FINAL WORKSHOP REPORT

EMERGENCY PREPAREDNESS FOR PERSONS WITH DISABILITIES AND SPECIAL NEEDS

A PUBLICATION OF THE ANSI HOMELAND SECURITY STANDARDS PANEL

MAY 2009
Purpose:
On February 3-4, 2009, the ANSI-HSSP convened a Workshop on Emergency Preparedness for Persons with Disabilities and Special Needs, bringing together over 100 key stakeholders from standards developing organizations (SDOs), federal agencies, and disability advocacy groups. The event, co-chaired by Mr. Allan Fraser, Senior Building Code Specialist, National Fire Protection Association (NFPA) and Ms. Hilary Styron, Director, National Organization on Disability, Emergency Preparedness Initiative (NOD/EPI), explored the need for standards-based solutions for more effective emergency preparedness for the community of persons with disabilities and special needs.

Scope:
Throughout the course of the two-day Workshop, participants engaged in a series of panels, roundtable discussions, and public input sessions to address the need for new or revised standards to codify the planning and specific equipment needs and planning considerations associated with evacuation concerns of the community of persons with disabilities and special needs. Additionally, break-out sessions were convened examining the built environment as well as evacuation operations and equipment for the subject community.

To determine the best way forward, Workshop participants engaged in a dialogue that suggested potential SDOs as well as federal agency resources for ANSI to conduct outreach to in efforts to identify existing standards. Once identified, these standards could be expanded in scope. Additionally new standards addressing specific areas of concern not already covered by existing standards could be initiated. Additional findings and recommendations of the Workshop are outlined below:

Findings & Recommendations:
I. Built environment for the community of persons with disabilities and special needs
A break-out group was convened to further examine immediate needs related to the built environment. In doing so, the group reviewed existing standards, best practices, and guides (e.g. CPG301 – Interim emergency management planning guide for special needs individuals; NFPA 1600 & Life Safety Code 101; EMAP; and OSHA 29CRF) to identify gaps and determine a course forward. It was found that the following four priority areas for immediate focus as related to the built environment are a primary concern:

- **Information**
  Further work is required related to dissemination and communication of relevant information. Specifically in regards to: two-way communication for all disability types; VMS; audible (frequency); sleeping/waking research and development; multiple languages and formats; alerting systems; and 911 GPS repeaters.

- **Stairways**
  The need exists for research and development initiatives related to further defining dimensions and evacuation flow rate. Additionally, monitoring movement in stairways remains an area for potential focus in creating standards-based solutions.

- **Elevators**
  Standards are needed to address special emergency evacuation operations criteria and control, decentralization of elevators, and hardening.

- **Stair Descent Devices**
  Additional work is required related to standards-based solutions for product standards for evacuation devices for mobility impaired persons as well as device usage.

II. Evacuation Operations and equipment for the community of persons with disabilities and special needs
A break-out group was convened with the task of identifying priority areas for immediate focus as related to evacuation operations and equipment for the disabilities community. In conducting this session it was noted that other organizations such as the National Emergency Number Association (NENA) and the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) should be included in future work resulting from this Workshop. Relevant findings for standards needs are outlined below:

- **Stair evacuation devices**
  Additional work is required related to standards-based solutions for product standards for the evacuation devices for mobility impaired persons as well as the placement/installation, usage, maintenance, operation and storage requirements for such devices.

- **Communication for 911 call centers**
  Problems have resulted from individuals relying on older communications devices to relay emergency information; an area where standards are needed.

- **Training**
  Standards-based solutions and conformity assessment programs are necessary to address levels of training attained as well as potential accreditation for first responders.

### III. Public Input

Workshop participants were presented with the opportunity to weigh in on ideas, share experiences, and provide suggestions for future focus in moving the Workshop initiatives ahead. Items and needs discussed included the following:

- Standards for evacuation planning and preparation
- Product standards on evacuation chairs/descent devices to current/new built environment
- New standards or revised standards to integrate emergency alerting abilities
- Single location for demographic data on the community of persons with disabilities
- Standards on functional medical/emergency shelters and operation of these facilities
- Research to determine what standards and guidance has been developed and by whom
- Standards for 911 communication procedures for 911 dispatch operators and associated services
- Potential for expanding the ANSI-DHS Homeland Security Standards Database (HSSD) to include topically relevant categories
- Public education related to standards dealing with persons with disabilities
- Standard for integration of persons with disabilities and special needs into emergency/disaster training, exercises, and drills
- Needs for Federal policies and guidance on writing policies
- Standards to address transportation needs and plan for evacuation processes
- Standards for wireless emergency communication
- Bring together a Task Group of volunteers to develop a list of standards related to persons with disabilities

### Next Steps:

- ANSI-HSSP will form a task group to identify a course of action that can be used to approach U.S. Standards Developing Organizations (SDOs) to formally begin work in identifying and prioritizing specific needs, including public education; enhanced federal policy; transportation needs; as well as various other issues outlined in the final Workshop report. This group will identify existing standards that have relevance as well as those that should be expanded in scope or developed to address specific needs.
- The ANSI-HSSP will work to develop input to code developing organizations, state, local, and government agencies for use in their policy development procedures.
- While several key stakeholders were represented at this Workshop, it is clear that there are others that were not in attendance that could contribute to the recommendations outlined above.
- It is imperative that outreach strategies be identified to advance standardization efforts addressing the needs of the community of people with disabilities.

In conclusion, the partnership the ANSI-HSSP has developed with the U.S. Department of Homeland Security (DHS), as well as with SDOs, disability advocacy groups, and the disabilities and special needs community plays an integral role in addressing the need for standards-based solutions for more effective emergency preparedness. Additionally, this partnership will continue to grow as ANSI, through its HSSP, remains dedicated to proactively responding to the needs and rights of people with disabilities and special needs.
Welcome
S. Joe Bhatia, President and CEO, American National Standards Institute (ANSI), welcomed participants to the first ANSI Homeland Security Standards Panel (HSSP) Workshop addressing emergency preparedness for persons with disabilities and special needs on behalf of the members and staff of ANSI and the HSSP and called the meeting to order. A complete listing of Workshop attendees is attached to the end of this meeting report (Attachment 1).

Mr. Bhatia emphasized the need to examine the current standards landscape and address the gaps to be filled, as well as improvements to be made related to this critical topic. With the end goal of assuring the safety and well-being of this community in the event of an emergency or a disaster, Mr. Bhatia highlighted the need to examine examples of the evacuation of people with disabilities in recent events; general concepts surrounding mass evacuations; specific lessons learned from these recent events; and the perspective from the population of people with disabilities.

Mr. Bhatia extended accolades to the Workshop co-leaders, Hilary Styron, Director, National Organization on Disability, Emergency Preparedness Initiative (NOD/EPI) and Allan Fraser, Senior Building Code Specialist, National Fire Protection Association (NFPA), for their leadership in convening this Workshop. Additionally, he noted the support from Dr. Bert Coursey and his team at the DHS S&T Office of Standards in addressing the nation’s critical need for standards and compliance programs related to this topic. He concluded his remarks by thanking all attendees for their active participation as subject matter experts and wished them a successful and productive meeting.

David Capozzi, Executive Director, U.S. Access Board, stated that the issues surrounding the topic of emergency preparedness for persons with disabilities are both broad and interwoven, and ultimately we all share in the responsibility of addressing them. Additionally, he noted two current endeavors being carried out by the U.S. Access Board, specifically, work related to emergency transportable housing, an initiative resulting from Hurricanes Katrina and Rita, as well as enhancing emergency alarms on passenger vessels to be inclusive of both visual alerts in addition to the current audio alarms. He concluded his remarks by stating that the US Access Board looks forward to providing continued support to this ANSI-HSSP initiative in responding to the standards-based needs of the community for persons with disabilities.

Christian Dubay, Vice President and Chief Engineer, National Fire Protection Association (NFPA) & ANSI-HSSP Co-Chair, communicated the primary objective of this Workshop which set the context for the discussion to follow: engage leaders, experts, standards developers, as well as those impacted by emergency planning to address the need for new or revised standards to codify the planning and/or procedures and specific equipment needs associated with evacuation concerns of the disability community. He outlined expectations for participants and encouraged attendees to think beyond their own “turf” while voicing concerns and focusing on specific standards-based solutions to address them. Lastly, he thanked the American Red Cross for their generous sponsorship.

“Evacuation for People with Disabilities from Recent Events”
Hilary Styron, Director, National Organization on Disability, Emergency Preparedness Initiative (NOD/EPI) and Workshop Co-Chair, moderated this panel.

Overview of concepts on evacuation:
Erica Kuligowski, Fire Protection Engineer, National Institute of Standards and Technology (NIST), gave a presentation that focused on social science research findings and applications for practice related to warning systems as well as public response summarizing over fifty years of research on this topic. She concluded her remarks with a summary of next steps related to future research and application needs.
Examples of specific lessons learned:
Elizabeth Davis, Founder and Executive Director, EAD & Associates, spoke to examples of specific lessons learned focusing on practical application points to address the intended objectives of the Workshop. She stated that codes, standards, and guidelines are each uniquely defined and clarifying these definitions will help to differentiate between the “shall” and “must” in their development, adoption, and implementation. Also, she translated these examples into the specific needs such as measurable outcomes, shift in focus from story-telling to empirical data collection as well as a repository for this data, and obtaining an understanding of the built environment vs. evacuation operations.

Edwina Juillet, Co-Founder, The National Task Force and Life Safety for People with Disabilities (NFT/LSPwD, addressed the need for progress in the following three key areas related to emergency preparedness for persons with disabilities: stair evacuation devices, use of elevators for emergency evacuation, and human factors. While such devices seek to fulfill the needs surrounding emergency evacuation, FDA regulation as to their designed use as well as a collection of opinions on experiences is lacking. She suggested that research leading to standards development is required to address what the human factors should be in such a situation. Lastly, she mentioned ANSI symbol standards as a potential solution to the elimination of language barriers in emergency evacuation situations.

Overview and Perspective on the Population of People with Disabilities
David Keer, Program Specialist, National Institute on Disability and Rehabilitation Research (NIDRR) delivered a presentation aimed at defining the role disability statistics play in understanding the needs of the community of persons with disabilities. Pointing out that no one data set covers all data needs, he provided examples of various surveys (e.g. National Health Interview Survey, Current Population Survey, American Community Survey, and Survey of Income and Program Participation) to review when examining needs related to this community, in addition to various questions to consider when using various data points. Specifically, he covered disability prevalence rates inclusive of age, gender, race, working age population, and educational attainment from the Census Bureau’s 2007 American Community Survey (ACS). He concluded his remarks by underscoring the need for improvements in disability data as challenges still exist in finding, accessing, using, and documenting relevant and valid statistics about the population with disabilities. Additional information outlining the comprehensive NIDRR research programs related to the rehabilitation of individuals with disabilities can be found at http://www.ed.gov/about/offices/list/osers/nidrr/index.html.

Public Input, Questions and Answers
Allan Fraser, Senior Building Code Specialist, National Fire Protection Association (NFPA) and Workshop Co-Chair moderated this session. Issues, concerns, suggestions, and questions were raised by persons with disabilities, advocates, federal agencies, and standards developing organizations regarding the following topics:

Metrics & Research Protocol:
Concern was voiced regarding the possibility of duplicative efforts and lack of unity in addressing the needs for the community of persons with disabilities. Workshop participants expressed a need for metrics (e.g. scientific data to support the needs of persons with disabilities and the impact on the overall evacuation process). It was suggested that the establishment of recommended quality research protocol could be an appropriate starting point. Additionally, stakeholders are looking for lessons learned and best practices on the subject topic. One qualification is that this data is still not supported by any one area. What may be appropriate in one area is not necessarily suitable in another area. Therefore there needs to be a push to catalogue these lessons learned and best practices including a ranking system as to what worked, what did not work, and reasons supporting these findings.

Standards:
As a matter of concern, it was noted that the development of a particular standard is not always a guarantee for success at meeting all required needs. However, without standards the general population assumes research and usability studies are needed that may already exist or be under development. Also, specific needs for standards were shared related to visual and audible warnings. Additionally, IT accessibility (e.g. Section 508) can fold into this subject and consideration could be given to referencing this in homeland security related standards. Lastly, from an Evacuation planning standpoint there is a need to think beyond getting out of the building (e.g. what happens to the person requiring a wheelchair once he/she have successfully evacuated the building if his/her chair is still in the building).

Inclusiveness:
Attention was called to the need for wider representation from the building community (designers, architects, and SDOs) in the development of standards-based solutions for the community of persons with disabilities. In addition, participants voiced the need for the elimination of assumptions about who makes up a particular community when considering emergency preparedness initiatives. While addressing specific needs and enhancing current practices, it is essential that
the community of persons with disabilities is included in planning as well as ensuring adequate representation in leadership roles. It was suggested that questions be posed as to who represents the target, who will be designated the champion, and what partnerships make sense in implementing changes.

**Funding:**
To carry out initiatives related to the subject topic effectively it is imperative that the issue of funding be addressed. Specifically, viewing this as a potential obstacle or barrier to progress should prompt immediate attention to funding requirements. It was suggested that if we can universalize concepts then we have a better chance at success in finding what limited funding exists. Additionally, it was noted that the Department of Education has a program that addresses funding in this area. The question was raised as to how we can bring together agencies to put funding into this initiative.

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<th><strong>Summary and Expectations for Day Two</strong></th>
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<td>Hilary Styron, Director, National Organization on Disability, Emergency Preparedness Initiative (NOD/EPI) and Workshop Co-Chair, provided a brief recap of highlights resulting from the preceding Workshop discussions. She reminded participants that this issue is multifaceted and tasked the group with keeping an open mind moving forward. In addition, she recalled the concern expressed that just because there is a standard does not mean it will be adhered to. This creates a need for accountability and research behind the development process in standards-based solutions. Also, she stressed the importance of leveraging the public-private partnership fostered by the ANSI-HSSP to advance work in this area.</td>
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Panel Discussion: What does the community of people with disabilities want and need, in terms of standards, to feel safe, protected and included?

Marsha Mazz, Technical Assistance Coordinator, US Access Board, moderated this panel.

Hilary Styron, Director, National Organization on Disability, Emergency Preparedness Initiative (NOD/EPI) and Workshop Co-Chair, spoke to the need for accessible formats for information as Federal Law requires accessibility. She cited relevant statistics to support this need, such as forty two percent of companies claimed they have emergency plans in place, however, only sixteen percent have accessible formats. Additionally, less than six percent had appropriately compliant accessible plans. Also, Ms. Styron outlined the need for standards related to functional medical support facilities as well as guidance for sheltering. She concluded by stating “nothing without us about us” to emphasize the need for inclusion of the community of persons with disabilities in the development of standards-based solutions.

Bill Scott, DARAC, Founder and President, Abilities Unlimited, Inc., shared his experience on testing an evacuation chair with the assistance of Allan Fraser, NFPA. In doing so, he called attention to the reliance on trust in moving from his wheelchair to the evacuation chair with assistance from a known or potentially random volunteer, which can be a rather frightening experience for both parties. Also, he noted the patience required by both parties in the midst of a crisis. Lastly, he pointed out that there is a need for addressing post evacuation procedures as the evacuation chair aids in exiting the building, while the wheel chair remains in the building. The aforementioned points lead Mr. Scott to his conclusion that a need for standards for the design of emergency evacuation devices exists.

Marcie Roth, Executive Director, National Coalition for Disability Rights (NCDR), stated that the wants of the community of persons with disabilities in regards to standards include safety, protection, the elimination of unnecessary fallout in a crisis, and clarity in making it possible for maintaining independence. She also noted that challenges for consideration cover integration of the subject community vs. making them feel “special”, ensuring adequate representation from the community not only at the table in standards development, but also in assuming leadership roles in the process, and devising successful training plans inclusive of entire communities. She concluded by noting the need for standards to clarify expectations.

Peg Blechman, Compliance Specialist, U.S. Access Board, spoke to the standardization needs for the built environment based on her experiences as well as from questions she has received in helping to enforce the Architectural Barriers Act and in acting as the contact person for public and interagency coordinating council. From a products perspective, she noted the need for matching evacuation devices to specific disabilities as well as the specific structure (e.g. low vs. high rise, school, and going up vs. down). In regards to infrastructure, emergency communications recommended guidelines could be addressed (e.g. message boards and radio systems). Also, operational concerns that require attention include use of buddy systems vs. cross-training exercises, inclusion of instructions for what happens outside of the building post-evacuation, and non-fire emergencies). Lastly, Ms. Blechman stated that in order to adequately address all needs outlined above, it is necessary to locate research, guidelines, standards, and usability studies as well as ensure inclusion of the community of persons with disabilities in the development of emergency plans.

Edwina Juillet, Co-Founder, The National Task Force and Life Safety for People with Disabilities (NFT/LSPwD), reviewed specific needs for the community of persons with disabilities related to standards, focusing primarily on egress and drill matters. Ms. Juillet cited access vs. egress as a potential focus for standards-based solutions moving forward. Additionally, she noted the need for increased participation in emergency drills. She stated that the question still remains as to how drills will be regulated in order to ensure they are part of a culture where enhanced emergency preparedness results from participation in drill exercises by all individuals and not just the community of persons with disabilities.

Mary Troupe, Coalition for Citizens with Disabilities, Mississippi, delivered a presentation that addressed standards needs as communicated by the community of persons with disabilities as well as lessons learned from events such as Hurricane Katrina. She noted the need for standards covering the scope of all disabilities (e.g. institutionalized people as well as those in nursing homes), accessible shelters and special needs shelters, as well as the evacuation of large numbers of people. In addition, she stressed the importance of inclusion in planning, execution, recovery, and every aspect of the emergency preparedness life cycle. She stated that direct involvement of the community of persons with disabilities at all levels offers insight and knowledge we cannot find elsewhere. Lastly, she cited the need for improved understanding and communication in knowing the community and forming partnerships with local communities to realize goals related to the needs of this population.
Breakout Group One: What standards are there for the built environment for the community of people with disabilities and what standards are still needed?

Bill Scott, DARAC, Founder and President, Abilities Unlimited, Inc. and Allan Fraser, Senior Building Code Specialist, National Fire Protection Association (NFPA) and Workshop Co-Chair moderated this break-out session. The moderators tasked break-out group participants with indentifying four to six priority areas for immediate focus as related to the built environment, noting that a primary concern is access and egress for mobility impaired individuals, however, not the only focus of discussion. In doing so, the group reviewed existing standards, best practices, and guides (e.g. CPG301 – Interim emergency management planning guide for special needs individuals; NFPA 1600 & Life Safety Code 101; EMAP; and OSHA 29CFR) to identify gaps and determine a course forward for immediate needs. Relevant findings for standards needs include the four key areas outlined below:

- **Information**
  Further work is required related to dissemination and communication of relevant information. Specifically in regards to: two-way communication for all disability types; VMS; audible (frequency); sleeping/waking (R&D); multiple languages and formats; alerting systems; and 911 GPS repeaters.

- **Stairways**
  The need exists for research and development initiatives related to further defining dimensions and flow rate. Additionally, monitoring movement in stairways remains an area for potential focus in creating standards-based solutions.

- **Elevators**
  Standards are needed to address special operations criteria and control, decentralization of elevators, and hardening.

- **Stair Descent Devices**
  Additional work is required related to product standards for the evacuation device itself as well as device usage.

Breakout Group Two: What standards are there for evacuation operations and equipment for the community of people with disabilities and what standards are still needed?

Elizabeth Davis, Founder and Executive Director, EAD & Associates and Hilary Styron, Director, National Organization on Disability, Emergency Preparedness Initiative (NOD/EPI) and Workshop Co-Chair, moderated this break-out session. The moderators tasked break-out group participants with indentifying a list of priority areas for immediate focus as related to evacuation operations and equipment for the community of persons with disabilities. In conducting this session it was noted that other organizations such as the National Emergency Number Association (NENA) and Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) should be included in future work resulting from this Workshop. Relevant findings for standards needs include the areas outlined below:

- **Stair evacuation devices**
  Additional work is required related to product standards for the evacuation device itself as well as device usage. Other considerations include placement and installation decisions as well as maintenance requirements associated with all devices.

- **Communication for 911 call centers**
  Problems have resulted from individuals relying on old devices. New standards addressing advanced communications capabilities of newer technologies are required.

- **Training**
  Standards-based solutions and conformity assessment programs are necessary to address levels of training attained as well as potential accreditation.

Additionally, the group addressed the need for further focused attention to addressing transportation (e.g. use of publicly available buses, etc) aspects of emergency evacuation for the community of persons with disabilities as well as encouraged participation of the transit community in such initiatives.

Report: Environmental scan results of what is in place right now

Allan Fraser, Senior Building Code Specialist, National Fire Protection Association (NFPA) and Workshop Co-Chair, delivered a presentation that encompassed highlights from an environmental scan exercise he conducted in efforts to compile results of work being carried out on this topic. He covered relevant findings and provided a listing of standards, codes, recommended practices, and guides from the following events:
Additionally, Mr. Fraser emphasized the need for all individuals, not just the disabled community, to consider the content of this Workshop from the perspective of what we would want when we become disabled rather than if we become disabled, in order to ensure significant progress in the development of standards-based solutions. He concluded by directing participants to www.NFPA.org/disabilities for further information and resources on this subject. Additionally he noted that NFPA’s “Emergency Evacuation Planning Guide for People with Disabilities” can be downloaded from this site free of charge.

Roundtable Discussion: Based on what standards we know exist, can we identify the gaps that need to be filled and what are the priorities?

Dominic Marinelli, United Spinal Association facilitated this roundtable discussion. The discussion focused on identifying standards, guidelines, and recommended practices currently in existence today, the identification of gaps requiring attention, and priorities for next steps. Included below is a summary of findings resulting from this dialogue.

Standards currently in existence or under development:

- NFPA 1600
- 29 CFR (OSHA 3008) 2001
- EMAP
- NFPA MGMT 2008
- Executive Order 13347
- NFPA 72 – Fire Alarms
- International Building Code (IBC)
- International Fire Code
- American National Standard for Accessible and Usable Buildings & Facilities (ANSI A117.1)
- Americans with Disabilities Accessibility Guidelines (ADAAG)
- Section 508
- Uniform Federal Accessibility Standard (UFAS)
- National Elevator Safety Code A17.1
- Emergency Management Research for People with Disabilities
- NFPA Emergency Evacuation Guide for People with Disabilities
- “Little Pieces” (Underwriters Labs, etc)

Gap Analysis:

- Dissemination/communication of information
- Stairway dimensions
- Monitoring movement in stairs
- Elevators (hardening the core)
- Stair evacuation device and product standards as related to training and installation
- Operations:
  - 911 call centers - understanding what different groups/responders do?
  - Training - inclusion in emergency exercises

Priorities:

- Organizations like RESNA and NFPA can work to develop requirements for stair evacuation devices.
- Organization such as ASME and the U.S. Access Board can take lead on dissemination and communication of needs.
- ANSI will include these organizations, as well as others, in attempt to respond to these issues.
- Stafford Act and NFPA 1600 (due in March, 2009) are important first steps. NFPA 1600 is updated every 3 years and additional information on NFPA 1600 can be found at www.nfpa.org. Comments can still shape this standard especially if targeted at augmenting Emergency Preparedness checklist (Business, Red Cross, Industry Business & Safety).
- Information on emergency evacuation procedures and other issues should be accessible per Section 508 requirements.
- ANSI HSSP and NFPA 72 to communicate progress at HSSP@ANSI.ORG
- Emphasis to reach stakeholders with message of “collective safety” and not a product vendor with a profit interest. Stakeholders might include: Independent Living Centers, DD Councils, Easter Seals, NCIL, DBTAC’S, PVA, and United Spinal Association.
- Include group topics on development, public education and training, etc. Future meetings can be held at accessible locations. Include Federal Facilities Council future initiatives.
- Nuclear Regulatory Commission (Standards for Alerts & Warnings)
- CSEP – Hazardous Waste Facilities
- REP – Radiological Environmental Protection
- Nuclear Regulatory Commission
- US Military - outdoor warnings and alerts
- IPOS, FEMA, FCC, NOAH - involved in developing new Federal Alert System
- PSAPS - Public Alerts with local input (chemical release, amber alert)

Public Input
Workshop participants were presented with the opportunity to weigh in on ideas, share experiences, and provide suggestions for future focus in moving the Workshop initiatives ahead. Items and needs discussed include the following:

- **Standards for evacuation planning and preparation**
  The need exists for creating a standardized approach to addressing gaps related to this topic such as individual buildings and facilities, homes and residences, community considerations, evacuation routes and planned implementation, and approaching this matter from the perspective of special needs vs. disabilities.

- **Product standards on evacuation chairs/descent devices**
  Manufacturing specs could be evaluated against the need for a product standard on evacuation devices. Considerations include size, shape, capacity, usage for going up vs. coming down, and post-evacuation procedures when a wheelchair is left in evacuated facility. It was noted that RESNA could be looked at as a contributor in future Workshop endeavors as they have begun work in this area.

- **Standards or revised standards on the integration of disability and special needs to current/new built environment**
  This need addresses consideration of public/work buildings, residential multi-family dwellings, and single-family homes, incorporating egress vs. access needs.

- **Standards or revised standards to integrate alerting**
  Such standards could cover the scope of dissemination and communication of information as well as devices used for alerting. There is a need for consistent and complete messaging in addition to well crafted and evidence-based messages. Additionally, there is a need to address methods to provide accurate and continued updates to allow for an effective decision making process.

- **Single location for demographic data**
  At a minimum, data should be centralized at the county level at a single source to ensure credible, accurate, and up-to-date data.

- **Standards on functional medical shelters and operation of these facilities**

- **Research to determine what has been done and by whom**
  This assessment should include information pertinent to topics such as stair flow, effectiveness, elevator changes, and building changes. More importantly, however, this literature search should include conclusions and/or recommendations, ideally kept in a centralized platform.

- **Standard for 911 communication procedures**
  A review of communication methods should be conducted and should include research related to contacting 911 by means other than by telephone. The National Emergency Number Association (NENA) and the Federal Communications Commission were identified as potential outreach candidates for inclusion in future efforts. Additionally, the FCC hosted a summit on deployment and operational guidelines for next generation 911/E911 Systems on February 25, 2009.

- **Potential for expanding the ANSI-DHS Homeland Security Standards Database (HSSD) to include topically relevant categories**

- **Bring together a Task Group of volunteers to develop a list of standards**

- **Public education related to standards**

- **Standard for integration of training and drills**

- **Needs for Federal policies**
Questions remain as to what federal policies should be developed. This should be looked at more closely in order to progress the work of standards-based solutions related to the community of persons with disabilities.

- **Guidance on writing policies**
  An opportunity exists for Workshop participants to look into the possibility of developing templates to aid in writing policies related to this subject matter.

- **Standards to address transportation needs and plan for evacuation processes**
  Consideration should be given to “carless cities” and urban vs. rural areas, campuses, and various types of vehicles used for the purposes of evacuations.

- **Standards for wireless emergency communication**

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**Action Items, Follow-Up Report, Next Steps & Closing Remarks**

Christian Dubay, Vice President and Chief Engineer, National Fire Protection Association (NFPA) and ANSI-HSSP Co-Chair, noted that all of the materials presented throughout the course of the Workshop would be consolidated and posted to the ANSI online document library via ANSI Online with a notice circulated to Workshop participants and ANSI-HSSP members. Also, the ANSI-HSSP will form a task group to identify a course of action that can be used to approach U.S. Standards Developing Organizations (SDOs) to formally begin work in identifying and prioritizing specific needs, including public education; enhanced federal policy; transportation needs; as well as various other issues as outlined in this report. In doing so, this group will identify existing standards that have relevance as well as those currently developed that should be expanded in scope to address specific needs. Additionally, the Panel will work to develop input to code developing organizations, state, local, and government agencies for use in their policy development procedures.

In conclusion, Mr. Dubay expressed his appreciation to Ms. Styron and Mr. Fraser for their leadership efforts and thanked all attendees for their participation.
#### Attachment 1 - Attendance List from the ANSI-HSSP Workshop Meeting on Emergency Preparedness for Persons with Disabilities and Special Needs (February 3-4, 2009)

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<td>District of Columbia Public Schools</td>
<td>Reggie</td>
<td>Ballard</td>
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<td>U.S. Access Board</td>
<td>David</td>
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<td>Berry</td>
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