RTA

REGIONAL TRANSIT AUTHORITY
RESPONSE TO RFP #2021-016
ON-CALL TECHNICAL SAFETY SUPPORT

TECHNICAL PROPOSAL

SUBMITTED BY:

ADS | SYSTEM SAFETY CONSULTING, LLC

August 17, 2021

ADS SYSTEM SAFETY CONSULTING, LLC

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August 17, 2021

Regional Transit Authority
Attn: Procurement Department
2817 Canal St.
New Orleans, LA 70119

Re: Response to Request for Proposals (RFP) #2021-016, On-Call Technical Safety Support

ADS System Safety Consulting, LLC (ADS) is pleased to submit this response to the *Regional Transit Authority's (RTA) Request for Proposals (RFP) #2021-016, On-Call Technical Safety Support*. ADS is a certified Minority Business Enterprise (MBE), a Federal Disadvantaged Business Enterprise (DBE) (certification #12-491), and a State of Louisiana Department of Transportation and Development certified DBE specializing in high impact and high value risk-based system safety and security consulting. ***We have provided services identical to those called for by RFP #2021-016 throughout the transit industry and offer key staff possessing direct experience across all modes of public transportation, including ferry, bus, paratransit, streetcar, light rail, heavy rail, vanpool, demand services, and funicular operations.***

Structure of Proposed Team

Employing a bench of nearly fifty (50) full-time transit system safety and security professionals and certified Safety Management System (SMS) practitioners, ADS retains an incredible depth of staff and experience capable of meeting all of RTA's technical safety support needs. As such, ***ADS will serve as Prime contractor and sole purveyor for this assignment,*** holding direct responsibility for activities completed in response to task orders issued by RTA. Consistent with our task order management philosophy, it is our goal to serve as an integrated extension of RTA's staff to assure task assignments are completed to RTA's satisfaction. In this manner, our committed staff will provide RTA with the hands-on expertise needed to develop, implement and support RTA's Safety and Security Certification (SSC), SMS Documentation and Auditing, Technical Review Support, and Occupational Safety and Health and Industrial Hygiene needs. We believe we are *best qualified* and will provide RTA with the *best value* technical safety consulting services across all scope of work areas for the following reasons:

1. **ADS is a recognized leader in SMS and has been providing on-call technical safety services to a diverse pool of local, state, and federal government agencies since the firm's inception.** We currently provide identical services as those required by RTA to the Tri-county Metropolitan Transportation District of Oregon (TriMet), the Maryland Transit Administration (MTA), Denver's Regional Transportation District (RTD), Hampton Roads Transit (HRT), the Metropolitan Transit Authority of Harris County (Houston Metro), the Washington Metropolitan Area Transit Authority (WMATA), the Capital Metropolitan Transportation Authority (CMTA), the New York, Pennsylvania, and North Carolina Departments of Transportation, the Federal Transit Administration (FTA), Federal Railroad Administration (FRA), National Aeronautics and Space Administration (NASA), and numerous others. *As a result, we are able to draw on the best practices of the transit industry and other high-risk industries to offer unique and effective system safety services to our clients.*

2. **Our proposed staff includes certified and industry recognized SMS practitioners and transit safety experts with direct multi-modal transit experience, including ferries**. Our team is led by our proposed *Principal In Charge, Mr. Ron Edwards, WSO-CSSD, TSSP, PTSCTP*, and our proposed *Project Manager, Mr. Eloy Recio, WSO-CSSD, TSSP*. Mr. Edwards and Mr. Recio both served as Chief Safety and Security Officer (CSSO) of HRT where they were directly responsible for developing, managing, and overseeing HRT's safety program for the entirety of the organization, including HRT's bus, light rail, paratransit, *and ferry* operations.

Mr. Edwards and Mr. Recio are supported by *Mr. Donald Pike, WSO-CSE/CSSD, TSSP, PTSCTP*, who spent seven years administering the U.S. Department of Transportation's (USDOT) SMS training curriculum, teaching thousands of students across the United States and abroad; *Mr. Dave Goeres, P.E, WSO-CSSD, TSSP,* former Chief Safety, Security and Technology Officer (CSSTO) of the Utah Transit Authority (UTA); *Mr. Kurt Wilkinson, CSP, WSO-CSSD, TSSP, PTSCTP*, former Director of SMS and Environmental Services of TriMet; *Mr. Kevin Jones, WSO-CSE/CSSD, TSSP, PTSCTP*, former Safety Manager of the Port Authority of Allegheny County (PAAC); and a team of technical experts with equally deep and diverse experience.

3. **ADS possesses an unmatched understanding of the operational and organizational challenges faced by RTA.** Our experience is rooted in hands-on transit operations and has been gained by serving directly in executive management positions within the public transit industry. Our staff include former Chief Safety and Security Officers (CSSO), Safety Directors, and Safety Managers, as well as former State Safety Oversight (SSO) Program Managers and proven consultants with decades of experience and SMS subject matter expertise assisting large and complex multi-modal transit agencies such as RTA with the development and administration of effective safety programs. As such, we can provide immediately useful recommendations and services incomparable to others.

Summary of Approach

ADS' risk-based approach is based on the principles of SMS and is the cornerstone of our business. It is also what differentiates ADS from our competitors, who too often focus on inconsequential program factors, making recommendations without fully understanding how they can be implemented effectively, or the system-wide impacts they will have on the organization. With every assignment, ADS seeks to understand the organization in its entirety, from the most senior executives to the most junior front-line employees, across each department, and across each role and responsibility, with the end user in mind.

Using this holistic approach, we provide products and services that account for the organizational uniqueness of our clients and the departmental, procedural, and hierarchical similarities and differences therein. We also strive to provide risk-based recommendations that clearly articulate the pros and cons of each recommendation across key factors including expected benefits and costs. Through this systematic process, our clients are provided with data that allows for a greater understanding of current and expected safety program conditions, broader knowledge sharing and increased safety promotion across the organization, better and more defensible decision-making and safety management capabilities, and clearer risk control and safety assurance processes. As a result, our technical safety products and services, including our SMS services, have been found to be more easily implemented and useful by our clients.

ADS' experience managing large-scale task order contacts with the MTA, the District of Columbia Department of Transportation (DDOT), RTD, WMATA, TriMet, CMTA, HRT, and others, as well as the depth of our SMS and System Safety and Security professionals assembled for this assignment, makes ADS unequivocally qualified to address any project-specific issues that may arise during this assignment. For these same reasons, ADS can take on multiple assignments across each scope of work area regardless of size, scope, period of performance, or criticality of completion.

For each task order request, we will evaluate RTA's needs and will allocate the most qualified staff capable of meeting those needs. Our proposed Project Manager, Mr. Eloy Recio, WSO-CSSD, TSSP, will have management authority over all tasks and personnel. As task needs are identified, Mr. Recio will meet with the appropriate RTA representatives to ensure a common understanding is agreed upon regarding the work to be completed and the desired product(s) of the assignment. Mr. Recio will communicate and remain

in regular contact with RTA's Project Manager to receive task direction and to assure RTA remains informed of work progress. He will thoroughly review each task order request, identify the most appropriate Task Leader and staff needed to complete the task, and provide RTA with a detailed task order proposal.

Each task order proposal will summarize our proposed work plan and the scope of services to be provided, the Task Leader responsible for overseeing work completion, proposed staff, anticipated man hours and estimated costs, and a project schedule identifying key milestones. Assignments will be coordinated among and across the team based on areas of expertise in each scope of work area. Once a Task Order is approved, all work will be performed with the goal of making clear, balanced findings that highlight achievements and successes, as well as recommendations for future progress.

Schedule

Consistent with our above approach, ADS will develop task specific schedules as part of our task order proposals. Each schedule will identify the project start date, key milestones and deliverable dates, and the task period of performance end date, and will be submitted to RTA for its review and concurrence. All schedules developed in response to task orders assigned by RTA will allow RTA to have ample opportunity to review and provide input into deliverables.

Quality Control and Cost Management

All deliverables will be reviewed first by the Task Leader, then by our Project Manager, and finally by our Principle in Charge prior to being submitted to RTA to ensure each deliverable meets its intended purpose and is of the highest quality. We will also conduct deliverable reviews with project technical and managerial staff, as appropriate, to ensure each meets RTA's expectations. Each Task Leader is also responsible for monitoring and managing the costs associated with each assignment, while the Project Manager will provide secondary cost management oversight for each assignment and the contract in its entirety. All task budgets and contract financial data will be summarized by task assignment and invoices will be submitted in accordance with the requirements of the contract.

Acknowledgement of Receipt of Addendums

ADS acknowledges receipt of Addendum 1, IFB 2021-016, On-Call Technical Safety Support, issued August 11, 2021.

Conclusion

Our enclosed proposal provides our specific approach to completing each of the scope of work areas, as well as information on the Knowledge and Current Experience of Key Individuals, Price, ADS' Experience and History, and our Project Approach and Work Plan. All required forms have also been included. We greatly appreciate this opportunity and look forward to hearing from you.

Sincerely,

Kahlil M. Allen
President and Chief Executive Officer
ADS System Safety Consulting, LLC
(240) 882-1126
kallen@adssafety.com

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1.0 Qualifications of the Firm, Staff, and Diversity

THE ADS DIFFERENCE

- **State of Louisiana Department of Transportation and Development Certified DBE**
- **Proposed Principal-in-Charge, Project Manager, and staff possess multi-modal transit safety experience including ferry operations**
- **Proposed Project Manager formerly served in the U.S. Coast Guard**
- **Employ nearly 50 diverse System Safety Engineers, SMS practitioners, and Security and Emergency Management experts nationwide**
- **Staff are degreed engineers (electrical, mechanical, civil, industrial, systems, traffic, structural, system safety, fire protection, environmental, etc.)**
- **Proven history of delivering identical services across all scope of work areas and all modes of transit**
- **Prime Contractor of the transit industry's largest Safety Consulting Contracts**
- **Proposed staff include Transportation Safety Institute (TSI) Senior Associate Instructors and serve as Chair and Vice Chair of APTA's Rail Safety Committee**
- **Unmatched system safety experience across transit, aviation, space, and defense industries with ability to leverage lessons learned and best practices to support RTA**
- **Experience at all industry levels (Federal, State and Local)**
- **Documented business practices and procedures to assure superb, consistent, compliant, and transparent service**
- **Client-first focus practiced in all engagements**

ADS System Safety Consulting, LLC (ADS) is a certified Minority Business Enterprise (MBE), a Federal Disadvantaged Business Enterprise (DBE) (certification #12-491), and a State of Louisiana Department of Transportation and Development (LADOTD) certified DBE specializing in high impact and high value risk-based system safety and security consulting services. Employing nearly 50 System Safety Engineers, certified Safety Management System (SMS) practitioners, and Security and Emergency Management experts nationwide, ***ADS has grown since its inception in 2011 to become the transit industry's largest consulting firm dedicated to system safety engineering and SMS services.***

Our team has experience across all modes of public transportation, including ferry operations, as well as across all levels of government, and across all scope of work areas required by the Regional Transit Authority (RTA). Our staff include an incredibly diverse mix of degreed engineers and technical experts including electrical, mechanical, civil, industrial, systems, traffic, structural, system safety, information technology, fire protection, and environmental engineers who have been providing on-call technical safety support and SMS services ***identical to those required by the RTA to every level of the transit industry since the firm's inception.***

We currently serve numerous multi-modal transit clients including Hampton Roads Transit (HRT), the Tri-county Metropolitan Transportation District of Oregon (TriMet), the Maryland Transit Administration (MTA), Denver's Regional Transportation District (RTD), the Metropolitan Transit Authority of Harris County (Houston Metro), the Washington Metropolitan Area Transit Authority (WMATA), Bay Area Rapid Transit (BART), the Chicago Transit Authority (CTA), and many others with developing and administering all aspects of their Safety, Security, and Emergency Management Programs.

In doing so, we have authored plans, policies and procedures, developed and implemented internal safety and security audit programs, developed and administered large-scale safety and security certification programs, performed accident investigations and program statistical analyses, developed and delivered safety training programs, conducted Threat and Vulnerability Assessments (TVAs) and assisted in developing and implementing security hardening programs and policing strategies, and organized and facilitated emergency drills and exercises.

We have conducted Preliminary Hazard Analyses (PHAs), Failure Modes, Effects and Criticality Analyses (FMECA), Fault Tree Analyses (FTA), Software Hazard Analyses (SHAs), and Operations and Support Hazard Analyses (O&SHAs), and assisted clients with meeting new regulatory requirements. We have performed SMS Gap Assessments, developed SMS Policies, authored Public Transportation Agency Safety Plans (PTASPs), developed and implemented SMS based risk reduction, safety assurance, and safety promotion programs, performed facility, system, and equipment fire/life safety inspections to identify hazards and to recommend corrective actions, and performed audits to measure program compliance. Employing Board Certified Safety Professionals (CSPs), we have also been called upon to provide occupational safety and health, industrial hygiene, and construction safety oversight services of existing systems and major capital projects involving new transit systems, extensions, facilities, rights-of-way, transit vehicle procurements, and structures.

We have also overseen Safety, Security and Emergency Management Programs on behalf of various State Safety Oversight (SSO) Agencies, including those of the North Carolina Department of Transportation (NCDOT) and its oversight of the Charlotte Area Transit System (CATS), Puerto Rico and its oversight of Tren Urbano, the Texas Department of Transportation (TxDOT) and its oversight of Houston Metro and the Dallas Area Rapid Transit (DART), and the New York State Department of Transportation (NYSDOT) SSO Program and its oversight of the nation's largest public transportation agency – the New York MTA. In each instance, we are guiding the development and administration of SSO Programs that implement FTA's SMS Program requirements.

In addition, we have supported the Federal Transit Administration (FTA), Federal Railroad Administration (FRA), and Federal Aviation Administration (FAA) with the development of SMS and technical safety program principles and requirements, managed the delivery of national SMS Training Programs through the USDOT, and have supported FTA's delivery of technical assistance programs to improve the safety and security of the nation's transit systems. This has included serving as safety and security experts and Project Management Oversight (PMO) consultants responsible for overseeing, critiquing and providing guidance to FTA grantees and assuring compliance with applicable regulations, including the Connecticut Department of Transportation (ConnDOT) New Britain to Hartford Bus Rapid Transit (BRT) project; the Central Florida Regional Transportation Authority (LYNX) BRT Extension projects; the Metropolitan Atlanta Rapid Transit Authority (MARTA) System-wide Fire Suppression System Upgrade Project; the Seattle Center City Streetcar Project; the Los Angeles County Metropolitan Transportation Authority's (LACMTA) Purple Line Project, and various others.

Finally, ADS currently provides technical safety support services to the National Aeronautics Space Administration (NASA), the autonomous vehicle systems industry, the commuter railroad industry, and the aviation industry. ***We are therefore able to draw on the best practices of other high-risk industries to offer unique and effective technical safety services to our clients that are unmatched by our competitors.***

Simply stated, no other firm offers the depth of technical safety, security, emergency management, compliance, and SMS expertise and diverse engineering acumen presented by ADS and our signature risk-based approach. As a result of our tremendous depth of experience, our proven successful history of managing large-scale task order contracts, and our experience completing assignments of identical size, scope and complexity, we are confident we can immediately and efficiently respond to RTA's needs for this assignment.

Table 1 provides a representative sample of ADS' current and past clients, demonstrating the diversity of our services. Examples of past projects, demonstrating are depth of experience providing services identical those required by RTA have been provided as part of our completed Consultant Questionnaire Form included in **Appendix A**.

TABLE 1 – SAMPLE OF ADS CLIENTS AND SERVICES

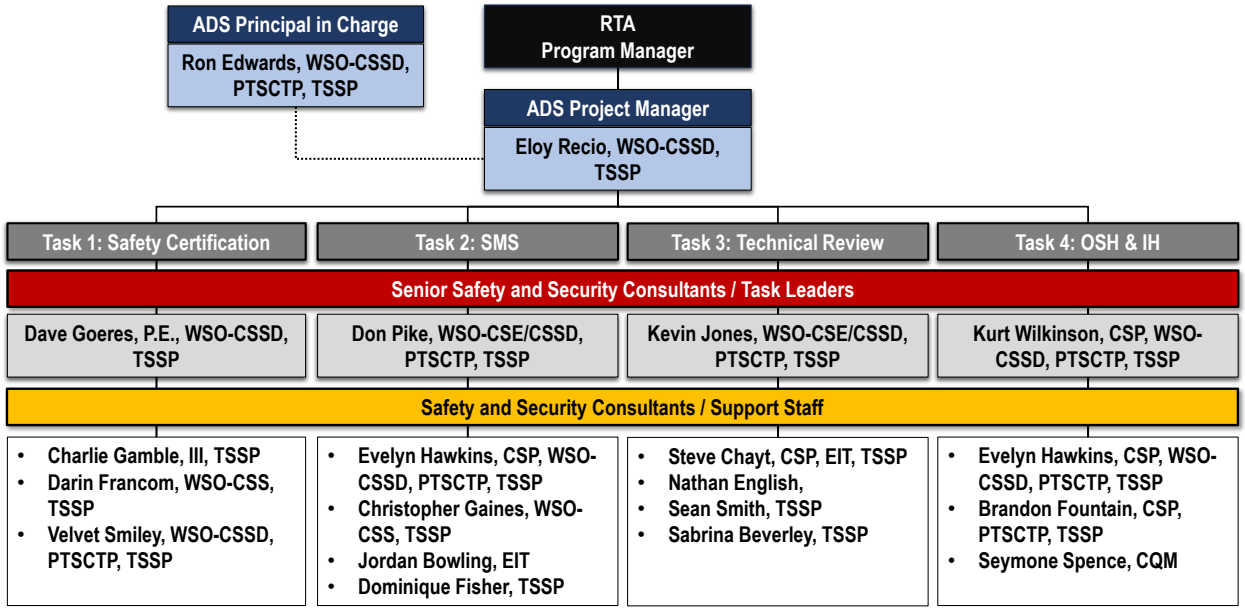
ADS Team Experience	Rules, Plans & Proc.	Safety Auditing / Assur.	Safety Policy	SMS Gap Assessments	Accident Investigation	Construction Safety	OSHA Compliance	Safety Reporting Sys.	Training & Promotion	Fire/Life Safety	Continuity of Ops.	SRM / Hazard Analyses	S&S Certification	Emergency Drills / Exer.	Industrial Hygiene	Safety/Security Strategy
Representative Clients:																
Arlington County Transit (ART)	✓		✓					✓								
Bay Area Rapid Transit (BART)								✓		✓		✓	✓			
Capital Metropolitan Transportation Authority (CMTA)	✓		✓						✓			✓	✓			
Chicago Transit Authority (CTA)	✓					✓						✓	✓	✓		
Dallas Area Rapid Transit (DART)	✓		✓	✓								✓				
Denver Regional Transportation District (RTD)	✓	✓		✓				✓	✓			✓				
District of Columbia Department of Transportation (DDOT)	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
Federal Transit Administration (FTA)	✓	✓			✓	✓		✓	✓	✓		✓	✓	✓		
Greater Richmond Transit Company (GRTC)	✓	✓	✓									✓	✓			
Hampton Roads Transit (HRT)	✓	✓	✓	✓			✓					✓	✓		✓	
Honolulu Authority for Rapid Transportation (HART)	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓		✓
Los Angeles County Metropolitan Transportation Authority (LACMTA)					✓			✓				✓				✓
Maryland Transit Administration (MTA)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Metropolitan Transit Authority of Harris County (Houston Metro)	✓	✓	✓					✓				✓	✓			✓
MV Transportation, Inc.	✓	✓	✓	✓								✓				
New York State Department of Transportation (NYSDOT)	✓	✓	✓	✓	✓			✓		✓		✓	✓			
North Carolina Department of Transportation (NCDOT)	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Port Authority Transit Corporation (PATCO)		✓	✓													
Tri-County Metropolitan Transportation District of Oregon (TriMet)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VIA Metropolitan Transit (VIA)		✓	✓	✓			✓	✓			✓	✓		✓		
Virginia Railway Express (VRE)	✓	✓	✓	✓					✓			✓				✓
Washington Metropolitan Area Transit Authority (WMATA)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

1.1 Qualifications of Staff

ADS' staffing and organization plan for this assignment, as shown in **Figure 1**, has been designed to offer RTA the industry's most qualified and recognized safety, security, emergency management, SMS, occupational safety and health, constructions safety, and fire/life safety experts available. Our proposed team includes CSPs, licensed Professional Engineers (P.E.), World Safety Organization Certified Safety and Security Directors and Certified Safety Executives (WSO-CSSD/CSE), United States Department of Transportation (USDOT) Transportation Safety Institute (TSI) Transit Safety and Security Program (TSSP) and Public Transportation Safety Certification Training Program (PTSCTP) certificate holders, industry recognized TSI Senior Associate Instructors, certified SMS practitioners, and certified Occupational Safety and Health Administration (OSHA) General Industry and Construction Industry Trainers.

Our team further includes former CSSOs, Safety Directors and Safety Managers, former SSO Program Managers, former Rail Line and Signal Supervisors, seasoned accident investigators, practiced auditors and inspectors, safety and security certification experts, experienced engineers, and proven consultants with decades of experience and SMS expertise assisting large and complex multi-modal transit agencies with the development and administration of effective safety programs. All key staff have demonstrated experience directly developing, managing, supporting, administering, and overseeing transit safety and security programs of varying size and complexity for transit agencies from across the nation, and are planned to be available for the entirety of the assignment. ***No personnel substitutions or changes will be made without first obtaining RTA's approval.***

Figure 1: ADS Proposed Project Staffing and Organization Plan



In addition, our proposed **Principal in Charge, Mr. Ron Edwards, WSO-CSSD, PTSCTP, TSSP**, our proposed **Project Manager, Mr. Eloy Recio, WSO-CSSD, TSSP**, and a member of our support staff, **Ms. Velvet Smiley, WSO-CSSD, PTSCTP, TSSP**, each formerly served as CSSOs of HRT where they held direct responsibility for developing, managing, and overseeing HRT's safety program for the entirety of the organization. As such, ***they are among a very small collective of transit safety, security and emergency management experts retaining practical, first-hand experience involving ferry operations*** and are thus uniquely qualified to support RTA with its technical safety needs. Bios of each member of our proposed team are provided in **Table 2**. Resumes for all proposed staff are provided in **Appendix A.**

TABLE 2: LIST OF ADS PROPOSED TEAM MEMBERS AND THEIR QUALIFICATIONS

Ron Edwards, WSO-CSSD, PTSCTP, TSSP
PRINCIPAL IN CHARGE

- 27 Years' Experience
- MS, Safety Sciences; Indiana University of Pennsylvania
- BS, Occupational Safety and Health; North Carolina Agricultural & Technical State University
- World Safety Organization, Certified Safety and Security Director (WSO-CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- USDOT TSI Transit Rail Safety and Security Auditing (TRSSA)
- USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP)
- USDOT TSI Senior Associate Instructor of SMS Principles for Transit, Rail Accident Investigation, and System Safety
- Former CSSO of HRT
- Former WMATA Rail Safety Manager
- Former Special Conservator of Peace (SCOP) for the State of Virginia
- Chair, APTA Rail Safety Committee

ELOY RECIO, WSO-CSSD, TSSP
PROJECT MANAGER

- 20 Years' Experience
- World Safety Organization, Certified Safety and Security Director (WSO-CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- Former Deputy and Chief Safety and Security Officer of HRT
- Former SSO Program Manager for Virginia Department of Rail and Public Transit (VDRPT), Tri-State Oversight Committee (TOC), and Puerto Rico
- Former Special Conservator of Peace (SCOP) for the State of Virginia
- Served as a member of the U.S. Coast Guard
- Emergency Management Expertise involving Natural Disasters including Hurricane Preparation, Planning, Response, and Recovery
- New Start Light Rail, Heavy Rail, and Bus System Design, Construction, and Operations

SAFETY AND SECURITY CERTIFICATION

DAVE GOERES, P.E., WSO-CSSD, TSSP
SR. SAFETY AND SECURITY CONSULTANT / CIVIL ENGINEER

- 30+ Years' Experience
- Master of Strategic Studies; US Army War College
- BS, Civil Engineering; University of Alabama
- MD P.E. (License #20921); SC P.E. (License #12388); UT P.E. (License #3082680-2202)
- World Safety Organization, Certified Safety and Security Director (WSO-CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- Former Chief Safety, Security and Technology Officer (CSSTO) of the Utah Transit Authority
- New Start Light Rail, Commuter Rail, Heavy Rail, Bus and Transit Infrastructure Project Design, Construction, and Operations Safety and Security Certification Expert

TABLE 2: LIST OF ADS PROPOSED TEAM MEMBERS AND THEIR QUALIFICATIONS

CHARLIE GAMBLE, TSSP-RAIL
SR. SAFETY AND SECURITY CONSULTANT / ELECTRICAL ENGINEER

- 21 Years' Experience
- BS, Electrical Engineering; South Carolina State University
- USDOT Transit Safety and Security Program (TSSP) – Rail
- Former WMATA System Safety Engineer
- Light Rail, Commuter Rail, Heavy Rail, and Bus Transit Project, Vehicle, and Infrastructure Design, Construction, and Operations Expertise
- Safety and Security Certification Expertise across all modes of Transit
- Has authored and implemented dozens of Safety and Security Management Plans (SSMP) and Safety and Security Certification Plans (SSCPs)
- Has authored dozens of Safety and Security Certification Verification Reports
- Safety Risk Management, Safety Assurance, and Safety Promotion Expert

VELVET SMILEY, WSO-CSSD, PTSCTP, TSSP
SR. SAFETY AND SECURITY CONSULTANT / BRT AND TRANSIT INFRASTRUCTURE SSC SPECIALIST

- 13 Years' Experience
- BS, Organizational Security and Management; University of Phoenix
- AA, Criminal Justice; University of Phoenix
- World Safety Organization, Certified Safety and Security Director (WSO-CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP)
- Former Safety Manager and Interim CSSO of HRT
- Former SSO and Agency Emergency Preparedness Manager of VDRPT
- New Start Bus, Transit Facility, and Infrastructure Project Design, Construction, and Operations Safety and Security Certification Expert

DARIN FRANCOM, WSO-CSS, TSSP
SAFETY AND SECURITY CONSULTANT / RAIL SSC SPECIALIST

- 19 Years' Experience
- BS, Business Management; Western Governors University
- MBA, Western Governors University
- World Safety Organization, Certified Safety Specialist (WSO-CSS)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- Former Rail Safety Administrator for UTA
- Former Line and Signal Supervisor for UTA
- New Start Light Rail, Commuter Rail, and Heavy Rail Transit Project Design, Construction, and Operations Expertise
- Safety and Security Certification Expert

SAFETY MANAGEMENT SYSTEMS

DON PIKE, WSO-CSE/CSSD, PTSCTP, TSSP
SR. SAFETY AND SECURITY CONSULTANT / SMS AND TRAINING SPECIALIST

TABLE 2: LIST OF ADS PROPOSED TEAM MEMBERS AND THEIR QUALIFICATIONS

- 30 Years' Experience
- BS, Business Management; Western Governors University
- World Safety Organization, Certified Safety Executive / Certified Safety and Security Director (WSO-CSE/CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP)
- US Department of Labor / Occupational Safety and Health Administration (OSHA) Authorized General Industry 501 Instructor
- Former USDOT TSI Course Manager and Transit Safety and Security Specialist
- Former Safety and Training Coordinator of the Fayetteville Area System of Transit (FAST)
- Industry Recognized SMS Training Expert who has delivered training to thousands of students worldwide
- Accident Investigation, Auditing, and SMS development and implementation Expert

EVELYN HAWKINS, CSP, WSO-CSSD, TSSP-RAIL
SAFETY AND SECURITY CONSULTANT / SMS AND OSHA SPECIALIST

- 16 Years' Experience
- MS, Technology Management, Environmental Health and Safety; North Carolina Agricultural & Technical State University
- BS, Business Management; North Carolina Agricultural & Technical State University
- Board Certified Safety Professional (CSP #29404)
- World Safety Organization, Certified Safety and Security Director (WSO-CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Rail
- USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP)
- US Department of Labor / Occupational Safety and Health Administration (OSHA) Authorized General Industry Trainer (#G0061306)
- US Department of Labor 30-Hour Construction Safety Certification
- Former Rail Senior Safety Coordinator for the Charlotte Area Transit System (CATS)
- Accident/Incident Investigation, Internal Auditing, SSC, Safety Rules and Training, Risk Analysis, OSHA, and SMS Expert

CHRISTOPHER GAINES, WSO-CSS, TSSP
SAFETY AND SECURITY CONSULTANT / SMS SPECIALIST

- 8 Years' Experience
- BS, Industrial Engineering; Morgan State University
- World Safety Organization, Certified Safety Specialist (WSO-CSS)
- USDOT Transit Safety and Security Program (TSSP) – Rail
- SMS Gap Assessments and Public Transportation Agency Safety Plan Development
- Safety Policies, Procedures, and Rules Development and Implementation
- State Safety Oversight Compliance

DOMINIQUE FISHER, TSSP
JR. SAFETY AND SECURITY CONSULTANT / ELECTRICAL ENGINEER

TABLE 2: LIST OF ADS PROPOSED TEAM MEMBERS AND THEIR QUALIFICATIONS

- 10 Years' Experience
- BS, Electrical Engineering; Morgan State University
- USDOT Transit Safety and Security Program (TSSP) – Bus
- System Safety Engineering and Bus Maintenance Quality Assurance Expertise
- Internal Safety and Security Auditing Expert and Safety Policies, Procedures, and Rules Development and Implementation
- State Safety Oversight Compliance

JORDAN BOWLING, EIT
JR. SAFETY AND SECURITY CONSULTANT / FIRE PROTECTION ENGINEER

- 4 Years' Experience
- BS, Fire Protection Engineering; University of Maryland
- Engineer in Training (EIT), Maryland
- Fire / Life Safety Plans, Policies, Inspections, and Reports
- Emergency Operating Plans and Procedures
- Transit Vehicle Material Flame, Smoke and Toxicity Data Analysis
- Egress Analysis/Calculations, Fire Investigations and Root Cause Analysis

TECHNICAL REVIEW SUPPORT

KEVIN JONES, WSO-CSE/CSSD, PTSCTP, TSSP
SR. SAFETY AND SECURITY CONSULTANT / TECHNICAL ENGINEERING REVIEWS

- 25 Years' Experience
- BS, Safety and Environmental Management; Slippery Rock University
- World Safety Organization, Certified Safety Executive / Certified Safety and Security Director (WSO-CSE/CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP)
- Former Rail Safety Manager for the Port Authority of Allegheny County (PAAC)
- USDOT TSI Senior Associate Instructor of Rail System Safety and Effectively Managing Transit Emergencies
- Vice Chair, APTA Rail Safety Committee
- New Start Light Rail, Commuter Rail, Heavy Rail, Bus Rapid Transit (BRT), and Transit Infrastructure Project Design, Construction, and Operations Safety and Security Certification Expert
- 49 CFR Part 672, 673, 674 Expert

STEVE CHAYT, EIT, CSP, TSSP
SR. SAFETY AND SECURITY CONSULTANT / MECHANICAL ENGINEER

- 25 Years' Experience
- MS, Environment Technology; New York Institute of Technology
- BE, Mechanical Engineering; City College of New York
- Board Certified Safety Professional (CSP #32952)
- USDOT Transit Safety and Security Program (TSSP) – Rail

TABLE 2: LIST OF ADS PROPOSED TEAM MEMBERS AND THEIR QUALIFICATIONS

- Former Rail Systems Engineer for Valley Metro
- Former Director of Risk Reduction for Metro-North Railroad
- Former General Manager of Bus Maintenance for CTA
- Former Chief of Facilities Maintenance and System Safety Supervisor for Miami Dade Transit
- Former Superintendent of Safety Compliance for New York City Transit Department of Buses
- New Start Light Rail, Commuter Rail, and Heavy Rail, Bus Rapid Transit (BRT) Project Design, Construction, Operations and Safety and Security Certification Expertise

NATHAN ENGLISH
SR. SAFETY AND SECURITY CONSULTANT / RAMS ENGINEER

- 18 Years' Experience
- MS, Engineering Management; Old Dominion University
- BS, Mechanical Engineering; Pennsylvania State University
- Reliability, Availability, Maintainability, and Safety (RAMS) Engineering Expertise
- Safety Risk Management, Hazard Analysis, Systems Assurance, and Systems Engineering Expertise
- Transit Vehicle and Systems Design, Engineering, and Production Expertise
- Failure Modes, Effects, and Criticality Analysis (FMECA), Fault Tree Analysis (FTA), Safety Integrity Level (SIL) Analysis Expert
- Safety and Security Certification Expert

SEAN SMITH, TSSP-RAIL
SAFETY AND SECURITY CONSULTANT / ELECTRICAL ENGINEER

- 11 Years' Experience
- BS, Electrical Engineering; Morgan State University
- USDOT Transit Safety and Security Program (TSSP) – Rail
- World Safety Organization, Certified Safety Specialist (WSO-CSS)
- SRM, Hazard Analysis, Systems Assurance, and Systems Engineering Expertise
- New Start Commuter Rail and Heavy Rail Transit Project Design, Construction, Operations Safety and Security Certification Expert
- Internal Safety Auditing, Policies, Procedures, and Rules Development and Implementation

SABRINA BEVERLEY, TSSP-RAIL
JR. SAFETY AND SECURITY CONSULTANT / TECHNICAL REVIEWS

- 30 Years' Experience
- BS, Business Education; North Carolina Agricultural State University
- USDOT Transit Safety and Security Program (TSSP) – Rail
- Internal Safety Auditing, SSO Compliance, Policies, Procedures, and Rules Development and Implementation Expertise
- Adult Education and Training

OCCUPATIONAL SAFETY AND HEALTH AND INDUSTRIAL HYGIENE

KURT WILKINSON, CSP, WSO-CSSD, PTSCTP, TSSP
SR. SAFETY AND SECURITY CONSULTANT / OSHA GENERAL INDUSTRY SPECIALIST

TABLE 2: LIST OF ADS PROPOSED TEAM MEMBERS AND THEIR QUALIFICATIONS

- 21 Years' Experience
- BS, Occupational Safety and Health, Science and Engineering Option; Montana Tech of the University of Montana
- Board Certified Safety Professional (CSP #23708)
- World Safety Organization, Certified Safety and Security Director (WSO-CSSD)
- USDOT Transit Safety and Security Program (TSSP) – Bus and Rail
- USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP)
- USDOT TSI Senior Associate Instructor of Rail Incident Investigation and Advanced Rail Incident Investigation
- Former TriMet Director of SMS and Environmental Services
- Construction Safety, Occupational Safety and Health, and System Safety Program Development and Implementation Expert
- New Start Heavy Rail, Light Rail, Bus, and Transit Project Infrastructure Design, Construction, Operations Safety and Security Certification Expert

BRANDON FOUNTAIN, CSP, PTSCTP, TSSP
SAFETY AND SECURITY CONSULTANT / OSHA CONSTRUCTION INDUSTRY SPECIALIST

- 25 Years' Experience
- BS, Technical Management – Occupational Safety; Embry Riddle Aeronautical University
- AS, Applied Science, Safety; Community College of the Air Force
- Board Certified Safety Professional (CSP #38429)
- USDOT Transit Safety and Security Program (TSSP) – Rail
- USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP)
- OSHA 510, Standards for the Construction Industry
- OSHA 511, Standards for General Industry
- OSHA 521, Guide to Industrial Hygiene
- OSHA 3110, Fall Protection
- OSHA 2264, Permit Required Confined Space Entry
- OSHA 30-Hour General Industry
- Former TriMet System Safety Engineer
- Construction Safety, Occupational Safety and Health, and System Safety Program Development and Implementation Expert

SEYMONE SPENCE, CQM
SAFETY AND SECURITY CONSULTANT / OSHA CONSTRUCTION SPECIALIST

- 10 Years' Experience
- BS, Workforce Development; Southern Illinois University
- Project Management Certification; Villanova University
- Certified Construction Quality Management (CQM)
- OSHA 30-Hour General Industry
- Lead Auditor ISO 9001: 2015 Certification
- USDOT Transit Safety and Security Program (TSSP) – In Progress

1.2 Diversity

It is ADS' belief that the best products and services are developed and delivered by leveraging the unique attributes and strengths of all the individuals employed by the firm. In fact, it has been our experience that the more diversified our team, the more successful we are. Since our inception, we have sought to build the best, most diversified team of safety and security experts available in the transit industry. We do not discriminate in employment opportunities or practices because of race, color, religion, ethnic or national origin, age, sex, sexual orientation, gender identity, pregnancy, citizenship, familial status, mental or physical disability status, veteran status, genetic information, other non-disqualifying disability, or any other characteristic protected by law. Additionally, ADS fully complies with the Federal Acquisition Regulations (FAR), including those of 52.222-26, Equal Opportunity, 52.222-36, Affirmative Action for Workers with Disabilities, and 52.222-37.1, Employment Reports on Veterans, as well as the Americans with Disabilities Act (ADA) and the provisions of Reasonable Accommodation, the Pregnancy Discrimination Act (PDA), and the Genetic Information Nondiscrimination Act of 2008.

ADS' compliance with these laws and our dedication to diversity and Equal Employment Opportunity (EEO) is evidenced by the makeup of ADS' Executive Management Team and the key staff we have assembled to support this project. ADS ***presents RTA with a truly diverse team*** of transit safety, security, SMS, and emergency management experts made up of individuals of different races and ethnicities, genders, ages, socioeconomic backgrounds, political affiliations, professional experiences and education, ***as well as an incredibly diverse array of engineering pedigree, experience, and technical knowledge across all modes of transit***. Our approach to employing diverse teams, such as that assembled in response to this opportunity, is consistent across each of our contracts where we have delivered identical services to that required by RTA.

2.0 Project Understanding – Work Plan

As a result of ADS' extensive experience providing services identical to those required by RTA at all levels of the transit industry and to other high-risk industries, we understand that an SMS is, at its core, a systematic and proactive approach to identifying and effectively controlling safety risks throughout an organization. When implemented correctly, the SMS creates a proactive culture of shared responsibility focused on continually improving both safety performance and overall organizational performance through open communication and cooperation across all levels and departments. Every individual, from the chief executive to the lowest front-line employee takes ownership of the SMS, recognizing their importance to its success and the success of the organization. Information, especially as it pertains to hazards and safety risks, is freely shared without fear of reprisal and with the trust of knowing appropriate action will be taken.

Implementing an SMS is especially important in organizations such as RTA that undergo frequent changes. No matter how large or small, changes in service, ridership, equipment and technologies, operating environment and conditions, organization and personnel, policies and procedures, regulatory requirements, and financial resources all impact the safety and operations of the organization. Each presenting opportunity for hazards and safety risks to be created and, in an effective SMS, identified, reported, analyzed and controlled to acceptable levels before they can result in a loss.

As RTA continues to grow and evolve, it is therefore critical that an SMS be implemented to effectively and systematically manage these many changes and their potential risks. This, however, is no easy task. To effectively implement a functional SMS, consideration must first be given to RTA's organizational structure and the unique challenges faced by the transit industry as a whole.

Transit agencies through their very nature are broken into modal operations (i.e., bus, light rail, heavy rail, ferry, streetcar, etc.), creating organizational silos that are often reluctant to share information. Hazards and risks are viewed singularly by each mode or department, with limited consideration given to how these hazards and risks may impact the entire organization. On-time performance, and operating, maintenance and safety goals are often set and managed independently by each mode or established by managers without input from others, including the front-line employees that are the most critical to the goals being achieved.

Further, the inherent differences that exist between the risk tolerance of every individual must be recognized. An activity considered too dangerous by one may be viewed as safe by another. As a result of these differing perceptions of safety, employees may place themselves at a level of risk that is in fact unacceptable to RTA.

Further still, unlike "for profit" industries, the public transit industry must operate under restrictive financial constraints, personnel changes, political oversight, and public pressure. These complex factors impact the priorities of the organization and its managers on a near daily basis affecting how the organization operates and how the SMS functions.

While these and other challenges make the implementation of SMS difficult in the transit industry, they also demonstrate why implementing an SMS is so important. A fully mature SMS eliminates communication silos and instills at the very core of the organization, systematic processes for managing change and determining consistent levels of acceptable risk. The SMS enables greater data and information sharing across the organization and defines and standardizes the organization's risk tolerance. Risk management is used as a key factor in decision making, allowing managers to make better decisions. This in turn improves how the organization establishes and manages its priorities, including how available funds are being allocated to focus attention on the greatest needs and risks. As a result, safety and operational performance improvements are continually achieved.

Our approach to completing assignments in response to each scope of work area requested by RFP #2021-016 is built on the above understanding and provided herein.

2.1 Approach to Safety and Security Certification

Developing and implementing effective Safety and Security Certification (SSC) Programs can be both time-consuming and complex but are essential to complying with Federal and State regulations and to ensuring new technologies, equipment, processes, and systems can be safely and successfully applied by the transit industry. When implemented correctly, the SSC Programs become relied upon and essential tools to ensuring new technologies, equipment, processes, and systems can be safely and successfully applied to improve system safety and security, operational performance and reliability, maintenance capabilities, and overall management proficiency.

This is especially true of RTA's own capital projects, such as the current Ferry Terminal Project, restoration of the Canal Street Line (as a result of the Hard Rock Hotel collapse), planned Bus Rapid Transit (BRT) and Micro Transit projects, and the potential for future development of a Light Rail line to the airport, which have all been undertaken to expand, repair and upgrade system infrastructure. While these projects are intended to improve performance, they also pose unique, new hazards and risks that must be fully analyzed and effectively mitigated prior to their adoption. Safety and security certification is essential to achieving this understanding.

It is also important to recognize that in the context of SMS, SSC Programs, when implemented correctly, demonstrate and effectuate each SMS component (i.e., Safety Policy, Safety Risk Management (SRM), Safety Assurance, and Safety Promotion) of the RTA's SMS. SSC Programs demonstrate RTA's commitment to safety, implement RTA's SRM requirements for each project, serve as critical Safety Assurance tools and processes used to verify the Safety Policy and SRM requirements are being implemented, and promote SMS awareness through training of Project personnel and hands-on involvement of safety experts throughout the Project.

As a result of our long history developing and administering SSC Programs throughout the transit industry, ADS both knows and has demonstrated the importance of integrating SSC Programs early into the overall project lifecycle to ensure certification activities can be performed without inhibiting progress, unnecessarily increasing projects cost, duplicating effort, or adversely impacting operations. The focus of such Programs must be placed on implementing effective SRM processes used to verify safety and security requirements are met throughout each project phase and to ensure identified hazards and security vulnerabilities have been properly reviewed, eliminated, or controlled to acceptable levels as defined by RTA's SRM and Safety Assurance processes. In this manner, project safety certifiable elements and items can be identified, documented, and prioritized through proven system safety and systems engineering and integration techniques to focus the SSC Program on project critical items.

APPROACH IN ACTION

ADS has developed and administered SSC Programs for all types and sizes of transit capital projects including:

- HART's $12.4 Billion new start rail transit project.
- MTA's LRV Fleet Overhaul, MARC Siemens Locomotive Procurement, and Metro Track Replacement and Restoration Program.
- WMATA's 7K and 8K Series Railcar Procurements, 700 MHz Radio and Cellular Infrastructure Repair and Replacement Program, Red/Green/Orange/Blue Line Power System Upgrade Programs, and the current Heavy Railcar Overhaul (HRO) facility.
- CMTA's Downtown Station Design and Construction Program
- CTA's Red and Purple Line Modernization Project
- NICTD West Lake Corridor Project
- TriMet's Division Transit Project (DTP) Bus Rapid Transit Project
- BART's Commuter Based Train Control (CBTC) Program
- DDOT's DC Streetcar Benning Road Extension Project

FTA's "*Handbook for Transit Safety and Security Certification*" FTA-MA-90-5006-02-01, November 2002, and Circular 5800.1, "*Safety and Security Management Guidance for Major Capital Projects*" provide guidance to assist States and transit agencies in developing SSC Programs compliant with the requirements of 49 CFR Part 633, Project Management Oversight. RTA's Agency Safety Plan (ASP) and Safety and Security Certification Program Plan (SSCPP) also establish the foundation of its safety and security certification process as required to comply with these requirements and those of the LADOTD SSO Program. Specific Safety and Security Certification Plans (SSCPs) may also be developed to document and establish project specific processes for verifying the incorporation of essential safety and security requirements into new and rehabilitated alignments, vehicles, facilities, systems and equipment.

For the past ten (10) years, ADS' expert understanding of these requirements has been demonstrated by leading the SSC Programs of the industry's largest and most important projects; by authoring Standard Operating Procedures (SOPs) to standardize and clarify safety and security certification processes across complex organizations such as WMATA, MTA, CTA, CMTA, BART, and others; by reviewing and authoring SSCPs to incorporate new requirements and processes including those of FTA's SMS framework; and by developing and providing SSC training. ADS has also authored and implemented project-specific Safety and Security Management Plans (SSMPs), and has managed all aspects of large civil infrastructure, new start, design-build, vehicle procurement and overhaul, system extensions and modification SSC Programs for all modes of transit.

APPROACH IN ACTION

ADS' key staff, Mr. Ronald Edwards and Mr. Kevin Jones, currently serve as Chair and Vice Chair of APTA's Rail Safety Committee and are leading the committee's effort to develop and publish an SSC Guideline for the industry that may be expanded and used to update FTA's Safety and Security Certification Handbook.

In doing so, we have worked on behalf of our clients as integrated members of Project Teams, serving as liaisons between Safety Departments, Project Engineering, and contractor staff to provide systems engineering, system safety, Fire/Life Safety (FLS) and integration expertise, conducting technical reviews of program documentation including design review packages, test plans and reports. We have conducted safety analyses including Preliminary Hazard Analyses (PHA), Operating Hazard Analyses (OHAs), Failure Modes, Effects and Criticality Analyses (FMECAs), Job Hazard Analyses (JHA), System and Sub-System Hazard Analyses (SHA and SSHA), Fault Tree Analyses, Operating and Support Hazard Analyses (O&SHAs), Threat and Vulnerability Assessments (TVAs), Egress Analyses, and Fire Safety Analyses of vehicles, facilities, systems, equipment, and subsystems. We have produced and managed the development of SSC Program documentation including SSCPs, SSMPs, Certifiable Elements and Items Lists (CELs/CILs), Design and Construction Conformance Checklists, Test Program Verification Logs and Systems Integration Testing Checklists (SITC), Hazard Tracking Logs (HTLs), and Pre-Revenue Operations Plans (PROPs).

Furthermore, we have worked with contractors and Authorities Having Jurisdiction (AHJs) during design reviews, testing programs and inspections, supported project meetings and Safety Certification Review Committees (SCRC), and led Safety Certification Working Groups (SCWG) and FLS Committees (FLSC), presenting status reports and progress on assigned certification activities, as well as supporting presentations to Boards of Directors.

In each instance, our risk-based services approach has helped our clients to move beyond mere compliance with stated requirements to implement industry-leading SSC Programs that are forward thinking, built on FTA's SMS Framework, and effectively and efficiently manage project risks.

We have demonstrated through these services that SSC of capital projects requires more than the development and completion of conformance checklists and CELs/CILs. These checklists, while useful and necessary in *documenting the certification process*, are too often relied upon by others as the primary safety analysis tool based on converting *existing* word-based specifications, design manuals, and other project documentation into excel workbooks. This reliance on checklist-based tools results in limited analysis through system safety engineering to identify and truly understand project risks. While needed, care must be taken to assure the checklists and CEL/CILs are not used to turn the certification program into an administrative function focused on the number of certifiable items that have been closed, rather than the types of hazards that have been mitigated, the safety issues that have been resolved, or the engineering achievements that have been made to assure the safety and security of the final project.

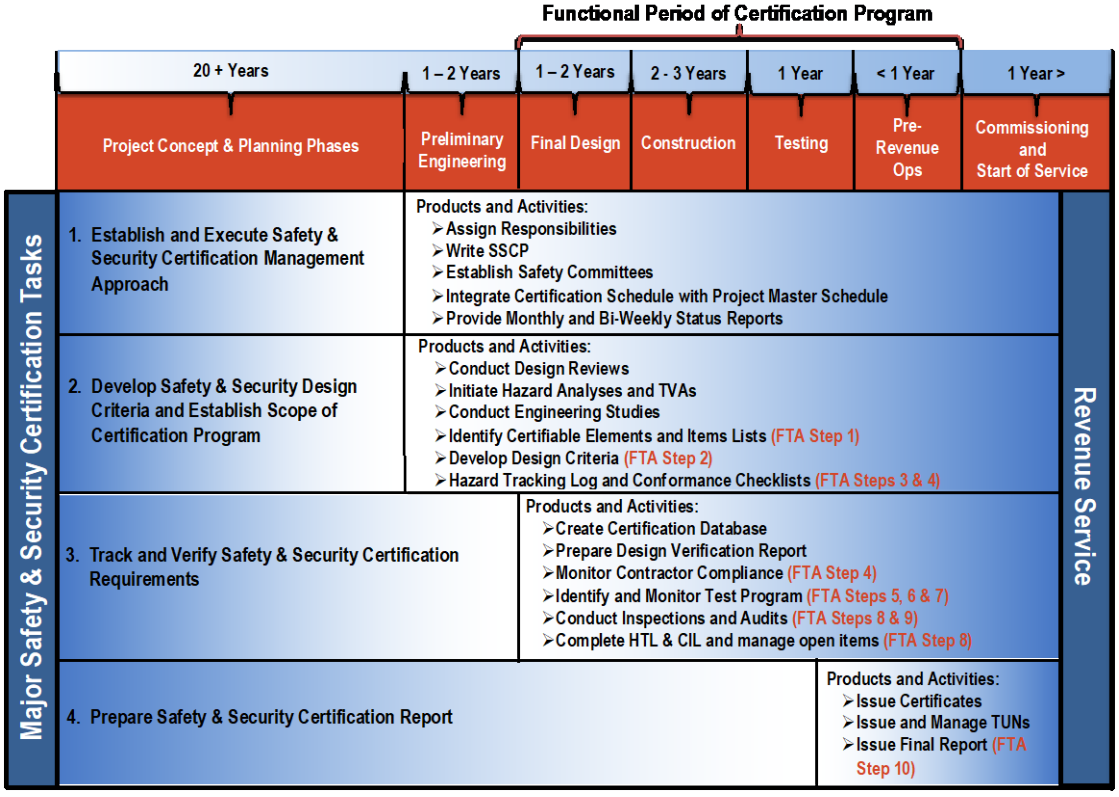
ADS' risk-based process stands in contrast to this approach, delivering real, meaningful value to each project by providing the critical thinking and engineering expertise needed to focus the SSC Program on true safety and security concerns. We add value by assisting in identifying and evaluating solutions to the many unknown challenges that can occur during each project. Our approach, which centers on sound hazard and risk analysis to drive the requirements of CEL/CIL items, helps to maximize efficiency and preserve precious time and resources by avoiding items that have no direct or minimal impact on the safety and security of the project or the system. It also reduces the resources necessary to "chase down" checklist items that do not apply to the key risks necessary for mitigation.

FTA's Handbook for Transit Safety and Security Certification recommends the following ten steps be completed as part of the safety and security certification process:

Step 1: Identify Certifiable Elements
Step 2: Develop Safety and Security Design Criteria
Step 3: Develop and Complete Design Criteria Conformance Checklist
Step 4: Perform Construction Specification Conformance
Step 5: Identify Additional Safety and Security Test Requirements
Step 6: Perform Testing and Validation in Support of the SSC Program
Step 7: Manage Integrated Tests for the SSC Program
Step 8: Manage "Open Items" in the SSC Program
Step 9: Verify Operational Readiness
Step 10: Conduct Final Determination of Project Readiness and Issue Safety and Security Certification

ADS' approach to SSC is inclusive of these steps, meets the requirements of FTA Circular 5800.1, and those of 49 CFR Part 633. However, what differentiates ADS from our competitors is our emphasis on systems engineering and integration, system safety, and risk management. Where others seek to duplicate existing requirements and specifications, we focus on verifying thorough hazard analyses and security assessments are completed to identify, document, and prioritize certifiable items and project elements that are critical to project safety and security. In this manner, our approach is streamlined to provide greater value to the project and produces results that are both more meaningful and more defensible because they have been developed through proven system safety engineering practices that can qualitatively and quantitatively demonstrate why project elements and items have been included in and must be verified through the SSC Program. As shown in **Figure 2**, our approach encompasses the implementation of the FTA's recommended 10 steps throughout all project phases, from inception to revenue operations.

FIGURE 2: ADS SAFETY AND SECURITY CERTIFICATION PROCESS



2.1.1 Establish and Execute Safety and Security Certification Management Approach

ADS begins each safety and security certification assignment by conducting a detailed review of the project, including the schedule, scope, design, plans, specifications, organization structures, applicable Federal, State, and local requirements, and supporting documentation. We then work with the Safety Department and the Project Management Team to integrate the safety and security certification tasks into the overall Project Master Schedule and critical path. Tying the SSC Program to other project milestones in this manner allows the SSC Program to remain visible, a top priority of all project stakeholders, and assures certification activities remain on schedule throughout the entirety of the project.

We next develop a project specific SSCP, SSMP, and other required policies, procedures, plans and guidelines as necessary. These documents comply with established SSC Program requirements such as those of the FTA and LADOTD's SSO Program and document the project specific organizational roles and responsibilities for the SSC Program to be carried out by project personnel and stakeholders. The Plans also identify and formalize RTA's approach to SRM and the tasks to be completed as part of RTA's Safety Assurance process to achieve safety and security certification for the project. The SSCP and SSMP are reviewed and revised throughout the course of the project to assure they remain accurate and consistent as the project moves through its stages of development.

In addition, once the SSC Program is initiated, monthly status reports are provided to the Safety Department, Security and Emergency Management Department, CSO, and the Project Manager, documenting the SSC Program progress that has been made, and any issues or concerns that may delay or impact the SSC Program.

In supporting RTA's Safety and Security Certification Review Committee (SSCRC), ADS will establish project-specific Safety Certification Working Groups (SCWGs) and Fire/Life Safety Committees (FLSCs) to support each SSC Program. The primary purpose of these committees is to ensure project stakeholders and AHJs understand the SSC Program goals and objectives for the project, and to ensure certification activities are carried out as described in the SSCP and compliant with RTA's SSCPP. The committees consist of functional experts and project personnel and are chaired by an RTA representative. A broad range of project stakeholders, including representatives from Safety, Security and Emergency Preparedness, Operations, Engineering, Maintenance, construction contractors and subcontractors, and emergency responders may all support the committees at different intervals throughout the project. However, in each instance, the committees will focus on completing safety and security tasks such as reviewing hazard analyses, verifying the implementation of hazard mitigations, and verifying safety certifiable item requirements have been met. The identification and resolution of safety and security design requirements, hazards, and certifiable items will also be vetted through each meeting.

A cornerstone of our SSC management approach is to become fully integrated and active members of each Project Team. This includes integrating into project offices and work flows, actively monitoring and participating in project meetings and the decision-making process, conducting site inspections of work sites to monitor progress and compliance, and attending site visits to system developers and vehicle manufactures to inspect and verify that safety and security requirements are being included during design and production activities, to become more fully engaged in the project management and delivery, and to better assist the project in resolving engineering issues as they arise. In this manner we can better monitor Project progress, key developments and concerns, and are better positioned to serve as a liaison between the Safety Department, Security and Emergency Preparedness Department, and the project team, including contractors and internal and external stakeholders. We will attend project meetings as directed to remain informed of project activities and milestones and will provide RTA's CSO with necessary updates.

2.1.2 Safety and Security Design Criteria and Scope of Certification Program

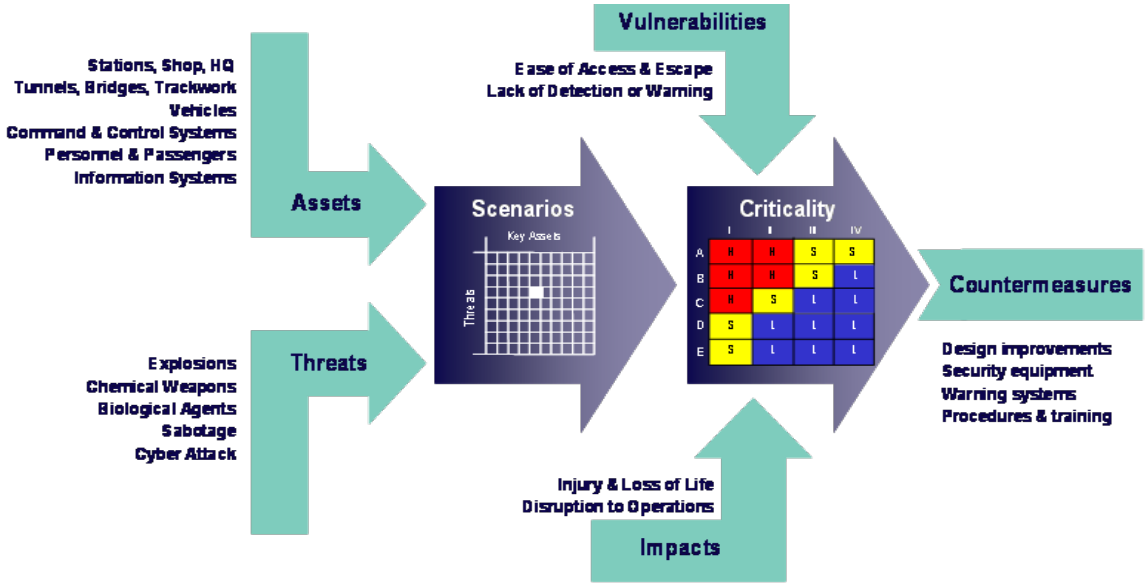
Certification activities must be initiated during the project definition and planning phases to be effective. During these phases, preliminary designs are being conceptualized and technical specifications are maturing through engineering design reviews. These activities present the first opportunity to conduct *hazard analyses and security assessments* that can be used to identify project risks and to establish specific safety and security design criteria to address these risks. They also present the first opportunity to identify the safety and security certifiable elements and items that will define the scope of the SSC program.

ADS will review existing and proposed design criteria and technical specifications and will perform hazard analyses, including PHAs, Fault Tree Analyses, FMECAs, O&SHAs, SHAs and SSHAs, and TVAs as necessary to identify risks that can be eliminated through design. PHAs will be conducted in accordance with FTA's Hazard Analysis Guidelines for Transit Projects-2000, MIL-STD 882, and Department of Defense Standard Practice for System Safety, as well as those prescribed by RTA's SSCPP and ASP.

Hazards with the highest probability and severity characteristics (i.e., Category I and II hazards with potentially catastrophic or critical results) will be prioritized for elimination and control to RTA's satisfaction, ***consistent with RTA's SRM requirements***, prior to final safety and security certification being achieved. We will assure that the intended function and performance requirements for each system are identified; the potential hazard causes, and effects are examined; the hazard probabilities and severities are assessed; and the hazard mitigations, including design and engineering modifications, the use of safety and security devices and warning systems, and operational and/or maintenance controls are identified and evaluated. In each case, keeping RTA informed of all issues and concerns.

With respect to security risks, ADS will conduct TVAs as requested by RTA to verify that identified security threats and vulnerabilities are appropriately analyzed using FTA's "*Public Transportation System Security and Emergency Preparedness Planning Guide*", 2003. TVAs will identify key system assets and high consequence facilities and scenarios to provide a preliminary assessment of the consequences and possible effects resulting from credible terrorist threats against these assets. The TVAs will also qualitatively assess the likely locations of threats and probability of occurrence. The TVA process is illustrated in **Figure 3**.

FIGURE 3: TVA PROCESS



In addition to project specific hazard analyses and security assessments, each project may require the development of Fire Safety Assessments (FSAs) and Egress Analyses to verify modified and new stations, vehicles, passenger facilities, and other occupancies meet FLS requirements, including those of the National Fire Protection Association Life Safety Code (NFPA 101), National Electric Code (NFPA 70), the International Building Code (IBC), the Standard for Fixed Guideway Transit and Passenger Rail Systems (NFPA 130), and the American Public Transportation Association's (APTA) RP-PS-005-00, Recommended Practice for Fire Safety Analysis of Passenger Rail Equipment. Operation Hazard Analyses (OHA) may also be required to determine the project will create new operational hazards and risks requiring mitigation. ADS will assure mitigation measures and recommendations resulting from the hazard analyses, TVAs, FSAs, and OHAs are incorporated into the design and construction of the project.

Once accepted, the initial PHA and TVA will be converted into a Hazard Tracking Log (HTL), which will be reviewed and revised throughout the duration of the project to demonstrate that all identified hazards and threats have been eliminated or controlled prior to placing the completed project into service. This approach, which is consistent with FTA's SMS framework, emphasizes the use of SRM to identify hazards and evaluate and mitigate risks. **Figure 4** provides an example of a portion of an HTL developed for a Vehicle Acquisition Program.

APPROACH IN ACTION

The Hazard Tracking Log is a more robust means of ensuring the completed project is safe, secure, and ready for revenue operations. It is completed in conjunction with the CEL/CIL and implements FTA's SMS processes by focusing on SRM and Safety Assurance to provide true value to the project.

FIGURE 4: EXAMPLE HAZARD TRACKING LOG

Item No.	Certifiable Item	TS Ref.	Hazard Identification			Hazard Rating (Pre-Resolution)			Hazard Resolution	Hazard Rating (Post-Resolution)			Status			Date Closed	Closure Reference
			Potential Hazard	Potential Cause	Effects	Sev. (I-IV)	Freq. (A-E)	HRI	Safety Assurance Provisions & Closure Actions	Sev. (I-IV)	Freq. (A-E)	HRI	Life Cycle Phase	References	Status		
BRAKES																	
FB-03-01	Friction Brake System	16.4.2	Loss of friction brakes on a truck	Deficient maintenance	Equipment failure, possible death or serious injury.	I	C	1	Maintenance tasks must be carried out according to the maintenance manual, by qualified personnel only	I	D	2	Operation	TA34706/505-12 (FMECA), CDRL 405.04, Section 8.0 TA34706/507-01 (FTA), CDRL 407.04, Section 8.0	Closed	MOC-299 8/23/2012	KR7.T.WM7.02643 WM7.T.KR7.02551
FB-03-02	Friction Brake System	16.4.2	Loss of friction brakes on a truck	Failure to follow approved maintenance procedures	Equipment failure, possible death or serious injury.	I	C	1	WMATA must follow maintenance procedures and schedule.	I	D	2	Operation	TA34706/505-12 (FMECA), CDRL 405.04, Section 8.0 TA34706/507-01 (FTA), CDRL 407.04, Section 8.0	Closed	MOC-330 11/7/2012	KR7.T.WM7.02891 WM7.T.KR7.02738
FB-03-03	Friction Brake System	16.4.2	Loss of friction brakes on a truck	Failure to perform scheduled maintenance tasks, or not in accordance with recommended maintenance schedule	Equipment failure, possible death or serious injury.	I	C	1	Friction braking still available on unaffected trucks	I	D	2	Operation	TA34706/505-12 (FMECA), CDRL 405.04, Section 8.0 TA34706/507-01 (FTA), CDRL 407.04, Section 8.0	Open		

We will review equipment, facility and systemwide design drawings to very safety and security requirements have been met. Where necessary, design review engineering reports will be developed to provide recommendations to assure project design criteria and requirements can effectively eliminate or control identified risks. This includes assessing the various safety and security implications of new technologies, equipment, systems and processes, and their interfaces to assure that stated design criteria and technical specification requirements are adequate. We will also review design criteria and specifications for compliance with applicable Federal, State, and local safety and security requirements, and will support project specific design criteria review committees as necessary to assure design criteria and technical specifications are revised as appropriate to address identified safety and security concerns.

In each instance, we will provide recommendations that clearly demonstrate why stated design criteria should be revised or added. We will assist RTA in preparing and providing safety and security input to bid documents and in reviewing contract documents as bids are received to evaluate the manner and method bidders have proposed to meet safety and security design requirements, again making recommendations to RTA has appropriate.

As project design criteria and technical specifications and requirements are developed, top-level Certifiable Elements are identified and aligned to the project lifecycle, contractor and subcontractor work breakdowns, and project technical documentation, including Contract Deliverable Requirements Lists (CDRLs). Certifiable Elements, for example, may include alignment, structures, communication, lighting, and FLS systems (among others), security controls, and more, all of which may be delivered by different contractors and subcontractors, at different times throughout the Project. Knowing this, ADS identifies which contractor and/or subcontractor is responsible for each Certifiable Element and when each Element must be completed within the scope of the overall project. In this manner, the SSC Program is again aligned to the Project Master Schedule and critical path, and thus can be better managed to assure certification is achieved on-time.

APPROACH IN ACTION

Hazard mitigations are the items that must be implemented to ensure the safety and security of the Project. Using hazard analysis results to identify Certifiable Elements and to create CILs focuses the Project on what is truly safety and security critical, thereby streamlining the entire certification process.

For each Certifiable Element, ADS creates a CIL using the results of the PHA and TVA, project design criteria, specifications and technical documentation. The CIL establishes the formal process used to verify the as-built project elements incorporate the safety and security design requirements, including approved changes that may occur after final design. Each CIL will be organized by appropriate project phase (i.e., Design, Construction, Testing, etc.). In this manner the CIL is used as Design Criteria, Construction Conformance, Specification Conformance, and Systems Integration Testing Checklists.

Each requirement contained in the CIL requires evidence demonstrating its achievement. Means of verification include vendor and/or contractor certifications, completed safety analyses, stamped design drawings, CDRLs, test reports, inspector reports, job photos, manuals, or other evidence deemed acceptable by RTA. We will assist RTA in conducting inspections of project elements including facilities, guideway, trackwork, stations, vehicles, power systems, and other components as necessary to physically verify safety and security requirements have been met.

2.1.3 Track and Verify Safety and Security Certification Requirements

Approved design packages and CDRLs, completed safety analyses and test reports, inspection records, site photos, and other program documentation are required to provide evidence that safety and security requirements have been met and that identified hazards and security risks have been eliminated or controlled. This documentation also provides a historical record of the decisions made throughout project. The SSC Program must therefore include a mechanism(s) for compiling, tracking, searching, and reproducing (as necessary) documentation required for and relevant to final certification of the project. ADS will thus retain copies of the reviews conducted on behalf of RTA as well as associated project correspondence. We will work with the Project Team to identify and obtain copies of documentation needed to develop the Final Safety and Security Certification Verification Report (SSCVR), to complete the final Certificates of Compliance (COCs), and to assemble the final SSC files for the project.

Many capital projects use commercial document control software systems such as "PROCORE", "Windchill", "Constructware" or "Latista". Other smaller-scale projects use more simplified systems such as standard Microsoft Access and Excel databases. ADS has worked with these applications, as well as others in support of our other clients, and can use these systems as necessary to meet the SSC Program needs of each RTA project.

If required, ADS can also build both project and organization-specific safety data storage and tracking systems to support implementation of RTA's tracking of SSC products. In support of the WMATA 2/3K overhaul, and 5K and 6K railcar procurements, as well as HART's new start rail transit system, our staff developed and maintained documentation control websites for storage and configuration management of SSC deliverables, project correspondence, engineering drawings, CDRL logs, and other related project documentation. We have also successfully developed and implemented similar certification database applications for MTA, HART, NCDOT, the FAA, and others. For this assignment, we will work with each project and RTA to identify and use the most appropriate document control applications needed to successfully complete the SSC Program.

ADS will monitor and verify compliance with safety and security design criteria, technical specification requirements, and testing. This will include providing on-site engineering and management support staff and program management services needed to track identified hazards and certifiable items to closure using the project HTL/CIL and conformance checklists. The project SCWG and the SSCRC will monitor contractor conformance to technical specifications and design contracts and will verify that SSC requirements have been met by reviewing drawings, CDRLs, hazard analysis submittals, test procedures and reports, and other project documentation submitted for approval. ADS will also participate in and witness testing to monitor and verify that stated safety and security requirements are being achieved.

Contractor requests for waivers and/or deviations from technical specifications will be reviewed to identify their impact to safety and security certifiable items. During integrated and pre-revenue acceptance testing, we will support each project by tracking and verifying the satisfactory completion and approval status of test procedures and reports. Means of verifying fire/life safety hazards have been appropriately mitigated may also include review of material Flammability, Smoke Emission, and Toxicity (FST) test data to verify materials meet technical specification requirements (i.e., ASTM E662, D3675, C1166, E162, and BSS 7239). ADS has reviewed thousands of material test reports and will verify this data complies with RTA's requirements. Our staff have also managed full-scale floor fire testing, in accordance with ASTM E119, for WMATA's 6000 Series procurement and 2/3K Series Overhaul Programs.

We will also track and close identified hazards related to the completion and approval of maintenance manuals, operating procedures, emergency drills, and training. Hazards identified as Category 1 or 2 must be eliminated or controlled to an acceptable level prior to revenue service. We will help each project establish this precedence and document this requirement in the SSCP. Certifiable items will be closed once all safety and security requirements have been fully verified and individual COCs for each Certifiable Element will be issued when all CILs have been approved.

2.1.4 Prepare Safety and Security Certification Verification Report

As the project reaches final design, ADS will develop a Design Verification Report (DVR) documenting the requirements and activities completed as part of the SSC Program through 100% design. The DVR will summarize the project and detail the purpose, goals, objectives, and scope of the SSC Program for the project. It will present the SSC process, consistent with the requirements of RTA's SSCPP, and will explain how the SSC Program has been used to implement the SRM and Safety Assurance requirements of RTA's SMS for the project.

The DVR will document how Certifiable Elements and Items have been identified through safety analyses and the design process and will provide evidence of how the identified hazards and CELs/CILs requirements for the project have been verified. Emphasis will be placed on assuring Category 1 and 2 hazards have been mitigated to acceptable levels and to RTA's satisfaction. The draft DVR will be submitted to RTA's Safety Department for review prior to being issued to the project. ADS will address comments received to the DVR as appropriate and will prepare and submit the Final DVR for delivery to RTA's SCRC. ADS will also support presentation of the Final DVR to the SCRC, Executive Leadership, and other applicable stakeholders (i.e., FTA, SSO, etc.) at RTA's request.

As each project nears completion, ADS will produce a SSCVR. The SSCVR is the culmination of the safety and security activities and tasks completed during each project phase. It will document the processes, responsibilities, documentation, and procedures used for certification and will include COCs for each certifiable element of the project and the Project Safety and Security Certificate. The SSCVR will identify the final list of certifiable elements, provide verification that all planned SSCP activities have been completed, and identify the documentation and procedures reviewed for safety and security compliance.

Again, the SSCVR will emphasize and provide evidence that Category 1 and 2 hazards have been mitigated to acceptable levels ***consistent with RTA's SRM requirements***. The SSCVR will also state, as applicable, the compliance or noncompliance of the project's systems, subsystems, equipment and facilities with established safety and security design criteria and standards. The Report may also include restrictions that do not affect the compliance of the operating system with established safety and security criteria and standards. These restrictions may remain in effect provided the restrictions are documented, attached to the COC, and all concerns regarding the restriction(s) have been resolved. This may include the development and issuance of Temporary Use Notices (TUN) in accordance with RTA's current procedures. All such issues and other open items will be tracked and managed using an Open Items List (OIL). The OIL will identify the open item(s) and associate requirements, the actions needed to close each, the individual or department responsible, and the projected closure date. Open items and issues of noncompliance will be tracked until fully verified and implemented, or until RTA formally accepts the risks associated with the items, at which point the OIL will be closed.

The SSCVR will also provide documentation that verifies safety-critical subsystems, integrated testing, emergency response drills, contract deliverables, operating and maintenance procedures, and training programs have been reviewed for compliance with safety and security requirements and completed prior to the start of revenue service. A Draft SSCVR will be provided to RTA's Safety Department, Security and Emergency Preparedness Department, the CSO, Project Management, and the SCRC for review and comment and comments received will be addressed as appropriate. Once approved by the SCRC, the Final SSCVR will be submitted to the Project Program Manager, the CSO, applicable contractor representatives, and the General Manager and Chief Executive Officer for signature, publication, and distribution. ADS will provide the Final SSCVR and supporting documentation in both electronic and hardcopy formats.

2.2 Approach to SMS Documentation and Auditing

FTA has been enacting new regulations pertaining to SMS and Transit Asset Management (TAM) since the issuance of the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Fixing America's Surface Transportation (FAST) Act, and the Transit Rail Inspection Practices (TRIP) Act. This includes 49 CFR Part 625, Transit Asset Management, 49 CFR Part 670, Public Transportation Agency Safety Program, 49 CFR Part 672, Public Transportation Safety Certification Training Program, 49 CFR Part 673, Public Transportation Agency Safety Plans, and 49 CFR Part 674, State Safety Oversight. RTA's SMS must also be guided by the requirements of 33 CFR Part 104, Maritime Security Vessels and 33 CFR Part 105, Maritime Security Facilities.

RTA must comply with these new requirements, implementing SMS principles and concepts and TAM programs based on data driven analysis and risk management processes. RTA must also remain cognizant of new legislation, regulations, and industry standards and recommended practices under development by the FTA, OSHA, LADOTD's SSO Program, APTA, NFPA, the Department of Homeland Security (DHS) and the Transportation Security Administration (TSA), the Federal Emergency Management Agency (FEMA), the U.S. Coast Guard, and other AHJs that may impact its SMS.

APPROACH IN ACTION

On January 15, 2021, the U.S. Coast Guard issued a Notice of Proposed Rulemaking (NPRM) to evaluate the potential use of SMS to improve safety and reduce marine casualties on board U.S.-flagged passenger vessels. While RTA's contracted ferry service provider, Labmar Ferry Services, has voluntarily implemented an SMS, the Coast Guard may use the information gathered through this NPRM to develop new regulations for SMS to which RTA may be required to respond.

ADS has been assisting our clients with complying with the requirements of MAP-21 and those of 49 CFR Parts 625, 670, 672, 673, and 674 since their inception and prior to each regulation being issued. Our proposed staff for this assignment currently serve as Chair and Vice Chair of APTA's Rail Safety Committee, as USDOT TSI Senior Instructors, and as OSHA Authorized General Industry and Construction Industry Instructors. They include CSPs, WSO-CSEs and CSSDs, licensed P.E.s, and certified SMS practitioners who are required to remain current with new regulations and requirements in order to retain their certifications and licenses. As a result, we have become recognized leaders in SMS in the transit industry.

In serving our clients, ADS has reviewed Safety Program policies, plans, procedures, rulebooks, resources and reporting systems; conducted safety culture assessments; reviewed, developed and implemented SMS training programs; conducted safety analyses; and has identified, evaluated, and assisted in the improvement of safety data sources and reporting systems. Through each, we have worked alongside our clients to determine the effectiveness of current Safety Programs, conducting detailed studies of program data and information gained by working at all organizational levels, across each division and department, and across each role and responsibility. In this manner we have assured our recommendations are holistic in nature, accommodating top-down, bottom-up, two-way communication and implementation.

We have also assisted in revising existing Program documentation and developing and implementing new documents, training programs, and practices to incorporate the principles of SMS into and across organizations. This has included conducting compliance reviews and gap assessments of existing Safety Programs, leading the transition of System Safety Program Plans (SSPPs) and authoring ASPs, developing and implementing new Safety Policies and SRM, Safety Assurance, and Safety Promotion processes and programs, developing and delivering reports, presentations, and training programs to executive management teams, Boards of Commissioners, SSO Agencies, and State Secretaries of Transportation, and developing and delivering presentations and risk-based recommendations to clearly explain the findings and gaps that exist within the organization, and the benefits, reasons for, and anticipated costs of modifying the Safety Program to effectively implement an SMS.

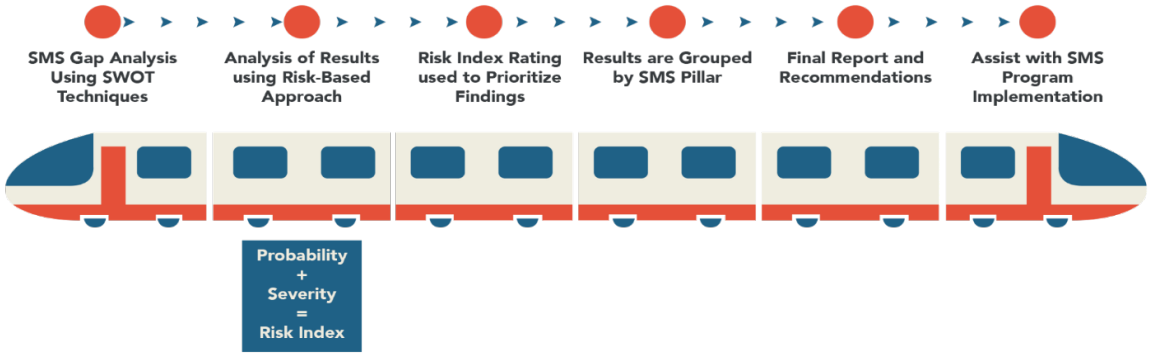
As a result of our recognized expertise in this area, we have been called upon by many of our clients to review safety regulations and to research and monitor legislation that may impact their Safety Programs. In doing so, we have assisted in determining the applicability of rules and regulations to client organizations; developed and delivered presentations and summary briefings to executive management to explain the impacts of regulations on client organizations and programs; provided recommendations on how to best meet existing and new regulatory requirements; and developed and assisted in implementing new rules, policies, plans, procedures, processes and training programs to meet new regulatory requirements. We will draw on this vast regulatory experience to assist RTA in interpreting and responding to Federal, State, and local health and safety regulations.

We know RTA has taken many steps to begin development and implementation of its own SMS. This has included transitioning the SSPP to an ASP, developing and implementing stronger SRM and Safety Assurance processes, and working closely with FTA and the LADOTD to better understand their requirements and to strengthen relationships among all parties. To understand RTA's current degree of implementation in meeting FTA's SMS requirements, including the requirements of 49 CFR Parts 625, 670, 672, 673, and 674, as well as to measure the degree to which RTA has developed and implemented its ASP and SMS, *ADS proposes completing an SMS Gap Assessment tailored and sized specifically to the RTA's needs—knowing that much has already been done by RTA in response to these requirements*.

As a result of our work supporting FAA's Next Generation Air Traffic Control System Program, our preferred SMS Gap Assessment and SMS Implementation approach is a phased approach following that recommended by the International Civil Aviation Organization's (ICAO) SMS Implementation Evaluation Guide. We begin by identifying and documenting SMS requirements in a matrix format. This includes drawing on our depth of SMS and transit industry experience, including current and past client engagements, and our extensive involvement in industry working groups and associations such as APTA and TSI, to incorporate recognized industry best practices and benchmarks into the requirements matrix.

As summarized by **Figure 5**, our comprehensive approach includes administering the SMS Requirements Matrix, organized by SMS component (i.e., Safety Policy, SRM, Safety Assurance, and Safety Promotion) to compare RTA's existing SMS and Safety culture to recognized SMS requirements. Our approach uses Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis techniques and "yes" and "no" questions to evaluate the existing program, ASP, organization, and the degree to which SMS requirements have been implemented within RTA's operations.

FIGURE 5: ADS SMS GAP ANALYSIS APPROACH



The Draft SMS Requirements Matrix will be submitted for RTA's review and comment, and we will work with RTA's Safety Department to discuss and make changes as necessary. The Final SMS Requirements Matrix will then be used to complete the SMS Gap Assessment and ASP review by:

1. Identifying and evaluating the existing organizational structure, emergency response capabilities, and assigned roles and responsibilities and if they are correctly documented in the ASP.
2. Identifying and speaking with key SMS stakeholders to evaluate their knowledge and perceptions of the current Safety Program, culture and ASP.
3. Identifying and reviewing existing safety, operations, maintenance, management, emergency, and administrative rules, policies, plans, procedures, and programs, including SRM tools and verifying they are documented in the ASP.

4. Reviewing training programs, including training tools, procedures, and employee perceptions and if they are documented in the ASP.
5. Identifying and evaluating existing safety program tools and processes used to administer the safety program and assure operational safety including safety reporting systems and SRM processes and verifying they are documented in the ASP.
6. Examining current operations and work practices to determine the extent to which existing rules and procedures are followed.
7. Reviewing past accident / incident and emergency response data, investigations, after action reports, and the effectiveness of reporting systems.
8. Reviewing past hazard and safety risk data and the effectiveness of reporting systems.
9. Evaluating the condition of work areas, vehicles, equipment, and facilities to identify hazards, and to determine how hazards are addressed and managed in real-time, and if these processes are consistent with those documented in the ASP.
10. Reviewing safety communication processes and programs, including the use and effectiveness of committees and working groups to effectively mitigate safety risk to acceptable levels and if these are appropriately documented in the ASP.

APPROACH IN ACTION

ADS is the only firm offering key staff that have been certified in SMS since 2004, who have not only met, but currently teach FTA's SMS and PTSCTP certification program course requirements throughout the U.S. as TSI Senior Instructors, and who have implemented SMS principles and programs in the Transit, Aviation, Aerospace, and Autonomous Vehicle Systems industries.

Because SMS requires the involvement of every individual and department within the organization, we will work with RTA to identify the staff and departments to be interviewed during the SMS Gap Assessment. This will include members of executive leadership, managers and supervisors, and front-line employees from across the organization. In addition, ADS may assist RTA in developing surveys and questionnaires that can be administered on a large scale throughout the organization. These surveys will be designed to solicit feedback from operators, mechanics, technicians, managers and supervisors, and others with regard to their perceptions of RTA's Safety Program and culture, available tools and processes for maintaining safety, hazard reporting mechanisms, and operational priorities.

Implementation of a fully functional SMS takes between 3 and 5 years based on the organization's capabilities and culture. The SMS Gap Assessment will therefore also examine RTA's resources, technical capacity, and capabilities to fully develop, implement, and administer its SMS over the near, intermediate, and long term. In this manner, the SMS Gap Assessment will function as an Initial Action Plan, identifying the steps to be taken and the elements of RTA's ASP to be developed to fully implement RTA's SMS in compliance with 49 CFR Part 673 and LADOTD's SSO Program requirements, using a phased approach as recommended by ICAO's SMS Implementation Guidelines and as adopted by the FTA.

Consistent with our approach to developing the SMS Requirements Matrix, the Gap Assessment Report will be organized by SMS element (i.e., Safety Policy, SRM, Safety Assurance, and Safety Promotion), by Department and transit mode (i.e., rail, bus, ferry, etc.) and for the RTA in its entirety. Results of the Gap Assessment will be used to measure the degree to which RTA has implemented its SMS and ASP using an SMS Maturity Model, consisting of the following five (5) implementation measures:

1 **Planning**: The SMS component is in its infancy stage; no measurable action has been taken, but RTA is developing an understanding of what is required.

2 **Developing**: The SMS component is being developed and plans for implementation exist.

3 **Implementing**: The SMS component is being implemented throughout the organization. Processes are beginning to be documented.

4 **Managing**: The SMS component has been incorporated into RTA's operations. Processes are documented and their use is verifiable.

5 **Sustaining / Improving**: The SMS component is fully implemented, and processes are resulting in measurable improvements.

In this manner, RTA will be able to quickly and efficiently identify, prioritize, and understand where SMS gaps exist within each Department and the organization. The Draft SMS Gap Assessment Report will be submitted to RTA for review and comment. We will meet with project stakeholders to review the report and discuss any changes or revisions that may be necessary. The Gap Assessment Report will then be finalized and submitted for approval.

The results of these efforts will then be used to revise RTA's ASP, as necessary, and to develop and begin implementation of the ASP and RTA's SMS throughout the organization. Services to be provided to support RTA's ongoing compliance with FTA's and LADOTD's SMS requirements and to provide ongoing maintenance of the ASP and supporting safety programs and plans may include:

- Reviewing and revising RTA's Safety Policy;
- Annually updating Safety Performance Targets, Goals and Objectives;
- Assisting in Reorganizing Reporting Structures and Organizational Alignments;
- Updating Roles and Responsibilities;
- Updating Hazard Identification, Reporting, Analysis, Control, and Tracking Systems and Processes;
- Reviewing and modifying, if necessary, Accident Prevention, Investigation and Risk Management Plans, Procedures and Programs;
- Updating Safety Policies, Plans, Rules, Procedures and Documentation;
- Developing SMS Communications and Promotional Materials for distribution throughout the organization;
- Reviewing and recommending improvements to Safety Incentive Programs;
- Reviewing existing training programs, including tools and technologies, and providing guidance and recommendations to assure the training program is sufficient and compliant with FTA requirements, and developing and providing new training as necessary;
- Reviewing Human Resource practices to attract and retain qualified employees;
- Reviewing and revising the Security and Emergency Preparedness Plan and Emergency Management Plan;

- Developing and delivering SMS compliance reports, training programs and supporting training classes throughout the organization; and
- Identifying and monitoring Key Performance Indicators to measure RTA's changing Safety Culture.

In each instance, we will provide ongoing guidance and assistance to RTA to respond to and implement new requirements that may be issued by FTA, LADOTD, and other Federal, State, and local regulatory authorities. We will work with RTA to assure personnel and stakeholders understand the requirement(s) being addressed, how to best implement and meet the requirement(s), and the expected pros and cons of doing so. This includes working directly with RTA, FTA, and LADOTD to assure all parties share a common understanding of what is required, and the actions being taken in response by RTA. ADS will then assist RTA in developing, revising as necessary, and implementing plans, rules and procedures to ensure program documentation, including SOPs and EOPs, Emergency and Contingency Plans and Procedures, Procurement and Contract documents, operating rules, maintenance rules, manuals and plans are consistent with RTA's SMS and ASP requirements and existing configuration management processes.

In doing so, we will ensure RTA's standard format for safety plans, rules and procedures is used, and, if necessary, will work with RTA to develop new formats. We will work to define a logical sequence of steps and sub-steps, using the imperative voice for clarity and economy of words. Procedures will be written with the audience in mind and to the reader's ability level. This will be ascertained by working with the supervisors of affected organizations, training specialists, and Department of Human Resources.

Unfamiliar terms will be defined, and any information believed to be useful to the reader/user's understanding, such as illustrations, diagrams, models, checklists, sketches, photographs, charts, graphs or other aids will be included. At a minimum, each document will be formatted to include all necessary identifying information including responsible department, person issuing/approving, date of issuance/effective date, superseded documents, past revision dates, title of the procedure, and assigned number as dictated by RTA's configuration management and document control policies. Each document will be written to introduce the background, purpose, and scope of the procedure, including how it applies to RTA. Specific roles and responsibilities will be identified for applicable affected personnel and departments, including those responsible for supervision and management oversight of the procedure. All applicable and necessary reference documents needed to perform or that support the procedure will be cited as appropriate. Similarly, all equipment and tools needed to perform the procedure, including safety equipment (i.e., PPE) will also be identified.

Next the document will identify the complete step-by-step instructions to be taken to perform the subject activity to the standards of RTA, regulatory agencies, and manufacturers (as applicable). All required safety precautions and warnings will be clearly identified and departments and personnel holding enforcement authority for the procedure will be identified along with a description of the consequences that may be suffered as a result of failing to comply with the procedure. Checklists, forms, diagrams, charts, standards and other supporting documentation will be included as necessary.

Draft plans, policies, procedures and other documents will be proofread and reviewed using MS Word® spell check and grammar check to identify and correct errors. Draft procedures will also be reviewed by our Task Leaders, then by our Project Manager, and finally by our Principal in Charge prior to being submitted to RTA to ensure they meet appropriate quality standards. During this review, the Project Manager will confirm that the procedure is understandable, effective and complete, and will verify that it does not present any new hazards.

We will then work with RTA to review the draft procedures and to make revisions as necessary to address comments or concerns. Again, we will work with the appropriate RTA departments, personnel and committees to develop procedures that are acceptable to all stakeholders. All final procedures submitted to RTA will remain the sole property of RTA.

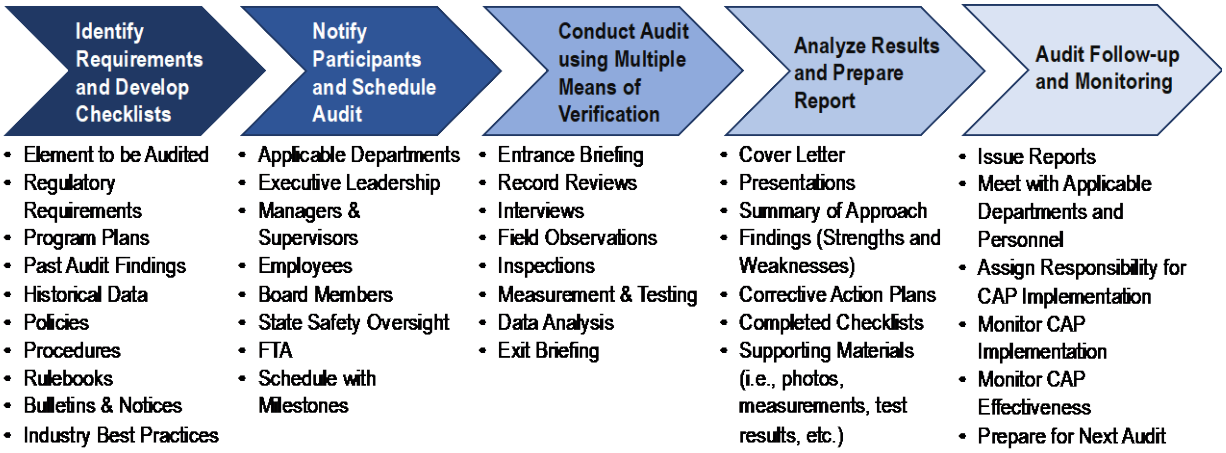
ADS also has extensive experience developing and administering internal safety auditing programs as a cornerstone of organizational Safety Assurance. Our proposed staff, including **Mr. Ron Edwards, WSO-CSSD, PTSCTP, TSSP**, ***has been certified in Transit Rail Safety and Security Auditing (TRSSA) through USDOT's TSI*** and has conducted audits of transit agency safety programs throughout the country at all levels of the industry (i.e., as an FTA PMOC representative, as a SSO Agency representative, as transit agency staff, and as contractor to various transit agencies).

APPROACH IN ACTION

ADS' staff has completed USDOT TSI's Transit Rail Safety and Security Auditing (TRSSA) course; developed and administered auditing programs for Transit Agencies and SSO Agencies alike; overseen ISA Programs as SSO Agency representatives; managed FTA's Rail SSO Audit Program; served as FTA PMOCs assisting new start transit systems in establishing ISA Programs; provided bus quality oversight and quality assurance services to improve transit operations; and has provided system assurance and auditing services to NASA's most high-profile missions.

Our comprehensive auditing approach, as depicted in **Figure 6**, begins by identifying the requirements being audited and using multiple means of verification to demonstrate identified requirements are being met across all applicable organizational departments and levels. Audit checklists are prepared based on the identified requirements and submitted according to RTA's internal safety auditing procedures. Audit participants are then identified, and an audit schedule is developed and submitted for RTA's approval. When necessary, the audit checklists and schedule will be submitted to LADOTD as part of audit notification packages as required to comply with LADOTD's SSO Program Standard.

FIGURE 6: ADS APPROACH TO AUDITING



We will review previous internal and external audit findings and corrective action plans (CAP) to identify past areas of non-compliance or concern for inclusion in audit checklists. Additional data to be reviewed as we develop the audit checklists may include system configuration information, safety data including accident and incident data, equipment and rolling stock information, operational data including schedules and ridership data, right-of-way and equipment specifications, maintenance records, training records, facilities information, contractor safety plans and programs, emergency plans and procedures, and construction specifications, plans and procedures.

Once scheduled, the audits will be performed with a focus toward determining and documenting program compliance in relation to performance targets. Our audits are thus focused on identifying both strengths and weaknesses so that continual program performance improvements can be achieved.

Audits will be performed to verify and ensure that the audited area addresses all requirements and demonstrates compliance through documentable activities. We will review records and program documentation and interview staff to confirm their knowledge of the program requirements and to determine if processes and requirements are being implemented as documented and intended. We will perform field reviews, inspections, and measurements as necessary to witness and verify the application of documented processes. We will also conduct data analysis to identify potential trends that can be used to focus and prioritize RTA's actions in response to audit findings.

Each audit will conclude with an out-brief held with the audit participants to discuss audit findings and preliminary concerns and to begin the development of corrective actions. Audit results will then be documented using the completed audit checklists as well as in narrative report format. Draft audit reports, including the completed audit checklists, will be prepared and submitted for RTA's review, focusing on the believed root causes of the findings. In this manner, we can develop a clearer understanding of the underlying factors that caused and/or contributed to the noncompliance findings and are therefore able to offer recommended CAPs that will be more effective in addressing the root causes. We will then work with RTA as necessary to revise and finalize the audit report.

Each finding and recommended CAP will be evaluated and prioritized using our risk-based approach to determine the safety risk presented in terms of potential severity and probability. The CAPs will also be evaluated to determine the costs and effort required for implementation versus the impact and benefits that will be gained. This information, coupled with the estimated timeframe believed to be needed to implement the CAP, will enable RTA to prioritize and focus on the CAPs that will have the greatest positive impact on the SMS and in reaching performance targets. We will then work with RTA to ensure applicable and affected departments and personnel concur with the proposed CAPs and will assist in entering the CAPs into RTA's CAP management system for analysis, tracking and implementation. We will also assist RTA in monitoring the implementation of CAPs and will prepare status reports as requested.

2.3 Approach to Technical Review Support

The number, size, type, and scope of RTA's current and planned capital projects is extensive, ranging from new design and construction projects, including planned system extensions, to repair and rehabilitation projects, involving virtually all aspects RTA's infrastructure, operations and services. Projects occur throughout RTA's systems, involving different jurisdictions, regulatory agencies (including the U.S. Coast Guard), and stakeholders. Overseeing and assuring the safety of such a large scale of varying projects ***fulfills a critical SRM and Safety Assurance function within RTA's SMS*** and requires an equally extensive depth of technical resources capable of providing engineering and system safety expertise across numerous disciplines.

ADS' proposed project team, supported by the entirety of ADS' nearly 50-employee bench, meets this need, providing near immediate response to RTA's requests, regardless of the engineering discipline required, or the criticality of the task to be completed.

APPROACH IN ACTION

Our staff hold graduate engineering degrees, maintain PE licenses, include CSPs, possess all necessary certifications and qualifications required by RTA, have conducted, supported and reviewed the full gamut of engineering studies and analyses required in the transit industry, and have helped to prepare national guidelines for transit system safety and security; all of which may be required to support RTA's various major capital projects and to respond to emergency or critical events that may occur within the operation of RTA's transit system.

Our key staff for this project possess the ***in-depth, discipline specific, and comprehensive engineering capabilities across varying engineering disciplines including mechanical, electrical, civil, industrial, structural, system safety, fire protection, systems, vehicle, information technology, traffic, and environmental engineering*** needed to support RTA's immediate, ongoing and long-term capital projects.

As a result of our system safety expertise and engineering depth, we have been called upon by the likes of WMATA, MTA, CTA, CMTA, TriMet, HART, HRT, Houston Metro, BART, VRE, and others to provide technical review support services identical to those required by RTA. This has included analyzing and determining the risks and the safety and security certification and system modification needs of their largest and most safety critical Projects, such WMATA's Dulles Silver Line Extension, 7K and 8K Series Railcar Procurements, and the Red, Green, Orange, and Blue Line Traction Power System Upgrade Projects, HART's $12.4 Billion new start rail transit project, CTA's Red and Purple Line Modernization Project, CMTA's Downtown Station Construction Project, MTA's LRV Fleet Overhaul, MARC Siemens Locomotive and Multi-Level Railcar Procurements, Metro Shot Tower Station Improvements Program, Central Control Center Rehabilitation Project, Metro Anchor Bolt Replacement Project, and MTA's Metro Track Replacement and Restoration Project, to name just a few.

Additionally, ADS can perform safety and system assurance analyses and quantitative risk assessments, including reliability studies, engineering studies, hazard analyses, FMECAs, Fault Tree Analyses, Comparative Safety Analyses (CSA), cost benefit analyses, and other forms of analysis to support the RTA's current and future capital project needs to determine their safety risk potential and the degree of safety and security certification required.

We know from experience that every project is unique. The procurement and installation of new vehicles, systems, equipment and technology; modifications to service, including changes to bus routes, operator working hours, and rail system operating headways; and modifications to existing, or implementation of new operating and maintenance rules, processes and procedures, must all be thoroughly analyzed to determine their safety risks prior to implementation. For each technical review assignment, we will therefore first meet with RTA's CSO, Project Manager, and other RTA staff and stakeholders to identify the type, scope, size and complexity of the capital project, as well as the project's intended purpose and outcomes, and the expected costs and needed resources. This initial meeting will also be used to identify the intended purpose of the assignment and the required deadlines for its completion.

APPROACH IN ACTION

ADS completed a Bus Operator Safety Barrier Effectiveness Study for LACMTA's OIG, evaluating bus operator injury and illness rates and costs across each division, shift, and route, as well as in comparison to 10 other US transit agencies. ADS Presented the results of the Study to LACMTA's Board of Directors, providing justification to support the continued investment in and installation of Bus Operator safety barriers throughout LACMTA's bus fleet.

We will then analyze the project using techniques most appropriate to the subject matter under review. Transit Operations Safety Analyses, for example, will begin by reviewing existing operating processes and procedures to understand operating priorities, goals and objectives. We will review operating data, including ridership, accident/incident, maintenance, warranty, and hazard data to identify trends and/or areas requiring greater analysis. This data will then be compared to industry data through peer reviews to determine how RTA's programs compare to those of others, and to identify industry best practices.

We will also evaluate the degree to which safety considerations are incorporated into RTA's operations and practices, as well as the degree to which the Safety Department is included in the decision-making process, including if rule and procedure revisions are analyzed prior to being implemented to determine if they will create new hazards.

For example, bus route selection processes may be reviewed to identify if route-specific hazard analyses are required as part of the selection process, and if so, how these analyses are performed, documented, and used to make decisions. Factors examined will include operational and environmental characteristics such as geography, population and traffic density, vicinity to and interaction with other transportation modes including commuter and/or freight railroads, crime statistics, and the purpose and use of neighboring properties (i.e., industrial or residential, presence of hazards, etc.). Operating procedures will be reviewed to determine their need for revision as a result of operational, organizational, and procedural changes resulting from bus service changes, as well as against industry best practices, standards, and guidelines. Each analysis will be completed in accordance with our overall hazard analysis approach with a focus on identifying and resolving Category 1 and 2 hazards.

For complex projects, we will establish an "Experts Panel" of project stakeholders and technical experts, including project representatives, Safety, Security and Emergency Preparedness, Operations, and Maintenance Department staff, representatives from applicable AHJs, SSO personnel, and others to assure the analysis is completed through collaboration as opposed to the "siloed" approach used by others. We will also organize, facilitate and support project specific working groups and committee meetings to assure all stakeholders remain well informed of all safety, security, and emergency management risks.

Each analysis will conclude with the development of a comprehensive report that summarizes the type of analysis performed and the methodology used, the subject of analysis (i.e., capital project, system modification, rule change, etc.), the participants involved, findings, conclusions, and recommendations. Identified hazards will be presented using HTLs identifying the hazard(s), causes and effects, and potential impact(s) to the system described in terms of potential severity and probability.

The CSO will again be made aware of all Category 1 and 2 hazards regardless of the type of analysis performed. Proposed mitigations will be presented identifying and describing how the potential hazard severity and/or probability may be reduced with their implementation, and the personnel and departments responsible for implementing the mitigation and monitoring its effectiveness will be identified. ADS will then work with RTA staff and contractors, including the CSO and Safety Department and other affected departments and parties to verify the results of each study and analysis, including mitigating and controlling measures, are incorporated into designs, new processes and procedures, and training programs, and are effective. We will also prepare and deliver summary presentations to RTA's Board of Commissioners, Executive Leadership Team, SCRC, FTA, LADOTD, and others as directed by RTA.

Work products, including reports and presentations, will be reviewed first by our assigned Subject Matter Expert, then by our Project Manager and finally by our Principal in Charge to assure each is of the highest quality and meets RTA's intended purpose, goals, and objectives before being submitted to RTA as draft and final documents.

2.4 Approach to Occupational Safety and Health and Industrial Hygiene

ADS' proposed staff include certified OSHA authorized general industry instructors and CSPs with years of practical experience in the transit industry performing and reviewing safety assessments and developing and delivering OSHA required programs. This includes those required for confined space entry, respiratory protection, personal protective equipment (PPE), bloodborne pathogens, lock out/tag out, fall protection, hazardous communication, overhead and gantry cranes, powered industrial trucks, and first aid.

Our staff have also conducted industrial hygiene sampling, including air sampling for dusts and airborne particulates, noise, chemical, heat exposure, and light intensity sampling to identify hazards, to monitor employee exposures, and to developed and implemented hazard control programs, including hearing conservation programs, respirator fit testing programs, and asbestos and lead abatement programs. In addition, we have developed, delivered, assessed and offered improvements to Roadway Worker Protection (RWP) Programs throughout the industry.

As a result, we understand many projects, work assignments and activities require the performance of specialized and specific assessments, testing, and training to identify and control hazards not easily identified through other means. This includes Job Hazard Analyses (JHAs), Job Tasks Analyses (JTAs), Job Safety Analyses (JSAs), Cognitive Task Analyses (CTAs), Regulatory Requirements Reviews, and various forms of Industrial Hygiene sampling and monitoring.

JHAs and JTAs, for example, are effective means of identifying hazards specific to a particular, often physical, task or work assignment (i.e., identifying the potential for repetitive motion injuries that may be experienced by vehicle mechanics). They provide a formal means of examining how employees complete their assigned tasks, under what working conditions, and with what knowledge and skills to gain a better and more broad understanding of the tasks being performed and the potential hazards and/or risks that may exist therein.

Likewise, CTAs are an equally effective means of evaluating tasks and job assignments that require a great deal of decision-making, problem solving, attention to detail and judgement (i.e., such as that required by rail operators and controllers). They are essential to identifying the key steps and critical decision points within a task, can be instrumental in identifying and eliminating hazards brought about by or intrinsic to human factors, and are often an effective means of identifying the knowledge and understanding (or lack thereof) of employees with regard to specific tasks (i.e., seasoned employees are often able to make better, faster decisions than new employees unfamiliar with or still learning their job assignments).

ADS's approach to completing safety assessments is consistent regardless of the type of assessment being performed. We first work with RTA to identify and understand the job, task, process, procedure, equipment, system, or work activity to be analyzed. We then identify and recommend the type of analysis and/or assessment most appropriate and best to meet RTA's needs in identifying potential hazards and safety concerns. Next, we complete the analysis using the appropriate analysis techniques (i.e., reviewing existing procedures and processes and mapping task steps and decision points, observing employees as they complete assigned tasks (behavioral task analysis to identify overt actions), examining existing engineering and administrative controls, interviewing employees, reviewing and quantifying statistics, including those related to accidents and incidents, reviewing industry best practices, etc.). Finally, we develop and deliver comprehensive reports detailing what was analyzed, the analysis methodology used, findings, conclusions, and recommendations.

APPROACH IN ACTION

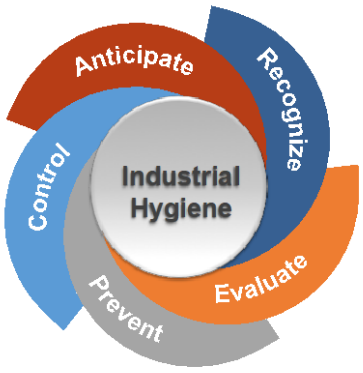
ADS completed an OSHA gap assessment and regulatory review of WMATA's Tagging Relay Pilot Program and the existing Lock Out / Tag Out Procedure for Traction Power Substations to determine the applicability of OSHA electrical safety standards, to identify gaps and areas in which the Tagging Relay System did not meet OSHA's requirements, and to develop mitigations and corrective actions to bring the Tagging Relay Pilot Program into compliance with each OSHA requirement.

In each instance, examining the potential severity and probability of occurrence of identified hazards to create a combined Hazard Risk Index (HRI) consistent with FTA's Hazard Analysis Guidelines for Transit Projects-2000, MIL-STD 882, the Department of Defense (DoD) Standard Practice for System Safety, and RTA's own hazard management program and SRM process as documented in its ASP is a critical and necessary step. Once complete, we will then support RTA in revising existing, or developing and implementing new processes, rules, plans, procedures and training programs to meet mandatory OSHA requirements and mitigate the identified hazards. Draft documents will be provided for RTA's review and comment before being finalized and implemented as directed.

Training programs will be developed and delivered to meet OSHA mandatory requirements. ADS will begin by reviewing RTA's existing training programs and will recommend revisions as necessary or will develop new training programs specific to the applicable OSHA requirement (i.e., hazard communication, fall protection, fire protection and prevention, bloodborne pathogens, etc.) for RTA's review and comment. Training programs will include presentations, supporting tools and teaching aides, graphics, videos and planned exercises, participation guides, and methods for validating the effectiveness of training, and a means to gain feedback from students regarding the training program. This may include student testing, work practice observations, auditing, measuring program improvements through Key Performance Indicators (KPI), and/or student feedback forms and surveys. The training program will be assembled into a topic specific training manual and presented in hard copy and electronic formats. A draft of the completed training manual will be submitted to RTA for review and comment, and we will make revisions as appropriate prior to the curriculum being finalized and delivered. We will then support the delivery of the training courses as directed by RTA.

As summarized by **Figure 7**, Industrial Hygiene is the science of anticipating, recognizing, evaluating, preventing, and controlling employee exposures to workplace environmental factors and stresses that can affect their health and well-being. This includes chemical, biological, physical, environmental, and ergonomic factors that must be effectively controlled to assure employee health and safety.

Figure 7: Five Phases of Industrial Hygiene



RTA's operating environments, including its many maintenance facilities, rights-of-way, vehicles, and work processes present hazards that must be properly and regularly assessed through proven Industrial Hygiene sampling methods to assure RTA's employees, contractors, and passengers are not exposed to unsafe conditions.

ADS' understanding of these issues is a direct result of our practical transit industry experience. We know that transit employees, especially those serving in maintenance roles, work in environments and perform tasks inherent with hazards best monitored through Industrial Hygiene sampling programs. Bus and rail maintenance facilities and rail rights-of-way are often loud, dirty, hot, at times poorly lit, and often require the use, storage and disposal of hazardous materials and chemicals.

ADS will review RTA's existing Industrial Hygiene program, including existing SOPs, equipment, and sampling techniques to verify they are the most effective for monitoring the types of hazards present within RTA's operating environment. We will make recommendations as necessary to improve upon the existing sampling program or, if such a program does not exist, we will assist RTA in developing and implementing the necessary plans and procedures to establish such a program.

ADS will identify the types of Industrial Hygiene sampling techniques required and will perform sampling of RTA's work environments as directed. Sampling methodologies will be consistent with those recommended by the American Conference of Governmental Industrial Hygienist (ACGIH) and those required by OSHA and other regulatory bodies. We will also work with RTA to identify testing laboratories capable of analyzing air, dust, chemical, and biological samples collected through the Industrial Hygiene program, and will assist RTA in interpreting analysis results to determine if employee exposures are within allowable limits, comparing the results to regulatory requirements and guidelines.

Lastly, we will assist RTA in determining the best actions to take to eliminate employee exposures or to reduce them to acceptable levels. This may include implementing new engineering or process changes, using alternative chemicals and materials, or using PPE. The results of these activities will be documented in reports summarizing the types of Industrial Hygiene sampling completed, analysis results, and recommendations.

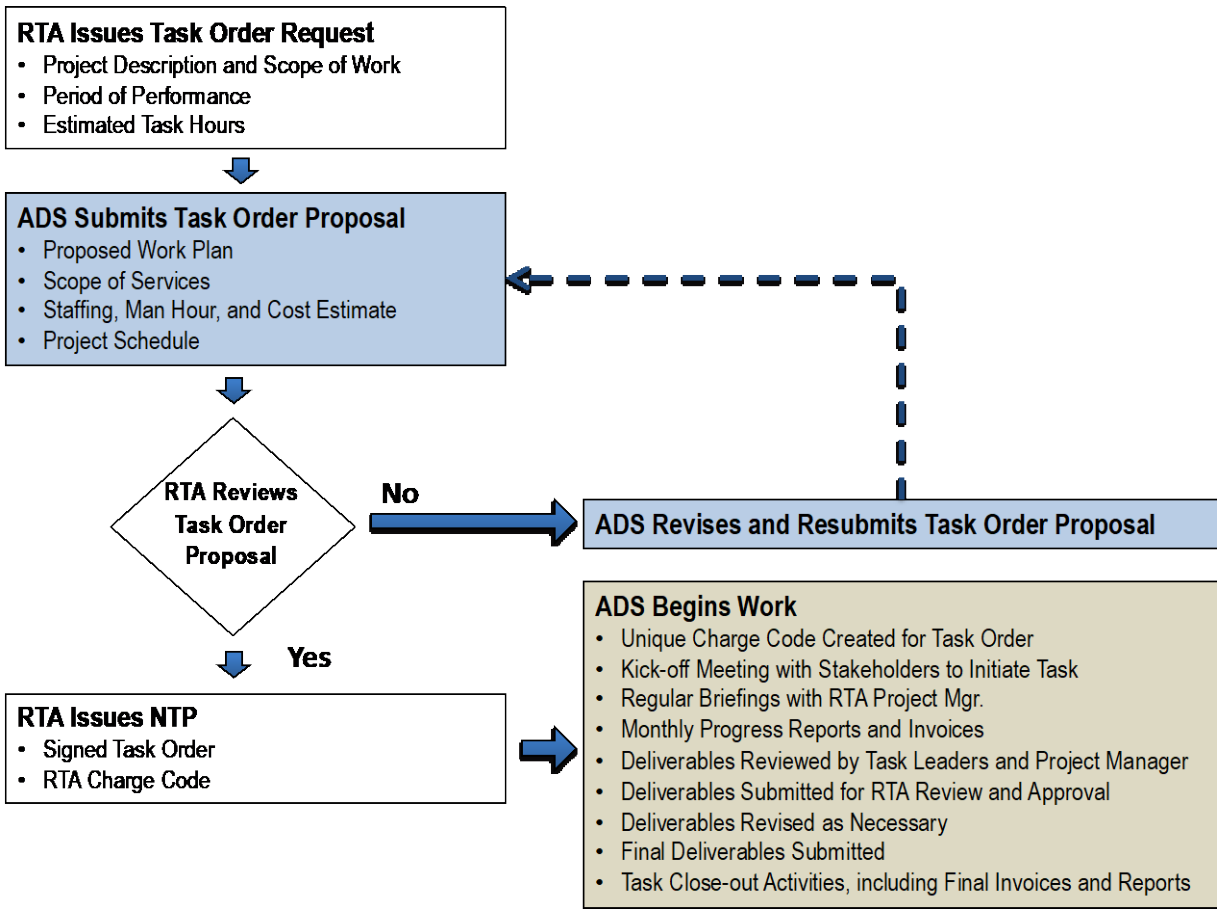
Again, ADS will support RTA by preparing CAPs necessary to mitigate or eliminate identified hazards, to develop and implement necessary processes, plans, procedures, rules and related training programs needed to meet mandatory OSHA requirements, and to develop performance metrics, including KPIs to measure and monitor the effectiveness of CAPs and program changes. We will again work with RTA to monitor CAP implementation and effectiveness and will prepare and deliver presentations regarding preliminary and final assessment and analysis findings, conclusions and recommendations to RTA's Executive Management, the Board of Commissioners, LADOTD's SSO Program, and others as requested by RTA.

2.5 Work Plan

ADS has extensive experience managing on-call services contracts like that required by RFP #2021-016. This includes currently serving as prime contractor of on-call technical safety support contracts with the MTA, TriMet, RTD, Houston Metro, CMTA, HRT, VRE, HART, NCDOT, and numerous others. As a result of our successful history both managing and supporting the aforementioned contracts, as well as our depth of available safety, security, and emergency management experts, ADS is capable of immediately responding to each task order request that may be issued by RTA, regardless of size or nature, including those considered critical and time sensitive in nature.

Our **Project Manager** for this assignment, **Mr. Eloy Recio, WSO-CSSD, TSSP**, will have management authority over all tasks and personnel. As task needs are identified, Mr. Recio will meet with the appropriate RTA representatives to ensure a common understanding is agreed upon regarding the work to be completed and the desired end product(s) of the assignment. Mr. Recio will communicate and remain in regular contact with RTA's Project Manager to receive task direction and to assure RTA remains apprised of work progress. He will thoroughly review each task order request, identify the most appropriate Task Leader and staff needed to complete the task, and provide RTA with a detailed task order proposal. As summarized by **Figure 8**, each task order proposal will document our proposed work plan and scope of services, the Task Leader responsible for overseeing work completion, proposed staff assigned, anticipated man hours and estimated costs required to complete the task, and a project schedule identifying key milestones as necessary.

FIGURE 8: APPROACH TO TASK ORDER MANAGEMENT



Work schedules, including deliverable milestones, will be developed consistent with the project master schedule and task budget. ADS will then work with RTA to revise the task order proposals as necessary to assure RTA's goals and objectives for each task are being met. Assignments will also be coordinated among and across the team based on areas of expertise to assure RTA is provided with the most qualified staff to meet its specific needs.

Once the Task Order is approved, ADS will establish a unique charge code specific to the Task Order in our accounting system and issue applicable charge authorizations and notices to begin work to ADS staff. All work will be performed with the goal of making clear, balanced findings that highlight RTA's achievements and successes, as well as recommendations for future progress. ADS will formally begin each task by holding a kick-off meeting with the RTA Project Manager and applicable task stakeholders to assure all parties are aware of the task objectives, goals, and intended outcomes and deliverables. Ample opportunity for input and response by all parties will be provided to avoid potential conflicts due to miscommunication.

We also understand that safety and security performance results must be objectively assessed, substantiated through quantitative and qualitative analyses, and presented from a balanced perspective. Likewise, findings need to be presented in the appropriate context and focused on the cause(s), not the symptoms, of the issues at hand. Findings that may have a significant impact on safety or security performance or present a clear hazard or threat to RTA and its personnel and patrons will be immediately reported to the RTA Chief Safety Officer (CSO).

Each Task Leader will be responsible for tracking and managing task work efforts, costs, schedules, deliverables, and staff performance, while our Project Manager will retain overall responsibility to assure all products and deliverables are completed on time and within budget. Monthly Progress Reports will be developed by the Project Manager to summarize and report cumulative contract and task order data for all ADS assignments. Each Monthly Progress Report will be submitted with our monthly invoices for review and approval.

As work is performed, Task Leaders will also effectively communicate and coordinate activities with project stakeholders to ensure that RTA remains involved with and has ample opportunity to provide input into the completion of all assignments and deliverables. This collaborative team approach minimizes surprises and potential conflicts or miscommunications by ensuring our clients are provided with timely information that will allow them to make well-informed decisions to appropriately prioritize the implementation of findings and recommendations.

Throughout the execution of this assignment, ADS will implement Project controls that have been proven through numerous client engagements managing task order contracts. As work is performed, we will effectively communicate and coordinate activities with project stakeholders to ensure all parties remain involved with and have ample opportunity to provide input into task assignments and the completion of deliverables. Our project controls ensure that project status is visible, work activity is timely and directed toward task objectives, and corrective action (if needed) is taken quickly. Our approach highlights the following control mechanisms:

- **Frequent Communications with RTA and Project Team Personnel**. During the execution of this assignment, we expect that weekly or daily discussions between RTA and ADS staff will be held. Through regular meetings, teleconferences, emails, monthly progress reports, and frequent on-site activities, we will make certain that all work is coordinated and completed as efficiently as possible and in a manner that meets RTA's expectations and requirements.

- **Briefings**. We recognize the important, time sensitive, and potentially high-profile nature of the tasks to be performed during this assignment. As such, it is essential that RTA be provided with the most accurate and timely information possible. To accomplish this, we will hold weekly (or more frequent) briefings with RTA's Project Manager, CSO, and other personnel as required, ensuring all parties remain up to date regarding all project activities, schedules, and actions being taken to resolve any issues or concerns.

- **Monthly Progress Reports**. Each month we will prepare and submit a progress report that will include discussions of each task. At a minimum, the progress report will document activities completed over the preceding month, activities planned for the coming month, schedule information including progress towards meeting stated milestones and anticipated completion dates, a discussion of issues and/or concerns requiring management attention and the actions being taken to resolve them, and a summary of financial data (i.e., labor costs and expenses incurred, total remaining funds, etc.). The reports will be formatted to facilitate ease of comprehension.

- **Schedule Management**. We will define milestones and deliverable dates for each task as articulated above and will monitor progress toward reaching each milestone and completion date. This progress will be reported as part of our Monthly Progress Reports.

- **Monitoring Staff Performance**. We actively seek feedback from our clients during every engagement to ensure expectations are being met, and we take immediate action to correct any deficiencies that may be cited. Should a client not be satisfied with the performance of a team member, our Senior Project Manager will meet with the RTA representative to identify and understand the issues at hand and will work with RTA and the team member involved to correct the deficiency to RTA's satisfaction. In addition, because of the depth of our team and our pool of additional resources, ADS can replace staff if RTA believes doing so is necessary to fully address the performance issue, or if additional resources are needed.

- **Quality Management**. All deliverables will be reviewed first by the Task Leader, then by our Project Manager, and finally by our Principle in Charge prior to being submitted to RTA to ensure each deliverable meets its intended purpose and is of the highest quality. We will also conduct deliverable reviews with project technical and managerial staff, as appropriate, to ensure they meet RTA's expectations.

- **Cost Management**. It is the responsibility of each Task Leader to monitor and manage the costs associated with each task assignment, while the Project Manager will provide secondary cost management oversight for each task assignment and the contract in its entirety. All task budgets and contract financial data will be summarized by task assignment and work category issues that may impact task budgets, and we will invoice for our services on a monthly basis unless otherwise directed by RTA. Invoices will be submitted in accordance with the requirements of the contract.

3.0 Price Proposal

ADS' proposed staff for this assignment has been carefully selected to provide RTA with the best value technical safety support services available in the transit industry. Our team includes the industry's most qualified and recognized safety, security, emergency management, SMS, occupational safety and health, constructions safety, and fire/life safety experts available, possessing the diverse engineering depth, technical expertise, demonstrated practical experience, and business acumen to assure project success.

Our proposed labor rates in response to RFP #2021-016 have been developed based on the direct labor of each staff member, ADS' current audit overhead rate (**independent auditor's report, which has been reviewed and approved by other transit agencies and State DOTs, is included in Appendix B**), and fixed fee. All other direct costs, such as project related travel costs including lodging, ground transportation, meals and incidentals will be expensed in accordance with RTA's rules and procedures and those of the General Services Administration (GSA) published rates for New Orleans, LA.

As the scope, nature, and size of tasks to be issued under this contract are presently unknown, a total project cost cannot be provided. As such, costs per individual and labor category/project role, inclusive of overhead and fee (i.e., fully loaded) is provided in **Table 3**.

Table 3: Summary of ADS Labor Rates					
Overhead Rate	**128.1%**				
Fixed Fee	**10%**				
Individual	**Labor Category / Project Role**	**Direct Labor**	**OH**	**Fee**	**Fully Loaded**
R. Edwards	Principal in Charge	$82.50	$105.68	$18.82	**$207.00**
E. Recio	Project Manager	$75.00	$96.08	$17.11	**$188.18**
K. Wilkinson	Senior Safety and Security Consultant / OSHA General Industry Specialist	$74.00	$94.79	$16.88	**$185.67**
K. Jones	Senior Safety and Security Consultant / Technical Engineering Reviews	$73.50	$$94.15	$16.77	**$184.42**
D. Goeres	Senior Safety and Security Consultant / Civil Engineer	$73.50	$94.15	$16.77	**$184.42**
C. Gamble	Senior Safety and Security Consultant / Electrical Engineer	$72.00	$92.23	$16.42	**$180.66**
N. English	Senior Safety and Security Consultant / RAMS Engineer	$71.00	$90.95	$16.20	**$178.15**
V. Smiley	Senior Safety and Security Consultant / Bus and Transit Infrastructure Safety and Security Certification Specialist	$69.71	$89.30	$15.90	**$174.91**
S. Chayt	Senior Safety and Security Consultant / Mechanical Engineer	$66.53	$85.22	$15.18	**$166.93**
D. Pike	Senior Safety and Security Consultant / SMS and Training Specialist	$64.81	$83.02	$14.78	**$162.61**
S. Smith	Safety and Security Consultant / Electrical Engineer	$62.50	$80.06	$14.26	**$156.82**
B. Fountain	Safety and Security Consultant / OSHA Construction Industry Specialist	$62.25	$79.74	$14.20	**$156.19**
S. Spence	Safety and Security Consultant / OSHA Specialist	$60.10	$76.99	13.71	**$150.80**
D. Francom	Safety and Security Consultant / Rail Safety and Security Certification Specialist	$59.25	$75.90	$13.51	**$148.66**
E. Hawkins	Safety and Security Consultant / SMS and OSHA Specialist	$57.05	$73.08	$13.01	**$143.14**
C. Gaines	Safety and Security Consultant / SMS Specialist	$55.43	$71.01	$12.64	**$139.08**
S. Beverley	Junior Safety and Security Consultant / Technical Engineering Reviews	$36.17	$46.33	$8.25	**$90.75**
J. Bowling	Junior Safety and Security Consultant / Fire Protection Engineer	$33.63	$43.08	$7.67	**$84.38**
D. Fisher	Junior Safety and Security Consultant / Electrical Engineer	$28.25	$36.19	$6.44	**$70.88**

Appendix A: Completed Forms

Instructions: The prime, each subconsultant, and any other tier subconsultant must submit a fully completed Contractor Questionnaire form. All items requested on the form are required, if an item is not applicable, respondents are instructed to enter N/A. Each prime firm participating as a joint venture should complete a separate Contractor Questionnaire form and indicate on the form in item 10 that the response is a joint venture.

Regional Transit Authority Service Provider Questionnaire	1. Project name, project number and date of submittal: On-Call Technical Support Request for Proposals (RFP) #2021-016	2. Official name of firm, indicate if prime or subconsultant: ADS System Safety Consulting, LLC (PRIME)	3. Address of office to perform work: 20 S. Charles St., Suite 1103 Baltimore, MD 21201
4. Name of parent company, if any: N/A	5. Location of headquarters (city): 20 S. Charles St., Suite 1103 Baltimore, MD 21201	6. Name, title, and telephone number of principal contact: Kahlil M. Allen President & CEO (240) 882-1126	7. Name, title, and telephone number of project manager: Eloy Recio, Project Manager, Sr. Safety and Security Consultant (787) 209-4949
8. Specify Type of Ownership: Private corporation Public corporation Proprietorship **X** Partnership	9. Indicate Special Status: Small business **X** Minority-owned business Woman-owned business	10. Indicate certifications held regarding special status: SBA certified SLDBE certified **X** LAUCP certified	11. Is this submittal a joint venture (JV)? Yes **No** If so, has the JV worked together before? Yes No

12. List full-time personnel by primary function. Count each only once. If all personnel are not stationed in office as listed in item 3, indicate in-office personnel separately, e.g. "5/1".

#	Function (e.g. civil engineer)	#	Function (e.g. civil engineer)	#	Function (e.g. civil engineer)	#	Function (e.g. civil engineer)
17	Safety Engineer 3/14	2	Security Engineer 0/2				
3	Civil Engineer 0/3	3	Administrative				
1	Industrial Engineer 1/0	1	Internship 1/0				
7	Electrical Engineer 2/5						
3	Mechanical Engineer 1 / 2						
3	Fire Protection Engineer 3/0					0	**Total Personnel Domiciled in LA**
3	Systems Engineer 1 / 2					43	**Total Personnel**

13. List all outside subcontractors or subconsultants you intend to employ for this project.

a. Name and address of subconsultant or subcontractor	b. Specific work to be performed on this project	c. Worked with prime firm before?
N/A	N/A	N/A

14. Brief resumes of key persons anticipated for this project (clearly identify if alternate office location if different than listed in item 3).

a. Name and title: Ron Edwards, Vice President Office Location: Baltimore, MD	a. Name and title: Eloy Recio, Sr. Safety and Security Consultant Office Location: San Juan, Puerto Rico
b. Position or assignment for this project: Principal in Charge	b. Position or assignment for this project: Project Manager
c. Years of professional experience with this firm: 7 With other firms: 20	c. Years of professional experience with this firm: 5 With other firms: 15
d. Education: Degree / Year / Specialization M. S. / 2006 / Safety Sciences B. S. / 1994 / Occupational Safety and Health	d. Education: Degree / Year / Specialization
e. Active registration or applicable certifications: State / Discipline / License number / First year registered World Safety Organization, Certified Safety and Security Director (WSO-CSSD) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) USDOT Public Transportation Safety Certification Training Program (PTSCTP) / 2019	e. Active registration or applicable certifications: State / Discipline / License number / First year registered World Safety Organization, Certified Safety and Security Director (WSO-CSSD) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP)
f. Experience and qualifications relevant to this project: Mr. Edwards has 25 years of safety and security experience focused on all modes of public transportation including Ferries, Light Rail, Heavy Rail, Commuter Rail, Bus and Paratransit. He formerly served as Chief Safety and Security Officer of Hampton Roads Transit (HRT) where he managed all aspects of HRT's Safety, Security, and Risk Management Programs, reporting directly to the CEO. Mr. Edwards also served as Rail Safety Manager for the Washington Metropolitan Area Transit Authority (WMATA) where he was responsible for overseeing the implementation of WMATA's System Safety Program Plan (SSPP), including maintaining compliance with Federal and State Safety Oversight (SSO) requirements. As a consultant, Mr. Edwards has provided system safety and security services to the Federal Transit Administration (FTA), various State DOTs, and numerous public transportation agencies across the U.S. In doing so, he has completed hazard analyses of systems, equipment, infrastructure, processes, and critical transit assets; developed and managed Safety Certification Programs; developed and implemented safety and security policies, plans, and procedures; developed and delivered safety training programs; performed compliance audits; conducted Safety Management System (SMS) gap assessments and assisted in developing and implementing SMS programs. Mr. Edwards is also a USDOT Transportation Safety Institute (TSI) Senior Instructor where he delivers TSI's SMS Principles for Transit, Rail Accident Investigation, and Bus and Rail System Safety courses. He also serves as Chair of APTA's Rail Safety Committee.	f. Experience and qualifications relevant to this project: Mr. Recio has over 20 years of safety, security, and emergency preparedness and response experience. As a former Deputy and Chief Safety and Security Officer (CSSO) for Hampton Roads Transit (HRT), and as a former State Safety Oversight (SSO) Program Manager, Mr. Recio has an unmatched understanding and practical knowledge of the challenges faced in implementing Safety and Security Programs in compliance with changing regulatory requirements. As HRT's CSSO he was directly responsible for developing, administering, and overseeing HRT's safety, security, and risk management program for the entirety of HRT's multi-modal organization, including HRT's Ferry service. He also served as SSO Program Manager for the State of Virginia and Puerto Rico, was a member of the Tri-state Oversight Committee (TOC) and served in the U.S. Coast Guard. As a consultant, Mr. Recio has provided security, risk management, and safety compliance services to HART, TriMet, the DDOT Streetcar, and many others, including various State DOTs. He has completed and reviewed preliminary hazard analyses (PHAs) and threat and vulnerability assessments (TVAs) of systems, equipment, infrastructure, processes, and critical transit assets. He has developed and managed Safety and Security Certification Programs; conducted accident, incident and unacceptable hazardous condition investigations and developed corrective action plans in response to findings; developed, reviewed and revised safety and security policies, plans, procedures, and rules; developed and delivered training programs; and performed safety and security audits. He has also provided guidance on transit policing strategies for new start projects.

a. Name and title: David Goeres, Sr. Safety and Security Engineer Office Location: Salt Lake City, Utah	a. Name and title: Kevin Jones, Sr. Safety and Security Engineer
b. Position or assignment for this project: Sr. Safety and Security Consultant / Civil Engineer	b. Position or assignment for this project: Sr. Safety Safety and Security Consultant / Technical Engineering Reviews
c. Years of professional experience with this firm: 2 With other firms: 29	c. Years of professional experience with this firm: 2 With other firms: 23
d. Education: Degree / Year / Specialization Master of Strategic Studies / 2006 / US Army War College B. S. / 1982 / Civil Engineering	d. Education: Degree / Year / Specialization B.S. / 1996 / Safety and Environmental Management
e. Active registration or applicable certifications: State / Discipline / License number / First year registered Maryland / Civil Engineering / P.E. (license #20921) South Carolina / Civil Engineering / P.E. (license #12388) Utah / Civil Engineering / P.E. (license #3082680-2202) World Safety Organization, Certified Safety and Security Director (WSO-CSSD) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP)	e. Active registration or applicable certifications: State / Discipline / License number / First year registered World Safety Organization, Certified Safety and Security Director (WSO-CSSD) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) USDOT Public Transportation Safety Certification Training Program (PTSCTP) / 2019
f. Experience and qualifications relevant to this project: Mr. Goeres has over 30 years of safety, security and transit engineering experience. He formerly served as the Chief Safety, Security and Technology Officer for the Utah Transit Authority (UTA), where he was responsible for managing all aspects of UTA's Safety and Security Programs, including developing and implementing UTA's SMS and obtaining UTA's Occupational Health and Safety Management Systems (OHSAS) 18001 certification. His responsibilities included integrating safety into UTA's daily operations, services, and construction activities, directing the project activation process and coordinating all safety and security certification program requirements, and managing the Public Safety, Emergency Management, Operational Analysis and Solutions, and the IT Departments, including UTA's 82-Officer Transit Police Department. As a consultant, Mr. Goeres has administered safety and security certification programs for large-scale major capital projects; completed engineering analyses, studies, and hazard analyses of systems, equipment, infrastructure, processes, and critical transit assets; conducted accident, incident and unacceptable hazardous condition investigations and developed and overseen the implementation CAPs in response to findings. He has developed, reviewed, revised, and implemented safety and security policies, plans, procedures, and rules; developed and implemented processes to monitor contractor safety, construction safety programs, and workplace safety policies and instructions. He has developed and delivered comprehensive training programs; performed internal safety and security audits; and assisted transit agencies with developing and implementing proactive safety and security programs for their organizations. Representative clients include MTA, BART, RTD, TriMet, HART, CMTA, and others.	f. Experience and qualifications relevant to this project: Mr. Jones has over 25 years of transit safety and security experience. Between 1999 and 2009, he served the Port Authority of Allegheny County (PAAC) as Rail Senior Safety Specialist where he ensured PAAC's compliance with Federal and State Safety Oversight (SSO) requirements, including those for annual reporting, internal safety and security auditing, Safety Plan and Program documentation updates and implementation, hazard management and corrective action plan (CAP) development and tracking, and accident/incident investigation. For the past 12 years, Mr. Jones has served as a consultant and industry recognized Transit Safety and Security expert, providing safety and security services to transit agencies located throughout the U.S. and Canada. He has assessed and implemented processes to improve organizational safety cultures; developed and administered Safety and Security Certification Programs for new systems, system extensions, and transit vehicle procurements; developed Public Transportation Agency Safety Plans (ASPs), project specific Safety and Security Management Plans (SSMPs) and Safety and Security Certification Plans (SSCPs); conducted design reviews and developed safety and security criteria; developed and implemented hazard management programs; developed, tracked and verified Safety Certification checklists, Certifiable Elements and Certifiable Items Lists through all project phases; and authored Safety and Security Certification Verification Reports. Mr. Jones is a USDOT Transportation Safety Institute (TSI) Senior Instructor responsible for teaching TSI's Transit Rail System Safety course. He also serves as Vice-Chair of ATPTA's Rail Safety Committee.

a. Name and title: Charlie Gamble, III, Sr. Safety and Security Consultant	a. Name and title: Velvet Smiley, Sr. Safety and Security Consultant
b. Position or assignment for this project: Sr. Safety and Security Consultant / Electrical Engineer	b. Position or assignment for this project: Sr. Safety and Security Consultant / Bus Rapid Transit and Transit Infrastructure Safety and Security Certification Specialist.
c. Years of professional experience with this firm: 6 With other firms: 15	c. Years of professional experience with this firm: <1 With other firms: 12
d. Education: Degree / Year / Specialization B. S. / 1999 / Electrical Engineering	d. Education: Degree / Year / Specialization B.S. / 2010 / Organizational Security and Management A.A. / 2008 / Criminal Justice
e. Active registration or applicable certifications: State / Discipline / License number / First year registered USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP)	e. Active registration or applicable certifications: State / Discipline / License number / First year registered World Safety Organization, Certified Safety and Security Director (WSO-CSSD) / 2017 USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) Bus and Rail USDOT Transportation Safety Institute Public Transportation Safety Certification Training Program (PTSCTP) / 2019 FEMA Incident Command System Classes – 100, 200, 300, 700, 800, and 801
f. Experience and qualifications relevant to this project: Mr. Gamble has 21 years of system safety, security, and electrical engineering experience focused on all modes of public transportation, as well as the defense and manufacturing industries. He formerly served as a System Safety Engineer for the Washington Metropolitan Area Transit Authority (WMATA), where he oversaw the safety and security certification programs for WMATA's 2/3K Railcar Overhaul and 5K and 6K railcar procurements. He also conducted accident investigations and supported the development of related corrective action plans. As a consultant, Mr. Gamble has provide system safety and security support services to numerous transit agencies, including MTA, HRT, TriMet, CMTA, Houston Metro, OCTA, WMATA, and others. He is an expert in system safety engineering, risk assessment, security threat and vulnerability analysis, and quality assurance. He has written Safety Plans, Policies and Procedures, and led safety programs for major transit capital projects. He has developed Fault Tree Analyses, Failure Modes and Effects Analyses (FMEA), Operating and Support Hazard Analyses (O&SHAs), and Sub-System Hazard Analyses for various transit projects. He has also led the development of standard and emergency operating procedures, performed risk assessments, led emergency management operations, and conducted accident/incident investigations and internal safety and security audits. Mr. Gamble is also an expert in State Safety Oversight (SSO) compliance, Systems Engineering Design, and the requirements of 49 CFR Parts 270, 670, 672, 673, and 674.	f. Experience and qualifications relevant to this project: Ms. Smiley has 12 years' experience focused on public transit system safety and security. She formerly served as Interim Chief Safety and Security Officer (CSSO) and Safety Manager of Hampton Roads Transit (HRT) as well as the former Manager of Rail State Safety Oversight and Agency Emergency Preparedness of the Virginia Department of Rail and Public Transportation (VDRPT). As Interim CSSO of HRT, she held responsibility for the entirety of HRT's Safety, Security and Risk Management programs for all HRT transit modes, including Light Rail, Bus, and Ferry. While with VDRPT, Ms. Smiley held responsibility for the development and administration of the State of Virginia's SSO Program, including its participation in the Tri-state Oversight Committee (TOC). As a consultant, Ms. Smiley has provided Safety Management System (SMS), Safety and Security Certification, and Emergency Preparedness and Management services throughout the transit industry. This has included developing and administering Safety Certification Programs for WMATA's Northern Bus Garage Replacement Program, the Greater Richmond Transit Company's (GRTC) Pulse Bus Rapid Transit system, the Fairfax County Richmond Highway Bus Rapid Transit project, and CTA's non-revenue Rail Vehicle Maintenance Facility project. Throughout her career, she has conducted hazard analyses, design reviews, accident investigations, safety audits, security assessments, worksite inspections, and has led the development and implementation of Safety, Security and SMS policies, plans, procedures, rules, and emergency operating procedures.

a. Name and title: Darin Francom, Safety and Security Consultant	a. Name and title: Don Pike, Sr. Safety and Security Consultant
b. Position or assignment for this project: Safety and Security Consultant / Rail Safety and Security Certification Specialist	b. Position or assignment for this project: Sr. Safety and Security Consultant / SMS and Training Specialist
c. Years of professional experience with this firm: 1 With other firms: 18	c. Years of professional experience with this firm: 2 With other firms: 28
d. Education: Degree / Year / Specialization MBA / 2021 / Business Administration B. S. / 2017 / Business Management A.S. / 2006 / General Studies	d. Education: Degree / Year / Specialization B.S. / 2007 / Business Management
e. Active registration or applicable certifications: State / Discipline / License number / First year registered World Safety Organization, Certified Safety Specialist (WSO-CSS) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) – Bus and Rail	e. Active registration or applicable certifications: State / Discipline / License number / First year registered World Safety Organization, Certified Safety Executive and Certified Safety and Security Director (WSO-CSE / CSSD) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) Safety Management Systems (SMS) – MITRE Aviation Institute / 2014 USDOT Public Transportation Safety Certification Training Program / 2019 OSHA Authorized General Industry 501 Instructor / 2020
f. Experience and qualifications relevant to this project: Mr. Francom has nearly 20 years of transit safety experience. Prior to becoming a consultant, Mr. Francom served as both a Rail Safety Administrator and as a Line and Signal Supervisor for the Utah Transit Authority (UTA), where he helped to develop, implement, and manage UTA's Safety Management System (SMS). He also supported the Safety and Security Certification Programs for UTA's TRAX Light Rail system, Airport Line Extension, TRAX LRT Draper Line, Streetcar System extension, and UTA's FrontRunner South Commuter Rail extension. In doing so, he prepared, maintained, and completed project Hazard Analyses, and was primarily responsible for transitioning UTA's SSPP to an Agency Safety Plan (ASP). As Line and Signal Supervisor, Mr. Francom was responsible for repair and maintenance of UTA's signal, crossing, and traction power systems. He also wrote and implemented policies and procedures specific to these systems and developed and implemented UTA's Roadway Worker Training Program. As a consultant, Mr. Francom has supported the Safety and Security Certification Program for TriMet's MAX Red Line Extension, as well as CMTA's Downtown Station construction project. He is currently supporting Denver RTD's development and implementation of its Safety Risk Management (SRM) program as part of RTD's SMS. He also supported TriMet's Grade Crossing Enhancement Study, identifying and analyzing safety risks, and mitigating measures to improve grade crossing safety.	f. Experience and qualifications relevant to this project: Mr. Pike has over 30 years of experience focused on system safety and organizational development with an emphasis on building effective safety programs and cultivating positive safety cultures. He is regarded as an experienced professional throughout the public transit industry with expert knowledge in the areas of transportation safety, drug & alcohol program compliance, Safety Management Systems (SMS), and emergency management program design, implementation, auditing and compliance. He formerly served as Course Manager for the USDOT Transportation Safety Institute where he was responsible for managing the delivery of TSI's Transit Safety and Security Program (TSSP) throughout the country and abroad, delivering training to thousands of students. Since joining ADS, Mr. Pike has provided safety and security compliance and SMS services to the North Carolina Department of Transportation (NCDOT), MTA, TriMet, Denver RTD, VRE, DART and others where he has been instrumental in assisting in the performance of SMS Gap Analyses, developing Public Transportation Agency Safety Plans (PTASPs), conducting accident investigations, and performing compliance audits. He has developed and delivered SMS training programs, conducted hazard analyses, overseen the implementation of Safety and Security Certification Programs for Streetcar system extensions, reviewed and critiqued operating rules, policies, and procedures from an SMS perspective, and led the development of training programs in response to Transportation Security Administration (TSA) requirements. He has also participated in emergency drills and table-top exercises, witnessed system testing and start-up activities, and conducted inspections and rule compliance audits of safety programs and procedures.

a. Name and title: Evelyn Hawkins, Safety and Security Consultant	a. Name and title: Christopher Gaines, Safety and Security Consultant
b. Position or assignment for this project: Safety and Security Consultant / SMS and OSHA Specialist	b. Position or assignment for this project: Safety and Security Consultant / SMS Specialist
c. Years of professional experience with this firm: 3 With other firms: 13	c. Years of professional experience with this firm: 7 With other firms: 3
d. Education: Degree / Year / Specialization M. S. / 2013 / Technology Management, Occupational Health and Safety B. S. / 2003 / Business Management	d. Education: Degree / Year / Specialization B.S. / 2010 / Industrial Engineering
e. Active registration or applicable certifications: State / Discipline / License number / First year registered Board Certified Safety Professional (#29404) / 2015 World Safety Organization, Certified Safety and Security Director (WSO-CSSD) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) USDOT Public Transportation Safety Certification Training Program (PTSCTP) / 2019 OSHA Authorized General Industry Instructor (#G0061306)	e. Active registration or applicable certifications: State / Discipline / License number / First year registered World Safety Organization, Certified Safety Specialist (WSO-CSS) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) - Rail
f. Experience and qualifications relevant to this project: Ms. Hawkins has over 16 years' experience in both the public and private sectors focused on transit system safety, occupational safety and health, and construction safety. As Senior Safety Coordinator for the Charlotte Area Transit System (CATS), she was responsible for overseeing the implementation of CATS' system safety requirements for the agency's light rail and streetcar operations. This included the Safety and Security Certification Programs for CATS' Streetcar Starter Project and Blue Line Extension Project. She also led accident investigations, internal audits of CATS' Safety Program, and the development and implementation of corrective action plans. Since joining ADS, Ms. Hawkins has served as a representative of the North Carolina Department of Transportation (NCDOT) State Safety Oversight (SSO) Program, leading its oversight of the GoTriangle Durham to Orange County Light Rail Transit (DOLRT) new start project. She has supported the Maryland Transit Administration (MTA) and Houston Metro by completing internal safety audits of both agencies in compliance with Federal and State safety regulations. She is currently supporting the District of Columbia Department of Transportation (DDOT) DC Streetcar System by providing Safety Management System (SMS) support services. This includes conducting Safety Assurance activities, such as internal safety audits, as well as performing an SMS Gap Assessment used to supported DDOT's development of its Agency Safety Plan (ASP) for the DC Streetcar system. She has also conducted hazard analyses, developed SMS training Programs, supported the development of emergency drills and table-top exercises, and supported DDOT in responding to external audits of its SMS. She has also supported the development of DART's ASP and Safety and Security Certification of CMTA's Downtown Station Project.	f. Experience and qualifications relevant to this project: Mr. Gaines has 10 years of system safety certification and Safety Management System (SMS) experience in both the public transportation and aeronautics industries. He has supported the Maryland Transit Administration (MTA), Washington Metropolitan Area Transit Authority (WMATA), DDOT Streetcar System, and Houston Metro with developing and implementing Safety and Security Certifications Programs for a wide spectrum of transit capital projects, including vehicle procurements, new system design and installation, and infrastructure projects involving bus, light rail, heavy rail, commuter rail, and streetcar systems. He has also assisted these clients with developing and implementing SMSs, including conducting SMS gap assessments, authoring Agency Safety Plans (ASPs), developing and administering Safety Assurance programs, including internal safety audits, and developing and tracking Corrective Action Plan and Safety Risk Management Programs. He has assisted in reviewing and revising safety rules, plans, procedures and policies. He has led the development of hazard analyses, certifiable items lists, Safety and Security Certification Verification Reports, fire safety assessments, audit reports, SMS training programs, Safety and Security Management Plans (SSMPs), and technical reports and analyses for transit-related projects and programs. Mr. Gaines also provides system safety engineering support to the National Aeronautics and Space Administration (NASA) Goddard Space Flight Center, where he is responsible for administering safety programs for various NASA missions.

a. Name and title: Dominique Fisher, Junior Safety and Security Consultant	a. Name and title: Jordan Bowling, Junior Safety and Security Consultant
b. Position or assignment for this project: Junior Safety and Security Consultant / Electrical Engineer	b. Position or assignment for this project: Junior Safety and Security Consultant / Fire Protection Engineer
c. Years of professional experience with this firm: 5 With other firms: 5	c. Years of professional experience with this firm: 3 With other firms: 0
d. Education: Degree / Year / Specialization B. S. / 2011 / Electrical and Computer Engineering	d. Education: Degree / Year / Specialization B.S. / 2019 / Fire Protection Engineering
e. Active registration or applicable certifications: State / Discipline / License number / First year registered USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP)	e. Active registration or applicable certifications: State / Discipline / License number / First year registered Fundamentals of Engineering, Engineer in Training (Maryland) / 2019
f. Experience and qualifications relevant to this project: Ms. Fisher has 10 years of electrical engineering, system safety, quality assurance and risk management experience in the transit industry. She has supported the Maryland Transit Administration (MTA) and Tri County Metropolitan Transportation District of Oregon (TriMet) with implementing Internal Safety Auditing, State Safety Oversight Compliance, Safety and Security Certification, and Bus Maintenance Quality Assurance Programs. This has included completed engineering design reviews associated with transit vehicle procurements and overhauls, and system infrastructure projects; conducting hazard analyses of critical safety systems; developing and completing design and construction conformance checklists; observing pre-revenue testing; and supporting the development of Safety and Security Certification Verification Reports. She has also supported the development of hazard analyses of systems, equipment, processes, and procedures; supported internal safety auditing programs; supported the development of Corrective Action Plans; assisted with meeting State Safety Oversight (SSO) requirements; and assisted in developing and authoring standard and emergency operating procedures. She has performed detailed hazard analyses of Battery Electric Buses. For the MTA, Ms. Fisher currently provides document control, data collection, analysis, and reporting in support of MTA's Bus Maintenance Quality Assurance program. She is also responsible for developing departmental level standard operating procedures related to bus maintenance.	f. Experience and qualifications relevant to this project: As a recent gradutate of the University of Maryland, Mr. Bowling joined ADS in July of 2019 to support the company's growing fire/life safety engineering practice. In his short time with the firm, Mr. Bowling has supported the Washington Metropolitan Area Transit Authority (WMATA), Bay Area Rapid Transit (BART) system, and the Maryland Transit Administration (MTA), providing engineering design reviews focused on fire/life safety. This has included reviewing computer-aided drafting (CAD) drawings and design plans of transit facilities, structures, stations and other assets to verify compliance with applicable fire/life safety codes and regulations. It has also included reviewing fire protection and life safety plans, developing solutions to egress configurations for emergency evacutaions, developing egress analyses for varying types of occupancies, and conducting fire/life safety facility assessments to identify hazards and fire/life safety code violations. Mr. Bowling is an Engineer in Training (EIT) in the state of Maryland and has begun taking couses to obtain the USDOT's Transportation Safety and Security Program (TSSP) certificate.

a. Name and title: Stave Chayt, Sr. Safety and Security Consultant	a. Name and title: Nathan English, Sr. Safety and Security Consultant
b. Position or assignment for this project: Sr. Safety and Security Consultant / Mechanical Engineer	b. Position or assignment for this project: Sr. Safety and Security Consultant / Reliability, Availability, Maintainability, Safety (RAMS) Engineer
c. Years of professional experience with this firm: 1 With other firms: 24	c. Years of professional experience with this firm: <1 With other firms: 18
d. Education: Degree / Year / Specialization M. S. / 2006 / Environmental Technology B. E. / 1996 / Mechanical Engineering	d. Education: Degree / Year / Specialization M.S. / 2006 / Engineering Management B.S. / 2001 / Mechanical Engineering Naval Nuclear Officer Power School and Prototype Training Unit / 2005
e. Active registration or applicable certifications: State / Discipline / License number / First year registered Board Certified Safety Professional (CSP #32592) / 2017 USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) Fundamentals of Engineering, Engineer in Training (New York)	e. Active registration or applicable certifications: State / Discipline / License number / First year registered Occupational Safety and Health Administration (OSHA) 10-Hour
f. Experience and qualifications relevant to this project: Mr. Chayt has over 25 years of public transit and commuter railroad system safety, capital program management, and facility, systems, and bus maintenance experience. Over his career, he has worked for the New York City Transit Authority (NYCTA), Miami Dade Transit (MDT), Chicago Transit Authority (CTA), Metro-North Railroad, and Valley Metro serving in various System Safety, Operations, and Maintenance roles. He has completed Preliminary Hazard Analyses (PHAs), Operating Hazard Analyses (OHAs), and other safety analyses of systems, equipment, infrastructure, processes and critical transit assets. He has developed and managed certifiable elements and certifiable items lists (CEL/CILs), led accident investigations, developed safety programs and management systems, managed and developed preventative maintenance schedules, developed and implemented Systems Integration Work Plans, and completed design, construction, specification and testing conformance checklists. Mr. Chayt also supported systems design, system integration and safety and security certification of three Light Rail Transit expansion projects at Valley Metro, as well as an Operations and Maintenance Expansion Design Build Project, and the Tempe Streetcar new start project. Since joining ADS, Mr. Chayt has provided Safety and Security Certification, Occupational Safety and Health, and SMS support services to the Honolulu Authority for Rapid Transportation (HART), the Chicago Transit Authority (CTA), and commercial clients.	f. Experience and qualifications relevant to this project: Mr. English has over 18 years of experience in the transportation and defense industries and served in the United States Navy. His areas of expertise include systems engineering, and Reliability, Availability, Maintainability, and Safety (RAMS) engineering for rail vehicles and systems. He has supported the development of Safety and Security Certification Plans (SSCPs) and Safety and Security Management Plans (SSMPs), conducted and reviewed RAMS-related analyses, and provided engineering recommendations to assure the achievement of technical specification and contractual performance requirements. Since joining ADS, Mr. English has served as a Sr. Safety and Security Consultant focusing on the development and review of RAMS documentation for the Maryland Transit Administration's (MTA) Metro Heavy Railcar Overhaul and Computer Based Train Control Upgrade Project, and the Washington Metropolitan Area Transportation Authority (WMATA) 8000 Series Railcar Procurement. Mr. English develops Preliminary Hazard Analyses (PHAs), Failure Modes, Effects and Criticality Analyses (FMECAs), Fault Tree Analyses (FTAs), Operating and Support Hazard Analyses (O&SHAs), System Safety Assessment Reports, and safety and security certifiable elements and items lists (CEL/CIL) for rail vehicles and systems. His areas of focus include braking, propulsion, traction electrification, HVAC, communications, signaling, and automatic train control. He formerly served as System Safety Program Manager for Bombardier Transportation; as a Plant Integration Engineer for Westinghouse Electric Company; and as a member of the United States Navy as a Propulsion Plant Watch Officer and Officer of the Deck.

a. Name and title: Sean Smith, Safety and Security Consultant	a. Name and title: Kurt Wilkinson, Sr. Safety and Security Consultant
b. Position or assignment for this project: Safety and Security Consultant / Electrical Engineer	b. Position or assignment for this project: Sr. Safety and Security Consultant / OSHA General Industry Specialist
c. Years of professional experience with this firm: 4 With other firms: 7	c. Years of professional experience with this firm: 3 With other firms: 17
d. Education: Degree / Year / Specialization B. S. / 2010 / Electrical Engineering	d. Education: Degree / Year / Specialization B.S. / 2000 / Occupational Safety and Health, Science and Engineering Option
e. Active registration or applicable certifications: State / Discipline / License number / First year registered USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) - Rail World Safety Organization, Certified Safety Specialist (WSO-CSS)	e. Active registration or applicable certifications: State / Discipline / License number / First year registered Board Certified Safety Professional (CSP #23708) / 2013 World Safety Organization, Certified Safety and Security Director (WSO-CSSD) USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) USDOT Public Transportation Safety Training Certification Program (PTSCPT) / 2019
f. Experience and qualifications relevant to this project: Mr. Smith has 10 years of system safety and electrical engineering experience focused on the public transportation industry. He has supported the Maryland Transit Administration (MTA), Honolulu Authority for Rapid Transportation (HART), Houston Metro, the Tri-county Metropolitan Transportation District of Oregon (TriMet), Union Pearson Express, and the Toronto Transit Commission (TTC) with developing and administering Safety and Security Certification Programs for a wide-array of transit projects, including new start capital project, vehicle procurements and overhauls involving light rail, heavy rail, and commuter rail, and system infrastructure programs involving stations, maintenance facilities, right-of-way, and communications, signaling, fire/life safety, power, and water systems. He has also conducted threat and vulnerability assessments (TVAs). He has developed Agency Safety Plans (ASPs), developed and administered Safety Assurance programs, including internal safety audits, and developed and tracked Corrective Action Plan and Safety Risk Management Programs. He has assisted in reviewing and revising safety rules, plans, procedures and policies. He has led the development of hazard analyses, certifiable items lists, Safety and Security Certification Verification Reports, fire safety assessments, audit reports, SMS training programs, Safety and Security Management Plans (SSMPs), Safety and Security Certification Plans (SSCP), and technical reports and analyses for transit-related projects and programs. He has also conducted Threat and Vulnerability Assessments (TVAs) of existing and planned transit systems and projects.	f. Experience and qualifications relevant to this project: Mr. Wilkinson has 20 years of transit industry safety, security, and environmental compliance experience. He spent 17 years with Tri-County Metropolitan Transportation District of Oregon (TriMet) where he advanced quickly to serve as Director of Safety Management Systems (SMS) and Environmental Services. During this time, he oversaw numerous transit safety and security programs to improve safety and operational performance and was responsible for developing and implementing TriMet's SMS, as well as administering Safety and Security Certification Programs for many of TriMet's largest infrastructure projects. He has delivered a multitude of safety and security related engineering services. Since joining ADS, Mr. Wilkinson has supported the Maryland Transit Administration (MTA), Los Angeles County Metropolitan Transit Authority (LACMTA), Capital Metropolitan Transportation Authority (CMTA), the District of Columbia Department of Transportation (DDOT) DC Streetcar System, the Loop Trolley Company, Golden Gate Transit (GGT), the New York State Department of Transportation (NYSDOT), Texas DOT, and Arizona DOT as a technical expert in transit system safety and security, accident investigation, occupational safety and health, construction safety, and by providing SMS support services, including Safety SMS Gap Analysis, Safety Risk Management, Safety Assurance, and Public Transportation Agency Safety Plan (ASP) development. Mr. Wilkinson is also a USDOT Transportation Safety Institute (TSI) Senior Instructor responsible for teaching TSI's Rail Incident Investigation and Advanced Rail Incident Investigation courses.

a. Name and title: Brandon Fountain, Safety and Security Consultant	a. Name and title: Seymone Spence, Junior Safety and Security Consultant
b. Position or assignment for this project: Safety and Security Consultant / OSHA Construction Industry Specialist	b. Position or assignment for this project: Junior Safety and Security Consultant / OSHA Construction Specialist
c. Years of professional experience with this firm: <1 With other firms: 25	c. Years of professional experience with this firm: <1 With other firms: 10
d. Education: Degree / Year / Specialization B. S. / 2018 / Technical Management, Occupational Safety A.S. / 2016 / Applied Science, Safety	d. Education: Degree / Year / Specialization B.S. / 2010 / Workforce Development
e. Active registration or applicable certifications: State / Discipline / License number / First year registered Board Certified Safety Professional (CSP #38429) / 2020 USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) – Rail USDOT TSI Public Transportation Safety Certification Training Program (PTSCTP) OSHA 510, Standards for the Construction Industry OSHA 511, Standards for General Industry OSHA 521, Guide to Industrial Hygiene OSHA 3110, Fall Protection OSHA 2264, Permit Required Confined Space Entry OSHA 30-Hour General Industry	e. Active registration or applicable certifications: State / Discipline / License number / First year registered Project Management Certification, Villanova University / 2008 Certified Construction Quality Management (CQM) OSHA 30-Hour General Industry Lead Auditor ISO 9001 / 2015
f. Experience and qualifications relevant to this project: Mr. Fountain has over 25 years of progressive safety experience in the armed forces, public transportation, and private sectors. He formerly served the Tri-County Metropolitan Transportation District of Oregon (TriMet) as a Safety Engineer where he oversaw both bus and rail safety programs. He was responsible for conducting accident/incident investigations of bus and rail related events to identify root causes and to develop corrective action plans. He served as TriMet's Roadway Worker Protection (RWP) Program Manager and Lead Instructor, responsible for maintaining TriMet's RWP program and providing RWP training to hundreds of TriMet staff and contractors. He also developed and delivered SMS training directed toward informing TriMet's executive managers of FTA's SMS requirements and the measures required of TriMet to comply with these requirements. He further served as a Safety Department Advisor to six rail infrastructure rehabilitation projects where he assisted in the Safety and Security Certification and Construction Safety Oversight of each project. Since joining ADS, Mr. Fountain has provided Safety and Security Certification Program support to the Chicago Transit Authority (CTA) Red/Purple Line Project and the Capital Metropolitan Transit Authority's (CMTA) Downtown Station Construction Project. This has included developing design criteria and construction specification conformance checklists and conducting verification activities; participating in conceptual, preliminary, and final design reviews; reviewing and revising Safety and Security Management Plans (SSMPs) and Safety and Security Certification Plans (SSCP); and conducting hazards analyses and tracking their results to closure.	f. Experience and qualifications relevant to this project: Ms. Spence has 10 years of safety and quality assurance experience in the public transportation, aviation, and construction industries. She has led the development and management of Certifiable Items Lists (CILs) for some the nation's largest transit projects, including the Washington Metropolitan Area Transit Authority's (WMATA) 700 MHz Radio and Cellular Infrastructure Repair and Replacement Program, and WMATA's current Systems Program. She as participated in the development of hazard analyses and hazard mitigations and project design and compliance reviews, supported the oversight of construction projects to assure compliance with safety and quality assurance requirements, and has supported the identification and analysis of project risks using definitive risk management tools to mitigate, eliminate, and reduce risk exposures. In addition, Ms. Spence led the quality and project management programs for three projects involving the Baltimore-Washington International (BWI) Airport, United States Agency for International Development (USAID), and the United Nations Foundation (UNF) where she developed, managed and implemented a quality control plan to assure construction safety and quality requirements were met for a $45 million Integrated Airport Security System (IASS) at BWI. She is ISO 9001 certified, a certified Construction Quality Manager (CQM), has completed the Occupational Safety and Health Administration's (OSHA) 30 Hour Safety and Health Certification, and is currently pursuing the United Stated Department of Transportation (USDOT) Transportation Safety and Security Program (TSSP) Certification.

a. Name and title: Sabrina Beverley, Junior Safety and Security Consultant	a. Name and title:
b. Position or assignment for this project: Junior Safety and Security Consultant / Technical Reviews	b. Position or assignment for this project:
c. Years of professional experience with this firm: 4 With other firms: 26	c. Years of professional experience with this firm: With other firms:
d. Education: Degree / Year / Specialization B. S. / 2007 / Business Education	d. Education: Degree / Year / Specialization
e. Active registration or applicable certifications: State / Discipline / License number / First year registered USDOT Transportation Safety Institute, Transit Safety and Security Program (TSSP) - Rail	e. Active registration or applicable certifications: State / Discipline / License number / First year registered
f. Experience and qualifications relevant to this project: Ms. Beverley has over 30 years of experience. For the past 10 years, she has provided administrative, quality assurance, scheduling, auditing, and documentation support to the Maryland Transit Administration (MTA) and many of its largest major capital projects, including MTA's Metro Railcar and Train Control Replacement Project. She also provides System Safety support to MTA in response to the Maryland Department of Transportation (MDOT) State Safety Oversight (SSO) Program. As part of ADS' team supporting MTA's Metro Railcar and Train Control Replacement Project, Ms. Beverly prepares monthly invoices, organizes team meetings, prepares meeting minutes, and maintains and distributes staff calendars. She is responsible for the Document Management System (DMS) for correspondence tracking, contractor submittals, RFIs, RFCs, and action items. Ms. Beverley also serves as a Safety Support Specialist for MTA's SSO compliance program, where she is responsible for supporting updates to the Agency Safety Plan and facilitating Corrective Action Plan/Hazard Tracking Log meetings with MTA staff. She has also supported MTA's Office of Engineering and Construction. She processed consultant invoices, maintained spreadsheets for projects, coordinated and tracked training for staff using Cornerstone. She prepared agenda items for board meetings; prepared and distributed meeting minutes; and scheduled meetings. Ms. Beverley also reviewed applicant files for selection into the police academy. She also verified employment documents for authenticity, prepared statistical information for state stat reports, proctored and scored the written exam, and traveled to recruiting events to promote the agency.	f. Experience and qualifications relevant to this project:

15. List work by firm's personnel members to be assigned to this project which best illustrates current qualifications relevant to this project (limit 15 projects).

a. Project name, location, and owner's name	b. Reference contact name, telephone number, and e-mail	c. Project description	d. Nature of firm's responsibilities	e. Completion date (actual or estimate)	f. Estimated fees (000's)	
					Entire project	Firm's work
On-Call System Safety Services (Contract MTA-19-004D) Maryland Transit Administration 1515 Washington Blvd. Baltimore, MD 21230	Michael E. Winger Safety Management System / Acting Chief Safety Officer Telephone: (410) 454-7323 Cell: (443) 683-0128 Email: MWinger@mdot.maryland.gov	$10M prime contract to provide on-call System Safety Engineering, Safety Management System (SMS), and Quality Assurance Program support and implementation.	Develop and administer Safety and Security Certification Programs for major capital projects. Conduct Internal Audits and develop and track Corrective Actions. Support SMS development and implementation, including training. Provide Construction Safety Oversight, Fire/Life Safety Engineering, and Environmental Health and Safety Services. Develop Safety Plans, Policies, and Procedures. Support MTA compliance with State Safety Oversight and other regulatory requirements.	September 2025	10,000	10,000
Safety Management System (SMS) Consulting Services (Contract RS170146LJ) Tri-county Metropolitan Transportation District of Oregon (TriMet) 210 NW 1st Ave. Portland, OR 97209	Marla Blagg Executive Director of Safety and Security Telephone: (530) 962-5823 Email: blaggm@trimet.org	Prime contractor responsible ofr providing On-call Safety Management System (SMS) Support and Implementation Services, including Safety Risk Management, Safety Promotion, and Safety Assurance.	Conduct SMS gap assessments of Agency Safety Plan and develop recommended corrective actions. Conduct hazard analyses and safety studies of TriMet operations, services, and equipment and provide recommended mitigations. Support the development of Safety Risk Management tools, including risk registers and hazard tracking mechanisms. Develop and provide Risk Assessment Training Programs.	February 2022	875	875
Safety and Security Consulting Services (Contract SC-HRT-1900054) Honolulu Authority for Rapid Transportation (HART) 1099 Alakea Street, Suite 1700 Honolulu, Hawaii 96813	Raed Dwairi Chief Safety and Security Officer Telephone: (808) 768-6118 Email: raed.dwairi@honolulu.gov	$21.8M joint venture contract to provide Safety and Security Certification Program support services to HART's $12.2B new start rail transit project.	Authored and maintains the Project Safety and Security Management Plan (SSMP) and Safety and Security Certification Plan (SSCP). Participate in project design reviews. Conduct hazard analyses, threat and vulnerability assessments, and identify and track mitigations through closure. Developed and manage the	December 2021	21,800	13,000

			Certifiable Items List for each project element. Facilitate the Project Safety and Security Certification Review Committee and Fire / Life Safety Committee. Support interagency coordination and emergency preparedness planning. Support HART in responding to FTA and SSO audits and requests for information. Verify safety and security requirements have been met. Plan and execute emergency drills and table-top exercises. Prepare Safety and Security Certification Verification Report.			
Safety and Security Certification Support Services (Contract CMTA-200143) 2910 East 5th St. Austin, TX 78702	Gardner Tabon Vice President, Safety, Risk Management and Accessible Services Telephone: (512)-369-6026 Email: Gardner.Tabon@capmetro.org	Prime contractor responsible for providing Safety and Security Certification Support Services to the construction of CMTA's Downtown Station.	Authored the project Safety and Security Certification Plan (SSCP). Developed and delivered Safety Certification Training program. Conducted project hazard analyses and developed and managed certifiable elements and items lists, construction conformance, and testing verification checklists through completion. Established and facilitated the Project Safety and Security Certification Committee and Fire/Life Safety Committee/ Completed the Project Threat and Vulnerability Assessment. Verified project safety and security requirements had been met and authored Final Safety and Security Certification Verification Report.	March 2021	383	383
System Safety Support Services (Contract 19-00057) Hampton Roads Transit 509 E 18th St., Bldg. 1 Norfolk, VA 23504	Dawn Sciortino Chief Safety and Security Officer Telephone: (757) 222-6000 x6035 Cell: (757) 303-3951 Email: dsciortino@hrtransit.org	Prime contractors responsible for providing support to HRT's SMS, including System Safety Engineering, Fire/Life Safety support, Regulatory Consulting, Compliance Training, and Safety and Regulatory Compliance and Assistance	Provide technical safety engineering services, including hazard analyses of capital project design criteria and specification development to support safety and security certification programs. Review, revise and create safety-related standard operating procedures and programs. Completed a hazard analysis of HRT's electric bus pilot project.	May 2023	450	450

			Provide. Assist in reviews and revisions to Agency Safety Plan. Support HRT's compliance with State Safety Oversight (SSO) requirements.			
Safety Consulting Services (Contract 7020000122) Metropolitan Transit Authority of Harris County 1900 Main St. Houston, TX 77208	Henry Porche Safety Compliance and Analysis Administrator Telephone: (713) 739-6005 Cell: (713) 299-2159 Email: Henry.Porche@ridemetro.org	Prime contractor responsible for providing a broad scope of on-call services spanning system safety engineering, Safety Management Systems, safety training, safety analysis, fire/life safety engineering, industrial engineering, and accident/incident investigation.	Support the develop and revision of new and existing safety initiatives, policies and procedures. Develop and administer safety training and continuous education of METRO's staff. Conduct internal safety audits to comply with State Safety Oversight requirements. Conduct hazard analyses and safety studies of systems, equipment, processes and procedures. Support accident investigations. Conduct grade crossing safety enhancement studies to evaluate and provide recommendations to reduce safety risks. Prepare reports and presentations.	February 2023	1,250	1,250
Safety Management System Consultant (Contract 18DO004A) Regional Transportation District 1660 Blake Street Denver, CO 80202	Dan Mclain Senior Manager, Safety, Environmental, and Assessment Management Telephone: (303) 299-3323 Email: dan.mcclain@rtd-denver.com	Prime contractor responsible for providing Safety Management System (SMS) services, including system safety engineering, safety training, safety analysis, fire/life safety engineering, industrial safety, and accident investigation.	Conducted SMS gap assessment of RTD's safety program and organization to support development and implementation of RTD's Agency Safety Plan. Evaluating RTD's hazard feedback and communication processes to determine effectiveness and making recommendations for improvement. Assisting in the development of Safety Promotion programs, including the SMS Training Program and curriculum.	February 2022	310	310
Safety and Security Consulting Services (Contract VRE-020-018) Virginia Railway Express 1500 King Street, Suite 202 Alexandria, VA 22314	Charlotte Nourse System Safety and Security Administrator Telephone: (703) 838-5435 Email: cnourse@vre.org	Prime contractor responsible for providing safety and security program services, including development of Safety and Security Plans to comply with federal requirements, performance of hazard analyses and internal audits, developing Safety Program Strategic Plans, and developing Security Training Program Plans.	Conducted a gap analysis of VRE's System Safety Program (SSP) Plan in comparison 49 CFR Part 270 and revised the SSP Plan to assure compliance. Coordinated and facilitated meetings with the Federal Railroad Administration (FRA). Developed VRE's Security Training Program for security sensitive employees to comply with	September 2025	2,500	2,500

			Transportation Security Administration (TSA) requirements. Developing and implementing an audit program of VRE's security contractor to verify compliance with performance requirements. Developing a Strategic Plan for VRE's Safety and Security Program to identify near-term, mid-term, and long-term goals and Key Performance Indicators (KPI). Conduct review of Contractor Safety Plan submittals to assure compliance with OSHA requirements.			
Grade Crossing Safety Enhancement Study (Contract RS2000129LJ) Tri-county Metropolitan Transportation District of Oregon (TriMet) 210 NW 1st Ave. Portland, OR 97209	Marla Blagg Executive Director of Safety and Security Telephone: (530) 962-5823 Email: blaggm@trimet.org	Prime contractor responsible for completing a comprehensive grade crossing safety enhancement study of TriMet's existing light rail grade crossings in comparison to industry standards and best practices, and for developing a risk-based evaluation tool for future use by TriMet to evaluate grade crossing designs and modifications.	Conducted a review and analysis of relevant industry data and literature pertaining to light rail grade crossings and pedestrian interfaces to identify industry best practices. Identified new vehicle borne and roadway-based technologies to reduce grade crossing incidents. Identified grade crossing trespasser education/prevention programs. Developed a risk-based analysis tool to evaluate and quantify risks at grade crossing to assist TriMet in prioritizing enhancements. Conducted trend analysis of grade crossing incidents, safety systems, employee reporting systems, and near misses. Developed a complete inventory of TriMet's grade crossings, identifying characteristics and factors affecting safety. Prepared a comprehensive report documenting project findings, conclusions and recommendations.	February 2021	193	193
Railcar Vehicle Engineering Consultant Services (Contract FQ18149) Washington Metropolitan Area Transit Authority (WMATA) Office of Vehicle Program Services Greenbelt Rail Yard 5801 Sunnyside Ave., Bldg. H	Nahom Debassay Program Manager, Vehicles Telephone: (301) 955-5358 ndebessay@wmata.com	As a subcontractor to Hatch LTK, ADS is responsible for administering the Safety and Security Certification Program for the procurement of WMATA's 8000 series railcar fleet.	Review and provide input to technical specifications. Review contractor technical proposals. Prepared the project Safety and Security Management Plan. Review contractor submittals to assure compliance with technical specification and WMATA Safety	July 2022	Unknown	500

College Park, MD 20740			and Security Certification Program requirements. Manage and facilitate meeting of the 8000 Series Safety Certification Working Group and make reports to WMATA's Safety Certification Review Committee. Participate in design reviews. Conduct hazard analyses and identify and verify implementation of mitigations. Develop and managed completion of project Certifiable Elements and Items Lists.			
Program Management, Construction Management, and Engineering Support Services IDIQ (Contract FQ18033) Washington Metropolitan Area Transit Authority (WMATA) 600 5th Street NW Washington DC, 20001	David Hahn Safety Certification and Engineering Manager Telephone: (202) 317-0238 Email: DEHahn@wmata.com	As a subcontractor to Jacobs Engineering Group, Inc., ADS is responsible for supporting the Safety and Security Certification Programs for WMATA's Heavy Rail Overhaul (HRO) design and construction program and the Infrastructure Repair Program.	Participate in project design reviews to identify safety and security risks and hazards. Review and support development of project-specific hazard analyses, certifiable items lists, and threat and vulnerability assessments. Chair and facilitate meetings of project Safety Certification Working Groups and committees. Work with internal and external project stakeholders, including authorities having jurisdiction and Federal, State and local regulators to assure compliance with safety and security requirements. Conduct fire/life safety assessments and engineering reviews and studies to identify safety risks and mitigations.	August 2023	Unknown	500
Fire/Life Safety – Fire Protection Support (Contract 6M8146-GES, Work Plan BART_B.11-01) San Francisco Bay Area Rapid Transit District (BART) 300 Lakeside Drive 18th Floor, #1832 Oakland, CA 94604	Thomas Moloney Deputy Director, Fire/Life Safety Department Telephone: (510) 464-6425 Email: tmoloney@bart.gov	As a subcontractor to Parsons, ADS provides Safety and Security Certification, Fire/Life Safety, and Safety Program Management Oversight support to BART.	Participate in capital project design reviews, conducting hazard analyses to identify risks. Developed a fire/life safety inspection program specific to BART's facilities, operations, maintenance, equipment, and environment. Conducts fire/life safety inspections of BART's facilities to identify and mitigate hazards. Conducted egress analyses of BART's Powell Street, Walnut Creek, Civic Center, Embarcadero,	July 2021	Unknown	607

			and Balboa Park stations to analyze the impact of intended design modifications and existing conditions. Determined occupant loads, calculated egress capacities, walking times to clear platforms and stations, travel distances, and assessed common paths of travel. Documented findings and made recommendations for design modifications.			
Project Management Consultant Services (Contract DDOT-DCKA-2019-C-062) District Department of Transportation (DDOT) 55 M Street, SE Suite 500 Washington DC, 20003	Derrick Snowden Safety Manager / DCS Chief Safety and Security Officer, Transit Delivery Division Telephone: (202) 671-4040 Email: derrick.snowden@dc.gov	As a subcontractor to Jacob Engineering Group, Inc., ADS provides on-call safety and security program support services to DDOT's DC Streetcar System (DCS), including safety oversight of DDOT's contracted operator and maintainer for the system.	Assists with managing all aspects of DDOT's Safety and Security Program for the DCS. Assists in developing program goals and objectives. Assists DDOT in developing and implementing an SMS in compliance with 49 CFR Part 670, 672, 673, and 674. Conducted an SMS gap assessment of the DCS Safety Program. Led the revision of the Agency Safety Plan (ASP). Developed an SMS training program for DCS. Conduct hazard analyses of system modifications, including system extensions, operational changes, and changes to the operating environment. Support the Safety and Security Certification Program, participating in design reviews of system extensions, conducting hazards analyses, supporting development of Certifiable Elements and Items Lists. Conduct internal audits to comply with State Safety Oversight (SSO) requirements. Completed a comprehensive review of the OMC-prepared operations and maintenance plans and procedures, identifying areas of noncompliance and making recommendations for revision.	May 2023	Unknown	1,000

Red and Purple Modernization Phase One Project (Contract CTARPMJV.0014) Chicago Transit Authority (CTA) 200 S. Michigan Ave., Suite 2000 Chicago, IL 60604	George J. Cussen Principal Project Director, Arcadis Telephone: (312) 285-1511 Email: George.cussen@arcadis.com	As a subcontractor to Elevated Solutions Partners (ESP), ADS leading the Safety and Security Certification Program for CTA's $2.1 Billion Red and Purple Line Modernization Project.	Developed and maintains the Project Safety and Security Certification Plan (SSCP) and Safety and Security Management Plan (SSMP). Conduct hazard analyses of the project. Prepare and manage verification of Certifiable Elements and Certifiable Items Lists, Conformance Checklists, and Hazard Tracking Logs. Assist CTA in implementing safety and security related activities, attending monthly Safety and Security Certification Committee and Fire/Life Safety Committee meetings, preparing agenda, maintaining meeting minutes, and tracking action items through closure. Conduct safety and security verification activities to verify compliance with requirements.	July 2026	Unknown	4,875
National Aeronautics and Space Administration (NASA) Goddard Space Flight Center (GSFC) Safety and Mission Assurance (SMAS-II) Directorate (Code 300) Support (Contract 80GSFC17C0015) Goddard Space Flight Center 8800 Greenbelt Rd. Greenbelt, MD 20771	John Rauscher GSFC Associate Chief, Systems Safety Telephone: (301) 286-9575 Email: john.c.rauscher@nasa.gov	As a subcontractor to Millennium Engineering and Integration, LLC, ADS provides System Safety Engineering and Mission Assurance Services to various space programs managed from the GSFC.	Provide system safety, quality and software safety engineering, and software assurance support to GSFC's Satellite Servicing Products Division, including the James Webb Space Telescope, X-ray Astronomy Recover Mission Resolve Project, Hubble Space Telescope, Joint Polar Satellite System, EUROPA Spacecraft and other projects. Conduct hazard analyses, support design and working group meetings, provide inspection, integration, installation, and functional test of hardware. Prepare Fault Tree Analyses integrating Event Tree and Markov Analysis to evaluate events that may lead to on-orbit collisions. Provide Mission Operations Assurance Support, including risk assessments of critical events to evaluate on-orbit anomalies, support failure investigations, evaluate change management processes, and conduct trend analyses of anomalies.	November 2024	Unknown	5,840

16. List all projects currently under contract or under contract negotiations that are being (or will be) performed by the firm's office as listed in item 3.

a. Project name, location, and owner's name	b. Nature of firm's responsibility	c. Indicate whether work completed as prime, subconsultant or joint venture	d. Percent complete	e. Estimated fees (000's)	
				Total fee	Fee remaining
On-Call System Safety Services (Contract MTA-19-004D) Maryland Transit Administration 1515 Washington Blvd. Baltimore, MD 21230	Prime contractor providing on-call System Safety Engineering, Safety Management System (SMS), and Quality Assurance Program support and implementation	Prime	18%	1,294	8,706
National Aeronautics and Space Administration (NASA) Goddard Space Flight Center (GSFC) Safety and Mission Assurance (SMAS-II) Directorate (Code 300) Support (Contract 80GSFC17C0015) Goddard Space Flight Center 8800 Greenbelt Rd. Greenbelt, MD 20771	Provides System Safety Engineering and Mission Assurance Services to various space programs managed from NASA's Goddard Space Flight Center (GSFC).	Subconsultant	28%	1,638	4,202
Project Management Consultant Services (Contract DDOT-DCKA-2019-C-062) District Department of Transportation (DDOT) 55 M Street, SE Suite 500 Washington DC, 20003	Provide on-call safety and security program support services to DDOT's DC Streetcar System (DCS), including safety oversight of DDOT's contracted operator and maintainer for the system.	Subconsultant	34%	337	663
Program Management, Construction Management, and Engineering Support Services IDIQ (Contract FQ18033) Washington Metropolitan Area Transit Authority (WMATA) 600 5th Street NW Washington DC, 20001	Support the Safety and Security Certification Programs for WMATA's Heavy Rail Overhaul (HRO) design and construction program and the Infrastructure Repair Program	Subconsultant	32%	239	739
Safety and Security Consulting Services (Contract VRE-020-018) Virginia Railway Express 1500 King Street, Suite 202 Alexandria, VA 22314	Provide safety and security program services, including development of Safety and Security Plans to comply with federal requirements, performance of hazard analyses and internal audits, developing Safety Program Strategic Plans, and developing Security Training Program Plans	Prime	15%	321	2,179
System Safety Support Services (Contract 19-00057) Hampton Roads Transit 509 E 18th St., Bldg. 1 Norfolk, VA 23504	Provide support to HRT's SMS, including System Safety Engineering, Fire/Life Safety support, Regulatory Consulting, Compliance Training, and Safety and Regulatory Compliance and Assistance	Prime	25%	110	340

Safety Consulting Services (Contract 7020000122) Metropolitan Transit Authority of Harris County 1900 Main St. Houston, TX 77208	Provide a broad scope of on-call services spanning system safety engineering, Safety Management Systems, safety training, safety analysis, fire/life safety engineering, industrial engineering, and accident/incident investigation	Prime	23%	291	959
Fire/Life Safety – Fire Protection Support (Contract 6M8146-GES, Work Plan BART_B.11-01) San Francisco Bay Area Rapid Transit District (BART) 300 Lakeside Drive 18th Floor, #1832 Oakland, CA 94604	Provide Safety and Security Certification, Fire/Life Safety, and Safety Program Management Oversight support to BART.	Subconsultant	91%	550	57
Railcar Vehicle Engineering Consultant Services (Contract FQ18149) Washington Metropolitan Area Transit Authority (WMATA) Office of Vehicle Program Services Greenbelt Rail Yard 5801 Sunnyside Ave., Bldg. H College Park, MD 20740	Administration of the Safety and Security Certification Program for the procurement of WMATA's 8000 series railcar fleet.	Subconsultant	17%	87	418

17. Use this space to provide any additional information or description of resources supporting your firm's qualifications for the proposed project.

ADS is a certified Minority Business Enterprise (MBE), a Federal Disadvantaged Business Enterprise (DBE) (certification #12-491), and a State of Louisiana Department of Transportation and Development certified DBE specializing in high impact and high value risk-based system safety and security consulting services. ***We have provided services identical to those called for by RFP #2021-016 throughout the transit industry and offer key staff possessing direct experience across all modes of public transportation, including ferry, bus, paratransit, streetcar, light rail, heavy rail, vanpool, demand services, and funicular operations***.

ADS presents RTA with an incredibly diverse and superbly qualified team of recognized public transit industry safety, security and emergency management experts and certified SMS practitioners. Our staff is committed to providing RTA with the expertise necessary to analyze its current safety culture, identify program gaps, develop and assist with the implementation of an effective SMS throughout the organization and its daily operations, and monitor organizational compliance with SMS requirements. We believe we are *best qualified* and will provide RTA with the *best value* safety and compliance consulting services across all scope of work areas.

ADS is a recognized leader in SMS, and has been providing SMS services to local, state, and federal government agencies, including the Federal Transit Administration (FTA) and Federal Aviation Administration (FAA), since the firm's inception. We were among the first in the nation to begin assisting transit agencies and State Safety Oversight (SSO) Agencies alike with developing and implementing SMS compliant safety programs and currently provide identical services as those required by RFP #2021-016 throughout the transit industry.

Our proposed staff includes certified and industry recognized SMS practitioners and compliance experts. All staff have direct experience developing and implementing safety programs across all modes of transit and have completed tasks identical to those requested by RFP #2021-016. Our proposed team includes former Chief Safety and Security Officer and Safety Managers, former SSO Program Managers, nationally recognized instructors and OSHA authorized trainers, and seasoned consultants.

Our team for this project is supported by a bench of nearly fifty (50) full-time transit system safety and security professionals and SMS practitioners, thereby assuring RTA is provided with depth of expertise needed to meet all of its Safety and Compliance Consultant needs.

ADS's signature risk-based services approach is based on the principles of SMS and is the cornerstone of our business. It is also what differentiates ADS from our competitors, who too often focus on inconsequential program factors, making recommendations without fully understanding how they can be implemented effectively, or the system-wide impacts they will have on the organization as a whole.

18. Ethics Questionnaire: If any owner, officer, or employee of respondent or any of the respondent's subcontractors (whether identified in the submittal or not) is currently an officer, employee, or board member of the City of New Orleans or of any of its departments, boards, or commissions, committees, authorities, agencies, public trusts, or public benefit corporations, please state the name or names of said owner, officer or employee, the relationship to respondent and/or respondent's subcontractor(s), the relationship with City board, agency, department, commission, authority, public trust, or public benefit corporation; if respondent or person(s) identified believe that the relationship is not or would not be a violation of applicable ethics laws, fully explain why not. If applicable, please complete ethics questionnaire on company letterhead attached to the back of this form. By signing below, you have completed the ethics questionnaire or you have not identified any ethics conflict at this time.

19. Pursuant to Louisiana Revised Statute 42:6.1, I hereby authorize the Regional Transit Authority to discuss the character and professional competence of this firm in Executive Session.

20. The forgoing is a statement of facts.

Signature:  Date: 08-09-2021

Typed Name: Kahlil M. Allen Title: President and CEO

CERTIFICATION REGARDING DEBARMENT SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION - LOWER TIER COVERED TRANSACTION

1. The prospective lower tier participant certifies, by submission of this offer, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participants shall attach an explanation to this offer.

3. The Lower-Tier participant (Potential Contractor under a major Third Party Contract), certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification and understands that the provisions of 31 U.S.C., 3801 ET SEQ are applicable thereto.

COMPANY ADS System Safety Consulting, LLC

ADDRESS 20 S. Charles, St. , Suite 1103, Baltimore, MD 21201

DATE August 9, 2021

Signature of Offeror's Authorized Representative

CERTIFICATION ON PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The Primary Participant (Potential Contractor for a major third party contract), certifies to the best of its knowledge and belief, that it and its principles:

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; 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 government 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 is unable to certify to any of the statements I this certification, the participants shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT, (POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT, CERTIFIES OR AFFIRMS THAT 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. SECTION 3801 ET SEQ ARE APPLICABLE HERETO.

COMPANY ADS System Safety Consulting, LLC

ADDRESS 20 S. Charles St., Suite 1103, Baltimore, MD 21201

DATE August 9, 2021

Signature of Offeror's Authorized Representative

PARTICIPANT INFORMATION FORM

All offerors are required to submit the information contained on this form. This information is a condition of submitting an offer to the RTA. Offerors must insure that **ALL** sub-contractors, sub-contractors or others at all tiers, which are proposed to be used or used under any agreement issued by RTA have submitted an executed copy of this form. RTA is required to maintain this information by the Federal Transit Administration and it is not subject to waiver.

Firm Name ADS System Safety Consulting, LLC

Firm Address 20 S. Charles St., Suite 1103, Baltimore, MD 21201

Telephone Number (301) 774-1914

Fax Number (301) 774-1913

E-Mail Address kallen@adssafety.com

Firm's status as Disadvantaged Business Enterprise (DBE) or Non- DBE DBE

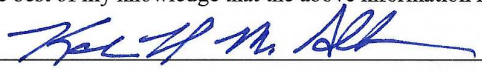
Age of the firm 10 Years

Annual gross receipts of the firm $10 Million

Prime or Sub-Contractor Prime

NAICS code (s) 541330, 541611, 541690

I certify to the best of my knowledge that the above information is true and correct:

Signature 

Title President and Chief Executive Officer

Date 08/09/2021

RTA Project No. 2021-016

FAILURE TO PROVIDE AN EXECUTED COPY OF THIS FORM AS STIPULATED HEREIN MAY PRECLUDE YOUR OFFER FROM CONSIDERATION FOR AWARD.

NON-COLLUSION AFFIDAVIT

STATE OF CALIFORNIA

PARISH OF LOS ANGELES

Kahlil Allen, being first duly sworn, deposes and says that:

(1) He is (Owner) (Partner) (Officer) (Representative) or (Agent), of ADS System Safety Consulting, LLC, the Contractor that has submitted the attached bid;

(2) Such Bid is genuine and is not a collusive or sham Bid.

(3) The attached bid is not made in the interest of or on behalf of any undisclosed person, partnership, company association, organization or corporation; that such bid is genuine and not collusive or sham; that said bidder has not, directly or indirectly, induced or solicited any other bidder to put in a false or sham bid, and has not, directly or indirectly colluded, conspired connived or agreed with any bidder or anyone else to put on a sham bid, or refrain from bidding; that said bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the bid price of said bidder or any other bidder, or to fix any overhead, profit, or cost element of such bid price or that of any other bidder, or to secure any advantage against RTA or anyone interested in the proposed contract; that all statements contained in such bid are true; that said bidder has not, directly or indirectly, submitted his bid price or any breakdown thereof or the contents thereof, or divulged information or data relative thereto, or paid or agreed to pay, directly or indirectly, any money or other valuable consideration for assistance or aid rendered or to be rendered in procuring or attempting to procure the contract above referred to, to any corporation, partnership, company, association, organization or to any member or agent thereof, or to any other individual; and further that said bidder will not pay or agree to pay directly or indirectly, any money or other valuable consideration to any corporation, partnership, company, association, organization or to any member or agent thereof, or to any individual, for aid or assistance in securing contract above referred to in the event the same is awarded to said bidder.

Signed: _____

Title: President and CEO

Sworn to me and subscribed in my presence this 9th day of August, A.D., 2021

_____
NOTARY PUBLIC

STEVEN B. NEMIROFF
Notary Public - California
Los Angeles County
Commission # 2310801
My Comm. Expires Oct 28, 2023

CERTIFICATION OF RESTRICTIONS ON LOBBYING

I, Kahlil M. Allen, President and Chief Executive Officer hereby certify on
(Name and Title of Offeror Official)

behalf of ADS System Safety Consulting, LLC that:
(Name of Offeror)

(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 any 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 influencing or attempting to influenced 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.

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

This certification is a material representation of fact upon which reliance is placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. 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.

Executed this 09 day of August, 2021.

BY Kahlil Allen

Witnesses: _____
(Signature of Authorized Official)

President and CEO
(Title of Authorized Official)

Sworn to and subscribed before me on this 9th day of August, 2021.

Notary Public In and For Los Angeles Parish/County

State of CALIFORNIA

STEVEN B. NEMIROFF
Notary Public - California
Los Angeles County
Commission # 2310801
My Comm. Expires Oct 28, 2023

1.15 ADDENDA

Proposers shall acknowledge receipt of all addenda to this Request for Proposals. Acknowledged receipt of each addendum shall be clearly established and included with each proposal. The undersigned acknowledges receipt of the following addenda.

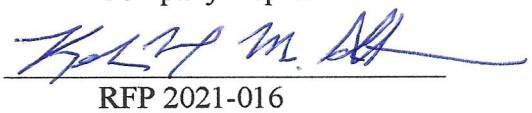
Addendum No. 1, dated August 11, 2021

Addendum No. _____, dated _____

Addendum No. _____, dated _____

ADS System Safety Consulting, LLC
Company Name

Kahlil M. Allen, President & CEO
Company Representative



RFP 2021-016

approved categories shall be substantiated by a current audit conducted by a federal or state agency. Labor rates for all individuals who may perform any work associated with this project shall be identified in the proposal. The individuals will be identified by name and job category. This requirement extends to all individuals whether classified as professional or non-professional. Any changes in labor rates and/or additions or changes to personnel providing work on this project must be pre-approved by RTA in writing.

4.4 OVERHEAD RATES

Contractor will be required to submit an audited overhead rate.

4.5 PLACE OF PERFORMANCE

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation, **____ intends, _X___ does not intend [check applicable block]** to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks "intends" in paragraph (a) of this provision, it shall insert in the following spaces the required information:

Place of Performance (Street Address, City, State, County, ZIP Code)	Name and Address of Owner and Operator of the Plant or Facility if Other than Offeror or Respondent
_____	_____
_____	_____

Appendix B: Independent Auditors Report

ADS SYSTEM SAFETY CONSULTING, LLC

SCHEDULE OF DIRECT LABOR, FRINGE BENEFITS AND GENERAL OVERHEAD - FAR COMPLIANT

YEAR ENDED DECEMBER 31, 2019

TABLE OF CONTENTS

PENAN & SCOTT, P.C.
CERTIFIED PUBLIC ACCOUNTANTS AND CONSULTANTS

INDEPENDENT AUDITOR'S REPORT

The Members
ADS System Safety Consulting, LLC
Baltimore, MD

Report on the Schedule of Direct Labor, Fringe Benefits and General Overhead -FAR Compliant

We have audited the accompanying schedule of direct labor, fringe benefits and general overhead - far compliant ("the schedule") of ADS System Safety Consulting, LLC ("the Company") for the year ended December 31, 2019 and the related notes to the schedule.

Management's Responsibility for the Schedule

Management is responsible for the preparation and fair presentation of the schedule in accordance with the basis of accounting practices prescribed by Part 31 of the Federal Acquisition Regulations (FAR). Management is also responsible for the design, implementation and maintenance of internal controls relevant to the preparation and fair presentation of the schedule that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the schedule based on our audit. We conducted our audit in accordance with auditing standards general accepted in the United States of America and the financial audit standards contained in *Government Auditing Standards,* issued by the Comptroller General of the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule is free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to the Company's preparation of the schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal controls. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the schedule referred to above present fairly, in all material respects, the total overhead of the Company for the year ended December 31, 2019, on the basis of accounting described in Note A.

Basis of Accounting

We draw attention to Note A, which describes the basis of accounting. As described in Note A, the schedule is prepared by the Company on the basis of accounting prescribed by Part 31 of the Federal Acquisition Regulations (FAR), which is the basis of accounting other than accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Restriction on Use

Our report is intended solely for the information and the use of the Company and government agencies or other customers related to contracts employing the Federal Acquisition Regulation cost principles and is not intended and should not be used by anyone other than these specified parties.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards,* we have issued a report dated August 18, 2020 on our consideration of the Company's internal control over financial reporting as it relates to the schedule and on our test of its compliance with laws, regulations and contracts, including provisions of the applicable sections of Part 31 of the Federal Acquisition Regulation. The purpose of that report is to describe the scope of our testing of internal controls over financial reporting and compliance and the result of the testing, and not to provide an opinion on internal controls over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Company's internal control over financial reporting and compliance.

Penan & Scott, P.C.

Rockville, Maryland
August 18, 2020

ADS SYSTEM SAFETY CONSULTING, LLC
SCHEDULE OF DIRECT LABOR, FRINGE BENEFITS AND GENERAL OVERHEAD - FAR COMPLIANT
YEAR ENDED DECEMBEER 31, 2019

	GENERAL LEDGER	UNALLOWABLE		PROPOSED COSTS	HOME OFFICE	FIELD OFFICE
DIRECT LABOR	$ 3,510,765	$ 154,886	(1)	$ 3,510,765	$ 1,275,110	$ 2,235,655
FRINGE BENEFITS						
Medical, dental, and disability	$ 212,426	$ -		$ 212,426	$ 77,153	$ 135,273
Vacation and holiday pay	424,993	11,347	(1)	413,646	150,236	263,410
Retirement	122,520	-		122,520	44,499	78,021
Employer payroll taxes	260,153	-		260,153	94,488	165,665
TOTAL FRINGE BENEFITS	$ 1,020,092	$ 11,347		1,008,745	366,376	642,369
GENERAL OVERHEAD COSTS						
Nonproject Labor	$ 816,067	$ 39,984	(1)	776,083	698,475	77,608
Advertising and Promotion	3,943	3,943	(2)	-	-	-
Business development labor	111,333	111,333	(2)	-	-	-
Automobile, tolls and parking	45,123	-		45,123	42,867	2,256
Bank charges	695	-		695	243	452
Charitable contributions	3,800	3,800	(3)	-	-	-
Computer support	111,315	-		111,315	100,184	11,132
Depreciation	2,302	-		2,302	2,072	230
Dues and subscription	17,062	-		17,062	16,209	853
Education and seminars	15,618	-		15,618	14,056	1,561
Gifts	12,405	12,405	(5)	-	-	-
Insurance	58,108	-		58,108	49,392	8,716
Interest	28,011	28,011	(4)	-	-	-
Office expenses	33,558	-		33,558	31,880	1,678
Licenses and fees	25,556	-		25,556	21,723	3,833
Meals and entertainment	23,911	9,019	(6)	14,892	13,403	1,488
Professional fees	88,850	-		88,850	75,523	13,328
Rent	111,930	-		111,930	95,141	16,790
Repairs and Maintenance	1,717	-		1,717	1,459	258
Telephone and Utilities	46,677	-		46,677	34,849	7,002
Travel	200,532	1,292	(6)	199,240	69,595	129,645
TOTAL GENERAL OVERHEAD COSTS	$ 1,758,513	$ 209,787		1,548,726	1,267,071	276,828
TOTAL INDIRECT COSTS				$ 2,557,471	$ 1,633,448	$ 919,197
PERCENTAGE OF DIRECT LABOR				72.85%	128.10%	41.12%

(1) FAR Regulations - Compensation in excess of $239,254 - $382,270 per year is unallowable
(2) 31.205-1 - Public relations and advertising costs
(3) 31.205-8 - Charitable contributions
(4) 31.205-20 - Interest Expense
(5) 31.205-13(b) - Gifts
(6) 31.205-14 - Meals and Entertainment

The accompanying notes are an integral part of this schedule.

ADS SYSTEM SAFETY CONSULTING, LLC
NOTES TO SCHEDULE OF DIRECT LABOR,
FRINGE BENEFITS AND GENERAL OVERHEAD - FAR COMPLIANT
YEAR ENDED DECEMBER 31, 2019

NOTE A – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

ADS System Safety Consulting, LLC ("the Company") was established in 2011. The Company engages in architecture and engineering related to infrastructure, primarily under contracts with state and municipal governments. The Company is based in the Washington, D.C. area with an office in Raleigh, North Carolina, although work may be performed throughout the United States of America.

Basis of Accounting

The Company's schedule of direct labor, fringe benefits and general overhead was prepared on the basis of accounting practices prescribed in Part 31 of the Federal Acquisition Regulation (FAR). Accordingly the schedule of direct labor, fringe benefits and general overhead - older contracts is not intended to present the results of operations of the Company in conformity with accounting principles generally accepted in the United States of America.

Overhead Rate Structure

The financial accounting system is kept using the accrual method. The reporting unit is the entire Company. Costs fall into four categories: direct, fringe benefits, overhead and unallowable. Direct costs include direct labor, travel, and some miscellaneous costs that are charged directly to the contracts. Unallowable costs are costs that are unallowable under Part 31 of the Federal Acquisition Regulation. Fringe benefits are costs incurred to provide benefits to employees other than direct compensation. All other costs are general overhead. The job cost system records direct costs by contract. Fringe benefits and general overhead costs are allocated based on direct labor. Separate rates are calculated for home-office costs and costs incurred at the jobsites.

NOTE B – LABOR-RELATED COSTS

Direct labor is charged to contracts using actual costs. Employees receive between 10.67 and 14 hours of paid time off per monthly pay period, depending on the employee's position. The paid time off may be used for vacation or sick time. Accrued paid time off is paid to the employee upon termination. Paid time off is recorded as a fringe benefit.

NOTE B – LABOR-RELATED COSTS (CONTINUED)

Premium overtime costs may be occasionally incurred. Eligible employees receive time and a half for overtime. The premium portion of paid overtime is recorded as a general overhead cost. The Company did not have any uncompensated overtime.

The Company performed an analysis of executive compensation in accordance with FAR. The analysis included an examination of the activities performed by Company executives, and the forms of compensation paid to executives. Labor amounts charged to business development of $111,333 were eliminated from overhead related to unallowable activities. Labor amounts of $194,870 were eliminated from the direct and indirect cost pools because they exceed the allowable compensation limits of FAR.

The Company operates a 401(k) retirement plan that meets the requirements of FAR 31.205-6(j).

The Company uses contract labor for some services. The Company does not provide office space or control the contract laborers. Therefore, they are not treated as employees and are either recorded as a direct contract cost or a general overhead cost.

NOTE C – DEPRECIATION AND LEASING

Certain assets are purchased and depreciated; while others are leased under operating leases, and the annual lease costs are included in the general overhead pool. All of the equipment rental costs and depreciation are considered allowable indirect costs.

NOTE D – LIST OF OTHER DIRECT COSTS

Other direct costs include consultants and subcontractors, travel costs, and other miscellaneous costs that are specifically required by the contracts.

NOTE E – SUBSEQUENT EVENTS

Management has evaluated subsequent events through August 18, 2020, which is the date the schedule of direct labor, fringe benefits and general overhead - FAR compliant was available to be issued.

PENAN & SCOTT, P.C.
CERTIFIED PUBLIC ACCOUNTANTS AND CONSULTANTS

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL AND COMPLIANCE

The Members
ADS System Safety Consulting, LLC
Baltimore, MD

We have audited, in accordance with the auditing standards general accepted in the United States of America and the standards applicable to financial audits contained in the Government Auditing Standards, issued by the Controller General of the United States, the schedule of direct labor, fringe benefits and general overhead - FAR compliant of ADS System Safety Consulting, LLC ("the Company") for the fiscal year ended December 31, 2019, and the related notes to the schedule and have issued our report thereon dated August 18, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit of the schedule, we considered the Company's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the schedule, but not for the purpose of expressing an opinion on the effectiveness of Company's internal control. Accordingly, we do not express an opinion on the effectiveness of the Company's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a control deficiency, or combination of control deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Company's schedule is free from material misstatement, we performed tests of the Company's compliance with certain provisions of laws, regulations, contracts, and grant agreements including provisions of the applicable sections of 48 CFR Part 31, noncompliance with which could have a direct and material effect on the determination of the amounts reported on the schedule. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly we do not express such an opinion. The results of our tests disclosed no instances on noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Company's internal control and compliance. This report is intended solely for the use and information of the Company and government agencies or other customers related to contracts employing the cost principles of the Federal Acquisition Regulation, and should not be used for any other purpose.

Penan & Scott, P.C.

Rockville, Maryland
August 18, 2020