

### **ELECTRIC VEHICLE READINESS ORDINANCE**

SALT LAKE CITY SUSTAINABILITY DEPARTMENT





### PRESENTATION AGENDA

- **O1**BACKGROUND + CONTEXT
  An introduction to electric vehicle readiness and current SLC policy
- O2 LOCAL BENEFITS

  How EV readiness provides
  economic benefits and improves
  Salt Lake City's air quality
- PROPOSED REQUIREMENTS

  An overview of the proposed ordinance additions and property types impacted



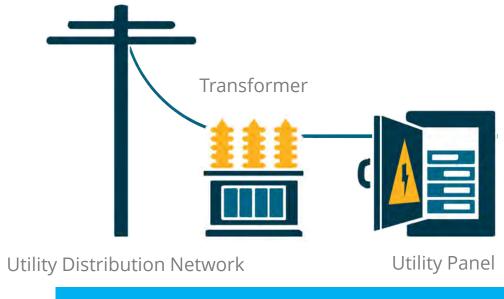
Three levels of "electric vehicle supply equipment" (EVSE) infrastructure are often regulated by municipal zoning ordinances:

**EV CAPABLE** 

**EV READY** 

**EVSE INSTALLED** 

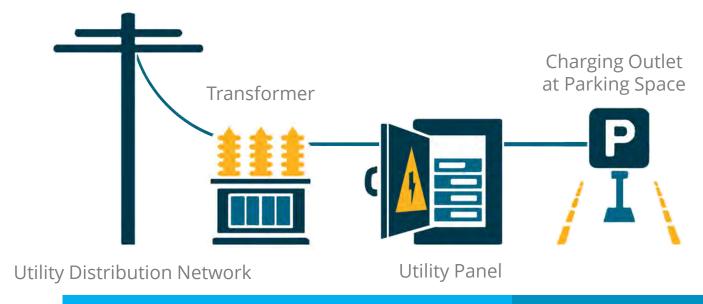




#### **EV CAPABLE**

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

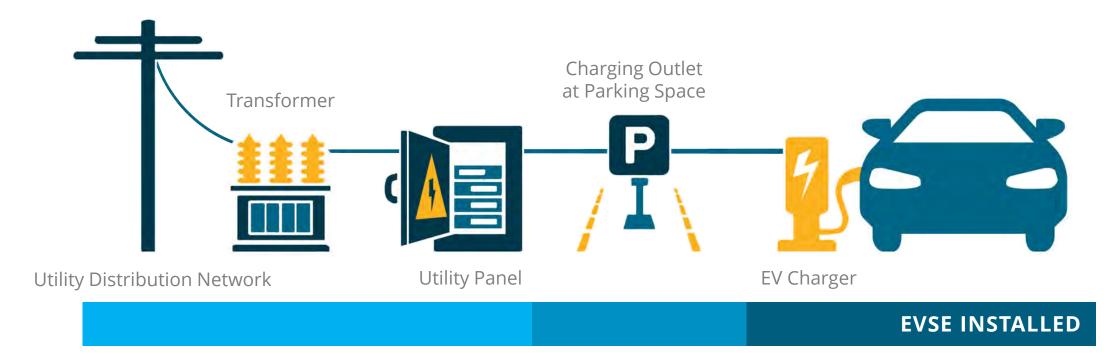




**EV READY** 

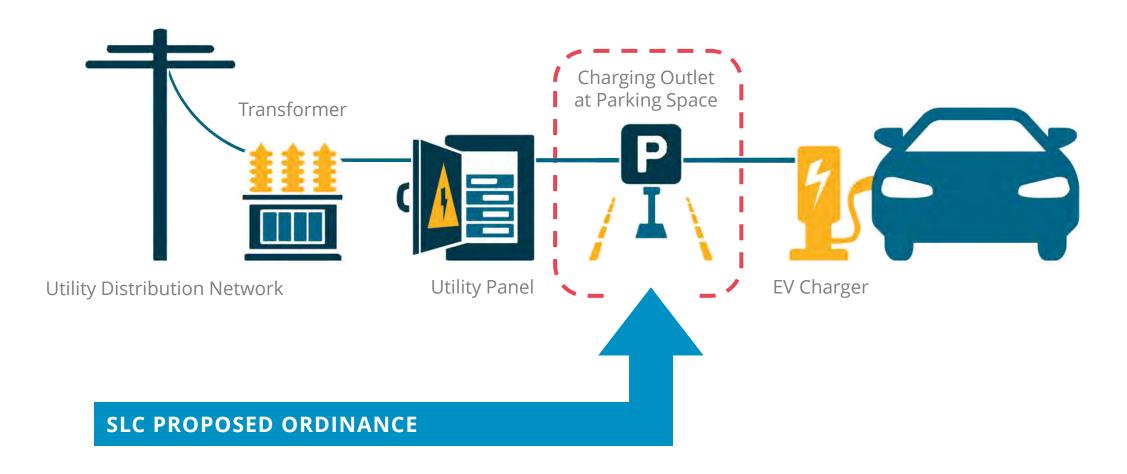
Installed electrical panel capacity and raceway with conduit to terminate in junction box or 240-volt charging outlet.





Installed Level 2 charging station.







# **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**

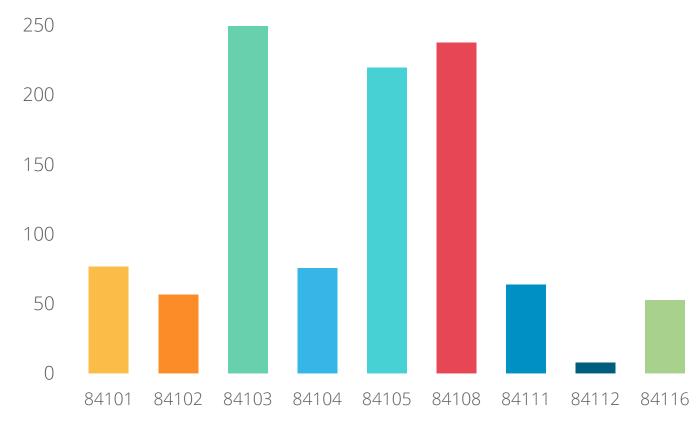
MARKET SIZE & DEMAND



### **SALT LAKE CITY**



**1,043 EVs** registered in 2020



Data Source: Utah State Tax Commission

### **Market Trends**

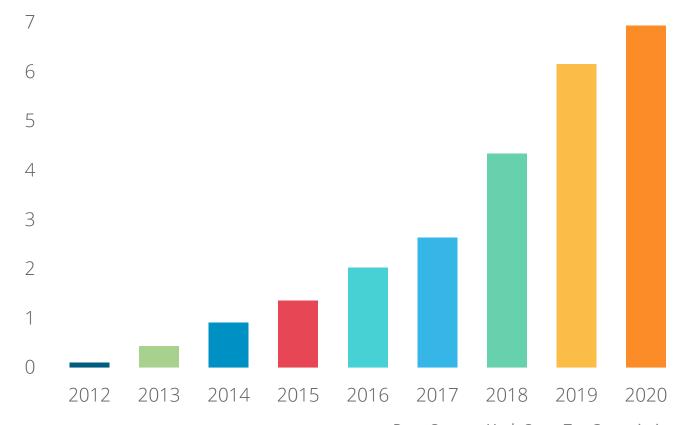
MARKET SIZE & DEMAND



### **UTAH**



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



Data Source: Utah State Tax Commission

### New vs. Retrofit Costs

#### AN ECONOMIC COMPARISON



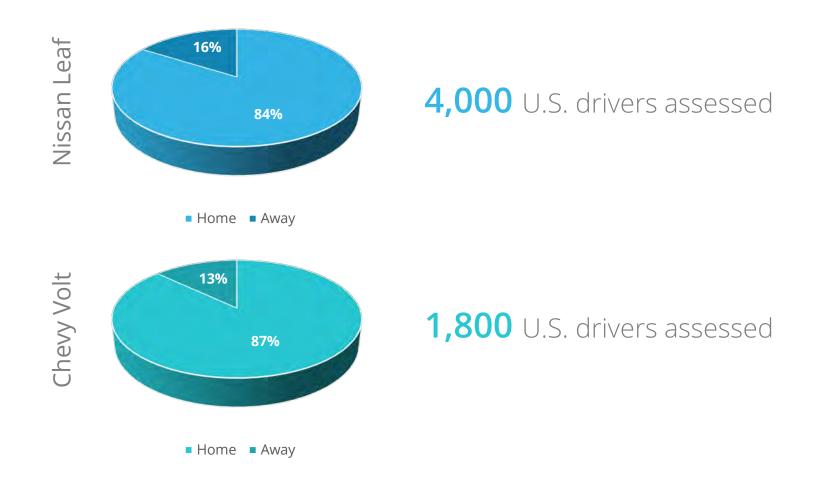
A study of EV-ready construction costs shows that installing infrastructure during the new construction phase is the most cost-efficient.

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

# **Charging Behavior**

PLACE-BASED CHARGING DEMANDS

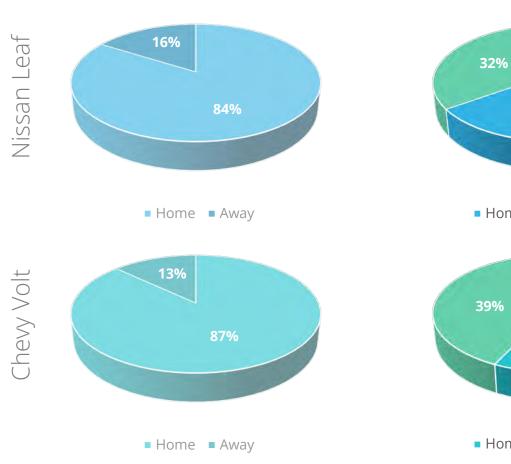


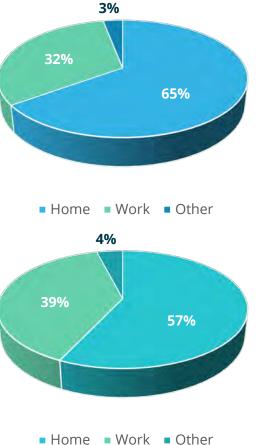


# **Charging Behavior**

PLACE-BASED CHARGING DEMANDS







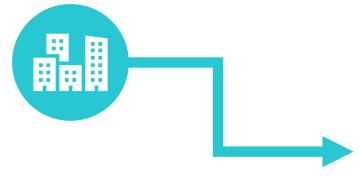
**Subgroups**with access to workplace charging

## **Economic Benefits**

PREPARING FOR TECHNOLOGY INNOVATION

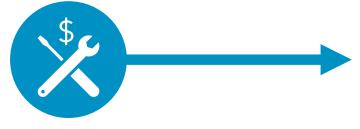
#### **Future-Proof Development**

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



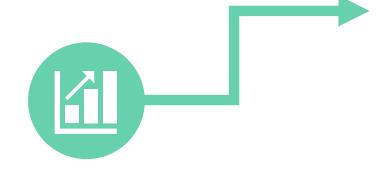
### **Avoid Costly Retrofits**

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



#### **Market Competitiveness**

Properties without installed EV-ready infrastructure will become less viable to specific residents that require homebased charging options.





# Air Quality BENEFITS TO SLC'S AIRSHED



Direct Emissions are Eliminated



AQ Pollutants are Significantly Reduced



Effects are Compounded with an Increasingly Cleaner Grid



# **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
- Electric vehicle parking spaces that exceed those required by Subsection B.1 shall count towards the required number of EV-ready spaces



