SUMMARY: NFPA FIRE DATA VENDOR SUMMIT

December 2017
Acknowledgements
The National Fire Protection Association thanks all who took part in this fire data summit.

To learn more about the National Fire Data System Project, visit [www.nfpa.org/nfdsproject](http://www.nfpa.org/nfdsproject)

To learn more about research and data analytics at NFPA, visit [www.nfpa.org/research](http://www.nfpa.org/research)

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PART 1: WHAT IS NFPA DOING AROUND DATA (MORNING)

DR. MATT HINDS-ALDRICH, PROGRAM MANAGER – ANTI-TRUST STATEMENT
All attendees were provided a copy of the Anti-Trust Statement and Policy and then Dr. Hinds-Aldrich read the Anti-Trust Statement aloud (see Appendix A) at the start of the meeting and a verbal confirmation to abide by its contents was received from all attendees.

JIM PAULEY, PRESIDENT AND CEO, NFPA – WELCOME
Mr. Pauley welcomed attendees to the NFPA Headquarters and highlighted the growing emphasis on data within the NFPA.

DR. NATHANIEL LIN, CHIEF DATA SCIENTIST – NFPA DATA EFFORTS
Dr. Lin provided an overview of the NFPA’s ongoing fire data efforts. Specifically he highlighted the exploratory proof-of-concept research being done by the NFPA’s new Data Science team. He noted that NFPA is using a “laboratory” or “test kitchen” type of approach to see what is possible and that this exploratory work is distinct from the grant funded work.

Participant Question: There is a concern that while a current Battalion Chief may have years of experience, there has been a steady decline in firefighting. Will we be able to have a predictive response tool to help a new Battalion Chief attack a real fire?

Answer: Well first we need to combine data and experts – start collecting the right data with the right experts to imbue dumb algorithms with training and information. It will start showing intelligence coming out of data but need the collective wisdom to make that happen. But at the end of the day it is about creating decision support tools to help battalion chiefs make better decisions; not replacing or taking away decision making from anyone.

Participant Question: How do we get the line fire captain/officer to fill out all these reports? How do we make the benefit case for the line firefighters? Until we solve this problem, we can’t get the data we need.

Answer: It is a question of getting the technology to conform to firefighters rather than trying to get firefighters to conform to technology. We need to make it easier for firefighter using technology available today such as text mining versus dropdown menus. Let the firefighters speak and do what they do naturally as storytellers. The second part, make sure who is filling out reports sees the results quickly, not 2+ years later.

DR. MATT HINDS-ALDRICH – NATIONAL FIRE DATA SYSTEM PROJECT OVERVIEW
Dr. Hinds-Aldrich provided an overview of the grant funded National Fire Data System project. He noted that since there was an active RfP for which bids had been received but had not been awarded, he was limited in some of the specifics or clarifications he could provide. However,
he shared publically available information about the project, the overall goals, and the emphasis upon helping local fire departments better utilize and analyze their local data. Visit www.nfpa.org/nfdsproject for current information about the project.

**Participant Question:** How will the back-end infrastructure and client-facing tools function?

**Answer:** We have not specifically figured out how the outbound data will be configured or what any possible future client-facing tool will look like/function. We asked the vendor community how we will get information out of the NFDS system through the RFP process. This is a big challenge we have, as there’s many types on info and we’ll need to de-conflict that data and ensure it gets out to the end users.

**Participant Question:** How is the NFPA planning to address streamlining data reporting requirements and reducing data duplication across the fire service?

**Answer:** Our current thinking is to connect the “as-is” approach, and then move collectively to solve this issue moving forward. We recognize that in the context of national data, this is increasingly burdensome. Do we fix the approach or the system? NFPA has mechanisms in place to help address this streamlining of data; we are exploring these concepts with different approaches including a taxonomist who’s working on the foundation to understand languages/word connections. NFPA 901 is where some of the coding structure for NFIRS came from and could be a vehicle to streamline some of the current coding model in the future. We are also doing a lot of R&D work ourselves to determine approaches on bringing data together as Nathaniel discussed.

**PART 2: NFPA STANDARDS RELATED TO DATA (MORNING)**

Dr. Matt Hinds-Aldrich – Intro
The second portion of the discussion focused around the Standards Development Process, the codes & standards that specifically relate to data, how to offer insights and feedback on existing or proposed standards, and encouraged participants to consider applying to join a technical committee. Attendees were encouraged to speak to Chris Farrell (cfarrell@nfpa.org) who was in attendance who is the Staff Liaison for the data related standards if they have specific questions about the technical committees or how to participate.

**Chief Ed Plaugher – Chair, NFPA 950**
Chief Plaugher provided background and the history of the NFPA 950 standard and its companion guide NFPA 951. He noted that the current standards are in their first cycle, meaning that they are the first edition and will benefit greatly as more data-savvy users, interested parties, and experts provide guidance and recommendations. He noted some of his
own struggles and frustrations when he was a fire chief in the Washington D.C. area with accessing data and using data to justify his requests and services.

- **Background**
  - 2007 original letter request to NFPA to develop data standards while working through Mutual Aid challenges
  - Industry-wide approach versus the “one-off” approach to tackle this through standards; felt like it’s necessary to develop a “cookbook”, hence the 951/guide

- **Resources:**

**Dr. Dave Icove – Chair, NFPA 901**

Dr. Icove provided some history on the NFPA 901 standard and specifically recent efforts to align the standard with the current NFIRS coding model. He also noted some of his recent efforts to identify problems and possible strategies about fire data challenges.

- **Review of Audit findings – Incidents in NFIRS not coded from 2006 – 2011 (i.e. Arson fires)**
  - Whatever doesn’t get measured doesn’t get done
  - Possibility of algorithms to determine info (i.e. looking at foreclosures/vacant buildings)

- **Emerging trends overview; cross integration opportunities; opportunities for collaboration**
  - Application of FEMA on Vehicle Losses during 2006 – 2011 (took 3 hours to do this analysis) – “crowd sourcing”
  - Cluster Analysis techniques – Saginaw, MI example (use of graph theory to explain relationships in NFIRS Data)

- **Support of the NFPA’s NFDS project**
  - [www.firedata.org](http://www.firedata.org) now reserved
  - Overview - Concept of a National Fire Data System Fusion Center – CIA example
  - CATALYST – computing center example

- **Resource:**
  - NFPA 901 Standard Classifications for Incident Reporting and Fire Protection Data ([www.nfpa.org/901](http://www.nfpa.org/901))

**Jay Dornseif – Chair, NFPA 1061/Member, NFPA 1221**

Mr. Dornseif spoke about the role of industry and vendors the technical committee process and why he and his employer saw value in being part of the process as representatives of industry.

- Encourage vendors to engage and be part of the Technical Committee process
As “manufacturers”, vendors have a role in this process
- Standard development strives to balance membership so that all have an equal voice
- Committee membership classifications: manufacturer, user, installer/maintainer, labor, applied research/testing lab, enforcing authority, insurance, consumer, special expert
- Good to be a member of any technical standards that affects your software
  - Have a voice to provide input into the standard
  - Committees meet twice in the revision cycle; can call in if cannot come in face to face
  - NFPA employees not allowed to provide input on the Technical Committee Process
- Resources:
  - NFPA 1061, Professional Qualifications for Public Safety Telecommunications Personnel (www.nfpa.org/1061)
  - NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems (www.nfpa.org/1221)

LUNCH & CONVERSATION ON WAYS TO ENGAGE WITH NFPA

BILL MELLO – NFPA NATIONAL SALES DIRECTOR
- NFPA’s Annual Conference & Expo (NFPA C&E)
  - NFPA has made a significant investment in data and analytics over the past few years. For the past few years most of the keynote addresses at our annual Conference & Expo have been focused upon data. As vendors working with fire service data and helping fire departments leverage data to improve their operations, we invite and encourage you to consider being part of our Conference & Expo next year. Bill noted we’re pushing the data conversation and we encourage you to be part of it. If you want to know more about our C&E, or about exhibition options, you can go to http://www.nfpa.org/Training-and-Events/By-type/Conferences/Conference/Exhibitors
- Using NFPA Content in Vendor Software
  - NFPA is focused on how to strengthen the connection to end users and ensuring we are meeting their needs—NFPA recognizes that content is being consumed in different formats and using different types of technology.
  - Most of the vendors in attendance (which represented different parts of the fire data world) noted that their customers are all asking for NFPA content to be embedded and accessible within their software systems, so for instance, when a fire marshal issues a violation to a property owner they can include the relevant code within the violation notice through the vendor’s proprietary software.
Participant Question: Firefighters tend to conduct inspections through the use of proprietary software and it would make their jobs easier if NFPA made its codes and standards available in a variety of formats for incorporation into software. Is there a plan to work with software vendors to allow for seamless integration of the NFPA codes and standards into the software fire departments use?

Answer: Yes, we are working on better understanding how fire departments, AHJs and others use 3rd party software to make their operations more effective and efficient. We’re also working to better understand how the software vendor community wants to consume and make our content available. Bill explained that this analysis is ongoing and will take some time and we won’t likely meet all their needs and expectations overnight—but we are committed to helping meet the needs of end users: firefighters, fire marshals, fire chiefs, architects, ITM vendors, and anyone else that uses NFPA content.

Participant Question: How does NFPA handle software vendors who use NFPA codes in their proprietary software but do not pay licensing fees? We’re all trying to do the right thing but we’re not sure everyone is playing by the rules.

Answer: We have a few systems in place that monitor usage and we take it very seriously; by working closely with the vendor community, this should help in the future with identifying these outliers.

PART 3: OPEN FORUM: HOW CAN WE HELP FIRE DEPARTMENTS BETTER USE AND ANALYZE DATA (AFTERNOON)

Building upon the open, engaged, and lively discussion of the morning, the afternoon was reserved for an open and wide ranging discussion. The conversation was moderated by Dr. Matt Hinds-Aldrich to facilitate to the dialog, to address follow up questions, and to ensure all voices and opinions had equal opportunity to speak.

Question: What is the impact of standardizing data?
- For creating standards/technical specifications: make it easy, not expensive
- Business Intelligence (BI) Tool discussion for CAD and RMS; need to be in easily exportable formats

Statement: One vendor representative made the strong recommendation that NFPA should take a role of dictating instead of asking
- He noted if NFPA allows too much latitude it will not be the best path forward.
While other participants did not take as strong of a stance, others did seem to share the view that they either supported or were not opposed to efforts to develop standards for data systems. Several noted that their frustration was that without widely embraced standards every customer wants their systems completely customized to their specific set up or configuration and that isn’t how software development typically works.

**Question:** Is there a way to enforce standards?

- Some attendees suggested taking a carrot and stick approach – incentive based, underscore impacts of not complying to standards

**Statement:** Some participants suggested there needs to be an effort to help the fire service to be more educated customers.

- It was noted that many times the fire chiefs and others making purchasing decisions don’t really understand technology or what questions to ask so they may not get what they really want, or not ask key questions until it is too late and get frustrated.
- So they may feel like they were cheated, for example, when one system doesn’t connect to another system but they didn’t ask the right questions or didn’t make sure the contract included integrations because they may assume this stuff just magically happens.
- Having the knowledge that a fire truck or software complies to a minimum standard, the department will have confidence in what they are purchasing (i.e. fire truck based upon NFPA 1901) at meets industry agreed upon standards in terms of functionality, usability, safety, security, interoperability, serviceable, and the like.

**Statement:** One participant representing a stakeholder group suggested one way to address the lack of standardization was through the use of Group Purchasing Organization (GPO) agreements.

- A participant immediately raised an Anti-Trust concern and the moderator stopped the conversation before there was any discussion and moved the conversation on to the next topic.

**Question:** How does the inspector community impact this space?

- Often collecting lots of data and using many other aspects of data collection
- Inspector community is helping build a bigger picture/platform of the community the fire department previously never had access to; instead of having to go out and solicit the data, now the data is coming to the fire service
- No standard reporting format continues to be a pain point
- So many competing priorities that to some extent, the enforcement community has fallen by the wayside
- ITM (Inspection, Testing & Maintenance) type of inspection can advance fire prevention model and sustain models
• Data and analytics has proven to have tremendous value and is gaining traction

Question: What are the challenges surrounding integrating systems?
• Fire service industry is exposed to almost all the other attributes of all other industries
  o I.e., NFIRS standards, NEMSIS system, exposures, occupational health challenges
• Vendors are asked by customers to integrate
• Vendors need to think about being open to collaborating with other vendors to advance value to the customer
• When fire departments work with new vendors there needs to be a dialogue as to whether a new vendor can integrate with the department’s existing systems
  o Often comes down to cost/dollars
• Standards can help ease integration challenges
  o Would be good to provide a new data sharing format (i.e., xml or json format)

Statement: For NFDS, (a vendor stated) that they think NFPA needs to give “Firm Guidance”; otherwise it may become limit the adoption of NFDS
• Someone raised a question about AHJ (Authority Having Jurisdiction) home grown software? Noting it will be near impossible to get these AHJs off their home grown/legacy systems.
• Others noted that many departments opt not to keep up with updates, system changes or new capabilities so they hold onto legacy systems that may or may not meet their needs for a long time.

Question: How frequent is too frequent in terms of updates to system specification and requirements?
• The vendors in attendance noted that they need some lead time to plan major system changes
• They suggested they cannot feasibly support changes that occur less than 18 months.
• Preferably they noted that 3 years was more feasible for major system updates.

Question: Is the NFPA having any discussion regarding standards for wearable sensors?
• NFPA Research Foundation (Casey Grant) may have more information on this
• There is a need with to have interoperability across fire departments; important to have this close coordination especially given the current security threats

Question: Should there be minimum requirements for a fire data reporting systems?
• Would the industry be open if there was a technical specification that came through the standards process that specified the minimum elements of a reporting system?
One of the things the NFPA process can help do for the industry is to help move where we want to be collectively.

The standards don’t typically specify a limit or a top end, but they establish a starting point.

This raised the question of how do the data or system needs differ from large municipal fire departments with many stations, incidents, and even trained data analysts and small, rural departments with few runs, limited budgets, and typically fewer people interested or trained in maintaining data systems or even filling out reports.

- One attendee noted that many of their customers are small rural departments so they don’t have as complex of data/system needs so standards should be careful not to raise the bar beyond their needs, capabilities or budgets.
- Other attendees suggested that there should be standards but there should be “tiers of attributes” (i.e. 3-5 tiers) in the standards that reflect the different needs and wants.
  - They suggested this was a way that they could say for a certain price you can get the Tier 1 system will all the bells and whistles or for a lower price you can get the Tier 3 system that has less functionality but still meets certain criteria.
  - And customers could compare apples to apples.

**Discussion Takeaways**

- **Idea:** Working with Consultants as they are another source/driver in the industry
- **Comment:** Reason why IT projects fail is turnover in resources, etc.; most IT projects fail because of turnover
- **Insight:** Fire Service taking ownership of this work, and not using external resources (per surveying the group, no one is working with outside consultants, but instead the fire chiefs and/or internal officer)
- **Interoperability:**
  - Prevention data has not been vetted; no standard set (Inspection to CAD system)
  - CAD to RMS integrations have already been vetted out and are pretty common (comment – it’s expensive to do this integration)
- **Idea:** If we build one standard API and create standard global API sets, vendors would be responsible for their own translations
  - Thoughts for Global API sets:
    - First Responder EMS
    - Fire Call
    - Inspection
- **Insights across industries:** Setting some sort of standard will alleviate the issues we have today (i.e. Google Transportation standards are used by all transportation systems)
- **Incentive ideas:**
- Aggregating data / the Pie is growing (i.e. PIP, analytics done on risk score for insurance; potentially revenue opportunities for all in the future)
- use Data & Analytics to grow the value of data and cross over industries

- **Who Owns Fire Data:**
  - Vendors sharing data are sharing their IP, so they would like to see something back; is NFPA putting their name on the data going out, or are the vendors getting recognition
  - Can there be recognition for the Vendors who participate in this pioneering effort?
    - NFPA Note: We haven’t gotten there yet. We want the value to make it all the way back to the end users in the fire service; hopefully early adopters will help the NFPA craft this for the entire community
APPENDIX A: ANTI-TRUST STATEMENT

It is the policy of the NFPA to strictly comply with state and federal antitrust laws. NFPA’s antitrust policy is available at www.nfpa.org/regs.

To support compliance with these laws at all meetings, the discussions and activities shall be limited to the stated purpose of the meeting, which is to discuss the fire service data landscape.

Meeting members and other participants must remember that their respective firms are or may be competitors in the marketplace. Each member or participant therefore shall conduct themselves in full compliance with the letter and spirit of all state and federal antitrust laws.

Those participating in meetings must exercise care that there is no discussion or agreement, formal or informal, expressed or implied, as to any matters which might give rise to an allegation of attempts unlawfully restrain competition or violate state and federal antitrust laws in anyway.

Specifically, and without limitation, there should be no discussions, exchange of information, concerted actions or agreements concerning individual prices, rates, coverages, margins or any other cost data, market practices, claims settlement practices, or any other competitive aspect of an individual company’s operation.

Antitrust concerns are serious matters. All members or other participants in meetings and other activities are obliged to speak up immediately for the purpose of preventing any discussion from going beyond the bounds indicated by this statement.
NFPA Antitrust Policy

The NFPA is a not for profit organization with a mission of promoting the science and improving the methods of fire protection and prevention and electrical safety. The primary way in which the NFPA fulfills this mission is by developing and disseminating safety standards intended to minimize the possibility and effects of fire and other risks.

The standards development process depends on volunteer participation by a diverse range of individuals on behalf of numerous stakeholders including participants representing business and industry. As a result, antitrust concerns can arise in connection with standards development activity.

It is the policy of the NFPA to strictly comply with state and federal antitrust laws, and the NFPA expects all participants in NFPA standards development activities to conduct themselves in strict accordance with these laws. NFPA minimizes the risk of antitrust problems by providing a forum for standards activities that is based on the principles of openness, honesty, fairness and balance and that is conducted in accordance with published rules and regulations. Each participant in the standards development process has the obligation to adhere to all rules, regulations, and policies of the NFPA including, without limitation, the Regulations Governing the Development of NFPA Standards. In addition, participants can draw valuable guidance on how to conduct themselves by consulting NFPA’s Guide for Conduct of Participants in the NFPA Standards Development Process.

While compliance with NFPA’s standards developments rules and regulations is essential, it alone is not sufficient to avoid conduct that may violate the antitrust laws. Participants must also avoid any conduct, conversations or agreements that would constitute an unreasonable restraint of trade or be otherwise illegal under the antitrust laws. Although it’s not possible to identify every situation that could be found to be anticompetitive or a violation of antitrust laws, the following topics should NOT be addressed or discussed, even informally, by or among competitors or other individuals in the course of their NFPA involvement:

- Profits, profit margins or cost data;
- Prices, rates, and fees;
- Selection, termination, division or allocation of customers, sales territories, or markets; or
- Refusal to deal with a specific business entity.

Participants in NFPA activities may receive antitrust training or advice from their employers or other organizations or entities they represent. This NFPA antitrust policy, as well as other information or presentations that NFPA may provide concerning the antitrust laws and standards development, are not intended to take the place of such training or advice; nor are they intended to constitute legal advice to participants. In addition to consulting with their legal counsel, however, participants can assist NFPA and their fellow participants by refusing to engage in inappropriate discussions and by speaking up if they have questions or concerns about any matter or discussion that occurs in the course of NFPA standards development activities. Participants should bring matters of concern to the attention of NFPA staff. Any participant may also raise questions regarding this policy to the NFPA’s General Counsel.
APPENDIX B: MEETING AGENDA

FIRE DATA VENDOR SUMMIT
June 21, 2017 • 9:00a – 4:30p
NFPA Headquarters • Quincy, MA

Meeting Purpose
Bring fire service data system vendors together to discuss the fire service data landscape.

Meeting Objectives
- To increase awareness on the activities of the National Fire Data System project and other data initiatives.
- To increase awareness and encourage involvement with the NFPA codes and standards process, including the NFPA 950, 951 and 901 technical committees.
- To provide a forum for open dialogue on emerging trends, persistent issues, and opportunities for collaboration.

Welcome and Introductions
8:30am – 9:00am Attendee Check-In Continental Breakfast Available
9:00am – 9:10am Welcome Jim Pauley
9:10am – 9:45am Agenda, Introductions, and Review of Antitrust Statement and Policy (Attachments A & B) Matt Hinds-Aldrich
9:45am – 10:00am Break Big Data Program Manager

Briefings: NFPA Data Efforts (Matt Hinds-Aldrich)
10:00am – 10:15am NFPA Data Initiatives Nathaniel Lin
10:15am – 10:30am National Fire Data System Project Matt Hinds-Aldrich

10:30am – 10:40am Open Discussion
10:40am – 10:50am Break

Funding for this meeting has been provided by NFPA and DHS/FEMA/Assistance to Firefighters Grant/Fire Prevention and Safety grant award.
# NFPA Data Codes and Standards (Chris Farrell)

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<tr>
<th>Time</th>
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<tr>
<td>10:50am – 11:05am</td>
<td>NFPA 950/951 Technical Committee Update</td>
<td>Ed Plougher</td>
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<td>11:05am – 11:20am</td>
<td>901 Technical Committee Update</td>
<td>David Iovev</td>
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<td>11:20am – 11:30am</td>
<td>Vendors Being Part of Technical Committees</td>
<td>Jay Domseif, III</td>
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<td>11:30am – 11:45am</td>
<td>Open Discussion</td>
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<td>11:45am – 12:45pm</td>
<td>Lunch</td>
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<td>12:45pm – 1:00pm</td>
<td>NFPA Opportunities for Engagement</td>
<td>Bill Mello National Sales Director, NFPA</td>
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## Open Discussion

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<td>Discussion: Emerging Trends</td>
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<td>1:50pm – 2:00pm</td>
<td>Break</td>
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<td>2:00pm – 2:50pm</td>
<td>Discussion: Persistent Issues</td>
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<td>2:50pm – 3:00pm</td>
<td>Break</td>
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<td>3:00pm – 4:00pm</td>
<td>Discussion: Opportunities for Collaboration</td>
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<td>4:00pm – 4:30pm</td>
<td>Wrap-Up, Next Steps</td>
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<td>4:30pm</td>
<td>Adjourn</td>
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## Attachments:
- Antitrust Compliance Statement (Attachment A)
- NFPA’s Antitrust Policy (Attachment B)

## Resources
- National Fire Data System Project [Link](#)
- NFPA Data Analytics Sandbox [Link](#)
- NFPA 901: Standard Classifications for Incident Reporting and Fire Protection Data [Link](#)
- NFPA 950: Standard for Data Development and Exchange for the Fire Service [Link](#)
- NFPA 951: Guide to Building and Utilizing Digital Information [Link](#)
- NFPA 1061: Professional Qualifications for Public Safety Telecommunications Personnel [Link](#)

*Funding for this meeting has been provided by NFPA and DHS/FEMA/Assistance to Firefighters Grant/Fire Prevention and Safety grant award.*
APPENDIX C: SUMMIT ATTENDEES

Preet Bassi, Chief Executive Officer, Center for Public Safety Excellence
Shayne Boyd, Vice President, Conduent (Firehouse Software)
Brian Coolidge, Senior Project Manager, AppGeo
Jill Cotton, Communications Director, Inspection Reports Online (IROL)
Julie Desmarais, Deccan International
Jay Dornseif, Program Administrator – Fire, Priority Dispatch (NFPA 1061 & 1221 TC)
Brian Dunn, Senior Programmer, MobileEyes Inspection Software
John Evarts, Advanced Analytics/Senior Consulting Manager, Unisys Corporation
Rebecca Harned, National/Federal Director, National Alliance for Public Safety GIS Foundation
Mark Horwich, Fire Station Software, LLC
Sarah Horwich, Fire Station Software, LLC
Dr. David Icove, UL Professor of Practice, University of Tennessee Knoxville (NFPA 901 & 921 TC)
Tim Irelan, Vice President Fire Software Systems, ESO Solutions
Jeff Jacobson, Region Sales Manager, ESO Solutions
Bill Johnson, Principal Software Engineer/Architect, EmergencyReporting
Jason Kronz, President and CTO, BuildingReports.com
Ed Linehan, Director of Enterprise Sales, EmergencyReporting
Mike McGreevey, Product Owner – Infrastructure, EmergencyReporting
David Nokes, Managing Director, Emergency Reporting
Colleen Pennington, IROL Team Sales Representative, (Inspection Reports Online) IROL
Andy Pittman, VP – Solution Services, ImageTrend
Edward Plaugher, Chair, NFPA 950 Technical Committee
Thomas Pond, Northeast Territory Regional Account Manager, Firehouse Software
Jeff Snow, Subject Matter Expert, International Association of Fire Chiefs
Waibhav "Amol" Tembe, Advanced Analytics Principal, Unisys Corporation
Mike Wiley, Director of Strategic Engagements, AppGeo
Dwight Wills, Vice President Sales & Marketing, BuildingReports.com

NFPA Staff
Dr. Matt Hinds-Aldrich, Big Data Program Manager
Melissa Knight, NFPA Consultant
Dr. Nathaniel Lin, Chief Data Scientist
Adele Nicolosi, Systems Development Project Manager
Keith Quackenbush, Vice President of Information Technology
Chris Farrell, Staff Liaison, Public Fire Protection Division
Chief Ken Willette, Segment Director – First Responders
Nicole Comeau, Segment Director – Enforcers

*Some staff attended for part or all of the day based upon their availability