ELECTRIC VEHICLE READINESS ORDINANCE

SALT LAKE CITY SUSTAINABILITY DEPARTMENT

PRESENTATION AGENDA

01 **BACKGROUND + CONTEXT**
An introduction to electric vehicle readiness and current SLC policy

02 **LOCAL BENEFITS**
How EV readiness provides economic benefits and improves Salt Lake City's air quality

03 **PROPOSED REQUIREMENTS**
An overview of the proposed ordinance additions and property types impacted

04 **PROVIDING FEEDBACK**
We want to hear from you!

What does **electric vehicle readiness** mean?

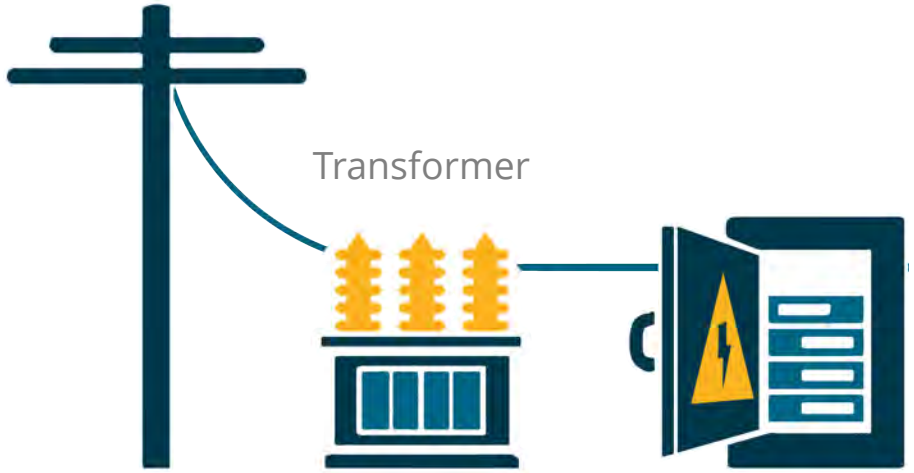
Three levels of “electric vehicle supply equipment” (EVSE) infrastructure are often regulated by municipal zoning ordinances:

EV CAPABLE

EV READY

EVSE INSTALLED

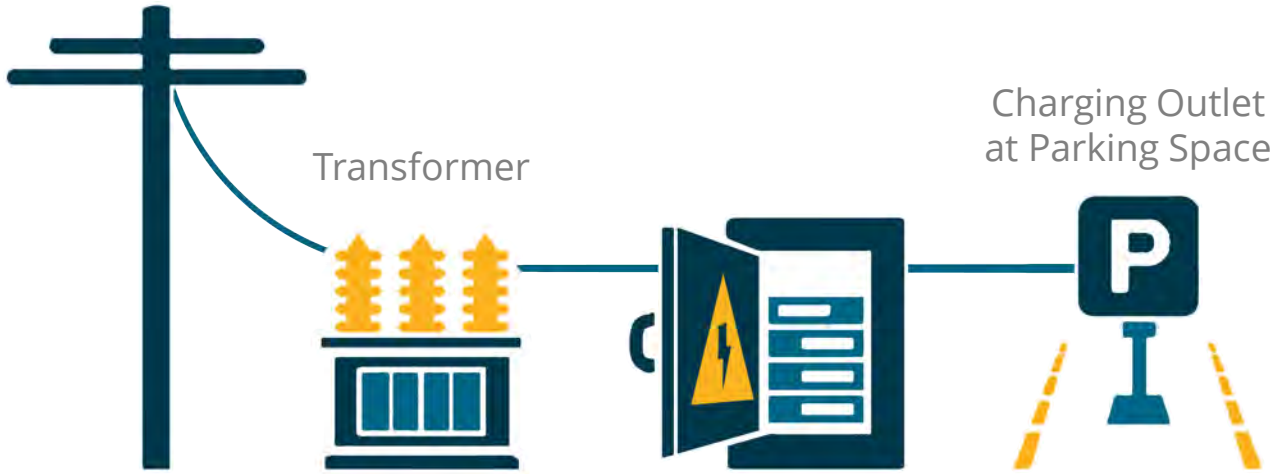
What does **electric vehicle readiness** mean?



EV CAPABLE

Installed electrical panel capacity with a dedicated branch circuit and a continuous raceway from the panel to the future EV parking space.

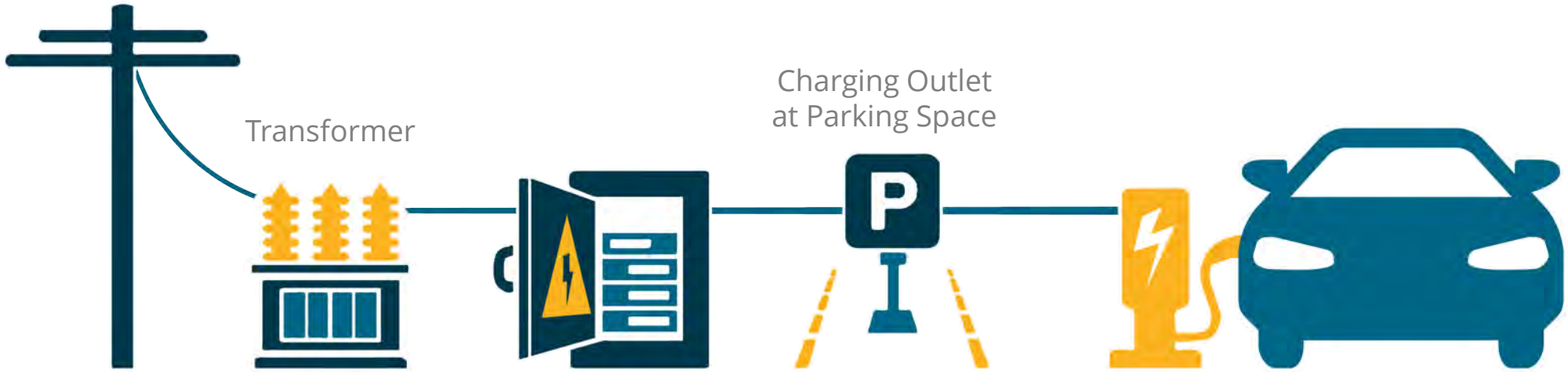
What does **electric vehicle readiness** mean?



EV READY

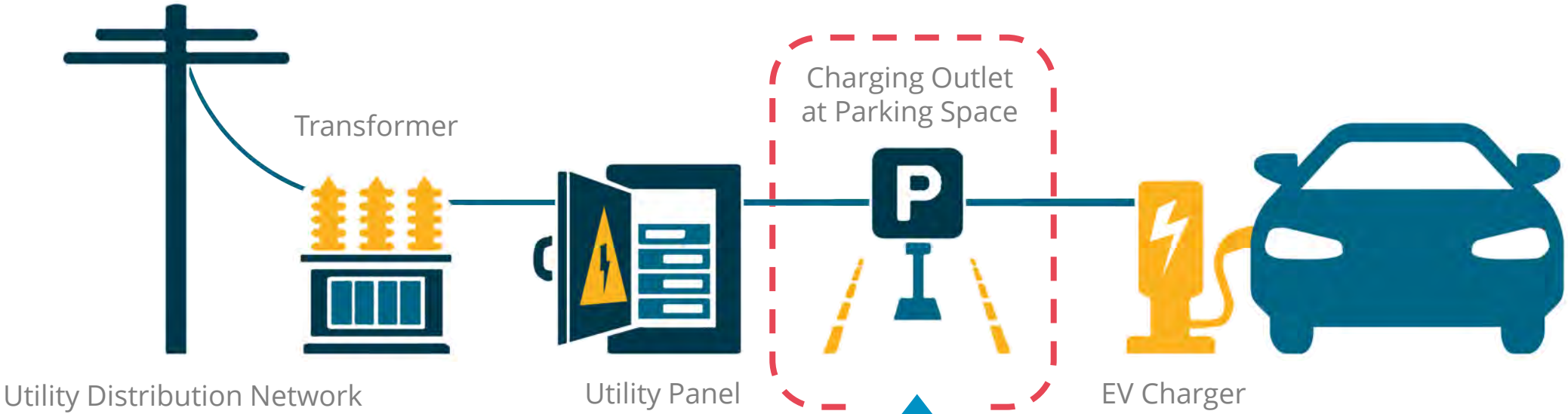
Installed electrical panel capacity and raceway with conduit to terminate in junction box or 240-volt charging outlet.

What does **electric vehicle readiness** mean?



Installed Level 2 charging station.

What does **electric vehicle readiness** mean?



SLC PROPOSED ORDINANCE

Existing EV Policy

MULTIFAMILY PROPERTIES

One (1) installed EV charging station per 25 required parking spaces

- ✓ Count toward total required parking spaces
- ✓ Must be located near building entrance
- ✓ Signed in a clear and conspicuous manner
- ✓ Specific charging station level not required

Proposed EV Readiness

MULTIFAMILY PROPERTIES

Twenty percent (20%) of required parking spaces constructed as EV-ready

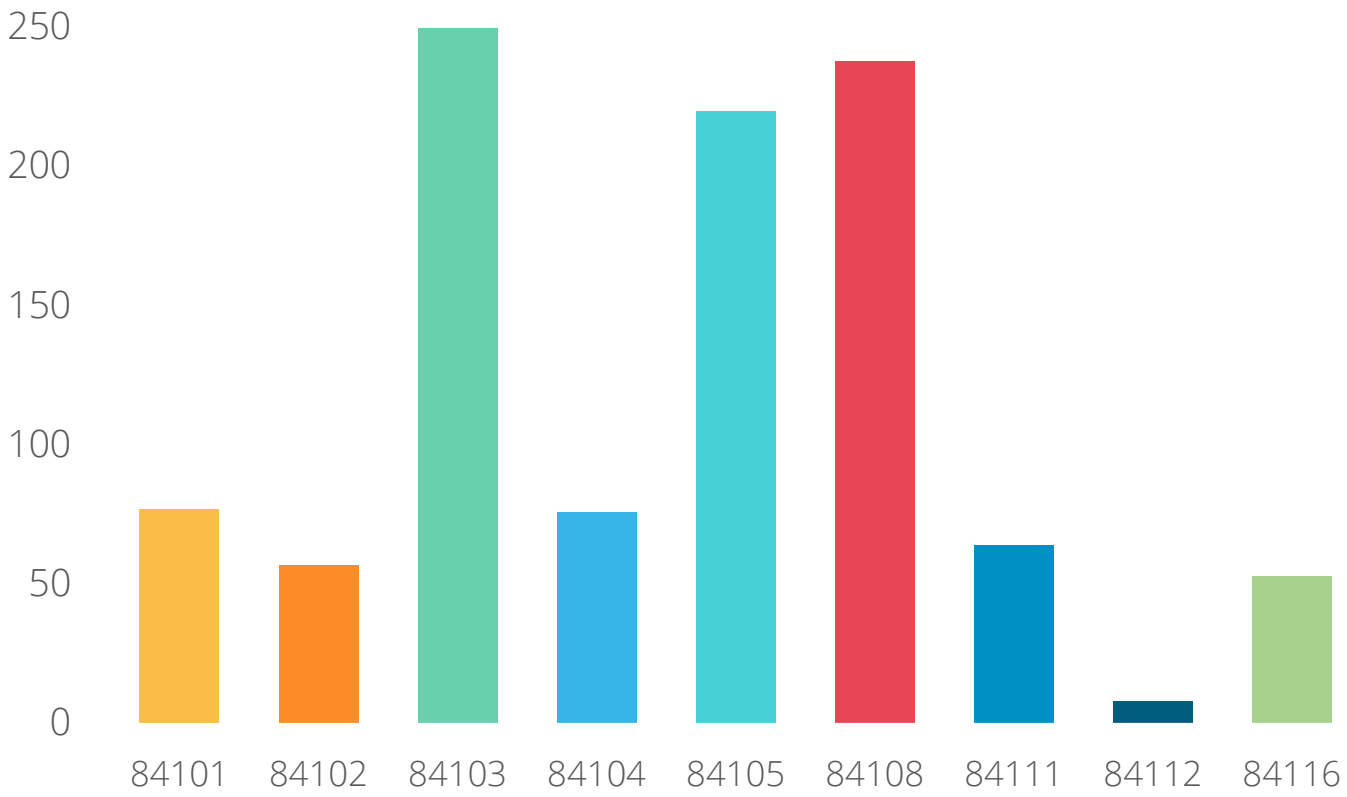
- ✓ Count toward total required parking spaces
- ✓ EV-ready parking spaces shall have electrical conduit and sufficient electrical capacity
- ✓ For new multi-family uses, a minimum of 20% of ADA spaces shall be constructed as EV-ready.

Market Trends

MARKET SIZE & DEMAND

SALT LAKE CITY

1,043 EVs registered in 2020



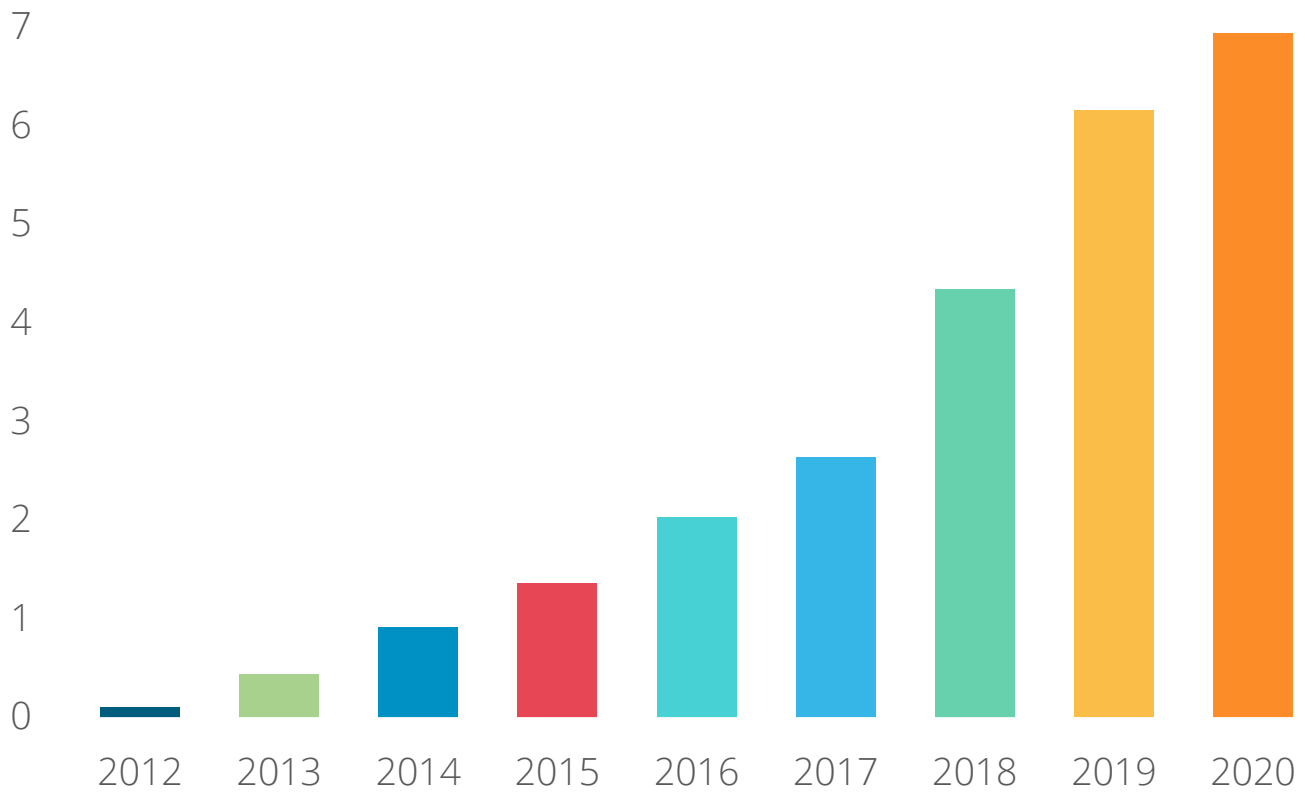
Data Source: Utah State Tax Commission

Market Trends

MARKET SIZE & DEMAND

UTAH

6,947 EVs as of Q2 2020 (in thousands)



Data Source: Utah State Tax Commission

New vs. Retrofit Costs

AN ECONOMIC COMPARISON

A study of EV-ready construction costs shows that installing infrastructure during the new construction phase is the most cost-efficient.

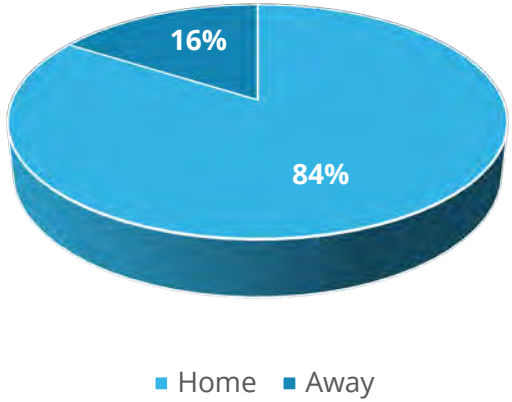
New Construction		Retrofit
$610	Balance of Circuit	$1,210
$180	Raceway	$1,070
$70	Permitting & Inspection	$650
$60	Construction Management	$620
$920	**Total (per space)**	**$3,550**

Data Source: SWEEP (Southwest Energy Efficiency Project). "Cracking the Code on EV-Ready Building Codes." 2018.

Charging Behavior

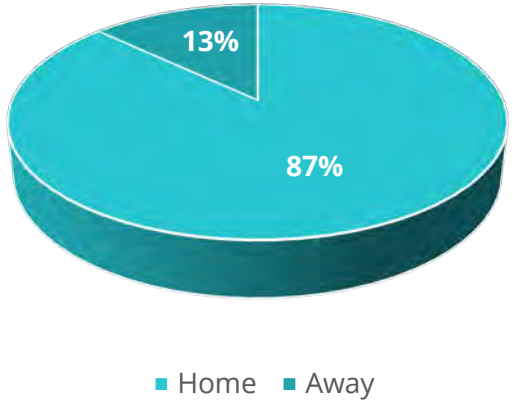
PLACE-BASED CHARGING DEMANDS

Nissan Leaf



4,000 U.S. drivers assessed

Chevy Volt



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Data Source: Idaho National Laboratory. 2015.

Charging Behavior

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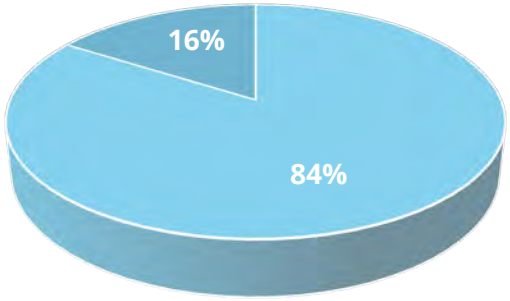

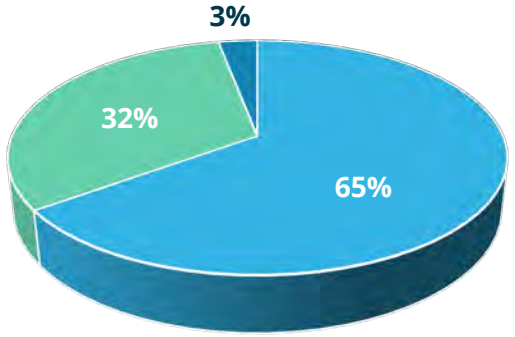

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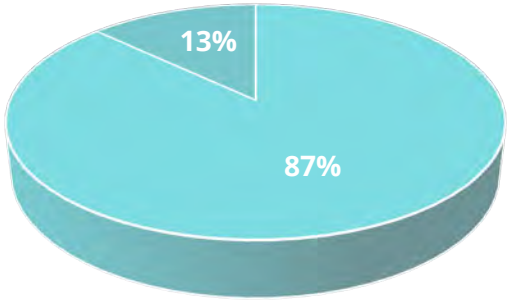
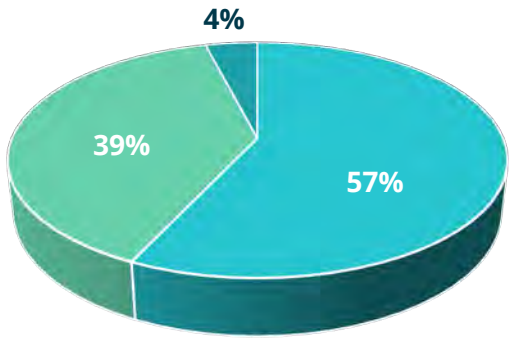




Subgroups

with access to workplace charging

Data Source: Idaho National Laboratory. 2015.

Economic Benefits

PREPARING FOR TECHNOLOGY INNOVATION

Future-Proof Development

Building code standards are moving quickly to keep up with EV technology.

Avoid Costly Retrofits

Retrofits costs are significantly higher than new construction for EV-ready.

Market Competitiveness

Properties with install EV-ready infrastructure are more attractive to specific clientele that require home-based charging options.

A resilient building stock that is prepared to meet demands for future acceleration of electric vehicle adoption.

Air Quality

BENEFITS TO SLC'S AIRSHED

Direct Emissions are Eliminated

AQ Pollutants are Significantly Reduced

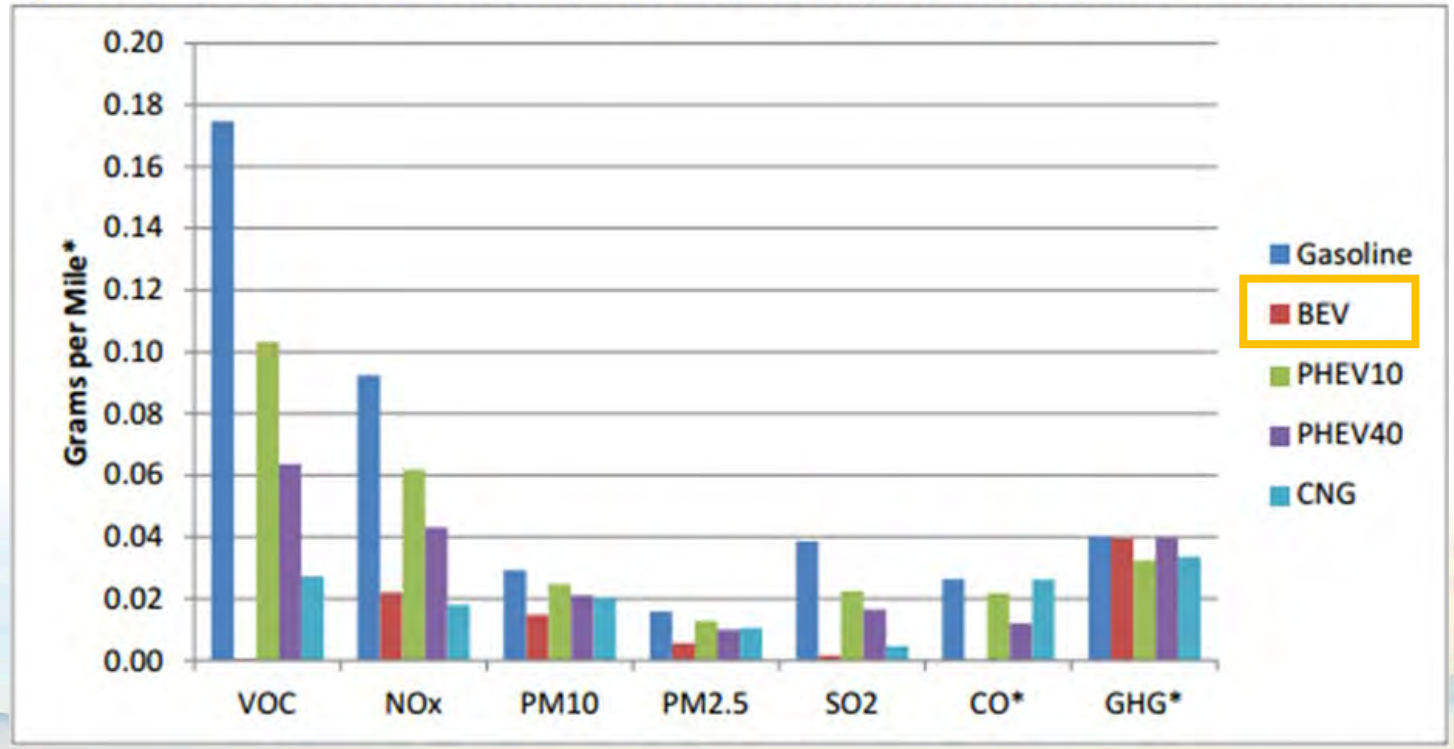
Effects are Compounded with an Increasingly Cleaner Grid

Air Quality

BENEFITS TO SLC'S AIRSHED

AQ Pollutants are Significantly Reduced

Figure 1. Criteria Pollutant Emissions in Wasatch Front by Vehicle Type, New 2013 Vehicles



Data Source: SWEEP. "The Potential for EVs to Reduce Vehicle Emissions and Improve Air Quality In the Wasatch Front." 2014.

Proposed Ordinance

EV READINESS LANGUAGE

Each multifamily use shall provide a minimum of 20% electric vehicle ready parking spaces of total required parking on-site.

- ✓ EV-ready parking spaces shall have electrical conduit and sufficient electrical capacity for future use of 200 volt charging station.
- ✓ Proposed EV-ready parking spaces shall be submitted on site plans.
- ✓ For new multi-family uses, a minimum of 20% of ADA spaces shall be constructed as EV-ready.

Proposed Ordinance

EV READINESS LANGUAGE

Additional Provisions:

- EV-ready parking spaces count toward the total required number of parking spaces
- Parking areas with 4 or fewer parking spaces are not required to identify EV-ready spaces
- Where no minimum parking is required, EV-ready parking spaces are based on provided parking

How to Provide Feedback

WE WANT TO HEAR FROM YOU!

Please share your comments, questions, and concerns on the following:

- Technical resources and guidance
- Proposed ordinance provisions
- General concerns and inquiries

SALT LAKE CITY

DEPARTMENT OF SUSTAINABILITY

Contact Information

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