

2022 Fire Prevention Institute Session Descriptions

Moving from Prevention to Process – Josh Fulbright (60 minutes)

Building upon our first "Salmon Tank" Experience, this presentation will discuss the need to move from fire prevention as a function of a department to risk reduction programs as a sustainable process. Presentation will highlight the role of practitioners, mid-level managers, and unit leaders, to include Chiefs, in risk reduction as a community and agency-wide effort.

At the end of the course, learners will be able to:

- Differentiate between fire prevention and community risk reduction
- Identify common challenges in the risk reduction process for all levels of the organization
- Focus on program impacts and outcomes for decision-making and sustainability

Salmon Tank #1 – Josh Fulbright (60 minutes)

20/20 Symposium 7, present your program to Washington State's Salmon Tank. Submissions should be submitted two weeks prior to the conference for an opportunity to present a 10-minute pitch to our panel. We are looking for new programs that have not yet been implemented or are in their very early stages, not model programs. Submissions should be limited to two pages. Briefly describe your service area, and then identify the risk you are trying to address. Explain your proposed plan to address the risk, identify obstacles, and tell us what you need help on. Present programs in the beginning stages of development for sharing of ideas. Develop presenters and attendees through panel feedback. Promote the risk reduction process to address identified risks.

At the end of the course, learners will be able to:

- Attendees will learn how to present programs in the beginning stages of development for sharing of ideas.
- Attendees will learn what information is needed when presenting new programs
- Attendees will learn how to communicate the relevant ideas quickly to key stakeholders to build excitement for collaboration

Salmon Tank #2 – Josh Fulbright (60 minutes)

The follow up to Salmon Tank Session #1, will include an analysis of the programs presented throughout the CRR track of the 2022 Fire Prevention Institute.

At the end of the course, learners will be able to:

- Attendees will learn how to promote the risk reduction process to address identified risks.
- Attendees will get feedback on how they could use information gained from previous sessions into their program
- Attendees will get feedback from other participants on the focus and clarity of their program.

Josh Fulbright, the Community Risk Reduction (CRR) Section Chief with SC State Fire, leads a team of seven tasked with fire and life safety data analysis, curriculum coordination, and outreach. Chief Fulbright coordinates statewide CRR through the Fire Safe South Carolina program. He manages fire fatality research of the Community Loss Education and Response (CLEAR) Team. Annually, his team hosts quarterly Fire and Life Safety Educator Trainings, a Fire and CRR Summit, and supports local CRR practitioners. As Situation Unit Leader for the Palmetto Incident Support Team and as a State Duty Chief, he manages routine and emergency response coordination of personnel. For nationwide relationship-building, he serves as Team Lead for Vision 20/20 Technical Advisors to the Statewide Collaboration and Engagement Framework and South Carolina Representative to the NFPA. He is also a Board Director to the NFPA Education Section and a National Fire Academy Contract Instructor).

Community Para Medicine – Nicole Picknell (60 minutes)

South County Fire's Community Resource Paramedic (CRP) program links patients with the community services they need. The community paramedic follows up with at-risk patients through a telephone call or a home visit to find out what is behind multiple calls to 911. In addition to a medical assessment, there is a home safety survey to prevent falls and other risks. We help patients understand doctor's orders, find detox programs, provide housing referrals for people at risk of homelessness, assist with transportation

for care, help identify home hazards and assisting with in-home care referrals. The goal is to help clients remain in their home, safe and without need for emergency medical care.

At the end of the course, learners will be able to:

- Learn what is a CRP/MIH program and what is the purpose
- Discuss how the program can benefit a fire department
- Explore potential outcomes for our residents

Captain Nicole Picknell has 30+ years of fire ground experience including wildland and structural firefighting, 25-years as a paramedic, as well as 25-years in the exercise, fitness and nutrition industry. Nicole has spent the last 2.5 years overseeing the Community Resource Paramedic Team at South Snohomish Fire and Rescue Regional Fire Authority (South County Fire). The South County Fire's Community Paramedic team has been serving their residents for almost 10-years.

Adaptive Fire Safety Education – Holly and John Goodman (120 minutes)

ISAAC Foundation has created its own on-site, studio apartment simulation space where individuals with disabilities learn developmentally appropriate fire safety education. Participants receive adaptive kitchen safety skills related to stoves, ovens, and microwaves, as well as safety training related to portable heaters and fireplaces. Most importantly, the curriculum teaches the fire safety skills related to evacuation in the event of a home fire. While all of this learning is available through schools for typically developing students, kids with disabilities who spend the majority of their school day in self-contained special education environments do not receive this important education. In order for our special needs community to master these life-saving concepts and skills, they need access to repetitive learning opportunities.

At the end of the course, learners will be able to:

- Participants will learn adaptive kitchen safety skills for children with disabilities / special needs
- Participants will learn adaptive portable home heating and fire place safety and evacuation skills for children with disabilities / special needs
- Participants will get to experience firsthand how this is being taught in schools and how they can replicate the program in their department.

Holly Goodman is the founder and executive Director of the Isaac Foundation, a Spokane-based foundation named after her son, who was diagnosed with an autism spectrum disorder, and unexpectedly died shortly before his fourth birthday. In her grief, she founded the non-profit to help families and individuals touched by autism. Drawing from her personal autism experiences and relationships she has built with individuals with autism throughout her career, Holly and her husband **John Goodman**, a firefighter/paramedic with the Spokane Fire Department created the nationally accredited Autism in the Wild First Responder Training Program. The program focuses on teaching participants how to understand what is happening inside the mind and body of a person on the spectrum and how to interpret the meaning behind the behavior to improve communication and interactions between ASD patients and first responders.

Let Your Data Lead – Esther Hernandez (60 minutes)

At the end of the course, learners will be able to:

- Understand how data drives decision-making in identifying and prioritizing community risks.
- Be familiar with steps you can take to help ensure quality data submissions in NFIRS.
- Develop ways to look at, and analyze your data at the local level to identify training and educational needs to help reduce the risks in your community.

Esther Hernandez has been with the WSP for 18-years; the last 16-years have been in the State Fire Marshal's Office. She currently oversees the Education, Enforcement and Analytics Section, which includes the Sprinkler and Fireworks Licensing, Fire Safe Cigarette Certification, Public Information, Community Risk Reduction, and NFIRS programs. She also provides support to the Mobilization Program during fire season.

Craig 1300 – The Leatherman in Your Toolkit – Karen Berard-Reed (60 minutes)

One tool: Many uses! In this fun, interactive session, the speakers will provide an overview of NFPA 1300 Standard on Community Risk Assessment and Community Risk Reduction Plan Development and explain how professionals focused on community safety can use the process outlined in the standard to guide effective CRR initiatives. Attendees will learn why Community Risk Assessment is the critical first step in the CRR process and how the community profiles outlined in NFPA 1300 provide a helpful framework to tell the local data story. Additionally, the presenter will share unexpected benefits of implementing strategic, data-driven CRR such as internal buy-in, community support, and increased funding. Successful applications of CRR will be presented as vignettes from the field and will clearly explain how CRR serves as dynamic tool to solve typical problems faced by fire service personnel, community leaders, and local partners. Attendees will leave the session with concrete ideas about how to leverage CRR to meet local goals

At the end of the course, learners will be able to:

- Speakers will provide an overview of NFPA 1300 and explain how professionals focused on community safety can use the process outlined in the standard to guide effective CRR initiatives.
- Attendees will learn why Community Risk Assessment is the critical first step in the CRR process and how the community profiles outlined in NFPA 1300 provide a helpful framework to tell the local data story.
- The presenter will share unexpected benefits of implementing strategic, data-driven CRR such as internal buy-in, community support, and increased funding.

Karen Berard-Reed, M.Ed., is a Senior Strategist leading the Community Risk Reduction initiative at the National Fire Protection Association. Karen develops innovative tools and resources to assist stakeholders who are focused on data and standards-driven processes to improve community safety. Her contributions include training, partnership-building, and critical tools to support CRR efforts such as CRAIG 1300™, the NFPA Community Risk Assessment Insight Generator and the CRR Kitchen Table, a monthly virtual gathering of prevention-minded professionals. Karen previously managed NFPA's high-risk outreach activities and created safety education materials for young children, older adults, and underserved communities. Karen serves on the IAFC Fire and Life Safety Section Board, the Vision 20/20 steering committee and has served as an instructor at the National Fire Academy. Before coming to NFPA, Karen worked in the health promotion field in K-12, higher education, and community settings.

Become a Social Media Architect for How People Consume – Lanette Dyer & Tina Curran (120 minutes)

The future is here and using creative and mixed content for your pictures, Reels and Stories allows agencies to connect with their communities in exciting and engaging ways —while inspiring them to take action. Tina and Lanette will dive into leveraging IG to promote your agency mission and brand through short video like Reels and Stories that allows you to get more direct with your audience. To further unlock your unique and branded storytelling they will show you how to create gifs using your own people and apparatus to make on brand social media posts for your community. You will be provided with pre-loaded, ready to brand, Canva templates that we will show you how to edit and brand for your use. ***Tina and Lanette suggest downloading a free account on Canva to be able to use the templates**

At the end of the course, learners will be able to:

- Participants will learn that using creative and mixed content for your pictures, Reels and Stories allows agencies to connect with their communities in exciting and engaging ways —while inspiring them to take action.
- Participants will dive into leveraging IG to promote your agency mission and brand through short video like Reels and Stories that allows them to get more direct with their audience.
- Participants will learn to further unlock their unique and branded storytelling to create gifs using their own people and apparatus to make on brand social media posts for their community.

Lanette Dyer started as volunteer in 1990, and like most fell in love with public service and made it her career. After finishing college, she went to Medic School doing her internship in New Orleans where she learned to work and learn under what her Preceptor called "Controlled Chaos." Lanette eventually went into Fire Administration and brought her passion for her community to the forefront. Lanette now serves as a Captain and Medical Services Officer, as well as a Prevention Specialist and Master PIO for West Thurston Fire in Olympia. Lanette and her family enjoy free time with their dogs on their hobby farm, sport fishing and travel.

Tina Curran has had a long career in education. She spent most of her teaching career in middle and junior high schools (not very different from working with firefighters ;) and pivoted five years ago into another form of education—Prevention Specialist and Public Information Officer at Gig Harbor Fire & Medic One in Gig Harbor, WA. Through managing dozens of fire and life safety programs for her community and connecting with thousands of Gig Harbor residents each year, she dove headlong into community communication through social media. Like their parents, Tina's two sons attend Washington State University and share the "Go Cougs" spirit she brings to the fire service.

Believe in Fire Safety Campaign – Sara Jasmin (60 minutes)

This presentation will provide an introduction of Oregon Office of State Fire Marshal's Bigfoot: Believe in Fire Safety campaign including the rationale, purpose, and goals. It will also discuss campaign components, successes, and areas of growth, as well as provide insight on campaign stakeholder engagement and distribution of messaging and resources at the local level.

At the end of the course, learners will be able to:

- Attendees will get an introduction to Oregon's Office of State Fire Marshal's Bigfoot: Believe in Fire Safety campaign including the rationale, purpose and goals
- Learn the components, successes, and areas of growth.
- Provide Insight on Campaign stakeholder engagement and distribution of messaging

Sara Jasmin has been with Oregon State Fire Marshal's Office for the past 5-years where she is currently in the role of Fire Prevention Coordinator. Prior to joining OSFM in 2017, she worked as a Juvenile Counselor for 10 years in Crook and Clackamas Counties. Sara also has a BS of Community Health Education from Western Oregon University.

Classroom Management in Today's Classroom – Don Maher (60 minutes)

Ideas and strategies for teaching young children to grown adults. Understanding that all people learn differently and how to differentiate. Helping to identify diverse learners and strategies to adjust your teaching on the fly. The course would focus on providing tools and ideas on how to handle our ever-changing population of diverse learners.

This course has the following objectives.

- Apply skills to create a positive learning environment in the classroom.
- Explain the differences in teaching children and adults.
- Determine the type of management tools required to effectively deliver a lesson in the classroom.

Don Maher is a Public Education Specialist with the Puget Sound Regional Fire Authority. Since 2017, Don has worked alongside his partner to teach an extremely diverse population within the Puget Sound region. Don received his Bachelors in Education from Arizona State University. He then taught in the classroom for 11 years before joining the Puget Sound Fire Department. In 2012, Don was awarded as the Educator of the Year by the Renton Chamber of Commerce. Don currently resides in North Bend, WA with his wife and nine-year-old daughter...

From CRA to CRR –B-Plan: A Roadmap to Strategy –Caroline Kusher (120 minutes)

This session will highlight the overall process undertaken to help shift to a holistic, integrated, risk management culture. Strong foundational work is necessary to reshape the culture of an agency. Culture is key to an organization's ability to pivot and drive execution of its goals and objectives particularly critical in times of significant change. The recent CPSE/ICMA 21st Century Fire and Emergency White Paper directly indicates and supports the evolutionary actions required of agencies to "remain viable." Changing a culture can take anywhere from several months to several years to take hold. It is not something that can be delegated. It needs to be a top priority embraced by senior leadership. The desired culture needs

to be modeled from the top. How can you determine the shift in culture and the adoption of an integrated risk management, CRR, perspective throughout the agency? How can you demonstrate that you are embracing a culture of proactive risk mitigation? We will walk through a case study of how our agency moved from the development of our CRA to an adopted and signed a formal CRR Business Plan. This documented 5-yr strategic plan is verification that we have made the culture shift, as our process will be able to survive beyond the signatures contained within the document. The formality of a documented approach will drive a data-driven, best practices method to incorporate a station-based approach to CRR.

At the end of the course, learners will be able to:

- Participants will learn the process used to build engagement in CRR
- Participants will learn the methods used to reshape culture.
- Participants will focus on the steps taken to pivot towards a proactive. Strategic response to risk

Caroline Kusher has been affiliated with Spokane Valley Fire Department for over two years. Ms. Kusher has frontline experience as a volunteer firefighter and Wilderness EMT. She holds an MBA in Finance. She has developed, promoted, coordinated, and conducted fire, life safety, and injury prevention programs. In the private sector, she worked in Healthcare, Pharmaceutical, and Diversified Manufacturing. She has revitalized and led Value Analysis Programs, including strategy and business case development. She has designed and implemented enhanced pharmacovigilance policies, practices, strategies, and guidance surveillance practices. She has presented at international conferences rolling out new business processes, strategies, and initiatives.

What Do You Know About CO? – Neal Zipser (60 minutes)

This upbeat, engaging and informative presentation will quiz the audience on what they know about carbon monoxide (CO).

Course objectives include:

- Gaining a better understanding of what CO is, how you can detect CO, what causes CO, proper placement/maintenance/replacement of alarms, etc.
- Gaining a better understanding of the sounds alarms make and how the fire service must educate themselves, and then the community.
- Understanding why CO Poisonings are expected to increase and what can be done to lower that escalation of emergencies.

Neal Zipser is the Industry Affairs Manager with the Knox Company, and has the same role with the company's new Knox Safety Division. Neal manages the company's relationships with fire industry organizations and is the company's primary liaison with the fire service. In his current role, Neal works with fire departments and industry/state associations on rapid entry programs, public education activities ND IOTHER COMMUNIT RISK REDUCTION INITIATIVES, INCLUDING CARBON MONOXIDE (co) AWARENESS. Prior to joining Know, he held the same position with Kidde and spoke regularly on home smoke alarm and CO detection technology and how families can better protect themselves from the hazards of fire.

Water Safety: Raising Community Engagement and Awareness– Chezik Tsunoda (120 minutes)

The founder of the Bellevue based water safety organization, No More Under, will be discussing the organizations strategy for community engagement and education, how they use social media and collaborations with other organizations to raise awareness, and the ways which their local fire department has supported their organization and mission.

Chezik Tsunoda is a mother of four boys, a documentary filmmaker and the founder of No More Under. Since her 3-year-old son Yori drowned in a friend's backyard pool, Tsunoda has been driven to promote the conversation about and raise awareness around drowning prevention and water safety. Tsunoda is an accomplished director and producer whose work spans across movies, television and advertising. She has just completed a documentary film entitled Drowning In Silence, which brings more awareness to water safety and the Impact a drowning has on families.

Best Practices and Planning For the Future Ben Shearer & Jamie McIntyre (120 minutes)

This presentation is a chance to meet WPFE members from across the state in an open discussion format with the objectives of:

- Learning fire and life safety risks that fire departments across Washington State are encountering.
- Discussing interventions used by Fire Educator to address these issues in their jurisdiction.
- Connecting with resources, programs, and partners from across the Washington State.

Ben Shearer and Jamie McIntyre are Chair and Vice Chair of the Washington Public Fire Educators (WPFE). The WPFE meets quarterly to share Public Safety issues and resources with Fire Educators across Washington State. Working collaboratively, they create successful collaborative through unified messages, shared resources.

Specialty Products, Including Hazmat Fire & Investigation – Chris Pfaff (120 minutes)

This presentation will be on the WPFR & CPFR response to SPI, located on our common border, and the difficulties with a commercial fire with hazmat. The event itself will be lightly touched upon, but the bulk of this presentation will be based on the following days and the logistics to keep our members safe during an investigation. Multiple delays, setbacks and significant use of PPE were required for this multi-day investigation, which eventually resulted in a massive learning experience for our agency and the South Puget Sound Region.

This course has the following objectives:

- Site safety and security through a multi-day investigation
- Proper entry procedures for investigation and cleanup
- Resources available to assist with technical investigations.

Chris Pfaff has been a firefighter in the Northwest for 18-years. He is a HazMat Technician and Prevention Captain at West Pierce Fire & Rescue. Chris currently instructs HazMat classes at Bates Technical College, instructs for multiple fire departments across Washington State, and was the lead HazMat Instructor at WPFR. He previously was an adjunct instructor at the Washington State Patrol Academy and currently instructs under contract for the WSP. Chris is certified with Fire Inspector I, II and Plans Review with the ICC, and is a NAFO certified Fire Investigator.

Evidence Collection – Cindy Brewer, Michael Sargent and Alfonso Mercado (60 minutes)

During the course of any fire investigation, it is the responsibility of the fire investigator for locating, identifying storing and arranging for testing if fire scene evidence that is relevant to the issues of origin, cause, spread, and the responsibility of the fire scene. On multi-agency fires, it is critical for investigators involved to work from the same framework in evidence collection. We will review a large scale officer involved shooting event that resulted in multiple agency collaboration which included multiple local law enforcement agencies, ATF, WSP, FBI, coroner and local fire departments. This large event included fire investigation, evidence collection, human remains collection and an officer involved shooting investigation. We will detail how we collected evidence from the remains of a complete house and garage fire that were a total loss, how we collaborated with multiple agencies, and what worked and what did not.

This course has the following objectives:

- Learn the difference between physical evidence and artifact evidence.
- Best practices in the collection of different types of evidence
- Documentation of evidence collection prior to the removal from the scene and chain of custody.

Officer **Cindy Brewer** has over 23 years of law enforcement experience. She is currently the Evidence Officer and manages over 15,000 pieces of evidence.

Corporal Michael Sargent has over 25 years of law enforcement experience. He currently is the Detective Corporal and oversees traffic investigations, UAV program, and civil asset unit.

Detective Mercado has over 10 years of law enforcement experience. He currently works in detectives handling major crimes.

Basic Electricity for Investigators – Scott Dau (60 minutes)

This presentation will cover the basics of electrical theory and terms that every investigator should know when considering electrical issues as a cause.

This course has the following objectives:

- Understanding the basics behind the invisible magic: Concepts and definitions of core terms.
- Take the information presented and apply it to real-life scenarios.
- The Collaboration: Forgot how to calculate amperage from the information on the label of a partially burned up space heater? Did the OCPD malfunction? Who or were to go will be discussed.

Scott Dau is a CFEI and a firefighter with the Seattle Fire Department, in his 31st year of the fire service. He teaches electrical fire investigation classes for the NFA, the ATF, and fire departments around the country, and is known for his ability to make electrical concepts easy for investigators to understand. He spent 25 years working for an electrical contractor specializing in medical, light industrial and commercial facilities

Sharing Resources– Moderator Brian Ellis (60 minutes)

Fire Investigator “Sharing Resources” – A moderated forum to discuss what Fire Investigators are using currently when conducting fire investigations – from documentation software, vehicles, specific equipment (beyond shovels and rakes), evidence collection, lighting, photography, (types of cameras). Personal Protective Equipment (head to toes: SOPs/SOGs, and general discussion on best practices, successes, or even lessons learned that can be shared with others.

This course has the following objectives:

- An opportunity to learn from investigators in other jurisdictions on best practices. The participants will be asked to share opinions and first-hand experiences on specific fire investigations.
- Class participants will leave with a broader network on investigation professionals to tap into when future issues rise.
- Discuss the intent and purposes of existing or proposed SOPs with regard to personal safety of fire investigators.

Captain Brian Ellis is currently assigned as Captain/Deputy Fire Marshal in the Kennewick Fire Department (KFD), with 29 years at KFD, and has been an IFSAC Fire Investigator since 2017.

Metadata in Investigations – Steve Beltz (60 minutes)

In the current world of digital media, every user-created file can contain metadata. Metadata can be useful when investigating claims and can help provide leads and support interviews or EUO's. This course has been updated to include 2021 case examples. We also explore new phone settings for 2022 that will enable the user to change or delete metadata on the fly. In the end, we will learn how to obtain, view, and document metadata found in photos and other files, such as Word and PDF files, as well as how metadata can and cannot be used in civil and criminal investigations.

This course has the following objectives:

- Attendees will understand what metadata is and why it is important to investigations.
- Attendees will understand how to access metadata found in photos and other user-created files, such as PDF's, Excel, and Word documents.
- Attendees will understand how to use metadata during subject interviews.

Open Source Intelligence (OISNT) Investigation Tools – Steve Beltz (60 minutes)

The way people choose to communicate and the tools that facilitate that communication is evolving rapidly. Using open source intelligence (OSINT,) the attendees will be shown how to go past surface, internet searches and take a deep dive into the web using advanced online search techniques. We will also discuss how to examine and properly collect the information that is found during the investigation. This will include knowing how to understand metadata, which is often found with any

user-created file to include photographs, documents, and websites. Just as important as locating the information, this talk will discuss how investigators can protect themselves (and their families) during online investigations. In the end, the attendees will walk away with a wide range of web-based information sources and tools needed to find and examine user-created data and conduct a complete, online investigation.

This course has the following objectives:

- Attendees will learn when Open Source Intelligence is and why it is important to investigations.
- Attendees will learn about what tools are available to them and how to use those tools to perform online, open-source searches.
- Attendees will understand how to organize and report on open source intelligence information

Data Analysis in Support of Criminal Investigations – Steve Beltz (60 minutes)

In this session, using real criminal case scenarios and readily available software, such as Excel, Power BI, and Google Earth, we will learn how the data located and received, how the data is organized, and how the data is used to support criminal investigations. Techniques will include, finding data points in various sources, converting pdf's to tables, locating and exporting tables from websites, formulas, pivot tables, data linking, charting options and the use of dashboards for analysis.

This course has the following objectives:

- The attendees will learn the “Five-Steps of Data Analysis.”
- The attendees will understand what data is, how to locate, and organize the data for analysis.
- Attendees will learn how to visualize and report on their data analysis findings.

Steve Beltz is the Director of Learning and Development, and leads the day-to-day events and development of field trainers. He is responsible for competent and quality-driven delivery of on-site and webinar training programs for internal staff, member organizations, and Law Enforcement. Previously, Steve was a special agent with NICB, specializing in data analysis, and responsible for conducting investigations involving auto theft, property and casualty, arson, worker's compensation, and medical fraud as well as training law enforcement and insurance personnel. In the past, Steve has been in law enforcement directly or in support operations for over 30 years. His past assignments include computer and audio/video forensic and data analysis for the Department of State and Department of Defense. Steve also served as Assistant Director of the federal Recovery Operation Center in Washington DC, performing “big data” analysis in support of federal fraud investigations. Before that, Steve had been employed by the Washington State Patrol, where he spent most of his career as a detective specializing in major crime scene investigations, computer forensics, and criminal intelligence.

Identification of Burned Vehicles – Dale Zlock (60 minutes)

Often one of the key elements in determining if a fire was intentionally set is determining a motive. More specifically a financial motive. With vehicle fires, this requires the investigator to make a positive identification of the vehicle. Given the damage a fire causes positive identification can be difficult due to the destruction of the public vehicle identification numbers (VINs). This course is intended to provide the investigator with information on options for secondary vehicle identifiers, information resources, and how the vehicles identity can be used to determine motive for arson.

This course has the following objectives:

- Learn what other agencies and organizations are available to assist your investigations
- How the information can be used to determine motive
- Knowing what secondary vehicle identifiers are and where to find them

Visual Investigative Analysis – Dale Zlock (60 minutes)

Visual Investigative Analysis (VIA) was developed as a way to keep track of multiple events and timelines prior to the computer age and expensive computer software that now can perform these functions provided your agency has the budget. VIA provides a very flexible platform that can be performed manually (pen and paper) or with basic and readily available (free or cheap) software.

This course has the following objectives:

- Understand the need for visualization of data

- Learn the component parts of VIA techniques
- Learn how VIA can be used in collaborative environments to quickly bring command staff, PIO's and outside agencies up to speed on the investigation

Dale Zlock retired after a 40+-year career in law enforcement and insurance fraud investigations. His career being evenly split between public and private service. The majority of this career focusing on the investigation of financial and organized crime, including supervisory and management positions. Mr. Zlock has a Bachelor of Science degree in Information Technology Management and Associate degree in Fire Sciences. Mr. Zlock held certifications as Criminal Analyst, Fraud Examiner, Vehicle Forensics Examiner and Fire Investigator (IFSAC-WA). He is a published author and lecturer on the topics of Asian Organized Crime, Insurance Fraud, Criminal Intelligence, and the use of Visual Analytics in Investigations. Mr. Zlock currently serves as a board member on the WA State Chapter of the IAAI (International Association of Arson Investigators) and the Arson Alarm Foundation.

Firefighter Air Replenishment Systems – Mike Gagliano (60 minutes)

This session will include a history of air delivery, case studies on high-rise fires, a full description of the FARS components and current implementations throughout the country. In addition, there will be small props available for students to review that demonstrate the ease of use of FARS

This course has the following objectives:

- The attendee will understand code requirements for FARS.
- The attendee will analyze the code applications for FARS.
- The attendee will be able to formulate requirements for FARS.

Mike Gagliano has over 30-years of fire/crash/rescue experience with the Seattle Fire Department and the United States Air Force. He retired as the Captain of Ladder 5 and remains a proud member of Fire Station 31. Captain Gagliano has written numerous fire service articles, is co-author of the bestselling books Air Management for the Fire Service, Challenges of the Firefighter Marriage and the SCBA chapter of the Handbook for Firefighter 1 & 2 from Pennwell. He is a member of the Fire Engineering/FDIC Advisory Board, a Director for the Firesmoke Coalition (Firesmoke.org), on the Advisory Board of the UL-Firefighter Safety and Research Institute and teaches across the country on Air Management, Fire ground Tactics, Leadership and Company Officer Development. Mike co-hosts the popular Fire Engineering radio webcast "The Mikey G and Mikey D Show" and partners with his wife Anne (Firelife.com) to teach on strategies for developing and maintaining a strong marriage/family.

Energy Storage Systems – Fire Service Response & Research Sean DeCrane (60 minutes)

This program will provide a detailed overview of a fire department response to an ESS failure that resulted in four firefighters being seriously injured. We will review the UL SFRI Incident Investigation and Report, outlining contributing factors, as well as recommendations for future actions to limit the risk of a similar occurrence in the future. This course has will provide an update to continuing large-scale testing being conducted by UL's Fire Research and Development Team, in support of UL 9540, ESS fire testing, and fire service response.

At the end of the course, learners will be able to:

- Describe a ESS
- Define Code Considerations for ESS
- Identify Firefighter Tactical Considerations for ESS.

Automated Storage and Retrieval Systems - Sean DeCrane (60 minutes)

The growth in popularity of these systems has not been met with the development of code and standards to address the challenges the fire service may encounter when responding to an incident involving a fire system. Recently, one manufacturer approached UL and wanted to engage the fire service to understand how they can partner with the fire service to develop tactical considerations for the fire service in the event of a fire. This presentation will describe what is a top Loaded-Automated Storage and Retrieval System (TL-ASRS) and outline the project conducted at the UL facilities. We will discuss the three phases of the project from the initial meeting to the large-scale fire test, incorporating the firefighter response and operations.

At the end of the course, learners will be able to:

- Describe a Top Loaded Automated Storage and Retrieval System
- Define Code Considerations with TL-ASRS
- Identify Firefighter Tactical Considerations developed with the project

Sean DeCrane retired as a 25+-year veteran of the Cleveland Division of Fire. He served in various roles including the Director of Training and Chief of Operations, retiring as a Battalion Chief. Sean is currently the Manager of Industry Relations for the Underwriters Laboratories Building Life Safety, Security and Technologies Division. He is responsible for engaging with various industry organizations with a focus on the international fire service including Asia, Australia, Europe and the United Kingdom. Sean has been involved in the research at Underwriters Laboratories and the National Institute of Standards and Technology. He served on the UL Fire Council and is a member of the UL Fire Fighter Safety Research Institute's Advisory Board. In 2021, Sean was named to the UL William Henry Merrill Society as a Distinguished Member of Technical Staff. Chief DeCrane also represented the International Association of Firefighters in the International Code Council process and has served on the 2009, 2012, 2105 and 2018 Fire Code Developing Committee and as Chair for 2015 and 2018. Sean served on the NFPA 1 Technical Advisory Panel, NFPA Research Foundation on Tall Wood Buildings and is serving as the Chair of the Fire Test Work Group for the ICC Tall Wood Building Ad Hoc Committee.

Presenting to Council, Commissioners & Senior Staff – Tony Doan (60 minutes)

This course will focus on presenting new ordinances to commissioners and council members, and presenting organizational goals to senior staff.

This course has the following objectives:

- Students will learn how to explain complex ordinance proposals to council and commissioners.
- Attendees will learn how to prepare for questions from local government officials with stats and information in a clear and easy to understand manner.
- Class participants will learn how to get buy-in from senior staff (Chief level offices, managers, directors, city managers/administrators).

Tips, Tricks and Hacks to Fire Plan Review – Tony Doan (60 minutes)

This course will cover tips, tricks and hacks for fire plans examiners.

This course has the following objectives:

- The attendees will learn how to make their job easier before the plan review process starts
- Will focus on how electronic plan review can streamline the plan review process.
- Will focus on specific fire system plans (sprinkler, alarm and kitchen suppression) and how the plans examiners can utilize their effort in an efficient manner, focusing on the intent of the system and common industry terms that may be confusing to plans examiners.

Tony Doan has 6-years of fire sprinkler design experience and 6-years of fire code inspection experience with Yakima Fire Department. In March of 2020, he accepted as position with the city of Yakima as Deputy Building Official in the Code Administration Department. He is certified through the ICC as a Fire Code Inspector I & II, Commercial Building Inspector, and Certified Building Official. He is the current Chair for the Fire Code Technical Advisory Group for the Washington State Building Code Council.

Flexible Hoses 101 – Victaulic TBD (120 minutes)

At the end of the course, learners will be able to:

- Identify the various designs of flexible hoses and comprehend the important differences in how they perform
- Recognize and inspect properly installed flexible hoses
- Comprehend the hydraulic performance of flexible hoses
- Locate technical support information for flexible hoses
- Comprehend why flexible hoses are an important component in fire safety

Bio will be provided once speaker is determined

A New Tool For Your Sprinkler Advocacy Efforts – Suzanne Mayr (60 minutes)

Washington jurisdictions may adopt fire sprinkler requirements for single-family homes, a process that requires educating policy-makers. One of the best ways to demonstrate the devastation of fire and the effectiveness of fire sprinklers is to conduct a side-by-side burn demonstration. However, there are many barriers to conducting a burn event, including burn bans, inclement weather, policy-maker meetings held after sundown, lack of suitable location, cost of materials, and limited time. The Home Fire Sprinkler Coalition (HFSC) has developed a resource to provide an alternative to a live side-by-side burn that allows participants to experience the impact of a side-by-side burn using Virtual Reality (VR) technology. Thanks to a FEMA grant, fire sprinkler advocates in Washington and Oregon will be able to utilize this resource for educating policy-makers. The VR system and other available resources will be demonstrated.

Suzanne Mayr is the Northwest Regional Manager for the National Fire Sprinkler Association. Ms. Mayr advocates for the widespread acceptance of the fire sprinkler concept in the five northwestern states. She is active in code adoption processes, legislative issues, and promoting the fire sprinkler industry. Before joining NFSA IN 2012, Ms. Mayr worked in injury prevention for Mary Bridge Children's Hospital and the Tacoma-Pierce County Health Department. She graduated from Gonzaga University.
Suzanne Mayr

What Happens Between Being Hired & Retiring? How to Create a Legacy That Lasts

Todd Short (60 minutes)

This class will identify guiding principles that focus on becoming the best subject matter expert you can be. Additionally, the benefits of collaboration will be discussed with specific ways to increase connections with other AHJ's, contractors and stakeholders. We will discuss what success and leadership looks like in Fire Prevention and what will provide you with the greatest fulfillment at the end of your career. You will be provided with proven techniques that can be incorporated in your daily work that when repeated will provide a legacy to be passed on.

The course objectives are:

- Provide understanding on the role of being a subject matter expert and how that increases meaning, purpose and job satisfaction.
- Define success in a manner that embraces individual strengths and focuses on how to improve one's best self.
- Explore the benefits of collaboration and understand why we are truly better together and how relationships are the key to lasting results.
- Recognize that legacy is anchored in the choices we make and the ultimate measure of one's devotion is not individual achievement but rather time spent with others in the arena.

Life, Leadership & Being a Fire Marshal – My Best Lessons Learned

Todd Short (60 minutes)

The content of the presentation will provide the audience with a collection of lessons learned and techniques applied within a 30-year fire service career. Sharing my most effective guidelines and principles with real examples to provide the audience with proven tools to become more effective in their current position. Examples of how to implement simple ideas to guide and lead yourself, your team or your department will be offered.

The course objectives are:

- Define the benefits of regional and state collaboration as fire code officials with an emphasis on why you should never go it alone.
- Understand simple methods to increase your ability to take action that results in positive change for your community.
- Understand that failure can be the springboard to exponential growth and is always an ingredient in meaningful achievement.

Todd Short has over 30-years of experience in the fire service, with 25 of those in Fire Prevention. Todd is a past president of WSAFM, and is recognized as a leader in many regional, state and national efforts

to promote the benefits of fire sprinklers, as well as collaborating with stakeholders on fire alarm system installations. One of his most significant career achievements was the passing of a local ordinance requiring the installation of residential fire sprinklers in all new homes built in the city of Redmond.

Tall Mass Timber Buildings and Fire Service Concerns – Ray O’Brocki - (60 minutes)

This course introduces firefighters and fire inspectors to tall mass timber (TMT) buildings (that can be constructed up to 18-stories in some cases), the history of cross-laminated timber (CLT), how it is made and its properties. The course outlines the new code requirements in the International Building Code (IBC) and discusses the extensive fire testing that was conducted. The program addresses specific fire service concerns.

This course has the following objectives:

- Identify the make-up of the TWB Ad Hoc Committee and the process used to reach consensus on code changes.
- Recognize how the new types of construction compare with existing types of construction in the International Building Code and specify the inherent differences.
- Understand the process by which the allowable heights, areas, and number of stories permitted for the mass timber types of construction were developed and will be able to utilize the information for building design.
- Address specific fire service concerns.

Wood Construction and the Fire Investigator – Ray O’Brocki - (60 minutes)

This course is designed for Fire/Arson Investigators to better know the principles of wood construction and how a thorough knowledge of wood construction can benefit an investigation. It will review key sections of NFPA 921. The program will highlight provisions of the International Residential Code to call attention to possible code violations that could possibly cause unusual or rapid-fire spread and failure of an assembly.

The course concludes with a case study has the following objectives:

- Review the scientific method as a “systematic approach” to fire investigation and why a knowledge of building construction is required.
- Identify the five types of building construction and wood construction methods. Focus on various wood construction methods.
- Discuss scientific code requirements and how failure to meet the code can result in rapid fire spread
- Review the performance of wood and wood products, including the char rate.

Pre-Planning and Suppression of Buildings Under Construction – Ray O’Brocki - (60 minutes)

This program is designed to provide background and information to fire departments that may experience the construction of large area buildings in their community. Many fire departments have limited experience in the planning and response to these complex buildings. This requires a thorough understanding of the fire and building code provisions as well as the proper use of NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations and NFPA 1620, Standard for Pre-Incident Planning. The second half of this program discusses fire suppression concerns and considerations when a large area construction site experiences a fire.

This course has the following objectives:

- Identify hazards on construction sites. Learn the leading causes of fires in structures under construction.
- Apply model codes and standards that pertain to safety precautions during construction and pre-incident planning.
- Identify the methods of pre-incident planning and review a construction fire case study

Raymond O’Brocki, CBO, is the Manager of Fire Service Relations for the American Wood Council. Before that, he was the Chief Building Official for the city of Rockville, MD. He retired as the Assistant Fire Chief of the Baltimore City Fire Department in 2013. He was appointed fire marshal for Baltimore City in 2008. O’Brocki has served on the Maryland State Child Care Advisory Council, and Maryland State Fire Code Update Committee. He has served on the NFPA Urban Fire Safety Task Force. He is

currently a sitting member of the NFPA 1 Technical Committee, the IFC committee and the ICC Fire Code Action Committee. Ray is the administrator of the Construction Fire Safety Coalition, a diverse group of industry and government, committed to reducing the occurrence and severity of construction fire fires. O'Brocki is a graduate of the University Of Baltimore School Of Law and a licensed attorney.

Fire Dynamics! What the Fire Inspector Should Know – Tim Whitham (60 minutes)

A review of unique building construction that facilitated the firefighter near miss.

This course has the following objectives:

- Review the selection of tactics and strategies still could not completely eliminate a change in dynamic fire behavior.
- Factors involved in the decision making process of interior firefighting crews.
- Reconstruct the fire load and layout of the materials that advanced the dynamic fire behavior change.
- Integrate the lessons learned from the Department into take-a-ways for their own agency.

Tim Whitham; MS, EFO, CFO is a 30-year veteran of fire and emergency services, and is the Fire Chief of the Edwardsville Fire Department, in the Kansas City, KS metro area. Tim holds a Master's Degree in Leadership with Emphasis in Disaster Planning and Executive Fire Leadership and is a graduate of the Executive Fire Officer (EFO) program. He is credentialed as a Chief Fire Officer (CFO) through the Center for Public Safety Excellence, as well as accredited through the International Fire Service Accreditation Congress as a Fire Officer III, Instructor III, Inspector II, as well as numerous other certifications. Tim is a Professor for Columbia Southern University, College of Safety and Emergency Services; teaching students at the Associate and Bachelor Degree level. He is also an adjunct Instructor with the National Fire Academy. Tim is currently a member of the International Association of Fire Chiefs, where he serves as the Volunteer and Combination Officers Section Representative on the Fire Rescue International Program Planning Committee, and other committees.

Performance-Based Design Review – Mark Mannex (60 minutes)

This session will provide an overview of Performance-Based Design (PBD) concepts.

This course has the following objectives:

- Identify and apply applicable codes (IBC, IFC) standards, and Recommended and Generally Acceptable Good engineering Practice (RAGAGEP).
- Equivalency to prescriptive guidelines or Independently Safe?
- PBD Planning – Team approach, Qualified Design Professional, schedule and documentation.
- The PBD process – Was it safe enough?
- Code Officials Review – Do you need to hire a Peer Reviewer?

Industrial Oven Explosion Hazards, Prevention & Protection – Mark Mannex (60 minutes)

This session will review industrial oven technology, operation, and design with large carbon fiber drying ovens used as an application example for the entire presentation.

This course has the following objectives:

- Identify and apply applicable codes, standards, and Recommended and Generally Acceptable Good Engineering Practice (RAGAGEP), including performance goals and interpretation.
- Understand and determine combustible vapor equipment explosion hazards, and associated flammable liquids storage and dispensing fire hazards.
- Identify equipment explosion prevention systems and practices, including safety interlocks, industrial ventilation design and reliability, combustible vapor detection and alarm, and inspection testing and maintenance programs.
- Identify passive and active equipment and building fire and explosion mitigation strategies including siting considerations, fire detection, automatic sprinklers, special hazard fire protection systems, equipment and building explosion venting, and building damage limiting construction.

Mark Mannex, FPE, PE is President of Mannex Engineering in Sammamish WA, with over 40-years of experience in fire protection engineering. After beginning his fire protection career with NASA on the Space Shuttle program, he was a consulting engineer for 12-years before joining FM Global. While at FM,

Mark served as the Chief Engineer of the Northwest US for 17-years. Mark is a member of NFPA, ASHRAE, the Society of Fire Protection Engineers, and is the current president of the SFPE Pacific NorthWest Chapter. Mark holds separate PE designations in both the mechanical and fire protection disciplines.

Fire Sprinkler Contractor Licensing, Certification & Enforcement – John Wabel & Humberto Rodriguez
(60 minutes)

This session will provide an overview of the Washington State Fire Marshal's Office - Fire Sprinkler and Contractor Licensing and Certification Program.

The session will cover following Course Objectives:

- Review of what the laws require of the SFMO for the industry
- How we go about ensuring compliance before the industry meets the AGJ
- What the jurisdiction can do to assist with enforcement/compliance during construction.

Assistant State Fire Marshal Humberto Rodriguez and Deputy State Fire Marshal John Wabel work in the Sprinkler Contractor Licensing and Certification Program within the Education, Enforcement, and Analytics Section of the State Fire Marshal's Office.

The History of Community Risk Reduction (CRR) – Jim Crawford (60 minutes)

At the end of the course, learners will:

- Understand that Community Risk Reduction (CRR) is not just another name for Prevention.
- Be able to list all of the "E's" typically associated with CRR (Emergency Response, Engineering, Enforcement, Education, and economic Incentive.
- Discuss the proper location for CRR activities within the fire service chain of command.

Jim Crawford retired as Project Manager of the Vision 20/20 Project in December 2019. He has 45-years of experience in the fire service, having served as Fire Marshal in Portland, Oregon and Vancouver, Washington. Jim has served on the Standards Council of NFPA, is a lifetime member of the IAFC, the WSAFM, the Washington Public Fire Educators, and is a Fellow of the Institute of Fire Engineers.

What Do You Know About CO? – Neal Zipser (60 minutes)

This upbeat, engaging and informative presentation will quiz the audience on what they know about carbon monoxide (CO).

Course objectives include:

- Gaining a better understanding of what CO is, how you can detect CO, what causes CO, proper placement/maintenance/replacement of alarms, etc.
- Gaining a better understanding of the sounds alarms make and how the fire service must educate themselves, and then the community.
- Understanding why CO Poisonings are expected to increase and what can be done to lower that escalation of emergencies.

Neal Zipser is the Industry Affairs Manager with the Knox Company, and has the same role with the company's new Knox Safety Division. Neal manages the company's relationships with fire industry organizations and is the company's primary liaison with the fire service. In his current role, Neal works with fire departments and industry/state associations on rapid entry programs, public education activities ND IOTHER COMMUNIT RISK REDUCTION INITIATIVES, INCLUDING CARBON MONOXIDE (co) AWARENESS. Prior to joining Know, he held the same position with Kidde and spoke regularly on home smoke alarm and CO detection technology and how families can better protect themselves from the hazards of fire.

The Perils of Plan Review – Dave Kokot (60 minutes)

This session will present challenges, obstacles, and odd situations that any plan review may be involved in, situations that may not be clear in the code, as well as showing what may happen when the field conditions differ from the original review.

This course has the following objectives:

- Provide information on how to handle challenging situations.
- Provide an interactive discussion about the experiences, not only from the presenter, but the attendees.
- Provide some information on the Fire Code and how it is applied.

Dave Kokot has over 39-years of experience in the construction industry and is licensed as both a Mechanical and Fire Engineer in Washington and Idaho. After spending 20-years in the consulting and engineering business, he joined the Spokane Fire Department in January of 2002, as their fire Protection Engineer. His responsibilities include reviewing construction and development plans for the city of Spokane, to verify compliance with the fire Code. Mr. Kokot has been involved with code development at all levels, and has served as the Chair of the Washington state Building Code Council in 2015. He currently serves as the President of the Washington State Association of Fire Marshals.

Sled Dog Leadership – Alex Boyd (60 minutes)

Each year, Dog Sled Teams from around the world travel to Alaska to tackle: The Last Great Race on Earth.” The Iditarod Sled Dog Race is a 1,000-mile test of dog-team and musher that pays homage to the 1925 act of service that saved a community from developing a diphtheria epidemic. In a race where simply finishing is an achievement to be proud of, mushers and dog teams tackle the challenges of the trail and work together to achieve their objective. To ensure success, Iditarod mushers must be the personification of expert servant leaders. The sled dogs themselves are amazing, well-trained athletes that work beyond expectations in harsh conditions with little reward beyond the achievement of their mutual goals. The core of “Sled Dog Leadership” is within the behaviors that get the most successful teams to the end of the trail successfully. Sled Dog Leadership requires deft application of team selection, development, training, relationship building, discipline, conflict management and team care to find the trail to success. We in the fire service can use these inspirational lessons and lead within our own teams to create a healthy culture of “Sled Dogs” pulling for company and organizational success.

The presentation will be all the student to meet the objectives:

- Describe how to handle challenging situations.
- Provide an interactive discussion about leadership to develop leadership skill sets.
- Describe leadership behaviors that develop effective teams.

Alex Boyd currently serves as the Assistant Fire Chief of Fire Programs for the Anchorage Fire Department. Alex has over 26-years in the fire service. Alex started as a firefighter in early 1995, and has subsequently held every rank up to his current rank of Assistant Chief. He has also been involved in all aspects of department operations, including Special Teams and Community Risk Reduction. The Anchorage Fire Department is an all-hazard, Advanced Life Support provider and the sole emergency transport agency within the largest city in Alaska. The Anchorage Fire Department has over 400 full time positions, responding to over 37,000 incidents annually. Alex also serves on the Alaska Fire Chief’s Association Board of Directors.

Brace for Impact – Dave Sanderson (60 minutes)

When US Airways Flight 1549, or ‘The Miracle on the Hudson,’ ditched into the Hudson River on January 15, 2009, Dave Sanderson knew he was exactly where he was supposed to be.

As the last passenger off the back of the plane on that fateful day, he took responsibility for the well-being and safety of others. He risked his own life in the frigid water to help other passengers off the plane despite the hazards to himself, Dave thought only of helping others. He emerged from the wreckage that day with a mission to encourage others to do the right thing.

This profound experience changed his life and today he travels the globe sharing his inspirational and motivational leadership messages to help people make a difference in how they do business and in how they live their lives.

Objectives of this presentation:

- Describe how to handle challenging situations under pressure.
- State how to demonstrate leadership skill sets.
- List leadership behaviors that develop effective teams.

Dave Sanderson is an inspirational survivor, author, and nationally sought-out leadership speaker. Named one of Inc.com's Top 100 Leadership speakers, Dave travels the world to share his inspirational leadership lessons, raising over \$14.8M USD for the American Red Cross over the last ten years through his talks