A resolution expressing the need to educate and equip first responders with the information and tools needed to address safety challenges posed by emerging technologies such as electrical vehicles

Offered by:

National Fire Protection Association

National Volunteer Fire Council

International Association of Fire Chiefs

International Code Council

Whereas by every measure technology is changing and improving at the fastest rate in history;

Whereas the Department of Energy, in its most recent Quadrennial Review, noted that "America is in the midst of an energy revolution" and "emerging advanced energy technologies provide a rich set of options to address our energy challenges;"

Whereas new technologies including electric, hybrid, alternative fuel, autonomous, and other vehicle types have continued to evolve and more technologies will emerge in the future.

Whereas the National Transportation Safety Board (NTSB) issued a report in November 2020 titled *Safety Risks to Emergency Responders from Lithium-Ion Battery Fires in Electric Vehicles*, which identified gaps in safety standards and research related to high-voltage lithium-ion batteries involved in high-speed, high-severity crashes;

Whereas the NTSB report also highlighted the need to inform first responders about the circumstances of the fire risks described in their report and the guidance available to emergency personnel who respond to high-voltage lithium-ion battery fires in electric vehicles;

Whereas from 2012 to 2021, the Department of Energy and the Federal Emergency Management Agency (FEMA) have devoted resources to the continued development of Alternative Vehicle Safety Training for First Responders which builds awareness of electric, hybrid, propane, hydrogen fuel cell, and natural gas vehicles while providing incident tactics education;

Whereas in 2021, the Department of Energy devoted funding to the development of free safety training related to distributed energy systems for emergency responders, including microgrids, solar panels, electric vehicle charging stations, and energy storage systems, to keep responders

safer when responding to incidents;

Whereas the Department of Energy has devoted resources to the development of free safety training for utilities, code officials and charging station installers, electric vehicle fleet owners, tow & salvage responders, Crash Reconstruction Teams, manufacturers and dealerships, garage maintenance workers, insurance companies, and electric vehicle owners;

Whereas FEMA has provided funding to conduct research and develop firefighter safety training in preparation for our nation's transition to environmentally friendly refrigerants that have a lower Global Warming Potential (GWP) but also pose a flammability and toxicity risk when involved in fire events;

Whereas, despite significant efforts to build awareness and provide training, many of the more than 1.1 million career and volunteer firefighters in the United States need to be better informed about emerging technologies to do their jobs effectively and safely;

Whereas only 20 percent of the firefighters in the United States have participated in available electric vehicle and energy storage systems safety training to date;

Whereas new technologies will continue to emerge and fire and EMS personnel must be trained and prepared to safely respond.

Therefore, be it resolved that the Congressional Fire Services Institute supports federal legislation, funding and policies that:

1. Educate and inform first responders, enforcement personnel, and others about the unique safety issues related to emerging technologies

2. Facilitate the development and distribution of information, education, and other resources needed to address the safety issues related to new technologies; and

3. Promote the use and enforcement of the most current consensus-based codes and standards that address new technologies.