



Industry Briefing
General Engineering Consultant for
Transform 66 Projects and Transportation Management Program

June 23, 2015

GEC Industry Briefing Agenda and Goals

Goal:

To provide an overview of the scope and services for a GEC to manage the major, complex and diverse congestion relief projects in the Northern Virginia District. These projects include the Transform I-66 Outside and Inside the Beltway Projects and the Transportation Management Program.

Agenda:

- Introductions of Key VDOT Staff
- Project Overview for I-66 Inside the Beltway
- Project Overview for I-66 Outside the Beltway
- Project Overview for Transportation Management Plan
- Scope of Services
- Civil Rights Program
- Key Program Areas
- Procurement Schedule
- Conclusion

I-66 Multimodal Improvements Inside the Beltway



TRANSFORM 66
INSIDE the Beltway

VDOT | DRPT

Investing in Multimodal Solutions



I-66 Multimodal Improvements Inside the Beltway



Investing in Multimodal Solutions

Project Scope

Tolling

- HOV-2 to HOV-3 conversion
- Dynamic tolling in both directions during peak periods only
 - ✓ HOV-3+ vehicles ride free; Restricted hours to be determined
 - ✓ Facility free to all traffic during off-peak periods
 - ✓ Consistent with current policy, heavy trucks are prohibited
 - ✓ All electronic tolling – no toll booths
 - ✓ Clean fuel vehicles no longer exempt from restrictions
- VDOT owns and operates facility
- Project revenue directed toward operations, maintenance, multimodal elements, and future widening

Transit

- Review and validate transit recommendations from:
 - ✓ DRPT I-66 Transit / TDM Study, 2009
 - ✓ I-66 Multimodal Study, 2012/2013



I-66 Multimodal Improvements Inside the Beltway



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GEC Expectations

- Support VDOT Project Manager in the administration, design and implementation of the design-build for the Tolling Infrastructure and Systems Integration
- Facilitate the development of an evaluation plan that monitors the effectiveness of improved transit in the corridor
- Coordinate with key stakeholders in the corridor
- Support the development and implementation of stakeholder and public outreach program, including public education campaign and strategies for the conversion of HOV-2 to HOV-3, including tolling

Project Milestones

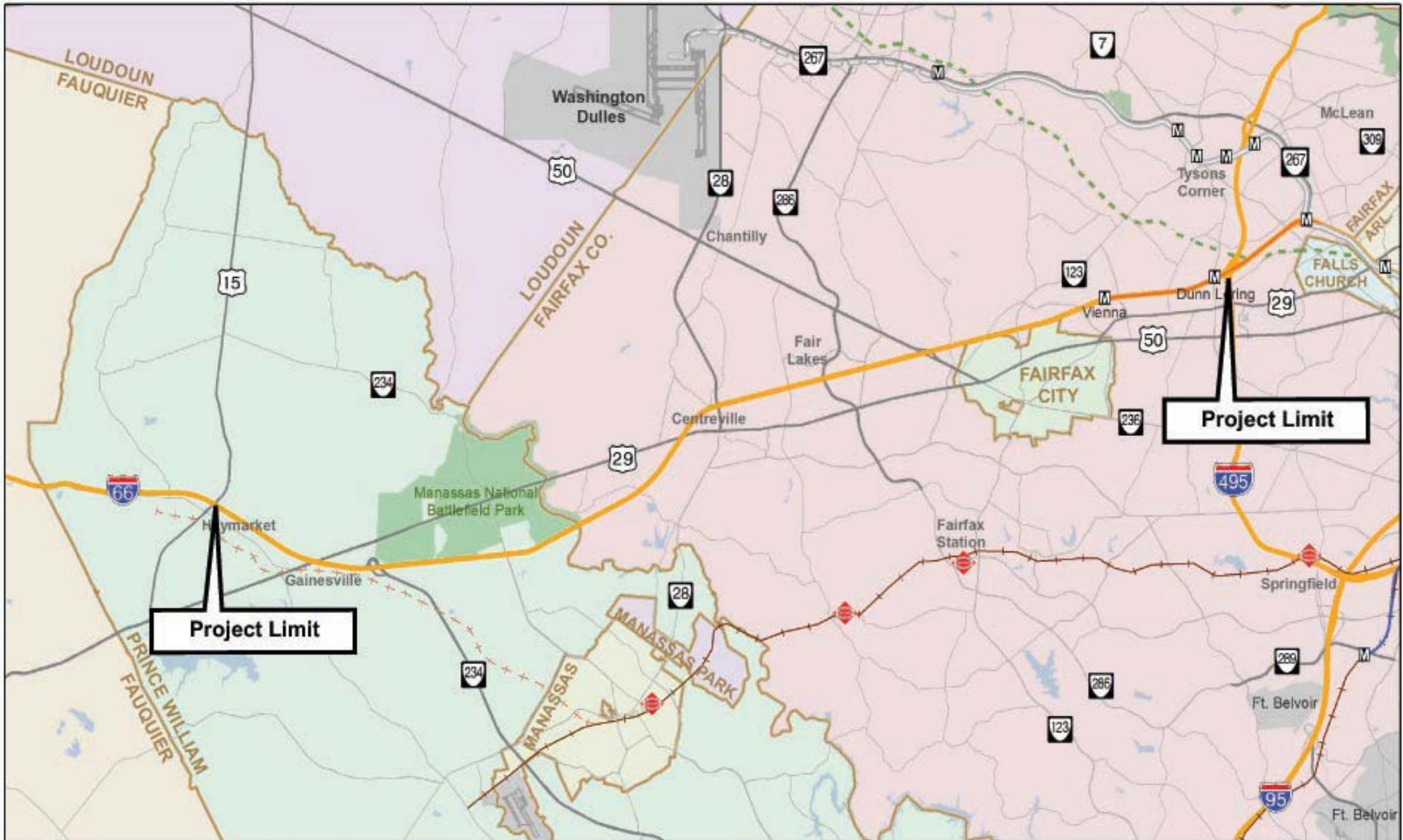
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Key Milestones	Begin Dates / Duration
Public Outreach	Ongoing
Public Information Meetings	Summer 2015 and Fall 2015
Working Group / Technical Stakeholder Advisory Group	Ongoing
Traffic and Revenue Study	Spring 2015 / 6 months
Group multimodal solutions according to implementation schedule	Spring 2015 / 9 months
Framework Agreement	Fall 2015 / 4 months
Procurement of Tolling Integrator	Fall 2015 / 4 months
Design-Bid-Build Award (Civil Work Only)	Spring 2016
Tolling Construction	2016
Group 1 multimodal solutions and tolling implementation	2017
Acceptance testing, operations, and maintenance	2017-2021



I-66 OUTSIDE THE BELTWAY

Multimodal Solutions - 495 to Haymarket





Project Scope

- **Two Express Lanes (convert existing HOV lane & add one lane)**
 - HOV-3 and buses travel free
 - Non-HOV tolled
 - Congestion-based tolls (similar to other Express Lanes in region)
 - Converting HOV-2 to HOV-3 by 2020, consistent with the region's Constrained Long Range Plan
- **Three regular lanes**
 - Open to all traffic
 - No tolls
 - Ramp-to-ramp connections (auxiliary lanes)
- **Rapid bus service and other multimodal improvements**
 - High frequency of service beyond peak hours
 - Travel in express lanes for predictable travel times
 - Park-and-Ride lots, Transportation Demand Management

I-66 OUTSIDE THE BELTWAY



TRANSFORM 66
OUTSIDE the Beltway

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Multimodal Solutions - 495 to Haymarket

GEC Expectations

- Support Project Manager in the administration, design and construction of the 66 Outside the Beltway Project including express lanes, access points, interchanges and bike and pedestrian crossings
- Support Project Manager in the administration, design and construction of project's transit components including park and ride lots
- Develop and implement maintenance of traffic operations for all construction activities
- Facilitate project partnering and agency coordination
- Support the development and implementation of stakeholder and public outreach program, including public education campaign and strategies for the conversion of HOV-2 to HOV-3, including tolling

Project Milestones

Multimodal Solutions - 495 to Haymarket

Key Milestones	Dates
Transportation P3 Advisory Committee determination expected	July 2015
Public Outreach for preferred alternative	Fall
Present preferred alternative at CTB Workshop	September 15, 2015
CTB decision on preferred alternative	October 14, 2015
TPB action on project in CLRP	October 2015
Final Environmental Document	End of 2015
Design Public Hearing	2016
Construction Start	2017
Open to traffic	2021

Transportation Management Plan

TMP Goals

- Ensure public safety
- Provide a high level of mobility
- Offer reliable information so travelers can better plan their trips throughout the construction zone

Efforts focused in four broad strategy groups to mitigate construction-related congestion:

- Traffic Operations and Incident Management
- Transit and Transportation Demand Management
- Local Network Operational Enhancements
- Communications and Outreach

Transportation Management Plan

GEC Expectations

- Review and/or development of Traffic Management Plans
- Oversight of congestion management activities, maintenance of traffic
- Liaison with the first responders and Traffic Operations Center
- Coordination of public information; Keep a wide range of audiences informed on traffic related information and minimizing traffic in the work zones
- Develop and implement lane closure conflict monitor and approval process for regional projects
- Provide analysis of measurements of effectiveness of TMP strategies for reports to localities, elected officials, and transportation agencies

GEC Scope of Services

- Support of Transform 66 Projects estimated at approximately \$2 Billion
- Core consultant staff is expected to be co-located at VDOT's Northern Virginia District Office
- Contract administration and core GEC administrative duties
- Project Management including project controls, scheduling, estimating, project documentation systems, claims avoidance and review, project communications electronic network, project partnering and state and federal regulatory and policy compliance
- Financial and administrative plan development and monitoring
- Design management and services for disciplines including roadway, interchange design, structures, bridges, hydraulics, geotechnical and heavy rail systems engineering, and submittal and shop drawing coordination and review
- Environmental services including permit acquisition and monitoring review

GEC Scope of Services (continued)

- Right of Way and Utilities
- Construction management and inspection services including project partnering, quality control processes, constructability and bid ability review
- Inspection staff is expected to be co-located in a field office during construction phases of assigned projects.
- Safety Program Review and Inspection
- Transit planning and coordination
- Traffic Management Plan (TMP) coordination and traffic planning, forecasting and design
- Intelligent Transportation System (ITS)
- Tolling, Toll and Revenue
- Public affairs and outreach management and support

Civil Rights Program

- The GEC will operate a “Disadvantaged Business Enterprises” Program.
- Program will have a **13% DBE goal** and **29% SWaM goal**.
- The DBE Program will comply fully with U.S. Department of Transportation regulations, 49 CFR Part 26.
- DBE Program team will assist in workforce development.
- A Community Resource Board (CRB) will be established to assist in the identification of businesses within specific work items.

Contract and Project Management

Contract Administration

- Consultant Project Manager to provide resources to administer the contract between VDOT and the consultant, as well as the subconsultants

Project Management

- Project Managers for each project and task managers for key disciplines to coordinate with VDOT's Project Manager and/or Contract Administrator as appropriate
- Oversight and implementation of project controls, including scheduling, estimating, project documentation systems, and claim avoidance and review
- Project communication electronic network for internal and external project participants may be required
- State and Federal regulatory and policy compliance

Agency Coordination

- Coordination of project with key stakeholders
- Coordination of project with federal and state agencies, and local jurisdictions

Design Management Services

Engineering Disciplines

- Roadway
- Interchange
- Structures and bridges
- Hydraulics
- Geotechnical
- Heavy rail
- Survey and mapping services

Environmental Services

- Environmental permit review
- Monitoring and review of construction and mitigation measures
- Preparation of environmental documentation in accordance with the National Environmental Policy Act (NEPA), and/or with Virginia requirements.

Right of Way and Utility Services

- Acquisition and relocation oversight and coordination
- Appraisal reviews
- Utility relocation oversight

Transit Planning and Coordination

- Operations planning to include market forecast and operating scenarios
- Development of an evaluation program to measure effectiveness of transit in the corridor
- Coordination with transit providers (WMATA, Fairfax Connector, PRTC, etc.)

Traffic and Intelligent Transportation Systems (ITS)

Traffic Planning, Forecasting, Design

- Traffic engineering and forecasting review and/or performance of traffic modeling
- Review and/or develop Interchange Modification/Justification Report (IMR/IJR) including operational and traffic analysis
- Develop traditional and Intelligent Transportation Systems (ITS) solutions to traffic issues

ITS

- Evaluation of technology, networking, systems architecture alternatives
- Oversight of equipment installation

Tolling

Toll and Revenue Forecasting

Intelligent Transportation System (ITS)

- Assist Project Manager in the oversight of equipment installation and integration of technology, networking, and systems architecture alternatives

Tolling Support

- Assist Project Manager in the review of test plans and integration of all tolling and ITS equipment
- Provide technical expertise for the tolling and traffic management systems and “back office” support systems
- Provide technical expertise in the oversight of factory acceptance testing, systems acceptance testing and user acceptance testing of equipment and software

Toll and Revenue Forecasting and Analysis

- Review or develop Toll and Revenue Forecasts
- Conduct Toll Sensitivity Analysis

Public Affairs/Outreach Management

Goal

- Build public awareness, understanding and acceptance of construction impacts, project benefits and developments, as well as traffic changes and new rules of the road, leading to public support of project improvements and safe and efficient travel.

Services

- Provide public affairs and communications expertise
- Develop and implement communications strategies and tools
- Develop, disseminate and maintain information to communicate key construction information and issues to affected audiences
- Develop and implement public education strategies and programs

Construction Management and Inspection Services

- Constructability review
- Plan 'Errors and Omissions' Review
- Supplemental core inspection and management duties
- Review of project and construction documents
- High-level QA/QC or IA/AV inspection and review
- High-level environmental, and safety inspection and review
- Work zone safety inspection and review
- Ongoing risk assessment / risk management / scope management
 - Review schedules and monitor progress to ensure on-time delivery
 - Provide oversight and scope control: planned versus actual
 - Provide and handle potential changes within VDOT and FHWA guidelines
- Monitor and review responses to all correspondence
- Progress and partnering meetings
- Safety Program



Financial and Administrative Monitoring

- **Financial and progress report for the program**
 - Integrates project planning, schedules and costs
- **Provide annual updates to the program**
 - Initial financial plan
 - Program status
 - Program financial status
- **Provide routine updates to the project**
 - Project/phase status update
- **Cash flow & financial requirements**
 - Funding source
 - Allocations and authorizations
- **Will require change and updating**
 - Project status
 - Project cost estimates
 - Budget updates
 - Cash-flow



Financial and Administrative Monitoring

Routine Financial Reports

- **Project expenditures**
 - Ongoing reconciliation
 - Monthly reporting
- **Project funding**
 - Funding sources
 - Allocations and authorizations
- **Reports Schedule**
 - Monthly - expenditure reporting
 - Quarterly - financial plan updates
 - Annually - financial plan updates



Financial and Administrative Monitoring

Internal Audits

- **Ensure compliance with program requirements and evaluate the integrity of business operating systems**
 - Business process and transactions
 - Expenditure integrity
 - Budgets
- **Assess the effectiveness of management controls**
 - Policy and procedures
 - Risks
 - Mitigation
- **Determine compliance with policies and regulations**
 - Policy and procedures
 - Risks
 - Mitigation



Project Controls

- Scheduling
- Cost estimating
- Contract development (design-bid-build and design-build), review and analysis
- Risk management analysis and claims avoidance, and document control
- Operations and maintenance life-cycle costing
- Maintenance requirements

Procurement Schedule

Expression of Interest Due	7/17/2015
Short List	NLT 8/6/2015
Interviews/Technical Presentations	8/18/2015
Final Consultant Selection	9/01/2015
Scoping Meeting with Consultant	9/10/2015
Selected Consultant Pre-award Documents Due	9/11/2015
Completed Negotiations Agreement Due	10/27/2015
Consultant Contract Signed	11/11/2015

All procurement related questions or information should be directed to:

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