CA Governor's ZEV Summit 2014

"ZEVs in Other States" Plenary

March 7, 2014

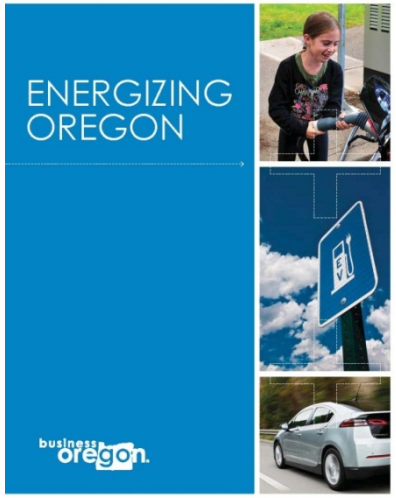
Ashley Horvat, State of Oregon Chief EV Officer

WEST COAST ELECTRIC HIGHWAY

Drive cleaner. Drive smarter. Drive electric. and save!

Oregon: What's driven EV adoption?

- ***West Coast Electric Highway***
- ***Oregon Electric Byways***
- Statewide EV Action Plan ("Energizing Oregon")
- Energize Oregon Coalition
- Oregon Auto Dealers Association Collaboration
- Clean Cities Collaboration



- Clean Tech Industry & Environmental Leadership
- Leadership structure around EVs in State Government
- City & County Leadership
- High Visibility

WEST COAST ELECTRIC HIGHWAY

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$915,000

U.S. Department of Energy
ARRA funds ODOE granted to ODOT.

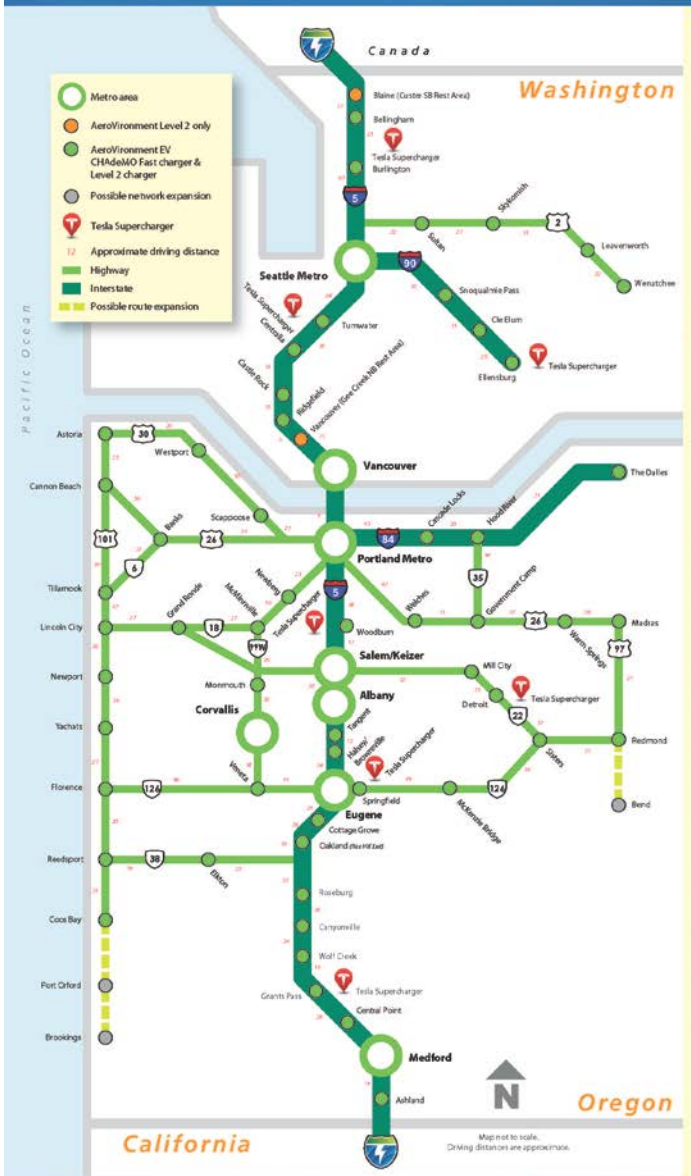
TIGER $3.34 million

U.S. Department of Transportation TIGER II
funds awarded to ODOT.

43

ODOT AeroVironment fast-chargers installed throughout Western Oregon along the Columbia River Gorge, the entire Oregon Coastline, the Cascades, Mt. Hood, Willamette Valley, and beyond.

Electric Highway Map



Tweet @ West Coast Electric Highway Stations with **#WCEH** or **#WestCoastElectricHighway**
Let us know how we're doing, rate the stations on your smartphone charging station locator apps & mention **#WCEH!**
If you are an EV Ambassador, include **#EVAmbassador**

WEST COAST ELECTRIC HIGHWAY

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Washington AeroVironment EV Station* Locations

Bellingham
Sehome Village Shopping Center
222 39th Street
Bellingham, WA 98225

Blaine**
Custer Southbound Safety Rest Area
I-5 Southbound, M.P. 269
Blaine, WA 98230

Burlington
The Outlet Shoppes at Burlington
4649 Fashion Way
Burlington, WA 98233

Castle Rock
Cascade Select Market
234 West Cowlitz Drive
Castle Rock, WA 98611

Centralia
Wendy's
617 Harrison Ave
Centralia, WA 98531

Cle Elum
Suncadia Resort
3500 Suncadia Trail
Cle Elum, WA 98922

Leavenworth
City Hall
700 US Highway 2
Leavenworth, WA 98826

Ridgefield
Country Cafe
6370 Pioneer Street
Ridgefield, WA 98642

Skykomish
Sky Deli
144 5th Street North
Skykomish, WA 98288

Snoqualmie
Snoqualmie Pass Chevron
521 SR 906
Snoqualmie Pass, WA 98068

Sultan
Sultan Visitor Information Center
320 Main Street
Sultan, WA 98294

Tumwater
Shell Station & Deli Mart
6131 Capitol Blvd SE
Tumwater, WA 98501

Vancouver**
Gee Creek Northbound Safety Rest Area
I-5 Northbound, M.P. 11
Vancouver, WA 98642

Wenatchee
Wenatchee Convention Center
290 North Columbia Street
Wenatchee, WA 98801

Oregon AeroVironment EV Station* Locations

Ashland
Treats
237 I Ashland St.
Ashland, OR 97520

Astoria
Sunset Empire Transit District
900 Marine Dr.
Astoria, OR 97103

Banks
Jim's Thriftway
660 S. Main St.
Banks, OR 97106

Cannon Beach
Cannon Beach RV Resort
340 Elk Creek Road
Cannon Beach, OR 97110

Canyonville
Seven Feathers Truck and Travel Center
130 Creekside Rd.
Canyonville, OR 97417

Cascade Locks
City of Cascade Locks Public Parking Lot
95 N.E. Wa Na Pa
Cascade Locks, OR 97014

Central Point
Fairground Chevron
1510 E. Pine St.
Central Point, OR 97502

Coos Bay
Fred Meyer
1020 1st St.
Coos Bay, OR 97420

Cottage Grove
Village Inn Restaurant
1390 Gateway Blvd.
Cottage Grove, OR 97424

Detroit
Mountain High Grocery
245 Detroit Ave N
Detroit, OR 97342

Elkton
Brandborg Winery
365 1st Street
Elkton, OR 97436

Florence
Three Rivers Casino
5147 Oregon 126
Florence, OR 97439

Government Camp
Skibowl West
87000 E. Hwy 26
Government Camp, OR 97028

Grand Ronde
Spirit Mountain Casino
Service Station
27820 Salmon River Highway
Grand Ronde, OR 97346

Grants Pass
Grants Pass Chamber of Commerce
1995 N.W. 9ine St.
Grants Pass, OR 97526

Halsey
Pioneer Villa Truck Plaza
33180 Hwy 228
Halsey, OR 97348

Hood River
City of Hood River Public Parking Lot
7th & Columbia
Hood River, OR 97031

Lincoln City
Lincoln City Cultural Center
540 N.E. Hwy 101
Lincoln City, OR 97367

Madras
Dairy Queen
443 SE Fifth St
Madras, OR 97741

McKenzie Bridge
Harbick's Country Store
91898 McF Creek Rd.
McKenzie Bridge, OR 97413

McMinnville
Oregon Mutual Insurance
619 N.E. Baker St
McMinnville, OR 97128

Mill City
Mountain Edge Cafe
400 NW Sandlam Blvd.
Mill City, OR 97360

Monmouth
Dairy Queen
329 Pacific Ave. S
Monmouth, OR 97361

Newberg
Chevron
1745 E. Portland Rd.
Newberg, OR 97132

Newport
City of Newport Public Parking Lot
825 S.W. Hurbert St.
Newport, OR 97365

Oakland
Motel 6
521 John Long Rd.
Oakland, OR 97462

Port Orford
Port Orford
Coming soon
Port Orford, OR

Redmond
Fred Meyer
864 SE Veterans Way
Redmond, OR 97756

Reedsport
Recreation Station
1575 Highway 101 S
Reedsport, OR 97467

Roseburg
Wagon Wheel Restaurant
722 N.W. Garden Valley Blvd.
Roseburg, OR 97471

Scappoose
Fred Meyer
51501 Columbia River Highway
Scappoose, OR 97056

Sisters
Sister Mainline Station
100 I Rail Way
Sisters, OR 97759

Springfield
Safeway Marketplace
840 Beltline Rd
Springfield, OR 97477

Tangent
Chevron Station
33125 Hwy 34 S.E.
Tangent, OR 97322

The Dalles
Fred Meyer
1215 W. 6th St
The Dalles, OR 97058

Tillamook
Fred Meyer
2500 Main Ave. N
Tillamook, OR 97141

Veneta
Veneta Park n' Ride
88136 Territorial Rd
Veneta, OR 97396

Warm Springs
Indian Head Casino
3236 Hwy 26
Warm Springs, OR 97761

Welches
Barlow Trail Roadhouse
69590 E. Highway 26
Welches, OR 97367

Westport
Berry Patch
49269 U.S. 30
Westport, OR 97616

Wolf Creek
Wolf Creek Inn
100 Front St.
Wolf Creek, OR 97497

Woodburn
Coming Soon
Woodburn, OR

Yachats
Yachats City Hall
441 U.S. Highway 101
Yachats, OR 97498

* EV Station (West Coast Electric Highway EV Station) = CHAdeMO Fast Charger & Level 2 charger

** AeroVironment Level 2 only

Tesla Model S Supercharger Network for OR/WA

Grants Pass, OR
Black Bear Diner
1990 NW 6th St.
Grants Pass, OR 97526

Springfield, OR
Holiday Inn Eugene - Springfield
919 Kruse Way
Springfield, OR 97477

Detroit Lake, OR
219 D Street
Detroit, OR 97342

Woodburn, OR
Ernie's Restaurant
255 N Arney Rd.
Woodburn, OR 97071

Centralia, WA
Centralia Outlets
1201 Lum Rd.
Centralia, WA 98531

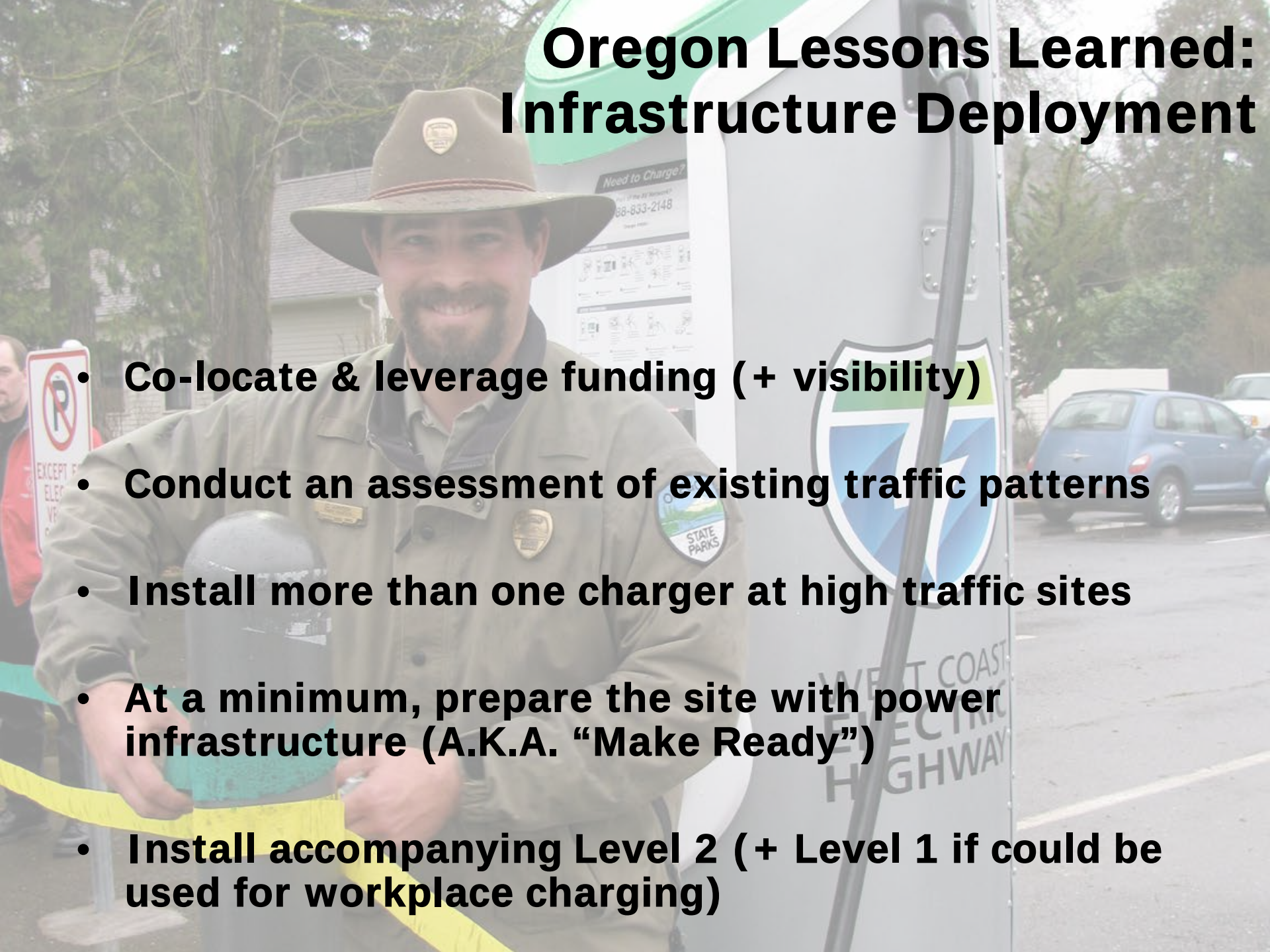
Ellensburg, WA
Holiday Inn Express Ellensburg
1620 Canyon Rd.
Ellensburg, WA 98926

Burlington, WA
Fairfield Inn & Suites
8346 Old Highway 99
North Burlington, WA 98233

Oregon Lessons Learned: Infrastructure Deployment

- Determine single point of contact
- Agree upon cohesive EV Network “Brand”
- Establish parameters for site placement
- Involve host sites, community, and beyond to gain support & “champions” throughout state
- Install both CHAdeMO & SAE
- Collaborate with Dealers on awareness of network

Oregon Lessons Learned: Infrastructure Deployment



- Co-locate & leverage funding (+ visibility)
- Conduct an assessment of existing traffic patterns
- Install more than one charger at high traffic sites
- At a minimum, prepare the site with power infrastructure (A.K.A. “Make Ready”)
- Install accompanying Level 2 (+ Level 1 if could be used for workplace charging)

Oregon Electric Byways and Other EV Tourism Initiatives
TRAVEL OREGON
Oregon Department of Transportation

WEST COAST ELECTRIC HIGHWAY

Drive cleaner. Drive smarter. Drive electric. and save!

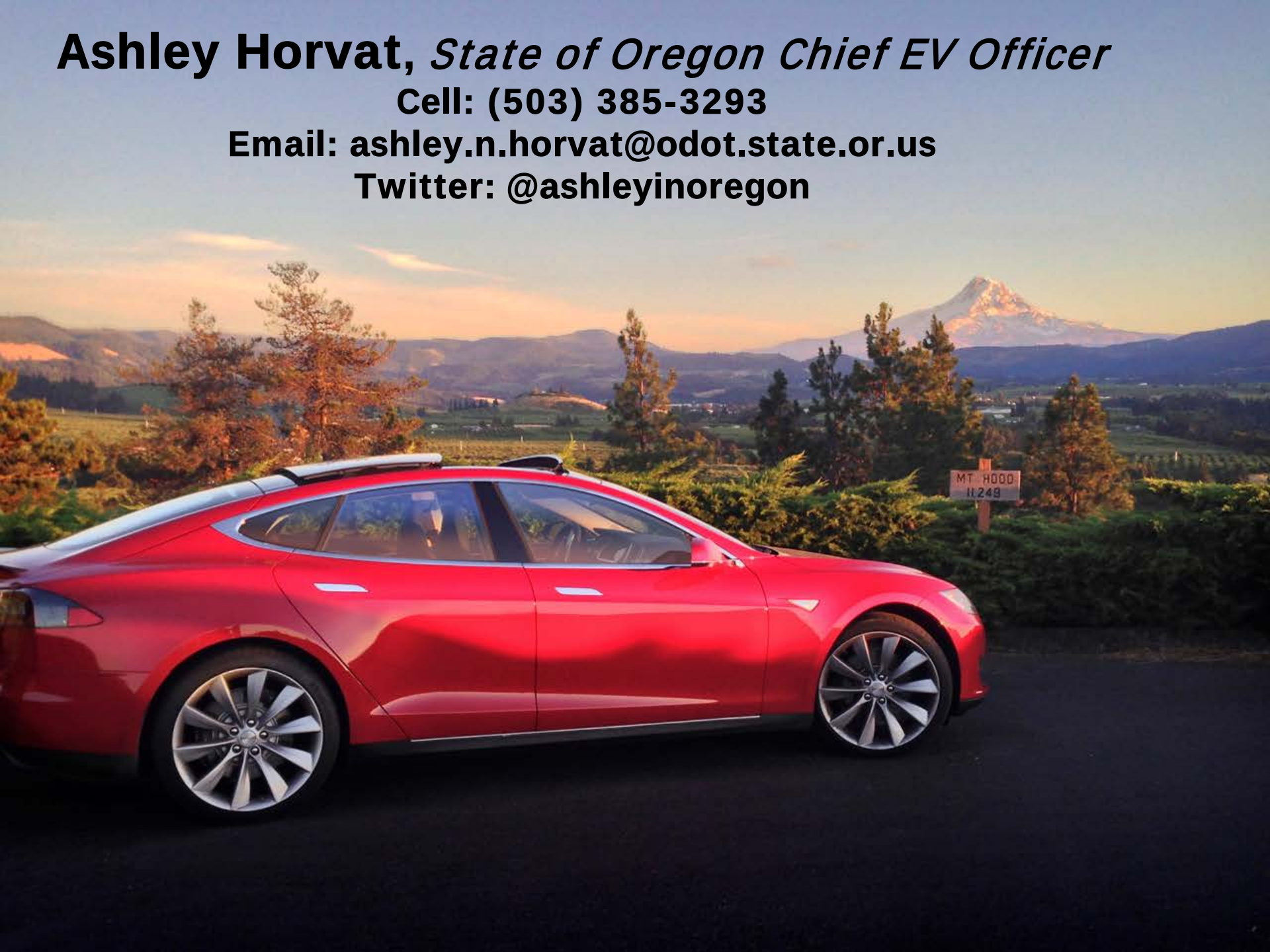
Oregon Electric Byways: Itineraries based on the West Coast Electric Highway that take EV drivers on curated trips to experience a more thorough view of the state.

Oregon Electric Byways: Destination Charging Changes the "EV Story"

Explore Oregon's Electric Byways

WEST COAST
ELECTRIC
HIGHWAY

What's Next for Oregon?

1. ZEV MOU Action Plan Implementation
2. Expand EV Tourism Initiative
3. More fast chargers
4. Workplace Charging & Employer Programs
5. ZEVs in Fleets
6. Dealer & Other Outreach Programs
7. Coordinate with CA on West Coast Electric Highway's expansion

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