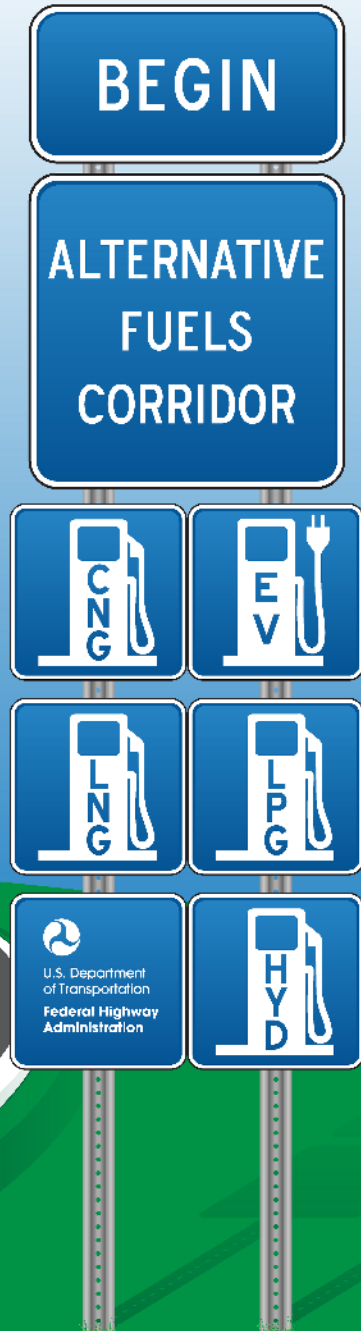


Alternative Fuel Corridors Analysis and Planning Tools

INTERMOUNTAIN WESTERN CORRIDOR CONVENING
NOVEMBER 6, 2019

MIKE SCARPINO | U.S. DEPARTMENT OF TRANSPORTATION- VOLPE CENTER



Corridor Planning Tools Session Agenda

- FHWA HEP GIS Website

Mike Scarpino, US DOT-Volpe Center

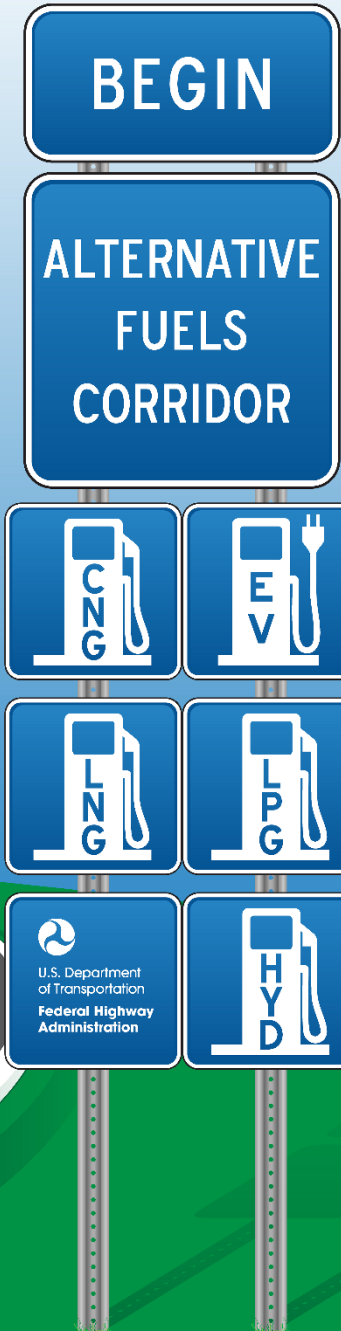
- Alternative Fuels Data Center Station Locator and Corridor Tools

Johanna Levene & Matt Rahill, NREL

- REV West Mapping Tool

Tim Ularich, Utah Department of Transportation

- Questions from the Audience



FHWA HEPGIS Website

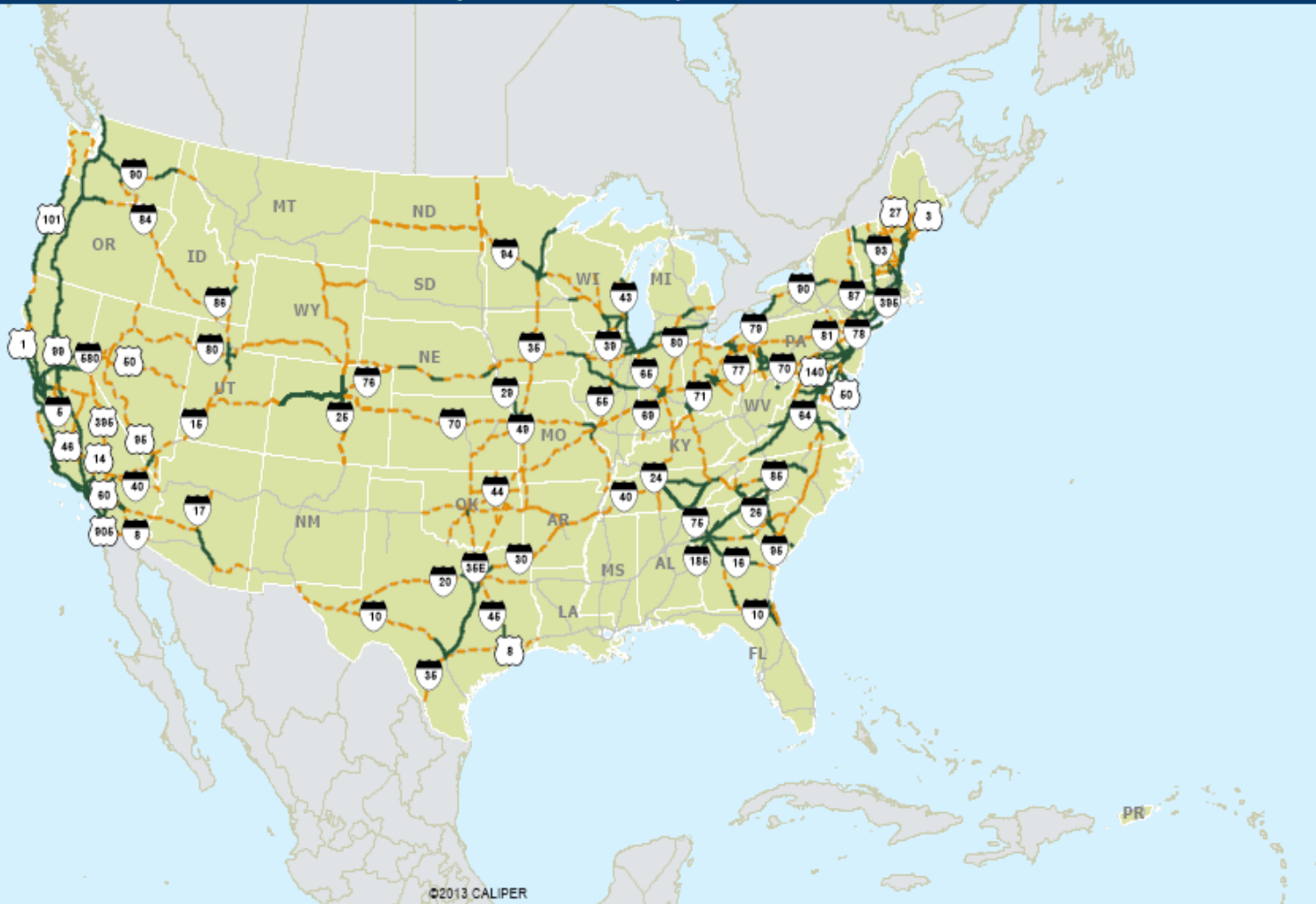
3

- The website is an interactive, web-based geographic map server that enables users to navigate, view and print geo-spatial maps.
- Home to all AF Corridor maps (by fuel and designation round)
- Includes multiple layers of information to aid in corridor analysis and planning

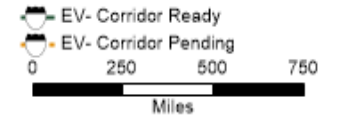
<https://hepgis.fhwa.dot.gov/fhwagis/>

(HEP= Planning, Environment, Realty)

Electric Vehicle (EV-Round 1, 2 and 3)



Alternative Fuel Corridors



[Go to Layers to turn on Fuel Stations](#)

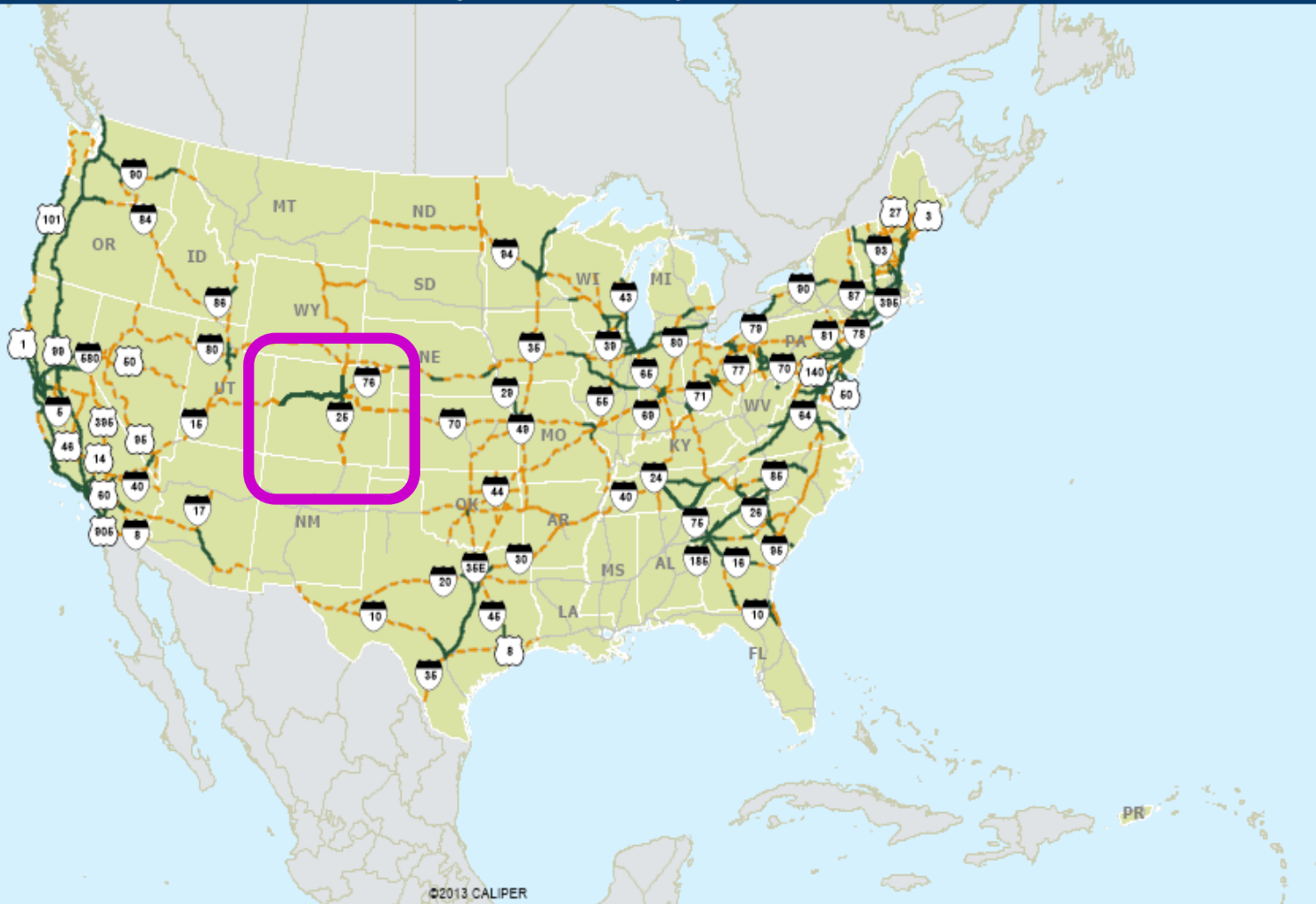


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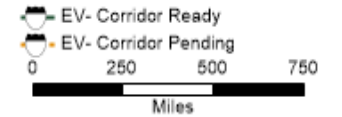
For information and comments about this web site, contact [Supin Yoder](#)

Electric Vehicle (EV-Round 1, 2 and 3)



[Sources](#) | [Legend](#) | [Data](#) | [Layers](#)

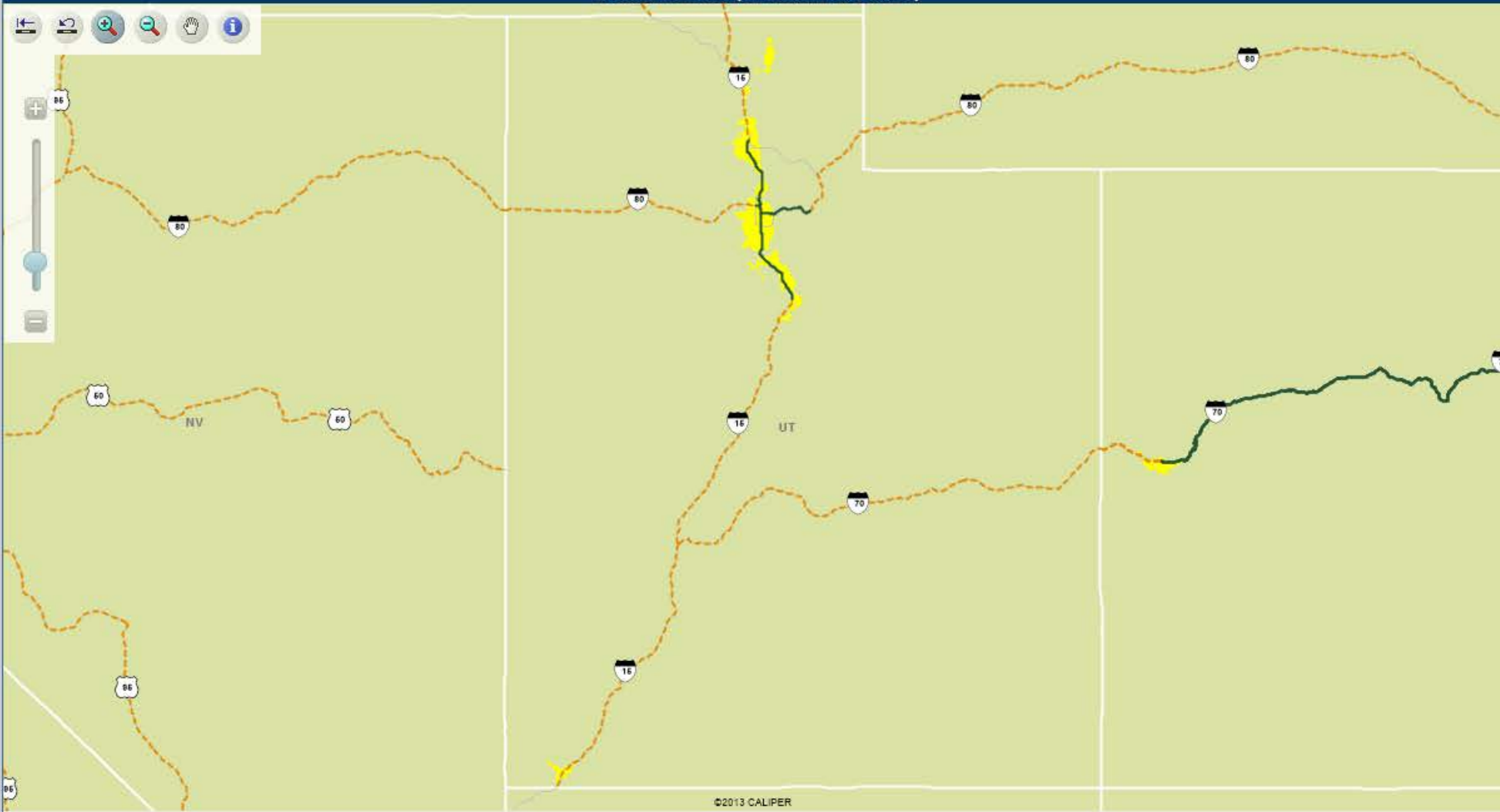
Alternative Fuel Corridors



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Electric Vehicle (EV-Round 1, 2 and 3)



[Sources](#) | [Legend](#) | [Data](#) | [Layers](#)

Legend

- 2010 Urbanized Area
- Alternative Fuel Corridors
 - EV-Corridor Ready
 - EV-Corridor Pending

0 25 50 75 Miles

[Go to Layers to turn on Fuel Stations](#)

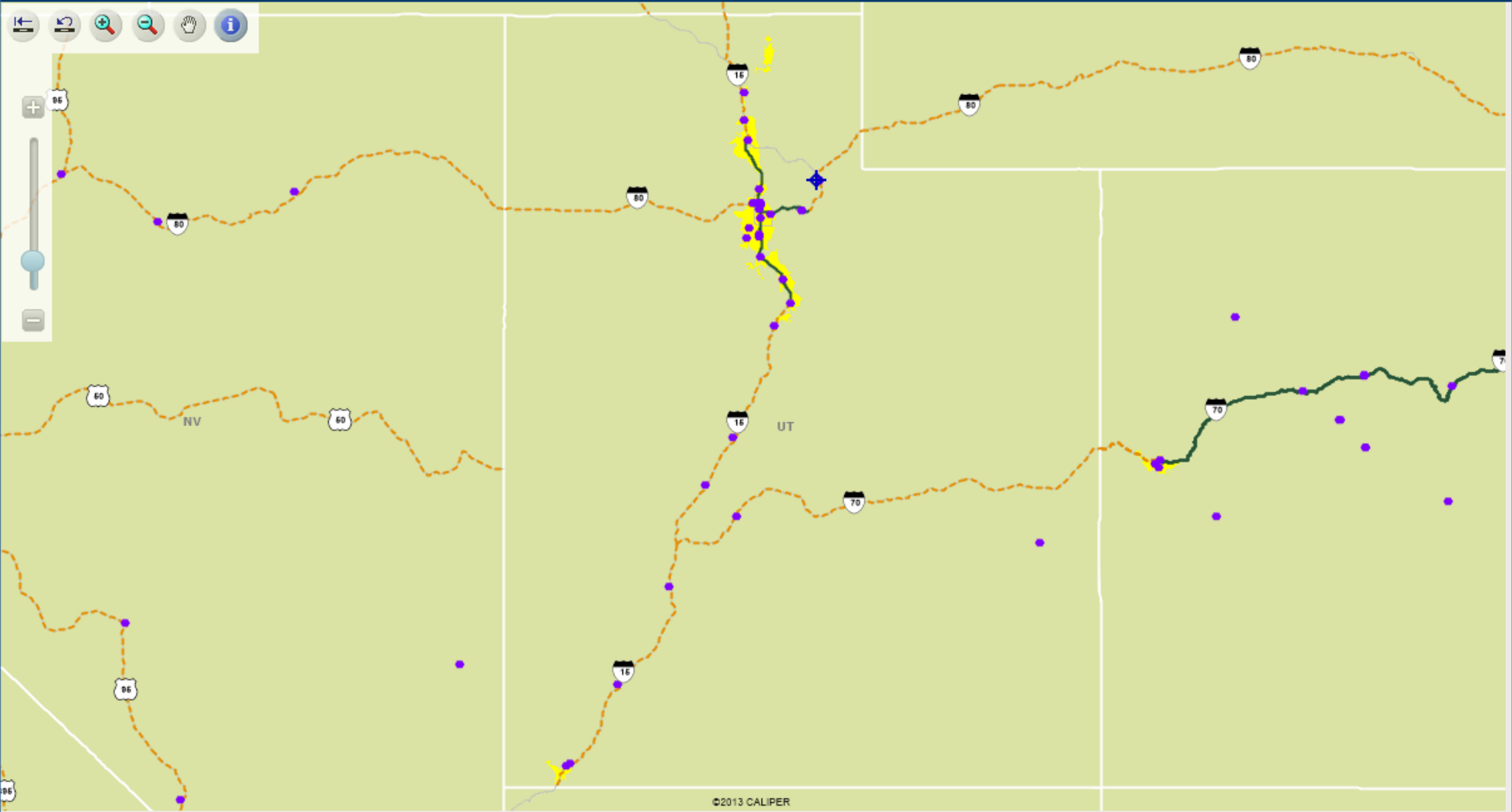
Map Scale: 1 : 2,887,618 Width: 673 Miles

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Electric Vehicle (EV-Round 1, 2 and 3)



Sources | **Legend** | Data | Layers

Legend

- Electric Fast Charging Station
- 2010 Urbanized Area

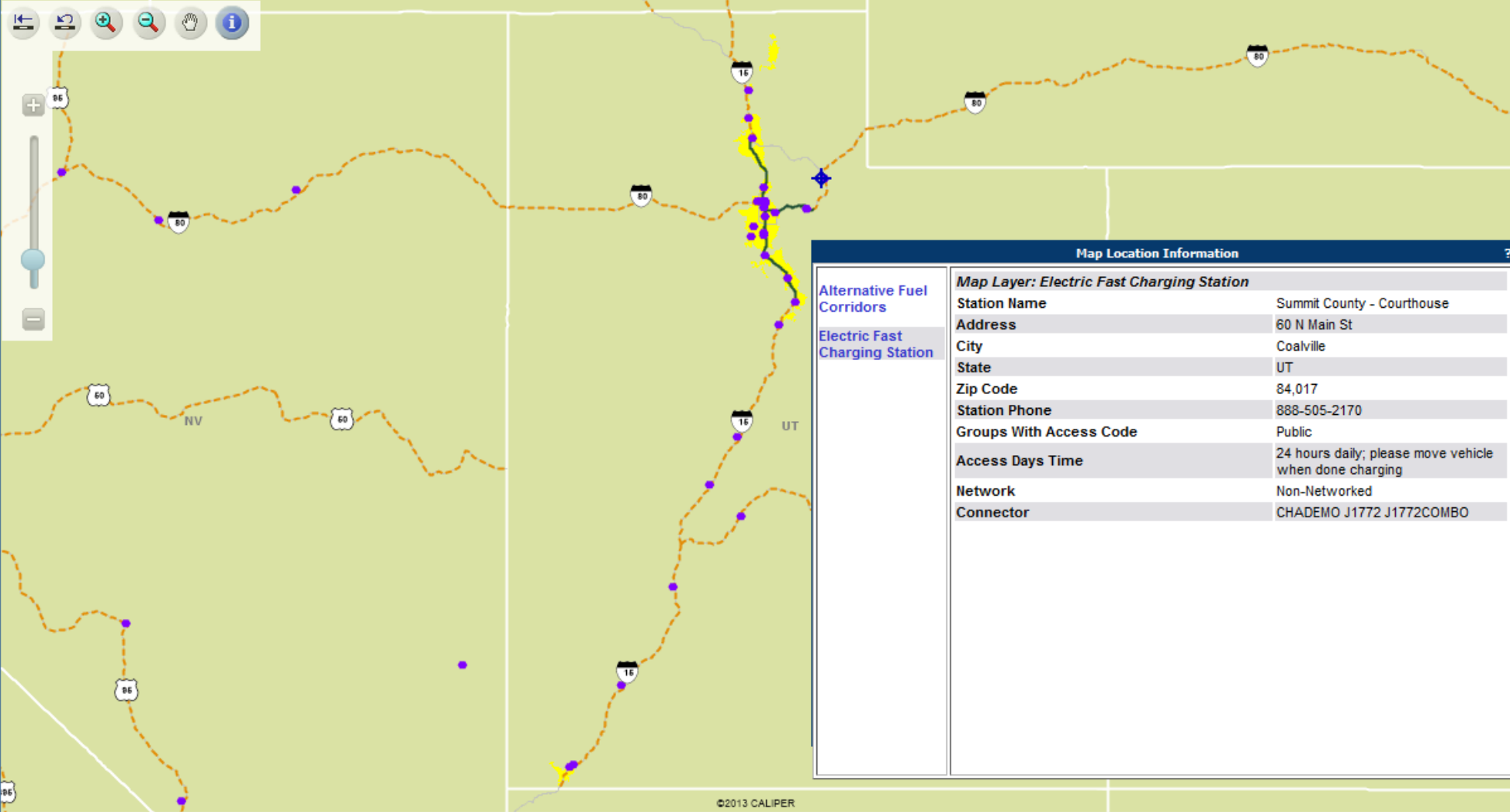
Alternative Fuel Corridors

- EV-Corridor Ready
- - - EV-Corridor Pending

0 25 50 75
Miles

[Go to Layers to turn on Fuel Stations](#)

Electric Vehicle (EV-Round 1, 2 and 3)



Map Location Information ? X

Map Layer: Electric Fast Charging Station	
Station Name	Summit County - Courthouse
Address	60 N Main St
City	Coalville
State	UT
Zip Code	84,017
Station Phone	888-505-2170
Groups With Access Code	Public
Access Days Time	24 hours daily; please move vehicle when done charging
Network	Non-Networked
Connector	CHADEMO J1772 J1772COMBO

- | Sources | Legend | Data | Layers |
|-------------------------------------|--------|-------------------------------------|--------------------------------|
| Show/Hide | Labels | | |
| <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | 2010 Urbanized Area |
| <input type="checkbox"/> | | <input type="checkbox"/> | 2012 FAF4 AADT |
| <input type="checkbox"/> | | <input type="checkbox"/> | 2012 FAF4 Truck Volume |
| <input type="checkbox"/> | | <input type="checkbox"/> | 2045 FAF4 AADT |
| <input type="checkbox"/> | | <input type="checkbox"/> | 2045 FAF4 Truck Volume |
| <input checked="" type="checkbox"/> | | <input type="checkbox"/> | Alternative Fuel Corridors |
| <input type="checkbox"/> | | <input checked="" type="checkbox"/> | County Boundary |
| <input checked="" type="checkbox"/> | | <input type="checkbox"/> | Electric Fast Charging Station |
| <input type="checkbox"/> | | <input checked="" type="checkbox"/> | MPO Boundary |
| <input type="checkbox"/> | | <input type="checkbox"/> | NHS |
| <input type="checkbox"/> | | <input type="checkbox"/> | NHS Intermodal Facility |
| <input type="checkbox"/> | | <input type="checkbox"/> | National Park |
| <input checked="" type="checkbox"/> | | <input type="checkbox"/> | Other Highways |
| <input type="checkbox"/> | | <input type="checkbox"/> | Populated Place |
| <input type="checkbox"/> | | <input type="checkbox"/> | Private Truck Stop |
| <input type="checkbox"/> | | <input type="checkbox"/> | Public Rest Area |
| <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | State (2010) |

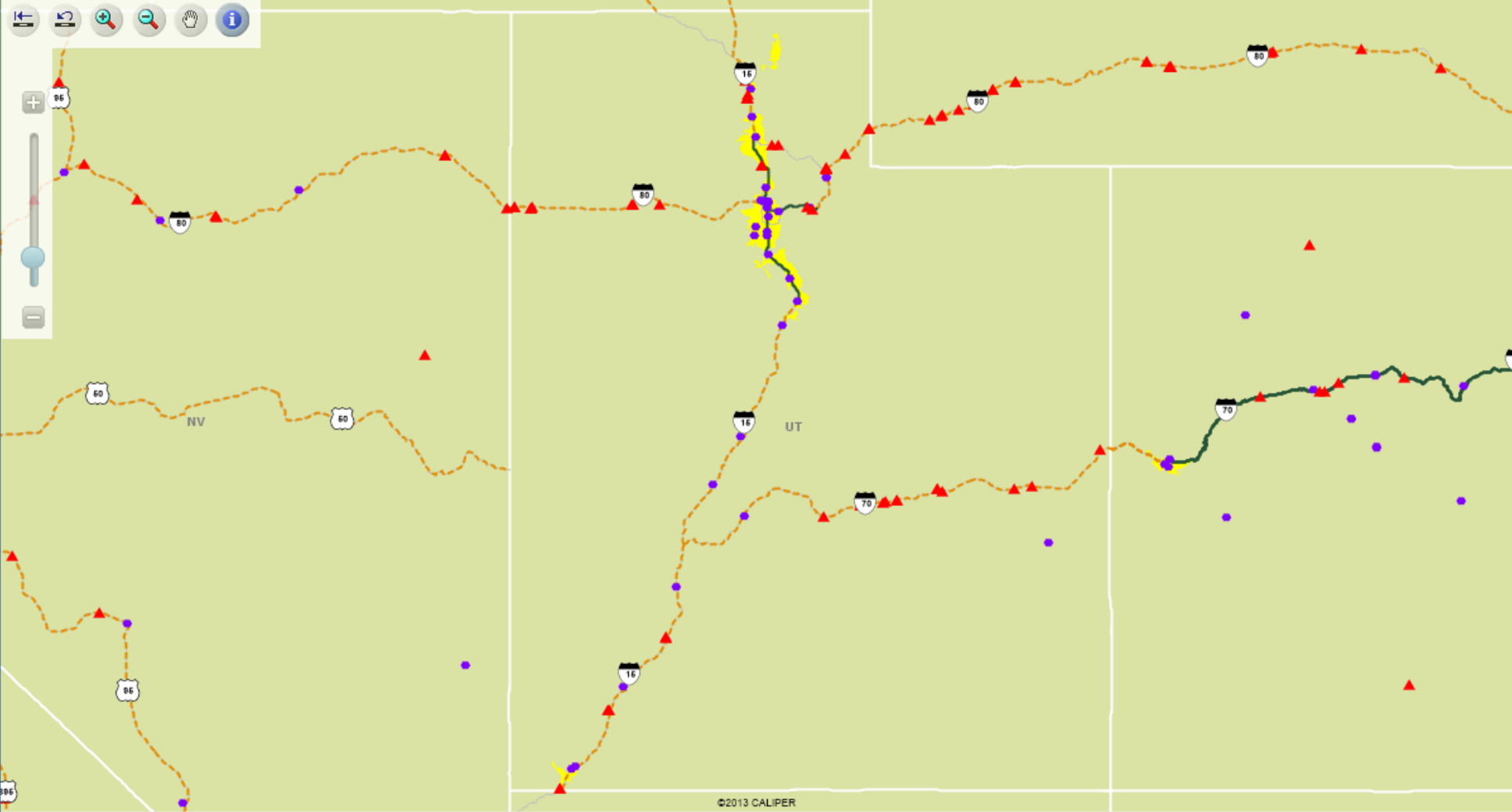
Redraw Map

Map Scale: 1 : 2,887,618 Width: 673 Miles

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Electric Vehicle (EV-Round 1, 2 and 3)



Sources | Legend | Data | Layers

Legend

- ▲ Public Rest Area
 - Electric Fast Charging Station
 - 2010 Urbanized Area
 - Alternative Fuel Corridors**
 - EV-Corridor Ready
 - - - EV-Corridor Pending
- 0 25 50 75
Miles

[Go to Layers to turn on Fuel Stations](#)

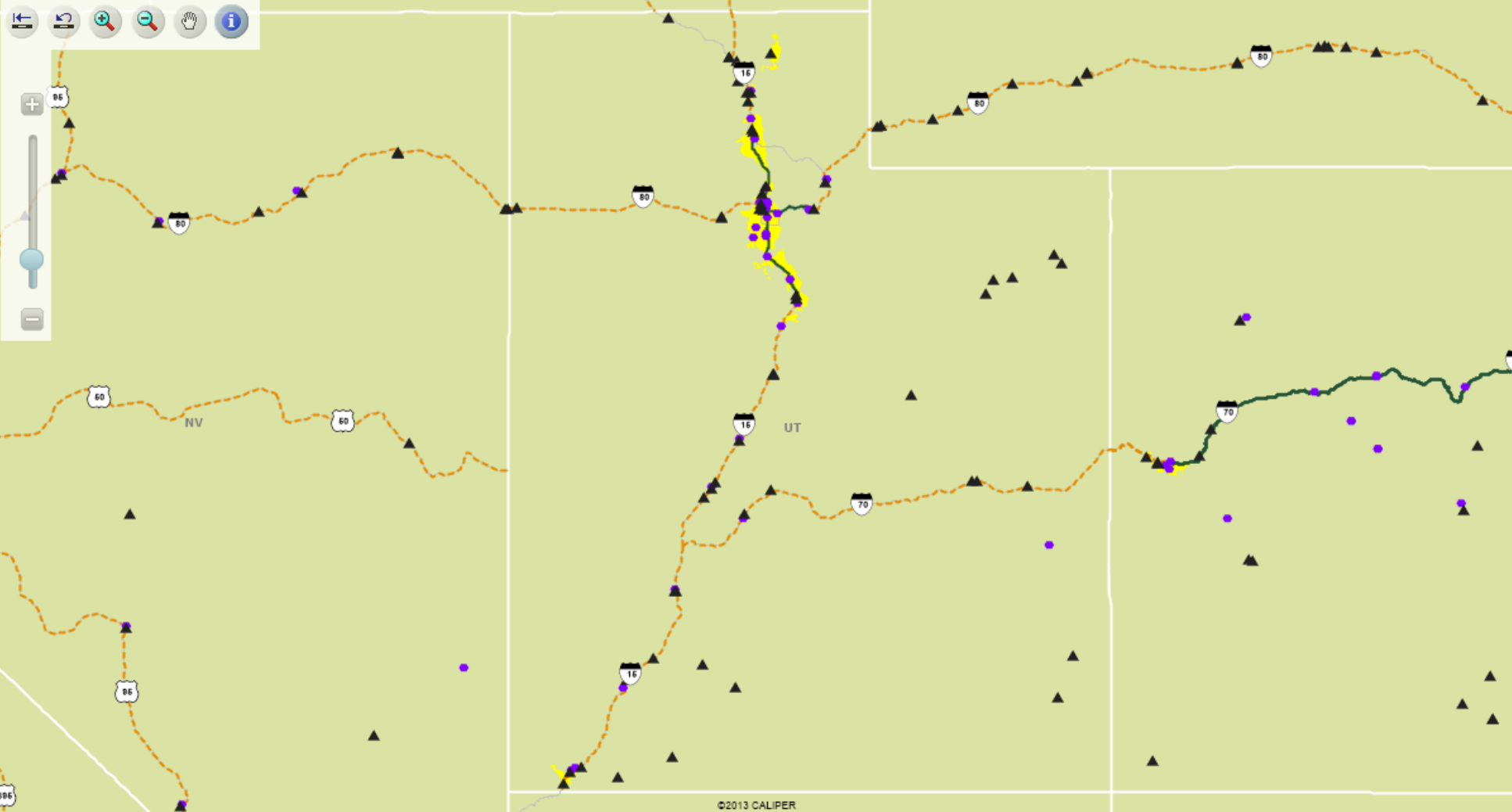
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Electric Vehicle (EV-Round 1, 2 and 3)



Legend

- ▲ Private Truck Stop
 - Electric Fast Charging Station
 - 2010 Urbanized Area
 - Alternative Fuel Corridors**
 - EV-Corridor Ready
 - - - EV-Corridor Pending
- 0 25 50 75
Miles

[Go to Layers to turn on Fuel Stations](#)

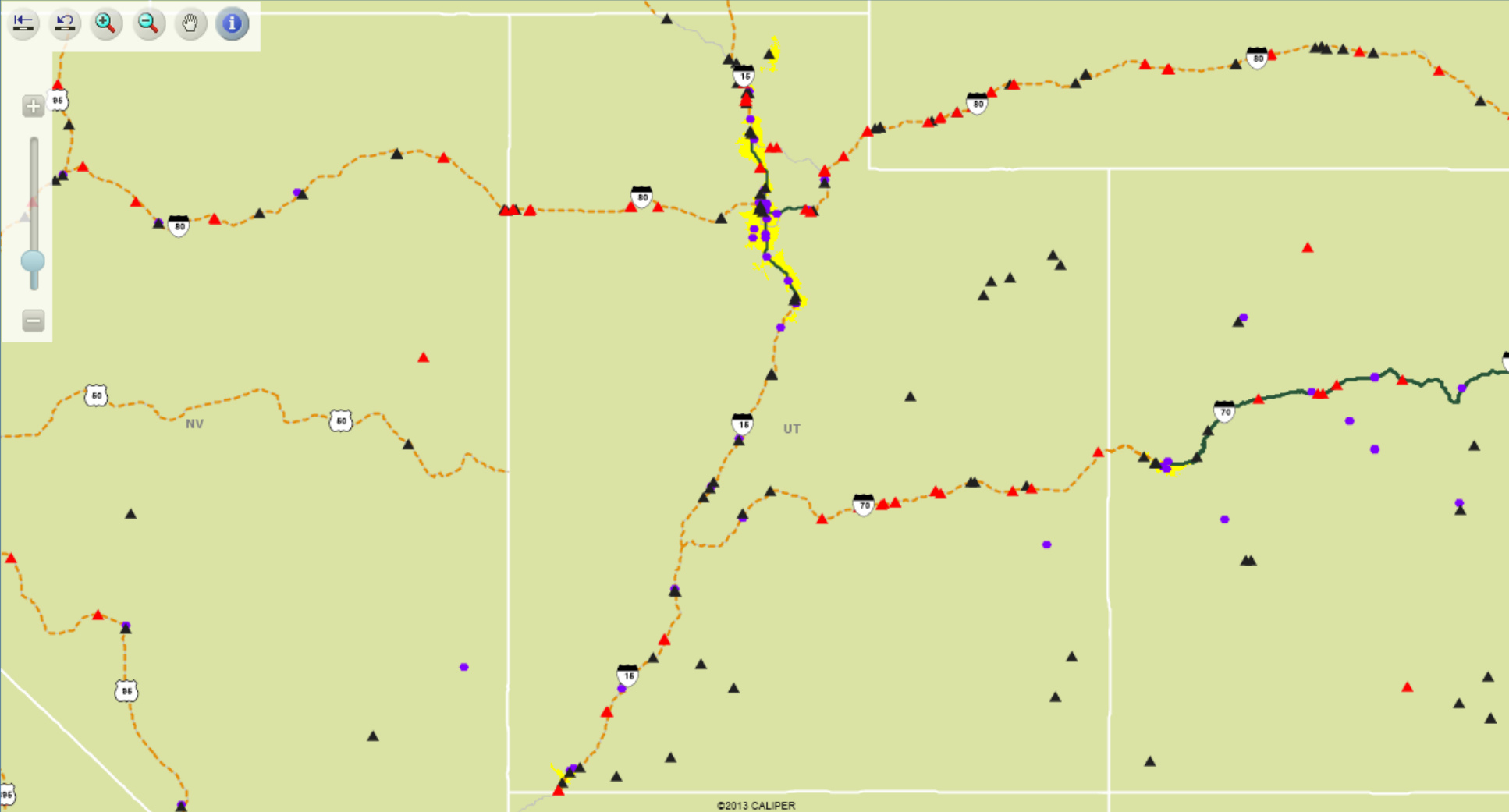
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Map Scale: 1 : 2,887,618 Width: 673 Miles

Electric Vehicle (EV-Round 1, 2 and 3)



[Sources](#) |
 [Legend](#) |
 [Data](#) |
 [Layers](#)

Legend

- ▲ Public Rest Area
- ▲ Private Truck Stop
- Electric Fast Charging Station
- 2010 Urbanized Area

Alternative Fuel Corridors

- EV-Corridor Ready
- EV-Corridor Pending

0 25 50 75
Miles

[Go to Layers to turn on Fuel Stations](#)

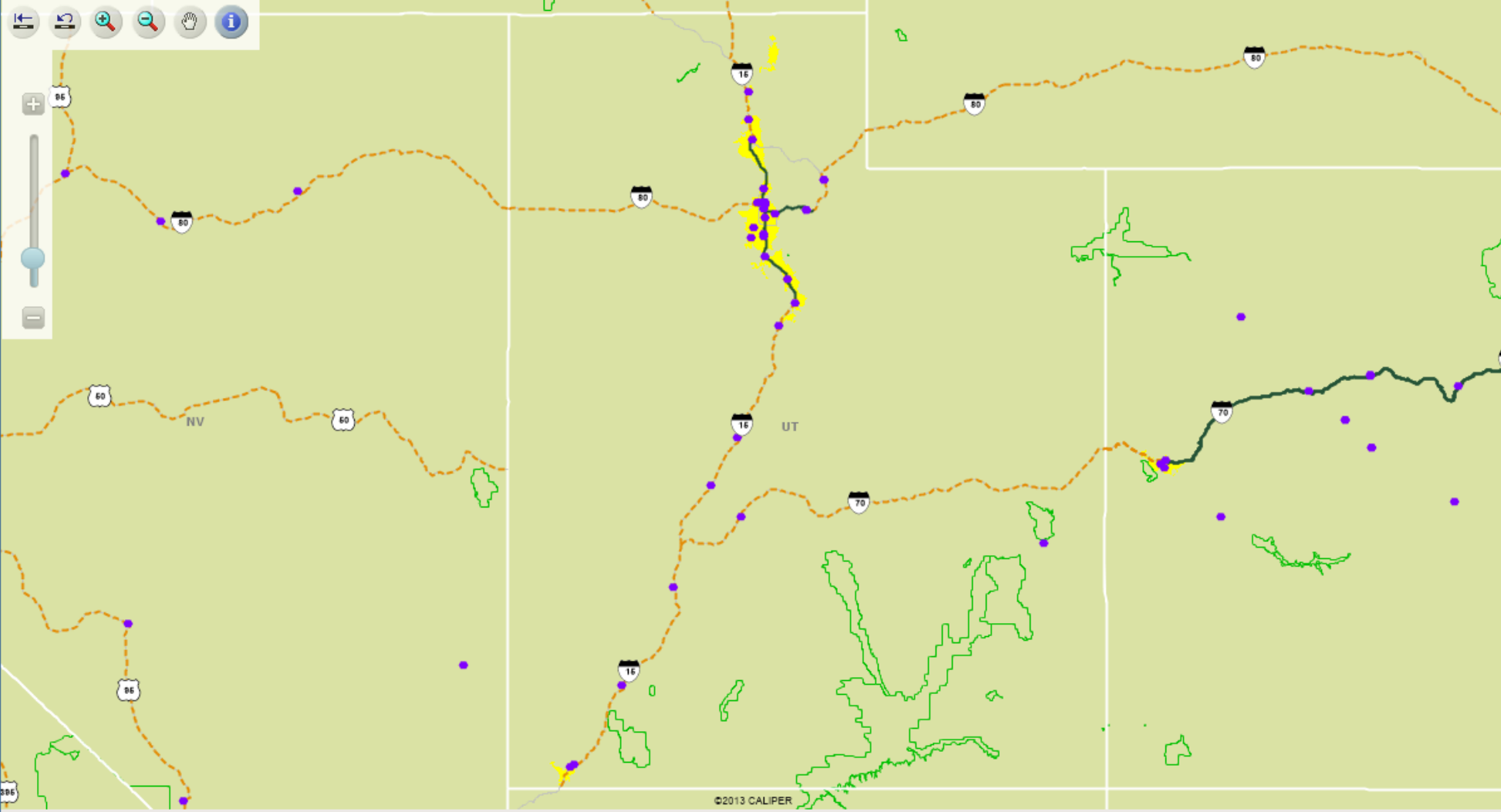
Map Scale: 1 : 2,887,618 Width: 673 Miles

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Electric Vehicle (EV-Round 1, 2 and 3)



Sources Legend Data Layers

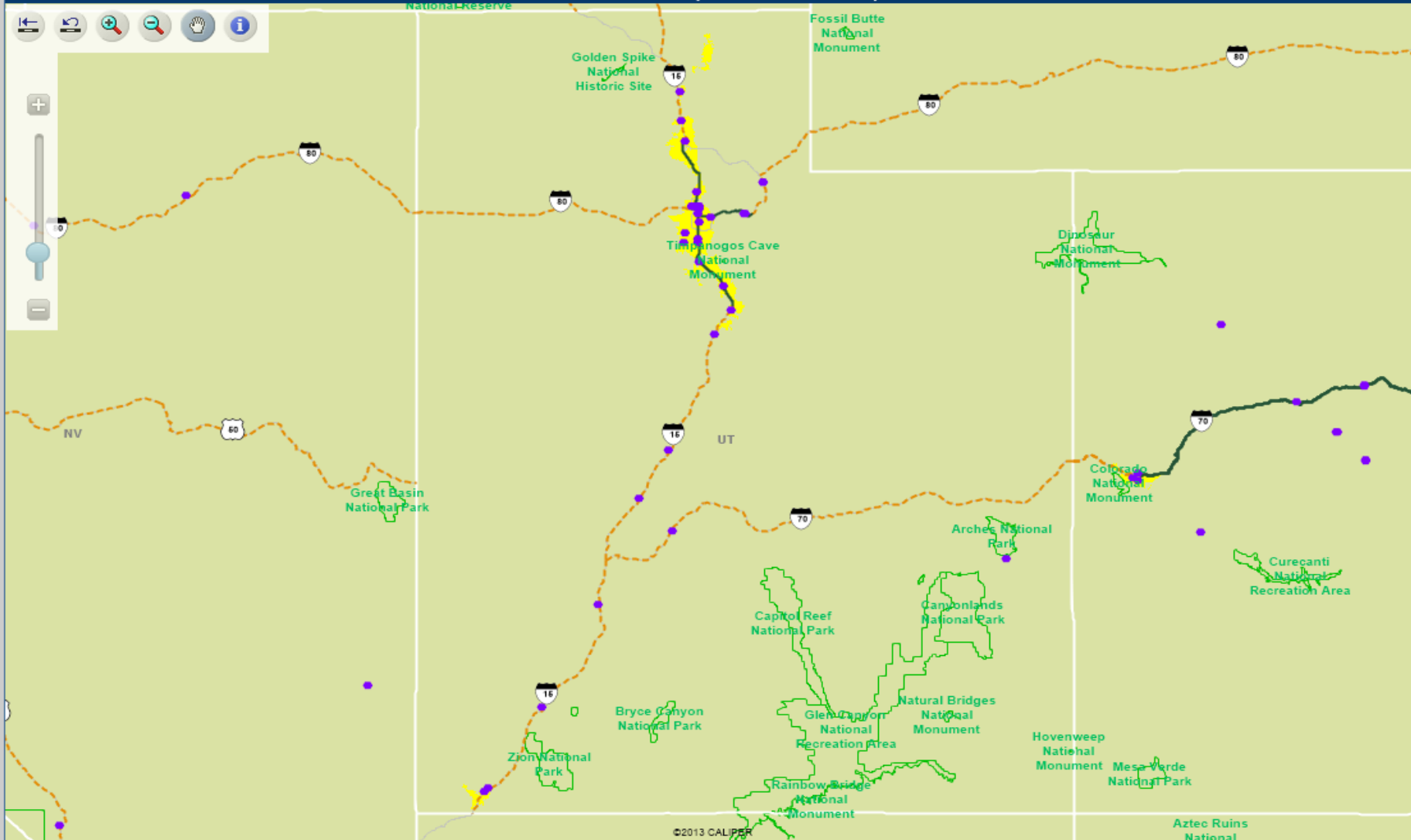
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<input type="checkbox"/>	<input type="checkbox"/> 2045 FAF4 Truck Volume
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<input type="checkbox"/>	<input checked="" type="checkbox"/> County Boundary
<input checked="" type="checkbox"/>	<input type="checkbox"/> Electric Fast Charging Station
<input type="checkbox"/>	<input checked="" type="checkbox"/> MPO Boundary
<input type="checkbox"/>	<input type="checkbox"/> NHS
<input type="checkbox"/>	<input type="checkbox"/> NHS Intermodal Facility
<input checked="" type="checkbox"/>	<input type="checkbox"/> National Park
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<input type="checkbox"/>	<input type="checkbox"/> Populated Place
<input type="checkbox"/>	<input type="checkbox"/> Private Truck Stop
<input type="checkbox"/>	<input type="checkbox"/> Public Rest Area
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> State (2010)

[Redraw Map](#)

Map Scale: 1 : 2,887,618 Width: 673 Miles

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Electric Vehicle (EV-Round 1, 2 and 3)



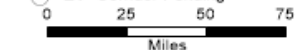
Map Scale: 1 : 2,677,723 Width: 576 Miles

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[Sources](#) | [Legend](#) | [Data](#) | [Layers](#)

- Legend**
- National Park
 - Electric Fast Charging Station
 - 2010 Urbanized Area
 - Alternative Fuel Corridors**
 - EV- Corridor Ready
 - EV- Corridor Pending

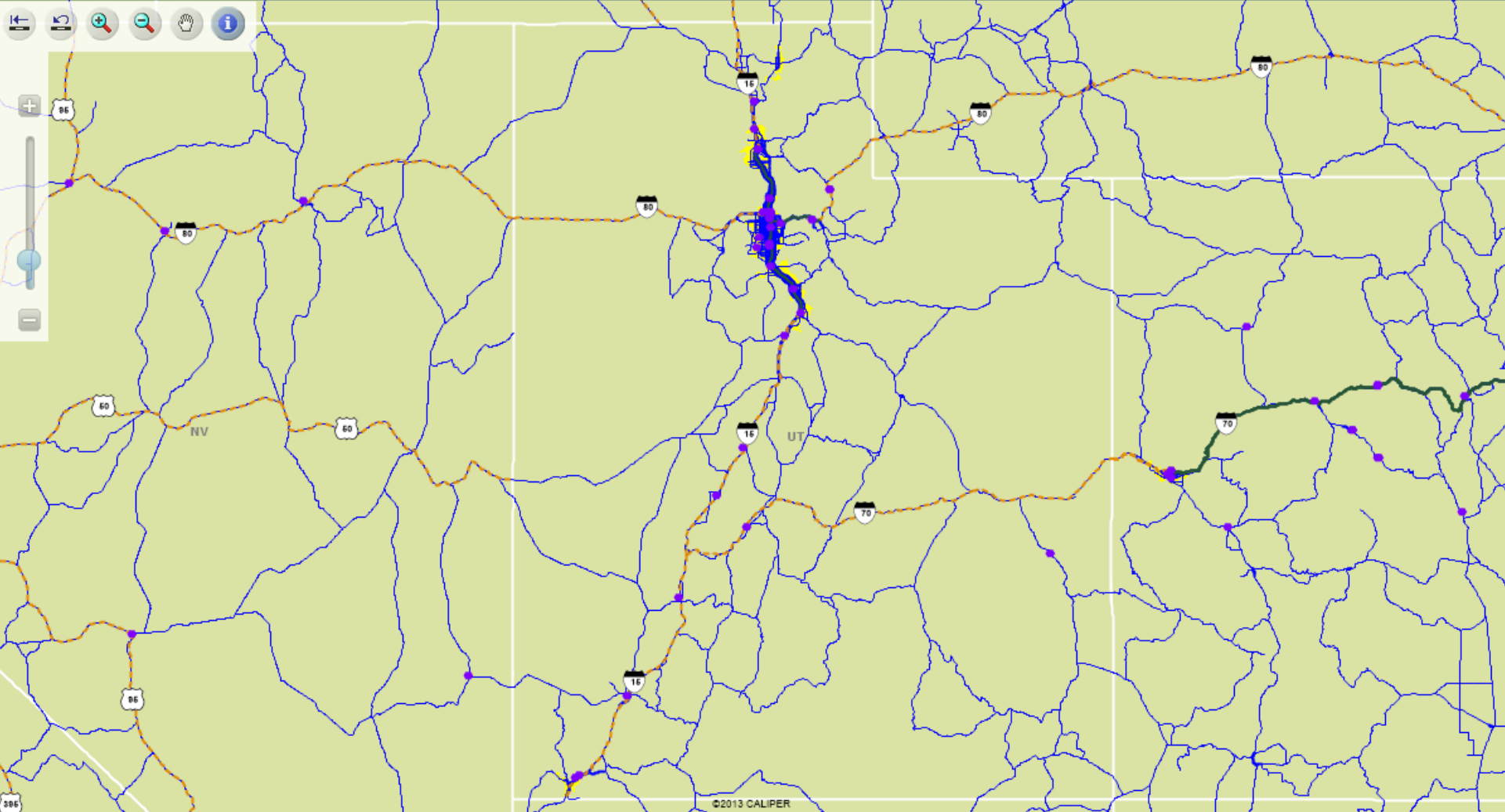


[Go to Layers to turn on Fuel Stations](#)

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Electric Vehicle (EV-Round 1, 2 and 3)

Sources | Legend | Data | Layers



Legend

- 2012 FAF4 AADT
- Electric Fast Charging Station
- 2010 Urbanized Area

Alternative Fuel Corridors

- EV- Corridor Ready
- EV- Corridor Pending

Traffic Volume (2012 AADT)

500000	250000	125000	
0	30	60	90

Miles

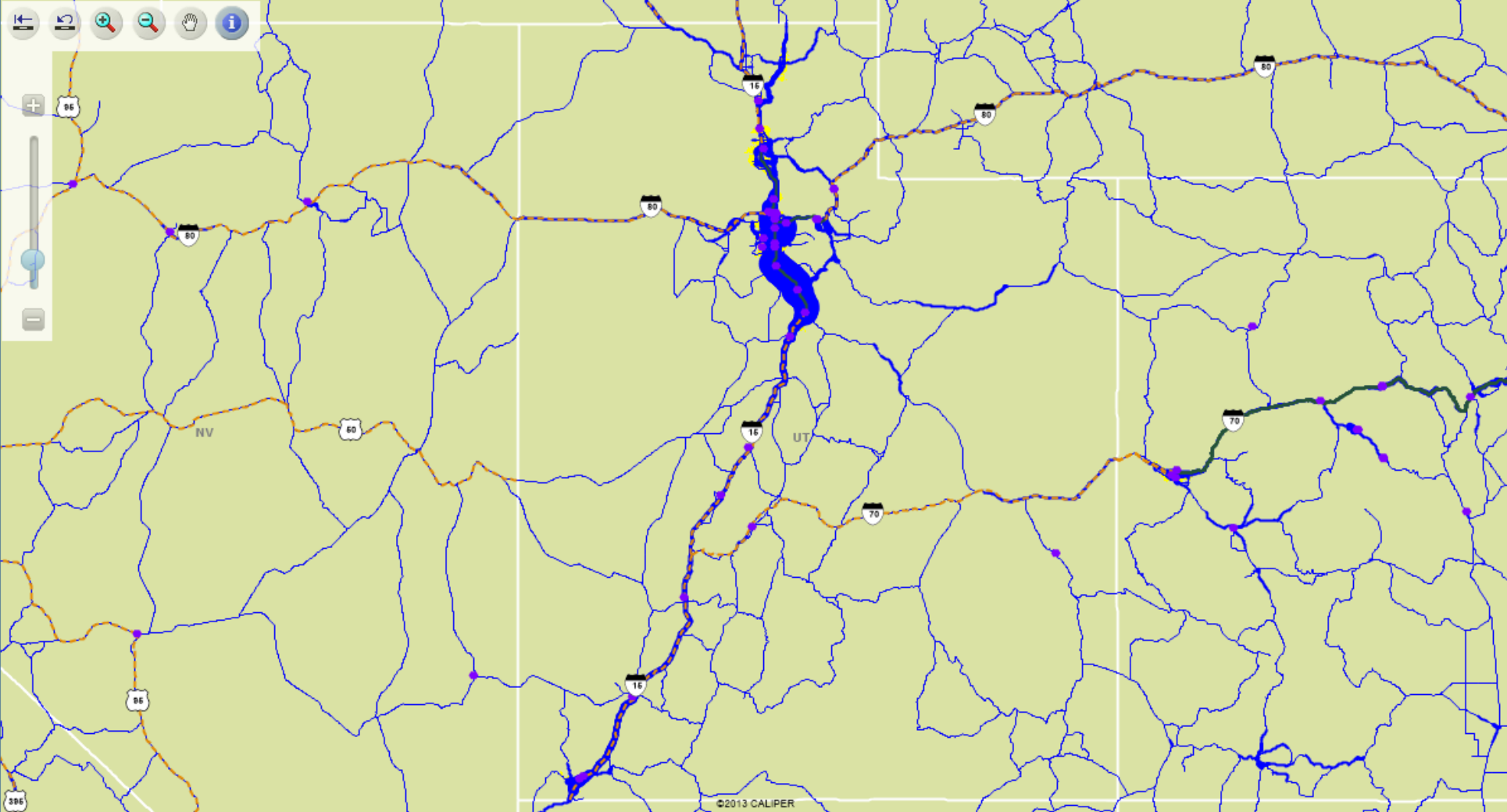
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Map Scale: 1 : 2,887,618 Width: 673 Miles

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Electric Vehicle (EV-Round 1, 2 and 3)

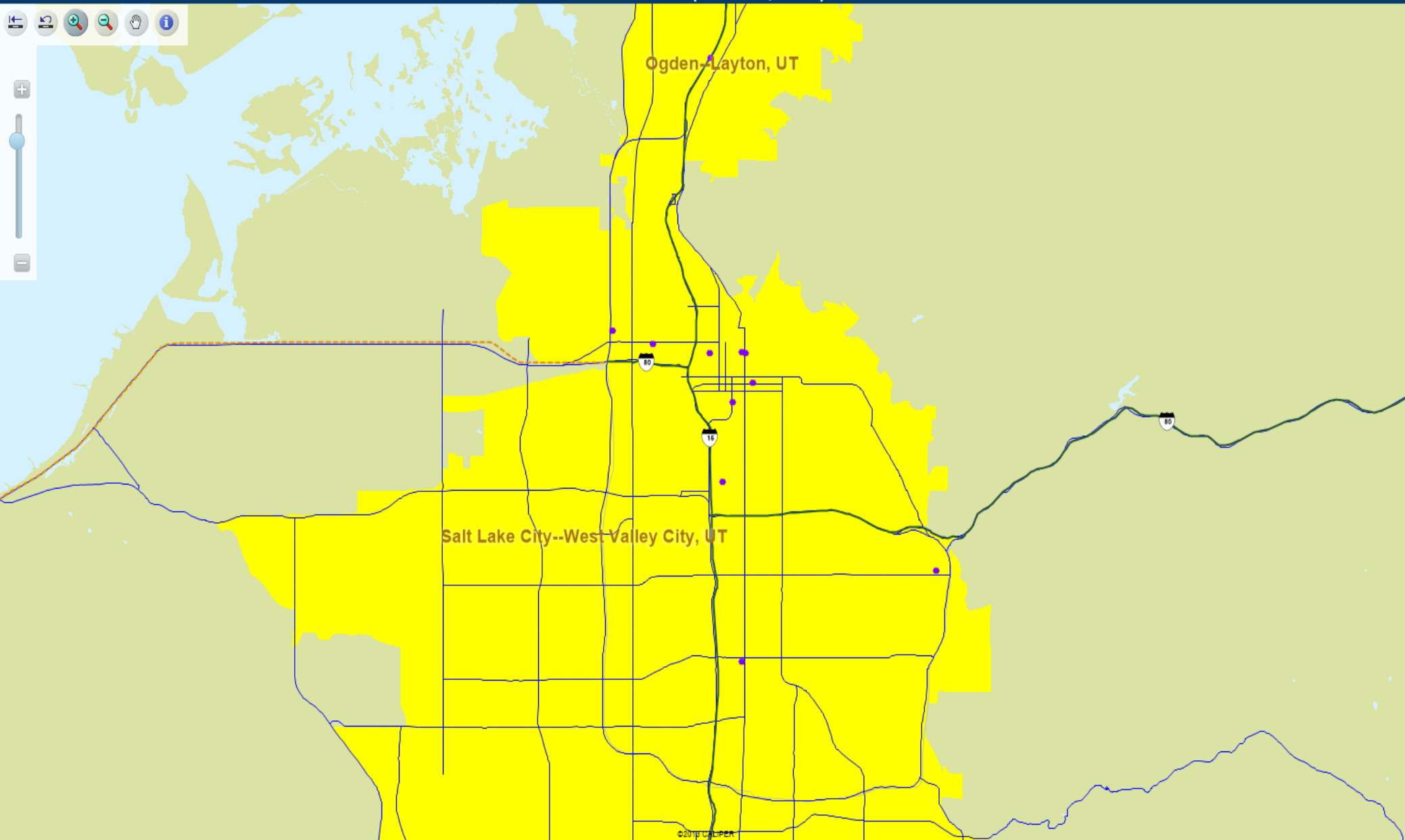


Sources | Legend | Data | **Layers**

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<input type="checkbox"/>	<input type="checkbox"/>	2012 FAF4 AADT
<input type="checkbox"/>	<input type="checkbox"/>	2012 FAF4 Truck Volume
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<input type="checkbox"/>	<input type="checkbox"/>	2045 FAF4 Truck Volume
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Alternative Fuel Corridors
<input type="checkbox"/>	<input checked="" type="checkbox"/>	County Boundary
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Electric Fast Charging Station
<input type="checkbox"/>	<input checked="" type="checkbox"/>	MPO Boundary
<input type="checkbox"/>	<input type="checkbox"/>	NHS
<input type="checkbox"/>	<input type="checkbox"/>	NHS Intermodal Facility
<input type="checkbox"/>	<input type="checkbox"/>	National Park
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<input type="checkbox"/>	<input type="checkbox"/>	Populated Place
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<input type="checkbox"/>	<input type="checkbox"/>	Public Rest Area
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	State (2010)

Redraw Map

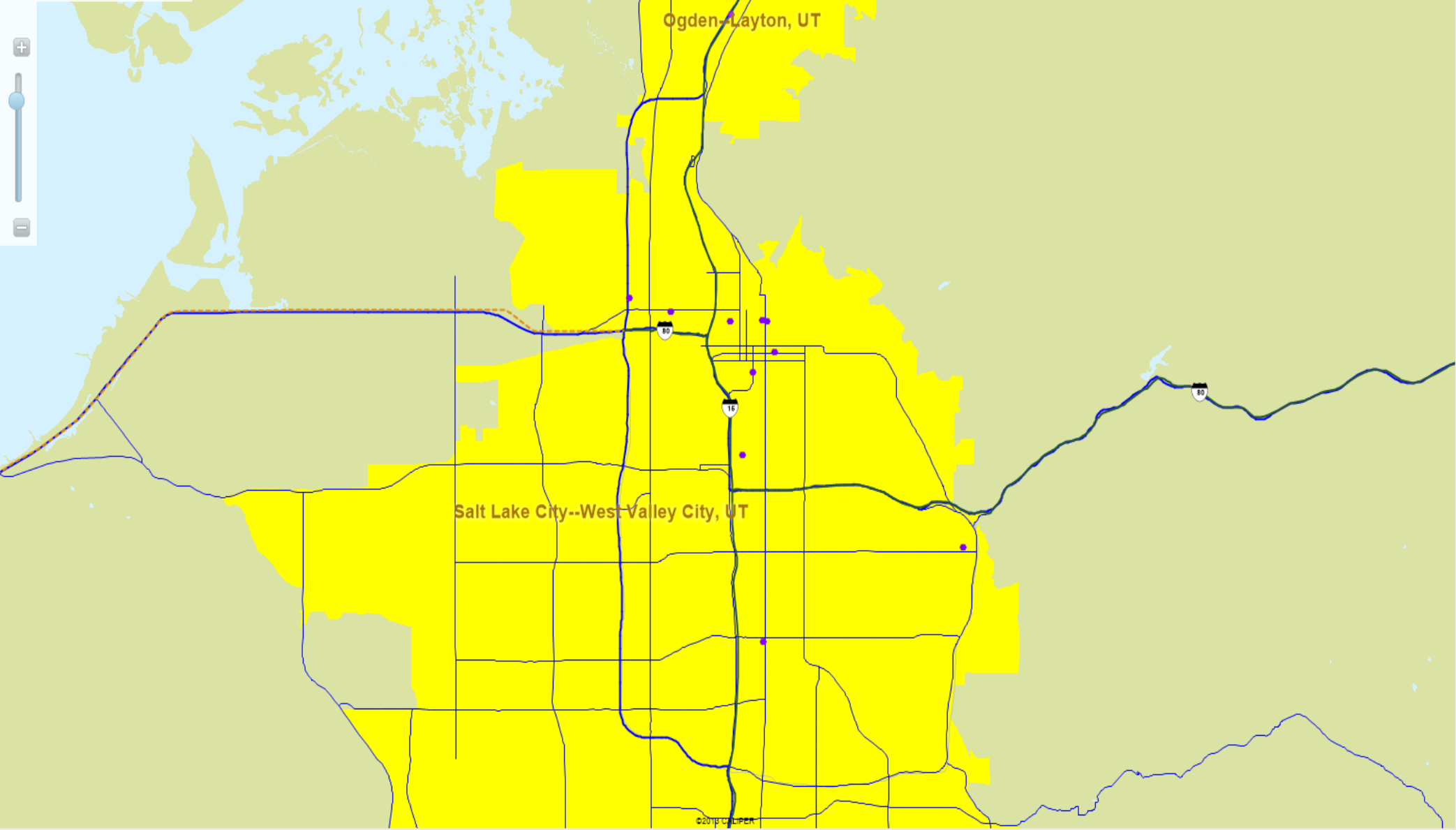
Electric Vehicle (EV-Round 1, 2 and 3)



Sources	Legend	Data	Layers
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<input checked="" type="checkbox"/>		<input type="checkbox"/>	2012 FAF4 Truck Volume
<input type="checkbox"/>		<input type="checkbox"/>	2045 FAF4 AADT
<input type="checkbox"/>		<input type="checkbox"/>	2045 FAF4 Truck Volume
<input checked="" type="checkbox"/>		<input type="checkbox"/>	Alternative Fuel Corridors
<input type="checkbox"/>		<input checked="" type="checkbox"/>	County Boundary
<input checked="" type="checkbox"/>		<input type="checkbox"/>	Electric Fast Charging Station
<input type="checkbox"/>		<input checked="" type="checkbox"/>	MPO Boundary
<input type="checkbox"/>		<input type="checkbox"/>	NHS
<input type="checkbox"/>		<input type="checkbox"/>	NHS Intermodal Facility
<input type="checkbox"/>		<input checked="" type="checkbox"/>	National Park
<input checked="" type="checkbox"/>		<input type="checkbox"/>	Other Highways
<input type="checkbox"/>		<input type="checkbox"/>	Populated Place
<input type="checkbox"/>		<input type="checkbox"/>	Private Truck Stop
<input type="checkbox"/>		<input type="checkbox"/>	Public Rest Area
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	State (2010)
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Streets

[Redraw Map](#)

Electric Vehicle (EV-Round 1, 2 and 3)

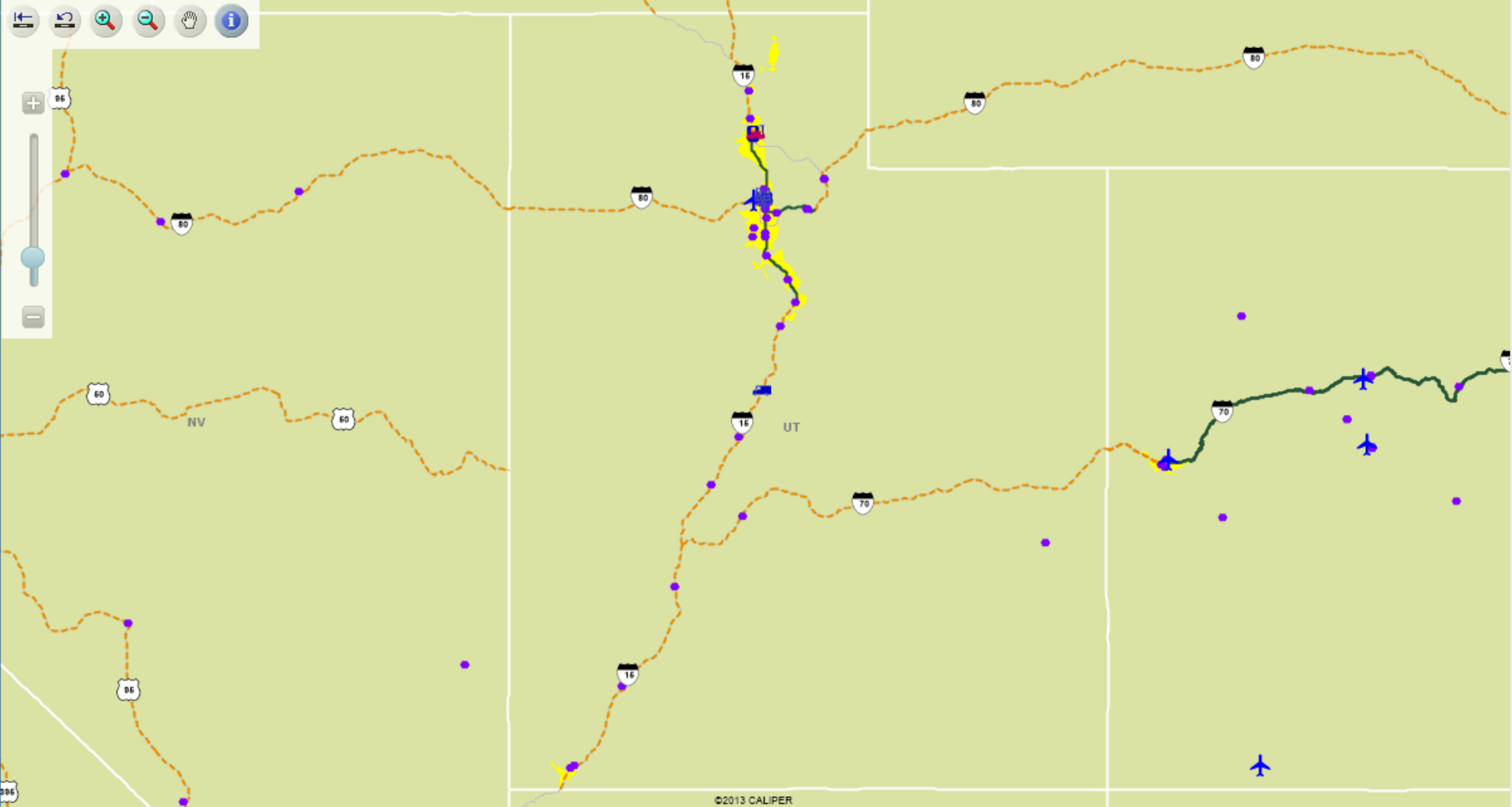


Sources Legend Data Layers

Show/Hide	Legend	Labels	
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<input type="checkbox"/>		<input type="checkbox"/>	2012 FAF4 AADT
<input type="checkbox"/>		<input type="checkbox"/>	2012 FAF4 Truck Volume
<input type="checkbox"/>		<input type="checkbox"/>	2045 FAF4 AADT
<input type="checkbox"/>		<input type="checkbox"/>	2045 FAF4 Truck Volume
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Alternative Fuel Corridors
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<input type="checkbox"/>		<input checked="" type="checkbox"/>	MPO Boundary
<input type="checkbox"/>		<input type="checkbox"/>	NHS
<input type="checkbox"/>		<input type="checkbox"/>	NHS Intermodal Facility
<input type="checkbox"/>		<input checked="" type="checkbox"/>	National Park
<input checked="" type="checkbox"/>		<input type="checkbox"/>	Other Highways
<input type="checkbox"/>		<input type="checkbox"/>	Populated Place
<input type="checkbox"/>		<input type="checkbox"/>	Private Truck Stop
<input type="checkbox"/>		<input type="checkbox"/>	Public Rest Area
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	State (2010)
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Streets

Redraw Map

Electric Vehicle (EV-Round 1, 2 and 3)



[Sources](#) | [Legend](#) | [Data](#) | [Layers](#)

Legend

- Electric Fast Charging Station
- 2010 Urbanized Area
- Alternative Fuel Corridors**
- EV- Corridor Ready
- EV- Corridor Pending
- Intermodal Facility**
- AMTRAK Station
- Airport
- Ferry Terminal
- Intercity Bus Terminal
- Multipurpose Passenger Facility
- Port Terminal
- Public Transit Station
- Truck/Pipeline Terminal
- Truck/Rail Facility

0 25 50 75
Miles

[Go to Layers to turn on Fuel Stations](#)

Map Scale: 1 : 2,887,618 Width: 673 Miles

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For More Information

DOT Alternative Fuel Corridor Team Contact Information

19

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michael.scarpino@dot.gov

Stephen Costa

U.S. Department of Transportation
Volpe Center
617-494-3852
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Resources

FHWA Alternative Fuel Corridor website and Corridor Tools:

http://www.fhwa.dot.gov/environment/alternative_fuel_corridors/
<https://hepgis.fhwa.dot.gov/fhwagis/>

MUTCD Memorandum – Signing for Designated Alternative Fuel Corridors:

https://mutcd.fhwa.dot.gov/resources/policy/alt_fuel_corridors/index.htm

DOE/NREL Alternative Fueling Station Locator & Corridor Tools:

<https://afdc.energy.gov/stations/>
<https://afdc.energy.gov/corridors>

FHWA Alternative Fuel Corridors Convenings:

<http://altfueltoolkit.org/regional-convenings/>

Motorweek Video Segment on Corridors:

<https://www.youtube.com/watch?v=QZhLFqTXb-g>