

As Staff Consultant, Austin Shires performs inspections, undertakes analysis of incidents, and writes reports of his findings.

Prior to joining ESi, he worked as a Transportation Engineer with the Ardurra Group, based out of West Palm Beach, Florida. While there he was tasked with the creation of roadway plans including Temporary Traffic Controls/Maintenance of Traffic, Drainage, Signing and Pavement Marking, Intersection Details, and Roadway Design.

While at ESi, Mr. Shires has been involved in investigations involving passenger vehicles, motorcycles, and commercial vehicles as well as numerous Fire and Explosion investigations. He has also participated in several cases involving product design and defect or negligent installation of products. He is experienced with FARO scanning, Black Elite hand scanning, Drone Piloting, passenger vehicle downloads, commercial vehicle downloads, and brake inspections

His background in Transportation Engineering and expertise as a motor vehicle accident reconstructionist have been leveraged to assist in cases that involved the function of roadway safety components, and the design of roadways specifically work zones and traffic controls.

Education

BS, Mechanical Engineering. Texas A&M. 2023

Licenses & Certifications

- State of Texas EIT Certification, Texas EIT 84135
- FARO Focus Scanner User Certification Program
- Part 107, Remote Pilot: Small Unmanned Aircraft System, Certification Number 5251802

Positions Held

Engineering Systems Inc., Aurora, Illinois

- Staff Consultant, 2025 – Present

Contact Information

atshires@engsys.com

(214) 343-3811

ESi Dallas

10338 Miller Road
Dallas, Texas 75238

Areas of Specialization

- Accident Reconstruction
- Mechanical Engineering
- Automotive (Gas/EVs/Hybrids)
- Commercial Vehicles
- Traffic Controls Analysis
- Transportation Engineering
- Fire and Explosion Investigations
- Motor Vehicle Fires
- Thermal Sciences
- Product Design & Analysis

Ardurra Group Inc., West Palm Beach, Florida

- Engineer I, 2023 - 2024
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Professional Affiliations / Honors

American Traffic Safety Services Association (ATSSA)

- Member 2026
- Friend of the Pavement Marking, Sign, Traffic Signals, High Friction Surface Treatment, Government Relations, Safety & Public Awareness committees as well as the Work Zone ITS subcommittee and the Innovation Council

SAE International

- Member 2025
- Publication Reviewer since 2025

International Association of Arson Investigators (IAAI)

- Member 2026
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Continuing Education

Motor Vehicle Accident Reconstruction

- **Traffic Crash Reconstruction for Engineers** – Northwestern University Center for Public Safety, 2026
- **Accessing and Interpreting Heavy Vehicle Event Data Recorders** – SAE International, 2026
- **Vehicle Crash Reconstruction: Principles and Technology** – SAE International, 2026
- **Hyundai-Kia & Tesla EDR Tools Technician** – IPTM, 2025
- **Passenger Restraint Safety Systems** – IPTM, 2025
- **Bosch CDR Tools Technician** – IPTM, 2025
- **Bendix On-Site Air Brake Course Tested/Passed Certificate of Training** – Bendix, 2025

Traffic Controls and Transportation Engineering

- **The Art of Developing and Testing Roadside Safety Hardware** – American Traffic Safety Services (ATSSA) Convention & Traffic Expo, 2026
 - **Computer Simulation and MASH Testing of Battery Electric Vehicles** – American Traffic Safety Services (ATSSA) Convention & Traffic Expo, 2026
 - **Reducing Equipment-Related Deaths and Injuries in Work Zones** – American Traffic Safety Services (ATSSA) Convention & Traffic Expo, 2026
 - **Deposition Dominance** – American Traffic Safety Services (ATSSA) Convention & Traffic Expo, 2026
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- **How Connected Worksites are Transforming Offsite Traffic Control Operations** – American Traffic Safety Services (ATSSA) Convention & Traffic Expo, 2026
- **Flagger Training** –National Highway Institute (NHI), 2026
- **Maintenance Training Series: Basics of Work Zone Traffic Control** – NHI, 2026

Fire & Explosion Investigation

- **Motor Vehicle Fire Investigation 2-Day Course, Tested and Passed** – IAAI 2026
- **Principles of Fire Investigation Multi-Program Certificate** – IAAI, CFITrainer.net, 2026
- **Understanding Undetermined** – IAAI, CFITrainer.net, 2026
- **The Scientific Method for Fire and Explosion Investigation** – IAAI, CFITrainer.net, 2026
- **Residential Natural Gas Systems** – IAAI, CFITrainer.net, 2026
- **Residential Electrical Systems** – IAAI, CFITrainer.net, 2026
- **Physical Evidence at the Fire Scene** – IAAI, CFITrainer.net, 2026
- **Introduction to Evidence** – IAAI, CFITrainer.net, 2026
- **Insurance and the Fire Investigation** – IAAI, CFITrainer.net, 2026
- **Fundamentals of Interviewing** – IAAI, CFITrainer.net, 2026
- **Fire Investigator Scene Safety** – IAAI, CFITrainer.net, 2026
- **Fire Flow Analysis** – IAAI, CFITrainer.net, 2026
- **Fire Chemistry** – IAAI, CFITrainer.net, 2026
- **Explosion Dynamics** – IAAI, CFITrainer.net, 2026
- **Ethics and the Fire Investigator** – IAAI, CFITrainer.net, 2026
- **Electrical Safety** – IAAI, CFITrainer.net, 2026
- **Effective Investigation and Testimony** – IAAI, CFITrainer.net, 2026
- **Documenting the Event** – IAAI, CFITrainer.net, 2026
- **Critical Evaluation and Testing of Commonly Reported Accidental Causes** – IAAI, CFITrainer, 2026
- **Alternative Fuel Vehicles** – IAAI, CFITrainer.net, 2026
- **Motor Vehicles: Investigation** – IAAI, CFITrainer.net, 2026
- **Motor Vehicles: Exhaust, Brake, Accessory, and Transmission Systems** – IAAI, CFITrainer.net, 2026
- **Motor Vehicles: Engine and Ignition, Electrical, and Fuel Systems** – IAAI, CFITrainer.net, 2026

Miscellaneous

- **Foundations of Forensic Photography** – Texas A&M Extension Service, 2025

Publications & Presentations

- **How To Better Navigate Claims and Litigation in Roadside Work Zones** – Author, Texas Association of Defense Council (TADC) Spring Magazine, 2026