Background

- Lack of education for first responders on hydrogen and fuel cell vehicles
- Members of CaFCP recognized need & developed program for California
- Other programs in other regions followed
- Intention has always been to pass along material/information
- Timing was never appropriate
- Until now....
CaFCP ER Program

- Developed in 2002
- Overhauled in 2006
- Updated regularly
- Added permitting education in 2008
- Deployed to over 5,600 first responders and permitting officials
- Contributed to the DOE’s program curriculum
  - Assist with the deployment and delivery
  - Reached over 25,500 (online and operations programs)
Recognized need for a National Program

• Annual Merit Review, May 2012
• Realized various & similar first responder programs
• Increase in training requests
• Developed the concept for a nationally available ‘template’/program
• Planted the idea with DOE staff then
  » Cultured the idea
• Stakeholder in-person meeting at 2013 AMR
  » Follow up meeting with PNNL (developed the existing DOE ER prop program)
  » Got the National Program into their Operating Plan (pending approval)
• Here we are!
Review of existing programs

- Attended/reviewed
- Spoke with individuals
- Online information
- Examples of positive elements in existing programs to include in the ‘template’:
  - online, self-paced access to information
  - the ability to broadly disseminate information
  - smart phone apps allowing for quick access to essential information
  - quality illustrations/graphics
Program content

• Based largely on existing programs
• Consistent, vetted content and messaging on:
  » Hydrogen
  » Vehicles
  » Infrastructure
  » Safety
  » Deployment
• Provide resources
  » Slides
  » Links
  » Videos
A. Introduction to hydrogen
   » Properties, uses, safety

B. Fuel Cells
   » How a fuel cell works
   » FC applications (brief overview)
     ▪ Stationary, industrial truck, back up power

C. Fuel Cell Electric Vehicles
   » How they work, compare to other vehicles, fuel storage, emergency response (scenarios), extrication suggestions

D. Fueling stations
   » Various elements, safety features, how it works, emergency response
Example scenarios

• Vehicle submersion
• Single vehicle fire
• Multi-vehicle collision (various kinds of light and heavy duty vehicles)
• Above ground parking garage incident
• Station fire incident
Overarching message

- Over all goal of the program:
  - Balance the amount of information given
  - Participants conclude:
    - Not ‘bombs’ 😊
    - No more dangerous than current vehicles; many similarities
    - Can incorporate a FCV into and follow their SOP/SOG’s
In addition to classroom...

Sacramento Metro FD

Beverly Hills FD

Corona Auto-X

DOE Prop Course, HAMMER
Status

• Working to put together content
• Present a ‘straw man’ to the stakeholders
• Speaking to potential users/implementers
  » NFPA (June, 2014)
  » National Fire Academy
  » CA Office of Emergency Services
  » CA Office of the State Fire Marshal
Visit **www.cafcp.org**

Jennifer Hamilton  
Safety & Education Specialist  
jjhamilton@cafcp.org  
916-375-4914 direct  
916-267-4083 cell