Texas Hydrogen Highway
Fuel Cell Hybrid Bus and Fueling Infrastructure Technology Showcase

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Texas H2 Coalition
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This presentation does not contain any proprietary, confidential, or otherwise restricted information.
Overview

Timeline
• Start: not yet initiated
• End:
• 0% complete

Budget
• Total Project Funding: $382,776
  – DOE share: 100%
  – Contractor share: 0%
• Funding received in FY08 and FY09:
  – FY08: $0
  – FY09: $0

Barriers
• Technology Validation Barriers Addressed
  – Risk Aversion
  – Dearth of hydrogen fuel cell components and vehicles and hydrogen refueling infrastructure hardware
• Partners
  – Interactions/collaborations
    • University of Texas at Austin
    • Gas Technology Institute
    • Center for Transportation and the Environment
    • Houston Advanced Research Center
  – Project Lead
    • Texas H2 Coalition
Objectives

• Objectives
  – To provide public outreach and education by showcasing the operation of a 22-foot fuel cell hybrid shuttle bus and hydrogen fueling infrastructure
  – To showcase operation of zero-emissions vehicle for potential transit applications
  – To advance commercialization of hydrogen-powered transit buses and supporting infrastructure
E-bus: 22-ft fuel cell electric battery plug-in hybrid bus in Austin, Texas

Gas Technology Institute
University of Texas at Austin

Hydrogen fueling dispenser
## Milestones

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Milestones</th>
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| To provide public outreach and education by showcasing the operation of a 22-foot fuel cell hybrid shuttle bus and hydrogen fueling infrastructure | • Final bus prep and checkout  
• Route data collection, modeling and simulation  
• Support, start-up, and operation of fueling station  
• Over six months, conduct public outreach and education through bus and fueling station operation and performance evaluation  
• Mid-term inspection and evaluation |
| To showcase operation of zero-emissions vehicle for potential transit applications | • Bus training for transit staff  
• Station training and follow-on activities  
• On-site education and outreach |
| To advance commercialization of hydrogen-powered transit buses and supporting infrastructure | • Overall project implementation  
• On-site education and outreach  
• Hydrogen fuel bus transit plan for target county |
# Milestones/Timeline

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Approach

- First fuel cell vehicle and hydrogen fueling infrastructure in the State of Texas
- Outreach and education through showcasing of real world operation of vehicle and fueling technologies
- Data collection and modeling intended for additional potential transit applications in the state.
Technical Accomplishments/Progress/Results

• Project not yet underway, awaiting final approval from DOE
• Fuel cell bus and fueling infrastructure funded by non-DOE sources
Future Work

• Project kick-off
• Bus preparation
• Fueling infrastructure start-up and training
• Operations
• Outreach and education activities
Summary

• Fuel cell bus and fueling infrastructure funded by non-DOE sources
• Operation and data collection with fuel cell bus and fueling infrastructure in Texas
• Aimed at transit applications and fleets
• Multi-partner expertise for on-site project operations, fueling infrastructure, technical guidance, and management