

**CITY OF PHOENIX  
ELECTRIC VEHICLE AD HOC COMMITTEE:  
PUBLIC, WORKPLACE & HOME CHARGING INFRASTRUCTURE SUBCOMMITTEE**



**Summary Minutes  
Friday Oct. 15, 2021**

Virtual Meeting – Via WebEx

**Ad Hoc Committee Member Present**  
**Absent**

Councilwoman Ansari  
Omar Gonzales  
Autumn Johnson  
Catherine O'Brien  
Court Rich  
Caryn Potter

**Ad Hoc Committee Members**  
Tim Sprague

**City Staff Present**

Mark Hartman, Sustainability  
Karen Peters, City Manager's Office  
Karen Apple, Sustainability  
Stephen Dudley, Planning & Dev  
John Chan, Phoenix Convention Center  
Sandra Hoffman, Planning & Dev  
Jesús Sapien, Transit

Lawrence Polk, Parks  
Gabriel Nevarez, Aviation  
Alice Bimrose, Aviation  
Keith Carbajal, Public Works  
Karl Kaseoru, ITS  
Scott Coughlin, Parks  
Felissa Washington Smith, Public Works

**1. Call to Order/Roll Call**

Councilwoman Ansari called the meeting to order at 10:02 a.m. and Karen Apple, City Electric Vehicle Program Manager performed the roll call. Councilwoman Ansari reports that this is the second meeting for this subcommittee. Councilwoman Ansari reports that the agenda includes a presentation by staff and developing a workplan and schedule to take us to January 2022.

**2. Approval of Minutes – Sept. 17, 2021 Electric Vehicle Ad Hoc – Public, Workplace and Home Charging Infrastructure Subcommittee Meeting**

Councilwoman Ansari requested a motion, Committee Member Johnson called for a first motion and Committee Member Gonzales called for a second, unanimous pass, motion carried.

**3. News and Announcements**

Councilwoman Ansari introduced Karen Apple to discuss recent news in the EV world.

Ms. Apple reported that the DOE estimates EV battery pack costs in 2021 are 87% lower than in 2008. Additionally, they are approaching \$100kWh mark. She reports

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that the auto industry will contribute more than \$500 billion into EV investment by 2030. With Ford contributing \$30 billion, Volkswagen \$60 billion and Honda \$46 billion. Apple reports that charging speeds are increasing. Norway estimates that could phase out gas-powered cars before 2025. Additionally, 9% of new cars sold globally will be EV or plug in hybrid. Apple states that there is a global increase in ownership and adoption rates. Apple reported that the Climate Action Plan was approved by City Council on Tuesday October 12, 2021.

Committee Member O'Brien commented on ABB is momentous for the EV world. However, a big barrier for this will be whether or not EV batteries will be able to handle a charge that quickly. Committee Member O'Brien posed a question whether OEM's put batteries in their vehicles that can handle that charge?

Mark Hartman commented that technology is increasing and provides example of the Ford F-150 with two charging plugs to increasing charging capabilities and speed. Furthermore, Mr. Hartman recommends flexible solutions as the industry moves forward.

**4. Comparable Cities – Public, Workplace and Home Charging Infrastructure Overview**

Councilwoman Ansari presented Mark Hartman to provide the presentation.

Mr. Hartman introduced Karen Apple to present on city roadmaps.

Ms. Apple reported that nine cities were reviewed and noted that within each city there was an equity focus. Apple reports on common themes for public, home and workplace charging.

Committee Member Johnson asked how the cities were selected and to explain the methodology behind the selection.

Ms. Apple reported that the cities were selected due to their comparable size and had recent roadmaps.

Committee Member O'Brien asked if any of the cities mandated building codes, or if it was primarily incentives and streamlining permitting processes?

Ms. Apple reported that there were several cities that did mandate, but the details of the approved building codes differ from city to city.

Committee Member Potter stated that some cities are adding the EV Roadmap to their CAP and was asked if that was featured in the research.

Ms. Apple reported that she did see a mix of both; 1) standalone EV Roadmaps, and 2) EV goals mixed into climate action plans.

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Mr. Hartman asked how many providers the subcommittee thought was appropriate and recommended a maximum of 3 to remain organized.

Ms. Apple provided best practices for home, public and workplace charging.

Mr. Hartman reported on demographic and survey data. Informed the subcommittee of the 2019 Origin and Destination Study and that the Equity subcommittee is evaluating the content. Additionally, Mr. Hartman reviewed the American Forests Tree equity Score, and stated that it would be a helpful tool to use when selecting areas. Mr. Hartman recommends an EV/ mobility equity map, and what would that look like? Mr. Hartman reported on the Cooler Phoenix Public Survey (2017).

Committee Member O'Brien asked if there was any thought to the City redoing the survey to compare the data.

Mr. Hartman stated that it should/would be a component of the Education and Outreach subcommittee recommendations. Additionally, Mr. Hartman stated that surveys are a great way of creating dual purpose possibilities for education and information opportunities.

Committee Member O'Brien recommended that the City redo the Cooler Phoenix Public Survey to include asking additional questions that were not included in the 2017 survey but based of information that is known today. Additionally, Committee Member O'Brien explained that SRP has an EV Community started in 2014/2015 which completes annual surveys to understand their thoughts about EV and EV Education and how they feel SRP is doing. SRP has seen an increase in support for EV.

Mr. Hartman asked if it seemed appropriate to partner with the utilities.

Committee Member O'Brien stated she could see a lot of partnership opportunities.

Committee Member Potter provided support for redoing the survey and highlighted the NREL Solar as another tool for use. Additionally, she recommended using energy burden as a data point to get a better understanding of what equity means in terms of transportation electrification. She also recommended creating partnerships to create and use data.

Committee Member Gonzales recommended using equity zones, energy burden, and transportation resources in the roadmap. Furthermore, he asked if the roadmap would include the philosophical questions or more specific recommendations.

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**5. Overview of Current Zoning, Permitting, and Outreach Processes**

Councilwoman Ansari introduced Alan Stephenson, Director of Planning and Development and Sandra Hoffman, Assistant Planning and Development Director to provide an overview of what is involved in updating zoning ordinances and building codes.

Director Alan Stephenson reported on EV charging building codes and zoning ordinances.

Stephen Dudley, Deputy Director - Building Official, presented on current EV building codes. The presentation included information on current adopted relevant codes, the 2017 National Electric Code regulations, and ICC Executive Committee mandate.

Committee Member Potter asked Mr. Dudley how many new construction projects in Phoenix, both single, multi-family and commercial have included EV readiness provisions on the installation process since the 2017 Electrical code.

Mr. Dudley stated that he did not know, and that there is not currently tracking on that information.

Mr. Dudley continued to report on EV Charging Plans, including new buildings, interior installations, and exterior installations. Additionally, Mr. Dudley reported adopting new EV Building code amendments.

Committee Member Johnson asked if the city is currently tracking what Tucson is doing on EV related projects.

Ms. Hoffman confirmed that they are reviewing what Tucson is doing in the EV world as well as researching and staying up to date with other cities. Additionally, inquired what they scope of Tucson's EV process was, but had yet to discuss stakeholder information.

Committee Member Johnson stated that Tucson will begin community engagement this fall and have stakeholder meetings in December and might have draft language that might be helpful. Additionally, Committee Member Johnson reiterated Committee Member Potter's question about data tracking for installations in new construction projects and is that something that could be tracked simultaneously with amendment data?

Ms. Hoffman stated that the current city tracking system is KIVA and there is not a differentiation between different types of electrical permitting. The City is working on a new tracking system called Shape Phoenix, however, the system will not get down to a granular level. Ms. Hoffman explained that there are so many types of permitting

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that it might be difficult but that they can ask the new provider if that is something that is possible.

Committee Member Potter stated that it would be helpful to have that information to understand where the demand for EVs is coming from. Committee Member Potter suggested that there be a comment section in the permitting process which could include “are you looking at installation for EV charging, equipment, etc.” This data would be helpful to better understand the trends by building types.

Ms. Hoffman asked for questions, then presented on current zoning ordinances including regulations on parking spaces, setbacks, parking time limits, and screening requirements. Ms. Hoffman also presented on potential zoning ordinances, including addition of EV terminology, clarification of applicability of parking standards, and amendments that will impact affordability of homes. Ms. Hoffman continued by reporting on new zoning ordinances including text amendment zoning ordinances and adoption by City Council.

Committee Member Johnson suggested contacting Ms. Acacia Duviare who has been doing outreach for the City of Tucson regarding building codes.

**6. Recommended Actions – Workplace Development**

Councilwoman Ansari proposed that the subcommittee start developing a workplan that will identify tasks, roles, and schedules to provide the recommended deliverables by the January 2022 deadline.

Mr. Hartman presented on deliverables agreed to from last months meeting. Mr. Hartman recommended that if the recommendations/deliverables have budget implications that they be brought forward by January or early February. Additionally, Mr. Harman asked the subcommittee how to curate content to be delivered by that timeframe.

Committee Member Potter volunteered to create a template for inputting recommendation information.

Committee Member Johnson asked for clarification on the task.

Mr. Hartman reviewed best practices from other roadmaps.

Committee Member Rich volunteered to assist in the workplace and business content curation.

Committee Member Johnson volunteered to be the second reviewer on content.

Committee Member Potter volunteered to curate content for home charging infrastructure and create a template for all subcommittees.

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Committee Member Johnson asked for clarification on Open Meeting Laws.

Mr. Stephenson provided clarification on communication between subcommittee members and stated that two members can collaborate but cannot share with multiple parties.

Committee Member Johnson asked that documents be sent out for review before the meeting along with deliverables, presentations, and agendas.

Mr. Hartman confirmed that they would send it out and it would be available on SharePoint.

Committee Member O'Brien volunteered to curate information for public/city provided EV charging infrastructure.

Councilwoman Ansari volunteered to be the second reviewer for public/City provided EV charging infrastructure.

Committee Member Johnson asked for a timeline for getting the templates to the group.

Mr. Hartman asked for it to be shared the Monday prior to the next Friday's meeting to give members time to digest the information. Deadline set to November 15<sup>th</sup>, 2021.

Committee Member Potter said she would have information circulated to second reviewers by October 25<sup>th</sup>, 2021.

**7. Public Comment**

Councilwoman Ansari opened the discussion to members of the public. No members of the public commented.

**8. Future Agenda Items**

Councilwoman Ansari asked if there were any items that committee members or staff would like to request be brought forward at the next meeting.

Councilwoman Ansari noted that there are many stakeholders and would suggest creating roundtables in Mid-November for multi-family and public charging.

Mr. Stephenson provided clarification that subcommittee members may attend roundtable meetings, the City would post that members may be present to avoid open meeting law issues.

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Committee Member Johnson asked if previous deliverables would be available as future agenda items or were being tracked by City staff.

Mr. Hartman said that EV charging companies would be on the next meeting agenda and potentially invite presenters from those companies.

Mr. Stephenson suggested that some stakeholders from the development community/ industry present or provide recommendations.

Committee Member Potter suggested getting a presenter from another city whom already at EV codes enacted for some considerable time. Committee Member Potter stated that this could address gaps in the EV permitting process.

Councilwoman Ansari announced that Jason Smith from APS would be replacing her on this subcommittee starting with the next subcommittee meeting.

**9. Adjournment**

Councilwoman Ansari adjourned the meeting at 11:40am. Next meeting is November 19<sup>th</sup>, 2021.