

CONTRACT REQUEST FORM (CRF)



A) New Agreement 600-12-012 (To be completed by CGL Office)

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Aniss Bahreinian	41	916-653-0381

C) Contractor's Legal Name	Federal ID Number
Regents of the University of California, Davis	94-6036494

D) Title of Project
Feasibility Study of Integrated Vehicle Choice and Utilization Model Option

E) Term and Amount	Start Date	End Date	Amount
	6 / 24 / 2013	6 / 30 / 2014	\$ 74,800

F) Business Meeting Information

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

ARFVTP agreements under \$75K delegated to Executive Director.

Proposed Business Meeting Date	06 / 12 / 2013	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Aniss Bahreinian	Time Needed:	5 minutes

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

Agenda Item Subject and Description

Possible approval of Agreement 600-12-012 with the Regents of University of California, Davis for a \$74,800 contract to evaluate options to integrate personal light duty vehicle choice and utilization models, using the survey results of the newly integrated 2013 Caltrans and Commission's travel and vehicle surveys of California households. The feasibility study will result in a set of final recommendations for model improvements that will improve forecast quality.

G) California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?

Yes (skip to question 2) 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 it only involves analysis of literature and data.

2. If Agreement is considered a "Project" under CEQA:

a) Agreement **IS** exempt. (Attach draft NOE)

Statutory Exemption. List PRC and/or CCR section number: _____

Categorical Exemption. List CCR section number: _____

Common Sense Exemption. 14 CCR 15061 (b) (3)

Explain reason why Agreement is exempt under the above section: _____

b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)

Check all that apply

<input type="checkbox"/> Initial Study	<input type="checkbox"/> Environmental Impact Report
<input type="checkbox"/> Negative Declaration	<input type="checkbox"/> Statement of Overriding Considerations
<input type="checkbox"/> Mitigated Negative Declaration	

H) List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)

Legal Company Name:	Budget	SB	MB	DVBE
	\$ 0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	\$ 0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	\$ 0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I) List all key partners: (attach additional sheets as necessary)

Legal Company Name:



J) Budget Information			
Funding Source	Funding Year of Appropriation	Budget List No.	Amount
State - ERPA	2012-2013	600.003	\$60,000
State - ERPA	2012-2013	600.004	\$14,800
Funding Source			\$
Funding Source			\$
Funding Source			\$
R&D Program Area: N/A		TOTAL:	\$74,800
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

K) Contractor's Administrator/ Officer				Contractor's Project Manager			
Name:	Ahmad Hakim-Elahi			Name:	David S. Bunch		
Address:	Office of Research Sponsored Programs 1850 Research Park Drive, Suite 300			Address:	One Shields Avenue University of California, Davis		
City, State, Zip:	Davis, CA 95618			City, State, Zip:	Davis, CA 95618		
Phone:	530-754-7700	Fax:	530-754-8229	Phone:	530-752-2248	Fax:	530-752-2924
E-Mail:	awards@ucdavis.edu			E-Mail:	dsbunch@ucdavis.edu		

L) Selection Process Used (For amendments, address amendment exemption or NCB, do not identify solicitation type of original agreement.)	
<input type="checkbox"/> Solicitation	Select Type Solicitation #: _____ - _____ # of Bids: _____ Low Bid? <input type="checkbox"/> No <input type="checkbox"/> Yes
<input type="checkbox"/> Non Competitive Bid	(Attach CEC 96)
<input checked="" type="checkbox"/> Exempt	Other Governmental Entity

M) Contractor Entity Type
<input type="checkbox"/> Private Company (including non-profits)
<input checked="" type="checkbox"/> CA State Agency (including UC and CSU)
<input type="checkbox"/> Government Entity (i.e. city, county, federal government, air/water/school district, joint power authorities, university from another state)

N) Is Contractor a certified Small Business (SB), Micro Business (MB) or DVBE?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
If yes, check appropriate box:	<input type="checkbox"/> SB <input type="checkbox"/> MB <input type="checkbox"/> DVBE

O) Civil Service Considerations
<input type="checkbox"/> Not Applicable (Agreement is with a CA State Entity or a membership/co-sponsorship)
<input type="checkbox"/> Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER)
<input checked="" type="checkbox"/> The Services Contracted:
<input type="checkbox"/> are not available within civil service
<input type="checkbox"/> cannot be performed satisfactorily by civil service employees
<input checked="" type="checkbox"/> are of such a highly specialized or technical nature that the expert knowledge, expertise, and ability are not available through the civil service system.
<input type="checkbox"/> The Services are of such an:
<input type="checkbox"/> urgent
<input type="checkbox"/> temporary, or
<input type="checkbox"/> occasional nature
that the delay to implement under civil service would frustrate their very purpose.
Justification:
Conduct of this study requires highly specialized field knowledge and expertises, currently not in place throughout the civil service system.

P) Payment Method
<input checked="" type="checkbox"/> A. Reimbursement in arrears based on:
<input type="checkbox"/> Itemized Monthly <input type="checkbox"/> Itemized Quarterly <input type="checkbox"/> Flat Rate <input checked="" type="checkbox"/> One-time
<input type="checkbox"/> B. Advanced Payment
<input type="checkbox"/> C. Other, explain:

Q) Retention	
1. Is Agreement subject to retention?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
If Yes, Will retention be released prior to Agreement termination?	<input type="checkbox"/> No <input type="checkbox"/> Yes



R) Justification of Rates

Negotiated agreement between Regents of UC and the Energy Commission.

S) Disabled Veteran Business Enterprise Program (DVBE)

1. Exempt (Interagency/Other Government Entity)
2. Meets DVBE Requirements DVBE Amount:\$ 0 DVBE %: _____
 Contractor is Certified DVBE
 Contractor is Subcontracting with a DVBE: Name of DVBE Company
3. Contractor selected through CMAS or MSA with no DVBE participation.
4. Requesting DVBE Exemption (attach CEC 95)

T) Miscellaneous Agreement Information

1. Will there be Work Authorizations? No Yes
2. Is the Contractor providing confidential information? No Yes
3. Is the contractor going to purchase equipment? No Yes
4. Check frequency of progress reports
 Monthly Quarterly Other... _____
5. Will a final report be required? No Yes
6. Is the Agreement, with amendments, longer than a year? If yes, why? No Yes

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

- | | | |
|---|---|--|
| 1. Exhibit A, Scope of Work | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> Attached |
| 2. Exhibit B, Budget Detail | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> Attached |
| 3. CEC 96, NCB Request | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> Attached |
| 4. CEC 30, Survey of Prior Work | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> Attached |
| 5. CEC 95, DVBE Exemption Request | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> Attached |
| 6. CEQA Documentation | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> Attached |
| 7. Resumes | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> Attached |
| 8. CEC 105, Questionnaire for Identifying Conflicts | | <input checked="" type="checkbox"/> Attached |

Agreement Manager

Date

Office Manager

Date

Deputy Director

Date

Exhibit A
SCOPE OF WORK

TASK LIST

Task #	CPR	Task Name
1	N/A	Administration
2		Model and Data Review
3		Model Integration Assessment
4		Final Recommendations

ACRONYMS/GLOSSARY

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

Acronym	Definition
CARB	California Air Resources Board
CARBITS	CARB and ITS vehicle choice model
CAM	Energy Commission Agreement Manager
CHTS	California Household Travel Survey
CSTDM	California Statewide Travel Demand Model
CVC	Commercial Vehicle Choice Model
CVS	California Vehicle Survey
Energy Commission	California Energy Commission
ITS	Institute for Transportation Studies
LDV	Light Duty Vehicle
MVSTAFF	Motor Vehicle Stock, Travel and Fuel Forecast
PVC	Personal Vehicle Choice Model
VMT	Vehicle Miles Traveled

BACKGROUND and PROBLEM STATEMENT

One of the California Energy Commission's (Energy Commission) responsibilities is to analyze, understand, and evaluate the impact of alternative transportation and fuel-related policies on future energy consumption in California. The majority of transportation fuel consumption originates from the operation of light duty vehicles (LDVs) by households, commercial fleets, and others to support a wide variety of activities, and the Energy Commission uses a number of inter-related computer-based behavioral models to generate forecasts of LDV fuel consumption arising from these activities. These models are also used to assess the potential impact of alternative transportation and energy policies on LDV fuel usage in the future. Policy evaluation is typically performed by first developing a baseline set of assumptions and an associated forecast for a specified planning horizon (e.g., 2013 to 2050) and then modeling how the forecast would change relative to the baseline under alternative assumptions and/or policy scenarios. Examples of alternative assumptions are different economic conditions, changes in demographic trends, or changes in availability and/or prices for fuel. Hypothetical examples of alternative policies could include: increased fuel taxes, feebate policies that incentivize purchase of vehicles with high fuel efficiency (while also imposing fees on purchase of vehicles with low fuel efficiency), improvements in travel-related infrastructure, increasing level of service for transit, or a fleet-average fuel efficiency requirement on new vehicle sales.

Travel-demand modeling of the type used by the Energy Commission has been the subject of ongoing research and development in academia, private industry, and government for decades. In addition to ongoing efforts to improve the state of modeling practice, changes in demographics, land-use patterns, economic and social conditions, transportation technology, and travel behavior, as well as shifts in policy goals have required ongoing data collection, analysis, and advances in modeling methodologies to improve the effectiveness of policy analysis. The purpose of this project is to investigate and make recommendations to the Energy Commission on how its modeling capabilities can be improved, primarily by using a rich new data set on travel behavior that is now being collected in California. Before discussing these data, it is helpful to briefly review the status quo on travel demand modeling at the Energy Commission.

The Energy Commission has developed a range of energy-related transportation models over the years that capture key drivers and elements of travel-related behaviors by households and others that ultimately lead to fuel consumption. For example, two key behaviors are the purchase decisions of households and commercial fleets for light-duty vehicles. A legacy model of household light-duty vehicle choice and usage (called CALCARS) has undergone ongoing modification and improvement using data collected from multiple incarnations of the California Vehicle Survey (CVS), and is now called the Personal Vehicle Choice (PVC) model. A related model for the commercial segment is the Commercial Vehicle Choice (CVC) model, which is used to forecast both vehicle purchases and Vehicle Miles Traveled (VMT).

Vehicle purchase decisions by households are affected by many factors, including the types of vehicles offered for sale by manufacturers in each new model year, how new and used vehicles are priced in the market place, the availability and cost of competing transportation fuels, the availability and performance characteristics of alternative transportation modes, the lifestyle choices and characteristics of various household types (including income, location, and place in the life cycle), etc. Demand for travel services in urban areas would depend on transit availability and service levels, which would, in turn, affect vehicle purchase decisions. Demand for intercity travel depends on a variety of factors such as alternative travel mode services (air, bus, rail) and perhaps improvements in road infrastructure. This demand, in turn, would affect vehicle purchase decisions. In addition to the PVC and CVC, the Energy Commission has an Urban Travel Model and an Intercity Travel Demand Model that it uses to forecast VMT for various transport modes that it uses in conjunction with the PVC to forecast household fuel consumption (the VMT module from CALCARS is no longer used). Finally, there has been an ongoing concern about the effects of congestion on fuel usage, which are not currently addressed by either of these models. (There is a separate Congestion model that exists to address this issue.)

These models and others have recently been re-deployed in DynaSim, a software application and database platform developed for the Energy Commission to support the ongoing development and use of travel-related models. The current implementation generally reflects the functionality of the legacy versions of the models described here. However, the DynaSim platform opens the possibility for tighter integration among different modeling modules to take into account the mutual interaction effects among different types of travel-related decisions. The current legacy models have been developed in a somewhat piecemeal fashion at different points in time using different sources and types of data as inputs. In many cases there are inconsistencies and incompatibilities across the legacy models in terms of theory, key variables assumed to drive behavior, and the level of detail used in the analysis (including level of geographical detail). The availability of new data, along with the potential for deploying new and more tightly integrated models in DynaSim, are the motivation for this project.

In earlier years two different types of surveys have been conducted related to vehicle purchase and travel behavior in California (particularly for households). The California Household Travel Survey (CHTS), conducted by Caltrans approximately every 10 years, collects data on Californians' travel behavior. Information on household demographics, vehicle ownership, and geographic location are collected, along with data from a travel diary for all members of the household. CVS focuses more specifically on the process of vehicle purchase decisions for both households and commercial fleet owners. The CVS includes stated choice experiments to collect data on preferences for different types of light duty vehicles and fuel technology types that might not yet exist in the current marketplace. These survey data have been collected every 2-3 years to update and extend the capabilities of the PVC and CVC. The timing of the latest CVS coincided with Caltrans' CHTS. The Energy Commission took advantage of this timing to field a survey that integrates data in the CVS with data in the CHTS, i.e., a sample of households recruited for the CHTS also provided responses to the CVS data. The result is a rich data set that integrates household travel and vehicle choice survey data from the two surveys, completed by the same households in the same survey year. This provides an opportunity for a major improvement to the Energy Commission's modeling capabilities. Previous legacy models that were developed independently in a piecemeal fashion can be replaced by a larger, coherent, internally consistent system of integrated sub-models that have been estimated using data collected from the same respondents at the same point in time. These circumstances also open the possibility for reviewing and comparing closely related models used by other agencies (e.g., Caltrans and California Air Resources Board (CARB)) to identify ways in which various types of assumptions and approaches to policy analysis could be made more consistent.

OBJECTIVES OF THE AGREEMENT

The main objective of this agreement is to conduct a project in which two academic experts in vehicle choice and travel demand modeling develop and provide recommendations for making major improvements to the Energy Commission's modeling capabilities afforded by the availability of the 2012-2013 integrated CHTS and CVS household survey data. The sub-objectives of the project include: (1) review the current legacy models, (2) review the data elements of the integrated survey, (3) establish possible options for replacing existing models with an improved specification, and (4) evaluate the relative merits of competing options. Implicit in these objectives is that an improved specification would not only replicate but enhance the modeling capabilities of the existing models by a combination of more recently developed modeling theories and methodologies and the unique properties of the integrated data set. The likelihood is that there will be no dominant option. For example, there might be options that offer more capabilities but also require more resources in terms of computational effort, model development expertise, and additional data sources beyond the survey data. In particular, the CARB's ITS vehicle choice model (CARBITS) has similar capabilities to the ones being explored here, but this model requires a much higher level of detail when defining new vehicle technology options.

FORMAT/REPORTING REQUIREMENTS

Deliverables/Reports

When creating reports, the Contractor shall use and follow, unless otherwise instructed in writing by the Energy Commission Agreement Manager (CAM), the latest version of the Consultant Reports Style Manual published on the Energy Commission's web site:

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

Each final deliverable shall be delivered as one original, reproducible, 8 ½" by 11", camera-ready master in black ink. Illustrations and graphs shall be sized to fit an 8 ½" by 11" page and readable if printed in black and white.

Electronic File Format

The Contractor shall deliver an electronic copy (CD ROM or memory stick or as otherwise specified by the CAM) of the full text in a compatible version of Microsoft Word (.doc).

The following describes the accepted formats of electronic data and documents provided to the Energy Commission as contract deliverables, and establishes the computer platforms, operating systems and software versions that will be required to review and approve all software deliverables (if applicable).

- Data sets shall be in Microsoft (MS) Access or MS Excel file format.
- PC-based text documents shall be in MS Word file format.
- Documents intended for public distribution shall be in PDF file format, with the native file format provided as well.
- Project management documents shall be in MS Project file format.

Software Application Development

If this scope of work includes any software application development, including but not limited to databases, websites, models, or modeling tools, contractor shall utilize the following standard Application Architecture components in compatible versions:

- Microsoft ASP.NET framework (version 3.5 and up) Recommend 4.0
- Microsoft Internet Information Services (IIS), (version 6 and up) Recommend 7.5
- Visual Studio.NET (version 2008 and up) Recommend 2010
- C# Programming Language with Presentation (UI), Business Object and Data Layers
- SQL (Structured Query Language)
- Microsoft SQL Server 2008, Stored Procedures Recommend 2008 R2
- Microsoft SQL Reporting Services Recommend 2008 R2
- XML (external interfaces)

Any exceptions to the Electronic File Format requirements above must be approved in writing by the Energy Commission Information Technology Services Branch.

TASK 1- ADMINISTRATION

The goal of this task is to clarify the terms and methods of managing the projects.

Task 1.1 Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement.

A kick-off meeting (as well as subsequent meetings) will be held in person or via WebEx (conference call). At the discretion of the CAM, the meetings will be held monthly, as specified in the project deliverable due dates. These meetings will be approximately one hour in duration

and will outline current findings, issues, or challenges as they emerge, and allow opportunities to resolve issues and develop contingency plans where needed.

The Contractor shall:

- Attend the “kick-off” meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the Accounting Office. The meeting will be held in Sacramento, CA and the CAM will designate the specific location. The Contractor shall include their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the CAM in this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting.
- If necessary, prepare an updated Schedule of Deliverables based on the decisions made in the kick-off meeting.

The CAM shall:

- Arrange the meeting including scheduling the date and time.
- Provide an agenda to all potential meeting participants prior to the kick-off meeting.

Deliverables:

- One-page summary document of Kick-Off meeting
- An Updated Schedule of Deliverables (if applicable)

TASK 1.2 Invoices

The Contractor shall:

- Prepare invoices for all reimbursable expenses incurred performing work under this Agreement in compliance with the Exhibit B of the Terms and Conditions of the Agreement. Invoices shall be submitted with the same frequency as progress reports (task 1.4). Invoices must be submitted to the Energy Commission’s Accounting Office.

Deliverables:

- Invoices

TASK 1.3 Manage Subcontractors

The goal of this task is to ensure quality products, to enforce subcontractor Agreement provisions, and in the event of failure of the subcontractor to satisfactorily perform services, recommend solution to resolve the problem.

The Contractor shall:

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

Task 1.4 Progress Reports

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

The Contractor shall:

- Prepare progress reports that summarize all Agreement activities conducted by the Contractor for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns.
 - Milestones met since previous progress meeting.
 - Milestones to be met before next progress meeting.
 - Issues arising since previous progress meeting.
 - Proposed resolution of issues and discussion of impacts to project.

Each progress report is due within 15 calendar days after the end of the reporting period. The CAM will provide the format for the progress reports.

The contractor shall also submit status emails upon request from the CAM.

Deliverables:

- Quarterly Progress Reports

Task 1.5 Final Report

The goal of this task is to prepare a comprehensive written Final Report that describes the original purpose, approach, results and conclusions of the work completed under this Agreement. The Final Report shall be prepared in language easily understood by the public or layperson with a limited technical background.

The Final Report must be completed before the termination date of the Agreement in accordance with the Schedule of Deliverables.

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

Task 1.5.2 Final Report**The Contractor shall:**

- Prepare the draft Final Report for this Agreement.
- Submit the draft Final Report for review and comment. The CAM will provide written comments to the Contractor. The Contractor shall review the comments and discuss any issues with the recommended changes with the CAM.
- Prepare and submit the Final Report, incorporating CAM comments.

Deliverables:

- Draft Final Report
- Final Report

TASK 2 - MODEL AND DATA REVIEW

The purpose of this task is to gain familiarity with the light duty vehicle choice and travel demand models currently used by the Energy Commission's Forecasting Unit, as well as the integrated data set, and place them in the context of current models identified in the existing literature. The Energy Commission will provide sample data as well as model documentation for the current light duty vehicle choice and travel demand models. The links for other statewide vehicle and travel models are included in the footnotes, below. The following items will be reviewed:

- Existing Energy Commission models
 - Urban model
 - Intercity model
 - Congestion module
 - PVC model
- Data elements of the travel-vehicle integrated data set
 - CHTS¹
 - CVS
- Other statewide travel and vehicle demand models
 - Caltrans California Statewide Travel Demand Model (CSTDM)²
 - Caltrans' Motor Vehicle Stock Travel, and Fuel Forecast model (MVSTAFF)³
 - CARBITS⁴

Task 2.1 – Report

The Contractor shall:

- Present a brief report with the following content:
 - Overview of the differences, similarities and links between both the existing statewide models and the input data used by these models.
 - The potential new model types that can be estimated using the integrated travel and vehicle survey data.
- Present Draft Task 2 report to the CAM for review and feedback.
- Present Final Task 2 report that will include a response to concerns, questions and issues raised in the meeting and email exchanges.

Deliverables:

- Draft Task 2 Report
- Final Task 2 Report

TASK 3 - MODEL INTEGRATION ASSESSMENT

The purpose of this task is to use the results from Task 2 to identify and specify specific options for new integrated models, and to assess the advantages and disadvantages of these options. Features of these options will consider (but not necessarily be limited to) the following:

- Estimating a new integrated vehicle choice and utilization model from the integrated travel-vehicle survey data.

¹ <http://www.dot.ca.gov/hq/tsip/tab/travelsurvey.html>

² <http://www.dot.ca.gov/hq/tsip/cstdm/index.html>

³ <http://www.dot.ca.gov/hq/tsip/tab/mvstaff.html>

⁴ http://www.arb.ca.gov/research/single-project.php?row_id=64667

- Evaluating the possibilities for establishing consistency and/or possible integration between inputs and/or outputs of the CSTDM with Energy Commission models of vehicle choice and usage.
- Evaluating the options for creating greater (or even complete) consistency between the CARB's CARBITS models and Energy Commission models.

This effort will identify the various advantages and disadvantages of competing options, including consideration of gains and losses in model fit, forecast accuracy, and policy analysis capabilities, as well as resource implications such as difficulty and expertise required for model estimation, maintenance and use, ongoing data requirements, computing resources, inter-agency communication, etc.

The Contractor shall:

- Prepare a brief report, including a table to compare and contrast the advantages and disadvantages of the above options.
- Present a Draft Task 3 report to the CAM for review and feedback.
- Present a Final Task 3 report that will include response to concerns, questions and issues raised by the CAM in the meeting and email exchanges.

Deliverables:

- Draft Task 3 Report
- Final Task 3 Report

TASK 4 - FINAL RECOMMENDATIONS

The purpose of this task is to prepare and present a report that integrates and summarizes the final reports from Task 2 and Task 3, and includes material in the form of final recommendations that will be beneficial for subsequent decision making by the Energy Commission. The final report shall follow the guidelines set in Task 1.5.

The final report shall contain the following sections:

- Summary of the status quo with respect to statewide travel demand modeling capabilities (including perhaps other agencies) that is oriented to the needs of the Energy Commission.
- Summary of specific modeling improvement options, including relative advantages and disadvantages.
- Final recommendations and comments to support future decision making by the Energy Commission.

Draft Task 4 report shall be presented to the CAM for review and feedback.

After delivering Task 4 report, Contractor shall meet with CAM, to discuss any potential questions, clarifications or issues.

Final Task 4 report shall include response to concerns, questions and issues raised in the meeting and email exchanges.

The Contractor Shall:

- Present the summaries and final recommendations to an interagency working group.

Deliverables

- Summaries and recommendations from this Task shall be included in the Final Report per Task 1.5

- Copy of presentation to an interagency working group

Deliverables Schedule

Task	Deliverable	Due Dates
1 - Agreement Management	Kick-Off Meeting Summary Monthly Progress Reports Email Status Update	Ongoing, starting in June 24, 2013
2 - Model and Data Review	Draft Task 2 Report Final Task 2 Report	August 15, 2013
3 - Assessment of Model Integration	Draft Task 3 Report Final Task 3 Report	September 15, 2013
4 - Final Recommendations	Draft Task 4 Report Final Task 4 Report Summaries and recommendations from this Task shall be included in the Final Report per Task 1.5 Copy of presentation to an interagency working group	December 30, 2013