Alternative Fueling Station Locator
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Agenda

➢ Station Locator
➢ Background
➢ Data Methodology
➢ Data Users
➢ Data Fields
➢ Live Tour
➢ Contact Information
Station Locator Background

- Began in mid-1990s
- Fuels
  - Biodiesel (B20 and above)
  - Compressed natural gas (CNG)
  - Electric vehicle supply equipment (EVSE)
  - Ethanol (E85)
  - Liquefied natural gas (LNG)
  - Propane (liquefied petroleum gas)
  - Hydrogen

**Total Stations by Fuel Type (2009-2018)**

**Total EVSE (2009-2018)**
# Station Locator Inclusion Criteria

<table>
<thead>
<tr>
<th>Includes</th>
<th>Does Not Include</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Public stations</td>
<td>X Residential fueling</td>
</tr>
<tr>
<td>✓ Private stations</td>
<td>X Private (resident only) multi-unit dwelling EVSE</td>
</tr>
<tr>
<td>✓ Planned stations</td>
<td>X Off-road vehicle stations</td>
</tr>
<tr>
<td>✓ Temporarily out of service stations</td>
<td></td>
</tr>
<tr>
<td>✓ Stations in the United States</td>
<td></td>
</tr>
<tr>
<td>✓ Stations in Canada</td>
<td></td>
</tr>
</tbody>
</table>
Station Locator Data Methodology

- Station Locator
- Clean Cities Coordinators
- EVSE Network Application Program Interfaces (APIs)
- Other Infrastructure and Fuel Providers
- Original Equipment Manufacturers (OEMs)
- Industry Associations
- Fleet Fuel Cards
- Federal Fleets
- Direct Station Outreach
- Drivers and Fleets
- Federal Fleets
- Station Locator
What Sets the Station Locator Apart?

**Accurate and Unique Data**
• All details confirmed before adding a station or removing stations that go out of service
• Conservative inclusion criteria (e.g., stations not for vehicle fueling left out)

**Comprehensive and Fuel-Neutral Approach**
• Same visibility to all alternative fuel types
• Allows user to consider several fuel options at once

**Free and Independent Data**
• Available through Station Locator online, Data Download, and upon request at no cost
• Independent of any special interests, allowing for collaborations (e.g., APIs)

Careful comparing counts with other tools!
Users and Uses of Station Locator Data

Users
- Academics & Researchers
- Federal Agencies
- State Agencies
- Local Agencies
- Original Equipment Manufacturers
- Software Platforms
- Industry Associations
- Mobile Applications
- Fleets
- Drivers

Uses
- Resiliency Planning
- Corridor Planning
- Policy Planning
## Station Locator Data Fields

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Station Locator</th>
<th>Behind the Scenes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-diesel</td>
<td>Blends available</td>
<td>• Maximum biodiesel level</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Seasonal blends</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Custom blends</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Facility type*</td>
</tr>
<tr>
<td>CNG</td>
<td>Fill type (fast, timed)</td>
<td>• Generator information</td>
</tr>
<tr>
<td></td>
<td>Compression (psi)</td>
<td>• Gas provider</td>
</tr>
<tr>
<td></td>
<td>Vehicle accessibility</td>
<td>• Number of compressors</td>
</tr>
<tr>
<td></td>
<td>(light-, medium-, or heavy-duty)</td>
<td>• Compressor types</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Total compression capacity*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Storage capacity*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of dispensers*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• On-site renewable source*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Facility type*</td>
</tr>
<tr>
<td>EVSE</td>
<td>Charging network (link to website)</td>
<td>• Workplace charging (yes or no)</td>
</tr>
<tr>
<td></td>
<td>Charging Level (L1, L2, DC fast)</td>
<td>• Manufacturer*</td>
</tr>
<tr>
<td></td>
<td>Number of outlets</td>
<td>• Power output *</td>
</tr>
<tr>
<td></td>
<td>Connector type</td>
<td>• Pricing*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• On-site renewable source*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Facility type*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Open dates (all stations)</td>
</tr>
</tbody>
</table>

* Indicates coming soon online

### Fuel | Station Locator | Behind the Scenes
---|-----------------|--------------------------------------------------|
E85 | Mid-level blends | • Other ethanol blends*  
|     |                  | • Facility type*        |
Hydrogen | Status website | • Pressure*  
|     |                  | • Standards compliance* |
|     |                  | • Retail station (yes or no)  
|     |                  | • Facility type*        |
LNG | Vehicle accessibility | • Generator information  
|     |                  | • Gas provider          |
|     |                  | • On-site renewable source*  
|     |                  | • Facility type*        |
Propane | Services (primary or secondary) | • Sufficient Fill Rate (yes or no)  
|     |                  | • Nozzle Type          |
|     |                  | • Facility type*        |

* Indicates coming soon online
## New Primary Propane Station Criteria

<table>
<thead>
<tr>
<th>Old Criteria</th>
<th>New Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffed during regular business hours (i.e., 9am-5pm)</td>
<td>Staffed during regular business hours (i.e., 9am-5pm)</td>
</tr>
<tr>
<td>Do not require drivers to call ahead in order to fuel</td>
<td>Do not require drivers to call ahead in order to fuel</td>
</tr>
<tr>
<td>Accept credit cards or fleet cards as a payment type</td>
<td>Accept credit cards or fleet cards as a payment type</td>
</tr>
<tr>
<td>Equipped with a dedicated (or purpose-built) fuel dispenser for vehicle fueling</td>
<td>Can fill at a rate of 12 gallons per min. or faster, or at a rate similar to filling a gasoline vehicle</td>
</tr>
</tbody>
</table>
Live Station Locator Tour

- **Station Locator Tool**
  - Public Station Searches
  - Advanced Filters Searches
    - Including private and planned stations
  - Additional Features
  - Map a Route
  - Add a Station
  - Edit a Station
  - About the Data

- **Where to Find Station Locator Data on the AFDC**

  [afdc.energy.gov/stations/#/find/]
Live Station Locator Tour: Useful Links

- **Station Data by State**
  - [afdc.energy.gov/stations/states](afdc.energy.gov/stations/states)

- **Download Station Data**
  - [afdc.energy.gov/data_download](afdc.energy.gov/data_download)

- **Maps & Data**
  - [afdc.energy.gov/data/](afdc.energy.gov/data/)

- **TransAtlas**
  - [maps.nrel.gov/transatlas](maps.nrel.gov/transatlas)

- **EVI-Pro Lite**
  - [afdc.energy.gov/evi-pro-lite](afdc.energy.gov/evi-pro-lite)

- **Information by State**
  - [afdc.energy.gov/states/](afdc.energy.gov/states/)

- **About the Data**
  - [afdc.energy.gov/stations/#/find/nearest?show_about=true](afdc.energy.gov/stations/#/find/nearest?show_about=true)
Station Locator Updates and Submissions

**SUBMIT a New Station Online**
- Search the Station Locator to make sure the station is not listed
- Click “Submit New Station” and fill out the online form

**UPDATE an Existing Station Online**
- Search the Station Locator to find and select the station
- Click “Report a change” and fill out the online form

**Submit or Update via EMAIL**
- technicalresponse@icf.com
- Request a submission spreadsheet, OR
- Provide station information in the email text or an attached document

Provide as much information as possible!

Changes do not go live immediately!

Send multi-unit dwelling EVSE!
Questions?
Contact Information

• Stephen Lommele
  – Stephen.Lommele@nrel.gov
  – 303-275-3720

• Abby Brown
  – Abby.Brown@icf.com
  – 303-792-7804

• Technical Response Service (TRS)
  – TechnicalResponse@icf.com
  – 800-254-6735
  – *Contact the TRS for a bulk station submission spreadsheet and questions about the Station Locator