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?

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?

Installed electrical panel capacity and raceway with conduit to terminate in junction box or 240-volt charging outlet.
What does **electric vehicle readiness** mean?

![Diagram showing electric vehicle readiness](image)

- **Transformer**
- **Utility Distribution Network**
- **Utility Panel**
- **Charging Outlet at Parking Space**
- **EV Charger**

Installed Level 2 charging station.
What does electric vehicle readiness mean?
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.

<table>
<thead>
<tr>
<th>New Construction</th>
<th>Retrofit</th>
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<tbody>
<tr>
<td>$610</td>
<td>$1,210</td>
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<tr>
<td>Balance of Circuit</td>
<td>$1,070</td>
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<td>$180</td>
<td>$650</td>
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<tr>
<td>Raceway</td>
<td>$620</td>
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<tr>
<td>$70</td>
<td>Total (per space)</td>
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<tr>
<td>Permitting &amp; Inspection</td>
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<td>$60</td>
<td>$3,550</td>
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<td>Construction Management</td>
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Charging Behavior
PLACE-BASED CHARGING DEMANDS

4,000 U.S. drivers assessed

Nissan Leaf
84% Home
16% Away

1,800 U.S. drivers assessed

Chevy Volt
87% Home
13% Away

Data Source: Idaho National Laboratory. 2015.
Charging Behavior
PLACE-BASED CHARGING DEMANDS

Nissan Leaf
- Home: 84%
- Away: 16%

Chevy Volt
- Home: 87%
- Away: 13%

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

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Significantly Reduced
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Direct Emissions are Eliminated
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.
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

www.slcgreen.com/EVready
SALT LAKE CITY
DEPARTMENT OF SUSTAINABILITY

Contact Information
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