



**CITY OF PHOENIX  
ELECTRIC VEHICLE AD HOC COMMITTEE:  
CITY FLEET AND CHARGING INFRASTRUCTURE SUBCOMMITTEE**

**SUMMARY MINUTES  
Virtual Webex Meeting – 5:00 p.m.  
September 21, 2021**

**ATTENDEES**

**Committee Members Present**

Yassamin Ansari	Kathy Knoop
Caryn Potter	Katherine Stainken

**City Staff Present**

Karen Apple	David Benton	Keith Carbajal
John Chan	Sarah Demory	Joe Giudice
Mark Hartman	Sandra Hoffman	Karl Kaseoru
Christine Mackay	Karen Peters	Lawrence Polk
Jesus Sapien	Larry Smallwood	Felissa Washington Smith
Jessica Yates		

**1. CALL TO ORDER / ROLL CALL**

**Councilwoman Yassamin Ansari**, Subcommittee Chair, called the meeting to order at 5:05 p.m.

**Chair Ansari** opened the floor for those in attendance to introduce themselves.

Each Committee Member provided an introduction, including why they have interest in electric vehicle initiatives. Delbert Hawk was the only Subcommittee member not present. Subcommittee members Katherine Stainken, Caryn Potter, and Kathy Knoop all made introductions.

City staff present that will be helping with this framework provided introduction, including why they have interest in electric vehicle initiatives. City staff included Karen Apple (Electric Vehicle Program Manager), Mark Hartman (Chief Sustainability Officer), Joe Giudice (Public Works Director), Jesus Sapien (Public Transit Director), Christine Mackay (Community and Economic Development Director), Sandra Hoffman (Assistant Director of Planning and Development), Lawrence Polk (Deputy Parks and Recreation Director), John Chan (Phoenix Convention Center Director), Keith Carbajal (Deputy Public Works Director), and Sarah Demory (Assistant Aviation Director).



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**2. NEWS AND ANNOUNCEMENTS**

**Chair Ansari** opened the floor for news and announcements.

**Karen Apple** provided some facts. From 2011-2020, light duty plugin displaced 1.9 billion gallons of petroleum, resulting in reduction of greenhouse gas (GHG) emissions. Ford announced advancement in their electric vehicle (EV) technology, specific to F150 truck. Lucid Air is the longest-range electric vehicle rated by the EPA; it has greater capacity than other manufacturers on the market. Prices of EVs in general are coming down. 22 additional charging ports at city facilities. City will be hosting a virtual webinar during National Drive Electric Week – announcements have been made to the public and will be held on Sept. 29, 2021.

**3. OVERVIEW OF SHAREPOINT SITE AND USE**

**Karen Apple** provided overview of the sharepoint page which is a central repository of information related to this Subcommittee. This page is for city staff and Subcommittee members. Examples of information stored on this page: sample EV roadmaps, building codes, meeting minutes, and meeting recordings. There is a newsfeed for others to see specific information that is pertinent to this Subcommittee. Website [www.phoenix.gov/sustainabilitysite/Pages/Electric-Vehicles.aspx](http://www.phoenix.gov/sustainabilitysite/Pages/Electric-Vehicles.aspx) was highlighted as a resource.

**Subcommittee Member Stinken** asked whether the sharepoint page allows for other resources to be uploaded, as applicable; example provided, other EV roadmaps.

**Karen Apple** responded that any resources that the Subcommittee would like to upload to the sharepoint page can be provided to her. Rights are limited to viewing only.

**4. DISCUSSION OF CITY FLEET AND CHARGING INFRASTRUCTURE**

**Chair Ansari** directed attention to the Subcommittee framework document. For this discussion, there are three different focus areas: (1) Purchase of Electric Fleet Vehicles; (2) Purchase of Electric Fleet Charging Infrastructure; and (3) Charging Infrastructure for Employees. Ansari opened the discussion around this framework by asking the Subcommittee whether there is anything else to be considered not listed under these focus areas. The Electric Vehicle Ad Hoc Committee will be reconvening on Oct. 1, 2021, aiming to have updates to this document by then. She also mentioned that any presentations that may be helpful to these discussions are welcomed.



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**Subcommittee Member Knoop** asked whether the city has a list of vehicles by type (sedan, delivery vehicle, etc.) available for review as this information will be useful in producing guidance for replacement.

**Keith Carbajal** responded, yes, we have this information. Fleet also tracks other various metrics such as miles, age, maintenance schedule, etc. He also mentioned that the city is looking to establish new contracts, potentially through Cooperative Agreements, to allow for more purchasing flexibility. Chevy Bolts are one unit we do have available for purchase, and they seem to be a reliable option based on customer feedback. As we expand purchasing power, we will have other EV options available.

**Subcommittee Member Potter** asked about annual fuel usage and whether that data can be provided. She also mentioned that the type of shift and duty cycle will be important information to consider; specific to charging requirements. Different partnership offerings may be helpful in addressing these specific needs.

**Joe Giudice** responded that it would be useful for the city team to present this information to the committee, including the vehicle replacement approach and fleet makeup. This information may help guide the questions for future meetings. Regarding duty cycles, we may have some information, but will work with the customers (client departments) to better understand this.

**Keith Carbajal** commented that vehicles to be considered in this replacement effort as priority are admin vehicles and light duty.

**Subcommittee Member Knoop** asked whether the city allows for employees to take home their work vehicles.

**Joe Giudice** responded, yes, in some cases. Mainly for emergency response functions, but there may be others. From a charging perspective, it would be worth to note this.

**Subcommittee Member Knoop** mentioned that this type of information will be important to consider; to understand EV metrics and employee incentives.

**Subcommittee Member Stainken** asked whether the city considers upfront capital or total cost of ownership when making business decisions. She mentioned that this type of assessment should be done off the total cost of



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ownership. Upfront cost may be more, but long-term more affordable. She would also like to see the development of employee training around how to charge these vehicles and other proper procedures. Would like to set goals and timelines, not just framework.

**Chair Ansari** responded that she is comfortable with setting actual goals and timelines, not only framework.

**Subcommittee Member Potter** requested that this framework document be created into a working document with track changes to show edits. She would also like for the Fleet Division to conduct a presentation and is thankful for the offer. She mentioned different categories may be useful, including goals of the Fleet Division, fleet inventory, and facility considerations. By seeing this type of information, many questions should arise to help facilitate discussions.

**Chair Ansari** responded by asking Larry Smallwood, Management Assistant II from the City Manager's Office, whether this document is good to share.

**Larry Smallwood** responded, yes, referencing open meeting laws.

**Mark Hartman** requested that all Subcommittee members review the document and provide comment individually, and after edits are made, send to Karen Apple to compile responses into one document.

**Chair Ansari** started to discuss the next focus area, Fleet Charging Infrastructure. She then opened the floor for comments.

**Subcommittee Member Knoop** commented that the Subcommittee needs to understand duty cycles, as this will help determine the infrastructure needed. Slow charging is better for vehicle batteries, maybe having one quick charge station at a primary location is recommended. L2 for vehicles that require more frequent charging. Consideration is needed for electric usage, utilities and demand.

**Mark Hartman** commented that, specific to employees, the city needs a managed charging approach.

**Subcommittee Member Potter** commented that we will want to avoid creating a new peak and agreed that establishing a managed charging approach is needed. The Department of Energy has a resource available for calculating charging



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infrastructure needs. She will get this resource to the Subcommittee as it will help identify locations for L1 and L2 needs.

**Subcommittee Member Stinken** mentioned building codes and thinking long term, for example, digging up a parking structure to ensure proper infrastructure should happen one time, rather going back to do additional retrofits. Future EV buildout should be considered.

**Mark Hartman** referenced a bullet under this focus area on the shared document. Future planning is considered, but it would be great to get further input on this.

**Subcommittee Member Stinken** mentioned that when looking at other areas of the country, timeliness may be important as permit requirements could delay timelines. Unsure if this impacts Phoenix.

**Subcommittee Member Potter** commented on EV supply equipment, mentioning that there may be some interesting purchasing methods to consider; leasing, financing, and/or offering EV charging as a service. Many models to pursue.

**Joe Giudice** responded that one of the challenges the city is currently facing is parking locations and how we phase-in infrastructure that will provide the best return on investment, including types of locations. He asked Mark Hartman whether there was any research to provide to support this effort. Another key thing to note is that the city is behind on their vehicle replacement schedule; some vehicles are currently past their useful life. We will share this data during the next Subcommittee meeting.

**Chair Ansari** asked about current fleet and replacement cycles and whether there is room to adjust these plans; specifically, whether there are less EVs than the committee recommends.

**Joe Giudice** responded that to adjust plans, we need more access to purchasing opportunity. As it stands, there are not many contracts supporting EV purchases, and expansion is required. Many EVs are entering the market, specific to high end models, and we know fleet vehicles are coming, but more so in a platinum model. We do not necessarily have the financing to support this type of fleet and need to consider the specific field use. There are options available in the market, and we will provide some potential selections that will work for the city needs.



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Phased approach is warranted, including the purchase of some hybrid models, which will reduce petroleum reliance while reducing air quality impacts. This is not the main charge of this Subcommittee but may be a transitional opportunity to get us closer to EV goals.

**Chair Ansari** opened the floor up for any last questions or comments regarding EV Infrastructure and asked that all edits to the document be provided to Karen Apple before the next Committee Meeting. Moving on to topic three, Charging Infrastructure for Employees. Ansari opened for comments.

**Subcommittee Member Potter** asked a clarifying question about the type of employee usage; whether personal or on-the-job.

**Chair Ansari** responded the latter, both. We will need to set targets to meet these objectives.

**Subcommittee Member Knoop** requested a list of all employees currently driving EV; both personally and for work.

**Mark Hartman** responded that the city provides free charging for employees that have an EV. Although this benefit has generated equal opportunity issues; some sites have the benefit, some do not. He would like to know whether this service should be free to help encourage this type of behavior, like bus passes provided to city employees for free.

**Chair Ansari** commented that a program, policy, and/or procedure around employee charging infrastructure is needed. Benchmarking information is also needed highlighting these types of efforts in place.

**Subcommittee Member Knoop** commented that based on her experience, charging service cannot be free. The Subcommittee will need to provide a reasonable recommendation.

**5. RECOMMENDATIONS TO FULL COMMITTEE**

**Chair Ansari** asked who on the Subcommittee would like to present this information discussed on Oct. 1, 2021 at the full Committee meeting. She also mentioned that the next Subcommittee group will occur Tuesday, Oct. 19, 2021.

**Subcommittee Member Knoop** volunteered to present.



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**Mark Hartman** requests that all changes to the framework to be submitted before Oct. 1, 2021, so that Kathy has all the updated information before the presentation.

**Subcommittee Member Potter** requested access to the other documents provided at prior Committee meetings.

**Larry Smallwood** responded that they could share this and referenced open policy requirements.

Motion for Subcommittee Member Knoop to present at the next Committee meeting on Oct. 1, 2021 passes unanimously.

**6. PUBLIC COMMENT**

No public comments

**7. FUTURE AGENDA ITEMS**

TBD

**8. ADJOURNMENT**

Adjourned at 6:09 PM.