

nsert Project Titl sert Project Subtitle	е	
ert a map providing an overviev S files to generate maps	w of the project scope and limits.	Note: When possible use the Master Plan
ITS COMP	PONENTS	COST ESTIMATE
CCTV Cameras:	Dynamic Message Signs:	Total: \$
Detectors:	Telecom: LF	Preliminary Engineering: \$
Other Devices:	Software: Yes or No	Construction: \$

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Other Devices:	Software: Yes	or No 🗌	Construction: \$



PROJECT OVERVIEW

DISTRICT: PROGRAM AREAS:

REGION:

JURISDICTION / COUNTY:

PROJECT DESCRIPTION: Insert a short description. For example: This project will deploy "core ITS

infrastructure" on Route 28 in Loudoun and Fairfax Counties. Core ITS infrastructure includes closed circuit television (CCTV) cameras, detection, dynamic message signs

(DMS), and communications.

ROAD SYSTEM: Primary or Secondary **PRIMARY UPC:**

 ROUTE:
 PE COST:
 \$

 FROM:
 CN COST:
 \$

 TO:
 TOTAL:
 \$

ALLOCATIONS AND PROJECTED FUNDING

PI	ROJECT PHASE	PREVIOUS ALLOCATION	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
	Scoping/ConOps	\$	\$	\$	\$	\$	\$	\$
	Pre. Field Review	\$	\$	\$	\$	\$	\$	\$
PE	Utility Review	\$	\$	\$	\$	\$	\$	\$
PE	Permits	\$	\$	\$	\$	\$	\$	\$
	Soil Survey	\$	\$	\$	\$	\$	\$	\$
	Design (PS&E)	\$	\$	\$	\$	\$	\$	\$
	Procurement	\$	\$	\$	\$	\$	\$	\$
CN	Installation	\$	\$	\$	\$	\$	\$	\$
CIN	CEI	\$	\$	\$	\$	\$	\$	\$
	Integration	\$	\$	\$	\$	\$	\$	\$
TOTAL		\$	\$	\$	\$	\$	\$	\$

PRELIMINARY CN ESTIMATE

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST (\$)	TOTAL COST
1	Dynamic Message Sign (DMS)	Each		350,000	\$
2	Dynamic Message Sign (DMS) Upgrade	Each		350,000	\$
3	Closed Circuit Television (CCTV) Camera	Each		55,000	\$
4	CCTV Upgrade with Existing Structure	Each		20,000	\$
5	Road Weather Information System (RWIS)	Each		100,000	\$
6	Detection	Each		30,000	\$
7	Lane Control Signals (LCS)	Each		35,000	\$
8	Video Incident Detection (VID)	Each		30,000	\$
9	Communication (96 Strands)	LF		50	\$
TOTAL	\$				



1 PROJECT OVERVIEW

Insert an overview of the project including the project's purpose, limits of the project, and expected outcomes.

2 GOALS AND OBJECTIVES

VDOT's vision for the region and also for the Project Corridor is to:

Make Roadway Travel Safe, Efficient, and Reliable.

To meet this vision, VDOT NRO plans to achieve through this project by: (example below)

- Serving the public by providing them with the information they need to make good travel decisions;
- Monitoring real-time traffic conditions and the condition of its infrastructure;
- Proactively and rapidly identifying problems, including traffic congestion, crashes, and other mobility and safety needs;
- Taking rapid and effective action to address current and developing problems, appropriately
 applying a range of methods including physical improvements and advanced technologies;
- Sharing information, coordinating responses, and planning jointly with its partner agencies.

Goals and objectives met by this project include:

GOALS AND OBJECTIVES Mark the Goals and Objectives that apply to this project with an "X"	EXPECTED BENEFITS	
Goal #1: Reduce Congestion		
1.1 Reduce travel times and delays for all modes along identified major corridors	 Reduction in travel times Reduction in delay (vehicle hours) Reduction in incident duration Improved travel time reliability 	
1.2 Improve travel time reliability on major corridors		
1.3 Actively manage travel demand on NRO facilities		
1.4 Reduce delays due to work zones and planned special events		
1.5 Reduce incident clearance times	. Chasiney	
Goal #2: Improve Safety		
2.1 Reduce vehicular crashes	Reduction in incidents	
2.2 Reduce pedestrian and bicyclist crashes		
Goal #3: Enhance Communications with Travelers	Improved customer	
3.1 Provide proactive, timely, and accurate information and responses to the traveling public	satisfaction	
Goal #4: Promote Environmental Responsibility	• Reduction in fuel	



GOALS AND OBJECTIVES	EVECTED DENICEITS		
Mark the Goals and Objectives that apply to this project with an "X"	EXPECTED BENEFITS		
4.1 Reduce energy consumption and environmental costs of transport operations	consumption		
Goal #5: Preserve and Manage an Integrated Traffic Management System	 Improved field infrastructure reliability 		
5.1 Maintain field infrastructure so that it operations reliably	Improved data availability to support operations and		
5.2 Improve information gathering on freeways and arterials	performance monitoring		
Goal #6: Improve Emergency Management	 Improved emergency management 		
6.1 Enhance coordination of regional emergency management	coordination		
6.2 Reduce NRO critical asset vulnerability	 Reduction in critical asset vulnerability 		
Goal #7: Improve the NRO Business Process	Reduction in project delivery time		
7.1 Optimize operations planning, programming and project delivery time	Enhanced relationship between NRO		
7.2 Make the rationale for all NRO investments clear and consistent	investments and strategic goals and objectives		
7.3 Make performance-based decisions	 Increased SWAM business utilization 		
7.4 Utilize equal employment opportunity practices in hiring and	 Improved percentage of projects completed on-time and within- 		
7.5 Minimize project cost and schedule overruns	budget		
Goal #8: Improve Regional Operations Coordination and Efficiency	 Improved day-to-day regional operations 		
8.1 Encourage application of technology-based operations solutions in all relevant construction projects	coordination • Increased application		
8.2 Improve operations planning with regional operations partners	of operations solutions		
8.3 Improve day-to-day information exchange with regional operations partners	to regional transportation problems		
Goal #9: Enhance and Develop NRO Workforce Capabilities	Improved NRO		
9.1 Enhance Workforce needs planning to prepare for the future operations	workforce knowledge- base		
9.2 Support and sustain a learning environment for NRO staff	• Improved NRO		
9.3 Attract and retain a diverse talented workforce	workforce retention • Reduction in		
9.4 Reduce workplace accidents	workforce accidents		



3 EXISTING CONDITIONS

Provide text describing existing conditions within the environment in which this project will be implemented. For example: include a description of the existing traffic condition, agency operation environment (software, personnel, operating facility, regional cooperation), its deployment (device and telecom) on the proposed and adjacent roadways, and recommendations from existing planning documents or research findings).

4 OPERATIONAL NEEDS

Provide text describing the operational needs that this project will address. Note: Many operational needs have been identified through a series of its master planning efforts led by the VDOT NRO Planning & Programming Section. These plans reflect input from operations planning, engineering, operations, maintenance, and research staff. It is recommended to use the master plan as the basis for developing the operational needs of the proposed project.

5 SYSTEM OVERVIEW

Provide text conveying an overview of the system/recommendations for deployment. include information about the primary components, their location and any special capabilities. based on the needs identified above, this section should address the specific its recommendations for the proposed project. List the recommended ITS subsystem one at the time. A map illustrating the recommended device locations is highly recommended.

6 PROJECT ARCHITECTURE

Provide information related to the components of the Northern Virginia ITS Architecture that are associated with this project. Note: The project architecture provides a framework that identifies the institutional agreement and technical integration necessary to interface the ITS project with other ITS projects and systems. It addresses the application of the proposed system with a focus on integration and operation of the system(s). The NRO regional ITS architecture (www.vdot-itsarch.com/default.htm) should be used as the basis for generating the project architecture. This section should summarize key stakeholders impacted by the project (e.g. VDOT NRO, private sector ISPs, MATOC, video clearinghouses, etc.), elements (e.g. VDOT NRO MPSTO - TOC CCTV Cameras, VDOT NRO MPSTOC - TOC Detection, VDOT NRO MPSTOC - TOC DMS, etc.), and its market packages description and interconnect diagram impacted by the proposed project.

"Key" Regional Stakeholders Impacted

The following stakeholders will be directly impacted and/or benefit from this project:

List the stakeholders from the architecture associated with this project

"Key" Elements Impacted

The following elements will be directly impacted and/or benefit from this project:

List the architecture elements/subsystems associated with this project



"Key" ITS Market Packages

The project impacts the following ITS Market Packages:

 List the market packages, descriptions, and diagrams from the ITS architecture associated with this project

7 ITS STANDARDS

Provide a list of the ITS standards identified from the Northern Virginia ITS architecture or other sources that are recommended for this project

8 IMPLEMENTATION RECOMMENDATION

Describe the sequence of the project development and implementation, identify other projects or activities that have impact on the proposed projects (technically or financially), and other critical factors that would influence a successful implementation of the project.