STAFF REPORT

DATE: July 7, 2020

TO: City Council

FROM: Stan Gryczko, Public Works Utilities and Operations Director
Brian Mickelson, Assistant City Engineer
Kerry Loux, Sustainability Coordinator

RE: Electric Vehicle Charging implementation for "Electrify Yolo' Project

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Recommendation

Informational Item. Review the primary tasks included as part of the City of Davis Request for Proposals (RFP) for Electric Vehicle (EV) infrastructure implementation, including life cycle cost analysis of EV equipment ownership and maintenance options, EV charging site feasibility and cost analysis, construction documents and other related materials necessary to go to bid for Phase 1 EV charging construction.

Background

In mid-2018, the City of Davis was co-applicant with Valley Clean Energy Alliance (VCE) for a Green Region grant application submitted to Sacramento Area Council of Governments (SACOG), representing four regional partner agencies: Yolo County, cities of Davis and Woodland, and VCE, called 'Electrify Yolo' in December 2018, VCE and the City of Davis were notified that our grant application was successful and the regional partnership would be awarded the full $2,912,000 request for implementing Electric Vehicle Charging Stations in the region. The City of Davis share of the grant award is $2 million.

On January 28, 2020, the Davis City Council passed a resolution authorizing the City Manager to sign the SACOG Fund Exchange Agreement, (FEA, attached), accept the grant funds, and complete Memoranda of Understanding (MOUs) with partner agencies to implement the project (Yolo County, $700,000 total; City of Woodland, $150,000 total; and VCE, $150,000 total on behalf of City of Winters), with a required completion date by December 31, 2023.

As part of the FEA, the project becomes funded by local Davis funds and the original requirement for an 11.47% federal funding match was eliminated. Therefore, no additional local funds need to be allocated, outside of the already-budgeted staff time to assist with this effort. Davis acts as the fiduciary agent and SACOG contact for all partner agencies. The four partner agencies will meet quarterly for progress updates; however each agency will implement their EV

contracts separately, based on the executed MOUs with Davis, with the grant funding share identified above.

In May and June 2020, staff presented information to the Utilities Commission (UC) for input on implementing the City of Davis Phase 1 EV infrastructure. The following motion was approved on June 17th1 by the UC 6-0-i:

> *"Approve the recommendation to Council to release a Request for Proposals (RFP) for Phase 1 EV charging feasibility and cost analysis, construction documents and other related materials."*
> (Moved by Roberts-Musser, seconded by Deos, ayes Braun, Bystrom, Deos, Kristov, Roberts-Musser, Troost; abstain Franco)

The UC staff report is attached for reference.

This Phase I RFP will complete the planning, engineering and construction document requirements of the SACOG Green Region grant funding and will prepare the City to bid a construction contract to install the chargers. This includes previously identified site locations for Level 2 and Level 3 (DC Fast) chargers, as per the awarded grant application, the FEA and the 2017 EV Charging Plan. Additionally, purchase of mobile solar chargers and purchase or lease of electric vehicle(s) to transport 8 or more people will be included as per the FEA.

This Phase 1 effort for implementing EV charging infrastructure and equipment purchases, based on the identified Green Region 'Electrify Yolo' goals for funding, is intended to benefit Davis residents, build internal capacity for Davis as a destination and improve multi-modal hub development in the Davis downtown. This is being accomplished through the suite of elements funded by this grant, including charging infrastructure in the downtown, and purchase of mobile chargers and electric vehicle(s).

The field of electric vehicle infrastructure is rapidly evolving; new technologies and opportunities arise regularly. Future EV infrastructure goals will be addressed in subsequent phases following implementation of Phase 1, based on City EV implementation priorities and may include, but not be limited to:

- Identifying and installing EV chargers at additional site locations such as to support city fleet electrification; to service multi-family housing sites or commercial/business uses, especially recent development projects that have been required to pre-wire EV infrastructure and panel capacity; or to provide charging infrastructure adjacent to freeway locations such as Park-and-Rides, additional sites identified in the EV Charging Plan or other community-desired site locations;

- Changing the mix of installing additional Level 2 or Level 3 chargers, or purchasing electric vehicles or mobile chargers;
- Recommending implementation of other technology such as battery storage or microgrids in conjunction with EV charging infrastructure and with input from UC Davis and local experts; or
- Further developing multi-modal hub improvements and microtransit to increase mode share of active transportation in conjunction with EV charging sites.

Discussion of further City of Davis EV implementation priorities will be discussed with appropriate commission(s) and brought to City Council for review and approval. Future phases can be supported either with funding remaining following 'Electrify Yolo' Phase 1 implementation, or with further grant, loan or funding source efforts to implement EV charging infrastructure. Note that once the minimum commitments in the SACOG FEA have been met, the City can utilize the remaining funding for any EV-related implementation, without limits from SACOG or federal funding requirements.

Request for Proposals

The following elements will be included in the RFP:

1. **Life Cycle Cost Analysis:**
   The consultant will be asked to provide a life cycle cost analysis of EV charging equipment ownership vs. lease vs. third party ownership or other models available at the time. These costs and benefits for various options will allow comparisons to be made and will inform the decision to select an approach to ownership for current and future EV charging infrastructure implementation. As part of the approach, the consultant will be expected to include considerations of return on investment, impacts of rapidly changing technology, staff capacity, cost and options for operations and maintenance agreements with optimal time frames (3-year, 5-year, other).

2. **Site Locations: Site Feasibility and Cost Analysis**
   City of Davis Phase 1 EV charging locations are previously identified and approved by City Council in the 2017 EV Charging Plan (EVCP) and incorporated into the SACOG grant application and FEA. These locations will be prioritized and selected for implementation in Phase 1 based on site feasibility and cost analysis of the candidate sites (not included in the EVCP). These locations to prioritize and select from include Level 3 (DC Fast) Chargers at City Hall, Downtown E Street parking lot, Downtown Parking Garage at 1st and F Streets (I-80 corridor), Nugget Shopping Center, and/or Sutter Davis Hospital/Medical Offices; and networked Level 2 Chargers in multiple locations on city property.

The goal with the available funding is to maximize the total possible number of installed chargers, along with infrastructure for future chargers and completing other commitments. For this reason, the site feasibility and cost analysis will address more than the minimum number of sites required in the FEA, so that the optimal sites from those identified can be selected for Phase 1, and additional sites can be considered for future phases.

3. **Technology:**
   Charging infrastructure technology for networked, or 'smart' chargers, which provide data tracking capabilities, required for implementation in Davis, are as follows:
   a. Network capable, with ability for City to engage in two-way communication via internet or cell phone;
   b. Demand response capable;
   c. Flexibility for City to require users to pay for electricity (fuel), and to have varying fuel costs for different users and/or different lengths of time (e.g. for agency employees vs. the public; free for the first hour, then charged at increasing rates for subsequent hours; or other);
   d. Providing City with ability to push software upgrades through the communication channel; and
   e. Providing City with ability to collect use data and/or maintenance/operational data.

   Additionally, the RFP identifies the desire for analysis of appropriate power management technology, such as rotating four chargers to one circuit. Other technologies may be recommended for implementation by the consultant.

4. **Construction Documents, Environmental Review and Permitting**
   Following life cycle cost analysis to select ownership model, site feasibility and cost analysis to prioritize and select identified Phase i site locations and quantities/level of chargers and technical components at each location, the consultant will be asked to prepare all documents required for a construction bid. This will include design and engineering, provision of code-required accessibility requirements, any necessary environmental review, complete construction documents and permitting through the city building department.

   The consultant will incorporate all approved City procurement/purchasing policies to install and maintain EV charging infrastructure, in accordance with the City's local requirements and in compliance with all applicable state or federal laws and regulations, including but not limited to payment of prevailing wages. These documents will be followed by the standard City contract bidding/award process in a separate contract.

5. **Additional Funding and Implementation Resource Recommendations**
   The consultant will be asked to provide any information available to them to assist the City in optimizing this project, including information about statewide or other programs to fund and facilitate EV charging, and to leverage available funding. Some of the possible programs that may be active and/or have available funding include but are not limited to:
   a. Sourcewell (formerly NJPA), a type of GSA contract. Purchasing through this contract may avoid time and labor cost associated with an RFP process and provide a pre-negotiated 20% hardware discount.
   b. Pacific Gas & Electric (PG&E) EV programs, including EV Charge Network (minimum i0 Level 2 chargers), EV Fast Charge program and Fleet funding. it is not clear at this time which, if any, of these PG&E programs are active.
   c. Yolo Solano Air Quality Management District (YSAQMD) Clean Air Funds
   d. California Electric Vehicle infrastructure Project (CALeViP) https://calevip.org/available-funding
   e. Low Carbon Fuel Standard (LCSF) funding of the California Air Resources Board (CARB)
   f. Electrify America funding and resources
   g. Other funding and resources as they evolve

Schedule

July 2020:	City Council approval for implementation approach and Phase i RFP
July 2020:	Release RFP and/or lease/operations and maintenance contract
Fall 2020:	Begin Phase I project implementation/construction
Spring 2021:	Purchase equipment required in FEA; analyze data from installed Level 2 and 3 networked chargers; consider future phases and priorities

ATTACHMENTS

1. UC Questions and Staff Responses

PUBLIC WORKS
UTILITIES AND OPERATIONS
DEPARTMENT
MAIN 530.757.5686

Memorandum

Date:	June 17, 2020
To:	Utilities Commission
From:	Stan Gryczko, Public Works Utilities and Operations Director Brian Mickelson, Assistant City Engineer Kerry Loux, Sustainability Coordinator
Subject:	Item 6B - Electric Vehicle Charging Implementation for "Electrify Yolo' Project

Recommendation

1. Review and consider staff's recommendation to release a Request for Proposals (RFP) for Electric Vehicle (EV) infrastructure implementation. This RFP will request a life cycle cost analysis of City EV equipment ownership vs. lease options and approaches to long-term operations and maintenance. Additionally, the RFP will be to complete site feasibility and cost analysis for identified Level 2 and Level 3 EV charging sites, construction documents and other related materials necessary to go out to bid for Phase I EV charging construction.
2. Review and consider the attached draft RFP for terms and conditions of Phase I consultant selection.
3. Following review and discussion, staff requests that the Utilities Commission recommend this approach to City Council for implementation on the timeline provided below.

Background

Staff has reviewed input from the May 20, 2020 Utilities Commission discussion and subsequent commissioner questions in making this recommendation for implementing EV infrastructure. The funding source is the City of Davis $2 million share of the Sacramento Area Council of Governments (SACOG) Green Region grant funding for the project called 'Electrify Yolo'. No additional City of Davis funding is necessary, outside of the already-budgeted staff time to assist with this effort. Because of commitments in the Fund Exchange Agreement (FEA) with SACOG, the previously identified site locations must be completed in Phase I implementation, as per the 2017 EV Charging Plan and the grant application. Therefore, staff is not seeking input on site locations at this time. Similarly, quantity and types of EV charging stations (Level 2, Level 3) for Phase I are as per the agreement. More information about this and answers to questions submitted by UC are attached at the end of this staff report.

This Phase I effort for implementing EV charging infrastructure and equipment purchases, based on the identified Green Region 'Electrify Yolo' goals for funding, is intended to benefit Davis residents, build internal capacity for Davis as a destination and improve multi-modal hub development in the Davis downtown. This is being accomplished through the suite of elements

funded by this grant, including charging infrastructure in the downtown, and purchase of mobile chargers and electric vehicle(s).

Staff is aware that existing City of Davis on-call engineering and transportation consultants may not have appropriate up-to-date expertise and knowledge of EV technology and costs. Therefore, the RFP will be released broadly to interested firms, as well as to selected EV infrastructure consultants in the region. Following completion of the Phase I analysis and engineering contract, the selected firm and other firms that submitted proposals will be eligible to propose on subsequent design and engineering phases. However, it is also possible that an amendment to the contract with the selected Phase I firm will be made for future phase implementation.

The field of electric vehicle infrastructure is rapidly evolving; new technologies and opportunities arise regularly. Future EV infrastructure goals may be based on City electric vehicle charging priorities and may include, but not be limited to:

- Identifying and installing EV chargers at additional site locations such as to support city fleet electrification; to service multi-family housing sites or commercial/business uses, especially recent development projects that have been required to pre-wire EV infrastructure and panel capacity; or to provide charging infrastructure adjacent to freeway locations such as Park-and-Rides, additional sites identified in the EV Charging Plan or other community-desired site locations;
- Changing the mix of installing additional Level 2 or Level 3 chargers, or purchasing electric vehicles or mobile chargers;
- Recommending implementation of other technology such as battery storage or microgrids in conjunction with EV charging infrastructure and with input from UC Davis and local experts; or
- Further developing multi-modal hub improvements and microtransit to increase mode share of active transportation in conjunction with EV charging sites.

These goals can be supported either with funding remaining following 'Electrify Yolo' Phase I implementation, or with further grant, loan or funding source efforts to implement EV charging infrastructure. Note that once the minimum commitments in the SACOG FEA have been met, the city can utilize the remaining funding for any EV-related implementation, without limits from SACOG or federal funding requirements. While it is not the current focus for input from the Utilities Commission, staff will seek out and welcome input on these future issues and funding allocations from appropriate city commissions at the relevant time; these recommendations will then be reviewed and approved by City Council for priority implementation.

As part of this project, the City of Davis is required to meet the following minimum requirements, based on the FEA with SACOG:

- Site, design, permit, construct and install Level 2 Chargers in the project area (3 minimum)

- Site, design, permit, construct and install DC Fast Chargers (Level 3) in downtown area within ½ to 5 miles of major freeway corridors (2 minimum)
- Purchase Mobile Chargers of the type similar to 'EV ARC' solar standalone charging stations (2 minimum)
- Purchase or lease electric vehicle(s) to transport 8 or more people (one minimum)

A draft RFP is included with this staff report for review by the UC to address implementation terms and conditions of EV charging in Davis. The following components are included:

1. **Life Cycle Cost Analysis:**
   The consultant will be asked to provide a life cycle cost analysis of EV charging equipment ownership vs. lease vs. third party ownership or other models available at the time. These costs and benefits for various options will allow comparisons to be made and will inform the decision to select an approach to ownership for current and future EV charging infrastructure implementation. As part of the approach, the consultant will be expected to include considerations of return on investment, impacts of rapidly changing technology, staff capacity, cost and options for operations and maintenance agreements with optimal time frames (3-year, 5-year, other).

2. **Site Locations: Site Feasibility and Cost Analysis**
   As noted in Background paragraph 1 above, City of Davis EV charging locations are previously identified and approved by City Council in the 2017 EV Charging Plan (EVCP) and incorporated into the SACOG grant application and FEA. These locations will be prioritized and selected for implementation in Phase I based on site feasibility and cost analysis of the candidate sites (not included in the EVCP). These locations to prioritize and select from include Level 3 (DC Fast) Chargers at City Hall, Downtown E Street parking lot, Downtown Parking Garage at 1st and F Streets (I-80 corridor), Nugget Shopping Center, and/or Sutter Davis Hospital/Medical Offices; and networked Level 2 Chargers in multiple locations on city property.

   The goal with the available funding is to maximize the total possible number of installed chargers, along with infrastructure for future chargers and completing other commitments. For this reason, the site feasibility and cost analysis will address more than the minimum number of sites required in the FEA, so that the optimal sites from those identified can be selected for Phase I, and additional sites can be considered for future phases.

3. **Technology**
   The Memoranda of Understanding (MOUs) with other partner agencies require them to utilize certain technology for networked, or 'smart' chargers. It is staff's intention to use the same networked charging infrastructure parameters, which provide data tracking capabilities, for implementation in Davis, as follows:
   a. Network capable, with ability for City to engage in two-way communication via internet or cell phone;

b. Demand response capable;
c. Flexibility for City to require users to pay for electricity (fuel), and to have varying fuel costs for different users and/or different lengths of time (e.g. for agency employees vs. the public; free for the first hour, then charged at increasing rates for subsequent hours; or other);
d. Providing City with ability to push software upgrades through the communication channel; and
e. Providing City with ability to collect use data and/or maintenance/operational data.

Additionally, the RFP will identify the desire for analysis of appropriate power management technology, such as rotating four chargers to one circuit. Other technologies may be recommended for implementation by the consultant.

4. <u>Construction Documents, Environmental Review and Permitting</u>

Following life cycle cost analysis to select ownership model, site feasibility and cost analysis to prioritize and select identified Phase I site locations and quantities/level of chargers and technical components at each location, the consultant will be asked to prepare all documents required for a construction bid. This will include design and engineering, provision of code-required accessibility requirements, any necessary environmental review, complete construction documents and permitting through the city building department.

The consultant will incorporate all approved City procurement/purchasing policies to install and maintain EV charging infrastructure, in accordance with the City's local requirements and in compliance with all applicable state or federal laws and regulations, including but not limited to payment of prevailing wages. These documents will be followed by the standard City contract bidding/award process in a separate contract.

5. <u>Recommendations on Additional Funding and Implementation Resources</u>

The consultant will be asked to provide any information available to them to assist the City in optimizing this project, including information about statewide or other programs to fund and facilitate EV charging, and to leverage available funding. Some of the possible programs that may be active and/or have available funding include but are not limited to:

a. Sourcewell (formerly NJPA), a type of GSA contract. Purchasing through this contract may avoid time and labor cost associated with an RFP process and provide a pre-negotiated 20% hardware discount.
b. Pacific Gas & Electric (PG&E) EV programs, including EV Charge Network (minimum 10 Level 2 chargers), EV Fast Charge program and Fleet funding. It is not clear at this time which, if any, of these PG&E programs are active.
c. Yolo Solano Air Quality Management District (YSAQMD) Clean Air Funds

d. California Electric Vehicle Infrastructure Project (CALeVIP) https://calevip.org/available-funding
e. Low Carbon Fuel Standard (LCSF) funding of the California Air Resources Board (CARB)
f. Electrify America funding and resources
g. Other funding and resources as they evolve

Following UC recommendations on the RFP, staff will include the final RFP in a staff report to City Council for approval of recommendations, and then proceed with Phase I. These components can help determine appropriate 'fee for use' rates, which can also be easily adapted over time as needs and data-collection evolve.

April 2020:	City Council approved approach to EV infrastructure implementation
May 2020:	Provided background information and implementation options to Utilities Commission for preliminary discussion
June 2020:	Final discussion and recommendations from Utilities Commission; prepare staff report to City Council
July 2020:	City Council approval for implementation approach and Phase I RFP
Late July 2020:	Release RFP and/or lease/operations and maintenance contract
4th Qtr 2020:	Begin Phase I project implementation/construction
1st-4th Qtr 2021:	Purchase equipment required in FEA; analyze data from installed Level 2 and 3 networked chargers; consider future phases and priorities

Attachments

1. Draft Request for Proposals for Electric Vehicle Infrastructure
    - Life Cycle Cost Analysis for own/lease options
    - Site feasibility and cost analysis for selection of preferred Phase I sites
    - Phase I design and construction documents, and other relevant implementation requirements
2. UC Questions and Staff Responses

ATTACHMENT 1:
Draft Request for Proposals for Electric Vehicle Infrastructure

City of Davis

Request for Proposals

EV Charging Infrastructure

Date Released: DATE
Date and Time Due: DATE AND TIME

Contact Person:

NAME
TITLE
DEPARTMENT
STREET ADDRESS
Davis, CA 95616
EMAIL

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REQUEST FOR PROPOSALS – EV Charging Infrastructure

INTRODUCTION

Overview and Background

The City of Davis is seeking qualified engineer or electric vehicle (EV) infrastructure consultant for Phase I implementation of the 'Electrify Yolo' project. The scope of work is to provide a life cycle cost analysis for City EV equipment ownership vs. lease options and approaches to long-term operations and maintenance; provide site feasibility and cost analysis for identified Level 2 and Level 3 EV charging locations in order to select preferred sites; and provide a bid package including design, engineering, environmental review, construction documents and permitting/utility provider coordination for selected sites. This separate bid package will be released for construction/installation and maintenance contract for the EV charging infrastructure (qualified consultants who submitted to this Request for Proposals (RFP) will be eligible to bid).

Electrify Yolo is a regional project, with City of Davis as the lead agency, and including Yolo County, Valley Clean Energy Alliance (VCE) on behalf of City of Winters, and City of Woodland. Each agency is managing its own contracts and implementation, based on Memoranda of Understanding (MOUs) between the agency and City of Davis. It is possible but not required that the partner agencies may want to coordinate or collaborate on consultant selection, scope of work and installation, however that is not included at this time.

The project is funded under a Sacramento Area Council of Governments (SACOG) Green Region grant, with a total funding of $2, 911,752. The City of Davis is identified as implementing approximately $2 million through a Fund Exchange Agreement (FEA) between SACOG and Davis, in order to de-federalize the funding for the entire project. The current RFP is to implement 'Phase I', the minimum City of Davis requirements of the FEA, including some or all of the following components, based on the scope of work identified in this RFP:

1) Site, design, permit, construct and install a minimum of two (2) downtown, networked Level 3 (DC Fast) chargers within ½ to 5 miles of major freeway corridors
2) Site, design, permit, construct and install a minimum of three (3) networked Level 2 chargers on city-owned property
3) Purchase a minimum of two (2) mobile solar charging stations of the type similar to 'EV ARC' solar standalone charging stations
4) Purchase or lease one (1) electric vehicle to transport 8 or more people

This RFP is being released broadly to interested firms with up-to-date expertise and knowledge of EV technology and costs. Following completion of the Phase I analysis and engineering contract, the selected firm and other firms that submitted proposals will be eligible to propose on subsequent design and engineering phases. However, it is also possible that an amendment to the contract with the selected Phase I firm will be made for future phase implementation.

DRAFT

The City is aware that the field of electric vehicle infrastructure is rapidly evolving; new technologies and opportunities arise regularly. Future EV infrastructure goals may be based on City electric vehicle charging priorities and may include, but not be limited to:

- Identifying and installing EV chargers at additional site locations such as to support city fleet electrification; to service multi-family housing sites or commercial/business uses, especially recent development projects that have been required to pre-wire EV infrastructure and panel capacity; or to provide charging infrastructure adjacent to freeway locations such as Park-and-Rides, additional sites identified in the EV Charging Plan or other community-desired site locations;
- Changing the mix of installing additional Level 2 or Level 3 chargers, or purchasing electric vehicles or mobile chargers;
- Recommending implementation of other technology such as battery storage or microgrids in conjunction with EV charging infrastructure and with input from UC Davis and local experts; or
- Further developing multi-modal hub improvements and microtransit to increase mode share of active transportation in conjunction with EV charging sites.

These goals can be supported either with funding remaining following Electrify Yolo Phase I implementation, or with further grant, loan or funding source efforts to implement EV charging infrastructure.

Purpose of Project

This Phase I effort for implementing EV charging infrastructure and equipment purchases, is specifically designed to satisfy the minimum City of Davis commitments in the FEA. Based on the identified Electrify Yolo goals for funding, the overall project is intended to benefit Davis residents, build internal capacity for Davis as a destination and improve multi-modal hub development in the Davis downtown. This is being accomplished through the suite of elements funded by the SACOG Green Region grant, including charging infrastructure in the downtown, and purchase of mobile chargers and electric vehicle(s).

Project site locations have been identified for the Phase I feasibility and cost analysis phase. It is anticipated that more candidate EV charging sites than the minimums identified will be assessed, in order for the City to select the optimal sites for Phase I, and potentially provide information for additional site selection in the future. An addendum to the selected consultant for the Phase I project may be implemented for additional scope of work in Phase II.

<u>Potential Davis Locations:</u>
Preliminary City of Davis candidate sites for feasibility and cost analysis, selected from the short-term action list in the 2017 City of Davis EV Charging Plan (EVCP) adopted by City Council and the FEA between City of Davis and SACOG (as per the Green Region grant narrative), include, but are not limited to:

Level 3 (DC Fast chargers)
A minimum of two locations will be selected by City staff team, following site feasibility and cost analysis, for development of the bid package:

- City Hall (200 KW capacity available with current upgrade project implementation)
- City-owned Downtown E Street parking lot (adjacent to I -80 corridor; capacity or availability of electric connection unknown, existing non-networked chargers may be upgraded)
- City-owned Downtown Parking garage at 1st and F streets (adjacent to I -80 corridor; capacity or availability of electric connection unknown)
- City-owned Downtown Parking garage at 4th and G streets (adjacent to I -80 corridor; capacity or availability of electric connection unknown)
- Nugget shopping center and/or Sutter Davis Hospital/Medical Offices (I -80 and CA-113 corridors; capacity or availability of electric connection unknown)

Level 2 Chargers

These chargers are assumed to be networked dual chargers as per specifications in RFP. The total number at each site and potential future pre-wiring/panel upgrades to increase capacity are to be determined by the site feasibility and cost analysis.

A minimum of two locations will be selected by City staff team, following site feasibility and cost analysis, for development of the bid package:

- Davis City Hall
- Downtown E Street Parking Lot
- Central Davis Veterans' Memorial/Yolo County Library on 14th Street/Davis High School
- Central Davis Downtown Parking garage at 1st and F streets
- Central Davis Downtown Parking garage at 4th and G streets
- Davis Police Department
- Davis Public Works Department at 1717 5th Street
- Davis Fleet/ Parks at 1818 5th Street

Term of Contract

The Phase I EV Infrastructure contract will be for one year from the date of contract execution. However, it is the City of Davis intent to proceed with construction bids for Phase I infrastructure before the end of the 2020 4th Quarter. Consultant time frames for completion of the work will be a factor in selection.

Additional Regulations

The consultant will incorporate all approved City procurement/purchasing policies to install and maintain EV charging infrastructure, in accordance with the City's local requirements and in compliance with all applicable state or federal laws and regulations, including but not limited to payment of prevailing wages. These documents will be followed by the standard City contract bidding/award process. The construction document package shall require all bidding contractors to obtain adequate insurance to cover any risks associated with the construction and operation of such infrastructure.

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SCOPE OF WORK

The following scope of work shall be included in the consultant proposals:

1. Life Cycle Cost Analysis:

The consultant is asked to provide a life cycle cost analysis of EV charging equipment ownership vs. lease vs. third party ownership or other models available at this time. These costs and benefits for various options will allow comparisons to be made and will inform the decision to select an approach to ownership for current and future EV charging infrastructure implementation. As part of the approach, the consultant is expected to include considerations of return on investment, impacts of rapidly changing technology, staff capacity, cost and options for operations and maintenance agreements, and identifying optimal time frames (3 year, 5 year, other).

2. Site Locations: Site Feasibility and Cost Analysis

City of Davis EV charging locations are previously identified and approved by City Council in the 2017 EVCP and incorporated into the SACOG grant application and FEA. These locations will be prioritized and selected for implementation in Phase I based on site feasibility and cost analysis of the candidate sites (not included in the EVCP). These locations potentially include Level 3 (DC Fast) Chargers at City Hall, Downtown E Street parking lot, Downtown Parking Garage at 1st and F Streets (I-80 corridor), Nugget Shopping Center, and/or Sutter Davis Hospital/Medical Offices; and networked Level 2 Chargers in multiple locations on city property.

The goal with the available funding is to maximize the total possible number of installed chargers, along with infrastructure for future chargers and completing other commitments. For this reason, the site feasibility and cost analysis will address more than the minimum number of sites required in the FEA, so that the optimal sites from those identified can be selected for Phase I, and additional sites can be considered for future phases.

3. Technology:

Networked charging infrastructure parameters, which provide data tracking capabilities, for implementation in Davis, are identified as follows:

a. Network capable, with ability for City to engage in two-way communication via internet or cell phone;
b. Demand response capable;
c. Flexibility for City to require users to pay for electricity (fuel), and to have varying fuel costs for different users and/or different lengths of time (e.g. for agency employees vs. the public; free for the first hour, then charged at increasing rates for subsequent hours; or other);
d. Providing City with ability to push software upgrades through the communication channel; and
e. Providing City with ability to collect use data and/or maintenance/operational data.

DRAFT

Additionally, the consultant should provide analysis of appropriate power management technology, such as rotating four chargers to one circuit. Other current and emerging technologies may be recommended for implementation by the consultant.

4. Construction Documents, Environmental Review and Permitting

Following life cycle cost analysis to select ownership model, site feasibility and cost analysis to prioritize and select identified Phase I site locations and quantities/level of chargers and technical components at each location, the consultant will prepare all documents required for a construction bid. This will include design and engineering, provision of code-required accessibility requirements, any necessary environmental review, complete construction documents and permitting through the city building department.

5. Recommendations on additional funding and implementation resources

The consultant is asked to provide any information available to them to assist the City in optimizing this project, including information about statewide or other programs to fund and facilitate EV charging, and to leverage available funding. Some of the possible programs that may be active and/or have available funding include but are not limited to:

a. Sourcewell (formerly NJPA), a type of GSA contract. Purchasing through this contract may avoid time and labor cost associated with an RFP process and provide a pre-negotiated 20% hardware discount.
b. Pacific Gas & Electric (PG&E) EV programs, including EV Charge Network (minimum 10 Level 2 chargers), EV Fast Charge program and Fleet funding. It is not clear at this time which, if any, of these PG&E programs are active.
c. Yolo Solano Air Quality Management District (YSAQMD) Clean Air Funds
d. California Electric Vehicle Infrastructure Project (CALeVIP) https://calevip.org/available-funding
e. Low Carbon Fuel Standard (LCSF) funding of the California Air Resources Board (CARB)
f. Electrify America funding and resources
g. Other funding and resources as they evolve

Notwithstanding the inclusion of services in this RFP, the final scope of services negotiated between the City and the successful Proposer shall be set forth in the [INSERT TYPE OF AGREEMENT] ("Agreement") executed by and between the City and the successful Proposer. A copy of the Agreement is attached hereto as Appendix A and incorporated herein by this reference.

PROPOSAL REQUIREMENTS

Cover Letter of Interest

Please submit a Cover Letter of Interest signed by a duly authorized officer or representative of the Respondent, not to exceed one page in length. The Letter of Interest must also include the following information:

- The principal place of business and the contact person, title, telephone numbers and email address.

- A brief summary of the qualifications of the Respondent and team.
- Description of organization (i.e. Corporation, Limited Liability Company, or Joint Venture).
- Teams/firms submitting proposals in response to this RFP must disclose any actual, apparent, direct or indirect, or potential conflicts of interest that may exist with respect to the firm, management, or employees of the firm or other persons relative to the services to be awarded pursuant to this RFP. If a team/firm has no conflicts of interest, a statement to that effect shall be included in the cover letter.

Proposal Content

1. **Scope of Work.** In a maximum of 10 pages, double sided (so (5) of sheets of paper), please include a description of the firm and its qualifications for providing services to meet the needs outlined in this RFP. This should convey the respondent's understanding of the work, and demonstrate specialty experience, management, and other features that lead to successful achievement of the City's goals. This section shall include the respondent's specific tasks for performing the work.

   Please address how you would approach this project and reflect on what you know about the Davis community and what you think is important in this project.

   Include a list of deliverables. Deliverables should match milestones shown in the proposed schedule.

2. **Key Personnel.** In a maximum of five (5) pages, provide an organization chart, and for each key team member, provide the following:
   - Qualifications and their experience on similar projects
   - Role and responsibilities for this project
   - Home office location
   - Estimate of time allocation to the study (averaged over the duration of the project).

   If sub-consultants will be used, provide names, qualifications, experience, location, and role of each sub-consultant.

3. **Project List.** In a maximum of five (5) pages, provide references for projects that demonstrate proposer's qualifications and experience for performing the requested services. The reference projects should be linked to the staff listed in Key Personnel.

4. **References.** In a maximum of five (5) pages, please include names, emails and telephone numbers of at least three (3) of your firm's previous clients whom the City staff may contact for references regarding the past performance of your firm, project managers, team members and sub-consultants proposed for this project.

5. **Fee Schedule.** Compensation will be on a time and expense basis, with a not-to-exceed total cost limit of $DOLLAR AMOUNT. If the proposer finds that additional budget would be necessary and/or appropriate to achieve the project objectives, please propose a list of optional tasks with additional costs that the City might consider, subject to approval by City Council.

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Provide:

- Estimated fee by task (tasks should match scope of services section)
- Hourly billing rate schedule for all proposed staff
- Types and estimated amount of expenses to be billed to the project
- Fees by sub-consultant, by task

6. **Evidence of Insurance.** The Proposer shall provide a summary of the firm's current insurance coverage for comprehensive, general liability, professional liability, automotive liability and worker's compensation insurance. Indicate the limits of coverage on each policy. City required endorsements and minimum coverage limits must be provided at time of agreement execution.

Type of Insurance	Description	Amount
Commercial General Liability (CGL)		
Automobile Liability		
Workers' Compensation		
If applicable		
Professional Liability (Errors and Omissions)		
Other Insurance Provisions		

7. **Acceptability of Terms and Conditions for the City Standard Agreement.** Please refer to our standard agreement included as Appendix A. Any proposed deviations and modifications to the agreement should be noted, with reasons given. Proposed agreement changes will require City Attorney approval. The City will not consider changes to the agreement once the selection process has been completed.

PROPOSAL SUBMISSION REQUIREMENTS

Please mail or drop-off three (3) bound copies, and one (1) USB drive of a PDF copy of your proposal at your earliest convenience, but no later than DAY OF THE WEEK, MONTH ##, 201# at TIME to:

Name of City Staff issuing the RFP
c/o City Clerk's Office
City of Davis
23 Russell Blvd., Suite 1
Davis, CA 95616
Attn: **EV Charging Infrastructure**

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Please note, the City will not accept incomplete proposals, proposals postmarked after the submittal due date and time, or proposals submitted via email or facsimile, unless otherwise noted.

EVALUATION CRITERIA AND SCORING

The City will evaluate proposers based on the following criteria:

Criteria	Points Possible
Quality, completeness and responsiveness of proposal	20
Expertise in current and emerging EV charging infrastructure technology;	20
Recent related experience with similar projects	20
Demonstrated understanding of scope of work	20
Availability and staffing to complete the project within the proposed timeline	20
Total Points	**100**

SELECTION PROCESS AND ESTIMATED SCHEDULE

Proposals will be reviewed to determine if the applicant meets the minimum qualifications necessary to complete the Scope of Services required for the Project. Proposals not meeting minimum qualifications will be disqualified from further consideration at the sole discretion of the City. The City may seek written clarification from any or all Proposers in order to better understand and evaluate the proposed solutions. This process may not be used as an opportunity to submit missing documentation or to make substantive revisions to the original proposal.

The City of Davis will appoint an evaluation team that will review and evaluate the proposals and will make a final recommendation based on the provided materials and references contacted. Interviews may be conducted if needed.

PROPOSAL SCHEDULE

The tentative schedule is as follows:

Anticipated Dates	Steps
July 15 2020	**Release RFP and/or lease/operations and maintenance contract**
August 13, 2020 at 5:00 p.m.	**Proposal submission deadline**
August 13-19, 2020	**Consultant evaluation by staff**
August 26, 2020	**Consultant interviews**

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August 26-Sept 15, 2020	**Reference checks, selection and approval by City Council, Complete contract for Phase I**
September 21, 2020	**Project Kick-off Meeting**
December 1, 2020	**Completion of Phase 1 documents**
December 15, 2020	**Release Phase I Bid Package**
1st Quarter, 2021	**Begin Phase I project implementation/construction**

The above scheduled dates are tentative and City retains the sole discretion to adjust the above schedule or cancel all or any part of the same.

COMPANIES BEING SENT THIS RFP

While any qualifying company can respond to this request for proposals, the City sent this RFP to the following consulting firms for their consideration:

- ChargePoint
- Clean Fuel Connection
- Grid Scapes
- Etc.—other companies/consultants to be added as available or recommended

NO OBLIGATION

The City reserves the right to modify this RFP package at any time prior to the proposal due date, or to extend the proposal due date, or to cancel this RFP package at any time. The City further reserves the right to reject any and all proposals for any reason or to accept any qualifying proposal received which the City, in its sole unrestricted discretion deemed most advantageous to itself. The lowest or any proposal may not necessarily be accepted. The respondent acknowledges the City's rights and this clause and absolutely waives any right of action against the City for the City's failure to accept its proposal whether such right of action arises in contract, negligence, bad faith or any other cause of action. The acceptance of any proposal is subject to funds being legally available to complete this transaction and/or approval by the City Council or the officer or employee of the City having authority to accept the proposal.

The City of Davis is not responsible for any loss, damage or expense incurred by a respondent as a result of any inaccuracy or incompleteness in the RFP, or as a result of any misunderstanding or misinterpretation of the terms of this RFP on the part of the Respondent. Further, the City of Davis is not liable for any costs incurred in the preparation of the proposal submittals.

MISCELLANEOUS

Confidentiality of Proposal

Pursuant to *Michaelis, Montanari, & Johnson v. Superior Court* (2006) 38 Cal.4th 1065, proposals submitted in response to this RFP shall be held confidential by City and shall not be subject to disclosure under the California Public Records Act (Cal. Government Code section 6250 *et seq*.) until

after either City and the successful proposer have completed negotiations and entered into an Agreement or City has rejected all proposals. All correspondence with the City including responses to this RFP will become the exclusive property of the City and will become public records under the California Public Records Act. Furthermore, the City will have no liability to the Proposer or other party as a result of any public disclosure of any proposal or the Agreement. If a Proposer desires to exclude a portion of its proposal from disclosure under the California Public Records Act, the Proposer must mark it as such and state the specific provision in the California Public Records Act which provides the exemption as well as the factual basis for claiming the exemption. For example, if a Proposer submits trade secret information, the Proposer must plainly mark the information as "Trade Secret" and refer to the appropriate section of the California Public Records Act which provides the exemption as well as the factual basis for claiming the exemption. Although the California Public Records Act recognizes that certain confidential trade secret information may be protected from disclosure, the City is not in a position to establish that the information that a Proposer submits is a trade secret. If a request is made for information marked "Confidential", "Trade Secret" or "Proprietary", the City will provide Proposers who submitted the information with reasonable notice to seek protection from disclosure by a court of competent jurisdiction.

Exceptions Certification

In submitting a proposal in response to this RFP, Proposer is certifying that it takes no exceptions to this RFP including, but not limited to, the Agreement. If any exceptions are taken, such exceptions must be clearly noted in the proposal and may be reason for rejection of the proposal. As such, Proposer is directed to carefully review the attached Agreement and, in particular, the insurance and indemnification provisions therein. Failure to include any exceptions to the RFP, including the Agreement, shall be deemed an acceptance of all terms therein by Proposer and Proposer shall not have any further opportunity to request revisions to the same following submission of its proposal.

Amendments to Proposals

No amendment, addendum or modification will be accepted after a proposal has been submitted to City. If a change to a proposal that has been submitted is desired, the submitted proposal must be withdrawn and the replacement proposal submitted to City prior to the proposal due date and time.

Cancellation of RFP

City reserves the right to cancel this RFP at any time prior to contract award without obligation in any manner for proposal preparation, interview, fee negotiation or other marketing costs associated with this RFP.

Price Validity

Prices provided by Proposers in response to this RFP are valid for ____ days from the proposal due date. The City intends to award the contract within this time but may request an extension from the Proposers to hold pricing, until negotiations are complete and the contract is awarded.

No Commitment to Award

Issuance of this RFP and receipt of proposals does not commit the City to award a contract. City expressly reserves the right to postpone the RFP process for its own convenience, to accept or

reject any or all proposals received in response to this RFP, to negotiate with more than one Proposer concurrently, or to cancel all or any part of this RFP.

Right to Negotiate and/or Reject Proposals

City reserves the right to negotiate any price or provision, task order or service, accept any part or all of any proposals, waive any irregularities, and to reject any and all, or parts of any and all proposals, whenever, in the sole opinion of City, such action shall serve its best interests and those of the tax-paying public. The Proposers are encouraged to submit their best prices in their proposals, and City intends to negotiate only with the Proposer(s) whose proposal most closely meets City's requirements at the lowest estimated cost.

Prevailing Wage

Proposers shall take cognizance of the requirements of California Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public work" and "maintenance" projects. The Proposer must agree to fully comply with and to require its subcontractors/subconsultants to fully comply with such Prevailing Wage Laws to the extent applicable.

QUESTIONS

Questions about this RFP should be made in writing and emailed to EMAIL ADDRESS or mailed to ADDRESS. All requests for information or questions must be submitted by TIME on DATE. Questions submitted after the due date or via phone will not be accepted. All questions and answers will be published.

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APPENDIX A: CITY STANDARD AGREEMENT SAMPLE

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ATTACHMENT 2:
UC Questions and Staff Responses

The following questions from Utility Commissioners were submitted by email. They are included below, in the order received. Staff answers are noted for each question.

From: Elaine Roberts Musser

1. Is any city funding (including staff time) being used for this project? If so, how much funding?

As per the Fund Exchange Agreement (FEA) with SACOG, no additional funding or City match funding (previously required at 11.47%, or approximately $230,000 for the full project) is required for this project. Consultant fees, construction costs, up to 5 years operations and maintenance agreement (if necessary) and equipment purchases are included in the $2 million funding provided by the grant. Staff time, however will be required to facilitate the above elements. City management and staff considers this time to be part of the job description for the relevant staff members. No estimate for the staff funding required to complete the work is available at this time.

2. Please better explain the "swap" between different funding sources. What was the purpose of the swap and is it critical to understanding this project? If yes, why?

The 'swap' or FEA was required by SACOG for delivery of the Green Region grant funding as new information following completion of the grant application process. The purpose of the swap is to defederalize the funding, which will help expedite the implementation of EV infrastructure. For example, with federal funding, environmental review for every EV installation site is required through the National Environmental Policy Act (NEPA), which can be time-consuming and costly (thereby increasing consultant costs or requiring significant staff time, potentially eating up the budget). Conversely, through the FEA, this is not required, nor was the 11.47% federal match requirement, as the funding is considered locally sourced by Davis.

The basic concept of the swap is that the federal funding goes into another City of Davis project, the Richards-I-80 Interchange, which is already subject to the federal requirements, and an equal amount of local funding that would have been used for that project is used for the 'Electrify Yolo' project. Once the FEA was executed between Davis and SACOG, the two projects are separate from each other, so there is no downside from a funding point of view. Also, Davis became the fiscal agent for the full project and regional partners. More information can be provided, but basically, no, it is not critical to understand this to consider recommendations from the UC.

3. Are these charging stations for public use, private use, or both? Is this a choice the city needs to make when implementing this project, or is it already decided?

The minimum requirements of the FEA are considered to be that the charging stations are required to be available for public use and located on public property. (Note that the requirements from SACOG have been somewhat vague, but this is our best understanding at this time, based on communication with SACOG.) However, the definition of public use is very broad: 'Publicly accessible' EV chargers for this Project shall mean available for public use at a minimum of six hours per day (e.g. 9am to 3pm), for a minimum of five days/week, with the goal of providing maximum time of public use. Placing chargers within fenced county/municipal properties such as libraries, county/municipal offices or other locations is acceptable as long as the minimally available hours noted here are provided. "Public property' for this Project shall mean property owned by Yolo County and/or incorporated cities within Yolo County (including Davis). These definitions are as per the MOUs with partner agencies, as informed by conversation with SACOG staff.

Note that once the minimum requirements of the FEA are met, the remaining City of Davis funding can be spent on any EV infrastructure-related improvements or purchases, as noted in the staff report above.

4. How many people is the proposed shuttle going to carry, and for what purpose? Where will it go? What problem is it trying to solve? What will be the ongoing maintenance costs of this shuttle that would not be covered by the grant funding?

First some background: The concept of the 'Electric Shuttle Pilot Project' as identified in the Green Region grant application, is part of the suite of electric vehicle infrastructure and multi-modal hub components proposed. The VCE/ City of Davis team was told when we were notified of our selection as one of four funded projects, that this integration of different elements was a key factor in our successful application as the only fully funded project. City of Davis is the lead agency in proposing these additional components, as the other partner agencies proposed funding for only Level 2 charging infrastructure at the time. The grant application identified several options for the shuttle, but no precise purpose or management of the pilot project was included in the application materials. Some suggested ideas in the grant narrative included partnership with Unitrans, YoloBus and/or Davis Community Transit (DCT), 'with the goal of connecting UC Davis to downtown Davis destinations, the Amtrak Station, and supporting city center walking, biking, transit and ride hailing services… (This was considered to be an effort) to support electric microtransit in downtown Davis, as a first phase of a net-zero transportation infrastructure envisioned in the Downtown Davis plan.'

At the time of the grant application, a shuttle that could carry 12-15 passengers was suggested. However, in the FEA, the minimum requirement was changed to 'purchase or lease of one or more electric vehicles to transport 8 or more people', which was acceptable to SACOG. This is more in line with the current procurement policies of City of Davis and DCT, and does not require an upgraded driver's license to operate. Therefore, in advance of an actual pilot project, the vehicle can be used for standard city purposes, such as staff use as appropriate, shuttling visitors to the city, or other uses and opportunities that have been discussed with the City Manager's Office and staff. In essence, this vehicle will be purchased through the grant funding as an addition to City of Davis Fleet. It will be managed and maintained by Fleet within their existing budget. Further discussion and implementation of a shuttle pilot can be on-going, if appropriate, but the FEA does not require it.

5. Why would the city consider not collecting a fee for use of the chargers? Citizens tend to expect free service once given, and balk when fees are instituted after the fact. We saw this play out with the organics program.

At this time, based on the information in the approved City of Davis Electric Vehicle Charging Plan, staff assumes that use of the city chargers will be 'fee for service'. Specific rates have not yet been established, as noted in the staff report above, however the EV chargers will start with a fee structure to be determined, and can be adjusted with time as data is gathered. Some of the approaches, as noted in the previous staff report:

- Charge by kWh (similar to charging by gallon of gas)
- Charge by hour (allows charging for both parking and EV charging)
- Flat connection fee (discourages short charging sessions)
- Variable rate fees, such as to reduce costs for city employees, fleet or other; or charge less for first 2 hours. more for subsequent, for example
- Although 'free' was noted in the previous staff report, it is not currently an option being considered by staff, as it would establish precedent of free charging services and would increase funding requirements for EV charging in the long run. The EVCP states that charging will be 'fee for service.

6. Please explain why it is useful to have the chargers networked, as opposed to "dumb" chargers.

Networked chargers are 1) identified in the grant application and in the MOUs with partner agencies, and 2) this technology offers the state-of-the-art operations, maintenance and data collection that the City desires for the EV infrastructure moving into the future. The reason for originally questioning this approach was that smart chargers can be significantly more expensive to install, however the benefits outweigh the cost, especially when the $2 million funding is provided.

7. What is the cost of Fast Chargers versus the Level 2 Chargers? How much speedier time wise is the Fast Charger versus the Level 2 Charger?

This information varies somewhat based on the manufacturer and product selected for each level. However, staff is currently researching current information on this, and hopes to have more information by the time of the June 17 UC meeting. Additionally, this information will be included in the Phase I consultant contract, to provide most up-to-date information and for consideration in making decisions.

8. What are the advantages/disadvantages to lease vs own including price tag, ongoing responsibilities? Lease or own what exactly? What costs and their dollar amount are not covered by the grant, or by leasing, e.g. ongoing operating costs, maintenance costs?

This information will be included in the consultant RFP and resulting contract for consideration in making decisions. Basically, ownership allows the city to control the purchases and equipment, similar to the benefits of owning vs. leasing solar photovoltaic equipment. However, with EV technology changing so rapidly, ownership does not allow the city to update equipment as easily when new technology emerges. With leasing, the company that actually owns the equipment has the economy of scale to keep the technology up to date. Additionally, own vs. lease may impact the cost of operations and maintenance. Either owning or leasing equipment is covered by the grant; the FEA specifically notes that maintenance agreements are covered by the grant.

From: Matt Williams

The following comments were received from one of our (City of Davis) constituents, who is very knowledgeable on this issue, now included for review by staff and the UC. These comments are in relation to the **2017 Electric Vehicle Charging Plan.**

Table 1, question about the intent of the power supply column. This is the size of circuit delivered to the charging equipment, not the power delivered to the vehicle.

This comment is informational, rather than a question. Thank you.

Also in Table 1 for "New Gen DCFC" is listed 200-400 miles of range per hour of charge. And this ignores the most popular EVs on the road: Tesla. My car can charge at over 900 miles of range per hour on the Gen 3 Tesla Super Chargers that started deployment about a year ago. On the thousands of Gen 2 Superchargers in the country, my car charges faster than 400 miles of range per hour already.

The City is not installing Tesla chargers. There is a currently a Tesla supercharger site permit in process to provide 16 chargers at the Oak Shade shopping center. Construction may be completed this year.

Number of EVs on the road, and the switch to dedicated charging sites. One of the huge benefits of EV charging is that it can be distributed. It can happen in your garage, at the curb, at work, at the shopping mall, hotel, restaurant, etc. All these places where the car is normally parked anyway. The "gas station" model where you have to drive somewhere specifically to charge only makes sense for super-fast charging for highway trips where a driver is NOT intending to park somewhere for a while. Fast

chargers belong on high-speed corridors with easy on/off (like gas stations!), and never in congested towns. All other charger types will be distributed as they have always been, because that's what convenience, practicality and cost dictates.

Thank you for your comment.

Consumer vehicle charge rates. I'm not going to look up and verify accurate data for every vehicle listed… but I can tell you at a glance that there are errors in all of the Teslas listed. First…. the Model 3 and Model Y have basically the same packs. And they're both 75 kW. If one is slightly larger, it is the Model Y… not as listed to be the Model 3. And the Model 3 charge rate is 250 kW, not the 120 kW listed. These are pretty significant mistakes. Model S and X in the mis-labeled "exotics" category are also significantly wrong. Those cars are capable of 200+ kW charging since a year ago, but listed as 120 kW (Their original rate). Listing old charge rates in a document intended to be "future proof" is troubling.

Thank you for your updated comments. The EV Charging Plan was developed in 2016 and 2017, adopted by City Council in 2017. We believe that the information was up to date at that time, but there are certainly components that are out of date now. This will be taken into consideration when using the document for planning purposes.

List of New Generation chargers in Sac. None of them listed is over 175 kW, and some are as low as 50 kW. These are not "new generation" fast chargers. In fact 50 kW is the slowest "fast charger" made, and was the standard 10-15 years ago. None of the Tesla Superchargers are listed for some reason.

Again, thank you for your updated comments on the EVCP. See above.

Building a charging infrastructure. It is quite odd to talk about the ideal charge time for downtown cars by looking at how long it takes to charge a given battery pack from empty to 80%. Almost nobody needs this or will do this. More appropriate is: How much time to give some acceptable amount of additional range. 25 miles? 50 miles? Decide how much range we wish to give, then the power of the charger, and time needed on the charger can be determined.

Thank you for your comment. This is the reason that we will be working with a qualified consultant to evaluate site feasibility, cost and proposed charging infrastructure. We will certainly take these standards into account.

Where to place fast chargers. I agree with the "problems" of the suggested locations for DCFC. Near Sutter makes some sense, but a couple of these suggestions are terrible. Put them at Park and rides next to the freeway. Do NOT put them anywhere near downtown.

This Phase I effort for implementing EV charging infrastructure and equipment purchases, based on the identified Green Region 'Electrify Yolo' goals for funding, is intended to benefit Davis residents, build internal capacity for Davis as a destination and improve multi-modal hub development in the Davis downtown. This is being accomplished through the suite of elements funded by this grant, including charging infrastructure in the downtown, and purchase of mobile chargers and electric vehicle(s).

Reference to ITS Charging Plan
Full agreement with this! 2. The Charging Plan "recognizes the role and benefits of bringing business to downtown", which is also one of the objectives of this booklet. However the Charging Plan does not propose putting fast chargers downtown (only Level 2). It is not clear where the suggestion originated that fast chargers be placed at City Hall, the Downtown E Street parking lot, and the Downtown Parking Garage at 1st and F Streets. The author believes that downtown chargers should be Level 2, or at most 25 kW fast chargers.

Because of commitments in the Fund Exchange Agreement (FEA) with SACOG, these identified downtown site locations must be completed in Phase I implementation, as per the 2017 EV Charging Plan and the grant application. Similarly, quantity and types of EV charging stations (Level 2, Level 3) for Phase I are as per the agreement.

3. The plug share map in the charging plan is most definitely outdated. (The only fast charging shown today is (accurately, I think) the EVgo site behind the defunct Whole foods)

Thank you for this information.

And a final note:

Don't fall into the trap of fee-based charging in order to recoup money. This part of the system is almost always farmed out, and the expense of taking money for charging has typically been equal to or greater than the value of the energy being used by the customer. In other words, the city loses basically nothing more (more than all the costs involved in the installation of a charging station) by giving away the energy to charge (I'm not talking about fast charging here), and these slower chargers can bring value to our town and citizens (way more than free parking does!). This "cost to charge" irony has been misunderstood for the 20+ years that I've been dealing with it. Charge for parking, but don't charge for charging (The word "charging" is a challenge!)

This will be discussed by staff and Utility Commission.

From: Olof Bystrom

1. What costs, if any, will the city incur and over what time as a result of the project?

Almost all costs associated with this project will be covered by the SACOG funding (though the FEA). No match or other city funding is required. Exceptions include staff time to implement the project and maintenance (through City Fleet) of any vehicles or equipment purchased. Life-cycle analysis of the ongoing costs once grant funding has been used will be part of the consultant assessment.

2. Please explain how VCE and the city will work together on the project. What is each party's role?

VCE and City of Davis partnered on submitting the Green Region grant application to SACOG to fund this 'Electrify Yolo' project on behalf of the regional partners—Yolo County, City of Woodland, VCE and City of Davis. Largely because of the FEA, it was mutually agreed by each of these parties that it is most expeditious for each agency to manage their own project, site selection, engineering and procurement/contracts/bids. Therefore, MOUs between Davis and each of these agencies have been completed or are in progress to ensure that FEA commitments made to SACOG by City of Davis on behalf of all partners are met. Status of each agency's project was given in the May 20, 2020 staff report to the UC.

As part of this approach, VCE will be implementing their own $150,000 project on behalf of the City of Winters, once the MOU between Davis and VCE (and an attached executed MOU between VCE and Winters) is completed. All four partner agencies continue to have quarterly coordination meetings, mostly to update each other on progress and/or opportunities identified. Other than that, there is no further coordination or shared management between City of Davis and VCE on this project.

3. Have you considered unconventional charger applications, such as combining them with existing solar PV systems to create small microgrids, or perhaps being able to use cars as batteries for the city's critical infrastructure such as pumps?

These are valuable suggestions, and may be included with phases subsequent to the Phase I implementation of minimum FEA requirements, as noted in staff report above.

4. How are you planning for the city's post-grant use and/or costs associated with the project?

Staff continues to search for additional grant funding or other funding sources to continue to expand EV infrastructure implementation. Other than that, most project costs are included in the grant funding, except as noted in the answer to your question 1 above.

5. Are you considering full outsourcing to third parties as a way to avoid city risks and costs?

Yes, this would be one of the options considered in the consultant RFP own vs. lease life cycle cost analysis. Decisions on the best approach will be made, once more information is available.

6. How will the selected locations support EV adoption by residents in multi-family housing?

At this time, based on the information submitted in the grant application, Phase I implementation will be primarily for identified downtown, publicly owned locations. However, residents of multi-family housing will have the opportunity to use these chargers. Future phases may prioritize supporting multi-family housing sites, as noted in the additional 'short-term action' sites identified in the 2017 EV Charging Plan, as well as projects developed since adoption of that plan.

7. How will the selected charge locations and/ or potential fee structures support downtown commerce?

Providing Level 2 and Level 3 chargers in and adjacent to the Davis downtown is envisioned to support downtown commerce in a number of ways. The integration of EV charging infrastructure and eventual multi-modal hub developments and improvements will help to support city center walking, biking, transit and ride hailing services, bringing people in contact with downtown businesses while charging EVs. Additionally, although the improvements are intended to support Davis residents, the downtown locations adjacent to major transportation corridors will help pull visitors to Davis into the downtown for fast charging or Level 2 charging, and could help with promoting downtown economic vitality.

8. Are you pursuing any collaboration with UCD? This could perhaps help with additional funding, UC staff support and/or innovative project design features?

We are and continue to work with UCD. The Institute for Transportation Studies was a key participant in the development of the 2017 EV Charging Plan, and we will continue to look to them for technical information, collaboration and innovative, up-to-date project design features. It would also be great if they have suggestions for funding and staff support.

From: Johannes Troost

Utility Commission: Questions regarding the EV Charging Implementation Grant
*Note from staff - in the questions received by staff, there was no question 12. The questions are presented as received.

Q_ID		Questions	Area
1	EV	*What criteria will be used to determine the mix of Level 2 and 3 charging stations?* For Phase I, the mix will be determined by the site feasibility and cost analysis, with an eye to the minimums required by the FEA. However, more locations than the minimum numbers will be studied to make sure that we select the best sites and technology with full site and cost information, such as availability of electrical panel capacity, cost/ease of running conduit to the preferred site, number of charging stations that can be installed with available capacity and/or cost of upgrading panels to increase capacity. Subsequent phases may address different needs, based on EV infrastructure priorities identified and approved by City Council.	Technology
2	EV	*How do EV sales (past and emerging) inform the choices of intended audience and charger type?* We do not currently have this data. This may be a question addressed at a later time.	Data
3	EV	*What EV's are being purchased in the region we intend to focus on?* We do not currently have this data. The key component is that most charging infrastructure is applicable to most vehicles, except that Tesla requires a vehicle-specific charging connection. This project is not intended for Teslas; a separate Tesla supercharging site is in the planning and permitting stages for the Oakshade shopping area at this time.	Data
4	EV	*Could we have a grid/chart that addresses among many things the following:* Staff is currently researching up to date information on this, and will have more information by the time of the June 17 UC meeting. Hopefully we will be able to get data on all of your points below. Additionally, questions 5, 6, 7 will be addressed in the RFP and resulting consultant contract.	Data; costs
5	EV	*Comparative cost of the acquisition of Level 2 and 3 charging station infrastructure.* See above	Data; Cost recovery, Technology
6	EV	*Comparative cost of the maintenance of Level 2 and 3 charging station infrastructure.* See above	Data; Cost recovery; Technology;
7	EV	*What are the range of costs for each of the three modes: own, lease, 3rd party vendor, blended?* This information will be included in the consultant contract for consideration in making decisions.	Cost recovery, Technology

8	EV	*What is the current policy and procedures for permitting charging stations?* All charging stations, including those proposed by the City of Davis within the city must be submitted to the City of Davis Building Division (Community Development and Sustainability Department) to obtain a permit, and must comply with all current local and statewide codes.	Policy
9	EV	*Will the city staff continue to use the Utility Commission RFP review process for the consulting contract(s): RFP pre-release review and participation in the consultant review and selection process?* Staff does not intend to use the Utilities Commission process for rate studies for this effort. This project touches on many different commissions' areas of focus.	Policy; procedures
10	EV	*What are the goals of the project? Does it/they answer the "why?" question?* Please see information in staff report above. If these questions are not adequately answered, please request further clarification.	Goals
11	EV	*Based on the goals, who is the intended audience(s) for these charging stations?* This project is intended to benefit Davis residents, build internal capacity for Davis as a destination and improve multi-modal hub development in the Davis downtown. Additionally, many of the chargers are within ½ to 5 miles of major transportation corridors, so the charging stations in Davis and partner agencies will also support regional and statewide EV infrastructure.	Use; audience; Cost recovery
13	EV	*How do these charging stations fit into other plans and outcomes the city has either planned or is intending to address?* These charging stations, and electrification of municipal and community vehicles and transportation in general, meets city sustainability and carbon reduction goals as identified in the General Plan, the 2010 Climate Action and Adaptation Plan and the city's Downtown Plan, among other plans and outcomes.	Policy; Planning; Cost recovery
14	EV	*What assumptions made in the 2017 Electric Vehicle Charging Plan need to be revisited and updated?* As needed for future phases beyond Phase I (which already identifies infrastructure being requested), City staff will work with UC Davis' Institute for Transportation Studies (ITS), commission(s) and other local experts, as necessary to identify needs for any updates to the EVCP the plan as the needs emerge.	Planning; Cost recovery
15	EV	*What is the expected "life" of each EV charging infrastructure: Level 2? Level 3? Other?* This information varies somewhat based on the manufacturer and product selected for each level. However, staff is currently researching current information on this, and hopes to have more information by the time of the June 17 UC meeting. Additionally, this information will be included in the Phase I consultant contract, to provide most up-to-date information and for consideration in making decisions.	Data; Cost recovery; Technology

16	EV	*Can the infrastructure be set up in places where solar power and associated battery storage could be used to power these charging stations? Is this an opportunity to further microgrid development?* Yes, especially in future phases.	Planning; Technology
17	EV	*Is there a trend toward this thinking in current purchases?* Phase I will be primarily to implement the minimums in the FEA. Thinking for future phases, technologies and infrastructure will be on-going, from current staff, commission and local/UCD expert input, through components and decisions made in the Phase I consultant contract, and continuing into future decisions and purchases.	Planning; Technology
18	EV	*What are the trends in capacity variables for current and emerging EV models, and how does that impact our choices?* We do not currently have this data. Staff (with input from consultant) will be assuming that the most up-to-date technology will be used for selection of networked chargers to service existing and emerging EV models.	Data
19	EV	*How many EV's does the city own/lease? What are the City goals in this area?* The City currently owns one EV, a Ford Fusion. Goals of the City Fleet Manager and interdepartmental management and staff, along with identified City plans and policies, are to transition to an electrified fleet. At this time, no timeline or specific schedule has been established (although that may be a priority in the upcoming 2020 CAAP). However, a key component of fleet electrification is having the charging infrastructure to support it, so this project will be a crucial step.	Data; Planning;
20	EV	*What is the budgetary impact on providing which kind of chargers for our current and future fleets: Utilities; Fire; Police?* Although this information is not documented or researched, it is the current opinion of staff that the majority of fleet vehicle charging can be Level 2 charging stations, since most vehicles that are used during regular working schedules can be charged overnight, and have a range for a full day's use. However, some fire or police locations may require fast charging, since vehicles may be used 24-7. For Phase I, only Level 2 charging is being considered, except for the five locations identified. Future phases may include Level 3 charging at city facilities for these purposes.	Data; planning
21	EV	*Based on data, what choices further other infrastructure efforts in Davis? Who are the beneficiaries? Why?* See narrative in staff report above for future phase opportunities being considered., as this question is a larger planning level analysis that will be considered in future phases.	Planning; Cost recovery
22	EV	*What is the impact of using these opportunities to maximize our fleets to go green and reduce longer term costs to taxpayers by moving from fossil fuel/hybrids to all green energy?* These opportunities and impacts are addressed in the 2010 CAAP, the commitment to carbon neutrality by 2040 in City Council's March 2019 Climate Emergency Resolution, and other city policy.	Policy; Audience; Planning

23	EV	*What would be the impact on our budget of installing some of this infrastructure for City use only?* Eventually, the City will most likely consider some EV charging infrastructure for City use only, such as chargers at Fleet location, chargers for city staff designated parking only, such as at City Hall, or other locations. However, this would be for future phases beyond Phase I implementation.	Cost recovery
24	EV	*What process will be used to determine charging fees?* Further discussion with Utilities Commission and analysis of data from consultant and collected at charging infrastructure will be used to determine (and modify as necessary) charging fees for EV charger use. These fees may vary depending on location, time of use, etc. (as noted in staff report narrative above), and may be addressed in a similar manner to parking rates as studied and proposed in the City of Davis Downtown Parking Management Plan last year.	Planning
25	EV	*Which charging station infrastructure provides the most flexibility for charging fees?* It is staff's understanding that all 'smart' charger technology offers flexibility for charging fees.	Technology; Cost recovery
26	EV	*If the City does not own and operate, will the City require profit sharing with the city for private lease/owner models?* This information will be analyzed and covered by the Phase I consultant in the life cycle cost analysis.	Cost recovery
27	EV	*What are the problems other cities have had with EV infrastructure implementation?* Various problems have included budgetary constraints (or lack of budget), site selection issues, lack of electrical connections or capacity, conflicting community input on technology, locations, fee for service, etc. The City of Davis is fortunate to have a data-based EV Charging Plan, developed in partnership with ITS, to rely on, and funding from the SACOG Green Region grant, to overcome some of these obstacles for the current effort.	Planning; data
28	EV	*Are there laws specific to the City of Davis and/or State of California that govern EV infrastructure, and what is the impact on implementation and cost?* Yes, there are codes and policies that require and/or oversee implementation of EV infrastructure, including CALGreen, building/electric codes. City of Davis EV infrastructure implementation will comply with these standards.	Policy
29	EV	*In your analysis, please clarify how infrastructure models, site location, and capacity impact the goals of the project? Sustainability? Cost recovery?* This information will be analyzed and covered by the Phase I consultant in the life cycle cost analysis.	Policy; planning
30	EV	*Which charging station infrastructure provides the greatest opportunity for building a platform that will attract additional investment? Why? Please articulate your assumptions and cite existing City documents if they exist* This information will be analyzed and covered by the Phase I consultant in the life cycle cost analysis.	Policy; Planning

31	EVSP	*What is the purpose of the Electric Shuttle Pilot? Who is the intended audience? What are the expected outcomes? Who will be involved in the design and implementation planning?* Please see answer above to Commissioner Musser-Roberts' question 4.	Electric Shuttle: Goals
32	EVSP	*Based on the purpose(s) of the EV Shuttle what are the costs for the vehicle and maintenance? What is the expected life expectancy?* Please see answer above to Commissioner Musser-Roberts' question 4.	Electric Shuttle: Cost recovery
33	EVSP	*How will the vehicle be integrated into existing transportation infrastructure: Unitrans, Yolo Bus, private ride purveyors?* Staff has already had conversations with these agencies. This integration will most likely be pursued at later phases of EV infrastructure implementation.	Planning
34	EVSP	*Does any new charging infrastructure anticipate or consider capacity to charge driverless cars, and, depending on audiences, electric scooters (persons with disabilities), bikes, other short distance vehicle charging connections?* The current project is focused on the established of EV chargers for automobiles, as required by the grant award minimums in this case. The city has supported a wide variety of transportation options, and continues to look for ways to support the use of alternatives to cars.	Planning; ADA; Emerging green transportation