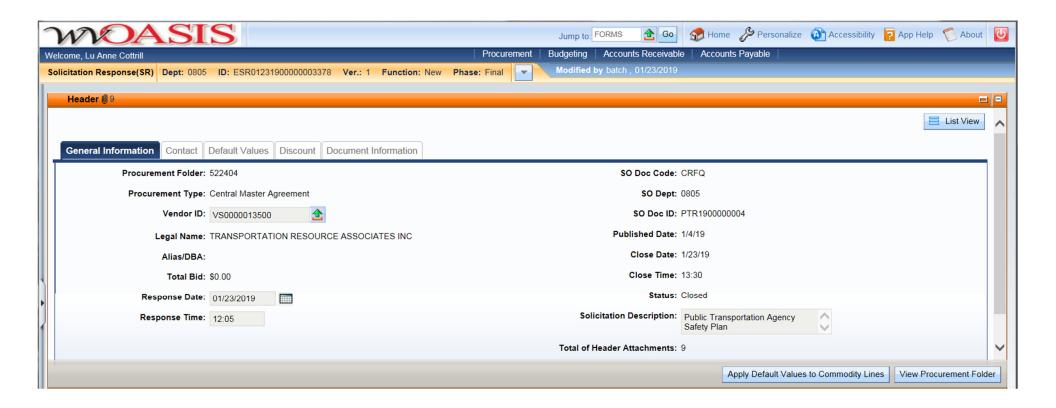
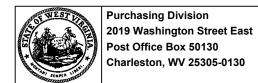


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





State of West Virginia Solicitation Response

Proc Folder: 522404

Solicitation Description: Public Transportation Agency Safety Plan

Proc Type: Central Master Agreement

Date issued	Solicitation Closes	Solicitation Response	Version
	2019-01-23 13:30:00	SR 0805 ESR01231900000003378	1

VENDOR

VS0000013500

TRANSPORTATION RESOURCE ASSOCIATES INC

Solicitation Number: CRFQ 0805 PTR1900000004

Total Bid : \$0.00 **Response Date**: 2019-01-23 **Response Time**: 12:05:25

Comments:

FOR INFORMATION CONTACT THE BUYER

Michelle L Childers (304) 558-2063 michelle.l.childers@wv.gov

Signature on File FEIN # DATE

All offers subject to all terms and conditions contained in this solicitation

Page: 1 FORM ID: WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Public Transportation Agency Safety Plan				

Comm Code	Manufacturer	Specification	Model #
94131503			

Extended Description:

Vendor MUST complete the ATTACHED Pricing Page, Exhibit A. If bidding electronically, vendor is to put \$0.00 on the commodity line in WVOasis, complete the Excel pricing page, and upload into WVOasis as an attachment. Only pricing submitted via Exhibit A pricing page will be evaluated for award.

Comments: For complete breakdown of pricing, please see Exhibit A, attached.

Proposal for Public Transportation Agency Safety Plan Consulting Services

State of West Virginia Request for Quotation PTR 190000004



Submitted to: State of West Virginia Department of Administration Purchasing Division 2019 Washington Street E Charleston, WV 25305



Submitted by: Transportation Resource Associates, Inc. 1608 Walnut Street Suite 1602 Philadelphia, Pennsylvania 19103



January 23, 2019

Michelle L. Childers Senior Buyer West Virginia Purchasing Division 2019 Washington Street, East Charleston, WV 25305-0130 1608 Walnut Street
Suite 1602
Philadelphia, Pa.
19103
Phone: 215-279-6811
Fax: 215-546-9120
www.traonline.com

Submitted Electronically

Re: TRA Proposal to provide Public Transportation Agency Safety Plan Consulting Services to the West Virginia Department of Transportation, Division of Public Transit

Dear Ms. Childers:

Thank you for the opportunity to present this proposal in response to West Virginia's Request for Quotation (RFQ) CRFQ 0805 PTR1900000004, for Public Transportation Agency Safety Plan (PTASP) consulting services. TRA has an unparalleled background in transit safety consulting projects, including:

- Development of safety plans
- Direct safety consulting with transit agencies, including safety organization, procedures, processes, training, and monitoring
- Extensive, unmatched experience in state oversight of FTA-compliant safety oversight programs
- Direct consulting, technical assistance, and oversight projects covering bus and rail agencies of all sizes and organizations, throughout the United States

Based on West Virginia's RFQ, TRA appreciates that a comprehensive and flexible work approach, focused on individual transit agencies' needs, State requirements, and Federal Transit Administration compliance, is key to project success. TRA is prepared to meet these requirements, as well as the task and contractual requirements described in the RFQ. We are ready to begin work immediately, and eagerly anticipate the possibility of working with West Virginia and its Department of Transportation on this critical project.

TRA's staff and our proposed team includes decades of transit safety planning expertise, and personnel currently working with West Virginia DOT's Division of Public Transit on its state safety oversight program. As the Project Principal, I have prepared this proposal personally, and am available (609 320-8111 [m] or daniel.hauber@traonline.com) to answer any questions about TRA's experience, approach, cost, or other factors. Again, thank you for the opportunity to present this proposal.

Sincerely,

Daniel T. Hauber Vice President

3. TRA Qualifications

The PTASP requirement is relatively new, published as part of the Federal Transit Administration (FTA) final rule, 49 CFR §673. Transit agencies covered under the rule must develop a compliant PTASP by July 20, 2020, and must also begin to structure, implement, train to, and monitor a safety management system (SMS). While the PTASP requirement and SMS structure are relatively new, they do have roots in transit and transportation safety programs. The MAP-21 legislation that dictated §673, prior FTA rules related to rail state safety oversight, and SMS experience in industries including aviation, help to inform the new PTASP requirements and their implementation.

As part of FTA-guided transit safety oversight programs and direct transit agency consulting, TRA has extensive experience that is directly applicable to this project. Core project skills and experience samples are presented below. TRA's key staff have the FTA-required *transit safety and security program* (TSSP) certification, as well as membership with and certification from the World Safety Organization. TRA's consulting staff work closely with transit state safety oversight agencies across the country (including West Virginia's Department of Transportation) to transition to the new PTASP and SMS structures, and our staff is very well-versed in 49 CFR§673 and its specific requirements. Finally, TRA's staff understand the FTA's transit asset management requirements, and their impact on safety of equipment, facilities, and vehicles. This relationship makes the transit asset management plan a key part of safety planning, and interdependent with the PTASP and the overall SMS process.

Current experience with Division of Public Transit

TRA is the contractor for the Division of Public Transit's (DPT) state safety oversight (SSO) program. As part of several safety responsibilities under that program, TRA is assisting DPT with development, implementation, and oversight of PTASP requirements for the West Virginia University Personal Rapid Transit (in this case the university itself will develop the PTASP, according to DPT and FTA requirements). TRA is also working to help set and implement PTASP standards in several of our SSO projects (see below).

3.1 Work experience with FTA safety programs and planning

TRA has worked on transit SSO programs since the company's inception in 1991, including working on FTA-compliant safety oversight programs since the FTA's first state safety oversight rule was established in 1996. TRA also has more than five years' past experience with the FTA's project management oversight programs, and direct work experience with the FTA, conducting a nationwide assessment of security programs at the top 50 U.S. transit agencies (by asset value).

3.2 Specific work examples

Because the PTASP requirement is relatively new, and organized safety planning has varied somewhat between U.S. bus transit agencies, TRA believes that experience in the following areas is essential to this project:

- Experience with transit bus agencies, and transit bus safety programs: As shown below, TRA has completed bus safety assignments both directly for transit agencies, as well as audit functions for oversight agencies.
- Experience with FTA Section 5307 recipients: In 2018, TRA performed a safety audit of the Petersburg Area Transit system, on behalf of the Virginia Department of Rail and Public Transit (DRPT), using SMS principles and recommending implementation of specific SMS-based activities throughout the agency. TRA used its understanding of

transit safety and federal regulatory requirements to produce a comprehensive report that identified key organizational, safety, and process implementation gaps.

- Experience with varying sizes and types of transit agencies: As shown below, in our state DOT experience and in attached resumes, TRA has worked with some of the largest U.S. transit agencies (such as Washington Metropolitan Area Transit Authority and Chicago Transit Authority), and with some of the smallest transit providers (such as helping CamTran in Johnstown, Pennsylvania to formalize and operationalize the system safety program for its small inclined plane). We pride ourselves on our ability to scale our safety consulting to each transit agency's organization, capabilities, and operating situation.
- Experience with FTA regulations, audits, and requirements: As shown below and throughout our proposal, TRA has over 22 years' experience with FTA requirements, having worked in state safety oversight projects since the FTA's initial safety rule (1997). This work includes helping states to implement such requirements, auditing transit agencies to FTA requirements, assisting states being audited by the FTA, and helping transit agencies formulate and implement FTA-compliant safety programs.

In order to show the breadth of TRA's recent and current projects, TRA offers the project examples shown below. Additional relevant examples are available on our website or upon request.

TRA Project Examples

Client: Virginia Department of Rail and Public Transportation (DRPT)

Project: Petersburg Bus Safety Review

Location: Petersburg, VA

Duration: 2018

Reference: Andrew Ennis, State Safety Oversight Program Manager

Phone: 804-786-3434

TRA performed a comprehensive safety review of the bus and paratransit system in the city of Petersburg, Virginia, on behalf of the DRPT. The review included a comprehensive Safety Management System (SMS) approach to evaluating safety management, including the safety organization, operations, maintenance, and associated training and certification programs. The review was a deep-dive into the existing business processes, as well as written policies and procedures, of the system. TRA inspected vehicles, facilities, and equipment, as well as a library of documents governing the safety, security, operations, and maintenance of the bus and paratransit system. TRA produced a comprehensive report that identified key organizational, safety, and process implementation gaps.

Client: Port Authority of New York & New Jersey (PANYNJ)

Project: MAP-21 Implementation

Location: New York, NY and Newark, NJ

Duration: 2018 - Present

Reference: James Keane, General Manager, Operations Safety

Phone: 201-216-2821

TRA is currently providing technical consulting services to the PANYNJ to identify current safety management practices in each business line of the PANYNJ, and develop a plan for agency-wide implementation of an SMS. The effort includes the assessment and documentation of current safety management practices, constant coordination and collaboration with PANYNJ leadership, and the development of a comprehensive plan. The project also requires coordination with another contractor conducting similar efforts related to asset management.

Client: Florida Department of Transportation (FDOT), District 6

Project: Bus Safety and Security Oversight Services, Miami-Dade Transit

Metrobus

Location: Miami, FL Duration: 2007 -Present

Reference: Robert E. Westbrook, Transit Operations/Safety Administrator

Phone: 850-414-4533

In 2007, 2010, 2014, and 2018, TRA supported FDOT District 6 in the performance of the Bus Transit System Safety and Security Review of the Miami-Dade Transit (MDT) Metrobus system. In each of the audits, TRA followed the requirements of 14-90 F.A.C. and performed a thorough assessment of MDT's compliance with state requirements. TRA subject matter experts interviewed front line and management personnel, assessed the condition of and maintenance records for over 70 buses (or 10% of the fleet), and reviewed and assessed the central program documents such as the system safety program plan (the predecessor to the PTASP), safety data analysis, operational and maintenance performance data, standard operating procedures, rule books, maintenance manuals, and other documents comprising the safe operations of Metrobus. TRA issued a final report with completed checklists of compliance and listing areas of concern and findings requiring corrective action. TRA also provided detailed narratives explaining all areas reviews, their current state, and ways in which to improve overall performance, with a focus on compliance with all FDOT safety and security requirements. Also note that TRA is working closely with FDOT to develop state-wide PTASP and SMS requirements for its state safety oversight program.

Client: West Virginia Department of Public Transit (DPT)

Project: State Safety Oversight Location: Morgantown, WV Duration: 2016 - Present

Reference: Karen Zamow, State Safety Oversight Program Manager

Phone: 304-558-9233

TRA is West Virginia's contractor for its SSO program, which oversees the West Virginia University's Personal Rapid Transit (PRT) line. TRA has worked with state personnel to formulate and implement SSO program procedures and standards, including FTA-compliant processes at WVU, including hazard management, accident investigation, safety and security audits, and others. TRA has also conducted a baseline audit of the PRT, and has worked with the state to oversee safety certification of a new PRT train control system. TRA and the SSO program will begin on-site, ongoing auditing of PRT safety plan elements in 2019.

Client: Pennsylvania Department of Transportation (PennDOT)

Project: Rail Transit Safety Review Program (RTSRP)
Location: Philadelphia, Pittsburgh, and Johnstown, PA

Duration: 1992 - Present

Reference: Elizabeth Bonini, RTSRP Program Manager

Phone: 717-787-1207

The RTSRP oversees safety and security of the light rail and subways of the Southeastern Pennsylvania Transportation Authority (SEPTA); the light rail, busways, and inclined planes of the Port Authority of Allegheny County (PAAC); and the inclined plane of the Cambria County Transit Authority (CamTran). TRA technical assistance for program activity includes extensive ongoing on-site safety and security audits of covered transit agency compliance with established procedures and standards, as well as routine operations and rule compliance observations. TRA works with the covered transit agencies to monitor accidents, incidents, hazards, and

corrective action plans. Beyond that, TRA provides technical assistance in safety and security best practices. TRA also assists transit agency personnel in conducting internal audits, and executing other safety and security initiatives. The Program has ongoing communication and frequent face-to-face meetings with the covered transit agencies to produce positive results for the client and the transit agencies alike. This proactive, collaborative relationship with rail transit agencies defines the RTSRP State Safety Oversight Program.

CamTran, which is a smaller urban transit system, is particularly relevant for this WV PTASP project. TRA (including our proposed project principal) has worked very closely with CamTran over the last 22 years to establish, develop, and implement an FTA-compliant safety program. As part of this work, TRA worked carefully to balance FTA requirements with transit agency organization, capacity, and operating situation.

Client: Hawai'i Department of Transportation (HDOT)

Project: State Safety Oversight Program

Location: Honolulu, HI Duration: 2017 - Present

Reference: Brandon Eshenour, State Safety Oversight Program Manager

Phone: 808-587-2136

TRA's project team works with HDOT to identify, analyze, and address issues related to both overall program structure and the Honolulu Rail Transportation Project (HRTP) system in particular. The Honolulu Authority for Rapid Transportation (HART)'s rail project is in the construction phase, and HDOT and TRA are actively reviewing issues related to safety certification, testing, and agency safety structure. At the same time, HDOT and TRA are working toward full implementation of the state's FTA-certified SSO program at the HRTP.

3.3 Experience with at least other state departments of transportation with references

TRA has 17* current or recently-completed transit state safety oversight projects, most of which are run by state departments of transportation including the West Virginia DPT. TRA also has a current project with the Connecticut Department of Transportation for a state-wide risk and safety assessment, and a past project with the department related to safety and security certification and oversight of the CTfastrak busway network. TRA has been working for various state departments of transportation since its inception in 1991, with PennDOT as one of our first (and still our longest-standing) clients.

(*Including West Virginia, Hawaii, Oregon, Utah, Texas, Michigan, Missouri, Illinois, Maryland, Florida, Pennsylvania, and Oklahoma, in addition to other governmental agencies including Minnesota's Department of Public Safety, the District of Columbia's Fire and Emergency Medical Services department, the Tristate Oversight Committee [Washington, D.C., Maryland, and Virginia], the Metrorail Safety Commission [D.C.], and Virginia DRPT, which all fulfill the same function here as state DOTs, as well as the Port Authority of New York and New Jersey which is a congressionally-sanctioned bistate authority.)

3.4 References

For project descriptions for the below-listed state departments of transportation, please see table above.

West Virginia Department of Transportation

Karen Zamow, State Safety Oversight Program Manager

1900 Kanawha Blvd., East Building 5, Room 650 Charleston, WV 25305

Phone: 304-558-9233

Hawaii Department of Transportation

Brandon Eshenour, State Safety Oversight Program Manager 869 Punchbowl Street #511 Honolulu, HI 96813

Phone: 808-587-2136

Proposed Personnel

The TRA team will be led by Daniel Hauber, who is also the Project Principal for our West Virginia SSO Program project. James Young is proposed as the Project Manager, who will be supported by Project Analysts as needed. In addition, transit safety consultants Ronald Keele and William Matthews will serve as Subject Matter Experts. All key personnel (and most proposed personnel) have attained the TSSP certification from the USDOT's Transportation Safety Institute.

Team members will fulfill the following general roles. Task-specific roles are shown in the section below.

Project Principal: Daniel Hauber will be responsible for directing the project overall; ensuring compliance with DPT, FTA, and industry requirements; resolving internal or external project problems as needed; and conducting quality assurance and project management oversight.

Project Manager: James Young will be responsible for project scheduling, task identification and assignment, primary interaction with DPT, and primary interaction with transit agencies (as authorized by DPT). Mr. Young will also be responsible for identifying and assigning appropriate TRA team members for each work task, and recruiting additional TRA resources (with DPT approval) if needed.

Subject Matter Experts: Ronald Keele and William Matthews will be responsible for all technical aspects of the project, including detailed task development and work plan steps. They will be responsible for identifying and recommending appropriate safety standards and expectations for DPT programs, assessing transit agency capabilities and implementation, and helping transit agencies interpret and apply safety requirements. Mr. Keele and Mr. Matthews will be responsible for ensuring that PTASP content and SMS content are appropriately scaled to the size and organization of each of the eight transit agencies covered under the project. Mr. Keele will be the primary transit safety expert, while Mr. Matthews will provide as-needed technical support and additional staffing as needed.

Project Analysts: TRA's Project Analysts will assist in all aspects of project execution, including organizing interview and on-site notes and records; authoring and revising reports at PM and SME direction; organizing and analyzing data, conducting transit agency, regulatory, and industry research; and conducting front-line quality control activities.

Complete personnel resumes are included at the end of this document.

Tasks & Deliverables

Generally, TRA recommends a project approach that incorporates the following principles:

- We will work closely with DPT to ensure complete understanding of West Virginia's project goals and objectives, and to ensure they are incorporated in our ongoing work.
- We will ensure that activities are focused on FTA regulatory compliance and recommended best practices.
- We will work closely with each of the eight transit agencies to understand their specific operating situations, and to ensure that PTASP content and SMS programs are scaled to meet each agency's organization and capabilities.

TRA has developed the following tasks and deliverables based on West Virginia's RFQ (and specifically based on Exhibit A). TRA is prepared to complete all RFQ-described tasks and work, including monthly progress reports and other project management.

It is critical to note that many of these tasks will overlap – for example, development of the SMS program will overlap with PTASP development – and the written plan will describe the safety management system processes. TRA will also work with transit agencies to identify, analyze, and prioritize safety issues. This will impact safety reporting and safety performance targets, and these targets are likely to vary from one agency to another.

West Virginia PTASP Tasks						
Task No. (from Ex. A)	Description	Planned Subtasks	Deliverables			
4.1.1	Assisting small urban area transit providers in compiling internal information necessary to support planning process	 Compile project-wide questionnaire and document request Conduct on-site interviews with safety, operations, maintenance, and other relevant representatives at each transit agency Interview MPO representatives via teleconference or online survey tool, identify safety goals and targets, and any MPO- or transit agency-specific needs 	 Questionnaire and survey tools Technical memo highlighting interviews by transit agency and MPO Cross-agency matrix of needs, opportunities, and potential pitfalls, including assessment of which transit agencies may require more effort to complete future tasks 			

	West Virginia PTASP Tasks							
Task No. (from Ex. A)	Description	Planned Subtasks	Deliverables					
4.1.2	Develop small urban transit provider safety plan from an FTA template utilizing safety management systems safety methodology	 Analyze and format information from information collection task to fit FTA template and incorporating SMS elements described below, as well as national public transportation safety plan requirements Draft PTASP for each transit agency and submit first example to DPT for comment, revise as needed Submit draft PTASPs to respective transit agencies for review and comment, specifically identifying areas that transit agencies may need to complete, develop, or modify, and revise as needed Recommend or draft revisions to the group transit asset management plan, at the direction of DPT, to match PTASP content and/or to match safety goals and measures 	 Draft and final PTASPs for each transit agency, as noted Updated draft language for transit asset management plans, as needed 					

	West Virginia PTASP Tasks						
Task No. (from Ex. A)	Description	Planned Subtasks	Deliverables				
4.1.3	Technical assistance to small urban transit providers for implementing new safety plan	 Conduct gap analysis between information gathered and final plan (with FTA requirements), identify likely areas requiring assistance Conduct conference call with each transit agency after their review of PTASP, identify assistance areas Formulate technical assistance presentations and training Deliver technical assistance including on-site presentations and training at each transit agency 	 Written gap analysis Technical memo detailing onsite and off-site assistance and transit agency-specific issues 				
4.1.6.1	Utilize FTA PTASP template and applicable FTA final rules	TRA will utilize FTA templates and final rule requirements to complete tasks herein, including 4.1.1 above					
4.1.6.2	Ensure transit providers utilize appropriate MAP-21 requirements	As noted herein, TRA will ensure that its work, and resulting transit agency safety plans and programs, are compliant with FTA and MAP- 21 requirements					
4.1.6.3	Development of an organizational SMS program scaled to the size and capabilities of the subject small urban transit organization including SMS training	 Identify specific enhancements or changes that may be needed to organization or processes to allow for SMS implementation and success (e.g., safety data collection practices, safety reporting mechanisms, etc.) Incorporate any necessary changes into PTASP as described above 	 SMS-focused sections of PTASPs for each transit agency SMS tools and procedures that may be needed to implement PTASP and SMS requirements (e.g., written procedure for employee safety reporting) 				

	West Virginia PTASP Tasks						
Task No. (from Ex. A)	Description	Planned Subtasks	Deliverables				
4.1.6.4	Develop safety performance targets for small urban transit providers	 As part of initial information gathering, technical assistance, and PTASP drafting, work with transit agencies to identify and analyze safety issues Develop appropriate safety performance targets and key performance indicators to address safety issues Reconcile transit agency safety targets and measures with MPO requirements as needed Integrate safety targets into SMS, PTASP (or PTASP appendices), and ongoing safety processes 	 Safety performance targets and measures sections of PTASP Additional implementation documents (e.g., procedures, tracking spreadsheets, etc.) that may be needed to implement SMS and PTASP requirements relative to safety performance 				
4.1.6.5	Develop SMS safety training curriculum for employees	Develop presentations, tests, instructor materials, and course guides consistent with each transit agency's PTASP, SMS programs, and existing training programs (where possible)	Training materials as noted				
4.1.6.6	MPO coordination assistance	 Coordinate with MPOs as described above, ensuring conformance with MPO safety and planning requirements Ensure that PTASP document and SMS programs have appropriate MPO reporting and interface 	Technical memo for MPO issues, if not included in other deliverables				

	West Virginia PTASP Tasks						
Task No. (from Ex. A)	Description	Planned Subtasks	Deliverables				
4.1.6.7	Develop process and schedule for conducting annual programmatic/plan reviews	 Provide detailed PTASP review plan and schedule, with criteria for potential updates Provide detailed SMS selfassessment scheme for transit agency use Develop detailed assessment checklist and review tools for DPT annual use 	 Transit agency tools incorporated in PTASP document Checklists for DPT use in reviewing PTASPs and SMS implementation 				
4.2	Technical assistance/review service to the Division for safety plans	 Provide detailed, transit agency-specific comments on PTASP documents and SMS programs during initial implementation and as requested by DPT Provide annual assessment of transit agencies' internal PTASP and SMS assessments, and each agency's decision to update PTASP or not, develop plan- and SMS-specific comments for each transit agency as needed 	 Completion of PTASP checklists as noted in task above Additional technical memos documenting recommendations to DPT, as needed 				
	Provide monthly progress report	 Update project schedule and budget monthly, report to DPT Identify any issues, roadblocks, or new issues for DPT review Conduct minimum monthly conference call to review project progress (more frequently as needed) 	Monthly written progress report, using a DPT-approved format				

Project Cost Exhibit A spreadsheet is submitted separately with project costs.				

The following are detailed resumes for proposed key personnel and sample project analysts.

Personnel Resumes

Daniel Hauber Transportation Resource Associates, Inc. Vice President Years of Transit Experience: 22 Years with TRA: 22

Daniel Hauber is a Vice President at TRA and has been an integral part of its state safety oversight technical and management teams for his entire career. He specializes in transportation projects related to safety, operations, and maintenance. Mr. Hauber has been a technical auditor for rail transit safety oversight in 16 states and jurisdictions, and has project manager for several of those efforts. He helps states and oversight agencies assess their covered transit agencies, and to stay in compliance with FTA requirements and best practices. He has conducted audits in areas including system safety, security, operations, training, fixed facilities maintenance, vehicles maintenance, and safety and security certification. He has helped states with both triennial reviews and ongoing safety oversight programs.

Education

- Masters Certificate, Project Management Villanova University 2013
- M.B.A., Business Administration Temple University 2004
- B.A., Urban Studies University of Pennsylvania 1997

Certifications

• Transit Safety & Security Program (TSSP) Certificate – U.S. Department of Transportation, Transportation Safety Institute (TSI) – Transit Rail Program – 2018

Selected Relevant Experience

West Virginia Department of Transportation (WVDOT) – State Safety Oversight Program – Morgantown, WV

Mr. Hauber is the project principal for West Virginia's SSO program. The project has worked towards and successfully obtained the state's SSO certification under MAP-21 and Part 674 requirements. At the same time, WVDOT and TRA are working closely with the covered transit agency – the Personal Rapid Transit system at West Virginia University – to apply the FTA's SSO requirements. WVDOT and TRA are actively working to ensure FTA-compliant processes at WVU, including hazard management, accident investigation, safety and security audits, and others.

Connecticut Department of Transportation (CTDOT) – Multi-Modal Transportation Safety (Risk Management) Program Review – Hartford, CT

Mr. Hauber is the project principal for this comprehensive assessment of CTDOT's safety and risk programs. The effort covers internal functions such as highway, engineering, railroad, and transit operations, as well as contractor operations and interface with other stakeholders. The project examines internal, CTDOT plans and programs, as well as external regulatory requirements and best practices. The final assessment deliverables will include a comprehensive rewrite of the state's risk and safety program plans, and detailed recommendations for process improvements.

Santa Clara Valley Transportation Authority (VTA) – Comprehensive Assessment of System Safety – San Jose, CA

Mr. Hauber orchestrated and led a TRA project to assess five specific safety incidents; the Authority's operations, maintenance, and safety responses; and implications for VTA's safety functions. Mr. Hauber was a primary interface with VTA safety and risk personnel, and led many of the field interviews as well. He had overall responsibility for project scheduling and reporting.

Pennsylvania Department of Transportation (PennDOT) – Rail Transit Safety Review Program – Philadelphia, Pittsburgh, and Johnstown PA

Mr. Hauber is the project principal for Pennsylvania's Rail Transit Safety Review Program (RTSRP), and has been a primary technical auditor in areas including safety (accident investigation, safety certification, corrective action plans, internal audit oversight, and hazard management), training, maintenance and infrastructure, and operations. In addition to auditing responsibilities, Mr. Hauber has been a key member of the RTSRP team for activities including accident investigations, system safety and security plan review and approval, corrective action plan monitoring, internal and external reporting, and overall state safety oversight program direction. He was previously the project manager for the program (since delegated within TRA). Mr. Hauber has been part of the RTSRP team since 1997.

Hawaii Department of Transportation (HDOT) – State Safety Oversight Program – Honolulu, HI

Mr. Hauber is the project principal for the Hawaii SSO program, and works with TRA's project team to identify, analyze, and address issues related to both overall program structure and the Honolulu Rail Transportation Project (HRTP) system in particular. HART's rail project is in the construction phase, and HDOT and TRA are actively reviewing issues related to safety certification, testing, and agency safety structure. At the same time, HDOT and TRA are working toward full implementation of the state's FTA-certified SSO program at the HRTP.

Minnesota Department of Public Safety (DPS) – Rail Safety Oversight Program – Minneapolis and St. Paul, MN

Mr. Hauber currently serves as the project principal for Minnesota rail safety oversight. He worked with the Minnesota State Patrol to formulate and implement its state safety oversight program starting in 2004, and continues to work with state officials to ensure program viability and effectiveness. Mr. Hauber started as the contract project manager (since delegated within TRA), and continues to serve as a senior advisor as the program ensures its compliance with MAP-21 requirements. Mr. Hauber has been responsible for technical and field audits in areas including safety (including accident investigation, safety certification, corrective action plans, internal audit oversight, and hazard management), security, operations, training, maintenance, and new/capital projects (including three substantial light rail extensions).

Maryland Department of Transportation (MDOT) – State Safety Oversight Program – Baltimore, MD

Mr. Hauber has been responsible for several on-site audits and reviews of Baltimore MTA rail operations, maintenance, and related topics, affecting both light rail and heavy rail modes. Specific audit topics have included operations, training, rule compliance, signals maintenance, traction power maintenance, track maintenance, roadway worker protection, and safety management. Mr. Hauber has been part of the MDOT project team since 2001, and has been a part of five on-site triennial audits.

Florida Department of Transportation (FDOT) – Rail Fixed Guideway Transit Safety and Security Oversight Program – Jacksonville, Miami, Tampa, and Fort Lauderdale, FL

Mr. Hauber has been a technical auditor on the FDOT team, and has been responsible for reviewing maintenance, operations, and safety topics for Miami Metro Rail (metro/heavy rail mode), Miami Metro Mover (automated people mover), Jacksonville Skyway (automated peoplemover), Miami Airport (automated people movers), and Miami-Dade Transit (bus). Mr. Hauber has audited Miami-Dade Transit safety in maintenance topics including track, bridges

and structures, train control, facilities, traction power, and passenger vehicles. He has also been a primary auditor in areas including roadway worker protection, operations, and system safety. He has been part of the FDOT project team since 2005.

Illinois Department of Transportation (IDOT) – State Safety Oversight Program – Chicago and St. Clair County, IL

Mr. Hauber serves as the project principal for the IDOT state safety oversight program. He works closely with the project manager and technical team to help IDOT transition into its new SSO role, and to meet emerging FTA and MAP-21 requirements. He has also completed technical audits as part of IDOT's triennial on-site review. Mr. Hauber completed similar program-level and auditing work for the RTA SSO program, which oversaw the CTA from 2001-2016, and the St. Clair County SSO program, which was previously responsible for Bi-State/Metro oversight.

Regional Transportation Authority (RTA) – State Safety and Security Oversight Program of Chicago Transit Authority (CTA) – Chicago, IL

Mr. Hauber was part of the RTA state safety oversight team from 2001 through the program's conclusion in 2016. He participated in five RTA triennial audits in areas including infrastructure maintenance (facilities, stations, signals, track, structures, and traction power elements), operations, railcar maintenance, training, and system safety. Mr. Hauber also assisted RTA with high-level program direction, and led several special audits and investigations, including of critical safety and whistleblower issues, accident investigations, corrective action plan followup, and special infrastructure maintenance assessments. He previously served as the contract project manager (since delegated within TRA), and served as a senior advisor to the program until its closure.

Oregon Department of Transportation (ODOT) – State Safety and Security Oversight Program – Portland, OR

Mr. Hauber has worked with ODOT's state safety oversight program since 1998, and previously acted as TRA's project manager (since delegated within TRA). He has been responsible for organizing and implementing several triennial audits and pre-revenue service reviews, and has participated in eight such audits and reviews. During his work for ODOT, Mr. Hauber has been responsible for technical audits in areas including track, signals, vehicles, structures, and traction power maintenance, operations and supervision, training, and safety functions. His auditing and project management work has related to both the TriMet light rail system and the Portland Streetcar.

Texas Department of Transportation (TxDOT) – State Safety and Security Oversight Program – Dallas and Houston, TX

Mr. Hauber has been responsible for leading technical audits including track, signals, traction power, elevator/escalator maintenance, emergency equipment, operations, and technical training. Mr. Hauber has been a key team member for six total triennial audits, three audits at DART in Dallas and three at Houston Metro.

Port Authority of New York and New Jersey (PANYNJ) – AirTrain Safety Oversight Board (ATSOB) – Newark, NJ and New York, NY

Mr. Hauber has been part of triennial audit teams at both the Newark and JFK AirTrain automated fixed guideway systems. He has been responsible for technical audits in areas including track and guideway maintenance, train control, traction power, passenger stations, elevator/escalator maintenance, training, and operations control centers. Mr. Hauber has been a significant part of technical audits in system safety areas as well, including configuration management, safety certification, hazard management, and accident investigation. He has

participated in seven comprehensive on-site audits. Mr. Hauber has also led and participated in several on-site incident and hazard investigations, both at Newark and JFK AirTrain sites.

Sound Transit/Talson Solutions – Safety and Security Certification Program Audits – Seattle, WA

TRA, under subcontract to Talson Solutions, is working to plan, program, and execute independent audits of Sound Transit's safety and security certification programs. Sound Transit has several large-scale, capital projects in design and construction, and has retained the Talson-TRA team to audit safety and security requirements of physical construction, training, operating and maintenance procedures, and other critical project elements. Mr. Hauber is TRA's project principal, and works with its project manager and team to ensure timely, thorough, and quality completion of on-site and off-site audit activities.

Santa Clara Valley Transportation Authority – Rail State Safety Oversight Audit Support – San Jose, CA

Mr. Hauber was the project principal as the TRA team assisted VTA with a state safety oversight audit and associated findings. TRA provided VTA with independent analysis and evaluation of state audit findings related to vehicle, track, signals, SCADA, traction power, and right-of-way maintenance; as well as operations and the rail operations control center. TRA also conducted additional, independent audits for each of the identified areas, providing objective findings and process evaluation, and recommendations for corrective action plans and paths forward. The team helped VTA evaluate the relative impact of the various findings, and ensure that each is given appropriate weight and attention at VTA.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Atlanta Streetcar System Safety Program Plan (SSP) and Security Emergency Preparedness Plan (SEPP) Development – Atlanta, GA

Mr. Hauber served as a senior advisor and technical editor during the Atlanta Streetcar system safety program plan and security & emergency preparedness plan development processes. He also provided semi-independent perspective within the TRA team, to ensure the two plans fit within overall industry standards. He also contributed operations and maintenance information and details to the plans where needed.

San Francisco Bay Area Rapid Transit District (BART) – Transportation Department Budget Efficiency Assessment – San Francisco, CA

Mr. Hauber is TRA's project principal for the team reviewing BART Transportation overtime usage, tracking, and budget and contract implications. The team is working to identify leading drivers and factors associated with overtime use, and how to address these in future contract negotiations. TRA is working to help BART better structure the Transportation overtime budget, based on recent actual expenses and reasonable forecasts. The team is also identifying key performance indicators, management controls, and other processes to help BART monitor and control overtime expenditures in the future.

Port Authority of New York and New Jersey (PANYNJ) – Port Department Rail Safety Assessment

Mr. Hauber led TRA's team, and was a technical auditor, in an assessment of rail safety and regulatory compliance at PANYNJ's ExpressRail Newark, ExpressRail Elizabeth, ExpressRail Staten Island, and New York New Jersey Rail (NYNJR) operating locations. The ExpressRail operating locations provide rail service, mostly intermodal traffic, to PANYNJ maritime port locations. NYNJR is the last remaining carfloat operation, and barges general freight trains from Jersey City to Brooklyn, across New York Harbor. The audit focused on operations, occupational

issues, Federal Railroad Administration regulations, training, and reporting, and culminated in a final report of audit findings and recommendations.

Santa Clara Valley Transportation Authority (VTA) and San Francisco Bay Area Rapid Transit District (BART) – Peer Review of Silicon Valley BART Extension Tunnel Options

Mr. Hauber facilitated a peer review of tunnel options for Phase II of the Silicon Valley BART Extension. The panel examined single-bore and twin-bore options, and evaluated issues related to fire/life safety, operations, and maintenance. Mr. Hauber helped to moderate and monitor presentations and discussions, and helped the peer review group organize questions, information requests, and its final presentation. After the peer review was completed, Mr. Hauber also presented findings to each transit agency's board of directors. Mr. Hauber worked closely with VTA and BART representatives to ensure the objectivity and consistency of the review process.

San Francisco Bay Area Rapid Transit District (BART) – Maintenance and Service Options Study – San Francisco, CA

Mr. Hauber served as a senior advisor and technical consultant to TRA's BART project team. He assisted the project principal and the project manager in interpreting and analyzing BART materials, findings, and input; and in placing them in context in the transit industry and in transportation in general. Mr. Hauber provided high-level direction and review of the final report, analyses, recommendations, and findings.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Rail Transportation Consulting Projects – Atlanta, GA

Mr. Hauber has been a technical lead for several MARTA Rail Transportation assignments. He co-managed the Comprehensive Assessment of Rail Transportation, and led several field and control center interviews, conducted a line-by-line assessment of existing rules and procedures, and led a comprehensive organizational and functional assessment. Mr. Hauber has been a principal in TRA's ongoing operations support at MARTA, including assisting Rail Transportation with implementing comprehensive assessment findings, reviewing and addressing specific accidents and incidents, planning for new control center organization and systems, and improving departmental training.

North County Transit District (NCTD) – Development of Standard Operating Procedures (SOPs) – Oceanside, CA

Mr. Hauber was responsible for overall project direction, interface with NCTD project management and technical personnel, and direction and quality of written deliverables. He led project scheduling and SOP tracking, and led the team's technical and program recommendations regarding SOP structure and content (both since delegated within TRA).

Southwest Ohio Regional Transit Authority (SORTA) – Cincinnati Streetcar Operations & Maintenance Consulting – Cincinnati, OH

Mr. Hauber was the TRA technical team's project principal for Cincinnati Streetcar operations, maintenance, safety, and security tasks. He directed the team's assessment of the streetcar project and its operations and maintenance needs, possible O&M scenarios and organization, budgeting and forecasting, and startup schedule. He led the team's resulting efforts to develop an O&M request for proposals, and plan for contractor implementation. Mr. Hauber was responsible for overall project management and direction, and interface with SORTA and other project stakeholders – these functions were later delegated within TRA.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Comprehensive Assessment of Safety-Critical Systems – Atlanta, GA

Mr. Hauber was a team leader responsible for managing, and completing assessments in, areas related to fire protection systems, emergency equipment, and backup electrical power. He also assisted team leaders in other technical areas throughout the project, including railcar maintenance, track maintenance, signals and train control, and traction power maintenance.

New Jersey Transit - Rail System Field Operations Safety Review - Newark, NJ

Mr. Hauber led technical audits of NJ Transit's compliance with Federal Railroad Administration regulations. He was responsible for areas including blue signal protection, signals/train control testing and inspections, stations inspections, and structures inspections. He was also a significant contributor to audits in areas including operations and train handling, safety functions, and personal protective equipment use. Mr. Hauber led the TRA team as part of its subcontract with Rail Safety Consulting (RSC), and also acted on RSC's (and the project's) behalf for a number of on-site, executive-level presentations.

Professional Activities and Affiliations

- Project Management Professional, Certificate No. 1681000 Project Management International
- Graduate, Citizens Academy, 2005 Federal Bureau of Investigation, Philadelphia Office
- Delegate, 2017 APTA International Study Mission to Asia (Hong Kong, Singapore, Japan)

James Singleton Young Transportation Resource Associates, Inc. Project Manager Years of Transit Experience: 8 Years with TRA: 8

Mr. Young offers specialized expertise in transportation operations, planning, safety, and communications. An integral part of Mr. Young's work at TRA involves managing portions of rail transit safety oversight programs and helping agencies implement related topics, such as rule compliance. With a background in planning, Mr. Young is adept at identifying strengths and weaknesses of programs, assessing and crafting plans, creating strategies to enhance operation, and gathering input and buy-in from stakeholders.

Education

- M.C.P., City and Regional Planning University of Pennsylvania 2009
- B.A., Journalism Pennsylvania State University 2005

Certifications

• Transit Safety & Security Program (TSSP) Certificate – U.S. Department of Transportation, Transportation Safety Institute (TSI) – Transit Rail Program – 2017

Selected Relevant Experience

Metropolitan Washington Council of Governments (MWCOG) – Metrorail Safety Commission (MSC) Organizational Management – Washington, DC

Mr. Young led the TRA team that guided the new organizational management structure and process for the new, high-profile State Safety Oversight Agency that will oversee the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system. The team's work involved: surveying benchmarking other safety oversight agencies, analyzing the effort and expense needed for technical and administrative functions of the MSC, drafting organizational structure and budget options, drafting governance documents and procedures, creating job descriptions and a recruitment profile, and staging an agency implementation plan, all within a seven-week period. His team also developed orientation materials for the agency's new Commissioners.

Tri-State Oversight Committee (TOC) –State Safety & Security Oversight Program of Washington Metropolitan Area Transit Authority (WMATA) – Washington, DC

Mr. Young serves as a subject matter expert for several of the TOC's intensive, ongoing Three-Year Safety and Security Audits of WMATA. Mr. Young has led multiple audits of fatigue management, drug and alcohol testing, roadway worker protection, operations, and facilities maintenance over the past several years. He has participated in audits of several other topic areas, including emergency operations, industrial safety, and overall System Safety Program Plan (SSPP) implementation, as well as Federal Transit Administration (FTA) audits of WMATA operations and maintenance. Mr. Young previously was responsible for running the audit program, including defining audit scope and running the audits on-site. In addition, Mr. Young was instrumental in completing the investigation and development of two in-depth "Special Studies" – one of rule compliance in 2012, and one of fatigue management/hours of service in 2011, as well as Pre-Revenue Service Reviews of the Silver Line in 2014 and new railcars in 2015. Mr. Young previously assisted with annual evaluations of WMATA's SSPP updates, completing annual reports and Safety Advisory responses to the FTA, reviews of WMATA accident investigations, Corrective Action Plan verification, and implementation of MAP-21 enhancements into the TOC's internal and external procedures.

Utah Department of Transportation (UDOT) – State Safety and Security Oversight Program – Salt Lake City, UT

Mr. Young manages TRA's ongoing support of UDOT's safety and security oversight of the Utah Transit Authority (UTA) TRAX light rail system. Mr. Young worked with UDOT to enhance and transition its program to a Part 674-compliant State Safety Oversight Agency, making UDOT only the third agency to gain that certification. Mr. Young managed UDOT's 2012, 2015, and 2018 Three-Year Safety and Security Audits, including scheduling, document requests, on-site presentations, report production, and project completion. He has led multiple audits of rail operations, training, drug and alcohol testing, facility and equipment maintenance, and industrial safety of maintenance facilities. Mr. Young also conducted on-site Pre-Revenue Service Reviews of the Airport Line, Draper Extension, and Sugar House Streetcar in 2013 as well as the Mid-Jordan and West Valley extensions in 2011; his reviews primarily involved grade crossings, station areas, accident/incident prevention, and operations. Additionally, Mr. Young conducted Federal Railroad Administration-required audits of UTA's compliance with hours of service procedures annually from 2012 through 2017. He has also conducted special assessments of roadway worker protection in 2014 and 2016 as well as grade crossing/intersection design for accident prevention in 2016. On an ongoing basis, Mr. Young has helped UDOT update its SSO Program Standard and Procedures, conduct annual reviews of UTA SSPPs, evaluate annual internal audit report submissions, and organize follow-up responses to FTA audits.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – System Safety Department Needs Assessment – Atlanta, GA

Mr. Young worked with a TRA team that evaluated current conditions in MARTA's bus transportation division and System Safety Department. The team interviewed frontline and management-level personnel throughout relevant areas of the authority before revising and drafting rules and Standard Operating Procedures based on industry best practices and standards.

Santa Clara Valley Transportation Authority (VTA) – Comprehensive Assessment of System Safety – San Jose, CA

Mr. Young participated in the 2013 analysis of VTA's operations division implementation of safety practices and protocols. Mr. Young interviewed management and front-line personnel in rail and bus operations to determine conditions, challenges, and opportunities for improvement in safety practices. Mr. Young supported development of a report that identified recommended enhancements to operating procedures.

Pennsylvania Department of Transportation (PennDOT) – Rail Transit Safety Review Program (RTSRP) – Philadelphia, Pittsburgh, and Johnstown, PA

Mr. Young serves as a subject matter auditor as needed for the state's three transit agencies: Southeastern Pennsylvania Transportation Authority, Port Authority of Allegheny County, and Cambria County Transit Authority. He has completed several audits each of operations rule compliance, training, roadway worker protection programs, system safety program elements, and drug and alcohol testing programs for all three systems. Mr. Young previously managed PennDOT's accident/incident investigation adoption process in accordance with state and FTA standards, by monitoring the completeness of investigations and appropriateness corrective actions. Mr. Young has also conducted field observations of employee rule compliance, reviewed agency System Safety and Security Program Plans, and other daily tasks. In 2011-12, Mr. Young managed the state's ongoing pre-revenue assessment and safety certification oversight for the North Shore Connector light rail extension in Pittsburgh. He joined the Port Authority of Allegheny County's regular committee meetings for rail activation, safety certification, and federal oversight, and arranged focused state reviews of all system elements

Tennessee Department of Transportation (TDOT) – State Safety and Security Oversight Program – Memphis and Chattanooga, TN

Mr. Young manages TRA's support of TDOT's safety oversight for resumption of service of the Memphis Area Transit Authority (MATA) Trolley heritage streetcar system and the Chattanooga Area Regional Transportation Authority (CARTA) Lookout Mountain Incline Railway. Mr. Young has participated in safety certification oversight of the MATA Trolley, and coordinated team member assessment of operations and maintenance readiness. He has also conducted site inspections of both systems, focusing on operations, maintenance records, facility conditions, and safety programs. He managed teams' completion of the 2018 triennial safety and security audits of both transit systems.

Maryland Department of Transportation (MDOT) – Rail Safety and Security Oversight Program – Baltimore, MD

Mr. Young is the Project Manager for TRA's support of ongoing oversight of the Maryland Transit Administration heavy and light rail systems. Mr. Young instituted an inspection program for MDOT and assisted MDOT with gaining its certification as a Part 674-compliant State Safety Oversight Program in 2018. Mr. Young led a special study of hours of service/fatigue management of the Maryland Transit Administration heavy and light rail systems in 2016, and audited the topic areas of facilities maintenance, industrial safety, and drug and alcohol testing for MDOT's 2013 and 2016 Triennial Safety and Security Reviews. Mr. Young has provided MDOT with support for internal safety and security audits, updates to the Program Standard and Procedures, and a State Safety Oversight program audit conducted by the FTA.

Washington State Department of Transportation (WSDOT) – State Safety and Security Oversight Program – Seattle and Tacoma, WA

Mr. Young served as Project Manager for four comprehensive Triennial Safety and Security Audits along with two simultaneous Pre-Revenue Service Reviews in 2015. He was responsible for organizing and running the audits in conjunction with the WSDOT SSO Program Manager for the Central Link, Tacoma Link, Seattle Monorail, and Seattle Streetcar systems. He was also the subject matter expert for audits in operations, grade crossings/modal interface design, facility safety, facility maintenance, and drug and alcohol testing programs. His team conducted all reviews successfully within an intensive six-week span.

Oregon Department of Transportation (ODOT) – State Safety and Security Oversight Program – Portland, OR

Mr. Young managed ODOT's Pre-Revenue Service Assessment of a six-mile Portland Streetcar extension, which opened in September 2012. He was responsible for scheduling, document requests, delivering on-site presentations, report production, project completion, and assisted in communication with the Federal Transit Administration. He conducted final reviews of the new alignment's interface with pedestrians, bicycles, and vehicles. Mr. Young also participated in the 2011 Triennial Safety and Security Audit of TriMet's MAX light rail system. He conducted reviews of station maintenance, industrial safety of maintenance facilities, and assisted with reviews of System Safety Program Plan topic implementation.

Minnesota Department of Public Safety (DPS) – Rail Safety Oversight Program – Minneapolis and St. Paul, MN

Mr. Young led the ongoing DPS monitoring and reviews of Metro Transit's Green Line in the two years leading up to passenger service in 2014. Mr. Young participated in construction project teleconferences, document reviews, and audits with recommendations focused on safety and security certification completion, operations rules updates and training, and the appropriateness

of signage, markings, visibility, and traffic control signals on the light rail line connecting Minneapolis and St. Paul. Mr. Young has also assisted MnDPS as a subject matter expert for Triennial Safety and Security Audits of System Safety topic areas and in reviewing System Safety Program Plan submissions.

Regional Transportation Authority (RTA) – State Safety and Security Oversight Program of Chicago Transit Authority (CTA) – Chicago, IL

Mr. Young was the lead auditor for evaluating CTA's compliance with system safety program elements, fatigue management, and drug and alcohol testing during the 2017 Three-Year Safety and Security Audit, as well as operations practices, rule compliance programs, fatigue management, and drug and alcohol testing programs during the 2014 Three-Year Safety and Security Audit. He conducted interviews, records audits, and field observations in multiple locations throughout the comprehensive rail system. Mr. Young was also responsible coordinating, compiling, and maintaining quality control for the reports of approximately 12 review team members during the post-review period.

Michigan Department of Transportation (MDOT) – State Safety and Security Oversight Program – Detroit, MI

Mr. Young was the audit team manager and lead auditor for the topic areas of operations, training, and drug and alcohol testing during the 2013 and 2016 MDOT Triennial Safety and Security Audits of the Detroit People Mover. Mr. Young also coordinated with MDOT to produce overall review material, arrange on-site work, and complete the team's final report. Mr. Young has previously assisted MDOT with reviewing and approving annual SSPP updates and updating the MDOT Program Standard and Procedures.

Port Authority of New York and New Jersey (PANYNJ) – AirTrain Safety Oversight Board (ATSOB) – Newark, NJ and New York, NY

Mr. Young led audits of stations/facility maintenance, industrial safety, and drug and alcohol testing for the 2016 and 2012 Triennial Safety and Security Reviews of the Newark International Airport AirTrain system. Mr. Young also audited the topic areas of drug and alcohol testing, facilities maintenance, hazardous materials, and maintenance facility industrial safety for the 2014 Triennial Safety and Security Review of the JFK International Airport AirTrain automated people mover system. Mr. Young assisted with overall review coordination and report production for the 2014 and 2011 Triennial Safety and Security Reviews of AirTrain JFK.

Florida Department of Transportation (FDOT) – Rail Fixed Guideway Transit Safety and Security Oversight Program – Jacksonville, Miami, Tampa, and Fort Lauderdale, FL

Mr. Young participated in the 2011, 2014, and 2018 Triennial Safety and Security Reviews of Miami-Date Transit's heavy rail and automatic people mover systems. He assisted with or led audits of operations practices, rule compliance, operations training, drug and alcohol testing, facility industrial safety, and maintenance areas.

Texas Department of Transportation (TxDOT) – State Safety and Security Oversight Program – Dallas and Houston, TX

Mr. Young was the reviewer for shop industrial safety, safety training, facilities maintenance, and drug and alcohol testing for the 2015 Triennial Safety and Security Review of Dallas Area Rapid Transit's light rail system. He was also Project Coordinator for TxDOT's 2011 review. He managed and edited report production, document review, and audit checklists for the team's review. He also participated in reviews of structural and station maintenance, employee training, and the inspection of related records for completeness.

Sound Transit - Safety and Security Certification Program Audits - Seattle, WA

Mr. Young is part of the TRA subcontractor team supporting Sound Transit in conducting audits of its safety and security certification documentation during the design and construction of several major capital projects. The work includes creating audit procedures and conducting audits of hazard analyses and conformance documentation at all stages of the certification process before capital projects enter revenue service.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Rail Rule Compliance Program Development – Atlanta, GA

Mr. Young was part of the TRA team that created a new rule compliance program for rail transit operators and supervisors at MARTA. Mr. Young assisted with on-site presentation, discussions and interviews with MARTA rail managers and line supervisors regarding current procedures and potential elements of a new program. He collaborated in the development of the new rule compliance program document, managed development of a results database, and trained supervisors to conduct rule compliance checks.

American Public Transit Association (APTA) – Operating Practices Working Group – Washington, DC

Mr. Young assisted with coordinating this committee's conferences and its work revising and creating new standards for the rail transit industry. Mr. Young researched transit agency policies regarding mobile phone use and assisted with the development of a new industry-wide standard for employee use of electronic devices. He has also analyzed the impacts of the Public Transportation Safety Act of 2010 on state safety oversight and provided recommendations for the Committee to make an impact in these areas.

Metropolitan Washington Council of Governments (MWCOG) – Metropolitan Safety Commission (MSC) Organizational Management – Washington, DC

Mr. Young led the TRA team that guided the new organizational management structure and process for the new, high-profile State Safety Oversight Agency that will oversee the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system. The team's work involved: surveying benchmarking other safety oversight agencies, analyzing the effort and expense needed for technical and administrative functions of the MSC, drafting organizational structure and budget options, drafting governance documents and procedures, creating job descriptions and a recruitment profile, and staging an agency implementation plan, all within a seven-week period. His team also developed orientation materials for the agency's new Commissioners.

Ronald Keele, P.E.

Transportation Resource Associates, Inc.

Years of Transit Experience: 37

Mr. Keele is a Professional Engineer who has provided safety expertise to the transit industry for 37 years. Mr. Keele's previous positions include serving as Chief Safety Officer at the Washington Metropolitan Area Transit Authority as well as the Maryland Transit Administration, in addition to serving as Director of the Federal Transit Administration's Office of Safety and Security.

Education

- M.E., Civil Engineering, University of Maryland at College Park
- M.B.A., Finance and Investments, George Washington University
- B.S., Civil/Structural Engineering, Virginia Tech

Certifications

- Professional Engineer (P.E.), State of Maryland, Registration No.
- Certified Safety Professional (CSP), Board of Certified Safety Professionals, Certification
 No.

Selected Relevant Experience

Chief Safety Officer, Department of System Safety and Risk Management – Washington Metropolitan Area Transit Authority – Washington, DC

As the Chief Safety Officer, Mr. Keele served as the key safety advisor to the General Manager, Deputy General Manager and the Assistant General Managers and managed all administrative aspects of the system safety and risk management organization. He was responsible for reviewing the system safety functions set forth in the WMATA System Safety Program Plan and establishing measurable goals and objectives and adjusting resources to ensure that these goals and objectives were achieved within the specified time frames. This included performing accident/incident investigations, reviewing operating rules and procedures, and conducting management oversight audits, inspections and investigations as necessary to monitor the effectiveness of the vehicle, passenger, and fire life safety requirements of the WMATA System Safety Program Plan.

Chief Safety Officer, Office of Safety, Quality Assurance, Environmental Compliance and Risk Management – Maryland Transit Administration – Baltimore, MD

As the Chief Safety Officer of Safety, Quality Assurance, Environmental Compliance and Risk Management, Mr. Keele served as the administration's primary representative to local, state and national stakeholders and the various governmental agencies to ensure that the MTA was providing a safe and reliable service to all of its patrons and employees. He was also the key safety advisor to the MTA Administrator and managed all aspects of the safety and risk management organization. Mr. Keele was responsible for directing all of the system safety audits, surveys, assessments and reports to ensure proper compliance with all state safety oversight and environmental protection requirements and for overseeing all of the safety reporting and accident investigations, including notification to and compliance with all of the state safety oversight regulatory requirements and standards. This included performing accident/incident investigations, reviewing operating rules and procedures, and conducting management oversight audits, inspections and investigations as necessary to monitor the effectiveness of the vehicle, passenger, and fire life safety requirements of the MTA System Safety Program Plan.

Director, Office of Safety and Security – Federal Transit Administration (FTA) – Washington, DC

Mr. Keele functioned as the key advisor to the FTA Administrator and Deputy Administrator in all matters safety and security related and was responsible for ensuring that safety and security was a top priority with the FTA grantees and contractors, the transit industry, and concerned interest groups. As the senior FTA expert in safety and security, he also served as the key liaison with other elements within USDOT, with the state DOTs, with other Federal agencies, and national organizations concerned with transit safety and security. Mr. Keele advised and assisted the transit industry with strategies for improving both rail and bus safety; developing data & cost benefit analyses to support program goals and objectives; developing safety management systems (SMS); developing transit asset management (TAM) plans; developing continuity of operations (COOP) plans; conducting hazard analyses; inspecting and certifying all bus and rail equipment; investigating all incidents, near-misses and/or accidents.

William J. Matthews Transportation Resource Associates, Inc. Senior Consultant Years of Transit Experience: 35 Years with TRA: 7

Mr. Matthews is a transportation subject matter expert specializing in transit system operations and maintenance. Mr. Matthews partners with regional and metropolitan transportation systems and State Safety Oversight Agencies to provide technical guidance and ensure system regulatory compliance. Mr. Matthews also delivers engineering and management solutions to transit agencies and transit system "new starts" regarding operations, system maintenance and safety certification processes. Mr. Matthews has over 30 years of experience in commuter railroad and intercity rail transit operations, system equipment maintenance, accident investigation and industrial occupational health and safety.

Education

- M.S., Public Safety Management Saint Joseph's University, Philadelphia, PA 2006
- B.S., Technical and Industrial Administration Widener University, Chester, PA 1999

Certifications

- Transit Safety & Security Program (TSSP) Certificate U.S. Department of Transportation, Transportation Safety Institute (TSI) Transit Rail Program 2015
- Certified Safety and Security Director (CSSD), World Safety Organization
- National Incident Emergency Management (NIMS 100, 200,700 & 800)
- 30 Hour General Industry Safety and Health, Occupational Safety and Health Administration

Selected Relevant Experience

Santa Clara Valley Transportation Authority (VTA) – Comprehensive Assessment of System Safety – San Jose, CA

Mr. Matthews continues to support TRA in conducting comprehensive assessment of operations, maintenance, and safety functions at VTA. Mr. Matthews reviewed operational and maintenance practices, policies and procedures, including department responsibilities to the Office of System Safety, Rail Maintenance and Operations, and issued recommendations for improvement based on industry best practices.

North County Transit District (NCTD) – Development of Standard Operating Procedures (SOPs) – Oceanside, CA

Mr. Matthews conducted a safety assessment of the NCTD modal contractor rail and bus operations and maintenance. Mr. Matthews reviewed bus and rail maintenance practices, operations control center safety procedures and occupational safety training. Mr. Matthews is also conducting an operations and maintenance technical review of NCTD's Standard Operating Procedures.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – System Safety Department Needs Assessment – Atlanta, GA

Mr. Matthews supports MARTA's continuing development and implementation of an improved System Safety Department business structure. Mr. Matthews was involved in researching the causes and underlying factors and contributing to an improved business practice, and identifying possible solutions or mitigating steps for a comprehensive program.

Pennsylvania Department of Transportation (PennDOT) – Rail Transit Safety Review Program (RTSRP) – Philadelphia, Pittsburgh, and Johnstown, PA

Mr. Matthews assists the PennDOT SSO team comply with its internally defined schedule for audits and conducts intensive quality control reviews. He also conducts three-year safety and security reviews of system operations and maintenance processes including Pennsylvania's Funicular transit systems.

Florida Department of Transportation (FDOT) – Rail Fixed Guideway Transit Safety and Security Oversight Program – Jacksonville, Miami, Tampa, and Orlando, FL

Mr. Matthews continues to work with state safety oversight staff coordinating the on-going activities of the statewide SSO program administered by the Florida Department of Transportation. This project includes oversight support to transit agencies in Tampa, Jacksonville, Miami and the Miami and Orlando International Airports regarding regulatory safety compliance reviews, corrective action plan activity, accident/incident/hazardous condition investigations, standard operating procedures, vehicle maintenance processes and safety and security reviews.

Illinois Department of Transportation (IDOT) – State Safety Oversight Program – Chicago and St. Clair County, IL

Mr. Matthews is part of TRA's SSO team for the Illinois Regional Transportation Authority's state safety oversight program mainly for the Chicago Transit Authority (CTA). As part of that team, he continuously completes technical safety reviews of CTA's subway elevated rail system in areas including safety and security certification, traction power distribution, rail vehicles, tunnel ventilation system and fire and life safety systems.

Hawaii Department of Transportation (HDOT) – State Safety Oversight Program – Honolulu, HI

Mr. Matthews provides technical support for the Hawaii SSO program, and works closely with the State Program Manager to identify and analyze issues related to the overall program of HART rail project in the construction phase while actively reviewing issues related to safety certification, testing, and agency safety culture.

Maryland Department of Transportation (MDOT) – Rail Safety and Security Oversight Program – Baltimore, MD

Mr. Matthews provides technical support for MDOT's SSO program, which oversees the Maryland Transit Administration's Light Rail and Metro heavy rail systems. Mr. Matthews recently conducted a review of MTA tunnel ventilation and fire life safety systems including equipment maintenance, training and inspection processes and associated emergency procedures.

Minnesota Department of Public Safety (DPS) – Rail Safety Oversight Program – Minneapolis and St. Paul, MN

Mr. Matthews supports the TRA Project Manager conducting safety and regulatory compliance audits for St Paul Metro Transit's Three-Year Safety and Security Reviews of traction power, vehicle, and facilities maintenance.

Port Authority of New York and New Jersey (PANYNJ) – AirTrain Safety Oversight Board (ATSOB) – Newark, NJ and New York, NY

Mr. Matthews assists the TRA's AirTrain Safety Oversight Board team with the AirTrain rail systems at JFK and Newark International Airports. Mr. Matthews provides technical guidance

and support in system maintenance and reviews accident/incident/hazard investigation repots and corrective action plans.

District of Columbia Fire and Emergency Medical Services (DCFEMS) – State Safety and Security Oversight Program – Washington, DC

DCFEMS is the State Safety Oversight agency for the Washington, D.C. Streetcar System. Mr. Matthews is TRA's technical consultant for the system operations and maintenance and system safety certification process. He continuously reviews design, construction and operational verification for system certification. Additionally, he also reviews system safety program plan, related sub-plans, and key safety-related elements of the project.

Missouri Department of Transportation (MoDOT) – Rail Safety and Security Oversight Program – St. Louis and Kansas City, MO

Mr. Matthews provided subject matter expert support for the Kansas City Streetcar "new start project" and the St. Louis MetroLink Light Rail System Three Year Safety and Security Review. Mr. Matthews conducts safety and regulatory compliance audits for transit system equipment and maintenance processes, vehicle maintenance processes, communications and tunnel /fire life safety equipment maintenance and inspection processes.

Utah Department of Transportation (UDOT) – State Safety and Security Oversight Program – Salt Lake City, UT

Mr. Matthews continues to play a key role in assisting UDOT state safety oversight staff with operations and maintenance technical support with the Utah Transit Authority (UTA) TRAX system.

Massachusetts Bay Transportation Authority (MBTA) - Safety Department Consulting – Boston, MA

Mr. Matthews currently provides technical assistance to MBTA for the development of an organization-wide Fire Life Safety and Emergency Egress Plan. The task is to provide MBTA with research and application of current fire life safety regulatory requirements in relationship to MBTA current operating practices.

Southwest Ohio Regional Transit Authority (SORTA) – Cincinnati Streetcar Operations & Maintenance Consulting – Cincinnati, OH

Mr. Matthews is TRA's primary consultant and project manager for the system safety certification portion of its Cincinnati Streetcar. The current tasks include planning and interface with the transit agency (Southwest Ohio Regional Transit Authority) and other stakeholders; conducts vehicle and system design and construction verification audits and updates, planning and preliminary development for system safety program plan and other related sub-plans, and reviewing key safety-related elements of the project.

Southeastern Pennsylvania Transportation Authority (SEPTA) – Safety Officer – Philadelphia, PA

Prior to joining TRA, Mr. Matthews held various technical and senior management positions responsible for rail vehicle operations and maintenance in the commuter railroad, intercity subway and light rail divisions of SEPTA.

Michael Catsos Transportation Resource Associates, Inc. Senior Project Analyst Years of Transit Experience: 5 Years with TRA: 3.5

As a Senior Project Analyst at TRA, Mr. Catsos participates in a variety of State Safety Oversight project activities, including triennial audits, corrective action plan monitoring, accident and incident investigations, safety and security certification, oversight of capital projects, and policy development. His responsibilities in support of these tasks have included records reviews, personnel interviews, maintenance of Corrective Action Plans (CAP) and A/I databases, development of formal correspondence, development of policies and procedures, facility inspections, field reviews, policy research, and report development.

Education

- M.R.P., City and Regional Planning Cornell University 2015
- B.S., Geography Arizona State University 2011
- B.S., Sustainability Arizona State University 2011

Certifications:

• Transit Safety & Security Program (TSSP) Certificate – U.S. Department of Transportation, Transportation Safety Institute (TSI) – Transit Rail Program – 2018

Selected Relevant Experience

Virginia Department of Rail and Public Transportation (DRPT) - Petersburg Area Transit Bus Safety Review — Petersburg, VA

Mr. Catsos supported a comprehensive safety review of the Petersburg Area Transit (PAT) bus system, which included an exploration of the nexus between safety and maintenance, operations, and management practices. He conducted field observations of bus operations, inspected shop facilities and vehicles, reviewed O&M records and training materials, and conducted interviews with agency executives to assess PAT's overall safety performance.

Maryland Department of Transportation (MDOT) – Rail Safety and Security Oversight Program – Baltimore, MD

Mr. Catsos participates in a variety of ongoing activities at MDOT. He developed materials, conducted interviews, and reviewed records for Safety and Security Reviews of MTA, including the 2016 MDOT Triennial Audit of MTA and special audits of Hours of Service and Track Maintenance practices. Mr. Catsos also develops meeting materials and minutes in support of regular MDOT meetings with MTA, and maintains MDOT's CAP and incident tracking matrices. Lastly, Mr. Catsos supported MDOT during the 2015 Federal Transit Administration audit of Maryland State Safety Oversight activities, and participates in ongoing FTA SSO reporting and MAP-21 compliance activities.

Missouri Department of Transportation (MoDOT) – Rail Safety and Security Oversight Program – St. Louis and Kansas City, MO

Mr. Catsos supports MoDOT in oversight of the Delmar Loop Trolley, St. Louis Metrolink, and Kansas City Streetcar system. He helped to coordinate activities for MoDOT's Pre-Revenue Service Review of the Loop Trolley and has participated in ongoing meetings and document review activities to evaluate the system's readiness for revenue operations. He participates in regular meetings and document reviews for each of MoDOT's covered RTAs, and has supported

the SSO program in the transition to Part 674 compliance by updating the MoDOT Program Standard and other program documents.

Oregon Department of Transportation (ODOT) – State Safety and Security Oversight Program – Portland, OR

Mr. Catsos supported the Oregon Department of Transportation State Safety Oversight Program in conducting 2018 triennial audits of the TriMet MAX light rail system and Portland Streetcar. His role included conducting interviews, records reviews, and field inspections to assess agency compliance with System Safety Program Plan requirements related to shop safety, station and platform maintenance, hazardous materials, and other topics.

Tri-State Oversight Committee (TOC) –State Safety & Security Oversight Program of Washington Metropolitan Area Transit Authority (WMATA) – Washington, DC

Mr. Catsos has provided logistical support, maintained records, and drafted report materials for TOC triennial reviews, ongoing TOC meetings, work sessions, and calls. In addition to supporting day-to-day activities conducted by the Tri-State Oversight Committee, Mr. Catsos has prepared Technical Training Plan materials and contributed updates to the TOC's Program Standards and Procedures and Internal TOC Operations Manual to support TOC compliance with MAP-21 requirements. In the past, Mr. Catsos maintained databases of accident / incident investigations and corrective action plan progress at WMATA.

Hawaii Department of Transportation (HDOT) – State Safety Oversight Program – Honolulu, HI

Mr. Catsos supports a variety of ongoing safety oversight activities at HDOT. He has prepared updates to the HDOT Program Standard in coordination with Honolulu Authority for Rapid Transportation (HART) personnel, reviewed accident investigation reports, evaluated key HART program documents, and participated in ongoing meetings related to pre-revenue activities for the Honolulu Rail Transit Project.

Port Authority of New York and New Jersey (PANYNJ) – AirTrain Safety Oversight Board (ATSOB) – Newark, NJ and New York, NY

Mr. Catsos conducted personnel interviews, observed maintenance and operations activities, reviewed a range of maintenance and training documentation, and developed report materials in support of the 2015 Triennial Safety and Security Audit of AirTrain Newark.

Virginia Department of Rail and Public Transportation (DRPT) – State Safety and Security Oversight Program – Norfolk, VA

Mr. Catsos supported DRPT in updating its Program Standard and related program documentation in response to changing regulatory requirements under MAP-21. His work included a review of relevant FTA regulations and guidance, discussions with SSOA personnel, and development of new and reorganized content for the program's governing documents.

Florida Department of Transportation (FDOT) – Rail Fixed Guideway Transit Safety and Security Oversight Program – Jacksonville, Miami, Tampa, and Fort Lauderdale, FL

Mr. Catsos participated in interviews, records reviews, and field inspections during investigation of the December 2015 derailment of the Concourse D Skytrain at Miami International Airport. Mr. Catsos has also conducted site inspections, interviews, and records reviews in support of safety certification for Miami International Airport's Terminal E People Mover.

Pennsylvania Department of Transportation (PennDOT) – Rail Transit Safety Review Program (RTSRP) – Philadelphia, Pittsburgh, and Johnstown, PA

In support of the Pennsylvania RTSRP, Mr. Catsos has conducted reviews of rail operations and station conditions throughout the Southeast Pennsylvania Transit Authority system, and drafted memoranda to communicate the results of inspections to stakeholders.

Texas Department of Transportation (TxDOT) – State Safety and Security Oversight Program – Dallas and Houston, TX

Mr. Catsos has performed work to support a variety of ongoing State Safety Oversight projects conducted by the Texas Department of Transportation. He has contributed to the development of Three-Year Review audit reports for rail systems including the Dallas Area Rapid Transit.

San Francisco Bay Area Rapid Transit District (BART) - Maintenance and Service Options Study – San Francisco, CA

Mr. Catsos conducted research on service delivery alternatives for BART, including options for implementation of a BART-branded bus service, in support of a broader assessment of operations, maintenance, and service planning activities.

Samuel S. Korach Transportation Resource Associates, Inc. Project Analyst Years of Transit Experience: 3 Years with TRA: 3

Mr. Korach provides effective safety and security oversight support services to State Safety Oversight (SSO) programs across the country. Mr. Korach's extensive portfolio of safety and security oversight work has included the management and coordination of numerous on-site reviews and audits in accordance with SSO program requirements. Mr. Korach works closely with state clients to ensure focused and effective reviews and audits that result in actionable findings to improve system safety and security. Mr. Korach provides assistance to SSOs as they transition from the system safety methodology to the safety management systems approach.

Education

- B.A., Political Science Rutgers, The State University of New Jersey 2015
- Certificate in Spanish Translations University of Salamanca 2014

Selected Relevant Experience

Connecticut Department of Transportation (CTDOT) – Multi-Modal Transportation Safety (Risk Management) Program Review – Newington, CT

TRA work with CTDOT to assess safety management throughout the Department. Mr. Korach serves as Lead Analyst and Auditor for meetings and site visits with nearly all operating units of CTDOT. TRA examines safety in highway operations, traffic management, bridge evaluation, bus operations, railroad operations, construction, and fire/life inspections. TRA is developing a safety gap analysis, roadmap, and implementation plan for a strengthen safety management function throughout the Department that highlights safety in all job classifications and functions.

District of Columbia Fire and Emergency Medical Services (DCFEMS) – State Safety and Security Oversight Program – Washington, DC

TRA supports DCFEMS safety and security oversight activities of the DC Streetcar as technical contractor. DCFEMS is the authorized SSO agency (SSOA) for the DC Streetcar by order of the Mayor of DC. While the SSOA is housed within DCFEMS' structure, its activities are independent from the day-to-day fire and emergency medical services for the District. Mr. Korach is the Lead Analyst for the Oversight Program, which is administered as an independent office from DCFEMS operational and emergency response duties. TRA provides operational, mechanical, and legal support services to the DCFEMS Program Manager and his superiors on a daily basis.

Florida Department of Transportation (FDOT) Central Office – Rail Fixed Guideway Transit Safety and Security Oversight Program – Jacksonville, Miami, Tampa, and Fort Lauderdale, FL

TRA supports FDOT's SSO program as a technical contractor for the state's rail foxed guideway public transportation systems. The operational environments are unique, ranging from automated guideways operating on exclusive rights-of-way to streetcars operating with mixed traffic. Mr. Korach served on the 2018 audit of Miami-Dade DTPW Metrorail and Metromover systems in the fields of operating rules compliance, system security, emergency preparedness, operations training, and safety training.

FDOT District 6 – Bus Safety and Security Oversight Program – Miami, FL

Mr. Korach conducted bus operating rule compliance, facility inspections, and vehicle safety and maintenance assessments of the Miami-Dade DTPW Metrobus fleet as part of the District's 2018 triennial safety and security audit. Mr. Korach met with operations and maintenance personnel and conducted interviews and fleet inspections to assess Miami-Dade's compliance with written safety and security plans, as well as State of Florida Administrative Codes.

FDOT District 6 – Miami International Airport Automated Peoplemover Systems Triennial Audit & Safety Oversight Services – Miami, FL

Mr. Korach was a part of the District's 2018 triennial safety and security audit of the Miami-Dade Aviation Department's automated people movers at Miami International Airport. Mr. Korach conducted reviews and interviews at each of the three airport rail systems including operations control and supervision, accident/incident investigation, fire/life safety, maintenance facilities, operations and maintenance training, and emergency operations.

FDOT District 6 – Miami International Airport E Terminal Satellite Train Safety Certification – Miami, FL

TRA reviewed the System Safety Program Plan (SSPP) and certifiable items of the Miami International Airport (MIA) APMs. TRA provided support for the construction and replacement of a fixed guideway Automated People Mover (APM) connecting Terminal E to Satellite E as part of Miami Dade Aviation Department's (MDAD's) Capital Improvement Plan (CIP). The replacement system is a cable-pull APM linking the Terminal E to international gates. The CIP involves new facilities throughout MIA, including the Miami Intermodal Center for connection to Metrorail, Metrobus, and Tri-Rail. TRA continues to coordinate with MDAD and their fixed guideway contractors as part of safety oversight technical assistance.

Metropolitan Washington Council of Governments (MWCOG) – Metro Safety Commission (MSC) Organizational Management – Washington, DC

Mr. Korach worked with transportation policy makers in the DC area to standup the new SSOA of the WMATA Metrorail system. The MSC will be certified under 49 CFR Part 674 and resume oversight activities once held by the Tri-State Oversight Committee (TOC), now held directly by the Federal Transit Administration (FTA). Project activities included: benchmarking all comparable SSOAs nationwide and developing a research synthesis, calculating estimated level of effort for staffing purposes, drafting likely organizational structures with associated costs per scenario, and developing hiring plans and recruitment profiles for key MSC positions. TRA's reports formed the basis of MSC organizational structure, governance, operational authority, and guiding policies/procedures.

Port Authority of New York and New Jersey (PANYNJ) – AirTrain Safety Oversight Board (ATSOB) – Newark, NJ and New York, NY

TRA provides safety and security consulting services for the AirTrain Automated People Mover (APM) Systems at Newark-Liberty and John F. Kennedy International Airports. The two airport APM systems are overseen by an independent body of PANYNJ, organized as the AirTrain Safety Oversight Board. The ATSOB is not a recognized SSOA by the Federal government, but it mirrors all Federal requirements for transit agency safety and security. Mr. Korach worked with ATSOB personnel and the AirTrain operations and maintenance contractor to update the ATSOB program to full compliance with new federal rules for oversight of ail fixed guideways.

Pennsylvania Department of Transportation (PennDOT) – Rail Transit Safety Review Program (RTSRP) – Philadelphia, Pittsburgh, and Johnstown, PA

Mr. Korach conducts routine compliance checks, audits, and infrastructure inspections of the Southeastern Pennsylvania Transportation Authority and the Port Authority of Allegheny County on behalf of PennDOT. Mr. Korach's reviews focus on heavy and light rail operator rules compliance, roadway worker protection, hazardous material storage and procurement, maintenance facilities, and reviews of tunnel infrastructure including fire/life safety and emergency evacuation.

American Public Transit Association (APTA) – Operating Practices Working Group – Washington, DC

Mr. Korach serves as project consultant and staff advisor on a working group comprised of rail transit agency operating managers from nearly every agency in the United States. The working group has developed 21 operations and safety standards, on important subjects from accident investigation, to hours of service requirements and roadway worker protection. The standards and recommended practices published by the working group form the basis of rail transit industry-best practices. Mr. Korach supports the working group's online and in-person meetings and conferences, develops drafts and final versions of standards and recommended practices, and updates the working group's leadership team.

Atlanta Streetcar - Operations & Maintenance Consulting - Atlanta, GA

TRA organized the Atlanta Streetcar operations and maintenance structure and functions for the Atlanta Streetcar while the project was in design phases. Mr. Korach reviewed the Atlanta Streetcar Operations and Maintenance Contractor Request for Proposals before publication to assist the City of Atlanta and MARTA with soliciting the best qualified contractor for the day to day operation of the 2.7-mile system that runs through downtown Atlanta.

Bay Area Rapid Transit District (BART) - Evaluation of BART Passenger Station Cleaning Programs – Oakland, CA

Mr. Korach worked with BART to evaluate the passenger stations cleaning programs with the customer feedback process. Mr. Korach conducted interviews and site visits with frontline personnel to understand stations cleaning issues and improvements. These items were raised in a final report and communicated to senor agency management in a final presentation. Mr. Korach currently assists BART in identifying additional improvements to the stations cleaning program and coordinates District collaboration

Bay Area Rapid Transit (BART) – Maintenance and Service Options Study – Oakland, CA

TRA conducted a comprehensive study of BART maintenance and engineering programs to support various capital projects. The study assessed the current state of traction power, track, structures, train control systems, and system safety and issued recommendations that accompany BART's capital programs of service expansion and fleet renewal. Mr. Korach assisted BART by providing research into innovative maintenance practices that would support BART moving towards a state of good repair.

Bay Area Rapid Transit (BART) – Transportation Department Budget Efficiency Review – Oakland, CA

TRA supports BART in performing a detailed analysis of the Transportation Department overtime budget. Mr. Korach's contributions to the project include document reviews of collective bargaining agreements and memoranda, data collection and modeling using overtime actuals, and interviews with Transportation Department frontline and senior managers.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Assessment of Rail Services Control Center – Atlanta, GA

Mr. Korach worked with TRA Principals and Managers to assess the current state of rail control at MARTA and support groups such as Training, Human Resources, Capital Programs, and Rail Transportation. In addition, Mr. Korach's identified high reliability organization characteristics within the control center, proposed corrective actions, and implemented industry-best practices for Rail Transportation. TRA was contracted for assessment follow-up tasks of retooling MARTA's operating procedures for multimodal operations control.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Technical Support for Integration of Atlanta Streetcar Operation – Atlanta, GA

TRA assists MARTA with the transition of streetcar services from the City of Atlanta to MARTA. TRA assisted with the integration of current plans, polices, and procedures, and their revision for functionality as a MARTA Operations unit.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Train Control Systems Upgrade & Integrated Operations Center Development – Atlanta, GA

TRA supported MARTA's transition to new train control and control center equipment by working with Capital Programs, the equipment manufacturers, and MARTA senior management to recalibrate employee training based on new requirements as well as the findings and recommendation of TRA's Assessment of RSCC. Mr. Korach worked with MARTA stakeholders to revise all rail and bus control procedures for operations in a new control center. These procedures reflected significant changes in business process as well as technology and were developed in collaboration with MARTA capital program management, engineering, and transportation.

Massachusetts Bay Transportation Authority (MBTA) – Fire/Life Safety and Emergency Egress Program – Boston, MA

The MBTA selected TRA to perform an authority-wide assessment of fire and life systems safety for all modes. The TRA team, of which Mr. Korach serves as Lead Analyst, conducted records reviews and field assessments of rail and bus vehicles, tunnel infrastructure, maintenance facilities, stations, and major transit centers. TRA is working to bring the MBTA into OSHA compliance as well as compliance with applicable fire codes and transportation industry standards.

Southwest Ohio Regional Transit Authority (SORTA) – Cincinnati Streetcar Operations Safety & Security Consulting Services – Cincinnati, OH

Mr. Korach was responsible for implementation and review of the first Cincinnati Streetcar full scale exercise held prior to revenue service. Mr. Korach worked with project stakeholders and first responders to stage, conduct, and analyze an emergency exercise that complied with Department of Homeland Security guidelines. In addition, TRA developed the System Safety Program Plan, Security and Emergency Preparedness Plan, and the Safety and Security Certification Verification Report and provided feedback on countless policies and procedures for streetcar personnel and emergency responders. TRA's involvement was critical to the timely safety and security certification of the new-start system.

Angel Jacome Transportation Resource Associates, Inc. Project Analyst Years of Transit Experience: 2.5

Mr. Jacome provides effective safety and security oversight support services to State Safety Oversight (SSO) programs across the country. Mr. Jacome's extensive portfolio of safety and security oversight work has included the management and coordination of numerous on-site reviews and audits in accordance with SSO program requirements. Mr. Jacome works closely with state clients to ensure focused and effective reviews and audits that result in actionable findings to improve system safety and security. Mr. Jacome provides assistance to SSOs as they transition from the system safety methodology to the safety management systems approach.

Education

- MCP Massachusetts Institute of Technology 2017
- MS. Ed, Secondary Education Long Island University 2013
- BA, Economics University of Pennsylvania 2009

Selected Relevant Experience

West Virginia Department of Transportation (WVDOT) – State Safety Oversight Program – Morgantown, WV

Mr. Jacome is a project analyst for West Virginia's SSO program. The project is focused on obtaining the state's SSO certification under MAP-21 and Part 674 requirements. At the same time, WVDOT and TRA are working closely with the covered transit agency – the Personal Rapid Transit system at West Virginia University – to interpret, scale, and apply the FTA's SSO requirements. WVDOT and TRA are actively working toward FTA-compliant program processes, including hazard management, accident investigation, and on-site audits, and others.

Texas Department of Transportation (TxDOT) – State Safety and Security Oversight Program – Dallas and Houston, TX

Mr. Jacome assisted in the security review for the assessment of the McKinney Avenue Transit Authority's (MATA) M-Line Vintage Trolley in Dallas. Three incidents at MATA prompted this Special Review: two derailments and a service shutdown of the MATA trolley barn. Mr. Jacome also evaluated the staffing at MATA, which included an evaluation of headcount, training and qualifications, future staffing plans, and staff's involvement in inspections, operations, safety, investigations, maintenance of rolling stock, facilities, and infrastructure. After the on-site review, TRA submitted a final report to TxDOT, containing findings and recommendations from the review. The report included an analysis of MATA's compliance with TxDOT's State Safety Oversight requirements of rail transit systems in the State of Texas.

Florida Department of Transportation (FDOT) Central Office – Rail Fixed Guideway Transit Safety and Security Oversight Program – Jacksonville, Miami, Tampa, and Fort Lauderdale, FL

TRA supports FDOT's SSO program as a technical contractor for the state's rail fixed guideway public transportation systems. The operational environments are unique, ranging from automated guideways operating on exclusive rights-of-way to streetcars operating with mixed traffic. Mr. Jacome assists in FDOT's provision of safety and security oversight services for the Miami-Dade County Department of Transportation and Public Work (DTPW), the Jacksonville Transportation Authority (JTA) Skyway, and the Hillsboro Area Regional Transit (HART) Authority TECO Line Streetcar. In 2018, Mr. Jacome worked closely with FDOT and Miami in

preparation of their new SSO standards. Mr. Jacome conducts site visits to check for the SSO. Mr. Jacome provided support during the 2018 Triennial Safety and Security Review of the Department of Transportation and Public Works (DTPW). During the audit he conducted interviews and records reviews for the vehicle maintenance and power maintenance programs implemented by DTPW, resulting in a report of safety and security findings and recommendations.

Utah Department of Transportation (UDOT) – State Safety and Security Oversight Program – Salt Lake City, UT

Mr. Jacome is a project analyst for TRA's ongoing support of UDOT's safety and security oversight of the Utah Transit Authority (UTA) TRAX light rail system. He has supported UDOT's transition and application to becoming compliant with 49 CFR Part 674. Mr. Jacome has provided guidance, policy review, document development, and has performed reviews of UTA's System Safety Program Plan and Emergency Preparedness Plan. Mr. Jacome provided support during the 2018 Triennial Safety and Security Review of the Utah Transit Administration (UTA). During the audit he conducted interviews and records reviews for system safety programs implemented by UTA, resulting in a report of safety and security findings and recommendations.

Illinois Department of Transportation (IDOT) – State Safety Oversight Program – Chicago and St. Clair County, IL

Mr. Jacome is the Project Coordinator for the Illinois SSO Program since late-2017. He assisted the client in establishing an SSO program, including development of tracking mechanisms, meeting agendas, and drafting of a System Safety Program Standard and program Standard Operating Procedures (SOPs). Mr. Jacome also supports coordination for oversight of the Bi-State MetroLink system, in coordination with the Missouri DOT. He provides guidance and document development to support IDOT MAP-21 compliance and to address Federal Transit Administration (FTA) audit findings. He has drafted numerous Standard Operating Procedures (SOPs) for the Program, including Enforcement Authority, Corrective Action Plan Monitoring, Audits & Inspections, and Event Scene Deployment. In 2018, Mr. Jacome, assisted with conducting rolling triennial audits and writing reports for all safety and security audit elements at Chicago Transit Authority, including system safety, hazard management, and data collection. In 2018, Mr. Jacome assisted with conducting a special study on Chicago Transit Authority's grade crossing by reviewing documentation, coordinating on-site activities, and drafting the report.

Missouri Department of Transportation (MoDOT) – Rail Safety and Security Oversight Program – St. Louis and Kansas City, MO

Mr. Jacome has been providing ongoing coordination of tasks for TRA's support of the Missouri SSO Program since 2017 as the Project Coordinator for Bi-State Safety Oversight. He led the document assembly and on-site coordination of a 2018 Three-Year Safety and Security Review at Bi-State MetroLink. Mr. Jacome also supported the client in providing guidance and document development to support IDOT MAP-21 compliance.

Maryland Department of Transportation (MDOT) – Rail Safety and Security Oversight Program – Baltimore, MD

Mr. Jacome participates in a variety of ongoing activities at MDOT. He currently supports MDOT in its oversight of the Purple Line light rail project.

Minnesota Department of Public Safety (DPS) – Rail Safety Oversight Program – Minneapolis and St. Paul, MN

Mr. Jacome supports the TRA Project Manager conducting safety and regulatory compliance audits for Minneapolis Metro Transit's Three-Year Safety and Security Reviews of structures and power.

Florida Department of Transportation (FDOT) District 6 – Miami International Airport Automated Peoplemover Systems Triennial Audit & Safety Oversight Services – Miami, FL

Mr. Jacome assisted with the 2018 FDOT District 6 triennial audit of Miami Internal Airport's automated people mover systems (APM). Mr. Jacome reviewed compliance with agency and industry standards for operations, safety, training, emergency preparedness, and related topics

Florida Department of Transportation (FDOT) District 5 – Greater Orlando Airport Authority (GOAA) Automated Peoplemover System Safety Program Plan Audit – Miami, FL

Mr. Jacome helped conduct FDOT District 5's 2018 triennial audit of the GOAA automated people mover systems (APM). Mr. Jacome reviewed compliance with agency and industry standards for vehicle, guideway, and traction power, and signal systems maintenance, as well as employee and contractor training.

Tennessee Department of Transportation (TDOT) – State Safety Oversight Program – Memphis and Chattanooga, TN

Mr. Jacome assisted TDOT with the 2018 triennial audit of Memphis Area Transportation Authority's Lookout Trolley. Mr. Jacome reviewed topics related to system safety, security, and emergency preparedness.

Metropolitan Washington Council of Governments (MWCOG) – Metro Safety Commission (MSC) Organizational Management – Washington, DC

Mr. Jacome worked with transportation policy makers in the DC area to standup the new SSOA of the WMATA Metrorail system. The MSC will be certified under 49 CFR Part 674 and resume oversight activities once held by the Tri-State Oversight Committee (TOC), now held directly by the Federal Transit Administration (FTA). TRA's reports formed the basis of MSC organizational structure, governance, operational authority, and guiding policies/procedures.

Metropolitan Atlanta Rapid Transit Authority (MARTA) – Technical Support for Integration of Atlanta Streetcar Operation – Atlanta, GA

Mr. Jacome serves as a project analyst on the TRA team support MARTA in the merger of the Atlanta Streetcar into MARTA. Mr. Jacome reviews existing Atlanta Streetcar and MARTA Standard Operating Procedures (SOPs) to ensure quality as well as consistency with MARTA's organizational structure and document formatting. The TRA team assisted MARTA in revising and, where necessary, re-writing Atlanta Streetcar SOPs to comply with MARTA's requirements.

Bay Area Rapid Transit – Transportation Department Budget Efficiency Review – Oakland, CA

TRA supports BART in performing a detailed analysis of the Transportation Department overtime budget. Mr. Jacome's contributions to the project include document reviews of collective bargaining agreements and memoranda and data collection, modeling, and visualization.

Exhibit A Pricing Page

Public Transportation Agency Safety Plan

Task	Description	Unit of Measure	Unit Price	# of Units	Extended Price
4.1.1	Assisting Small Urban Area Transit Providers in Compiling Internal Information Necessary to Support Planning Process	Cost of Supporting Planning Process for one Transit Provider	\$15,352.35	8	\$122,818.77
4.1.2	Develop Small urban Transit Provider Safety Plan from an FTA Template Utilizing Safety Management Systems Safety Methodology	Cost Per Safety Plan	\$10,741.07	8	\$85,928.58
4.1.3	Technical Assistance to Small urban Transit Providers for Implementing New Safety Plan	Cost for Technical Assistance to one trans Provider	\$14,841.29	8	\$118,730.33
4.1.6.3	Development of an Organizational SMS Program Scaled to the Size and Capabilities of the Subject Small urban transit Organization Including SMS Training	Cost Per Program	\$23,670.98	8	\$189,367.83
4.1.6.4	Develop Safety Performance targets for Small Urban Transit Providers	Cost Per Set of Performance Targets	\$4,793.39	8	\$38,347.14
4.1.6.5	Develop SMS Safety Training Curriculum for Employees	Cost of Developing One Transit Prover's Curriculum	\$11,220.35	8	\$89,762.77
4.1.6.6	MPO Coordination Assistance	Cost of Providing Support to Small urban Transit Providers	\$2,820.77	8	\$22,566.15
4.1.6.7	Develop Process and Schedule for Conducting Annual Programmatic/ Plan Reviews	Cost of Developing one Transit Provider's Annual Review Schedule	\$4,599.16	8	\$36,793.31
4.2	Technical Assistance/ review Service to the Division for Safety Plans	Per Review	\$3,939.26	8	\$31,514.11

TOTAL BID AMOUNT \$735,829.00

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: (Check the box next to each addendum receiv	ed)
☐ Addendum No. 1 ☐ Addendum No. 2 ☐ Addendum No. 3 ☐ Addendum No. 4 ☐ Addendum No. 5	☐ Addendum No. 6 ☐ Addendum No. 7 ☐ Addendum No. 8 ☐ Addendum No. 9 ☐ Addendum No. 10
I further understand that any verbal representa	t of addenda may be cause for rejection of this bid ation made or assumed to be made during any oral ives and any state personnel is not binding. Only the specifications by an official addendum is
TRANSPORTATION RESOURCE Company Authorized Signature	ASSOCIATES, INC.
Date	
NOTE: This addendum acknowledgement sho	ould be submitted with the bid to expedite

document processing.

REQUEST FOR QUOTATION Public Transportation Agency Safety Plans

BID FORM #1 CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The Primary Participant (applicant for an FTA grant or coopera	tive agreement, or potential
contractor for a major third party contract),	
TRANSPORTATION RESOURCE ASSOCIATES, INC.	(COMPANY NAME) 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 had 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 indicted 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 or default.

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

THE PRIMARY PARTICIPANT (APPLICANT FOR	R AN FTA GRANT OR COOPERATIVE AGREEMENT,
OR POTENTIAL CONTRACTOR FOR A MAJOR	
TRANSPORTATION RESOURCE ASSOCI	ATES. LHC. CERTIFIES OR AFFIRMS THE
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WITH THIS CERTIFICATION AND UNDERSTAN	DS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS
3801 <u>ET SEQ</u> . ARE APPLICABLE THERETO.	
	1 1 //
L X	

Signature and Title of Authorized Official

REQUEST FOR QUOTATION Public Transportation Agency Safety Plans

BID FORM #2 CERTIFICATION OF RESTRICTIONS ON LOBBYING

The undersigned (Vendor, Contractor) 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 (P.L. 104-65, to be codified at 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 sub awards at all tiers (including subcontracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients 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 Vendor, TRANSPORTATION TESCURCE ASSOC. , certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Vendor understands and agrees that the provisions of 31 U.S.C. § 3801, et seq., apply to this certification and disclosure, if any.

ate Authorized Signatur

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

PATEICIA PAKSON	
(Name, Title)	
CONTRACTS ADMINISTRATOR	
(Printed Name and Title)	
1608 WAL MUT STREET STE. 1602 PHILADELPHIA PA I	9103
(Address)	
(Address) Z15.Z79.6811 /Z15.5+6.9120	
(Phone Number) / (Fax Number)	
PATRICIA. PAXSOND TRACHLINE.COM	
(email address)	

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

TRANSPORTATION RESOURCE ASSOCIATES, INC.
(Representative Name, Title)
DANIEL T. HAUDER, VICE PRESIDENT
(Printed Name and Title of Authorized Representative)
JANUARY ZZ, ZOIG
(Date)
215.279.6811/215.546.9120
(Phone Number) (Fax Number)

West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

TRANSPORTATION Name of Contracting Business Entity: <u>Pesource Associates</u> Address:	608 WALHUT STREET SUITE 160Z
Name of Authorized Agent: DANIEL HAUBER Address: P	PHILADELPHU. PA 1910)
Contract Number: CRFQ 0805 PTR 19 0000000 + Contract Description	n: PODLIC TRINS, AGENCY SIFETY
Governmental agency awarding contract: PUBLIC TRANSIT DIVISIO	N, STATE OF WEST VIRGINIA
☐ Check here if this is a Supplemental Disclosure	
List the Names of Interested Parties to the contract which are known or reasonable entity for each category below (attach additional pages if necessary):	y anticipated by the contracting business
1. Subcontractors or other entitles performing work or service under the	Contract
☑ Check here if none, otherwise list entity/individual names below.	
2. Any person or entity who owns 25% or more of contracting entity (not a ☐ Check here if none, otherwise list entity/individual names below. ★CNNLTH 4. KORACH	applicable to publicly traded entities)
3. Any person or entity that facilitated, or negotiated the terms of, the services related to the negotiation or drafting of the applicable contract	
Check here if none, otherwise list entity/individual names below.	
	JAHUARY ZZ, ZO19
Notary Verification	
State of NEW JERSEY , County of ATLANT	1 <u>C</u>
I, DANIEL T.HAUDER, the authentity listed above, being duly sworn, acknowledge that the Disclosure herein is penalty of perjury.	orized agent of the contracting business being made under oath and under the
Taken, sworn to and subscribed before me this ZZno day of day	JARY ,ZOIG.
To be completed by State Agency: Date Received by State Agency: Date submitted to Ethics Commission: Governmental agency submitting Disclosure:	PATRICIA A. PAXSON PATRICIA A. PAXSON NOTARY PUBLIC OF NEW JERSEY COMM. # 2200525 MY COMMISSION EXPIRES 04/18/2022 Revised June 8, 2018

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

WITHEOUTHE TOLLOWING	S GIGHAT DILL.	
Vendor's Name: TRANSE	ORTATION RESOURCE ASSOCIATES	5, IHC.
Authorized Signature:		Date: JAHUARY ZZ, ZOIG
State of NEW JERSE		
County of ATLANTIC	, to-wit:	
Taken, subscribed, and swor	n to before me this ZZ day of A HUARY	, 20 <u>19</u> .
My Commission expires	PATRICIA A. PAXSON	> 10
AFFIX SEAL HERE	COMM. # 29005ARY PUBLIC OF NEW JERSEY COMM. # 29005ARY PUBLIC MY COMMISSION EXPIRES 04/18/2022	the Passes
	MIT CONTINUES OF THE STATE OF T	Purchasing Affidavit (Revised 01/19/2018)



Business for West Virginia www.business4wv.com

Fees for Registration of TRANSPORTATION RESOURCE ASSOCIATES, INC. - 2018 Corporations Annual

Report

Unified Business ID: UF000695070001

Filing Date: 3/15/2018 10:57:40 AM

Secretary of State

Annual Report Fee \$25.00 SOS - WV.gov Portal Charge \$1.00

Business Registration Total Fees \$26.00