A) New Agreement 800-18-001 (To be completed by CGL Office)

<table>
<thead>
<tr>
<th>800 Energy Assessments Division</th>
<th>Aniss Bahrenian</th>
<th>22</th>
<th>916-653-0381</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Systems Group, Inc.</td>
<td></td>
<td></td>
<td>02-0405879</td>
</tr>
</tbody>
</table>

2018-2019 California Vehicle Survey

| 11 / 01 / 2018 | 03 / 30 / 2020 | $645,579 |

Operational agreement (see CAM Manual for list) to be approved by Executive Director

- ARFVTP agreements $75K and under delegated to Executive Director.

Proposed Business Meeting Date: 10 / 03 / 2018

- Consent
- Discussion

Business Meeting Presenter: Aniss Bahrenian

Time Needed: 10 minutes

Please select one list serve. Transportation (General Trans / Petroleum Issues)

**Agenda Item Subject and Description**

Proposed resolution approving Agreement 800-18-001 with Resource Systems Group, Inc. for a $645,579 contract to conduct a survey of California light-duty vehicle owners in the household and commercial markets. This includes a targeted survey of zero-emission vehicle owners in both markets, to assess the shifts in consumer preferences. The survey data will be used to update the vehicle choice models used in forecasting light-duty vehicles.

1. Is Agreement considered a “Project” under CEQA?
   - No (complete the following (PRC 21065 and 14 CCR 15378)):
     - Explain why Agreement is not considered a “Project”:
       Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because surveys will be conducted at commercial and residential buildings which already exist.

2. If Agreement is considered a “Project” under CEQA:
   - b) Agreement IS NOT exempt. (Consult with the legal office to determine next steps.)
     - Check all that apply
       - Initial Study
       - Negative Declaration
       - Mitigated Negative Declaration
       - Environmental Impact Report
       - Statement of Overriding Considerations

**List all subcontractors (major and minor) and equipment vendors:**

- Legal Company Name: Budget SB MB DVBE
  - Source One Communications $140,550
  - $0
  - $0

**List all key partners:**

- Legal Company Name:

---

**Legal Company Name:**

---
### J) Budget Information

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Funding Year of Appropriation</th>
<th>Budget List No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>2018-2019</td>
<td>800.009</td>
<td>$300,000</td>
</tr>
<tr>
<td>Other</td>
<td>2018-2019</td>
<td>800.009</td>
<td>$95,579</td>
</tr>
<tr>
<td>Other</td>
<td>2018-2019</td>
<td>800.009</td>
<td>$250,000</td>
</tr>
</tbody>
</table>

R&D Program Area: Select Program Area $645,579

Explanation for "Other" selection: COIA (every 3 years), COIA (annual), and Air Pollution Control Fund

### K) Contractor's Administrator/Officer

- **Name:** Thomas Adler
- **Address:** 55 Railroad Row
- **City, State, Zip:** White River Junction, VT 05001
- **Phone:** 802-295-4999
- **Fax:**
- **E-Mail:** Thomas.Adler@rsginc.com

- **Name:** Mark Fowler
- **Address:** 55 Railroad Row
- **City, State, Zip:** White River Junction, VT 05001
- **Phone:** 802-861-0504
- **Fax:**
- **E-Mail:** Mark.Fowler@rsginc.com

### L) Selection Process Used

- Solicitation Select Type: RFP-18-801
- # of Bids: 2
- Low Bid? No
- Non Competitive Bid (Attach CEC 96)
- Exempt

### M) Contractor Entity Type

- Private Company
- CA State Agency
- Government Entity

### N) Is Contractor a certified Small Business (SB), Micro Business (MB) or DVBE?

- No
- Yes

### O) Civil Service Considerations

- Not Applicable (Agreement is with a CA State Entity or a membership/co-sponsorship)
- Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER)

The Services Contracted:

- are not available within civil service
- cannot be performed satisfactorily by civil service employees
- are of such a highly specialized or technical nature that the expert knowledge, expertise, and ability are not available through the civil service system.

The Services are of such an:

- urgent
- temporary, or
- occasional nature

that the delay to implement under civil service would frustrate their very purpose.

**Justification:**

### P) Payment Method

- A. Reimbursement in arrears based on:
  - Itemized Monthly
  - Itemized Quarterly
  - Flat Rate
  - One-time

- B. Advanced Payment
- C. Other, explain:

### Q) Retention

- Is Agreement subject to retention? No
- If Yes, Will retention be released prior to Agreement termination? No
### R) Justification of Rates

Rates are consistent with the industry standard for performing this type of work.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>☐</td>
<td>Exempt (Interagency/Other Government Entity)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>☒</td>
<td>Meets DVBE Requirements</td>
<td>DVBE Amount: $140,550</td>
</tr>
<tr>
<td></td>
<td>☐</td>
<td>Contractor is Certified DVBE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>☒</td>
<td>Contractor is Subcontracting with a DVBE: Source One Communications</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>☐</td>
<td>Contractor selected through CMAS or MSA with no DVBE participation.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>☐</td>
<td>Requesting DVBE Exemption (attach CEC 95)</td>
<td></td>
</tr>
</tbody>
</table>

### T) Miscellaneous Agreement Information

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Will there be Work Authorizations?</td>
<td>☒ No</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>2.</td>
<td>Is the Contractor providing confidential information?</td>
<td>☐ No</td>
<td>☒ Yes</td>
</tr>
<tr>
<td>3.</td>
<td>Is the Contractor going to purchase equipment?</td>
<td>☒ No</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>4.</td>
<td>Check frequency of progress reports</td>
<td>Monthly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>5.</td>
<td>Will a final report be required?</td>
<td>☐ No</td>
<td>☒ Yes</td>
</tr>
<tr>
<td>6.</td>
<td>Is the Agreement, with amendments, longer than a year? If yes, why?</td>
<td>☐ No</td>
<td>☒ Yes</td>
</tr>
</tbody>
</table>

Surveys take more than one year to conduct a pre-test, collect the data, and clean the data.

### U) The following items should be attached to this CRF (as applicable)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Exhibit A, Scope of Work</td>
<td>☐ N/A</td>
<td>☒ Attached</td>
</tr>
<tr>
<td>2.</td>
<td>Exhibit B, Budget Detail</td>
<td>☐ N/A</td>
<td>☒ Attached</td>
</tr>
<tr>
<td>3.</td>
<td>CEC 96, NCB Request</td>
<td>☒ N/A</td>
<td>☐ Attached</td>
</tr>
<tr>
<td>4.</td>
<td>CEC 95, DVBE Exemption Request</td>
<td>☐ N/A</td>
<td>☐ Attached</td>
</tr>
<tr>
<td>5.</td>
<td>CEQA Documentation</td>
<td>☒ N/A</td>
<td>☐ Attached</td>
</tr>
<tr>
<td>6.</td>
<td>Resumes</td>
<td>☒ N/A</td>
<td>☐ Attached</td>
</tr>
<tr>
<td>7.</td>
<td>CEC 105, Questionnaire for Identifying Conflicts</td>
<td>☒ Attached</td>
<td></td>
</tr>
</tbody>
</table>

---

Agreement Manager: [Name]  Date: [Date]
Office Manager: [Name]  Date: [Date]
Deputy Director: [Name]  Date: [Date]
# EXHIBIT A

## SCOPE OF WORK

### TASK LIST

<table>
<thead>
<tr>
<th>Task #</th>
<th>Task Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Contract Management</td>
</tr>
<tr>
<td>2</td>
<td>Work Plan</td>
</tr>
<tr>
<td>3</td>
<td>Survey Review, Website, and Database Design Development</td>
</tr>
<tr>
<td>4</td>
<td>Survey Design</td>
</tr>
<tr>
<td>5</td>
<td>Survey Pre-Tests</td>
</tr>
<tr>
<td>6</td>
<td>Survey Recruitment, Implementation, Response Categories, and Data Correction</td>
</tr>
<tr>
<td>7</td>
<td>Analysis of Data Quality and Survey Results</td>
</tr>
</tbody>
</table>

### ACRONYMS/GLOSSARY

*Specific acronyms and terms used throughout this scope of work are defined as follows:*

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caltrans</td>
<td>California Department of Transportation</td>
</tr>
<tr>
<td>CAM</td>
<td>Commission Agreement Manager</td>
</tr>
<tr>
<td>CARB</td>
<td>California Air Resources Board</td>
</tr>
<tr>
<td>CVS</td>
<td>California Vehicle Survey</td>
</tr>
<tr>
<td>DMV</td>
<td>Department of Motor Vehicles</td>
</tr>
<tr>
<td>IEPR</td>
<td>Integrated Energy Policy Report</td>
</tr>
<tr>
<td>FCEVs</td>
<td>Fuel Cell Electric Vehicles</td>
</tr>
<tr>
<td>LDV</td>
<td>Light Duty Vehicle</td>
</tr>
<tr>
<td>PEV</td>
<td>Plug-In Electric Vehicle</td>
</tr>
<tr>
<td>PHEVs</td>
<td>Plug-In Hybrid Electric Vehicles</td>
</tr>
<tr>
<td>RP</td>
<td>Revealed Preference</td>
</tr>
<tr>
<td>SP</td>
<td>Stated Preference</td>
</tr>
<tr>
<td>VMT</td>
<td>Vehicle Miles Traveled</td>
</tr>
<tr>
<td>ZEV</td>
<td>Zero Emission Vehicle</td>
</tr>
</tbody>
</table>

### BACKGROUND

The Energy Commission is directed by Public Resources Code (PRC) Section 25301 to prepare a forecast of transportation fuel demand to assess the need for resource additions, efficiency, and conservation with consideration for all aspects of energy industries and markets essential for the state economy, general welfare, public health and safety, energy diversity, and protection of the environment. PRC Code Section 25304 specifies that the Energy Commission transportation forecast shall include:

- Assessment of trends in transportation fuels, technologies, and infrastructure supply and demand and the outlook for wholesale and retail prices for petroleum and alternative transportation fuels under current market structures and expected market conditions;
- Forecasts of statewide and regional transportation energy demand, both annual and seasonal, and the factors leading to projected demand growth including, but not limited to, projected population growth, urban development, vehicle miles traveled, the type, class, and efficiency of personal vehicles and commercial fleets, and shifts in transportation modes;
• Evaluation of the sufficiency of transportation fuel supplies, technologies, and infrastructure to meet projected transportation demand growth;

• Evaluation of alternative transportation energy scenarios, in the context of least environmental and economic costs, to examine potential effects of alternative fuels usage, vehicle efficiency improvements, and shifts in transportation modes on public health and safety, the economy, resources, the environment, and energy security; and

• Examination of the success of introduction, prices, and availability of advanced transportation technologies, low- or zero-emission vehicles, and clean-burning transportation fuels, including their potential future contributions to air quality, energy security, and other public interest benefits.

These forecasts and assessments are used in making recommendations to improve the efficiency of transportation energy use, reduce dependence on petroleum fuels, decrease adverse environmental impacts from transportation energy use, contribute to congestion reduction, promote economic development, and enhance energy diversity and security.

The Energy Commission prepares the forecast and assessment of transportation fuel demand, the outlook for retail fuel prices, and the analysis of shifts in fuel types, vehicle types, and other factors based on analysis of data collected from different sources. The Energy Commission uses the California Vehicle Survey (CVS) data in particular to assess current vehicle ownership, the factors that current and future vehicle owners consider when purchasing a new vehicle and the likelihood that they would operate an alternative fuel vehicle or other advanced technology vehicle.

As part of the requirements for the PRC Section 25304, the Energy Commission periodically conducts independent surveys of California light duty vehicle (LDV) consumers in both the residential and commercial sectors. Changes in the market conditions, consumer awareness, and technology and manufacturer offerings will change consumer preferences. Repeating the survey allows the Energy Commission to capture the shift in consumer preferences and improve the accuracy of forecasts. Because the 2011-2013 CVS vehicle survey coincided with the California Department of Transportation’s (Caltrans) 2010-2013 survey of household travel, these two surveys were integrated for the first time. This resulted in a rich data set that can be used for integrated modeling of both travel and vehicle choices of the households, but it also resulted in some differences in household survey and sample designs, as compared with the 2009 survey. The 2015-2017 vehicle survey included additional targeted sample of 500 plug-in electric vehicle (PEV) owners, in addition to the residential and commercial fleet owner surveys, and resulted in completion of 600 PEV owner surveys in the residential and commercial market segments.

The 2018-2019 California vehicle survey will build upon the previous surveys to update consumer preferences. Additionally, it will augment surveys to add targeted samples of current zero emission vehicle (ZEV) owners to learn about both their preferences and their vehicle use and charging behavior. However, compared with prior surveys three of the survey deliverables will be eliminated in the 2018-2019 survey to expedite survey completions. The 2018-2019 survey project eliminates the focus group and excludes the model estimation. To expedite project completion, the draft survey instruments and sample design will be provided to the winning contractor for review and pretest implementation by the contractor. The 2015-2017 survey data, survey reports, and the survey instruments can be accessed at http://www.energy.ca.gov/assessments/vehiclesurvey/.
The California Air Resources Board (CARB) will use the CVS results to characterize California’s vehicle market and use the subsequent LDV models to analyze the potential effects of various regulatory, incentive, infrastructure, and educational and outreach programs. For example, CARB plans to use the survey results to inform the Advanced Clean Car II rulemaking, explore the impact of different ZEV incentive structures (including the lack of the federal tax credit) on ZEV purchases, and understand transportation patterns and needs of disadvantaged communities to support SB 350.

**GENERAL REQUIREMENTS OR GOALS AND OBJECTIVES**

The goals of this Agreement are to design and conduct both revealed preference (RP) and stated preference (SP) surveys for the household/residential LDV sector and the commercial LDV sector. The survey results will be used to update vehicle choice models, in a separate agreement that will be used in generating a LDV fuel demand forecast for the 2020 Integrated Energy Policy Report (IEPR).

The survey of California LDV consumers must be a fair representation of the California household population and businesses. The Energy Commission uses LDV models that are designed around levels of vehicle ownership; three categories of vehicle holdings for households and five categories of fleet size for businesses. The survey must represent California households and California businesses in each of these categories.

**Differences with prior surveys:** The 2018-2019 survey has fewer deliverables compared to prior surveys, to fit within the project budget and timeline. The contractor will be provided with both the survey questionnaires and the sampling plan, before starting the project. Unlike previous survey rounds, the scope of work does not include focus group sessions and the contractor is not responsible for model estimation.

**ADMINISTRATIVE TASKS**

**TASK 1: CONTRACT MANAGEMENT**

The goal of this task is to clarify administrative elements of the agreement. The contractor shall manage a team capable and qualified to complete the tasks identified in the scope of work.

**TASK 1.1 - KICKOFF MEETING**

The goal of this task is to establish the lines of communication between the administrative and technical project teams of the contractor and the Energy Commission.

The **Contractor shall:**

- Attend a kick-off meeting with the Energy Commission Agreement Manager (CAM), Contracts Officer, the Accounting Office, and others as determined by the CAM. The Contractor shall include their Project Manager, Contract Administrator, and Accounting Officer, and others as agreed upon with the CAM. The meeting will be held in Sacramento, CA and the CAM will designate the specific location, or via Webex and teleconference. Both the administrative and technical aspects of this contract will be discussed in the meeting.
TASK 1.2 – INVOICES

The goal of this task is to clarify the invoice approval process.

The Contractor shall:

• Prepare an invoice for all reimbursable expenses incurred performing work under this contract in compliance with the Terms and Conditions of the contract. These invoices must be accompanied with monthly progress reports for approval by the CAM. Official invoices must be submitted to the Energy Commission’s Accounting Office.

TASK 1.3 - INCENTIVE PAYMENTS

The goal of this task is to pay monetary incentives to survey participants at both phases of the 2018-2019 CVS: pre-test and the main survey.

The Contractor shall:

• Design and distribute monetary incentives at different stages of the survey, as described in Tasks 5 and 6.
• Maintain a log of monetary incentive payments, including the distribution and logging of payments. The log will include, survey ID number, incentive(s) payment amount, and the date(s) the payment was issued. Funding for incentives is included in the associated deliverable payment. For example, Task 5 deliverable payments should include all pre-testing incentive payments.
• Payment log.

TASK 1.4 - SUBCONTRACTORS

In the event Subcontractors are part of the Contractor’s proposal, the Contractor shall:

• Manage and coordinate subcontractor activities. The Energy Commission will assign all work to the Contractor. The Contractor is responsible for the quality of all subcontractor work. If the Contractor decides to add new subcontractors, they shall 1) comply with the terms and conditions of the contract, and 2) notify the CAM who will follow the Energy Commission’s process for adding or replacing subcontractors.

TASK 1.5 - MONTHLY PROGRESS REPORTS

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of the project.

The Contractor shall:

• Prepare monthly progress reports to summarize all contract activities conducted by the Contractor for the reporting period, including an assessment of the ability to complete the contract within the current budget and any anticipated cost overruns.
• Each progress report is due to the CAM within 15 calendar days after the end of the reporting period.

Deliverables:

• Monthly Progress Reports
**TASK 1.6 - FINAL REPORT AND MEETING**
The goal of this task is to prepare a comprehensive Final Report and to meet for a discussion and review of the project, and to discuss the closeout of this Agreement.

**Task 1.6.1 – Final Report**
The Final Report shall integrate different task reports into a single document, and add the Contractor’s assessment of actions and methods to improve future CVS’s. The Contractor shall meet with the Energy Commission to discuss the draft Final Report prior to finalizing the Final Report. The meeting can be held via conference call, online, or in person. The CAM will review and approve the Final Report. The meeting and Final Report must be completed on or before the termination date of the contract.

The Final Report formatting requirements include illustrations and graphics to be sized to print on 8 ½” by 11” paper and readable if printed in black and white. The Contractor’s Reports shall be prepared consistent with the Energy Commission Document Production protocols for Consultant Reports located at:

http://www.energy.ca.gov/contracts/consultant_reports/index.html.

The Final Report shall be a public document. If the Contractor has obtained confidential status from the Energy Commission and will be preparing a confidential version of the Final Report as well, the Contractor shall perform the following subtasks for both the public and confidential versions of the Final Report.

**The Contractor shall:**
- Prepare the draft Final Report for this contract.
- Submit an electronic draft Final Report to the CAM for review and comment.
- Schedule a meeting with the CAM approximately 15 calendar days after submitting the draft Final Report to the CAM. The purpose of the meeting is to discuss the draft Final Report. The CAM will provide written comments to the Contractor after the meeting has occurred.
- Prepare and submit a Final Report that addresses all of the CAM’s comments on the draft Final Report. Any problematic recommended changes should be discussed with the CAM. Once final editing is completed, the CAM shall provide written approval to the Contractor.
- Submit one print ready copy, one electronic copy, and one bound copy of the Final Report with the final invoice.

**Deliverables:**
- Draft Final Report
- Final Report

**Task 1.6.2 - Final Meeting**
The goal of this task is to discuss closeout of this Agreement and review the project.

**The Contractor shall:**
- Meet with Energy Commission staff prior to the term end date of this Agreement. The meeting will be held via Web-Ex or teleconference. This meeting will be attended by the Contractor Project Manager and the CAM. The CAM will determine any additional appropriate meeting
participants. The administrative and technical aspects of Agreement closeout will be discussed at the meeting.

- Present findings, conclusions, and recommended next steps (if any) for the Agreement, based on the information included in the Final Report.
- Prepare a written document of meeting agreements and unresolved activities.
- Prepare a schedule for completing the closeout activities for this Agreement, based on determinations made within the meeting.

Deliverables:
- Written documentation of meeting agreements
- Schedule for completing closeout activities

TASK 1.7- CONFIDENTIALITY AGREEMENTS

The Contractor shall:
- Enter into, a confidentiality agreement with the DMV if using the DMV data, and a non-disclosure agreement with the Energy Commission. The CAM will provide these agreements at the kick off meeting.

Deliverables:
- Signed confidentiality agreement for using DMV data
- Signed non-disclosure agreement with the Energy Commission

TECHNICAL TASKS

TASK 2: WORK PLAN

The goal of this task is to create a clear description of the work to be performed under each task and the associated methods. The Contractor shall finalize a project Work Plan based on the comments on the draft Work Plan submitted in the proposal. This Work Plan will describe the scope of the work and the methodologies to be used for completing the surveys and estimating the equations.

The Contractor shall:
- Meet with the CAM and others to discuss finalizing the work plan. This strategy meeting to discuss the Work Plan shall take place within ten (10) business days after the Kick-Off Meeting. This strategy meeting will be held either at the Energy Commission or over the internet.
- Finalize a project Work Plan in consultation with the CAM. The Work Plan shall contain a thorough discussion of the work to be performed. It will document the Energy Commission’s and the Contractor’s expectations for each task, and serve as a reference throughout the course of the project. The Work Plan shall address:
  o Review the following documents:
    ▪ Sampling frame for both household and commercial markets;
    ▪ Sampling design for both household and commercial markets;
    ▪ Approach to oversampling of ZEV owners;
    ▪ Survey sample stratification;
    ▪ Survey Instruments
    ▪ The 6 regions used for the 2015-2017 survey (see Attachment A);
Approach to incentive design in order to maximize response rate and minimize non-response bias;
Discussion of non-response bias, as well as other bias risks associated with survey and sample design, and approaches to dealing with them;
Approach to representation of non-English Californians;
Approach to increasing the accuracy of self-reported vehicle miles traveled (VMT), in the RP survey, and its fuel type dimensions (distribution between electric and gasoline miles, for instance);
Survey mode(s) and tools (Online Panel, email campaign, mail-in, web, smart phone apps, etc.);
Scope of survey instruments, including consumer knowledge and awareness of alternative fuel vehicle technologies and fuels;
Respondent recruitment procedures;
Approach to pre-test survey;
Data collection protocols;
Quality control procedures;
Logistics of survey execution;
Cleansing and coding of collected survey data;
Database and software format of delivered survey data
Project schedule, detailing the tasks and their associated dates and costs.

- Update the Work Plan as necessary throughout the Agreement, in consultation with the CAM.

**Deliverables:**
- Final Work Plan
- Updated Work Plan as necessary

**TASK 3: WEBSITE AND DATABASE DESIGN DEVELOPMENT**

The goal of this task is to develop both website and database management plans that accommodate the data obtained from the Energy Commission-CARB survey instruments.

**TASK 3.1 - SURVEY WEBSITE**
The goal of this task is to create a website for the 2018-2019 CVS respondents to complete the survey online. The final website design shall require approval by the CAM before its use in the 2018-2019 CVS and must be accessible to the CAM for the duration of the contract.

**The Contractor shall:**
- Create and maintain a secure and confidential website for all surveys, in both English and other languages if applicable, to allow respondents to complete the surveys via the Internet.
- Develop a description of the survey website for CAM approval. The description shall include:
  - The website’s appearance;
  - How the respondents will log into the website;
  - How the website will prevent multiple responses from the same individual;
  - How the respondents will complete the survey;
  - Whether or not both revealed and stated preferences will be completed in one website visit;
Whether or not click patterns will be monitored in pretest and/or main survey, and how it will be used;
- How the data will be stored securely; and
- How the website will be secure and remain confidential

- Develop a mock-up of survey website for CAM approval. The mock-up shall be a sketch of how each screen will look for the respondents.
- Provide the URL and screenshots of the survey website

**Deliverables:**
- Description of survey website
- Mock-up of survey website
- URL and screenshots of the survey website

**TASK 3.2 - SURVEY DATABASE DEVELOPMENT**

The goal of this task is to create a development plan for a database to populate and store survey responses. If necessary, the Contractor shall contact the survey respondent(s) by telephone, after completion of the survey, to obtain additional information or to modify and correct the collected data. The Contractor will be responsible for entering the responses from all survey modes (mail, phone, and online as applicable), into the database.

**The Contractor shall:**
- Prepare a database development plan for storing 2018-2019 CVS data.
- Create and maintain a database that stores all responses from the respondents.
- Populate and/or update the database on a weekly basis with survey responses from all survey modes, and monitor segment representation

**Deliverables:**
- Database development plan

**TASK 4: SURVEY DESIGN**

The goal of this task is to complete the survey designs and survey material for the 2018-2019 CVS. The joint Energy Commission-CARB draft survey instruments, as well as the sampling designs will be provided before the contract starts. Prior CVS instruments are available on the Energy Commission website’s survey page [http://www.energy.ca.gov/assessments/vehiclesurvey/](http://www.energy.ca.gov/assessments/vehiclesurvey/). Under this task, the Contractor shall develop the 2018-2019 CVS based on acceptable standards in the field, for this type of survey and model.

**TASK 4.1 - HOUSEHOLD SURVEY**

The goal of this task is to finalize survey designs and survey material for the 2018-2019 CVS household vehicle survey. The 2015-2017 CVS household vehicle survey resulted in over 3,600 completed stated preferences household surveys, including 315 PEV owners. The 2015-2017 CVS only considered those surveys to be complete if it had answers to all questions. In the 2009 CVS, almost half of the participants who completed the household RP survey chose to participate in the SP survey, resulting in about 3,200 completed SP surveys. The ratio of SP to RP survey has been raised significantly since the 2013 survey, when the two phases of survey (RP and SP) were combined into one for web-only participants.
The Contractor shall:
- Discuss any proposed revision to the household sampling plan document.
- Review and revise the household survey as needed, and suggest cost effective methods to complete the survey while maintaining the designated quality and quantity of the survey data.
- Prepare the household survey material to include the revisions approved by CAM.
- Develop quality control procedures for key variables that have been used to develop nested multinomial logistic utility equations. Quality includes, but is not limited to, corrections for misinformation from survey respondents, outlying data, and any other data collection and data entry errors. Contractor is responsible for the quality of the 2018-2019 CVS household vehicle survey data that it collects.
- Compose communications, subject to CAM review and approval, to inform all survey respondents that the survey information they provide will be held confidential by the Contractor and the Energy Commission pursuant to the California Information Practices Act and the signed non-disclosure agreement with the Energy Commission.
- Translate survey instrument and survey material into Spanish, as directed by the CAM.
- Maintain each respondent’s contact information in the event that further clarifications are needed from the respondents or survey responses appear to be internally inconsistent and/or unlikely to be correct.
- Include the survey designs, and survey instrument(s) for the 2018-2019 CVS household vehicle survey in the Task 4 Report (See Task 4.4)

Deliverables:
- Household survey material
- Draft communications regarding confidentiality
- Final communications regarding confidentiality
- Survey translation into Spanish

TASK 4.2 - COMMERCIAL VEHICLE SURVEY
The goal of this task is to complete the commercial vehicle survey and finalize sampling designs and survey instruments for the 2018-2019 CVS commercial vehicle survey. The 2009 CVS commercial vehicle survey resulted in 1800 completed stated preferences surveys and the ratio of RP to SP completed surveys was a little more than two to one. The 2013 commercial LDV survey resulted in over 2000 completed stated preferences survey, and a lower RP/SP ratio. The 2013 CVS included a web-only survey mode for the first time. The 2015-2017 survey resulted in 1712 completed SP surveys, including over 284 PEV owner surveys.

The Contractor shall:
- Discuss any proposed revision to the commercial sampling plan document and survey instrument.
- Develop quality control procedures for key variables that have been used to develop commercial multinomial logit models. Quality includes, but is not limited to, corrections for misinformation from survey respondents, outlying data, and any other data collection and data entry errors. The commercial fleet data required for estimation of the commercial vehicle choice models will be collected or generated by the Contractor, who must ensure their accuracy.
- Review and revise the survey as needed and suggest cost effective methods to complete the survey while maintaining the designated quality and quantity of survey data.
- Compose communications to inform all survey respondents that the survey information they provide will be held confidential by the Contractor and the Energy Commission.
pursuant to the California Information Practices Act and the signed non-disclosure agreement with the Energy Commission.

- Prepare the commercial survey material to include the revisions approved by CAM.
- Translate survey material and instruments into Spanish, as directed by the CAM
- Maintain each respondent’s telephone number, address, and e-mail in the event that further clarifications are needed from the respondents or survey responses appear to be internally inconsistent and/or unlikely to be correct.

**Deliverables:**
- Commercial survey material
- Draft communications regarding confidentiality
- Final communications regarding confidentiality
- Survey translation into Spanish

**TASK 4.3 - ZEV OWNER SURVEY**

The goal of this task is to design the California Zero-Emission Vehicle (ZEV) Owner Survey, targeting ZEV owners, encompassing plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs), and fuel cell electric vehicles (FCEVs). The contractor shall target 600 completed ZEV owner surveys and distribute it across both commercial and residential sectors. These survey participants will complete the ZEV owner add-on RP and SP surveys, in addition to the main RP and SP survey instruments.

The contractor shall:
- Discuss any proposed revision to the ZEV owner sampling plan document and survey instruments.
- Develop additional survey material for ZEV owner surveys, if necessary and as directed by CAM;
- Review and revise the survey as needed and suggest cost effective methods to complete the survey while maintaining the designated quality and quantity of survey data.

**Deliverables:** ZEV owner survey material

**TASK 4.4 - TASK 4 REPORT**

The goal of this task is to prepare a Task 4 Report.

The Contractor shall:
- Prepare a draft Task 4 Report for the CAM for review. The Task 4 Report shall include the following content:
  - Survey and sampling designs (revised) and survey instruments (revised) for the 2018-2019 CVS household vehicle survey;
  - Survey and sampling designs (revised) and survey instruments (revised) for the 2018-2019 CVS commercial fleet survey; and
  - Survey and sampling designs (revised) and survey instruments (revised) for the 2018-2019 CVS ZEV owner survey;
  - Communications prepared for the survey participant recruitment and retrieval for both surveys.
- Incorporate all changes and respond to all comments by the CAM in a final Task 4 Report.

**Deliverables:**
- Draft Task 4 Report
• Final Task 4 Report

TASK 5: SURVEY PRETESTS AND DESIGN OF FINAL SURVEY INSTRUMENTS
The goals of this task are to review, revise and execute the survey pre-test, and to finalize survey instruments and survey procedures.

The Contractor shall:
• The updated survey pre-test will be used to evaluate the draft survey instruments with regard to:
  o Clarity and effectiveness of the instructional cover message;
  o Time required by respondents to complete the questionnaire;
  o Respondent's reactions to the general appearance of the questionnaire (such as page layout, print size, etc.);
  o Ability of respondents to understand questions;
  o Reliability of each question to measure what is intended; and
  o Identify issues regarding placement and wording of sensitive questions.
• Provide a written description of the survey pre-tests to the CAM;
• Provide a final description of recommended pre-tests, based on comments from the CAM;
• Propose sample size for both commercial and household pretest surveys, as well as the regional distribution;
• Conduct the survey pre-tests;
• Distribute incentive payment for participating in the survey pre-test; and
• Log incentive payments and submit incentive logs as described in Task 1.3.
• Use the results of the pre-tests to revise the final survey instruments, material, and procedures;
• After conducting the pre-tests, prepare a draft Task 5 Report for the CAM.

The Task 5 report shall include:
  o Written description of the survey pre-tests; and
  o Results of the survey pre-tests.
• Based on comments from the CAM, prepare a final Task 5 Report.
• Submit the final PR and SP survey instruments and other materials, for both the main survey and the ZEV owner add-on surveys, as requested by the CAM.
• The survey instrument and material must be written at the sixth grade comprehension level.

Deliverables:
• Draft description of the survey pre-tests
• Final description of the survey pre-tests
• Log of incentive payments for the survey pre-tests
• Draft Task 5 Report
• Final Task 5 Report
• Final survey material and instruments for both the main survey and the ZEV owner surveys.

TASK 6: SURVEY RECRUITMENT, IMPLEMENTATION, RESPONSE CATEGORIES, AND DATA CORRECTION

The goal of this task is to execute the main survey, as well as the ZEV owner add-on surveys, compile and document the survey data, and analyze survey data quality during data collection.
The Contractor shall update the draft recruitment letter from the 2015-2017 CVS, recruit respondents, conduct the surveys, and categorize survey responses, including those responses that do not fit within predefined categories.

The survey data are critical to the Energy Commission’s modeling and analysis activities. A high standard of data collection and survey response classification is expected from the Contractor.

**The Contractor shall:**

- Prepare a draft recruitment letter/communication to notify respondents that the individual information they provide, while taking part in the survey, shall be held confidential by the Energy Commission and the Contractor pursuant to the California Information Practices Act and the non-disclosure agreement between the Contractor and the Energy Commission.
- Prepare final respondent recruitment letters/communications for each survey, based on comments from the CAM,
- Conduct the 2018-2019 CVS. During the survey execution, Contractor will:
  - Compile respondent responses.
  - Categorize the response data. The survey data shall include each respondent’s residence or cell phone number(s) and workplace telephone number(s), if they chose the option to respond.
  - Document and distribute all incentive payments to all survey participants.
  - Log incentive payments and submit a log of all incentive payments, as described in Task 1.3
  - Monitor survey representation of the targeted segments of California population on a weekly basis and take appropriate actions to ensure representativeness of the survey.
  - Prepare brief weekly survey implementation progress reports on recruitment and initial survey validity as the survey is in progress. These progress reports can be communicated via e-mail or posted on the Contractor’s project management portal. The weekly survey implementation progress reports should:
    - Discuss the current sample, describe the distribution of the parameters; where shortfalls exist (for example, not enough people sampled in a certain age range); and how to fix this shortfall, if necessary; and
    - Discuss how any shortfall affects the survey results.
    - Verify the survey data to ensure that information regarding vehicle ownership, transactions, and usage are accurate and complete;
    - Provide Zip code plus 4 for each survey respondent;
    - Create and submit draft household and commercial fleet survey data files in electronic format, using Excel or a comma-delimited text file, or as otherwise agreed upon between the Contractor and the CAM.
    - Incorporate any revisions to the draft survey data files, as indicated by the CAM, deliver final survey data files in electronic format;
    - Correct data entry or survey data errors in the resulting data files, as necessary
    - Prepare a draft Task 6 Report for the CAM. The Task 6 Report shall include:
      - Respondent recruitment letters/communications for the 2018-2019 CVS for both the household and the commercial surveys, and the ZEV owner surveys;
      - Limitations of survey and survey data; and
      - Documentation of data coding procedures used to categorize survey responses.
    - Prepare a final Task 6 Report, based on any revisions to the draft Task 6 Report as indicated by the CAM.
Note that the Energy Commission shall have the sole authority to release survey material, anonymized survey results, and other materials produced from this survey to outside parties.

**Deliverables:**
- Draft Recruitment Letters for both main surveys and the ZEV owner survey
- Final Recruitment Letters for both main surveys and the ZEV owner survey
- Survey participation incentive payment log
- Weekly survey implementation progress reports
- Survey data files, including data dictionaries
- Draft Task 6 Report
- Final Task 6 Report

**TASK 7: ANALYSIS OF DATA QUALITY AND SURVEY RESULTS**

The goal of this task is to analyze and assure the quality of the survey data and to complete a descriptive analysis of survey results. Under this task, the Contractor shall analyze and document the quality and content of the main survey data, as well as the ZEV owner add-on survey, both during and after the data collection tasks. The reporting of response or completion rates shall conform to the standards established by the Council of American Survey Research Organizations.

The **Contractor shall:**
- During data collection, prepare detailed statistical summaries of participation rates and similar indicators of quality and consistency, including:
  - Misinterpretation of collected data;
  - Other errors in transporting the data into the electronic format;
- After the data collection is complete, prepare summary statistics for each sample, including:
  - Number of contacts, participation rates, respondents who did not answer all questions fully, number of outliers (if any), size of individual outliers (if any), and any biased survey respondents or surveyors;
  - Any abnormal variances in the data and any noticeable patterns that suggest the possibility of erroneous data that would need to be investigated further;
  - Completed responses in each cell of the sampling stratification and completed response rates by question, cross-tabulated; and
  - Any other descriptors or question responses that deviates more than a reasonable rate from what would be expected.
- Prepare a draft Task 7 Report. The Task 7 Report shall include the following content:
  - Documentation of the statistical analyses performed and a detailed summary of the results from these analyses;
  - Methods used to check accuracy and make corrections to VMT estimates, by fuel type.
  - Descriptive analysis of the data with cross tabulations of different data items, for household, commercial and ZEV owners, by key variables and as requested by the CAM.
- Based on any revisions to the draft Task 7 Report indicated by the CAM, prepare a final Task 7 Report.

**Deliverables:**
- Draft Task 7 Report
### Schedule of Deliverables and Due Dates

<table>
<thead>
<tr>
<th>TASK</th>
<th>DELIVERABLE</th>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CONTRACT MANAGEMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Kick-Off Meeting</td>
<td>November 1, 2018</td>
</tr>
<tr>
<td>1.5</td>
<td>Monthly Progress Reports</td>
<td>The 15th of each month</td>
</tr>
<tr>
<td>1.6.2</td>
<td>Draft Final Report, Part 1</td>
<td>November 15, 2019</td>
</tr>
<tr>
<td></td>
<td>Final Report, Part 1</td>
<td>December 15, 2019</td>
</tr>
<tr>
<td>1.7</td>
<td>Signed confidentiality agreement for using DMV data</td>
<td>November 15, 2018</td>
</tr>
<tr>
<td></td>
<td>Signed non-disclosure agreement with the Energy Commission</td>
<td></td>
</tr>
<tr>
<td>2. WORK PLAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Final Work Plan</td>
<td>November 15, 2018</td>
</tr>
<tr>
<td>3. SURVEY WEBSITE, AND DATABASE DESIGN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Draft Task 3 Report</td>
<td>November 15, 2018</td>
</tr>
<tr>
<td></td>
<td>Final Task 3 Report</td>
<td>November 30, 2018</td>
</tr>
<tr>
<td></td>
<td>Description and mock-up of survey website, URL, and screenshots of the survey website</td>
<td>November 30, 2018</td>
</tr>
<tr>
<td></td>
<td>Database development plan</td>
<td>November 30, 2018</td>
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<tr>
<td>4. SURVEY DESIGN</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Draft Task 4 Report</td>
<td>November 15, 2018</td>
</tr>
<tr>
<td></td>
<td>Final Task 4 Report</td>
<td>November 30, 2018</td>
</tr>
<tr>
<td>5. SURVEY PRE-TESTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Draft description of the survey pretests</td>
<td>December 15, 2018</td>
</tr>
<tr>
<td></td>
<td>Final description of the survey pretests</td>
<td>December 30, 2018</td>
</tr>
<tr>
<td></td>
<td>Description of interviewer training procedures and materials</td>
<td>December 15, 2018</td>
</tr>
<tr>
<td></td>
<td>Complete and accurate log of incentive payments</td>
<td>December 30, 2018</td>
</tr>
<tr>
<td></td>
<td>Draft Task 5 Report</td>
<td>January 15, 2019</td>
</tr>
<tr>
<td></td>
<td>Final Task 5 Report</td>
<td>January 30, 2019</td>
</tr>
<tr>
<td></td>
<td>Final survey instruments and other material</td>
<td>January 30, 2019</td>
</tr>
<tr>
<td>6. SURVEY RECRUITMENT, IMPLEMENTATION, RESPONSE CATEGORIES AND DATA CORRECTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Draft Recruitment Letters</td>
<td>Jan 5, 2019</td>
</tr>
<tr>
<td></td>
<td>Final Recruitment Letters</td>
<td>Jan 15, 2019</td>
</tr>
<tr>
<td></td>
<td>Survey participation incentive payment log</td>
<td>March 15, 2019</td>
</tr>
<tr>
<td></td>
<td>Weekly survey implementation progress reports</td>
<td>Weekly from the beginning to the end of task 6</td>
</tr>
<tr>
<td></td>
<td>Household &amp; Commercial fleet survey data files</td>
<td>May 30, 2019</td>
</tr>
<tr>
<td></td>
<td>Draft Task 6 Report</td>
<td>May 15, 2019</td>
</tr>
<tr>
<td></td>
<td>Final Task 6 Report</td>
<td>May 30, 2019</td>
</tr>
<tr>
<td>7. ANALYSIS OF DATA QUALITY AND SURVEY RESULTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Draft Task 7 Report</td>
<td>June 15, 2019</td>
</tr>
<tr>
<td></td>
<td>Final Task 7 Report</td>
<td>June 30, 2019</td>
</tr>
</tbody>
</table>
Table A: Survey Regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Name</th>
<th>Counties in Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>San Francisco</td>
<td>Alameda, Contra Costa, Marin, Napa, San Mateo, Santa Clara, Solano, Sonoma, and San Francisco Counties</td>
</tr>
<tr>
<td>2</td>
<td>Los Angeles</td>
<td>Los Angeles, Orange, Imperial, Riverside, San Bernardino, and Ventura Counties</td>
</tr>
<tr>
<td>3</td>
<td>San Diego</td>
<td>San Diego County</td>
</tr>
<tr>
<td>4</td>
<td>Sacramento</td>
<td>El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba Counties</td>
</tr>
<tr>
<td>5</td>
<td>Central Valley</td>
<td>Fresno, Kern, Kings, Tulare, Madera, San Joaquin, Stanislaus, and Merced Counties</td>
</tr>
<tr>
<td>6</td>
<td>Rest of State</td>
<td>Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Monterey, Nevada, Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Tehama, Trinity, and Tuolumne Counties</td>
</tr>
</tbody>
</table>
RESOLUTION NO: 18-1003-6

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: RESOURCE SYSTEMS GROUP, INC.

RESOLVED, that the State Energy Resources Conservation and Development Commission (Energy Commission) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the Energy Commission approves Agreement 800-18-001 with Resource Systems Group, Inc. for a $645,579 contract to conduct a survey of California light-duty vehicle owners in the household and commercial markets. This includes a targeted survey of zero-emission vehicle owners in both markets, to assess the shifts in consumer preferences. The survey data will be used to update the vehicle choice models used in forecasting light-duty vehicles; and

FURTHER BE IT RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on October 3, 2018.

AYE: [List of Commissioners]
NAY: [List of Commissioners]
ABSENT: [List of Commissioners]
ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat