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# Electric Vehicle Ready Code Project Technical Advisory Series – Meeting #2 April 6, 2021

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# Agenda

- Welcome, Meeting Purpose, Discussion Guidelines
- Introductions
- Three-part presentation on legislative overview, best practices overview, draft code concepts
- Q & A and Group Discussion
- Next Steps

# Meeting #2 Purpose

- Share information about proposed relevant legislation
- Share overview of best practices research
- Present draft code concepts (best case scenario, contingency plans, etc.)
- Discussion and draft code concepts
- Review timeline

## BPS SHARED GROUND RULES

### 01 LISTEN TO UNDERSTAND, NOT TO RESPOND

Listen for learning opportunities. Do not prepare a response; just listen.

### 02 W.A.I.T.

Use self-awareness by asking yourself "Why Am I Talking?" Remember everyone has the right to share their ideas, but not everyone always has the opportunity.

### 03 ASSUME GOOD INTENTIONS, BUT ATTEND TO IMPACT.

We are all good people looking to collaborate for better outcomes.

Not all good intentions lead to good outcomes: If someone is hurt, focus on listening and understanding the impact, not on the intent.

### 04 BE WILLING TO MAKE MISTAKES AND BE FORGIVING OF THOSE WHO DO.

Forgiveness fosters safety so we can all take risks. We make mistakes, even with good intentions. By making mistakes, we ultimately learn how to do things better.

### 05 ALLOW FOR, AND APPRECIATE, DISAGREEMENT OF OPINIONS, IDEAS, METHODS – RESPECTFULLY.

Don't interrupt someone just because you disagree with them. Listen to understand; you may find you have something in common. Critique ideas, not people.

### 06 PERSONAL STORIES STAY, LESSONS CAN BE SHARED.

After the meeting, comments, ideas and thoughts will not be attributed to any individual – this is a group learning process. If you share a personal story, let people know if or how your story can be shared.

### 07 \_\_\_\_\_ (FILL IN THE BLANK.)

This can be meeting- or team-specific, should the group want to include one or more additional Ground Rules.

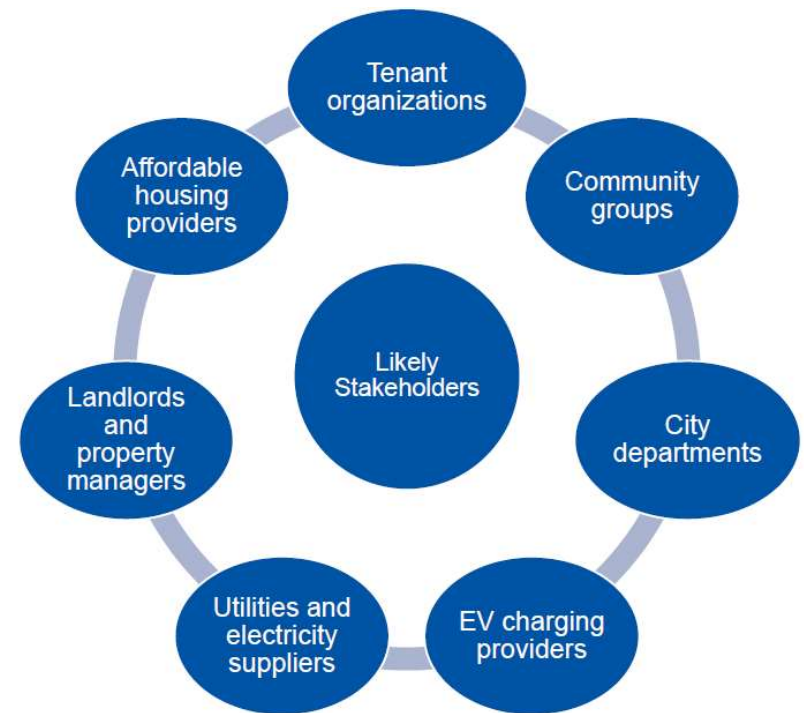


# Discussion Guidelines

# Introductions

## Round-robin “in the chat” introductions:

- Name and organization
- In one sentence, please share something you are looking forward to this spring
- **Note:** As this is a public meeting, both likely stakeholders and members of the general public may be in attendance



Legislative  
Overview,  
Best Practices  
Overview, Draft  
Code Concepts

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# Legislative Overview

## Building code versus land use code authority

- Oregon Revised Statute (ORS) preemption says local building and electrical codes can't exceed state building code.
- [OAR 918-020-0380](#) (2017) established mandatory code requirements of 5% of parking spaces to provide electric vehicle charging station infrastructure to new parking facilities of 50 or more spaces in the cities of Portland, Eugene, Salem and Gresham. **This current OAR blocks Portland from exceeding the number of spaces and exceeding the definition of “EV-ready” (conduit system and electrical capacity).**
- Ideally, local land use codes would establish the number of spaces that can be designated “EV-ready,” but the local land use codes still need to coordinate with the state building and electrical codes on the definition of “conduit system” to maintain fire, life, and safety requirements.

# Legislative Overview

## Proposed legislation (HB 2180)

- Increases the percentage of EV-ready parking spaces to 20% for newly constructed, privately-owned commercial, and multi-dwelling and mixed-use buildings with 5+ residential units.
- Allows a municipality to go above and beyond the 20% requirement for these same building types by “ordinance, rule or land use process.”
- Take-away: In order to increase the percentage of parking spaces required to be EV-ready beyond 5% for new parking facilities with 50 parking spaces or more, we need HB 2180 to pass. If it doesn't pass, we are significantly limited by existing OAR.



# Discussion Questions – #1

Are there questions on the legislation process?

# Discussion Questions – #2

Are there questions on the relationship between State and local codes?

# Best Practices Overview

<b>State</b>	<b>State</b>	<b>Year</b>	<b>Location of Code</b>	<b>Single-family</b>	<b>Multi-family</b>	<b>Commercial</b>
<a href="#">California</a>	CA	2010	CalGreen Building Standards Code	1 EV-Capable Space per Dwelling Unit	10% EV-Capable	10% EV-Capable
<a href="#">Oregon</a>	OR	2017	Oregon OAR Rule 918-020-0380		5% EV-Ready	5% EV-Ready

# Best Practices Overview

Municipality	State	Year	*Location of Code	Single-family	Multi-family	Commercial
<a href="#">Boulder</a>	CO	2020	<a href="#">Energy Conservation Code</a>	1 EV-Ready Space per Dwelling Unit	5% EV-Installed, 15% EV-Ready, 40% EV-Capable (25+ spaces)	5% EV-Installed, 10% EV-Ready, 10% EV-Capable
<a href="#">Denver</a>	CO	2020	Building Code <a href="#">Section R-327 of the 2016 Denver Building and Fire Code Amendments</a>	1 EV-Ready Space per Dwelling Unit	5% EV-Installed, 15% EV-Ready, 80% EV-Capable	5% EV-Installed, 10% EV-Ready, 10% EV-Capable
<a href="#">Salt Lake</a>	UT	2019	Zoning Code <a href="#">Chapter 21A.44</a> Off Street Parking, Mobility and Loading		1 EV-Installed Space for every 25 parking spaces	
<a href="#">San Francisco</a>	CA	2017	Green Building and Environmental Codes	1 EV-Ready Space per Dwelling Unit	10% EV-Ready, Panel Capacity for 20%, Raceway for 100%	10% EV-Ready, Panel Capacity for 20%, Raceway for 100%
<a href="#">Seattle</a>	WA	2019	Land Use Code (Sections <a href="#">23.54.030</a> and <a href="#">23.49.019</a> )	1 EV-Ready Space per Dwelling Unit	100% EV-Ready up to 6 spaces, 20% for parking lots with 7+ spaces	10% EV-Ready

\*Important inclusion to the Southwest Energy Efficiency Project table excerpt.

Source: <https://www.swenergy.org/transportation/electric-vehicles>

**Other U.S. cities reviewed:** Atlanta, Boston, Chicago, Honolulu, New York City, Oakland, Palo Alto

**Canadian cities reviewed:** Richmond, Vancouver, BC

# Best Practices Overview

## Accessibility

**Denver:** C405.10.4. *Accessible parking* Where new EVSE Installed Spaces and/or new EV Ready Spaces and new accessible parking are both provided, parking facilities shall be designed so that at least one accessible parking space shall be EV Ready or EVSE Installed.

## EV Car Share

**Boston:** Developers are permitted to install EV Car Share as an equivalence option.

- The baseline requirements for both the Transportation Demand Management (TDM) Point System and EV Car Share requirements are **one (1) Car Share vehicle** each.
- Baseline required EV Car Share installed to meet the EVSE-Installed requirements are independent of the baseline TDM Point System Car Share requirements and **cannot be double counted**. EV Car Share vehicles in excess of the baseline may support further TDM Point System requirements.
- Non-electric Car Share vehicles in excess of the baseline TDM Point System requirement **do not** fulfill EV Car Share requirements.

# Discussion Questions – #3

Of the **best practices** we shared, what stood out to you?

# Draft Code Concepts

**Best case scenarios if HB 2180 passes and Portland has local authority to develop code:**

## **Multi-dwelling and mixed-use**

- 100% spots are EV-ready for up to 6 spaces.
- 50% of spots for parking lots with 7 or more spaces.
- EV-ready requirements would include electrical capacity and conduit to support level 2 charging for the number of spaces specified above.

## **Commercial**

- 20% of spots are EV-ready for parking, conduit and electrical capacity to support level 2 chargers
- Commercial may include employment and industrial/our stakeholder process was not designed to address these categories.

# Draft Code Concepts

## Best case scenarios if HB 2180 passes **(continued)**:

### EV requirements for car-share parking spaces or parking spaces that require user turnover **(mitigation strategy)**

- Note that current parking code has no provisions related to short-term versus long-term parking. Central City has a reference to short-term parking (<4 hrs.) as part of a visitor parking analysis.

### Single-dwelling

- Our understanding is that we are currently – and still will be – preempted from requiring EV installation for single family dwelling/1-4 units.



# Draft Code Concepts

## Implementation Issue

- Even if HB 2180 becomes law, BPS is still unclear about implementation. We don't have a precedent for how to incorporate EV-ready requirements in the City of Portland's **Title 24 Building Regulations** or **Title 26 Electrical Regulations** that are more aggressive than the building code.
- So, even though HB 2180 appears to give local jurisdictions a pathway to exceed current building code, we are not sure how to use this authority in implementation between City Titles 24 and 26 and **Title 33 Planning and Zoning**.
- We will need to figure out how a more aggressive City requirement would integrate with the building code-specific fire, life and safety concerns.

# Draft Code Concepts

## **Contingency plan if HB 2180 does not pass:**

- Apply for a local code amendment. State process is long and designed to discourage local governments from doing this.
- HB 2398 (Reach Code) could create this pathway but faces multiple barriers during this legislative session. If it fails, we'll need to advocate for new legislation.
- Governor Brown's 2017 Executive Order direction to State agencies to require at least one level 2 charger for new construction projects that have parking.

# Draft Code Concepts

## Overview of code pieces that will move forward regardless of state bills

### Title 33 can be amended now as follows:

**Clarifying code** to acknowledge EV-ready installations taking place, as right now the zoning code is silent on this infrastructure:

- Add development standards (e.g., placement, signage) for voluntary EV-ready installations
- Clarify how EV-ready installations are categorized in land use code (e.g., primary versus accessory use)
- Define what use category a mobility hub is in accordance with the Transportation System Plan's (TSP) New Mobility policies.

# Draft Code Concepts

**Overview of code pieces that will move forward regardless of state bills**

**Title 33 can be amended now as follows (continued):**

## **Voluntary incentives**

- Floor Area Ratios (FAR) bonuses for EV-ready installation in structured parking
- Non-conforming: EV infrastructure costs are not counted towards non-conforming upgrades thresholds. (mitigation strategy)

## Discussion Questions – #4

Of the draft code concepts, we've presented and discussed, which do you think are most important to implement with the **goal of increasing EV access to low-income and multi-dwelling residents?**

Why?

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# General Q & A and Discussion

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# Next Steps

## **Technical Advisory Planning Series**

- **May 25 (Meeting 3):** Review and discuss an updated code concept
- **June 29 (Meeting 4):** Present on outcome of State legislation and review Discussion Draft

# Next Steps

## EV Ready Code Project – Updated Timeline

### **Share information and Consult Stakeholders (Jan to Aug 2020)**

- Early Information Gathering, Sharing and Consultation

### **Code Concepts (Sept 2020 to May 2021)**

- Align the Code with the Concepts
- Consider Zoning Code and Building Code Related Options

### **Discussion Draft and Impact Analysis (June to Sept 2021)**

- Develop Code and Mitigation Strategies Drafts
- Conduct Economic impact Analysis

### **Proposed Draft (Oct 2021 to Jan 2022)**

- Develop Code and Mitigation Strategies Proposals

### **Recommended Draft (Feb to May 2022)**

- Refine Code and Mitigation Strategies Recommendations





# Project Webpage

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<https://www.portland.gov/bps/ev-ready>