



TAMPA2: Carrying the Safety Message into the Future



**Report from the 2014
Firefighter Life Safety Summit
March 10–12, 2014**

National Fallen Firefighters Foundation

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Tampa 2



10th Anniversary of the Firefighter Life Safety Initiatives: Building for the Future

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Introduction

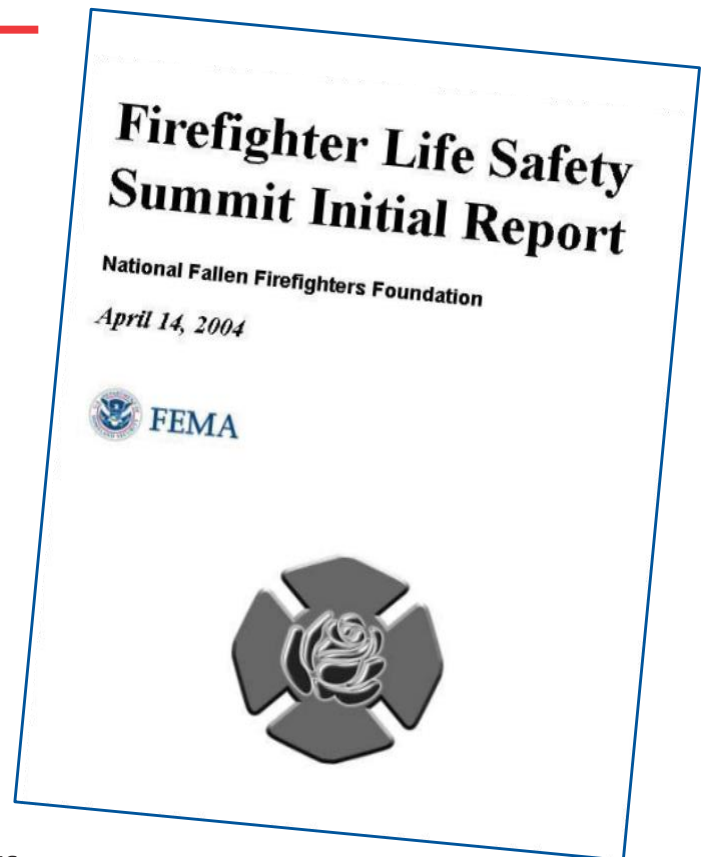
In March 2004, a select group of fire service leaders came together for a landmark event: the first Firefighter Life Safety Summit. Held in Tampa, Fla., and hosted by the National Fallen Firefighters Foundation (NFFF), the summit brought together more than 200 individuals representing a broad spectrum of the fire service and related organizations. The participants included the leaders of national fire service organizations, influential members of the fire service, representatives of numerous governmental agencies, researchers, fire service media and industry, and related fields. All came to Tampa with one goal in mind: Drastically reduce firefighter line-of-duty deaths (LODDs).

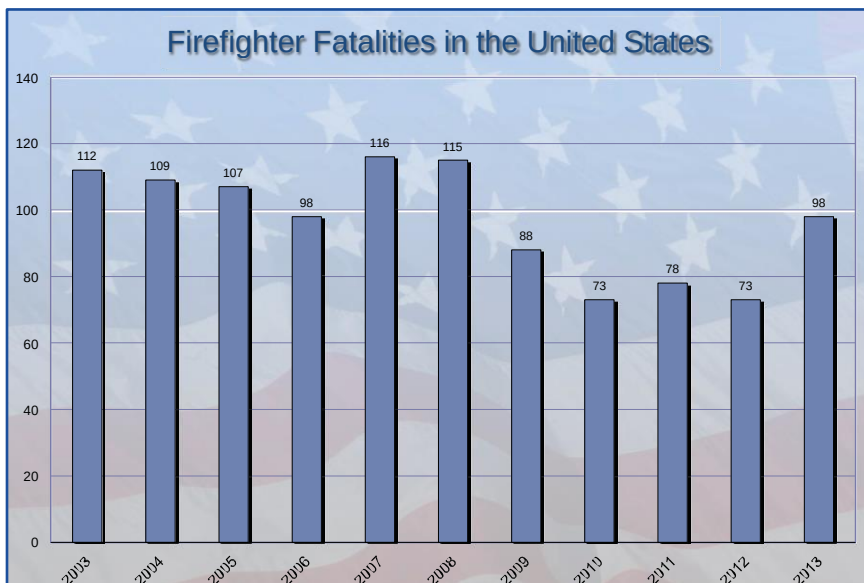
More specifically, the first summit sought to produce a common vision of changes that would have to occur to produce a significant reduction in LODDs and to seek a broad consensus and commitment to work toward that goal. The U.S. Fire Administration had established ambitious targets of reducing LODDs by 25 percent within five years and 50 percent within 10 years. By the conclusion of the 2014 meeting, an exciting new slate of recommendations and goals were put forward which served to increase the scope and impact of the 16 Firefighter Life Safety Initiatives.

The participants in Tampa produced a wealth of material covering a broad spectrum of subjects, but equally important they had a shared sense of mission to implement the strategies that emerged from the process. Following the event, the NFFF released a set of 16 Firefighter Life Safety Initiatives (FLSIs) distilled from the summit discussion and began the Everyone Goes Home campaign to educate the fire service on one unified agenda for reducing LODDs. The project has produced a wealth of information and educational resources for the fire service.

As the 10-year anniversary of the first Tampa summit dawned, it became clear that it was time to assemble again, to assess how far the fire service had come in implementing the initiatives and achieving the LODD reduction goals. It was also the appropriate time to ask whether the 16 FLSIs are still on target and to develop priorities and strategies for the next decade. TAMPA2, as it was dubbed, sought to bring a similar group of fire service leaders together, but with an added focus on the company officer/crew boss and the next generation of leadership.

In fact, TAMPA2 was not the second firefighter life safety summit, but actually the third. In 2007, a smaller summit was held in Novato, Calif., bringing together many of these same fire service leaders, along with several new faces. The second summit was directed toward further discussion and refinement of the FLSIs. The participants were asked to focus on each of the specific initiatives and propose key strategies to achieve the desired results. In addition, the NFFF held a series of mini-summits focusing on particular topics (e.g., wildland firefighting, structural firefighting, fire prevention) between 2005 and 2007. The foundation also





Source: NFFF

issues throughout the fire service was much more evident on many different fronts.

Tragically, however, TAMPA2 followed a year where the declining LODD trend had been interrupted by two exceptional incidents in (Prescott, AZ and West, TX) that resulted in 29 firefighter fatalities. It was a discouraging year for many individuals who had been working hard over the previous decade to make a difference.

Such was the backdrop for TAMPA2: an understanding and appreciation that over the past 10 years, the conversation around safety in the fire service had definitely produced results, and yet the realization that there was a long way to go in achieving the objectives established at the original summit.

Program Format

To tackle this enormous task, the NFFF convened the TAMPA2 summit on March 10–12, 2014, at the same location as and on the 10-year anniversary of the first summit. Key to the event was the support and involvement from the fire service industry. In-kind and general sponsors of the event included:

- California Casualty
- Columbia Southern University
- Common Voices
- IAFC's Safety, Health and Survival Section
- IAFC's Volunteer and Combination Officers Section
- International Society of Fire Service Instructors
- International Fire Service Training Association-Oklahoma State University
- Kidde
- Lion Apparel
- Motorola Solutions
- National Fire Protection Association
- National Fire Sprinkler Association
- Neptune Aviation
- PBI
- Phoenix Society
- Provident
- RescueAir
- Safety Components
- Scott Safety
- South Carolina State Firefighters' Association
- State Farm
- Stedfast
- UL
- VFIS



published in-depth white papers on each of the initiatives that were used as briefing material for the Novato summit.

Coming into TAMPA2, there was no shortage of thought or effort that had gone into crafting the FLSIs and thinking about how they could be implemented. And there was some indication that these efforts were working: The number of LODDs was declining, although not as quickly as the aggressive goal of a 50 percent reduction would have required. From 2004 to 2012 there was a reduction of 32 percent in the annual rate of firefighter deaths, from 119 to 81. Moreover, the focus on health and safety

In addition, Honeywell and W.L. Gore lent sponsorship support to the Vulnerability Assessment Program (VAP), which was introduced at TAMPA2. VAP is an NFFF-coordinated tool to help fire departments evaluate their risk profile.

The planning team reached out to various groups to identify key figures from the fire service and related organizations. This time, however, there was a special effort to involve the next-generation fire service leadership, which was reflected in the attendance of more company officers and line firefighters. This outreach was considered as essential, not only to bring a different perspective to the discussion, but to develop continuity in the leadership for the next 10 years. The foundation established a scholarship program to ensure that these younger members could attend.

The foundation formulated an extensive pre-summit survey assessing participants' awareness and implementation of the FLSIs and the many programs that had been produced in support of their implementation. In addition, the NFFF provided all participants with an extensive package of materials, including the reports generated following the 2004 and 2007 summits as well as the FLSI white papers. This helped prepare participants and ensure that they would see the TAMPA2 summit within the proper historical context; the preparation also gave them an opportunity to reflect on previous recommendations and strategies and consider how much progress has been made since the original summit.

The TAMPA2 format was similar to previous summits: a series of plenary sessions to share information and inspirational messages, followed by significant time spent in smaller discussion groups. At TAMPA2, those groups were structured to focus on the following areas:

- | | |
|--|--|
| 1. Behavioral Health | 6. Physical Health |
| 2. Company Officer/Crew Boss Development | 7. Reducing Fire Occurrences |
| 3. Firefighter Survivability | 8. Firefighting Operations and Thermal Assault |
| 4. Leadership | 9. Training and Education |
| 5. Wildland Firefighting | 10. Transportation Trauma |

As they broke into their smaller discussion groups, TAMPA2 participants were given two main assignments:

1. Assess each of the 16 FLSIs from the perspective of what's working, and what's not working; whether the initiative is still relevant in 2014; what successes have been achieved toward implementing the initiative; and what new strategies should be undertaken to further progress toward achieving the initiative.
2. Focusing more narrowly on the topics assigned to the group, develop a series of problem statements that identify contributing factors for LODDs and injuries. Then, recommend key strategies to address those problems and consider which groups/individuals should take the lead in implementing those strategies.

The general assembly reconvened on the last day of the summit to allow each group to share their problem statements and recommendations. This report summarizes not only those presentations, but also many of the discussions that occurred within the small groups. Following the summit, the NFFF conducted a post-event survey of all participants. Responses to that survey are incorporated throughout this report.



Scholarship Program

Early on in the planning for TAMPA2, the NFFF identified the need to invite not just well-known fire chiefs and senior-level officers, but to make a special effort to include the next generation of fire service leaders. Although high-level officer participation is critical to producing cultural change, participation and buy-in at all levels is essential to ensure that change initiatives don't lose momentum. In addition, the efforts have to be relevant and logical to the individuals who are most directly impacted by the changes.

Company officers and firefighters, however, often lack the resources to travel to fire service meetings. That's why the NFFF settled on the idea of a scholarship program that would cover the travel costs for these up-and-comers to attend. The scholarship program was funded by generous contributions from fire service and private sector organizations, including:

- IAFC's Safety, Health and Survival Section
- Lion Apparel
- Scott Safety
- UL

Seeking applicants, the planning team put the word out through major fire service media and various organizations. A selection committee organized by the International Society of Fire Service Instructors (ISFSI) used a 100-point scoring system to select 46 scholarship recipients from more than 145 applications.

Many of these individuals expressed humility and gratitude that they had been chosen to be included along with well-known fire service leaders. They also provided valuable feedback about the impact of the FLSIs and what's needed to continue building a culture of safety. As full participants throughout the conference, their opinions are reflected throughout this entire report.

A special debriefing session convened by Chief Timothy E. Sendelbach at the end of the event provided some focused feedback from this important group. Some of the trends that emerged from that discussion include:

- **The “all-inclusive” FLSIs are difficult to apply at the company level.** The scholarship group felt that as currently stated, most of the FLSIs are either too broad or at too high a level for company officers to implement. They recommended adding components within the initiatives at the strategic, tactical and task levels. They also pointed out the need for more ideas for customizing the initiatives based on local-level resources, staffing and other factors. As noted later in this report, this is a sentiment that was shared broadly across the TAMPA2 participants, regardless of age or fire service experience.
- **Modernize the message.** Scholarship participants suggested revising the FLSIs to “support the Twitter Age,” using shorter messages and multimedia formats to spread the message. They also recommended the development of a smartphone or tablet app, a wallet card and a taskbook approach for training. At the same time, participants cautioned that it's important not to oversimplify the messages being conveyed in the FLSIs.
- **Fitness remains one of the biggest barriers to success.** The scholarship group stressed that physical ability testing should be established as a baseline standard throughout the fire service and that a special focus on the fitness level of volunteer firefighters is needed.



- **Get the company officer/crew boss involved.** Scholarship participants focused heavily on the role of the company officer/crew boss in creating cultural change. Participants recommended developing a formal and structured company officer/crew boss development program at the national level. They also recommended the dissemination of best practices that company officers can customize and adapt to the needs of their department.
- **Engage individuals.** The younger generation is often characterized as having a “me” focus, and the scholarship participants indicated that it is important for cultural change efforts to promote individuality and personal accountability, empowering firefighters at the individual level to implement and apply the FLSIs. The “officers of now” need to provide an opportunity for all members to be equal participants.

As the FLSI program moves into its second decade, tapping into the energy of this younger group will be essential in understanding how firefighters of all ages view cultural change, and what specific strategies will resonate with those just entering the ranks.

Progress Check: How Have Visions Changed?

One lens through which we should view the results of TAMPA2 is how the 2014 recommendations compare with those developed at the last major summit, held in Novato in 2007. At that event, six groups dissected the FLSIs and came up with more than 90 recommendations directly related to their implementation.

It’s beyond the scope of this report to examine each of those 90 recommendations and determine the fire service’s success in achieving them, but we can benefit from a brief analysis. The following summaries represent the 2014 reflections on some of the key statements that were included in that list.

For true culture change to happen, everyone in the fire service, from firefighter to fire chief, must take accountability to promote safe actions and stop unsafe actions.

Although this is a difficult dimension to measure, TAMPA2 participants generally felt that there has been real progress in relation to firefighters and fire service leaders accepting the call for accountability. White papers have been produced on each of the FLSIs, and the Everyone Goes Home program has a national presence. The push toward a “culture of safety” has produced backlash among certain circles, but this debate has also prompted healthy discussion on how we can preserve the best of the fire service while also initiating changes that save lives. And such controversies bring the conversation to the kitchen table, exposing more firefighters to the discussion.

Fire prevention can no longer be an afterthought. We must incorporate prevention in initial and ongoing firefighter training and develop more scientifically based, effective fire and life-safety education programs that resonate with the public. Fire service leaders must promote and support model building and fire codes and residential sprinklers, including incentives for homebuilders.

This recommendation was repeated nearly word for word at TAMPA2. There have been some local successes with the building code and residential fire sprinklers. Community risk reduction concepts are starting to garner more success. Vision 20/20 has also made important advancements in quantifying the value of prevention and education programs to build support and funding for them. But fire prevention remains an afterthought in too many departments, in terms of funding and in the interest level of engagement by firefighters.

Unsafe acts must be punished, or at least go unrewarded, while safe acts should be rewarded. These efforts should include challenging the traditional definition of what it means to be a “heroic” firefighter.

The fire service still has a long way to go with this recommendation. Of course, firefighters who risk their lives to save others should be commended, but in many cases these actions tend to reward behavior that is



outside the boundaries of acceptable risk versus potential benefit. In addition, more recognition should be given to firefighters who fight, often unrecognized, for better building codes, or who work ceaselessly at the company level to check smoke alarms and generally help residents reduce their risk of death or injury.

Our efforts will be more successful if they are shared and standardized across the fire service in terms of staffing levels, incident command procedures, risk management policies, standard operating procedures, training and certification requirements, to name a few.

Lack of knowledge about existing standards was identified as a priority by TAMPA2 participants, many of whom clearly see national standards as a key element to reducing firefighter LODDs and injuries. The adoption of the Incident Command System and the National Incident Management System, as well as related programs such as Blue Card Command, are examples of success in this area. But we still face significant hurdles in developing national standards, let alone in building acceptance for them and implementing them across the diverse fire service.

The fire service should have a zero-tolerance seatbelt policy.

The call to “Buckle up!” has become widespread, but seatbelt use is inconsistent, and there are many departments that do not enforce seatbelt policies. Further, responding unbelted in personally owned vehicles (POVs) continues to be a source of injuries and deaths. The International First Responder Seatbelt Pledge (www.everyonegoeshome.com/seatbelts), and Dr. Burton Clark’s work in developing and building support for it, has been a huge step in the right direction for establishing a zero-tolerance attitude toward seatbelts. Critical work has also been done in this area by Mike Wilbur and FDNY in developing more firefighter-friendly seatbelts. The NFFF has also been working with NIOSH on an anthropometric study directed toward ensuring that apparatus seating spaces are engineered to accommodate firefighters wearing protective clothing.

The fire service should have a zero-tolerance policy for tobacco use.

On the positive side, the conversation around cancer has grown steadily, fueled at first by 9/11 and, in more recent years, by research that has documented the toxic environment to which firefighters are routinely exposed, and the direct impact of these exposures on firefighter cancer rates. More must be done, however, to reveal this connection and to educate firefighters on how they can limit exposure (e.g., cleaning PPE, showering after fires, monitoring the air at incident scenes). If the fire service is going to continue to fight for cancer presumption legislation, maintaining a zero-tolerance policy for any and all forms of tobacco is critical.

We must implement mandatory medical examinations and physical fitness programs for all members, in accordance with NFPA standards.

NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments has gained much more acceptance in the years since the Novato summit, but clearly this is still an area where much progress needs to be made. There is increasing focus on the need for annual (“incumbent”) fitness testing as well as sophisticated medical screenings to identify cardiovascular and cancer risks as early as possible. Fortunately, this issue has a lot of momentum and although universal implementation appears daunting, there is little doubt that the culture within the fire service is slowly shifting toward demanding that firefighters be fit for duty.



Firefighter mental and emotional wellbeing is an often-overlooked topic. The fire service must address it at the national organizational level all the way down through the local department level with targeted offerings that help firefighters suffering from depression, suicidal thoughts, post-traumatic stress disorder, addiction and other behavioral health issues.

This is an area where the NFFF's efforts have had huge impact. Initiative #13 has been an area of special focus for the foundation in the past five years, resulting in a host of programs and resources for firefighters and fire departments to draw on. Most recently, the move away from Critical Incident Stress Management to a new focus on the After-Action Review and Stress First Aid has given company officers concrete tools to proactively use at every call to identify and mitigate undue stress at the company level. The foundation has also produced a series of articles on firefighter behavioral health and produced two reports on firefighter depression and suicide which can be found on the EGH website, www.everyonegoeshome.com. More can be done, but critical progress has been made.

Every fire department must identify, investigate, report on and learn from near-misses and LODDs.

The NIOSH Firefighter Fatality Investigation program and the Firefighter Near-Miss Reporting System are two highly visible contributors to this effort. NIOSH reports routinely make headlines in fire service media and are distributed widely; although not every death is investigated, NIOSH now meets little resistance from fire departments in investigating LODDs. The Near-Miss program made great strides before losing funding, but it has now been brought back in a reinvigorated form that has the potential to help firefighters and officers learn from near-misses in a more interactive, in-depth format. In addition, many more fire departments are committed to conducting in-depth investigations and openly sharing the results.

Grant funding is key to achieving many of the initiatives, but it must be pursued responsibly and in line with best practices and a commitment to use the equipment or staffing to enhance safety. We must also use data to justify the need for safety programs, higher levels of staffing and new equipment.

The success of the FIRE Act grant program is obvious, even taking into account reductions in funding in recent years. Yet many departments still view the grant funding process as mysterious and arbitrary. More research and sharing of information is needed to help fire departments big and small, career and volunteer, understand how to build safety into grants and use data to document why grant funding is needed. And efforts to educate legislators to support the reauthorization of grant programs will be critical in ensuring that departments continue to receive greatly needed funding to implement the changes called for in the FLSIs.

The Next 10 Years

As you will see in the following pages, many of the recommendations passionately put forth at the Novato summit, and the reactions to the FLSIs, were echoed at TAMPA2. But rather than seeing the repetition as an indication of a lack of progress, it may be helpful to understand it as a continued discussion of ideas that are central to firefighter survivability, yet are often difficult to quantify or measure. These are not “check the box” ideas, but comprehensive concepts that will take many years to achieve. The “mini” summits of the past 10 years have laid valuable groundwork to build off of, and have kept the issues at the forefront.

Now, the time has come to drill down into these sometimes nebulous concepts, develop concrete actions that can address the issues, and prioritize them based on achievability, cost-effectiveness and available resources. When, at the next summit, we look back at the list of recommendations from TAMPA2, there should be many that we can say emphatically, “We accomplished that—together.”



The Firefighter Life Safety Initiatives: 10 Years Later

The 16 Firefighter Life Safety Initiatives (FLSIs) were introduced to the fire service a decade ago. At the time, they were designed to identify the essential challenges that needed to be addressed to meet the U.S. Fire Administration's objectives of reducing firefighter line-of-duty deaths (LODDs) by 25 percent in five years and 50 percent in 10 years.

Those goals were aggressive, and so were the FLSIs. There is little doubt, however, that the 16 initiatives provided a common agenda for the leadership of the fire service to push toward significant change. The overall effort has been described as building a culture of safety within the fire service. There is also little doubt that the fire service itself has changed significantly in 10 years, and that different strategies may be needed to sustain such change going forward.

Accordingly, a portion of the small group work at TAMPA2 was dedicated to reviewing the FLSIs. Rather than restricting the groups to the FLSIs that most related to their topical area, each group was invited to weigh in on any and all of the initiatives. Specifically, for each initiative, they were asked to consider six questions:

1. After 10 years, is the Initiative still on the mark?
2. Has progress been made in the last 10 years to address the Initiative? Anything solved?
3. What has changed in the past 10 years? What changes can we foresee in the next 10 years?
4. Any particular examples of success in the last 10 years?
5. What works, what doesn't work?
6. Suggestions for going forward?

In the following pages, we take a look at each FLSI and reproduce what the various groups had to say about the fire service's progress toward achieving it. First, however, it's important to look at some overall statements that came out during the discussion.



Identify Action Items for Each FLSI

Perhaps the most compelling critique of the FLSIs in general was the need to provide not just high-level goal statements, but more specific actions for how to achieve each goal. It was frequently emphasized that the most significant changes in firefighter attitudes and behaviors are often influenced by the discussions that occur around the kitchen table in the firehouse. “The initiatives are great, but they go on the wall and then are forgotten—we need tactics,” one participant said. “Initiatives are goals/mission statements, not tools for their toolbox.”

That sentiment was repeated over and over. “They’re a great administrative tool but they don’t mean a lot to the officers; they’re not practical for those in the firehouse,” said another participant. “If we’re going to change the kitchen table, we need to gear initiatives toward something they can do.” Or to put it simply: We do a good job of telling firefighters that “everyone goes home,” but we don’t do a good job telling them what to do to ensure that happens.

A related suggestion was to extract the five or six key points from the 16 FLSIs that can be used by the company officer/crew boss at the kitchen table. As one participant noted, there is a successful precedent in the law enforcement community: the Below 100 campaign, which seeks to lower officer LODDs below 100 annually—a level that has not been seen for more than 65 years. By using 5 simple statements (Wear Your Belt; Wear Your Vest; Watch Your Speed; WIN—What’s Important Now? And Remember: Complacency Kills!), the campaign gives law enforcement officers specific things to do, rather than involving them in a prolonged discussion about culture and safety. Although many factors affect law enforcement LODDs, in the years since the campaign was introduced, LODDs have fallen significantly: 2013 was the lowest level of loss since 1944, and 2012 was the lowest since 1959. Could a similar strategy in the fire service have a significant impact on reducing LODDs from heart attacks, apparatus accidents, etc.?

Target the Messaging

Closely related to the need for action items is the suggestion to break down the FLSIs so that there are messages appropriate for different audiences. Some of the initiatives are clearly set at a high level and do not apply directly to individual firefighters or fire departments. The participants encouraged the development of action items that could be applied by line firefighters, company officers and chief officers to promote positive change at their levels.

“Perhaps the concepts are too difficult to understand for the average firefighter or company officer/crew boss,” one group noted. “It was recommended that these be simplified for local-level firefighters and company officer-level understanding at the kitchen table. We need to organize and package them into specific FLSIs for firefighters, company officers and chief officers. They could package them as pocket guides that can be marketed at the local level.”

Another group suggested a similar breakdown, but along the lines of the three fire service levels of operation: strategic, tactical and task: “For example, the average Joe firefighter doesn’t have any authority over vehicle response policy development. He should focus on what he can control. The initiatives could potentially be re-ordered—1-4 may be specifically for firefighters, 5-10 for company officers, etc. Obviously there is a lot of overlap, but it’s a concept to be considered.”

Such an approach also recognizes the important role that the company officer/crew boss plays in changing fire service culture. “Real change needs to occur at the fire station/company officer/crew boss level,” one group said. “Leaders and recruits are buying into this, but we need change at the company officer/crew boss level.”



Perhaps change at the company officer/crew boss level is slow because officers struggle to talk with their crews about the high-level organizational concepts reflected in the initiatives. That's where targeted, action-oriented messages might have the biggest impact.

Integrate the FLSIs into NFPA standards

Another overarching suggestion to come out of TAMPA2 was the need to weave the initiatives into NFPA standards. Integrating the FLSIs into NFPA 1001 and NFPA 1021 would ensure that the information is delivered to all firefighters training/certifying at these levels, one group noted. "Departments feel they only need to cover what's in national standards," another group said. "The initiatives should have to appear in the national standards as job performance requirements (JPRs). Standards drive every textbook and training program. We can recommend everything we want, but if you get it in the NFPA standard, it will get done."

Increase Enforcement, Reinforce Success and Positive Change

Finally, many participants focused on the need to increase enforcement—to create consequences when safety initiatives aren't followed. "The fire service makes excuses, covers up," said one participant. "There are no consequences for taking unsafe actions. There are very few fatalities where the person did not know what they SHOULD have done. We shouldn't have to pledge to wear a seatbelt—it should be automatic and there should be consequences for not doing so." If the fire service can find ways to "put teeth into" the initiatives, it could go a long way toward achieving the change that the initiatives envision.

But it should be a carrot-and-a-stick approach; rewards are an equally important part. "We focus on negative culture but we do not recognize positive actions or safe actions," said one participant. "It's hard to make some things sexy—sometimes it can't be done—but we need to reinforce positive behaviors." Or as another participant put it, we need to "fall out of love with the pageantry associated with an LODD, and celebrate what works" to prevent them.

Looking Ahead

Rather than focusing on eliminating specific FLSIs or adding additional ones, suggestions from participants at TAMPA2 were mainly related to the need to provide more actionable items for the fire service to work toward the high-level goals.

The Firefighter Life Safety Initiatives have helped the fire service achieve significant progress over the past decade, but it's time for the next step. As one participant noted, 10 years from now at TAMPA3, "There should be fewer than 16 initiatives, because we should have accomplished some of them."

Fortunately, there's a model in the fire service that can provide the vision for the next decade, one that all firefighters are already familiar with. "We've reached the 'Awareness' level for the 16 Firefighter Life Safety Initiatives," one participant noted. "In these next 10 years, we need to reach the 'Operations' level and maybe even the 'Technician' level."



16 Firefighter Life Safety Initiatives

INITIATIVE 1—Define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility.

Initiative #1 is the broadest of any of the 16 FLSIs, and an area where TAMPA2 participants see great progress. Without doubt there is much more emphasis on and acceptance of safety throughout the fire service than there was a decade ago. The desired change is occurring, but there is also a great distance still left to travel.

“The initiative is hard to define, not quantifiable or measurable,” one group noted. Another stated, “We feel we are off to a slow start with this process. More direction on cultural change needs to be defined.” But others focused on “a new openness” and “a significant shift in mindset toward safety.” Examples of this change included seatbelt use and integration of data to help focus efforts on exactly where change is needed.

Several groups focused on the relationship between cultural change and leadership, especially the leadership of a new generation. “Once our leadership changed, our culture changed,” one group noted. “With new leadership, either people got on board, or left.” Yet another group noted the difficulties in such an aggressive approach: “In Smalltown USA, change has to be done slowly or personnel will leave.”

Several groups noted the challenge of starting the FLSIs with an initiative that focuses on cultural change rather than defining specific behaviors that will lead to that change. “Culture is the consistent acceptance of behaviors,” one group wrote; another noted that “behavior changes attitudes; attitudes don’t change behavior.” Participants also stressed the importance of keeping perspective, reminding firefighters where the fire service has come from in its journey to create a culture of safety, and to focus on supporting behavioral change, not enforcement.

So what could help firefighters make the transition from this broadly worded initiative to behavior that realizes its vision? The groups offered the following suggestions for going forward:

- Use case studies and stories to personalize the need for safety and change.
- Get the company officer/crew boss involved. Progress has been made in training recruits to be safer, but we haven’t been as successful at educating and changing the culture at the company officer/crew boss level.
- Consider rewriting FLSI #1 to be more tactical. As written, this and many of the FLSIs are overwhelming.
- Make data accessible to those in the field.
- Remember that cultural change takes time.



INITIATIVE 2—Enhance the personal and organizational accountability for health and safety throughout the fire service.

There is almost total agreement that personal and organizational accountability are needed to reduce firefighter injuries and deaths, but envisioning how to create accountability is a bigger challenge.

The groups at TAMPA2 agreed that the goal of Initiative #2 is still very much on the mark, but struggled with it being elusive. “We are definitely talking more about accountability and safety now than we were 20 years ago,” one group noted, but another expressed frustration that the fire service hasn’t better prepared firefighters and chief officers for what happens when they push for change. “When you propose change, it makes you a big target,” one group noted. “Everyone wants change, but no one wants to change.” This group also noted that fire chiefs are often not held accountable for safety because their role more closely resembles that of a politician, and they are “caught in bureaucracy.” Perhaps related to that, fewer firefighters show an interest in advancing to chief—something the group called a “dangerous symptom.”

Still, several examples of progress and change in the last 10 years were noted, including numerous research studies to ground the fire service in scientifically proven tactics, improved data on firefighter LODDs, better access to NIOSH LODD reports and the FDNY retrofit of all apparatus seatbelts.

For the road forward, the groups proposed the following ideas:

- Push prevention from the very beginning; focus on community risk reduction.
- Emphasize academy-level training on health and safety.
- Require the seatbelt pledge at the academy level.
- Don’t use punishment to enforce accountability: “Punitive does not work.”
- Participate honestly in injury and death investigations.
- Improve injury reporting; develop a central database for injuries.
Develop common definitions of injuries.
- Enhance near-miss reporting. Consider using rewards to encourage firefighters to report near-misses.
- Improve statistical analysis of LODD trends to better identify what’s causing/contributing to LODDs.
- Explore grant funding and other options to make annual medical evaluations a reality.
Ensure administration supports annual testing so those in the field see that it is important.
- Use the new Vulnerability Assessment Program and integrate the program into the initiatives.



INITIATIVE 3—Focus greater attention on the integration of risk management with incident management at all levels, including strategic, tactical and planning responsibilities.

After 10 years, Initiative #3 was widely regarded by TAMPA2 participants as still very much valid. Further, the groups indicated that significant progress toward the integration of risk management has been made. “We have made good strides on this initiative, primarily because it is more tactical and implementable,” one group noted. The availability of technology, and the willingness of the new generation to use it, was cited as a main reason behind the initiative’s success, as well as the increased emphasis on after-action reviews (AARs) and self-questioning risk factors in relation to tactical decisions, such as, “Was interior attack appropriate in this situation?”

Other examples of success related to FLSI #3 included ISO ratings, CPSE community risk assessments, AFG grants for community risk assessment; the seatbelt pledge; implementation of NFPA 1410 (Standard on Training for Initial Emergency Scene Operations) evolutions; and a tactical approach to funding of research (e.g., technology, accountability systems).

But there’s still much work to be done. Participants cited the need to improve National Fire Incident Reporting System (NFIRS) consistency and application, as well as the need for more reliable data. In the future, they would like to focus on the following:

- Recruit, develop and promote the most qualified, level-headed, safety-oriented candidates to company officer/crew boss positions.
- Continue to improve two-way voice communications for fireground operations, both firefighter-to-firefighter and fire officer-to-command (inside to outside).
- Promote the National Fire Academy curriculum.
- Recognize positive examples of unsafe practices that were recognized and stopped.
- Stress fire prevention/education.
- Teach departments how to integrate tactical risk management into training.
- Require continuing education and re-certification in order to continue going to fires.
- Better educate firefighters and officers on knowledge of fire protection systems.

INITIATIVE 4—All firefighters must be empowered to stop unsafe practices.

Participants at TAMPA2 had mixed feelings about Initiative #4. Although all groups agreed that the initiative is still valid, whether the fire service has made progress in this area was more up for debate. A few groups stressed that progress is relative. Change is often slower and more difficult in large departments, one group noted, while another indicated that “Change has not occurred across the board, but there are success stories.”

Participants focused on the concepts of empowerment and the need for zero-tolerance policies. One group stressed that the fire service already employs the “see something, say something” approach during special operations incidents, such as technical rescue. “When someone says STOP, everyone stops. Why isn’t structural firefighting the same?” they asked. But several groups were optimistic that reluctance to speak up will largely be a problem of the past as a new generation of firefighters enters the ranks. “The new ‘me’ generation has less of a problem speaking up on their own behalf,” one group noted, while another stressed their openness to new ideas and change.

But it can be an uphill battle against peer pressure and negative kitchen-table talk. “After you train a new employee and infuse them with the new culture, they are changed within minutes after hitting the bay floor,” one group noted. “Everyone knows that [someone’s doing something] dangerous, but they do nothing out of fear of reprisal [at the kitchen table]. We reward the wrong things. Courage and valor awards are often given for the wrong acts; we need to stop reinforcing unsafe acts and start rewarding things like enacting a sprinkler act. We are rewarding individualism and pride (machismo).”

So what is working? Groups stressed the role of continuing education, including the Executive Fire Officer program, as well as online training, in helping fire officers understand how to build a culture where firefighters feel comfortable speaking up. And they noted many examples of strategies to consider to further empower firefighters:

- Better define how to accomplish FLSI #4. Develop better definitions for “unsafe practices” and specific actions related to challenging them.
- Ensure that departmental leadership offers the empowerment and allows it to occur.
- Don’t hire speakers or instructors who claim the fire service has pushed “the safety thing” too far.
- Recognize positive examples of when unsafe practices were recognized and stopped.
- Develop standard operating procedures (SOPs) that help departments establish procedures to empower firefighters to stop unsafe practices.
- Continue to stress the importance of company officers teaching firefighters about unsafe conditions.
- Emphasize decision-making and safety in all training.
- Be willing to fire/discipline repeat offenders of safety rules.



INITIATIVE 5—Develop and implement national standards for training, qualifications and certification (including regular recertification) that are equally applicable to all firefighters based on the duties they are expected to perform.

This initiative was one of the most discussed at the TAMPA2 meeting. Participants widely agreed that enhanced training, qualifications and certification standards are urgently needed in the fire service. How far we've come, and whether such standards are achievable in the near future, was the subject of greater debate.

First, the progress. One group noted that there are more certified firefighters today than 10 years ago, and that many states have increased education requirements since 2004. There's a broader recognition of certifications, credentialing and the Executive Fire Officer program within the fire service in general.

Yet significant challenges still remain. One of the most obvious: the gap between volunteer and career firefighters when it comes to universal standards. The push for higher training standards creates challenging demands for many volunteer departments that are struggling to recruit and retain active members. "We have states where legislators will not put requirements on volunteers because they are afraid of losing them," one group noted, while another put it succinctly: "The mere fact that we have 'all' firefighters in the statement makes it problematic."

And, since the fire service has not typically adopted uniform standards and recertification requirements, there is a lot of resistance to the introduction of mandatory requirements at the individual level as well. "We hear 'we don't have time, or you can't make me do it,'" one participant noted. "But people EXPECT us to be certified and trained."

The discussion noted the significant differences across states when it comes to standards. "The 'development' portion [of the initiative] is largely accomplished (NFPA 1001, Pro Board, etc.)," one group noted. "The challenge ... is in the implementation." One group felt that federal legislative action would likely be required to fully implement Initiative #5. And of course, any additional standards and training requirements imposed on fire departments must be balanced against the costs and resources required.



Given all this debate, it's no surprise that the list of recommended strategies going forward was quite long, including:

- Update the NFPA professional qualification standards to address current realities.
- Change NFPA standards to require recertification.
- Advocate for federal legislative mandates for certification.
- Press state fire training directors to support national standards.
- Define significant benchmarks for recertification training (e.g., 5, 10, 15 years of service).
- Develop systems to better document training.
- Require officer development schools/programs.
- Consider different levels of certification standards based on resources, demographics and geography. (For example, limiting what certain firefighters can do on the fireground based on their training and resources. Some firefighters should not be expected to perform interior firefighting.)
- Consider interim steps to certification, similar to EMR/EMT/Paramedic (possibly, Firefighter Awareness, Operations, Technician, Specialist).
- Consider age limits for active firefighters.
- Ensure every firefighter receives an annual physical that screens for cardiovascular disease and cancer.
- Emphasize achieving competency/proficiency, not simply fulfilling an amount of training or education.
- Identify ways to enforce national mandates and to compel fire service organizations to comply.
- Don't allow "one and done" training competency evaluation. Constant, rigorous, ongoing training needs to be reinforced.



INITIATIVE 6—Develop and implement national medical and physical fitness standards that are equally applicable to all firefighters, based on the duties they are expected to perform.

Perhaps no issue is more contentious in the fire service than the need for firefighters to be fit for duty, and how to achieve this across the varied and complex fire service. Firefighter Life Safety Initiative #6 is “a huge can of worms,” noted one group. That’s because discussion about mandatory national fitness and medical standards immediately brings up career vs. volunteer issues (Is it realistic to expect volunteers to meet the same physical standards as career firefighters?) as well as labor rights issues (Can incumbent testing be required? What happens if the incumbent doesn’t pass?).

Furthermore, there are genuine questions about what makes a firefighter fit for duty and how to test for it. One group noted that the application of NFPA 1582 (Standard on Comprehensive Occupational Medical Program for Fire Departments) has been largely successful, but others noted that to truly attack the problem, differentiation between “medical” and “physical fitness” standards is necessary.

Although they recognized many of these challenges, most of the participants at TAMPA2 were supportive of annual fitness and medical testing, and expressed the need for standards. “Some people are not built to be firefighters ... not everybody should get a trophy, like in T-ball,” one group noted. “Other countries have very stringent requirements that result in expulsion from the service if a minimal fitness level is not maintained.”

Suggestions for the future include:

- Add language to the initiative specifically concerning cancer.
- Add specific wording in the initiative for annual physicals.
- Require incumbent physical testing, much like maintaining a red card for wildland firefighting.
- Base standards and testing on the duties firefighters are expected to perform (e.g., red card testing has different levels—Walk, Moderate, High-Impact—based on duties that the person is expected to perform).
- Seek implementation at a national level, but don’t let it stall local/regional efforts.
- Find ways to enforce national mandates to compel fire service organizations to comply.
- Identify funding sources (federal grants?) for volunteer firefighter physicals.
- Partner with public and private organizations to develop health standards.
- Increase screening for heart disease and strokes.
- Build a standard model for firefighter physicals that is followed nationally.
- Develop a national program to educate physicians who perform firefighter physicals.
- Ensure programs aimed at physical fitness are non-punitive and provide incentives for being in good health.
- Use rest studies and other research on shift durations and nutrition to identify how fatigue impacts firefighter health and performance.
- Track post-retirement health of firefighters.
- Develop return-to-work standards.
- Consider age limits for active firefighters.
- Develop personal protective equipment that provides more flexibility and reduces the amount of stress experienced by firefighters.



INITIATIVE 7—Create a national research agenda and data collection system that relates to the initiatives.

Initiative #7 is “another wide-ranging and moving target,” as one group put it. Yet few doubt the necessity of data collection and research in the fire service, and it’s not difficult to point to numerous examples of research that has saved firefighter lives.

Unfortunately, TAMPA2 participants were mostly negative about how far the fire service has come in achieving the data collection portion of FLSI #7—something they identified as extremely important in the effort to reduce fires. “We don’t feel like we’ve made that much progress with data collection, given the technology available today, especially with NFIRS,” said one group. Another noted, “We really do not have a good system in place yet. Data quality is a big issue.” Some questioned whether NFIRS is collecting the appropriate information.

Positive signs include increased data collection for suicide and cancer rates. But “we are constantly told the data does not match our testimony,” one group noted. “Are we collecting the right data?”

One key factor several groups identified: The need to help company officers and line firefighters understand why data reporting is so important, enter it correctly and use the data later. “There is a behavior issue in that there’s a desire to get to the next call and not document the previous call,” one group said. “We dismiss the importance of data collection. We’ll train in the heat and snow for hours, but won’t take 3 minutes to properly fill out a report.” After all, reports don’t put out fires.

Funding also remains an issue. One group noted that this initiative may have been modeled off of similar efforts in the military, where funding is readily available. Fire departments, however, often lack the funding and staffing to support robust data collection efforts.

As for the path forward, groups identified the following possible steps:

- Advocate for a standardized reporting and data collection system.
- Train firefighters and company officers on the benefits of good data collection.
- Revamp NFIRS to collect more information, not just data.
- Reward departments and states that achieve 100 percent NFIRS reporting.
- Consider support for the National Fire Operations Reporting System (N-FORS).
- Examine EMS reporting systems and identify concepts to emulate.
- Focus on a plan for data analysis, implementation and dissemination—how we can use the data at the local level.
- Partner with other agencies (who often have more funding) to conduct research.
- Conduct a national summit on data collection to determine best practices and develop a plan forward to enhance data collection.



INITIATIVE 8—Utilize available technology wherever it can produce higher levels of health and safety.

TAMPA2 participants saw huge progress since this initiative was developed. They also reported being more open to technology, a trend they expect to grow with the new generation of firefighters. Seatbelt sensors, rollover protection, vehicle data recorders, thermal imaging cameras, advances in radio communication, atmospheric monitoring and incident command post monitoring are just some examples of successes within the technology arena. Participants noted that the advances will continue to come; drones, robotics and more advanced firefighter tracking systems were just a few examples.

Groups also provided some caveats. “We might not be utilizing technology to its fullest potential,” one group noted, “and new technology comes with a high price.” The key will be continuing to press for driving down costs. Further, participants stressed the need for a common voice about what new technologies would best serve the fire market. Along those lines, it’s important that the fire service carefully evaluate technology originally built for the military or law enforcement. Technology transfer can be beneficial, but the fire service must also advocate for technology that’s specifically developed for fire and rescue incidents.

Finally, new technologies must be implemented in step with culture, experience and practices. “Technology won’t solve everything,” one group noted. “Don’t try to over-engineer our problems.” For example, advances in PPE can provide additional thermal protection, but firefighters must also be making behavioral changes that take into account the risks they’re facing.

Groups focused their recommendations not on specific technologies, but broader strategies, including:

- Leverage relationships and partnerships to continue progress in the technology arena.
- Embrace technology at the local level.
- Advocate for standardization in how equipment interacts with other equipment, across manufacturers (e.g., SCBA interface with radios).
- Advocate for technological solutions that “push” information to the incident commander, rather than having the IC “pull” information from the firefighter.
- Embrace modern fire tactics as taught by NIST/UL.
- Continue to teach the importance of technology—but know the limits.
- Investigate whether the fire service can benefit from military technology to transfer.
- Develop a clearinghouse of available technologies.
- Create a technology “wish list” that enhances firefighter safety.

INITIATIVE 9—Thoroughly investigate all firefighter fatalities, injuries and near misses.

Initiative #9 is “arguably one of the most critical initiatives,” one group noted, and other groups agreed that this initiative is still valid 10 years later. Investigations into firefighter line-of-duty deaths (LODDs) are almost universal, and many departments have embraced the Near-Miss Reporting System or other types of injury and accident tracking. The fire service has seen “a huge increase in safety committees and accident investigations over the past 10 years,” one group said, while another noted that larger departments talking about their mistakes makes a significant impact on other departments being willing to share information and learn from near-misses and LODDs.

And yet, we know that numerous injuries and near misses still go unreported. “We are not doing a good job of this,” one group stated flatly. “We lack a lot of reporting due to lack of funding.” Even the NIOSH fatality investigation program is on fragile ground from a funding perspective, forced to justify its existence every budget cycle. Another group mentioned the disconnect between generating reports and holding individuals accountable for changing behavior to prevent the circumstances from recurring.

Suggestions for improvement included:

- Expand the initiative to cover firefighter illness/disease.
- Advocate continued funding of the NIOSH firefighter fatality investigation program, Near-Miss, etc.
- Create a national definition of “injury” (Drexel University is working on this).
- Continue to address data gaps in death/illness/injury collection, such as firefighter suicides (which is actively being addressed by the NFFF through professional alliances with such as an on-going study with Florida State University). Chronic firefighter illness and cancer rates must also be scientifically studied and monitored.
- Focus on human factors in LODD/injury reports and investigations.
- Expand the NIOSH firefighter fatality investigation program to include wildland fatalities.
- Create a safe, non-punitive environment for reporting.
- Perform an after-action review on every call.
- Use specific case study examples of LODD incidents in training programs.
- Conduct an analysis of non-physical contributing factors to cardiovascular incidents (emotional, external stressors, etc.).
- Enhance NFIRS reporting consistency.

INITIATIVE 10—Grant programs should support the implementation of safe practices and/or mandate safe practices as an eligibility requirement.

Initiative #10 gets the support of all groups at TAMPA2, but participants noted some shortcomings: There's no good way to measure success related to this initiative, and "safe practices" is a broad term that begs definition or description.

Many participants cited the federal grant programs, and related Congressional support, as having a significant impact on the fire service. "We require equipment and firefighters using it to meet applicable standards, or you must be requesting money for the training to use the equipment," noted one participant. "Safety is paramount in the discussions for grant criteria." Yet many departments still lack the expertise and resources to prepare successful grant applications, and there is no guarantee that grant funding will be around 10 years from now.

Clearly, securing grant funding in and of itself is a challenge, not to mention connecting such programs to specific safety practices. As far as future efforts, participants recommended the following:

- Require departments to spell out specific safety program improvements as a category on grant applications.
- Apply research data to grant requests.
- Increase funding for human factors training instead of equipment.
- Use the Vulnerability Assessment Program to document need and therefore improve chances of successful grant applications.



INITIATIVE 11—National standards for emergency response policies and procedures should be developed and championed.

TAMPA2 participants clearly struggled with FLSI #11, recognizing the benefit of a national response policy to differentiate between emergency response situations and non-emergency incidents, but ultimately being unable to reconcile this model with local realities. Each fire department, one group noted, has different needs and applications based on resources and demographics. “We need to keep working on this initiative,” one group said. “How is this going to be implemented and enforced?”

Perhaps not surprisingly, then, most of the progress in the area of response standards is seen at the local level. “Numerous departments have developed sensible, non-emergency response policies,” one group said. “These should be shared with peer departments and careful data should be collected on their successes and/or failures.”

One group stressed the need to start small. “Fire-related events come with a great cultural challenge for altered response. Start with the low-hanging fruit: water leaks, non-injury lift assists, etc.” Developing standard responses to these calls can be a “foot in the door” to further expand national response policies and procedures.

Other suggestions for moving forward included:

- Integrate altered response policies into NFPA 1710/1720.
- Mandate the installation of vehicle data recorders on fire apparatus and enforce their use.
- Examine the rationale behind carrying emergency equipment in privately owned vehicles (POVs).
- Examine the rationale behind allowing tankers/tenders to respond as emergency traffic.
- Develop a model for writing standard operating procedures/guidelines.



INITIATIVE 12—National protocols for response to violent incidents should be developed and championed.

When this initiative was first written, most of the focus was on firefighter response to incidents of terrorism or situations where firefighters had come under attack. But some TAMPA2 participants focused on a very different aspect: incidents where fire is used as a weapon. “We need to look at this issue through the Department of Justice,” one group noted. “Arson is considered a violent incident. The fire service is [therefore] considered a ‘target’ of violent incidents.”

More recently, Initiative #12 has come into sharp focus during several high-profile active-shooter incidents, including those where fire was used to lure firefighters to a structure, where they were then attacked. Participants felt that IAFF/IAFC protocols developed for active-shooter response have helped make progress in this area. The NFFF has developed a 90-minute course on the Response to Violent Incidents that can help any department navigate this issue. The debate about firefighter/paramedics entering the “warm zone” during active-shooter situations illustrates, however, that there is still no national model standard. Some departments have begun training personnel (with the support of local law enforcement) to move into “warm” zones under certain conditions, but many still specifically require personnel to stage in a safe place away from the scene until law enforcement has declared it secure.

Actions participants would most like to see:

- Increase funding for training and PPE appropriate for violent incidents.
- Expand protocol development to today’s issues, such as active shooters and improvised explosive devices (IEDs).
- Form partnerships with law enforcement and conduct joint policymaking and joint training.



INITIATIVE 13—Firefighters and their families must have access to counseling and psychological support.

In 2010, the NFFF launched a major effort around Initiative #13, introducing a new approach to mental and behavioral health in the fire service. That effort continued in 2013 with the introduction of a new Behavioral Health Model aimed at helping firefighters recognize the signs of mental and emotional stress in themselves and others and react accordingly. Clearly, as one group noted, we’ve made a lot of progress in this area: Stress First Aid, multiple programs from the National Volunteer Fire Council, the work of the Safety, Health and Survival Section of the IAFC, expanded employee assistance programs. Such efforts have “produced measurable success in the last decade,” according to one group.

But as with all of the FLSIs, there is still work to be done. There is “still a significant stigma associated with behavioral health issues,” one group said. In some departments, seeking help through an Employee Assistance Program (EAP) leads to immediate removal from normal duty until a psychological evaluation is completed. “Seeking help should not mean being immediately ‘pulled off the line,’” one group noted. “This decreases participation and increases stigma”—or looked at another way, it can create the same kind of reluctance firefighters often have to calling a mayday on the fireground. Still another group noted the difficulty in recognizing mental and emotional stress in firefighters who are conditioned to hide it: “You have to have experienced it so you know what to recognize.”

Further, many fire departments remain unaware of the excellent resources available to them; even among the well-connected TAMPA2 participants, many had not heard of the NFFF behavioral health resources. Other groups noted the need to expand efforts to retirees, EMS personnel, veterans and firefighters’ family members.

To that end, potential solutions included:

- Continue to encourage firefighters to seek help when feeling distressed.
- Encourage family members to seek counseling.
- Explore additional fire service partnerships in the realm of behavioral health.
- Promote training for (not from) EAP providers through outlets such as the “Helping Heroes” website.
- Improve pre-employment psychological profile testing.
- Equip firefighters with tools and support for non-incident stressors (family issues, marital problems, substance abuse, financial problems, etc.).
- Encourage departments to bring behavioral health training in house before there’s a problem.
- Address chronic post-traumatic stress disorder due to racism, sexism and homophobia in the fire service.
- Monitor firefighters months and years after an incident.
- Increase data collection on suicide in the fire service.



INITIATIVE 14—Public education must receive more resources and be championed as a critical fire and life safety program.

Groups unanimously supported the need for public education to receive more resources, but were split in terms of how much success the fire service has made in this area in the past 10 years. Some groups thought that, other than fire prevention, public education has changed little since the first Life Safety Summit. On the other hand, some groups noted successes such as the work of Vision 20/20, Fire 2020's Partnering for Prevention program, USFA's efforts to educate and prepare public information officers for the transition to External Affairs Officers and new National Fire Academy programs that focus on community risk reduction.

One key area identified related to public education: the need to educate firefighters as well. "[We] need more education on fire protection systems for firefighters and fire officers," one group wrote. Only when firefighters understand and support residential fire sprinklers can they, in turn, educate the public. Another group stressed the need to take proactive rather than reactive approaches when dealing with homebuilders associations regarding residential sprinklers and other fire and life safety codes.

Another challenge to this initiative: how fire prevention and education is downplayed within the fire service itself. "It's always the first program to go," one group noted, "and it's not always the most effective people [who are] assigned there. It's usually used as a dumping ground for our personnel." To overcome this attitude, participants noted, fire service leadership must embrace prevention and prevention must be taught to firefighters as an offensive fire tactic: "When you think about it in the context of 'fast water,' you realize that fire sprinklers are indeed the fastest water we have."

Given that public education is "one of the most crucial areas for a true cultural change across the board," as one group put it, what can be done to continue to marshal support for public education? Suggestions from the groups included:

- Make prevention a normal, standard part of the job for all firefighters.
- Integrate social media into all prevention strategies.
- Consider renaming fire departments as Community Risk Reduction Departments.
- Emulate the community policing model.
- Resist budget cuts to prevention and public education.
- Integrate community risk reduction activities at the fire company level.
- Make fire prevention and life safety education mandatory in public and private schools starting with K4/K5 and continuing through high school.



INITIATIVE 15—Advocacy must be strengthened for the enforcement of codes and the installation of home fire sprinklers.

Although residential sprinkler success stories abound, many TAMPA2 participants still felt strongly that the fire service has not come far enough in achieving Initiative #15. “We need to create a public demand for sprinklers,” one group said. “We say how important prevention is, but we fail to take actionable steps to do something about it.” And homebuilders associations keep up the fight against change, even in communities that have seen initial success.

Further, there’s the danger of boiling down the entire initiative into a residential sprinkler issue, when in fact it’s much broader than that. “It is not one issue; too many think this initiative is only about residential sprinklers,” one group noted. “[We need to] define the work environment.” A firefighter’s work environment goes way beyond the station, encompassing any structure they respond in. And just as we would not be OK with firefighters living in fire stations that are not up to code, we should not be OK with them responding to structures that aren’t up to code.

Legislative support was seen by many groups as key to success in this area. Individual legislators (local and federal) can push for tax breaks as incentives for support of safe buildings and updated codes, and apply pressure that the fire service cannot. “Money works,” one group noted. Getting politicians on board will be critical to future success.

Other ideas from the groups included:

- Firefighters, and especially fire service leaders, should set the example by installing residential sprinkler systems in their own homes.
- Push for new, more cost-effective technologies in sprinkler design and installation.
- Take on groups disseminating false information and call out builders who don't allow fire sprinklers.
- Provide more resources (time, money) for code enforcement at the company level.
- Continue and enhance fire service involvement in the codes and standards process.
- Consider marking lightweight construction buildings with signs to warn firefighters.
- Promote the concept of company officers being certified inspectors and encourage company level inspections with enforcement.



INITIATIVE 16—Safety must be a primary consideration in the design of apparatus and equipment.

Initiative #16 is a bright spot in the Firefighter Life Safety Initiatives. Several groups noted that it is the most successful initiative, the area where the fire service has come the farthest. Why? Apparatus design standards as outlined in NFPA 1901 have changed dramatically to create much safer fire apparatus. “Apparatus manufacturers, in general, have done an extraordinary job here,” one group noted.

Changes in technology have helped, too, creating rollover protection, improved seatbelt systems and cost-effective vehicle data recorders. Yet one group cautioned that working against all these developments is “the never-ending challenge of firefighters finding their way around certain apparatus safety features.” And apparatus manufacturers can only do so much—sometimes, the first safety decision is in the type of vehicle that’s being specified, and departments would do well to consider mini-pumpers and quick-response vehicles over larger, traditional pumpers and heavy-rescues, according to one group.

Interestingly, the groups focused almost exclusively on apparatus design in their discussions, even though equipment such as thermal imaging cameras and SCBA is also evolving to address safety concerns.

Even with all this success, there is always room for improvement. Suggestions included:

- Increase support for vehicle data recorders.
- Advocate for additional standards for specialized apparatus (e.g., tankers).
- Emphasize training and human factors in addition to technology.
- Revamp ambulance design standards.
- Expand the initiative to cover equipment age and maintenance and how firefighters use the equipment.
- Ensure that the newly produced anthropometric data is used to improve apparatus and equipment for firefighters.
- Develop zero-tolerance policies for firefighters who disable or find workarounds to apparatus safety features.
- Consider writing a separate set of FLSIs that provides specific actions for apparatus and equipment manufacturers.

Problems & Solutions

The second assignment for the small group discussions at TAMPA2 was for each of the 10 groups to develop a series of problem statements related to their assigned topic area. For each problem statement, they were also encouraged to identify strategies for addressing the problem, as well as who (what groups, organizations or ranks) should be tasked with implementing the strategies.

The 10 groups were assigned a wide range of topic areas, and not surprisingly they developed a long list of problem statements and potential strategies. In the concluding session at TAMPA2, each group briefly presented their findings. But with greater distance and time, we are able to examine all of the problem statements and strategies as a whole, and identify trends and topics that recurred across the groups.

Accordingly, in the following pages, we have grouped the suggestions into five main “problem” areas:

1. Standardization and certification
2. Data and research dissemination
3. Implementation of the Firefighter Life Safety Initiatives
4. Health and fitness
5. Risk management

Imposing this grouping on the long list of suggestions necessarily involves some measure of simplification. But it can be an effective means to digest what is otherwise a lengthy list of varied suggestions with incredibly varying amounts of detail. Some of the suggestions produced by the groups were at the 30,000-foot level, while others were specific and tactical. For example:

“Each fire agency should develop an attitude, exhibited by every member of the organization, ingrained from their first day on the job as a personal commitment to be a ‘safety, survival, health and wellness advocate’ and ‘servant leader.’”

“Use traffic slowing/control devices while operating in the roadway to alert oncoming traffic.”

Similarly, some groups identified specific roles (e.g., chief, company officer, Authority Having Jurisdiction) in the fire service that should be responsible for implementation of the suggested strategies, while others pointed toward broader groups or associations (NFPA, NFFF), and some preferred to leave this open to local level interpretation. A few groups identified timeframes for their suggestions, but many did not.

Grouping the problems and solutions into five broad categories allows us to present the ideas more uniformly, allowing trends to dominate rather than specific groups or topics. Viewing the problems facing the fire service in this manner is intended to illuminate the overarching messages and allow us to better prioritize suggestions for immediate action.

First, however, it is necessary to look at some comments that didn’t fit into the “problems and solutions” format but are nevertheless important to document and consider.



- If we are truly focused on serving the citizens, we must stop celebrating “fire”—that’s not to say we shouldn’t get pumped up about putting the fire out, but we don’t need to be just waiting on the “big one.”
- We must develop solutions with the volunteer fire service and wildland firefighting in mind. Several individuals expressed concern that many of the 16 FLSIs, as well as the concepts discussed at TAMPA2, are just not realistic for the average volunteer fire department, many of which are very small, underfunded and serve predominantly rural areas.
- We should consider developing realistic target timeframes for each of the strategies suggested in this report.
- Materials generated around these efforts should be in-depth, but we should always consider developing companion messaging that is short, simple and appropriate for social media. More and more of our contact with firefighters comes through social media.
- Suggestions for change and for how we can build on the initial summit must take into account how our operating environment has changed since 2004. Then, we were “riding the wave” of support garnered by 9/11; today, we have massive cuts to municipal budgets, cuts to federal grant programs and a decline in employee morale. This may limit what we can accomplish.
- We should consider whether the paramilitary culture of the U.S. fire service actually works against the full acceptance and implementation of the FLSIs and inhibits productive community relationships and effective prevention programs.
- When looking for safety models to emulate, we should not limit ourselves to those in manufacturing or business, but should consider the military, especially the mindset of preparing for battle and training in real-life scenarios. The military’s application of safety measures in training and combat is more applicable to our operating environment than the systems and approaches that have been developed for manufacturing and industry.
- We need to add an EMS component throughout the FLSIs.
- We need to make greater efforts to integrate wildland firefighters within the unified fire service community and, at the same time, provide more discussion and examples that are applicable in the wildland environment.
- We must stress both personal and organizational responsibility—whether you are the person with the gold or the informal leader or the manager of a large fire department, you have responsibility for yourself and you have an influence on those around you
- Smart, safe firefighting will never be about one silver bullet strategy; rather, firefighters must be able to use multiple tools in the “toolbox,” read situations correctly and apply appropriate tactics.
- All firefighters should be encouraged to ask questions, and officers should use questions as teachable moments for the entire crew.
- We need an attitude shift to prevention. If we have only a suppression mindset, we will have a bad attitude about prevention. Firefighters should be brought up in a culture that emphasizes the “3 E’s”—education, engineering and enforcement—early warning (smoke alarms), early suppression (fire sprinklers) and emergency response.

As you read the problem statements and proposed solutions on the following pages, we challenge you to keep these varied perspectives in mind and also to consider how the recommendations should be prioritized. To truly integrate health and safety into the culture of the fire service and drastically reduce LODDs and injuries, we must employ a variety of strategies. Some of these strategies are more complicated and challenging than others, but they are essential to sustain the effort over the long term and address deep-rooted beliefs that continue to reinforce unsafe behaviors.



PROBLEM: A lack of formal standards for firefighter training, certification and recertification contributes to LODDs and injuries.

The American fire service is fundamentally organized at the local community level. Every fire department prides itself on its unique identity, culture and history. The complex makeup of the fire service fosters independence, yet there is a growing realization that the lack of adopting formal standards for training and certification is a big contributor to firefighter LODDs and injuries. If we truly want to reduce deaths and injuries, fire departments—and firefighters—may need to be willing to give up some of their independence and commit to adopting national standards to ensure all firefighters meet a minimum level of competence in relation to the duties they are expected to perform.

The TAMPA2 groups identified a range of problems related to the lack of standardization in training and education, from apparatus accidents (driver/operator training is lacking) to inconsistent responses on wildland fires to fire prevention not being integrated into formal curriculum and job standards. Tackling each of these problems will require different tactics, but an underlying focus for all of them will be the need for fire service leaders and organizations to work together, put egos aside and think realistically about how to develop, adopt and strengthen standards that will work for all fire departments. .

At the same time, this effort will need to be conducted in a way that is appropriate and realistic for both career and volunteer departments. Several TAMPA2 participants felt that the discussion around standardization and increased training requirements was unattainable for many volunteer fire departments and the volunteers themselves. Others, however, noted that a standard for firefighter certification would give volunteer departments the power needed to enforce training requirements that often currently go unheeded.

Strategies suggested by the various groups related to standardization include the following:

- **Call for a Presidential Blue Ribbon Commission to study minimum requirements for all firefighters and fire officers commensurate to their duties.** This study should devote specific attention to risk assessment, risk management and situational awareness, and incorporate fire dynamics and empirical, evidence-based strategies. Such requirements could be modeled following the Department of Transportation (DOT) regulations for EMS.
- **Develop a mandated firefighter certification and continuing competency program.** This effort will involve the NFPA 1000 Technical Committee, the International Fire Service Accreditation Congress (IF-SAC) and the Pro Board as well as national fire service organizations.
- **Train all firefighters to NFPA 1001, all driver/operators to NFPA 1002 and all officers to NFPA 1021 within the next 10 years.**
- **Develop a uniform, mandatory, national officer/supervisor (company officer/crew boss or above) training program.** This program, which would go beyond current NFPA 1021: Standard for Fire Officer Professional Qualifications, should be based on current research and science and follow nationally recognized standards. It should be scalable for different department sizes and community needs and should include a mentorship program that outlines key job responsibilities. Consider including a tool box for officers with emphasis on safety, Everyone Goes Home and the 16 FLSIs (e.g., checklists, training tools, role definition). When developing the program, consider the military model of officer candidate development and training school.



- **Ensure structural departments that respond to wildland fires adopt and implement National Wildfire Coordinating Group standards.** When multiple fire departments respond to wildland fires with different levels of training and different approaches to communications, tactics and procedures/policies, it creates confusion and the potential for things to go wrong.
- **Develop processes to manage instructor qualifications and performance.** Promote NFPA 1041 certification for all instructors, and ensure that instructors are qualified and current in the subject matter, especially as related to health and safety.
- **Implement uniform driver/operator training and certification across the fire service.** This should incorporate annual competency evaluations and national traffic incident management training. It will require a lobbying effort for state and federal DOT agencies to enact legislation and/or regulations. Apparatus operators should NOT be exempt from appropriate licensing and competency evaluations.
- **Integrate fire prevention and community risk reduction into standardized training, core job requirements and qualifications for advancement.** It has been said many times that the best way to prevent firefighter LODDs is to prevent the fires from occurring in the first place. To do this, fire service leaders should consider changing the entry-level firefighter curriculum to place community risk reduction as a first-phase course, find additional ways to educate firefighters and company officers on the value and importance of fire prevention, and require all firefighters to participate in community risk reduction activities as a routine part of their duties.

PROBLEM: Valuable data and research are not widely disseminated or applied.

The last decade has been a boon for the fire service in terms of research and data collection. Grant funding has produced excellent research on heat stress, physiological monitoring, firefighter tracking, smoke exposure and many other topics. UL and NIST have scientifically reinforced our knowledge of fire behavior and how traditional tactics need to change. NIOSH, state fire marshal offices and individual departments now routinely produce highly detailed investigative reports on LODDs. Systems like Firefighter Near-Miss and the National Fire Incident Reporting System (NFIRS) produce meaningful data every year.

This week's ground-breaking study or statistical report is always at a danger for becoming lost in the never-ending tide of information. The coordinated effort of the UL Firefighter Safety Research Institute and NIST to develop many free, downloadable training programs is a shining example of applied research. But the reports produced by significant research projects too often land on a shelf, out of sight and lacking the mechanisms for dissemination and implementation. Firefighters struggle to stay up to date on all of the information that is available and particularly to understand what is truly relevant and actionable.

TAMPA2 participants identified a need not only to continue the valuable research and studies being conducted, but to improve the methods of disseminating the information and implementing the results. They look to organizations such as the NFFF and the International Society of Fire Service Instructors to summarize the information in order to produce actionable changes.



Along those lines, the groups at TAMPA2 identified the following strategies:

- **Disseminate information in creative, accessible ways.** Long reports are important, but the fire service needs to focus on efficient methods to get the word out about new research and initiatives. Develop apps for smartphones, use websites and employ social media to reach firefighters and officers, rather than expecting them to seek out the information.
- **Emphasize the importance of and use of data for effective decision-making at all levels.** Every member of the fire service should understand and appreciate the need for valid data and data analysis to drive change.
- **Establish a clearinghouse for the coordination of data, research and technology.** Better systems are needed to rapidly deliver findings to major fire service organizations and policymakers for adoption and/or implementation. The NFFF should consider developing a research section to account for and report on research related to firefighter injuries and fatalities.
- **Advocate for the inclusion of research findings in academic coursework (e.g., requirements for degree programs, through the Fire and Emergency Services Higher Education model curriculum).**
- **Develop a clearinghouse for resources, sample policies and templates for validated training programs and delivery mechanisms.** This will help instructors, training officers and company officers access best practices in fire service training and education.
- **Overhaul NFIRS to improve the amount and the accuracy of data collection.** This could include encompassing evolving issues (exposures, etc.) and making the program more user-friendly. Seek out private partners to assist in this effort.

PROBLEM: The Firefighter Life Safety Initiatives and related training and education are not implemented across all fire departments.

In spite of the extensive efforts that have been made since 2004 to promote the 16 FLSIs, the great majority of firefighters are still unaware of the program and unfamiliar with the initiatives themselves. Awareness of the program is, of course, less important than awareness of the messages and implementation of the programs that are incorporated within the initiatives.

The challenge of reaching every firefighter in every fire department is monumental. The NFFF has spearheaded the immense effort to educate firefighters across the country about the initiatives and the importance of developing a safety culture. The Everyone Goes Home (EGH) program provides several different training opportunities and maintains a website with easily accessible resources. To further reach firefighters, the EGH program employs the use of advocates to spread awareness and implementation at the local level.

These efforts have had a significant impact on fire service culture. Many firefighters have participated in EGH training, fire service media routinely reference the initiatives and “everyone goes home” has become a rallying cry for thousands of firefighters. Yet, unfortunately, not everyone has gotten the message. As TAMPA2 participants pointed out, the initiatives are not universally institutionalized (known, understood and practiced) and fully implemented within all fire agencies. The fire service is approaching a tipping point—truly eliminating the perception that LODDs are an “acceptable” part of the job—but we must maintain the momentum. The mission continues to be reaching out to every firefighter and every fire agency to promote the initiatives and deliver all of the related training and information.



Suggested strategies to accomplish this effort include:

- **Enhance the specificity of the FLSIs with task- and tactical-level strategies that operationalize them for all levels.** More effectively communicate the intent of each initiative in relation to individual firefighters and fire departments. This should include specific tangible, measurable steps to implement the recommended policies and practices. Identify those initiatives that target specific positions within the organization (firefighter, company officer, chief officer) and develop talking points for each level.
- **Use public/private partnerships to continuously communicate the safety message to the American fire service and our communities.** This message should include the essential elements of prevention, education, mitigation and research.
- **Develop mechanisms to communicate with our customers (internal and external) via the technology they use every day.** Such mechanisms could include social media, smartphone apps, blogs, websites, etc.
- **Revitalize the Everyone Goes Home program.** Develop a diverse marketing plan to inform firefighters and fire departments about the numerous line-of-duty death and injury initiatives developed by the NFFF over the last several years.
- **Update the training, delivery methods and implementation tools (including the train-the-trainer guide) for “Courage to Be Safe.”** This will ensure that the next generation of firefighters is exposed to this valuable program.
- **Review the FLSIs on a biannual basis.** This will ensure that the initiatives reflect current trends and developments in the fire service.
- **Author a white paper to detail how the FLSIs correlate with wildland firefighting.** This should include an assessment of whether additional initiatives directed at wildland firefighting are needed.
- **Develop a program to educate firefighters’ families on the life safety initiatives and on firefighter health and safety in general.** Families need to be an integral part of understanding the significance of safety, health, wellness, training and education.
- **Aggressively market NFFF’s current programs around FLSI #13.** Such a campaign could include a stand-alone class offered at the National Fire Academy and a video that highlights firefighters who are “survivors”—either themselves or in their families—of mental health/suicide challenges.
- **Champion the image of a firefighter as a humble public servant.** Change the perception of a firefighter as a macho excessive risk-taker and invincible hero (an image that is predominantly male and white). Company officers will also need to be trained in how to lead and manage change as the fire service tackles this cultural shift.

PROBLEM: Fitness, health and medical issues continue to make up a large percentage of firefighter deaths and injuries.

Firefighter health and fitness is one of the most talked about and most contentious topics in the fire service. The issue of cancer within the fire service is also emerging as an undeniable priority. The focus is evolving from recognition of the problem to presumptive acceptance of cancer as an occupational disease and the necessity for regular medical screening. The additional area that requires immediate attention is the issue of what must be done to reduce exposures to carcinogens, beyond the steps that are already known.



But the issues are myriad. What does it mean to be fit for duty? Should firefighters be required to undergo annual medical and fitness testing? Is testing firefighters for cardiac or cancer risk before symptoms arise too invasive? If we implement fitness standards, will volunteer departments lose too many members? How will departments afford annual medical and fitness evaluations? If the fire service fights for cancer presumption laws, what behavioral changes is it fair to require of firefighters? How can we encourage firefighters to get help for post-traumatic stress, depression and alcohol and drug problems?

These issues produce endless debate. They are not simple issues and solving them won't be easy. It requires a more concerted effort among national organizations to promote a unified message of education, prevention, detection, treatment and monitoring. Further, it demands that all firefighters stop getting lost, even hiding, in the debate over why annual fitness testing won't work, and commit to taking immediate steps to enhance their own and others' fitness and health.

TAMPA2 participants envision a health and fitness agenda that will study the toxic effects of the fireground, compile data on cancer rates, develop standards for firefighter physicals, eliminate the stigma associated with behavioral health issues and much more. It's an aggressive agenda, but the groups had no shortage of ideas on how to achieve it.

- **Adopt NFPA 1582 medical standards for all firefighters regardless of organization type.** Meeting the basic standard should be a prerequisite for receiving grant funding, participating in structural firefighting and being deployed on wildland fires and emergency events.
- **Make annual physicals affordable.** Identify partnerships that can provide funding for firefighter physicals. Use success stories from other departments to develop best practices. Produce a strategic plan on how fire departments can implement a cost-effective annual physicals program, drawing on the knowledge and experience of insurance companies, fire service leaders and unions. The plan should include approaches applicable for volunteer departments, small career departments and larger metro departments.
- **Expand research to establish the correlation between occupational exposures and health effects.** This effort will require additional grant funding, the establishment of reporting mechanisms to create databases to track and trend incidents of cancer, and an educational component to increase firefighter awareness and accountability.
- **Support research to identify methods to prevent exposure to carcinogens.**
- **Advocate for presumptive cancer laws in all states.**
- **Promote the importance of diet, exercise and nutrition as three critical elements to reducing risk of cancer and heart disease.** Bring "heart healthy" and cancer reduction programs to all departments.
- **Develop a "fit for duty" evaluation to be used nationwide to ensure job readiness for firefighters prior to returning to duty.**
- **Eliminate tobacco use in the fire service.** Departments should adopt and enforce policies prohibiting all tobacco use and explore the potential role legislation could play in this effort.
- **Investigate how the aging process affects firefighters.** Support efforts to determine whether fitness-for-duty programs should include a maximum chronological age point.
- **Establish a national fire service database for reporting behavioral health needs, training, gaps and successes.** Enhance firefighters' ability to manage behavioral health issues through education and training and use testimonials, case studies and peer support to battle the stigma associated with behavioral health issues.



- **Design and implement a Family Readiness Group program for the fire service.** In volunteer departments, a spouse could lead the group, and in career departments it could be led by an outreach coordinator. The purpose would be to host events for the families to develop a network of support to sustain firefighters and their families in the midst of traumatic events.
- **Consider the impact of harassment on firefighter behavioral health and its associated impact on safety.** Collect data on incidences of sexism, racism, homophobia, sexual assault and other forms of harassment, and create training programs that help firefighters recognize prejudicial and offensive behavior and react accordingly.
- **Require students to meet the NFPA 1582 medical standard before entering into any strenuous training program.** Training incidents related to medical conditions have killed and injured many firefighters.

PROBLEM: Risk management often remains a concept, rather than being translated into specific action.

Risk management gets a lot of lip service in the fire service, but it's a difficult concept to define and an even more difficult one to teach. Yet it is the key to dramatically reducing firefighter deaths and injuries.

There are two fundamental approaches to teaching risk management. The first is to use simulation-based training to walk firefighters through various scenarios and hone their decision-making skills in a safe environment. Fire service instructors often talk about this process as creating "slides" in a "slide tray" (or data in the hard drive for the younger generations) that firefighters later draw on when facing the real thing. Many training programs and products available on the market employ this approach, and the Firefighter Near-Miss Program recently added a training component based on pattern recognition and scenario-based training.

The second approach is to identify specific actions that increase risk, and train firefighters to avoid these actions. This takes the theory out of the mix and boils down risk management into simple directives: Wear your seatbelt, perform a 360-degree assessment at every fire, etc.

Both approaches are needed within the fire service. We want "thinking firefighters" who maintain keen situational awareness, and we want all department members who act as officers/supervisors to be empowered and accountable for their role. But we also need to provide specific strategies that can be easily taught, absorbed and followed. Several of the recommendations that TAMPA2 participants developed suggest how the fire service can mitigate certain risks. They include:

- **Focus on developing firefighters as better decision-makers.** Firefighters must be taught to use scientific findings to inform their tactics. When we are entrenched in suppression through aggression we lose sight of science. Example: UL and NIST studies emphasizing the benefits of "fast water." The culture of safety is not about undercutting rescues or not saving people; it's about making sensible decisions.
- **Teach better air management.** Firefighters routinely stay too long in the IDLH atmosphere, often ignoring low-air alarms and other signals to exit. Fire departments should adopt, train on and enforce air management policies that require firefighters to closely monitor their air supplies and exit from IDHL atmospheres before reaching the alarm setting on their SCBA, such as NFPA Standard 1404: Fire Service Respiratory Protection Training.
- **Teach firefighters the limits of PPE.** Firefighter PPE is continually evolving and providing enhanced thermal protection, which can have the effect of reducing the users' awareness of extreme environments and increasing heat stress on firefighters. Fire departments should teach firefighters about how PPE is designed, and what it can and cannot do.



- **Enforce a zero-tolerance seatbelt policy.** Fire departments should mandate and enforce 100 percent use of seatbelts in all fire and EMS apparatus as well as personally owned vehicles (POVs). Further, the fire service should pursue changes to federal and state legislation that currently exempts firefighters from wearing seatbelts, and push for making seatbelt use mandatory in all 50 states.
- **Enforce high-visibility vest use.** Firefighters are at great risk when operating on roadways. Fire departments should require all firefighters to wear traffic safety vests when operating on roadways and should train firefighters on positioning apparatus to protect crews. A future NFPA Standard (1092) will address traffic management issues.
- **Adopt risk-based emergency response algorithms.** Too many departments still respond with lights and sirens to calls that don't merit the risk associated with emergency response. Fire departments should consider the wealth of research showing the ineffectiveness and danger associated with lights-and-siren response and adjust response policies for certain types of calls.
- **Train firefighters on radio use and radio discipline and advocate for improved radio technology.** Even after many developments in radio technology, firefighters still experience radio complications and failures. Fire departments should address limitations through specs, guidelines, testing and research and development. They should also train firefighters on radio use and the limitations of their system's technology.
- **Avoid over-reliance on technology.** Technology can produce sensory overload, and if firefighters come to rely excessively on it, they may be helpless if it fails. Fire departments should employ a cautious approach when implementing new technologies, and train firefighters with and without the technology so they're prepared in case of a failure.
- **Teach prevention as an offensive attack strategy.** Prevention and community risk reduction must be elevated to the level of offensive fire attack—in terms of initial training and overall culture—so that it becomes a tactical priority for every firefighter.
- **Discontinue the use of outdated and non-NFPA compliant apparatus.** Many tanker/tenders and some wildland aircraft are outdated and contribute to elevating risk for drivers, operators and the public.



Who Should Do What?

One critical aspect to maintaining the momentum from TAMPA2: Identifying who should do what for the strategies that are considered top priorities. Each strategy will involve different players, of course, but following are some of the roles TAMPA2 participants envisioned for individuals and groups:

National Organizations (IAFF, IAFC, USFA, CFSI, NFPA, NVFC, ISFSI, Pro Board, etc.)

Work collectively to produce model policies, procedures, standards; update and reinforce appropriate NFPA standards to incorporate FLSIs and other strategies recommended in this report; create model legislative and policy language; identify, develop and promote best practices; lobby for local, state and federal support.

State Organizations

Adopt national training, certification and recertification standards; train officers on the Everyone Goes Home Program and the 16 FLSIs; develop and adopt state legislation to address issues of firefighter fitness, seatbelt use, etc.; share best practices.

National Fallen Firefighters Foundation

Market the FLSI and Everyone Goes Home programs and ensure they are up to date; bring organizations together to improve information sharing and discuss possibilities for data collection and dissemination; solicit support from private organizations to build public/private partnerships for safety goals; partner with organizations to bring cancer and heart-healthy programs to all departments; continue efforts to identify the relationship between products of combustion exposure and cancer.

Fire Departments

Embrace and use the FLSIs; issue joint information on the value of good diet, regular exercise and nutrition; adopt tobacco non-use policies; implement policies to reduce continued exposure to toxins and carcinogens; adopt NFPA 1582 requirements and make every effort to secure an annual physical and fitness-for-duty program for operational firefighters.

Company Officer

Serve as a model of safety and health for firefighters on their crew; rigorously and uniformly enforce safe practices and stop unsafe practices; hold firefighters to high standards of training, fitness and readiness. Note: Special focus was given at TAMPA2 to the unique role of the company officer/crew boss in ensuring safe practices and implementing change at the company level. This will be an area of enhanced focus moving forward.

Other Individuals

Share information from TAMPA2 and encourage others to get involved; model safe practices; wear seatbelts and demand compliance from crew; subscribe to routine medical evaluations; get and stay fit; hold discussions on how to implement the FLSIs in your department; follow best practices for decontamination of PPE and personal hygiene; ensure the crew has time to exercise.



Focus on the Future

TAMPA2 was designed not only to assess the progress made since the development of the Firefighter Life Safety Initiatives, but also to reaffirm and re-energize the fight to dramatically reduce firefighter line-of-duty deaths and injuries. This report is just the beginning of the next phase of the journey that the National Fallen Firefighters Foundation will undertake to reduce firefighter line of duty deaths—but success will depend on the commitment of firefighters, company officers, fire chiefs, major fire service organizations and many others.

What will that effort look like? Responses from TAMPA2 participants provide some clues.

Actions Participants Are Taking

There's no need to wait for the next NFFF program or presentation to start, or continue, individual efforts to enhance the safety culture. Many TAMPA2 participants left with new ideas for actions they could personally take to advance this fight.

In the follow-up survey, the NFFF asked participants what they had done or are doing to implement the FLSIs and make their departments safer. Their responses range from very specific to much broader, long-term programs, illustrating how both will be required to achieve the vision of the FLSIs. By sharing them here, we hope that readers will see that a healthier, safer fire service is within reach, and be inspired to take steps of their own to identify and mitigate health and safety risks—immediately.

Here are just some of the many actions TAMPA2 participants are taking:

Health and fitness

- Ordering two washing machines designed to wash turnouts, to be shared by 13 volunteer fire departments.
- We have increased our focus on cancer training and awareness and we are developing a couple of quick-reminder safety bulletins.
- Installed an air hose on our primary structure engine for gross decon of PPE and equipment on scene.
- I hope to develop a more in-depth medical screening and physical fitness plan along with more training and knowledge on behavioral health issues, which currently are not on my organization's radar.
- Each engine now carries "wet wipes" for initial on-scene skin cleaning.
- Our department has been trying for two years to persuade our county to provide a facility to clean PPE, with no result. Our department is too small, with no "extra" turnouts, to utilize the traveling PPE cleaning vendors. We can't be without gear that long. Post-summit, our department negotiated with the largest municipal department in our county to have our PPE properly cleaned by their staff, one or two sets at a time, and same-day service.
- Our decrepit station has no option for diesel fume removal, so we are changing response and return protocols to limit exposure.
- I'm planning to push for prompt gross decon and then showers after fires. The summit really increased my concern about cancer.
- I have purchased baby wipes for my career and volunteer engine company to wipe down after a working incident (on the scene). Showers are taken as soon as we get back, clothes are changed. Turnout gear is washed down, and the rig interior is decontaminated.



- Will be requesting funding for vaccinations for volunteers from the County Board of Supervisors (which currently funds vaccinations for career firefighters) for next fiscal year.
- We will continue to make our behavioral health program better.
- Developed standard operating procedure to check CO level of firefighters before they leave structure fires.
- I am working on implementing a department directive that will enable the assistant district chiefs to immediately take companies out of service when back in the firehouse. This will allow all firefighters to put “clean” bunkers in service, properly clean all safety gear and shower before going back in service. Anything we can do to immediately remove carcinogens, the better.

Awareness

- Summit materials, websites and other information were passed along to our 19 member fire departments.
- We have framed and matted the 16 FLSIs and the Prevent Cancer posters and hung them in the station.
- I am meeting with every crew to discuss the FLSIs for each member. I am also adding initiative action items to our goals and objectives system to ask each member to take action in their capacity.
- Following the summit, we held department-wide discussions and “power-thinking” sessions related to identifying more risks, mitigating those identified and implementing several changes.
- I have selected one of our most talented captains, who in turn handpicked a team of 10 people to identify ways to implement the FLSIs and other best practices into our department. We will have a standing team that continues to push for a safer and healthier fire department.
- I plan to work with the NFFF to explore building a crowdsourcing mechanism for fire service standard operating procedures.

Prevention

- We are elevating prevention by analyzing our data to identify the most prevalent causes of our fires and targeting those causes with education and engineering measures. If we prevent the fire, we prevent the LODD associated with the fire.

Tactics and Training

- We will change, even more, our fire attack strategy [to reflect new fire behavior research].
- We held a drill focused on quick water and use of piercing nozzles as an initial tactic.
- In an effort to help get firefighters trained in surrounding agencies, I put together an abbreviated Hazmat Ops and Firefighter I Class. To achieve this we had to cut the number of in-classroom/drill ground hours significantly (36 classroom hours for hazmat and 44 hours for Firefighter I), but all students successfully passed the state testing requirements (which meet NFPA standards and are endorsed by IFSAC and Pro Board). The classroom/drill ground training was supplemented with Web-based training. Even though there weren’t a lot of hours and such training may not meet expectations of others, there are now more volunteers who have received formal training under this format. Without this format, they would not be trained at all.

Leadership Development

- We are increasing the frequency and intensity of our leadership development program.
- We created a new position in the department: assistant chief for Safety and Planning. The person appointed has experience as chief of another department, and is trained as a mine rescue and safety techni-



cian (in a multinational mining corporation.)

- I am working with our assistant chief of Operations to improve the Company Officers Academy and develop a Company Officers Mentoring Program Taskbook which, in addition to the current minimum qualifications for promotion, must be completed to be eligible to take the fire captain's examination.
- We have created a new Health, Wellness and Safety Bureau to develop the strategic plan to implement each initiative.

Future Events

As mentioned in the introduction to this report, the foundation has employed different approaches over the past 10 years, including a series of mini-summits on specific topics and the development of white papers on each initiative. The Everyone Goes Home and Courage to Be Safe programs also continue to be delivered around the country.

Going forward, what format is best? Is small-group discussion and implementation more effective than large-scale presentations? How often should the fire service come together around the FLSIs and reducing LODDs? Who should be involved in setting priorities from the vast list of recommendations, and appropriating resources accordingly?

The NFFF will continue to gather input as it plans future activities. For now, the suggestions of the TAMPA2 participants provide valuable direction.

No matter the format, TAMPA2 participants underscored that the diversity of attendees matters. The effort to identify and invite next-generation fire service leaders through the scholarship program was greatly appreciated, but more can and should be done. Several participants suggested keeping that group involved in the coming years. Others noted the need for participation from even more line officers and staff.

Many participants advocated for more frequent summits—once every five years at a minimum. Participants were specifically asked about the effectiveness of mini-summits held in conjunction with national conferences. Thoughts were mixed on this—some saw it as an excellent place to reach key stakeholders, while others voiced concerns that this could limit the discussion to the “usual suspects” or, conversely, open the discussion up so much that the effort loses strategic direction. Others suggested holding the mini-summits at state conferences, where the program could be customized for the LODD and injury data of the specific state. Town-hall and roundtable discussion formats were promoted so that attendees can ask questions of subject matter experts and share ideas for local implementation.

Finally, prioritization is critical. As this report noted, the FLSI program has reached a point of maturity where there is no shortage of ideas, but rather a need for identifying those strategies that will have the best results and putting resources behind them. For that reason, some participants suggested that future meetings should involve work groups that map out how to implement specific suggestions from TAMPA2, rather than the reevaluating the FLSIs themselves. Others promoted the idea of a “top 10” list of priorities coming out of TAMPA2.

The Way Forward

Although the future programs, strategies and events have yet to be determined, one thing is clear: Too many firefighters die and are injured in preventable events each year. The NFFF stands ready to channel, support and organize the effort. But it will be the actions of individuals—their energy and their dedication—that will carry this effort forward.

