

Date of Hearing: April 18, 2018

ASSEMBLY COMMITTEE ON GOVERNMENTAL ORGANIZATION

Adam Gray, Chair

AB 2811 (Flora) – As Amended March 22, 2018

SUBJECT: SMART Firefighting for the 21st Century

SUMMARY: Establishes the Firefighting for the 21st Century Act of 2018 (Act). Specifically, **this bill:**

1. Establishes, within the Governor's Office of Emergency Services (Cal OES), the SMART Firefighting for the 21st Century Pilot Program (pilot program), which will provide grants to selected local and state agencies for the purpose of acquiring and utilizing SMART firefighting equipment.
2. Requires the director of Cal OES (director) to do the following:
 - a) Establish an advisory committee no later than 45 days after effective date of this bill, which shall be comprised of representatives of firefighter organizations, as defined. The committee shall meet no later than 30 days after all members are appointed.
 - b) Consult with the advisory committee regarding equipment specifications and other matters relating to the acquisition of SMART firefighting equipment, and require the advisory committee to formulate specifications no later than 120 days after its initial meeting.
 - c) Notify all local and state agencies about the pilot program and determine whether those agencies are interested in obtaining SMART firefighting equipment.
3. Requires the director, after consultation with advisory committee, to choose five pilot locations, with at least at least one location in a rural area, one in a suburban area, and one in an urban area, and shall select a fire department for the program in each location.
4. Requires a fire department, in order to be eligible for funding, to establish a labor management committee that is composed of equal number of representatives of the employer and employees. The members of a labor management committee who are employees shall be appointed by the recognized employee organization that represents firefighters in that jurisdiction.
5. Requires a fire department that receives grant funds, not to exceed \$5 million, to use those funds for the purpose authorized in that grant, which may include: 1) The purchase of SMART firefighting equipment; 2) The training of department personnel in the use of that equipment; and 3) Necessary staffing costs incurred by that fire department.
6. Requires the director to establish a task force for the purposes of evaluating the effectiveness of the pilot program. The 7 member task force shall consist of the following members:
 - a) One member from each fire department in a pilot program location, chosen by that department.

- b) The director or the director's chosen representative.
 - c) One member from the county or city government most closely aligned with the jurisdiction of the fire department in a pilot program location, as determined by the director, chosen by that county or city.
 - d) The chairperson of the Senate Committee on Budget and Fiscal Review or the chairperson's representative.
 - e) The chairperson of the Assembly Committee on Budget or the chairperson's representative.
 - f) One rank and file member from each fire department in a pilot location, chosen by that department.
 - g) One member of the California Fire Chiefs Association, chosen by the California Fire Chiefs Association.
7. Establishes in the State Treasury the SMART Firefighting for the 21st Century Fund (fund). Clarifies funds shall be made available to Cal OES upon appropriation by the Legislature.
8. Requires the task force shall submit a report to the Legislature, on or before January 1, 2021, regarding the status of the pilot program and its conclusions regarding its effectiveness.
9. Defines "SMART firefighting equipment" as Specific-Measurable-Actionable-Relevant-Timely (SMART) equipment, systems, and tools that use sensors, databases, and wireless Internet access to assess the environment and apply experience-based programs to anticipate possible scenarios and evaluate optimal responses in firefighting.
10. Contains a sunset of January 1, 2022, unless a later enacted statute that is enacted before January 1, 2022, deletes or extends that date.

EXISTING LAW:

- 1. Establishes CalOES by the Governor's Reorganization Plan No.2, operative July 1, 2013.
- 2. Requires CalOES to perform a variety of duties with respect to specified emergency preparedness, mitigation, and response activities in the state, including emergency medical services.
- 3. Establishes in OES a thermal imaging equipment-purchasing program under which the office shall acquire firefighting thermal imaging equipment on behalf of local and state agencies that are interested in obtaining this equipment.

FISCAL EFFECT: Unknown

COMMENTS:

Purpose of the bill: According to the author: “AB 2811 would create the SMART Firefighting for the 21st Century Pilot Program within the Office of Emergency Services (OES) for the purpose of providing grants, not to exceed five million dollars, to local and state agencies to acquire and utilize Specific-Measurable-Actionable-Relevant-Timely (SMART) firefighting equipment. California firefighter and other emergency service personnel respond to millions of requests each year. First responders need every advantage during potentially life threatening operations. AB 2800 would provide a nexus between local jurisdictions and emerging technologies aimed at improving firefighting efforts.”

Background: In 2009, the California Legislature merged the powers, purposes, and responsibilities of the former Cal OES with those of the Office of Homeland Security (OHS) into the newly- created California Emergency Management Agency (CalEMA). On July 1, 2013, Governor Edmund G. Brown Jr. 's Reorganization Plan #2 eliminated CalEMA and restored it to the Governor's Office, renaming it the California Governor's Office of Emergency Services (Cal OES), and merging it with the Office of Public Safety Communications. Today, Cal OES is responsible for overseeing and coordinating emergency preparedness, response, recovery and homeland security activities within the state. In addition, Cal OES administers a variety of programs, including the Firefighting Thermal Imaging Equipment Program.

In 2001, the Legislature passed and the Governor signed AB 70 (Wright, et. al.), which created the Firefighting Thermal Imaging Equipment Act of 2001 (Act of 2001). The act established a program, administered by Cal OES, to acquire firefighting thermal imaging equipment on behalf of local and state agencies that provide fire suppression services and are interested in obtaining this equipment.

AB 2811 would repeal the Act of 2001 and replace it with Firefighting for the 21st Century Act of 2018 (Act). While the type of equipment for purchase is different, this bill retains much of the same process and bureaucracy as the Act of 2001.

Specific-Measurable-Actionable-Relevant-Timely (SMART) Equipment: Several fire departments across the country, working with technology companies such as Microsoft and others, are developing SMART tech to aid firefighters in saving lives during emergencies. Similar to virtual reality and holograms, this technology can be critical to outlining building and housing dimensions that could aid entry and egress for a burning structure with people still inside. Smoke filled rooms can be mitigated by visual assistance where augmented reality can project where furniture, walls or obstructions may be when responding to a fire emergency.

Beyond efforts of improving the current 911 telecommunications system, development of applications directed at assisting first responders on the ground has also begun (see “AUDREY” below). Emerging SMART technologies are being implemented to provide real-time traffic data, building and room layout information, first responder and victim location, physiological monitors and artificial intelligence. While SMART technologies are being developed and built, solutions are generally unrealized by first responders on the ground who are left to mitigate emergencies utilize a crumbling and underperforming communications systems.

“AUDREY”: Assistant for Understanding Data through Reasoning, Extraction, and sYnthesis (AUDREY) is an artificial intelligence system being developed by NASA's Jet Propulsion Laboratory. The technology is designed to be integrated with the "Internet of Things" -- the idea of numerous devices and sensors all wirelessly "talking" to one another. In the case of

firefighters, wearable sensors in their clothes could pick up their GPS location, heat in other rooms, the presence of dangerous chemicals and gases, satellite imagery of a location and much more.

AUDREY is part of the Next Generation First Responder (NGFR) program, a Department of Homeland Security (DHS) initiative to innovate new ways to keep firefighters, police, paramedics and other first responders safe in the field through increased awareness of their surroundings and communication abilities.

Support: The California Professional Firefighters write in support: “AB 2811 would create the SMART Firefighting for the 21st Century Pilot Program within Cal OES for the purpose of providing grants, not to exceed five million dollars, to local and state agencies to acquire and utilize SMART firefighting equipment.

The women and men of the fire service face unique and increasing challenges every day as demonstrated by the devastating wildfires that raged in Northern and Southern California in 2017. Thankfully, California’s fire service is represented by the best trained women and men in the world. Integrating improved technology to enhance the ability to fight fires in urban and rural settings is imperative to ensure our firefighters have every tool at their disposal to ensure their safety and the safety of the public.

AB 2811 will create an important program to provide grants to local agencies to integrate and test new technology that has been developed. AB 2811’s grant program also includes important provisions to ensure labor and management work together to arrive at a consensus on the best ways to leverage this technology without impacting their existing budgets or a department’s ability to appropriately staff fire houses throughout the State.”

Prior/Related Legislation: AB 70 (Wright), chapter 837, Statutes of 2001, enacted the Firefighting Thermal Imaging Equipment Act of 2001, and established in OES a thermal imaging equipment purchasing program under which OES is required to acquire firefighting thermal imaging equipment on behalf of local and state agencies that are interested in obtaining this equipment. That same legislation also created an advisory committee consisting of designated firefighting representatives to develop specifications and information to facilitate the purchase of thermal imaging equipment at competitive rates. AB 70 additionally appropriated \$50,000 from the General Fund to OES for funding the thermal imaging equipment-purchasing program established pursuant to this act. This funding, however, was vetoed by then-Governor Davis who in his consideration of this bill directed OES to begin establishing the program with existing resources.

REGISTERED SUPPORT / OPPOSITION:

Support

California Professional Firefighters
Colonel Edward Riehle (Ret.), United States Army
Cosumnes Fire Department
Fantasmo.io
Fit4Emergency
Parascom

Opposition

None on file

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