

# From Mobility to Base Energy: Demonstrating Fuel Cells for Naval Facilities

Presentation to the Interagency Working Group on Hydrogen and Fuel Cells 16 June 2020

David Cook, P.E.
Alternative Fuel Vehicle Team Lead
Energy Management Division

Sarah Mandes, P.E.
Division Manager
Energy Management Division

#### NAVFAC – EXWC Introduction



## EXWC Mission:

-Provide research, development, testing, and evaluation, and inservice engineering to deliver specialized facility and expeditionary solutions to the warfighter

# Energy Management Division Focus Areas

- -RDT&E of energy technologies supporting Navy strategic goals
- -Technical support for Energy Savings Performance Contracts
- -Management of Energy Support Budget

# Navy Energy Security Framework

-Resilience, Reliability, and Efficiency

## Prior Effort: Hydrogen Technology Demonstration



# Fuel Cell Vehicle Testing Support

- -Hydrogen Fill Station Development
- –Design and Construction Planning
- Operating and Safety Procedures





## Recent Effort: Fuel Cell Vehicle Workshop



- Energy Systems Technology Evaluation Program
  - -"Veteran to Energy Career" Training project
  - –Inspiring the Next Generation of Engineers and Scientists





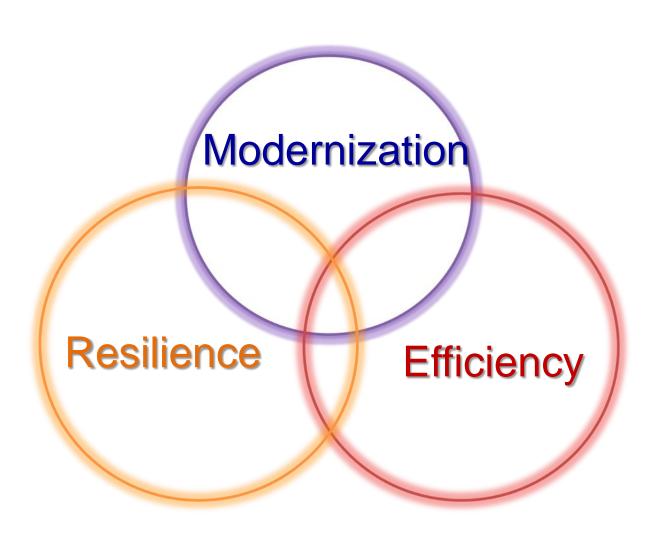
## Workshop Outcomes



- "Opportunities to drive fuel cell vehicles during class helped build my confidence in the technology. I now believe the future is close."
- "The workshop experience convinced me of the benefits of fuel cell electric vehicles. My next car will be an advanced drive vehicle."

## **Broader Strategic Initiatives**





### **Research Initiatives**



## Interest Areas

- -Hydrogen Infrastructure
- -Modular Hydrogen Fueling
- -Fuel Cell Bus and Truck
- -Exportable Power Systems

