

# Technical Proposal

State of West Virginia, Division of Public Transit

## State Safety Oversight

CRFP PTR2200000001

09/29/21 10:06:27  
WV Purchasing Division  
09/29/21 10:06:30  
WV Purchasing Division

September 30, 2021

### Submitted to:

Mr. Toby L. Welch  
Bid Clerk  
State of West Virginia, Department of Administration  
Division of Public Transit - Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25305



### Submitted by:

Transportation Resource Associates, Inc.  
1608 Walnut Street, Suite 1602, Philadelphia, PA 19103  
P: (215) 279-6811 | F: (215) 279-6812



### Point-of-Contact:

Daniel Hauber, WSO-CSE, TSSP, PMP | Vice President  
(609) 320-8111 | daniel.hauber@traonline.com

### Vendor Signature:

A handwritten signature in black ink, appearing to read "D. Hauber", is written over a horizontal line.

9/30/21

Daniel Hauber, WSO-CSE, TSSP, PMP

Date

## Transportation Resource Associates, Inc.

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September 30, 2021

Mr. Toby L. Welch  
Bid Clerk  
State of West Virginia, Department of Administration  
Division of Public Transit - Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25305

**Re: State of West Virginia, Division of Public Transit | State Safety Oversight | CRFP PTR2200000001  
TECHNICAL PROPOSAL**

Dear Mr. Welch:

Transportation Resource Associates, Inc. (TRA), is pleased to submit this proposal to the West Virginia Department of Administration, Purchasing Division (Purchasing Division) as authorized on behalf of the West Virginia Division of Public Transit (WVDPT) to provide State Safety Oversight (SSO) for the West Virginia Personal Rapid Transit (PRT). Through past experience with the PRT and other SSO agencies, TRA has gained invaluable insight into the mission, vision, goals, and objectives of the WVDPT. TRA is prepared to continue working seamlessly with the WVDPT as an innovative, effective, and proactive partner.

TRA is widely recognized as a national leader in the provision of technical and management consulting services in safety, security, emergency preparedness, operations and maintenance program planning, resiliency, and other areas that are critical to the efficient operation of complex transportation and infrastructure systems. Founded in 1990, TRA's team is comprised of subject matter experts with multi-disciplinary backgrounds and multimodal transit experience. The firm has worked with more than 60 transit systems, over 20 state DOTs, and many federal agencies. As you evaluate our experience, please consider these points:

- ✓ With more than 30 years in the transportation industry, we have come to understand the expectations of clients and the need to present SAFE, creative, and cost-effective solutions while maintaining interactive communication.
- ✓ Every assignment is unique and has its own individual challenges. How TRA solves and manages those challenges sets us apart from the competition. Our client-centered focus has helped us build our stellar reputation for pragmatic solutions.
- ✓ We have created a focused team of qualified professionals to work with the WVDPT on this contract. Each member was selected based on his/her level of specialized expertise and will be accessible to WVPT staff – to respond to questions, attend meetings, collect input, and share ideas.
- ✓ The team's efforts will be guided by a well-defined process and set of protocols designed to maximize project management, quality control and assurance, and document control.

TRA is eager to continue working the State of West Virginia, its Purchasing Division, the WVDPT, and the PRT. We look forward to exceeding your expectations for service. Should questions arise, please contact me at (609) 320-8111 | [daniel.hauber@traonline.com](mailto:daniel.hauber@traonline.com). Thank you for the opportunity to share our proposal.

Sincerely,  
**Transportation Resource Associates, Inc.**

Daniel Hauber, WSO-CSE, TSSP, PMP  
Vice President

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## **PROPOSAL TRANSMITTAL RECEIPT**

<b>Date:</b>	September 28, 2021
<b>To:</b>	Toby L. Welch Bid Clerk State of West Virginia, Department of Administration Division of Public Transit - Purchasing Division 2019 Washington Street, East Charleston, WV 25305
<b>From:</b>	Patti Gibson Director, Business Development Transportation Resource Associates, Inc. (TRA) 1608 Walnut Street, Suite 1602 Philadelphia, PA 19103
<b>Via:</b>	Federal Express - Overnight
<b>Reference:</b>	State of West Virginia Division of Public Transit – CRFP PTR2200000001 State Safety Oversight
<b>Dept. Code:</b>	Proposal / P21-026

SEALED BID: WVDPT State Safety Oversight  
 BUYER: Toby L. Welch  
 SOLICITATION NO.: CRFP PTR2200000001  
 BID OPENING DATE: Thursday, September 30, 2021  
 BID OPENING TIME: 1:30 PM  
 FAX NUMBER: 304-558-3970

**ENCLOSED:**

- 1) State of West Virginia, Division of Public Transit | State Safety Oversight  
 CRFP PTR2200000001 | TECHNICAL PROPOSAL  
 3 COPIES  
 (Sealed Envelope)
  
- 2) State of West Virginia, Division of Public Transit | State Safety Oversight  
 CRFP PTR2200000001 | COST PROPOSAL  
 3 COPIES  
 (Sealed Envelope)



Section 1

**BID TITLE PAGES**



Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Centralized Request for Proposals  
Service - Prof

Proc Folder: 923339

Doc Description: RFP for State Safety Oversight of PRT

Reason for Modification:

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2021-08-30	2021-09-30 13:30	CRFP 0805 PTR2200000001	1

**BID RECEIVING LOCATION**

BID CLERK  
DEPARTMENT OF ADMINISTRATION  
PURCHASING DIVISION  
2019 WASHINGTON ST E  
CHARLESTON WV 25305  
US

**VENDOR**

Vendor Customer Code: 541614

Vendor Name : Transportation Resource Associated, Inc. (TRA)

Address :

Street : 1608 Walnut Street, Suite 1602

City : Philadelphia

State : PA

Country : USA

Zip : 19103

Principal Contact : Daniel Hauber, WSO-CSE, TSSP, PMP

Vendor Contact Phone: (609) 320-8111

Extension: N/A

**FOR INFORMATION CONTACT THE BUYER**

Toby L Welch  
(304) 558-8802  
toby.l.welch@wv.gov

Vendor  
Signature X

FEIN# 23-2622338

DATE September 30, 2021

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

**ADDITIONAL INFORMATION**

## Request for Proposal (CRFP)

As Authorized by W.V. Code 5A-3-10b, The West Virginia Purchasing Division is soliciting proposals for the agency, the West Virginia Division of Public Transit, to provide Professional Consulting Services and expert technical assistance for the State Safety Oversight Program. Including, but not limited to Investigative activities, safety audits, and documenting and reporting as per the attached documentation.

Online bidding has been prohibited for this solicitation.

INVOICE TO	SHIP TO
PUBLIC TRANSIT DIVISION OF BLDG 5 RM 663 1900 KANAWHA BLVD E CHARLESTON WV 25305-0432 US	PUBLIC TRANSIT DIVISION OF BLDG 5 RM 663 1900 KANAWHA BLVD E CHARLESTON WV 25305-0432 US

Line	Comm Ln Desc	Qty	Unit of Measure	Unit Price	Total Price
1	Professional Services SSO				

Comm Code	Manufacturer	Specification	Model #
80101508			

**Extended Description:**

Vendors must fill out Cost Sheet included as an attachment. Online responses prohibited.

\*SEE ATTACHED PRICING PAGES\*

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Questions are due by 4:00 p.m.	2021-09-16

	Document Phase	Document Description	Page 3
PTR2200000001	Draft	RFP for State Safety Oversight of PRT	

# **ADDITIONAL TERMS AND CONDITIONS**

**See attached document(s) for additional Terms and Conditions**

Section 2

**UNDERSTANDING,  
EXPERIENCE, AND APPROACH**

## **SECTION 2 – UNDERSTANDING, EXPERIENCE AND APPROACH**

TRA's overall goals in supporting the State of West Virginia (WV) and its State Safety Oversight (SSO) Program will focus on the following:

1. Working at the direction of WV's SSO program manager, maintaining ongoing and close communications to ensure every action we take is in step with the state's requirements and approach.
2. Providing ongoing support, including a designated project manager, a project engineer, and a team of technical experts who are intimately familiar with both WVDPT's requirements and the FTA's SSO rules overall.
3. Drawing on nationwide SSO experience to proactively identify issues, successfully address problems, and collaboratively improve rail transit safety in West Virginia.

The TRA team, and especially TRA's proposed project manager and its project principal, have nearly four years of experience with the West Virginia State Safety Oversight (SSO) program, as planned, administered, and operated by the West Virginia Division of Public Transit (WVDPT). As part of our work with the WV SSO manager and the WVDPT team, TRA has helped transition the SSO program from the original (49 CFR Part 659) FTA SSO rule to the current requirements under 49 CFR Parts 673 and 674, including helping to revise and reissue the state's Program Standard and associated procedures. We are hopeful that our close working relationship with WVDPT means that we appreciate and can help fully implement the state's SSO priorities in a way that is seamlessly consistent with its preferred approaches and methodologies.

In addition to helping to revise the Program Standard and implement its requirements, the entire TRA team has experience across several other SSO contracts and projects. Further, our team members either have their FTA-required Transit Safety and Security Professional (TSSP) and Public Transit Safety Certification Training Program (PTSCPT) credentials, or are actively working to complete those credentials. With this project experience and these training credentials, the TRA team has a deep working knowledge of FTA SSO requirements and practices and can help WVDPT work to implement these with West Virginia University (WVU).

The TRA team is also very familiar with the organization and operation of the WVU Personal Rapid Transit (PRT) system, including its recent history and system upgrades. This project experience is an especially important part of TRA's project understanding. The PRT's revamped organization, with some changes in operations and safety leadership, but with largely consistent personnel, will need to work closely with WV's SSO program, its leadership, and through it, its contractor staff. There are several areas requiring ongoing attention and coordination, including further development of corrective action plans (CAP), hazard/safety risk management programs, safety data analysis, and safety promotion, as well as other Safety Management System (SMS) elements.

Perhaps one of the most important aspects of SMS overall, and specifically its implementation by WVU and oversight by WVDPT's SSO program, is *safety culture*. While safety culture is somewhat difficult to define exactly, it can be generally described by the SMS requirements from FTA and the WVDPT Program Standard, as well as holding safety to be of paramount importance in all aspects of a transportation organization's operations, maintenance, and administration. The TRA team will work with the SSO program manager to evaluate not only specific instances of WVU compliance with the Program



Standard, but also the university's consistent and ongoing approach to improving safety, learning from past events and analyses, and taking active steps that increase passenger safety in the future.

We are hopeful that our positive and cooperative working relationship with WVDPT, and through it with WVU, and our overall appreciation of WVDPT's project goals and approach, will allow TRA to continue to build on the state's success and continue to elevate transit safety for the PRT. The remainder of this proposal document spells out the specifics of the proposed project approach, our understanding of WVDPT's preferred SSO program approach, and our team's ability to meet the state's project needs.

### ***Approach & Methodology to Goals/Objectives***

TRA will assist WVDPT annually (at a minimum, per the WV Program Standard) in reviewing and updating the Program Standard to reflect the latest in FTA guidance, audit findings, and best practices. In each contract year, TRA will actively identify and note potential updates to the Program Standard that may help clarify WV SSO program operations, enhance WVU implementation of WV requirements, and/or address issues identified through audits, investigations, organizational changes, or safety risk analyses. While the Program Standard typically is updated at least once a year, when necessary, TRA will identify more urgent Program Standard updates, and help WVDPT's SSO Manager determine if more urgent, interim updates are required.

The WV SSO Program Standard dictates ongoing program operations and procedures, as well as WVU Agency Safety Plan minimum content. TRA, working with WVDPT, will utilize the Program Standard for critical SSO program functions including the following:

1. Evaluating and recommending for approval the WVU Agency Safety Plan (ASP).
2. Evaluating the components of WVU's SMS, including safety management policy, safety risk management, safety assurance, and safety promotion.
3. Evaluating key SMS activities as required in the Program Standard, including WVU CAPs, safety risk assessments, and event investigations.
4. Conducting WVDPT-led event investigations, external audits, and ongoing oversight activities.

The implementation of several of these functions is discussed in additional tasks below.

To proactively and consistently address possible Program Standard changes, TRA's project manager will maintain a log of potential issues, changes, and improvements that may affect that document. He will review these issues regularly with WVDPT's SSO manager and cooperatively identify those issues that require immediate attention and those that may be better addressed during annual updates.

While Program Standard updates typically dictate changes to the narrative of the document, TRA will also actively identify other tools, such as checklists and diagrams that may clarify either the state's requirements or how WVU may most effectively address them.

## *Approach & Methodology to Compliance to Mandatory Project Requirements (RFP §4.2)*

### **Investigation of Accidents and Unacceptable Hazardous Conditions (RFP § 4.2.1.3)**

TRA can provide WVDPT with a complete spectrum of investigative options, on demand, to address potential WVU issues. These options include quick response, a deep technical expertise, and expertise in investigations led by SSO agencies, by transit agencies, and by the National Transportation Safety Board (NTSB). TRA's team and especially its project manager will work cooperatively with WVDPT to ensure that investigation-related information is shared in a timely and transparent way, including between potential field teams, the FTA, and WVU, all as directed by the state.

#### **Accidents (RFP § 4.2.1.3.1)**

WVU must report accidents, as defined by the WVDPT SSO Program Standard, to the state within two hours. Unacceptable safety risks must be reported as soon as practical as required by Program Standard Section 7, and other safety risks/hazards must be reported on an ongoing, monthly basis. TRA's project manager will actively work with the SSO program manager to evaluate reported issues, and to formulate an appropriate investigative response and team.

TRA will assist WVDPT's SSO program with the following investigation scenarios, ordered by likelihood:

1. WVU-led investigation, overseen, reviewed, and accepted by WVDPT: WVU will lead most investigations, including those of accidents, incidents, and hazards. WVU must submit its investigation procedures to WVDPT's SSO program at least annually, and as updated throughout the year, for review and approval. The SSO program will review, monitor, and as appropriate, approve and adopt WVU investigations, ensuring that they are conducted objectively and in accordance with both WVU's established programs and consistent with WVDPT and FTA requirements. TRA will assist WVDPT in both reviewing individual investigations, as well as ensuring that investigation programs are consistent with WVU's ongoing SMS programs.
2. WVU-led investigation, with active WVDPT SSO involvement directing additional investigative activities and follow-up as needed: Depending on the specifics of the investigation, WVDPT will often require WVU to address specific investigative concerns, including providing additional on-site information, analyses, and follow-up (the latter often connected with WVU's CAP processes).
3. WVU-WVDPT joint investigation: In some cases, WV's SSO program may require a joint investigation, where both university and state personnel actively engage in on-site and/or follow-up activities. Such investigations may involve collaboration on field investigation, interviews, records reviews, or technical analyses. Depending on the specifics of the investigation, the state may require WVU to lead the investigation report development, the state may lead report development, or the two agencies may agree to share equally in report development.
4. WVDPT-led investigation, independent of WVU: The state may identify a need for an independent investigation, either because of the specifics of the event or hazard being investigated, or because of possible issues with the completeness or objectivity of the university's

investigation. In such cases, the state will inform the university of its intent, and require WVU to incorporate state findings and develop appropriate corrective action plans.

5. National Transportation Safety Board (NTSB) investigation: If the NTSB declares its intent to investigate a PRT accident, the state and WVU typically will both act independently, coordinating with the NTSB, as part of its investigation party system.

In all cases, TRA will provide technical expertise attuned specifically to both the urgency and the technical nature of the issue at hand. The TRA team provides WVDPT with several options for on-site investigation teams and can effectively and quickly conduct investigations of events (including accidents, incidents, and occurrences), hazards/safety risks, and other urgent circumstances at the PRT. The TRA team includes personnel in Pittsburgh, just 1.5 hours' drive from Morgantown, as well as personnel from TRA's Northern Virginia and Philadelphia offices who can be on site in Morgantown within hours. (It is also important to note that TRA's team has been involved in several NTSB investigations, and is very familiar with the NTSB's process, requirements, and approach.) Depending on the specifics of the investigation, TRA can deploy investigative personnel to address issues related to operations, maintenance, human factors, technology, and other areas of interest. TRA's project manager will work closely with the SSO manager to formulate an investigative team, including both on-site and support personnel as needed, to address the specifics of each investigation.

TRA's project manager will work at the SSO program manager's direction to evaluate reported accidents and hazards, and to choose the appropriate response as described above. Frequently this response will involve oversight of university investigations, and active input into those investigations to ensure completeness and objectivity. TRA will work with the SSO program manager to evaluate WVU investigative processes, written reports, and associated follow-up and corrective actions to ensure they address the issue at hand, and that they are part of an ongoing, proactive WVU approach to SMS and safety. Frequently this oversight process includes both evaluating WVU-submitted materials and also objectively assessing steps or procedures that may be missing or incomplete and requiring the university to amend investigations as needed.

There have been several recent examples of accidents, incidents, and hazardous conditions where the SSO program has required the university to provide additional investigative information, to conduct broader analyses, or to amend corrective actions or other responses to address either the issues at hand or overall SMS requirements. TRA's project manager and its technical personnel will work closely with the SSO program manager to identify not only individual investigation steps that the university may need to enhance, but also areas where its investigative or follow-up processes need to be enhanced to improve overall PRT safety.

### **Corrective Action Plans (RFP §4.2.1.3.6)**

Corrective action plans (CAPs), are a cornerstone of SSO programs, as well as an area of special attention for the FTA in its oversight and auditing of SSO operations. TRA will assist WVDPT in oversight of CAPs at several levels, including the following:

1. Ensuring that WVU develops, maintains, fulfils, and closes out CAPs to address all key issues, including event (accident and incident) investigation findings, hazard and safety risk management analyses, internal audit findings, and external audit findings.
2. Ensuring that WVU CAPs address the root cause or core element of each identified safety issue, and that CAPs are clear, achievable, and measurable.

3. Ensuring that WVU tracks and manages its CAPs within the context of its safety management system, including utilizing safety data, safety performance targets and indicators, and SMS process improvements to successfully and systematically address the core of each CAP safety issue.
4. Independently, as part of WVDPT's SSO program, evaluating and tracking each CAP, and verifying ongoing status, interim updates, and final closeout of each CAP by WVU.

The FTA has paid special attention to CAPs in recent years, both as part of its periodic SSO program audits, and as part of ongoing monitoring meetings. TRA will work with WV's SSO manager to ensure that both state and university activities related to CAP programs are clear, well-documented, appropriate to the issue at hand, updated on an ongoing basis, and associated with clear milestones. This will help to not only ensure compliance with FTA requirements, but also to advance SMS implementation and safety compliance overall at WVU.

#### **Capital Project Safety Oversight (RFP §4.2.1.3.7)**

TRA will actively work with the SSO program manager to monitor potential WVU capital projects, and to assess what level of safety management from WVU and safety oversight from WVDPT is necessary. Based on that determination and ongoing updates, TRA will recommend specific approaches to capital project safety oversight, which may include:

1. Oversight of WVU safety certification programs.
2. Oversight of WVU safety and change management efforts.
3. Integration of new capital projects and improvements into ongoing PRT operations and maintenance.
4. Analysis of WVU capital projects for possible changes to WVDPT SSO's Program Standard or its day-to-day operations.

Some WVU capital projects may require intensive safety certification efforts (as did the automatic train control and fare collection systems upgrades in recent years). Such larger projects, as well as some smaller projects, may impact WVU's operating procedures, maintenance processes, training, or other ongoing programs. TRA will evaluate university capital programs and formulate recommended approaches to address safety oversight, governed by both the Program Standard and the approved WVU ASP. Based on the specifics of each project, TRA's project manager will recommend ongoing project tracking; focused reviews and evaluations of technical plans, documents, or field installations; and/or evaluation of WVU operations, maintenance, training, or safety program updates as dictated by project scope.

TRA will work with the SSO program manager to maintain a flexible, safety-focused approach to capital project oversight, and will scale that approach to meet such projects as potential PRT vehicle overhauls, ongoing station and structural improvements, and system extensions.

#### **Oversight Activities (RFP §4.2.1.3.8)**

Much of the hard work of transit safety oversight occurs on a day-to-day basis, behind the scenes, in reviewing and monitoring CAP updates, ensuring thorough and objective investigations, responding to

FTA inquiries and requirements, and managing the overall SSO project. TRA provides a suite of support options for WVDPT, including a single, designated project manager; a local engineer who has dedicated a significant portion of her time specifically to WVDPT support; and a team of technical experts with deep experience in FTA's SSO requirements, SSO project resumes spanning the United States, and vast technical expertise applicable to the PRT. In addition to helping WVDPT with the tasks identified in its request for proposals, TRA can assist in other oversight activities such as updating FTA-required Technical Training Plans (in accordance with 49 CFR Part 672) and workload assessments, preparing presentations and briefings as needed, and coordinating with other potential stakeholders such as first responders (for emergency preparedness oversight) or metropolitan planning organization personnel (for safety planning oversight) and providing technical assistance and guidance to WVU, such as the recently-completed SMS gap analysis and workshop.

#### **Reporting Requirements (RFP §4.2.1.3.9)**

1. TRA's project manager and its project engineer will work with WVDPT's SSO manager to complete required reports, including the following:
2. Ongoing and periodic updates to WVDPT SSO logs, such as CAP and accident tracking logs, correspondence logs, and findings logs.
3. Required periodic and as-needed reports to the FTA, such as through its State Safety Oversight Reporting (SSOR) Tool website, which is integrated with the National Transit Database.
4. Periodic reconciliation of SSO and WVU records, such as between the SSO event logs and the SSOR Tool.
5. Required and periodic reports from the SSO program, including reports to the state's governor, briefings and updates to the West Virginia Secretary of Transportation and WVU Board of Governors, and reports to PRT management.
6. As-needed analyses for the FTA, such as requests for information, CAP updates, accident updates, and capital program oversight updates.
7. Periodic and as-needed analyses of WVDPT records and logs versus those of WVU, in areas such as accidents, CAPs, and findings, and update and issuance of WVDPT logs as needed.

Depending on the specifics of ongoing SSO program operations, TRA will identify and review with the WVDPT SSO manager any recommendations for specialized reporting tools. Such tools might include databases, specialized spreadsheets, training materials, SMS evaluation tools, or implementation schedules. In all cases, these recommendations will be focused on elevating rail transit safety and SSO program compliance within the state and will be developed within the framework of the WVDPT's Program Standard (e.g., utilizing existing requirements for CAP reporting fields or accident investigation data).

#### **Triennial Safety & Security Review (RFP §4.2.1.3.10)**

TRA will provide a strong team of technical auditors and robust project management to ensure the continued success of WVDPT's external safety and security audit program. The TRA team will conduct all audit activities in accordance with the procedures, requirements, and timelines in WVDPT's program

standard. Further, we will strive to maintain the high levels of professionalism and cooperation (within an oversight relationship) that characterize the WV SSO program and its audits.

In accordance with the Program Standard, TRA proposes to continue to conduct triennial safety and security audits on an ongoing basis over the three-year period. While this approach meets FTA requirements of auditing the entire PTASP every three years, it is superior in some ways, including distributing the audit effort for both WVDPT and WVU personnel, and providing an ongoing and more sustained engagement with the overseen transit agency (the PRT). The overall process includes the following general steps:

- Planning the overall audit calendar for the triennial period.
- Providing 60-day notice to the PRT of upcoming audit dates.
- Formulating document requests and audit checklists.
- Conducting entrance and exit briefings, on-site auditing, and document and evidence review
- Authoring draft and final reports for each audit area.
- Ensuring that WVU appropriately incorporates audit findings into its CAP process and its SMS overall.

The SSO audit process will focus on WVU's compliance with its PTASP. As noted above, TRA's work (and triennial audits conducted) will focus especially on SMS implementation and safety culture, and specifically how WVU identifies, addresses, and learns from safety issues in a proactive and cohesive manner. Safety auditing under the old FTA final rule (49 CFR Part 659) was a somewhat easier affair, revolving around 21 key audit elements such as drug and alcohol testing, facilities maintenance programs, operating rules and procedures, and safety goals and objectives. While these 21 elements are still represented in various ways under the PTASP structure and SMS practices, SSO auditing has changed. WVDPT's SSO program is just starting a new triennial audit cycle, with a focus on the four SMS elements (safety management policy, safety assurance, safety risk management, and safety promotion). Challenges include whether to audit each SMS element across different departments, or to audit each department and function for all four SMS elements at the same time. At the same time, WVU is still in somewhat early stages of implementing its SMS, which means that some audit findings may need to account for future safety improvements or milestones. As WVDPT refines its approach to external safety audits, the TRA team will help the state's SSO manager to evaluate these and other issues, and to make the SSO audit process as thorough and productive as possible.

#### **PRT FTA Audits (RFP §4.2.3.11)**

The FTA may choose to audit the PRT and WVU's safety organization, reviewing such requirements as drug and alcohol testing programs, SSO compliance, or overall safety implementation. Perhaps equally likely, the FTA may (and recently did) audit WVDPT's SSO program implementation and regulatory compliance. In either case, TRA's project team stands ready to help WVDPT prepare for, participate in, and respond to FTA audits.

Depending on the specifics of the audit, TRA's support may include helping to update and/or gather background information and data, submitting information to FTA, providing analysis or context to FTA, analyzing FTA's written audit reports, and formulating corrective actions to address FTA findings. As with all of TRA's activities, we will utilize both our nationwide SSO expertise and our West Virginia-specific experience to recommend the best response to FTA. While we will always work to ensure transparent and accurate communication with FTA, we will also help WVDPT ensure that its ongoing project approach and overall SSO program intentions are clear and well-represented in any communications with FTA.



As with other areas of this project, FTA findings often dictate changes to state SSO program standards. In other cases, findings may also impact how the state interacts with its covered transit agencies. TRA will ensure, wherever possible, that FTA audit findings and associated corrective actions are used to help improve WVDPT's SSO operations, and that CAPs focus on specific, actionable changes such as Program Standard updates or more effective implementation of that standard.

#### **General Administration (RFP §4.2.3.12)**

In all of TRA's SSO contracting experience, our focus is on improving rail transit safety through the increasing and continued success of our SSO clients. Ensuring comprehensive project documentation, collaborative approaches, and proactive sharing of knowledge between the TRA team and WVDPT's SSO program manager is a key part of achieving these goals. As such, TRA's project manager, on an ongoing basis, will ensure our work is well-documented, that all communications and files are routed through WVDPT as it directs, and that all information received, developed, or maintained by TRA is shared with the state. We very well understand that our potential work under this contract is at West Virginia's direction, is the state's property, and is key to its continued safety oversight efforts. As directed by the SSO program manager, TRA will provide periodic and as-needed transfers of electronic files. We will ensure that work products, wherever possible, are in a format that is reusable and modifiable by WVDPT. We will proactively obtain approval from WVDPT where it is preferable or necessary to utilize special deliverable formats (e.g., for a global information system analysis or a special, safety-related database). Throughout the project, when TRA develops tools such as project calendars, checklists, or databases, we will do so with an eye toward the smooth, ongoing, and successful operation of WVDPT's SSO program.

TRA understands that the ongoing administration of WVDPT's SSO program is critical to its success. While logs, databases, and reports may sometimes not be as spectacular as on-site investigations or large capital projects, they are the resources that ensure the consistency and success of the SSO program. With this in mind, TRA offers ready access to its project manager, its project engineer, its project analysts, and all of its technical team to help the WVDPT creatively and efficiently address SSO program needs, and to ensure the program's continued smooth operation.

Section 3

# PROJECT EXPERIENCE

## SECTION 3 – PROJECT EXPERIENCE

### *Qualifications & Experience (RFP §4.2.2)*

TRA has a unique combination of nationwide rail state safety oversight experience spanning 15 current projects and 30 years of experience. The firm's portfolio of projects includes automated rail systems, automated people movers (APMs), work with legacy transit systems, and success in overcoming the unique challenges they sometimes present. TRA has a high level of familiarity with WVDPT's SSO management, the WVU PRT organization and its key personnel, and the key issues facing both agencies.

Below are some examples of the firm's relevant project experience:

PROJECT ONE	
<b>CLIENT:</b>	Florida Department of Transportation (FDOT)
<b>PROJECT NAME:</b>	Rail Fixed Guideway State Safety Oversight Program (SSO)
<b>PROJECT LOCATION:</b>	Miami   Tampa   Jacksonville   Orlando   Tallahassee, FL
BRIEF NARRATIVE	
<p>Since 2005, TRA has served as the ongoing safety and security contractor to FDOT in its oversight of transit systems in Miami, Jacksonville, and Tampa. In addition to conducting triennial reviews of the Miami-Dade Department of Transportation and Public Works Metrorail and Metromover, the Jacksonville Transit Authority Skyway, and the TECO Line Streetcar, TRA plays a continuing role in safety and security document review; accident/incident investigations; hazard management processes; corrective action plan (CAP) tracking and review; and overall oversight support for FDOT at each of these systems. Both the JTA Skyway and DTPW Metromover are driverless APMs.</p> <p>TRA supported FDOT and the agencies it oversees through their transition to compliance with Title 49 of the United States Code of Federal Regulations (CFR) Parts 672, 673, and 674 by supporting the update of FDOT procedures, reviewing PTASPs, and adapting FDOT's triennial audit approach to best review agency safety management systems. TRA supports FDOT's robust inspection program, which includes quarterly site visits to each covered agency, at a minimum, and conducts targeted risk-based reviews of identified challenges and hazards at the agencies as needed. TRA supports FDOT's development and submittal of annual reports to the FTA, develops monthly activity reports for FDOT, and leads monthly calls with each agency. Under separate contracts for FDOT, TRA also provides safety oversight for the driverless APMs at Orlando International and Miami International airports.</p>	
GOALS & OBJECTIVES:	
<p>TRA and FDOT's goal for this project is to provide comprehensive safety and security oversight in accordance with 49 CFR Parts 670, 672, 673, and 674 requirements, as well as FDOT's expanded requirements under 14-15.017, Florida Administrative Code. FDOT's primary goal is to leverage TRA's subject matter expertise and program management skills to administer a program that helps DTPW, HART, and JTA to mitigate and manage safety risk, develop and administer programs across each agency to assure safety in all work that is done, and develop and administer programs to promote safety both internally within the agency and among its employees, as well as externally to passengers and the public at large. TRA and FDOT's objectives are to provide cooperative technical assistance to each of the covered rail transit agencies (RTAs) as the SSO program core activities are carried out.</p>	

Core activities of the SSO program include, but are not limited to, triennial safety and security audits; CAP monitoring; accident, incident, and occurrence investigation; safety risk and hazard management; Federal Transit Administration (FTA) reporting; and ongoing RTA document and data reviews and analysis. FDOT and TRA meet on a monthly basis to review safety and security performance in accordance with all FDOT SSO Program Standard and RTA PTASP requirements, and FDOT and TRA provide minimum quarterly scheduled site visits, as well as additional unannounced visits to perform visual inspections, interviews, data reviews, and other in-person assessment activities to verify the successful administration of rail safety and security program activities.

#### **ACHIEVEMENTS:**

While TRA has supported the FDOT SSO Program since 2005 in the performance of triennial audits, TRA helped FDOT to centralize the SSO program in 2012, at which time TRA expanded its oversight role to include the rail systems in Jacksonville and Tampa. At that same time, TRA helped FDOT to develop a more engaged program that included the activities described above and the more integrated presence with each of the covered RTAs. TRA worked with FDOT to anticipate safety management system (SMS) changes that were forthcoming from the FTA, and helped FDOT to establish close, cooperative working relationships with each of the covered RTAs during this time, thereby easing the transition into the requirements of 49 CFR Parts 670, 672, 673, and 674. TRA and FDOT continue to evaluate the effectiveness of the SSO program in relation to the safety performance at each of the RTAs and uses the results to develop new methods for requesting and analyzing safety-related data and developing risk-based audit activities. TRA's success in supporting the statewide SSO program that oversees the FTA-funded RTAs has resulted in FDOT's District Offices in Orlando and Miami engagement of TRA to provide ongoing safety oversight support services for FDOT-regulated automated people mover systems at Miami International Airport and Orlando International Airport.

A key achievement of this project has been comprehending safety requirements as they relate to the driverless systems at DTPW, JTA, and the two airports, all of which have APM systems. TRA has helped each system to develop more robust roadway worker protection program requirements and other changes related to the unique operating environments of these systems. TRA has investigated accidents and hazardous conditions involving each of covered APM systems and monitored the development and administration of CAPs and hazard mitigations.

#### **PROJECT DATA**

<b>Principal-in-Charge</b>	<b>Christopher Wallgren, WSO-CSE, TSSP</b>
<b>Project Manager</b>	<b>Christopher Wallgren, WSO-CSE, TSSP</b>
- <b>Phone</b>	<b>(917) 520-2153</b>
- <b>Email</b>	<b>Christopher.Wallgren@traonline.com</b>
<b>Type of Project</b>	<b>State Safety and Security Oversight</b>
<b>Start   End Dates</b>	<b>2005   Current</b>

#### **REFERENCE INFORMATION**

<b>Agency   Entity</b>	<b>Florida Department of Transportation</b>
<b>Name</b>	<b>Ashley Porter</b>
- <b>Title</b>	<b>Transit Safety Programs Manager</b>
- <b>Phone</b>	<b>(850) 414-4070</b>
- <b>Email</b>	<b>Ashley.L.Porter@dot.state.fl.us</b>



## PROJECT TWO

<b>CLIENT:</b>	Hawaii Department of Transportation (HDOT)
<b>PROJECT NAME:</b>	State Safety Oversight Program for Honolulu Rail Transportation Project (H RTP)
<b>PROJECT LOCATION:</b>	Honolulu, HI

### BRIEF NARRATIVE

TRA provides technical support for the HDOT SSO program, and works to identify, analyze, and address issues related to both overall program structure and the H RTP 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 ahead of the revenue service start date. As a part of this, HDOT and TRA have worked with numerous project stakeholders including the Honolulu Authority for Rapid Transit (HART), The Honolulu Department of Transportation Services (DTS), and the supporting operations and maintenance provider.

### GOALS & OBJECTIVES:

TRA and HDOT's goal for this project is to initially provide oversight and subject matter expertise to the H RTP stakeholders ahead of the revenue service date for interim opening section one. Following the initiation of revenue service interim opening section one, HDOT will begin the ongoing state safety oversight process including: triennial safety and security audits; corrective action plan (CAP) monitoring; accident investigations; hazard management oversight; FTA reporting; and ongoing document reviews and approvals. During this time, HDOT and TRA will simultaneously maintain the pre-revenue service oversight for the subsequent interim and final segments of the rail project.

### ACHIEVEMENTS:

TRA has been integrally involved in overseeing Honolulu's rail project currently under construction, and through its auditing has gained much insight into design, construction, and safety and security certification through working on behalf of HDOT. During this time, TRA has performed an initial review and approval of the H RTP Agency Safety Plan and Security Plan; analyzed and monitoring pre-revenue service CAPs; conducted reviews of safety and security

### PROJECT DATA

<b>Principal-in-Charge</b>	Daniel Hauber, WSO-CSE, TSSP, PMP   Vice President
<b>Project Manager</b>	Amelija Sorg-Taylor, WSO-CSS, TSSP
- Phone	(215) 646-9131
- Email	Amelija.Sorgtaylor@traonline.COM
<b>Type of Project</b>	State Safety and Security Oversight
<b>Start   End Dates</b>	2017 - Current

### REFERENCE INFORMATION

<b>Agency   Entity</b>	Hawaii Department of Transportation
<b>Name</b>	Brandon Eshenour
- Title	State Safety Oversight Project Manager
- Phone	(808) 587-2136
- Email	Brandon.J.Eshenour@hawaii.gov

## PROJECT THREE

<b>CLIENT:</b>	Port Authority of New York and New Jersey (PANYNJ)
<b>PROJECT NAME:</b>	AirTrain Safety Oversight Board (ATSOB)
<b>PROJECT LOCATION:</b>	Newark, NJ   New York, NY

### BRIEF NARRATIVE

In 2004, TRA worked with PANYNJ to establish the AirTrain Safety Oversight Board (ATSOB), an internal board charged with providing safety and security oversight of the AirTrain systems at Newark Liberty International (EWR) and John F. Kennedy International (JFK) airports. The ATSOB is modeled on the federal rail transit state safety and security oversight program codified 49 CFR Parts 673 and 674, even though the systems are not formally subject to the regulations. TRA provided the ATSOB with technical assistance in reviewing safety and security-related issues. Other involvement consisted of the 2004 Pre-revenue baseline safety/security review, the 2007 Triennial Review, the 2011 Triennial Review, the 2014 Triennial Review, and the 2019 Triennial Review for AirTrain JFK, as well as the 2004 Initial baseline safety/security review, the 2008 Triennial Review, the 2011-12 Triennial Review, the 2015 Triennial Review, and the 2019 Triennial Review for AirTrain Newark.

### GOALS & OBJECTIVES:

The goal – for both the PANYNJ and TRA – is to administer a comprehensive, independent safety and security oversight program for the AirTrain JFK and AirTrain Newark automated people mover systems that operate between terminals, parking facilities, and external commuter rail and rail transit systems. Together, these systems carry over 100,000 passengers daily, without state or federal regulations covering the systems. The intent is to carry out oversight that meets/exceeds current rail transit safety and security oversight requirements established under 49 CFR Parts 670, 672, 673, and 674. TRA's subject matter expertise and program management skills to administer a program that helps the AirTrain systems mitigate and manage safety risk, to assure safety in all work that is done, and to promote safety both internally within the agency and among its employees, as well as externally to passengers and the public at large. The objectives are to provide cooperative technical assistance to each system as the ATSOB program core activities are carried out. Core activities of the ATSOB program include, but are not limited to: triennial safety and security audits; corrective action plan (CAP) monitoring; accident, incident, and occurrence investigation; safety risk and hazard management; internal safety data reporting; and ongoing AirTrain system document and data reviews and analysis. PANYNJ and TRA meet on a monthly basis to review safety and security performance in accordance with ATSOB Program Standard and AirTrain Agency Safety Plan requirements. The PANYNJ and ATSOB provide monthly scheduled site visits, as well as additional unannounced visits, to perform visual inspections, interviews, data reviews, and other in-person assessment activities to verify the successful administration of rail safety and security program activities. Other supporting objectives relate to the development of safety certification programs for major capital projects, including the replacement of the legacy AirTrain Newark system, the development of a first-ever, new AirTrain system for LaGuardia International Airport, and the expansion of the AirTrain JFK system.

### ACHIEVEMENTS:

A primary achievement of the ATSOB program has been its original development in 2004 and the successful ongoing administration of the program over nearly two decades since. TRA has helped PANYNJ establish a robust safety oversight program through the ATSOB that establishes comprehensive and in-depth safety and security reporting and analysis that exceeds that which is typically in place for airport people mover systems in North America. TRA has worked with PANYNJ



to establish detailed safety requirements on the contract operators of the systems and is presently clarifying those requirements for the procurement of the new and expanded AirTrain activities across the three airports. TRA has helped PANYNJ to stay abreast of changes to federal regulations to enhance safety management, while providing critical, ongoing oversight needed to manage and mitigate safety risk, confirm that safety is assured throughout all aspects of the operations and maintenance of the AirTrain system, and promote safety both internally and externally.

#### PROJECT DATA

<b>Principal-in-Charge</b>	Christopher Wallgren, WSO-CSE, TSSP
<b>Project Manager</b>	Christopher Kozub
- <i>Phone</i>	(732) 261-4170
- <i>Email</i>	Christopher.Kozub@traonline.com
<b>Type of Project</b>	State Safety and Security Oversight
<b>Start   End Dates</b>	2004   Current

#### REFERENCE INFORMATION

<b>Agency   Entity</b>	Port Authority of New York & New Jersey
<b>Name</b>	James Keane
- <i>Title</i>	General Manager, Operations Safety
- <i>Phone</i>	(201) 216-2821
- <i>Email</i>	jkeane@panynj.gov

### PROJECT FOUR

<b>CLIENT:</b>	Pennsylvania Department of Transportation (PennDOT)
<b>PROJECT NAME:</b>	Rail Transit Safety Review Program (RTSRP)
<b>PROJECT LOCATION:</b>	Southeastern Pennsylvania Transportation Authority (SEPTA)   Philadelphia, PA; Port Authority of Allegheny County (PAAC)   Pittsburgh, PA; Cambria County Transit Authority (CamTran)   Johnstown, PA

#### BRIEF NARRATIVE

For 29 years, TRA has led the PennDOT RTSRP contractor team in ongoing safety and security oversight. The RTSRP oversees SEPTA, PAAC, and CamTran, and TRA has helped PennDOT build and maintain one of the nation's strongest SSO programs. TRA's success with the PennDOT RTSRP has served as a model program by the FTA and for other SSOAs nationwide. This comprehensive program utilizes an ongoing, detailed review of light rail, heavy rail, and fixed guideway operations. TRA has primary responsibility for all parts of the program, including developing program standards and reviewing agencies' PTASPs and security plans; conducting numerous triennial audits as well as other safety and security reviews and investigations; monitoring agency SMS implementation; tracking hazards and CAPs; and managing project meetings, records, and reports. TRA has supported PennDOT during multiple audits of the RTSRP conducted by the FTA, most recently in 2021.

#### GOALS & OBJECTIVES:

The PennDOT RTSRP establishes minimum safety standards for all three covered systems; performs audits; and oversees corrective action plans and internal safety reviews; reviews public transportation agencies safety plans and security and emergency preparedness plans; and performs and delegates event investigations.

**ACHIEVEMENTS:**

TRA assisted the PennDOT RTSRP achieve certification of its SSO program in conformance with 49 U.S.C. 5329(e) and 49 CFR Part 674 in April 2018 (one year in advance of the federal deadline). Since 2018, TRA has supported PennDOT in the development of Standard Operating Procedures, as well as Safety Standards for roadway worker protection.

**PROJECT DATA**

<b>Principal-in-Charge</b>	<b>Daniel Hauber, WSO-CSE, TSSP, PMP   Vice President</b>
<b>Project Manager</b>	<b>Stephen Frazier, WSO-CSSD</b>
- <i>Phone</i>	(267) 442-8454
- <i>Email</i>	Stephen.Frazier@traonline.com
<b>Type of Project</b>	<b>State Safety and Security Oversight</b>
<b>Start   End Dates</b>	<b>1992 - Current</b>

**REFERENCE INFORMATION**

<b>Agency   Entity</b>	<b>Pennsylvania Department of Transportation (PENNDOT)</b>
<b>Name</b>	<b>Elizabeth Bonini</b>
- <i>Title</i>	<b>Rail Transit Safety Review Program Division Chief</b>
- <i>Phone</i>	(717) 787-1207
- <i>Email</i>	ebonini@pa.gov

Section 4

# TEAM ORGANIZATION

## SECTION 4 – TEAM ORGANIZATION

### *Staffing Plan*

TRA's proposed team to support West Virginia's State Safety Oversight Program offers:

- Years of experience with West Virginia's SSO program and decades of SSO experience nationwide.
- Personnel certified in FTA's (49 CFR Part 672) required Transit Safety and Security Professional (TSSP) Program as well as its Public Transit Safety Certification Training Program (PTSCTP).
- Broad expertise in the areas key to WVDPT's SSO program, including safety, operations, maintenance, emergency preparedness, investigations, audits, and SSO program management.
- An exceedingly efficient project approach, whether for ongoing tasks, as-needed work, or emergency investigations, utilizing the right people at the right time to provide West Virginia with the highest levels of both expertise and efficiency in achieving its project goals.

TRA pledges to work closely with WVDPT's SSO manager, and to ensure that all work is performed at his direction and in close communication with him or his designees. We believe strongly that an efficient, effective project team is both technically adept and totally transparent in its work. These will be among our most important guiding principles throughout our work for the state.

TRA's team structure includes:

- A project manager who, in addition to providing technical expertise in SSO, FTA requirements, and transit safety, will provide WVDPT with a primary contact for all project tasks and concerns
- A project engineer who is located in close proximity to both Morgantown and Charleston, and can assist the rest of the team with day-to-day site meetings and inspections, and guide deliverables, FTA compliance, and SSO program operations
- Subject matter experts who can provide deep expertise for audits, investigations, and review of technical concerns and documents.
- Project analysts who can efficiently and effectively complete project operation and administration tasks including developing and maintaining project calendars, formulating and formatting deliverables, coordinating reporting and technical documents, and assisting the SSO manager and contract personnel with field activities.

We are hopeful that our positive and cooperative working relationship with WVDPT, and through it with WVU, and our overall appreciation of WVDPT's project goals and approach, will allow TRA to continue to build on the state's success and continue to elevate transit safety for the PRT. The remainder of this proposal document spells out the specifics of the proposed project approach, our understanding of WVDPT's preferred SSO program approach, and our team's ability to meet the state's project needs.

### *Key Personnel and Organization Structure*

#### **Project Manager**

TRA's proposed project manager, **Joshu Shih, WSO-CSM, TSSP**, has worked closely with WVDPT for nearly four years, and is very familiar with both the state's SSO program and with the WVU's PRT. Mr. Shih also brings SSO experience from several other states, including as contract project manager for SSO

programs in Texas and Washington, DC. TRA anticipates the following responsibilities for its project manager:

- Serving as a primary interface with WVDPT's SSO manager.
- Working at WVDPT's direction to track and update ongoing issues such as WVU CAPs, investigations, internal audits, and overall SMS implementation; FTA regular and as-needed submissions such as technical training plans, annual reports, workload assessments, and ad hoc requests for information; and WVDPT's own, internal tracking logs, scheduling, and program administration.
- Assessing ongoing and day-to-day project needs, as well as planned and unplanned tasks, and assigning TRA team members with appropriate skills and capacity to address those issues.
- Ensuring ongoing contract compliance, recording, and reporting.

TRA's project manager is located in Northern Virginia, and can be on site in Charleston or Morgantown in just a few hours as needed.

### **Project Engineer**

TRA's proposed project engineer, April Dorcak, TSSP, PTSCTP, has nearly three years of experience with the WV SSO program, and is located in Pittsburgh, just 90 minutes from Morgantown. Ms. Dorcak can also serve, at the WVDPT SSO program manager's direction, as a primary interface between the SSO program and WVU. She has provided integral support to the WVDPT SSO program manager by maintaining certain project schedules and documentation, leading SMS workshops, attending WVU and WVDPT audits and safety meetings, and interfacing with WVU PRT management. She has a background in process engineering and organizational management, and in addition to her WV SSO work, has provided extensive consulting services to the state in developing PTASPs and SMS programs for eight small urban bus providers.

### **Project Principal**

Daniel Hauber, WSO-CSE, TSSP, PMP, is TRA's proposed project principal, and has acted as the WV SSO contract project manager during the early phases of TRA's work with the state. He has nearly a quarter century of experience working on SSO programs and projects, and has worked closely with both WVDPT and WVU managers and stakeholders. Mr. Hauber is located in TRA's Philadelphia office, and can be on site in Morgantown or Charleston in just a few hours.

### **Subject Matter Experts**

In addition to its project management team., TRA is proposing a team of highly-qualified and experienced subject matter experts (SMEs) to support the WVDPT SSO program. This team (along with the project manager, project engineer, and project principal noted above) offers expertise in overseeing, auditing, and investigating the following areas:

- Accident, incident, and hazard/safety risk investigations
- Safety risk assessments and analyses
- SMS assessments and gap analyses
- SSO Program Activities (data tracking, reports, etc.)
- Passenger vehicles
- Traction power
- Train control, signal systems, and communications



- Guideway, stations, structures, and vertical transportation (elevators and escalators)
- Automated, fixed-guideway transit operations
- Transit-specific emergency preparedness
- Safety certification, system modification, and configuration management

TRA's project manager, working with WVDPT's SSO manager, will establish the overall project activities and monitor adherence to program requirements and timelines. Subject matter experts will work at the direction of the project manager to develop specific work plans such as developing plans, schedules, and materials for triennial audits, hazard analyses, or on-site spot checks.

TRA seeks to utilize the right personnel at the right time. WVDPT will have access to TRA's project management team, its subject matter experts, and its analyst staff throughout the project, but will not be required to have those personnel assigned to the project when they are not needed. If an investigation, safety risk analysis, audit, or investigation must be completed, WVDPT will have access to a wide array of experts, but is not required to keep each person on a task for the entirety of the project.

### **Project Analysts**

TRA's project analysts possess subject matter knowledge in a broad range of areas and are actively engaged in SSO auditing, oversight, and even management activities nationwide. Analysts provide critical support for on-site and off-site activities, including developing program documentation and reports associated with program administration (e.g., audit reports, periodic project updates, annual reports, etc.). TRA's analysts efficiently provide in-depth analyses and program support, while freeing up SMEs to support the more detailed audit, interview, and review activities.

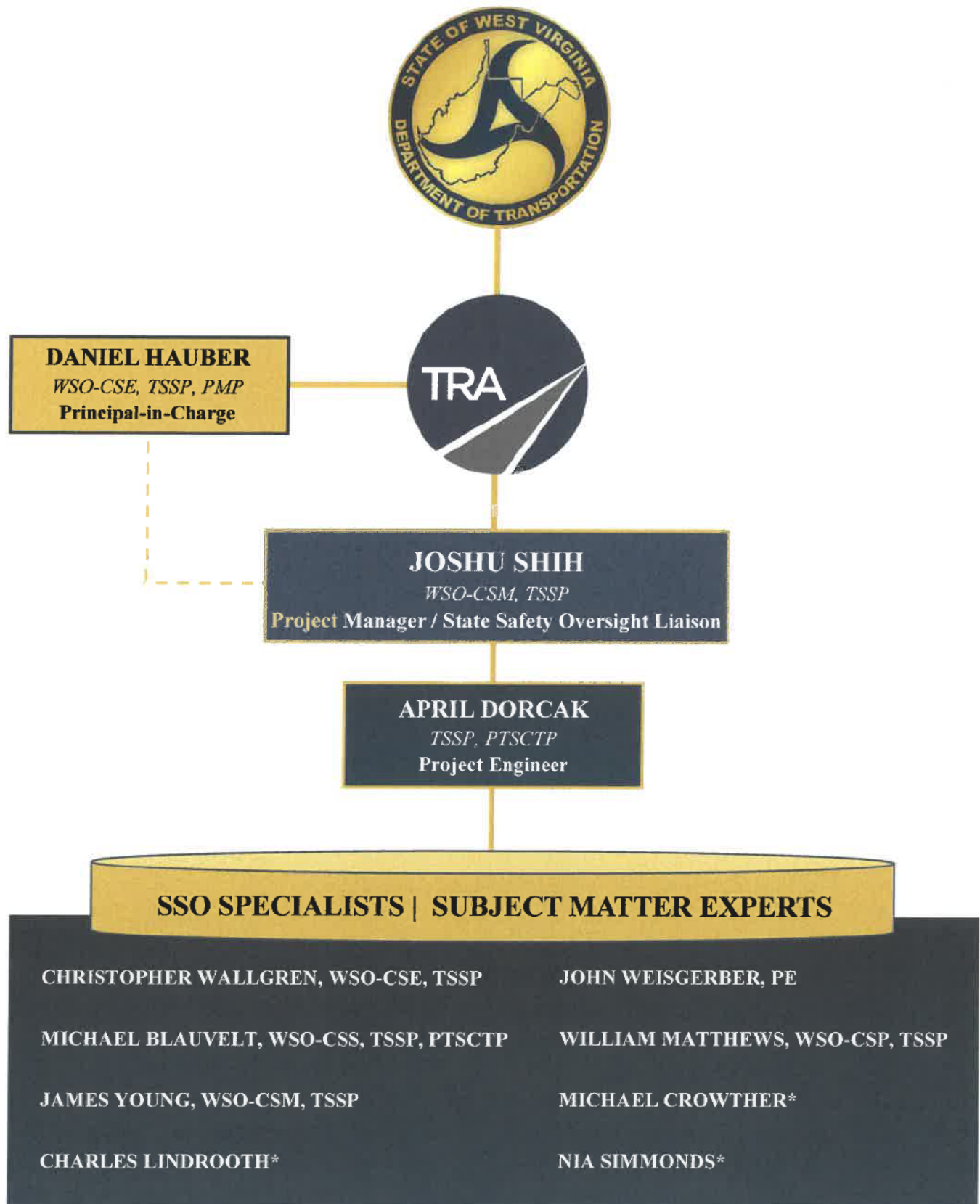
### ***Team Responsiveness***

TRA has a history of responsiveness and attentiveness to client needs, including being on-site for accident investigations quickly and for as long as needed. As noted above, TRA's project engineer is located just 90 minutes from Morgantown, and its project manager and project principal both have a history of responding quickly to West Virginia project needs. TRA staff have both responded to accident sites within hours (sometimes minutes) of occurrence, and, in some cases, have remained on site for as long as a week. TRA has responded within hours from its Philadelphia headquarters to incidents in Washington, DC; Salt Lake City; Newark; New York City; Pittsburgh; and other locations. We are prepared to help WVDPT in this same way and ensure the same high level of responsiveness.

Also, note that, for some of our SSO clients, much of our on-site response has been for hazards and safety risks rather than defined accidents. These clients have recognized hazards as a precursor to potential accidents, and have tried to monitor these areas closely to prevent worse situations. TRA is prepared to bring this same level of responsiveness to serious PRT hazards that may arise, at WVDPT's direction. Likewise, as part of our work with WVDPT under ongoing program monitoring, TRA personnel will help WVDPT analyze incidents and hazards for potential investigation, and to be as proactive as possible in addressing them.



# Team Organization Chart



\* TSSP certification in progress.

## CAPABILITIES MATRIX

SERVICES	J. Shih	D. Hauber	A. Dorcak	C. Wallgren	J. Weisgerber	W. Matthews	M. Crowther	M. Blauvelt	J. Young	C. Lindrooth	N. Simmonds
State Safety Oversight	●	●	●	●	●	●	●	●	●	●	●
SSO Program Standards and Procedures	●	●	●	●	●	●	●	●	●	●	●
Public Transportation Agency Safety Plans (PTASPs)	●	●	●	●	●	●	●	●	●	●	●
Safety Management Systems (SMS)	●	●	●	●	●	●	●	●	●	●	●
Rail Fixed Guideway Public Transportation Systems (RFGPTS)	●	●	●	●	●	●	●	●	●	●	●
Automated Transportation Systems	●	●	●	●	●	●	●	●	●	●	●
Triennial On-Site Safety and Security Reviews	●	●	●	●	●	●	●	●	●	●	●
Safety, Incident, and Accident Records Review	●	●	●	●	●	●	●	●	●	●	●
Accidents and Hazards <ul style="list-style-type: none"> <li>- Analyses and Assessments</li> <li>- Data Gathering</li> <li>- Investigation</li> <li>- Mitigation</li> <li>- Notification Thresholds</li> </ul>	●	●	●	●	●	●	●	●	●	●	●
Monitor and Review Accident Investigation Activities	●	●	●	●	●	●	●	●	●	●	●
Corrective Action Plans	●	●	●	●	●	●	●	●	●	●	●
Data Gathering and Analysis	●	●	●	●	●	●	●	●	●	●	●
Trend Analysis	●	●	●	●	●	●	●	●	●	●	●
Rail Facilities, Systems, and Vehicles	●	●	●	●	●	●	●	●	●	●	●
Physical Inspections	●	●	●	●	●	●	●	●	●	●	●
Systems Design, Construction, Operations, and Maintenance	●	●	●	●	●	●	●	●	●	●	●
Safety Certification	●	●	●	●	●	●	●	●	●	●	●
Emergency Response/Preparedness	●	●	●	●		●	●				
Federal Transit Administration (FTA) Coordination	●	●	●	●	●	●	●	●	●	●	●
FTA Annual Reports	●	●	●	●	●	●		●	●	●	●
National Transportation Safety Board (NTSB) Coordination	●	●		●	●	●		●			
Schedule Development/Milestone Tracking	●	●	●	●			●	●	●	●	●
SSO Program Administration	●	●	●	●		●		●	●	●	●



## **JOSHU SHIH, WSO-CSM, TSSP**

### **Project Manager**

Mr. Shih is a transit operations expert who manages and participates in numerous TRA reviews of public transportation operations, maintenance, safety, and security across North America. He has served in a variety of roles - project manager, project analyst, subject matter expert – in relation to transit operations, operations training, and facilities maintenance. Mr. Shih directly manages several SSO project teams, and serves as the main point-of-contact to those clients.

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#### **EDUCATION**

- MCP, City and Regional Planning, University of Pennsylvania
- BA, Psychology and Finance, Washington University

#### **YEARS OF EXPERIENCE**

- Total: 17
- With TRA: 11

#### **LICENSES/CERTIFICATIONS**

- World Safety Organization, Certified Safety Manager, May 2021
- Transit Safety & Security Program Certificate, USDOT, Transportation Safety Institute, 2016

#### **AREAS OF EXPERTISE**

- Operations, Maintenance, Safety, Security
- Project Management
- Rules Compliance and Auditing
- Analysis and Inspection

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#### **EXPERIENCE**

**West Virginia Department of Transportation Division of Public Transit, State Safety Oversight Program, Morgantown, WV:** Served as the project manager for the State Safety Oversight Program, covering the Morgantown Personal Rapid Transit (MPRT) System at West Virginia University. Evaluated WVDOT and MPRT plans, policies, and procedures for compliance with Federal regulations, including 49 CFR Parts 659 and 674. Led a WVDOT-DPT triennial audit of the MPRT's rules compliance, operations training, maintenance training, and drug and alcohol testing programs. Supported WVDOT in achieving MAP-21 certification from FTA, as well as WVDOT's oversight of WVU's safety certification of communications-based train control upgrades.

**Virginia Department of Rail and Public Transportation, Statewide Public Transportation Agency Safety Plan, Multiple Locations:** Served as a rail operations and drug and alcohol testing program subject matter expert for the DRPT triennial audit of rail operations, rail operations training, and the drug and alcohol testing program at the Hampton Roads Transit (HRT) Tide light rail system. Inspected HRT vehicles and signals maintenance. Interviewed HRT personnel; reviewed documents and records; and made field observations related to its control center, grade crossings, and maintenance-of-way facilities. Observed personnel performing preventive maintenance of rail vehicles.

**Virginia Department of Rail and Public Transportation, Statewide Bus Public Transportation Agency Safety Plan, VA:** Wrote the Statewide Bus Public Transportation Agency Safety Plan on behalf of the DRPT, covering bus agencies with up to 100 revenue vehicles in peak service. Interviewed bus agency personnel and reviewed agency documentation to learn about current safety, operations, and maintenance practices. Wrote several sections of the Statewide Bus PTASP to document the safety practices of individual agencies.

**Maryland Department of Transportation, Rail Safety and Security Oversight Program, Baltimore, MD:** Served as a subject matter expert for MDOT in variety of reviews of the Maryland Transit Administration, including a





## **JOSHU SHIH, WSO-CSM, TSSP**

### **Project Manager**

Triennial Review and the MTA Light Rail and Metro operations training. Interviewed MTA personnel and performed field evaluations. Supported MDOT in its execution of the FTA Right-of-Way Worker Protection Safety Advisory and the FTA Tunnel Ventilation Systems Safety Advisory. Interviewed MTA personnel, reviewed MTA plans, policies, and procedures, and evaluated MTA practices in the field.

**Washington Metrorail Safety Commission, State Safety Oversight Program of WMATA, Washington, DC:** Served as Project Manager for the State Safety Oversight Agency covering WMATA's Metrorail system. Coordinated with WMSC's Chief Operating Officer to facilitate requests for TRA team subject matter experts for task orders, managing the overall contract and team.

**Tri-State Oversight Committee, State Safety & Security Oversight Program of WMATA, Washington, DC:** Managed team as related to technical assistance and support of the review and analysis of WMATA accident/incident investigations, corrective action plans, and hazard reports. Reviewed safety and security certification of WMATA capital projects, including Phases 1 and 2 of the Metrorail Silver Line and the 7000-Series Railcar Procurement. Participated in numerous TOC triennial safety and security audits and field inspection of Metrorail. Performed field inspections of WMATA vehicles, infrastructure, and facilities; reviewed WMATA documents; and interviewed WMATA personnel. Served as a subject matter expert in the TOC audits of WMATA stations maintenance and rail operations and operations training. Supported the TOC in its coordination with FTA WMATA Safety Oversight in FWSO's safety oversight duties over WMATA.

**Pennsylvania Department of Transportation, Pennsylvania Rail Transit Safety Review Program, Philadelphia, Pittsburgh, and Johnstown, PA:** Performed a variety of operational safety reviews in the field for SEPTA and the Port Authority of Allegheny County. Maintained the RTSRP accident/incident database and met regularly with system safety personnel to discuss open accident/incident investigations. Performed a variety of RTSRP reviews, including: subway emergency egress and equipment; subway tunnel inspections; operations and operations training; operations control center; procurement; traction power; rule compliance; vehicle inspections; station safety and maintenance; shop safety inspections; and roadway worker protection.

**Oregon Department of Transportation, State Safety and Security Oversight Program, Portland, OR:** Managed the Oregon Rail Transit SSO program. Facilitated a mock audit of the SSO Program. Supported multiple Triennial Audits of TriMet and Portland Streetcar, Pre-Revenue Reviews of TriMet's Orange Line extension, and Portland Streetcar's "Complete the Loop" extension. Served as the subject matter expert for rail operations and operations training, drug and alcohol testing program, stations maintenance, and station-pedestrian interface. Also managed enhancements to the SSO program to achieve MAP-21 compliance. Developed a new Program Standard compliant with 49 CFR Part 674, procedures for Accident Investigation and Corrective Action Plan, and a Conflict-of-Interest Policy.

**Texas Department of Transportation, State Safety and Security Oversight Program, Dallas and Houston, TX:** Supported TXDOT in its oversight of the Dallas Area Rapid Transit (DART) light rail system, the Dallas Streetcar (DSC), and the McKinney Avenue Transit Authority (MATA) trolley system. Also led oversight of the Metropolitan Transit Authority of Harris County (Houston METRO) light rail system. Oversaw day-to-day support on such activities as accident investigation, Corrective Action Plan (CAP) reviews and approvals, monthly teleconferences, quarterly site visits, and RFI/safety advisory responses. Managed past Triennial State Safety Oversight (SSOA) Audits of Houston METRO, DART, and MATA. Reviewed, approved, and verified Corrective Action Plans (CAPs). Coordinated with METRO, DART, and MATA to fulfill TxDOT's document requests and to set each respective review's on-site schedule. Reviewed the drug and alcohol testing program, contractor safety training and requirements, hazardous materials; stations and shop safety; and rail operations; and operations training.

**Metropolitan Atlanta Rapid Transit Authority, Comprehensive Assessment of Safety-Critical Systems, Atlanta, GA:** Performed a comprehensive assessment of MARTA's Safety Critical Systems. Evaluated rail vehicles and rail vehicle maintenance. Contributed to the findings of the final project report, which resulted in recommendations for improvements to rail and bus maintenance practices and procedures.

**New Jersey Transit, Rail System Field Operations Safety Review, Newark, NJ:** Led technical audits of NJ Transit's compliance with FRA regulations. Was responsible for blue signal protection, signals/train control testing and inspections, stations inspections, and structures inspections. Also contributed to audits related to operations and train handling, safety functions, and personal protective equipment use.



## **DANIEL HAUBER, WSO-CSE, TSSP, PMP**

### **Vice President/Principal-in-Charge**

Mr. Hauber specializes in the operations, maintenance, safety, and security of transportation and new start projects. He works with transportation authorities and government agencies to formulate integrative, management-focused approaches. Mr. Hauber plans and implements independent, comprehensive assessments focused on key business process elements, such as procedures and rules structures. As integral leader of the firm's state safety oversight technical and management teams, Mr. Hauber has helped plan, develop, program, and implement state safety oversight programs. He has also helped existing programs achieve better safety and security outcomes. He has been a technical auditor for rail transit safety oversight in 19 states and jurisdictions, examining all aspects of transit agency safety, security, operations, maintenance, and supporting functions. He has helped states with both triennial reviews and ongoing safety oversight programs, and has been a key part of accident investigation teams.

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#### **EDUCATION**

- Masters Certificate, Project Management, Villanova University
- MBA, Business Administration, Temple University
- BA, Urban Studies, University of Pennsylvania

#### **YEARS OF EXPERIENCE**

- Total: 24
- With TRA: 23

#### **LICENSES/CERTIFICATIONS**

- Transit Safety & Security Professional, Transit Safety Institute, February 2018
- Public Transportation Safety Certification Training Program, September 2021
- Project Management Professional, Certificate No. [REDACTED] Project Management International, December 2022

#### **SPECIALIZED TRAINING**

- ICS-100, Introduction to Incident Command System, Emergency Management Institute, March 2019
- ICS-200, Basic Incident Command System for Initial Response, Emergency Management Institute, May 2019
- NIMS-700, Introduction to the National Incident Management System, Emergency Management Institute, May 2019
- NIMS-800, National Response Framework Introduction, Emergency Management Institute, May 2019

#### **AREAS OF EXPERTISE**

- State Safety Oversight
- Project Management
- Technical Auditing
- Operations and Maintenance

#### **EXPERIENCE**

**West Virginia Department of Transportation, State Safety Oversight Program, Morgantown, WV:** Served as project principal. Assisted in finalizing West Virginia's Part 659-compliant SSO program, and in obtaining the state's SSO certification under MAP-21 and Part 674 requirements. Coordinated with the Personal Rapid Transit system at West Virginia University to apply the FTA's SSO requirements, as well as other FTA-compliant processes, including hazard management, accident investigation, safety and security audits, and others.



**DANIEL HAUBER, WSO-CSE, TSSP, PMP**  
**Vice President/Principal-in-Charge**

**Pennsylvania Department of Transportation, Rail Transit Safety Review Program, Philadelphia/Pittsburgh/Johnstown, PA:** Served as project principal and primary technical auditor in several areas, including safety (accident investigation, safety certification, corrective action plans, internal audit oversight, and hazard management), training, maintenance and infrastructure, and operations. Provided 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.

**Hawaii Department of Transportation, State Safety Oversight Program, Honolulu, HI:** Directed TRA's project team to identify, analyze, and address issues related to the overall program structure and the Honolulu Rail Transportation Project (H RTP) system. Audited the safety and security certification, testing, and safety programs of HART's rail project, as well as the safety and oversight capacity of HDOT Services (responsible for operations and maintenance once the line opens). Participated in field audits, meetings, and conference calls associated with project startup and safety.

**Tennessee Department of Transportation, State Safety Oversight Program, Memphis and Chattanooga, TN:** Served as system safety subject matter expert during audits of the Chattanooga Area Regional Transportation Authority's (CARTA) Lookout Mountain Inclined Railway. Facilitated and led a hazard management and safety management systems (SMS) training class and seminar for CARTA managers.

**Minnesota Department of Public Safety, Rail Safety Oversight Program, Minneapolis and St. Paul, MN:** Served as the principal-in-charge for Minnesota rail safety oversight. Worked with the Minnesota State Patrol to formulate and implement its state safety oversight program, while ensuring compliance with MAP-21 requirements. Performed technical and field audits related to safety (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).

**Illinois Department of Transportation, State Safety Oversight Program, Chicago and St. Clair County, IL:** Assisted the agency meet FTA and MAP-21 requirements. Performed technical audits as part of IDOT's triennial on-site reviews. 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. Audited CTA and Bi-State topics, including operations, safety, training, roadway worker protection, and maintenance of track, structures, signals, traction power, and rail vehicles.

**Maryland Department of Transportation, State Safety Oversight Program, Baltimore, MD:** Performed on-site audits and reviews of Baltimore MTA rail operations, maintenance, and related topics, including training, rule compliance, signals maintenance, traction power maintenance, track maintenance, roadway worker protection, and safety management. Served on five on-site triennial audits within a 20-year span of working with this client.

**Florida Department of Transportation, Rail Fixed Guideway Transit Safety and Security Oversight Program, Jacksonville/Miami/Tampa/Fort Lauderdale, FL:** Served as a technical audit 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 people mover), Miami Airport (automated people movers), and Miami-Dade Transit (transit bus). Audited Miami-Dade Transit safety related to the maintenance of track, bridges and structures, train control, facilities, traction power, and passenger vehicles. Also served as the primary auditor for roadway worker protection, operations, and system safety.

**Oregon Department of Transportation, State Safety and Security Oversight Program, Portland, OR:** Organized and implemented several triennial audits and pre-revenue service reviews. Performed technical audits related to track, signals, vehicles, structures, and traction power maintenance, operations and supervision, training, and safety functions for the TriMet light rail system and the Portland Streetcar.

**Washington State Department of Transportation, State Safety and Security Oversight Program, Seattle and Tacoma, WA:** Planned and implemented several triennial reviews of the Seattle Waterfront Streetcar, Seattle Monorail, Tacoma Link, Central Link, and South Lake Union Streetcar. Conducted pre-revenue service assessments of the two Link light rail systems. Led audits related to operations, system safety functions (including accident investigation, safety certification, corrective action plans, internal audit oversight, and hazard management), infrastructure maintenance (including track, signals, traction power, stations, and structures), and training. Also contributed to several security-related audits.





## **DANIEL HAUBER, WSO-CSE, TSSP, PMP**

**Vice President/Principal-in-Charge**

**Texas Department of Transportation, State Safety and Security Oversight Program, Dallas and Houston, TX:** Led technical audits related to track, signals, traction power, elevator/escalator maintenance, emergency equipment, operations, and training. Performed six total triennial audits - three at DART and three at Houston Metro.

**Port Authority of New York and New Jersey, AirTrain Safety Oversight Board, Newark, NJ and New York, NY:** Performed triennial audits for the Airtrain automated fixed guideway systems at Newark-Liberty International and JFK International airports. Was responsible for technical audits in areas of: track and guideway maintenance, train control, traction power, passenger stations, elevator/escalator maintenance, training, and operations control centers. Also performed technical audits in system safety areas, including configuration management, safety certification, hazard management, and accident investigation. Led and participated in several on-site incident and hazard investigations involving operational events, engineering and maintenance issues, and organizational safety issues.

**West Virginia Department of Transportation, Development of Public Transportation Agency Safety Plans, Charleston, WV:** Developed PTASPs for eight small urban bus transit systems. The project included detailed interviews and listening sessions with the transit agencies, information gathering and analysis, authoring of new PTASP sections and content, and provision of PTASP and safety management system (SMS) training for transit agency personnel. Served as the project principal. Ensured consistency and quality across tasks and between transit agencies. Developed SMS training programs directed at managers, administrative personnel, and front-line workers.

**Sound Transit, Safety and Security Certification Program Audits, Seattle, WA:** Planned, programmed, and executed independent audits of the agency's safety and security certification programs. Elements taken into consideration included: physical construction, training, operating and maintenance procedures, and other critical project elements. Served as project principal, subject matter expert, and audit lead. Also performed an assessment of Sound Transit's light rail vehicle (LRV) procurement and related safety and security certification programs.

**Southwest Ohio Regional Transit Authority, Cincinnati Streetcar Operations & Maintenance Consulting, Cincinnati, OH:** When the City of Cincinnati assumed direct control over Cincinnati Streetcar's operations and maintenance, performed an assessment of the safety and security plans, processes, organizational structure, operations contractor procedures, and other key Streetcar elements. Liaised between the city and the local transit agency.

**San Francisco Bay Area Rapid Transit District, Transportation Department Budget Efficiency Assessment, San Francisco, CA:** Reviewed BART's overtime usage, tracking, and budget and contract implications. Identified leading drivers and factors associated with overtime use, as well as how to address these in future contract negotiations. Helped to better structure the overtime budget based on actual expenses and reasonable forecasts. Identified key performance indicators, management controls, and other processes to monitor and control overtime expenditures.

**San Francisco Bay Area Rapid Transit District, Maintenance and Service Options Study, San Francisco, CA:** Served as a senior advisor and technical consultant. Interpreted and analyzed 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.

**Santa Clara Valley Transportation Authority/San Francisco Bay Area Rapid Transit District, Peer Review of Silicon Valley BART Extension Tunnel Options, San Francisco, CA:** Facilitated a peer review of tunnel options for Phase II of the Silicon Valley BART Extension. Examined single-bore and twin-bore options. Evaluated issues related to fire/life safety, operations, and maintenance. Moderated presentations and discussions. Helped the peer review group organize questions, information requests, and its final presentation. Presented findings to board of directors. Collaborated with VTA and BART representatives.

**Metropolitan Atlanta Rapid Transit Authority, Atlanta Streetcar Operations & Maintenance Consulting, Atlanta, GA:** Served as project principal. Helped transition Atlanta Streetcar operations and maintenance from the city to MARTA. Managed overall project direction. Provided technical input and accuracy. Evaluated operations and maintenance practices and plans. Formulated a transition plan for the change in operating authorities.



## **APRIL DORCAK, TSSP, PTSCTP**

### **Project Engineer**

Ms. Dorcak provides state safety oversight (SSO) consulting services for various clients. Her responsibilities include coordinating with rail transit agency personnel, performing on-site safety and security audits, managing corrective action plans, participating in internal audits, conducting field reviews, identifying opportunities for improvement, and monitoring safety-related projects, initiatives, and hazards. Ms. Dorcak develops Public Transportation Agency Safety Plans (PTASPs), and is involved in training agency personnel on safety management systems (SMS) and PTASP implementation. Her experience in project coordination and oversight, process improvement, data analysis, and change management enables her to identify operational efficiencies and continuous improvement opportunities related to the development of best practices, processes, and procedures.

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#### **EDUCATION**

- MBA, Business Administration, Duquesne University
- BS, Industrial Engineering, Pennsylvania State University
- AS, Environmental Studies, Columbia College
- Graduate Certificate, Railroad Engineering, University of Illinois Urbana-Champaign

#### **YEARS OF EXPERIENCE**

- Total: 14
- With TRA: 3

#### **LICENSES/CERTIFICATIONS**

- Public Transportation Safety Certification Training Program - Initial Certification November 2020
- Rail Transit Safety and Security Program (TSSP) Certification - U.S. Department of Transportation, Transportation Safety Institute (TSI) - November 2020

#### **SPECIALIZED TRAINING**

- National Incident Management System Incident Command System Training, ICS-100, ICS-200, ICS-700, ICS-800, 2019
- University of Wisconsin Fundamentals of Train Control and Signaling, 2019
- Rail Transit Agency Training
- Right of Way Certification - PAAC, SEPTA
- PAAC First Responder Familiarization Training
- PAAC Crisis Awareness Training
- PAAC Active Shooter Training
- PAAC First Observer Training
- Six Sigma Yellow Belt Certified
- Six Sigma Green Belt Trained

#### **AREAS OF EXPERTISE**

- State Safety Oversight
  - Public Transportation Agency Safety Plans
  - Corrective Action Plans
  - Hazard Mitigation
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## **APRIL DORCAK, TSSP, PTSCTP**

### **Project Engineer**

#### **EXPERIENCE**

**West Virginia Department of Transportation, Division of Public Transit, State Safety Oversight Program, Morgantown, WV:** Served as the on-site safety oversight representative for the WVDOT-DPT at the West Virginia University's Personal Rapid Transit (WVU PRT). Worked closely with the SSO Program Manager to provide ongoing reviews of program safety plans, program standard development, and internal and external audit coordination and execution. Participated in safety audits. Monitored CAPs, events and hazards, and worked with WVU's Director of Transportation and the PRT's Chief Safety Officer to ensure safety of the RTA and compliance with SSO requirements. Also developed and led an SMS training and implementation workshop at the WVU PRT.

**West Virginia Department of Transportation, Division of Public Transit, Development of Public Transportation Agency Safety Plans (PTASPs), Charleston, WV:** Collaborated with the WVDOT-DPT to enhance the operations for eight bus agencies in WV. Developed PTASPs, the tasks of which involved reviewing documentation, conducting on-site interviews with key personnel, developing safety plans for the agencies, documenting compliance gaps, and ensuring that agency PTASPs were approved. Assisted with the development of training materials, and provided training to the bus agencies on SMS and PTASP implementation.

**Pennsylvania Department of Transportation, Rail Transit Safety Review Program, Pittsburgh, Johnstown, and Philadelphia, PA:** Served as the on-site state safety oversight representative in Pittsburgh and Johnstown. Coordinates and participated in triennial safety and security audits at both the Port Authority of Allegheny County (PAAC) and the Cambria County Transit Authority (CamTran). Performed operations and station evaluations. Reviewed policies and procedures. Conducted field observations and assessments. Participated in tabletop and functional emergency exercises. Worked incident scenes and participated in after-action reviews. Collaborated closely with PAAC and CamTran staff, including system safety, emergency responders, and other RTA management and personnel to manage oversight activities, develop and monitor corrective action plans, and ensure safety at the RTAs. Directed preparation and led quarterly safety and security update meetings with PAAC and CamTran. Attended RTA-led safety and security meetings. Supported SEPTA in the development of program standard and standard operating procedure revisions, monthly reporting, and annual reporting.

**Illinois Department of Transportation, State Safety Oversight Program, Chicago, IL/St. Louis, MO:** Provided program-level support to the IDOT SSO Program, including providing assistance with the program standard, monthly and annual reporting, and the development of a triennial audit schedule for the CTA. Coordinated with the IDOT SSOA to ensure joint oversight of Metrolink, which serves both Missouri and Illinois in the St. Louis region.

**The Bank of New York Mellon, Various Roles, Pittsburgh, PA:** Functioned as a business analyst and a client implementation specialist. As a business analyst, streamlined operations and continually improved processes across multiple operations in the US, Europe, and Asia. Assisted in the development of a global operating model with recognized best practices. Delivered operational impact analysis in the form of workflow documentation and FTE analysis. Facilitated discussions between multiple business partners during new process or technology implementations. Created and delivered a project tracking dashboard for the Global Fund Accounting program, and ensured that all initiatives aligned with the global operating model. As a client implementation specialist, achieved the build-out of an offshore operations site. Produced training and transition plans. Developed goals, objectives, and success measures for a subject matter expert visit. Generated an operational clock and deliverable tracker. Introduced a resource allocation model to position the project and operations teams across three locations for new requests and to manage resources based on priorities. Generated an efficient product-based quality assurance checklist. Wrote operating procedures. Led testing, operational readiness, and production parallel efforts. Liaised with consultants and clients. Delivered a standard client onboarding model across three regions and six products in order to scale the technology platform. Collected inventory for a multi-phased implementation approach. Produced artifacts to support the business model.

**Bayer Corporation, Internal Auditor, Pittsburgh, PA:** Examined operational and financial data and management reports in detail to verify their accuracy. Eliminated fraud and waste through the review of management practices and internal controls, as well as verified operations' consistency with corporate objectives and policies, laws, and regulations. Developed recommendations based on audit findings and produced audit reports to deliver findings to management, executives, and other key personnel.





## **CHRISTOPHER WALLGREN, WSO-CSE, TSSP**

### **Vice President**

Mr. Wallgren is a transit industry leader in the development, support, and performance of state safety oversight (SSO) services. He has supported the development and audit of SSO program standards and procedures for state safety oversight agencies (SSOAs) and independent safety oversight boards for non-FTA fixed guideway systems. He understands the complex management, operations, and maintenance needs of multimodal systems. He has served as principal, manager, and researcher on bus and rail operations and maintenance needs assessments, and he has identified improved business processes that support safe, reliable, and functional transportation options. Mr. Wallgren is adept at working with all types of employees involved in Operations and Maintenance, from front-line operators and maintainers to senior management and board members. He understands the complex systems and how to optimize their performance. In addition, Mr. Wallgren develops security and emergency preparedness plans, concepts of operations plans (COOPs), and threat and vulnerability assessments. He recognizes that the open environment of the transit/rail industries pose unique challenges that must carefully considered.

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#### **EDUCATION**

- MSE, Urban Transportation Systems Engineering, University of Pennsylvania
- BSE, Urban Transportation Civil Engineering Systems, University of Pennsylvania

#### **YEARS OF EXPERIENCE**

- Total: 22
- With TRA: 21

#### **LICENSES/CERTIFICATIONS**

- Transit Safety & Security Professional, Transportation Safety Institute, September 2018
- Public Transportation Safety Certification Training Program, October 2021
- World Safety Organization, Certified Safety Executive, October 2021

#### **AREAS OF EXPERTISE**

- State Safety Oversight
- Automated People Movers
- Standards and Practices
- Operations and Maintenance

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#### **EXPERIENCE**

**Port Authority of New York and New Jersey, AirTrain Safety Oversight Board, Newark, NJ/New York, NY:** Helped developed the ATSOB, an independent internal safety oversight body modeled on the requirements of Federal rail transit state safety oversight regulations. The ATSOB oversees the AirTrain automated people mover systems at JFK International and Newark-Liberty International airports. Served as the principal-in-charge over project activities. Monitored corrective action plan responses, accident/incident reporting, and tracking of other safety and security critical items. Led Triennial Audits for both AirTrain systems. Performed audits of the operations control centers and system safety functions. Led independent incident investigations, and assisted in oversight and monitoring of various

## CHRISTOPHER WALLGREN, WSO-CSE, TSSP

Vice President



training programs. Worked with the PANYNJ to transition the ATSOB into a program that complies with the requirements for State Safety Oversight established under 49 CFR Parts 673 and 674. Developed a safety certification program for the new AirTrain systems being planned for LaGuardia and Newark-Liberty International airports.

**Illinois Department of Transportation, State Safety Oversight Program Triennial Audit of Chicago Transit Authority, Chicago, IL:** Served as an auditor on the team for multiple triennial reviews for the IDOT SSO Program and its predecessor under IL-RTA. Led audits of all system safety department functions, including accident investigation, safety inspections, safety training, and hazard management. Also audited rail operations control, rail supervision and audit, and rail operations training, in addition to safety data analysis, hazard management, safety management systems, safety training, drug and alcohol program compliance, and shop and industrial safety. Provided advice on SSO best practices nationwide for consideration of applicability to the IDOT program.

**Florida Department of Transportation, Rail Fixed Guideway Transit Safety and Security Oversight Program, Jacksonville/Miami/Tampa, FL:** Established and administered a comprehensive, statewide SSO program. Performed five triennial audits of Miami-Dade Metrorail & Metromover, three triennial audits of the Jacksonville Transportation Authority Skyway, and three triennial audits of the Hillsborough Area Regional Transit TECO Line Streetcar in Tampa. Led safety compliance audits in all areas of transit agency operation and maintenance. Developed specialized FDOT familiarization and guidance on hazard assessment, roadway worker protection, and other topics. Directed TRA team in the performance of hazard analyses, rule compliance audits, safety certification, hazard and risk management, safety promotion, and incident investigation. Worked with FDOT to implement a significantly expanded SMS-based audit program statewide. Monitored the incorporation of safety certification of the Miami-Dade Metrorail fleet replacement.

**Texas Department of Transportation, State Safety Oversight, Statewide TX:** Served as principal-in-charge. Expanded the TxDOT SSO program into a more comprehensive and engaged effort at Dallas Area Rapid Transit (DART), McKinney Avenue Transit Authority (MATA), the Dallas Streetcar, and Galveston Island Transit (GIT). Led audit efforts at Houston METRO. Performed the Three-Year Safety and Security Reviews of DART and METRO light rail systems. Led detailed topic audits in rail operations, training, system safety, employee health and safety, and facilities and infrastructure inspection and maintenance. Worked with TxDOT officials to evaluate DART and METRO corrective action plans and resulting corrective actions. Advised TxDOT on implications associated with changes in State Safety Oversight legislation. Performed targeted audit of MATA in response to reportable events involving the historic streetcar operations. Directed the team's efforts related to the Triennial Audit of Houston METRO. Oversaw GIT's safety certification and reopening of historic trolley service after several years of closure. Oversaw MATA, DART, DSC, and GIT PTASP and SMS implementation.

**Hawaii Department of Transportation, State Safety Oversight Program, Honolulu, HI:** Served as an operations and safety expert on the oversight of Honolulu Rail Transportation Project. Audited safety certification, testing, and safety programs, as well as the safety and oversight capacity of Honolulu's Department of Transportation Services. Audited operations and staffing plans, as well as SMS and emergency preparedness and response documentation.

**Florida Department of Transportation-District 6, Miami International Airport Automated People Mover Safety Oversight, Miami, FL:** Served as the principal-in-charge responsible for supporting safety oversight of the MIA APMs. Led a safety certification oversight program for the construction and opening of a new, upgraded APM system in Terminal E. Managed ongoing safety oversight assistance for the SkyTrain, MIA APMs, and the Terminal E train. Reviewed safety certification checklists, operating rules and procedures, the system safety program plan, and other related documents. Performed on-site reviews. Led operations, rule compliance, safety, and fitness for duty audits related to the Triennial Audit of MIA's APMs' compliance with 14-15.017 F.A.C. Also directed an independent investigation of a SkyTrain derailment.

**Florida Department of Transportation-District 5, SunRail System Safety Program Plan Review and Triennial Audit, Orlando, FL:** Conducted annual reviews of the safety plan that governs safety activities of the SunRail commuter rail line. Evaluated the plan's compliance with FDOT-mandated requirements for the safety program. Established plans in compliance with FDOT requirements for contractors related to train operation and maintenance. Conducted the first on-site Triennial Audit of the SunRail system.



## **CHRISTOPHER WALLGREN, WSO-CSE, TSSP**

**Vice President**



**Florida Department of Transportation-District 5, Orlando International Airport APM Review of Operational Safety and Triennial Audit, Orlando, FL:** Performed detailed reviews of the plan that governs safety activities of the APM systems. Evaluated safety plan compliance with FDOT-mandated requirements. Established plans, policies, and procedures, compliant with FDOT regulations, to protect contractors. Conducted an emergency review of one of the new APM systems plagued with in-service breakdowns. Led the first-ever Triennial Audit of the APM systems.

**Oregon Department of Transportation, State Safety and Security Oversight Program, Portland, OR:** Served as an auditor on the triennial review team for multiple Triennial Reviews performed for Tri-Met and Portland Streetcar. Assisted in performing a pre-revenue service assessment for a Portland Streetcar extension. He focused reviews on system safety functions, including accident investigation, safety inspections and training, emergency preparedness, and hazard management.

**Massachusetts Bay Transportation Authority, Safety Management System Consulting Services, Boston, MA:** Provided support to the MBTA's Safety Department as it introduces an advanced safety management system. Established new safety data gathering. Aligned safety data with SMS goals and objectives. Gathered and assessed existing data and migrated it into the new SMS to ensure the usefulness and accuracy of the safety data. Provided technical support related to internal audit performance and corrective action plan management.

**Sound Transit, Safety Certification Independent Verification, Seattle, WA:** Served as a subject matter expert. Conducted the independent review, audit, and verification of the extensive Safety Certification Program. Scope involved auditing safety certification records, including confirming that final designs referenced mitigations identified in hazard analyses and threat and vulnerability assessments, NFPA standards, and local building codes.

**Metropolitan Atlanta Rapid Transit Authority, Assessment of TrackSafe Roadway Worker Protection Technology, Atlanta, GA:** Served as an independent safety assessor to MARTA in Phase 2 of the TrackSafe Roadway Worker Protection Technology pilot project. TrackSafe is a roadway worker protection secondary warning device intended to supplement existing roadway worker protection rules and enhance worker safety while working in live track environments. Worked with the Project Manager to establish the audit scope and schedule. Developed questionnaires for participant interviews. Led reviews of MARTA Integrated Operations Center and its use of and for TrackSafe. Developed an independent assessment report for MARTA and FTA regarding the feasibility and safety of wayside alert technologies based on the findings from data analysis and onsite interviews/observations.

**Bay Area Rapid Transit District, Safety Programs and Training Needs Assessment and Agency Safety Plan Development, Oakland, CA:** Led a team responsible for assessing the safety programs and training. Developed questionnaires related to safety training and the integration of safety into operations and maintenance training programs. Established criteria for interviews with safety, operations, maintenance, training, and other agency personnel to determine their current engagement with the safety department and their understanding of internal safety activities. Gauged requirements established by the state and the FTA. Developed a 49 CFR Part 673-compliant Public Transportation Agency Safety Plan that integrated the three separate safety plans in place for BART's existing BART heavy rail line, the eBART diesel multiple unit service, and the Oakland Airport Connector APM. Developed a four-hour management safety training module related to PTASP and SMS efforts.

**Bay Area Rapid Transit District, Maintenance and Service Options Study, Oakland, CA:** Performed an in-depth assessment of options for BART related to whether to incorporate extensive new maintenance protocols system-wide, while balancing increased ridership levels and requests for more service. Approved a comprehensive overview of needs and demands with options for seeking the most appropriate balance of service and maintenance. The goal was to deliver high levels of service while upgrading and maintaining infrastructure. Presented findings to Board of Directors. Conveyed critical need to coordinate extensive maintenance and capital project plans to maintain and improve operating reliability and performance.

**American Public Transportation Association, Rail Transit Standards Operating Practices Working Group, Washington, DC:** Managed APTA's Rail Operating Practices Working Group in its development of rail transit standards. Served as a liaison between APTA and the members of the Committee, which include transit agency managers from nearly every rail transit system in the U.S. The Working Group has developed 27 operations and safety standards on important subjects from accident investigation to rulebook introduction and authority to hours-of-service requirements. His expertise in transit operations offered an additional perspective in the drafting of the industry's first rail transit operations standards so that they offer clear and useful guidance to the industry.





## **JOHN WEISGERBER, PE**

### **Senior Director – Engineering**

Mr. Weisgerber's career spans more than 40 years during which he has been involved with the infrastructure and rolling stock of railroads and transit agencies. He has worked closely with Class 1 railroads, short lines, international lines, and maintenance and engineering departments. Mr. Weisgerber provides safety oversight support for a number of SSO programs, including triennial audits of track, structures, traction power, train control, and vehicle maintenance programs.

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#### **EDUCATION**

- BEE, Electrical Engineering, Georgia Institute of Technology

#### **YEARS OF EXPERIENCE**

- Total: 42
- With TRA: 6

#### **LICENSES/CERTIFICATIONS**

- Registered Professional Engineer [REDACTED] Pennsylvania, 1997

#### **SPECIALIZED TRAINING**

- ICS-100, Introduction to Incident Command System, Emergency Management Institute, 2019
- ICS-200, Basic Incident Command System for Initial Response, Emergency Management Institute, 2019
- ICS-700, Introduction to the National Incident Management System, Emergency Management Institute, 2019
- ICS-800, National Response Framework Introduction, Emergency Management Institute, 2019
- FTA SMS Awareness, 2019
- Derailment Investigation and Prevention Seminar, 2015

#### **AREAS OF EXPERTISE**

- State Safety Oversight
- Track Maintenance
- Rail Vehicles – Revenue and Non-Revenue
- Elevated Structures

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#### **EXPERIENCE**

**West Virginia Department of Transportation, State Safety and Security Oversight Program, Morgantown, WV:** Participated in the SSO Triennial Safety and Security Audit of the West Virginia University Personal Rapid Transit (PRT). Reviewed the safety programs, including drug/alcohol, training, training, security and emergency management, accident and incident response and investigation, hazard management, and hazardous materials management. Also reviewed the PRT structures inspection procedures and reports as part of the routine inspection visits.

**Virginia Department of Rail and Public Transportation, SS and Security Oversight Program, Hampton Roads, VA:** Participated in the SSO Triennial Safety and Security Three-Year Reviews of the Hampton Roads Transit Light Rail maintenance. Reviewed the inspection and maintenance practices. Provided technical training for track, systems, structures, and facilities. Provided ongoing oversight with regular visits to review inspection and maintenance practices and documentation. Reviewed incident and hazard reports submitted to VADOT as required by the FTA.

**Maryland Department of Transportation, Rail Safety and Security Oversight Program, Baltimore, Montgomery, and Prince Georges, MD:** Participated in two MDOT SSO Triennial Safety and Security Audits of track inspection/ maintenance practices of heavy and light rail. Reviewed inspection/maintenance practices of the non-revenue maintenance vehicles of both modes, including the technical training, maintenance facilities, and reporting practices. Supported MDOT during the unscheduled shutdown of Baltimore Heavy Rail due to rail wear issues.



## **JOHN WEISGERBER, PE**

### **Senior Director – Engineering**

Participated in a special MDOT audit/review of MTA's Roadway Worker Protection procedures. Provided ongoing reviews of incidents and hazards reports for thoroughness and technical accuracy of the causes and responses to events.

**Pennsylvania Department of Transportation, Pennsylvania Rail Transit Safety Review Program, Philadelphia, Pittsburgh, and Johnstown, PA:** Participated in the Triennial Safety and Security Audit of: SEPTA's structures, technical training, track maintenance, signals, vertical transportation, and non-revenue vehicles; PAAC's structures, signals, and station maintenance; and the CamTran structures. These included the NTSB investigations of a SEPTA Market-Frankford accident at 69th Street Yard, the SEPTA Norristown High-Speed Line accident at 69th Street Transportation Center, the SEPTA Broad Street Line passenger fatality, and the SEPTA Broad Street Line employee fatality. Provided expertise for the: recovery program of the SEPTA M4 Body Bolster failures and repairs; the SEPTA M4 Grounding Brushes failures; the investigations of the PAAC Library Line flooding incident and Station Square closure due to the Norfolk Southern derailment. Reviewed agency reports of hazards and incidents for thoroughness and technical accuracy related to the causes and responses of these events.

**Florida Department of Transportation, Rail Fixed Guideway Transit Safety and Security Oversight Program, Jacksonville, Miami, Tampa, and Fort Lauderdale, FL:** Provided oversight to Miami DTPW track, structures, traction power, train control, and vehicle maintenance for Metrorail and Metromover. Supplied technical support for the Track and Guideway Department, inspection, and maintenance operations. Participated in two SSO Triennial Safety and Security Audits of Metrorail and Metromover. Reviewed inspection/maintenance practices of the track, traction power, and train control departments. Was involved in two SSO Triennial Safety and Security Audits of the TECO Line Streetcar Track Department. Reviewed inspection/maintenance practices, procedures, and reports. On two SSO Triennial Safety and Security Audits of the JTA Skyway, reviewed the guideway and structures maintenance and inspections, the train control system, and the traction power. Assessed the Roadway Worker Protection Program and General Employee/Contractor Safety procedures. Provided ongoing oversight of these three RTAs with regular visits to review inspection and maintenance practices, documentation, and incident and hazard reports.

**Texas Department of Transportation, State Safety Oversight Program, Dallas/Houston, TX:** Participated in the TxDOT Triennial Safety and Security Audit of the Houston Metrorail light rail track and vehicles departments. Reviewed the maintenance and inspection practices and procedures, assessed its current condition, and analyzed the reporting practices of the track and the revenue vehicles departments. Also participated in the TxDOT Triennial Safety and Security Audit of the McKinney Avenue Transit Authority (MATA) trolley track and vehicle departments. Reviewed the maintenance and inspection practices and procedures, assessed its current state, and analyzed the reporting practices of the track and the revenue vehicles departments. Investigated the causes and lessons learned from incidents related to the shutdown of the MATA Trolley Barn. Reviewed maintenance documents and engineering drawings of the system. Inspected the track, the vehicles and the overhead catenary system. Participated in the TxDOT Triennial Safety and Security Audit of the Dallas Streetcar (DSC) track and technical training departments. Reviewed maintenance and inspection practices and procedures, assessed its current state, and analyzed the reporting practices of the track department. Performed a review of the technical training procedures and requirements. Provided ongoing reviews of the agency reports for thoroughness and technical accuracy of the causes and the responses to the events. Performed a restart review of the Galveston Island Streetcar. Was responsible for reviewing the inspection and maintenance procedures, as well as the readiness of the system infrastructure after the system's shutdown due to damage from Hurricane Ike in 2008.

**Missouri Department of Transportation, Rail Safety and Security Oversight Program, St. Louis/Kansas City, MO:** Participated in the MoDOT PRSR activities for St. Louis Loop Trolley. Provided oversight of Loop Trolley in pre-revenue activities and recently during start-up/revenue activities. Performed ongoing reviews of the Kansas City Streetcar and St. Louis Metrolink. Analyzed incident and hazard reports for thoroughness and technical accuracy of the causes and the responses to the events.

**Illinois Department of Transportation, State Safety Oversight Program, Chicago, IL:** Performed two IDOT SSO Triennial Safety and Security Audits of the Chicago Transit Authority. Reviewed inspection and maintenance practices as related to track inspection and maintenance and structure inspection and maintenance. Provided technical review of hazard/incident reports to IDOT SSO. Participated in a special IDOT audits/reviews of CTA's grade crossing protection and of ultrasonic rail testing practices.



**JOHN WEISGERBER, PE**  
Senior Director – Engineering

**Hawaii Department of Transportation, State Safety Oversight Program, Honolulu, HI:** Supported the SSO program for the HART startup. Reviewed the documentation (SOPs and maintenance practices) under development by Hitachi Rail Honolulu, as well as hazard mitigations and incident reports.

**Washington Metrorail Safety Commission, State Safety Oversight Program of WMATA, Washington, DC:** Served as Technical Program Specialist in the WMSC SSO Triennial Safety and Security Audit of: inspection/maintenance of elevated structures; non-revenue maintenance vehicles; and revenue vehicles. Reviewed WMATA technical documentation for triennial audits, providing comments to WMSC audit staff. Advised on technical issues identified in triennial audits. Evaluated proposed corrective action plans in response to triennial audits and advised on WMSC's follow-up actions. Reviewed revised WMATA-1000 track standards document and provided comments to WMSC track maintenance subject matter expert with identified issues and recommendations.

**Metropolitan Atlanta Rapid Transit Authority, Safety Review of Bombardier's TrackSafe System, Atlanta, GA:** Participated in the final review of Bombardier's TrackSafe roadway worker protection secondary warning system. The review included operations and effectiveness of the technology in providing a safe working environment for on-track workers.

**Bay Area Rapid Transit, Evaluation of Service Planning, Customer Communications, and Maintenance Planning Options, San Francisco, CA:** Conducted an operations and maintenance review of BART. The project entailed site visits, interviews, and research assessing the current state of operations, along with recommendations for improvements. affairs and recommending a path forward for BART. Focused largely on interviews and field observations related to maintenance practices and roadway worker protection.





## **WILLIAM MATTHEWS, WSO-CSP, TSSP**

**Senior Consultant**

Mr. Matthews is a transportation subject matter expert specializing in system operations and maintenance. He provides technical guidance and system regulatory compliance as related to operations, system maintenance, and safety certification processes. His areas of expertise include commuter railroad and intercity transit operations, system equipment maintenance, accident/incident investigations, fire/life safety equipment, and occupational health and safety.

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### **EDUCATION**

- MS, Public Safety Management, Saint Joseph's University, Philadelphia, PA
- BS, Technical and Industrial Administration, Widener University, Chester, PA

### **YEARS OF EXPERIENCE**

- Total: 38
- With TRA: 10

### **LICENSES/CERTIFICATIONS**

- Transportation Safety and Security Program Certificate (TSSP), December 2010
- Certified Safety and Security Director, World Safety Organization

### **SPECIALIZED TRAINING**

- National Incident Emergency Management (NIMS 100, 200, 700 & 800)
- OSHA 30 Hour General Industry Safety and Health.
- National Professional Qualifications Standard - Fire Inspector I, Fire Fighter I, Fire Fighter II, Fire Instructor I, Fire Instructor II
- Transportation Safety Institute, Advanced Transit Rail Incident Investigation, September 2018

### **AREAS OF EXPERTISE**

- Safety and Security Compliance
- System Operations and Maintenance
- Regulatory Compliance
- Fire/Life Safety

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### **EXPERIENCE**

**West Virginia Department of Transportation, Division of Public Transit, State Safety Oversight Program, Morgantown, WV:** Provided technical support to the SSO Program Manager. Responsible for safety oversight and security regulatory compliance related to the Personal Rapid Transit, an automated people mover system operating within West Virginia University. Participates in triannual safety and security compliance auditing for vehicles, communications, signals, fire/life safety, and occupational health and safety processes, including accident/incident investigations and hazard management corrective actions.

**Maryland Department of Transportation, Rail Safety and Security Oversight Program, Baltimore, MD:** Provided technical support for MDOT's SSO program, which oversees the MTA's Light Rail and Metro heavy rail systems. Supported the SSO with triannual safety and security compliance audits for transit system equipment and maintenance processes, vehicle maintenance processes, communications and tunnel, fire/life safety equipment maintenance, and inspection processes. Participated in the safety certification process for new rail cars and communication-based train control signal system upgrade. Reviewed tunnel ventilation and fire life safety systems, including equipment maintenance, training and inspection processes, and associated emergency procedures.



## **WILLIAM MATTHEWS, WSO-CSP, TSSP**

**Senior Consultant**

**Pennsylvania Department of Transportation, Rail Transit Safety Review Program, Philadelphia/Pittsburgh/Johnstown, PA:** Performed technical audits in system operations, maintenance, and fire/life safety equipment maintenance processes, including PA's Funicular Transit Systems. safety and security auditing, regulatory safety compliance reviews, Corrective Action Plan activity, accident/incident/hazardous condition investigations, standard operating procedures, and security reviews. Participated in NTSB investigations.

**Illinois Department of Transportation, State Safety Oversight Program, Chicago and St. Clair County, IL:** Provided state safety oversight for the Chicago Transit Authority (CTA). Performed technical safety reviews of CTA's accident investigation reporting, system preventive maintenance, and inspection processes for traction power distribution, rail vehicles, elevators and escalators, tunnel ventilation equipment and emergency egress and fire and life safety systems.

**Florida Department of Transportation, Rail Fixed Guideway Transit Safety and Security Oversight Program, Jacksonville/Miami/Tampa, FL:** Provided oversight support to transit agencies in Tampa, Jacksonville and Miami, such as regulatory safety compliance reviews, Corrective Action Plans, accident/incident/hazardous condition investigations, standard operating procedure review, infrastructure and vehicle maintenance processes, and security reviews to ensure compliance with FDOT-mandated Safety Program.

**Florida Department of Transportation-District 6, Miami International Airport, State Safety Oversight of MIA Mover, Sky Train, and E Terminal Train, Miami, FL:** Audited the elements of System Safety Program Plan that covers all three Automated People Mover lines. Power distribution, communication and signals, vehicles, fire/life safety systems, and the operating infrastructure were assessed. Also participated in investigation of the MIA Mover train derailment.

**Florida Department of Transportation-District 6, Miami-Dade Bus Safety and Security Oversight Program, Miami, FL:** Participated in two triannual safety and security compliance audit reviews based on the system safety plan of the Miami Metrobus fleet. The review included an assessment of system operations, fleet maintenance, maintenance shop conditions and security at Central, Coral Way and Northeast maintenance facilities. The audit also ensure compliance with FDOT-mandated Safety Program.

**Florida Department of Transportation-District 5, Greater Orlando Airport Authority, Automated People Mover System, Orlando, FL:** Performed a triannual compliance audit review of the system safety program plan for the APM system. Assessed vehicles, power distribution, communications, and signals systems maintenance processes. Also included an assessment of fire/life safety systems and emergency management processes. Evaluated System Safety Program Plan for compliance with FDOT's safety program mandates.

**Minnesota Department of Public Safety, Rail Safety Oversight Program, Minneapolis and St. Paul, MN:** Conducted safety and regulatory compliance audits for St. Paul's Metro Transit's Three-Year Safety and Security Reviews of traction power, vehicle, and facilities maintenance.

**District of Columbia Fire and Emergency Medical Services, DC Streetcar State Safety and Security Oversight Program, Washington, DC:** Provided technical subject matter expertise related to system operations and maintenance, as well as system safety certification. Reviewed design, construction, and operational verification for system certification. Also reviewed system safety program plan, related sub-plans, key safety-related elements, system expansion plans, and new vehicle procurement designs.

**Port Authority of New York and New Jersey, AirTrain Safety Oversight Board, Newark, NJ/New York, NY:** Provides technical guidance and support to the ATSOB as related to the Automated People Movers at JFK International and Newark-Liberty International airports. Conducted system operation and maintenance reviews, including accident/incident/hazard investigations, root cause analysis, and Corrective Action Plan acceptance.

**Missouri Department of Transportation, Rail Safety and Security Oversight Program, St. Louis and Kansas City, MO:** Provided technical support for the Kansas City Streetcar and the St. Louis MetroLink Light Rail System on Three Year Safety and Security Reviews. Conducted safety and regulatory compliance audits for transit system equipment and maintenance processes, vehicle maintenance processes, communications and tunnel equipment, and fire/life safety equipment maintenance and inspection processes.

**Utah Department of Transportation, State Safety and Security Oversight Program, Salt Lake City, UT:** Assisted the UDOT state safety oversight staff with operations and maintenance technical support for the Utah Transit





## **WILLIAM MATTHEWS, WSO-CSP, TSSP**

### **Senior Consultant**

Authority (UTA) and the TRAX system. Conducted reviews of signal system equipment maintenance records, per FRA standards, including vehicle maintenance and facility maintenance requirements to ensure FTA, APTA and OSHA compliance.

**Hawaii Department of Transportation, State Safety Oversight Program, Honolulu, HI:** Worked closely with the state Program Manager to identify and analyze issues related to the program startup and asset management of the Honolulu Authority Rapid Transportation rail project. Reviewed issues related to safety certification, fire life safety requirements, and system integrated testing.

**Southwest Ohio Regional Transit Authority, Cincinnati Streetcar Operations & Maintenance Consulting, Cincinnati, OH:** Managed the system safety certification for the Cincinnati Streetcar. Collaborated with the agency and other stakeholders. Conducted vehicle and system design and construction verification audits and updates, asset management, planning, and preliminary development for system safety program plan and other related sub-plans. Also reviewed key safety-related elements.

**Massachusetts Bay Transportation Authority, Safety Department Consulting, Boston, MA:** Provided technical assistance to MBTA for the development of an organization-wide Fire/Life Safety and Emergency Egress Plan. The task provided research and a comparison of fire/life safety regulatory requirements in relationship to MBTA operating and maintenance practices.

**Denver Regional Transportation District, Internal Safety Assessment, Denver, CO:** Conducted a safety assessment of the RTA's regional railroad contractor, Denver Transit Operators (DTO). Managed staff. Reviewed DTO Safety Department procedures and associated processes within railroad operations, maintenance, safety and training departments, as related to compliance with FRA, FTA and NFPA.

**North County Transit District, Development of Standard Operating Procedures, Oceanside, CA:** Conducted a safety assessment of the NCTD modal contractor rail operations and maintenance. Reviewed bus and rail maintenance practices, operations control center safety procedures, asset management processes, and occupational safety training. Led an operations and maintenance technical review of NCTD's Standard Operating Procedures related to CA PUC, FRA, FTA, OSHA, and APTA regulations.

**SEPTA, Various Positions, Philadelphia, PA:** Held various technical and senior level management positions responsible for rolling stock operations and system maintenance within SEPTA's Commuter Railroad, Subway, Light Rail, and System Safety Department. Provide safe regional transportation equipment all while ensuring regulatory compliance with the FRA, FTA, APTA, OSHA and PA State PUC. Participated in various accident investigations, including by the NTSB, serving as a System Safety Officer.



## **MICHAEL CROWTHER**

### **Senior Director - Security**

Mr. Crowther is a retired police sergeant with more than 30 years of law enforcement experience. He serves as a project manager and subject matter expert in transportation security, emergency preparedness, and training. His area of expertise include: management and implementation of transit policing; development and implementation of security and emergency preparedness programs; security program training; force protection; and drills and exercise programs. Mr. Crowther is also a veteran of the United States Army.

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#### **EDUCATION**

- Camden County College, Police Academy
- Northwestern University, Traffic Institute School of Staff and Command
- Federal Bureau of Investigation, Investigators School, Gloucester County Police Academy
- Temple University, Criminal Justice Center Police Academy
- United States Army Military Police Academy

#### **YEARS OF EXPERIENCE**

- Total: 37
- With TRA: 10

#### **SPECIALIZED TRAINING**

- Homicide/Crime Scene Investigations, Philadelphia Police Department
- Drug Enforcement Agency Investigators School, Gloucester County Police Academy
- Methods of Instruction, Camden County Police Academy
- Advanced Interview & Interrogation Training, Federal Bureau of Investigation, Burlington County Police Academy
- Supervision School, Gloucester County Police Academy
- Hostage/Crisis Negotiations, Federal Bureau of Investigation/SEPTA Police Department
- Threat Assessment for Law Enforcement Professionals, Camden County Police Academy
- Critical Incident Management, Public Agency Training Council
- Explosive Devices & Weapons of Mass Destruction, Rutgers University
- Explosives & Improvised Explosive Device Familiarization, Bureau of Alcohol, Tobacco and Firearms
- Weapons of Mass Destruction, Train-the-Trainer, Louisiana State University
- Drill Instruction, Gloucester County Police Academy
- Domestic Terrorism, Thomas Jefferson University
- Contemporary & Islamic Fundamentalist Terrorism, CTS Associates
- Chemical, Biological, Radiological, Nuclear, Explosives & Hazardous Materials Awareness, NJ State Police
- First Responders Awareness to Terroristic Threats for Bridges and Tunnels, Federal Transit Administration
- Basic Counter Anti-Terrorism Training Program, SEPTA Police Department/Kroll Associates
- Land Transportation Anti-Terrorism Training Program, United States Department of Homeland Security
- Internal Affairs, Camden County Police Academy
- PATRIOT Training, Federal Transit Administration
- Information Sharing Planning, Mind-Alliance/Philadelphia Area Regional Transit Security Working Group
- Counter Terrorism & Intel Analysis, Philadelphia Area Regional Transit Security Working Group/Treliator
- Urban Area Security Initiative, Intelligence Lead Policing, NJ Regional Intelligence Academy/NJ State Police/Department of Homeland Security
- ICS-100, Introduction to Incident Command System, Emergency Management Institute
- ICS-200, Basic Incident Command System for Initial Response, Emergency Management Institute
- NIMS-700, Introduction to the National Incident Management System, Emergency Management Institute



## **MICHAEL CROWTHER**

### **Senior Director – Security**

- NIMS-800, National Response Framework Introduction, Emergency Management Institute
- ICS 300: Intermediate Incident Command System for Expanding Incidents - Texas A & M University
- Transit Security, Transit Safety Institute

#### **AREAS OF EXPERTISE**

- Transit Security and Safety
- Emergency Preparedness
- Incident Management
- Threat Assessment
- Elevated Structures

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#### **EXPERIENCE**

**West Virginia Department of Transportation Division of Public Transit, State Safety Oversight Program, Morgantown, WV:** Evaluated the Morgantown Personal Rapid Transit (MPRT) System at West Virginia University, including its plans, policies, and procedures for compliance with Federal regulations (49 CFR Parts 659 and 674). Reviewed emergency preparedness and management measures for the triennial audit of the MPRT as related to rules compliance, operations training, maintenance training, and drug and alcohol testing programs. Supported WVDOT in achieving MAP-21 certification from FTA, as well as WVDOT's oversight of WVU's safety certification of communications-based train control upgrades.

**Utah Department of Transportation, State Safety and Security Oversight Program, Salt Lake City, UT:** Provided support and subject matter expertise related to the review and oversight of the Utah Transit Authority's TRAX light rail system. Assisted with a Pre-Revenue Service assessment for the Airport Line extension. Participated extensively two Triennial Safety and Security Reviews. Provided project support in response to the most recent FTA audit of the SSO program's security and emergency preparedness planning.

**Pennsylvania Department of Transportation, Rail Transit Safety Review Program, Philadelphia/Pittsburgh/Johnstown, PA:** Coordinated with security personnel at the state's covered transit systems - SEPTA, Port Authority of Allegheny County (PAAC), and Cambria County Transit Authority to review pertinent data and trends related to security and emergency preparedness. Conducted reviews relating to each agency's security plans, emergency management plans, continuity of operation plans and policies, handling of sensitive security information, and the planning/execution of emergency exercises. Investigated the Norfolk Southern (NS) freight train derailed near the Port Authority of Allegheny County (PAAC) Panhandle Bridge. Provided technical assistance following Homeland Security Exercise & Evaluation Program (HSEEP) standards for PAAC to conduct an After-Action Report (AAR) regarding this incident to improve response and communications with NS, the FTA, the FRA, and local emergency responders. Devised an Improvement Plan to improve PAAC response in the future.

**Virginia Department of Rail and Public Transit, State Safety and Security Oversight Program, Norfolk, VA:** Served as a subject matter expert for the DRPT, which provides State Safety and Security Oversight of the Hampton Roads Transit (HRT) TIDE light rail system. Provided oversight of safety and security operations and emergency preparedness. Participated in the review and evaluation of HRT's security and emergency preparedness programs.

**Illinois Department of Transportation, State Safety and Security Oversight Program, Chicago, IL:** Served as a subject matter expert, providing State Safety and Security Oversight for the Chicago Transportation Authority (CTA) rail system. Conducted triennial audit. Also participated in the Special Study of Trespassing on the Chicago Transit Authority Rail System commissioned by IDOT.

**Missouri Department of Transportation, Rail Safety and Security Oversight Program, St. Louis and Kansas City, MO:** Served as a subject matter expert responsible for providing technical assistance for oversight of the safety and security program at the Kansas City Streetcar and the St. Louis Metrolink System as related to safety and security operations and emergency preparedness. Conducted tabletop and full-scale exercises, in addition to triennial reviews.

**Minnesota Department of Public Safety, Rail Safety Oversight Program, Minneapolis and St. Paul, MN:** Provided technical assistance for oversight of the safety and security program. Served as a security and emergency preparedness technical consultant.





## **MICHAEL CROWTHER**

**Senior Director – Security**

**Oregon Department of Transportation, State Safety and Security Oversight Program, Portland, OR:** Evaluated the security and emergency preparedness levels of the Portland Streetcar. Assessed compliance with state and federal standards, including evaluation of the security plan, security deployment strategies/practices, training, safety and security outreach programs, risk management, and threat and vulnerability issues. Performed triennial audit, pre-revenue service reviews, and regulatory compliance audits.

**Texas Department of Transportation, State Safety and Security Oversight Program, Dallas, TX:** Conducted triennial safety and security reviews of DART's light rail operations. Reviewed Security and Emergency Management Program Plan, as well as related policies and procedures. Performed a pre-revenue review of the Galveston Island Transit (GIT) system and provided technical assistance to the McKinney Avenue Transit Authority (MATA) regarding their Emergency Preparedness activities related to Homeland Security Exercise and Evaluation Program (HSEEP) compliant exercise objectives.

**Port Authority of New York and New Jersey, AirTrain Safety Oversight Board, Newark, NJ/New York, NY:** Served as a subject matter expert for the security review team. Conducted on-site reviews and provided security and emergency management oversight of the automated people movers at JFK International and Newark-Liberty International airports. Collaborated with the Port Authority Police Department to assist in developing security and emergency management plans compliant with the Safety and Security Oversight standards developed by TRA.

**Washington State Department of Transportation, State Safety and Security Oversight Program, Seattle, WA:** Conducted assessments of the System Security and Emergency Preparedness Plans for Sound Transit's Central Link and Tacoma Link light rail systems, as well as the Seattle Monorail. Responsibilities included interviewing personnel, assessment of procedures, records and documents, observation of practices and conditions, and development of a formal report and findings identifying security and emergency preparedness deficiencies. Assessments were based on compliance with transit agency procedures and standards, as well as APTA Standards. Also conducted the Pre-Revenue Service Assessment for the University Station extension to Central Link. This task determined the readiness for revenue service and compliance with safety and security certification requirements of FTA Part 659.

**District of Columbia Fire and Emergency Medical Services, State Safety and Security Oversight Program, Washington, DC:** Reviewed and edited drafts of the Security Plan, Emergency Preparedness Plan, and System Safety Program Plan. Reviewed and provided suggested revisions to Standard Operating Procedures and numerous pre-revenue operations documents, including the Threat & Vulnerability Plan, Car Barn & Control Center Emergency Evacuation Plan, Continuity of Operations Procedure, SSO Accident/Incident/Hazard tracking matrix, and the Opening Events Plan. Contributed to the triennial review and provided technical subject matter expertise.

**North County Transit District, Threat and Vulnerability Assessment, Oceanside, CA:** Assessed and evaluated potential threats and vulnerabilities caused by human-initiated and natural hazard events. Recommended countermeasures for potential impacts on NCTD facilities. Specific emphasis was placed on those assets or systems which would constitute a single-point-of-failure for any segment of NCTD operations. Recommendations were made for risk reduction and updates were made to NCTD's security plans. Also provided Train-the Trainer education for NCTD personnel.

**Amtrak, Transit Risk Assessment Module (TRAM) Refresh, Various Locations:** Served as a subject matter expert and lead project coordinator for a TRAM refresh. Evaluated threats and vulnerabilities of critical assets and services, the consequences of a myriad list of emergency events, and possible mitigations/responses to those events resulting in an overall level of system risk.

**Philadelphia Area Regional Transit Security Working Group (PARTSWG), Emergency Operation Plan (EOP) Updates, Camden, NJ:** Updated, revised, and amended the EOP for this working group which is comprised of four rail/transit systems identified by the Department of Homeland Security as a Tier 1 System. These include: SEPTA, the Delaware River Port Authority/Port Authority Transit Corporation, New Jersey Transit, and the Delaware Transit Corporation. Amtrak also partners with this group due to its connectivity to the Northeast Corridor. Ensured scope of work, level of effort, and budget mandates were maintained. Provided training in relation to the updates for PARTSWG members. Developed and facilitated a Tabletop Exercise in accordance with Homeland Security Exercise and Evaluation Program (HSEEP) guidelines to test the PARTSWG member agency's integration with the updated EOP.



## **MICHAEL BLAUVELT, WSO-CSS, TSSP, PTSCTP**

### **Subject Matter Expert – SSO Management**

Mr. Blauvelt leads safety and security assessments at rail transit agencies throughout the country. He provides ongoing support in the development and audit of safety and security-related program standards and procedures for automated people mover systems, heavy rail systems, modern light rail and streetcar systems, and historic trolley operations. His safety-related assessments focus on enhancing transit agency operations and maintenance.

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#### **EDUCATION**

- MUPP, Transportation Planning, University of Illinois-Chicago – 2014
- BS, Environmental Economics and Policy – University of Illinois-Urbana-Champaign – 2011

#### **YEARS OF EXPERIENCE**

- Total: 7
- With TRA: 6

#### **LICENSES/CERTIFICATIONS**

- Transit Safety and Security Program (TSSP) Certificate, USDOT Transportation Safety Institute, 2017
- Public Transportation Safety Certification Training Program, Initial Certification, 2018
- World Safety Organization (WSO), Certified Safety Specialist (CSS), 2019
- Certificate in Project Management, Cornell University
- Certificate of Geospatial Analysis and Visualization (GSAV), Urban Data Visualization Lab, University of Illinois-Chicago, 2014

#### **SPECIALIZED TRAINING**

- Occupational Safety and Health Administration (OSHA) – 30-hour General Industry Safety and Health
- Transit Industrial Safety Management, USDOT Transportation Safety Institute
- National Incident Management System, Incident Command System Training - ICS-100, ICS-200, ICS-700, ICS-800
- Select Rail Transit Agency Training
- Rail Accident/Incident Investigation, SEPTA
- State Rail Vehicle Maintenance and Inspection Training – Port Authority of Allegheny County
- Employee Drug and Alcohol/Reasonable Suspicion Training, Port Authority of Allegheny County
- Operator Crisis Awareness Training, Port Authority of Allegheny County
- Light Rail Transit Operations Training, Port Authority of Allegheny County
- First Responder Familiarization Training, Port Authority of Allegheny County (CamTran)
- Right of Way Certification, Various Transit Agencies (SEPTA, PAAC, CTA, MetroLink, KC Streetcar)
- Rail Signaling, National Transit Institute

#### **AREAS OF EXPERTISE**

- State Safety Oversight
- Operations and Maintenance
- Audits and Assessments
- Accident/Incident Program

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#### **EXPERIENCE**

**West Virginia Department of Transportation, State Safety Oversight Program, Morgantown, WV:** Provided coordination and management support. Contributed to safety and security-related program enhancements, including





## **MICHAEL BLAUVELT, WSO-CSS, TSSP, PTSCTP**

### **Subject Matter Expert – SSO Management**

Program Standard development and compliance with MAP-21. Reviewed program safety and security plans. Provided internal and external audit coordination at the West Virginia University related to its Personal Rapid Transit.

**Pennsylvania Department of Transportation, Rail Transit Safety Review Program, Philadelphia/Pittsburgh/Johnstown, PA:** Provided coordination and management support. Performed reviews of program safety and security plans, program standard development, and internal and external audit coordination and execution. Worked with transit agencies to ensure Corrective Action Plans were developed and implemented. Assisted with FTA-mandated rules compliance, reporting, and program support. Participated in working groups of four NTSB investigations.

**Illinois Department of Transportation, State Safety Oversight Program, Chicago and St. Clair County, IL:** Directed TRA's team for IDOT's SSO program, providing ongoing program support and management to review transit agency safety plans and compliance with federal and state requirements. Directed the accident/incident program. Developed tools and procedures to ensure accurate data for trend analysis. Participated in the triennial audits. Supported on-site reviews of vehicle maintenance, maintenance training, facilities, power, track, elevator/escalator maintenance, hazardous materials, communications, system modification, safety certification, configuration management, procurement, and drug/alcohol programs.

**Missouri Department of Transportation, Rail Safety and Security Oversight Program, St. Louis and Kansas City, MO:** Provided coordination and management of tasks in support of the Missouri SSO Program. Directed safety and security certification oversight activities for the Kansas City Streetcar, including coordination with regional and national FTA representatives. Conducted an Hours of Service compliance review at MetroLink. Also supported safety efforts and monitoring for the St. Louis Delmar Loop Trolley. Provided guidance and document development in support of federal compliance, including drafting revisions to the Program Standard and to rail-related state regulations. Coordinated with the IDOT SSOA to ensure joint oversight of Metrolink, which serves both Missouri and Illinois in the St. Louis region.

**Michigan Department of Transportation, State Safety and Security Oversight Program, Detroit, MI:** Served as the lead analyst and project manager for the coordination of tasks in support of the Michigan SSO Program. Coordinated triennial safety and security audit. Participated in quarterly meetings. Performed site visits and inspections. Developed and updated program documents.

**Delaware River Port Authority/Port Authority Transit Corporation, Safety & Security Internal Audit Program, Camden, NJ:** Provided technical assistance to the PATCO System Safety Department. Conducted safety assessments of system maintenance, as well as the drug and alcohol program. Audits included interviews with key personnel, field inspections, and detailed records review. Assisted with report development and coordination.

**Santa Clara Valley Transportation Authority, Comprehensive Assessment of System Safety, San Jose, CA:** Performed a comprehensive assessment of operations, maintenance, and safety functions. Reviewed operational and maintenance practices, policies and procedures. Developed recommendations for improvements based on industry best practices.

**San Francisco Bay Area Rapid Transit District, Maintenance and Service Options Study, San Francisco, CA:** Develop alternative options for maintenance operations. Performed a peer review to determine industry practices and how operations, maintenance, and service planning activities might be optimized.

**San Francisco Bay Area Rapid Transit District, Transportation Efficiency Study, San Francisco, CA:** Examined the BART Transportation Department's use, budgeting, charging, and reporting of overtime. Conducted on-site and telephone interviews with BART personnel. Analyzed data. Utilized BART-authored data analyses. Examined reports and statistics. Observed overtime-related processes, such as coding and record-keeping. Analyzed the Amalgamated Transit Union, Local 1555 (ATU) Collective Bargaining Agreement (CBA) provisions related to overtime.



## **JAMES YOUNG, WSO-CSM, TSSP**

### **Subject Matter Expert – SSO Management**

As a Project Manager and subject matter expert for Triennial Safety Audits and Pre-Revenue Service Reviews, Mr. Young routinely works with State Safety Oversight (SSO) Program Managers to develop plans, materials, and reports related to audits. He is highly skilled at identifying strengths and weaknesses of programs and policies, as well as in assessing compliance with procedures and regulations – particularly in the areas of accident investigation, rules compliance, fitness for duty, and other system safety topics. Mr. Young also specializes in assessing potential improvements to the vehicular and pedestrian interface with new rail lines under construction. He works closely with clients to create strategies to enhance operations and gathers input and support from stakeholders.

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#### **EDUCATION**

- MCP, City and Regional Planning, University of Pennsylvania
- BA, Journalism, Pennsylvania State University

#### **YEARS OF EXPERIENCE**

- Total: 15
- With TRA: 11

#### **LICENSES/CERTIFICATIONS**

- Transit Safety & Security Program (TSSP) Certificate, U.S. Department of Transportation, Transportation Safety Institute (TSI), Transit Rail Program, 2017
- Public Transportation Safety Certification Training Program, 2019
- World Safety Organization, Certified Safety Manager

#### **SPECIALIZED TRAINING**

- National Incident Management System (NIMS) Incident Command System (ICS) ICS-100, ICS-200, ICS-700, ICS-800 – April 2019
- Occupational Safety and Health Administration 30-hour training for General Industry Safety and Health, 2012

#### **AREAS OF EXPERTISE**

- State Safety Oversight
- Document Reviews
- Hazard Management
- Training and Testing

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#### **EXPERIENCE**

**West Virginia Department of Transportation, State Safety Oversight Program, Morgantown, WV:** Led WVDOT's 2019 triennial safety audit of the West Virginia University Personal Rapid Transit (PRT) system's compliance with hazard management, safety data, and accident investigation processes. Reviewed records and interviewed WVU management responsible for each area under audit. Worked with WVU on the refinement of its proposed Corrective Action Plans in response to findings outlined in the audit report.

**West Virginia Department of Transportation, Development of Public Transportation Agency Safety Plans, Morgantown, WV:** Managed the team that created PTASPs and Safety Management System Gap Analyses for eight bus agencies. Managed the team's work on schedule, quality control, and refinement of product development.



## **JAMES YOUNG, WSO-CSM, TSSP**

### **Subject Matter Expert – SSO Management**

Interviewed transit agency personnel. Developed processes for the agencies to meet the new requirements of 49 CFR Part 673. Also established a self-assessment mechanism for the transit agencies.

#### **Maryland Department of Transportation, Rail Safety and Security Oversight Program, Baltimore, MD:**

Provided oversight of the Maryland Transit Administration's (MTA) heavy and light rail systems. Set the overall direction and management of the oversight program. Analyzed accident investigations. Reviewed Corrective Action Plans. Conducted inspections and other activities. Instituted an inspection program for MDOT and assisted the agency gain its certification as a Part 674-compliant State Safety Oversight Program. Led a special study of hours of service/fatigue management of the MTA's heavy and light rail systems and audited the topic areas of facilities maintenance and industrial safety for MDOT's Triennial Safety and Security Audits. Also directed the review of the MTA's drug and alcohol testing program and its 2019 Triennial Safety and Security Audits. Provided support for internal safety and security audits. Updated the Program Standard and Procedures. Assisted with multiple State Safety Oversight program audits conducted by the FTA.

#### **Pennsylvania Department of Transportation, Rail Transit Safety Review Program, Philadelphia/Pittsburgh/Johnstown, PA:**

Served as a subject matter auditor for the state's three transit agencies: SEPTA, Port Authority of Allegheny County, and Cambria County Transit Authority. Completed audits related to operations rule compliance, training, roadway worker protection programs, hazard management, event investigation, and drug and alcohol testing programs. Managed accident/incident investigation adoption process. Monitored the completeness of investigations and appropriateness corrective actions. Conducted field observations of employee rule compliance, reviewed agency System Safety and Security Program Plans, and other daily tasks. Managed revenue assessment and safety certification oversight for the North Shore Connector light rail extension in Pittsburgh. Participated in committee meetings for rail activation, safety certification, and federal oversight, and arranged focused state reviews of all system elements.

#### **Utah Department of Transportation, State Safety and Security Oversight Program, Salt Lake City, UT:**

Provided safety and security oversight of the Utah Transit Authority (UTA) for TRAX light rail system. 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. Managed UDOT's 2012, 2015, 2018, and 2021 Three-Year Safety Audits. This included scheduling, document requests, on-site presentations, report production, and project completion. Performed audits of rail operations, grade crossings, station area, accident/incident prevention, training, drug and alcohol testing, facility and equipment maintenance, and industrial safety of maintenance facilities. Also conducted on-site Pre-Revenue Service Reviews of the Airport Line, the Draper Extension, the Sugar House Streetcar, and the Mid-Jordan and West Valley extensions. Conducted FRA-required audits of UTA's compliance with hours of service procedures, as well as special assessments of roadway worker protection, and grade crossing/intersection design for accident prevention. Updated SSO Program Standard and Procedures. Conducted annual reviews of UTA SSPPs. Evaluated internal audit report submissions. Reviewed investigation reports. Verified Corrective Action Plan completion. Assisted UDOT with FTA audits of the SSO program.

#### **Tennessee Department of Transportation, State Safety and Security Oversight Program, Memphis and Chattanooga, TN:**

Supported TDOT's safety oversight for resumption of service of the Memphis Area Transit Authority's (MATA) Trolley heritage streetcar system and the Chattanooga Area Regional Transportation Authority's (CARTA) Lookout Mountain Incline Railway. Participated in safety certification oversight of the MATA Trolley. Coordinated a team member assessment of operations and maintenance readiness. Conducted site inspections of both systems, focusing on operations, maintenance records, facility conditions, and safety programs. Managed 2018 triennial safety and security audits.

#### **Washington State Department of Transportation, State Safety and Security Oversight Program, Seattle and Tacoma, WA:**

Led four comprehensive Triennial Safety and Security Audits, along with two simultaneous Pre-Revenue Service Reviews. Organized the audits in conjunction with the WSDOT SSO Program Manager for the Central Link, Tacoma Link, Seattle Monorail, and Seattle Streetcar systems. Served as a subject matter expert for audits in operations, grade crossings/modal interface design, facility safety, facility maintenance, and drug and alcohol testing programs. Conducted all reviews successfully within an intensive six-week span.

#### **Oregon Department of Transportation, State Safety and Security Oversight Program, Portland, OR:**

Conducted a mock audit of the ODOT oversight program in preparation of the state's triennial audit by the FTA. Managed ODOT's Pre-Revenue Service Assessment of a six-mile Portland Streetcar extension. Was responsible for scheduling,





## **JAMES YOUNG, WSO-CSM, TSSP**

### **Subject Matter Expert – SSO Management**

document requests, delivering on-site presentations, report production, and project completion. Coordinated between the state and the FTA. Conducted final reviews of the new alignment's interface with pedestrians, bicycles, and vehicles. Also participated in the Triennial Safety and Security Audit of TriMet's MAX light rail system. Conducted reviews of station maintenance and industrial safety of maintenance facilities. Assisted with reviews of System Safety Program Plan topic implementation.

#### **Minnesota Department of Public Safety, Rail Safety Oversight Program, Minneapolis and St. Paul, MN:**

Assisted MnDPS as a subject matter expert for several Triennial Safety and Security Audits of System Safety topic areas. Led the ongoing DPS monitoring and reviews of Metro Transit's Green Line in the two years leading up to passenger service. 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.

**Illinois Department of Transportation, State Safety Oversight Program, Chicago and St. Clair County, IL:** Led triennial safety audits of CTA's accident investigation process, operations rules compliance, and operations training, as well as system safety program elements, fatigue management, and drug and alcohol testing. Reviewed records and interviewed CTA management responsible for each area under audit. Developed findings and recommendations for improvement. Conducted an internal audit of IDOT's combined program with the Missouri Department of Transportation that oversees the Metrolink system in advance of the FTA's audit. Also reviewed CTA's accident investigation procedures prior to approval by IDOT.

**District of Columbia Fire and Emergency Medical Services, State Safety and Security Oversight Program for the DC Streetcar System, Washington, DC:** Conducted interviews and records reviews of drug and alcohol testing, medical testing, and hours of service during the Triennial Safety Audit. Evaluated compliance with federal regulations and transit agency policies.

#### **Port Authority of New York and New Jersey, AirTrain Safety Oversight Board, Newark, NJ/ New York, NY:**

Performed audits of stations/facility maintenance, industrial safety, internal audits, and drug and alcohol testing for the 2019, 2016, and 2012 Triennial Safety and Security Reviews of Newark Liberty International Airport's automated people mover (APM) system. Also audited the topic areas of drug and alcohol testing, facilities maintenance, hazardous materials, and maintenance facility industrial safety for the 2019 and 2014 Triennial Safety and Security Reviews of the APM at JFK International Airport. Assisted with overall review coordination and report production for the 2014 and 2011 Triennial Safety and Security Reviews.

**Florida Department of Transportation, Rail Fixed Guideway Transit Safety and Security Oversight Program, Jacksonville/Miami/Tampa/Fort Lauderdale, FL:** Participated in the 2011, 2014, 2018, and 2021 Triennial Safety and Security Reviews of Miami-Dade Transit's heavy rail and automatic people mover systems. Performed audits of operations practices, rule compliance, operations training, drug and alcohol testing, facility industrial safety, and maintenance areas.

**San Francisco Bay Area Rapid Transit District, Reevaluation of Current Safety Training Programs and Planning, San Francisco, CA:** Conducted an assessment of the safety culture and safety training practices at BART through interviews with department managers and reviews of BART documentation. Reviewed training programs direct and indirectly related to safety requirements with a goal of determining how the training fit into the bigger needs of an effective Safety Management System (SMS). Drafted a report on safety culture at the management level, with recommendations for objectives, processes, and responsibilities needed for SMS implementation. Developed BART's Public Transportation Agency Safety Plan (PTASP) compliant with 49 CFR Part 673.

**Sound Transit, Safety and Security Certification Program Audits, Seattle, WA:** Conducted audits of the agency's safety and security certification documentation collected during the design and construction of several major capital projects. Created audit procedures. Performed audits of hazard analyses and conformance documentation at all stages of the certification process before capital projects enter revenue service.





## **CHARLES LINDROOTH**

### **Project Analyst**

Mr. Lindrooth works extensively with and for government agencies. His areas of expertise include regulatory compliance, stakeholder coordination, emergency management, safety and security plan review, and safety monitoring. He develops Public Transportation Safety Plan (PTASP) and train material for state safety oversight programs.

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#### **EDUCATION**

- JD, Rutgers University School of Law
- BA, Political Science, Temple University

#### **YEARS OF EXPERIENCE**

- Total: 2
- With TRA: 2

#### **AREAS OF EXPERTISE**

- State Safety Oversight
- Hazard Management
- Accident/Incident Management
- Regulatory Compliance

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#### **EXPERIENCE**

**West Virginia Department of Transportation, Development of Public Transportation Agency Safety Plans, Morgantown, WV:** Collaborated with WVDOT in order to enhance the operations for eight bus agencies. Assisted with the development of PTASPs for the agencies. Reviewed documentation. Developed safety plans. Creating training materials. Participated in live familiarization trainings.

**Virginia Department of Rail and Public Transportation, State Safety and Security Oversight Program, Norfolk, VA:** Supported on-site triennial audits and hazard management activities. Managed hazard logs and monitored agency progress on Corrective Action Plans (CAPs).

**Illinois Department of Transportation, State Safety Oversight Program, Chicago and St. Clair County, IL:** Supported oversight of the Bi-State MetroLink system. Prepared documentation for and assisted in conducting rolling triennial audits. Wrote reports for all safety and security audit elements at Chicago Transit Authority (CTA), including system safety, hazard management, and data collection. Conducted a special study on CTA's grade crossing by reviewing documentation. Also researched legal and regulatory issues. Coordinated with Missouri DOT.

**District of Columbia Fire and Emergency Medical Services, State Safety and Security Oversight Program, Washington, DC:** Supported safety and security oversight activities for 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. Provided operational, mechanical, and legal support services. Coordinated daily with the internal program manager and other staff.

**Missouri Department of Transportation, Rail Safety and Security Oversight Program, St. Louis and Kansas City, MO:** Provided state safety oversight for the Delmar Loop Trolley and Kansas City Streetcar system, as well as bi-state safety oversight for MetroLink in St. Louis. Supported the MoDOT review of the PTASPs submitted by Kansas City Streetcar and Loop Trolley. Worked with the individual agencies to ensure that their SMS was



## **CHARLES LINDROOTH**

**Project Analyst**

implemented in an effective and timely manner. Attended meetings and reviewed materials. Supported the development and completion of CAPs.

**Texas Department of Transportation, State Safety and Security Oversight Program, Dallas and Houston, TX:** Served as an analyst for the Texas Safety Oversight Program. Supported tasks related to the Houston Metro, Dallas Area Rapid Transit (DART) and the McKinney Avenue Transit Authority (MATA). Attended meetings. Reviewed safety and security plans. Monitored CAPs and conducted internal safety reviews.

**Port Authority of New York and New Jersey, AirTrain Safety Oversight Board, Newark, NJ and New York, NY:** Provided safety and security consulting services for the AirTrain Automated People Mover (APM) System at Newark-Liberty International Airport. While not a SSOA under the FTA's jurisdiction, the ATSOB mirrors all Federal requirements for transit agency safety and security. Supported the hazard management and accident/incident investigation programs through document review and research related to pertinent safety concerns.

**Santa Clara Valley Transportation Authority, Development of Public Transportation Agency Safety Plan, San Jose, CA:** Developed a PTASP compliant with 49 C.F.R. 673. Reviewed data. Identified and documented compliance gaps.

**Wilmington & Western Railroad, Assistant Trainman and Shop Assistant, Wilmington, DE:** Worked as an Assistant Trainman. Gained knowledge of the railroad's operational rule book, as well as a general familiarity with the NORAC Operating Rules. Implemented and enforced safe practices in yard and shop environments, including safe switching practices, fouling avoidance, blue flag rules, and lockout-tagout procedures. Employed accepted maintenance practices and requirements for steam locomotives, diesel locomotives, and passenger equipment. Assisted in the locomotive and car shop.

## **NIA SIMMONDS**

### **Project Analyst**



Ms. Simmonds provides State Safety Oversight consulting services. Her areas of expertise include safety plan reviews, operations and maintenance reviews, engineering reviews, external audits system audits, incident/hazard analysis, and policy development. In addition, Ms. Simmonds assists clients on operations and maintenance specific projects, specializing in quality and continuous improvement to help streamline processes related to maintenance and inspection.

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#### **EDUCATION**

- MEM, Engineering Management, Case Western Reserve University
- BSE, Electrical Engineering, Case Western Reserve University

#### **YEARS OF EXPERIENCE**

- Total: 3
- With TRA: 2

#### **SPECIALIZED TRAINING**

- Six Sigma and Quality Management, Greenbelt – Weatherhead School of Management, Case Western Reserve University
- Classes towards TSSP
- SMS Principles for Transit
- Transit System Security

#### **AREAS OF EXPERTISE**

- Operations, Maintenance, Safety, Security
- Corrective Action Plans
- Document and Record Reviews
- Rules Compliance and Auditing

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#### **EXPERIENCE**

**Maryland Department of Transportation, Rail Safety and Security Oversight Program, Baltimore, MD:** Served as a project analyst in support of the oversight of the Maryland Transit Administration (MTA) heavy and light rail systems. Reviewed and tracked corrective action plans (CAP) stemming from internal audits, external audits, and inspections. Maintained the SSOA's CAP and analyzed associated key performance indicators. Collaborated with the SSO team and agency to improve CAP processes and procedures. Developed annual reports to governor (or equivalent authority) and other officials. Assisted with various administrative duties, operations reviews, and inspections.

**Florida Department of Transportation-Central Office, Rail Fixed Guideway Transit Safety and Security Oversight Program, Jacksonville/Miami/Tampa, FL:** Assisted 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. Conducted bi-monthly oversight teleconferences and site visits with agencies. Tracked progress on agency issues and efforts for improvement. Performed document and record reviews, as well as data analysis. Participated in rules compliance audit activities. Assisted with engineering reviews, operations and maintenance reviews, and audits.

**Port Authority of New York and New Jersey, AirTrain Safety Oversight Board, Newark, NJ/New York, NY:** Performed safety and security consulting services for the AirTrain Automated People Mover (APM) Systems at Newark Liberty International and John F. Kennedy International airports. Assisted with operations reviews and



continuous improvement. The APM systems at both airports are overseen by an independent body of PANYNJ, 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.

**Texas Department of Transportation, State Safety and Security Oversight Program, Dallas and Houston, TX:** Supported oversight tasks of the Dallas Area Rapid Transit (DART) and the McKinney Avenue Transit Authority (MATA). Participated in meetings, onsite reviews, safety and security plans reviews, safety event reviews, and CAP tracking. Assisted with internal safety review observation and safety hazard review. Reviewed DART's Public Transportation Agency Safety Plan (PTASP) for light rail and streetcar.

**Hawaii Department of Transportation, State Safety Oversight Program for the Hawaii Area Rapid Transit (HART), Honolulu, HI:** Performed audits related to the rail project's safety certification, testing, and safety programs. Also audited the safety and oversight capacity of Honolulu's Department of Transportation Services regarding operations and maintenance. Provided ad-hoc support, such as standards and procedure review.

**District of Columbia Fire and Emergency Medical Services, State Safety and Security Oversight Program, Washington, DC:** Served as lead analyst in support of safety and security oversight activities of the DC Streetcar. Worked extensively to cooperatively improve SMS-related processes within DCFEMS and DC Streetcar. Assisted the DCFEMS Program Manager with operational and mechanical support services. Conducted oversight teleconferences, site visits (onsite and virtual), document and record reviews, and data analysis. Participated in rules compliance audit activities. Also assisted with reviews of safety and security plans.

**Washington Metrorail Safety Commission, State Safety Oversight Program, Washington, DC:** Performed standards and procedures reviews. Coordinated with the client to facilitate TRA's subject matter expertise in support of various task orders related to the execution of the State Safety Oversight program over WMATA.

**City of Cincinnati, Cincinnati Streetcar Management Transition, Cincinnati, OH:** Supported the transitioning of operations responsibility from Southwest Ohio Regional Transit Authority to the City of Cincinnati. Provided expertise related to compliance requirements for operations, maintenance, safety, and security. Created a project plan to ensure the deadlines and other milestones were met. Provided status updates to the client and management teams.

**Greater Cleveland Regional Transit Authority, Maintenance Workforce Efficiency and Planning, Cleveland, OH:** Evaluated the railcar inspection process at the GCRTA warehouse. Assisted in identifying idle waste. Developed a new inspection process across multiple shifts that would save the agency over a half million dollars annually. The new process also lowered the risk in railcar shortages at the initial time of service.



Section 5

# FORMS

**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.

 | Vice President

(Name, Title)

Daniel Hauber, WSO-CSE, TSSP, PMP | Vice President

(Printed Name and Title)

1608 Walnut Street, Suite 1602, Philadelphia, PA 19103

(Address)

P: (215) 279-6811 | F: (215) 279-6812

(Phone Number) / (Fax Number)

daniel.hauber@traonline.com

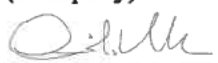
(email address)

**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.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

Transportation Resource Associates, Inc.

(Company)



| Daniel Hauber, WSO-CSE, TSSP, PMP | Vice President

(Authorized Signature) (Representative Name, Title)

Daniel Hauber, WSO-CSE, TSSP, PMP | Vice President

(Printed Name and Title of Authorized Representative)

September 30, 2021

(Date)

P: (215) 279-6811 | F: (215) 279-6812

(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: CRFP PTR220000001

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 received)

- ☒ 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 understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Transportation Resource Associates, Inc.

Company



Authorized Signature

September 30, 2021

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

# **REQUEST FOR PROPOSAL**

## **Division of Public Transit – CRFP PTR2200000001**

### **State Safety Oversight**

#### **SECTION 6: EVALUATION AND AWARD**

- 6.1. Evaluation Process:** Proposals will be evaluated in two parts by a committee of three (3) or more individuals. The first evaluation will be of the technical proposal and the second is an evaluation of the cost proposal. The Vendor who demonstrates that it meets all of the mandatory specifications required, attains the minimum acceptable score and attains the highest overall point score of all Vendors shall be awarded the contract.
- 6.2. Evaluation Criteria:** Proposals will be evaluated based on criteria set forth in the solicitation and information contained in the proposals submitted in response to the solicitation. The technical evaluation will be based upon the point allocations designated below for a total of 70 of the 100 points. Cost represents 30 of the 100 total points.

##### **Evaluation Point Allocation:**

###### **Project Goals and Proposed Approach (§ 4.2)**

- Approach & Methodology to Goals/Objectives (§ 4.2.1) (15) Points Possible
- Approach & Methodology to Compliance with Mandatory Project Requirements (§ 4.2.2) (15) Points Possible

###### **Qualifications and experience (§ 4.3)**

- Qualifications and Experience Generally (§ 4.3.1) (15) Points Possible
- Exceeding Mandatory Qualification/Experience Requirements (§ 4.3.2) (15) Points Possible

(Oral interview, if applicable) (§ 4.4) (10) Points Possible

Total Technical Score: 70 Points Possible

Total Cost Score: 30 Points Possible

**Total Proposal Score: 100 Points Possible**

- 6.3. Technical Bid Opening:** At the technical bid opening, the Purchasing Division will open and announce the technical proposals received prior to the bid opening deadline. Once opened, the technical proposals will be provided to the Agency evaluation committee for technical evaluation.



# **REQUEST FOR PROPOSAL**

## **Division of Public Transit – CRFP PTR2200000001**

### **State Safety Oversight**

**6.4. Technical Evaluation:** The Agency evaluation committee will review the technical proposals, assign points where appropriate, and make a final written recommendation to the Purchasing Division.

**6.5. Proposal Disqualification:**

**6.5.1. Minimum Acceptable Score (“MAS”):** Vendors must score a minimum of 70% (49 points) of the total technical points possible in order to move past the technical evaluation and have their cost proposal evaluated. All vendor proposals not attaining the MAS will be disqualified.

**6.5.2. Failure to Meet Mandatory Requirement:** Vendors must meet or exceed all mandatory requirements in order to move past the technical evaluation and have their cost proposals evaluated. Proposals failing to meet one or more mandatory requirements of the RFP will be disqualified.

**6.6. Cost Bid Opening:** The Purchasing Division will schedule a date and time to publicly open and announce cost proposals after technical evaluation has been completed and the Purchasing Division has approved the technical recommendation of the evaluation committee. All cost bids received will be opened. Cost bids for disqualified proposals will be opened for record keeping purposes only and will not be evaluated or considered. Once opened, the cost proposals will be provided to the Agency evaluation committee for cost evaluation.

The Purchasing Division reserves the right to disqualify a proposal based upon deficiencies in the technical proposal even after the cost evaluation.

**6.7. Cost Evaluation:** The Agency evaluation committee will review the cost proposals, assign points in accordance with the cost evaluation formula contained herein and make a final recommendation to the Purchasing Division.

**Cost Evaluation Formula:** Each cost proposal will have points assigned using the following formula for all Vendors not disqualified during the technical evaluation. The lowest cost of all proposals is divided by the cost of the proposal being evaluated to generate a cost score percentage. That percentage is then multiplied by the points attributable to the cost proposal to determine the number of points allocated to the cost proposal being evaluated.

**Step 1:**  $\text{Lowest Cost of All Proposals} / \text{Cost of Proposal Being Evaluated} = \text{Cost Score Percentage}$

**Step 2:**  $\text{Cost Score Percentage} \times \text{Points Allocated to Cost Proposal} = \text{Total Cost Score}$

**Example:**

Proposal 1 Cost is \$1,000,000

Proposal 2 Cost is \$1,100,000

Points Allocated to Cost Proposal is 30

# REQUEST FOR PROPOSAL

## Division of Public Transit – CRFP PTR2200000001

### State Safety Oversight

Proposal 1: Step 1 –  $\$1,000,000 / \$1,000,000 = \text{Cost Score Percentage of } 1 (100\%)$   
Step 2 –  $1 \times 30 = \text{Total Cost Score of } 30$

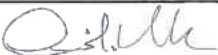
Proposal 2: Step 1 –  $\$1,000,000 / \$1,100,000 = \text{Cost Score Percentage of } 0.909091 (90.9091\%)$   
Step 2 –  $0.909091 \times 30 = \text{Total Cost Score of } 27.27273$

- 6.8. Availability of Information:** Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Transportation Resource Associates, Inc.

(Company)



Daniel Hauber, WSO-CSE, TSSP, PMP | Vice President

(Representative Name, Title)

P: (215) 279-6811 | F: (215) 279-6812

(Contact Phone/Fax Number)

September 30, 2021

(Date)

# **REQUEST FOR PROPOSAL**

## **Division of Public Transit – CRFP PTR2200000001**

### **State Safety Oversight**

#### **Bid Form #1**

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

The Primary Participant (applicant for an FTA grant or cooperative 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 AN FTA GRANT OR COOPERATIVE AGREEMENT, OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD-PARTY CONTRACT),**

Transportation Resource Associates, Inc., CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

 | Daniel Hauber, WSO-CSE, TSSP, PMP | Vice President  
Signature and Title of Authorized Official

**REQUEST FOR PROPOSAL**  
**Division of Public Transit – CRFP PTR2200000001**  
**State Safety Oversight**

**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 subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering 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 Resource Associates, Inc., 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.

September 30, 2021

Date



Authorized Signature

Vice President

Title



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 exceeds 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:**

Vendor's Name: Transportation Resource Associates, Inc.

Authorized Signature: 

Date: September 27, 2021

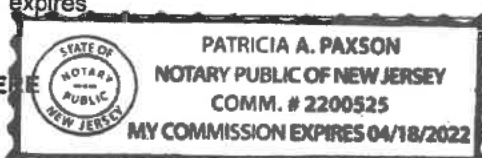
State of New Jersey

County of Atlantic, to-wit:

Taken, subscribed, and sworn to before me this 27th day of September, 2021.

My Commission expires \_\_\_\_\_ 20\_\_.

AFFIX SEAL HERE



NOTARY PUBLIC



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