FAST Act - Section 1413:
Alternative Fuels Corridor Program
October 16, 2017
Webinar
Agenda

- Alternative Fuels Corridor Program
  - Overview
  - Results of First Round
  - 2017 Request for Nominations
    - Criteria
    - Process
    - Benefits
    - Resources
  - State Signage Experiences
  - Shapefiles/GIS Maps
  - Q&A/Discussion
Alternative Fuels Corridor Designations

- The Secretary is required to designate corridors to improve mobility of passenger and commercial vehicles that employ electric vehicle charging, hydrogen, propane, and natural gas fueling technologies across the U.S. within one year of enactment (Dec. 2016):
  - Identify near and long-term need for infrastructure;
  - At strategic locations along major national highways;

- Solicit nominations from state and local officials;
- Incorporate existing infrastructure (demand and location)
- Stakeholder involvement (on a voluntary basis)
- No funding authorized
Results of 1st Round

- 34 nomination packages received, with nominated corridors separated into two designation categories:
  - **Signage-ready** – sufficient facilities on the corridor to warrant highway signage;
  - **Signage-pending** – currently insufficient facilities on the corridor to warrant highway signage.

- Designations....
  - Include portions/segments of 55 Interstates and a few state roads/highways
  - Comprise 35 states plus D.C.
  - Cover ~85,000 miles of the National Highway System

- This initial phase focused on interstate highway designations (many state highways and roads were nominated)

- Decisions based on DOE’s *Alternative Fuel Station Locator* database
**“Signage-Ready” Criteria for 2016 Initial Designations**

<table>
<thead>
<tr>
<th><strong>EV</strong></th>
<th><strong>CNG</strong></th>
<th><strong>LNG</strong></th>
<th><strong>Hydrogen</strong></th>
<th><strong>Propane</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes DCFC and Level 2</td>
<td>150 miles between stations</td>
<td>200 miles between stations</td>
<td>100 miles between stations</td>
<td>150 miles between stations</td>
</tr>
<tr>
<td>50 miles between stations</td>
<td>5 miles from highway</td>
<td>5 miles from highway</td>
<td>5 miles from highway</td>
<td>5 miles from highway</td>
</tr>
<tr>
<td>5 miles from highway</td>
<td>Public stations only</td>
<td>Public stations only</td>
<td>Public stations only</td>
<td>Public stations only</td>
</tr>
<tr>
<td>Public stations only (no Tesla)</td>
<td>Fast fill, 3,600 psi</td>
<td>Public stations only</td>
<td>Public stations only</td>
<td>Primary stations only</td>
</tr>
</tbody>
</table>
Propane Corridor Map
2017 Request for Nominations

Process

✓ Defined in FHWA Request for Nominations (RFN) notice (released Sept. 22, 2017)

✓ Distributed through FHWA Division Offices

✓ Provides ability to nominate new corridors or add fuel types to existing corridors

✓ Due date is November 30, 2017

Request for Nominations Posted AFC website at:

https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/index.cfm
2017 Request for Nominations (con’t.)

- Can be submitted by ANY state or local official.
- Focus is on Interstate highways but allows for a compelling case to be made for other highways.
- State DOT with jurisdiction over corridor must be aware and supportive of nomination.
- Multi-state and regional applications/approaches are encouraged.
- A plan for signage on the corridor is required.
- GIS Shapefile information:
  - Should be available from your State DOT
  - Additional guidance in RFN
2017 Request for Nominations (con’t.)

- **Signage-ready** corridors should have 2-3 stations and be at least 150 miles in length – or entire length of corridor in a State, if less (final classifications will be made on a case-by-case basis).

- **Signage-pending** corridors – if no facilities, then must submit a plan/timeline for build-out.

- **EV corridor nominations** – encourages coordination with Electrify America on targeted Interstates.

- **Public and private sector coordination** – working with state and local agencies, Clean Cities Coordinators, and other stakeholders.

- Coordinate with state freight plans and/or long-range transportation plans.
### “Signage-Ready” Criteria for 2017 Nominations

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Distance Between Stations</th>
<th>Distance From Highway</th>
<th>Station Type</th>
<th>Additional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EV</strong></td>
<td>50 miles</td>
<td>5 miles</td>
<td>Public stations only</td>
<td>DC FC only</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(no Tesla)</td>
</tr>
<tr>
<td><strong>CNG</strong></td>
<td>150 miles</td>
<td>5 miles</td>
<td>Public stations only</td>
<td>Fast fill, 3,600 psi</td>
</tr>
<tr>
<td><strong>LNG</strong></td>
<td>200 miles</td>
<td>5 miles</td>
<td>Public stations only</td>
<td></td>
</tr>
<tr>
<td><strong>Hydrogen</strong></td>
<td>100 miles</td>
<td>5 miles</td>
<td>Public stations only</td>
<td></td>
</tr>
<tr>
<td><strong>Propane</strong></td>
<td>150 miles</td>
<td>5 miles</td>
<td>Public stations only</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Primary stations only</td>
<td></td>
</tr>
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Benefits to Designating Corridors

- Provides a planning exercise to prioritize future public and private funding/investment for future corridor station development by identifying gaps along the corridor and/or opportunities to extend the corridor.

- Accelerate public interest and awareness through national highway signage branding.

- Opportunity to coordinate/collaborate with state and local officials who have Interstate highways that have been targeted for investment in the first 30-month cycle by Electrify America and other VW funds.

- CMAQ funding priority may be given to designated corridors for EV and CNG – Section 1114 of the FAST Act.
AFC Website

http://www.fhwa.dot.gov/environment/alternative_fuel_corridors/

- Frequently Asked Questions
- Interactive GIS maps for each fuel
- List of State DOT signage contacts
- MUTCD Memorandum – Signing for Designated Alternative Fuel Corridors
- “Sign Up” for Alternative Fuel Corridors Updates
Highway Signage

- MUTCD Memorandum – Signing for Designated Corridors
  - Provides guidance to State DOTs
  - First Corridor signs installed on I-94 and I-26
  - Some questions remain on General Service & Specific Service exit signage
  - FHWA is developing additional guidance (FAQs)
First Corridor Signs Installed

I-94 (Minnesota)

I-26 (South Carolina)
Other Alt Fuel Corridor Resources

- A set of **Frequently Asked Questions** has been developed and posted on the AFC web site.
  - Covers both the designation process and signage related questions

- **On-going presentations and assistance** for states and interested stakeholders

- **Development & Implementation of 5 Regional Alternative Fuel Convening’s in 2018/2019**
Alternative Fuels Pooled Fund Website

Website Overview:
- Accessible at [http://altfueltoolkit.org/](http://altfueltoolkit.org/)
- Tools such as interactive maps, a payback calculator, a planning guide, and more to help DOTs and MPOs accelerate alternative fuel vehicle deployment
- Five workshop toolkits each include a resource library, workshop summary report and presentations, and topic-specific materials such as fact sheets or case studies

Pooled Fund Overview:
- Participating State DOTs are CA, CT, NC, NY, OR, TX, VT, and WA
- ODOT is leading effort with FHWA as technical liaison
- Implemented five workshops to assist State DOTs and MPOs interested in accelerating the use of alternative fuels/vehicles and associated infrastructure
For More Information

DOT Alt Fuel Corridor Team Contact Information

<table>
<thead>
<tr>
<th>Name</th>
<th>U.S. Department of Transportation</th>
<th>Phone</th>
<th>Email</th>
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<tbody>
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Resources

FHWA Alternative Fuel Corridor website:  
http://www.fhwa.dot.gov/environment/alternative_fuel_corridors/

MUTCD Memorandum – Signing for Designated Alternative Fuel Corridors:

DOE/NREL Alternative Fueling Station Locator:  
https://www.afdc.energy.gov/locator/stations/
Appendix - GIS File Submission Requirements

- **Nominated Corridor GIS Files**
  - Route Name
    - Primary corridor Route Name (I-10, U-95, S-99, C-56 & O-34)
    - Alternative Route Name, if any
    - Local Name, if any
  - Length in miles
  - State Abbreviation
  - NHS: Yes or No
  - Fuel Type and Designation Status
  - GIS Coordinate System (such as NAD 1983)
Appendix - GIS File Submission Requirements (con’t)

- Nominated Corridor Fueling Station GIS Files
  - All fueling stations within 5 miles off the nominated corridor with the following information:
    - Station Name
    - Coordinates: Longitude and Latitude
    - First or Last station
    - Address of the station
    - Mileage marker/milepost of the exit off the corridor highway;
    - Fuel(s) provided;
    - Station Operator/Owner name
HEPGIS Interactive Maps

https://hepgis.fhwa.dot.gov/fhwagis/
Resources

- HEPGIS “Download Data”:
  - NHS Shapefiles
  - Alternative Fuel Corridor Shapefiles

- DOE Alternative Fuels Data Center
  Download: https://www.afdc.energy.gov/data_download
  - Alternative Fuel Stations GIS files

- GIS Contact:
  supin.yoder@dot.gov