National Highway Traffic Safety Administration

Research & Development/Studies
• Electrical Isolation Test Procedure for HFCVs (completed phase 1)
  ➢ Procedures for evaluating post-crash electric isolation must be updated to include fuel cells (currently apply to batteries only)

• Failure Modes and Effects Analysis (FMEA) for Compressed HFCVs (draft completed)
  ➢ Develop a structured, high-level schematic of a compressed HFCV to determine potential areas of concern for crashworthiness and fire safety

• Evaluation and Comparative Analysis of Existing and Draft HFCV Regulations and Standards (draft completed)
  ➢ Develop and maintain a database of industry standards, and regulations relating to HFCV safety with a query interface that allows quick comparison by component, function, design and performance requirements

• Compressed Hydrogen Fuel Container Integrity Testing (October 2007)
  ➢ Burst, bonfire, pressure cycling, gunfire penetration
Projects planned for 2008

- Assess several proposed alternatives for electrical isolation testing
- Analyze research performed by outside sources
- Award a task order contract to conduct system level safety assessment on representative fuel systems, vehicles, to assess post crash fuel leakage and fire safety