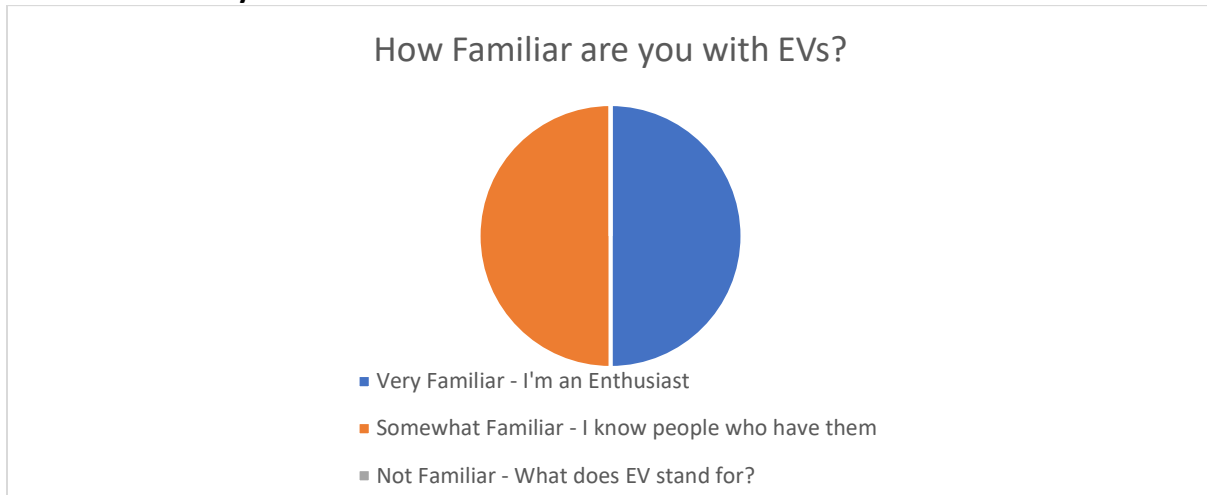


EV-Ready Parking Focus Groups Summary

Four Focus Group meetings were conducted between November 17 and November 22, 2022.

The types of representatives who participated included: Affordable Housing Developers; Architects; Engineers; Community Members; Realtors; Climate Advocates; Builders; and Business Community Members

How familiar are you with EVs?



What excites you most about electric vehicles?

Lower Energy, Reducing CO₂, contributing to a better future for my grandchildren, quieter, zippy, improves stormwater, saves money, environmentally friendly, chance to rethink need for driving as much, performance, convenience, low maintenance (no oil changes, no going to the gas station), micro-EVs (tiny cars, e-bikes, scooters), not having to pay for gas, no fossil fuels, interior technology, enables us to keep cars, business opportunities

What worries you about electric vehicles?

Recycling of batteries, grid capacity, costs, accessibility for all, getting battery materials, battery production, batter interchangeability vs. charging (amount of time), standardized batteries, range anxiety, where to charge (especially when travelling), loss of range in colder temperatures, fires and emergency response, battery fires, emergency responders dealing with lithium battery fires, dirty mining, safety (my kids hearing them), slow adoption, resistance to EVs, availability of charging, increased traffic, technology failure, affordability, travel distance, actual carbon footprint, reliance on battery technology, ethical manufacturing

Which best describes your role or organization?

Response	# of respondents for this option
Affordable housing developer or provider	3
Community-based organization	3
Local business owner	1
Industry professional	10
Community member	2

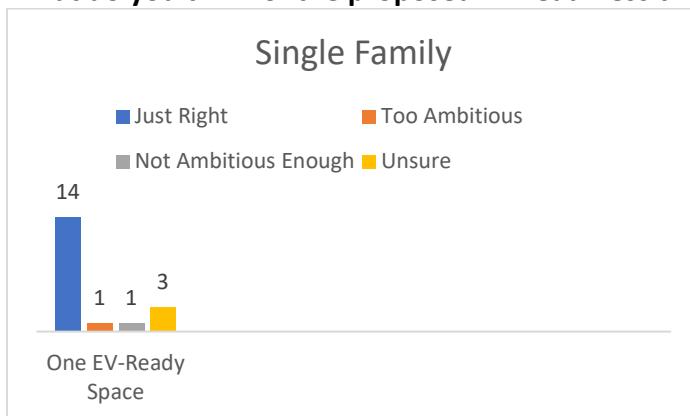
What kind of properties does your organization work with? Select all that apply.

Response	# of respondents for this option
Commercial, multifamily	16
Commercial, non-residential	14
Single family	16
Other	11

What does EV equity mean to you or your organization?

Access; Access for All; Reliability; Don't increase housing costs or production numbers; Availability; Affordable for all; accessible and affordable; amenity for tenants; affordable access to product and infrastructure; equitable access to infrastructure; equitable impact on location of infrastructure; giving everyone the chance to lower their carbon emissions (not just rich people); making sure EV access is not just for privileged individuals, families, and businesses; ability to choose access

What do you think of the proposed EV readiness thresholds for single family dwellings?



Comments:

- Most people felt like the City’s initial proposal was “just right”
- If two parking spaces are required (which may not be appropriate number), then both spaces should have EV-Ready access.
- The type of connection provided (required) should be the type that requires the least amount of work for the future user (Plug and Play)

What do you think of the proposed EV readiness thresholds for multifamily dwellings?

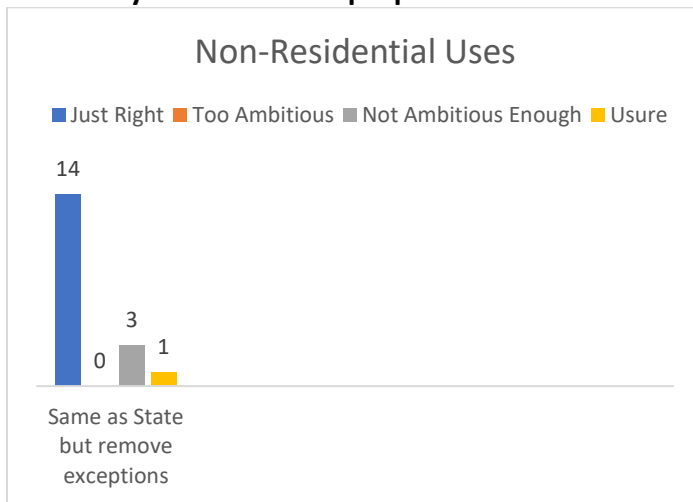


Comments:

- If applies to the total number of spaces provided instead of required, it will impact the number of spaces provided.
- Suggest phasing in the new requirements – start with some being EV-Capable instead of requiring all to be EV-Ready or EVSE Installed. Increase standards with time to be EV-Ready by 2030.
- Concern about theft of wiring.
- Costs and requirements keep going up – what can the city “give” to help off-set that? (Reducing parking requirements does not really help. Most developers want more parking.)
- Requiring 90% EV-Ready is probably too much too quickly. Most existing vehicles are gas and will be for several more years. The proposal for 10% EVSE and 90% EV-Ready will cost a lot. Should be EV-Capable instead. It’s an investment now for a need that isn’t there yet. Upsize the service pipe now but upgrade later to install the infrastructure/chargers.
- Technology is changing fairly quickly. Leave room to address changes.
- Impose the new requirements incrementally, not all at once. Consider staggering or phasing in these requirements.
- Installing the infrastructure that will prevent massive site disruptions later is important. EV-Capable probably does that.
- Having a mix of EV-Capable and EV-Ready is important. That way when the demand is there, it will get built. Put some of the proposed EV-Ready spaces into EV-Capable instead.
- Consider tying the number of spaces required in the categories to be tied to the number of units, not the number of stalls.
- This would require a huge amount of infrastructure upfront, and at a significant cost, even for EV-Capable, because of the extra panel requirements/capacity.

- The demand or use of the existing EV-Chargers at our multifamily projects is currently very low.
- Recent changes in market conditions have made costs to install this type of infrastructure go up considerably in the last year. In addition, the lead times to get the equipment to even install it is significantly longer than it used to be. It can easily take a year to get the equipment.
- Having the panels and availability with the appropriate taps is the most important thing to get upfront. EV owners could buy their own chargers and take them with them when they move as long as the tap is there for them to use. Install the outlet and panels.
- EV-Ready with a 110 option would be more cost effective. We already have problems with installing exterior outlets at mixed use developments (such as for restaurants). We have to turn them off every night after business hours and then on again in the mornings – otherwise we have people using them for charging things. It gets expensive to pay for the energy use.
- How do you go about getting the property owner to go from 10% EVSE and 90% EV-Ready to 100% EVSE over time? When would all of the spaces have the EV charging equipment installed?
- Please consider alternatives and incentives.
- Right now there are not a lot of EVs but there will be in future. These provisions will help remove barriers to people in the future.

What do you think of the proposed EV readiness thresholds for non-residential buildings?



Comments:

- 10% of spaces for each category seems reasonable.
- There is not much of a cost difference between EV-Capable and EV-Ready. The real cost is in the requirement for electrical panel capacity and space in the equipment room.
- Consider adding something less than EV-Capable, so the design is done.

- Opportunity charging is likely to become less important over time as range continues to improve. People will be more likely to rely on home and work charging.
- Need to consider designs for pull through spaces for trucks and towing (especially for DC Fast Charging).

What, if any, special considerations should be made for affordable housing?

Comments:

- For affordable housing, the requirement should be the same for access and equity reasons, but there has to be a way to offset the increased cost.
- Affordable housing projects are often on very tight spaces already. This will increase the cost of the units. Some tenants do not even own cars.
- Please phase in any new requirements.
- Meet the same requirements

Recognizing that additional lead time may be necessary to incorporate EV ready standards into new construction design, when should local requirements go into effect?

Implementation Date <i>(local standards only)</i>	# of respondents for this option
June 2023	5
July 2023	3
September 2023	1
December 2023	9

At what construction phases should EV-ready standards apply? Select all that apply.

- For any requirements tied to existing parking facilities, the requirement should be tied to clear thresholds (like in the building codes) and should only apply to the new parking spaces.
- There should be incentives to retrofit existing parking facilities.
- There should be more incentives than requirements.

Should local EV-readiness requirements also include considerations for parking and charging electric bikes?

Response	# of respondents for this option
Unsure	9
Yes	6
No	3

Comments:

- More support for Long Term bicycle parking areas, as those are usually indoors.
- Less support for Short Term/Visitor parking.
- Most E-Bikes have good range and won't require being "topped off" before returning home to charge.

What can the City do to ease the transition to EV-readiness? Is there anything else we should consider?

- Automatic Load Management Systems will be an important aspect of these requirements.
- Education
- Webpage with specific contacts
- Address all modes of electric transport
- Phasing/Staggering of EV Requirements.
- It is about \$5,000 per parking space to add the panel space/capacity, conduit, wiring, and the charger.
- Screens can be really hard to read/use, especially on sunny days.
- For privately operated charging stations, maintenance and operational facilities should be required and communicated to potential users.

OVERALL SUMMARY OF BEST PRACTICES LEVELS

