



COMMONWEALTH of VIRGINIA

Thelma D. Drake
Director

DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION
600 EAST MAIN STREET, SUITE 2102
RICHMOND, VA 23219

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VIRGINIA RELAY CENTER
1-800-828-1120 (TDD)

Contract for General Planning Consultant Services for Transit Projects in Virginia *Contract Number 505-13-CC0005*

THIS CONTRACT for General Planning Consultant Services for Transit Projects in Virginia is entered into this 19th day of June, 2013 by AECOM Technical Services, Inc., (the "Contractor"), and Commonwealth of Virginia, Department of Rail and Public Transportation (DRPT), (the "Department" or "Purchasing Agency").

WHEREAS, on March 28, 2013 in keeping with the Virginia Public Procurement Act, §§ 2.2-4300 *et seq.* of the *Code of Virginia* (the "Act"), the Department issued Request for Proposal number 505-13-RR0001 (the "RFP") seeking competitive negotiation for General Planning Consultant Services for Transit Projects in Virginia; and

WHEREAS, on April 26, 2013, the Contractor submitted a proposal (the "Proposal"), which is hereto attached and marked as Exhibit B; and

WHEREAS, after consideration and evaluation of all the proposals pursuant to the Act, the Department has determined that a contract should be awarded to the Contractor.

NOW THEREFORE, in consideration of mutual covenants, promises and agreements herein contained, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. **SCOPE OF WORK:** The Contractor shall provide the services to the Department as set forth in the following:
 - a. The RFP, which is hereto attached, marked as Exhibit A, and made a part of this document:
 - b. The Proposal which is hereto attached and marked as Exhibit B and hereby made a part of this document, and the negotiated modifications to the proposal dated June 4, 2013, which is hereto attached and marked as Exhibit C, and hereby made a part of this document.

2. **TERM.** The term of this contract shall be for a period of three years, renewable for up to two successive one-year periods.

3. **CERTIFICATION REGARDING LOBBYING:** The Contractor hereby certifies that it is in compliance with 49 C.F.R. Part 20, Certification Regarding Lobbying.

4. **NOTICE TO PROCEED:** No work shall be done by the Contractor prior to receipt of written notice to proceed in the form of an eVA Task Order from the Department Contract Manager. The Department will not be responsible for payment for work done in advance of such notice.

5. **ADDITIONAL TERMS:** This will be a Requirements contract with fixed labor rates. The consideration for Task Orders will be paid on a fixed billable rate basis using fully loaded hourly bill rates as shown in the attachment. The fully loaded hourly bill rates will remain constant for the first three years of the contract. Fees for specific task assignments shall be in accordance with the Price/Cost Chart included in the Final Price Schedule for the approved individuals assigned to the task. Task Orders may be issued on a fixed price or time and materials basis. All Task Orders will have a maximum cost.

IN TESTIMONY THEREOF, the parties have caused this contract to be executed, each by its duly authorized officers, all as of the day, month, and year hereinabove first written.

**AECOM TECHNICAL
SERVICES, INC**

By:  _____

Name: Michael Jelen

Title: Associate Vice President

Date: June 19, 2013

**DEPARTMENT OF RAIL AND
PUBLIC TRANSPORTATION**

By:  _____

Ashley Nusbaum
Financial Compliance and
Procurement Analyst

Date: 6/19/13

REQUEST FOR PROPOSAL

505-13-RR0001

General Planning Consultant Services Contract for Transit Projects in Virginia

There will be an optional pre-proposal conference for this solicitation

April 9, 2013 at 10:00 a.m.

Vendor Registration: In order to receive an award, the firm must be a registered Vendor with eVA.

Note: This public body does not discriminate against faith based organizations in accordance with the *Code of Virginia*, § 2.2-4343.1 or against an offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law.



Request for Proposal (RFP) Cover Sheet

RFP #: **505-13-RR0001**
Issue Date: **March 28, 2013**
Title: **General Planning Consultant Services Contract for Transit Projects in Virginia**
Commodity Code: **918-96 Transportation Consulting**
Issuing Agency: **Commonwealth of Virginia
Department of Rail and Public Transportation
600 East Main Street, Suite 2102
Richmond, VA 23219**
Initial Period of Contract: **Three years from date of award**
Proposals Will be received until: **April 26, 2013
4:00 p.m.**
All inquiries must be directed in writing to: **Ashley Nusbaum, Procurement Manager
ashley.nusbaum@drpt.virginia.gov**

No proposal will be accepted after the closing date and time unless the closing date and time is modified by written addendum. Proposals must be sealed and mailed or hand delivered to the appropriate delivery address identified above.

In compliance with this RFP and all conditions imposed in this RFP, the undersigned firm offers and agrees to furnish the services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation, and hereby certifies that all information provided below and in any schedule attached hereto is true, correct, and complete.

Name and Address of Firm:

_____	_____
_____	Date
_____	_____
_____	Signature in Ink
_____	_____
_____	Printed or Typed Name of Above
FEI/FIN Number	_____
_____	Phone
E-mail	_____
_____	Fax

Note: An Optional Pre-Proposal Conference will be held on April 9, 2013 at 10:00 a.m. See Section VIII for more information.

Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses are encouraged to participate.

REQUEST FOR PROPOSAL

General Planning Consultant Services Contract for
Transit Projects in Virginia

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General Planning Consultant Services Contract for Transit Projects in Virginia (Transit GPC)

I. CONTRACT AMOUNT AND TERM

The initial contract term shall be for a period of three years, renewable for up to two successive one-year periods. The compensation of this contract is estimated to be \$15,000,000 (to be divided among qualified firms). The effective date of the contract will be determined at time of award.

II. PURPOSE

The Department of Rail and Public Transportation (DRPT), an agency of the Commonwealth of Virginia, is issuing this Request for Proposal (RFP) to solicit sealed proposals for the purchase of General Planning Consultant Services related to DRPT's transit programs, projects, and initiatives. **It is the intent of DRPT to award to multiple qualified firms.**

III. BACKGROUND

DRPT is an agency of the Commonwealth of Virginia created in 1992. DRPT's mission is to improve the mobility of people and goods while expanding transportation choices in the Commonwealth. DRPT consists of the Director's office and two divisions: (1) Rail and Transit and (2) Finance and Administration.

DRPT's Rail Division assists passenger rail operations, freight rail operations, planning and special projects. Passenger and freight rail operations involve coordinating with both public and private entities to enhance rail operations, planning and development. Rail Planning involves providing input on state and federal rail policy and regulations, track abandonment, freight and passenger rail feasibility analysis, identification of freight rail needs, and updates to state rail studies, maps and plans. Rail special projects include demand analysis for passenger rail studies, rail capacity analysis, and coordinating with local and regional transportation authorities on rail modeling issues and intermodal studies.

The Transit Division assists more than 40 public transit agencies, 50 human service providers and 15 commuter assistance agencies that combined carry nearly 700,000 Virginians to work every day in something other than their own cars. Transit demand management services are provided through a unique partnership between DRPT, 15 local commuter assistance programs, Metropolitan Planning Organizations, various Transportation Management Associations (TMAs) and the Virginia Department of Transportation (VDOT). DRPT also provides technical and financial support to local commuter assistance agencies through grant programs, research, training, and marketing assistance.

The Finance and Administration Division is responsible for administering agency funds that empower our grantees to deliver efficient, effective transportation services. DRPT has a complex accounting environment utilizing 15 funds to account for 2000 open grants and projects involving the activities of approximately 75 grantees. DRPT is a funding and technical assistance participant in projects that combine federal, state, and local funding.

IV. STATEMENT OF NEEDS

The scope of work to be provided under this contract may cover the full range of activities required by federal, state, regional and local processes for public transportation and congestion management planning and projects. These transit activities include: project feasibility/identification, environmental analysis, public participation, marketing, research, financial planning, strategic planning/capital investment planning, operations planning and analysis, project/program evaluation, safety and security, short-range plan and program development, and training and technology/Intelligent Transportation Systems (ITS).

Potential Services to be provided for Transit

1. **Project Feasibility/Identification and Alternatives Analysis** – Conduct planning studies for rail and bus transit and congestion management projects as directed that meet federal, state, regional and local processes. Develop demand or market forecasts including utilizing transportation forecasting models when required. Develop alternatives for analysis and capital cost estimates necessary to support planning studies. Develop operating scenarios utilizing operational models and other tools and estimate operating costs and revenues.
2. **Environmental Analysis** – Recipients of federal funds must ensure that projects are in compliance with all environmental laws regardless of which federal agency authorizes the funding (i.e., Federal Transit Administration or Federal Highway Administration). Must be able to conduct in whole or in part, categorical exclusions, environmental assessments, environmental impact statements, and alternatives analyses, as required by the National Environmental Policy Act (NEPA) as amended (42 U.S.C. § 4321 *et seq.* and 23 C.F.R. pt. 771).
3. **Public Participation** – Establish and implement comprehensive public participation programs and outreach activities for planning studies and projects that meet the requirements of federal, state, regional and local processes.
4. **Marketing and Research** - Develop, produce and implement marketing, consumer research and public relations programs associated with applicable projects/programs.
5. **Financial Planning and Analysis** - Conduct financial studies as directed. Evaluate capital and operating and maintenance funding sources and options, including various financing tools. Develop project expenditure and cash flow forecasts.
6. **Strategic Planning/Capital Investment Planning** – Assist in the development of strategic and/or capital investment plans for DRPT and other authorized users as directed.
7. **Operations Planning and Analysis** – Review and conduct comprehensive operations planning and analysis for DRPT and other authorized users as directed. Develop demand or market forecasts including utilizing transportation forecasting models when required. Develop operating scenarios utilizing operational models and other tools and estimate operating costs and revenues.
8. **Project Evaluation** – Develop and implement evaluation programs that analyze the effectiveness, success and results of DRPT programs and projects.

9. **Safety and Security** – Conduct safety and security assessments of transit operators, evaluate system safety plans, conduct safety and security training and exercises for transit operators as requested.
10. **Short-Range Plan and Program Development** – Prepare updates to Transit Development Plans and Transportation Demand Management (TDM) Plans to identify needs and required resources for modifying/enhancing services and provide a basis for evaluating funding requests.
11. **Training** – Assist with developing training materials and conducting training courses for DRPT and other authorized users that are related to DRPT programs and industry specific issues.
12. **Technology/ITS** – Assist DRPT in the evaluation of technology products and systems designed to improve the efficiency and effectiveness of DRPT and other authorized users, including various Information Technology solutions and Intelligent Transportation Systems.

V. PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS

PROPOSED PROCUREMENT SCHEDULE:

Issue Date of RFP	March 28, 2013
Pre-Proposal Conference	April 9, 2013
Deadline for receipt of Proposals	April 26, 2013
Oral Presentations (if needed)	Week of May 15, 2013
Negotiations	May 20, 2013
Proposed Contract Award (Dependant upon timing of Oral presentations)	June 3, 2013

GENERAL REQUIREMENTS

1. RFP Response

The Offeror (“Offeror”) is the firm submitting the proposal, and for Federal Terms and Conditions, means Contractor as normally used in those terms and conditions. In order to be considered for selection, Offerors must submit a complete sealed written response to this RFP. One original of each proposal and five copies, each of which are marked “Copy,” must be submitted to DRPT in addition to one electronic version on a compact disc (CD).

Proprietary information must be clearly marked as proprietary prior to submittal. If the Offeror wishes to submit a version of the proposal that has proprietary information redacted, the redacted version must be submitted in electronic format on a CD and must redact all proprietary information. Section numbers which are redacted must be identified as follows: Example: Section 3, paragraph B: “Redacted.” The Offeror is responsible for ensuring that the redacted version of the proposal is carefully edited, altered, and refined in order to protect and maintain complete confidentiality of protected information.

No other distribution of the written proposal shall be made by the Offeror.

The signed proposal must be returned in an envelope or package, sealed and identified as follows:

From:	<u>04/26/2013</u>	<u>4:00 p.m.</u>
Name of Offeror	Due Date	Time
<u>505-13-RR0001</u>		
Street or Box Number	RFP No.	
<u>Transit GPC</u>		
City, State, Zip Code	RFP Title	

Name of Contract/Purchase Officer or Buyer **ASHLEY NUSBAUM**

Proposals must be received at the following location by April 26, 2013 at 4:00 p.m.

Commonwealth of Virginia
Department of Rail and Public Transportation
600 East Main Street, Suite 2102
Richmond, VA 23219

In addition, the Offeror may be required to make a subsequent oral presentation detailing how the Offeror would approach the specific program objectives outlined in the Statement of Needs.

DRPT reserves the right to ask any Offeror to submit information missing from its offer, to clarify its offer, and to submit additional information which DRPT deems desirable, and does not affect quality, quantity, price or delivery.

2. Written Proposal Preparation

A. Proposals shall be signed by an authorized representative of the Offeror. All information requested must be submitted. Failure to submit all information requested may result in DRPT requiring prompt submission of missing information and/or giving a lowered evaluation of the proposal. Proposals, which are substantially incomplete or lack key information, may be rejected by DRPT at its discretion.

B. Proposals must be organized in the order in which the requirements are presented in the RFP. All pages of the proposal must be numbered. Each paragraph in the proposal must reference the paragraph number of the corresponding section of the RFP. It is also helpful to cite the paragraph number, subletter, and repeat the text of the requirement as it appears in the RFP. If a response covers more than one page, the paragraph number and subletter must be repeated at the top of the next page. The proposal must contain a table of contents which cross-references the RFP requirements. Information which the

Offeror desires to present that does not fall within any of the requirements of the RFP must be inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.

C. Proposals should be prepared simply and economically, providing straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be on

completeness and clarity of content. Each copy of the proposal must be in a single volume where practical. Elaborate brochures and other representations beyond that sufficient to present a complete and effective proposal are neither required nor desired. **No proposal, in its entirety, should exceed 100 pages one-sided.**

SPECIFIC PROPOSAL REQUIREMENTS

Proposals must be as thorough and detailed as possible so that DRPT may properly evaluate the Offeror's capabilities to provide the required services. Offerors are required to submit the following items in order for their proposal to be considered complete.

Proposals shall be binding upon the Offeror for 120 days following the proposal due date. If the proposal is not withdrawn at that time, it remains in effect until an award is made or the solicitation is canceled. Every effort will be made by DRPT to provide status information during the selection process.

RFP Cover Sheet – The RFP Cover Sheet which is page two of this RFP shall be completely filled out and signed as required.

State Corporation Commission (SCC) Identification Number – See Attachment B - Special Terms and Conditions for the SCC Identification Number reporting requirement.

Tab 1 Understanding of Work and Plan for Providing Services – The Offeror must provide a detailed description of its understanding of the services to be provided with descriptions of the approach and procedures employed on similar projects elsewhere. The Offeror must describe the process it will follow to respond to a specific purchase order request from DRPT. The Offeror must also describe the management procedures it will follow to oversee work by its personnel and work by subcontractors on multiple purchase orders simultaneously.

Tab 2 Experience and Qualifications – The Offeror must describe the skills and qualifications it has available to perform the various types of tasks described in the Statement of Needs. The key personnel who could be assigned to these various tasks must be identified. The Offeror must demonstrate that it has sufficient personnel with the various types of skills needed to staff the purchase orders when needed. The Offeror shall provide all of the following information concerning its company, subcontractor and personnel qualifications.

- A.** A detailed statement indicating the organizational structure under which the firm proposes to conduct business. If more than one firm is involved in this project, state the type of arrangement between the firms and the percentage of work to be performed by each.
- B.** A list of the key personnel including subcontractors who could be assigned to the various tasks identified. Give the relevant experience record of each and include resumes and any certifications.
- C.** A list of references to include name, address, telephone number, email address, project, and dollar amount of project.
- D.** A Certificate of Insurance with at least the minimum amount of coverage cited in the Insurance clause in Attachment A - Required General Terms and Conditions of the RFP.

Tab 3 Virginia Department of Minority Business Enterprise (DMBE) Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses (SWAM) Participation – The Offeror shall indicate the percentage of DMBE SWAM participation and specify the types of work to be performed by DMBE SWAM subcontractors. In order to be considered for the selection of this RFP, the Offeror must include Attachment C - Small Business Subcontracting Plan in each copy of the proposal.

- A. If the Offeror on the contract is a DMBE-certified small business, the Offeror shall indicate such in Section A of Attachment C. This shall include DMBE-certified women-owned and minority-owned businesses that meet the small business definition and have received the DMBE small-business certification.
- B. If the Offeror is not a DMBE-certified small business, the Offeror is required to identify the portions of the contract the Offeror plans to subcontract to DMBE-certified small business by completing and returning Section B of Attachment C.
- C. If the Offeror is not a DMBE-certified small business and cannot practicably subcontract any portion of the requirements being solicited, in order to be considered responsive to the solicitation, the non DMBE-certified Offeror must document on Attachment C, section C, past efforts made to provide subcontracting opportunities to DMBE-certified small businesses for other contracts within the past 24 months.

All DMBE SWAM Offerors or subcontractors must be certified with DMBE. If the Offeror or subcontractor is not certified, they must demonstrate that they are eligible to be certified, and must receive such certification prior to the solicitation due date. DMBE can be contacted at (804) 786-5560. The DMBE SWAM goal for this contract is 15 percent. If the prime Offeror is DMBE SWAM certified, they will receive full credit for planned involvement.

Tab 4 Contact Person – The primary Offeror must identify the name, telephone number and e-mail address for the contact person who will be responsible for coordinating the efforts and personnel of all parties and/or subcontractor involved in the proposal.

Tab 5 Staffing and Pricing Plan – Offerors shall identify all staff positions by person and **actual** hourly rates (base rate, overhead and profit listed separately along with the total rate) in Attachment D - Price Schedule for the 12 potential services described in the Statement of Needs, and listed pursuant to Tab 2 to be fully loaded with all direct salaries and general overhead. Final pricing/rates will be addressed in the negotiation phase. Transportation costs, travel, and per diem rates must not be included in determining the fixed billable hourly rates. Proposals must provide for a diversity of team members and hourly rates, given the varied nature of the potential work assignments under this contract.

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VI. EVALUATION AND AWARD CRITERIA

A. EVALUATION CRITERIA - Multiple Offerors will be qualified and selected by DRPT's Selection Committee based on the following weighted criteria:

<u>FOR SERVICES</u>	<u>POINT VALUE</u>
1. Project management and communication experience and/or quality of previous project management services rendered (including ability to complete task orders on time and within budget, proper invoicing, and Quality Assurance / Quality Control procedures)	10 points
2. Experience with development of major capital transit projects, NEPA, multimodal corridor studies, and transit operations planning and analysis	10 points
3. Experience with regional and statewide transit and TDM planning, performance measurement, and transportation/land use planning	10 points
4. Qualifications and availability of proposed staff and resources to perform potential tasks	30 points
5. Experience with public outreach, marketing, and training	10 points
6. Commitment to DMBE SWAM Utilization	20 points
7. Price	10 points
Total Points	<hr/> 100 points

B AWARD TO MULTIPLE OFFERORS - DRPT reserves the right to make multiple awards as a result of this solicitation. Selection shall be made of multiple Offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation criteria included in the RFP. Negotiations shall be conducted with the Offerors selected. After negotiations have been conducted with each Offeror selected, the agency shall select the Offerors, which, in its opinion, have made the best proposal and shall award the contract to those Offerors. Should DRPT determine in writing and in its sole discretion that only one Offeror is fully qualified, or that one Offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Offeror.

C. AWARD DOCUMENTS AND CANCELLATION - The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation and of the Offeror's proposal as negotiated. In the event there is a conflict between the Offeror's proposal and the requirements, terms, and conditions of the solicitation, the requirements, terms, and conditions of the solicitation shall apply.

DRPT may cancel this RFP or reject proposals at any time prior to an award and is not required to furnish a statement of the reasons why a particular proposal was not deemed to be the most advantageous. (*Code of Virginia* § 2.2-4359(D).)

D. DELAYS IN AWARD: Delays in award of a contract beyond the anticipated starting date may result in a change in the contract period indicated in the solicitation. If this situation occurs, DRPT reserves the right to award a contract covering the period equal to or less than the initial term indicated in the solicitation.

E. PROTEST OF AWARD: An Offeror wishing to protest an award or a decision to award a contract must submit a written protest to the DRPT Purchasing Division, 600 East Main Street, Suite 2102, Richmond, Virginia 23219, no later than 10 days after public notice of award or announcement of the decision to award, whichever occurs first. The public notice will be in the area designated for solicitation/proposal and award notices. The protest must include the basis for the protest and the relief sought. Within 10 days after receipt of the protest, the Chief Financial Officer (CFO) will issue a written decision stating the reasons for the action taken. This decision is final unless within 10 days after receipt of such decision, the Offeror institutes legal action as provided in the *Code of Virginia*.

VII. REPORTING AND DELIVERY REQUIREMENTS

A. TASK ORDERS - Work associated with this contract must be conducted within an approved task order for which a purchase order will be issued and authorized by the DRPT Procurement Manager. No work is authorized to begin until a purchase order has been issued through eVA. The Offeror and DRPT are expected to negotiate the scope, budget, schedule and deliverables for each task and the manner in which payment will be made. The payment method must be agreed to and documented within the task order. The Offeror is fully expected to strictly adhere to the mutually agreed upon levels of effort and costs and complete the scope of work within the agreed upon budget and schedule. The Offeror will not be compensated for unauthorized work performed outside the approved scope of work.

- a. Fully loaded fixed hourly rates proposed and accepted via the Offeror initial response to the RFP and included in any negotiated Offeror responses may be used in individual task orders; however, the total quantity of hours, the job category, and the related project work plans for any work efforts may be subject to negotiations.
- b. Once fixed price task order project work plans are approved by DRPT, a task order may be issued to the selected Offeror specifying the maximum hours allowed by job category.
- c. To provide the most flexibility in work assignments, task orders may be issued as fixed price task orders or time and materials (fixed billable hourly rates) task orders. Task orders may have a combination of attributes listed above.

B. TASK ORDER SCHEDULE - The Offeror is required to develop a detailed task schedule as part of the task order. Once fixed priced task order activities have been defined at the time of task order initiation, their relationships shall be identified, start and end dates set, and budget controls established. At the sole discretion of DRPT, the task order completion date may be extended past the originally agreed upon completion date. Extension requests must be sent to the DRPT Procurement Manager and Program Manager no later than 30 days before the original completion date.

C. PROGRESS REPORTS – Offerors must meet all due dates on all tasks assigned. To provide feedback to DRPT concerning this requirement, the Offeror shall submit monthly progress reports providing detailed information on the status of the work effort on each of the various project tasks. The progress reports shall include total authorized funds and expended funds to date. It shall summarize all work efforts in the reporting period including personnel and hourly utilization. It shall also discuss any anticipated difficulties and proposed resolution.

D. SWAM AND OTHER REPORTING REQUIREMENTS – See Attachment B - Special Terms and Conditions for additional reporting requirements.

E. MEETINGS AND REVIEWS - DRPT may hold an initial conference with the Offeror at a place and time selected by DRPT for the purpose of reviewing the Offeror’s schedules, procedures, methods, and to clarify any ambiguities that may then exist. The Offeror’s Principal Officer and others requested by DRPT shall attend the conference. DRPT may request additional reviews during the contract period to evaluate vendor performance and provide feedback.

VIII. OPTIONAL PRE-PROPOSAL CONFERENCE - There will be an optional pre-proposal conference for this RFP on **April 9, 2013 at 10:00 a.m.** in the Main Street Centre building located at 600 E. Main Street, 1st Floor, Richmond, Virginia 23219, Conference Room 101. The purpose of this conference is to allow potential Offerors an opportunity to present questions and obtain clarification relative to any facet of this solicitation. The telephone number for directions to the conference location is 804-786-4440. While firms are not required to attend this pre-proposal conference in order to submit a response to this solicitation, attendance is strongly recommended.

Any changes resulting from this conference will be issued as a written addendum to the RFP.

IX. REQUIRED GENERAL TERMS AND CONDITIONS - Please see Attachment A - Required General Terms and Conditions.

X. SPECIAL TERMS AND CONDITIONS - Please see Attachment B - Special Terms and Conditions.

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Attachment A

REQUIRED GENERAL TERMS AND CONDITIONS

1. VENDORS MANUAL: This solicitation is subject to the provisions of the Commonwealth of Virginia's *Vendors Manual* and any changes or revisions thereto, which are hereby incorporated into this contract in their entirety. The procedure for filing contractual claims is in section 7.19 of the *Vendors Manual*. A copy of the manual is normally available for review at the purchasing office and is accessible on the Internet at www.eva.virginia.gov under Vendors Manual on the vendors tab.

2. APPLICABLE LAWS AND COURTS: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation concerning it shall be brought in the courts of the Commonwealth. The agency and the Offeror are encouraged to resolve any issues in controversy arising from the award of the contract or any contractual dispute using Alternative Dispute Resolution (ADR) procedures (*Code of Virginia*, § 2.2-4366). ADR procedures are described in Chapter 9 of the *Vendors Manual*. The Offeror shall comply with applicable federal, state and local laws, rules and regulations.

3. ANTI-DISCRIMINATION: By submitting their proposals, Offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans with Disabilities Act and § 2.2-4311 of the Virginia Public Procurement Act (VPPA). If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided. However, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body (*Code of Virginia* § 2.2-4343.1 (E)).

In every contract over \$10,000 the provisions in A and B below apply:

A. During the performance of this contract, the Offeror agrees as follows:

1. The Offeror will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona-fide occupational qualification reasonably necessary to the normal operation of the Offeror. The Offeror agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
2. The Offeror, in all solicitations or advertisements for employees placed by or on behalf of the Offeror, will state that such Offeror is an equal opportunity employer.
3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.

B. The Offeror will include the provisions of A. above in every subcontract or purchase order over \$10,000 so that the provisions will be binding upon each subcontractor or vendor.

4. ETHICS IN PUBLIC CONTRACTING: By submitting their proposals, Offerors certify their proposals are made without collusion or fraud and they have not offered or received any kickbacks or inducements from any other Offeror, supplier, manufacturer or subcontractor in connection with their proposal, and they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

5. IMMIGRATION REFORM AND CONTROL ACT OF 1986: By entering into a written contract with the Department of Rail and Public Transportation (DRPT), the Offeror certifies that the Offeror does not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.

6. DEBARMENT STATUS: By submitting their proposals, Offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting proposals on contracts for the type of services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

7. ANTITRUST: By entering into a contract, the Offeror conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of the action it may now or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular services purchased or acquired by the Commonwealth of Virginia under said contract.

8. MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS: Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, DRPT reserves the right to decide, on a case by case basis, in its sole discretion, whether or not to reject such a proposal.

9. CLARIFICATION OF TERMS: If any prospective Offeror has questions about the specifications or other solicitation documents, the prospective Offeror must contact the DRPT Procurement Manager whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the DRPT Procurement Manager.

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10. PAYMENT:

A. To Prime Offeror:

1. Invoices for items ordered, delivered and accepted by DRPT shall be submitted monthly by the Offeror directly to the payment address shown on the purchase order. All invoices shall show the DRPT contract number, eVA purchase request number; social security number (for individual Offerors) or the federal employer identification number (for proprietorships, partnerships, and corporations), a detailed list of any products delivered, and all applicable tasks for which payment is being requested.

2. Payment will be made (in accordance with the Virginia Prompt Payment Act) within 30 days after receipt of valid invoice and verification of satisfactory goods received and/or completion of work. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days. Final invoices shall be submitted within 90 days after the end date of the task order. As negotiated within the contract, payments may be reduced for retainage until the satisfactory completion of each task.

3. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the Offeror at the contract price, regardless of which public agency is being billed.

4. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.

5. Unreasonable Charges – Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, Offerors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, DRPT shall promptly notify the Offeror, in writing, as to those charges which it considers unreasonable and the basis for the determination. An Offeror may not institute legal action unless a settlement cannot be reached within 30 days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (*Code of Virginia*, § 2.2-4363).

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B. To Subcontractors:

1. An Offeror awarded a contract under this solicitation is hereby obligated:
 - a. To pay subcontractors within seven days of the Offeror's receipt of payment from DRPT for the proportionate share of the payment received for work performed by the subcontractors under the contract; or
 - b. To notify DRPT and the subcontractors, in writing, of the Offeror's intention to withhold payment and the reason.
2. The Offeror is obligated to pay subcontractors interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the Offeror that remain unpaid seven days following receipt of payment from DRPT, except for amounts withheld as stated in (b) above. The date of mailing of any payment by U.S. Mail is deemed to be the payment date to the addressee. These provisions apply to each subcontractor performing under the primary contract. An Offeror's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of DRPT.
3. Each prime Offeror who wins an award in which provision of a SWAM procurement plan is a condition of award, shall deliver to DRPT, on or before request for final payment, evidence and certification of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the SWAM procurement plan. Final payment under the contract in question may be withheld until such certification is delivered and, if necessary, confirmed by DRPT or other appropriate penalties may be assessed in lieu of withholding such payment.
4. DRPT encourages Offerors and subcontractors to accept electronic and credit card payments.

11. PRECEDENCE OF TERMS: Paragraphs 1-10 of these General Terms and Conditions shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

12. QUALIFICATIONS OF OFFERORS: DRPT may make such reasonable investigations as deemed proper and necessary to determine the ability of the Offeror to perform the services, and the Offeror shall furnish to DRPT all such information and data for this purpose as may be requested. DRPT reserves the right to inspect the Offeror's physical facilities prior to award to satisfy questions regarding the Offeror's capabilities. DRPT further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such Offeror fails to satisfy DRPT that such Offeror is properly qualified to carry out the obligations of the contract and to provide the services contemplated therein.

13. TESTING AND INSPECTION: DRPT reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.

14. ASSIGNMENT OF CONTRACT: A contract shall not be assignable by the Offeror in whole or in part without the written consent of DRPT.

15. CHANGES TO THE CONTRACT: Changes can be made to the contract in any one of the following ways:

- A. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
- B. DRPT may order changes within the general scope of the contract at any time by written notice to the Offeror. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment and the place of delivery or installation. The Offeror shall comply with the notice upon receipt. The Offeror shall be compensated for any additional costs incurred as the result of such order and shall give DRPT a credit for any savings. Said compensation shall be determined by one of the following methods:
1. By mutual agreement between the parties in writing; or
 2. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the Offeror accounts for the number of units of work performed, subject to DRPT's right to audit the Offeror's records and/or to determine the correct number of units independently; or
 3. By ordering the Offeror to proceed with the work and to keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The Offeror shall present DRPT with all vouchers and records of expenses incurred and savings realized. DRPT shall have the right to audit the records of the Offeror as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to DRPT within 30 days from the date of receipt of the written order from DRPT. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia's *Vendors Manual*. Neither the existence of a claim or a dispute resolution process, litigation or any other provision of this contract shall excuse the Offeror from promptly complying with the changes ordered by DRPT with the performance of the contract generally.

16. DEFAULT: In case of failure to deliver goods or services in accordance with the contract terms and conditions, DRPT, after due oral or written notice, may procure them from other sources and hold the Offeror responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which DRPT may have.

17. INSURANCE: By signing and submitting a proposal under this solicitation, the Offeror certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. The Offeror further certifies that the Offeror and any subcontractor will maintain this insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

MINIMUM INSURANCE COVERAGES AND LIMITS REQUIRED:

- A. Worker's Compensation: Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Offerors who fail to notify DRPT of increases in the number of employees that change their workers' compensation requirements under the *Code of Virginia* during the course of the contract shall be in noncompliance with the contract.
- B. Employer's Liability: \$100,000.

- C. Commercial General Liability: \$1,000,000 per occurrence. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.
- D. Automobile Liability - \$1,000,000 per occurrence. (Only used if motor vehicle is to be used in the contract.)

18. ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract as a result of this solicitation, DRPT will publicly post such notice on the Department of General Services/Department of Purchases and Supply (DGS/DPS) eVA Virginia Business Opportunities (VBO) website (www.eva.virginia.gov) and the DRPT website (www.drpt.virginia.gov) for a minimum of 10 days.

19. DRUG-FREE WORKPLACE: During the performance of this contract, the Offeror agrees to (i) provide a drug-free workplace for the Offeror's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Offeror's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Offeror that the Offeror maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each Subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to an Offeror, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

20. NON-DISCRIMINATION OF OFFERORS: An Offeror, or Offeror shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the Offeror employs ex-offenders unless DRPT has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

21. eVA Business-To-Government Vendor Registration: The eVA Internet electronic procurement solution, website portal www.eVA.virginia.gov streamlines and automates government purchasing activities in the Commonwealth. The eVA portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to provide goods and/or services to DRPT shall participate in the eVA Internet e-procurement solution either through the eVA Basic Vendor Registration Service or eVA Premium Vendor Registration Service. All Offerors must register in eVA and pay the Vendor Transaction Fees specified below; failure to register will result in the proposal being rejected.

Effective July 1, 2011, vendor registration and registration-renewal fees have been discontinued. Registration options are as follows:

- a. eVA Basic Vendor Registration Service: eVA Basic Vendor Registration Service includes electronic order receipt, vendor catalog posting, on-line registration, electronic bidding, and

the ability to research historical procurement data available in the eVA purchase transaction data warehouse.

- b. eVA Premium Vendor Registration Service: eVA Premium Vendor Registration Service includes all benefits of the eVA Basic Vendor Registration Service plus automatic email or fax notification of solicitations and amendments.

Vendor transaction fees are determined by the date the original purchase order is issued and are as follows:

- a. For orders issued prior to August 16, 2006, the Vendor Transaction Fee is one percent, capped at a maximum of \$500 per order,
- b. For orders issued August 16, 2006 through June 30, 2011, the Vendor Transaction Fee is:
 - (i) DMBE-certified Small Businesses: one percent, capped at \$500 per order.
 - (ii) Businesses that are not DMBE-certified Small Businesses: one percent capped at \$1,500 per order.
- c. For orders issued July 1, 2011 through June 30, 2013, the Vendor Transaction Fee is:
 - (i) DMBE-certified Small Businesses: 0.75 percent, capped at \$500 per order.
 - (ii) Businesses that are not DMBE-certified Small Businesses: 0.75 percent, capped at \$1,500 per order.
- d. For orders issued July 1, 2013 and after, the Vendor Transaction Fee is:
 - (i) DMBE-certified Small Businesses: one percent, capped at \$500 per order.
 - (ii) Businesses that are not DMBE-certified Small Businesses: one percent, capped at \$1,500 per order.

The specified vendor transaction fee will be invoiced, by the Commonwealth of Virginia Department of General Services, approximately 30 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

22. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the agency shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

23. SET-ASIDES: This solicitation is set-aside for DMBE-certified small business participation only when designated "SET-ASIDE FOR SMALL BUSINESSES" in the solicitation. DMBE certified small businesses are those businesses that hold current small business certification from DMBE. This shall not exclude DMBE-certified women- and minority-owned businesses when they have received DMBE small business certification. For purposes of award, Offerors shall be deemed small businesses if and only if they are certified as such by DMBE on the due date for receipt of proposals.

24. BID PRICE CURRENCY: Unless stated otherwise in the solicitation, Offerors shall state offer prices in US dollars.

25. AUTHORIZATION TO CONDUCT BUSINESS IN THE COMMONWEALTH: An Offeror organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the *Code of Virginia* or as otherwise required by law. Any business entity described above that enters into a contract with a public body pursuant to the Virginia Public Procurement Act shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1

or Title 50, to be revoked or cancelled at any time during the term of the contract. A public body may void any contract with a business entity if the business entity fails to remain in compliance with the provisions of this section.

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ATTACHMENT B

SPECIAL TERMS AND CONDITIONS

1. CHANGES TO THE RATES ON THE PRICE SCHEDULE: Rates may be revised by mutual agreement of the Department of Rail and Public Transportation (DRPT) and the Offeror 60 days prior to the renewal periods starting date. If DRPT elects to exercise the option to revise rates for the two one-year renewal periods the contract prices for the increase shall not exceed the contract prices stated for the third year of the original contract increased/decreased by more than the percentage increase/decrease of the Services Category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest 12 months for which statistics are available. The Offeror shall convey in writing its request to raise/lower prices to DRPT no later than 60 days prior to the renewal periods starting date. Applications for price increases shall be substantiated in writing with the request. DRPT shall have sole discretion in its decision to allow price increases.

2. RENEWAL OF CONTRACT: This contract may be renewed upon written agreement of both parties for two successive one-year periods, under the terms of the current contract, at approximately 60 days prior to the expiration.

3. CANCELLATION OF CONTRACT: DRPT reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the Offeror. After the initial three-year contract period, the resulting contract may be terminated by either party, without penalty, upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the Offeror of the obligation to deliver any outstanding orders issued prior to the effective date of cancellation.

4. AUDIT: The Offeror shall retain all books, records, and other documents relative to this contract for five years after final payment, or until audited by the Commonwealth of Virginia, whichever is sooner. DRPT, its authorized agents, and/or state auditors shall have full access to and the right to examine any of said materials during said period.

5. KEY PERSONNEL/SUBCONTRACTOR: People identified in terms of this RFP as “key personnel” who will work on the service contract, must continue to work on this contract for its duration so long as they continue to be employed by the Offeror unless removed from work on the contract with the consent of DRPT. DRPT reserves the right to approve any personnel or subcontractor proposed for the work described in this RFP and/or any subsequent purchase order resulting from this RFP. DRPT will provide written justification to the Offeror when approval is not granted. DRPT will provide the Offeror with copies of all written approvals.

6. PRIME OFFEROR RESPONSIBILITIES FOR SUBCONTRACTS: No portion of the work shall be subcontracted with a subcontractor not already included on the contract without a prior request from the Offeror and written consent of the DRPT Procurement Manager. In the event that the Offeror desires to subcontract some part of the work specified herein, the Offeror shall furnish the Procurement Manager and Program Manager with the names, qualifications and experience of their proposed subcontractors. The Offeror shall, however, remain fully liable and responsible for the work to be done by its subcontractors and shall assure compliance with all requirements of the contract.

7. ADDITIONAL USERS OF CONTRACT: This procurement is being conducted on behalf of all agencies/facilities within the Transportation Secretariat and on behalf of grantees of DRPT who are listed on Attachment F – Agencies Funded by DRPT. Grantees may be added or deleted at anytime during the period of the contract only by written contract modification issued by DRPT. Such modification shall name the specific grantee added or deleted and the effective date. The Offeror shall not honor an order citing the resulting contract unless the ordering entity has been added by written contract modification.

8. REPORT OF ORDERS RECEIVED FROM ADDITIONAL USERS: The Offeror shall provide Attachment G - Report of Orders Received from Additional Users to DRPT quarterly. This report shall reflect orders received from additional users on the contract for the respective quarter. The Offeror must remit the report within 15 days after the end of each quarterly calendar reporting period even if there was no activity.

9. SMALL BUSINESS SUBCONTRACTING PLAN AND EVIDENCE OF COMPLIANCE:

Each prime Offeror who wins an award in which provision of a small business subcontracting plan is a condition of the award, shall deliver to DRPT on a monthly basis, evidence of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the small business subcontracting plan. The Offeror shall use Attachment E - Monthly SWAM Report or other form approved by DRPT to report amounts paid to SWAM businesses on a monthly basis as well as paid to date. Said attachment or other approved form shall be submitted by the 15th of the month for the prior month to Ashley Nusbaum, Purchasing Manager, at ashley.nusbaum@drpt.virginia.gov. When such business has been subcontracted to these firms and upon completion of the contract, the Offeror agrees to furnish the purchasing office at a minimum the following information: name of firm with the DMBE certification number, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product or service provided. Payment may be withheld until compliance with the plan is received and confirmed by the agency or institution. DRPT reserves the right to pursue other appropriate remedies to include, but not be limited to, termination for default.

10. DISADVANTAGED BUSINESS ENTERPRISES (DBE) SUBCONTRACTOR REPORT: The Offeror shall provide to DRPT quarterly Attachment H - DBE Subcontractor Report. This report shall reflect DBE related information on subcontractors utilized on the contract. The Offeror must remit the report within 15 days after the end of each quarterly calendar reporting period.

11. APPROPRIATE LICENSURE, CERTIFICATIONS, AND/OR CREDENTIALS: The Offeror must submit copies of appropriate licensure, certifications, and/or credentials subsequently upon award and as requested by DRPT.

12. CLAIMS: The Offeror shall be responsible for all damage and expense to person or property caused by its negligent activities including, without limitation, those which it chooses to deliver through its subcontractors, agents or employees, in connection with the services required under this Agreement. Further, it is expressly understood that the Offeror shall defend and hold harmless the Commonwealth of Virginia, DRPT, its officers, agents, employees and any other authorized users from and against any and all damages, claims, suits, judgments, expenses, actions, and costs of every name and description caused by any negligent act or omission in the performance by the Offeror, including, without limitation, those which it chooses to deliver through its subcontractors, agents or employees, of the services under this Agreement.

13. CONTRACTUAL CLAIMS AND DISPUTES: Contractual claims arising after final payment shall be governed by § 2.2-4363(A) of the *Code of Virginia*. Claims shall be submitted to the Director of DRPT who will render a decision within 30 days. Contractual disputes arising during the course of performance shall be submitted to the CFO of DRPT who will make a decision in 30 working days, which will be final. Vendors will not be precluded from filing a claim at the conclusion of performance as a result of the decision made during the course of contract performance.

14. ADVERTISEMENT: In the event a contract is awarded for supplies, equipment, or services resulting from this proposal, no indication of such sales or services to DRPT will be used in product literature. The Offeror shall not state in any of its advertising or product literature that DRPT has purchased or uses any of its products or services, and the Offeror shall not include DRPT in any client list in advertising and promotional materials.

15. INTELLECTUAL PROPERTY RIGHTS: DRPT shall have exclusive rights to all data and intellectual property generated in the course of the project. Intellectual property includes all inventions subject to the United States (U.S.) Patent System. This shall be inclusive but not limited to, new processes, materials, compounds and chemicals, and all creations subject to the U.S. Copyright Act of 1976, as amended, including but not limited to printed material, software, drawings, blueprints, and compilations such as electronic databases. Furthermore, DRPT shall have all rights, title, and interest in or to any invention reduced to practice pursuant to a resulting contract. Proposals shall recognize the requirements of public sector agencies and of public policy generally, including the Freedom of Information Act, State statutes and agency rules on release of public records, and data confidentiality.

All copyright material created pursuant to this contract shall be considered work made for hire and shall belong exclusively to DRPT. Neither DRPT, nor the Offeror intends that any copyright material created pursuant to the contract, together with any other copyright material with which it may be combined or used, be a “joint work” under the copyright laws. In the case that either in whole or part of any such copyright material not be deemed work made for hire, or is deemed a joint work, then Offeror agrees to assign and does hereby irrevocably assign its copyright interest therein to DRPT. DRPT may reasonably request documents required for the purpose of acknowledging or implementing such assignment.

The Offeror warrants that no individual, other than regular employees and subcontractors of the Offeror, DRPT regular employees, agents, or assigns or additional users, while working within the scope of their employment or contracted duty, shall participate in the creation of any intellectual property pursuant to the contract. If this situation should arise, such individual and his or her employer, if any, must agree in writing to assign the intellectual property rights, as described herein, for work performed under this contract to DRPT either directly or through the Offeror.

DRPT shall have all rights, title and interest in or to any invention reduced to practice pursuant to this contract. The Offeror shall not patent any invention conceived in the course of performing this contract. The Offeror hereby agrees that, notwithstanding anything else in this contract, in the event of any breach of this contract by DRPT, the remedies of the Offeror shall not include any right to rescind or otherwise revoke or invalidate the provisions of this section. Similarly, no termination of this contract by DRPT shall have the effect of rescinding the provisions of this section.

DRPT is only entitled to the intellectual property rights for deliverables and associated documentation produced by the Offeror for which DRPT has fully paid the Offeror as the contract is completed or as the contract is terminated for any reason.

Copyright or pre-existing work of the Offeror shall remain the property of the Offeror. The Offeror grants to DRPT a perpetual, royalty-free, irrevocable, worldwide, non-exclusive license to use such pre-existing work in connection with exercising the rights of ownership granted to DRPT pursuant to this section.

Notwithstanding anything herein to the contrary, DRPT acknowledges that as part of the Offeror’s provision of services hereunder, the Offeror may license third-party software or acquire proprietary works of authorship (collectively referred to as “products”), which have been developed by third parties. DRPT must approve the third-party license agreements and the acquisition of these third-party products prior to their use by the Offeror and DRPT agrees that these products will remain the sole property of the third party.

The Offeror shall grant DRPT license to use all software developed by the Offeror under this contract in other applications within Virginia as DRPT sees fit. Should the Offeror desire to re-use software developed under this contract for other projects (both DRPT contracts and others), DRPT must be notified in writing 60 days prior to such use. Furthermore, DRPT shall be justly compensated for the re-use of such software.

Compensation shall be negotiated and agreed upon prior to DRPT releasing software rights. Typically, DRPT prefers increased software capabilities and/or functionality instead of monetary compensation.

16. PATENT RIGHTS: If any invention, improvement or discovery of the Offeror or any of its subcontractors is conceived or first actually reduced to practice in the course of or under this project which invention, improvement or discovery may be patentable under the Patent Laws of the United States of America or any foreign country, the Offeror shall immediately notify DRPT and provide a detailed report. The rights and responsibilities of the Offeror, its subcontractors, and DRPT with respect to such invention will be determined in accordance with applicable Federal laws, regulations, policies, and waivers thereof.

17. PROTECTION OF PERSONS AND PROPERTY:

- A. The Offeror expressly undertakes, both directly and through its subcontractors, to take every precaution at all times for the protection of persons and property which may come on the building site or be affected by the Offeror's operation in connection with the work.
- B. The Offeror shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.
- C. The provisions of all rules and regulations governing safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia, issued by the Department of Labor and Industry under Title 40.1 of the *Code of Virginia* shall apply to all work under this contract.
- D. The Offeror shall continuously maintain adequate protection of all work from damage and shall protect the owner's property from injury or loss arising in connection with this contract. The Offeror should make good any such damage, injury, or loss, except such as may be directly due to errors in the contract documents or caused by agents or employees of the owner. The Offeror shall adequately protect adjacent property to prevent any damage to it or loss of use and enjoyment by its owners. The Offeror shall provide and maintain all passageways, guard fences, lights, and other facilities for protection required by public authorities, local conditions, any of the contract documents or erected for the fulfillment of his obligations for the protection of persons and property.
- E. In an emergency affecting the safety or life of persons or of the work, or of the adjoining property, the Offeror, without special instruction or authorization from the owner, shall act, at its discretion, to prevent such threatened loss or injury. Also, should the Offeror, to prevent threatened loss or injury, be instructed or authorized to act by the owner, the Offeror shall so act immediately, without appeal. Any additional compensation or extension of time claimed by the Offeror on account of any emergency work shall be determined as provided by Attachment A – Required General Terms and Conditions.

18. MANNER OF CONDUCTING WORK AT JOB SITE: All work shall be performed according to the industry standards and to the complete satisfaction of DRPT.

- A. The Offeror shall be responsible for the conduct of all personnel while at the job site. All personnel involved with the work shall obey all rules and regulations of DRPT.
- B. Sexual harassment of any employee, DRPT or Offeror, will not be tolerated and is to be reported immediately to the DRPT Program Manager.

All work to be conducted by the Offeror in any facility shall be coordinated in advance with the DRPT Program Manager. If applicable, the Offeror shall coordinate his/her work efforts with other existing

Offeror/agency work efforts through the DRPT Program Manager. All Offeror work shall take place on non-holiday weekdays between the hours of 8:00 A.M. and 5:00 P.M, unless otherwise approved by the DRPT Program Manager.

19. POLICY OF EQUAL EMPLOYMENT: DRPT is an equal opportunity/affirmative action employer. DRPT encourages all vendors to establish and maintain a policy to ensure equal opportunity employment.

20. STATE CORPORATION COMMISSION IDENTIFICATION NUMBER: Pursuant to Code of Virginia, §2.2-4311.2 subsection B, an offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is required to include in its proposal the identification number issued to it by the State Corporation Commission (SCC). Any offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law is required to include in its proposal a statement describing why the offeror is not required to be so authorized. Indicate the above information Attachment I – SCC Form. Offeror agrees that the process by which compliance with Titles 13.1 and 50 is checked during the solicitation stage (including without limitation Attachment I - SCC Form) is streamlined and not definitive, and the Commonwealth’s use and acceptance of such form, or its acceptance of Offeror’s statement describing why the Offeror was not legally required to be authorized to transact business in the Commonwealth, shall not be conclusive of the issue and shall not be relied upon by the Offeror as demonstrating compliance.

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ATTACHMENT C

DEPARTMENT OF MINORITY BUSINESS ENTERPRISE (DMBE) SMALL BUSINESS SUBCONTRACTING PLAN

Definitions

Small Business: Small business means a business, independently owned or operated by one or more persons who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. Note: This shall not exclude DMBE-certified women-owned and DMBE-certified minority-owned businesses when they have received DMBE small business certification.

Women-Owned Business: Women-owned business means a business concern that is at least 51 percent owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, and both the management and daily business operations are controlled by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law.

Minority-Owned Business: Minority-owned business means a business concern that is at least 51 percent owned by one or more minority individuals or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

All small businesses must be certified by DMBE by the due date of the solicitation to participate in the Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses (SWAM) program. Certification applications are available through DMBE online at www.dmbv.virginia.gov (Customer Service).

Offeror Name: _____

Preparer Name: _____ **Date:** _____

Instructions: (Failure to complete and submit this form may result in your proposal not being considered.)

- A. If the Offeror is certified by DMBE as a small business, complete only Section A of this form. This shall include DMBE-certified women-owned and DMBE-certified minority-owned businesses when they have received DMBE small business certification.
- B. If the Offeror is not certified by DMBE as a small business and plans to subcontract part of this contract with a DMBE-certified business, complete only Section B of this form.
- C. If the Offeror is not certified by DMBE as a small business and cannot identify any subcontracting opportunities to subcontract part of this contract with a DMBE-certified business, only provide the information requested in Section C of this form.

Section A

If the Offeror is certified by DMBE, the Offeror is certified as a (check only one below):

_____ Small Business

_____ Small and Women-owned Business

_____ Small and Minority-owned Business

Certification Number: _____ Certification Date: _____

Section B

Populate the table below to show the firm's plans for utilization of DMBE-certified small businesses in the performance of this contract. This shall include DMBE-certified women-owned and DMBE-certified minority-owned businesses that meet the small business definition and have received the DMBE small business certification. Include plans to utilize small businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.

B. Plans for Utilization of DMBE-Certified Small Businesses for this Procurement

Small Business Name & Address DMBE Certificate #	Status if Small Business is also: Women (W), Minority (M)	Contact Person, Telephone & Email	Type of Goods and/or Services	Planned Involvement During Initial Period of the Contract	Planned Contract Dollars During Initial Period of the Contract
Totals \$					

Section C

Respond to how the Offeror has met or exceeded **at least two** of the following indicators within the past 24 months. The response may include any good faith efforts made regarding this procurement.

C. **Good Faith Effort Indicators by the Offeror**

1. Identify areas of work the business has subcontracted to DMBE-certified small businesses for other contracts. Include company names, dates, dollar amounts, and percentages on a per contract basis.
2. List research efforts conducted by the business in the past to locate DMBE-certified small businesses by advertising in publications or in the classified section of the newspaper where small businesses are likely to see it. List specific publications and dates.
3. List small business outreach meetings, conferences, or workshops conducted by the firm to locate DMBE-certified small businesses—including the dates, participation numbers, and results.
4. Provide documented correspondence (i.e., certified mail, email, receipt of fax transmissions, etc.) to small businesses from the lists provided by DMBE and other outreach agencies and organizations which indicate the solicitation of such for utilization of subcontracting opportunities on other contracts for which the business has competed.
5. List areas of work which the business has subcontracted with DMBE-certified small businesses for upcoming contracts—including the name of the business, certification number, dates, dollar amounts, and percentages on a per contract basis.
6. Provide documentation of any assistance offered to interested small businesses in obtaining bonds, lines of credit, and/or insurance for any present or past contracts the business has in place.
7. Provide documentation of follow-up on initial contacts with DMBE-certified small businesses (e.g., telephone call logs, emails, certified letters, etc.). Be sure to list the small business name and dates of contact.

Contract/Project Manager: Provides direction and management for small to large projects and ensures on-schedule completion within scope and budget. Responsible for preparing proposals to client's scope of work, management and performance of the project. Plans and defines project goals and devises methods to accomplish them. Requires at least 12-20 years of experience. Professional Planning or Professional Engineering registration generally is required at this level.

Principal Planner: Determines methods and solutions for complex planning problems and selects the most efficient and economical manner in meeting objectives. Applies advanced planning techniques and analyses within a discipline. As a qualified professional may serve as a technical task manager. Requires at least 10-18 years of experience.

Senior Planner: Completes a wide variety of planning assignments, applying specialized techniques and analyses with a discipline. Is proficient in the use of most planning theories and practices. Has 10-12 years of experience.

Planner: Performs conventional and moderately complex planning assignments applying a variety of planning analyses within a discipline. Has 5-8 years of experience in planning or landscape architecture.

Senior Environmental Scientist: Provides direction of specialized environmental and planning services as well as regulatory support, environmental planning, design, and mitigation management. This position requires 5-7 years of experience.

Environmental Scientist: Has knowledge of state and federal environmental regulations, permitting, and the ability to prepare reports as required for regulatory compliance. This position requires 4-6 years of experience.

Senior Financial Analyst: Under direction, performs a variety of professional financial forecasting and analysis work of a specialized or complex nature. Develops and analyzes long-range financial forecasts, capital cost estimates, funding strategies, profitability analysis, and life-cycle cost analysis for transit operations. This position requires 4-6 years of experience.

GIS Manager: Performs a variety of mapping and graphic tasks by applying standard GIS techniques. Requires specialized and continuing education in GIS upgrades. This position requires 5-7 years of experience.

Cultural Resources Principal Investigator: Develops research designs, oversees fieldwork and laboratory analyses meets or exceeds the requirements for professional

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ATTACHMENT F

Agencies Funded by DRPT

A Grace Place Adult Care Center
Accomack Northampton TDC
Adult Care Service
Adult Day Care of Martinsville and Henry Counties
Alexandria Transit
American Emergency Vehicles
American Red Cross
Appalachian Agency for Senior Citizens
ARC of Greater Prince William
Arc of the Virginia Peninsula
Arlington County
Bay Aging, Inc.
Bedford County
Beth Shalom Home
Blacksburg Transit
Blue Ridge Opportunity Services
Bon Secours Senior Health
Bristol Virginia Transit
Buchanan County Transportation
CAPUP
Central Shenandoah Planning District Commission
Central Virginia Area Agency on Aging, Inc.
Chesapeake Service Systems
Chesterfield Community Services Board
Chesterfield County
City of Alexandria
City of Bristol, Tennessee
City of Charlottesville
City of Danville
City of Fairfax
City of Falls Church
City of Fredericksburg
City of Harrisonburg
City of Kingsport
City of Lynchburg
City of Martinsville
City of Radford
City of Richmond
City of Staunton
City of Virginia Beach
City of Williamsburg
Community Association for Rural Transportation, Inc.
Community Transportation Association of Virginia
Crater District Area Agency On Aging /FGP
Crater Planning District Commission
Crossroads Community Services
Cumberland County
Daily Planet Health Care for Homeless
Danville City Parks and Recreation Department
Danville-Pittsylvania Community Services
Dickenson County Transportation
Northern Virginia Regional Commission
PARC Workshop, Inc.
Peninsula Agency on Aging
Petersburg Area Transit
District III Public Transit
Dulles Area Transportation Association
Eastern Shore Community Services Board
ECHO.INC
ElderHomes Corporation
ESAAA/CAA
Essex County
Fairfax County
Farmville Area Bus
Friendship Industries, Inc.
George Washington Regional Commission
Giles Health & Family Center
Gloucester County
Goochland Fellowship and Family Service
Goodwill Industries of the Valleys
Grafton School, Inc.
Greater Lynchburg Transit Company
Greater Richmond Transit Company
Greater Roanoke Transit Company
Greene County
Greensville Adult Activity Services
Hampton Roads Planning District Commission
Hampton-Newport News Community Services Board
Hanover Community Services
Henrico Area MH/MR Services
Historic Triangle Senior Center
Hope House Foundation
Hopewell Redevelopment and Housing Authority
Intelligent Transportation Society of Virginia
James City County
JAUNT, Inc.
Jewish Community Center of Northern Virginia
Junction Center for Independent Living
Lake Country Area Agency on Aging
Loudoun County
Lynchburg Community Action Group, Inc.
Metropolitan Washington Airports Authority
Metropolitan Washington Council of Governments
Middle Peninsula Planning District Commission
Middle Peninsula-Northern Neck CSB
Montgomery County
Mount Rogers Community Services Board
Mountain Empire Older Citizens
New River Valley Community Services Board
New River Valley Planning District Commission
New River Valley Senior Services - Pulaski Area Transit
Northern Neck Planning District Commission
Northern Shenandoah Valley Regional Commission
Northern Virginia Transportation Commission
Northwestern Community Services Board
NuRide, Inc.
Sussex-Greensville-Emporia Adult Activity Services
Tazewell County
The Arc of Central Virginia
The Arc of Greater Prince William

Piedmont Community Services Board	The Arc of Harrisonburg/Rockingham
Pleasant View, Inc.	Thomas Jefferson Planning District Commission
Portco, Inc.	Town of Altavista
Potomac and Rappahannock Transportation Commission	Town of Ashland
Prince William County	Town of Blackstone
Quin Rivers Agency for Community Action, Inc.	Town of Bluefield - Graham Transit
Rappahannock Area Agency on Aging	Town of Chincoteague
Rappahannock Area Community Services Board	Town of Haymarket
Rappahannock-Rapidan Area Agency on Aging	Town of Herndon
Rappahannock-Rapidan Community Services Board	Town of Kenbridge
Rappahannock-Rapidan Planning District Commission	Town of Orange
Resort Area Transportation Management Association	Town of Purcellville
Richmond Area ARC	Town of South Hill
Richmond Community Action Program	Town of Victoria
Richmond Planning District Commission	Town of Warrenton
Richmond Redevelopment and Housing Authority	Town of West Point
Richmond Residential Services	Transportation District Commission of Hampton Roads
Ridefinders	Tyson's Transportation Association, Inc.
Roanoke County	UHSTS, Inc. - RADAR
Roanoke Valley-Alleghany Regional Commission	Valley Program for Aging Services, Inc.
Rockbridge Area Community Services Board	Vector Industries, Inc.
Rockbridge Area Occupational Center, Inc.	Virginia Port Authority
Rockbridge Area Transportation System, Inc.	Virginia Rail Policy Institute
Rockbridge County	Virginia Regional Transportation Association
Rockingham County	Virginia Transit Association
Russell County Public Transportation	Virginias Region 2000 Local Government Council
Senior Services of Southeastern Virginia	West Piedmont Planning District Commission
Shenandoah Area Agency on Aging, Inc.	Western Tidewater Community Services Board
Shen-Paco Industries, Inc.	Williamsburg Area Transit Authority
Southern Area Agency on Aging	Winchester Transit
Southside Community Services Board	Wise County
St. Joseph's Villa	Washington Metropolitan Area Transit Authority
Stepping Stones, Inc.	Washington Metropolitan Area Transit Commission
STEPS, Inc.	

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ATTACHMENT H

Disadvantaged Business Enterprises (DBE) Subcontractor Report

DBE SUBCONTRACTOR REPORT												
PRIME CONTRACTOR NAME												
PRIME CONTRACTOR TAX ID												
CONTACT NAME												
TITLE/POSITION												
CONTRACTOR ADDRESS												
CONTRACTOR PHONE NUMBER												
EMAIL												
PROJECT TITLE												
DBE AWARD/COMMITMENT												
PAYMENTS TO SUBCONTRACTORS												
MONTH/YEAR	DBE SUBCONTRACTOR NAME	DBE SUBCONTRACT TAX ID	DBE EVA#	DBE CONTRACT #	Black American	Hispanic American	Native American	Subcont. Asian American	Asian-Pacific American	Non-Minority Women	Other	Total DBE Payments
												-
												-
												-
												-
												-
												-
												-
												-
												-
												-
												-
												-
												-
												-
DBE SUBCONTRACTOR TOTALS												
												-

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ATTACHMENT I

State Corporation Commission Form

Virginia State Corporation Commission (SCC) registration information. The Offeror:

is a corporation or other business entity with the following SCC identification number: _____ -
OR-

is not a corporation, limited liability company, limited partnership, registered limited liability partnership, or business trust **-OR-**

is an out-of-state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting any employees or agents in Virginia who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the Offeror in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contracts by which such goods were sold and shipped into Virginia from Offeror's out-of-state location) **-OR-**

is an out-of-state business entity that is including with this proposal an opinion of legal counsel which accurately and completely discloses the undersigned Offeror's current contacts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of § 13.1-757 or other similar provisions in Titles 13.1 or 50 of the Code of Virginia.

****NOTE**** >> Check the following box if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact business in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number after the due date for proposals (the Commonwealth reserves the right to determine in its sole discretion whether to allow such waiver):

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ATTACHMENT J

FEDERAL TERMS AND CONDITIONS

1. ENERGY CONSERVATION REQUIREMENTS

42 U.S.C. §§ 6321 *et seq.*
49 C.F.R. pt 18

Energy Conservation - The Offeror agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

2. CLEAN WATER REQUIREMENTS

33 U.S.C. § 1251

Clean Water - (1) The Offeror agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§ 1251 *et seq.* The Offeror agrees to report each violation to the Department of Rail and Public Transportation (DRPT) Program Manager and understands and agrees that DRPT will, in turn, report each violation as required to assure notification to FTA and the appropriate Environmental Protection Agency (EPA) Regional Office. (2) The Offeror also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

3. LOBBYING

31 U.S.C. § 1352
49 C.F.R. pt. 19
49 C.F.R. pt. 20

- Lobbying Certification and Disclosure of Lobbying Activities for third party contractors are mandated by 31 U.S.C. § 1352(b)(5), as amended by § 10 of the Lobbying Disclosure Act of 1995, and (Department of Transportation) DOT implementing regulation, "New Restrictions on Lobbying," at 49 C.F.R. § 20.110(d)

- Language in Lobbying Certification is mandated by 49 C.F.R. pt. 19, Appendix A, Section 7, which provides that offerors file the certification required by 49 C.F.R. pt. 20, Appendix A.

Modifications have been made to the Lobbying Certification pursuant to Section 10 of the Lobbying Disclosure Act of 1995.

- Use of "Disclosure of Lobbying Activities," Standard Form-LLL set forth in Appendix B of 49 C.F.R. pt 20, as amended by "Government wide Guidance For New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96) is mandated by 49 C.F.R. pt. 20, Appendix A.

Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352, as amended by the Lobbying Disclosure Act of 1995, 2 U.S.C. §§ 1601, *et seq.* - Offerors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 C.F.R. pt. 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its

behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. § 1352. Such disclosures are forwarded from tier to tier up to the recipient.

APPENDIX A, 49 C.F.R. pt. 20--CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned [Offeror] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995, 2 U.S.C. §§ 1601, *et seq.*]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Offeror, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Offeror understands and agrees that the provisions of 31 U.S.C. §§ 3801, *et seq.*, apply to this certification and disclosure, if any.

Signature of Offeror's Authorized Official

Name and Title of Offeror's Authorized Official

Date

4. FEDERAL CHANGES
49 C.F.R. pt. 18

Federal Changes - Offeror shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this contract. Offeror's failure to so comply shall constitute a material breach of this contract.

5. CLEAN AIR
42 U.S.C. §§ 7401 *et seq.*
49 C.F.R. pt. 18

Clean Air - (1) The Offeror agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 *et seq.* The Offeror agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Offeror also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

6. NO GOVERNMENT OBLIGATION TO THIRD PARTIES

(1) DRPT and the Offeror acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Offeror, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Offeror agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

**7. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS
AND RELATED ACTS**

31 U.S.C. §§ 3801 *et seq.*
49 C.F.R. pt. 31 18 U.S.C. § 1001
49 U.S.C. § 5307

Program Fraud and False or Fraudulent Statements or Related Acts.

(1) The Offeror acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. pt. 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Offeror certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Offeror further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Offeror to the extent the Federal Government deems appropriate.

(2) The Offeror also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Offeror, to the extent the Federal Government deems appropriate.

(3) The Offeror agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

8. GOVERNMENT WIDE DEBARMENT AND SUSPENSION (NONPROCUREMENT)

This contract is a covered transaction for purposes of U.S.DOT regulations, “Nonprocurement Suspension and Debarment,” 2 C.F.R. pt. 1200, which adopts and supplements U.S. Office of Management and Budget (U.S. OMB) “Guidelines to Agencies on Government Wide Debarment and Suspension (Nonprocurement),” 2 C.F.R. pt. 180.

Accordingly:

(1) The Offeror agrees to comply with the requirements of 2 C.F.R. pt. 1200, which adopts and supplements 2 C.F.R. pt. 180, throughout the period of this contract.

(2) The Offeror verifies that neither it, including its principals and affiliates, nor any of its principals in this contract, including subcontractors at any tier with contracts of \$25,000 or more, or requires the consent of a Federal official, or is for federally required audit services are presently excluded or disqualified, under the standards of those U.S. DOT regulations and U.S. OMB guidelines; or have been provided an exception in accordance with those U.S. DOT regulations and U.S. OMB guidelines. Among other things, the Offeror before entering into a covered subcontract, the Offeror agrees to:

- (a) Check the U.S. General Services Administration Excluded Parties List System (EPLS); or
- (b) Collect a certification from that person; or
- (c) Add a clause or condition the request for proposals pertaining to a covered third party contract or transaction.

(3) The Offeror agrees that it must inform the buyer/owner of any different information that may later come to its attention for the duration of this contract.

(4) The Offeror agrees to include a similar clause in any subcontract at any tier expected to be priced at \$25,000 or more (*or if applicable, contract at any tier that requires the consent of a Federal official, or contract at any tier for federally required audit services of any value*).

9. PRIVACY ACT 5 U.S.C. § 552

Contracts Involving Federal Privacy Act Requirements - The following requirements apply to the Offeror and its employees that administer any system of records on behalf of the Federal Government under any contract:

(1) The Offeror agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974.

5 U.S.C. § 552a. Among other things, the Offeror agrees to obtain the express consent of the Federal Government before the Offeror or its employees operate a system of records on behalf of the Federal Government. The Offeror understands that the requirements of the Privacy Act, including the civil and

criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

(2) The Offeror also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

10. CIVIL RIGHTS REQUIREMENTS
42 U.S.C. § 6102, 42 U.S.C. § 12112
42 U.S.C. § 12132, 49 U.S.C. § 5332
29 C.F.R. pt. 1630, 41 C.F.R. pts. 60 *et seq.*

Civil Rights - The following requirements apply to the underlying contract:

(1) **Nondiscrimination** - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Offeror agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Offeror agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(2) **Equal Employment Opportunity** - The following equal employment opportunity requirements apply to the underlying contract:

(a) **Race, Color, Creed, National Origin, Sex** - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Offeror agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. pts.60 *et seq.*, (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Offeror agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Offeror agrees to comply with any implementing requirements FTA may issue.

(b) **Age** - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § § 623 and Federal transit law at 49 U.S.C. § 5332, the Offeror agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Offeror agrees to comply with any implementing requirements FTA may issue.

(c) **Disabilities** - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Offeror agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans

with Disabilities Act," 29 C.F.R. pt. 1630, pertaining to employment of persons with disabilities. In addition, the Offeror agrees to comply with any implementing requirements FTA may issue.

(3) The Offeror also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

11. DISADVANTAGED BUSINESS ENTERPRISE (DBE) **49 C.F.R. pt. 26**

Background and Applicability

The newest version on the Department of Transportation's Disadvantaged Business Enterprise (DBE) program became effective July 16, 2003. The rule provides guidance to grantees on the use of overall and contract goals, requirement to include DBE provisions in subcontracts, evaluating DBE participation where specific contract goals have been set, reporting requirements, and replacement of DBE subcontractors. Additionally, the DBE program dictates payment terms and conditions (including limitations on retainage) applicable to all subcontractors regardless of whether they are DBE firms or not.

The DBE program applies to all DOT-assisted contracting activities. A formal clause such as that below must be included in all contracts above the micro-purchase level. The requirements of clause subsection b flow down to subcontracts. A substantial change to the payment provisions in this newest version of Part 26 concerns retainage (see section 26.29). Grantee choices concerning retainage should be reflected in the language choices in clause subsection d.

Disadvantaged Business Enterprises

a. This contract is subject to the requirements of 49 C. F. R. pt. 26, and Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10 percent. A separate contract goal has not been established for this procurement.

b. The Offeror shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Offeror shall carry out applicable requirements of 49 C.F.R. pt. 26 in the award and administration of this DOT-assisted contract. Failure by the Offeror to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department of Rail and Public Transportation deems appropriate. Each subcontract the Offeror signs with a subcontractor must include the assurance in this paragraph (see 49 C.F.R. pt. 26.13(b)).

1. The names and addresses of DBE firms that will participate in this contract;
2. A description of the work each DBE will perform;
3. The dollar amount of the participation of each DBE firm participating;
4. Written documentation of the Offeror's commitment to use a DBE subcontractor whose participation it submits to meet the contract goal;
5. Written confirmation from the DBE that it is participating in the contract as provided in the prime Offeror's commitment; and
6. If the contract goal is not met, evidence of good faith efforts to do so.

c. The successful Offeror will be required to report its DBE obtained through race-neutral means throughout the period of performance.

d. The Offeror is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the Offeror's receipt of payment for that work from DRPT. In addition, the Offeror is required to return any retainage payments to those subcontractors within 30 days after incremental acceptance of the subcontractor's work by DRPT and Offeror's receipt of the partial retainage payment related to the subcontractor's work.

e. The Offeror must promptly notify DRPT whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and the Offeror must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The Offeror may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of DRPT or authorized user of the contract.

12. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS FTA Circular 4220.1E

Incorporation of Federal Transit Administration (FTA) Terms - The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1E, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Offeror shall not perform any act, fail to perform any act, or refuse to comply with any (name of grantee) requests which would cause (name of grantee) to be in violation of the FTA terms and conditions.

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13. FTA Certifications

ATTACHMENT A-1

1.2.23 CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The Primary Participant (applicant for an FTA grant or cooperative agreement, or potential Offeror for major third party contract), _____ certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or has a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicated for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause of default.

(If the primary participant (applicant for an FTA grant, or cooperative agreement, or potential third party contractor) is unable to certify any of the statements in this certification, the participant shall attach and explanation to the Certification.)

THE PRIMARY PARTICIPANT (APPLICANT FOR AN FTA GRANT OR COOPERATIVE AGREEMENT, OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT), _____, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 *ET SEQ.* ARE APPLICABLE THERETO.

Signature and Title of Authorized Official

1.1.23

The undersigned chief legal counsel for the _____
hereby certifies that the _____ has
authority under State local law to comply with the subject
assurances and that the certification above has been legally made.

Signature of Applicant's Attorney

Date

This space intentionally left blank

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, _____ certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

_____, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 *ET SEQ.* ARE APPLICABLE THERETO.

(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____
_____ hereby certifies that the
_____ has authority under State and Local law to comply with the
subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

(Date)

14. TERMINATION
49 U.S.C. §§ 10301 et seq.
FTA Circular 4220.1F

a. Termination for Convenience (General Provision) The (Recipient) may terminate this contract, in whole or in part, at any time by written notice to the Offeror when it is in the Government's best interest. The Offeror shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Offeror shall promptly submit its termination claim to (Recipient) to be paid the Offeror. If the Offeror has any property in its possession belonging to the (Recipient), the Offeror will account for the same, and dispose of it in the manner the (Recipient) directs.

b. Termination for Default [Breach or Cause] (General Provision) If the Offeror does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services, the Offeror fails to perform in the manner called for in the contract, or if the Offeror fails to comply with any other provisions of the contract, the (Recipient) may terminate this contract for default. Termination shall be effected by serving a notice of termination on the Offeror setting forth the manner in which the Offeror is in default. The Offeror will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract. If it is later determined by the (Recipient) that the Offeror had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Offeror, the (Recipient), after setting up a new delivery of performance schedule, may allow the Offeror to continue work, or treat the termination as a termination for convenience.

c. Opportunity to Cure (General Provision) The (Recipient) in its sole discretion may, in the case of a termination for breach or default, allow the Offeror [an appropriately short period of time] in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions

If Offeror fails to remedy to (Recipient)'s satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within 10 days after receipt by Offeror of written notice from (Recipient) setting forth the nature of said breach or default, (Recipient) shall have the right to terminate the Contract without any further obligation to the Offeror. Any such termination for default shall not in any way operate to preclude (Recipient) from also pursuing all available remedies against Offeror and its sureties for said breach or default.

d. Waiver of Remedies for any Breach In the event that (Recipient) elects to waive its remedies for any breach by Offeror of any covenant, term or condition of this Contract, such waiver by (Recipient) shall not limit (Recipient)'s remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

e. Termination for Convenience (Professional or Transit Service Contracts) The (Recipient), by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Recipient shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

f. Termination for Default (Supplies and Service) If the Offeror fails to deliver supplies or to perform the services within the time specified in this contract or any extension or if the Offeror fails to comply with any other provisions of this contract, the (Recipient) may terminate this contract for default. The (Recipient) shall terminate by delivering to the Offeror a Notice of Termination specifying the nature of the default. The Offeror will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract.

If, after termination for failure to fulfill contract obligations, it is determined that the Offeror was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Recipient.

g. Termination for Default (Transportation Services) If the Offeror fails to pick up the commodities or to perform the services, including delivery services, within the time specified in this contract or any extension or if the Offeror fails to comply with any other provisions of this contract, the (Recipient) may terminate this contract for default. The (Recipient) shall terminate by delivering to the Offeror a Notice of Termination specifying the nature of default. The Offeror will only be paid the contract price for services performed in accordance with the manner of performance set forth in this contract.

If this contract is terminated while the Offeror has possession of Recipient goods, the Offeror shall, upon direction of the (Recipient), protect and preserve the goods until surrendered to the Recipient or its agent. The Offeror and (Recipient) shall agree on payment for the preservation and protection of goods. Failure to agree on an amount will be resolved under the Dispute clause.

If, after termination for failure to fulfill contract obligations, it is determined that the Offeror was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the (Recipient).

h. Termination for Default (Construction) If the Offeror refuses or fails to prosecute the work or any separable part, with the diligence that will ensure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Offeror fails to comply with any other provisions of this contract, the (Recipient) may terminate this contract for default. The (Recipient) shall terminate by delivering to the Offeror a Notice of Termination specifying the nature of the default. In this event, the Recipient may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Offeror and its sureties shall be liable for any damage to the Recipient resulting from the Offeror's refusal or failure to complete the work within specified time, whether or not the Offeror's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Recipient in completing the work.

The Offeror's right to proceed shall not be terminated nor shall the Offeror be charged with damages under this clause if

1. the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Offeror. Examples of such causes include: acts of God, acts of the Recipient, acts of another Offeror in the performance of a contract with the Recipient, epidemics, quarantine restrictions, strikes, freight embargoes; and
2. the Offeror, within 10 days from the beginning of any delay, notifies the (Recipient) in writing of the causes of delay. If in the judgment of the (Recipient), the delay is excusable, the time for completing the work shall be extended. The judgment of the (Recipient) shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Offeror's right to proceed, it is determined that the Offeror was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Recipient.

i. Termination for Convenience or Default (Architect and Engineering) The (Recipient) may terminate this contract in whole or in part, for the Recipient's convenience or because of the failure of the Offeror to fulfill the contract obligations. The (Recipient) shall terminate by delivering to the Offeror a Notice of

Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Offeror shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.

If the termination is for the convenience of the Recipient, the Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.

If the termination is for failure of the Offeror to fulfill the contract obligations, the Recipient may complete the work by contract or otherwise and the Offeror shall be liable for any additional cost incurred by the Recipient.

If, after termination for failure to fulfill contract obligations, it is determined that the Offeror was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Recipient.

j. Termination for Convenience of Default (Cost-Type Contracts) The (Recipient) may terminate this contract, or any portion of it, by serving a notice of termination on the Offeror. The notice shall state whether the termination is for convenience of the (Recipient) or for the default of the Offeror. If the termination is for default, the notice shall state the manner in which the Offeror has failed to perform the requirements of the contract. The Offeror shall account for any property in its possession paid for from funds received from the (Recipient), or property supplied to the Offeror by the (Recipient). If the termination is for default, the (Recipient) may fix the fee, if the contract provides for a fee, to be paid the Offeror in proportion to the value, if any, of work performed up to the time of termination. The Offeror shall promptly submit its termination claim to the (Recipient) and the parties shall negotiate the termination settlement to be paid the Offeror.

If the termination is for the convenience of the (Recipient), the Offeror shall be paid its contract close-out costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a notice of termination for default, the (Recipient) determines that the Offeror has an excusable reason for not performing, such as strike, fire, flood, events which are not the fault of and are beyond the control of the Offeror, the (Recipient), after setting up a new work schedule, may allow the Offeror to continue work, or treat the termination as a termination for convenience.

15. BREACHES AND DISPUTE RESOLUTION

49 C.F.R. pt. 18

FTA Circular 4220.1F

Applicability to Contracts

All contracts in excess of \$100,000 shall contain provisions or conditions which will allow for administrative, contractual, or legal remedies in instances where Offerors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. This may include provisions for bonding, penalties for late or inadequate performance, retained earnings, liquidated damages or other appropriate measures.

Flow Down

The Breaches and Dispute Resolutions requirements flow down to all tiers.

Model Clauses/Language

FTA does not prescribe the form or content of such provisions. What provisions are developed will depend on the circumstances and the type of contract. Recipients should consult legal counsel in developing appropriate clauses. The following clauses are examples of provisions from various FTA third party contracts.

Disputes - Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of (Recipient)'s [title of employee]. This decision shall be final and conclusive unless within 10 days from the date of receipt of its copy, the Offeror mails or otherwise furnishes a written appeal to the [title of employee]. In connection with any such appeal, the Offeror shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the [title of employee] shall be binding upon the Offeror and the Offeror shall abide by the decision.

Performance During Dispute - Unless otherwise directed by (Recipient), Offeror shall continue performance under this Contract while matters in dispute are being resolved.

Claims for Damages - Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

Remedies - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the (Recipient) and the Offeror arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the (Recipient) is located.

Rights and Remedies - The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the (Recipient), (Architect) or Offeror shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

General Planning Consultant Services Contract for Transit Projects in Virginia

Virginia Department of Rail and Public Transportation



Submitted to:
Virginia Department of Rail and Public Transportation

In Association With:

- Cordell & Crumley
- IBI Group
- McCormick Taylor
- Newlands & Company
- Randolph Richardson Associates
- Rhodeside & Harwell
- Sharp & Company
- Spy Pond Partners
- Transportation Management & Design
- Transportation Resource Associates
- Travesky & Associates

April 26, 2013

Ashley Nusbaum
Procurement Manager
Commonwealth of Virginia
Department of Rail and Public Transportation
600 East Main Street, Suite 2102
Richmond, VA 23219

**Subject: Request for Proposal – General Planning Consultant Services Contract for
Transit Projects in Virginia, RFP Number: 505-13-RR0001**

Dear Ms. Nusbaum,

AECOM is pleased to submit this technical proposal for RFP 505-13-RR0001- General Planning Consultant (GPC) Services for Transit Projects in Virginia. We are excited by the opportunity to continue the very productive relationship we have with DRPT on the existing GPC.

The AECOM team comprises firms which collectively provide unparalleled breadth and depth of experience. Our team offers a comprehensive range of technical services and complementary administrative management. We understand current issues and stand ready to address future initiatives and opportunities. Key considerations within the evolving transit planning environment in Virginia are the new statewide funding formula, the need to streamline project implementation, and integration of transportation and land use.

Our management approach defines the AECOM project manager, Derek Crider, as the single point of contact for the DRPT program manager. Derek, with support from our experienced project accountant, will ensure timely documentation of technical work and careful administrative and financial reporting.

The team structure allows us to respond quickly and effectively to single or multiple assignments. The AECOM project manager will be supported by functional area managers who in coordination with the twelve discipline leaders will direct team resources. Our approach allows for robust management and accommodates staffing flexibility to best meet task order needs; this approach strongly supports completion of projects on time, within budget and in compliance with reporting requirements.

Thank you for this opportunity to continue our work with DRPT. We hope that our experience, qualifications, and approach to project delivery will merit favorable consideration of our team.

Please do not hesitate to contact me should you have questions or desire additional information.

Sincerely,



Michael Jelen, PE
AECOM Technical Services, Inc.

Request for Proposal (RFP) Cover Sheet

RFP #: **505-13-RR0001**

Issue Date: **March 28, 2013**

Title: **General Planning Consultant Services Contract for Transit Projects in Virginia**

Commodity Code: **918-96 Transportation Consulting**

Issuing Agency: **Commonwealth of Virginia
Department of Rail and Public Transportation
600 East Main Street, Suite 2102
Richmond, VA 23219**

Initial Period of Contract: **Three years from date of award**

Proposals Will be received until: **April 26, 2013
4:00 p.m.**

All inquiries must be directed in writing to: **Ashley Nusbaum, Procurement Manager
ashley.nusbaum@drpt.virginia.gov**

No proposal will be accepted after the closing date and time unless the closing date and time is modified by written addendum. Proposals must be sealed and mailed or hand delivered to the appropriate delivery address identified above.

In compliance with this RFP and all conditions imposed in this RFP, the undersigned firm offers and agrees to furnish the services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation, and hereby certifies that all information provided below and in any schedule attached hereto is true, correct, and complete.

Name and Address of Firm:

AECOM Technical Services, Inc.
2101 Wilson Boulevard
Arlington, VA 22201

0411000563
FEI/FIN Number
paul.anderson@aecom.com
E-mail

April 26, 2013
Date

Signature in Ink
Paul Anderson, PE
Printed or Typed Name of Above
540.857.3203
Phone
540.857.3296
Fax

Note: An Optional Pre-Proposal Conference will be held on April 9, 2013 at 10:00 a.m. See Section VIII for more information.

Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses are encouraged to participate.

ATTACHMENT I

State Corporation Commission Form

Virginia State Corporation Commission (SCC) registration information. The Offeror:

is a corporation or other business entity with the following SCC identification number: 0411000563 -
OR-

is not a corporation, limited liability company, limited partnership, registered limited liability partnership, or business trust **-OR-**

is an out-of-state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting any employees or agents in Virginia who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the Offeror in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contracts by which such goods were sold and shipped into Virginia from Offeror's out-of-state location) **-OR-**

is an out-of-state business entity that is including with this proposal an opinion of legal counsel which accurately and completely discloses the undersigned Offeror's current contacts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of § 13.1-757 or other similar provisions in Titles 13.1 or 50 of the Code of Virginia.

****NOTE**** >> Check the following box if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact business in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number after the due date for proposals (the Commonwealth reserves the right to determine in its sole discretion whether to allow such waiver):



COMMONWEALTH of VIRGINIA

Thelma D. Drake
Director

DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION
600 EAST MAIN STREET, SUITE 2102
RICHMOND, VA 23219

(804) 786-4440
FAX (804) 225 3752
VIRGINIA RELAY CENTER
1-800-828-1120 (TDD)

April 10, 2013

ADDENDUM NO. 1 TO ALL OFFERORS:

Reference – Request for Proposals: 505-13-RR0001
Commodity: 918-96 Transportation Consulting
Dated: March 28, 2013
For Delivery To: Department of Rail and Public Transportation,
Agencies/Facilities within the Transportation
Secretariat and Grantees of DRPT
Proposal Due: April 26, 2013
Pre-proposal Conference: April 9, 2013

The above is hereby changed to read:

1. Reference Page 27, Attachment C - Department of Minority Business Enterprise (DMBE) Small Business Subcontracting Plan: Section B. is replaced with "If you are not a DMBE-certified small business, complete Section B of this form. For the offeror to receive credit for the small business subcontracting plan evaluation criteria, the offeror shall identify the portions of the contract that will be subcontracted to DMBE-certified small business in this section. Points will be assigned based on each offeror's proposed subcontracting expenditures with DMBE certified small businesses for the initial contract period as indicated in Section B in relation to the offeror's total price.

2. Reference Pages 27 and 30, Attachment C - Department of Minority Business Enterprise (DMBE) Small Business Subcontracting Plan: Section C. on pages 27 and 30 are stricken from the RFP.

Clarification Questions

See attached responses to all questions received on or before April 9, 2013.

All other information will remain the same.

Note: A signed acknowledgment of this addendum must be received at the location indicated on the RFP either prior to the proposal due date and hour or attached to your proposal. Signature on this addendum does not substitute for your signature on the original proposal document. The original proposal document must be signed.

Regards,

Ashley Nusbaum
Contract Officer
Phone: 804-786-2890

AECOM Technical Services, Inc.

Name of Firm

 Senior Vice President
Signature/Title

April 26, 2013
Date

Attachment



COMMONWEALTH of VIRGINIA

Thelma D. Drake
Director

DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION
600 EAST MAIN STREET, SUITE 2102
RICHMOND, VA 23219

(804) 786-4440
FAX (804) 225 3752
VIRGINIA RELAY CENTER
1-800-828-1120 (TDD)

April 22, 2013

ADDENDUM NO. 2 TO ALL OFFERORS:

Reference – Request for Proposals: 505-13-RR0001
Commodity: 918-96 Transportation Consulting
Dated: March 28, 2013
For Delivery To: Department of Rail and Public Transportation,
Agencies/Facilities within the Transportation
Secretariat and Grantees of DRPT
Proposal Due: April 26, 2013
Pre-proposal Conference: April 9, 2013

The above is hereby changed to read:

1. Reference Page 9, Tab 3 C.: Section C. on page 9 is stricken from the RFP.

Clarification Questions

See attached responses to all questions received since April 10, 2013.

All other information will remain the same.

Note: A signed acknowledgment of this addendum must be received at the location indicated on the RFP either prior to the proposal due date and hour or attached to your proposal. Signature on this addendum does not substitute for your signature on the original proposal document. The original proposal document must be signed.

Regards,

Ashley Nusbaum
Contract Officer
Phone: 804-786-2890

AECOM Technical Services, Inc.

Name of Firm

Paul P. Anderson Senior Vice President

Signature/Title

April 26, 2013

Date

Attachment

The Offeror must provide a detailed description of its understanding of the services to be provided with descriptions of the approach and procedures employed on similar projects elsewhere. The Offeror must describe the process it will follow to respond to a specific purchase order request from DRPT. The Offeror must also describe the management procedures it will follow to oversee work by its personnel and work by subcontractors on multiple purchase orders simultaneously.

Introduction: Challenges and Opportunities

In the near term, the Virginia Department of Rail and Public Transportation (DRPT) faces several challenges to development of future transit networks and maintaining state of good repair of the current systems. However, with significant changes to the state and federal funding landscapes, this is a time of great opportunity. DRPT has prepared for this moment by establishing clear priorities and programs, and deepening relationships with stakeholders across the Commonwealth.

Decisions made today regarding the physical environment and public investment will have a lasting effect on the quality of life in Virginia communities.

At the federal level, there is significant uncertainty about future funding for discretionary programs, with sequestration and general budgetary pressures limiting future discretionary spending, and possibly resulting in redistribution of federal employment in Virginia and other economic impacts through actions such as base closings and consolidation. At the same time, the Commonwealth of Virginia's change in transportation funding from a gas tax to a sales tax provides DRPT and Virginia transit agencies with new opportunities, but also introduces greater volatility in the revenue stream by tying revenue to the cost of fuel rather than total fuel consumed. Future plans need to account for the uncertainty introduced by these factors.

The recent passage of the new federal transportation authorization bill, "Moving Ahead for Progress in the 21st Century Act" (MAP-21) presents DRPT with additional challenges and opportunities. MAP-21 ties funding more directly to performance measurement, and seeks to streamline project development. Because of recent systematic efforts

by DRPT managers to establish Transit Development Plans, asset management plans, and performance measures, Virginia transit providers are well positioned to demonstrate their readiness to take advantage of refinements to federal funding programs. With many ongoing capital projects and plans for system expansion, DRPT grantees will benefit by a clear understanding of how to streamline and expedite project planning and delivery.

There is an increased awareness among citizens that planning matters—that decisions made today regarding the physical environment and public investment will have a lasting effect on the quality of life in Virginia communities. The continued push for environmental stewardship and inclusive decision making will mark every major effort that DRPT undertakes. These trends will provide opportunities for the Department to educate stakeholders and continue to advance its progressive standards for integration of land use and transportation decisions.

AECOM is Prepared to Assist DRPT

AECOM and its team members understand that projects must be conducted with recognition and consideration of DRPT's objectives to assist in managing highway growth, improve access to transportation choices, provide railway access and improvements as highway traffic mitigation, seek the best return on investment, and implement best practice elements for customer service and for accountability.

This General Planning Consultant Services Request for Proposal highlights twelve key service areas which support the overarching mission of the Virginia Department of Rail and Public Transportation to improve the mobility of people and goods while expanding transportation choices in the Commonwealth.

Specifically, the scope of services calls for a full range of activities as required by federal, state, regional and local processes for public transportation and

congestion management planning and projects. The AECOM team comprises firms and individuals who can address the range of services; the team composition is both comprehensive and deep, to allow undertaking single and multiple assignments at the same time. The team includes members familiar to DRPT who have worked together in the past and members who will bring additional complementary and specialized expertise. The team is balanced from the perspective of staff dedicated to conducting studies and technical analyses and those conducting administrative and accounting activities.

AECOM managers and staff have been fortunate to assist DRPT on many important assignments under the existing General Planning Consultant Services contract. This ongoing partnership provides AECOM with a firm understanding of DRPT's role within the state transportation framework, its relationship to the range of rail and public transportation providers, and its administrative processes to provide and document assistance.

AECOM's commitment to DRPT and our familiarity with the processes for initiating and managing multiple task assignments will allow DRPT staff to focus on their most important role, supporting public transportation within Virginia, while minimizing the energy spent on administrative items. However, AECOM and the team recognize the changed environment in regard to state transportation funding and related distribution requirements.

The remainder of this section describes:

1. AECOM's approach and process for responding to purchase order requests from DRPT and a description of procedures AECOM will follow to simultaneously manage work by AECOM personnel and by sub-consultants on multiple purchase orders.
2. Detailed descriptions of AECOM's understanding and approach for services to be provided.



AECOM Project Management Approach

AECOM has extensive experience with DRPT for a wide range of task orders that required both quick and comprehensive responses. The AECOM team resources were assigned appropriately and tasks then efficiently completed.

AECOM proposes to maintain this flexible task order delegation arrangement, wherein DRPT has the flexibility to reach out directly to

AECOM team staff or to the contract Program Manager with scope and budget requests. As well, this convenient and expeditious process can be expanded to include agencies funded by DRPT who could also directly solicit scope and budgets for specific projects. This arrangement will continue the convenience and flexibility for DRPT and for agencies to deal directly with key staff to initiate tasks promptly and to ensure clear understanding of objectives and comprehensive responses to assignments. Correspondingly, the project assignment process will be coordinated with DRTP and led by AECOM Project Management, including our Project and Deputy Project Managers, Derek Crider and Jason Mumford, and the Project Accountant, Christian Russo. The project management team has worked with DRPT on a number of task orders and is familiar with assignment procedures and management.

The AECOM Project and Deputy Project Managers will be responsible for maintaining clear lines of communication between the consultant team, DRPT, and as appropriate, the affected grantee lead. Derek Crider, Project Manager, will serve as the single point of contact for DRPT. He and Jason Mumford, Deputy Project Manager, will manage project

assignment, resource allocation, and project reporting in conjunction with team members and the project accountant.

This management approach will ensure that all administrative items for DRPT such as timely SWAM reporting will be addressed as well as task order initiation, reporting, and close-out. The project and deputy project managers will be responsible for ensuring that individual task orders are conducted and documented as specified in the respective scopes of work.

AECOM proposes monthly administrative coordination sessions with DRTP to discuss task order needs, team resources, administrative issues and technical issues which include task order status. The minutes of these internal meetings shall document key discussion items and all action items.

AECOM will follow its ISO certified QA/QC program to ensure high quality deliverables. This program ensures that all DRPT assignments, no matter their size, will be tracked relative to our QA/QC program procedures. These procedures focus on comprehensive review of technical products prior to their submittal and budget and schedule tracking.

Task Order Response

Responses to task order requests for scope, budget and schedule may include additional recommendations for completing a task that was not initially contained in the original task request. Responses will also include a description of key deliverables. The ultimate intent of the scope of work is to be as specific as possible regarding the work to be done, the time required to complete the work, and the specific products that will be delivered.

This level of detail underscores the elements to be done and expectations and therefore benefits DRPT and the grantee agency. Cost proposals shall be simple to read and understand and in a format comparable to that used by AECOM for existing GPC task orders.



In summary, AECOM will continue to respond to task assignments based on a proven process that has met DRPT's needs. The proposed process also maintains the flexible lines of communication followed by AECOM and DRPT for the existing GPC contract. This approach provides a robust management structure to ensure that task assignments and administrative requirements meet DRPT needs and expectations.

AECOM's Understanding of Services to be Provided

The following sections describe the AECOM team's understanding and approach for each of the potential required services areas identified in the RFP. The team recognizes that some tasks may require expertise from one or more areas for the best possible outcome. Therefore, the team structure comprises overarching functional areas to which the service areas can be categorized. A broad base of support services is available, as necessary, to all service areas. This structure is designed to be flexible to benefit the work to be done and to facilitate efficient project management.

We are confident that these descriptions will highlight the strength of the AECOM team in providing the breadth necessary to respond to the full range of potential task

assignments as well as the depth to respond to multiple assignments simultaneously.

1. Project Feasibility/ Identification and Alternatives Analysis

The transportation industry challenge of previous years continues - meeting demands in an era of scarce resources. As we move forward, state, regional, and local jurisdictions will allocate significant funding on system maintenance and preservation, and anticipate increased demand for transit and passenger services through enhanced and restructured transportation funding programs. Transit ridership is up nine percent over the past three years, and new services are increasing Virginia's transit funding needs. Virginia's landmark transportation funding reform bill will respond to these needs by generating new revenues for transportation.

AECOM has exceeded client expectations in all areas of transportation planning. Our planning capabilities and experience in rail and bus transit studies that meet federal, state, regional and local requirements are second to none. Our multi-disciplined team approach has met

the unique challenge of conducting feasibility studies and alternatives analyses at a sufficient level of detail, yet delivering results in a concise manner which enables sound decision making for state and local officials.

AECOM's experience in transit corridor studies includes alternatives analyses, feasibility studies, modeling and forecasting, capacity analyses, conceptual & preliminary engineering, capital and operating cost estimating, finance planning, public involvement and multi-agency coordination. AECOM has recently led the Alternatives Analysis/Environmental Assessment for the Columbia Pike Transit Initiative for WMATA with Arlington and Fairfax Counties; the District of Columbia Benning Road Streetcar Extension Feasibility Study; Maryland Transit Administration's Red Line Corridor EIS, Purple Line EIS and Corridor Cities Transitway (CCT) Bus Rapid Transit (BRT); the District of Columbia Transit Alternatives Analysis; New Jersey Transit Routes Alternatives Analysis; and the Dulles Corridor Metrorail Study.

AECOM has conducted a number of transit plans for large and small agencies, including Harford County Service Plan, MTA Fleet Management Plan, Tysons Circulator Plan and Transit Development Plan for Fairfax County, VA, and the Prince George's County, MD Transit Development Plan. Plan activities include transit needs analysis, small area studies, modeling and forecasting, recommendations of short and long term improvements, improvements to existing systems and services, development of operation and capital cost estimates, and implementation and funding strategies.

AECOM is also experienced in assessing existing transit systems and providing short-term, low-cost improvements to the existing system due in part to funding constraints. AECOM successfully responds with cost-effective, high-efficiency upgrades to service reliability, on-time performance, maintenance and storage facilities and passenger amenities as demonstrated in the MTA Baltimore Metro System Capital Needs Assessment, and MTA's





Downtown Baltimore Transit Centers Feasibility Study.

Having the ability to address a complex transportation network with high levels of congestion is necessary and AECOM is equipped for this challenge. We have successfully coordinated strategies with multiple agencies to plan bus-only lanes, traffic signal priority, and geometry modifications to better accommodate buses for such notable projects as MTA's CCT project identified above, WMATA Bus Priority Corridors study, the Crystal City-Potomac Yard Transitway, and Montgomery County Bus Rapid Transit.

AECOM recommends a Federal Transit Administration (FTA) preferred data-driven technique for forecasting ridership using transit customer surveys, regional model transit networks, and path-building and assignment routines. This methodology represents real observed customer travel patterns and generates realistic results that will clearly identify impacts and benefits of new services. Horizon year ridership forecasts are developed by applying forecasted changes in land use, population and employment to represent the customer experience.



AECOM has successfully employed data driven methodologies in a variety of contexts including Richmond, VA (development of 2030 system plan and the Broad Street BRT), Albany, NY (Washington-Western BRT), Bergen County, NJ (regional bus/BRT study), New York City Transit Nostrand Avenue Select Bus Service, and Nassau County, NY (Nassau Hub).

Financial plans for proposed long-term alternatives are essential in determining the real feasibility of the initiative. Funding mechanisms include creation of new regional transit authorities, inter-agency and/or inter-regional operational or facility-sharing agreements, tax increment financing, benefit assessment districts, parking taxes, and tolling options. AECOM has explored the viability of these different approaches in a variety of settings in Virginia and across the U.S.

2. Environmental Analysis

The AECOM team Developing an understanding of how the physical environment can affect planning for transportation projects is an important piece to the successful implementation of a project. The AECOM team understands this and before any project requiring environmental analysis gets underway, a quick assessment of potential environmental “triggers” that could affect the scope and schedule of a project should be undertaken. This information can inform decision-makers early on in regards to potential risks or road-blocks. It is also valuable information when coordinating early with the lead federal agency to help them determine the appropriate NEPA Class of Action for a project.

The AECOM team understands that there is no one formula when it comes to conducting environmental analysis. Each project is unique and should be addressed as such. Determining the appropriate level of technical analysis early on results in a streamlined,

efficient product that in the end can save time and money.

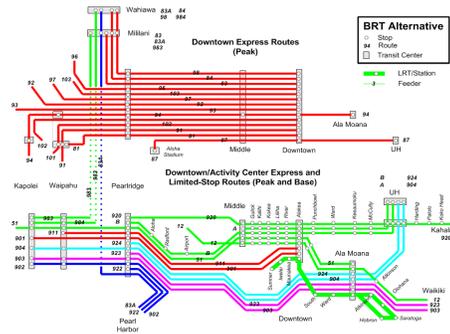
There are several key factors in determining and conducting the right approach, or level of technical analysis:

- A comprehensive understanding of the project and its goals and objectives;
- A comprehensive understanding of the project study area, in relation to the issue being evaluated;
- Recognizing the right disciplines and skills needed to conduct the required analysis;
- Open communication with affected agencies early on to determine the right approach, required permits and mitigation requirements as appropriate; and
- Using the right people to complete the job.

The AECOM team brings a combination of qualified staff and a wealth of project experience in preparing environmental documents in accordance with the National Environmental Policy Act of 1969 , and other federal, state, and local regulations. The AECOM team has prepared numerous Categorical Exclusions, Environmental Assessments, Environmental Impact Statements, pre-NEPA environmental screening studies, and various technical memoranda for a variety of disciplines.

The team understands the implications of Sections 1301-1323 of Moving Ahead for Progress in the 21st Century (MAP-21) to transit projects, environmental review, and project delivery. MAP-21, the March 2012 Executive Order 13604 “Improving Performance of Federal Permitting and Review of Infrastructure Projects,” and recent FTA rulemaking in response to these directives have provided new opportunities to streamline environmental reviews.

In the end, the appropriate environmental analysis and documentation should provide a foundation from which decision-makers can make well-informed



choices. The AECOM team provides this foundation for DRPT and its grantee transit operators.

NEPA Documents

For projects that would likely receive or desire to remain eligible for federal funding, the NEPA process would be followed and applicable NEPA documentation would be needed. Depending on the scale of the project defined and the magnitude of impacts anticipated, the appropriate class of action would be determined by the lead federal agency, such as the Federal Transit Administration (FTA), to be an:

- Environmental Impact Statement (EIS);
- Environmental Assessment (EA); or
- Categorical Exclusion (CE).

An Environmental Impact Statement (EIS) would likely be required for larger scale projects that are likely to have significant impacts on the human or natural environment. AECOM is leading the EIS for the Potomac Yard Metrorail Station Project, a new construction or extension of a fixed rail transit facility, and led the NEPA phase of Dulles Corridor Rapid Transit Project. New streamlining of the EIS process under MAP-21 and associated FTA final rulemaking allow project-specific NEPA scoping to begin in conjunction with a broader metropolitan or state-wide planning process. These new measures will help save project sponsors time and cost during the environmental review process.

Environmental Assessments (EA) are typically prepared when the significance of potential impacts is unknown.

AECOM recently completed an EA for the Columbia Pike corridor of Arlington County and Fairfax County, Virginia. The project consisted of analyzing the potential effects of introducing a modern streetcar line and ancillary facilities and restructuring bus services along a redeveloping suburban corridor. This example of enhancing an important existing surface transit corridor is comparable to the types of transit projects DRPT may wish to investigate throughout the Commonwealth. Another recently completed EA by the AECOM team is the Southern Avenue Bus Garage Replacement for WMATA. This project assessed multiple sites for a new bus storage and maintenance facility to serve WMATA's expanding fleet and newer technologies.

Categorical Exclusions (CE) are defined as those actions that do not individually or cumulatively have a significant environmental effect. FTA recently issued final rules in response to MAP-21 that expand the list of CEs and modify the documentation required, especially for projects that can be efficiently implemented within existing right-of-way. Most notably, bus transfer stations, intermodal centers, busways, streetcar lines, or other transit improvements within existing ROW can now be evaluated as a CE. Understanding these new changes in the NEPA process as well as frequent and close communication with FTA staff is critical for a successful project. The AECOM team, led by Susan Anderson, has cultivated close relationships with FTA staff is ready to lead new DRPT projects.

Commonwealth of Virginia Environmental Analysis Requirements

The Commonwealth of Virginia requires state agencies to prepare and submit an environmental impact report (EIR) for each major state project. A major state project is defined as an "acquisition of an interest in land for construction of any state facility, or the construction of any state facility, or expansion of an existing facility costing over \$500,000." Much like a NEPA document, the purpose of the EIR is to inform lead agencies, reviewing agencies, and other decision-makers of the potential environmental consequences of

the proposed development activity. Specific guidelines are set forth in the procedural manual developed by the Department of Environmental Quality (DEQ).

Areas of Technical Analysis

The resource areas listed below are typically covered in a NEPA document as well as the State EIR. In some cases, however, a NEPA document or State EIR may not be warranted; and analysis related to a specific resource area would suffice. The technical evaluations for each scenario would be done in accordance with applicable federal, state and local laws and regulations. AECOM's depth of technical specialists spans all disciplines including:

- Transportation
- Air Quality
- Noise & Vibration
- Historic Resources
- Navigable Waterways & Coastal Zones
- Water Quality
- Wetlands
- Floodplains
- Endangered Species
- Social/Economic Conditions
- Environmental Justice
- Hazardous Materials

3. Public Participation

Effective public participation is essential to the successful completion of projects of all sizes and complexity, which is especially relevant to DRPT staff given the very wide range of agencies and projects they support on an ongoing basis. The success of the public involvement process, in turn, is based on gaining comprehensive understanding of the public's goals and objectives for the project and incorporating those goals and objectives into an overall project public involvement strategy.

Our public participation efforts will be led by one of the most accomplished public involvement firms in Virginia on its team: Cordell & Crumley Communication Strategists, with support from Travesky & Associates.



Over the past 15 years, Cordell & Crumley has guided the public involvement process on projects of varying size and complexity throughout Virginia. This work includes their partnership with AECOM on the completion of the Richmond/Hampton Roads High Speed Passenger Rail Study and Tier 1 Draft EIS. Other relevant projects include the firm's role in leading the public involvement efforts for the Super NoVa Transit & TDM Vision Plan and Richmond's Broad Street BRT study.

The underlying foundation of any public involvement strategy is early and continuous interaction with the public throughout the life of the project, regardless of the project size. The participation process should also be as broad based as possible, involving members of the general public, elected officials, other agencies in the public sector, and other stakeholders such as businesses. Each of these stakeholders should be involved throughout the project development process, from the development and evaluation of alternatives through the selection of the final preferred plans. It should be noted that the public involvement strategy must be a flexible plan that may change over the life of the project as new, unforeseen,



issues arise and as the project moves from planning toward design and ultimately implementation.

The development of a public involvement strategy for each project regardless of its scope begins by identifying a series of fundamental elements about the project. These include:

- What are the overall project goals and objectives?
- What do the agency project managers hope to achieve through the public involvement process?
- What are the special issues associated with the project and what is the general level of support for the project?
- Who are the key project stakeholders in addition to the general public; are there any stakeholders whose support is essential to implementing the project?
- How do we encourage and broaden participation by Title VI groups, such as those traditionally underrepresented?
- How can we best collaborate and partner with the sponsor's communication staff?

Once these questions are answered, a public involvement strategy will be developed based on the specific requirements of the project. Depending on the answers to the questions outlined above, the plan may focus on some elements more than others. An example of several key elements of the strategy could include:

- **Database Development** – Identify diverse groups and individuals to “bring to the table” and identify special committees- technical, advisory, and citizen committees.
- **Meeting Strategy** – Work with the team to define the key points in the study, what we need to share and learn from the public. Decide the best method to encourage attendance and participation to get the information the team needs to

proceed to the next step.

- **Outreach Strategy** – Educate and notify stakeholders and the community through website/web page, social media, brochures, ads, emails, flyers, translation and more. Focus on special outreach – public Involvement Officers, Title VI, etc.
- **Comment/Input Strategy** – Include opportunities for the public to provide insight at all phases of the effort.
- **Media Strategy** – Review what levels of media to involve and how proactive does the project team need to be in reaching out to the media.
- **Elected Official Strategy** – Some projects may not be controversial and therefore interaction with elected officials may be focused on keeping them informed of project progress, while other projects may require a much more comprehensive and proactive plan for involving elected officials;

Communication and Visualizations

While project websites are now standard, depending on the specific project circumstances, there may be a large population affected by the project that does not have regular access to the internet. In that instance, project newsletters delivered by mail may be required to supplement the website. A strategy like this also would involve getting addresses from sources such as churches and community organizations.

For all projects, we will employ numerous strategies to make project documents as accessible to readers as possible. Our approach also recognizes the importance of strong visualizations and graphics to communicate proposed projects- large or small. AECOM has invited Newlands & Company to support with developing visualizations of proposed projects to help communities envision a different future. In addition, reports will include graphic elements, such as photographs, simulations, drawings, figures, and diagrams to help convey the information found within the



document. AECOM will utilize other elements, such as tables, graphs, maps, and text boxes, to concisely explain conditions and potential impacts. Reports will be user-friendly, with technical details clearly explained.

4. Marketing and Research

Several of DRPT's projects require a blending of public involvement and consensus-building activities with more focused marketing and market research efforts. Marketing and research activity assignments under the GPC contract will rely on Sharp & Company, which has extensive experience in completing market research analysis to support the development and implementation of marketing strategies, the actual development of strategies, and providing support in the implementation of these strategies. Staff from AECOM and other partner firms will complement the strategic effort, providing technical input to put the research and marketing efforts to practical use in projects and communications with agency stakeholders.

Sharp & Company's goal in completing market research and developing marketing strategies for any assignment, regardless of size and scope, is to develop a comprehensive understanding of DRPT's and its partner agencies' goals for each task. This understanding will include the establishment of priorities, a careful definition of the audiences to be met by the marketing program, and the data required to develop

an effective program. Sharp & Company's extensive marketing and public relations experience for business and government agencies has taught them that carefully determining all requirements from the outset considerably reduces the risk of unexpected costs and delays and allows them to complete each assignment on time and within budget.

Sharp and Company's marketing approach utilizes the traditional "push" technique of appealing directly to target audiences while also utilizing an often overlooked "pull" component – that is, impacting those whose behavior we want to influence by appealing to those who influence them. It is another way to work toward reaching a critical audience, where social factors contribute to and support the marketing message.

Market research to support the development of a marketing plan may include a wide range of techniques depending on the ultimate audience. This is a critical consideration in Virginia, where DRPT's partner agencies range from small social services transit providers to large regional transit authorities. The variety of techniques may include existing rider surveys, either on board, through telephone or internet surveys, or through focus groups. These surveys can incorporate any number of subject areas, including satisfaction with existing service, to desired new service. The research framework set up at the beginning of the project will ensure survey avenues that all elements of the target audience. In addition to existing riders, potential new riders and non-riders will also be an essential target audience. This is especially true in areas that are growing rapidly, areas that face significant congestion, and areas that do not currently have service but which likely have significant unmet demand. Again, multiple research avenues will be utilized to ensure all elements of the target audience are reached.

The WMATA Metrobus Market Effectiveness Study involves review of Metrobus services in the context of

regional growth and local plans. The effort has identified market constraints and opportunities to strategically position Metrobus towards building an effective network that can better serve current and future demand, enhance Metrobus productivity and efficiency, and improve system integration between Metrobus and local bus services.

The DDOT Long Bridge Study has included robust marketing and outreach to facilitate two-way communication between the study team and stakeholders. To target public materials and shape the overall project effort, Sharp & Company are conducting individual interviews with stakeholders and decision makers in the study area, including jurisdictional staff and elected officials.

5. Financial Planning and Analysis

The objective of any assignment related to Financial Planning and Analysis will be to support DRPT in evaluating projects and identifying funding and financing mechanisms that will assist DRPT and its grantees in developing fiscally sound and effective plans to support transit and congestion management initiatives. In completing these assignments, breadth of financial planning and analysis experience will be critical in understanding federal, state and local impacts across a wide variety of specific projects and plans.

AECOM has significant experience with analyzing both DRPT's financial plans, as well as the financial approach of DRPT's largest grantees. As part of AECOM's Grants Analysis in 2007, we became familiar with the capital funding strategies of GRTC, VRE, and NVTC, and built upon our years of experience with the capital planning of HRT. In addition, AECOM staff is familiar with DRPT's capital grants, and could complement DRPT's financial services consultants well in financial planning and analysis at the project level. These projects would

benefit from AECOM's understanding of both the state programs and the grantee approach to capital investment and financial planning.

In responding to and completing Financial Planning and Analysis assignments an AECOM Senior Manager that is the most appropriate to the specific project will be designated. Each of the AECOM Senior Managers available for this contract has industry-leading expertise in transit financing.

Each Senior Manager will be supported by an experienced consultant with whom they have teamed in prior work, and they will also have the authority to identify additional technical expertise as required to meet DRPT's needs.

Outlined below is our proposed approach to some of the financial planning tasks that may be assigned as part of this contract.

Financial Studies and Reports

- **Analysis of short-, medium- and long-term capital needs:** To complete these analyses we will draw on our experience developing and applying a capital needs assessment tool for the Massachusetts Bay Transportation Authority (Boston) and subsequently applied for transit agencies in Philadelphia, Miami, San Francisco, San Jose, and Vancouver (British Columbia) These analyses assess 1) the current state-of-good-repair backlog, 2) future SGR investment needs, and 3) future asset condition if SGR investment needs are not funded in a timely fashion.
- **Analysis of Benefits of Transportation Investments:**



Beyond merely understanding needs, it is critical that the Commonwealth clearly understand the benefits associated with proposed investments. This approach is both to ensure that benefits exceed costs and also provide a means of prioritizing investment of funds among competing uses. AECOM has completed net-present value benefit-cost analysis for transportation investments and has also modeled the impact of alternate transportation re-investment strategies on the physical condition of existing transportation assets and their implied impact on service quality, safety and reliability. These techniques are also an important element of project evaluation, another potential assignment area outlined in the RFP.

Statewide Financial Capacity Analysis

AECOM foresees a particular need for DRPT to augment its on-going asset management and capital needs assessment tools with a comprehensive understanding of statewide financial capacity. Transit agencies and other local funding partners have a limited pool of available funding in the short term, and statewide financial planning should consider the capacity of local funding partners to match various state-initiated programs for operating and capital projects. AECOM has experience modeling fiscally constrained financial plans for transit projects and agencies as well as for statewide planning. Similar services to those recommended on a statewide basis for DRPT were applied regionally to the transit element of Hampton Roads Planning District Commission's Long Range Plans for 2026 and 2030.

Evaluation of capital and operating and maintenance funding sources and options.

AECOM has developed financially constrained plans that incorporate realistic forecasts of capital and O&M requirements and integrate capital and O&M funding sources across multiple

scenarios and options. In Virginia, we have undertaken these analyses for Washington Metro (WMATA), the Dulles Metrorail project, and Hampton Roads Transit Norfolk LRT. We have performed similar analyses in Boston, New York, Washington, Atlanta, Orlando, Miami, New Orleans, Chicago, Minneapolis, St. Louis, Houston, Dallas, Corpus Christi, Los Angeles, San Francisco, San Jose, and Vancouver (BC).

We will examine all sources of state funding, including:

- **Operating Assistance:** Up to 95% of eligible costs borne by eligible recipients for operating related public transportation expenses.
- **Capital Assistance:** Up to 95% of eligible costs borne by eligible recipients for public transportation capital projects.
- **Demonstration Project Assistance:** Up to 95% of eligible expenses for innovative investments in all functional areas of public transportation.
- **Public Transportation Intern Program:** Up to 95% of eligible expenses for increased awareness of public transportation as a career choice.
- **Technical Assistance:** Up to 50% of eligible expenses for planning or technical assistance to help improve or initiate public transportation related services.
- **TDM Operating Assistance:** Up to 80% of eligible expenses for administration of existing or new local and regional Transportation Demand Management/Commuter Assistance programs.
- **Transportation Management Project Assistance:** Up to 80% of eligible expenses for Transportation Demand Management projects and programs that encourage the reduction of single occupant vehicle travel.
- **Senior Transportation Program:** Up to 80% of eligible expenses for projects and programs that improve mobility for senior citizens.

For all projects, we will employ numerous strategies to make project documents as accessible to readers as possible.

We understand that each of these programs has limits to the total funding available statewide and that the state has established methods for apportioning these funds on the basis of program-specific criteria addressing needs, benefits, and other factors.

Development of Financial Plans for Major Capital Investments, Including Project Expenditure and Cash Flow Forecasts

AECOM includes staff dedicated to the development of financial plans for state and local transportation clients. We have contributed to the development of a significant proportion of the financial plans for New Starts projects proposed over the past ten years (including HRT's light-rail investment). Recently, our financial plans have helped secure Full Funding Grant Agreements for New Starts projects in Boston (Green Line Extension), San Jose (Silicon Valley Rapid Transit Project), and San Francisco (Central Subway). Plan development has included the identification and development of realistic sources of capital and operating funds as well as the effective estimation of the O&M cost impacts of the new investment.



Address Financial Planning and Analysis Requirements as Needed in Support of Transit and Congestion Management Inputs to Budget.

AECOM staff has participated in the development of budgets and multi-year transportation planning,

including contributing to Hampton Roads Planning District Commission's Long Range Plans, developing transit agency annual budgets for Hampton Roads Transit and statewide funding scenarios for the Pennsylvania Transportation Funding and Reform Commission, and development of long-range capital plans for multiple regional authorities and states. AECOM can apply its skills to assisting DRPT and its grantees in applying the new funding formula to the budgeting process, including developing linkages to grantee Transit Development Plans, the TIP and STIP, and DRPT's Business and Strategic Plans.

6. Strategic Planning/ Capital Investment Planning

DRPT's Strategic and Capital Investment Planning activities are critical for helping DRPT comply with state and federal requirements, for best targeting transportation investments to make the best use of scarce resources, and for linking DRPT's internal Business Plan and work efforts to its overall Strategic Plan, as well as to other transportation planning in the Commonwealth. Activities that may be performed in this category of services include refining DRPT's Strategic Plan, assisting in development of the Capital Investment Plan, and/or refining existing grantee strategic/capital investment plans based on changing needs or changes in available funding.

Spy Pond Partners, a nationally recognized consultancy specializing in strategic planning, will lead this service area. Typically, assignments related to Strategic Planning and Capital Investment Planning will be handled through a Strategic/Capital Investment Planning Manager from Spy Pond or AECOM, with additional support from highly experienced consultants and various modal experts.

AECOM has assembled a team with extensive experience in developing

state-of-the-art tools and approaches for strategic and capital investment planning, as well as in putting those tools and approaches into practice. The team has the skills and experience to assist DRPT and its clients to develop the conceptual framework and plans for rail and public transportation investment programs at all levels. Team members have put this experience to work in recent projects, such as through: assisting transit agencies in Boston, San Francisco, Vancouver and other cities in assessing state of good repair needs and developing investment plans, development and implementation of the Transit State of Good Repair (SGR) Database for transit capital needs assessment; developing an innovative framework and analysis approaches for prioritizing transit asset rehabilitation/ replacement investments in Transit Cooperative Research Program (TCRP) Project E-09; developing enhancements to the National Transit Database (NTD) for FTA; and providing on-call strategic planning support to agencies such as the Maryland Transit Authority and DRPT.

Our basic approach to developing strategic or capital investment plans incorporates the following steps, tailored as appropriate to the exact set of project needs:

- **Perform an Assessment:** the first step in many strategic/ capital investment planning efforts is to take stock of current circumstances in a formalized manner. For strategic planning exercises the process often begins with a Strengths, Weaknesses, Opportunities, and Threats analysis. This step serves not only the immediate purpose of providing the logical basis for establishing needs, but also brings policymakers together to form consensus on DRPT's goals and objectives. This analysis supports the development of certain overarching statements that will guide DRPT, including mission and vision statements that outline DRPT's fundamental role within the Commonwealth.



- Translate Goals into Measures and/or Projects:** The core of the strategic planning process culminates with the translation of the vision into specific program goals and the criteria for determining goal accomplishment, and often further into the projects necessary to achieve the goals through development of a capital investment plan. The AECOM Team’s work on previous DRPT business plans is illustrative of this step. Previous efforts included development of business plans with specific initiatives that link to the Strategic Plan, as well as definition of key performance goals and measures for each Business Plan Initiative (BPI) and ensuring that the various staff Employee Work Programs highlight the contributions that each make to the BPIs.
- Reconcile the Plan with Available Resources:** while it useful to assess needs in an unconstrained environment, ultimately an organization’s vision must be reconciled with its resources. The application of Commonwealth policy (through a DRPT Strategic Plan or other policy document) to potential capital investment projects is a critical step in a statewide capital investment planning process. The AECOM Team’s recent work for TCRP to develop a framework for analyzing and prioritizing transit asset investments illustrates a well-structured approach to performing this step.
- Coordinate with Stakeholders:** a defining feature of DRPT is its relationships with other

Virginia agencies, including but not limited to the local transit agencies throughout the Commonwealth, Metropolitan Planning Organizations, and other state agencies. Stakeholder communication/coordination is not optional for DRPT – it is absolutely fundamental. While coordinating with as large a stakeholder community as DRPT’s is a challenge, it is one with which the AECOM Team has extensive experience through its previous assignments for DRPT, such as the statewide Vehicle Fleet Inventory and Virginia-Google Transit Partnership.

As noted above, DRPT faces a set of challenges with respect to funding. Relevant provisions of MAP-21 include requirements for grant recipients to develop transit asset management plans, for FTA to define state of good repair (SGR) standards and establish performance measures based on those standards, and for inclusion of additional transit asset inventory and condition data in the NTD. FTA is in the process of developing rules for implementing MAP-21, and an Advance Notice of Proposed Rulemaking is expected in 2013 on the transit asset management provisions of MAP-21.

While the details of the new rules are far from established, it is likely that Virginia transit agencies receiving federal grants will need to collect and report additional data to the NTD, and DRPT can expect to face additional challenges in collecting inventory and condition data on transit assets. However, DRPT has established processes and standards that will ease the transition to the MAP-21 provisions. As DRPT continues to improve its information on and analysis of transit conditions, performance and investment needs, the AECOM team’s prior experience at the federal level will help position DRPT to best respond to MAP-21 transit-related requirements.

7. Operations Planning and Analysis

The AECOM team’s approach to operations planning approach includes a series of well-structured elements designed to incorporate an assessment of current service and identify unmet needs as well as potential operating efficiencies that strengthen the overall service network. These elements include:

- Data review, collection and analysis provide the foundation for the analysis of the market area and the transit system.
- Detailed service area market analysis and consumer research help identify key market and service opportunities and challenges. The process begins with a detailed data analysis of both transit markets (demand) and service (supply) to gain a thorough understanding of how customers use the system today; to identify promising market opportunities where transit can be competitive both for specific travel needs and as a mobility lifestyle; and, where the service network can be designed and operated more efficiently.
- The evaluation process examines service at the network, route, and route-segment level. We also place a high priority on collaboration with and education of leadership, through development of key metrics to provide a framework for decision-making.
- Visioning and brainstorming sessions are indispensable in defining the “art of the possible” to result in strategies and themes for change. The process ensures plan recommendations are practical, efficient and implementable.
- Outreach through ongoing communication with internal and external stakeholders, the general public, transit riders, and operating staff is crucial in building support for changes and future investment.

Documenting current transit operations allows internal benchmarks to be set and facilitates comparisons to a statewide baseline. In light of a new state transportation funding policy and focus on using existing resources efficiently, operators must clearly understand system gaps and deficiencies in order to better develop short and longer term service plans. Operators should also be able to provide sound and consistently accurate operating data. While this database may be required for determining funding allocations, it also will inform service planning. We anticipate that task assignments from DRPT or grantees will generally relate to one of the following key areas:



- Valuation and modification of existing services to ensure cost-effective use of financial resources.
- Development of new or expanded services to better serve existing demand, meet growth in demand or coordinate with other transit and transportation projects.
- Development of new transit services to meet unmet transit demand.

The team recognizes that development of long term plans requires sound understanding of current service provided, monitoring and assessment of service performance, and identification of service needs and opportunities. As part of the

AECOM foresees a particular need for DRPT to augment its on-going asset management and capital needs assessment tools with a comprehensive understanding of statewide financial capacity.

analysis, performance monitoring shall assess service delivery and utilization, resulting in documentation of effectiveness and efficiency. Market analysis will be the primary planning tool to identify underserved markets or gaps and needs within current markets. Market analysis and future forecasts will establish the framework for service expansion or modifications, either as stand-alone projects or in conjunction with other regional transit and transportation projects.

The depth and focus of specific operations planning activities relates directly to context or environment. The scope of analysis and planning will vary according to locale – urban, suburban, or semi-rural, group – as well as the perceived service issue.

The AECOM team will “right-size” scope of activities to ensure that they are appropriate for the desired outcomes. A key effort often is improving operating efficiencies of existing service. However, this should be done in consideration of latent demand and opportunities for growth. With regard to development of new transit service to meet unmet demand, AECOM previously worked with DRPT to develop a Transit Development Plan for Virginia Regional Transit (VRT). The foundation of this plan was identification of unmet transit demand throughout the VRT service area. In this case, limited mobility for many residents was a key driver. The resulting plan recommendations listed resources that would be required for transit service improvements, including operating and capital costs and personnel.

Over the last six years, the AECOM team has completed detailed operational analysis of 12 corridors of the WMATA Priority Corridor Network. The work culminated with a series of improvement recommendations that included:

- Modifications to existing service levels, including hours of service and service frequencies;
- New limited stop service, serving only the most heavily used stops, in order to increase capacity and provide more convenient service to riders;

- Improvements to traffic operations, including modified signal phasing to support bus movements, bus only lanes, and roadway modifications;
- Improvements to passenger facilities, including consolidating stops and adding passenger amenities based on boarding and alighting activity at stops; and
- Proactive line management to ensure correct bus separation and also to ensure line issues are addressed quickly.

The projects also involved a proactive public outreach effort wherein the team solicited public input regarding issues for the route, potential solutions, and final feedback on the recommendations. This solicitation of feedback includes completing an on-board rider survey on each study.

8. Project Evaluation

A consistent theme across all DRPT initiatives is to apportion scarce financial resources in accordance with the transportation need and the effectiveness of the proposed action. Project evaluations are an integral part of any planning effort AECOM undertakes, whether the project is a capital investment for either state of good repair projects or new infrastructure, or new operations and maintenance cost commitments for new transit service.

Increasingly, federal transportation investment is connected with quantitative performance evaluation criteria. MAP-21 specifies that within 18 months of MAP-21 enactment (by April 1, 2014) USDOT is to promulgate a rulemaking that establishes performance measures and standards. The federal DOT is to consult with State DOTs, MPOs and other stakeholders to establish measures that will guide long-range plans, TIPs, and STIPs. MAP-21 emphasizes the following goals with respect to transportation investment:

1. Safety
2. Infrastructure Condition
3. Congestion Reduction
4. System Reliability
5. Freight Movement and Economic Vitality
6. Environmental Sustainability
7. Reduced Project Delivery Times

DRPT is at the forefront of the push to establish performance measures. The Department has already established a new grant formula based on the performance and readiness of grantee projects and programs. In instituting a far reaching program of Transit Development Plans and Comprehensive Operational Analyses, DRPT is systematically evaluating each grantee agency's proposed capital projects, operational recommendations, and TDM recommendations, with a specific focus on whether these strategies are meeting the long-range vision of public transportation within the Commonwealth.

AECOM has assembled a team with extensive experience in developing state-of-the-art tools and approaches for strategic and capital investment planning.

Project evaluation is also a key element of the work AECOM and Transit Management & Design have completed on the development of Transit Development and Long Range Plans as well as service recommendations that are the result of Comprehensive Operational Analyses. In completing the evaluation of recommendations for the WMATA Priority Corridor Network implementation program, AECOM utilized a series of evaluation criteria that evaluated recommendations



that incorporated service elements, passenger facility improvements, technology improvements such as bus priority, and running way improvements such as exclusive bus lanes. Evaluation criteria for the physical improvements included total capital cost per rider impacted, the number of daily riders impacted, total daily travel time savings, total capital cost/annual hours of travel time saved, and whether the physical improvement supported the associated service recommendation.

The evaluation process is also the underlying framework for the completion of an alternatives analysis. AECOM has completed hundreds of alternatives analyses for new or extended fixed guideway, intermodal terminals, and park and ride facilities. One example is the Benning Road Streetcar Feasibility Study conducted for the District of Columbia DOT where multiple alignment and configuration characteristics were discussed. AECOM set up an evaluation framework that allowed for comparison of the benefits and costs of each location. Evaluation criteria included impacts to existing bus service, traffic impacts, community impacts, and business impacts.

AECOM also has unparalleled experience with the Federal New Starts evaluation process and can be counted on to provide DRPT with the assistance needed to prepare and document the New Starts/Small Starts criteria and other information required by FTA to support the evaluation, rating, and advancement of potential New Starts projects.

9. Safety and Security

To support DRPT in completing safety and security tasks, AECOM is teaming with Transportation Resource Associates, Inc. (TRA). TRA has an established and productive working history with DRPT in providing technical, programmatic, and administrative support for safety and security tasks. TRA is prepared to continue to provide such support



to DRPT and transit operators, including, but not limited to conducting safety and security assessments and developing, conducting, and evaluating safety and security training and exercises.

Safety and security assessments are required under the current FTA Final Rule for State Safety Oversight (SSO) of Fixed Guideway Transit Systems, as specified in 49 Code of Federal Regulations Part 659. TRA has unmatched experience in conducting safety and security assessments of transit operators throughout the United States under the SSO program.

Safety and security assessments are one of the most essential parts of the SSO program. At least once every three years, every SSO is required to review the implementation of the transit agency's System Safety Program Plan (SSPP) and the Security and Emergency Preparedness Plan (SEPP). Our staff can provide a wide breadth of technical knowledge to grantees, including system safety programs, transit policing, emergency management, transit operations, maintenance, training, and fitness for duty programs.

TRA has assisted DRPT in the implementation of the three-year safety and security review process, and completed a review of system safety functions carried out by the HRT Safety Department. The team will assist DRPT to review transit agency safety and security programs, including, but not limited to:

- SSPP and SEPP implementation;
- Transit operations, rule compliance, supervision, and control;



- Employee fitness for duty programs, including drug and alcohol programs, hours of service, and medical qualifications;
- Operations and maintenance training and certification;
- Facility and employee safety;
- Track, power systems, and power systems maintenance;
- Vehicle maintenance;
- Transit policing and patrols; and
- Emergency management programs, including drills and exercises

TRA provided technical assistance to DRPT in developing the System Safety Program Standards and Procedures (SSPS) for the SSO program. The SSPS delineates the safety and security program requirements that rail transit agencies must follow, including the development of the SSPP and SEPP, accident investigations, hazard management, internal audits, and corrective actions. As DRPT considers implementing safety and security oversight of other transit providers throughout the state, TRA is prepared to provide assistance and support to DRPT in the development of statewide plans, policies, procedures, and program requirements.



The team can provide technical assistance in the development, review, comment, and ultimate approval of an SSPP. Rail transit agencies such as HRT are required to develop and implement a SSPP, subject to annual review and update by the SSO (DRPT). TRA reviewed and recommended the approval of the most current version of the HRT SSPP. TRA transit safety experts are fluent in the language of transit system safety, as well as with the pertinent regulations, guidance, and industry best-practice applicable to system safety programs.

TRA applies such expertise to every review of every safety-critical document. TRA consultants can also assist in transit security and emergency preparedness programs. As with the SSPP, rail transit systems must develop and implement a SEPP and the team can develop a framework for future reviews of the implementation of the SEPP.

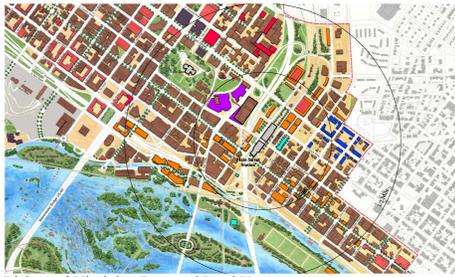
TRA has extensive expertise in transit safety and security training and exercises and can therefore support DRPT in efforts such as evaluate of training and certification for safety-critical employees, including train operators, supervisors, controllers, and maintenance technicians across various disciplines.

As part of its security and emergency preparedness oversight responsibilities, DRPT also participates in and evaluates tabletop and live drills and exercises. TRA has the personnel and expertise to help DRPT and transit providers develop, implement, and evaluate emergency training, drills, and exercises. TRA worked extensively with both DRPT and HRT security and emergency management personnel as the agency conducted a series of such drills leading up to the start of revenue service for the TIDE. TRA observed several of these drills on behalf of DRPT, and provided input during the after-action and hotwash processes. TRA also helped DRPT in evaluating corrective action plans associated with such drills and exercises.

The team can also assist with additional safety and security tasks, as required. In addition to the tasks described in the Request for Proposal, TRA is prepared to assist with potential assignments related to safety and security including:

- Assisting DRPT in the development, review, and update of its safety and security policies, including, but not limited, the System Safety Program Standards and Procedures;
- Developing safety and security plans, policies, and procedures;
- Developing, implementing, monitoring and evaluating training and certification programs for transit employees and local first responders;
- Assisting in emergency exercises conducted in coordination with surrounding first responder agencies;
- Assisting DRPT in monitoring the developments of MAP-21, other federal safety and security legislation and policies, and identifying funding opportunities.

In completing the assignments related to safety and security, TRA will work with DRPT as required to ensure that all program requirements are fulfilled. Deliverables from these tasks will include updated plans, policies, and procedures, and reports from safety and security assessments that clearly describe the review processes and methodologies used, practical and tangible findings and recommendations developed by transit industry experts, and technical assistance in the oversight and monitoring of transit agency safety and security activities, such as accident investigations, hazard management programs, and corrective action plans.



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10. Short-Range Plan and Program Development

AECOM has proven records of delivering solid market-driven short-, mid- and long-range transportation plans that advance transit modes and networks in combination with efficient and effective service design. The design and implementation of financially sustainable transit plans has become increasingly important in the overall planning process and often are the basis for funding. The team approach focuses on three areas:

- Thorough analysis and efficient service design to achieve cost saving service efficiencies.
- Effective and efficient service design increases ridership.
- Understanding increasingly complex multi-modal networks of bus, rail, commuter rail, and bus rapid transit services
- Developing service plans that leverage complementary initiatives or projects and support community quality of life and economic development projects
- Collaboration with local communities and vested stakeholders at key points during the plan development.

DRPT plays a crucial role in providing technical assistance to local jurisdictions in preparing required TDPs and Transit Demand Management (TDM) plans. The AECOM/TMD team will assist DRPT and grantees in developing or updating six year TDPs.

TDPs are essential planning tools because they provide the operator and DRPT a framework for understanding required resources over the life of the plan. Resource requirements identified as part of the TDP will include:

- Operating costs associated with existing service as well as service expansion.
- Facility related capital costs to support passenger or operating facility expansion. Passenger facilities may include new bus stops associated with service expansions, improved passenger amenities at stops, or intermodal transfer centers. Operational facilities may include a new or expanded operations and maintenance facility or new or expanded Administration buildings.
- Capital costs associated with revenue vehicles to support expanded service or replacement and new or replacement support vehicles.
- Capital costs to replace equipment such as operations and maintenance facility equipment or tools.

Since most systems in the Commonwealth have an existing TDP, the focus of the work would be updates to existing plans. The framework for the updates will be the TDP Requirements published by DRPT in February 2013. This update process would include an update of Chapter 1, the Transit System Overview, to reflect any changes since the last version of the Plan. Changes to system Goals, Objectives and Standards would be described in Chapter 2. Chapter 3, Service and System Evaluation, would provide trend analysis on ridership, productivity, and other evaluation factors in order to provide an understanding of system performance and changes in system performance over the life of the existing plan. The results of the chapter will provide a foundation for service recommendations and the operations plan to be completed in Chapter 5. Another input into Chapter 5 will be

service expansion recommendations, as outlined in Chapter 4. These expansions may be carryovers from the current plan or may be new recommendations identified for the first time. The recommendations made in Chapter 4 will rely on a transit needs analysis that will evaluate demographic trends, land use trends, and new development trends.

Capital cost requirements will be identified and estimated based on the parameters outlined in the TDP requirements. This will include revenue and non-revenue vehicle replacement, facilities and equipment. The final output, in Chapter 7, will be a financial plan outlining operating and capital budgets as well as anticipated funding sources over the life of the updated plan, for use by both DRPT and the local jurisdiction.

The ultimate focus of the work described above will be to develop living documents that reflect changes in a system's service area, financial resources, and ongoing expansion and replacement requirements.

TDM plans are long range plans that have a 25 year horizon, but each plan also contains a six-year implementation plan that is consistent with the Six Year Improvement Program and the Six-Year Statewide Transit Improvement Program. TDM plan updates will focus on two areas:

- The effectiveness in implementing TDM strategies included in the current plan.
- Potential new strategies to reflect changing demographics, land uses, trip patterns, and traffic congestion conditions.



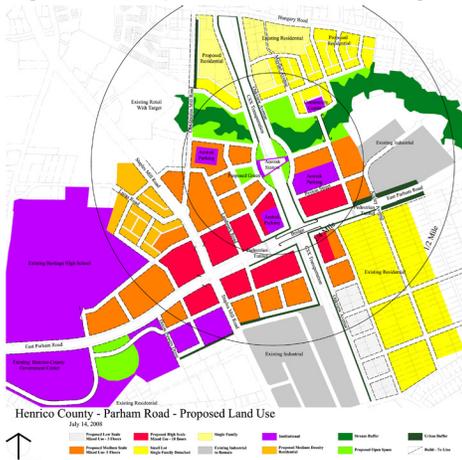
Updates will include an intensive data analysis, including an analysis of change in travel patterns, current TDM strategies, traffic levels, and demographic changes. These will also include a proactive effort to garner stakeholder feedback regarding issues and requirements. The intent of updates is to establish a dynamic document that is regularly updated to reflect the most current conditions and stakeholder requirements.

In light of a new state transportation funding policy and focus on using existing resources efficiently, operators must clearly understand system gaps and deficiencies in order to better develop short and longer term service plans.

11. Training

An important aspect of communication is how one explains policies, programs, and best practices to internal audiences, such as employees. The degree to which employees understand new initiatives, procedures, and alternative ways of providing customer service depends on the quality of training programs. A sound training program is vital.

The delivery of transportation services is a changing industry. At both the federal and state levels, procedures are always being refined and streamlined while at the same time funding is being constrained. New legislation requires new methodologies



for delivering transportation programs and the need for training has never been greater.

AECOM and McCormick and Taylor have considerable experience in designing and implementing training programs for a variety of topics related to transportation planning and design. Highly experienced staff are complemented with in-house capabilities to develop customized, high-quality print and audio-visual presentation materials. These materials are also designed to stand-alone as post-training reference information.

McCormick Taylor has developed and conducted over 50 courses on environmental and regulatory issues. Training courses have ranged from half-day seminars to week-long workshops. Specific to transportation planning, these courses have included:

- Project Partnering
- Emergency Operations Plans
- Transportation Project Development Case Studies
- Tenets of Communication for Technical Personnel
- Context Sensitive Solutions
- Using NETSIM
- Computer Cartography/Design Course
- Smart Growth Training
- Secondary and Cumulative Effects Analysis
- Making Public Involvement Work
- Public Involvement for Small Projects

The AECOM team, led in this area by McCormick Taylor, offers subject matter technical experts and instructional system designers who can assist DRPT in developing dynamic, effective, and informative training sessions. We know how to successfully integrate technical content with effective training techniques to develop a course strategy.

A great example of their transportation planning training efforts is the



The three-day NEPA and Transportation Decision-Making Process course is one of NHI's most highly-requested and sought after courses. It covers technical areas including purpose and need, alternatives development, mitigation, Section 4(f), and other Federal requirements on transportation projects.

Transportation and Land Use Course (NHI 151043) being given nationwide, where the classes themselves are currently being taught by McCormick Taylor personnel. McCormick Taylor is delivering this recently revised course through the NHI contract on behalf of the National Transit Institute program.

In addition to the Transportation and Land Use course, McCormick Taylor is also developing course materials for and/or currently teaching four additional instructor led courses: NEPA and Transportation Decision-Making Process course (NHI 142005), Advanced Seminar on Transportation Project Development: Navigating the NEPA Maze (NHI 142055), Mitigating Road Impacts on Stream Ecosystems: An Interdisciplinary Approach (NHI 142048), and Section 4(f): Regulation to Application, which is in development and projected to be available for delivery in the fall of 2013.

Another contract McCormick Taylor holds is the Statewide Open-End Contracts for Program Management Assistance, including Preliminary Design Activities for the Pennsylvania Department of Transportation. Consistent with their strategic goal of enhancing and streamlining programs for transportation project delivery, PennDOT chose McCormick Taylor as their first Statewide Management Consultant more than 20 years ago

to provide assistance and technical support in the development of major transportation programs and projects. Today, McCormick Taylor continues to be one of PennDOT's primary consultants to provide mission support and management assistance statewide.

The AECOM team can provide assistance for a broad range of training topics, including Development, Technical Assistance, Management Consultation, and Document and Plan Review. Specific topic areas such as program management and mission support services on numerous multi-modal transportation initiatives statewide by interpreting federal policies and guidelines, managing project planning and design programs, establishing program goals and performance criteria, and facilitating interagency coordination.



12. Technology/ITS

AECOM and IBI will approach Technology and ITS assignments with a focus on executing overall integrated transit technology programs. IBI has proven ITS experience and has assisted several agencies in successfully planning, identification, and deployment of integrated technology from different vendors. The team will provide a breadth of resources that will allow timely response to any type of assignment.

A key element of the ITS strategy is to assess whether needs are being addressed appropriately by the current technology.

The AECOM team is able to offer comprehensive services in an efficient manner due to extensive prior experience. Responses to assignments will generally be developed based on anticipated magnitude of needs and the size of the client agency. IBI Group will generally take the lead for assignments related to smaller systems as well as those related to technology improvements that support operations.

The basic premise of the team's approach entails working with an agency from an early stage to assess whether needs are being addressed appropriately by current technology. The result is a strategic vision/plan for integrated technology deployment. Having a vision plan is often a prerequisite for acquiring additional technology development funding. The team will work with the grantee to define the functional/performance requirements for individual procurements, and help develop stable specifications and RFPs. The team will also assist in procurement process management, proposal evaluations, vendor selection, and contract negotiations.

IBI's contract management services help achieve successful deployments that deliver on the contracted commitments from vendors and have been well configured to mesh with agency operations. This involves steps including design review and structured acceptance testing

IBI has completed extensive work for Virginia Regional Transit on the VRT Transit Development Plan. One of the elements VRT wants included in the plan is the incorporation of Automatic Vehicle Location for its

vehicle fleet. This would allow better management of vehicles spread over a wide geographic area. This type of ITS application, which would be on a relatively small scale, would be the type of assignment that IBI would handle. It should be noted that combining AVL purchases for a number of small systems into a single contract would result in cost savings and also support a common technology across small fleets throughout Virginia. This would be of great benefit in system maintenance and equipment replacement.

The Offeror must describe the skills and qualifications it has available to perform the various types of tasks described in the Statement of Needs. The key personnel who could be assigned to these various tasks must be identified. The Offeror must demonstrate that it has sufficient personnel with the various types of skills needed to staff the purchase orders when needed. The Offeror shall provide all of the following information concerning its company, subcontractor and personnel qualifications.

Introduction

AECOM, as one of the largest transportation and transit planning and engineering firms in the United States, has a long and successful history of providing clients with planning support for a wide range of rail, bus transit, and multimodal assignments. This success includes our current and very productive partnership with DRPT on the existing General Planning Consultant contract. This success also includes providing services to a wide range of agencies, including statewide agencies such as DRPT, under on-call contracts. As AECOM and its team members move forward in requesting an extension of our current work through the re-compete of the General Planning Consultant Services contract, we can promise that we will continue to focus on one goal, to provide DRPT with the highest level of service available. This focus will obviously include our technical work, but it also includes our approach to the required administrative elements of the contract. We understand that DRPT staff members are busy, with an extraordinary range of responsibilities. Spending large amounts of time on administrative items associated with consultant contracts takes away from your ability to effectively and efficiently deal with the most important part of your job, providing service to your grantees and the traveling public throughout the Commonwealth.

AECOM has assembled a team of individual professionals and firms to support DRPT in its vital and wide-ranging mission to provide Commonwealth residents and visitors with the highest quality multi-modal transportation and mobility options available, all ultimately with the goal of improving the quality of life for all Commonwealth citizens.

In developing Multimodal System Design Guidelines, DRPT continues to lead toward a future of integrated thinking about land use planning that sets the stage for phased implementation of key projects.

We recognize that DRPT has a clear mandate within state government to improve transit service performance and productivity, while contributing to reduced congestion and expanded opportunities for economic development along key corridors throughout the Commonwealth. DRPT staff have defined a program of plans and policies that are changing the way citizens, agencies, and service providers view transportation, and public transportation in particular.

There is a recognition that precious public right-of-way must be used in the most efficient ways, to move people safely and provide equitable access to jobs and services. Recent development and broad adoption of the Multimodal System Design Guidelines is one important example of how the agency continues to lead toward a future of integrated thinking about land use planning that sets the stage for phased implementation of key projects.

AECOM has contributed to many of DRPT's recent, successful projects. We have been involved in key initiatives such as the Richmond to Hampton Roads EIS, the Hampton Roads Vision Plan, the Statewide Transit Plan, and multiple Transit Development Programs throughout the state. Given our past experience serving DRPT, we understand that for any given task, resources will be drawn from multiple categories of Services. Our approach emphasizes flexibility in allowing DRPT access to the best professionals to carry out the assignments at hand.

The remainder of this section of the proposal contains each of the elements related to our team that is requested in the RFP relative to Tab 2. Specifically, this section contains the following pieces:

- A description of all team members and their responsibilities within the team relative to the potential services and assignments outlined in the RFP. This includes a detailed statement outlining the organizational structure under which the AECOM team will respond to assignments under this contract.

- The large majority of the firms on the team are not only known to DRPT through their work on projects in Virginia, they have critical experience with AECOM and one another on similar projects for other clients within the Commonwealth and throughout the nation.
- Identification of the key personnel that will be assigned to this contract and their responsibilities within the team relative to the potential services and assignments outlined in the RFP. This includes the relevant experience of key assigned staff along with resumes.
- A list of references, including name, address, telephone number, project, and project amount.

Each of these elements is described in greater detail in the following sections.

Team Members

Cordell & Crumley is experienced at developing successful public involvement programs. Our planning approach involves studying the needs of the project and determining the most effective way to reach out to various stakeholders using multiple strategies and techniques. Each situation is unique and the approach to each specific public involvement challenge will be distinctive and adaptable. It is essential to include the public, agencies and special interest groups early in the process. Their input is vital to guarantee that the resulting project meets the needs of the entire community.

Cordell & Crumley will work in concert with agencies DRPT, grantee and the community to create public involvement programs for each effort. Our strength is including audiences that are traditionally under-represented.

IBI Group is a multi-disciplinary firm specializing in transportation/ systems, land planning, urban design, and architecture. The integration of these disciplines within a single firm allows us to provide

comprehensive professional services for creating solutions, while our project management services ensure quality control and cost efficiency in completing projects.

Established in 1974, IBI Group has grown steadily and now has offices throughout North America, as well as in Europe, Asia, the Middle East, Africa and South America and employs more than 3,000 professionals.

For its transit agency and urban and metropolitan planning clients, IBI Group offers services drawing on both its transportation and systems expertise. Public transportation capabilities include route and alignment design, corridor service design, ridership estimation, operations and maintenance cost estimation, alternatives analysis, comprehensive operational analyses, technology selection, highway and rail facility design. These services have been provided to clients ranging from small municipalities to large metropolitan areas, and span all surface modes of transportation, from ferries and buses to high-speed rail and magnetic levitation. IBI Group also has an extensive practice related to the design and implementation of intelligent transportation systems (ITS) technology for transit, including: automatic vehicle location (AVL) and supervisory control; automatic passenger counting; traffic signal priority; advanced fare collection; and real-time passenger information systems. The firm is also a recognized leader in the rapidly evolving field of bus rapid transit (BRT).

Since 1946 **McCormick Taylor, Inc.** has been providing planning, environmental, engineering, and communications services to transportation clients throughout the mid-Atlantic region. With approximately 400 people in 11 offices, the firm's long list of successful accomplishments includes a wide range of high visibility, groundbreaking, and award winning transportation planning, communications services and context-sensitive design projects. Our Virginia office is located in the

metro Richmond area and services our clients throughout Virginia. Our Virginia-based staff has countless years of experience successfully completing all types of transportation projects for numerous public sector clients throughout Virginia.

A unique aspect of McCormick Taylor is that the firm solely specializes in public sector transportation work. It is all we do and it is what we do best. It is a full service company that has all of the needed specialists in-house to successfully and quickly complete any type of transportation and transit planning or design project. The firm's mission is to exceed client expectations on every project through professionalism and integrity. We have the unique ability to help our clients develop innovative and cost effective solutions to complex transportation and land use problems. We highly experienced in complex urban areas and projects that involve all types of multi-modal planning, design and communication services efforts.

Being a full service transportation and planning firm, we recognize how our work affects communities and the people who live and work in them. Rather than simply just designing transportation improvements or evaluating environmental impacts, we are communicating ideas, listening to concerns, resolving conflicts, and improving the relationship between our clients and the people they serve. In essence, we strive to find harmony within the environment, between the natural and the built. That's why the firm does whatever is necessary, from planning concepts to final design and consultation, in all the services provided.

Donald Newlands, Principal and Founder of **Newlands & Company, Inc. (NC3D)**, brings over 24 years of experience working at the cutting edge of 3D graphics, visualization, and computer-aided design. Through his background in landscape architecture and art, Mr. Newlands founded his career in design visualization, and led him to start the first 3D visualization firm on the West Coast in 1988.

Newlands acts as Project Manager and Creative Director on most projects in the studio, and has played a key role in the design and community involvement for numerous major regional and national transit projects.

At the core of Mr. Newlands' career has been a desire to improve design through participation by re-thinking design tools and improving visual communication. In college and graduate school, Mr. Newlands focused on the public's role in art and design and how technology could help level the playing field. In business, Mr. Newlands pioneered the use of photo-simulation and 3D animation on major public projects, such as the Eugene / Springfield BRT Pilot Corridor and the Westside Light Rail Project, Mr. Newlands seeks to integrate and visualize highly technical, abstract and sensitive design issues such as seismology and construction processes within charged and highly visible public projects.

Randolph Richardson Associates is a professional services company offering expertise to the transit industry in areas such as project management, procurement, program planning, contracting, financial management, transit management, transit operations planning, and urban planning. The firm is dedicated to providing its services effectively and cost efficiently. We are highly capable of working with the wide range of clients in the transit industry with the ability to provide the right support at the right time.

Randolph Richardson Associates is experienced in a broad scope of transit projects. Some of the projects include major investment studies, corridor studies, feasibility studies, bus/rail specification reviews, technology reviews, benefit-cost analyses, fare collection studies, and procurement reviews. Presently the

We recognize DRPT's mandate to improve transit service while reducing congestion and expanding opportunities for economic development.

firm is involved in projects with tasks addressing transit construction related transportation management, as well as transit vehicle procurement and operations planning.

Established in 1986, **Rhodeside & Harwell** offers comprehensive services in planning, urban design, and landscape architecture. Their professional staff, based in offices in Alexandria, Virginia, and Newark, New Jersey, consults on significant projects throughout the world.

Rhodeside & Harwell's talented team includes founders Deana Rhodeside, PhD., Elliot Rhodeside, FASLA, and Faye Harwell, FASLA. Their expertise includes master planning, urban revitalization, streetscape design, open space planning, environmental design, site security, waterfront planning, transportation planning, and other critical practice areas. Their services in public engagement have enabled communities to advance vital initiatives in preservation, redevelopment, and the creation of exciting new amenities within the natural and built environment.

They work closely with clients in the public and private sectors to create landscapes and civic spaces that enhance communities and carefully address economic, ecological, and historic contexts. They bring a multidisciplinary focus to each project, along with inventive concepts and a commitment to standard-setting best practices throughout each phase of work. All of their projects benefit from principal-level involvement and a collaborative approach to design that yields unique and inspired results.

They are proud to have completed work at such celebrated sites as Gettysburg National Military Park, the George Mason Memorial on the National Mall, the historic Essex County Branch Brook Park in New Jersey, the National Zoo, the National Aquarium in Baltimore, Arlington National Cemetery, and the Virginia State Capitol in Richmond. their portfolio includes U.S. embassies around the world, state-of-the-art headquarters and campus

environments, forward-thinking plans for transit-oriented communities, and complex environmental restoration projects.

Their many awards include a Chamber of Commerce "Best Small Business" award and numerous regional and national planning and design commendations from ASLA, APA, and other professional organizations. They have also supported many distinctive projects that have earned AIA, GSA, and other prominent awards.

Sharp & Company has for over 17 of their 30 years in business, have helped transportation organizations achieve the interest and support they need—whether it's involving an affected community in approving plans for BWI's airport expansion or expressing the value of the Washington area Metro system to the public in a way that enabled the Authority to procure an additional \$1.5 billion in capital funding.

Sharp & Company provides:

- Experienced information communication strategists
- Seasoned print, video and web writing and design, as well as organization management professionals with significant private and public sector communication experience
- Outreach and meeting planning, logistics and support for up to 20,000 participants
- First-hand public agency operations experience
- Ability to form and lead cost-effective teams through long-standing key strategic alliances that provide comprehensive coverage

The firm's principals provide over 50 years of combined marketing and communications experience. Susan Sharp excels in the development of communications strategy, while Mary Arzt brings marketing and design project management experience to her role as award-winning creative director and production supervisor.

Spy Pond Partners, LLC (SPP), is a Massachusetts firm that focuses on providing management consulting services to transportation agencies. SPP helps clients improve their performance and enhance their accountability by building stronger connections between data, organizations, and decisions. Through expert analysis and facilitation, SPP serves as a catalyst, accelerating the pace of organizational improvements, performance measurement, and business process improvement efforts.

The partners at SPP work at both the executive and technical level within transportation organizations, and are national experts in asset management, performance measurement and management, strategic planning and information management. Particularly relevant to this project is SPP's work assisting in the MBTA SGR Database Enhancement project, and staff experience implementing asset management systems and approaches.

Transportation Management & Design, Inc. (TMD) is a Southern California transit-planning firm focused on developing and implementing market and customer driven transit networks and services nationwide. Over the past 22 years we have undertaken over one hundred transit service and operations planning projects that involve small and large systems and include bus, paratransit, and rail transit; many of which were in response to a task order as part of an on-call general planning services contract.

Their range of expertise in the areas of operations planning and analysis and short-range plan and program development provides a strong and reliable resource for our clients to draw on – as needed, when needed. With respect to the Virginia Department of Rail and Public Transportation's current request for general planning consultants TMD currently serves in such a capacity for a variety of agencies, including RTD (Denver, CO), Mountain Metropolitan Transit (Colorado Springs, CO), Summit Stage (Summit County, CO),

SunLine (Thousand Palms, CA), San Diego Association of Governments and Metropolitan Transit System (San Diego, CA), Los Angeles County Metropolitan Transportation Authority (LA Metro), and AC Transit (Oakland, CA). Our work is guided by three distinct principles: client success is the highest priority, continued improvement of our skills is essential, and each project has a unique framework of requirements. Successful outcomes happen when these principles are combined through comprehensively focused methodology, thorough needs assessment, and interactive client-consultant collaboration. We have found that such collaboration leads to sound, implementable solutions. The following is a general overview of the firm.

TMD has been serving the transit industry since 1988, specializing in service planning and market development, service efficiency and effectiveness, together with daily service operations support and scheduling. Dedicated focus throughout the entire process ensures a positive outcome for each of our clients in both project approval and project implementation. The first-hand management and technical experience of our senior staff consists of development, implementation, and ongoing assessment of a wide range of transit solutions at diverse transit agencies, both as system staff and as consultants. Our accomplishments are significant at systems ranging from small agencies with single-mode fixed route or demand-responsive systems, to large multi-modal rail and bus systems. We have extensive experience in successful transit development and implementation across the Country including San Diego, Los Angeles, San Francisco, Minneapolis, Chicago, Charlotte, Cincinnati, and Buffalo. We provide clients with an effective and strategic approach to projects while ensuring that innovative ideas are successfully translated into sound tactical operating recommendations, evidenced by our long-standing reputation in the transit consulting business. Our main offices are located in Southern California,

with supporting regional offices in New York, Oakland, and Kansas City.

Transportation Resource Associates, Inc. (TRA) is a professional consulting firm which specializes in passenger transportation operations, safety, security, and management. TRA was established in 1990 to provide clients in the public and private sectors with the operations-oriented consulting expertise necessary to address complex transit safety, security, operations, design, and regulatory issues. In particular, TRA focuses on transportation systems that carry large numbers of people – fixed guideway rail transit systems, commuter and intercity rail systems, bus systems, and other people mover systems. TRA is also the developer of IndustrySafe, a comprehensive safety data management software solution.

TRA provides technical and management consulting services in the areas of system safety; security and emergency preparedness; accident and incident investigation; transit and railway operations; maintenance and operations analysis; transportation planning; labor relations/human resources; and alternative transit services. The firm's personnel have extensive backgrounds and specialized expertise in:

- Rail State Safety Oversight (SSO),
- Safety & Security Certification,
- Rail and bus safety programs,
- Transportation industry standards development,
- System security assessments and technical assistance,
- Hazard analysis (HA)
- Threat and vulnerability assessments (TVAs)
- Operations service analysis,
- Operations control technology,
- System start-up,
- Human resources, and
- Labor relations.

TRA has significant experience and expertise in reviewing safety-critical elements of passenger transportation

across several different modes. TRA provides consulting support to several jurisdictions to fulfill their rail transit, automated peplemover, and monorail State Safety Oversight (SSO) requirements, as outlined by 49 CFR Part 659. Through its extensive SSO work history, TRA has garnered an extensive expertise in auditing and certifying safety and security-critical elements of transit, investigating passenger rail system accidents and incidents, and developing effective corrective action plans that address deficiencies and improve system safety and security.

Travesky & Associates, LTD. is a northern VA based firm specializing in government and community relations for a broad range of clients. The Travesky team possesses excellent human relations skills and the ability to communicate effectively in sensitive political environments. Team members are proficient in analyzing a project area to identify the demographics, key stakeholders, best communication venues, and important issues and concerns. The firm uses innovative and proven public involvement techniques to tailor programs to project areas.

Professional Services & Capabilities

- Develop Strategic Communications Plans that are based on thorough assessments of issues, audiences and political environment
- Risk Communications Management to facilitate public understanding of project
- Message Development for diverse audiences
- Technological Resource Development to create multi-faceted project communications environment
- Geographical and Political Affairs Expertise

We will continue to focus on one goal: to provide DRPT with the highest level of consultant services available.

“A detailed statement indicating the organizational structure under which the firm proposes to conduct business. If more than one firm is involved in this project, state the type of arrangement between the firms and the percentage of work to be performed by each.”

The proposed AECOM Project Manager is Derek Crider; with Deputy Project Manager, Jason Mumford; and Project Accountant, Christian Russo. Derek will be the direct point of contact for specific task order assignments and administrative matters, relying on Jason and Christian for support.

Four AECOM staff members are assigned as Functional Leaders. In consultation with DRPT, Derek will assign these senior professionals to serve as project managers for major assignments and assign others as appropriate to manage smaller assignments. These individuals will be responsive to DRPT managers by performing reviews of key deliverables to ensure that they respond to the specific requirements of the scope of work and that they are in keeping with the broader vision of DRPT.

The AECOM team has a single Discipline Leader for each of the Potential Services areas outlined in the RFP. Discipline Leaders will serve as project and task managers for task order assignments in their areas,

complemented by appropriate support staff. Seven of the twelve Discipline Leaders are subconsultants; the intent of this arrangement is to position subconsultant firms to take significant leadership roles as part of the team, and provide DRPT managers with the valuable perspectives that these professionals bring to their areas of expertise.

Key Subject Matter Resources include support staff from the range of disciplines required to serve DRPT in the anticipated assignments. These professionals will be configured across disciplines to provide the appropriate mix of expertise and diversity of perspectives for each task order.

Assumed Level of Effort by Firm

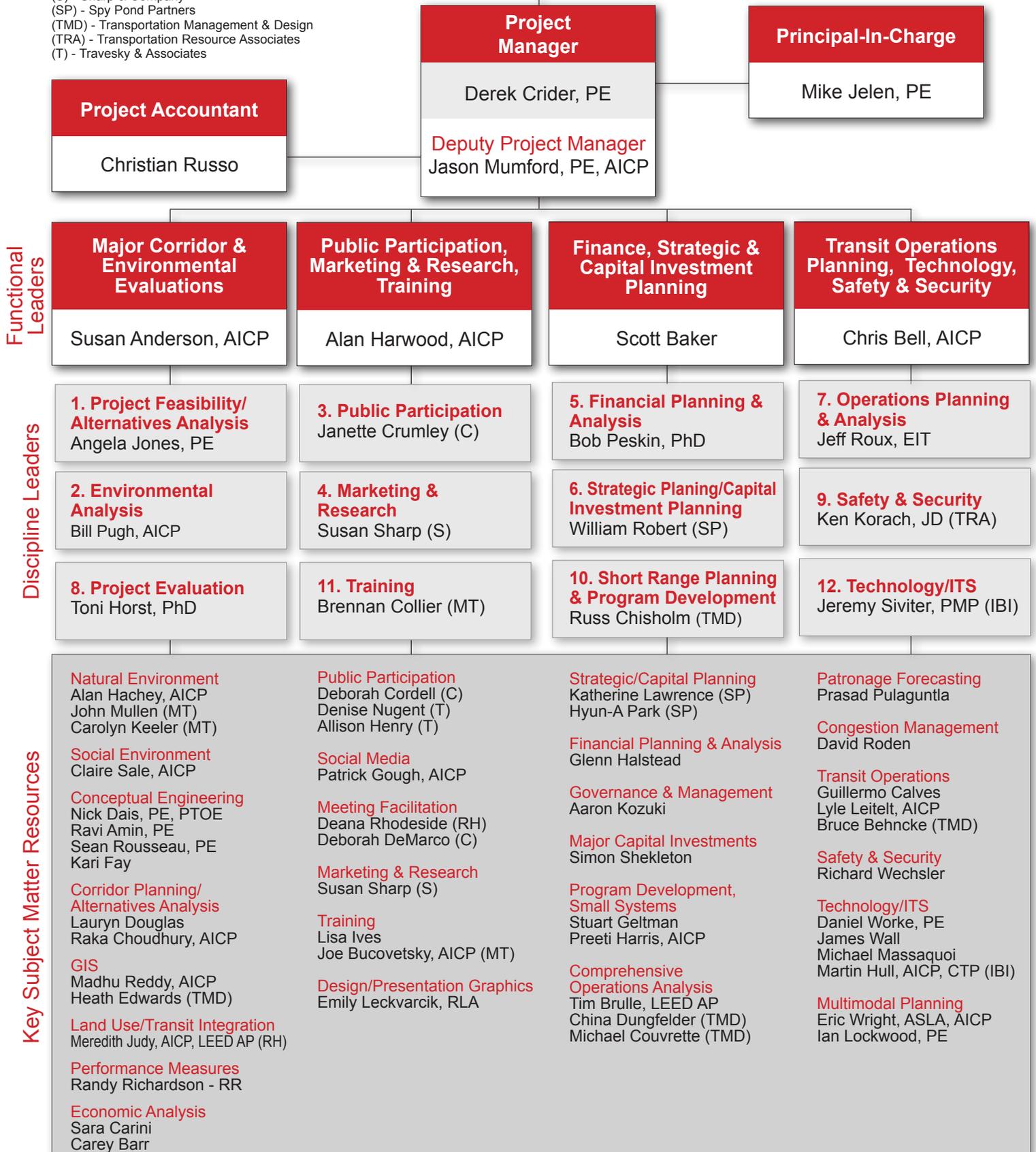
For assignments that require a mix of firms, as well as for “pass-through” assignments to a single firm, all subconsultant firms will contract with and report directly to AECOM. The table below shows the anticipated workload through the course of the contract by firm.

Assumed Level of Effort by Firm	
Firm Name	% Participation
AECOM	45%
Cordell & Crumley	5%
IBI Group	5%
McCormick Taylor	8%
Newlands & Company	2%
Randolph Richardson Associates	5%
Rhodeside & Harwell	5%
Sharp & Company	5%
Spy Pond Partners	5%
Transportation Management & Design (TMD)	5%
Transportation Resource Associates (TRA)	5%
Travesky & Associates	5%
TOTAL	100%

Total DBE/SWaM = 35%

Legend:

- (C) - Cordell & Crumley
- (IBI) - IBI Group
- (MT) - McCormick Taylor
- (N) - Newlands & Company
- (RR) - Randolph Richardson Associates
- (RH) - Rhodeside & Harwell
- (S) - Sharp & Company
- (SP) - Spy Pond Partners
- (TMD) - Transportation Management & Design
- (TRA) - Transportation Resource Associates
- (T) - Travesky & Associates



Tab 2, B. - Experience and Qualifications

“A list of the key personnel including subcontractors who could be assigned to the various tasks identified. Give the relevant experience record of each and include resumes and any certifications.”

The table below provides key management and technical personnel who will be assigned to the range of anticipated task orders. Detailed resumes follow.

Role/Services Category	Individual	Technical Discipline	Resume on Page #
Principal-In-Charge	Mike Jelen, PE	Principal-In-Charge	29
Project Manager	Derek Crider, PE	Project Manager	30
Deputy Project Manager	Jason Mumford, PE, AICP	Deputy Project Manager	31
Functional Leaders	Susan Anderson, AICP	Major Corridor & Environment Evaluations	32
	Alan Harwood, AICP	Public Participation, Marketing & Research, Training	33
	Scott Baker	Finance & Strategic Planning/Capital Investment Planning/Short Range Planning & Program Dev.	34
	Chris Bell, AICP	Transit Operations Planning & Technology/ITS, Safety and Security	35
Discipline Leaders and Key Subject Matter Resources			
1. Project Feasibility/Identification and Alternatives Analysis	Angela Jones, PE	Project Feasibility/Identification & Alternatives Analysis	36
	Nick Dais, PE, PTOE	Conceptual Engineering	37
	Lauryn Douglas	Corridor Planning/Alternative Analysis	37
	Madhu Reddy, AICP	GIS	38
	Meredith Judy, AICP LEED AP	Land Use/Transit Integration	38
2. Environmental Analysis	Bill Pugh, AICP	Environmental Analysis	39
	Alan Hachey, AICP	Natural Environment	40
	Claire Sale, AICP	Social Environment	40
3. Public Participation	Janette Crumley	Public Participation	41
	Deborah Cordell	Public Participation	41
	Deana Rhodeside, PhD	Meeting Facilitation	42
	Emily Leckvarcik, RLA	Design/Presentation Graphics	42
4. Marketing & Research	Susan Sharp	Marketing & Research	43
5. Financial Planning & Analysis	Bob Peskin, PhD	Financial Planning & Analysis	44
	Glenn Halstead	Financial Planning & Analysis	45
	Aaron Kozuki	Governance & Management	45
6. Strategic Planning/Capital Investment Planning	William Robert	Strategic Planning/Capital Investment Planning	46
	Katherine Lawrence	Strategic/Capital Planning	47
	Simon Shekleton	Major Capital Investments	47
7. Operations Planning & Analysis	Jeff Roux, EIT	Operations Planning & Analysis	48
	Guillermo Calves	Transit Operations	49
	Eric Wright, ASLA, AICP	Multimodal Planning	49
	Ian Lockwood, PE	Multimodal Planning	50
	David Roden	Congestion Management	50
	Prasad Pulaguntla	Patronage Forecasting	51
8. Project Evaluation	Toni Horst, PhD	Project Evaluation	52
	Randy Richardson	Performance Measures	51
	Sara Carini	Economic Analysis	53
9. Safety and Security	Ken Korach, JD	Safety and Security	54
	Richard Weschler	Safety & Security	53
10. Short Range Planning and Program Development	Russ Chisholm	Short Range Planning and Program Development	55
	Stuart Geltman	Program Development, Small Systems	56
	Tim Brulle, LEED AP	Comprehensive Operations Analysis	56
11. Training	Brennan Collier	Training	57
	Lisa Ives	Training	58
	Joe Bucovetsky, AICP	Training	58
12. Technology/ITS	Jeremy Siviter, PMP	Technology/ITS	59
	Daniel Worke, PE	Technology/ITS	60
	Martin Hull, AICP, CTP	Technology/ITS	60

Mike Jelen, PE

Principal-In-Charge

Total Years of Experience: 24

Education

BS, Civil Engineering, University of Illinois, 1989

Mr. Jelen has over two decades of progressively responsible staff and leadership experience in the planning, design, construction and maintenance of roads and bridges. After starting his career in the Illinois Department of Transportation's three-year engineer-in-training program, he worked as a structural engineer on the reconstruction and the Stevenson Expressway (I-55) in Chicago. Recently, Mr. Jelen has served as operations manager for the Corps of Engineers' \$800MM program to repair Katrina damages in New Orleans, and as program manager for federal aid and local funded transportation capital improvements in the District of Columbia.

Lower Georgia Avenue Transportation Study, Washington, DC. Team Leader responsible for conceiving, scoping and directing the study to determine the appropriate relationship between Sherman Ave NW and parallel Georgia Avenue NW from a complete streets perspective, including the incorporation of WMATA bus operation improvements on Georgia Ave, and consideration of major development projects forecast for the area.

Historic O&P Streets NW, Georgetown, DC. Team leader responsible for Section 106, NEPA and Section 4f documentation required for the reconstruction of these granite paver streets with historic trolley infrastructure.

14th Street Bridge Corridor EIS, Washington, DC. Member of the executive steering committee for this multi-jurisdictional EIS focused on determining the most cost effective ways to improve traffic operations on the corridor.

Mt. Pleasant, DC Transportation Study, Washington, DC. Team Leader responsible for general oversight of the scoping and delivery of this neighborhood study focused on developing an operational and capital improvement strategy to achieve the District's complete streets goals in the national historic district.

Kennedy Center Pedestrian Bridge.

Team Leader for the scoping and type, size and location (TS&L) design of a grand staircase and elevators connecting the Kennedy Center's performance level balcony to the Potomac River bike path. Led agency coordination and conceptual approvals from the NCPC, Commission of Fine Arts, DC-SHPO, the National Park Service and the Kennedy Center.

L'Enfant Promenade Environmental Assessment, Washington, DC. Program manager responsible for assuring the completion of a long EA process, including a signed FONSI for a significant streetscape upgrade.

14th Street NW Transportation Study, Washington, DC. Team Leader responsible for general oversight of the scoping and delivery of this neighborhood study focused on developing an operational and capital improvement strategy to achieve the District's complete streets goals along an up and coming commercial and residential corridor north of Downtown.

District of Columbia Department of Transportation (DDOT) Ward Based Delivery Program, Washington, DC. As program manager responsible for a geographic area equivalent to a quarter of the District, Mr. Jelen prepared DC local and Federal Aid capital budget submissions, signed project agreements with the Federal Highway Administration, reviewed and approved public space occupancy and construction permit applications, and provided oversight of a variety of local capital and federal aid highway funds. His leadership grew the size of the federal aid program in his quarter of the District from \$9MM to \$85MM in three years.

DDOT Streetcar Program, Washington, DC. As the first Streetcar Development Team leader, established the organization's framework structure and developed a road map to unity of effort in all of the Department's Streetcar planning, design and construction activities. Also, provided general oversight to over \$100MM of ongoing Streetcar related design and construction projects.

Task Force Guardian, New Orleans Hurricane Protection System Restoration Project.

Operations officer for the \$800MM program to restore 58 levee and floodwall breaches to design strength prior to the first hurricane season after Hurricane Katrina. Led the conversion of the task force from design through procurement and into a construction oriented operation, including recruiting and in-processing over 60 new personnel over a 45 day period.

Readiness XXI – Corps of Engineers Transformation Initiative. Operations officer responsible for creating the first ever command level training and exercise division. Established the organizational structure and served as the first USACE G37 Training & Exercise manager, providing leadership and oversight of activities worldwide.

Reconstruction of the 11th Street S.W. Bridge over D Street and the CSX Railroad, Washington, DC. Area engineer and contracting officer's technical representative for complete superstructure replacement of this two span bridge in downtown DC.

Great Streets: Reconstruction of Minnesota Avenue from A St S.E. to Sherriff Road N.E. Team Leader for the design of roadway geometry and public realm improvements intended to deliver a "complete streets" design for this struggling commercial corridor. Project required close collaboration with WMATA rail and bus operations, as well as the Office of the Deputy Mayor for Planning and Economic Development to incorporate adjacent development plans.

I-95 over the James River, Richmond, VA. Team Leader for this 102-span urban river crossing, with a fracture critical deck truss. Highly complex traffic control and access requirements due to four intersecting structures (ramps) and elevated rail, electric, and highway traffic beneath.

Derek Crider, PE

Project Manager

Total Years of Experience: 30

Education

MS, Civil Engineering, Purdue University, 1980

BS, Civil Engineering, Purdue University, 1978

Derek Crider has more than 30 years of bus and rail transit planning experience within the private and public sectors, including Major Investment Studies, Transit Development Plans, Corridor Studies, and Operational Analyses. Derek has led alternatives definition, technology evaluation, network design, and cost estimating tasks for major investment studies. Studies and analyses were conducted according to federal and state guidelines for environmental review and local guidelines for land use compatibility, urban form, and community involvement. He has developed short- and long-range transit plans and led transit corridor studies and system-level performance evaluations.

General Planning Consultant Services, Metropolitan Atlanta Rapid Transit Authority. GPC Technical Manager responsible for coordination of tasks and work orders for the consultant team as support to the MARTA planning department. Key areas were operations planning and analysis, scope development, staff mentoring, and strategic planning for long-term regional transit strategies.

Program Management Consultant (Fluor Middle East), Department of Transport, Abu Dhabi, UAE. Project Delivery Manager responsible for management and oversight of LRT consultant to ensure delivery to the Abu Dhabi DoT of comprehensive and high-quality documents defining alignment, cost and financial justification of an LRT network to the Abu Dhabi DOT.

Regional Transit District, Task Manager, Operations Analysis, Denver, CO. Responsible for operations planning and analysis for the East, Gold, and I-225 rail corridors of the \$6.2 billion FasTracks system expansion program. Led development of alternative rail and bus operating plans, travel time analysis, and terminal design verified that ridership and

costs were representative and appropriate for alternative operating plans and alignment options.

Hennepin County, Minneapolis, MN.

As Manager of Engineering and Transit Planning, responsible for long-term planning for light rail and bus transit, roadway enhancements, and trails along county right-of-ways. Led and managed feasibility studies, and corridor analyses; also led design review and oversight of Hiawatha light rail start-up operations.

Metro Transit, Minneapolis, MN. Chief of Staff, responsible for scope, budget and public involvement oversight for Metro Transit high capacity corridor projects, including planned busways and rail in the Riverview, Central, Northwest, and Southwest corridors. Represented general manager for selected corridor initiatives in regional forums; briefed and advised the general manager of project status and real or perceived issues regarding project implementation and transit operations.

Downtown to Astrodome Light Rail Project EA, Metropolitan Transit Authority of Harris County (Metro), Texas. Task Manager responsible for the Transportation Impacts chapter of the final Environmental Assessment. Impacts were documented for transit service, traffic and roadways, pedestrians, bicycle facilities, and freight movements. Transit operating plans were refined and final circulation plans identified. Ridership estimates were updated; corresponding travel time savings, vehicle miles, and vehicle hours were then calculated. The light rail project opened for service in January 2004.

Interregional Corridor Alternatives Analysis, Wasatch Front Regional Council, Mountainland Association of Governments, Utah Transit Authority, and Utah Department of Transportation, Salt Lake City, Utah. Project Manager responsible for development and analysis of transit and transportation alternatives for the state's 120 mile urbanized corridor. Led development of alternatives that included commuter and light rail, HOV lanes, roadways, and traffic/transit management support strategies.

Honolulu Transit Study, City and County of Honolulu, HI. Lead for development supporting bus network for alternative transit scenarios, including all bus, Bus Rapid Transit and Bus/Light Rail Transit alternatives extending through the most densely developed corridors in the city and along major travel corridors. This study was initiated to determine the most cost-effective transit network for areas in which a significant increase in population was expected.

Southeast Corridor Major Investment Study (MIS), Dallas Area Rapid Transit (DART). Technical Lead responsible for development of modal alternatives and coordination of community outreach efforts conducted by DART staff. This MIS was conducted as an initial step of the southeast segment of the Green Line as defined in the DART Light Rail System Plan.

VIA Metropolitan Transit 2020 Visioning, San Antonio, TX. Assisted a Blue Ribbon task force of community leaders in reviewing alternative transit growth scenarios, transit technologies and operating plans to develop guiding principles for the San Antonio 2020 transportation network.

Capital Metro, System Performance Assessment and System Plan Update, Austin, TX. Responsible updating the five year transit development plan that was completed in 1994. Led analysis focused on light rail and bus rapid transit modes and alternative alignments for a high-capacity network in the Austin region.

Jason Mumford, AICP, PE

Deputy Project Manager

Total Years of Experience: 18

Education

Masters, City Planning, University of Pennsylvania, 1998

BS, Civil Engineering, University of Utah, 1995

Mr. Mumford is a senior engineer/planner and project manager with expertise in planning, design, and evaluation of urban transportation improvements. Areas of technical expertise include track and facilities design for freight and passenger transit service, alignment and station planning, environmental documentation, cost estimation, scheduling, and project management. He has conducted work at all phases of project development, from system planning, alternatives analysis studies, and neighborhood transportation studies, to environmental assessment and preliminary engineering, to final design and construction. As a trained planner and engineer, Mr. Mumford has served as a vital link across disciplines and between organizations.

Planning and Program Management Support, Virginia Department of Rail and Public Transportation. AECOM

served as an extension of DRPT staff on a variety of assignments throughout the Commonwealth. Mr. Mumford managed several technical tasks including transit development plans, risk assessments of current projects, statewide vehicle inventories, and transit performance summaries, and he coordinated the work of subconsultants under the current General Planning Consultant agreement.

Virginia Intercity Rail Station Area Planning, Virginia Department of Rail and Public Transportation. DRPT is

advancing plans for enhanced rail service along major travel corridors within the state. As part of these efforts, the agency is assisting several jurisdictions as they develop plans for intensified mixed-use development around rail stations. Mr. Mumford has managed the consultant team's work on this task, which includes ridership surveys and forecasting, land use and economic analysis, and engagement with staff from the partner jurisdictions.

Columbia Pike Streetcar Project, WMATA with Arlington and Fairfax Counties, VA.

Mr. Mumford served as Project Manager on this evaluation of transit improvements along a five-mile corridor in Arlington and Fairfax Counties in Northern Virginia. Transit ridership has grown dramatically in recent years in step with bus improvements and corridor redevelopment. Project stakeholders are planning for the next phase of transit investment which includes a modern streetcar system. The recently completed phase of project planning included preparation of NEPA environmental documentation and FTA funding application.

Atlanta BeltLine Corridor Environmental Study, MARTA and Atlanta BeltLine, Inc.

Atlanta has grown up around its network of railroads. The BeltLine will link several historic railroad corridors through proposed streetcar service and recreational trails that form a 22-mile loop around central Atlanta. As engineering task manager, Mr. Mumford led the multi-disciplinary team that provided transit and trail design, cost estimates, and right-of-way analysis to support the Tier I EIS document, for which FTA issued a Record of Decision in August 2012.

Tampa Streetcar and Ybor Station, Hillsborough Area Regional Transit. This 2.3-mile trolley line in downtown Tampa features a unique station facility serving as public museum, park, and streetcar yard and shop, all located in a National Register Historic District. During construction, Mr. Mumford helped revise track geometry, reviewed shop drawings, and contributed to site planning, design, and construction management.

Guidelines for Interface of LRT and Streetcar Systems, WMATA.

There are several planned LRT and streetcar projects in the Washington, D.C. metropolitan area. As the region's core transit agency, WMATA is working with its partner jurisdictions and project sponsors to identify topics of mutual interest and opportunities for coordination. Mr. Mumford is managing the technical and coordination effort, the result of which will be a set of recommendations to be integrated in project design criteria and project management plans.

District of Columbia Transit Alternatives Analysis, WMATA.

Designed to address the next generation of transit in Washington, D.C., this extensive effort lays the groundwork for advancement of streetcar and BRT improvements along several transit corridors. Mr. Mumford managed capital cost development and facilities planning.

Grand Rapids Streetcar Feasibility Study, Interurban Transit Partnership-The Rapid.

This proposed streetcar line would link commercial and residential centers in downtown Grand Rapids and tie to the regional transit center. Mr. Mumford developed alignment recommendations, typical sections, and concept level capital cost estimates.

Crystal City-Potomac Yard Transitway, WMATA with Arlington County and City of Alexandria, VA.

This 5-mile corridor along a rapidly developing urban corridor northern Virginia includes 3 miles of dedicated bus lanes, enhanced passenger facilities, and ITS elements. Mr. Mumford served as the consultant project manager for environmental documentation, concept design, service planning, and implementation of the project. Arlington and Alexandria are using federal grants for construction of the facilities. FTA approved Documented Categorical Exclusions the two jurisdictions in 2010 and 2011; operations will begin in 2014.

Newark-Elizabeth Rail Link, NJ Transit.

This one-mile extension of the Newark City Subway, funded under the FTA New Starts program and now in operation, includes a 1000-foot tunnel and 4,000 feet of surface running double-track light rail alignment with four passenger stations. Mr. Mumford developed final design drawings for alignment and trackwork.

Birmingham In-Town Transit Partnership Project, Regional Planning Commission of Greater Birmingham, AL.

This Alternatives Analysis/DEIS and potential FTA Small Starts funding candidate examined BRT and LRT investments in downtown Birmingham. Intensive stakeholder workshops yielded an innovative transit district plan centered around the proposed bus rapid transit corridor and regional transit hub. Mr. Mumford served as engineering design task leader.

Susan Anderson, AICP

Functional Leader - Major Corridor & Environmental Evaluations

Total Years of Experience: 18

Education

BS, Geography (Environmental Planning), Radford University, 1994
Analytical Planning Courses (2 courses at Graduate level)
Graduate Coursework, Urban and Regional Planning, Virginia Commonwealth University

Ms. Anderson has considerable environmental planning and NEPA experience, including research and data collection for transportation related projects; data assimilation and management; field reviews; technical writing; agency coordination; and preparation of constraints mapping. Her experience includes project management; document management; preparation of categorical exclusions, environmental assessments, environmental impact studies, and various technical reports; and preparation for public information meetings and public hearings.

Columbia Pike Transit Initiative, Arlington and Fairfax Counties, VA.

Served as Deputy Project Manager and Environmental Technical Lead for an Environmental Assessment of implementing improved transit service along an approximate 5-mile urban corridor.

Potomac Yards Metrorail Station

EIS, Alexandria, VA. Provides technical oversight and technical advisor to the project.

FRA Northeast Corridor Program Rail Corridor Investment Plan, Northeast, USA.

Serves as the Environmental Technical Lead, environmental technical working group lead and liaison for a Council on Environmental Quality (CEQ) Pilot program for the Tier I Environmental Impact Statement/Service Development Plan.

Richmond to Hampton Roads Passenger Rail Tier I EIS, Hampton Roads, VA.

Task Manager for the Tier I EIS. The project evaluated the incorporation of higher-speed passenger rail service along a CSX and/or NS active freight lines in southeastern Virginia.

Southern Avenue Bus Garage Replacement Project, Prince George's

County, MD. Serves as the Environmental Task Manager for the preparation of an Environmental Assessment to evaluate three separate sites proposed for use as bus storage and maintenance facility. An Environmental Evaluation Report, per the WMATA Compact procedures was also prepared for this project.

Crystal City Potomac Yard Transit Improvements, Arlington, VA.

Served as Deputy Project Manager and environmental task manager for the completion of a Documented Categorical Exclusion for proposed transit improvements along the corridor.

Washington Metropolitan Area Transit Authority (WMATA), DC's Transit Future Alternatives Analysis, Washington, DC.

Assisted in the definition of project alternatives, data collection and preparation of various technical reports. Task Manager for environmental screening of alternatives.

Dulles Corridor Rapid Transit Project, Fairfax and Loudon Counties, VA.

Assisted in the preparation of responses to public comments on the supplemental environmental impact statement public hearing report. Environmental Task Manager responsible for natural resources documentation and preparation of the final environmental impact statement/Section 4(f) evaluation chapters.

Cinder Bed Road Bus Operations and Maintenance Facility, Fairfax, VA.

Prepared a WMATA Environmental Evaluation Report, Federal Consistency Certification, and Categorical Exclusion for proposed bus operations and maintenance facility in Fairfax County, Virginia.

MARTA BeltLine Tier 1 Environmental Impact Statement, Atlanta, GA.

Served as a Technical Advisor and assisted with Tier 1 Environmental Impact Statement, preparation of Georgia Environmental Policy Act Environmental Effects Report, and preparation of Existing Conditions Report.

Virginia Department of Rail and Public Transportation, Town of Haymarket Public Transportation Feasibility Study, Haymarket, VA.

Task Manager for preparation of feasibility study to determine

public transportation need within the town of Haymarket.

RTS Phase 1 Environmental Assessment, Jacksonville, FL.

Task Manager for the environmental assessment for the RTS phase 1. The project is evaluating the effects of refocusing the current bus system to include bus rapid transit through downtown Jacksonville.

Metro Matters Campaign, Washington Metropolitan Area Transit Authority (WMATA), Washington, DC.

Conducted field reviews and provided technical assistance for environmental documents.

Virginia Railway Express (VRE)/ Potomac Rappahannock and Transportation Commission (PRTC), VA.

Assisted in the overall project management as well as provided technical support for many of the various task orders listed below:

- **Task Order 1 - Cherry Hill Preliminary Design and Environmental Assessment** - Task Order Manager for the preliminary design and environmental assessment, as well as the lead author for the environmental assessment. Under this task, various locations for a new commuter rail station were evaluated pursuant to NEPA.
- **Task Order 2 - Value Engineering Study Quantico Creek Bridge** - Participated in the value engineering study of the proposed Quantico Creek railroad bridge. Evaluated the alignment from an environmental point of view.
- **Task Order 4 - Environmental Screening** - Task Order Manager for this task to evaluate potential environmental constraints/impacts associated with proposed capital improvements. The final deliverable was an environmental screening report addressing the proposed improvements, potential impacts, and the recommended level of NEPA compliance.
- **Task Order 5 - Quantico Creek Bridge Permitting** - Assumed the role of Task Order Manager to obtain the environmental permits (joint permit application with the State of Virginia).

Alan Harwood, AICP

Functional Leader - Public Participation, Marketing & Research, Training

Total Years of Experience: 26

Education

Masters Certificate, Urban and Regional Planning, George Washington University, 1991

BS, Geography, University of South Carolina, 1983

Mr. Harwood is a Principal and Vice President with AECOM and has worked in the Washington area office since 1987. He is a certified planner with more than 25 years of award-winning experience in community-based economic revitalization, urban planning, and environmental impact analysis. Mr. Harwood brings excellent instincts, a strategic approach, strong leadership skills, and a personal commitment to each project. His project responsibilities include overall direction, client coordination, team leadership, product quality, and public presentations.

Mr. Harwood has successfully completed challenging projects for a variety of clients, including federal agencies, local governments, and community private-sector interests. His work on commercial and mixed-use development, sports facilities and attractions, and open space and cultural resources has been recognized with more than 25 professional awards since 1990. Prior to AECOM and AECOM, Mr. Harwood worked for a public planning agency, an engineering firm, and a commercial builder.

Chester Economic Development Authority, Chester CBD Action Plan, Chester, PA. Project director for the design of an award-winning plan for a distressed urban community that contains economic development strategies, phasing plans, and detailed implementation actions to capitalize on a renovated commuter train station.

Louisville/Jefferson County Metro Government Economic Development Department, Pennsylvania.rk Hill Implementation Strategy Plan, Louisville, KY. Project director prepared land use, public realm, and branding recommendations to reposition a key development area, generate jobs, and strengthen the local economy.

City of Alexandria, Mount Vernon Avenue Business Area Study, Alexandria, VA. Senior planner, developed strategy to create a viable retail environment; including a market analysis and retail strategy; public/shared parking plan; design analysis and guidelines; and community facilitation.

Fayetteville Department of Community Development and Housing, Massey Hill Community Redevelopment Plan, Fayetteville, NC. Project director for revitalization plan for a former mill community with physical and programmatic recommendations to attract growth, manage open space, connect amenities to neighborhoods, and promote home ownership.

Alexandria Redevelopment and Housing Authority (ARHA), Samuel Madden Homes Feasibility Study, Alexandria, VA. Project manager, developed 5 alternative land use scenarios and recommended a 210-unit mixed-income redevelopment concept for a public housing site in Old Town that balanced the desires of public housing residents with the need for economic development in coordination with HOPE VI guidelines.

Transportation, and Federal Highway Administration, Woodrow Wilson Bridge Concept Competition, Alexandria, Virginia. Project manager, developed land use and open space enhancement/mitigation recommendations as part of a submitted bridge design concept.

Virginia Power, Clifton-Cannon Branch Environmental Study, Manassas, VA. Project manager, selected preferred alignment for a 230 kV transmission line and prepared expert witness testimony for State Corporation Commission hearings. Northern Virginia Electrical Cooperative, Compton Substation Visual Perspectives Analysis, Fairfax County, Virginia. Project manager, prepared mitigation plan to address public concerns for relocated substation.

Scott Baker

Functional Leader - Finance & Strategic Planning/Capital Investment Planning/Short Range Planning & Program Development

Total Years of Experience: 38

Education

JD, Georgetown University Law School, 1979

MBA, Harvard University Business School, 1974

BA, Harvard University, 1972

Mr. Baker has extensive experience in investment planning for major transportation systems, management, and business process improvements; strategic, operational, and information technology systems; organizational assessment and review; financial planning for transportation entities; and innovative contracting. Mr. Baker has a strong combination of national consulting experience on major transit projects and hands-on experience based on years of line responsibility for planning and implementation of projects. He is adept in project integration with ongoing agency service; fleet, facility, technology, financial, and labor relations planning; and he has extensive background in FTA New Starts project implementation. He has national experience in operations and operational planning, organizational assessment, urban transportation law, labor relations, transportation project implementation, and information technology.

Hampton Roads Transit New Starts Advisement, Norfolk, VA.

Led the financial planning and cost-effectiveness evaluation for a new rail system in the Hampton-Tidewater region of Virginia to secure Federal New Starts funding, as well as flexible highway funding and state participation. Evaluated a regional light rail system, and AECOM provided financial and management services to support a consolidation of transit throughout the region that was intended in part to facilitate regional investment in transit. The new regional system is pursuing its first rail segment in the City of Norfolk, and the team is examining later phases in the surrounding cities. Worked directly with the city and the state to make innovative use of state formula funds allocated to the area, state transportation trust funds, and a commitment from the city to appropriate local participation. Participated in guiding the project to a viable cost effectiveness

index and a highly rated financial plan and section 5309 submission, and supported the agency in meetings with the FTA to maximize the Federal New Starts ratings.

Chicago Transit Authority, Management and Operations Transformation, Chicago, IL. Managed a multidisciplinary team that identified long- and short-run savings and improvements in effectiveness in 19 specific functional areas that comprised the majority of CTA's management and operational processes.

Capital Metropolitan Transportation Authority, Freight Rail Business Plan, Austin, TX. The Transit Authority (Cap Metro) acquired a 120-mile freight rail line for passenger service development and has continued freight service, but has not been successful in earning a freight profit. Managed development of a long term strategy for Cap Metro freight operations. Line capacities were analyzed, various cost-sharing scenarios between various freight customers and the planned commuter rail service were considered, freight markets and tariffs were analyzed. Considered multiple operating scenarios, revenue environments, and freight traffic levels, and the interaction with passenger trains in the shared use segment. A strategy for structuring the service to achieve and maximize profitability while preserving the passenger service purpose of the investment was developed.

Hampton Roads Transit, Financial Management Improvement, Hampton, Virginia. HRT requested AECOM support in improving their financial reporting function and across a number of financial functional areas. A system of leading indicators was developed to provide advance information on financial trends through the preceding calendar month. AECOM reviewed and streamlined the revenue capture processes; cash management and accounts receivable; payment processes; general accounting processes; planning and analysis processes; asset management processes; treasury processes; internal control systems; and information systems, including management reports. In addition, a capital improvement program and financial planning system were

implemented and a detailed review of the cost allocation agreement among the member jurisdictions resulted in improved reporting to the members as well as improvements in the cost allocation agreement.

Regional Transportation Authority, Business Process Reengineering, New Orleans, LA. Managed a business process reengineering study of RTA, focusing on efficiency improvements that would form the basis of a sound financial plan including a fare increase and significant capital investments in rail infrastructure. The entire operation was reviewed, from service productivity and scheduling to maintenance and administrative efficiency. In concert with the management team, material efficiency improvements were recommended and implemented. These improvements included a reduction in the number of authorized positions in some areas, material reductions in unproductive service, and the implementation of service standards, revisions to compensation policies, and a fare increase. The study team worked directly with the New Orleans Mayor and City Council on behalf of RTA to secure approval of the resulting financial plan and fare increase. The potential for competitive outsourcing, including extending a pre existing maintenance management contract for a major bus division and paratransit, was reviewed and strategic recommendations were provided.

New York City Transit, Capital Improvement Project Review, NY.

Reviewed designer error and omissions in capital improvement projects for the transit agency's capital development department. Compared the extent of designer errors and omissions was compared to that in similar public entities. Identified methods for controlling the cost of errors and omissions. Conducted a concise and probative survey of designer errors and omissions. Assessed issues and defined the most effective methods for reducing and recovering the cost of errors. This was done through follow up with major transit agencies and construction authorities.

Chris Bell, AICP

Functional Leader - Transit Operations Planning & Technology/ITS, Safety & Security

Total Years of Experience: 30

Education

MBA, Transportation/Logistics, University of Maryland, College Park, 1993

MRP, Regional Planning/Transportation Planning, University of North Carolina, Chapel Hill, 1983

BA, Geography and Political Science, State University of New York, Oneonta, 1981

Mr. Bell is a senior manager in the transportation and transit planning practice at AECOM. He has project management responsibility for the full range of transit and transportation planning projects, including transportation planning for multimodal centers; transportation master planning; bus and rail operations and service planning; transit development plans; bus and rail operations and maintenance costs; bus and rail definition of alternatives; alternatives analysis; transportation planning; NEPA; project management; new starts; alternatives analysis; and the environmental evaluation process for large transit and transportation projects.

Virginia Regional Transit, Development Plan, Purcellville, VA. Project manager responsible for managing the completion of Transit Development Plan for Virginia Regional Transit, a non-profit transit operator serving 12 counties in central and northern Virginia. The service area is very diverse, with predominantly rural counties as well as counties on the edge of the Washington DC Metropolitan Area. Responsible for managing all elements of the study, including overall project management, completion of the analysis to identify transit needs throughout the service area, the review of existing service, the development of service recommendations, including modifications to existing service as well as new service, and the completion of the final report. The final set of recommendations include over 40 recommendations covering both demand response and fixed route service and which also range from commuter services to the Washington DC regional rail network to small 'life line' service meeting the most basic mobility needs.

Recommendations on fleet requirements to support the service recommendations were developed as were recommendations for passenger facilities.

Virginia Department of Rail and Public Transportation, New Transit Service Feasibility Analyses, Richmond, VA.

Project manager responsible for managing the development of a series of new transit service feasibility studies for a number of jurisdictions in Virginia that were interested in implementing new transit service. The studies were completed for the Virginia Department of Rail and Public Transportation, who will provide operations cost and capital cost support if the services are implemented. Each study evaluated service need based on demographic analysis, analysis of the location of key activity centers, and stakeholder input. Based on the needs analysis a preliminary route and service operations plan was developed for the purpose of estimating the cost of the service and the fleet requirements to support the service and final recommendations for implementation were made. Analyses have been completed for Dinwiddie County, Rockbridge County, and the Haymarket area of Prince William County.

Virginia Department of Rail and Public Transportation, Virginia Statewide Transit Plan, Richmond, VA.

Project manager responsible for managing the development of the Long Range Virginia Statewide Transit Plan, which will become part of the overall 2035 Virginia Statewide Transportation Plan. The planning process began with a detailed data collection effort which then formed the foundation for a series of detailed technical analyses on areas such as funding and funding stability, current and future required transit capacity, demographic changes in Virginia, the adequacy of regional planning relative to transit, and other issues potentially impacting transit in Virginia. These detailed technical analyses were then used to complete a Strength, Weaknesses, Opportunities and Threats (SWOT) Analysis of transit in Virginia. This SWOT Analysis will be the foundation for statewide transit goals and objectives and implementation strategies. The final

product of the planning process will be a detailed report summarizing the planning process and the technical analysis results and detailed implementation strategies, with associated costs, by implementation time frame, for inclusion in the Statewide Transportation plan.

Virginia Department of Rail and Public Transportation, Crystal City/Potomac Yard Transit Improvements Implementation Plan, VA.

Transportation Planning Task Manager. The Crystal City/Potomac Yard area of Arlington and Alexandria in northern Virginia is experiencing rapid development and redevelopment, with very large increases in both commercial and residential space expected to be built within the next 5-7 years. Work on long term transit solutions for the area has been completed but transportation officials in both jurisdictions are concerned that the rapid pace of development would leave the corridor without adequate transit service in the interim before the long term high capacity transit solutions would be implemented. AECOM was responsible for developing an implementation plan for transit service in the corridor in the interim between development and the implementation of a long term high capacity corridor transit system. As transportation planning task leader, played an integral role in the development of the implementation plan. This work included managing the development of an operating plan based on estimated demand in the corridor that formed the basis for estimating the required number of vehicles for service and the annual operations and maintenance costs. This work also included providing direction on facility and storage requirements, potential operating arrangements, input into passenger facility requirements, a checklist of items that must be addressed before implementation and additional operations elements such as supervision arrangements.

Angela Jones, PE

Discipline Leader - Project Feasibility/Identification & Alternatives Analysis

Total Years of Experience: 28

Education

MS, Engineering Management, Northwestern University, 1994
BS, Civil Engineering, Howard University, 1985

Ms. Jones has 28 years of experience in transportation planning and is a senior project manager with the Transportation Planning and Environmental group in the Maryland and Metro DC areas. She previously was a practice leader of a Transportation Planning group. Ms. Jones has also been responsible for researching new transit technology initiatives for regional buses, commuter rail, and rapid transit systems.

14th Street Bridge EIS. Served as Project Manager for the project which included multi-modal improvements along a four mile section of the I-395 Corridor in Arlington VA and Washington DC. Coordinated with the County on key projects such as US Route 1, Boundary Channel Drive Interchange, various bicycle and pedestrian improvements, Long Bridge Park improvements and realignment of Columbia Pike. Responsibilities included coordination with Arlington County stakeholders and members of the public via a series of steering committee meetings and public meetings hosted in various county locations throughout the duration of the study.

AECOM (Maryland Transit Administration 2013). Recently Ms. Jones is serving as a Quality Assurance/Quality Control Reviewer of NEPA documentation for the Purple Line project, a 14-mile light rail project estimated at \$2.5B. Project is under preliminary design.

KCI (Maryland Transit Administration 2008). Ms. Jones served as a Quality Assurance/Quality Control Review Manager of NEPA documentation for the Baltimore Red Line project. Services included reviews of Alternatives Analysis/DEIS, preliminary engineering concepts, capital and O&M cost estimates and technical studies for a 160mile light rail project currently under preliminary design.

Washington Metropolitan Area Transit Authority, Eight-Car Train Implementation, Washington, DC. Senior Planner of study that identifies required upgrades to infrastructure in support of 8-car train operation.

Federal Highway Administration - Eastern Federal Lands Highway Division, 14th St Bridge Corridor Environmental Impact Statement, Washington, DC; and Arlington, VA. Project Manager of a \$4.6 million environmental impact statement (EIS) for multimodal improvements along a 4-mile stretch of I-395 including the 14th Street Bridge corridor, the gateway into downtown Washington, DC.

Federal Highway Administration - Eastern Federal Lands Highway Division, Baltimore-Washington Parkway Feasibility Study, Anne Arundel/Prince Georges Counties, MD. Deputy Project Manager of a 29-mile corridor study that determined the operational, physical, environmental, and community effects of widening the parkway between Baltimore and Washington, DC.

Maryland Transit Administration, Red Line Corridor Transit Study - Alternative Analysis/Draft Environmental Impact Statement QA/QC Review, Baltimore, MD. Project Manager for QA/QC independent review of the alternatives analysis/draft environmental impact statement (DEIS) for the Red Line transit corridor.

Maryland Transit Administration, Lexington Market Metro Station and Lexington Market Light Rail Station, Baltimore, MD. Project Manager of preliminary engineering and planning services to the MTA for transit improvements involving connectivity between transit modes, weatherization of escalators and open areas, bus operations, and bus stops and shelters layouts.

Maryland Transit Administration, Magnetic Levitation Environmental Impact Statement, Planning, and Engineering Services, Baltimore-

Washington Metropolitan Area, MD. Transportation Planner coordinating preparation of a traffic study to assess the potential traffic impacts at three station sites in downtown Baltimore, BWI Airport, and Washington, DC.

District Department of Transportation, Far Southeast II Livability Study, Washington, DC. Project Manager of the study, a plan to increase livability and quality of life for residents and visitors in the southeast (east of the river) section of DC.

District Department of Transportation, Congress Heights Traffic Calming and Safety Study, Washington, DC. Project Manager for conceptual design and implementation of pedestrian safety, bicycle, and traffic calming improvements for the district's Ward 8 community. New technologies were explored and implemented as a pilot program for demonstration prior to implementation. The project won an American Council of Engineering Companies (ACEC) award in April 2010.

District Department of Transportation, U Street/Shaw/Howard University Transportation, Parking, and Streetscape Study, Washington, DC. Project Manager for development of a multi-modal transportation alternatives, parking management strategies, and streetscape concept plans in urban mixed-use area.

Maryland State Highway Administration, I-795/Dolfield Boulevard Planning Study, Owings Mills, MD. Project Manager for development of alternatives and environmental documentation (categorical exclusion) for a new interchange at I-795 and Dolfield Boulevard.

Regional Transportation Authority, Transit Signal Priority Integration Plan, IL. Oversaw development of a multi-phase transit signal priority integration program for funding of feasible routes, demonstrating technology, and implementing signal priority systems.

Nick Dais, PE, PTOE

Conceptual Engineering

Total Years of Experience: 14

Education

ME, Transportation Engineering and Planning, University of Maryland, 1999
BS, Civil Engineering, Aristotle University, Greece, 1994

Mr. Dais has over 14 years of experience in managing traffic engineering projects, including traffic analysis, traffic impact studies, traffic signal design, traffic controls design, signing and pavement marking design, maintenance of traffic plans, transportation management system design, parking studies, urban roadway design, and environmental impact studies. He has effectively managed projects of various sizes and complexity involving traffic studies and has been responsible as a task leader for several roadway design projects. Mr. Dais is proficient in the use of Synchro, MicroStation, AutoCAD Civil 3D, AutoTURN, GuidSign, and Highway Capacity Software.

CSX, CSX Intermodal Traffic Impact Study, Prince Georges and Anne Arundel Counties, Maryland. Conducted a traffic analysis to determine level of service with the site-generated traffic at 18 study intersections for three proposed sites at Beltsville, Jessup, and Montevideo, Maryland. Utilized Synchro software to determine the site-generated traffic and to compare 2011 existing, 2030 background (without the proposed site) conditions to 2030 build conditions (with the site in operation). Analyzed weekday AM and PM peak hours focusing upon the roadways and intersections along the main travel routes to and from the facility. Collaborated with CSX staff, Maryland Department of Transportation and Maryland State Highway Administration, and Prince George's County and Anne Arundel County officials. Assessed roadway and intersection performance with indicators such as peak hour level of service, queues, and delay. Defined areas of capacity constraints and areas requiring mitigation strategies.

Eisenhower Memorial Commission, Eisenhower Memorial Traffic Impact Study, Washington, DC. Evaluated parking impacts and the pedestrian and bicycle access and circulation. Coordinated traffic counts for AM, midday, PM, and Saturday peak periods for 11 intersections and modeled the street network using SYNCHRO. Evaluated existing, no build, and build conditions and assessed traffic impacts. Performed accident analysis and safety assessment. Completed a parking occupancy study and a parking supply-demand evaluation.

District of Columbia Water and Sewer Authority, Blue Plains Megaprojects Logistic Plan, Washington, DC. Task manager for developing a traffic impact study for the construction project which started in 2010 and extended for several years thereafter. A traffic impact study was performed to evaluate the future transportation conditions by taking into consideration projected growth to the existing traffic volumes and anticipated construction activity.

Lauryn Douglas

Corridor Planning/Alternatives Analysis

Total Years of Experience: 5.5

Education

MA, Urban and Regional Planning, 2011
BA, Public and Urban Affairs:
Environmental Affairs, Virginia Tech, 2010

Lauryn Douglas is a Transportation and Environmental Planner with AECOM. Ms. Douglas has provided technical and management support for a variety of transit planning efforts, ranging from corridor NEPA documentation to station access and capacity analysis. She has recently been instrumental in completing a combined Alternatives Analysis/Environmental Assessment for a 5-mile streetcar line, and in preparing a grant application under the FTA New Starts/Small Starts program.

Washington Metropolitan Area Transportation Authority (WMATA), Columbia Pike Streetcar Project, Arlington and Fairfax Counties,

VA. Task Manager on the recently completed FTA Alternatives Analysis and Environmental Assessment (AA/EA) and Small Starts submittal. Ms. Douglas helped manage the NEPA phase of the project, including writing sections of the AA/EA, coordinating public involvement activities, and managing production of project deliverables. Mrs. Douglas was the principal author of the Small Starts grant application.

Washington Metropolitan Area Transportation Authority (WMATA), Potomac Yard Environmental Impact Statement, Alexandria, VA. Contributed to development of an Environmental Impact Statement (EIS) for a proposed infill Metrorail station in Alexandria, Virginia. Assisted with writing sections of the Draft EIS related to natural resources and managed the process of integrating the various technical chapters into a coherent, whole document.

Washington Metropolitan Area Transportation Authority (WMATA), L'Enfant Plaza Metrorail Station Access and Capacity Study, Washington, DC. Deputy Project Manager for a station access and capacity study for the L'Enfant Plaza Metrorail Station. Managed tasks and prepared documents related to data collection, station demand modeling, pedestrian simulation, and design alternatives development.

Benning Road Streetcar Feasibility Study, District Department of Transportation (DDOT), Washington, DC. Contributed towards writing and preparing the final report. This study is assessing the feasibility of extending the H Street/Benning Road streetcar system. The Project includes engineering and planning feasibility including track design, structural analysis, traffic engineering, environmental assessment, economic impact, and ridership forecasting.

Madhu Reddy, AICP

GIS

Total Years of Experience: 14

Education

MUP, Urban Planning, University of Louisville, 2003

B Arch, Architecture, Jawaharlal Nehru Technological University, India, 1998

Mr. Reddy is a GIS manager with a background in planning and architecture and significant experience with GIS mapping, comprehensive land use planning, transportation planning, and urban design. He also has considerable training and experience in the use of CAD and GIS software. A significant part of his duties is to manage GIS data and graphic needs for projects, prepare report-ready graphics, and summarize the results of planning analysis using various graphic production tools. Mr. Reddy's involvement in projects includes gathering data, analysis, preparation of presentation materials for stakeholder outreach and engagement, and the creation of report-

ready tables and maps. He assists with data acquisition for alternatives analyses and environmental documentations, and is responsible for preparing census data such as demographics, transit-dependent population information, and socioeconomic characteristics of the alternatives. Mr. Reddy has been involved in determining the environmental impacts of the alternatives, such as identifying wetlands, floodplains, and historic areas.

Virginia Department of Railroad and Public Transportation, Crystal City/ Potomac Yard Corridor Interim Transit Improvement Project, VA

Assisted with the GIS data acquisition from Arlington and Alexandria counties. Prepared various maps for design dialogue implementation workshops and station area plans for the proposed alternatives.

Virginia Department of Railroad and Public Transportation, Richmond-Hampton Roads High Speed Rail

Alternative Analysis, VA. Assisted with the GIS data acquisition and mapping with regard to the alternatives analysis and environmental conditions (wetlands, soils, floodplains, etc.) for a high-speed rail system from Richmond to Hampton Roads.

Washington Metropolitan Area Transit Authority, Arlington County, and Fairfax County, Columbia Pike Transit Initiative, Arlington County and Fairfax County, VA. Provided services for GIS data acquisition, cataloguing existing conditions, and analysis of alternatives in preparation for environmental documentation and preliminary design.

Washington Metropolitan Area Transit Authority, Southern Avenue Bus Garage Replacement, Environmental Analysis and Documentation, MD. Managed GIS data acquisition and mapping with regard to socioeconomic and existing conditions for the completion of an environmental analysis for the two alternative sites proposed to replace the Southern Avenue Bus Garage.

Meredith Judy, AICP, LEED AP

Land Use/Transit Integration

Total Years of Experience: 13

Education

Master in City Planning, Massachusetts Institute of Technology, 2007

Bachelor of Arts, Environmental Analysis, Davidson College, 2000

Ms. Judy is a planner with specialized expertise promoting livable communities through integration of urban and suburban land use patterns with multi-modal transportation networks, including a full range of public transit modes as well as automobile, bicycle, and pedestrian infrastructure. She has managed many urban and regional transportation planning initiatives involving extensive public input and the development of detailed action plans. Ms. Judy's work emphasizes transit-oriented development (TOD), pedestrian scale design, community engagement, growth management policy, ordinance/technical writing, and NEPA documentation.

Her background includes leadership in the creation of an award-winning form-based code for local development, noted research in the area of transit-oriented growth strategies, and management of several comprehensive initiatives to establish land use plans promoting smart growth and sustainable development.

Hampton Roads Transit Vision Plan, VA.

Project manager for the Commonwealth of Virginia's collaborative effort with local and regional planning agencies to develop a comprehensive transit vision plan for the Hampton Roads area. This initiative assessed 36 potential transit corridors based on existing and future land use, projected market conditions, capital cost estimates, ridership modeling, and contribution to a regional transit and multi-modal network. Results included recommendations on corridor mode (light rail, bus rapid transit, streetcar, commuter rail, express bus, or enhanced bus),

phasing, and policies to promote transit oriented land use patterns. The project included facilitation of a stakeholder committee, presentations to elected officials, and public outreach.

Hull Street Corridor Revitalization, Richmond and Chesterfield County, VA.

Project manager for the Rhodeside & Harwell lead Hull Street Corridor Revitalization Plan. The purpose of the corridor revitalization plan was to build on the area's assets and opportunities to provide a comprehensive, implementation-oriented strategy and guide for creating quality of life improvements. These improvements included multi-modal transportation infrastructure upgrades, beautification strategies, mixed-income housing improvements, job opportunities, recreation/environmental protection investments, and building a constituency to champion long-term change.

Bill Pugh, AICP

Discipline Leader - Environmental Analysis

Total Years of Experience: 10

Education

MRP, Regional Planning, University of North Carolina, Chapel Hill, 2001
BA, Ecology, Princeton University, 1996

Mr. Pugh has diverse experience and capabilities in transportation, land use, and environmental planning. As a planner with the Transportation group, Mr. Pugh is responsible for mass transit/rail corridor studies, regional transportation planning, station-area planning, and environmental planning. His other specialized skills include technical writing, group facilitation, and Spanish-language communication.

Prince William County, Route 1 Bus Rapid Transit Study, Prince William County, VA. Task leader for environmental scan of possible transit alignment along Route 1 Corridor of Prince William County, including analyses of community resources, environmental resources, and socioeconomics.

Metropolitan Atlanta Rapid Transit Authority, Atlanta BeltLine Project, Environmental Impact Statement, Atlanta, GA. Task leader and author for transportation and land use chapters of tier 1 draft environmental impact statement and technical memoranda for a 22-mile light rail transit and trail project.

Washington Metropolitan Area Transit Authority and Arlington County, Crystal City/Potomac Yard Transitway Documented Categorical Exclusion, Arlington County, VA. Deputy task leader for station location study of Crystal City segment of transitway. Team member in update of documented categorical exclusion, including socioeconomics, community facilities, and zoning resource areas.

Washington Metropolitan Area Transit Authority and City of Alexandria, Potomac Yard Infill Station Environmental Impact Statement, Alexandria, VA. Deputy project manager for alternatives development and analysis, and environmental effects assessment for new heavy rail transit station. Task leader for multimodal transportation effects assessment of project alternatives.

Also provides Spanish-language public involvement support.

Transit Station Area and Access Planning Washington Metropolitan Area Transit Authority, Brookland-CUA Station Area Access Plan, Washington, DC. Deputy project manager for planning study of multimodal access for an existing urban heavy rail transit station and bus transfer facility. The study assessed existing and future bus and shuttle access needs within the context of planned redevelopment of the station site and adjacent properties, and developed alternatives to provide bus and private shuttle facilities and operations.

Washington Metropolitan Area Transit Authority, Deanwood Metro Station Access Improvement Study, Washington, DC. Project manager for planning study of multimodal access (pedestrian, bicycle, bus, and private automobile), facility improvement, and joint development for an existing urban heavy rail transit station. The study assessed existing and future multimodal access needs and developed short and long term improvement concepts for station access and transit-oriented development.

Virginia Department of Rail and Public Transportation and Virginia Department of Transportation, Corridors of Statewide Significance Report, VA. Deputy task leader for assessment of existing and proposed transit and rail capacity along Virginia corridors of statewide significance.

Department of Rail and Public Transportation, Commonwealth of Virginia, Virginia Statewide Transit Plan, VA. Project team member in research, analysis, and preparation of final plan and technical reports regarding DRPT activities and statewide transit planning for the Commonwealth of Virginia.

District Department of Transportation, DC Streetcar System Plan, Washington, DC. Project member in preparation of system plan final report. Translated and prepared Spanish-language outreach materials. Staffed public meetings for project.

Virginia Department of Rail and Public Transportation, Hampton Roads Regional Transit Vision Plan, Hampton Roads, VA. Deputy project manager in assessment of proposed regional transit corridors and development of long-range vision plan, including evaluation of land use, economic development, transit-oriented development potential, ridership forecasting, conceptual capital costs, and stakeholder and public outreach.

Washington Metropolitan Area Transit Authority, Regional Transit System Plan, Washington, DC. Deputy project manager for second phase and task leader for public involvement and graphic presentation component. Project is a comprehensive Metrorail, Metrobus, and other regional surface transit systems planning process for the year 2040.

District Department of Transportation, DC Streetcar Corridor Grant Applications and Concept Planning, Washington, DC. Deputy project manager for project concept planning and grant applications for segments of the planned DC streetcar system. Co-authored an urban circulator grant application for the Benning Road Extension project and a TIGER II grant application for the Anacostia Streetcar Phase 2 extension.

Washington Metropolitan Area Transit Authority, Metrobus Priority Corridor Service Restructuring, Washington, DC. Project member in technical analyses and public involvement for evaluation of bus services and proposed improvements along multiple major regional travel corridors. Prepared Spanish-language public outreach materials.

Washington Metropolitan Area Transit Authority, Arlington County, and Fairfax County, Pike Transit Initiative Environmental Assessment and Alternatives Analysis, Multiple Counties, VA. Deputy task leader for environmental assessment of existing conditions and potential effects in study area for proposed fixed guideway transit project. Chapter author for land use, zoning, and right-of-way analyses. Conducted Spanish-language public outreach tasks, including group presentation, preparation of materials, and public meeting support.

Alan Hachey, AICP

Natural Environment

Total Years of Experience: 13

Education

MRP, City and Regional Planning,
University of Massachusetts, Amherst,
2000

BA, Liberal Arts, University of New
Hampshire, 1994

Mr. Hachey is a senior transportation planner in the Arlington, Virginia office with thirteen years of experience in the transportation planning field. Mr. Hachey has significant experience in the areas of National Environmental Policy Act (NEPA) compliance, transit operations planning, rail corridor planning and studies, freight planning, and the metropolitan transportation planning process. Before entering the private sector, Mr. Hachey worked at both a Regional Transit District and a Metropolitan Planning Organization (MPO) in Connecticut. His project management experience includes establishing fee and

labor estimates for projects, assembling project teams in various disciplines, identifying potential teaming partners for projects, establishing schedules and assuring quality control for project deliverables. Mr. Hachey has extensive transportation and environment planning experience for highway, transit and heavy rail projects including preparation of National Environmental Policy Act (NEPA) documents and environmental permitting applications. Additionally, he has transit planning experience for fixed route and paratransit bus service, commuter rail, and intercity passenger rail service. Mr. Hachey also has expertise in the use of geographic information systems (GIS) for transportation and environmental planning analysis.

Virginia Railway Express, Commuter Rail Station Screening Analysis, Spotsylvania County, VA. Managed a multi-disciplinary team which developed a tiered screening analysis to assess

alternative rail station location site for a proposed VRE station in Spotsylvania County, Virginia on the CSX RF&P rail corridor. The screening analysis evaluated and ranked environmental and operational factors for fourteen alternative station sites. The analysis was developed in coordination with VRE, and through an existing task order contract with VRE.

Washington Metropolitan Area Transit Authority, Eisenhower Station Pedestrian Improvements Environmental Compliance, Alexandria, VA. Assisted in the development of a documented categorical exclusion in compliance with the National Environmental Policy Act (NEPA). The purpose of the project is to construct platform extensions and ancillary pedestrian facilities that connect the north side of Eisenhower Avenue to the existing Eisenhower Metrorail Station in the City of Alexandria, Virginia.

Claire Sale, AICP

Social Environment

Total Years of Experience: 12

Education

Masters Certificate, Regional Planning,
Economic Development, University of
North Carolina, 2001

BA, Economics, Lyon College, 1996

Ms. Sale is an Environmental Planner with AECOM. During her 12 years of experience, she has written environmental and planning documents for federal, state, and local jurisdictions. She has extensive experience working with parks, recreation facilities, and military installations.

National Park Service and Eisenhower Memorial Commission, Dwight D. Eisenhower Memorial Environmental Assessment, Washington, DC. Project manager / environmental planner prepared an environmental assessment (EA) for the new Eisenhower Memorial to be located near the National Mall. Considerations for the EA

included maintaining sightlines of the US Capitol and the potential impacts to traffic. Formatted documents, maintained client contact, and created graphics for presentations.

Smithsonian Institution, Museum of African American History and Culture Environmental Impact Statement, Washington, DC. Environmental planner contributed to development of an environmental impact statement (EIS) for new museum located on the National Mall. Developed alternative descriptions, analysed geotechnical data and impacts, and formatted document.

General Services Administration, Nebraska Avenue Complex Master Plan Environmental Impact Statement, Washington, DC. Environmental planner contributed to development of EIS for master plan. Analysed visual resource existing conditions and potential impacts. Created associated graphics for document.

Department of Defense, Construction and Use of Recreational ATV Trails Environmental Assessment, Fort Drum, NY. Senior planner conducted, with CSRM, an environmental assessment for the creation of a 17-mile trails system for all-terrain vehicles (ATVs). Provided technical expertise to Fort Drum in order to develop an alternative that would meet the recreational needs of the installation in a manner sensitive to the resources of the area. Developed EA that analysed potential impacts on area resources.

Petra Archaeological Park Interpretive Plan, Petra, Jordan. Senior planner. Created, with CSRM, an interpretive plan for Petra Archaeological Park, a UNESCO World Heritage Site in Jordan. Developed strategies to enhance visitor experience and augment economic development efforts at the site. Identified locations of visitor services and outlined interpretive themes to be repeated in a variety of ways throughout the park

Janette Crumley

Discipline Leader - Public Participation

Total Years of Experience: 25

Education

BS, Accounting, East Carolina University, 1985

Affiliations

Virginia Transit Association Public Relations and Marketing Former Committee Chair;
 St. Mary's Home for Disabled Children, Kid2Kid Program Chairperson;
 Public Relations Committee for National Engineers Week – Future City Competition;
 Public Relations Society of America (PRSA);
 Virginia Beach Forum Board of Directors

Janette Crumley has more than 25 years experience in the communication field with expertise in public relations management and public involvement. For the past fourteen years, she has managed Cordell

& Crumley Communication Strategists in partnership with Deborah Cordell.

Cordell & Crumley is a Virginia based, woman-owned firm specializing in designing, developing and managing public participation programs that engage the public to improve community decision-making. The firm's focus is on transportation, land use and environmental projects.

Ms. Crumley's specific expertise is in strategic planning. Cordell & Crumley is a certified Disadvantaged Business Entity (DBE) in Maryland, North Carolina and Virginia.

Ms. Crumley served as public relations manager for Tidewater Regional Transit for six years. During her tenure, she developed and implemented public relations and communication strategies for all facets of the agency in addition to

supervising public relations and customer service staff. Her responsibilities included strategic planning and implementation of public involvement techniques for the Light Rail Transit Major Investment Study, in addition to transit and rideshare programs. Her work with Tidewater Regional Transit gained national recognition by the American Public Transit Association earning her Public Education/Advocacy Awards in 1993, 1994, and 1995.

Deborah Cordell

Public Participation

Total Years of Experience: 13

Education

B.S. Communication Arts (Honors), Minor in Spanish, James Madison University, 1987

Associate of Arts, University of Maryland, Munich Germany Campus, 1984

Affiliations

- Virginia Transit Association Public Relations and Marketing Committee
- Hampton Roads Public Transit Alliance
- HOV Marketing Sub-Committee
- American Society of Training and Development
- Contemporary Art Center of Virginia
- Hampton Roads Clean Cities Coalition
- HOV Marketing Committee

Deborah Cordell has 25 years experience in the communication field including seven years in senior account management and

four years as vice president of a multi-state advertising and public relations firm. For the past fourteen years, she has managed Cordell & Crumley in partnership with Janette Crumley.

Cordell & Crumley is a Virginia based, woman-owned firm specializing in designing, developing and managing public participation programs that engage the public to improve community decision-making. The firm's focus is on transportation, land use and environmental projects.

Ms. Cordell's primary role with Cordell & Crumley is the development and implementation of educational and promotional materials that build awareness for projects and invite stakeholder participation. Cordell & Crumley is a certified Disadvantaged Business Entity (DBE) in Maryland, North Carolina and Virginia.

Ms. Cordell has represented a variety of clients on an international, national and regional level, providing marketing, research, advertising, public relations and public involvement strategy and implementation. She has managed multi-million dollar advertising and public relations campaigns for clients including Sprint Cellular, the Virginia Department of Transportation, the Federal Aviation Administration and Hampton Roads Transit. Her extensive experience focuses on multi-market advertising and public relations campaigns, survey research, broadcast and print media planning and placement and creative development of television and radio commercials, print ads, brochures and long-format videos.

Ms. Cordell served as a judge for the National Transportation Public Affairs Workshop Marketing and Public Relations awards competition and has conducted training seminars in public involvement for the Virginia Department of Transportation.

Deana Rhodeside, PhD

Meeting Facilitation

Total Years of Experience: 35

Education

Doctor of Philosophy, Urban Studies and Planning, Massachusetts Institute of Technology, 1978

Master of Arts in Psychology, Temple University, 1968

Bachelor of Arts in Psychology, City College of New York, 1966

Deana Rhodeside, Ph.D. is a founding partner and director of Rhodeside & Harwell, an award-winning landscape architecture and planning firm with an international practice. Dr. Rhodeside is known for her pioneering achievements in collaborative planning and design, with many notable projects completed in London and throughout the U.S. Her expertise in public outreach and community engagement has been instrumental in successfully guiding challenging work in urban revitalization, environmental restoration, transportation planning, master planning, and waterfront restoration and planning.

Dr. Rhodeside advocates an open and inclusive participatory process that enriches planning and design. She is skilled in facilitating design charrettes, workshops, and visioning processes. She is particularly adept in directing public involvement and achieving consensus-based results that help strengthen and sustain communities. Dr. Rhodeside first applied her breakthrough concepts in environmental psychology nearly 35 years ago while working with the UK Ministry of Housing's Sociological Research Center. Her experience in creating inspired and engaging urban settings has since included many projects in aging communities, along major transit corridors, and on historic or environmentally sensitive properties.

Amtrak Passenger Rail Stations, VA.

Project Director for developing land use plans for areas around six existing and future Amtrak stations in Virginia identified as potential stops along a multi-state, passenger rail commuter line. These

studies address land use in urban, suburb, and rural settings within a 1/4 to 1/2 mile station radius in order to develop a 2030 vision for each community. Priorities included integrating rail operations standards, existing transit service, regional development patterns, local zoning and comprehensive plans, area street networks and traffic projections, market analyses, potential funding mechanisms, stakeholder interviews, and transit-oriented development principles within each plan.

Bailey's Crossroads Planning Study, Fairfax County, VA.

Rhodeside & Harwell studied the potential for mixed-use redevelopment in the Bailey's Crossroads area, a dense urban community in Northern Virginia. Under Dr. Rhodeside's direction, the team evaluated connections to the adjacent community as well as alternatives regarding scale, intensity, and character of this new community from a former shopping strip corridor.

Emily Leckvarcik, RLA

Design/Presentation Graphics

Total Years of Experience: 2

Education

MCP, City Planning, University of Pennsylvania, 2011

Certificate, Urban Planning, University of Pennsylvania, 2011

BLA, Landscape Architecture, State University of New York, College of Environmental Science and Forestry, 2005

Ms. Leckvarcik is a landscape designer/planner and works in both the design and planning studios. She has a background in park master planning and specializes in urban design.

Plymouth Township, Harriet Wetherill Buffering and Naturalization Phase Construction Drawings, Montgomery County, PA.

Landscape designer responsible for conducting a site analysis of the park's existing vegetation to begin the first phase of park development. Work on the buffering and

naturalization phase consisted of identifying park boundaries in need of screening from neighboring land uses, identifying areas of significant invasive species for removal, and implementing a planting strategy of desirable native plants to reestablish the park's boundaries and hedgerows, and provide food and shelter for wildlife in the park. Developed a planting design, construction cost opinion, invasive species management guide, and the construction drawings for the park construction in 2007.

Galeton Borough, Galeton Town Centre Park Master Plan, Potter County, PA.

Landscape designer responsible for completing site analysis for this 7.8-acre park which included the municipal library and was the site of the annual fireman's 4th of July festival. Completed key person interview and developed the conceptual alternatives, pre-final design, and final master plan for the park as well as the walking trail surrounding the lake in the

center of the borough. Completed phased cost estimates for development of the park and master plan rendering.

Borough of Chambersburg, John A. Redding, Jr. Memorial Park, Nicholson Square Park, and Mill Creek Acres, Franklin County, PA.

Landscape designer responsible for completing designs for these three small neighborhood parks. Each park served a different segment of the community. Explored recreation needs through key person interviews and public meetings. Completed construction cost opinions and the project report.

Bethel Township, Lions Park and Pool Master Plan and Construction Documents, Lebanon County, PA.

Landscape designer for a 10.5-acre park site recently acquired by the borough and required extensive renovations to upgrade aged facilities, bring the park into compliance with the ADA, improve function, and add recreation amenities desired by residents.

Susan Sharp

Discipline Leader - Marketing and Research

Total Years of Experience: 35

Education

BA, Graphic Design, The American University, 1973

Ms. Sharp has over 35 years of professional experience in electronic and print information communication and marketing, information architecture, creation and implementation of effective communication strategies, strategic planning, marketing communications, and graphic design. She is a successful entrepreneur with experience delivering value and quality to an extensive loyal client base, including profit and non-profit organizations, government agencies, and institutions.

Areas of Expertise

- Internal organizational information communication in support of performance management and organizational change initiatives
- Strategic information analysis and dissemination via campaigns to internal and external stakeholders
- Specialized knowledge of information communication and marketing in the area of transportation policies and issues
- Strategic planning expert
- Public outreach and facilitation
- Ability to convey technical information clearly to a wide constituency
- Conceptualizing and implementing marketing campaigns that effectively reinforce and build brand image

Virginia Department of Rail and Public Transportation (DRPT) Statewide Rail Plan.

To help build support for its ambitious rail program, DRPT engaged Ms. Sharp to craft a new document. Working from a technical document created to meet Federal Railroad Administration requirements, Ms. Sharp worked closely with DRPT to devise a strong message, a purpose to the communications. Based on that, she was able to determine and produce the narrative value and story, developing text that engaged stakeholders by communicating a clear vision and strategy to address the Commonwealth's rail needs. Ms. Sharp repurposed material

for public meetings, creating PowerPoint presentations and writing text for other meeting materials.

DRPT Statewide Public Transportation Plan.

Based on the success of the Statewide Rail Plan, Ms. Sharp was again asked to craft a public document based on numerous planning studies, analyses, and presentations that had been developed. Working closely with DRPT, Ms. Sharp devised a structure and theme, and then wrote the copy for the document.

Virginia Department of Transportation (VDOT) I-66 Inside the Beltway Multimodal Study.

Ms. Sharp served as Public Outreach Project Manager for this study, developing the public outreach strategy and overseeing all aspects of implementation, including website development, visual materials, branding, fact sheet writing and production, and the coordination of public meetings and stakeholder interviews.

DDOT Long Bridge Railroad Bridge Study Public Outreach.

Ms. Sharp wrote the Long Bridge Study Public Involvement Plan that outlines the proposed strategies, tactics, and schedule that will facilitate two-way communication between the Long Bridge Study team and stakeholders throughout the course of the study. In addition, Ms. Sharp will develop the questions and conduct interviews with targeted stakeholders in the study area, which shall include jurisdictional staff, Municipal Planning Office staff, and elected officials.

Maryland Department of Transportation (MDOT) Maryland Transportation Plan Interviews and Outreach.

To assist Maryland in the development of its 2035 Long-Range Transportation Plan, Ms. Sharp developed the communications strategy and plan. She has also developed an innovative online survey to satisfy statutory requirements while actively engaging the public through traditional and new media.

MDOT Carbon Neutral Corridor Stakeholder Interviews and Outreach.

Ms. Sharp was responsible for all stakeholder interviews and outreach for

the Maryland Department of Transportation (MDOT) Neutral Corridor project.

Stakeholder outreach included local government staff, local developers or builders and their organizations, major businesses in the area, non-profit groups, farmers, local civic leaders, federal site staff, and local planning organizations of two counties and several jurisdictions in Maryland. In addition to identifying and coordinating stakeholder participation, Ms. Sharp prepared monthly updates for distribution and updated the MDOT website.

Bob Peskin, PhD

Discipline Leader - Financial Planning & Analysis

Total Years of Experience: 35

Education

PhD, Civil Engineering, Northwestern University, 1977

MS, Civil Engineering, Northwestern University, 1975

BS, Civil Engineering, University of Maryland, 1973

Dr. Peskin consults in the areas of transportation financing, planning, and management. He has been with AECOM throughout his entire career, serving the transit industry and a host of government agencies at the local, state, and federal level. He pioneered analytical methodologies in the areas of transportation financial planning, analysis of transportation infrastructure capital needs, and operating & maintenance cost modeling. His work focuses on the application of quantitative information to support transportation decision making. He works with public agency staff in integrating financial, capital, and operating data from all functional areas including planning, engineering, transportation, and maintenance. Dr. Peskin supports transportation agency executive staff and governing boards as they commit limited public resources to major capital investments and make difficult budgeting decisions.

Columbia Pike Streetcar, Washington Metropolitan Area Transit Authority, Arlington & Fairfax Counties VA.

Developed a financial plan for proposed bus rapid transit and streetcar alternatives for the Pike Transit Corridor, which runs along and near Columbia Pike in Arlington and Fairfax Counties between Pentagon City and Skyline. Examined potential new sources of funding, including tax increment financing, benefit assessment districts, parking tax, and tolls on existing arterial streets and bridges

District of Columbia Surface Transit Alternatives Analysis, Washington Metropolitan Area Transit Authority, Washington DC. Developed a financial plan for proposed bus rapid transit and streetcar alternatives. Examine potential new sources of funding, including tax increment financing, benefit assessment districts, parking tax, and tolls on existing arterial streets and bridges.

Green Line Extension Project, Massachusetts Department of Transportation, Boston, MA. Managed the development of a new operating and maintenance (O&M) cost model for application in Green Line Extension project New Starts financial plan and in service planning and other business functions by the Massachusetts Bay Transportation Authority (MBTA). The new O&M model was calibrated based on FY2011 actual expenses (across 363 management centers by object class) and actual level of service, by mode. Expense data in the model was structured in an Access database to facilitate ease of updating with subsequent data. Trained MBTA and consultant staff in the calibration and application of the O&M cost model.

Central Subway, San Francisco Municipal Transportation Agency, San Francisco CA.

Developed the financial plan to support the Federal Transit Administration New Starts application for the proposed Central Subway project. The Central Subway project is Phase 2 of the Third Street Light Rail Project, a major infrastructure project that restores modern light rail service to the eastern side of the city. The light rail line replaces the 15-Third Street motor coach line and will add 1.7 miles of light rail track north from the terminus of the Initial Operating Segment at Fourth and King Streets and extend into the heart of Chinatown. Undertook a comprehensive restructuring of the prior MTA financial plan and leveraged the new operating and maintenance cost model developed by AECOM Consult in connection with the Transit Effectiveness Project, a parallel comprehensive transit service planning study. The financial plan applied the AECOM Consult financial analysis model, which integrates projections of expenses and revenues, both capital and operating, in a framework that permits rapid examination of alternative project and service improvement schedules, funding, financing, and pricing. The analysis is undertaken with consideration of underlying uncertainty with respect to inflation, interest rates, project cost in base year dollars, caps on federal funding, growth in dedicated revenues, ridership, and other factors beyond the control of management. AECOM

Consult worked directly with the MTA Chief Financial Officer in the structuring of the analysis and the underlying assumptions. Prepared documentation consistent with FTA requirements and assisted in the integration of the financial plan with other reporting requirements. Supported SFMTA in securing a Letter of No Prejudice from FTA allowing SFMTA to proceed with acquiring a tunnel boring machine and initiating utility relocation in advance of securing a Full Funding Grant Agreement.

Santa Clara Valley Rapid Transit Project, Santa Clara Valley Transportation Authority, San Jose CA.

Preparing the financial plan to support the New Starts application for the extension of BART from Warm Springs to San Jose. Examining alternative construction and operational phasing, sources of funding, and financing structures. Managed the development of revenue estimates of value capture (in the form of benefit assessments, tax increment financing districts, and developer fees) based on the basic demographic data (population and employment by industry) applied in the travel demand analysis. Performed a comprehensive risk analysis to examine the implications of uncertainty with respect to inflation, interest rates, construction costs, ridership, annual federal grants to support project construction, federal formula grants, and state grants. Supported senior management in decision-making regarding the development of the FTA New Starts submission. Testified before the VTA Governing Board regarding the implications of projected sales tax revenues. Supported VTA in securing a Full Funding Grant Agreement.

Financial Planning in Transportation Course, National Transit Institute, New Brunswick NJ.

Assisted in the conception, structuring, development, and delivery of a three-day training program intended for the planning staffs and financial analysts of transit operators, MPO's, State DOT's and other governmental agencies (toll authorities, cities and counties) who assist in the preparation of long-range transportation plans and transportation improvement programs, are involved with direct funding of transportation, or provide financial assistance to transit operators.

Glenn Halstead

Financial Planning & Analysis

Total Years of Experience: 2

Education

MS, Urban Planning, University of Wisconsin, Madison, 2011
Masters Certificate, Transportation Planning and Management, University of Wisconsin, Madison, 2011
BS, Economics, Lehigh University, 2007

Mr. Halstead provides financial services to transit agencies nationwide, with special emphasis in the areas of capital asset management, capital investment planning, cost-based financial modeling, and ridership and revenue forecasting. He supports the implementation of an asset-based state of good repair database that assists transit agencies in the estimation of their future capital needs and the optimization of expenditures in fiscally constrained scenarios. Mr. Halstead is also involved in development of the Asset Information Module of National Transit

database, currently being considered by the Federal Transit Administration as a method to assemble a national inventory of transit administrative and maintenance facilities, passenger facilities, fixed guideway assets, equipment, and revenue vehicles.

Federal Transit Administration, National Transit Database Modification, Washington, DC. Provided technical support in development of a modified transit asset reporting module that will be distributed to agencies across the country. The updated reporting tool will be used to better evaluate national transit funding needs by including all types of assets including administrative and maintenance facilities, passenger and parking facilities, rail fixed guideway and track, and revenue and non-revenue vehicles. Specific responsibilities included maintaining the draft versions of the module, updating module content per client and stakeholder

input, and drafting the user manual to assist agencies with new asset data reporting policies

Southeastern Pennsylvania Transportation Authority, State-of-Good-Repair Capital Investment Planning, Philadelphia, PA. Supporting the analysis of the agency's comprehensive asset inventory data to determine the level of capital investment required to maintain those assets in a state of good repair. Specific duties include assembling and maintaining comprehensive list of capital projects that stem from the asset inventory, conducting data analysis to ensure that all reported costs and quantities are within an acceptable range based on agency input and industry standards, and creating presentations displaying results of analysis, including year-by-year spending needs in constrained and unconstrained environments and total asset replacement and renewal values.

Aaron Kozuki

Governance & Management

Total Years of Experience: 8

Education

MS, Civil Engineering, University of Maryland, College Park, 2007
BS, Civil Engineering, Washington University in St. Louis, 2005

Mr. Kozuki is a lead consultant specializing in the areas of transit asset management, activity-based cost financial modeling, financial planning, management analysis, and regional/statewide transportation planning. His responsibilities include developing and using tools to analyze capital planning programs and maintain infrastructure assets in a state-of-good-repair; developing short- and long-range capital programs under funding constraints; and the development and application of cost allocation and management allocation tools to determine a basis for pricing services. His other experience includes using travel demand models to produce transit ridership

and revenue forecasts; developing models and tools to evaluate different transportation policies; and analyzing macro-economic relationships with traffic growth. Mr. Kozuki is proficient in computer programming and in many computer-based statistical analysis and modeling tools, including Excel, SPSS, LIMDEP, MATLAB, ALOGIT, STATA, Cube, and TRANSCAD.

Hampton Roads Transit, On-Call General Financial Consulting Services, VA. Perform various financial consulting tasks including grant management for capital projects; creating cash flow models that forecasts project expenses and proposes a method to pay those from available grants; generating a short-term operating and capital plan, and; determining funding strategies through state and local partnerships. Assisted finance staff with invoice grant management for the light rail transit (LRT) project. Assisted in the development and update of the Agency's six-year operating and capital plan – specific

development tasks included: developing a model to predict federal grant appropriation and state operating assistance, calculating project grant balances as a component of determining required funding for the next year's capital request, and assisting in determining which capital projects were to be funded over the six-year plan. Developed a module to reconcile LRT costs based on cost categorization and grant drawdown, and developed a module to predict project expenses for the LRT project.

Williamsburg Area Transport Authority, Facility Feasibility Study, VA. Developed a 50-year financial plan incorporating operating and maintenance cost projections, grant and revenue projections, and capital investment projections to assist decision on the level of investment toward building a new administrative and maintenance facility. Assisted in the development of cost estimates for various building components and support systems.

William Robert

Discipline Leader - Strategic Planning/Capital Investment Planning

Total Years of Experience: 23

Education

SM, Civil and Environmental Engineering, Massachusetts Institute of Technology, 1997

BS, Physics, Massachusetts Institute of Technology, 1990

Affiliations

- Member, Transportation Research Board Asset Management Committee
- Member, Transportation Research Board Transit Management and Performance Committee
- Member, Transportation Research Board Joint Subcommittee on Transit State of Good Repair
- Associate Member, American Society of Civil Engineers
- Member, Editorial Board, Journal of Infrastructure System

Principal Investigator, Transit Cooperative Research Program (TCRP) E-09A Transit State of Good Repair Implementation. Currently piloting the prioritization tools developed during TCRP E-09A Project. The tools will be refined based on the results of the pilots along with guidance on developing a transit asset management plan based on the prioritization results.

Principal Investigator, TCRP Project E-09 State of Good Repair: Prioritizing the Rehabilitation and Replacement of Existing Capital Assets and Evaluating the Implications for Transit. Performed a comprehensive literature review and a set of agency interviews to collect information on existing and best practices in transit asset management and the modeling of asset rehabilitation and replacement. Developed a framework for transit SGR decision-making that considered impacts of asset investments on system performance and that proposed a process for prioritizing asset rehabilitation and replacement decisions. Developed a set of analytical tools for prioritizing rehabilitation and replacement actions in support of the framework. The results of the project are detailed in TCRP Report 157.

Technical Contributor, Massachusetts Bay Transportation Authority (MBTA)

SGR Database Enhancements. Working with AECOM to assist in implementing a series of enhancements to the existing MBTA SGR database. The project team will develop deterioration and cost models to improve the current prioritization approach and allow for the database to predict new measures of performance.

Contributor, Federal Transit Administration (FTA) Transit Asset Management Guide. Worked as part of a team to assist in the development of an asset management guide for U.S. transit agencies. Responsibilities included reviewing existing practices in asset management, preparing case studies highlighting best practices, and defining criteria for evaluating current asset-management related business processes.

Project Manager, Association of American Railroads (AAR) Transportation Technology Center, Inc. (TTCI) Rail and Wheel Life Research Post-Audits. Responsible for performing a post audit of the costs and benefits of AAR research on extending rail life for the Transportation Technology Center, Inc. (TTCI). Subsequently performed a post audit of costs and benefits for extending wheel life. The project team considered the costs and benefits of improved safety performance, reduced replacement costs, maintenance practices, and other factors.

Project Manager, Asset Management Implementation for the City of Philadelphia Department of Streets. Worked to review existing data and systems for the management of pavements, bridges, and other assets. Performed an analysis of future bridge conditions, reviewed model parameters and processes related to the existing pavement management system, and developed recommendations for the management of other assets.

Virginia Department of Rail and Public Transit Asset Management. Assisted in an assessment of existing practices in transit asset management, as well as in the design of the Program Guidance and Grant Evaluation System for evaluating transit grant applications.

FTA Transit Asset Management Review. Performed a review of existing practices in transit asset management and SGR analysis.

AAR Wayside Detector Audit. Performed a post audit of the costs and benefits of AAR's implementation of wayside detectors on the U.S. rail system.

Massachusetts Asset Management Implementation. Project manager for the development of an asset management improvement plan for Massachusetts DOT.

Asset Management Research and Training. Principal investigator for NCHRP Project 20-74 Developing an Asset Management Framework for the Interstate Highway System.

Katherine Lawrence

Strategic/Capital Planning

Total Years of Experience: 2

Education

BA, Growth and Structure of Cities, Bryn Mawr College, 2011

Professional Affiliations

Member, Youth Professionals in Transportation
Member, Women's Transportation Seminar, Boston Chapter

Spy Pond Partners, LLC (2012-Present)

Analyst focusing on improving the use of data for better decision-making. Current and recent projects include:

- Analyst, Transportation Cooperative Research Program (TCRP) E-09A Transit State of Good Repair Implementation. Currently developing guidance for the use of the TCRP E-09 prioritization tools.
- Analyst, National Cooperative Highway Research Program (NCHRP) 08-87 Best Practices in GIS-based

Asset Management. Assisting with the research and design for an executive guide and an implementation guide that will support the use of GIS technologies for asset management among transportation agencies.

- Analyst, Federal Transit Administration (FTA) Transit Asset Management Guide. Developed case studies for the Transit Asset Management Guide.
- Analyst, Asset Management Implementation for the City of Philadelphia Department of Streets. Performed data analysis and GIS database management for the City of Philadelphia bridge asset maintenance effort.

Bryn Mawr Department of Information Services (2010-2012)

Research assistant responsible for design, administration and analysis of information surveys. Developed and distributed survey instruments for the Measuring Information Services Outcomes (MISO) survey, a web-

based survey measuring the use of library services at over 60 colleges.

City of Philadelphia Center City District (2011)

Intern supporting the implementation and maintenance of the Walk!Philadelphia and Direction Philadelphia urban wayfinding systems.

Simon Shekleton

Major Capital Investments

Total Years of Experience: 10

Education

BE, Civil Engineering, University of New South Wales, Australia, 2001

Mr. Shekleton is a civil engineer with diverse experience in the planning and implementation of infrastructure projects in a number of countries around the world. He has participated in all levels of project development, including traffic, revenue, economic and land use forecasting, policy reviews, and feasibility and preliminary design and construction planning for public and private sector clients. He has extensive experience in the field of infrastructure finance, acting as project manager for numerous P3 bids, technical due diligence exercises, and advisory roles. He has also specialized in the communication and mediation of complex P3 processes, having led industry days, stakeholder working groups, and one-on-one meetings with numerous high-level government bodies.

NJ Transit, Access to the Region's Core Mass Transit Tunnel (formerly Trans-Hudson Express Tunnel), Newark, NJ. This is one of the most significant transportation projects underway in the Northeast region of the US, and was fast tracked into preliminary engineering in order to promote continuing economic growth. Helped refine placement and design of station entry locations and mechanical rooms north of New York PENN Station during the preliminary engineering phase.

MTA New York City Transit, New York City Bus Rapid Transit Study, New York, NY. Investigated a number of bus corridors throughout New York's five boroughs for potential upgrade to bus rapid transit service. Performed technical analysis and reporting tasks, primarily focusing on signalized intersection modeling for current and future conditions.

MTA Long Island Rail Road, Main Line Corridor Improvements Study and Draft Environmental Impact Statement, Long Island, NY. This project involves investigation and assessment of transport infrastructure and service alternatives to improve the performance of the 11.5-mile LIRR main line corridor between Queens Village and Hicksville. Managed the project's traffic impact and analysis elements and the traffic subconsultant; concept design of potential alignments in context of right of way (ROW), utilities, operational and other physical constraints; quantifying the purpose and need for the project in terms of travel demand and user projections; identifying ROW constraints and opportunities along the corridor; concept design of grade crossing alternatives; identifying and refining feasible engineering options to solve capacity and performance constraints; and reporting and communicating these issues to stakeholders and the community through the DEIS and public participation.

Jeff Roux, EIT

Discipline Leader - Operations Planning & Analysis

Total Years of Experience: 15

Education

ME, Transportation Engineering, University of Maryland, 2005

BS, Civil Engineering, University of Maryland, 1997

Mr. Roux has significant experience in travel demand forecasting, ridership, and revenue estimation; evaluation of transportation projects; and transportation alternatives development and analysis.

Mr. Roux's projects have involved the application of transportation planning software packages, including TP+, MINUTP, CUBE Voyager, TransCAD and AECOM Consult's own planning packages.

Mr. Roux has been responsible for the development and application of travel demand model systems to evaluate potential federally funded transportation projects at both the regional and corridor level. He has conducted these studies in Northern New Jersey, New York, Charlotte and Denver. Mr. Roux was responsible for travel forecasts which supported Full Funding Grant Agreements (FFGA) for Long Island Rail Road East Side Access and NYCT Second Avenue Subway. He also provided support in the development of travel demand forecasts for the Charlotte South Corridor and in Denver. He has also been directed FTA Small Starts projects (bus rapid transit and streetcar) in New York City, Mineola, NY, Albany, Allentown, PA, Arlington, VA and Richmond. In addition, Mr. Roux has participated in the development of FTA's soon to be released national transit forecasting model (called STOPS).

In addition to New Starts projects, Mr. Roux has developed travel demand models and projections forecasts to support Alternatives Analyses, Environmental Impact Statements, traffic and revenue studies, market assessment, regional transportation plans and air quality/conformity analysis.

WMATA Columbia Pike AA/EA Small Starts Project. Managed the effort to evaluate a series of multi-modal transit solutions for the Columbia Pike corridor in Arlington, Virginia. Mr. Roux directed

the application of development of the MWCOC travel demand forecasting model and WMATA transit post-processor models to evaluate a series of alternatives along Columbia Pike. These alternatives included, expanded bus options and streetcar operating in mixed traffic. Mr. Roux was responsible for estimating transit patronage and developing FTA Small Starts project justification materials, including the Transportation System User Benefit measure.

Federal Transit Administration, Improving New Starts – Development of National Forecasting Model.

Responsible for managing AECOM subcontract to assist in the development of FTA's National Forecasting Model called Simplified Trips on Project System (or STOPS). As part of this effort, AECOM tabulated national experience in fixed-guideway transit and developed the procedures to estimate non-work fixed guideway transit. AECOM was also responsible for developing the model validation datasets to assess the overall performance of the STOPS tool on a variety of contexts. In addition, AECOM was responsible for iteratively running FTA's Google Transit Feed (GTF) path-builder to support model calibration.

WMATA Potomac Yards Infill Station.

Managed the development of patronage forecasts to support the evaluation of WMATA's Potomac Yards Infill Station on the Blue and Yellow Lines in Arlington, Virginia. As part of this effort, AECOM developed forecasts for different station configurations and feeder bus services to the new station. AECOM estimated Metrorail trips boarding at the Potomac Yards Infill Station, diversions from Braddock Road and Crystal City, diversions from auto and bus, and impacts to vehicle trips and VMT.

Virginia Department of Rail and Public Transportation, Broad Street BRT Small Starts Support. Prepared ridership forecasts and project justification measures to support the introduction of BRT on the Broad Street corridor in Richmond, Virginia. Mr. Roux developed a data-driven methodology using on-board survey information and the regional transit

networks to develop a methodology for quickly and directly evaluating project boardings and FTA's Transportation System User Benefit measure for the project. Ultimately this project will submit an application for entry into the FTA Small Starts program in 2013.

Virginia Department of Transportation, Statewide On-Call Travel Demand Forecasting Consultant. Currently serving as deputy project for this contract to develop travel demand forecasting models statewide for Virginia Department of Transportation. Mr. Roux is responsible for managing the work effort to develop an updated Richmond/Tri-Cities forecasting model. This effort will calibrate updated trip generation/distribution procedures based on NHTS household survey data, incorporate improved transit processes, include a FTA compliant mode choice model and develop updated highway assignments by time-of-day. A key component of this effort is to embed enhanced capabilities for evaluation of transit projects and improved tolling capabilities.

Fairfax County, Virginia. Tysons Circulator. Project managed the development of ridership forecasts for several potential circulator services in Tysons Corner to be offered in conjunction with the WMATA Silver Line extension to Reston. As part of this project, Mr. Roux located transit-oriented development in Tysons Corner, identified trip generators, evaluated a variety of service and policy options (fares, headways and route configurations).

Nassau County, New York Nassau Hub AA/EIS. Currently managing the effort to prepare ridership forecasts for the evaluation of expanded transit options for central Nassau County, New York. As part of this effort, AECOM will evaluate a wide range of transit options including BRT and streetcar with connections to Long Island Rail Road. Work to date has included development of a transit on-board survey to assess current utilization and developing calibration targets. Special emphasis will be placed on non-traditional trip generators including Hofstra University and Nassau County Coliseum.

Guillermo Calves

Transit Operations

Total Years of Experience: 19

Education

MA, City Planning - Urban Transportation and Infrastructure System, University of Pennsylvania, 1994

BA, Geography, George Washington University, 1992

Mr. Calves is a senior planner with more than 17 years of experience performing transit and transportation planning studies and management reviews for public transportation agencies. He has a background in urban geography and planning with a specialization in urban transportation systems. He is responsible for compiling and analyzing data regarding public transportation agencies around the nation, and for the preparation of system route and marketing plans using the data results.

Mr. Calves has participated in the development of public transportation

improvement programs throughout the nation in various types of metropolitan areas and transit service environments. As part of these studies, he has conducted public participation programs, which involve various customer survey efforts, ridership counts, and interviews with both local community leaders as well as people who are not regular users of the public transportation system. Mr. Calves has also assembled peer groups for numerous public transportation agencies and conducted research to obtain data from peer systems to analyze transit operations. He also has extensive experience in the development and compilation of trend data that can be used to gauge the long-term performance of a transit system. As part of these efforts, Mr. Calves has developed key operating, revenue, and passenger statistics at the route level from aggregated statistical sources.

Greater Richmond Transit Corporation, Transportation Development Plan, Richmond, VA. Conducted vehicle inspections on both the fixed route and demand responsive service vehicles at the GRTC facility in Richmond. This review of the overall condition of the bus fleet was used to help gauge the effectiveness of GRTC's management and maintenance procedures and to determine if any issues warranted a modification of those procedures.

Washington Metropolitan Area Transit Authority, Maintenance Review, Washington, DC. Conducted the primary research for a review of the system's maintenance records at several bus fleet maintenance facilities. Determined whether the transit system was adhering to both the manufacturer's recommended preventive maintenance inspection schedules as well as the transit system's own vehicle inspection guidelines.

Eric Wright, ASLA, AICP

Multimodal Planning

Total Years of Experience: 16

Education

MLA, Landscape Architecture, University of Virginia, 2005

MA, Urban and Environmental Planning, University of Virginia, 2002

BA, Political Science, Emory University, 1997

Certificate, Historic Preservation, University of Virginia, 2005

Mr. Wright is an urban designer and planner with AECOM. His extensive experience managing public and private sector planning, urban design, landscape architecture, and environmental compliance projects throughout the US includes master planning, corridor studies, streetscape designs, design guidelines, planting plans, bicycle/pedestrian plans, transportation/land use plans, and environmental compliance projects in VA, MD, NC, PA, NJ, MO, and FL.

James City County, Rural Residential Development Study, James City County, VA. Project manager for the task of creating rural development scenarios for the county surrounding Williamsburg, Virginia. Designed scenarios that led to implementation tools for the client, including a design manual and a new cluster ordinance for residential growth in rural areas of the county.

James City County, Toano Community Character Study, Toano, VA. Project manager who identified context-sensitive options for future development in the historic town of Toano, Virginia. Facilitated steering committee meetings and community workshops regarding alternative development strategies to build a more cohesive and active town center. Presented the design guidelines manual and streetscape plan before the Planning Commission and Board of Supervisors, where they were adopted.

Isle of Wight County, Route 58 Land Use and Transportation Study, Franklin, VA. Urban designer that developed the urban design and land use analysis for the economic redevelopment of a suburban to rural highway and its associated land uses.

City of Winchester, Comprehensive Plan Update, Winchester, VA. Urban designer that provided urban design analysis for the update to the city's comprehensive plan, as well as the facilitation of public workshops.

VDOT, Route 20 and Route 15 Multimodal Streetscape Plan, Orange, VA. Urban designer that developed a conceptual streetscape plan for the two main roadway corridors through the historic town. The streetscape plan implemented a "complete streets" concept that includes a balance of modes in the right-way.

Ian Lockwood, PE

Multimodal Planning

Total Years of Experience: 35

Education

Loeb Fellow in Advanced Environmental Studies, Harvard University, 2012
Master of Civil Engineering, Carleton University, 1995
Bachelor of Civil Engineering, Carleton University, 1987

Starting with his high school paper "Bicycles, the Ultimate Mode of Urban Transportation" and continuing with decades of work to advance inclusive public realms, multi-modalism, and community health, Ian has dedicated his career to livable transportation. He is known nationally as a pioneer in station area planning, walkability, complete streets, and traffic calming. With fluency in collaborative processes and urban design, Ian works with stakeholders to develop and advance community visions into real projects. Through practical policy

and technical direction, Ian has helped private clients, transit agencies, campuses, towns, cities, and states turn conventional processes and projects into ones that are healthier and more successful financially, environmentally, and socially. Ian also is a cartoonist and an accomplished road cyclist and enjoys photography and canoeing.

Complete Streets Definition. In 2005, one of a only a couple of practitioners invited to Washington, D.C., to help the Complete Streets Coalition develop the official definition of the term, "complete streets."

Downtown Falls Church Transportation & TOD Plan, Falls Church, VA. Principal planner and designer for the downtown street network, parks, squares, and transit strategy; with the goal of achieving the vision of a walkable, vibrant, transit-friendly downtown.

VDOT, Route 50 Corridor Traffic Calming Plan, VA. Principal lead on a the community-based effort to replace plans to build highway bypasses and eventual highway around three towns along Route 50 with a traffic calming alternative that allowed the "town" functions and "traffic" functions to co-exist in harmony along the main streets within the three historic towns. Traffic projections indicated the bypasses and eventual highway would have doubled the traffic volumes in a short timeframe. The highway-related sprawl and induced automobile demand was avoided, which has helped preserve one of the most scenic and historic parts of the country. The project won the ITE Past Presidents' Award in 1997.

Annex Area Smart Growth Plan & TOD Project, Alberta, Canada. Principal planner for the street network, coordinated land use strategy, open space system, and transit strategy for a large annexed area.

David Roden

Congestion Management

Total Years of Experience: 32

Education

ME, Civil Engineering (Transportation), University of California, Berkeley, 1980
BS, Civil Engineering, University of Arizona, 1978

Mr. Roden has extensive experience in travel demand forecasting, traffic simulation, transportation planning, and commercial software development and support. He has been the project manager and technical lead on a wide variety of projects for federal, state, and local government agencies and private industry, both nationally and internationally. He pioneered advanced analytical methods used in 24 hour simulations of regional highway and transit networks, air quality analysis, evacuation planning, integrating activity-based models with dynamic traffic assignments, global positioning system (GPS) applications for travel time and speed studies, and geographic information system

(GIS) and database integration with travel demand forecasting models.

Virginia Railway Express, Attitudinal Survey and Market Research, VA.

Directed the technical analysis and model development phase of the VRE Market Research Study, which used home-interview surveys to estimate potential ridership on a new commuter rail service in Northern Virginia. Used mode choice analysis for each individual interview to compensate for response and state preference biases.

VDOT, Environmental Assessment Forecasts, VA. Lead modeler for Dulles Toll Road, Capital Beltway, and I-66 environmental assessments.

VDOT, Southeastern Expressway Environmental Impact Statement, VA. Responsible for SYSTEM II traffic forecasting for an environmental

impact statement regarding a proposed expressway between Virginia Beach and Chesapeake, Virginia.

VDOT, Dulles Toll Road Environmental Impact Statement, VA Developed traffic projections for the Dulles Toll Road and its Greenway extension. These projections included various pricing and toll collection alternatives. Simulated time-of-day pricing, electronic toll collection, and differential vehicle pricing strategies.

VDOT, US Route 1 Corridor Study, VA. Developed a GPS-based data collection system for recording second-by-second travel time and speed information for the Route 1 Corridor Study in Northern Virginia. Used the data to quantify roadway performance in ways the general public could understand; to quantify traffic flow characteristics for problem identification and model calibration; and to determine the dynamics and precise location of traffic congestion.

Prasad Pulaguntla

Patronage Forecasting

Total Years of Experience: 8

Education

MS, Transportation Engineering, Ohio State University, 2005

B Tech, Civil Engineering, Indian Institute of Technology, Madras, India, 2004

Mr. Pulaguntla specializes in urban and intercity travel demand forecasting, transportation planning, and traffic engineering. He has worked extensively with travel forecasting models in the Washington, DC, Virginia, northern New Jersey, and New York metropolitan areas. Mr. Pulaguntla has experience working with ridership and revenue forecasting for Amtrak intercity rail services nationwide. He is proficient in programming and experienced in many computer-based transportation analysis and modeling tools including CUBE/TP+, CUBE Voyager, TransCAD, ArcView, TRANSIMS, VISSIM, Synchro, HCS, ArcMap, FORTRAN, SPSS, and Excel.

Virginia Department of Rail and Public Transportation, Richmond Broad Street Bus Rapid Transit Small Starts, Richmond, VA. AECOM is working with VDRPT and Federal Transit Administration to develop FTA Small Starts ridership projections and associated project justification criteria. Involved with multiple tasks including calibrating bus travel times in the Richmond Forecasting model with scheduled times, processing on-board bus survey and preparing trip table, calibrating model path-building parameters to validate against the observed bus ridership numbers, network development for the baseline and build alternatives and computing travel time user benefits for alternative scenarios.

Washington Metropolitan Area Transit Authority, Columbia Pike Transit Initiative, Washington, DC. Part of team working with WMATA in Arlington and Fairfax counties, conducting preliminary engineering and environmental planning for transit improvements in the Columbia

Pike Corridor. Participated in the modeling alternative analysis phase, provided technical assistance in studying the historic and projected demographic trends and travel behavior patterns in the corridor. Modeled opening and build year streetcar alternative scenarios using the Washington area WMATA-MWCOG model to provide ridership forecasts and generate inputs for traffic analysis using VISSIM software.

Washington Metropolitan Area Transit Authority, Regional Transit System Plan, Washington, DC. Participated in the preparation of a regional transit system plan that outlines how WMATA and other transit operators evolve to serve the region in the long-range future. Involved in the recalibrating of WMATA-MWCOG mode choice model and validating the model assignment results with current transit system surveys. Provided technical assistance with GIS mapping, analyzing model results, and preparing long-range ridership forecasts for operations analysis.

Randy Richardson

Performance Measures

Total Years of Experience: 13

Education

MUP. (Master of Urban Planning) Planning Analysis, Graduate School of Public Administration, New York University, 1975
BA, Urban Studies, University of Rochester, 1973

Mr. Richardson is currently a Principal-In-Charge for Randolph Richardson Associates which was established in 2003. He also served as a member of the adjunct faculty in the Department of Civil, Environmental and Infrastructure Engineering, George Mason University, co-teaching a course in Public Transportation Systems.

DRPT Transit Performance Reviews.

Member of the project team led by VHB to evaluate the performance of transit providers within the Commonwealth of Virginia. Mr. Richardson anticipates task order assignments in the areas of service planning,

evaluation and reporting, procurement, and safety and security operations planning.

Dulles Metrorail Project. Member of the project team led by Jacobs Engineering which provides project management support services to the Metropolitan Washington Airports Authority (MWAA) for the design and construction of the new heavy rail transit line between the West Falls Church Metrorail Station and the Dulles International Airport. Mr. Richardson assists the airport authority project team in the areas of Planning and Systems Management. Under planning management, efforts include special exceptions package reviews, risk management reviews, transportation management process review and coordination as well as agency coordination. Under systems management, efforts include review and coordination in the areas of system design, with anticipated work in procurement, installation, testing and start-up.

CTA Transformation. Part of a Project Team led by AECOM Consult that conducted an evaluation of the transit agency's business processes against public sector and commercial industry best practices. Mr. Richardson conducted the review of the CTA Planning Department's processes with respect to transit industry best practices. Mr. Richardson also conducted a detailed cost analysis to assess the impact of Transit Signal Priority (TSP) on selected bus routes.

Case Western Reserve University Links Study. Under a subcontract with Lea+Elliott, Inc., Mr. Richardson participated in a study of transportation alternatives that would link the university's medical facilities as well as provide a connection to the Cleveland Clinic and the Veterans Hospital located in the University Circle area. Mr. Richardson reviewed other university and medical transit systems; conducted a traffic signal timing analysis for the University Circle area.

Toni Horst, PhD

Discipline Leader - Project Evaluation

Total Years of Experience: 18

Education

PhD, Regional Science, University of Pennsylvania, Philadelphia, 1997
BA, Economics and Government, Oberlin College, 1986

Dr. Horst is a senior consulting manager in the transportation consulting practice with significant experience. Her work focuses on analyzing how transportation investment changes local economies. Typical projects entail forecasting, economic impact analysis, and fiscal analysis. Recent economic impact assessments have included highway, rail, and port impact studies. Her real estate experience includes projecting commercial development impacts from large projects such as development around highway exits and transit stations. Fiscal analysis has included revenue forecasting, assessment of proposed New Start transit projects, and assessing yields from the implementation of possible new taxes.

*Dr. Horst's previous experience included forecasting economic concepts such as employment, housing permits and price appreciation, income and population for states and metro areas, development of short-term leading indexes for states and metropolitan areas to predict the near-term direction of regional economies, development of custom forecasting model applications for clients, and detailed demographic analyses. Dr. Horst is proficient with a number of econometric/financial modeling applications including SAS, SPSS, EVIEWS, LIMDEP and FAME econometric packages. She is an experienced presenter of economic analyses and formal reports before business-oriented audiences. She has edited several publications at *Economy.com* and was an assistant editor for the *Journal of Regional Science*.*

Tennessee DOT, Financial and Strategic Plan, TN. Developing financial and strategic plan as part of state's long-range transportation plan. Work entails projecting yield from current revenues over 30-year planning horizon based on expected economic growth, projecting potential yield from possible implementation of new sources, and benchmarking taxes to neighboring states to determine competitive position in the region. The plan

was awarded an Engineering Excellence Award by the Tennessee ACEC.

Washington Metropolitan Area Transit Authority, Economic Impact Analysis of Dulles Metrorail Extension, Washington, DC. Participated in a study to assess the economic, fiscal, and community impacts of the Dulles Metrorail extension. Performed a market analysis of the regional hotel market's potential response to the extension of Metrorail service to Dulles International Airport. Analyzed data on hotel properties to assess whether and how hotel development would develop in station areas in response to WMATA Board members' concerns.

North Carolina Department of Transportation, Rail Division, Assessment of North Carolina Station Revitalization, NC. Estimated and projected the local economic impact of North Carolina's station revitalization investments in seven communities. Projected regional economic, land use and development, and fiscal impacts in terms of employment, income and gross regional product. Land use impacts generally occur with station revitalization serving as the catalyst for other investment in proximity to the station resulting in higher valued land uses. Fiscal impact analysis involves the estimation of tax base changes (e.g. increases in household income) and the resultant tax revenue implications (e.g., sales tax increases through increased spending by household units).

Allegheny County Department of Community and Economic Development, South Hills TRID Study, Allegheny County, PA. The economic impact analysis for each of three station areas identifies the development and land use effects that could reasonably be induced by the series of public actions associated with the TRID: transit improvements, other infrastructure improvements, the use of public land for joint development, and the introduction of TOD-friendly zoning. The potential economic development benefits are significant in and of themselves—construction jobs, permanent jobs, enhanced commercial activity generated by added income and purchasing power, higher property values, and correspondingly higher municipal tax revenues. These

measures help to gauge the public sector's return on investment. Moreover, through tax increment financing or other value capture mechanisms, the economic development benefits created by the TRID can be used directly to help fund its public components.

Federal Highway Administration, Economic Development Highway Corridors, LA. Estimated and evaluated the economic development impacts of highway investment in two Louisiana locations, Lincoln Parish, and Morehouse Parish. The two locations were among 12 potential projects being studied by the team as part of a multi-year congressionally mandated study. The projects were evaluated according to six criteria: necessity, benefit-cost, region's potential for growth, engineering considerations, environmental considerations and economic justice. Developed regression model to project commercial development surrounding interstate exits for Lincoln Parish. Developed a model for Morehouse Parish to correlate industrial diversity with highway capacity to broaden scope of benefits considered. Research was presented at TRB annual meeting and published.

Arizona Department of Transportation, I-10 Corridor Economic Impacts and Displacements Analysis, Phoenix, AZ. Authored DEIS chapters and technical background paper a study to assess the economic, fiscal, and community impacts of widening I-10. Analysis considered construction impacts, value of travel time savings, and losses to the tax base from potential takings for the right of way.

Metropolitan Atlanta Rapid Transit Authority, Economic Analysis in Support of TIGER Funding Application for Peachtree Streetcar, Atlanta, GA. Project manager responsible for economic analysis included in TIGER application. Project benefits included construction, operation, commercial development, safety, fuel savings, and emission benefits. Developed technical memos and worksheets detailing all assumptions and calculations for the reviewers' reference including calculation of benefit cost ratio for project. Benefits were projected over 20-year horizon and discounted back to present value. Project was selected for TIGER II funding.

Sara Carini

Economic Analysis

Total Years of Experience: 16

Education

BA, Economics, Miami University, 1997
BA, History, Miami University, 1997

Ms. Carini is a senior consultant specializing in economic and financial analysis of transportation investments, cost-benefit analysis, and financial modeling and planning. She draws on her training in economics, statistics, and finance to provide support for major investment studies and major financial analyses for all modes of transportation. Ms. Carini has performed benefit cost analyses for clients as part of the TIGER and FRA High Speed Rail grant application process. In addition, she has performed economic impact analyses for numerous clients and is proficient in the use of economic analysis models and tools, including SPSS, REMI, RIMS II, TREDIS, GradeDec (FRA), and MARAD.

Virginia Department of Rail and Public Transportation, Hampton Roads Regional Vision Plan Phase 2 Market Analysis, Hampton Roads, VA. Conducted a market assessment of the potential impact of the vision plan's transit investment on real estate development opportunities in the Hampton Roads region. Provided quantitative estimates of potential new commercial and residential development in order to evaluate the economic and fiscal benefits of the Hampton Roads Transit Vision Plan 2 projects that feature light rail transit (LRT), bus rapid transit (BRT), streetcar, and commuter rail modes. Estimated development impacts for each project corridor using experiences from other cities and the results of personal interviews with economic development and planning professionals in the jurisdictions that comprise the Hampton Roads region. In addition, conducted on-site visits to the LRT, BRT, streetcar, and commuter rail corridors as background for the interviews

with the jurisdictions as well as for preparing development scenarios.

Arlington County, Columbia Pike Transit Initiative Return on Investment Analysis, Arlington, VA. Evaluating how land values and uses along the Columbia Pike Transit Initiative Corridor would change with the implementation of the streetcar build alternative. As part of the study, reviewing available development capacity data for the corridor as well as identifying potential order-of-magnitude return on investment based on a review of comparable streetcar systems. The identified return on investment potential will be validated through the use of online surveys and meetings with developers and key economic development stakeholders to determine the potential impacts and issues associated with the redevelopment and revitalization of the project corridor.

Richard Wechsler

Safety & Security

Total Years of Experience: 35

Education

MA, English, Middlebury College, 1975
BA, English, University of New Haven, 1971

Andover-Newton Theological School
Boston University, School of Fine and Applied Arts
University of Bridgeport, School of Education, CT Secondary Education Certificate

Mr. Wechsler is a security engineering specialist with 32 years of experience with risk assessment, systems design, installation, sales and project management. He has designed and implemented integrated security systems for major airports, hospitals, pharmaceutical companies, DNA laboratories, animal research facilities, water, wastewater and chemical facilities, oil companies and government

agencies. Mr. Wechsler's responsibilities include assessments, surveys, budget development, project management, scheduling, quality control, and design implementation. He is a long-standing member of the American Society for Industrial Security.

US Department of Homeland Security, Nebraska Avenue Complex Physical Security Architecture Program, Physical Security Planning Program, Washington, DC. Senior security specialist that provided security consulting and engineering design as well as quality assurance services for the program in support of the DHS relocation to the Nebraska Avenue Campus (NAC) and the need to comply with Homeland Security protective initiatives. The team conducted a review of the current physical security conditions and requirements in order to develop a physical security planning assessment and security master plan

with an implementation plan to include recommendations for the security upgrades. The project objectives were to: provide guidance and strategy for the deployment of a state-of-the-art physical security infrastructure for DHS HQ Office of Security and to develop and implement a complete end-to-end, integrated, interoperable physical security architecture for the DHS NAC HQ campus.

US Army Corps of Engineers, Washington Aqueduct Security Upgrade Design, Washington, DC. Security specialist on the team conducting a vulnerability assessment to identify critical assets at multiple facilities and designed appropriate physical and electronic security system upgrades to provide hardening of physical perimeters and critical areas as well as electronic security systems to enhance monitoring and control and provided construction period services.

Ken Korach, JD

Discipline Leader - Safety & Security

Total Years of Experience: 35

Education

JD, Temple University School of Law
MBA, Finance, Drexel University
BS, Business Administration, Drexel University

Kenneth A. Korach is President and CEO of TRA, and has over 35 years of experience in rail and fixed guideway transport operations, security assessments, operational safety and security reviews, control centers, performance assessments, regulatory/legal analysis, human resources, and labor relations. Mr. Korach has performed extensive safety and security assessments and operational analyses for numerous transit agencies, state governments, and consulting firms. He has been responsible for managing safety, security, and operational assessment projects, and he was responsible for rail operations at several transit systems prior to his consulting career. Mr. Korach has an extensive history of assisting States in the initial development of FTA-mandated rail transit State Safety and Security Oversight programs.

Tri-State Oversight Committee (TOC), Washington, DC. Mr. Korach serves as principal-in-charge for TOC state safety oversight of the Washington Metropolitan Area Transit Authority Metro system. This covers all aspects of the FTA-mandated requirements for oversight under Part 659, including security, safety, and operational analysis. In the role of consultant to TOC, TRA is also responsible for coordinating with TSA, FTA, NTSB, and other agencies.

Oregon Department of Transportation State Safety and Security Oversight of Tri-Met Light Rail and Portland Streetcar Systems, Portland, OR. Mr. Korach played a key role in implementing the Oregon Rail Safety and Security oversight program, and led TRA in completing multiple on-site safety and security reviews on its behalf. He recommended a number of safety and security enhancements as a result of the assessments, and provided technical assistance and support to ODOT personnel involved in rail transit and accident/hazardous condition investigations.

Washington State Safety and Security Oversight, Seattle, WA. Mr. Korach served as TRA project manager to provide state safety and security oversight for the Washington State Department of Transportation. Under this contract, TRA has conducted triennial reviews of the South Lake Union Streetcar, Seattle Center Monorail, and Central and Tacoma Link Light Rail systems. The effort also involved pre-revenue service review of the Tacoma Link Light Rail and South Lake Union Streetcar lines.

Hiawatha Light Rail Fixed Guideway System State Safety and Security Oversight Project, Minneapolis, MN. Mr. Korach served as Project Lead for the TRA review team to provide state safety and security oversight for the Minnesota Department of Public Safety and Security. He contributed to the development of System Safety and Security Program procedures and standards, as well the triennial audit and incident reviews. He reviewed operations/transportation and employee fitness-for-duty during two pre-revenue service reviews of the Hiawatha line.

Pennsylvania Department of Transportation Rail Transit Safety and Security Review Program (RTSRP), Multiple Location, PA. Mr. Korach serves as the principal-in-charge of the Pennsylvania RTSRP, evaluating the safety and security of rail and fixed guideway operations at SEPTA (Philadelphia), PAAC (Pittsburgh), and CCTA (Cambria County). This comprehensive program utilizes a continual, detailed review of light rail, heavy rail, and fixed guideway operations. The program addresses all aspects of transit operations that can impact the safety and security of rail and fixed guideway systems, including: service delivery functions, vehicle and facilities maintenance practices, engineering and operations support, safety and security and risk management, operational incident analysis, and accident investigation.

Port Authority of New York and New Jersey (PANYNJ), Multiple Locations, New York, NJ. Mr. Korach serves as the Project Manager for TRA's extensive and continuing work with PANYNJ on many security and safety initiatives. The primary focus is the AirTrain Safety

Oversight Board, which is responsible for the independent safety and security oversight of AirTrain JFK and EWR. This effort involves safety assessments and evaluations for the two systems, along with accident investigations, hazardous conditions, and other risk factors. He reviews and provides technical support to the Port Authority in evaluating SSPPs and SEPPs. He has also directed technical evaluations for the Port Authority Trans-Hudson (PATH), including the World Trade Center site station, security and emergency plans for PANYNJ Police, and other related activities. He has also worked closely with the PANYNJ Inspector General, assisting the Office in a number of investigations.

Metropolitan Atlanta Regional Transportation Authority (MARTA), Atlanta, GA. Mr. Korach served as principal-in-charge of a comprehensive evaluation of rail, bus, and infrastructure safety-critical systems at MARTA, as well as of TRA efforts to assist MARTA in the design and pre-revenue phases of the Atlanta Streetcar. In addition, he serves as an expert witness for MARTA in assessing agency compliance with rail transit industry practices and standards.

San Francisco (California) Municipal Transportation Agency (MUNI), San Francisco, CA. Mr. Korach provided a wide variety of operational safety and system safety review services for MUNI. This work included development of SSPPs and recommendations to modify the SSPP based on changes in organizational, operational, and physical conditions at MUNI. He advised the agency on internal safety assessment audit programs, state safety oversight requirements, and strategic approaches to safety deficiencies identified in the triennial review.

Illinois Rail Transit Safety and Security Review Program, Chicago, Illinois. Mr. Korach served as principal-in-charge for the Illinois Safety and Security Review Program, which provides FTA-required state safety and security oversight of the Chicago Transit Authority (CTA). In addition to leading multiple on-site triennial reviews at CTA under this contract, Mr. Korach provided the agency with expert advice regarding operating rules safety and security goals, as well as fitness-for-duty requirements.

Russ Chishom

Discipline Leader - Short Range Planning & Program Development

Total Years of Experience: 35

Education

Post-Graduate Program, Urban Geography
Boston University
B.A., Geography, Southern Connecticut
State University
Mathematics, Rensselaer Polytechnic
Institute

Russell Chisholm has developed, implemented and operated urban transit services for over 30 years within a variety of international and domestic operating environments. He spent the first half of his career in senior management and technical positions at some of the transit industry's most innovative transit systems. Mr. Chisholm founded TMD and has built the company into an industry leader in innovative, sustainable transit service and efficient transit operations.

Alexandria Transit Company Comprehensive Operational Analysis & Visioning Update. Project Manager. Directed the Comprehensive Operational Analysis (COA) in 2005 and a Visioning Study/COA update in 2008 for the Alexandria Transit Company's DASH system. The COA was based on detailed analysis of market conditions and mobility needs as well as ridership and service performance. The recommended network and service improvements were developed through consultation with community stakeholders and resulted in a more effective and efficient DASH system that carried more customers with lower operating costs and increased farebox revenue. Over the following decade the recommended DASH plan called for growth from fewer than 50 vehicles to 115 vehicles in the new operating/maintenance facility. Also directed the 2008 Transit Visioning study, which also updated the COA Plan based on the recently completed City Transportation Master Plan. The network and community roles for the Alexandria ATC DASH were developed with stakeholders based on both market and service assessments as well as future public mobility initiatives like the currently under construction Crystal City/Potomac Yard Transitway (Route 1 BRT).

San Francisco Bay Area MTC Transit Sustainability Project. Project Director. Directed TMD's work assisting the

Metropolitan Transportation Commission (MTC) in assessing, developing, and implementing new market, service, and operating performance standards for Bay Area transit systems. TMD's work focused on the principal contributors to financial sustainability: service performance (ridership generation and service effectiveness); operating efficiency (work rules, operating speeds, and daily delivery); and fare policy (revenue generation, integration, media). TMD continues to assist MTC with implementation including: a) a recent "Call for Projects" initiative for urban trunk speed improvement, which TMD helped develop and later evaluated proposals from individual transit systems; and b) developing a "transit investment" scenario for the Regional Transportation Plan. Currently directing the combined Inner East Bay COA of both.

San Francisco Transit Effectiveness Project. Project Manager. Served as Project Manager for the comprehensive market, service, and operations analysis of the San Francisco Municipal Railway (MUNI LRT, streetcar, cable car, trolleycoach, and motorcoach). The project was a collaborative effort with both SFMTA and the City Controller to support the redevelopment of the MUNI network of services and delivery systems. Major TEP tasks include analysis of MUNI bus and rail services and operations; transit preferential streets applications; consumer market segment and travel demand analysis; comprehensive bus and rail service restructuring plan; financial, operations, and organization development; and ongoing stakeholder outreach. The TEP recommended a financially sustainable redeveloped MUNI transit network that includes new LRT, BRT, streetcar, and Rapid Bus initiatives. Further, TMD developed Complete Street bus and streetcar/LRT prototypes for two-mile segments of the Market Street, Mission, Judah/Irving, and San Bruno corridors. The SFTEP and TMD's Santa Clara VTA COA were lauded by the Metropolitan Transportation Commission as transit success models for the Bay Area.

Denver RTD Sector Studies. Project Director. Overall responsibility for TMD

on-call project work for RTD now in its third five-year contract. Currently leading the development of the service and operations plan for Denver Union Station. Directed development of a second downtown BRT shuttle to complement the Free MallRide, assessment of FasTracks full build network connectivity costs and benefits; and a review of actual results for the Southeast Rail and bus network implementation. Overall responsibility for TMD work on several sector restructuring projects: Northside, Westside, and Southeast; the work involved major redevelopment of both regional and community transit services in the urban and suburban areas of Metro Denver. This is in response to both the T-Rex and FasTracks BRT, LRT, and Commuter Rail initiatives. Work included market assessment, ridership and service analysis, and operations review as well as development of working vehicle schedules for all recommendations. Additional work included development and testing of a system-wide timed transfer network, passenger transfer analysis, development of new service warrants and performance standards, and improvement in service reliability and quality.

Minneapolis-St. Paul Central South Service Restructuring Plan. Project Manager. Managed major service restructuring of the core Metro Transit service area that included both Minneapolis and St. Paul. Work involved a comprehensive analysis of market opportunities, ridership, service, and operations. Recommendations included development of arterial BRT on both radial and crosstown lines, streamlining of complex route patterns, enhanced park-and-ride based commuter express network, new community services, and coordination with the new Hiawatha LRT. A revised transit operating plan for Downtown Minneapolis was also developed that improved operating speeds, relocated commute transit from Nicollet Mall to faster adjacent one-way couplets, and reduced conflicts with other modes. Work also involved a special analysis of the I-35W and I-494 corridors that integrated BRT into the short and long-term freeway plans and a facility operations plan for the Mall of America intermodal transit center for LRT, BRT, and bus.

Stuart Geltman

Program Development, Small Systems

Total Years of Experience: 14

Education

MS, Transportation Management, Polytechnic Institute of New York (now Polytechnic Institute of New York University), 2010
BA, Urban Studies, University of Minnesota, 1999

Mr. Geltman is a senior transit planner with experience in urban transportation systems and transit planning. He has assisted in preparation of comprehensive neighborhood transportation plans, special project plans, and bus route development plans, in various parts of the country. Mr. Geltman's responsibilities have involved the preparation of transportation and development plans for state, county, city, and neighborhood governments and civic groups.

Washington Metropolitan Area Transit Authority, Priority Corridor Study, Washington, DC. Participating in development of new service proposals

for a number of corridors in the area. The corridors included Veirs Mill Road (Q2), H Street/Benning Road (X2), New Hampshire Avenue (K6), and U Street/Garfield (90s). The proposals include various strategies to provide passengers with an overall service improvement, including bus rapid transit proposals that would greatly modify the scope of services along these corridors. The assignment includes not only participating in the preparation of new service concepts and their accompanying presentation materials, but also meeting with the public to gather input and present transit solutions.

Greater Richmond Transit Company, Greater Richmond Comprehensive Operational Analysis, Richmond, VA. Transit planner that developed a comprehensive analysis of the Richmond transit system for the purposes of system improvement, as well as expansion into Chesterfield County. Specific study components included route and ridership profiles, development of service standards and recommendations, as well as fare policy analysis and recommendations.

Charlottesville Transit System, Charlottesville Transit Development Plan, Charlottesville, VA. Transit planner that evaluated customer opinions and concerns as well as conducting a fare policy analysis. Specific tasks include evaluating customer opinion surveys, which provided demographic, and service need data, and conducting a fare inventory and analysis to institute a fare policy.

New York Metropolitan Transportation Council, Southern Brooklyn Transportation Investment Study, Brooklyn, NY. Transit planner that assisted in development of a long-range major transit investment plan for the southern Brooklyn area. Included working with community members as well as agencies concerned with transit issues in this area. Prepared technical documents, assisted with subcommittee as well as advisory committee meetings, and represented the project study team in community transportation meetings.

Tim Brulle, LEED AP

Comprehensive Operations Analysis

Total Years of Experience: 8

Education

BA, Government and Environmental Studies, College of William and Mary, 2005

Mr. Brulle is a Transportation Planner with four years of professional planning experience within the public and private sectors. Mr. Brulle has experience with transit and environmental planning, transit operations planning, land use analysis, GIS and data analysis, field data collection, and public involvement coordination. Mr. Brulle earned the designation as a Leadership in Energy and Environmental Design (LEED) Accredited Professional in May, 2009.

WMATA, Metrobus Studies (On-call), Washington, DC Metropolitan Area. Transportation Planner responsible for tasks including public involvement coordination and materials preparation, GIS and data analysis, field data collection, and other technical

assistance. The purpose of these studies is to conduct a comprehensive analysis of methods for improving the performance of transit along various Metrobus corridors and to develop an improvement strategy that includes service, operations, facilities, and customer information enhancements.

WMATA, Columbia Pike Transit Initiative Environmental Planning and Small Starts, Arlington, VA. Transportation Planner responsible for providing environmental planning analysis and technical assistance in support of the federal environmental documentation process. The purpose of this project is to conduct environmental planning and satisfy Federal Small Starts requirements for the proposed transit improvements along the five-mile transit alignment on the Columbia Pike corridor. The improvements will provide enhanced transit service to connect existing and new land development along the corridor, improve access to

major activity centers, and encourage transit ridership growth. Environmental planning and documentation is required to evaluate and document potential effects on transportation conditions and social and natural environments in the corridor.

Metropolitan Washington Airports Authority (MWAA), Dulles Corridor Metrorail Project Phase 2: Extension to Dulles Airport/Route 772, Fairfax, VA. Transportation Planner responsible for providing environmental planning analysis and technical assistance in support of the federal environmental documentation process. The purpose of this Project is to complete Preliminary Engineering (PE) and prepare a Design-Build solicitation for the Dulles Corridor Metrorail Project (DCMP) Phase 2. Phase 2 of the Project extends the line another 11.5 miles from Wiehle Avenue in Fairfax County to Washington Dulles International Airport and on to Route 772 in Loudoun County.

Brennan Collier

Discipline Leader - Training

Total Years of Experience: 16

Education

BA, Interdisciplinary Studies - Environmental Science, George Mason University, 1998

BA, Geology, George Mason University, 1998

Awards

National Highway Institute (NHI) Instructor of Excellence Award (FY2010)

Training

Certified Instructor, NHI's NEPA and Transportation Decision Making Course Advanced Seminar on Managing the Environmental Review Process, June 11-12, 2008 in Atlanta, GA.

Virginia Natural Resources Leadership Institute, 2004 Fellow

FHWA NEPA Project Development and Section 4(f) Training, Instructor

FHWA Endangered Species Act: Section 7 Interagency Cooperation

VDOT Project Management Training

Ms. Collier is an Associate and Senior Project Manager in McCormick Taylor's Richmond, VA office and has over 16 years of experience completing planning studies for transportation projects. She has extensive experience in managing and preparing NEPA documentation, including Categorical Exclusions, Environmental Assessments, Environmental Impact Statements and Section 4(f) Evaluations. She has also managed multiple simultaneous complex cultural and natural resource studies, wetlands investigations and delineations, federal and state permitting and routinely conducts direct coordination with staff from the Federal Transit Administration, Federal Railroad Administration, and the Federal Highway Administration. Ms. Collier has planned and presented at a number of public and agency coordination meetings dealing with multiple controversial issues and projects. Prior to joining McCormick Taylor, Ms. Collier was a NEPA Document Specialist for the Virginia Department of Transportation's (VDOT) Northern Virginia District and an Environmental Program Manager in VDOT's Central Office.

Virginia Railway Express Cherry Hill Third Track, Stafford and Prince William County, VA.

Ms. Collier served as the Environmental Project Manager leading environmental studies and public participation services for this project. The project involved the completion of an Environmental Assessment and Preliminary Design for the addition of approximately 11.4 miles of mainline third track within the existing CSX Transportation RF&P right of way. Multiple complexities surrounded the project, including project work prior to identification of a lead agency. As a result, the NEPA document was prepared for either FTA or FRA approval. Midway through the project, it was identified as an ARRA funded project, increasing the coordination efforts with multiple stakeholders, including CSXT and FRA. A FONSI and Individual wetland permits were successfully obtained under an abbreviated project schedule.

Virginia Railway Express Gainesville-Haymarket Extension, Prince William County, VA.

Ms. Collier will serve as the Environmental Project Manager for this project. Environmental studies and public participation services will involve the completion of an Environmental Assessment and Preliminary Design for the addition of approximately 11 miles of mainline track within the existing Norfolk Southern right of way. The project will also include planning for three new stations.

Red Line Corridor Transit Corridor Study, Maryland Transit Administration, Baltimore, MD.

Ms. Collier assisted in the alternative analysis process and early planning for the Draft Environmental Impact Statement for a light rail and bus rapid transit project through Baltimore City and Baltimore County. Project work included assisting in the overall management of the NEPA document.

NEPA & the Transportation Decision Making Process' Certified Training Instructor, FHWA's National Highway Institute (NHI). Ms. Collier is a Certified Trainer for NHI and conducts nationwide training for state and federal highway officials and consultants on NEPA and

Section 4(f) processes. She has led 12 three-day courses in Phoenix, AZ; Lincoln, NE; Charleston, WV; Sacramento, CA; Atlanta, GA; Denver, CO; Anchorage, AK; Bismarck, ND; Newington, CT and Juneau, AK and participated in three others in Clearfield, PA, Nashville, TN, and Baltimore, MD.

VDOT Environmental Documentation & Related Services Statewide, VA.

Ms. Collier leads McCormick Taylor's environmental team on this three-year/ \$5 million per year on-call contract for VDOT. This is the third contract McCormick Taylor has been a part of for VDOT. Nearly 20 tasks orders have been completed under these contracts, including some of VDOT's most controversial projects. Tasks have involved the preparation of NEPA documentation, wetlands/streams delineation and permitting, cultural resource surveys, and air & noise studies. Projects have included roadways on new alignment, interchange improvements, roadway widenings, and HOT/HOV/ Express Toll lanes projects such as the Midtown/Downtown Tunnels, I-81 Tier 2 EA, Coalfields Expressway, Charlottesville Bypass, I-264/Lynnhaven Interchange, Bridgewater Bypass, Fairfax County Parkway Interchange Modifications, and the I-95 Express.

I-64 Peninsula Study Environmental Impact Statement, Richmond to Hampton, VA.

Ms. Collier is serving as the Deputy Project Manager for the development and management of the Environmental Impact Statement (EIS) and the coordination of the detailed environmental studies, including wetlands, cultural resources, air analyses, noise abatement studies, and Section 4(f) evaluations. The project consists of a 75-mile long interstate corridor connecting two of Virginia's largest regions. Alternatives under consideration include the addition of general purpose lanes, HOV/HOT lanes, and express toll lanes. A Draft EIS was signed by FHWA on October 24, 2012.

Lisa Ives

Training

Total Years of Experience: 22

Education

MS, Geography - Environmental Studies, Eastern Michigan University, 1992
BS, Earth Science, Eastern Michigan University, 1990

Ms. Ives has 22 years of experience in transportation and environmental planning, as well as project management. She has been the project manager for major transit and intermodal transportation projects, including various corridor evaluations, feasibility studies, transportation plans, major investment studies/alternatives analysis (MIS/AA), environmental impact statements/environmental impact reports (EIS/EIR), station area planning and design concepts, transit oriented development (TOD) projects, and public outreach efforts. Ms. Ives also has a comprehensive knowledge of the National Environmental Policy Act (NEPA),

California Environmental Quality Act (CEQA), and New Starts processes and has been an instructor for the Federal Transit Administration (FTA)/National Transit Institute (NTI) courses on Managing the Environmental Process and Project Management for Transit Professionals. She has been a project manager in both the public and private sector.

National Transit Institute, Rutgers University, Professional Development Courses. Teach a course on Managing the Environmental Process, which provides the fundamentals of implementing NEPA requirements and emphasizes the importance of using NEPA as a decision-making tool in the overall project development process. Also teach the Project Management for Transit Professionals course, explaining the basic components and functionality of each phase of a well-defined project. These NTI courses are geared towards transportation

professionals and are sponsored and funded by the FTA in cooperation with Rutgers University.

Exposition Metro Line Construction Authority, Exposition Corridor Transit Project Phase 2, Los Angeles to Santa Monica, CA. Managed the final environmental impact report (FEIR) for the Expo Phase 2, which is a proposed light rail extension from Los Angeles to Santa Monica. The FEIR involved significant coordination with agencies and communities to build consensus on key project issues that emerged during the draft environmental impact report (DEIR). The environmental process was successfully completed in February 2010, with the Expo Authority board of directors approving the project and filing a notice of determination on the FEIR.

Joe Bucovetsky, AICP

Training

Total Years of Experience: 20

Education

Master of Architecture and Master of City Planning, University of Pennsylvania
Bachelor of Architecture, University of Toronto

Mr. Bucovetsky has over 20 years of experience in the fields of city planning and urban design, including five years with county and state planning agencies and 15 years in association with urban design and planning consultant firms. His work has involved transit studies/design, land use planning, urban design, comprehensive and master planning, site design, campus planning, ordinance and development standards preparation, historic preservation planning and architectural design.

West Trenton Transit-Oriented Development Neighborhood Planning Study, Ewing Township, Mercer County, NJ. Project Manager for this high-profile project, with participation by regional, state, county and local agencies. The intent was to explore the transit oriented development (TOD) possibilities at a Southeastern Pennsylvania Transit Authority (SEPTA) rail station located in Ewing Township, NJ. Following initial analysis, alternate concepts that would marry TOD opportunities present in the vicinity of a rail station with realistic expectations about the type and intensity of new development the market can support were explored. Key considerations included: easy access to the rail station by pedestrians and bicyclists, developing a new mix of land uses including higher-density residential and retail in the vicinity of the rail station, links with a variety of transportation options, creation of a new marketable community, and an appropriate street hierarchy and circulation network.

The public involvement aspects of the study were significant in leading to Final Plan recommendations that include moving the rail station to better support the redevelopment of two brownfield sites.

U.S. Route 22 Pedestrian Improvement Project, Union County, NJ. Supervising Transit Operations Planner for this multi-municipal planning study in Kenilworth Borough and Union and Springfield Townships in Union County, NJ. Mr. Bucovetsky oversaw the development of the proposed shuttle routes and station stops along this busy commercial corridor, and provided guidance to the project team regarding the location of shuttle staging areas, potential headways and the integration of shuttle operations with other transportation systems and land uses along the corridor. The final plan included two distinct service routes that facilitated enhanced connections between residents, commuters, and businesses in the area.

Jeremy Siviter, PMP

Discipline Leader - Technology/ITS

Total Years of Experience: 26

Education

B.Sc., Electronic and Electrical Engineering, Manchester University, England, 1988

Mr. Siviter, an Associate with IBI and certified Project Management Professional, has managed a wide variety of ITS research, design, implementation and operation projects. These projects range from \$10,000 to multi-million dollar programs. His skills range from detailed technical analysis and testing through set-up and management of customer service operations. He has extensive experience in electronic payment systems, transit technology applications, traffic management systems and traveler information systems.

Transit ITS Strategic Plan for Virginia Department of Rail and Public

Transportation. As part of a Transit Planning on-call contract, Mr. Siviter managed this effort to develop a statewide Transit ITS Strategic Plan and provide periodic updates.

WATA Transit Technology for Operations Management and Public

Information. Mr. Siviter is project manager providing assistance to the transit agency in Williamsburg to guide its transit technology deployment. including needs analysis, development of RFP documents, procurement support and implementation oversight.

Northern Virginia Regional Smart

Card Integration. Mr. Siviter was Project Manager for providing technical oversight and coordination of the design and installation of new revenue collection devices and central systems for all transit vehicles at six transit agencies.

Delaware Transit Fare Collection

Services. Mr. Siviter was Project Manager for this effort to assist the Delaware Department of Transportation's (DelDOT) Delaware Transit Corporation (DTC) in planning future fare collection system, and provide support throughout the system design and implementation phases.

Virginia Regional Transit (VRT) Transit Technology Program Planning.

Mr. Siviter was project manager for this effort to assist VRT with transit technology deployment, including needs assessment and technology selection for this mixed fixed route and demand responsive operations that spans a variety of operating environments.

Development of a Low-Cost Bus Arrival System for Northern Virginia.

Mr. Siviter managed a project which designed, developed and deployed a low cost solution for bus arrival traveler information for small transit agencies.

Multi-Modal Traveler Information Kiosk (MMIK) System, Chicago.

Mr. Siviter was deputy project manager for the development of a multi-modal information kiosk system and transit information database for the metropolitan Chicago region.

MBTA South Station Traveler Information Kiosks, Massachusetts Bay Transportation Authority.

Mr. Siviter provided technical oversight to design transit traveler information kiosks for the MBTA at South Station in Boston.

TRANSMIT Evaluation.

Mr. Siviter was project manager for the evaluation of the TRANSMIT system in the New York Metropolitan region. This included evaluation of the benefits of using the E-ZPass tag technology for travel time measurement, incident detection and bus arrival time prediction.

Dulles Airport Ground Transportation Management System.

Project Manager to provide requirements and alternative analysis, specifications development and oversight of the installation of new AVI based ground transportation management system.

Dulles Airport Parking System Review.

Mr. Siviter was the task manager for this project to review the parking revenue system deployed at Washington Dulles Airport

Daniel Worke, PE

Technology/ITS

Total Years of Experience: 17

Education

MS, Transportation Planning and Engineering, University of Southampton, United Kingdom, 1993

BS, Civil Engineering, Addis Ababa University, Ethiopia, 1986

Mr. Worke has 17 years of experience in traffic engineering and intelligent traffic system projects including design/studies, maintenance of traffic, accident analysis and safety improvement, timing plan development, and technology applications, including transit signal priority. He has held both engineering and signal system management positions within the public and private sectors. Mr. Worke worked for eight years in the public sector and developed a pilot project, approved by Federal Highway Administration, to have a transit signal priority system that effectively integrates the region's logical architecture components addressing the required relationships between Arlington

County traffic service and transit services (Washington Metropolitan Area Transit Authority), county police, and emergency vehicle and neighboring jurisdictions. His experience in the private sector includes design of CCTV system installations, design of new traffic signals, developing optimized traffic signal timing for large networks, reconstruction and improvement of existing signals, traffic calming, signing, pavement marking, network modeling, optimization, and transit priority treatment.

Arlington County Department of Public Works - Traffic Division, Transit Priority and Emergency Vehicle Preemption System along Columbia Pike, Arlington County, VA. Developed a pilot project, approved by FHWA, to have a system that the region will follow to integrate effectively, the logical architecture components that will address the required relationships between the county traffic service and transit services (WMATA), county police and emergency vehicle, and neighboring jurisdictions.

CSX, Traffic Impact Study on CSX Projects, Washington, DC; and Maryland. Study and analyze traffic conditions during construction, reconstruction, and widening Virginia Avenue tunnel in District of Columbia to accommodate double rail tracks, and also when planning to raise the Maryland-175 bridge in to improve the train operation. The traffic study made recommendations regarding traffic detours at both locations during construction.

District of Columbia Department of Transportation, Develop Standard Operating Procedure, Washington, DC. Developed SOP to ensure managers and operators of the Traffic Management Center effectively communicate and respond to normal and abnormal traffic conditions, incidents, emergency conditions, special events, and weather emergencies. The purpose is to define the roles and relationships of TMC operators and managers with other stakeholders, enforcement, fire, and Homeland Security Emergency Management agencies.

Martin Hull, AICP, CTP

Technology/ITS

Total Years of Experience: 25

Education

Master of Urban Planning, McGill University, Montreal, Canada, 1995

Bachelor of Arts (Community Planning), University of Massachusetts, 1986

Mr. Hull has over 25 years of experience in transportation and land use planning and design and has managed a variety of complex projects in Philadelphia, Boston, Salt Lake City, Hartford, CT, Albany, NY, Portland, OR, and Vancouver, British Columbia.

Mr. Hull's foundation in the study of urban planning and focus in the specialty of transportation give him an understanding of the larger issues facing society and the way transportation improvements can be used to solve them. His professional interests include the relationship between land use and transportation and the ability of transportation to encourage the development

of complete, livable communities and urban and rural revitalization. He is a specialist in sustainable transportation and sees this as covering not just environmental issues, but social and economic aspects of service provision as well.

Mr. Hull has experience both in private consulting practice and with public transit providers giving him an understanding of the day-to-day challenges to delivering public sector services and the importance of a comprehensive long range vision in overcoming them.

New Britain-Hartford Busway Service and Operations Plan – Connecticut Department of Transportation. Mr. Hull is managing the development of a service plan and an operations plan for this facility.

Hartford – New Britain Busway Maintenance Plan – Connecticut Department of Transportation. Mr. Hull

is managing this study of maintenance procedures for fully grade-separated busways.

Washington and Western Avenues BRT Conceptual Design Study - Capital District Transportation Authority. Mr. Hull managed this study of alternatives for a new BRT route between downtown Albany, New York, and the major traffic generators at the State University of New York at Albany, the New York State Office Campus, and the large regional Crossgates Mall.

Route 19 Corridor Study – Pasco Co., New Port Richie, FL. Mr. Hull developed transportation concepts for this study of improved transit, pedestrian, and bicycle transportation in a heavily traveled highway corridor. Recommendations included implementing a multi-way boulevard cross section that separates higher speed through traffic from local traffic, transit, bicyclists, and pedestrians.

C. A list of references to include name, address, telephone number, email address, project, and dollar amount of project.

Project		1. Project Feasibility/Identification & Alternatives Analysis	2. Environmental Analysis	3. Public Participation	4. Marketing & Research	5. Financial Planning & Analysis	6. Strategic Planning/Capital Investment Planning	7. Operations Planning & Analysis	8. Project Evaluation	9. Safety & Security	10. Short-Range Plan & Program Development	11. Training	12. Technology/ITS
1	Columbia Pike Streetcar Alternatives Analysis & Environmental Assessment	•	•	•		•		•	•				
2	Crystal City-Potomac Yard Transit Improvements Implementation	•	•	•				•	•				
3	Benning Road Streetcar Feasibility and EA	•	•	•				•	•				
4	Hampton Roads Vision Plan	•		•		•		•	•				
5	Corridor Cities Transitway (CCT)	•	•	•		•		•	•				
6	Broad Street Corridor Bus Rapid Transit Study			•									
7	Virginia Megaprojects			•									
8	Long Bridge Study			•									
9	Urban Development Areas - VDOT Technical Assistance Program	•		•	•				•			•	
10	DRPT State Safety Oversight Program									•			
11	Transit Development Plans							•	•		•		
12	DRPT Statewide Grantee Vehicle Inventory						•						
13	Richmond/Hampton Roads High Speed Rail Study & Tier 1 EIS	•	•	•		•	•	•	•				
14	Maintenance Division Asset Management Support					•	•						
15	MBTA State of Good Repair Database Enhancements					•	•						
16	Tri-State Oversight Committee on State Safety & Security Oversight									•			
17	DRPT Google Transit Initiative											•	•
18	Statewide Public Involvement/Community Impact Assessment Program				•	•						•	
19	Training Program Development & Delivery											•	
20	Virginia Statewide ITS Planning & Development Support												•
21	Hartford BRT ITS Development												•
22	Dulles Metrorail Project - Project Management Support Services								•	•			
23	IndyGo Comprehensive Operational Analysis						•	•	•		•		
24	WMATA Metrobus Market Effectiveness Study					•	•	•	•	•			

Columbia Pike Streetcar Alt. Analysis & Env. Assessment

Arlington and Fairfax Counties, VA

AECOM

Client: WMATA
Contact: John Dittmeier
Address: 600 5th Street NW
 Washington, DC 20001
Telephone: 202.962.1027
Email: jdittmeier@wmata.com
Dollar Value: \$4,000,000

The Columbia Pike Transit Initiative embodies an advanced transit system that will increase mobility and serve the growing transit market along this vital urban corridor in Arlington and Fairfax Counties. Citizens, planners, and community leaders have expressed desire for a modern, higher capacity transit system that supports revitalization efforts and reinforces the "Main Street" environment envisioned for Columbia Pike. Throughout the project, WMATA and AECOM have led regular coordination meetings with staff from Arlington County, Fairfax

County, Department of Rail and Public Transportation, VDOT, and the Pentagon. Continuous involvement of this group has led to consensus decisions and expanding support for the project among diverse stakeholder groups. AECOM and the project management team are guiding the project through the Federal alternatives analysis and environmental review (NEPA) process, refining cost estimates, and developing financial and organizational strategies to efficiently implement the project.

The project recently completed a federal Alternatives Analysis and Environmental Assessment for the 5-mile corridor. In July/August 2012, the Arlington County Board and the Fairfax County Board of Supervisors adopted the Streetcar Build Alternative as the Locally Preferred Alternative. The team is currently preparing an application for entry to Small Starts Project Development.



Crystal City-Potomac Yard Transit Improvements Implementation

Arlington County and City of Alexandria, VA

AECOM

Client: WMATA
Contact: Wendy Jia
Address: 600 5th Street NW
 Washington DC, 20001
Telephone: 202.962.6474
Email: wjia@wmata.com
Dollar Value: \$250,000

AECOM and the multi-jurisdictional, multi-agency team are implementing phased transit improvements in the Crystal City/Potomac Yard corridor, which extends approximately 5 miles from the Braddock Road Metrorail Station in Alexandria to the Pentagon and Pentagon City in Arlington County. The improvements will provide transit access to new development and redevelopment occurring in Potomac Yard, Crystal City, and Pentagon City. The bus transit improvements will run primarily in exclusive lanes, with some segments running in mixed traffic, and will make use of technologies such as signal prioritization to improve speed

and reliability. The first phase of the improvements, a bus service connecting new the new development in Potomac Yard to the Crystal City Metrorail Station, was implemented in April 2006.

AECOM and project team have completed environmental documentation (in the form of a Documented Categorical Exclusion (CE) for the initial phase of Bus Rapid Transit service in the corridor.

As required by the FTA regulations, the evaluation included potential effects on transportation conditions and social, cultural, and natural environments in the corridor. These effects were documented to meet the requirements of the National Environmental Policy Act (NEPA) and other federal and state policies. The Documented CE was approved by FTA in 2010 and 2011, and final design is underway for near-term construction of the initial phase of improvements.

In an allied initiative, AECOM provided leadership participation in planning the sustainable future of Crystal City. AECOM assisted in preparing development guidelines for the proposed plan, creating standards for streetscape hierarchy and treatment, and guidance for the character of the open spaces. A variety of low impact development strategies in the public realm, including porous pavements, rain gardens, and green roofs were proposed.



Benning Road Streetcar Feasibility and EA

Washington, DC

AECOM

Client: District Department of Transportation

Contact: Circe M. Torruellas

Address: 55 M Street SE, Suite 500, Washington DC 20003

Telephone: 202.671.2847

Email: Circe.Torruellas@dc.gov

Dollar Value: \$2,376,000

The District Department of Transportation (DDOT) envisions a 37-mile network of modern streetcar lines connecting neighborhoods and encouraging economic development along emerging commercial and residential corridors. The first streetcar line on H Street and Benning Road, NE ("One City Line") is expected to start revenue service in 2013. At the direction of DDOT, AECOM initiated the Benning Road Streetcar Extension Feasibility Study in order to assess the engineering and planning feasibility of extending the One City Streetcar Line east of the Anacostia River, beyond its current terminus at

Oklahoma Avenue, NE, just west of the Anacostia River.

The project team developed two terminus options for extending the H Street/Benning Road Streetcar east of the river, either to the Minnesota Avenue Metrorail Station or the Benning Road Metrorail Station. The planning and engineering challenges of extending the streetcar line to either terminus point were taken into account during the development of the design options. Engineering considerations included how to accommodate streetcar track and facilities on the existing bridge structures, and impacts to the roadway geometry, traffic utilities and right of way. Planning considerations included the proximity of stop locations to activity centers, connections to Metrorail, Metrobus, and future streetcar lines, and pedestrian safety and access. The project team developed Microstation base files, Synchro and VISSIM traffic



microsimulation models that can directly be used for the Benning Road NEPA project, and various 3D visualizations to effectively communicate project findings.

The team had two public meetings and has successfully built rapport with the Benning Road community. The team also had various coordination meetings with FTA, NPS, NCPC and other stakeholder/agencies.

Hampton Roads Vision Plan

Hampton Roads, VA

AECOM, Rhodeside & Harwell

Client: Hampton Roads Transit

Contact: Ray Amoruso

Address: 3400 Victoria Boulevard Hampton, VA 23661

Telephone: 757.222.6000, ext. 6133

Email: ramoruso@hrtransit.org

Dollar Value: \$104,000

Rhodeside & Harwell, teamed with AECOM, conducted the Commonwealth of Virginia's collaborative effort with local and regional planning agencies to develop a comprehensive transit vision plan for the Hampton Roads area. This initiative built on general corridor concepts identified in an earlier phase, and thoroughly assessed, refined, and prioritized these 36 potential transit corridors. Corridor evaluations included existing and future land use planning and policies, projected market conditions, capital cost estimates, ridership modeling, and contribution to a regional transit and multimodal network. Results included recommendations on corridor mode (light rail, bus rapid transit, streetcar, commuter rail, express bus, or enhanced



bus), phasing, and policies to promote transit oriented land use patterns. The project included site visits and extensive coordination with local land use and transportation planners for thirteen participating jurisdictions; facilitation of a stakeholder committee with local, regional, and state-level representation; presentations to elected officials; and public outreach.

Rhodeside & Harwell studied the land use and form of each of the communities to create transit-oriented places that build on neighborhood assets and integrate with both existing and future community

frameworks. Existing comprehensive plans and zoning were evaluated and form-based code principles were introduced and recommended as appropriate. Rhodeside & Harwell also prepared the corridor evaluation criteria, compiled the analysis results completed by task leaders, and prepared the overall evaluation of the corridors, including recommendations. RHI prepared graphics to support the corridor evaluations and recommendations.

Corridor Cities Transitway (CCT)

Montgomery and Frederick Counties, MD

McCormick Taylor

Client: Maryland Transit Administration
Contact: Ernest Baisden
Address: Address
Telephone: 410.767.3752
Email: ebaisden@mta.maryland.gov
Dollar Value: \$1,000,000



McCormick Taylor is assisting the Maryland Transit Administration (MTA) in planning this fixed guideway transit system. The proposed Corridor Cities Transitway (CCT) is part of the larger I-270/US 15 Multimodal Corridor Study, which is investigating options to relieve congestion and improve safety conditions along the corridor, which extends approximately 32 miles in Montgomery and Frederick Counties.

McCormick Taylor provides onsite management for MTA and oversees the daily activities of the project while working with other consultants involved in performing various studies for the project. In addition, we work directly with local,

state and federal agencies on issues related to the project. McCormick Taylor prepares monthly progress reports for the Maryland Secretary of Transportation are prepared, provides project briefings and tours to groups interested in the project, and monitors the budgets of the consultants.

FTA requires that all projects submit a New Starts package for review. McCormick Taylor

is preparing the Land Use evaluation for this package and will work with other consultants to compile the entire document. Other components of the New Starts package will include a project history and financial plan. A Problem Statement has been written by McCormick Taylor. This document identifies the project need and states how the transitway will resolve those needs.

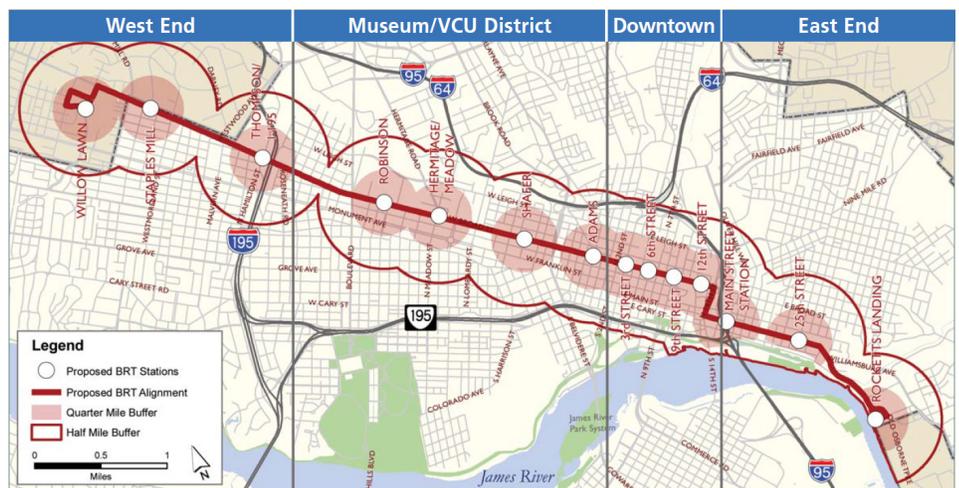
Broad Street Corridor Bus Rapid Transit Study

City of Richmond and Henrico County, VA

Cordell & Crumley

Client: Parsons
Contact: Stephen Walter
Address: 100 M Street, SE, Suite 1200 Washington, DC 20003
Telephone: 202.775.3380
Email: stephen.c.walter@parsons.com
Dollar Value: \$93,000

We are working to develop and manage outreach for this project between two agencies (DRPT and GRTC) and two jurisdictions (City of Richmond and Henrico County). Our role is to coordinate outreach between all parties involved. Outreach includes a mix of public meetings, website, social media, e-mail and print notifications. A large effort is being made to develop relationships with social service and other organizations to broaden and deepen our reach and partnerships.



Virginia Megaprojects

Northern Virginia

Travesky & Associates

Client: ATCS, PLC
Contact: John A. DePasquale, PE
Address: 6363 Walker Lane
 Alexandria, VA 22310
Telephone: 703.430.7500
Email: jdepasquale@atcsplc.com
Dollar Value: \$2,586,394 (Public Involvement)

Projects Include: I-495 Express Lanes, I-95 Express Lanes, Dulles Corridor Metrorail Project, I-95 Widening, I-95/Telegraph Road Interchange, Fairfax County Parkway, I-95 Defense Access Ramps, Mark Center, and other regional projects.

Under the Public-Private Transportation Act of 1995, VDOT and its private partners are working to deliver the most significant package of improvements to the Northern Virginia region in a generation – providing congestion relief and new travel options on roadways and rail lines.

Travesky & Associates, as a member of the VDOT General Engineering Consultant Services (GEC) team, is responsible for a significant portion of the communications efforts for the Megaprojects. The firm's efforts include:

- Augmenting VDOT communications staff by providing public information services.
- Developing and implementing strategic communications plans for each project.
- Coordinating logistics and participating in numerous information sessions and outreach meetings to continually update elected officials, community members, employers, media representatives, and local businesses on the projects' progress.
- Coordinating, managing logistics for, and documenting design public hearings.
- Developing outreach materials, including press releases, informational brochures, newspaper advertisements,

- postcards, and correspondence to impacted property owners.
- Developing and updating presentations.
- Preparing and disseminating email broadcasts regarding traffic alerts and construction activities.
- Providing briefings and information to elected officials to facilitate their responses to citizens' inquiries.
- Preparing crisis communication plans.
- Preparing informational materials for project websites.



Long Bridge Study

Washington, DC

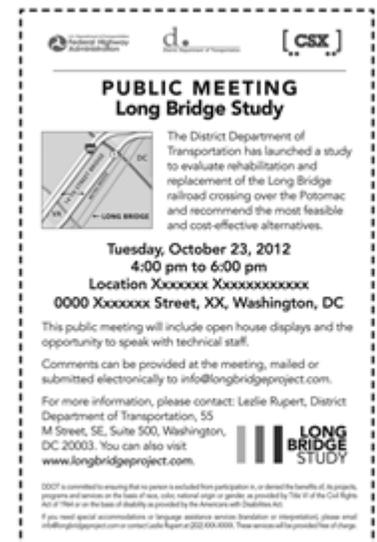
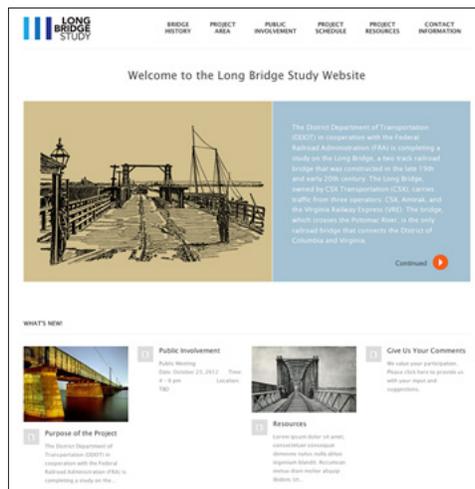
Sharp & Company

Client: District Department of Transportation (DDOT), as a subcontractor to Michael Baker, Jr.
Contact: Vic Siaurusaitis
Address: 1304 Concourse Drive, Suite 200, Baltimore, MD 21090
Telephone: 410.689.3400
Email: VSiaurusaitis@mbakercorp.com
Dollar Value: \$150,000

meetings throughout the project period. In support of this, the firm has developed a project identifier, web site, and presentation templates. Announcing meetings through advertising in traditional and social media, as well as the distribution of fliers at local rail stations, is also included in the firm's services for this project.

Sharp & Company is providing communication support for this project, studying the feasibility of rehabilitating and/or replacing this crucial crossing of the Potomac River that is used by Amtrak, freight rail, and the Virginia Railway Express.

The firm has developed and is executing a stakeholder outreach program that coordinates information among the many federal and local agencies involved in the project. In support of that, Sharp & Company is handling all communication and coordination for multiple stakeholder workshops. Additionally, the firm is coordinating public and community



Urban Development Areas - VDOT Tech. Assistance Program

Various Locations, VA

Rhodeside & Harwell

Client: VDOT

Contact: Paul Grasewicz, AICP

Address: 1401 E. Broad Street
Richmond, VA 23219

Telephone: 804.786.0778

Email: paul.grasewicz@vdot.virginia.gov

Dollar Value: \$750,900

Rhodeside & Harwell led a multidisciplinary technical team assisting seven Virginia communities meet the requirements of the Commonwealth's Urban Development Area (UDA) legislation. Virginia's January 2010 UDA legislation requires that municipalities amend comprehensive plans, zoning codes, and subdivision ordinances to accommodate between ten and twenty years of projected growth within designated UDAs. These UDAs must permit and provide specific guidance for creating compact, mixed-use, walkable neighborhoods consistent with Traditional Neighborhood Development (TND) patterns of development. The legislation includes minimum densities based on

municipality size and percentage growth expectations. Rhodeside & Harwell's technical assistance included identification of appropriate UDA locations, urban design guidance, code revisions, regional and local economic analysis, transportation benefits analysis, and public outreach. RHI worked with the following jurisdictions to complete these requirements:

- **Stafford Co.:** Completed a small area plan creating a "downtown" for the county; prepared a form-based code for this area and conducted extensive community outreach; prepared Chapter 527 submittals.
- **Spotsylvania Co.:** Defined and prepared land use concepts for two UDAs; prepared zoning code and comprehensive plan amendments; prepared development templates to guide development in mixed-use areas; conducted extensive community outreach.
- **Dinwiddie Co.:** Defined two potential

UDAs and developed small area plans for each; drafted comprehensive plan and zoning code amendments for UDAs; conducted community outreach.

- **Mecklenburg Co.:** Defined and developed a concept for a UDA within the Town of South Hill, in order to meet the County's obligations under the UDA law; drafted zoning code amendments; facilitated coordination and cooperation between the Town and the County.
- **Halifax Co.:** Defined the UDA for the county and developed a small area plan; drafted comprehensive plan and zoning amendments, and conducted community outreach.
- **City Virginia Beach:** Completed a development plan for one of the city's UDAs; drafted form-based code amendments of the area.
- **Town of South Boston:** Defined a UDA and a small area plan; drafted zoning code amendments and

DRPT State Safety Oversight Program

Hampton Roads, VA

TRA

Client: Virginia Department of Rail and Public Transportation (DRPT)

Contact: Kevin Page

Address: 600 East Main Street,
Suite 2102, Richmond, VA 23219

Telephone: 804.786.3963

Email: kevin.page@drpt.virginia.gov

Dollar Value: \$ 321,210

TRA assisted DRPT in overseeing the safety and security certification process for the Hampton Roads Transit TIDE Light Rail Line, work which included conducting a pre-revenue service assessment and coordinating the required Initial Submission to FTA. Following the system's transition to revenue service in 2011, TRA began providing other traditional safety and security oversight support to DRPT, including tasks related to Triennial Reviews, SSPP and SEPP modification, accident/incident investigations, hazard management, and corrective action plan implementation.



Transit Development Plans

Northern VA AECOM

Client: Virginia Regional Transit
Contact: Darrel Feasel
Address: 109 N. Bailey Lane
 Purcellville, VA 20132-3085
Telephone: 540.338.1610
Email: support@vatransit.org
Dollar Value: \$220,000

On this project, AECOM was responsible for the completion of a Transit Development Plan for Virginia Regional Transit (VRT), a non-profit transit operator serving 12 counties in central and northern Virginia. The VRT service area is extremely diverse, with a mix of rural counties in the Shenandoah Valley as well as rapidly growing counties on the edge of the Washington DC Metropolitan area. Project work elements included:

- Completion of a transit needs analysis utilizing Census data, stakeholder feedback, and a review of key activity centers to identify new service needs. The work utilized extensive mapping to

- effectively identify service gaps.
- Evaluation of current service based on an analytic framework that included an evaluation of each route’s productivity and cost-effectiveness.
- The development of service recommendations that included new service, the expansion of existing services, and the transition of demand response services to fixed route services.
- The development of passenger facility and amenity recommendations, including a series of intermodal terminals at key junctions of VRT routes.
- The development of operating cost estimates for all service changes, including modifications to existing service and new service proposals.
- The development of capital cost estimates for the passenger facilities and amenities to support the service recommendations.
- The recommended phasing of service

and capital improvements over the six year life of the plan.

The final set of recommendations included over 40 recommendations covering both demand response and fixed route service and which also ranged from commuter services to the Washington DC regional rail network to small ‘life-line’ services meeting the most basic mobility needs.

AECOM was also tasked with presenting the recommendations to the City or County council of each of the jurisdictions within the VRT service area.



DRPT Statewide Grantee Vehicle Inventory

Virginia AECOM

Client: DRPT
Contact: Darrel Feasel (now with VRT)
Address: 109 N. Bailey Lane
 Purcellville, VA 20132-3085
Telephone: 540.338.1610
Email: support@vatransit.org
Dollar Value: \$150,000

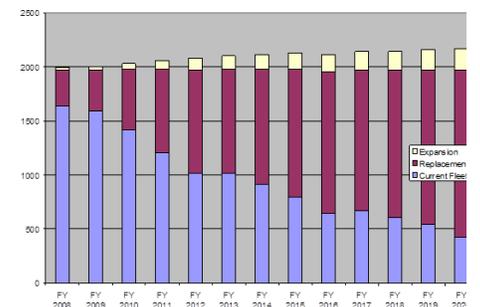
AECOM worked under the direction of DRPT to develop a standard set of protocols to report the status of vehicle fleets statewide.

Decisions about appropriate timing of vehicle purchases depend on each agency’s vehicle replacement schedule, peak vehicle requirements and maintenance of an acceptable spare ratio, plus maintenance of a contingency fleet, if necessary. Methods and needs vary by size of transit provider and type of transit service. However, DRPT implemented a set reporting process to ensure that the core

planning and grant management functions are predictable and efficient.

AECOM organized training sessions and worked with each transit property in the Commonwealth to collect information on peak vehicle requirements and the methodology by which requirements are determined. This information included planned expansion or contraction of the vehicle fleet and plans for contingency fleets for special events.

This effort served as a precursor to the DRPT initiative to require Transit Development Plans be prepared and updated by all of its grantees. Through these protocols DRPT is able to administer a more efficient public transportation program throughout the state, targeting resources where they may be used most effectively.



Transit Vehicles by Replacement Year

Richmond/Hampton Roads High Speed Rail Study & Tier 1 EIS

Richmond to Hampton Roads, VA

AECOM, Cordell & Crumley

Client: Virginia Department of Rail and Public Transportation (DRPT)

Contact: Kevin Page

Address: 600 East Main Street, Suite 2102, Richmond, VA 23219

Telephone: 804.786.3963

Email: kevin.page@drpt.virginia.gov

Dollar Value: \$212,000



Richmond/Hampton Roads Passenger Rail Project

Virginia Department of Rail and Public Transportation

The study area for this project is geographically large (between Richmond and Virginia Beach along I-64 and Route 460) and very diverse. At the onset of the Richmond-Hampton Roads Passenger Rail project, we coordinated speaking and listening opportunities for the team to reach out to various key interest groups in the study area. At the end of one year, the team had successfully held 15 key group meetings. Other communication strategies included the implementation of a technical working group, website development/

management, public meetings, newsletters, ads, educational materials, and media relations and multi-jurisdictional coordination.

Maintenance Division Asset Management Support

Statewide Virginia

Spy Pond

Client: VDOT

Contact: Tanveer Chowdhury, PE

Address: 1401 East Broad Street Richmond, VA 23219

Telephone: 804.786.0694

Email: tanveer.cowdhury@vdot.virginia.gov

Dollar Value: \$2,520,000

Needs-Based Budgeting (NBB)

Process Improvements. SPP provided an assessment of existing methods for determining asset preservation and replacement needs as part of the system maintenance and operations budgeting process. SPP provided subject matter expertise regarding approaches, techniques, and leading practices for the management of roadway assets. SPP also provided assistance related to enhancing business processes and formalizing roles and responsibilities.

Asset Management System Vision and Blueprint. SPP facilitated development of a vision and blueprint for a comprehensive

asset management tool set that integrates maintenance and operations needs for the VDOT System Operations Directorate. This effort looked at the full spectrum of asset management functions including inventory management, needs determination, economic analysis, budgeting, and performance management. As a part of this project, SPP delivered asset management training courses.

Data Business Plan. SPP developed a data business plan for the System Operations directorate. The data business plan integrates core business processes with needed data products and services. Gaps in data needs were identified and an implementation plan for priority actions was produced. The data business plan effort was built on a strong foundation of stakeholder engagement and involved interviews, online surveys, and workshops.

Pavement Management System Implementation. SPP supported VDOT

staff in the development of requirements, procurement documents, deployment, and subsequent implementation of a Custom Off-the-Shelf (COTS) pavement management system.

Roadway Network System (RNS) Implementation. SPP assisted the Maintenance Division in design and implementation of RNS modules, including the Roadway Inventory Management System (RIMS) and Highway Performance Monitoring System (HPMS), as well as in improvement of roadway inventory data quality.

MBTA State of Good Repair Database Enhancements

Boston, MA

AECOM, Spy Pond

Client: Massachusetts Bay Transportation Authority

Contact: Cheryl Anne Guidod

Address: Ten Park Plaza, Room 6720
Boston, Massachusetts 02116

Telephone: 617.222.4404

Email: cguidod@mbta.com

Dollar Value: \$57,000

Spy Pond, as part of a team led by AECOM, is assisting in implementing a series of enhancements to the existing SGR Database. SPP is focusing on using existing MBTA asset data, in conjunction with Federal Transit Administration (FTA) and Transit Cooperative Research Program (TCRP) defaults, to develop deterioration and cost models for the MBTA's assets. This, in turn, will support an improved prioritization approach and allow the database to predict additional measures of performance.



Tri-State Oversight Committee on State Safety & Security Oversight

Washington Metropolitan Area

TRA

Client: Washington Metropolitan Council of Governments

Contact: James Benton

Address: 7201 Corporate Center Drive
Hanover, MD 21076

Telephone: 410.718.3782

Email: JBenton@mdot.state.md.us

Dollar Value: \$ 1,397,126

TRA is the prime contractor to the Tri-State Oversight Committee (TOC) and is responsible for ongoing rail safety oversight, including developing updates to the Program Standard and other guiding documents, accident/incident investigation, and corrective action plan review. TRA conducted FTA-mandated Triennial Safety and Security Reviews of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system in Washington, DC in 2010, 2007, and 2004. TRA has also provided extensive general and on-going support to TOC related to the ongoing administration of its SSO responsibilities, including meetings/teleconferences;



document and data management; coordination among TOC Members, WMATA, FTA and others; performing analyses and preparing briefing materials;

and maintaining a calendar of TOC and WMATA-related activities.

DRPT Google Transit Initiative

Virginia

AECOM

Client: DRPT

Contact: Mike Harris (now with Kimley-Horn Associates)

Address: 11400 Commerce Park Suite 400, Reston VA 20191

Telephone: 703.674.1300

Email: Mike.Harris@kimley-horn.com

Dollar Value: \$150,000

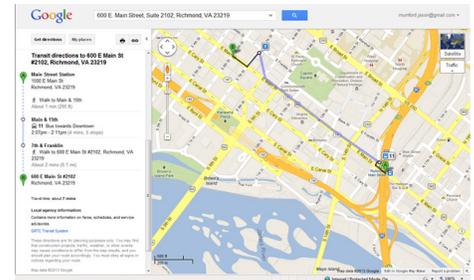
Under its on-call transit planning contract with DRPT, AECOM worked with Virginia transit operators and Google Transit to provide comprehensive trip itinerary information via the internet for transit customers throughout the Commonwealth. Anticipating growing demand for internet-based information for transit customers, Virginia was the first state in the U.S. to pursue statewide implementation of this tool.

In partnership with Google staff, AECOM led several on-site training sessions with

DRPT grantees to demonstrate the use of Google Transit and to package transit route and schedule information so that it could be easily transferred to the Google database.

AECOM also conducted follow-up to better understand how transit operators and transit customers use Google Transit:

- Participation in Google Transit has meant that operators did not need to develop their own web-based trip planner. This saves time and money for medium-sized operators that had been planning on developing their own trip planner.
- Developing the Google Transit feed provides an extra level of quality control in operations planning.
- Operators report that customers have discovered their services through Google Transit when looking for



Statewide Public Involvement/Community Impact Assess. Program

Statewide New Jersey

McCormick Taylor

Client: New Jersey Department of Transportation

Contact: Anthony Davis

Address: 1035 Parkway Avenue
Trenton, NJ 08625

Telephone: 609.530.2893

Email: Anthony.Davis@dot.state.nj.us

Dollar Value: \$1,000,000

McCormick Taylor was selected by the New Jersey Department of Transportation (NJDOT) for the Statewide Public Involvement / Community Impact Assessment program. In concert with a robust outreach program, the Community Impact Assessment (CIA) process enables the study team to identify and measure the effects that a transportation project may have on a community and its quality of life.

As an integral part of Project Planning and Development, CIA information is used to shape the outcome of a project in context with the wants and needs of an affected community. An effective assessment includes items of importance to people,

such as mobility, safety, employment effects, relocation and other community issues.

- Public Involvement
- Community Impact Assessment
- Environmental Justice
- Community Planning
- Urban Design
- Transportation Planning

The study included field visits, data collection and municipal coordination that inventoried and assessed existing land use and travel patterns (vehicular, transit and pedestrian) as well as pending and proposed development activities that may be affected during construction of these projects. The results were documented in a series of reports that summarized population characteristics (including under-served and potentially vulnerable EJ/Title VI populations), business and employment centers, traffic generators, pedestrian and transit facilities, land use, local zoning, institutional uses and public services. In addition, the appropriate public involvement techniques were able to be



identified based on the findings of the Community Impact Assessment study so that the outreach program could best and most effectively serve the unique social characteristics of a community.

Training Program Development & Delivery

United States

McCormick Taylor

Client: Federal Highway Administration and National Highway Institute

Contact: Mila Plosky

Address: NHI, 1310 North Courthouse Road, Suite 300, Arlington, VA 22201

Telephone: 703.235.0527

Email: Mila.plosky@dot.gov

Dollar Value: Varies per Course Delivery

The National Highway Institute (NHI), the training arm of the Federal Highway Administration (FHWA), in their effort to provide training to local, State, and Federal highway and transportation agencies on new and evolving highway-related technologies, selected McCormick Taylor to respond to training needs in a wide variety of environmental and regulatory (NEPA-related) subjects. McCormick Taylor, teaming with adult learning specialists, successfully integrates technical content with winning training techniques to develop a strategy for course development and a well-developed training program.

Under this contract, McCormick Taylor provides both training course development and course delivery services to the NHI on a variety of environmental and regulatory issues. These courses are developed to be delivered on a nationwide scale. McCormick Taylor subject matter (technical) experts team with instructional system designers to develop dynamic, effective, and informative courses that engage the adult learner in the learning process. The courses range from one to three days in length and are taught by McCormick Taylor's experienced subject matter experts. McCormick Taylor has been providing these services to NHI since 2003.

McCormick Taylor is currently teaching the three-day NEPA and Transportation Decision-Making Process course (NHI 142005). This is one of NHI's most highly-requested and sought after courses. Our experienced NEPA professionals are delivering this course on average of one to two times each month in a variety

of locations across the country. The course focuses on NEPA compliance, NEPA documentation and the decision-making process. It covers technical areas including purpose and need, alternatives development, mitigation, Section 4(f), and other Federal requirements.

McCormick Taylor is also delivering NHI's recently revised Transportation and Land Use course (NHI 151043). This three-day instructor led course looks at the relationships between transportation planning and land use planning, and how decisions made on one affects the other. Beginning with basic principles of planning; through detailed discussions on public participation, regional, corridor and local planning; and concluding with discussions on design and available tools, this course provides the participant with the necessary background and skills to effectively link transportation and land use planning.

Virginia Statewide ITS Planning & Development Support

Richmond, VA

IBI Group

Client: Department of Rail and Public Transportation

Contact: Tim Roseboom

Address: 600 E. Main Street, Suite 2102 Richmond, VA 23219

Telephone: 804.225.3746

Email: tim.roseboom@drpt.virginia.gov

Dollar Value: \$157,000

The Virginia Department of Rail and Public Transportation (VDRPT) is working with local transit agencies throughout Virginia to foster a coordinated approach to transit technology planning and development, as part of a strategy to apply available state funding grants in this area. In 2009, IBI Group conducted workshops with groups of agencies to explore current operations, transit technology infrastructure, and needs. A report was published on the findings from these discussions, highlighting identified needs that could be addressed through additional transit technology development as well as opportunities for coordinated efforts by agencies in these areas.

Follow-up workshops were conducted in 2010 to enable more in-depth discussions about potential deployments. In 2011 efforts were initiated with several different agencies in Virginia to provide assistance relevant to their current stage of transit technology deployment, including assistance with needs assessment, applying for grants, and procurement. Agencies that have received assistance under this VDRPT initiative include those in Fredericksburg, Harrisonburg, Pulaski, and Williamsburg, as well as Virginia Regional Transit who provide service in several small urban and rural regions around the state.

The current focus is assisting the transit agency in Williamsburg (WATA) with its transit technology deployment. We have assisted with needs assessment, deployment planning, specifications/RFP development and procurement, and are currently assisting with implementation.



Hartford BRT ITS Development

New Britain, CT *IBI Group*

Client: Connecticut Department of Transportation, Bureau of Public Transportation
Contact: Name
Address: P.O. Box 317546
 Newington, CT 06131-7546
Telephone: 860.594.2834
Email: lisa.rivers@ct.gov
Dollar Value: \$500,000

Department of Transportation (CTDOT), CT-Transit and CROCOG, the regional MPO, who modeled the routes designed by IBI Group. This effort included public outreach, cost estimation, and developing an organizational responsibility structure for the operation of the completed busway.

busway’s technology and communications systems. Consistent with federal Systems Engineering guidelines, the design is based on the Concept of Operations.

As a subconsultant, IBI Group developed a service and operations plan for the New Britain – Hartford Busway, a 9.4 mile exclusive transitway between these cities that will reduce transit travel times and provide a new, high-quality transit service in one of Connecticut’s most congested corridors. The project developed a completely new route and schedule plan for bus routes in the study corridor including busway express services, local routes, feeder routes, and commuter express services. The network was created through a cooperative process with the Connecticut

IBI Group also assisted CTDOT in identifying, prioritizing, and designing technology systems for development in the New Britain – Hartford Busway project. Technologies considered included: Traveler Information Systems, Transit Safety and Security Systems, Fleet Management Systems (Busway Operations Center, CAD/AVL, Transit Signal Priority), and Fare Payment Systems. Working with project stakeholders to identify system needs and operational goals, IBI Group developed a systems Concept of Operations for the busway.

IBI Group is currently developing functional requirements and detailed design of the



Dulles Metrorail Project - Project Mgmt. Support Services

Northern Virginia *Randolph Richardson*

Client: Metropolitan Washington Airports Authority
Contact: James Van Zee
Address: 1593 Spring Hill Road, Suite 300, Vienna, VA 22182
Telephone: 703.572.0504
Email: James.vanzee@dullesmetro.com
Dollar Value: \$1,500,000

Randolph Richardson Associates was a member of the project team led by Jacobs Engineering which provides project management support services to the Metropolitan Washington Airports Authority (MWAA) for the design and construction of the new heavy rail transit line between the West Falls Church Metrorail Station and the Dulles International Airport. Randolph Richardson Associates assists the airport authority project team in the areas of planning and systems management. Under planning management, efforts include special exceptions package reviews, transportation management process review and coordination as well as agency



coordination. Under systems management, efforts include review and coordination in the areas of system design, with

potential anticipated work in procurement, installation, testing and start-up.

WMATA Metrobus Market Effectiveness Study

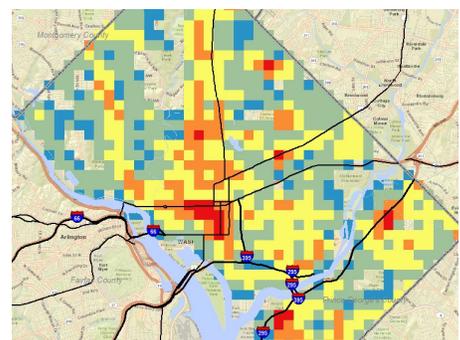
Washington, DC

AECOM

Client: WMATA
Contact: Wendy Jia
Address: 600 Fifth Street, NW
 Washington, DC 20001
Telephone: 202.962.6474
Email: WJia@wmata.com
Dollar Value: \$400,000

AECOM is assessing the market and roles of Metrobus services in a growing region with multiple transit service providers. This project is assisting WMATA in reviewing Metrobus services in the context of regional growth and local plans by identifying market constraints and opportunities and strategically position Metrobus towards building an effective network that can better serve current and future demand, enhance Metrobus productivity and efficiency, and improve system integration between Metrobus and local bus services. This project has developed innovative methods in identifying and analyzing bus markets and

- applies the results of the MWCOG Version 2.3 travel demand forecasting model in this methodology. The projects tasks include:
- Review of plans and studies developed by Metrobus and other local service providers to identify planned changes to the transit system;
 - Develop a methodology to analyze Metrobus market segments for the existing conditions and two future year scenarios;
 - Analyzing transit demand based on the results on the MWCOG version 2.3 travel demand forecasting model;
 - Creation of a strategic plan to develop an effective Metrobus network;
 - Evaluation of alternatives based on a set of metrics including travel demand forecasting results; and
 - Development of a rolling Metrobus Survey Plan allowing for data collection and analysis on an annual basis.



IndyGo Comprehensive Operational Analysis

Indianapolis, IN

TMD

Client: IndyGo
Contact: Michael Terry
Address: 1501 West Washington Street
 Indianapolis, IN 46222
Telephone: 317.614.9310
Email: mterry@indygo.net
Dollar Value: \$320,000

TMD completed a comprehensive review of IndyGo transit services for the Indianapolis Metropolitan Planning Organization (IMPO) and IndyGo. The project involved a major rethinking of transit mobility in the Central Indiana region and was reflected in a Network Evolution Plan with short-, mid- and long-term service recommendations. The Network Evolution Plan was developed to be consistent with the IndyConnect effort to create a new regional transportation system. The combined efforts include a new funding measure that allows for significantly expanded transit service in the region.

The mid- and long-term Network Evolution Plan service recommendations prioritize the expansion of existing core IndyGo services, as well as introducing pilot Bus Rapid Transit corridors, new crosstown routes, new community and downtown circulators, and an expanded set of regional commuter express bus services. Many planned initiatives are consistent with IndyConnect's planned long-term transit investments such as new rail corridors. The plan reflects the findings of the study's market assessment and service evaluation tasks, and identifies a set of key arterial transit corridors as the highest priority for investment in transit service, supporting amenities (enhanced stops, transit priority, new Park and Rides etc.) and redevelopment efforts. The Network Evolution Plan was developed in collaboration with the Board, staff, and key stakeholders. IndyGo was recently recognized for their double digit



ridership increases and has used the plan recommendations as part of their effort to educate the general public and local and state officials for an expanded funding base.

A Certificate of Insurance with at least the minimum amount of coverage cited in the Insurance clause in Attachment A - Required General Terms and Conditions of the RFP.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
04/01/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Marsh Risk & Insurance Services CA License #0437153 777 South Figueroa Street Los Angeles, CA 90017 Attn: Lori Bryson (213)-346-5464 06510 -AECOM-CAS-13/14 LosAng CA YVONN	CONTACT NAME: _____	
	PHONE (A/C, No, Ext): _____	FAX (A/C, No): _____
E-MAIL ADDRESS: _____		
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: Zurich American Insurance Company		16535
INSURER B:		
INSURER C: Illinois Union Insurance Co		27960
INSURER D: N/A		N/A
INSURER E:		
INSURER F:		

COVERAGES **CERTIFICATE NUMBER:** LOS-001495942-49 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR VVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			GLO 5965891 05	04/01/2013	04/01/2014	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPI/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			BAP 5965893 05	04/01/2013	04/01/2014	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						<input type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
C	ARCHITECTS & ENG. PROFESSIONAL LIAB.			EON G21654693 ""CLAIMS MADE""	04/01/2013	10/08/2014	Per Claim/Agg \$2,000,000 Defense Included

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 RE: SAMPLE CERTIFICATE** EVIDENCE OF INSURANCE

CERTIFICATE HOLDER AECOM Technical Services, Inc. 515 South Flower Street, 9th Floor Los Angeles, CA 90071	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE of Marsh Risk & Insurance Services David Denihan <i>David Denihan</i>
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CERTIFICATE OF LIABILITY INSURANCE

4/1/2014

DATE (MM/DD/YYYY)

3/21/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Insurance Brokers, LLC 725 S. Figueroa Street, 35th Fl. CA License #0F15767 Los Angeles CA 90017 (213) 689-0065	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE INSURER A : Travelers Property Casualty Co of America INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :	
INSURED 1075642 AECOM Technology Corporation AECOM Technical Services, Inc 515 S. Flower St., Fl 4 Los Angeles CA 90071	NAIC # 25674	

COVERAGES AECTE01 **CERTIFICATE NUMBER:** 10713239 **REVISION NUMBER:** XXXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR <hr/> GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX DAMAGE TO RENTED PREMISES (Ea occurrence) \$ XXXXXXXX MED EXP (Any one person) \$ XXXXXXXX PERSONAL & ADV INJURY \$ XXXXXXXX GENERAL AGGREGATE \$ XXXXXXXX PRODUCTS - COMP/OP AGG \$ XXXXXXXX \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			NOT APPLICABLE			COMBINED SINGLE LIMIT (Ea accident) \$ XXXXXXXX BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX
A A A A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	TRJUB-4245B231-13 (MA, WI) TC2JUB-4245B22A-13 (All Other States)	4/1/2013	4/1/2014	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 Notice of Cancellation applies per attached endorsement. RE: EVIDENCE OF INSURANCE

CERTIFICATE HOLDER

CANCELLATION See Attachments

10713239 AECOM Technical Services, Inc. 515 S. Flower St., Fl 4 Los Angeles CA 90017	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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TRAVELERS

**WORKERS COMPENSATION
AND
EMPLOYERS LIABILITY POLICY
ENDORSEMENT WC 99 06 11 (A)**

POLICY NUMBER: TRJUB-4245B231-13
TC2JUB-4245B22A-13

NOTICE OF CANCELLATION

Except for non-payment of premium by you, we agree that no cancellation or limitation of this policy shall become effective until the number of days written notice specified in item 2 of the Schedule has been mailed to you and to the person or organization designated in item 1 of the Schedule at the address indicated.

SCHEDULE

1. **Name:** Any person or organization to whom you have agreed in a written contract that notice of cancellation or material limitations of this policy will be given but only if:

1. You send us a written request to provide such notice, including the name and address of such person or organization, after the first Named Insured receives notice from us of the cancellation or material limitation of this policy; and

2. We receive such written request at least 14 days before the beginning of the applicable number of days shown in this Schedule.

Address: The address for that person or organization included in such written request from you to us

2. **Number of Days Written Notice:** 30 Additional Days

AECOM Technical Services, Inc.
515 S. Flower St., Fl 4
Los Angeles, CA 90017

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective: 4/1/2013 Policy No. TRJUB-4245B231-13 Endorsement No.
TC2JUB-4245B22A-13

Insured AECOM Technology Corporation AECOM Technical Premium \$
Services, Inc
Insurance Company Travelers Property Casualty Co of America

TRAVELERS

WORKERS COMPENSATION
AND
EMPLOYERS LIABILITY POLICY
ENDORSEMENT WC 99 03 76 (00)

POLICY NUMBER: TC2JUB-4245B22A-13

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS
ENDORSEMENT - CALIFORNIA
(BLANKET WAIVER)

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule.

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be % of the California workers' compensation premium otherwise due on such remuneration.

Schedule

Person or Organization
ANY PERSON OR ORGANIZATION
FOR WHOM THE NAMED INSURED
HAS AGREED BY WRITTEN
CONTRACT EXECUTED PRIOR TO
LOSS TO FURNISH THIS WAIVER.

Job Description

Virginia Department of Minority Business Enterprise (DMBE) Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses (SWaM) Participation – The Offeror shall indicate the percentage of DMBE SWaM participation and specify the types of work to be performed by DMBE SWaM subcontractors. In order to be considered for the selection of this RFP, the Offeror must include Attachment C - Small Business Subcontracting Plan in each copy of the proposal.

The AECOM team is committed to supporting small, disadvantaged, woman- and minority-owned businesses, to meeting DMBE/SWaM contracting goals, and to protecting local economies. By selecting qualified local firms as part of the AECOM team, we achieve two important goals: we keep dollars and jobs in the local economy, and we provide opportunities for small, minority- and women-owned, and disadvantaged business enterprises both to participate in an important local program and to develop their businesses and capabilities. We believe that the community and its local businesses should benefit directly from local projects.

AECOM is committed to diverse representation, and we strive to create equal and unrestricted opportunities

for the participation of qualified firms on our project teams. Our policy is to maximize opportunities for small, women, minority-owned and disadvantaged business enterprises, encouraging them to collaborate with us as part of the project team. Our proven management approach integrates local and disadvantaged businesses into our core team, where they serve as partners in the fulfillment of the contract.

AECOM has been rated highly by federal, state, and local governments for meeting and exceeding subcontracting goals on our contracts. The firm’s nondiscrimination practices have been reviewed and audited on numerous federal and state projects, and supporting records verifying our performance are routinely submitted.

DMBE/SWaM Participation		
Firm Name	Certification	% Participation
Cordell & Crumley	DBE, SWaM	5%
Randolph Richardson Associates	DBE, SWaM	5%
Rhodeside & Harwell, Inc.	DBE, SWaM	5%
Sharp & Company, Inc.	DBE, SWaM	5%
Spy Pond Partners	SWaM	5%
Transportation Resource Associates, Inc.	SWaM	5%
Travesky & Associates, Ltd.	DBE, SWaM	5%
TOTAL		35%

ATTACHMENT C

DEPARTMENT OF MINORITY BUSINESS ENTERPRISE (DMBE)
SMALL BUSINESS SUBCONTRACTING PLAN**Definitions**

Small Business: Small business means a business, independently owned or operated by one or more persons who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. Note: This shall not exclude DMBE-certified women-owned and DMBE-certified minority-owned businesses when they have received DMBE small business certification.

Women-Owned Business: Women-owned business means a business concern that is at least 51 percent owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, and both the management and daily business operations are controlled by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law.

Minority-Owned Business: Minority-owned business means a business concern that is at least 51 percent owned by one or more minority individuals or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

All small businesses must be certified by DMBE by the due date of the solicitation to participate in the Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses (SWAM) program. Certification applications are available through DMBE online at www.dmbv.virginia.gov (Customer Service).

Offeror Name: AECOM Technical Services, Inc.

Preparer Name: Mike Jelen, PE **Date:** April 26, 2013

Instructions: (Failure to complete and submit this form may result in your proposal not being considered.)

- A. If the Offeror is certified by DMBE as a small business, complete only Section A of this form. This shall include DMBE-certified women-owned and DMBE-certified minority-owned businesses when they have received DMBE small business certification.
- B. If the Offeror is not certified by DMBE as a small business and plans to subcontract part of this contract with a DMBE-certified business, complete only Section B of this form.
- C. If the Offeror is not certified by DMBE as a small business and cannot identify any subcontracting opportunities to subcontract part of this contract with a DMBE-certified business, only provide the information requested in Section C of this form.

Section B

Populate the table below to show the firm's plans for utilization of DMBE-certified small businesses in the performance of this contract. This shall include DMBE-certified women-owned and DMBE-certified minority-owned businesses that meet the small business definition and have received the DMBE small business certification. Include plans to utilize small businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.

B. Plans for Utilization of DMBE-Certified Small Businesses for this Procurement

Small Business Name & Address DMBE Certificate #	Status if Small Business is also: Women (W), Minority (M)	Contact Person, Telephone & Email	Type of Goods and/or Services	Planned	Planned Contract Dollars During Initial Period of the Contract
Cordell & Crumley 4136 Hermitage Point Virginia Beach, VA 23455 #001092 SWaM #1092	DBE (W) SWaM (W,S)	Janette Crumley 757.460.4183 crumley@cordell-crumley.com	Public Relations Advertising Marketing Graphic Design	5%	
Randolph Richardson Associates 11310 Westbrook Mill Lane, Suite 301 Fairfax VA 22030 #DB2006-0087-2013 SWaM #626705	DBE (M) SWaM (M,S)	Randolph Richardson 703.218.4890 R2Associates@cox.net	Process, Physical Distribution and Logistics Consulting Services	5%	
Rhodeside & Harwell, Inc. 320 King Street, Suite 202 Alexandria VA 2231 #DB1994-0063-2015 SWaM #626309	DBE (W) SWaM (W, S)	Meredith Judy 703.683.7447 Meredithj@rhodeside-harwell.com	Landscape Architectural Services	5%	
Sharp & Company, Inc. 794 Nelson Street Rockville MD 20850 #DB2007-0011-2010 SWaM #669711	DBE (W) SWaM (W, S)	Susan Sharp 301.424.6133 susan@sharpandco.com	Graphic Design Advertising Public Relations	5%	
Spy Pond Partners 1165R Massachusetts Ave., Suite 101 Arlington, MA 02476 SWaM #651254	SWaM (M, S)	William Robert 617.500.4853 wrobert@spypondpartners.com	Management Consulting	5%	
Transportation Resource Associates, Inc. 1608 Walnut St., Suite1602 Philadelphia, PA 19103 SWaM #662179	SWaM (S)	Robert Kogan, 215.546.9110 robert.kogan@traonline.com	Transportation Safety and Security Consulting	5%	
Travesky & Associates, Ltd. 3900 Jermantown Road, Suite 300 Fairfax VA 22030 #DB2002-0090-2015 SWaM #626467	DBE (W) SWaM (W, S)	Marie Travesky 703.934.4639 mtravesky@travesky.com	Admin. Management; General Management Consulting Services; Marketing; Physical Distribution and Logistics Consulting Services; Public Relations	5%	
Totals				35%	

The primary Offeror must identify the name, telephone number and e-mail address for the contract person who will be responsible for coordinating the efforts and personnel of all parties and/or subcontractor involved in the proposal.

Name: Mr. Derek Crider, PE
Title: Project Manager
Company: AECOM Technical Services, Inc.
Address: 2101 Wilson Blvd, Suite 800
Tel: 703.465.4283
Cell: 703.442.6444
Email: derek.crider@aecom.com

Offerors shall identify all staff positions by person and actual hourly rates (base rate, overhead and profit listed separately along with the total rate) in Attachment D - Price Schedule for the 12 potential services described in the Statement of Needs, and listed pursuant to Tab 2 to be fully loaded with all direct salaries and general overhead. Final pricing/rates will be addressed in the negotiation phase. Transportation costs, travel, and per diem rates must not be included in determining the fixed billable hourly rates. Proposals must provide for a diversity of team members and hourly rates, given the varied nature of the potential work assignments under this contract.

AECOM

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Senior Consulting Manager II					\$299.87
Senior Consulting Manager II					\$299.37
Senior Consulting Manager II					\$298.78
Project/Task Manager - Plan IV					\$241.22
Project/Task Manager - Plan IV					\$247.166
Project/Task Manager - Plan III					\$230.52
Project/Task Manager - Plan III					\$203.70
Project/Task Manager - Plan III					\$219.79
Project/Task Manager - Plan III					\$223.33
Project/Task Manager - Plan II					\$208.69
Project/Task Manager - Plan II					\$217.33
Project/Task Manager - Plan I					\$186.62
Consultant I					\$144.94
Consultant I					\$126.07
Consultant I					\$132.60
Consultant I					\$115.20
Consultant II					\$148.48
Consultant II					\$148.99
GIS Analyst II					\$117.35
Senior Planner I					\$160.86
Senior Engineer II					\$209.42
Junior Planner I					\$83.09
Junior Planner II					\$93.82
Junior Planner II					\$92.49
Junior Planner II					\$87.33
Junior Planner II					\$91.37
Junior Planner II					\$91.62
Junior Planner II					\$87.72
Junior Planner III					\$103.25
Junior Planner III					\$103.25
Junior Planner III					\$102.52
Junior Planner III					\$100.90
Junior Planner III					\$102.91
Senior Planner I					\$124.90
Senior Planner I					\$115.79
Senior Planner I					\$156.48

Cordell & Crumley

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Principal Public Involvement Manager					\$150.13
Principal Public Involvement Manager					\$150.13
Principal Public Involvement Manager					\$150.13
Public Involvement Specialist					\$79.77

IBI Group

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Project Director					\$328.65
Senior ITS Consultant					\$195.93
Senior ITS Consultant					\$211.68
Senior Planner					\$174.21
Planner					\$145.24
Planner					\$124.70
Transportation Engineer					\$125.86
Transportation Engineer					\$136.51
Transportation Engineer					\$115.03
Analyst					\$93.02
Analyst					\$103.64
Analyst					\$104.27
Analyst					\$90.92
Analyst					\$76.67
Analyst					\$73.30
Support	\$88.47				

McCormick Taylor

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Project Manager					\$258.61
Project Manager					\$258.61
Technical Manager III					\$187.88
Technical Manager III					\$187.88
Technical Manager II					\$139.52
Technical Manager II					\$139.52
Technical Manager II					\$139.52
Planner/Engineer II					\$156.33
Planner/Engineer II					\$156.33
Planner/Engineer II					\$156.33
Planner/Engineer I					\$119.95
Planner/Engineer I					\$119.95
Planner/Engineer I					\$119.95

Newlands & Company, Inc.

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Project Manager					\$165.00
Visualization Specialist					\$106.00
Visualization Specialist					\$102.00
Visualization Specialist					\$116.00
Visualization Specialist					\$83.00

Randolph Richardson Associates

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Principal Transit Planner					\$157.00

Rhodeside & Harwell

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Senior Project Manager					\$186.00
Senior Project Manager					\$186.00
Project Manager/Planner					\$116.00
Project Manager/Landscape Architect					\$116.00
Planner					\$88.00
CADD/Graphics Support					\$60.00

Sharp & Company

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Principal Planner					\$233.84
Principal Planner					\$233.84
Senior Planner					\$147.33
Planner					\$83.48

Spy Pond Partners

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Principal Planner					\$190.00
Principal Planner					\$190.00
Junior Planner					\$80.00

Note: The rates shown for Spy Pond Partners are all-inclusive standard billing rates. This approach is consistently applied to all of SPP's business activities. SPP offers its services on a commercial pricing basis, the prevailing method of pricing in the management consulting market. The Federal Acquisition Regulations (FAR) accept and recognize this method of pricing for consulting services in FAR Parts 12 and 15. SPP's hourly rates are inclusive of all costs (other than direct expenses) and profit and are based on comparable competitive rates in the management consulting business. SPP does not have an overhead rate (either audited or unaudited) that is subject to disclosure. In addition, as a partnership, there is no fixed salary cost for the two partners who are key personnel on most contracts a single "wage rate" cannot be established for them. SPP's existing clients, including the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Virginia Department of Transportation, have all accepted this method of pricing on SPP's past and current contracts.

Transportation Management & Design, Inc.

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Contract/Project Manager					\$200.43
Principal Planner					\$152.77
Senior Planner					\$139.13
Senior Planner					\$125.49
Senior Planner					\$95.48
GIS Manager					\$92.75
Planner					\$79.11
Administration					\$106.39

Note: TMD is reserving the right to increase our rates by four to five percent each October 1st, beginning October 1, 2014.

Transportation Resource Associates, Inc.

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Project Manager					\$109.49
Principal-In-Charge					\$225.07
Deputy Project Manager					\$84.95
Senior Consultant					\$128.88
Senior Consultant					\$180.51
Senior Consultant					\$117.36

Travesky & Associates, Ltd.

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit	Total Fixed Rate
Labor Category Role					
Public Participation Manager					\$235.25
Deputy Public Participation Manager					\$182.31
Senior Public Participation Specialist					\$120.66
Public Participation Specialist					\$80.71
Public Participation Specialist					\$77.99
Public Participation Specialist					\$75.61

13. FTA Certifications

ATTACHMENT A-1

1.2.23 CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The Primary Participant (applicant for an FTA grant or cooperative agreement, or potential Offeror for major third party contract), AECOM Technical Services, Inc. certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily exclude from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or has a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicated for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Except as noted below, have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause of default.

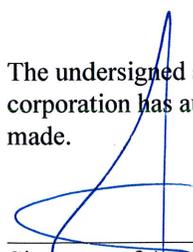
(If the primary participant (applicant for an FTA grant, or cooperative agreement, or potential third party contractor) is unable to certify any of the statements in this certification, the participant shall attach and explanation to the Certification.)

THE PRIMARY PARTICIPANT (APPLICANT FOR AN FTA GRANT OR COOPERATIVE AGREEMENT, OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT), AECOM TECHNICAL SERVICES, INC., CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.

 SR. VICE-PRESIDENT

Signature and Title of Authorized Official
Paul Anderson, PE, Senior Vice President

The undersigned senior legal counsel and assistant corporate secretary for AECOM Technical Services, Inc. hereby certifies that the corporation has authority under State local law to comply with the subject assurances and that the certification above has been legally made.



Signature of Applicant's Attorney
Christopher J. Karpathy

Contracts terminated for Cause or Default

In November of 2012, AECOM Technical Services, Inc. received a notice from the City of Sarasota, Florida, notifying AECOM Technical Services, Inc. that it has terminated its contract with AECOM Technical Services, Inc. for the design of a sewer lift station for default. AECOM Technical Services, Inc. disagrees with the termination, will look to contest the termination and is working with the City to resolve any issues in an amicable manner.

In August of 2012, AECOM Technical Services, Inc., the parent company of AECOM USA, Inc., received a notice from the County of Baltimore, Maryland, stating that the County intends to partially terminate its agreement with AECOM Technical Services for default. AECOM Technical Services hopes to resolve any issues between the parties in an amicable and mutually acceptable manner before any such action is consummated or taken by the County.

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, Cordell + Crumley certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

_____, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 *ET SEQ.* ARE APPLICABLE THERETO.

Owner/Partner 4/16/13

(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

(Date)

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, _____ certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

_____, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.

Digitally signed by Carl-Henry Piel
DN: cn=Carl-Henry Piel, o=IBI Group,
ou=Director, email=c-hpiel@ibigroup.com, c=US
Date: 2013.04.20 09:49:13 -04'00'

(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

(Date)

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

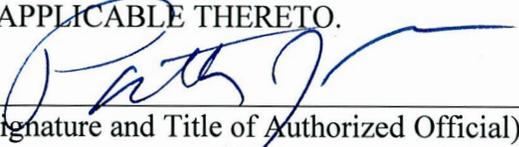
The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact,

McCormick Taylor, Inc. certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

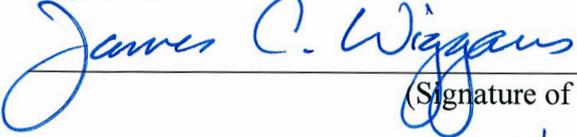
(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

McCormick Taylor, Inc., CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 *ET SEQ.* ARE APPLICABLE THERETO.


_____, Vice President of Finance
(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____
McCormick Taylor, Inc. hereby certifies that the
Executive Vice President has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.


_____, Executive Vice President
(Signature of Applicant's Attorney)

4/19/13

(Date)

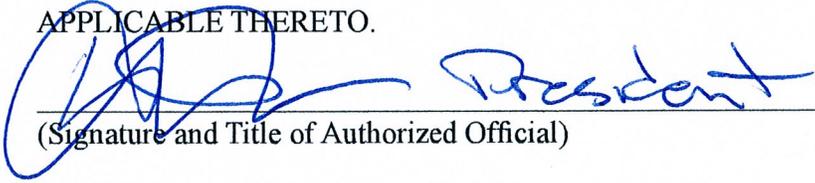
1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, Newlands & Company, Inc. certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

Newlands & Company, Inc., CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.

 President
(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

4/22/2013
(Date)

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract, Randolph Richardson Associates certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

Randolph Richardson Assoc., CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.

 _____, PRINCIPAL
(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

(Date)

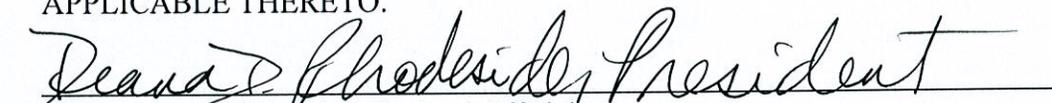
1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, Rhodeside & Harwell, Incorporated certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

Deana Rhodeside, PhD, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.


(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

April 22, 2013
(Date)

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, Sharp & Company, Inc. certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

Sharp & Company, Inc., CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.

Sumit Singh PRESIDENT
(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

(Date)

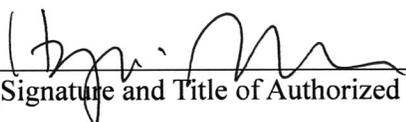
1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT,
SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, SPY POWD PARTNERS, LLC certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

SPY POWD PARTNERS, LLC, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.

 _____
(Signature and Title of Authorized Official) PRESIDENT

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

 _____
(Signature of Applicant's Attorney)

4/18/13

(Date)

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, Transportation Management & Design, Inc. certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

Transportation Management & Design, Inc., CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 *ET SEQ.* ARE APPLICABLE THERETO.

(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____
_____ hereby certifies that the
_____ has authority under State and Local law to comply with the
subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

April 23, 2013
(Date)

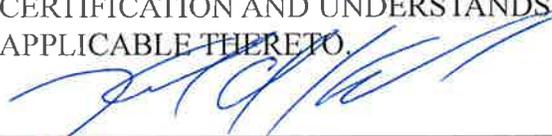
1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, TRANSPORTATION RESOURCE ASSOC. certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

KENNETH A. KORACH, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.



PRESIDENT
(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

(Date)

1.1.23 CERTIFICATION OF LOWER-TIER PARTICIPANTS REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

The Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contact, Travesky & Associates, Ltd. certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by and Federal department or agency.

(If the Lower Tier Participant (potential sub-grantee or sub-recipient under an FTA project, potential third party contractor, or potential subcontractor under a major third party contract) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.)

THE LOWER-TIER PARTICIPANT (POTENTIAL SUB-GRANTEE OR SUB-RECIPIENT UNDER AN FTA PROJECT, POTENTIAL THIRD PARTY CONTRACTOR OR POTENTIAL SUBCONTRACTOR UNDER A MAJOR THIRD PARTY CONTRACT)

Travesky & Associates, Ltd.; CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. ARE APPLICABLE THERETO.

Mario B. Travesky President

(Signature and Title of Authorized Official)

The undersigned chief legal counsel for the _____ hereby certifies that the _____ has authority under State and Local law to comply with the subject assurances and the certifications above has been legally made.

(Signature of Applicant's Attorney)

(Date)



**Below Is Required Information That Was Missing from
Proposal But Submitted Prior To Evaluation**

APPENDIX A, 49 C.F.R. pt. 20--CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned [Offeror] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995, 2 U.S.C. §§ 1601, et seq.]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Offeror, AECOM, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Offeror understands and agrees that the provisions of 31 U.S.C. §§ 3801, et seq., apply to this certification and disclosure, if any.

 Signature of Offeror's Authorized Official

PAUL F. ANDERSON
SR. VICE-PRESIDENT Name and Title of Offeror's Authorized Official

5/3/13 Date

Nusbaum, Ashley (DRPT)

From: Crider, Derek [Derek.Crider@aecom.com]
Sent: Friday, May 03, 2013 12:20 PM
To: Nusbaum, Ashley (DRPT)
Subject: RE: 505-13-RR0001 Proposal Submission -- Certification Regarding Lobbying under Attachment J - Federal Terms and Conditions -- AECOM
Attachments: DRPT RFP Page 44_AECOM.pdf

Ashley,

Thank you again for advising us of the required information. A completed certification is attached.

Would you advise that you have received this.

Thank you.

Derek Crider
Director, Transit Planning
2101 Wilson Blvd, Suite 800
Arlington, VA 22201
703-465-4283 office
763-442-6444 mobile
derek.crider@aecom.com

From: Nusbaum, Ashley (DRPT) [mailto:ashley.nusbaum@drpt.virginia.gov]
Sent: Thursday, May 02, 2013 5:50 PM
To: Crider, Derek
Subject: 505-13-RR0001 Proposal Submission

Derek,

Please see the attached letter regarding a required document not submitted with your proposal for 505-13-RR0001 General Planning Consultant Services for Transit Projects in Virginia. Please submit the information to me via email or regular mail at the address below by 5:00 on Monday, May 6, 2013. Please let me know if you have questions. Thanks.

Ashley Nusbaum
Financial Compliance & Procurement Analyst
Dept. of Rail and Public Transportation
600 E. Main Street, Suite 2102
Richmond, VA 23219
804-786-2890

5/3/2013



EXHIBIT C

COMMONWEALTH of VIRGINIA

Thelma D. Drake
Director

DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION
600 EAST MAIN STREET, SUITE 2102
RICHMOND, VA 23219

(804) 786-4440
FAX (804) 225 3752
VIRGINIA RELAY CENTER
1-800-828-1120 (TDD)

June 4, 2013

Mr. Derek Crider
AECOM Technical Services, Inc.
2101 Wilson Blvd, Suite 800
Arlington, VA 22201

Dear Mr. Crider:

Please find outlined below a summary of the contract terms negotiated between the Department of Rail and Public Transportation (DRPT) and AECOM on May 30, 2013 for RFP 505-13-RR0001 Contract for General Planning Consultant Services for Transit Projects in Virginia – Competitive Negotiation for Non-Professional Services.

- No work will begin on a task order until a purchase order has been issued through eVA. The issuance date of the eVA purchase order will serve as the Notice To Proceed.
- Invoices for task orders issued will be submitted within 90 days of the end date of the task order. After 90 days, task orders will be closed.
- Invoices will be submitted no more frequently than once a month and within 90 calendar days from the date an expense has occurred.
- Purchase Order Deobligation and Closing Forms will be signed and returned to DRPT within seven business days after receipt from a DRPT Program Manager.
- AECOM has the capacity to handle potential task orders issued under this contract.
- Annex 3-J Certification of Compliance with Prohibition of Political Contributions and Gifts During the Procurement Process will be signed and returned to DRPT before execution of a contract.
- AECOM will provide an updated pricing schedule lowering the profit rate from 10% to 8% for their firm and all subconsultants listed in the proposal. AECOM agrees to lock in the rates without rate increases for the first three years of the contract.

The Smartest Distance Between Two Points
www.drpt.virginia.gov

- AECOM will provide DRPT with a copy of the Federal Acquisition Regulation's approval letter for the firm's overhead rate before execution of a contract.

Please acknowledge AECOM's acceptance of the negotiated terms by signing below and returning to Ashley Nusbaum at ashley.nusbaum@drpt.virginia.gov. Should you have any questions, please contact me at the email address above or call 804-786-2890

AECOM TECHNICAL SERVICES, INC.

**DEPARTMENT OF RAIL AND
PUBLIC TRANSPORTATION**



Signature

Michael Jelen

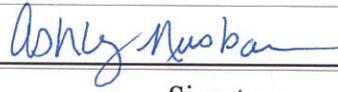
Printed Name

Associate Vice President

Title

June 7, 2013

Date



Signature

Ashley Nusbaum
Financial Compliance and
Procurement Analyst

6/7/13

Date

Annex 3-J
CERTIFICATION OF COMPLIANCE
WITH PROHIBITION OF POLITICAL CONTRIBUTIONS AND GIFTS DURING THE
PROCUREMENT PROCESS

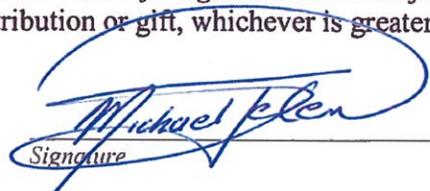
For contracts with a stated or expected value of \$5 million or more except those awarded as the result of competitive sealed bidding

I, Michael Jelen, a representative of AECOM Technical Services, Inc.,
Please Print Name *Name of Offeror*

am submitting a proposal to the Department of Rail and Public Transportation in response to 505-13-RR0001 - Contract for General Planning Consultant Services for Transit Projects in Virginia, a solicitation where stated or expected contract value is \$5 million or more which is being solicited by a method of procurement other than competitive sealed bidding as defined in § 2.2-4301 of the *Code of Virginia*.

I hereby certify the following statements to be true with respect to the provisions of §2.2-4376.1 of the *Code of Virginia*. I further state that I have the authority to make the following representation on behalf of myself and the business entity:

1. The offeror shall not knowingly provide a contribution, gift, or other item with a value greater than \$50 or make an express or implied promise to make such a contribution or gift to the Governor, his political action committee, or the Governor's Secretaries, if the Secretary is responsible to the Governor for an agency with jurisdiction over the matters at issue, during the period between the submission of the proposal and the award of the contract.
2. No individual who is an officer or director of the offeror, shall knowingly provide a contribution, gift, or other item with a value greater than \$50 or make an express or implied promise to make such a contribution or gift to the Governor, his political action committee, or the Governor's Secretaries, if the Secretary is responsible to the Governor for an agency with jurisdiction over the matters at issue, during the period between the submission of the proposal and the award of the contract.
3. I understand that any person who violates § 2.2-4376.1 of the *Code of Virginia* shall be subject to a civil penalty of \$500 or up to two times the amount of the contribution or gift, whichever is greater.


Signature

Associate Vice President
Title

June 6, 2013
Date

Tab 5 - Staffing and Pricing Plan

Offerors shall identify all staff positions by person and **actual** hourly rates (base rate, overhead and profit listed separately along with total rate) in Attachment D - Price Schedule for the 12 potential services described in the Statement of Needs, and listed pursuant to Tab 2 to be fully loaded with all direct salaries and general overhead. Final pricing/rates will be addressed in the negotiation phase. Transportation costs, travel, and per diem rates must not be included in determining the fixed billable hourly rates. Proposal must provide for a diversity of team members and hourly rates, given the varied nature of potential work assignments under this contract.

AECOM

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Senior Consulting Manager II					\$ 294.42
Senior Consulting Manager II					\$ 293.92
Senior Consulting Manager II					\$ 292.36
Project/Task Manager-Plan IV					\$ 236.84
Project/Task Manager-Plan IV					\$ 242.66
Project/Task Manager-Plan III					\$ 226.33
Project/Task Manager-Plan III					\$ 200.00
Project/Task Manager-Plan III					\$ 215.79
Project/Task Manager-Plan III					\$ 219.27
Project/Task Manager-Plan II					\$ 204.90
Project/Task Manager-Plan II					\$ 213.38
Project/Task Manager-Plan I					\$ 183.22
Consultant I					\$ 142.31
Consultant I					\$ 123.78
Consultant I					\$ 130.19
Consultant I					\$ 113.11
Consultant II					\$ 145.79
Consultant II					\$ 146.28
GIS Analyst II					\$ 115.22
Senior Planner I					\$ 157.94
Senior Engineer II					\$ 205.61
Junior Planner I					\$ 81.58
Junior Planner II					\$ 92.12
Junior Planner II					\$ 90.80
Junior Planner II					\$ 85.74
Junior Planner II					\$ 89.71
Junior Planner II					\$ 89.96
Junior Planner II					\$ 86.12
Junior Planner III					\$ 101.37
Junior Planner III					\$ 101.31
Junior Planner III					\$ 100.66
Junior Planner III					\$ 99.07
Junior Planner III					\$ 101.04
Senior Planner I					\$ 122.63
Senior Planner I					\$ 113.68
Senior Planner I					\$ 153.64

Tab 5 - Staffing and Pricing Plan

Cordell & Crumbley

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Principal Public Involvement Manager					\$ 147.40
Principal Public Involvement Manager					\$ 147.40
Principal Public Involvement Manager					\$ 147.40
Public Involvement Specialist					\$ 78.32

IBI Group

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Project Director					\$ 322.68
Senior ITS Consultant					\$ 192.37
Senior ITS Consultant					\$ 207.84
Senior Planner					\$ 171.04
Planner					\$ 142.59
Planner					\$ 122.44
Transportation Engineer					\$ 123.57
Transportation Engineer					\$ 134.03
Transportation Engineer					\$ 112.94
Analyst					\$ 91.34
Analyst					\$ 101.76
Analyst					\$ 102.38
Analyst					\$ 89.26
Analyst					\$ 75.28
Analyst					\$ 71.97
Support					\$ 86.86

McCormick Taylor

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Project Manager					\$ 253.91
Project Manager					\$ 253.91
Technical Manager III					\$ 184.46
Technical Manager III					\$ 184.46
Technical Manager II					\$ 136.99
Technical Manager II					\$ 136.99
Planner/Engineer II					\$ 153.49
Planner/Engineer II					\$ 153.49
Planner/Engineer II					\$ 153.49
Planner/Engineer I					\$ 117.77
Planner/Engineer I					\$ 117.77
Planner/Engineer I					\$ 117.77

Tab 5 - Staffing and Pricing Plan

Newlands & Company

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Project Manager					\$ 162.00
Visualization Specialist					\$ 103.68
Visualization Specialist					\$ 100.44
Visualization Specialist					\$ 113.40
Visualization Specialist					\$ 81.00

Randolph Richardson

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Principal Transit Planner					\$ 154.44

Rhodeside & Harwell

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Senior Project Manager					\$ 182.60
Senior Project Manager					\$ 182.60
Project Manager/Planner					\$ 113.92
Project Manager/Landscape Architect					\$ 113.92
Planner					\$ 86.80
CADD/Graphics Support					\$ 59.15

Sharpe & Company

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Principal Planner					\$ 229.59
Principal Planner					\$ 217.71
Senior Planner					\$ 144.64
Planner					\$ 81.96

Spy Pond Partners

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Principal Planner					\$ 186.55
Principal Planner					\$ 186.55
Junior Planner					\$ 78.55

Note: The rates shown for Spy Pond Partners are all-inclusive standard billing rates. This approach is consistently applied to all of SPP's business activities. SPP offers its services on a commercial pricing basis, the prevailing method of pricing in the management consulting market. The Federal Acquisition Regulations (FAR) accept and recognize this method of pricing for consulting services in FAR Parts 12 and 15. SPP's hourly rates are inclusive of all costs (other than direct expenses) and profit and are based on comparable competitive rates in the management consulting business. SPP does not have an overhead rate (either audited or unaudited) that is subject to disclosure. In addition, as a partnership, there is no fixed salary cost for the two partners who are key personnel on most contracts a single "wage rate" cannot be established for them. SPP's existing clients, including the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Virginia Department of Transportation, have all accepted this method of pricing on SPP's past and current contracts.

Tab 5 - Staffing and Pricing Plan

Transportation Management & Design, Inc.

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Contract/Project Mgr					\$ 196.79
Principal Planner					\$ 149.99
Senior Planner					\$ 136.60
Senior Planner					\$ 123.21
Senior Planner					\$ 93.74
GIS Manager					\$ 91.07
Planner					\$ 77.67
Administration					\$ 104.46

Note: TMD is reserving the right to increase our rates by four to five percent each October 1st, beginning October 1, 2014.

Transportation Resource Associates, Inc.

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Project Manager					\$ 103.57
Principal-In-Charge					\$ 220.98
Deputy Project Manager					\$ 83.41
Senior Consultant					\$ 126.53
Senior Consultant					\$ 177.23
Senior Consultant					\$ 115.23

Travesky & Associates, Ltd.

Labor Category	Name	Direct Hourly Rate	Overhead Rate	Profit (8%)	Total Fixed Rate
Labor Category Role					
Public Participation Manager					\$ 230.97
Deputy Public Participation Manager					\$ 179.00
Senior Public Participation Specialist					\$ 117.39
Public Participation Specialist					\$ 79.24
Public Participation Specialist					\$ 76.57
Public Participation Specialist					\$ 74.24

Cleary Government Services, LLC

AECOM TECHNICAL SERVICES, INC.

A wholly-owned subsidiary of AECOM Technology Corporation

**INDIRECT COST RATES PREPARED IN ACCORDANCE
WITH PART 31 OF THE FEDERAL ACQUISITION REGULATION
FOR THE TWELVE MONTHS ENDED SEPTEMBER 28, 2012**

Cleary Government Services, LLC

REPORT OF INDEPENDENT PUBLIC ACCOUNTANT

To: Mr. Raymon Thompson
Government Controller, AECOM Technical Services, Inc.

Re: Indirect Cost Rates Prepared in Accordance with Part 31 of the Federal Acquisition Regulation

We have audited the accompanying Schedules of the Indirect Cost Rates of AECOM Technical Services, Inc. (ATS) for the twelve months ended September 28, 2012 prepared in accordance with Title 48, Code of Federal Regulations, Part 31 of the Federal Acquisition Regulation (FAR). ATS is a wholly-owned subsidiary of AECOM Technology Corporation. These schedules are the responsibility of ATS' management. Our responsibility is to express an opinion on these schedules based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States and also the standards applicable to financial audits contained in the *Government Auditing Standards* (July 2007 Revision), issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedules of the Indirect Cost Rates are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the schedules and performing such other audit procedures as we considered necessary in the circumstances. Our audit also included assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

The aforementioned Schedules of Indirect Cost Rates were prepared on a basis of accounting practices as prescribed by Part 31 of the FAR and certain other federal and state regulations as discussed in Note 2, and are not intended to be a presentation in conformity with accounting principles generally accepted in the United States.

In our opinion, the Schedules referred to above present fairly, in all material respects, the Indirect Cost Rates of ATS for the twelve months ended September 28, 2012, calculated in accordance with Part 31 of the FAR.

In accordance with the *Government Auditing Standards*, we have also issued our report dated March 20, 2013 on our consideration of ATS' internal controls over financial reporting and our test of its compliance with applicable laws and regulations. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report.

Individuals relying on this report must have an adequate understanding of Part 31 of the FAR. Therefore, this report is intended solely for the information of management and government agencies for use under contracts regulated by the aforementioned regulation. It is not intended to be and should not be used by anyone other than the aforementioned parties nor should it be used for any other purpose.



Chicago, Illinois
March 21, 2013

AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)

Summary of the Indirect Cost Rates
Calculated in Accordance with Part 31 of the Federal Acquisition Regulation
For the Fiscal Year Ended September 28, 2012

	<u>Home Office</u>		<u>Field Office</u>		<u>Combined Total</u>
I. <u>Direct Labor Base</u>	\$ 448,848,843		\$ 153,605,507		\$ 602,454,350
II. <u>Indirect Overhead Cost Pool</u>					
Home Office Overhead Costs *	\$ 148,563,211	33.10%	\$ -	0.00%	\$ 148,563,211
Indirect Overhead Costs*	<u>438,765,595</u>	<u>97.75%</u>	<u>150,154,807</u>	<u>97.75%</u>	<u>588,920,402</u>
Operating Indirect Cost Pool and Rate*	<u>\$ 587,328,806</u> <u>130.85%</u>		<u>\$ 150,154,807</u> <u>97.75%</u>		<u>\$ 737,483,613</u>
II. <u>General and Administrative Cost Pool*</u>	\$ 101,225,758	22.55%	\$ 34,641,581	22.55%	\$ 135,867,339
 Home Office and Field Indirect Rates	<u>\$ 688,554,564</u> <u>153.40%</u>		<u>\$ 184,796,388</u> <u>120.30%</u>		<u>\$ 873,350,952</u>

* The amounts shown above are net of unallowable costs. See Note 2.

The accompanying notes are an integral part of these schedules.

AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)

Schedule of the Indirect Cost Rates

Calculated in Accordance with Part 31 of the Federal Acquisition Regulation
For the Fiscal Year Ended September 28, 2012

Home Office Overhead Costs*

Depreciation Expense	\$ 20,226,061
Office Rent	72,259,389
Equipment & Vehicle Leases	11,359,710
Office Equipment Expense	3,317,670
Software Licence and Maintenance	10,703,379
Outside Services	1,832,051
Supplies, Postage, & Outside Repro	12,189,571
Utilities	2,803,992
Telephone & Data Communications	<u>13,871,388</u>
Total Home Office Overhead Costs*	<u><u>\$ 148,563,211</u></u>
Home Office Direct Labor	<u><u>\$ 448,848,843</u></u>
Indirect Overhead Rate	<u><u>33.10%</u></u>

* The amounts shown above are net of unallowable costs. See Note 2.

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AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)

Schedule of the Indirect Cost Rates

Calculated in Accordance with Part 31 of the Federal Acquisition Regulation
For the Fiscal Year Ended September 28, 2012

Indirect Overhead Costs

<u>Description</u>	<u>Overhead Costs Allocable to:</u>		<u>Total Overhead Costs Allocable to Both Home Office And Field Jobs</u>
	<u>Home Office Jobs</u>	<u>Field Jobs</u>	
Indirect Overhead Labor	\$ 122,316,210	\$ 41,859,178	\$ 164,175,388
Fringe Benefits	227,857,334	77,977,568	305,834,902
Purchased Labor	1,352,176	462,743	1,814,919
Other Employee Benefits	4,101,569	1,403,643	5,505,212
Professional Services	12,839,744	4,394,030	17,233,774
Employment Services	209,959	71,852	281,811
Relocation	588,697	201,464	790,161
Advertising & Marketing	983,785	336,672	1,320,457
Dues, Licences, & Publications	1,734,575	593,608	2,328,183
Travel	12,700,562	4,346,399	17,046,961
Business Taxes and Licences	5,309,115	1,816,891	7,126,006
Bank Service Charges	7,251	2,481	9,732
General, Professional & Liability Insurance	17,076,618	5,843,977	22,920,595
Miscellaneous Expense & Cost Recovery	(8,709,978)	(2,980,738)	(11,690,716)
AECOM Corporate Home Office Allocation	41,330,174	14,144,054	55,474,228
Other (Income) Expense	(932,196)	(319,017)	(1,251,213)
Indirect Overhead Costs*	<u>\$ 438,765,595</u>	<u>\$ 150,154,807</u>	<u>\$ 588,920,402</u>
Home & Field Office Direct Labor	<u>\$ 448,848,843</u>	<u>\$ 153,605,507</u>	<u>\$ 602,454,350</u>
Allocable to Both Home Office and Field Labor Jobs	<u>97.75%</u>	<u>97.75%</u>	<u>97.75%</u>

* The amounts shown above are net of unallowable costs. See Note 2.

The accompanying notes are an integral part of these schedules.

AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)
Schedule of the Indirect Cost Rates
Calculated In Accordance with Part 31 of the Federal Acquisition Regulation
For the Fiscal Year Ended September 28, 2012

General and Administrative Costs

<u>Description</u>	<u>G&A Costs Allocable to:</u>		<u>Total G&A Costs Allocable to Both Home Office And Field Jobs</u>
	<u>Home Office Jobs</u>	<u>Field Jobs</u>	
General & Administrative Labor	\$ 9,188,419	\$ 3,144,470	\$ 12,332,889
Fringe Benefits	22,789,057	7,798,894	30,587,951
Bid & Proposal Labor	47,936,417	16,404,849	64,341,266
Bid & Proposal Other	8,989,792	3,076,496	12,066,288
Purchased Labor	85,394	29,223	114,617
Other Employee Benefits	(547,974)	(187,528)	(735,502)
Depreciation Expense	333,644	114,180	447,824
Office Rent	2,224,123	761,142	2,985,265
Equipment & Vehicle Leases	420,953	144,059	565,012
Office Equipment Expense	48,754	16,685	65,439
Software Licence and Maintenance	271,250	92,827	364,077
Outside Services	327,382	112,037	439,419
Professional Services	881,925	301,813	1,183,738
Employment Services	264,945	90,670	355,615
Supplies, Postage, & Outside Repro	439,244	150,318	589,562
Telephone & Data Communications	899,505	307,829	1,207,334
Advertising & Marketing	5,665	1,939	7,604
Dues, Licences, & Publications	421,777	144,341	566,118
Travel	665,522	227,756	893,278
Business Taxes and Licences	8,074	2,763	10,837
Miscellaneous Expense & Cost Recovery	(34,648)	(11,857)	(46,505)
AECOM Corporate Home Office Allocation	4,978,048	1,703,593	6,681,641
State Income Tax	305,846	104,667	410,513
Other (Income) Expense	322,644	110,415	433,059
General & Administrative Costs*	\$ 101,225,758	\$ 34,641,581	\$ 135,867,339
Home Office and Field Office Direct Labor	\$ 448,848,843	\$ 153,605,507	\$ 602,454,350
General & Administrative Rate	22.55%	22.55%	22.55%

* The amounts shown above are net of unallowable costs. See Note 2.

The accompanying notes are an integral part of these schedules.

AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)
Schedule of Indirect Cost Rates

Calculated in Accordance with Part 31 of the Federal Acquisition Regulation
For the Fiscal Year Ended September 28, 2012

Fringe Benefit Costs

<u>Description</u>	<u>Fringe Costs Included In:</u>		<u>Total</u>
	<u>Overhead</u>	<u>G&A</u>	
Payroll Taxes	\$ 67,475,654	\$ 6,748,550	\$ 74,224,204
Paid-Time-Off (Vacation, Sick Leave & Holiday)	109,703,951	10,971,995	120,675,946
Health & Welfare Benefits	84,044,814	8,405,707	92,450,521
401k Company Match	20,349,143	2,035,211	22,384,354
Workmens Compensation	2,104,019	210,433	2,314,452
Short Term Disability	3,543,310	354,383	3,897,693
Stock Match	1,178,079	117,825	1,295,904
Other Employee Benefits	17,435,932	1,743,848	19,179,780
Total Fringe Benefits Costs*	<u>\$ 305,834,902</u>	<u>\$ 30,587,951</u>	<u>\$ 336,422,853</u>

* The amounts shown above are net of unallowable costs. See Note 2.

The accompanying notes are an integral part of these schedules.

AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)
Schedule of the Field Indirect Cost Rate
Calculated in Accordance with Part 31 of the Federal Acquisition Regulation
For the Fiscal Year Ended September 28, 2012

I. <u>Direct Labor Base, Including Field Rate Jobs</u>	\$ 602,454,350	100.00%
II. <u>Field Indirect Overhead Cost Pool (Note 4)</u>		
Total Indirect Overhead Cost Pool*	\$ 737,483,613	122.41%
<u>Less: Costs Removed to Calculate the Field Overhead Pool:</u>		
Depreciation Expense	(20,226,061)	-3.36%
Office Rent	(72,259,389)	-11.99%
Equipment & Vehicle Leases	(11,359,710)	-1.89%
Office Equipment Expense	(3,317,670)	-0.55%
Software Licence and Maintenance	(10,703,379)	-1.78%
Outside Services	(1,832,051)	-0.30%
Supplies, Postage, & Outside Repro	(12,189,571)	-2.02%
Utilities	(2,803,992)	-0.47%
Telephone & Data Communications	(13,871,388)	-2.30%
Net Field Indirect Overhead Cost Pool and Rate*	\$ 588,920,402	97.75%
III. <u>Indirect G&A Cost</u>	\$ 135,867,339	22.55%
Total Field Indirect Costs and Rate*	\$ 724,787,741	120.30%

* The amounts shown above are net of unallowable costs. See Note 2.

The accompanying notes are an integral part of these schedules.

AECOM Technical Services, Inc.

(A wholly-owned subsidiary of AECOM Technology Corporation)

Notes to the Schedules of the Indirect Cost Rates

Calculated in Accordance with Part 31 of the Federal Acquisition
Regulation for the Twelve Months Ended September 28, 2012

(1) Company Description

AECOM Technical Services, Inc. (ATS) is a segment of AECOM Technology Corporation (AECOM), and AECOM is a publicly-traded company on the New York Stock Exchange. As described below, ATS provides professional engineering services to a variety of government and commercial customers in the United States. On October 3, 2009, AECOM (parent) combined the business and operations of ATS with those of an affiliated segment AECOM US. Both ATS and AECOM US operate in many of the same markets and businesses within the US (e.g., transportation, environmental, planning & design, water, etc.) The combined business operates under ATS' legal entity and name, and remains a wholly-owned subsidiary of AECOM. ATS' fiscal year ended on September 28, 2012, and it is referred to as "Fiscal Year 2012."

In addition, the financial information presented in the accompanying Schedules of the Indirect Cost Rates includes the operations and expenses of certain of AECOM's former operating companies including: AECOM Consulting Inc.; Boyle Engineering Corporation; Consoer Townsend Envirodyne Engineering, Inc.; Davis Langdon LLP; DMJM Aviation, Inc.; DMJM Harris Inc.; DMJM H&N, Inc.; Earth Tech, Inc.; The Ellerbe Becket Company, LLC; Economic Research Associates; EDAW, Inc.; ENSR Corporation; Hayes, Seay, Mattern & Mattern, Inc.; Metcalf & Eddy, Inc.; P&D Consultants Inc.; STS Consultants, Ltd.; Survcon Inc.; and TCB, Inc.

ATS provides engineering, consulting, construction and environmental services to both government and commercial customers primarily in the areas of environmental remediation, construction, urban planning, water treatment and transportation. AECOM (parent) provides certain management, administrative, insurance, employee benefit, financing and tax compliance services to ATS.

(2) Basis of Accounting and Description of Accounting System

ATS' policy is to prepare these calculations of indirect cost rates in accordance with Part 31 of the Federal Acquisition Regulation (FAR), and as such, these calculations and Schedules are not intended to be a presentation in conformity with accounting principles generally accepted in the United States. The rates presented herein are primarily used in connection with ATS' contracts with certain state and local government agencies. ATS maintains its books and records using the accrual basis of accounting.

ATS uses a combination of techniques to identify and quantify unallowable costs as defined in FAR Part 31. First, ATS identifies certain expense accounts in the general ledger and certain indirect projects as wholly unallowable. For certain other expense accounts that are likely to contain unallowable costs, ATS combines like accounts into groups, and reviews both a statistical sample of the transactions and also the high-dollar transactions in the sample grouping. The results of the sampled transactions are extrapolated to the entire expense account group balance excluding the high-dollar transactions. In addition, ATS voluntarily excluded certain other costs from the indirect cost pool, and it used estimates to determine the amount of certain other unallowable costs.

AECOM Technical Services, Inc.
(A wholly-owned subsidiary of AECOM Technology Corporation)
Notes to the Schedules of the Indirect Cost Rates
Calculated in Accordance with Part 31 of the Federal Acquisition
Regulation for the Twelve Months Ended September 28, 2012

(2) Basis of Accounting and Description of Accounting System - continued

ATS utilizes a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each contract is assigned a unique project number so that costs can be properly segregated and accumulated in the job-order cost accounting system. Costs incurred solely for the benefit of a specific project are charged directly to that project as a direct cost. Costs incurred for the benefit of two or more projects are classified as either overhead or G&A as described below.

Employee labor costs are charged to jobs using the employee's actual hourly pay rate based on 2080 hours per year. Non-exempt employees report all hours worked including any overtime, and exempt employees report all of their hours worked including any pre-approved extended workweek hours. Overtime and extended workweek pay, including any premium, is charged direct to projects if it was incurred in connection with direct labor. Otherwise, the overtime and extended workweek pay including any premium is charged indirect if it was incurred in connection with indirect activities such as the preparation of a proposal. For exempt employees, the variance between the actual hours incurred versus the actual hours paid is credited to the Indirect Overhead Cost Pool resulting in a credit of approximately (\$1,830,650) in Fiscal Year 2012.

Other significant costs that are incurred specifically for a project, such as subcontractors, consultants, travel, field supplies, usage of company-owned assets, reproduction, permits, temporary and other purchased labor, mileage, bonds, etc. are consistently charged direct to projects as Other Direct Costs (ODC's.) and are billed and recovered under contracts in accordance with the terms of the contract.

The Company offers its employees a comprehensive package of fringe benefits including medical plans, life insurance and other related benefits. Included in the benefits is a 401(k) plan for which the Company matches 50% of the first 6% of employee contributions. In addition, ATS accrues paid-time-off (i.e., vacation, holiday and sick) as the employees earn it, and vacation pay vests to the employees as it is earned.

ATS' method of estimating costs for pricing purposes during the proposal process is consistent with the methodology used for the accumulation and reporting of costs under its job-order cost accounting system.

(3) Basis of Accounting for Indirect Costs

ATS accumulates all of its allowable indirect costs into a single indirect cost pool. These indirect costs are allocated to contracts based on direct labor dollars. For internal management purposes, ATS captures its indirect costs in an Overhead Pool and a General and Administrative (G&A) pool. The Overhead Pool is further separated between indirect costs that benefit all jobs versus those costs that only benefit Home Office jobs as explained in Note 4 below. Certain of the claimed costs are based on management's best estimate of the actual allowable cost.

AECOM Technical Services, Inc.

(A wholly-owned subsidiary of AECOM Technology Corporation)

Notes to the Schedules of the Indirect Cost Rates

Calculated in Accordance with Part 31 of the Federal Acquisition
Regulation for the Twelve Months Ended September 28, 2012

(3) Basis of Accounting for Indirect Costs - continued

The Overhead and G&A Cost Pools include the costs associated with managing and operating ATS' various businesses. The significant costs included in the Indirect Overhead Cost Pool are salaries and wages, bonus, fringe benefits (e.g., payroll taxes, paid-time-off, health benefits, etc.), professional liability and general insurance, occupancy, equipment and furniture depreciation, leasehold improvement amortization, AECOM corporate home office allocation, travel and entertainment, business licenses and taxes, professional service costs and other office costs. The base for allocating the Indirect Overhead Cost and G&A Pools is direct labor dollars including any premium pay.

ATS calculates its depreciation expense in accordance with GAAP wherein fixed assets are capitalized and depreciated over their estimated useful lives. The Company utilizes the straight-line method of depreciation. The estimated service lives generally used are 3 to 5 years for vehicles and equipment, 7 years for furniture and fixtures, 3 to 5 years for software and computers, and the lesser of the lease term or useful life for leasehold improvements. The Company leases office space, copy machines and other office equipment under operating leases.

In addition, certain of the costs included in ATS' indirect cost pool such as employee medical insurance, state income taxes, professional liability and general insurance, workers compensation premiums and 401(k) company match costs, were actually paid by AECOM (parent) on behalf of ATS. ATS was charged for these costs either through its intercompany account with AECOM or it is accruing for such costs in anticipation of being charged by AECOM.

The cost transfer accounts are used to charge direct projects for the usage of company-owned equipment, supplies, etc. As projects use these items, ATS charges the project for them and then records a reduction (i.e., a credit) to the indirect cost pool. The transfer of costs is primarily to direct projects (i.e., contracts). During Fiscal Year 2012, ATS transferred the following types of costs from the indirect cost pool: field equipment and supplies, vehicle costs, reproduction costs and inter-departmental costs.

(4) Basis of Accounting for the Field Indirect Cost Rate

ATS calculates its Field Indirect Cost Rate (Field Rate) in part at the request of certain state agency customers. To calculate the Field Rate, ATS adjusts both the costs in the indirect overhead cost pool and also the direct labor base over which the pool is allocated. To adjust the indirect overhead cost pool, ATS starts with the total allowable indirect overhead cost pool and then eliminates the entire balance of each indirect expense account that contains costs that do not directly support or benefit field office operations. Accounts that were eliminated from the indirect overhead cost pool include: outside services, office rent, depreciation and amortization, communications, auto and truck and other facility costs.

After removing these costs from the indirect overhead pool, the remaining overhead costs are then allocated to both field rate jobs and to home office jobs. The costs that were removed are allocated solely to home office jobs. This approach is consistent with the methodology used in prior years.

AECOM Technical Services, Inc.

(A wholly-owned subsidiary of AECOM Technology Corporation)

Notes to the Schedules of the Indirect Cost Rates

Calculated in Accordance with Part 31 of the Federal Acquisition
Regulation for the Twelve Months Ended September 28, 2012

(5) Excess Compensation Analysis

ATS and AECOM Corporate used a two-step process to analyze their executive and employee compensation costs per the requirements of FAR Part 31.205-6. First, the compensation of the top 5 executives at both ATS and AECOM Corporate were compared to the FAR compensation benchmark resulting in total disallowances from indirect costs at ATS and AECOM Corporate of approximately \$602,000 and \$15,844,000, respectively.

In the second step, ATS and AECOM Corporate compared the compensation of other highly-compensated employees to the average compensation based on multiple surveys (more than 3). This step resulted in total salary disallowances from indirect costs at ATS and AECOM Corporate of approximately \$996,000 and \$1,138,000, respectively. An additional \$355,000 of excess compensation was identified in this last step that was attributable to ATS' direct labor, and ATS did not reduce its direct labor for this amount.

(6) AECOM Corporate Home Office Allocations

ATS receives an allocation of costs from AECOM Corporate (parent) that includes salaries, related fringe benefits, occupancy, insurance, travel, professional services, depreciation and amortization, and other general and administrative expenses. The G&A expenses includes the costs of executive management, legal, accounting, treasury, information systems, tax and compliance, human resources, and other corporate functions. These costs are allocated to ATS based upon a three-tier method, which allocates costs that are: (1) directly attributable to ATS; (2) separately associated with ATS that are allocated based upon appropriate bases that use Net Service Revenues (i.e., revenue earned on direct labor), total payroll dollars, number of users (e.g., number of employees with email accounts), headcount, or a combination thereof; and, (3) amounts remaining after the first two tiers, allocated based upon a three-factor formula that is computed using payroll dollars, net fixed assets and Net Service Revenues.

In FY '12, AECOM Corporate implemented a new method for allocating its costs to the various segments. The new methodology strengthens the causal and beneficial relationship between the Corporate Office costs and the benefitting segments, and the changes in the allocation method are also intended to simplify the allocation process. Overall, the new method follows the approach described above, and in the interests of simplification, the number of pools being allocated was reduced from 17 in the past to 7 in FY '12. AECOM Corporate's initial estimates of the effect of these changes on the allocation of its costs to ATS is that ATS' overall allocation is less.

The allocations of AECOM's Corporate Home Office costs have been properly adjusted to reflect FAR Part 31 disallowances. These amounts were determined by the multi-step process described above in Note 2. The net allowable costs for each of the Corporate Home Office cost pools are then allocated to ATS and other segments using the methodologies described above.

AECOM Technical Services, Inc.
(A wholly-owned subsidiary of AECOM Technology Corporation)
Notes to the Schedules of the Indirect Cost Rates
Calculated in Accordance with Part 31 of the Federal Acquisition
Regulation for the Twelve Months Ended September 28, 2012

(7) Management's Evaluation of Subsequent Events

Management has considered and evaluated significant subsequent events through March 20, 2013, and there were no significant subsequent events that would have a material effect on the FY '12 indirect rates.

AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)

Supplemental Schedule to Illustrate the Effect of Unallowable Costs

Calculated in Accordance with Part 31 of the Federal Acquisition Regulation

For the Fiscal Year Ended September 28, 2012

Description	Total Incurred Costs	Less: Unallowable Costs	Total Incurred Costs Without Unallowables	Notes
Home Office Overhead Costs				
Goodwill Valuation Adjustment	\$ 5,092,029	(5,092,029)	\$ -	a
Depreciation Expense	20,226,061	-	20,226,061	
Office Rent	72,259,389	-	72,259,389	
Equipment & Vehicle Leases	12,337,443	(977,733)	11,359,710	b
Office Equipment Expense	3,625,400	(307,730)	3,317,670	b
Software Licence and Maintenance	10,703,379	-	10,703,379	
Outside Services	2,011,320	(179,269)	1,832,051	b
Supplies, Postage, & Outside Repro	13,310,041	(1,120,470)	12,189,571	b
Utilities	2,803,992	-	2,803,992	
Telephone & Data Communications	14,410,975	(539,587)	13,871,388	b
	<u>\$ 156,780,029</u>	<u>\$ (8,216,818)</u>	<u>\$ 148,563,211</u>	
Total Indirect Overhead Costs Allocable to Both Home and Field Jobs				
Indirect Overhead Labor	\$ 166,056,534	\$ (1,881,146)	\$ 164,175,388	c
Fringe Benefits	307,302,678	(1,467,776)	305,834,902	d
Purchased Labor	1,977,898	(162,979)	1,814,919	b
Other Employee Benefits	5,738,976	(233,764)	5,505,212	e
Professional Services	21,567,557	(4,333,783)	17,233,774	e
Employment Services	532,486	(250,675)	281,811	e
Relocation	1,009,843	(219,682)	790,161	f
Advertising & Marketing	2,184,326	(863,869)	1,320,457	e
Dues, Licences, & Publications	3,160,373	(832,190)	2,328,183	g
Travel	19,069,035	(2,022,074)	17,046,961	h
Business Taxes and Licences	7,504,859	(378,853)	7,126,006	e
Bank Service Charges	10,606	(874)	9,732	b
General, Professional & Liability Insurance	22,920,595	-	22,920,595	
Miscellaneous Expense & Cost Recovery	(9,919,441)	(1,771,275)	(11,690,716)	b
Unallowable Lobbying & Contributions	1,162,356	(1,162,356)	-	i
AECOM Corporate Home Office Allocation	61,400,281	(5,926,053)	55,474,228	j
Other (Income) Expense	852,091	(2,103,304)	(1,251,213)	k
	<u>\$ 612,531,054</u>	<u>\$ (23,610,652)</u>	<u>\$ 588,920,402</u>	
General and Administrative Costs				
General & Administrative Labor	\$ 12,478,734	\$ (145,845)	\$ 12,332,889	c
Fringe Benefits	30,717,837	(129,886)	30,587,951	d
Bid & Proposal Labor	64,341,266	-	64,341,266	
Bid & Proposal Other	14,117,199	(2,050,911)	12,066,288	b
Purchased Labor	124,909	(10,292)	114,617	b
Other Employee Benefits	(732,350)	(3,152)	(735,502)	e
Depreciation Expense	447,824	-	447,824	
Office Rent	2,985,265	-	2,985,265	
Equipment & Vehicle Leases	599,101	(34,089)	565,012	b
Office Equipment Expense	71,315	(5,876)	65,439	b
Software Licence and Maintenance	364,077	-	364,077	
Outside Services	453,957	(14,538)	439,419	b
Professional Services	1,873,373	(689,635)	1,183,738	e
Employment Services	418,838	(63,223)	355,615	e
Relocation	4,800	(4,800)	-	f
Supplies, Postage, & Outside Repro	806,853	(17,291)	589,562	b
Telephone & Data Communications	1,286,357	(79,023)	1,207,334	b
Advertising & Marketing	20,486	(12,882)	7,604	e
Dues, Licences, & Publications	593,708	(27,590)	566,118	g
Travel	1,002,045	(108,767)	893,278	h
Business Taxes and Licences	12,194	(1,357)	10,837	e
Miscellaneous Expense & Cost Recovery	(54,935)	8,430	(46,505)	b
Unallowable Lobbying & Contributions	56,369	(56,369)	-	i
AECOM Corporate Home Office Allocation	14,521,980	(7,840,339)	6,681,641	j
State Income Tax	410,513	-	410,513	
Other (Income) Expense	(638,422)	1,071,481	433,059	l
Subtotal: G&A Costs	<u>\$ 148,083,293</u>	<u>\$ (10,215,954)</u>	<u>\$ 137,867,339</u>	

AECOM Technical Services, Inc.
(a Segment of AECOM Technology Corporation)
Supplemental Schedule to Illustrate the Effect of Unallowable Costs
Calculated in Accordance with Part 31 of the Federal Acquisition Regulation
For the Fiscal Year Ended September 28, 2012

Description	Total Incurred Costs	Less: Unallowable Costs	Total Incurred Costs Without Unallowables	Notes
Total Indirect Costs	\$ 915,394,376	\$ (42,043,424)	\$ 873,350,952	

The accompanying notes are an integral part of this schedule.

Notes:

- (a) The unallowable costs relate to the adjustment of the carrying value of goodwill (31.205-49).
- (b) The unallowable costs are due to application of the sample results. Sample "errors" are a combination of unallocable foreign activities (31.201), advertising and public relations (31.205-1), bad debts (31.205-3), charitable contributions (31.205-8), entertainment costs (31.205-14), costs relating to lobbying and governmental affairs (31.205-22) and mergers & acquisitions (31.205-27).
- (c) The unallowable indirect labor costs are related to foreign activities (31.201), advertising and public relations (31.205-1), charitable contributions (31.205-8), entertainment costs (31.205-14) and mergers & acquisitions (31.205-27).
- (d) The unallowable costs are compensation in excess of the Federal limit and the related reasonableness requirements (31.205-6).
- (e) The unallowable costs are due to application of the sample results. Sample "errors" are a combination of unallocable foreign activities (31.201), advertising and public relations (31.205-1), bad debt (31.205-3), charitable contributions (31.205-8), entertainment (31.205-14), fines and penalties (31.205-15), costs relating to lobbying and governmental affairs (31.205-22), mergers & acquisitions (31.205-27), meals that exceed the Federal per diem rate (31.205-46), costs related to legal and other proceedings (31.205-47), and costs of alcoholic beverages (31.205-51).
- (f) The unallowable costs are primarily lump-sum relocation payments in excess of the FAR limits (31.205-35) and voluntarily excluded amounts.
- (g) The unallowable costs relate to advertising and public relations (31.205-1), charitable contributions (31.205-8), lobbying and government affairs (31.205-22), and certain voluntarily excluded accounts.
- (h) The unallowable costs are due to the application of the sample results. Sample "errors" include unallocable foreign activities (31.201), advertising and public relations (31.205-1), charitable contributions (31.205-8), entertainment costs (31.205-14), costs relating to lobbying and governmental affairs (31.205-22) mergers & acquisitions (31.205-27), costs in excess of the Federal Per diem rates (31.205-46), first and business class airfare (31.205-46), and costs of alcoholic beverages (31.205-51).
- (i) The unallowable costs relate to lobbying and government affairs (31.205-22) and charitable contributions (31.205-8).
- (j) The unallowable costs are a combination of advertising and branding (31.205-1), compensation in excess of the Federal limit (31.205-6), contingency provisions (31.205-7), charitable contributions (31.205-8), interest income and expense (31.205-20), lobbying and government affairs (31.205-22), merger and acquisition costs (31.205-27), and travel costs in excess of the Federal Per diem rates (31.205-46).
- (k) The unallowable costs are for unallocable foreign activities (31.201), bad debts (31.205-3), contingencies (31.205-7), and fines and penalties (31.205-15).
- (l) The net unallowable costs are the net foreign exchange gains (31.201) offset by bad debts (31.205-3).

Cleary Government Services, LLC

REPORT OF INDEPENDENT PUBLIC ACCOUNTANT

To: Mr. Raymon Thompson
Government Controller, AECOM Technical Services, Inc.

Re: Internal Control Structure and Compliance with Applicable Laws and Regulations

We have audited the Schedules of the Indirect Cost Rates of AECOM Technical Services, Inc., a wholly-owned subsidiary of AECOM Technology Corporation for the twelve months ended September 28, 2012, and we have issued our report thereon dated March 21, 2013. These schedules are the responsibility of AECOM Technical Services, Inc.'s (ATS) management.

Internal Control Structure

We conducted our audit in accordance with auditing standards generally accepted in the United States and also the standards applicable to financial audits contained in the *Government Auditing Standards* (July 2007 Revision), issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the aforementioned schedules are free of material misstatement.

The management of ATS is responsible for establishing and maintaining an internal control structure and for maintaining internal control over financial reporting. In fulfilling this responsibility, estimates and judgements by management are required to assess the expected benefits and related costs of internal control structure policies and procedures. The objectives of an internal control structure are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of the aforementioned schedules in accordance with applicable regulations including Part 31 of the Federal Acquisition Regulation. Because of the inherent limitations in any internal control structure, errors or irregularities may nevertheless occur and not be detected. Also, projection of any evaluation of the structure to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

In planning and performing our audit of Schedules of the Indirect Cost Rates, we obtained a general understanding of ATS' internal control structure. That is, we obtained a general understanding of the design of the policies and procedures relevant to the aforementioned Schedules and whether these policies and procedures were in operation. Specifically, we obtained a general understanding of the controls over payroll processing, time reporting, cash disbursements, expense reporting and identification of unallowable costs. We assessed control risk in order to determine the nature and extent of our testing procedures for the sole purpose of expressing our opinion on the aforementioned Schedules but not for the purpose of expressing an opinion on the effectiveness of ATS' internal controls over financial reporting. Accordingly, we do not express an opinion on the effectiveness of ATS' internal controls over financial reporting. Further, in our assessment of control risk, we

concluded that substantive testing of the aforementioned Schedules was appropriate, and consequently, our compliance testing of ATS' internal control structure was very limited in its nature and scope.

The AICPA's Statement on Auditing Standards No. 115 states that a deficiency in internal control exists when the design or operation of an internal control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct misstatements on a timely basis.

A material weakness is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the Schedules of the Indirect Cost Rates will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or combination of control deficiencies, in internal control that is less severe than a material weakness, yet important enough to warrant the attention of management.

Our consideration of internal control over financial reporting was for the limited purpose described above and would not necessarily identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Nonetheless, we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses or significant deficiencies, as defined above.

Compliance with Applicable Laws and Regulations

Compliance with laws, regulations and contract terms applicable to ATS is the responsibility of ATS' management. As part of obtaining reasonable assurance about whether the aforementioned schedules are free of material misstatement, we performed tests of ATS' compliance with Part 31 of the Federal Acquisition Regulation. However, the objective of our audit of the Schedules of the Indirect Cost Rates was not to provide an opinion on overall compliance with those provisions. Accordingly, we do not express such an opinion. Nonetheless, the results of our tests did not disclose any instances of noncompliance that are required to be reported under *Government Auditing Standards*.

This report is intended for the information of ATS' management and those government agencies with whom ATS has contracted. It is not intended to be and should not be used by anyone other than the aforementioned parties nor should it be used for any other purpose.

Cleary Government Services, LLC

Chicago, Illinois
March 21, 2013