

**Testimony before the Pennsylvania State Senate & House
Committee(s) on Veterans Affairs & Emergency Preparedness**

regarding

**The Capabilities of DHS/FEMA Urban Search & Rescue (US&R) Pennsylvania Task Force One (PA-TF1) and the establishment of a second Urban Search & Rescue team in western PA
Public Hearing on Senate Bill 792 & House Bill 843, Urban Search & Rescue Teams**

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Thank you, Chairman Mastriano, Chairman Solomon, Minority Chair Muth, Minority Chair Gillen, and the distinguished members of the Pennsylvania State Senate and House Committee(s) on Veterans Affairs & Emergency Preparedness, for this opportunity to discuss Pennsylvania Task Force One (PA-TF1) and the establishment of a second Urban Search & Rescue team in western PA.

I am Kenneth P. Pagurek Jr.; I have been a Philadelphia firefighter for 29 years and am currently assigned as the Program Manager of PA-TF1, a unit within the Philadelphia Fire Department's Special Operations Command. I also serve the Federal Emergency Management Agency (FEMA) Urban Search & Rescue (US&R) National Response System in concurrent duty assignments as the Eastern Division Task Force Representative, Incident Support Team (IST) Alternate in the position(s) of Division Group Supervisor, Liaison Officer, Air Operation's Branch Director, and Task Force Leader for Pennsylvania Task Force 1. Additionally, I am a veteran of the United States Air Force, and I am currently serving as the Chair of the Southeastern Pennsylvania Regional Task Force Urban Search & Rescue Sub-Workgroup

I have served in various capacities at the local, state, and federal levels in disaster response operations, including deployments to; Bucks County Flooding (TFL), West Reading Building Explosion (TFL), Hurricane Henri (TFL/MRP leader), Surfside Building Collapse (TFL), NSSE Biden Inauguration (TFL), Covid Basecamp (TFL), Hurricane Matthew (TFL), Hurricane Dorian (TFL), Hurricane Florence (TFL), Hurricane Michael (TFL), Hurricane Irene (RS), Hurricane Sandy (STM), Papal Visit (D-TFL), Hurricane Earl (RS), Hurricane Gustav (RS), Hurricane Dean (RS) Hurricane Ernesto (RSO) Hurricane Dolly (TSS), and IST deployments to; Moore, OK Tornado (USAR Spec), Hurricane Harvey (USAR Spec), Hurricane Irma (USAR Spec, LNO), Hurricane Maria (USAR Spec, LNO), Hurricane Ida (Div Grp Sup), Hurricane Sally (Air Op's), Hurricane Laura (Div Grp Sup), Oregon Wildfires (Div Grp Sup), Hurricane Fiona (LNO), Hurricane Ian (Div Grp Sup). Oftentimes, these responses involved working in State, County, and Local EOC's and in coordination with SUSAR and local response elements.

I am speaking today as a First Responder and a proud citizen of the Commonwealth of Pennsylvania. Still, I also have the responsibility and privilege to speak on behalf of the nearly 210 members of Pennsylvania Task Force One and the members of the SEPARTF US&R elements.

Bottom Line Up Front (BLUF)

Without funding the in-state US&R system equally and appropriately, there will be the perception that some geographic regions (and lives in those areas) are more valuable and matter more than those outside those areas when citizens die due to a lack of funding and response capability.

FEMA Urban Search & Rescue Background

The Federal Emergency Management Agency's Urban Search & Rescue National Response System is the by-product of the 1989 Federal Government's response(s) to the disasters of Hurricane Hugo and the Loma Prieta earthquake. Congress tasked the Federal Emergency Management Agency (FEMA) to develop a national civilian urban search & rescue capability. Several advanced Urban Search & Rescue teams had already been developed by individual fire departments and within regions where unique risks had been recognized, such as California with its well-known earthquake potential. FEMA, with support from federal, state, and local authorities, fire departments, the nation's top technical rescue specialists, and other interested groups, developed the Urban Search & Rescue (US&R) National Response System.

As you know, the Federal Government implements the National Response Framework during a disaster to provide state and local governments with technical expertise, equipment, and other resources. These resources are provided by one or more federal agencies. The primary agency responsible for Urban Search & Rescue is FEMA, under Emergency Support Function #9 (ESF #9) of the National Response Plan.

The primary purpose of this system is to provide a nationwide network of heavy search and rescue teams that can be rapidly deployed to disaster incidents. The individual teams are established at the local-jurisdiction level and can be federalized and deployed by FEMA as needed for a nationwide response. The US&R teams provide an organized system of resources to locate, extricate, and provide immediate medical treatment to victims trapped in collapsed structures and to conduct other life-saving operations, such as water rescue. The US&R National Response System is responsible for coordinating, developing, and maintaining the Federal effort in providing these resources to augment state and local resources in disaster situations.

The twenty-eight Urban Search & Rescue (US&R) Task Forces are the fundamental units of FEMA's national response system and are strategically located throughout the country. Each Task Force is sponsored by a State or local government jurisdiction and deploys with technical specialists divided into management and operational elements. Over the years, FEMA has developed a variety of functional deployment configurations to right-size the resources assigned to the incident and thus reduce the burden of cost on requesting jurisdictions. Current configurations are as follows:

- Type I Task Force with 70 personnel (with a full equipment cache that includes specialized Weapons of Mass Destruction PPE/mitigation capabilities)
- Type II Task Force with 70 personnel modified cache (non-CBRNE incidents)
- Type III Task Force with 28 personnel (with the full equipment cache) primarily designed to operate in weather-driven disasters such as hurricanes.
- Type IV Task Force with 22 personnel focused operations on light to moderate frame construction damaged structures, capable of 12-hour operations periods

- Canine Search Mission Ready Package: Two (2) K9 teams and Three (3) support personnel
- Communications Mission Ready Package: One (1) Communications Unit Leader, two (2) Communications Specialists, one (1) Communications Specialist (Networking), two (2) Radio Operators
- Hazardous Materials Mission Ready Package: One (1) Hazmat Team Manager, one (1) Safety Officer, four (4) Hazmat Specialists, two (2) Support Personnel
- Command Mission Ready Package: One (1) IST Leader, one (1) Operations Section Chief, one (1) Planning Section Chief, one (1) Logistics Section Chief
- Logistics Support Mission Ready Package: One (1) Logistics Team Manager, two (2) Logistics Specialists
- Medical Support Mission Ready Package: One (1) Medical Team Manager, four (4) Medical Specialists
- Search Mission Ready Package: One (1) Search Team Manager, two (2) Technical Search Specialists, two (2) Support Personnel, and two (2) Canine Search Specialists (Both Live-Find or HRD)
- Structures Specialist Mission Ready Package: Two (2) Structures Specialists
- Technical Rescue Mission Ready Package: One (1) Rescue Team Manager, one (1) Rescue Squad Officer, five (5) Rescue Specialists, (2) Support Personnel
- Water Rescue Mission Ready Package: One (1) Water Rescue Manager, two (2) Water Rescue Squad Officers, two (2) Boat Operators, six (6) Water Rescue Specialist, one (1) Logistics Specialist, two (2) Medical Specialists

To ensure the ability to deploy at any time with the required number of personnel, teams are staffed in all positions “three-deep” and carry a total rostered personnel complement of two hundred and ten members. Many of the sponsoring agencies are municipal fire departments, and firefighters comprise the largest percentage of the rostered members within the system.

The FEMA US&R National Response System also provides an overhead management capability for field operations known as the Incident Support Team (IST). The IST provides Federal, state, and local officials with technical assistance in acquiring and utilizing Federal US&R resources through advice, incident command assistance, management and coordination of US&R Task Forces, and obtaining logistical support. The FEMA US&R Program rosters three 21-member Incident Support Teams (the Red, White, and Blue). Each IST is on call one out of every three months, and members must be able to deploy within two hours of receiving their activation orders.

Each Task Force maintains extensive capabilities within eight major functional elements.

- Search Specialists utilize canines and technical electronic search equipment to locate trapped victims.
- Rescue Specialists are skilled in shoring operations, lifting, cutting, and breaching all types of building materials, including structural steel and reinforced concrete, to extricate trapped victims.
- Water Rescue Specialists are skilled at conducting boat operations in standing and moving waterborne rescue and evacuation operations.
- Physicians and Medical Specialists (at the paramedic or equivalent level) provide advanced life support capability, pre-hospital and emergency care for Task Force members, and crush syndrome medicine and confined space medicine for rescued victims.

- Rigging Specialists work in conjunction with heavy equipment, such as large hydraulic cranes, to remove heavy debris and expose collapse voids where victims are buried.
- Structural Engineers perform structural integrity assessments of structures in rescue operations.
- Hazardous Materials Specialists and Technical Information Specialists support the overall search and rescue mission, including planning, hazards evaluation, hazardous materials assessments in rescue operations, data collection, and technical documentation.
- Logistics Specialists support the overall search and rescue mission by providing supplies, equipment, communications, and transportation for the Task Force and managing the mobilization and demobilization processes.

In addition to having the above-listed capabilities, Task Forces are structured to be able to operate under the following guidelines:

- 24-hour around-the-clock operations
- Self-sufficiency for 72 hours
- Report to the Point of Departure within 4-6 hours of activation and be able to deploy all personnel and the entire equipment cache by ground or air (as required)
- Standardized data collection and technology
- Standardized equipment and training
- Standardized operating procedures
- Operate under the Incident Command System (ICS)

Pennsylvania Task Force One (PA-TF1)

PA-TF1 has played a vital role in the in-state US&R system; it has been activated by the State to respond and/or stand by at the following events:

Concept Sciences Building Explosion
 North Central PA Flooding Event
 Little League World Series (multiple years)
 Super Storm Sandy
 Papal visit NSSE
 Tropical Storm Ida
 RM Palmer Chocolate Factory Explosion
 Bucks County Flash Flooding Event (City of Philadelphia Mutual Aid, County to County)

Additionally, we have deployed components of PA-TF1 to assist with in-state incidents such as missing persons, building collapses, bridge collapses, data collection & organization.

During the initial phases of the in-state US&R system, PA-TF1 provided much of the training and overhead to the system. Since that time, those responsibilities have been transitioned to the PA-IMT and Harrisburg Area Community College, which, in conjunction with PA-TF1, has developed an open enrollment, US&R curriculum allowing for all interested parties to attend and receive FEMA equivalency for many of the offered courses.

PA-TF1 offers the Commonwealth a tremendous return on investment for what they bring to the table. PA-TF1's annual readiness budget is approximately \$1.2 Million dollars to which the Commonwealth contributes no financial support. This funding is provided via a non-competitive grant program managed by the federal government. As with many programs, this program is underfunded as well, and the City of Philadelphia incurs many soft costs on the Task Force's behalf, such as vehicle insurance, lease management, fleet spec development, attorneys who coordinate the PA-TF1 Memorandum of Agreements (MOA's) with our Participating Agency Stakeholders, etc.

PA-TF1 can mobilize & respond to the entire Commonwealth within one operational period, which is the intent of the Tiered Response Con-Op. Additionally, due to the makeup of the team and the members being spread throughout the Commonwealth, we can rapidly deploy elements of the team, such as K9 (Live Find & Human Remains Detection), Structural Engineers, Command & Control, to an incident scene often arriving in only a few hours. To that end, the PA-TF1 resource is available to the Commonwealth for response at the PEMA Directors or the Governor's request. At that time (and only then), except for a few smaller cache items we have been helped with over the years, does the Commonwealth have a financial obligation, which would be the costs incurred by PA-TF1 to conduct the in-state response.

PA Urban Search & Rescue Background

The in-state system was born out of the September 11th attacks using the Governor's Task Force on Security (November 19, 2001) report to then Governor Schweiker as a guiding document. The report specifically cites the following regarding Emergency Response:

“Well-integrated, coordinated and tiered responses to terrorist incidents by public-safety, public works, investigative and recovery agencies ensure the most effective use of resources and provide the best opportunities to ensure safety and community recovery.”

“Pennsylvania is protected by thousands of fire, police, emergency medical, and rescue organizations, and, generally, these organizations function well. The vast majority of personnel staffing these organizations are volunteers. Whether career staff or volunteer, uniform, professional training is essential to the proper functioning of the response systems.”

“Equally important is the provision of specialized resources that support local, county and regional responses. Pennsylvania Task Force 1, the commonwealth's Urban Search and Rescue (USAR) Team, is one important example of a specialized resource that can be dispatched in the event of a major collapse or rescue emergency.”

“Responses to widespread disasters and emergencies, including terrorist attacks, function best when provided in a tiered manner. Tiered response begins with the arrival of personnel with basic awareness levels and basic skills and escalate through additional levels to the point in the incident where highly-specialized technicians with sophisticated equipment augment the response.

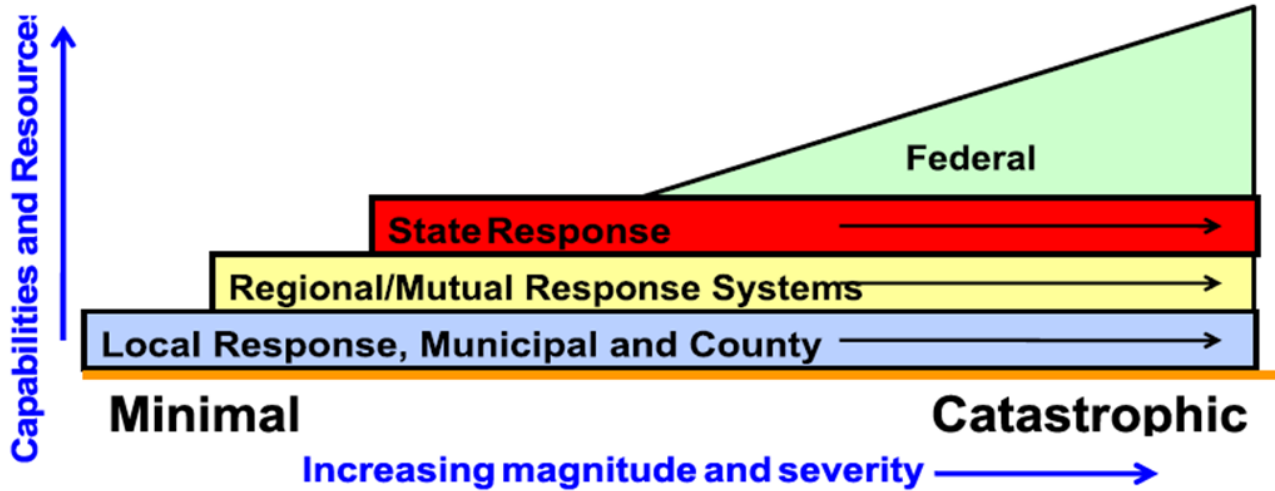
- A tiered response system should be implemented across the commonwealth.
- Personnel should be adequately trained and equipped to allow them to do their jobs safely and effectively in responding to a weapons of mass destruction (WMD) event.

- The State Fire Academy should research a shortened version of USAR Operations level response training that would focus on safety and basic techniques.
- A comprehensive, multi-agency security system including the immediate physical cordoning of disaster sites, establishment of secured access points, and issuance of restricted area badges to authorized personnel should be considered.
- Each Regional Counter Terrorism Task Force should identify personnel with training and experience in large incident management and USAR operations for service on Regional Incident Support Teams (IST) and Rapid Assessment Support Teams (RAST). It is recommended that the state explore funding options for regional RAST and IST training for selected personnel.
- The commonwealth should consider providing, through PEMA and mutual aid, mobile Incident Support Units to assist in coordination and communication on the scene of attacks and disasters.
- Resource identification and organization should be performed through the nine (9) existing Counter Terrorism Task Forces in coordination with county emergency management and 911 agencies.
- A standardized database system should be developed that includes information on resources at the county, regional and state levels. This database would be referenced when PEMA receives a report of an escalating incident or a request for assistance. In addition, state RAST and IST elements would receive notification and deployment through this process.
- PA-TF1 should receive the necessary equipment and training required for certification as a Weapons of Mass Destruction (WMD) team.
- The USAR program at the state level should be augmented by one additional staff member to assist in coordination, research and training.
- A second USAR team should be considered, and, if approved, be fully equipped for deployment within the commonwealth.”

To a large extent, the above recommendations have been implemented. However, it has been 22 years since this report was issued. The time has come to conduct a top-down review of the Commonwealth's preparedness, ability to respond, and ability to mitigate incidents within our jurisdictional boundaries. Conducting a thorough assessment & gap analysis of where we stand (from the Emergency Preparedness position) will assist PEMA (or an appointed group of Stakeholders) in developing a path forward that is right-sized for the Commonwealth, visionary and fiscally prudent to the taxpayers. During this review, attention should be paid specifically to team typing, standards to which the teams need to be measured against, insurance protections, and response protocols.

For example, National US&R Task Forces are evaluated by several methods concerning operational readiness parameters. Annually, each Task Force must submit a Self-Evaluation to the Program Office; each team scores themselves in three categories: Operations, Logistics, and Task Force Management. Another metric employed to ensure Task Force readiness is the Administrative Readiness Evaluations (where an Evaluation Team of Program Office staff and Peer Evaluators conduct a comprehensive on-site inspection and review of administrative policies, procedures and documentation, logistical readiness, training programs, financial record-keeping, and personnel files) this is currently being conducted on a three-year rotation for each team.

One common theme in the Governor’s Task Force on Security report is the concept of a “Tiered Response.” A Tiered Response is by far the most cost-effective way to manage an incident. Whereby the incident is escalated as the responding resources become overwhelmed or undertrained. Examples of the Tiered Response concept are as follows:



Graphic 1 – Chart depicting tiered response model taken from Version 4.0 of the Catastrophic Incident Search and Rescue Addendum of the National Search and Rescue Supplement.



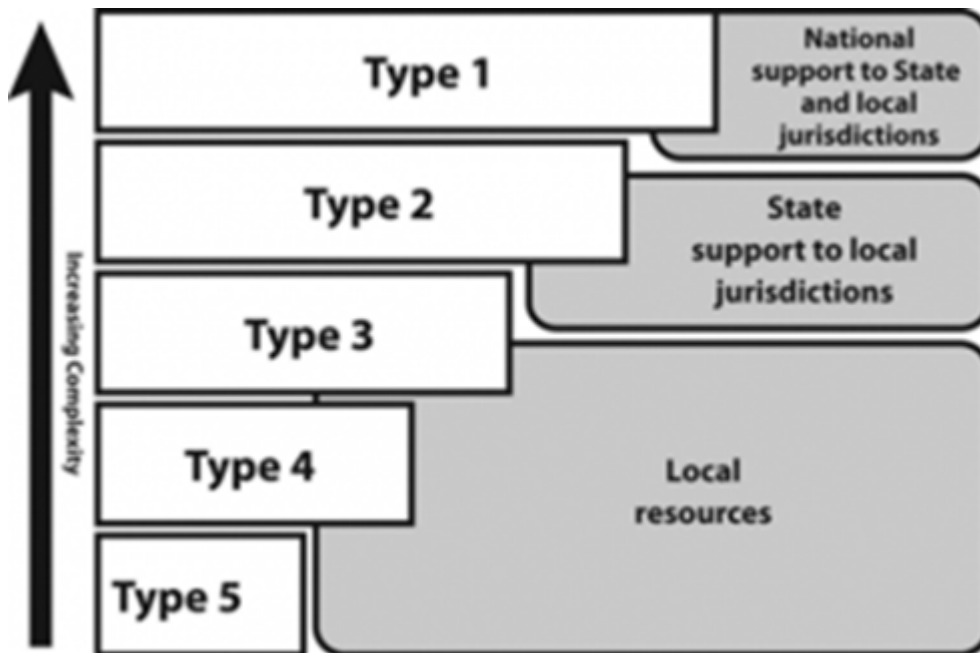
Graphic 2 – Tiered response model showing times for engagement of various response assets based on the incident timeline.

In addition to the Tiered Response Concept of Operations (Cop-Op), there is an Incident Typing process available to Incident Commanders to use in determining the scale of the incident.

Incident Typing

In the United States, NIMS, ICS, and the National Response Framework utilized by regulators and emergency response agencies describe emergency incident complexity on a spectrum of Type 5 to Type 1, with Type 1 being the most complex. Incident typing also aids emergency managers in organizing a “right-sized” response by matching resources and capabilities to the complexity of the incident (i.e., Type 1 IMT for a Type 1 incident). Type 1-5 may also be used to describe scenario complexity for exercises.

- **Type 1** – Most complex, requiring national resources for safe and effective management and operation. Type 1 response may continue for many weeks or months.
- **Type 2** – Incident extends beyond the capabilities of local control and is expected to go into multiple operational periods. Often requires the activation of response resources from outside the local area.
- **Type 3** – Incident needs exceed onsite capabilities, and additional resources from the local area may be brought in to support the response. The response will last longer than one or two operational periods.
- **Type 4** – Minor incidents that can usually be resolved within a day with onsite resources and support from other facility personnel.
- **Type 5** – Small incident that can usually be resolved within a few hours with onsite resources



Recent examples of the Tiered Response Con-Op Working

WM Palmer Building explosion, where the 1st Responders (West Reading Fire Dept.), shortly after they arrived, realized the incident was beyond their capabilities; they requested Mutual Aid from the Montgomery County US&R Team and concurrently PEMA coordinated an ESF #9 Liaison Officer from PA-TF1 being added to the incident, after which PA-TF1, as a modified Type 4 team was sent to relieve the Montgomery County US&R team and assume operations.

Philadelphia County to Bucks County Mutual Aid for a flash flooding event. The local 1st Responders again realized the incident was beyond their capabilities; they requested Mutual Aid from the Montgomery County US&R Team with water capability; after determining the need for additional operational periods, Bucks County contacted Philadelphia County to request a 20-person team from PA-TF1 be sent with wide area search, data collection, and water operations capabilities.

Current Overview of in-state US&R system & Challenges

PEMA currently operates the in-state US&R System under authorities drawn from various sections of the Commonwealth legislature and in-state response elements (PA-ST1 Pittsburgh, PA-CO4 Oil City, PA-CO6 Williamsport, PA-CO5 Saxton, PA-CO3 Scranton, PA-CO2 Conshohocken, PA-CO1 Dover, the Helicopter Aquatic Rescue Team (HART), and the PA-Incident Management Team (PA-IMT) these programs have been woefully underfunded and support for them has ebbed/flowed as leadership changed within PEMA. Annual funding amounts to build and sustain the program have varied widely (and majorly declined) since the program's inception. The current annual cost to maintain a Type 1 Task Force in a state of readiness is estimated to be approximately \$2.5 million annually. The cost of a complete Type 1 cache based on the 2023 FEMA cache list (including prime movers) is \$9.3 Million Dollars and is broken down into the following categories:

Comm Section MSRP	\$1,932,339.53
HazMat Section MSRP	\$720,206.20
Logistics Section MSRP	\$2,534,636.33
Medical Section MSRP	\$367,564.14
Plans Section MSRP	\$2,573.65
Rescue Section MSRP	\$547,255.99
Technical Section MSRP	\$265,681.46
Vehicles Section MSRP	\$2,486,000.00
Water Section MSRP	\$431,076.77
TOTAL MSRP	\$9,288,308.32

Additional monies are needed to fine-tune and fully support the response capabilities within the Commonwealth rather than unilaterally investing in one regional element. All citizens should have the same level of service available to them.

****Note:** The Pennsylvania in-state system was a Nationally recognized best practice. Over the years, we have been surpassed by many other states. It's time for Pennsylvania to become a leader once again in the realm of emergency preparedness and emergency response.

The in-state system has been functioning for many years without an Advisory Committee (historically comprised of members representing PEMA, In-State element leaders, technical experts, and emergency response professionals). In the past, the Advisory Committee has brought the diverse views of all stakeholders together and provided necessary guidance and a balanced viewpoint to PEMA regarding the operation and administration of the in-state program. The re-establishment and active participation of an Advisory Committee are extremely important to the system's and its participants' future success.

The maintenance/replacement of existing/original caches and acquisition of new technology upgrades requires significant and stable funding that currently needs to be identified. Furthermore, including PA-TF1 in any funding allocations is necessary as well because, in accordance with the Robert T. Stafford Act, prior to the Commonwealth requesting federal support, all resources must be employed on the incident (which would include PA-TF1), and therefore PA-TF1 should be funded in the same fashion as any other in-state US&R team.

Summary

Despite the lessons we have learned from our Commonwealth's response to many incidents that include the downing of Flight 94, attacks on the World Trade Center, and the Pentagon, and despite our lessons learned from responses to events similar to the most recent devastating flooding, the in-state Urban Search & Rescue System has not reached its full potential.

While these responses appear to be increasing in both frequency and urgency for us as an in-state system to continue to improve our skills and acquire new technologies to mitigate complicated large-scale technical rescue/collapse situations, specific legislative authorization, and sustainment of adequate and recurring funding for the in-state Urban Search and Rescue System remain one of the most significant missing pieces.

In effect, the Commonwealth has a proven "ready reserve" force of highly trained specialists capable of immediate response to any incident. This program is an outstanding example of cost-effective cooperation between all levels of state government. The introduced legislation must provide for the growth and sustainment of the in-state US&R system. It should provide equality for all citizens of the Commonwealth by improving the entire system and not unilaterally investing in one geographic area. Additionally, it should explicitly authorize PEMA the funding necessary to follow through on this commitment annually. Doing so will ensure a robust In-State Urban Search & Rescue response capability, with measurable benefits to the citizens and through all tiers of emergency response.

Closing

Again, I would like to thank Chairman Mastriano, Chairman Solomon, Minority Chair Muth, Minority Chair Gillen, and the distinguished members of the Pennsylvania State Senate and House Committee(s) on Veterans Affairs & Emergency Preparedness for the privilege of appearing before you today.