



**U.S. Department  
of Transportation**



# **U.S. Department of Transportation**

**Office of Science Technology & Policy-04/02/03**

## **DOT's Role in a Hydrogen Economy**

**Samuel G. Bonasso, Acting Administrator**

**Research and Special Programs Administration**



U.S. Department  
of Transportation

## Infrastructure Safety Issues:

- DOT has responsibility for codes and safety standards in hydrogen delivery and transportation
- Hazardous Materials Safety
  - Regulatory authority for safe hazmat transportation/packaging/inspection
  - State programs for hazmat training
  - Emergency response and preparedness
- Pipeline Safety
  - Regulatory authority for public safety for 2.2 million miles of oil, natural gas, and hydrogen transported by pipelines



U.S. Department  
of Transportation

## Vehicle Safety Issues:

- Design Standards for Vehicles
  - DOT/NHTSA is responsible for developing passenger car/light truck safety standards (49 U.S.C. 3011)
  - DOT/FTA is responsible for developing heavy-duty vehicle (fuel cell buses) safety standards
  - DOT will need to develop safety standards, criteria for fuel integrity under crash conditions
- CAFÉ Standards are also DOT's/NHTSA's responsibility—impacted by fuel-cell vehicles



U.S. Department  
of Transportation

## Hydrogen & Fuel Cell Bus Issues:

- DOT's FTA transit bus activities continue to be in the forefront and provide great synergy
- Past FTA efforts provide a solid foundation for current efforts
- DOT, through FTA, is developing a national program with industry to accelerate commercial viability of fuel cell buses and supporting infrastructure
- These efforts complement and support the Administration's hydrogen initiatives



**U.S. Department  
of Transportation**

## DOT's Next Steps in Support of Administration's Agenda

- Continue DOT's work on fuel-cell vehicles, hydrogen, and other alternative fuels to help increase America's fuel economy and decrease foreign petroleum dependence
- Provide for the safe handling and transport of hydrogen fuel--engineering to include safety:
  - o Infrastructure: pipeline / transport
  - o Vehicles – performance standards
  - o Coordinate DOT-wide research, UTC's/Volpe
- DOT will build partnerships and coordinated approach to market acceptance among Federal, state, industry, and others