through its project UPC leaving no shortfall.

⁶ Installation and Construction's 604 Funded Projects were the only projects designated as core.

Table 10: Installation and Construction – Fredericksburg

Installation and Construction – Fredericksburg			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$0	\$0	\$0
604 Projects	\$0	\$0	\$0
603 Projects			
Vehicle Over-Height Warning System at Rte 17 & I-95	\$994,345	\$994,345	\$0
TOTAL	\$994,345	\$994,345	\$0

6.2 Maintenance

The Maintenance Section is responsible for the upkeep and preservation of signs, pavement markings, lighting, signals, ITS assets, and telecommunications systems. In FY-09, the Maintenance Section will promote NRO's goal of improving asset preservation and maintenance by providing Preventative Maintenance for ITS Field Devices.

Maintenance Highlights – Northern Virginia:

- Maintenance requested \$28.9 million to fund core initiatives, programs, and ongoing projects in the NoVA District.
- About \$18.1 million of the requested funds were designated as core initiatives and \$14.6 million will be received; leaving a \$3.4 million shortfall for core initiatives.
- \$10.9 million was requested for ongoing projects and candidate programs, of which \$6.9 will be funded; leaving a \$4.0 million shortfall for ongoing and candidate projects
- Maintenance ended up with a total \$7.4 million shortfall for FY-09.
- Preventative Maintenance for ITS Field Devices was fully funded from its UPC for \$1,500,000.
- Maintenance staff will represent the NRO during the Research Council's project - "Evaluate Next Generation of Traffic-Signal Control Systems." This evaluation had been identified as a need for the NRO, so the provision of \$500,000 in funding by the Research Council is identified as meeting the funding need.

- Many of NRO's ITS assets are beyond their lifecycle, so resources will need to shift from maintaining existing devices to installing new devices in upcoming fiscal years.

Table 11: Maintenance – Northern Virginia

Maintenance – Northern Virginia			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$18,070,846	\$14,622,808	(\$3,448,038)
604 Projects / Programs			
IMSA Training	\$6,000	\$6,000	\$0
Traffic Signal Conflict Monitors – NoVA	\$75,000	\$25,000	(\$50,000)
Traffic Signal Control Cabinets – NoVA	\$900,000	\$800,000	(\$100,000)
Traffic Signal UPS	\$200,000	\$0	(\$200,000)
Traffic Signal LED replacement program	\$200,000	\$0	(\$200,000)
ITS Speed Sensor Maintenance	\$20,000	\$0	(\$20,000)
Pedestrian Countdown Signal Program	\$100,000	\$0	(\$100,000)
Pavement Marking Contracts for NoVA Co.s	\$6,000,000	\$3,000,000	(\$3,000,000)
Pavement Marking - Thermoplastic, Latex,	\$100,000	\$100,000	\$0
Eradication - remove pavement markings	\$100,000	\$100,000	\$0
Wood & Steel Post	\$100,000	\$100,000	\$0
Signs: Panel Replacement	\$10,000	\$10,000	\$0
Signs: Interstate: Maintenance Life-Cycle Preventative Maintenance – NoVA	\$100,000	\$100,000	\$0
Signs: Interstate: Maintenance Life-Cycle Preventative Maintenance - Fred ⁷	\$40,000	\$40,000	\$0
Signs: Primary: Maintenance Life-Cycle Preventative Maintenance – NoVA	\$400,000	\$345,000	(\$55,000)
Signs: Primary: Maintenance Life-Cycle Preventative Maintenance – Fred	\$15,000	\$15,000	\$0
Rosslyn Tunnel Ventilation	\$12,000	\$12,000	\$0
Storage Container Rental	\$1,000	\$1,000	\$0
Traffic Signal Communication Support	\$550,000	\$550,000	\$0
Truck Rollover Warning System	\$5,000	\$0	(\$5,000)
Manholes - I-66, 395 & 495	\$250,000	\$0	(\$250,000)
603 Projects	\$2,000,000	\$2,000,000	\$0
TOTAL	\$29,254,846	\$21,826,808	(\$7,428,038)

⁷ These projects are being completed in Fredericksburg but funded by the NoVA SoSYP.

Maintenance Highlights – Fredericksburg:

The Maintenance Section requested \$55,000 in funding for traffic signal conflict monitors and control cabinets in the Fredericksburg District. Neither of these programs will be funded. However, 20 core initiatives, including Pavement Messages, Signs, Lighting and Traffic Signals, were introduced, and they will be funded for about \$3.1 million.

Table 12: Maintenance - Fredericksburg

Maintenance – Fredericksburg			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$3,078,946	\$3,078,946	\$0
604 Projects			
Traffic Signal Conflict Monitors	\$5,000	\$0	(\$5,000)
Traffic Signal Control Cabinets	\$50,000	\$0	(\$50,000)
603 Projects	\$0	\$0	\$0
TOTAL	\$3,133,946	\$3,078,946	(\$55,000)

6.3 Operations Administration

Operations Administration oversees NRO's business planning, performance management, and contract administration. The section also manages 604 budgeting and back-office oversight. For FY-09, the section will continue advancing NRO's goal to improve the business process through Phase 2 of the Infrastructure Maintenance Management System (IMMS) Upgrade. Unfortunately, the development of NRO performance measures will be delayed once again due to budget constraints.

Operations Administration Highlights:

- Operations Administration requested about \$1.5 million to fund various initiatives and projects.
- Of that amount, about \$700,000 was core and it was almost entirely funded, leaving a \$31,000 shortfall.
- About \$752,000 was requested for ongoing and candidate projects and \$652,000 will be funded; leaving a \$100,000 shortfall.
- The development of NRO Performance Measures (\$100,000) – which supports NRO's goal of improving its business process – was left unfunded for the third year in a row.

Table 13: Operations Administration

Operations Administration			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$699,868	\$669,099	(\$30,769)
604 Projects			
IMMS Software Maintenance	\$30,000	\$30,000	\$0
Infrastructure Maintenance Management System Upgrade (Phase 2) (IMMS)	\$172,353	\$172,353	\$0
Develop and Track NRO Performance Measures	\$100,000	\$0	(\$100,000)
603 Projects	\$450,000	\$450,000	\$0
TOTAL	\$1,452,221	\$1,321,452	(\$130,769)

6.4 Planning and Programming

The Planning and Programming Section is responsible for strategic planning and programming efforts including NRO Strategic Program Plan development; ITS architecture and Rule 940 oversight; ITS deployment master planning; regional coordination; annual investment planning; project development; TMP support; project programming; earmark project coordination; year-end reporting; and outreach.

Due to budget constraints, in FY-09 the Planning and Programming team will focus on completing the development of ITS deployment projects identified during the FY-08 Master Planning effort. The section will complete the development and “place the ITS projects on the shelf,” so that NRO can easily move forward when resources become available. These plans will also guide ITS development associated with the construction of projects by developers, PPTA’s, local jurisdictions, etc.

In the meantime, the team will transition as many ITS projects to the engineering phase as possible. The lack of resources in FY-09 will necessitate a reduction in the consultant staff augmentation support and result in zero funding for the outreach program.

Planning and Programming Highlights:

- Planning and Programming requested \$6.2 million for core initiatives, ongoing programs, and candidate projects.

- About \$1.6 million was requested for core projects and \$1.4 million will be funded; leaving a \$200,000 shortfall.
- About \$4.6 million was requested for ongoing and candidate projects and \$2.7 million will be funded; resulting in a total \$3.4 million shortfall.

Table 14: Planning and Programming

Planning and Programming			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$1,577,185	\$1,376,164	(\$201,021)
604 Projects			
NRO Outreach Program	\$18,000	\$0	(\$18,000)
Develop Future NRO Strategic Program (SIPP) FY-10 & 11	\$150,000	\$115,179	(\$34,821)
Develop Consistency among Suite of NRO Plans	\$50,000	\$0	(\$50,000)
NRO Architecture Expansion, Maintenance, and Support <i>*\$93,316 funded by SPR</i>	\$157,898	\$156,316	(\$1,582)*
Integrated Corridor Decision Support Tool Enhancement	\$20,000	\$0	(\$20,000)
Integrated Network Management Concept of Operations	\$300,000	\$0	(\$300,000)
VDOT NRO Rural ITS Program	\$100,000	\$0	\$100,000
Incident Detection Integration Strategies	\$300,000	\$0	\$300,000
HAR Assessment and Deployment Plan Development Study	\$40,000	\$0	\$40,000
Critical Infrastructure Protection Study	\$70,000	\$0	\$70,000
603 Projects	\$3,394,200	\$1,157,771	(\$2,236,749)
TOTAL	\$6,177,283	\$2,805,430	(\$3,371,853)

6.5 Regional Operations Director

The Regional Operations Director manages and oversees all NRO activities and represents the directorate in federal, state, and regional coordination. This section of the Funding Plan also includes the ATMS Replacement project, which involves the planning, coordination, and transitioning of the Advanced Traffic Management System (ATMS). Between administrative oversight and the transition of ITS infrastructure, the Regional

Operations section will support all six of the goals outlined in the Region's strategic focus in FY-09.

Regional Operations Director Highlights:

- Regional Operations requested \$4.8 million for core initiatives, programs, and projects.
- About \$1.2 million was designated as core and that amount will be completely funded.
- About \$3.6 million was requested for programs and projects, and that amount will be fully funded, as well.

Table 15: Regional Operations Director

Regional Operations Director			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$1,245,080	\$1,245,080	\$0
604 Projects			
Operation Management- ATMS Replacement	\$2,100,000	\$2,100,000	\$0
Operation Management- ATMS Replacement Consultant Support * - funded by Central Office	\$83,333	\$83,333*	\$0
603 Projects	\$1,386,667	\$1,386,667	\$0
Total	\$4,815,080	\$4,815,080	\$0

6.6 Systems Engineering

The Systems Engineering Section provides operations engineering analysis, develops and manages projects, performs telecommunications master planning, researches and evaluates new technologies, and develops specifications/test plans for equipment and technology deployments. In FY-09, the Systems Engineering section will support NRO's goal of improving safety and mobility on the Region's roadway network through the design of DMS Phase I and the I-66 STL Upgrade. In spite of funding restraints, the section is planning to move ahead with the migration of existing DMS and Incident Detectors to the Internet Protocol (IP) Network.

Systems Engineering Highlights:

- Systems Engineering requested \$38 million for core initiatives, programs and projects.

- About \$688,000 was designated as core and \$688,000 will be funded.
- About \$37.4 million was requested for programs and projects and \$7 million will be funded; leaving a \$30.4 million shortfall.

Table 16: Systems Engineering

Systems Engineering			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$688,279	\$688,279	\$0
604 Projects			
SESITS - Systems Engineering Source for ITS Technology System	\$200,000	\$0	(\$200,000)
IP Migration Phase II: DMS & Other ITS Devices	\$500,000	\$0	(\$500,000)
Workforce Development	\$100,000	\$0	(\$100,000)
603 Projects	\$36,550,143	\$6,954,857	(\$29,595,286)
TOTAL	\$38,038,422	\$7,643,136	(\$30,395,286)

6.7 Traffic Engineering

NRO's Traffic Engineering Section conducts assessment studies, safety/operational reviews, planning development and coordination reviews, and constructability reviews. The section is also responsible for project programming, customer service, signal engineering coordination, data collection, strategic improvement / corridor studies, and operations enhancement. Due to the absence of districtwide funding in FY-09, the Traffic Engineering Section will need to leverage Highway Safety Improvement Program (HSIP) funds as much as possible. Available resources will enable the section to support NRO's goal of improving ITS/Operations coordination and efficiency through traffic counts and various Corridor Assessment of Capacity and Safety Programs.

Traffic Engineering Highlights – Northern Virginia:

- Traffic Engineering requested \$24.9 million for the NoVA District.
- Of that, \$5.9 million was requested for core initiatives and \$3.6 million will be funded; leaving a \$2.4 million shortfall.
- The remaining \$18.9 million was requested for projects and programs including Traffic Counts and Corridor Assessment of Capacity and Safety Program. About \$12.8 million will be funded; leaving a \$6 million shortfall.

- Of the many projects for which TE requested funding, most will have funding available via VDOT's "Six-Year Improvement Program" (their UPC's).
- Traffic Engineering's total shortfall for FY-09 will be about \$8.5 million.

Table 17: Traffic Engineering – Northern Virginia

Traffic Engineering – Northern Virginia			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$5,948,077	\$3,569,960	(\$2,378,117)
604 Projects			
Traffic Counts	\$377,739	\$377,739	\$0
TE Studies – Utilize Consultant Services	\$200,000	\$200,000	\$0
Corridor Assessment of Capacity and Safety	\$400,000	\$400,000	\$0
Corridor Assessment: Gallows Road Corridor Study	\$170,000	\$170,000	\$0
Intersection Condition Assessment	\$250,000	\$169,152	(\$80,848)
Intersection Safety Assessment and Implementation Program	\$250,000	\$0	(\$250,000)
Signals: Modifications for Traffic Signals	\$900,000	\$600,000	(\$300,000)
603 Projects	\$16,421,035	\$10,902,794	(\$5,518,241)
TOTAL	\$24,916,851	\$16,389,645	(\$8,527,206)

Traffic Engineering Highlights – Fredericksburg:

- Traffic Engineering requested \$4.2 million to fund core initiatives, programs and projects in the Fredericksburg District.
- Of that, about \$513,000 was designated as core, and it was fully funded.
- The other \$3.7 million was requested for projects and programs. It appears that there will be a deficit of approximately \$1.5 million dollars for TE's Fredericksburg projects. However, reallocation of existing districtwide funds and use of Fredericksburg's HSIP, where permissible, could significantly reduce this deficit.

Table 18: Traffic Engineering – Fredericksburg

Traffic Engineering – Fredericksburg			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$513,036	\$513,036	\$0
604 Projects	\$0	\$0	\$0
603 Projects	\$3,713,922	\$2,165,440	(\$1,548,482)
Total	\$4,226,958	\$2,678,476	(\$1,548,482)

6.8 Traffic Operations

The Traffic Operations Section ensures that NRO roadways are operating smoothly through emergency coordination, incident management, traffic management, and work zone management. The section is also responsible for freeway and arterial operations, signal operations, and roadway flow assessments. Traffic Operations also provides IT / Network support and information to highway travelers in the Commonwealth. In FY-09, the Traffic Operations Section will continue to improve safety and mobility in the Northern Region through the National Capital Region / Northern Region Operations (NCR / NRO) Evacuation Plan Development and the NRO Traffic Operations Center.

Traffic Operations Highlights – Northern Virginia:

- Traffic Operations requested \$20.4 million to fund core initiatives, projects, and programs in the NoVA District.
- Core initiatives made up \$15 million of the funding request, and \$9.1 million will be funded; leaving a \$5.9 million shortfall.
- The section requested \$5.4 million for projects and programs and \$5.3 will be funded; leaving about a \$128,000 shortfall. The funded projects included the NCR / NRO (ESF-1) Evacuation Plan Development.
- Over half of the shortfall (\$3.1 million) is attributable to Safety Service Patrol (SSP) and Transportation Operations Center (TOC) labor.
- Three of the section's unfunded activities are included in the Commissioner's Emergency Response ITS Deployment Plan: SSP Expansion, Quick-Clear Towing Services, and AVL for SSP.

Table 19: Traffic Operations – Northern Virginia

Traffic Operations – Northern Virginia			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$14,990,230	\$9,098,239	(\$5,891,991)
604 Projects			
Enhancement of Real-time Freeway Performance Monitoring System or Travel Time Data Processing	\$215,000	\$215,000	\$0
NOVA Freeway Modeling by UVA	\$150,000	\$150,000	\$0
Ramp Metering Control Optimization and Freeway Bottleneck Analysis	\$150,000	\$150,000	\$0
Support Contracts Computer refresh, Network Supplies & Replacement Parts	\$100,000	\$100,000	\$0
Traffic Signal MIST Support (Telvent)	\$80,000	\$80,000	\$0
NCR / NRO (ESF-1) Evacuation Plan Development	\$200,000	\$200,000	\$0
NRO Incident Management Plan and Manual	\$50,000	\$0	(\$50,000)
603 Projects	\$4,476,223	\$4,398,669	(\$77,554)
TOTAL	\$20,411,453	\$14,391,908	(\$6,019,545)

Traffic Operations Highlights – Fredericksburg:

- For the Fredericksburg District, Traffic Operations requested \$11.2 million in core initiatives, programs, and projects.
- About \$622,000 of the request was for core initiatives and will be fully funded.
- About \$10.3 million was requested for programs and projects and \$2 million will be funded; leaving an \$8.3 million shortfall.
- The vast majority of the shortfall (\$7.2 million) was intended for the Phase I installation of DMS and CCTV on Fredericksburg's interstate and primary highway systems.

Table 20: Traffic Operations – Fredericksburg

Traffic Operations – Fredericksburg			
Project / Program Name	Total Need	Amount Funded	Excess (Shortfall)
604 Labor/Overhead/Equipment	\$871,952	\$871,952	\$0
604 Projects			
Signal Timing Optimization - Fredericksburg	\$250,000	\$0	(\$250,000)
TOC Fredericksburg Facility - Replace Trailer	\$30,000	\$0	(\$30,000)
603 Projects	\$10,030,232	\$1,981,211	(\$8,049,021)
TOTAL	\$11,182,184	\$2,853,163	(\$8,329,021)

VI. Conclusion

The SIPP provides a strategic guiding framework for the effective management and operation of NRO's roadway system. Although funding is extremely limited in FY-09, NRO will continue its efforts to improve safety and mobility on the Region's highly congested roadway network. The Region will advance critical projects such as the DMS Upgrade while maintaining existing infrastructure and managing ITS assets. By completing the annual Planning and Programming process, NRO has taken the necessary steps to ensure that the Region is getting the best possible use out of existing resources while proactively preparing to seek any funds that may become available during the fiscal year.

When the fiscal year is complete, NRO will evaluate its efforts based on the strategic goals set forth in this document. The results will be conveyed in the FY-09 Year-End Report and serve as a baseline for the FY-10 SIPP. From developing the annual strategic focus to project programming and implementation, the Planning and Programming Process demonstrates NRO's commitment to Reshaping the System, Reshaping the Business, and Reshaping the Work Force.

Appendix A

NRO FY-09 Funding Plan

Installation and Construction
NRO - NoVA District

	Org Code	Sub Org Code	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal UPC (TBD)	NRO - CCTV Migration to an IP-Based Network	System Operations Improvements	Districtwide Project Improvements	Interstate Statewide Operational Improvements	Relocate Fiber on I-66 (Rte 650 to Rte 110)	Install Uninterrupted Power Supply (UPS) @ Various Locations	DMS Upgrade, Phase 1 (Interstate) I-66 from Rte. 50 (Fair Lakes) to DC Line	DMS Upgrade, Phase 1 (Primary, Leading to Interstate) I-66 from US 50 @ Fair Oaks to DC Line	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?		
							Total NRO Allocation / FY-09 Funding Need	\$43,831,201	\$1,490,859	\$525,143	\$0	\$0	\$1,000,000	\$2,500,000	\$250,000	\$3,500,000	\$2,529,714						
	Total Install & Const Projects						21	\$19,379,871						(\$9,525,000)									
26	30932					I & C Admin Labor	\$137,800	\$137,800										\$0					
27	30932					I & C Staff Labor	\$254,714	\$254,714										\$0					
28	30932			IC-23		PSTOC Project Management	Salary											\$0					
29	30932					I & C Overhead/ Supplies	\$30,000	\$30,000										\$0					
30	30932					I & C Equipment - (Trucks Acct 1355)	\$87,500	\$87,500										\$0					
31	30932			Asset 300	IC-73	Technical Inspection - Dewberry and Davis	\$100,000	\$100,000										\$0					
32	30932			Asset 360	IC-69	Traffic Signal Loop Replacement and Installation (Phillip Clarke Electrical)	\$500,000	\$500,000										\$0					
33	30932			Asset 360	IC-68	OPC 82976 OPC 82978	Traffic Signal Rehab & Maintenance	\$3,900,000	\$3,000,000									(\$900,000)		The estimate for OPC 82976 (rebuids) is \$3,000,000. The estimate for 82978 (modifications) is \$900,000. The contract mechanism is our Signal Maintenance Project (TS-7E-07) which has the capacity of \$3,313,508. The difference in the \$3.3+M capacity			
34	30932			IC-1AI	UPC 90113	DMS Upgrade, Phase 1 (Interstate) I-66 from Rte. 50 (Fair Lakes) to DC Line	Funding Listed in SE									Funding Listed in SE		Funding Listed in SE	3		Yes		
35	30932			IC-1AP	UPC 90114	DMS Upgrade, Phase 1 (Primary, Leading to Interstate) I-66 from US 50 @ Fair Oaks to DC Line	Funding Listed in SE										Funding Listed in SE	Funding Listed in SE	3		Yes		
36	30962	50907	Other	IC-305	UPC 78792	Retrofit / Upgrade of Overhead Signs / Structures on the NHS - Districtwide	\$2,994,857											\$0	2	Funding and project moved from Maint. PCES authorized amount is \$4,633,385			
37	30962			IC-331	OPC 82976 & 82978 Con CM904 SC17561	Traffic Signal Installation / Modification - Fairfax County (Brothers Signal)	See Note											\$0	1	Funding is from multiple sources. Each signal must have a source of funds before it can be installed. Funds will pay for material costs, contractor costs, I&C labor costs, etc.			
38	30962			IC-332	OPC 82976 & 82978 Con CM904 SC17561	Traffic Signal Installation / Modification - Prince William & /Loudoun Counties (Brothers Signal)	See Note											\$0	1	Funding is from multiple sources. Each signal must have a source of funds before it can be installed. Funds will pay for material costs, contractor costs, I&C labor costs, etc.			
39	30932			IC-1000	UPC 89535	Relocate Fiber on I-66 (Rte 650 to Rte 110)	\$2,500,000							\$2,500,000				\$0	5	Relocate Fiber on I-66 within WMATA's R/W within the specified limits. Project will be managed by WMATA and installed by their contractor. UPC 70670 is parent UPC.			
40	30932			IC-1001	UPC 89757	Install Uninterrupted Power Supply (UPS) @ Various Locations	\$1,000,000								\$250,000			(\$750,000)	2	Install Uninterrupted Power Supply (UPS) @ Various Locations Districtwide to provide uninterrupted power to signals, signs, CCTV, DMS, etc. on the interstate system. Project will be ongoing and implemented as funding becomes available.			
219					UPC TBD	Northern Region Operations Detectors - NoVA Interstate	\$1,000,000											(\$1,000,000)	3		Yes		
220					UPC TBD	Northern Region Operations Detectors - NoVA Primary	\$500,000											(\$500,000)	3		Yes		
221	30932			IC-506AI	UPC TBD	Northern Region Operations CCTV - NoVA Interstate	\$2,500,000											(\$2,500,000)	3	Requested \$1.75M; however, shortfall list request was \$2.5M	Yes		
222	30932			IC-506AP	UPC 88668	Northern Region Operations CCTV - NoVA Primary	\$1,500,000											(\$1,500,000)	3		Yes		
223	30932			IC-55C	UPC TBD	I-66, US 29 to VA 234 Business - ITS Relocation, Replacement & Installation - Install	\$2,375,000											(\$2,375,000)	3	VDOT's Man. Res. is attempting to find funding for project.			
224	30932			IC-55D	UPC TBD	I-66 / US 29 Gainesville Interchange ITS Installation - Install	Included above											\$0	3	Installation portion of project.			

Installation and Construction
NRO - Fredericksburg District

	Org Code	Sub Org Code	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal	Vehicle Over- Height Detection System	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?
							Total NRO Allocation / Funding Need	\$5,203,086	\$5,017,940	UPC 64195 \$994,345				
	Total Install & Const Projects 2						\$994,345	\$0						
44	30932		FIC-333			Traffic Signal Installation / Modification - NRO Counties in Fredericksburg District	See Note				\$0	1	Funding is from multiple sources. Each signal must have a source of funds before it can be installed. Funds will pay for material costs, contractor costs, I&C labor costs, etc.	
45	30932		FIC-8000	UPC 64195		Vehicle Over-Height Warning System at Rte 17 & I-95	\$994,345			\$994,345	\$0	3	This project was initiated by Fredericksburg District. Planning and engineering was complete in FY-08.	

Maintenance
NRO - NoVA District

	Org Code	Sub Org Code	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal UPC (TBD)	Grants	Preventative Maintenance for ITS Field Devices	NoVA Primary Pavement Marker DW	NoVA DW Traffic Markings (HSIP)	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?
							Total NRO Allocation / FY-09 Funding Need	\$43,831,201	\$1,490,859	\$539,118	\$1,500,000	\$88,010	\$423,998				
Total Maintenance Projects 66							\$27,608,964							(\$6,665,028)			
159	30962		1119007	M-75		Labor - Maint (Admin)	\$446,150	\$446,150						\$0			
160	30962		1119009	M-75LS		Labor - Secondary (30962)	\$84,414	\$84,414						\$0			
161	30962		1119010	M-75LP		Labor - Primary (30962)	\$84,414	\$84,414						\$0			
162	30962		1119011	M-75LI		Labor - Interstate (30962)	\$84,414	\$84,414						\$0			
163	30962		1119007	M-75O		Overhead/Supplies (30962)	\$30,000	\$30,000						\$0			
164	30962		1119007	M-75E		Maint/Admin Equipment - (Trucks Acct 1355)	\$20,000	\$15,000						(\$5,000)			
165	30962		1119007	RR-9007		Evaluate Next Generation of Traffic-Signal Control Systems for NRO - Conducted by Research Council (Coordination)	\$179,118			\$179,118				\$0	6	Will be fully funded by Research Council. Formerly identified as SP Next Generation Traffic Signal System Feasibility Study	
166	30962	50907	Asset 300	M-67L		Labor - Signals	\$1,192,709	\$425,061						(\$767,648)			
167	30962	50907	1119009	M-67LS		Labor - Secondary (50907)	\$33,867	\$26,314						(\$7,553)			
168	30962	50907	1119010	M-67LP		Labor - Primary (50907)	\$33,867	\$26,314						(\$7,553)			
169	30962	50907	1119011	M-67LI		Labor - Interstate (50907)	\$33,867	\$26,315						(\$7,552)			
170	30962	50907	1119007	M-67O		Overhead/Supplies (50907)	\$30,000	\$30,000						\$0			
171	30962	50907	1119007	M-67TE		Test Equipment (50907)	\$20,000	\$20,000						\$0			
172	30962	50907	1119007	M-67E		Maint/Signals Equipment - (Trucks Acct 1355)	\$628,000	\$649,254						\$21,254			
173	30962	50907	Asset 300	M-72		Traffic Signal / Ops / Maint in Arlington County	\$950,568	\$950,568						\$0			
174	30962	50907	Asset 300	M-515		Traffic Signal Generator Maint - NRO	\$2,000	\$2,000						\$0			
175	30962	50907		M-2010		Utilities - Interstate lighting	\$100,000	\$100,000						\$0			
176	30962	50907		M-2011		Utilities - Electrical Cost NOVEC	\$380,000	\$380,000						\$0			
177	30962	50907		M-2012		Utilities - Electrical Cost Dominion Power	\$500,000	\$500,000						\$0			
178	30962	50907	1119009	M-6001A		IMSA Training	\$6,000	\$6,000						\$0	5		
179	30962	50907	Asset 300	M-71		Traffic Signal Conflict Monitors (Control Technologies) - NoVA	\$75,000	\$25,000						(\$50,000)	2		
180	30962	50907	Asset 300	M-70		Traffic Signal Control Cabinets (Control Technologies) - NoVA	\$900,000	\$800,000						(\$100,000)	2		
181	30962	50908	Asset 321	M-91L		Labor - Pavement (50908)	\$932,370	\$932,370						\$0			
182	30962	50908	1119009	M-91LS		Labor - Secondary (50908)	\$84,414	\$52,453						(\$31,961)			
183	30962	50908	1119010	M-91LP		Labor - Primary (50908)	\$84,414	\$52,453						(\$31,961)			
184	30962	50908	1119011	M-91LI		Labor - Interstate (50908)	\$84,414	\$52,453						(\$31,961)			
185	30962	50908	1119007	M-91OA		Additional Overhead (Reflective Metering)	\$60,000	\$45,000						(\$15,000)			
186	30962	50908	1119007	M-910		Overhead/Supplies (50908)	\$30,000	\$30,000						\$0			</

Maintenance
NRO - Fredericksburg District

	Org Code	Sub Org Code	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?
							Total NRO Allocation / Funding Need	\$5,203,086	\$5,017,940				
	Total Maintenance Projects					10	\$3,133,946	(\$55,000)					
36	30962	50907 Asset 300				Traffic Signals	\$1,081,630	\$1,081,630		\$0			
37	30962	50907 Asset 399				Other Traffic Assets	\$3,282	\$3,282		\$0			
38	30962	50908 Asset 320				Pavement Messages	\$187,457	\$187,457		\$0			
39	30962	50908 Asset 321				Pavement Markings	\$1,627,749	\$1,627,749		\$0			
40	30962	50908 Asset 330				Pavement Markers	\$3,562	\$3,562		\$0			
41	30962	50909 Asset 310				Signs	\$164,360	\$164,360		\$0			
42	30962	50909 Asset 310				Overhead Signs - Spotsylvania	\$1,490	\$1,490		\$0			
43	30962	50923 Asset 380				Highway Lighting	\$9,416	\$9,416		\$0			
49	30962	50907 Asset 300				Traffic Signal Conflict Monitors (Control Technologies)	\$5,000			(\$5,000)	2	May be able to fund w/ pavement market funding, if projected surplus is available.	
50	30962	50907 Asset 300		FM-2001		Traffic Signal Control Cabinets (Control Technologies)	\$50,000			(\$50,000)	2	May be able to fund w/ pavement market funding, if projected surplus is available.	

Operations Administration
NRO

	Org Cod e	Sub Org Cod e	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal UPC (TBD)	HOV Lane Enforcement and Database Development	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?
							Total NRO Allocation / Funding Need	\$43,831,201	\$1,490,859	\$450,000				
	Total Operations Admnistration Projects 12						\$1,452,221	(\$130,769)						
148	30949		1119007	A-510L		Labor - Ops Admin	\$644,868	\$627,515			(\$17,353)			
149	30949		1119007	A-510S		Supplies - OPS Admin	\$30,000	\$30,000			\$0			
150	30949		1119007	A-510E		Equipment - OPS Admin	\$25,000	\$11,584			(\$13,416)			
151	30949		1119007	A-126	OPC 88009	Performance Measures ADMS Enhancement and Integration	Salary				\$0		Note: The FY-09 funding needs included a budget item specifically dedicated to Developing and Tracking NRO Performance Measures (A-127). However, funding was not allocated to this task. Consequently, this task will be accomplished using salary, but, due	
152	30949		1119007	A-403		Audit the Implementation of NR Operations Go-Forward Plan	Salary				\$0			
153	30949		1119007	A-405		Develop and Implement a Stand-Alone Budget for Northern Region Operations	Salary				\$0			
154	30949		1119007	A-413		Coordinate with HOT Lane On I-495 for Integration	Salary				\$0			
155	30949		1119007	A-4002		Coordinate with HOT Lane on I-95/395 for Integration	Salary				\$0			
156	30949		1119007	A-517		IMMS Software Maintenance	\$30,000	\$30,000			\$0	2		Yes
157	30949		1119007	A-517B		Infrastructure Maintenance Management System Upgrade (Phase 2) (IMMS)	\$172,353	\$172,353			\$0	6	IMMS Upgrade Phase 2 builds on the IMMS Upgrade Project (originally Phase 1) and expands support to the maintenance of signal and highway lighting assets. It also integrates IMMS with ATMS and SESITS. Phase 2 would progress NRO towards a single and seamle	Yes
158	30949		1119007	A-408	UPC 72835	HOV Lane Enforcement and Database Development	\$450,000			\$450,000	\$0	1	On an annual basis, the PM facilitates the extension of the MOU w/ the VA State Police (VSP) and the re-allocation of 603 funds to the VSP.	
265	30949		1119007	A-127		Develop and Track NRO Performance Measures	\$100,000				(\$100,000)	6	Note: As funding was not specifically dedicated to Developing and Tracking NRO Performance Measures, this task will be accomplished using salary (A-126), but, due to competing demands, not to the same degree that it would have if the task had had dedicat	

Operations Planning and Programming
NRO

	Org Code	Sub Org Code	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal UPC (TBD)	SPR	Earmark	Central Office	DMS Travel Time	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?	
							Total NRO Allocation / Funding Need	\$43,831,201	\$1,490,859	\$138,643	\$0	\$483,333	\$619,128					
	Total OPP Projects						38	\$5,962,610						(\$3,250,496)				
1	30931		1109006	P-411L7		Labor - OPP (Labor)		\$841,534						\$0				
2	30931		1119007	P-411O		Overhead - OPP (Management (Salary), Equipment, Supplies)	\$199,809	\$199,809						\$0		Reduce consultant staff augmentation support to Amy.		
3	30931		1109006	P-411L6(09)	PO: 00444217 27084-Iteris con 27090 - Kimley Horn	Staff Augmentation for Planning Team (Part 1)	\$290,638	\$201,535						(\$89,103)				
4	30931		1109006	P-411L8(09)		Staff Augmentation for Programming Team Labor	\$128,416	\$66,776						(\$61,640)				
5	30931		1109006	P-411L9(09)		Staff Augmentation for Communication Team Labor	\$116,788	\$66,510						(\$50,278)				
6	30931		1109006	P-130	OPC 83084 UPC 72979	NRO Architecture Expansion, Maintenance, and Support	\$157,898	\$63,000		\$93,316				(\$1,582)	5	Funded w/ SPR funds.		
7	30931		1109006	P-503-(10)	OPC 88010	Develop Future NRO Strategic Program (SIPP) - FY-10	\$150,000	\$115,179						(\$34,821)	5	Pay consultant invoices to complete FY-09 SIPP, develop FY-10 SIPP, and start FY-11 SIPP development at end of FY-10.		
8	30931		1109006	P-146D (see O-146D)		Dulles TMP, ITS (Coordination)	Salary							\$0		5/08 - With reinitiation of Federal funding, NROPP will continue in coordination role, funded by salary.		
9	30931		1109006	P-417	N/A	Develop Operations Project Tracking Database and Team Site Interface	Salary							\$0	6	Maintain and manage the overall fiscal investment work plan and funding plan. Facilitate monthly meetings, form submission, necessary approval, and share monthly plan update with managers. Maintain the unfunded project pool.		
10	30931		1109006	P-502 (see O - 60)	UPC 87396 (not for NROPP time)	NoVA Transportation Management Plan (TMP) - NROPP Liaison with NoVA Congestion Management Plan (Coordination)	Salary							\$0	1			
11	30931		1109006	P-506		NRO DMS, CCTV, and Detection COO's & Master Plans - Maintain and Assist w/ Next Phase of Project Development (Coordination w/ SE)	Salary							\$0			Yes	
12	30931		1109006	P-3002	N/A	Central Office I-95 CC Travel Time Probe Data Acquisition Project (Coordination)	Salary							\$0	1			
13	30931		1109006	P-3003	N/A	WMATA Parking Information Feasibility Study (Coordination)	Salary							\$0	1			
14	30931		1109006	P-3004	N/A	Central Office Traveler Information Program (Coordination)	Salary							\$0	1			
15	30931		1109006	P-3005	N/A	Central Office Planning - SOPP Development (Coordination)	Salary							\$0	5			
16	30931		1109006	P-3006	N/A	Central Office Long-Term ITS Planning (Coordination)	Salary							\$0	3			
17	30931		1109006	P-3007	N/A	Central Office Statewide ITS Architecture Development (Coordination)	Salary							\$0	3			
18	30931		1109006	P-3012		I-495 HOT Lane ITS Devices - NROPP Coordination	Salary							\$0				
19	30931		1109006	P-3013		I-95/395 HOT Lane ITS Devices - NROPP Coordination	Salary							\$0				
20	30931		1109006	P-3014		Base Realignment And Closure (BRAC) (Coordination)	Salary							\$0				
21	30931		1109006	P-3015		VDOT Roadway Construction Projects - ITS Review and Input (Coordination)	Salary							\$0				
22	30931		1109006	P-7008	UPC 89880	I-66 Shoulder Travel Lanes (STL) System Upgrade US 50 to I-495 (Transition to Systems Engineering)	Salary							\$0	3	OPP completed planning in FY-08. OPP will assist in the transition to Systems Engineering and serve as a resource to SE.		
23	30931		1109006	P-5	UPC 72659	DMS Travel Time	\$1,200,000				Rescinded		\$619,128	(\$580,872)	4	\$624 K ITS earmark was rescinded. This project will be developed for a limited implementation. Received \$619,128 in funds from UPC 70649.	Yes	
24	30931		1109006	P-133	OPC 87412 UPC 72980	NRO Strategic Program Plan	\$45,327			\$45,327				\$0	6	Funded w/ SPR funds.		
25	30931		1109006	P-198	TBD	Central Office - Tyson's Corner Accelerated Traveler Information Systems Project (Coordination)	\$400,000					\$400,000		\$0	1	This project has been submitted for funding through CO and for TMP. Scott Cowherd is spearheading the funding for this project		
225	30931		1109006			Integrated Network Management Concept of Operations	\$300,000							(\$300,000)	6			
226	30931		1109006			VDOT NRO Rural ITS Program	\$100,000							(\$100,000)	3		Yes	
227	30931		1109006			Incident Detection Integration Strategies	\$100,000							(\$100,000)	6		Yes	
228	30931		1109006			HAR Assessment and Deployment Plan Development Study	\$40,000							(\$40,000)	6			
229	30931		1109006			Critical Infrastructure Protection Study	\$70,000							(\$70,000)	6			
230	30931		1109006	P-55C	UPC TBD	I-66, US 29 to VA 234 Business - ITS Relocation, Replacement & Installation	Salary							\$0	3	VDOT's Man. Res. is attempting to find funding for project. Until funding is available to initiate the projects, OPP will not work (paid by salary) on these projects. The preliminary work was completed in FY-08, however, review of the design in FY-09 will		
231	30931		1109006	P-55D	UPC TBD	I-66 / US 29 Gainesville Interchange ITS Installation	Salary							\$0	3	VDOT's Man. Res. is attempting to find funding for project. Until funding is available to initiate the projects, OPP will not work (paid by salary) on these projects. The preliminary work was completed in FY-08, however, review of the design in FY-09 will		
232	30931		1109006	P-3001	UPC 89883	I-66 - Evaluate Deployment of the Next Generation Traffic Management Tools (VSL, Queue Warning) US 50 to I-495 - Planning	\$400,000							(\$400,000)	6	Funds previously allocated to this UPC were reallocated to UPC 72659, DMS Travel Time. This project is to analyze, select, and implement next generation traffic management strategies for the I-66 corridor. Possible strategies are variable speed limit and		
233	30931		1109006	P-158	OPC 83085	CapWIN and RITIS Integration - Enhanced Readiness and Response Through DOT AVL / GPS and Mobile Computing	\$1,244,200							(\$1,244,200)	5	FY-08 funds were VDOT's share of matching fund to a regional ITS earmark fund. UASI Grant was applied for, but it is questionable as to whether it will be received. Funding need will be less as the estimate is for the entire DC Region. Includes purchases		
234	30931		1109006	P-140	OPC 83088	NRO Outreach Program	\$18,000							(\$18,000)	6	Scale back the program		
235	30931		1109006			Develop Consistency among Suite of NRO Plans	\$50,000							(\$50,000)	6	Either do not do this work or use existing resource.		
236	30931		1109006	P-415	OPC 83779	Integrated Corridor Decision Support Tool Enhancement for FY-09	\$20,000							(\$20,000)	6			
237						DMS, CCTV, Detector Project Development	\$90,000							(\$90,000)	3		Yes	

Regional Operations
NRO

	Org Cod e	Sub Org Cod e	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal UPC (TBD)	ATMS Replacement (Advanced Transport'n Management System)	Central Office	MATOC Program	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?	
							Total NRO Allocation / FY- 09 Funding Need	\$43,831,201	\$1,490,859	\$9,654,179	\$483,333	\$1,647,000					
	Total ROD Projects 7						\$4,815,080	\$0									
126	30941		1119007	R-441L		Labor - ROD & Admin Staff	\$475,080	\$475,080					\$0				
127	30941		1119007	R-441S		Overhead - ROD (Supplies)	\$15,000	\$15,000					\$0				
128	30941		1119007	R-441E		Equipment - ROD	\$5,000	\$5,000					\$0				
129	30941		1119007	R-5001		Budget Contingency Per Central Office.	\$750,000	\$750,000					\$0				
130	30941		1118003	AT-26A	UPC 84368 Contract 27095	Operation Management- ATMS Replacement	\$2,100,000	\$420,000		\$1,680,000			\$0	5			
131	30941			AT-26C	UPC 84368 Contract 27095	Operation Management- ATMS Replacement Consultant Support & Lane Closure Application (LCAM) Software Acquisition, Integration, and Implementation	\$83,333				\$83,333		\$0	5			
132	30941		Other	R-159	UPC 80089	Metropolitan Area Transportation Operations Coordination (MATOC) Program	\$1,386,667					\$1,386,667	\$0	5	MATOC funds are from a Federal earmark and State Match. The whole contract / agreement is \$2 M . \$1.6 M from Feds plus 1/3 of 20% match from MD, VA, and DC (\$133 K each). This is essentially the fourth year of a five year contract. Need shown is 4/5 of		

Systems Engineering
NRO

	Org Code	Sub Org Code	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal UPC (TBD)	NRO - CCTV Migration to an IP-Based Network	I-66 Shoulder Travel Lanes (STL) System Upgrade US 50 to I-495	DMS Upgrade, Phase 1 (Interstate) I- 66 from Rte. 50 (Fair Lakes) to DC Line	DMS Upgrade, Phase 1 (Primary, Leading to Interstate) I-66 from US 50 @ Fair Oaks to DC Line	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?
							Total NRO Allocation / Funding Need										
										UPC 87381	UPC 89880	UPC 90113	UPC 90114				
								\$43,831,201	\$1,490,859	\$525,143	\$400,000	\$3,500,000	\$2,529,714				
	Total Systems Engineering Projects 23						\$38,038,422	(\$30,395,286)									
133	30942		1109006	S-509L		Labor - SE - Staff & Mgmt	\$608,279	\$608,279						\$0			
134	30942		1119007	S-509S		Overhead - SE (Supplies)	\$30,000	\$30,000						\$0			
135	30942		1119007	S-509E		SE Equipment (Trucks 1355)	\$20,000	\$20,000						\$0			
136	30942		1119007			Lab Equipment	\$25,000	\$25,000						\$0			
137	30942		1119007			Computer Software	\$5,000	\$5,000						\$0			
138	30942		1109006	S-55B	UPC TBD	IDEA-66 Spot Improvement - ITS relocation, replacement & installation; Engineering Phase.	Salary							\$0			
139	30942		1109006	S-217A		Trunk Cable Network Extension - Corridor to Be Determined	Salary							\$0			
140	30942		1109006	S-508		Technology Evaluation Process Phase 1 and 2	Salary							\$0			
141	30942		1109006	S-530		ITS Control Cabinet Grounding and Surge Upgrade	Salary							\$0		Complete task begun in FY-08.	
142	30942		1109006	S-6001		Develop & Implement NRO Telecom Plan for PSTOC	Salary							\$0			Yes
143	30942		1109006	S-6001B		Develop & Implement NRO Telecom Plan for Remaining NRO Assets	Salary							\$0			Yes
144	30942		1109006	S-7008	UPC 89880	I-66 Shoulder Travel Lanes (STL) System Upgrade US 50 to I-495	\$6,400,000				\$400,000			(\$6,000,000)	3	Funding is for the design phase of the project to upgrade the I-66 shoulder lane signal control system with active traffic management strategies such as video incident detection. Planning phase was completed in FY-08.	
145	30942			S-506	UPC 87381	NRO CCTV Migration Plan to an all IP-Based Video Transport Network	\$525,143			\$525,143				\$0	5	Project underway.	Yes
146	30942		Asset 660	S-1AI	UPC 90113 OPC 89886	DMS Upgrade, Phase 1 (Interstate) I-66 from Rte. 50 (Fair Lakes) to DC Line	\$7,000,000					\$3,500,000		(\$3,500,000)	3	Sources of funds in UPC 90113: \$0.5 M in FY-08 NRO SoSYP, \$2.0 M from OSD (FY-08), & \$1.0 M from UPC T4844. UPC T4853 to provide \$2.5 M and UPC T4849 to provide \$2.0 M. From an email dated 6/20/08 - funding sources T4849 and T4853 are no longer viable s	Yes
147	30942		Asset 660	S-1AP	UPC 90114	DMS Upgrade, Phase 1 (Primary, Leading to Interstate) I-66 from US 50 @ Fair Oaks to DC Line	\$3,500,000						\$2,529,714	(\$970,286)	3	Can use funds in 90113 w/ FHWA approval.	Yes
238				S-		Workforce Development Program	\$100,000							(\$100,000)	5		
239	30942		1109006	S-215		SESITS - Systems Engineering Source for ITS Technology System	\$200,000							(\$200,000)	5		Yes
240	30931		1109006	S-506B		IP Migration Phase II: DMS & Other ITS Devices	\$500,000							(\$500,000)	3	\$500,000 requested, but \$250,000 is acceptable. HP Openview Network monitoring tool - This will be used to manage the IP field networks that all devices are being migrated to - cost \$50,000. NRO will have migrated all CCTVs to the IP network in FY-08 pri	Yes
241				S-55C	UPC TBD	I-66, US 29 to VA 234 Business - ITS Relocation, Replacement & Installation - Engineering	TBD Hopefully funded by UPC.							\$0	3	VDOT's Man. Res. is attempting to find funding for project.	
242				S-55D	UPC TBD	I-66 / US 29 Gainesville Interchange ITS Installation - Engineering	TBD Hopefully funded by UPC.							\$0	3	As part of the Construction project, this project will fund the ITS elements.	
243	30942		1109006	S-3001	UPC 89883	I-66 - Evaluate of the Next Generation Traffic Management Tools (VSL, Queue Warning) US 50 to I-495 - Deployment	\$3,000,000							(\$3,000,000)	6	This project is to analyze, select, and implement next generation traffic management strategies for the I-66 corridor. Possible strategies are variable speed limit and queue warning system.	
244	30932			S-1BI	UPC TBD	DMS Upgrade - Districtwide Interstate - NOVA - Phase 2	\$10,125,000							(\$10,125,000)	3		Yes
245	30932			S-1BP	UPC TBD	DMS Upgrade - Districtwide Primary - NOVA - Phase 2	\$6,000,000							(\$6,000,000)	3		Yes

Traffic Engineering
NRO - NoVA District

[illegible]

Traffic Engineering
NRO - Fredericksburg District

[illegible]

Traffic Operations
NRO - Fredericksburg District

	Org Code	Sub Org Code	CSC	Internal Project ID	Tracking Code	Project Name	Funding Information	604 SoSYP	604 (SoSYP) Federal	Rtes. 1, 17 & 3 - Intersection Improvements for Signal Coord.	Rte. 1 - Install New Traffic Signal Coord. Equipment	Rte. 3 - Install New Traffic Signal Equipment	Signal Coordination Program	Installation of Equipment Shelter	Installation of Video Traffic Cameras	Fred. Interstate ITS DW	Fred Primary Technology DW	(Unfunded Need)	Strategic Focus Goal #	Comments	Emergency Response Project?
							Total NRO Allocation / Funding Need														
Total Traffic Operations Projects							18	\$11,182,184										(\$8,329,021)			
20	30935			1118007		TOC Labor		\$193,983										\$0			Yes
21	30935	50913		1118007	FO-35	UPC 84224	TOC/SSP Labor Contract (Telvent Farradyne)	\$250,000	\$250,000									\$0			Yes
22	30935	50914					Incident Management	\$427,969	\$427,969									\$0			Yes
23	30935		Other	FO-8005	UPC 76914	Routes 1, 17, & 3 - Intersection Improvements for Signal Coordination (Spot Geometric / Capacity Improvements) Fredericksburg, Spotsylvania & Stafford Counties	\$343,000			\$343,000								\$0	1	Richard Spurlock (Fredericksburg) is assigned as PM.	
24	30935		Other	FO-4	UPC 77061	Route 1 - Install New Traffic Signal Coordination Equipment Spotsylvania, from Route 3 Business to Spotsylvania Cross County Parkway	\$222,581				\$199,794							(\$22,787)	1	Richard Spurlock (Fredericksburg) is assigned as PM.	
25	30935		Other	FO-6	UPC 76912	Signal Coordination Program	\$600,000						\$600,000					\$0	1	Richard Spurlock (Fredericksburg) is assigned as PM.	
26	30935		Other	FO-8006	UPC 77062	Route 3 - Installation of New Traffic Signal Coordination Equipment Spotsylvania, from Route 3 Business (Fredericksburg City) to Route 1199	\$222,531					\$199,744						(\$22,787)	1	Funding need shows \$0. PCES estimate shows \$222,787. Previous allocation in SYP is \$200,000.	
27	30935		Other	FO-8	UPC 73730	Installation of Interstate Video Traffic Cameras	\$1,500,000								\$89,561	\$51,332		(\$1,359,107)	3	Funding in UPC 70759, Fred Interstate ITS DW, is assumed to be shared with Central Region on a pro-rated basis. Balances on other Fred. Interstate DW funding pots may be available to fund these projects.	Yes
28	30935		Other		UPC TBD	Installation of Fredericksburg Interstate DMS (Phase I)	\$1,500,000									\$51,332		(\$1,448,668)	3	Funding in UPC 70759, Fred Interstate ITS DW, is assumed to be shared with Central Region on a pro-rated basis. Balances on other Fred. Interstate DW funding pots may be available to fund these projects.	Yes
29	30935		Other		UPC TBD	Installation / Upgrade of Interstate Detectors	\$250,000									\$51,332		(\$198,668)	3	Funding in UPC 70759, Fred Interstate ITS DW, is assumed to be shared with Central Region on a pro-rated basis. Balances on other Fred. Interstate DW funding pots may be available to fund these projects.	Yes
30	30935		Other		UPC TBD	Upgrade / Expand Interstate Telecom in Fredericksburg (Phase I)	\$250,000									\$51,332		(\$198,668)	3	Funding in UPC 70759, Fred Interstate ITS DW, is assumed to be shared with Central Region on a pro-rated basis. Balances on other Fred. Interstate DW funding pots may be available to fund these projects.	Yes
31	30935		Other		UPC TBD	Installation of Primary Video Traffic Cameras	\$1,500,000										\$49,500	(\$1,450,500)	3	Funding in UPC 73608, Fred Primary ITS DW, is assumed to be shared with Central Region on a pro-rated basis.	Yes
32	30935		Other		UPC TBD	Installation of Fredericksburg Primary DMS (Phase I)	\$3,000,000										\$49,500	(\$2,950,500)	3	Funding in UPC 73608, Fred Primary ITS DW, is assumed to be shared with Central Region on a pro-rated basis.	Yes
33	30935		Other	FO-9	UPC 73727	Installation of Equipment Shelter	\$142,120							\$142,120				\$0	5	Funding is for CN. Bid package ready to go; working through FED approvals.	
34	30935		Other		UPC TBD	Installation / Upgrade of Primary Detectors	\$250,000									\$51,332		(\$198,668)	3	Funding in UPC 70759, Fred Interstate ITS DW, is assumed to be shared with Central Region on a pro-rated basis. Balances on other Fred. Interstate DW funding pots may be available to fund these projects.	
35	30935		Other		UPC TBD	Upgrade / Expand Primary Telecom in Fredericksburg (Phase I)	\$250,000									\$51,332		(\$198,668)	3	Funding in UPC 70759, Fred Interstate ITS DW, is assumed to be shared with Central Region on a pro-rated basis. Balances on other Fred. Interstate DW funding pots may be available to fund these projects.	Yes
47	30935	50906		FO-25		Signal Timing Optimization - Fredericksburg	\$250,000											(\$250,000)	1		
48	30935					TOC Fredericksburg Facility - Replace Trailer	\$30,000											(\$30,000)	5	Suggest setting up \$30k for PE and design of lot improvements and building design	

Appendix B

NRO FY-09 Unfunded Projects List

2009 NoVA Unfunded Project List

					Funding Request	Estimated Shortage	Strategic Ranking*	ER ITS Plan
Partially Funded Strategic Projects					\$21,207,898	(\$11,833,588)		
1	P-130	OPC 83084 UPC 72979	NRO Architecture Expansion, Maintenance, and Support	OPP	\$157,898	(\$1,582)	SC	
2	P-5	UPC 72659	DMS Travel Time	OPP	\$1,200,000	(\$580,872)	SC	Yes
3	S-1AI	UPC 90113	DMS Upgrade, Phase 1 (Interstate) I-66 from Rte. 50 (Fair Lakes) to DC Line	SE	\$7,000,000	(\$3,500,000)	SC	Yes
4	S-1AP	UPC 90114	DMS Upgrade, Phase 1 (Primary, Leading to Interstate) I-66 from US 50 @ Fair Oaks to DC Line	SE	\$3,500,000	(\$970,286)	SC	Yes
5	S-7008	UPC 89880	I-66 Shoulder Travel Lane (STL) System Upgrade from US 50 to I-495	SE	\$6,400,000	(\$6,000,000)	1A	
6	T-7045	UPC 88639	Bottleneck Mitigation & Safety Improvement Program NHS	TE	\$2,700,000	(\$700,000)	SC	
7	T-382	OPC 84768	Intersection Condition Assessment	TE	\$250,000	(\$80,848)	SC	
Partially Funded Projects					\$44,746,871	(\$19,039,496)		
8	A-510L		Labor - Ops Admin	OPS Admin	\$644,868	(\$17,353)	CORE	
9	A-510E		Equipment - Ops Admin	OPS Admin	\$25,000	(\$13,416)	CORE	
10	P-411L6(09)		Staff Augmentation for Planning Team (Part 1)	OPP	\$290,638	(\$89,103)	CORE	
11	P-411L8(09)		Staff Augmentation for Programming Team Labor	OPP	\$128,416	(\$61,640)	CORE	
12	P-411L9(09)		Staff Augmentation for Communication Team Labor	OPP	\$116,788	(\$50,278)	CORE	
13	P-503-(10)	OPC 88010	Develop Future NRO Strategic Program (SIPP) - FY-10	OPP	\$150,000	(\$34,821)	CORE	
14	T-92CL		Labor - TE (Technical Staff)	TE	\$4,341,124	(\$2,219,505)	CORE	
15	T-7052		Staff Augmentation - TE	TE	\$500,000	(\$200,000)	CORE	
16	T-108A	UPC 82207	Signal: Arlington County Route 120 @ N. 26th Street	TE	\$132,164	(\$71,980)	CORE	
17	T-68	OPC 82978	Signals: Modifications to Traffic Signals	TE	\$900,000	(\$300,000)	CORE	
18	T-7034B	UPC TBD	Replacement of O/H Traffic Sign Structures - Categories 2, 3 & 4	TE	\$4,140,000	(\$3,168,795)	CORE	
19	T-105	UPC 73868	Install Various Traffic Signs (Primary)	TE	\$200,000	(\$157,628)	CORE	
20	T-7041	UPC TBD	Springfield O/H Guide Signs Improvement Study and Implementation	TE	\$820,000	(\$224,131)	CORE	
21	T-115B	UPC 79984	Install Guardrail Districtwide on Primary System	TE	\$550,000	(\$473,760)	CORE	
22	IC-68	OPC 82976 OPC 82978	Traffic Signal Rehab & Maintenance	Install & Const	\$3,900,000	(\$900,000)	CORE	
22	IC-1001	UPC 89757	Install Uninterrupted Power Supply (UPS) @ Various Locations	Install & Const	\$1,000,000	(\$750,000)	CORE	
23			Labor - Traffic Ops (Salary, Manager Salary)	TO	\$454,521	(\$51,995)	CORE	
24			Overhead - Traffic Ops (Utilities, Phones, Exterminator, Bldg Maint & Grounds, Fuel, etc)	TO	\$247,705	(\$122,705)	CORE	
25	O-40DL		Labor - (Signal & Freeway Systems Ops)	TO	\$866,731	(\$288,910)	CORE	
26	O-40BO		Overhead - Traffic Ops (ITS IT)	TO	\$185,000	(\$155,000)	CORE	
27	O-48L	OPC TBD UPC 84224	Labor - Traffic Ops (SSP & TOC) (Not charged to UPC 84224)	TO	\$6,184,616	(\$963,968)	CORE	Yes
28	O-48E	UPC 84224	Equipment - NoVA (Trucks Acct 1355)	TO	\$1,895,091	(\$1,717,803)	CORE	
29	FO-48E	UPC 84224	Equipment - Fred (Trucks Acct 1355)	TO	\$391,933	(\$191,933)	CORE	
30	O-8007	UPC 69132	Safety Service Patrol: 14th Street Bridge	TO	\$324,000	(\$227,554)	CORE	Yes
31	M-67L		Labor - Signals	Maint	\$1,192,709	(\$767,648)	CORE	
32	M-67LS		Labor - Secondary (50907)	Maint	\$33,867	(\$7,553)	CORE	
33	M-67LP		Labor - Primary (50907)	Maint	\$33,867	(\$7,553)	CORE	
34	M-67LI		Labor - Interstate (50907)	Maint	\$33,867	(\$7,552)	CORE	
35	M-91LS		Labor - Secondary (50908)	Maint	\$84,414	(\$31,961)	CORE	
36	M-91LP		Labor - Primary (50908)	Maint	\$84,414	(\$31,961)	CORE	
37	M-91LI		Labor - Interstate (50908)	Maint	\$84,414	(\$31,961)	CORE	
38	M-82L		Labor - Signs (50909)	Maint	\$1,429,520	(\$361,208)	CORE	
39	M-82LS		Labor - Secondary (50909)	Maint	\$84,414	(\$29,714)	CORE	
40	M-82LP		Labor - Primary (50909)	Maint	\$84,414	(\$29,714)	CORE	
41	M-82LI		Labor - Interstate (50909)	Maint	\$84,414	(\$29,714)	CORE	
42	M-75E		Maint/Admin Equipment - (Trucks Acct 1355)	Maint	\$20,000	(\$5,000)	CORE	
43	M-91OA		Additional Overhead (Reflective Metering)	Maint	\$60,000	(\$15,000)	CORE	
44	M-91E		Maint / PM Equipment - (Trucks Acct 1355)	Maint	\$336,000	(\$79,968)	CORE	

2009 NoVA Unfunded Project List

					Funding Request	Estimated Shortage	Strategic Ranking*	ER ITS Plan
Partially Funded Projects (Cont.)								
45	M-82OA		Additional Overhead (50909)	Maint	\$60,000	(\$15,000)	CORE	
46	M-2020L		Labor - Maint (Comm & Hwy Lighting F. F.)	Maint	\$727,962	(\$6,199)	CORE	
47	M-2020O		Overhead/Supplies (Comm & Hwy Lighting F. F.)	Maint	\$50,000	(\$13,522)	CORE	
48	M-2006A		ITS Field Equipment (Lot 1) HOV Gates, LCS, DMS	Maint	\$1,860,000	(\$860,000)	CORE	Yes
49	M-2006B		ITS Field Equipment (Lot 2) CCTV, Communications	Maint	\$559,000	(\$59,000)	CORE	Yes
50	M-2006C		ITS Field Equipment (Lot 3) IDS, Ramp metering, HAR, Tunnel, Detection, Truck Rollover	Maint	\$2,080,000	(\$1,080,000)	CORE	Yes
51	M-2000		Pavement Marking - Contracts for Fairfax, Arl; PW, Loudoun	Maint	\$6,000,000	(\$2,911,990)	CORE	Yes
52	M-71		Traffic Signal Conflict Monitors (Control Technologies) - NoVA	Maint	\$75,000	(\$50,000)	CORE	
53	M-70		Traffic Signal Control Cabinets (Control Technologies) - NoVA	Maint	\$900,000	(\$100,000)	CORE	
54	M-2018		Signs: Primary: Maintenance Life-Cycle Preventative Maintenance - NoVA	Maint	\$400,000	(\$55,000)	CORE	
* SC - Strategic Core-type project CORE - Core activities for NRO 1A - FY-09's #1 Strategic Project. It was accelerated into FY-08.								
Unfunded Strategic Projects					\$34,702,894	(\$34,702,894)		
55	A-127		Develop and Track NRO Performance Measures	Ops Admin	\$100,000	(\$100,000)	SC	
56			DMS, CCTV, Detector Project Development	OPP	\$90,000	(\$90,000)	SC	Yes
57	P-158	OPC 83085	CapWIN and RITIS Integration - Enhanced Readiness and Response Through DOT AVL/GPS and Mobile Computing	OPP	\$1,244,200	(\$1,244,200)	SC	
58	P-415	OPC 83779	Integrated Corridor Decision Support Tool Enhancement for FY-09	OPP	\$20,000	(\$20,000)	SC	
59			Integrated Network Management Concept of Operations	OPP	\$300,000	(\$300,000)	2	
60			VDOT NRO Rural ITS Program	OPP	\$100,000	(\$100,000)	6	Yes
61			Incident Detection Integration Strategies	OPP	\$100,000	(\$100,000)	7	Yes
62			HAR Assessment and Deployment Plan Development Study	OPP	\$40,000	(\$40,000)	8	
63	P-3001	UPC 89883	I-66 - Evaluate Deployment of the Next Generation Traffic Management Tools (VSL, Queue Warning) US 50 to I-495 - Planning	OPP	\$400,000	(\$400,000)	9	
64			Critical Infrastructure Protection Study	OPP	\$70,000	(\$70,000)	14	
65			Bottleneck Mitigation & Safety Improvement Program Non-NHS	TE	\$1,000,000	(\$1,000,000)	SC	
67			Intersection Safety Assessment and Implementation Program	TE	\$250,000	(\$250,000)	SC	
68	S-506B		IP Migration Phase II: DMS & Other ITS Devices	SE	\$500,000	(\$500,000)	SC	Yes
69	S-215		SESITS - Systems Engineering Source for ITS Technology System	SE	\$200,000	(\$200,000)	SC	Yes
70			Workforce Development Program	SE	\$100,000	(\$100,000)	13	
71	S-1BI	UPC TBD	DMS Upgrade - Districtwide Interstate - NOVA - Phase 2	SE	\$10,125,000	(\$10,125,000)	SC	Yes
72	S-1BP	UPC TBD	DMS Upgrade - Districtwide Primary - NOVA - Phase 2	SE	\$6,000,000	(\$6,000,000)	SC	Yes
77	S-3001	UPC 89883	I-66 - Evaluate of the Next Generation Traffic Management Tools - Deployment	SE	\$3,000,000	(\$3,000,000)	9	
73		UPC TBD	Northern Region Operations Detectors - NOVA Interstate	Install & Const	\$1,000,000	(\$1,000,000)	SC	Yes
74		UPC TBD	Northern Region Operations Detectors - NOVA Primary	Install & Const	\$500,000	(\$500,000)	SC	Yes
75	IC-506AI	UPC TBD	Northern Region Operations CCTV - NoVA Interstate	Install & Const	\$2,500,000	(\$2,500,000)	SC	Yes
76	IC-506AP	UPC 88668	Northern Region Operations CCTV - NoVA Primary	Install & Const	\$1,500,000	(\$1,500,000)	SC	Yes
78	IC-55C	UPC TBD	I-66, US 29 to VA 234 Business - ITS Relocation, Replacement and Installation - Install*	Install & Const	\$2,375,000	(\$2,375,000)	SC	
79	IC-55D	UPC TBD	I-66 / US 29 Gainesville Interchange ITS Installation - Install*	Install & Const	Included above	Included above	SC	

2009 NoVA Unfunded Project List

				Funding Request	Estimated Shortage	Strategic Ranking*	ER ITS Plan
Unfunded Strategic Projects (Cont.)							
80	O-250	NCR Evacuation and Shelter Planning Coordination, Evaluation, and NRO Optimization	TO	\$20,000	(\$20,000)	SC	
81		CCTV Analytics - Recurring Congestion	TO	TBD	TBD	SC	
82		VDOT NRO Safety Service Patrol Expansion -- Interstates & Arterials	TO	\$2,618,694	(\$2,618,694)	4	Yes
83		Replacement / Upgrade of the NRO Incident Management Mobile Command Unit	TO	\$100,000	(\$100,000)	10	Yes
84		Implement AVL in Safety Service Patrol Vehicles	TO	\$300,000	(\$300,000)	11	
85		Incident Scenario-Based Sensitivity Analysis of Capacity Changes on the NRO Freeway System	TO	\$150,000	(\$150,000)	15	

* There are several sections coordinating these projects including: Systems Engineering, Install & Const. and OPP

Unfunded Projects				\$3,298,000	(\$3,298,000)		
86	P-140	OPC 83088 NRO Outreach Program	OPP	\$18,000	(\$18,000)	CORE	
87		Develop Consistency among Suite of NRO Plans	OPP	\$50,000	(\$50,000)	CORE	
88	T-118	UPC 6340 STOSIP Improvements	TE	\$1,000,000	(\$1,000,000)	CORE	
91	T-7053	UPC 86329 VA 620 (Braddock Road) @ VA 123 (Chain Bridge Road) - Operational Improvement	TE	\$825,000	(\$825,000)	CORE	
92	T-526	UPC 86336 Intersection of route 606 (Loudoun County Parkway) and route 621 (Evergreen Mills Road), Loudoun County - Extend left-turn bay on northbound route 606 (Loudoun County Parkway) to route 621 (Evergreen Mills Road).	TE	\$230,000	(\$230,000)	CORE	
96	O-40AL	TOC Routine Equipment Replacement	TO	\$200,000	(\$200,000)	CORE	
97	O-49	OPC 87280 NRO Incident Management Plan and Manual Annual Update	TO	\$50,000	(\$50,000)	CORE	
98		Quick-Clear Towing Services	TO	\$150,000	(\$150,000)	CORE	Yes
103	M-513	Traffic Signal UPS	Maint	\$200,000	(\$200,000)	CORE	
104	M-2004	Traffic Signal LED Replacement Program	Maint	\$200,000	(\$200,000)	CORE	
105		ITS Speed Sensor Maintenance	Maint	\$20,000	(\$20,000)	CORE	
106	M-2025	Pedestrian Countdown Signal Program	Maint	\$100,000	(\$100,000)	CORE	
107	M-63	Truck Rollover Warning System (Dynamics)	Maint	\$5,000	(\$5,000)	CORE	
108		Manholes - I-66, 395 & 495	Maint	\$250,000	(\$250,000)	CORE	

* SC - Strategic Core-type project CORE - Core activities for NRO

Numbers - ranked by NRO Managers the FY-09 strategic priority

2009 Fredericksburg Unfunded List

					Funding Request	Estimated Shortage	Strategic Ranking*	ER ITS Plan
Partially Funded Strategic Projects					\$8,945,112	(\$8,049,021)		
1	FO-8	UPC 73730	Installation of Interstate Video Traffic Cameras	TO	\$1,500,000	(\$1,359,107)	SC	Yes
2		UPC TBD	Installation of Fredericksburg Interstate DMS (Phase I)	TO	\$1,500,000	(\$1,448,668)	SC	Yes
3		UPC TBD	Installation / Upgrade of Interstate Detectors	TO	\$250,000	(\$198,668)	SC	Yes
4		UPC TBD	Upgrade / Expand Interstate Telecom in Fredericksburg (Phase I)	TO	\$250,000	(\$198,668)	SC	Yes
5		UPC TBD	Installation of Primary Video Traffic Cameras	TO	\$1,500,000	(\$1,450,500)	SC	Yes
6		UPC TBD	Installation of Fredericksburg Primary DMS (Phase I)	TO	\$3,000,000	(\$2,950,500)	SC	Yes
14		UPC TBD	Installation / Upgrade of Primary Detectors	TO	\$250,000	(\$198,668)	SC	Yes
15		UPC TBD	Upgrade / Expand Primary Telecom in Fredericksburg (Phase I)	TO	\$250,000	(\$198,668)	SC	Yes
11	FO-4	UPC 77061	Route 1 - Install New Traffic Signal Coordination Equipment Spotsylvania, from Route 3 Business to Spotsylvania Cross County Parkway	TO	\$222,581	(\$22,787)	SC	
12	FO-8006	UPC 77062	Route 3 - Installation of New Traffic Signal Equipment Spotsylvania, from Route 3 Business (Fredericksburg City) to Route 1199	TO	\$222,531	(\$22,787)	SC	
Partially Funded Projects					\$1,560,000	(\$1,423,482)		
7		UPC TBD	Install Rumble Strips on I-95	TE	\$100,000	(\$12,040)	CORE	
8		UPC TBD	Install Primary Signs in NRO of Fred.	TE	\$110,000	(\$88,052)	CORE	
9		UPC TBD	Install Primary Rumble Strips in NRO of Fred.	TE	\$250,000	(\$237,430)	CORE	
10		UPC TBD	Implement Bottleneck-Relief / STOSIP-Type Projects in NRO of Fred.	TE	\$1,100,000	(\$1,085,960)	CORE	
Unfunded Strategic Projects - None								
Unfunded Projects					\$490,000	(\$490,000)		
18		UPC TBD	Install Primary Pavement Markers in NRO of Fred.	TE	\$125,000	(\$125,000)	CORE	
19	FO-25		Signal Timing Optimization - Fredericksburg	TO	\$250,000	(\$250,000)	CORE	
95			SSP - Overhead - FRED	TO	\$30,000	(\$30,000)	CORE	Yes
20			TMC Fredericksburg Facility - Replace Trailer	TO	\$30,000	(\$30,000)	CORE	
16			Traffic Signal Conflict Monitors (Control Technologies)	Maint	\$5,000	(\$5,000)	CORE	
17	FM-2001		Traffic Signal Control Cabinets (Control Technologies)	Maint	\$50,000	(\$50,000)	CORE	

* SC - Strategic Core-type project CORE - Core activities for NRO

Appendix C

NRO FY-09 Work Plan

FY-09 NRO Operations Work Plan July 2008 Base Line																										
Program Information									Financial Information						Process Information								Project Information			
															VDOT Process			Federal Process			Both					
															CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁵⁾	Rule 940 Checklist	Amount Authorized				
Section	Org Code	Sub Org Code	CSC	ID	Tracking Code	Project Name	Project Manager	NRO Contact	Section	SoSYP (State)	Other State & Local	Federal + Match	Total Funding	Actual YTD Expenditures	% Spent vs. Authorized	N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved	FHWA Oversight? ⁽⁶⁾	STATUS	History	
Installation & Construction	30932		1109007	IC-23	N/A	PSTOC Project Management	Dave Evans	Dave Evans	Install & Const	Salary			Salary		Salary	N/A	N/A	N/A	N/A	N/A	N/A	Salary	N	Underway		
	30932			IC-73		Technical Inspection - Dewberry and Davis	Dave Evans	Dave Evans	Install & Const	\$100,000			\$100,000		0%	N/A	N/A	N/A	N/A	N/A	N/A	\$100,000	N	On-going		
	30932			IC-69	OPC 82972 Act 73399 Con 25649	Traffic Signal Loop Replacement and Installation	Jerry Gray	Dave Evans	Install & Const	\$500,000			\$500,000		0%	R	N/A	N/A		N/A	N/A	\$500,000	N	On-going	3/3/08 Per Dave Evans, could spend \$650,000 in FY-09, "Some of the intersections can cost around \$40 K because we need to install road bores and junction bores."	
	30932			IC-68	OPC 82976 OPC 82978	Traffic Signal Rehab & Maintenance	Jerry Gray	Dave Evans	Install & Const	\$3,000,000			\$3,000,000		0%	R	N/A	N/A	R	N/A	N/A	\$3,000,000	N	On-going	May be a source of funding for projects implemented by signal installation contracts associated w/ IC-331, IC-332, & FIC-333. T-68 may be a source of funds for signal design or for signal design work, itself.	
	30932			IC-1AI	UPC 90113	DMS Upgrade, Phase 1 (Interstate) I-66 from US 50 @ Fair Oaks to DC Line	Dave Evans	Dave Evans	Install & Const				Funding listed in SE		Funding listed in SE	R	R	C	Already Federal	R	R	R	Y	07/08 Per PCES, the CN phase has been authorized.	NROPP has completed the planning phase. This project will transition to SE and from SE to IC for implementation. The I-66 Corridor Plan consists of 29 upgrades / replacements and 13 removals. Est. cost is \$10.5 to \$12.0 M. 03/21/08 - Coordination meeting held w/ CO, SE & OPP. 04/23/08 - The task order with Transcore for design development, procurement, and specification is expected to be issued by the end of April 2008. 05/22/08 - Project will receive \$1.0 M in CMAQ funds from UPC T4844. Use of CMAQ funds will require development of an air quality cost / benefit analysis. It is likely the NoVA-TP will lead this effort. 07/08 - Per PCES, the CN phase has been authorized.	
	30932			IC-1AP	UPC 90114	DMS Upgrade, Phase 1 (Primary, Leading to Interstate) I-66 from US 50 @ Fair Oaks to DC Line	Dave Evans	Dave Evans	Install & Const				Funding listed in SE		Funding listed in SE	R	R	4/15/08 - Complete	Already Federal	R	R	R	Y	06/04/08 Funds have been allocated	03/31/08 - Project entered into PCES. Funds transfer in process. To be funded, initially, with remainder of UPC 70670's Bonus OA Funds - \$2,108,804. 06/04/08 - Funds have been allocated to this project. Working on authorization.	
		50907		IC-305	UPC 78792	Retrofit / Upgrade of Overhead Signs / Structures on the NHS - District wide (Midasco VA LLC)	Dave Evans	Dave Evans	Install & Const			\$2,994,857	\$2,994,857	\$831,941	18%	N/A	N/A	C	Partially	I	A PCE 11/06/06	N/A	Y	On-going	10/18/07 - Contract Awarded. Midasco VA LLC, Expires 10-13-09, no renewals 05/30/08 - Total budget is \$4,633,384.59; Funding and project moved from Maint.	
	30932			IC-331	OPC 82976 & 82978 Con CM904SC17561	Traffic Signal Installation / Modification - Fairfax County	Dave Evans	Dave Evans	Install & Const				See Note		See Note	N/A	N/A	N/A	N/A	N/A	N/A	See Note	N	On-going	Funding can come from multiple sources, including local jurisdictions and developers. Each sign must have a source of funds before it can be installed. Funds will pay for material costs, contractor costs, I&C labor costs, etc. T-68 is a potential source of funds for design work & IC-68 is a potential source of funds for implementation - material, labor, etc.	
	30932			IC-332	OPC 82976 & 82978 Con CM904RSC17562	Traffic Signal Installation / Modification - Prince William & Loudoun Counties	Dave Evans	Dave Evans	Install & Const				See Note		See Note	N/A	N/A	N/A	N/A	N/A	N/A	See Note	N	On-going		
	30932			FIC-333		Traffic Signal Installation / Modification - NRO Counties in Fredericksburg District	Dave Evans	Dave Evans	Install & Const				See Note		See Note	N/A	N/A	N/A	N/A	N/A	N/A	See Note	N	On-going		
	30932			IC-1000	UPC 89535	Relocate Fiber on I-66 (Rte 650 to Rte 110)	Dave Evans	Dave Evans	Install & Const			\$2,500,000	\$2,500,000		0%	R	N/A	2/28/08 C	Already Federal	04/14/08 TIP Approved STIP Approved	04/08/08 PCE	N/A	Y	06/27/08 Communicating w/ FHWA re public interest finding relative to WMATA's contractor	Relocate Fiber on I-66 within WMATA's R/W within the specified limits. Project will be managed by WMATA and installed by their contractor. UPC 70670 is parent UPC. 05/05/08 - Notified that NRO needed to complete federal criteria sheet. NROPP began response 05/22/08 - Federal Criteria Sheet Complete, All Environmental forms are in CEDAR 06/27/08 - Corresponding w/ FHWA re public interest finding relative to WMATA's contractor doing the work.	
	30932			IC-1001	UPC 89757	Install UPS at various locations	Dave Evans	Dave Evans	Install & Const			\$250,000	\$250,000		0%	N/A	N/A	3/11/08 C	Already Federal	Included under the parent project, UPC 70649.	6/24/08 SERP Begins	N/A	N	7/11/08 Funding authorized.	Install Uninterrupted Power Supply (UPS) @ Various Locations Districtwide to provide uninterrupted power to signals, signs, CCTV, DMS, etc. on the interstate system. Project will be On-going and implemented as funding becomes available. Funding source: UPC 70649, DW Interstate ITS. 06/24/08 - Per Stever Varner, SERP process started. 07/11/08 - Funding authorized.	
	30932			FIC-8000	UPC 64195	Rte. 17 - Over Height Vehicle Detectors	Rick Spurlock	Anwar Ansari Dave Evans	Install & Const			\$994,345	\$994,345		0%	N/A	N/A	C	Already Federal	I	A	R	N	07/01/08 Responding to questions from bidders.	Project is related to FP-8000. This project is going to Ad. In April. 07/01/08 - Responding to questions from bidders.	
	Sum of Install & Const								Install & Const	\$3,600,000	\$0	\$6,739,202	\$10,339,202	\$831,941												
Unfunded Projects	30932			IC-55C	TBD	I-66, US 29 to VA 234 Business - ITS Relocation, Replacement & Installation	Dave Evans	Dave Evans	Install & Const	TBD Hopefully funded by UPC			\$0		0%	R	R	TBA		TBA	may be covered by Env. Doc. for UPC	R	\$0	R, as part of UPC 70043.	01/08 - VDOT's Man. Res. is attempting to find funding for project.	Related to projects S-55C&D and P-55C&D. Installation Portion. TMS items were removed from the I-66 contract prior to advertisement because scope of ITS technology work had become obsolete. Contract did include the infrastructure (Conduits, sign foundations, pedestals, etc).
	30932			IC-55D	TBD	I-66 / US 29 Gainesville Interchange ITS Installation	Dave Evans	Dave Evans	Install & Const	TBD Hopefully funded by UPC			\$0		0%							\$0				
	30932			IC-506AI	UPC TBD	Northern Region Operations CCTV - NoVA Interstate	Dave Evans	Dave Evans	Install & Const	\$2,500,000			\$2,500,000		0%							\$0	Y			
	30932			IC-506AP	UPC TBD	Northern Region Operations CCTV - NoVA Primary	Dave Evans	Dave Evans	Install & Const	\$1,500,000			\$1,500,000		0%							\$0	Y			

FY-09 NRO Operations Work Plan
July 2008 Base Line

Program Information										Financial Information						Process Information								Project Information			
Section	Org Code	Sub Org Code	CSC	ID	Tracking Code	Project Name	Project Manager	NRO Contact	Section							SoSYP (State)	Other State & Local	Federal + Match	Total Funding	Actual YTD Expenditures	% Spent vs. Authorized	VDOT Process					Federal Process
										CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁵⁾							Rule 940 Checklist	Amount Authorized				FHWA Oversight? ⁽⁶⁾
Unfunded Projects				M-307		Modern Replacement for Interstate Field Units	Donald Bailey	M. Hagan	Maint	\$200,000							N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved	\$0			
				M-N/A		Sign Inventory and Condition Assessment			Maint	\$1,500,000													\$0				
	30962	50907	660	M-63	con 21363	Truck Rollover Warning System (Dynamics)	Mike St. Clair	Mark Hagan	Maint	\$5,000					0%	N/A	N/A	N/A		N/A	Hagan to enter by 4/21. To be federalized.	N/A	\$0	N	03/04/08 - Contract renewed until 02/09/09	TMC rollover truck warning system - sole source by International Rd Dynamics.. 01/03/08 - Contract expiring 02/09/08, there is an option for 1 more year of renewal. 02/27/08 - Renewal in process 03/04/08 - Contract renewed until 02/09/09. Contract value is \$85,683	
	30962	50907	300	M-2025		Pedestrian Countdown Signal Program		Mark Hagan	Maint	\$100,000			\$100,000		0%								\$0				
	30962	50907	300	FM-2001		Traffic Signal Control Cabinets (Culp/Fred)	Shawn Beavon	Mark Hagan	Maint	\$50,000			\$50,000		0%								\$0			Renamed M-514 to M-2001 to avoid confusion with project T-514.	
	30962	50907	300	Traffic Signal Control Monitors (Culp/Fred)			Shawn Beavon	Mark Hagan	Maint	\$5,000				0%		\$0											
	30962	50907	310	M-2004		LED replacement program	T. Wharton	Mark Hagan	Maint				\$0		0%								\$0			Renamed M-516 to M-2004 to avoid confusion with T-516	
	30962	50907	300	M-513		UPS for Traffic Signals	T. Wharton	Mark Hagan	Maint	\$128,000			\$128,000		0%								\$0		03/18/08 - 14 UPS sites should be up	03/18/08 - According to Paul Brown all 14 UPS sites in Tyson's should be up and running by March 21	

FY-09 NRO Operations Work Plan July 2008 Base Line																												
Program Information										Financial Information						Process Information										Project Information		
																VDOT Process			Federal Process				Both					
																CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁵⁾	Rule 940 Checklist	Amount Authorized					
Section	Org Code	Sub Org Code	CSC	ID	Tracking Code	Project Name	Project Manager	NRO Contact	Section	SoSYP (State)	Other State & Local	Federal + Match	Total Funding	Actual YTD Expenditures	% Spent vs. Authorized	N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved	Amount Authorized	FHWA Oversight? ⁽⁸⁾	STATUS	History		
Operations Administration	30949		1119007	A-511		Consultant Support to Admin Contracting Team	M. Bhatia		Ops Admin																	3/17/08 Consultant on board, may need to replace.	01/23/08 - New Project, \$50k reallocated from A-126 3/17/08 - Consultant on board, may need to replace.	
	30949		1119007	A-403		Audit the Implementation of NR Operations Go-Forward Plan	Lindquist	M. Bhatia	Ops Admin	Salary			\$0		0%	N/A	N/A	N/A		N/A	N/A	N/A		N	On-going	Audit the implementation of NR Operations Go Forward Plan by functional section to ensure that focus and direction are on track and continue to provide a planning framework for problem resolution and possible solutions enabling safe and efficient travel. (Lead: Administration with Planning).		
	30949		1119007	A-405		Develop and Implement a Stand-Alone 604 Budget for the Northern Regional Operations	M. Bhatia	M. Bhatia	Ops Admin	Salary			\$0		0%	N/A	N/A	N/A		N/A	N/A	N/A		N	On-going	In coordination with CO, develop and implement a stand-alone budget for the Regional Operations that includes / defines the budget process, required preparation procedures, training, monitoring protocol, and revised projections. Coordinate funding mechanisms / sources with Planning. Move to fully federalized budget program as goal. (Lead: Administration with Planning).		
	30949		1119007	A-126	OPC 88009	Performance Measures ADMS Enhancement and Integration	J. Lindquist	M. Bhatia	Ops Admin	Salary			\$0		0%	R	N/A	N/A		N/A	N/A	N/A		N		Continue the refinement / select expansion of appropriate operations performance metrics including ATMS platform uptime, device availability (including signal system), road system reliability (TBD), key corridor peak period travel time (TBD), signal optimization, incident response and intersection and corridor crash rates to complement metrics developed in FY-'06. (Lead: Administration). This project is one of the ways to assist A-127, Develop and Track NRO Performance Measures.		
	30949		1119007	A-408	UPC 72835	HOV Lane Enforcement and Database Development	G. Anderson		Ops Admin			\$450,000	\$450,000		0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N				
	30949		1119007	A-413	UPC 68805	Coordinate with HOT Lane On I-495 for Integration	T. Defore	Lindquist	Ops Admin	Salary			\$0		0%	TBD	TBD	N/A		R Received STIP Amendment on 10/25/06	N/A	TBD (May submit for coordination purposes)		No (but maintaining close coordination w/FHWA)	3/21/08 On-going, Attending weekly ITYS Technical design review meetings	Coordinate with I-495 HOT Lane PPTA to seek leverage opportunity for ITS / Operations investment. Interface Regional Operations' objectives, plans, programs, and projects with the Floror-Transurban I-495 PPTA to include all Regional Operations' sections. 10/19/2007 On-going. Working with project to finalize Ops portions of Technical Requirements and Joint Operating Protocols 11/20/07 - Key Milestones Concept of Operations - July 2008 Technical Specifications - September 2009 Interface Specifications - July 2008 Process Definition Deliverable (component of the ITS Architecture) - July 2009 Test Strategy - September 2009 Security Plan - July 2010 Disaster Recovery Plan - July 2010 3/21/08 On-going, Attending weekly ITYS Technical design review meetings		
	30946		1119007	A-4002	UPC 70849	Coordinate with HOT Lane on I-95/395 for Integration	L. Cloyed	Lindquist	Ops Admin	Salary			\$0		0%	TBD	TBD	N/A		N/A	N/A	TBD (May submit for coordination)		No (but maintaining close coordination)	3/21/08 Reviewing DRAFT project schedule (to	Renamed A-4002 from A-146B to avoid confusion with projects P-146D and O-146D. The projects are not related. Coordinate with I-95 HOT Lane PPTA to seek leverage opportunity for ITS / Operations investment. Interface Regional Operations' objectives, plans, programs, and projects with the		
	30949		1119007	A-517	OPC 88012	IMMS Software Maintenance	J. Lindquist		Ops Admin	\$30,000			\$30,000		0%										05/08 - \$150K reallocated to 30935 to cover budget deficit	9/4/07 Project Mgmt Forum - Decision was made for this project to be handled by Admin 10/2/07 PMF - 10/2/07 John L. got price from McDean. Contract pkg is ready to go for \$220K. 10/19/07 Leslie Parnell finalizing price negotiations. Ready to move. 11/19/07 - Sole source justification submitted. Waiting for decision. 12/7/07 - Sent to CO 11/17; assigned ASD buyer 11/26/07, per Joe Gray 1/22/08 - \$30k reallocated to this job from A-126 01/24/08 - Sent CO 11/7; assigned ASD buyer 11/26/07; BARB Review pending 1/22/08: Follow-up meeting scheduled for 1/25. 02/05/08 - Project Management Team established - John Lindquist, Joe Pugh, & Mark Hagan. 03/04/08 - On Feb. 26, approved by IT investment committee.		
	30949		1119007	A-517B		IMMS Upgrade, Phase 2	J. Lindquist		Ops Admin	\$172,353					0%													
				Sum of Ops Admin					Ops Admin	\$30,000	\$0	\$450,000	\$480,000	\$0	0%													
Unfunded Projects	30949		1119007	A-127		Develop and Track NRO Performance Measures	J. Lindquist	M. Bhatia	Ops Admin	\$100,000			\$100,000		0%	R	N/A	N/A		N/A	N/A	N/A	\$0	N		Continue the refinement / select expansion of appropriate operations performance metrics including ATMS platform uptime, device availability (including signal system), road system reliability (TBD), key corridor peak period travel time (TBD), signal optimization, incident response and intersection and corridor crash rates to complement metrics developed in FY-'06. (Lead: Administration). To assist with developing and tracking NRO Performance Measures		

FY-09 NRO Operations Work Plan July 2008 Base Line																										
Program Information										Financial Information						Process Information								Project Information		
Section	Org Code	Sub Org Code	CSC	ID	Tracking Code	Project Name	Project Manager	NRO Contact	Section	SoSYP (State)	Other State & Local	Federal + Match	Total Funding	Actual YTD Expenditures	% Spent vs. Authorized	VDOT Process			Federal Process			Both				
																CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁵⁾	Rule 940 Checklist	Amount Authorized			
																N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved		FHWA Oversight? ⁽⁶⁾	STATUS	History
Local NRO Projects				L-9004	UPC 85378	Install Video Traffic Monitoring Cameras -City of Fairfax		James Witherspoon	OPP	Salary		\$120,000	\$120,000		0%							R				12/5/07 - New project. 01/08 Per Dic Burke email, agreement needed before STIP mod and project kick-off 02/08 Tentatively scheduled to meet the week of 2/18 to discuss project status and Rule 940 conformance. 3/08 - Met w/ Dic Burke on 2/18. Nothing to report 04/18/08 - Updated funding information from SYIP. According to SYIP, funding comes from CMAQ funds
				L-9003	UPC 82843	Manassas Incident Management Variable Message Boards		James Witherspoon	OPP	Salary		\$200,000	\$200,000		0%					R	PCE	R	\$0			12/5/07 - New Project, identified in PCES as a new FY07 RSTP project. 01/08 Per Dic Burke email, agreement needed before STIP mod and project kick-off 02/08 Tentatively scheduled to meet the week of 2/18 to discuss project status and Rule 940 conformance. 3/08 - Met w/ Dic Burke on 2/18. Nothing to report 04/18/08 - Updated funding information from SYIP
	30931		1109006			Integrated Network Management Concept of Operations	Amy McElwain	Amy McElwain	OPP	\$300,000													\$0			Deemed Critical per Dick Steeg
	30931		1109006			VDOT NRO Rural ITS Program	Amy McElwain	Amy McElwain	OPP	\$100,000													\$0			
	30931		1109006			Incident Detection Integration Strategies	Amy McElwain	Amy McElwain	OPP	\$100,000													\$0			
	30931		1109006			HAR Assessment and Deployment Plan Development Study	Amy McElwain	Amy McElwain	OPP	\$40,000													\$0			
	30931		1109006			Critical Infrastructure Protection Study	Amy McElwain	Amy McElwain	OPP	\$70,000													\$0			
	30931		1109006	P-55C	TBD	I-66, US 29 to VA 234 Business - ITS Relocation, Replacement & Installation	JD Schneeberger	Amy McElwain	OPP	Salary					Salary	R	R	TBA		TBA	May be covered by Env. Doc.	R	\$0	R, as part of UPC 70043.	01/08 - VDOT's Man. Res. is attempting to find funding for project.	Related to projects IC-55C&D and S-55C&D. Planning phase. TMS items were removed from the I-66 contract prior to advertisement because scope of ITS technology work had become obsolete. Contract did include the infrastructure (Conduits, sign foundations, pedestals, etc).
	30931		1109006	P-55D	TBD	I-66 / US 29 Gainesville Interchange ITS Installation	JD Schneeberger	Amy McElwain	OPP	Salary					0%								\$0			
	30931		1109006	P-3001	UPC 89883	I-66 - Evaluate Deployment of the Next Generation Traffic Management Tools (VSL, Queue Warning) US 50 to I-495 - Planning	Amy McElwain	Amy McElwain	OPP	\$0		\$400,000	\$400,000										\$0		6/12/08 - Funds previously allocated to this UPC were reallocated to UPC 72659, DMS Travel Time. 02/08/08 Per Dick's email - OPP and SE to initiate a task to evaluate the deployment of the Next Generation Traffic Management Tools. This can include VSL, queue warning, or other advanced technology. Task will include: 1. Concept of Operations Development 2. VSL / QW Plan Development including alternatives identification 3. Go – No Go Decision 4. System Design Development 5. Contract documents preparator	
Unfunded Projects	30931		1109006			Develop Consistency among suite of NRO Plans	Amy McElwain	Amy McElwain	OPP	\$50,000													\$0			
	30931		1109006			DMS, CCTV, Detector Project Development	Amy McElwain	Amy McElwain	OPP	\$90,000													\$0			
	30931		1109006	P-158	OPC 83085	CapWIN and RITIS Integration	Amy McElwain	Amy McElwain	OPP				\$0		0%	A 1/11/07 w/ caveats	N/A	N/A	N/A	N/A	N/A	R by MDSHA	\$0	Y by MD FHWA	07/08 Several Items completed	This project is admn by MDSHA and managed by CapWIN project team. This project will integrate CapWIN and RITIS, enabling real-time field reporting and data access by transportation first responders using enhanced mobile data tools and enable TMC operators to access incident data entered by first responders in the field via CapWIN. 5/21/07 Partnership agreement between VDOT and UMD signed by all parties. 7/17/07 CFRS Kick-off meeting held. 12/07 - Finalized CFRS COO and Functional Requirements 07/08 - * Concept of Operations Completed * Functional Requirements Completed * Master Test Plan Completed * Initial System Design Completed * System Alternatives Analysis Completed * Development of new security interface module ("FIPSecure") Completed * Initial Coding for Iteration 1 – Mapping near completion (anticipated August 08) * Iterations 2-4 to be implemented by March 09.
	30931		1109006	P-140	OPC 83088	NRO Outreach Program	Liz Liverman	Amy McElwain	OPP				\$0		0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	N	5/08 - Completed stakeholder interviews and survey; compiling results and recommendations	Develop an outreach plan, implement the plan such as updating NoVA Smart Travel outreach material and website and publishing articles. 10/06 An outreach plan was developed. Submitted article to ITSVA. 12/20/06 Initiate Outreach Program Feb 1, 2007. 3/20/07 Completed and printed Smart Travel Brochure v. 1.0. 6/15/07 Designed and produced NRO outreach folders 10/12/07 - Revised scope of outreach. 10/07 Continued update of Arch. site with state mandated changes. 2/08 Completed work with Comic book. 03/13/08 - Submitted task scope and request to Ops. Admn. 03/27/08 - NTP issued to on-call consultant. 5/08 - Completed stakeholder interviews and survey; compiling results and recommendations.
	30931		1109006	P-415	OPC 83779	Integrated Corridor Decision Support Tool Enhancement for FY-09	JD Schneeberger	Amy McElwain	OPP				\$0		0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	N	5/08 Refined tools and reviewing detailed tool reports	06/25/07 - Received DRAFT Scope from consultant on 6/6/2007. 09/15/07 - Working with WSA to finalize scope and budget. 11/06/07 - Held Kick-Off Meeting. 03/17/08 - Completed ITS Consideration Form COO; Completed ITS Decision Support Tool COO Developed Storyboards for ITS Decision Support Tool. 5/08 - Refined tools and reviewing detailed tool reports.

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Program Information										Financial Information						Process Information								Project Information		
																VDOT Process			Federal Process			Both				
Section	Org Code	Sub Org Code	CSC	ID	Tracking Code	Project Name	Project Manager	NRO Contact	Section	SoSYP (State)	Other State & Local	Federal + Match	Total Funding	Actual YTD Expenditures	% Spent vs. Authorized	CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁵⁾	Rule 940 Checklist	Amount Authorized			
																N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved				
Regional Operations Director				R-159	UPC 80089	Metropolitan Area Transportation Operations Coordination (MATOC) Program	Dick Steeg	Dick Steeg	ROD		\$1,386,667		\$1,386,667		0%	R	A	C		I	A, PCE 3/10/06	S	\$960,000	R	2/2008 See notes.	Regional project. \$1.6M FY-05 congressional earmark plus \$400 K match shared by DC, MD, and VA over 5 years. May need additional annual O&M funding. 2/01/07 The Commissioner signed the Agreement and the MOU. 3/30/07 All parties have signed the MATOC Agreement. 5/11/07 Version 2 of LOA forwarded to Steering Committee. 5/24/07 COG released RFQ #10-07, for MATOC contractor support. 2/2008 All financial commitments and signatures by MATOC Committee members are in hand. COG staff to begin charging time to project. 2/2008 - VDOT staff developing draft letters for Commissioner's sign. indicating VDOT wishes to extend the MATOC Agreement to Years 2 and 3. Also drafting LOA for Year 3. 2/19/08 - COG's contract with Telvent Farradyne, Inc. for the MATOC Program was signed by Farradyne on February 14 and by COG on February 19. Anticipate issuing the first task order soon to the contractor.
	30941		1118003	AT-26A	UPC 84368 Contract 27095	Operation Management- ATMS Replacement	Phillips	T Phillips	ROD			\$2,100,000	\$2,100,000	\$701,516	6%	A	A	R	N/A	Included TIP/STIP	A - 1/30/07		\$11,000,000	R Federal-Aid Project Agreement signed 2/21/07	07/07/08 - Contract Renewal in Process	Kick-off meeting scheduled for 8/24/07 07/07/08 - Contract Renewal in Process
	30941		1118003	AT-26C	OPC TBD	Operations Management- ATMS Replacement (Lane Closure Software & Process Development)	Phillips	Steeg	ROD			\$83,333	\$83,333		0%										05/08 - Funds reallocated 30935, Traffic Ops	1/30/08 - New Project. Determine preferred pre-closure approval process, and confirming and canceling process after approval in real time. 02/06/08 - Funds reallocated from O-146D (Carryover = \$188,691 and SoSYP = \$11,309) and T-514 (SoSYP = \$200K) 05/08 - Funds reallocated 30935, Traffic Ops
					Sum of ROD					ROD	\$0	\$1,386,667	\$2,183,333	\$3,570,000	\$701,516	20%										

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										CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁵⁾							Rule 940 Checklist	Amount Authorized				FHWA Oversight? ⁽⁸⁾	STATUS
Unfunded Projects				T-118		State Traffic Operations Safety Improvement		Hari Sripathi	TE	\$1,000,000							N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved		\$0			
	30934		1109008	T-?	UPC 86329	VA 620 (Braddock Road) @ VA 123 (Chain Bridge Road) – Operational Improvement	Robert Jastrzebski		TE	\$825,000						0%									\$0			Extend right-turn lane on eastbound Braddock Road.
	30934		1109008	T-526	UPC 86336	VA 606 (Loudoun County Pkwy) @ VA 621 (Evergreen Mills Road) - Operational Improvement	J. Pauley	Kamal Suliman	TE	\$230,000						0%	N/A	N/A	N/A	N/A	Not Included	Not Processed	N/A	\$0		Needs funding	Extend left-turn bay on northbound Loudoun County Pkwy to westbound Evergreen Mills Rd. Child project of 88639 - District Wide Bottleneck Relief Funding Pot 5/31/07 UPC assigned, awaiting funding. \$230 K needed 10/16/07 Per Bill Harrell, can be implemented fairly quickly within our ROW.	
	30934		1109008	T-7011	OPC 87388	Old Keene Mill & Huntsman evaluation removal of permissive LT		Dittberner	TE	\$20,000				\$20,000		0%								\$0				
	30934		1109008	T-516	OPC 87620	Burke Commons Road - construct and modify median	Kamal Suliman	Kamal Suliman	TE	\$100,000				\$100,000	\$0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0			Child project of 88639 - District Wide Bottleneck Relief Funding Pot
	30934		1109008	T-7017	OPC 87621	Rte 50 EB at Stonecroft - extend right / thru lane	Kamal Suliman	Kamal Suliman	TE	\$300,000				\$300,000	\$0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0			Child project of 88639 - District Wide Bottleneck Relief Funding Pot
	30934		1109008	T-518	OPC 87622	Rte 244 WB at Braddock Rd - Extend left-turn lane	Kamal Suliman	Kamal Suliman	TE	\$100,000				\$100,000	\$0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0			Child project of 88639 - District Wide Bottleneck Relief Funding Pot
	30934		1109008	T-519	OPC 87624	Rte 120 at I-395 - Construct sidewalk and curb cuts	Kamal Suliman	Kamal Suliman	TE					\$0	\$0	0%	N/A	N/A	C	N/A	C	A 12/13/06	N/A	\$0	N	Auth. received on 8/28/06.	8/31 - Project still needs to go through CEDAR. Construct / install on an as needed basis Child project of 88639 - District Wide Bottleneck Relief Funding Pot	

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										SoSYP (State)	Other State & Local	Federal + Match	Total Funding	Actual YTD Expenditures	% Spent vs. Authorized	CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁶⁾	Rule 940 Checklist	Amount Authorized				
																N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved					
Org 30935 Operations Administration Traffic Ops										\$80,200	\$0	\$0	\$80,200	\$14,840	19%										FHWA Oversight? ⁽⁸⁾	STATUS	History
	30935		118007	O-37	Con 25949 2 New contracts pending (see comments)	Janitorial Services	Li	Li	Traffic Ops					\$14,840		N/A	N/A	N/A			N/A	N/A	N/A		N	05/27/08 - Awarded MITA 05/07/08 for 3, one year terms	9/30/07 - Contract renewed 12/3/07 - Contract to 10/31/08 2/27/08 - Cleaning service is going out of biz-gave 90-day notice to quit April 30, 2008. Two new contracts are being developed. Quick bid contract for SSP building due to short term; regular bid for TMC building because TMC will remain occupied after the move to PSTOC. 4/21/08 - Bids have been submitted and are being reviewed by Procurement. Hope to have some information by 4/23/08
	30935		1118007	O-242	New Contract in Process	Copy Machines (1 in TMC building; 1 in SSP building. TMC copier will move to PSTOC)	Klink/Li	Li	Traffic Ops	\$10,200			\$10,200			N/A	N/A	N/A			N/A	1/27/2006	N/A		N	4/21/08 - Contract for SSP will remain , but the TMC copier will be replaced.	9/30/07 - Awarded MITA 05/07/08 for 3, one year terms. 9/30/07 - O-37/ Contract # 25949 Renewing 01/03/08 - Contract expired 12/31/07 2/27/08-New contract is being negotiated for both copiers. Estimate \$10,200/year for both based on current rates. 4/21/08 - We are unable to get out of the contract for the SSP building, but the TMC copier will be replaced as its contract has ended. Xerox is picking up their copier on 4/25; we hope to have the new one delivered that same day but are awaiting confirmation from the vendor.
	30935		1118007	O-250		NCR Evacuation and Shelter Plan	DC	Pete Todd	Traffic Ops	Salary						N/A	N/A	N/A			N/A	N/A	N/A		N	03/27/08 NTP issued to on-call consultant.	This began as a District of Columbia Department of Emergency Management project funded by COG for a consultant to develop an NCR evacuation and shelter plan. RFP was issued. 5/9/07 NCR Plan expanded to include Northern Region. o Evacuation corridors identified by Core Group - VDEM, VDOT and VSP. o Plan is under Governor's Working Papers. VDEM & VDOT will make presentation to Governor on 5/25/07. 03/27/08 - NTP issued to on-call consultant.
	30935		1118007	O-251		Safety Meeting (monthly)	Pete Todd	Ling Li	Traffic Ops	Salary						N/A	N/A	N/A			N/A	N/A	N/A		N		03/27/08 - NTP issued to on-call consultant.
	30935		1118007	O-8012		PSTOC Transition Implementation	Li		Traffic Ops	\$70,000			\$70,000												N	05/22/08 - NRO has established PSTOC Transition Implementation Committee	1/22/08 - New Project. Part of O-8002 2/27/08-PSTOC initial overhead estimate=\$70,000; monthly estimate=\$38,227 thereafter. 05/22/08 - NRO has established PSTOC Transition Implementation Committee. Ling, Tom Phillips and Dave Evans chair it.
Org 50906 Signal & Freeway Operations Traffic Ops										\$515,000	\$0	\$0	\$515,000	\$0	0%												
	30935	50906	118008	O-8003	OPC 83091	NOVA Freeway Modeling by UVA	Sheehan	Vu	Traffic Ops	\$150,000			\$150,000		0%	R	N/A	N/A			N/A	N/A	N/A		N	12/03/07 - See Note 12/03/07	Renamed O-8003 from O-255 to avoid confusion with O-25. The purpose of this proposal is to provide Northern Virginia Traffic Management Center (NVTMC) staff with an estimated effort to develop a microscopic simulation model network for major Northern Virginia Freeway system (I-66, I-495, I-95, I-395 and SH 267). As suggested by NVTMC staff, the project team will use VISSIM as a tool to develop the Northern Virginia Freeway System. The proposed work plan consisted of three tasks: (1) network building, (2) OD estimation and (3) simulation model calibration. • Task 1, Network Building ONGOING • Task 2, Data Collection ONGOING • Task 3, Simulation, Calibration ONGOING 3/10/07 Received January 2007 project report □ Network coding complete. □ Data collection continues.
	30935	50906	118008	O-8004	OPC 83092	Development of Database Structure, Dataset, and Interface for the NOVA Freeway Sys by VA Tech	Sheehan	Vu	Traffic Ops	\$215,000			\$215,000		0%	P 1/11/07	P	N/A			N/A	N/A	N/A		N	05/05/08 - Developing 2nd Phase Proposal	Renamed O-8004 from O-255 to avoid confusion with O-25. The HOV monitoring tool has been added to the VA Tech proposal. To develop the database structure, database, interface and reporting mechanism for the following applications and uses: • Categorize the data for each recurring and non-recurring and automated import/export into VISSIM/VISUM-Online modeling programs. • Real time custom and auto-generated performance reports for HOV sub-system. • Real time custom and auto-generated traffic analysis queries / reports for entire freeway system and subsystems. • Detector verification and performance. The goal for production is Dec. or Jan. Dick Steeg identified a need for a reliability index. 12/30/06 Establish a real-time freeway monitoring system for the Northern Region Operations. This system is intended to help the TMC Engineers and Operators identify, measure, and report the status of the freeway system and individual facilities. It will give the user the ability to visualize data at many temporal and spatial scales. Additionally, we will provide traveler information based on system data, e.g., travel time estimates. A release available for development, six outfitting with it.
	30935	50906	1118008	O-8015		Ramp Metering Control Optimization and Freeway Bottleneck Analysis			Traffic Ops	\$150,000			\$150,000														
Org 50912 OPS ITS IT Traffic Ops										\$80,000	\$0	\$1,630,000	\$1,710,000	\$1,547,452	90%												
	30935	50912	AG-300	O-42	Con 21284	Signal MIST Support (Telvent)	Metzger	Asmussen	Traffic Ops	\$80,000			\$80,000	(\$22,755)	-28%	R	N/A	N/A			N/A	N/A	N/A		N	03/04/08 - Contract renewed. Expiring 02/19/09	9/30/06 Achieves will be stored as opposed to overwritten. This will allow IT staff to have "check points" to restore from. This will greatly increase data integrity and reliability. 3/24/07 Since the implementation of MIST 4, reports of minor bugs and requests for code changes have trickled up from the users. No single issue is enough to generate concern, but the totality of issues may become a concern if left uncorrected. Telvent has been made aware of all issues, and it has made a commitment to correct the issues at no costs to VDOT. However, these changes do not have the same priority as paid requests do. Consequently, Telvent has been slow to make all of the changes. How do we motivate Telvent to complete the work – that is being done for free – in more reasonable timeframe? 4/27/07 A new release of MIST 4 will be implemented the second week of May. 5/11/07 MIST availability 94%. • Verizon didn't communicate circuit changes internally, so the mapping for the unused intellimux system was wrong. The system had to be pointed to the unused line for testing purposes. The
	30935			O-45	Con 17188	Signal Communication Support (WestCorp)	Asmussen	Li	Traffic Ops					\$442,430		R	N/A	N/A			N/A	N/A	N/A		N	On-going	Renewed, effective date August, 1, 2006 till July 31 2008
	30935	50912	1118007	O-8002	UPC 82668	PSTOC SW/HW Transition Planning & Moving (Kimley-Horn Associates)	Mark Metzger	Kathy Asmussen	Traffic Ops			\$1,630,000	\$1,630,000	\$1,127,777	69%	R	A	PD-2 approved, 8/25/06. PD-1 approved 10/2/06 PD-3 approved 3/7/2007		Adjusted in TIP 12/05/06 Adjusted in STIP 2/21/07	A, PCE 2/12/07 A, PCE Re-evaluated 5/18/07	1/15/08 Updated by PM.	\$1,630,000	R	02/13/07 - Add'l Federal funding avail. in about 15 days	Formerly O-25, Renamed to avoid confusion with the other O-25 project 12/9/06 New planned completion date is August, 2008. 1/11/07 The plan is to break the project up into three phases, two engineering and one construction. The first of two engineering phases will be funded by the state. The second engineering phase and construction piece will be federally funded. 5/19/07 A second notice to proceed has been issued for the second planning phase. NRO Admin staff provided charge information to contracting officer. 6/9/07 Monthly internal coordination meetings will be held to ensure that all related projects are in agreement. Additional contractor meetings have been scheduled for the following four months. The project burn rate will increase dramatically over the next several months. 8/11/07 Additional \$200 K in Federal Funds awarded. 9/29/07 Current money allocation in order of intended use: \$ 80,000 from NOVA fund, \$880,000 from FHWA fund (\$453 PE and \$427 CN), Transition contractor selected – Jon Chambers of KHA will be the task leader. Activities dated on or after 3/7/07 will be funded federally. Phase II (federal) 11/15/07 - - A no cost extension was filed to keep the contractor on board through the PSTOC move 02/06/07 - The original estimate in PCES had a Preliminary Engineering (PE) Estimate of \$500,000	

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																CCB / Date	STOB	PD Forms	Advance Construction	TIP ⁽⁴⁾ / STIP	CEDAR ⁽⁵⁾	Rule 940 Checklist	Amount Authorized			
																N/A Required Approved Denied Pending	N/A Required Approved Denied Pending	N/A Required Completed	N/A Required Completed	N/A Required Included Amended	N/A Required Approved Pending	N/A Required Submitted - Date Approved		FHWA Oversight? ⁽⁸⁾	STATUS	History
Unfunded Projects	Inactive Projects	30935	50914	1118003	O-249	Quick-Clear Towing Services	Irving	Irving	Traffic Ops	\$0			\$0													05/12/08 - Change this project to Status 20 (Temporarily Deferred (for Decision)). 8/8/07 Per Mark Irving - Still working on the issue. May seek funding. 9/29/07 - Initial research / contacts mad. Meeting pending 9/25 12/7/07 - Initial research/ contacts made per Joe Gray 01/23/08 - Funds reallocated to S-6002. Contract Pending 03/04/08 - I-95 Coalition Conference 3/5-6; pending further action Joe has submitted a revision to the Pool to change this project to Status 20 (Temporarily Deferred (for decision)).
		30935	50914	1118003	O-49	OPC 87280 NRO Incident Management Plan Annual Update & Expansion	Todd	Irving	Traffic Ops				\$0		0%	N/A	N/A	N/A			N/A	N/A	N/A	\$0	N	2/27/08-Project is in its final phase. 5/16/07 IM pocket guide to go to press 5/17/2007. 01/23/08 - \$26k reallocated to O-8011. Total budget for O-49 was \$150 K. Ling had requested to combine with O-60's \$60 K budget to develop the evacuation plan. Since the evacuation task has not yet been established, the ability to use all of the funds from O-49 in FY-08 is questionable. OPP does recommend to release \$26+30 K. When evacuation plan task order is established, the funding need in FY-09 should be budgeted. \$124k reallocated to O-60 2/27/08-Project is in its final phase. Have to "drive it" as the last step. Drive is scheduled for 2/28/08.
		30935	50914	1118003	FO-25	Traffic Signal Optimization Fredericksburg			Traffic Ops				\$0		0%								\$0		12/11/07 - Reallocate \$50k in funds. 12/11/07 - Reallocate \$50k in funds for new/upgraded computer workstations	