CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

CONTRACT OPPORTUNITY NOTICE:
Vehicle Attributes Survey, Analysis, and Forecasts

The California Energy Commission (Energy Commission) staff will hold a public workshop to seek comments on a proposed contract to provide technical assistance to forecast the use of conventional and alternative fuels and vehicles in California. The Energy Commission intends to release a Request for Proposals (RFP) and/or Request for Offer (RFO) in the fall of 2012. Up to $590,000 may be available to support Energy Commission staff in conducting forecasts and analysis related to vehicle attributes. The purpose of the public workshop is to seek comments on the topics to be covered in the draft work statement. The public workshop will be held on:

MONDAY, JULY 30, 2012
9:00 AM
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, California
Hearing Room B
(Wheelchair Accessible)

Presentations and audio from the meeting will be broadcast via our WebEx web conferencing system. For details on how to participate via WebEx, please see the "Participation through WebEx" section at the end of this notice.

Background

The Energy Commission is directed by Public Resources Code Section 25301 to prepare a forecast of transportation fuel demand at least every two years to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. The data collected through this contract will be used as inputs in the transportation demand models used by the Energy Commission.

At this workshop, Energy Commission staff will present ideas and seek comments for an upcoming solicitation that may make available up to $590,000 in contract funding over a three year term. All of the funding is dependent on approval of the annual state budget and internal approval of contract funding. Forecasting analysis from this contract will be included in upcoming Integrated Energy Policy Reports.

A draft work statement is attached with this notice to provide further guidance to workshop participants regarding the scope of work that will be presented at the workshop and on which the Energy Commission seeks comments.

The Energy Commission invites interested parties to submit information by electronic mail (e-mail) for the following purposes:

- Provide comments on the draft work statement
- Indicate your desire to provide a five-minute presentation of your summary at the workshop followed by a five-minute discussion period with workshop attendees

Public Comment

Oral comments. Staff will accept oral comments during the workshop. Any comments may become part of the public record in this proceeding.

Written comments. Written comments should be submitted to Energy Commission's staff by 4:00 pm on August 13, 2012. Written comments will be also accepted at the workshop. All written comments will become part of the public record of this proceeding. Additionally, written comments may be posted to the Energy Commission's website for the proceeding.

The Energy Commission encourages comments by e-mail. Please include your name and any organization name. Comments should be in a downloadable, searchable format such as Microsoft® Word (.doc) or Adobe® Acrobat® (.pdf). Please indicate "CON – Vehicle Attributes Survey, Analysis, and Forecasts" in the subject line. Send comments to:

Laura.Lawson@energy.ca.gov

If you prefer, you may send a paper copy of your comments to:

California Energy Commission
c/o Laura Lawson
Transportation Energy Office, MS-41
Re: CON – Vehicle Attributes Survey, Analysis, and Forecasts
1516 Ninth Street
Sacramento, CA 95814-5512

Public Adviser and Other Commission Contacts

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission proceedings. If you want information on how to participate in this forum, please contact the Public Adviser's Office at PublicAdviser@energy.ca.gov or (916) 654-4489 (toll free at (800) 822-6228).

If you have a disability and require assistance to participate, please contact Lou Quiroz at lquiroz@energy.ca.gov or (916) 654-5146 at least five days in advance.

Media inquiries should be sent to the Media and Public Communications Office at mediaoffice@energy.ca.gov or (916) 654-4989.

If you have questions on the subject matter of this meeting, please contact Laura Lawson, Laura.Lawson@energy.ca.gov or (916) 651-1461.

Remote Attendance

Participation through WebEx, the Energy Commission's on-line meeting service

For computer logon with a direct phone number go to [https://energy.webex.com] and enter the unique meeting number 922 301 269, when prompted, enter your information and the password: meeting@9. After you login, a prompt will appear on-screen for you to provide your phone number. In the Number box, type your area code and phone number and click OK to receive a call back on your phone for the audio of the meeting. International callers can use the "Country/Region" button to help make their connection.

Participation for callers with an extension phone number

Go to [https://energy.webex.com] and enter the meeting number. When prompted, enter your information and the meeting password. **After you login, a prompt will ask for your phone number. CLICK CANCEL**. Instead call (866) 469-3239 (toll-free in the U.S. and Canada). When prompted, enter the meeting number above and your unique Attendee ID number which is listed in the top left area of your screen after you login. International callers can dial in using the "Show all global call-in numbers" link (also in the top left area).

Participation through audio only (no computer access)

Call (866) 469-3239 (toll-free in the U.S. and Canada) and when prompted enter the meeting number above. International callers can select their number from [https://energy.webex.com/energy/globalcallin.php]

If you have difficulty joining the meeting, please call the WebEx Technical Support number at (866) 229-3239. Please be aware that the meeting's WebEx audio and on-screen activity may be recorded.

DRAFT WORK STATEMENT

Details of Technical Tasks

The data collected through this contract will be used as inputs in the transportation demand models used by the Energy Commission and linked by the DynaSim software.

For this project, the Energy Commission will select a Contractor to forecast the vehicle technology attributes of vehicles to be offered for sale in California. The Energy Commission will use the data and analysis from this contract to support analysis required for implementing state policy goals to reduce petroleum dependence, increase use of alternative and renewable fuels, and reduce emissions of greenhouse gases.

Market Analysis and Vehicle Technology Data Survey

The Contractor shall obtain the following information by surveying vehicle manufacturers or using equivalent methods:

1. Plans to incorporate current and new vehicle technologies from 2012 to 2035, and
2. Anticipated vehicle classes and models that manufacturers will sell from 2012 to 2035 for light, medium, and heavy duty vehicles

The Commission Contract Manager will provide the Contractor with the report, research, and data from the light duty vehicle attribute projections and forecasts performed in 2011. Additionally, the Commission Contract Manager will provide the report, research, and data from the 2007 and 2009 light duty vehicle attribute projections and forecasts if desired. For each type of technology, the Contractor will compare the marginal cost of alternative fuel vehicle technology (relative to conventional fuel technology) to savings achieved via reduced gasoline and diesel consumption. The Contractor shall also compare the marginal cost of technology to improve fuel economy in gasoline vehicles to savings achieved via reduced fuel consumption. In addition, the Contractor shall compare the total lifetime vehicle and operating cost to the consumer or fleet user for each type of technology. Gasoline, diesel, and alternative fuel prices shall be taken into account in these comparisons. The Energy Commission Contract Manager shall provide the fuel prices to be used in these comparisons.

The Contractor shall report its research results to the Energy Commission in a Draft Market Analysis Worksheet, which shall describe the survey methodology, results, recommendations, data sources, and data. All information shall be provided in Microsoft Word or Microsoft Excel format. The projection data spreadsheets shall be formatted to meet DynaSim format needs.

The Contractor shall submit the Draft Market Analysis Worksheet to the Energy Commission for review and comment. The Energy Commission shall provide a minimum of two business days for the Contractor to submit revisions after receiving comments and feedback on the draft deliverable. The Contractor shall incorporate all comments and feedback in the Final Market Analysis Worksheet.

Historical Vehicle Attribute Data

For the light, medium, and heavy duty classes referenced in Appendix A, the Contractor shall use the information obtained from vehicle manufacturer research and other

sources of research to perform a baseline evaluation from 1992 to 2011, and a forecast for the years 2012 through 2035, of each of the following technologies or fuel types:

- Gasoline
- Gasoline Electric Hybrids
- Diesel
- Diesel Electric Hybrid
- Propane
- Plug-in Electric Gasoline Hybrids
- Compressed Natural Gas (CNG)
- Liquified Natural Gas (LNG)
- Dual Fuel – Gasoline and CNG
- Full Electric
- Hydrogen Vehicles

The Contractor shall develop a historical baseline of vehicle technology attributes by make and model from 1992 to 2011 for gasoline, diesel, gasoline electric hybrid, plug-in gasoline electric hybrid, full electric, propane, compressed natural gas, liquefied natural gas, and hybrid classes. The Contractor shall also provide this data aggregated by vehicle class. In addition, the Contractor shall forecast vehicle technology attributes from 2012 through 2035 for gasoline, gasoline electric hybrid, diesel, plug-in electric gasoline hybrid, flexible fuel, CNG, liquefied natural gas, diesel electric hybrid, full electric, propane, and hydrogen classes. Both the baseline and the forecast vehicle classes shall describe the mix of vehicles and classes available for sale in California. The attributes for the baseline and the forecast for light duty vehicles shall include, but are not limited to:

- Model year of vehicle
- Vehicle class of vehicle
- Number of individual makes and models
- Manufacturer suggested retail price (MSRP) of a new car expressed in 2011 U.S. dollars
- Fuel economy (on-road miles per gallon (mpg), or gasoline gallon equivalents (gge))
- Acceleration (seconds to 60 miles per hour)
- Annual new car maintenance cost in 2011 dollars, including fees for oil changes and regular maintenance
- Gradability (speed vehicle could maintain while climbing a 20-mile mountainous grade with full load)
- Range (The applicant shall report how range is determined specifying if it is all highway or a combined city/highway range estimate)
- Expected vehicle lifetime
- Passenger Seat Capacity (number of passengers)
- Trunk or Storage Space (in cubic feet)
- Time needed to complete full fueling or charging

The attributes for the baseline and the forecast for medium and heavy duty vehicles shall include, but are not limited to:

- Model year of vehicle
- Vehicle class of vehicle
- Body type (a component of vehicle class, e. g., bus type I, II, or III, tractor or straight truck, van, flatbed, tank, cement, garbage)
- Passenger Seat Capacity (number of passengers)
- Freight Capacity (in tons)
- Cargo Capacity (in cubic feet)
- Fuel economy (on-road miles per gallon (mpg), or gasoline gallon equivalents (gge))
- Annual fuel consumption in gasoline gallon equivalents (gge)
- Annual new vehicle maintenance cost in 2011 dollars, including fees for oil changes and regular maintenance
- Manufacturer Suggested Retail Price (MSRP) in 2011 dollars
- Range (The applicant shall report how range is determined specifying if it is all highway or a combined city/highway range estimate).
- Expected vehicle lifetime
- Gross Vehicle Weight
- Torque
- Torque to weight ratio

The Contractor shall identify and include in the baseline evaluation any additional vehicle or fuel attributes that would enhance the quality of the baseline evaluation and forecast.

The fuel economy estimates used by the Contractor must be consistent with the U.S. Environmental Protection Agency's revised methodology and must contain an explanation of the method used to estimate on-road mpg estimates.

The Contractor shall provide all details and assumptions regarding fuel economy estimates and duty cycles for vehicles using alternative fuels. For example, plug-in gasoline electric vehicles are able to run on both electricity and gasoline; the vehicle efficiency will depend on what portion of the time the vehicle uses electricity or gasoline. The Contractor shall provide details of the percentage of travel time the vehicle is using electricity only and the percentage of travel time the vehicle is using gasoline. The Contractor shall discuss blends whether and how the EPA's current testing of E15 gasoline will affect the forecasts. The Contractor shall discuss how the incorporation of B2 – B5 diesel blends will affect the forecasts. The Contractor shall also discuss the effect that updated EPA methodology will have on plug-in electric hybrid vehicle fuel economy estimates. For both gasoline hybrid and plug-in electric hybrid vehicles, the Contractor shall discuss current and future battery performance metrics i.e., cost/kWh, battery cycle life, battery calendar life, power density, and range deteriorations, affecting range and cost assumptions.

The Commission Contract Manager shall provide the Contractor with a DMV Guide File vehicle class definitions in order to ensure the development of light duty vehicle characteristics that are consistent with other Energy Commission analyses. Vehicle classes by make and model shall follow guidelines set forth in the guide file and all documents provided to the Contractor. These guidelines are used by multiple sources; hence consistency in all baseline and forecast data is critical. The Contractor shall meet and/or correspond with Energy Commission staff and/or other contractors as necessary in order to ensure consistent vehicle class definitions, and to reconcile model/vintage year in order to ensure consistent vehicle populations and classifications. Additionally, the Contractor shall adhere to the medium and heavy duty vehicle class definitions provided by the Commission Contract Manager.

California law requires that gasoline sold in the state of California be blended with 10 percent ethanol. All estimated fuel efficiencies shall take the lower energy content of fuel into consideration when estimating on-road fuel economies. The Contractor shall incorporate a 10 percent ethanol blend for all gasoline vehicles.

The Contractor shall use the vehicle class definitions provided by the California Energy Commission. This guide file will be used for allocating vehicles to the appropriate vehicle class in the DMV Vehicle Registration Database.

The Contractor shall provide mean historic values, for each vehicle class and fuel type:

- MSRP
- Fuel Economy
- Acceleration
- Number of Available Models
- Gradability

The Contractor shall develop a Historical Vehicle Data Worksheet of the historical baseline from 1992 to 2011 in Microsoft Excel. The worksheet shall contain four sections:

- Section 1: Historical Vehicle Class baseline from 1992 to 2011 aggregated by vehicle class
- Section 2: Historical Vehicle Class baseline data disaggregated by vehicle make, year, and model
- Section 3: Details and assumptions regarding fuel economy estimates and for alternative fuels
- Section 4: Details and assumptions explaining how disaggregated vehicle data is combined into vehicle classes

The Contractor shall submit the Draft Baseline Historical Vehicle Class Data Worksheet to the Commission Contract Manager for review and comment. The Contractor shall incorporate all feedback and comments in the Final Baseline Historical Vehicle Class Data Worksheet. The Energy Commission shall provide a minimum of two business

days for the Contractor to submit revisions after receiving comments and feedback on the draft deliverable.

Data shall be formatted to expedite data entry; the Commission Contract Manager will provide a Microsoft Excel template within one week after the Kickoff Meeting.

Deliverables:

- Draft Historical Vehicle Class Data Worksheet
- Final Historical Vehicle Class Data Worksheet

Technology Lists and Descriptors

The Contractor shall provide the Energy Commission with a Draft Vehicle Technologies Worksheet containing an updated list of vehicle technologies and a description of the attributes of these vehicle technologies. The Draft Vehicle Technologies Worksheet shall specify all technology updates that will be incorporated into vehicle attribute forecasts.

The Draft Vehicle Technologies Worksheet shall reflect recent vehicle and component technological advances, changes to California-specific market conditions, economy of scale manufacturing achievements, vehicle deployment market penetration, changes in applicable state or federal laws, regulations, and incentives, and shall use the most current California DMV and vehicle manufacturer data. The Draft Vehicle Technologies Worksheet shall also be consistent with recent California regulations. The vehicle technology updates shall serve to improve the reliability and defensibility of vehicle attribute forecasts by documenting recent technological changes and anticipated future technologies to be incorporated in the forecasts.

The worksheet shall include the different vehicle technologies that meet California's unique emission requirements. The worksheet shall include vehicle technology updates for each of the following fuel types:

- Gasoline
- Gasoline Electric Hybrids
- Diesel (fueled by Diesel)
- Diesel (fueled by Biodiesel)
- Diesel Electric Hybrid
- Propane
- Plug-in Electric Gasoline Hybrids
- Flexible Fuel (fueled solely by E85, a blend of 85% ethanol and 15% gasoline)
- Flexible Fuel (fueled solely by gasoline)
- Compressed Natural Gas (CNG)
- Liquefied Natural Gas (LNG)
- Dual fuel vehicles (fueled by gasoline and CNG)
- Full Electric
- Hydrogen Vehicles

The Contractor shall submit a Draft Vehicle Technologies Worksheet to the Commission Contract Manager in Microsoft Excel format for review and comment and the Contractor shall incorporate all feedback and comments in the Final Vehicle Technologies Worksheet. The Energy Commission shall provide a minimum of two business days for the Contractor to submit revisions after receiving comments and feedback on the draft deliverable.

Deliverables:

- Draft Vehicle Technologies Worksheet
- Final Vehicle Technologies Worksheet

Forecasted Data for Vehicle Attributes and Baseline Vehicle Classes

The Contractor shall provide vehicle attribute data for all cases provided to the Contractor from 2013 to 2035 to facilitate their use in the model. The Contractor shall project the number of models by class with special attention to the plans of manufacturers for alternative fuel vehicles. The Energy Commission will provide the economic input data necessary to execute each case. The Contractor shall complete all scenarios and cases and describe circumstances, conditions, and assumptions required for each scenario and case. The contractor shall provide a Microsoft Excel worksheet that includes, but is not limited to:

- All vehicle attribute data for all scenarios
- Forecasts of models by vehicle class.

The Contractor shall estimate growth rates for future makes and models for each vehicle class evaluated. The Contractor shall document the methodology used in obtaining these growth rates. Additionally, the Contractor shall validate their forecast by forecasting vehicle attributes from an earlier base year and comparing forecast results to actual data, noting and explaining any discrepancies between forecast and actual data.

The Contractor shall submit a Draft Vehicle Attribute Worksheet to the Commission Contract Manager for review and comment and the Contractor shall incorporate all feedback and comments into the Final Vehicle Attribute Worksheet. The Energy Commission shall provide a minimum of two business days for the Contractor to submit revisions after receiving comments and feedback on the draft deliverable.

The worksheet shall contain five sections:

- Section 1: Vehicle Class Attribute Data Forecast from 2013 to 2035 aggregated by vehicle class
- Section 2: Details and assumptions regarding fuel economy estimates and duty cycles for all alternative fuels. This section shall specify how data by vehicle make, model, and year is aggregated into data by vehicle class

- Section 3: Details and assumptions explaining how disaggregated vehicle data is combined into vehicle classes
- Section 4: Fuel economy forecasts for flexible fuel vehicles (FFVs) assuming they are fueled solely by gasoline
- Section 5: Fuel economy forecasts for flex-fuel vehicles assuming they are fueled by E85

Data shall be formatted to expedite data entry; the Commission Contract Manager will provide a Microsoft Excel template within one week after the Kickoff Meeting. The Contractor shall submit the Draft Vehicle Class Forecast Data worksheet to the Commission Contract Manager for review and comment. The Contractor shall incorporate all feedback and comments in the Final Vehicle Class Forecast Data worksheet. The Energy Commission shall provide a minimum of two business days for the Contractor to submit revisions after receiving comments and feedback on the draft deliverable.

Deliverables:

- Draft Forecast Vehicle Attribute Worksheet
- Final Forecast Vehicle Attribute Worksheet

Training and Public Workshop Participation

The Contractor shall periodically conduct data gathering and vehicle attribute assessments with Energy Commission staff identified by the Commission Contract Manager to share information about surveys, techniques, and evaluation methods. The Contractor shall present information on findings and conclusions at one public workshop for each Integrated Energy Policy Report (IEPR) cycle.

Deliverables:

- Data gathering and vehicle attribute assessments
- IEPR workshop presentation

Draft and Final Report

The Contractor shall prepare a Draft Report including the projected cost and fuel economy, improvement of technologies and an overview of expected availability and market penetration schedules of hybrid, plug-in hybrid, flex-fuel, diesel, diesel electric hybrid, CNG, LNG, full electric, propane, and hydrogen vehicles. The Draft Report shall also document how vehicle attribute data is aggregated from the make, model, and year level to the vehicle class level. The report shall discuss the cost, payback period, and total lifetime cost to the consumer or fleet user of fuel efficiency improvements and alternative fuel vehicle adoption. The report shall identify deployment trends and barriers impacting the adoption of alternative fuel market penetration. The report shall be prepared in language easily understood by the public or by a layperson with a limited technical background. The report shall document and explain all assumptions and data sources used to complete the survey and forecasts.

The Draft Report will follow the Energy Commission report format as specified by the Commission Contract Manager. The Commission Contract Manager will review the Draft Report, provide comments, and request changes as needed. The Contractor will then revise the Draft and submit a Final Report as directed by the Commission Contract Manager.

After review and approval of the Final Report by the Commission Contract Manager, the Contractor shall deliver an electronic copy of the report to the Commission Contract Manager. The Contractor shall deliver an electronic copy of the full study text in Microsoft Word, which shall be consistent with Energy Commission standards. The Energy Commission shall maintain but may not necessarily exercise all ownership rights to the final report including but not limited to possession, distribution, use, reproduction, and publication.

Deliverables:

- Draft Report
- Final Report

Deliverables and Due Dates:

Task	Deliverable	Due Date
1	Kick-off Meeting Summary	One day after Kick-off Meeting
	Status Emails (when requested)	With 1 week of request, unless otherwise specified
	Progress Meeting and Progress Report	February 14, 2013 and by the 15th of each subsequent month through the term of the contract
2	Draft Market Analysis Worksheet	May 17, 2013
	Final Market Analysis Worksheet	May 27, 2013
	Draft Baseline Historical Vehicle Class Data Worksheet	February 21, 2013
	Final Baseline Historical Vehicle Class Data Worksheet	March 5, 2013
	Draft Forecast Vehicle Class Data Worksheet	March 12, 2013
	Final Forecast Vehicle Class Data Worksheet	March 19, 2013
4	Draft Vehicle Technologies Worksheet	April 5, 2013
	Final Vehicle Technologies Worksheet	April 12, 2013
5	Draft Vehicle Attribute Worksheet	April 19, 2013
	Final Vehicle Attribute Worksheet	April 30, 2013
6	IEPR Workshop Presentation	Fall 2013 (exact date tbd)
7	Draft 2013 Vehicle Attributes Final Report	December 16, 2013
	Final 2013 Vehicle Attributes Report	January 31, 2014
8	Final 2013 IEPR Meeting and Presentation Summary	March 3, 2014

Note: Similar deliverables and due dates will be assigned for the 2015 IEPR cycle.

Appendix A:
Light Duty Vehicle Class Definitions

Numerical Class	Car Classes	Interior Volume Definition	Example Models
1	Subcompact (1-6000 lbs)	Less than 89 cu ft	Toyota Echo, Hyundai Accent, VW Golf
2	Compact (1-6000 lbs)	89 to 95 cu ft	Honda Civic, Chevy Cavalier, Ford Focus
3	Midsize (1-6000 lbs)	96 to 105 cu ft	Honda Accord, Ford Taurus, Toyota Camry
4	Large (1-6000 lbs)	Over 105 cu ft	Buick LeSabre, Ford Crown Victoria
5	Sport (1-6000 lbs)	Two door high performance subcompact cars (Wt/HP ratio less than 18)	Ford Mustang, Chevy Camaro, Toyota Celica
6	Cross Utility - Small (1-6000 lbs) (See Note 1)	Small Wagons (Passenger volume less than 95 cu ft) with flexible seating (Fold down rear seat to provide flat floor to front seat)	Chrysler PT Cruiser, Toyota Matrix
	Light Truck Classes		
7	Cross Utility - Small (1-6000 lbs) (See Note 1)	Unibody SUV less than 140 cu ft	Toyota RAV4, Honda CRV, Ford Escape
8	Cross Utility - Midsize (1-6000 lbs)	Unibody SUV over 140 cu ft	Toyota Highlander, Honda Pilot, Lexus RX300
9	Sports Utility - Compact (1-6000 lbs)	Body on Frame SUV less than 140 cu ft	Chevy Blazer, Nissan Xterra, Isuzu Amigo
10	Sports Utility - Midsize (1-6000 lbs)	Body on Frame SUV 140 to 180 cu ft	GMC Envoy, Dodge Durango, Isuzu Trooper
11	Sports Utility - Large (6001 - 8500 lbs)	Body on Frame SUV over 180 cu ft	Chevy Tahoe, Toyota Sequoia, Ford Expedition
11	Sports Utility - Heavy (8501 - 10000 lbs)	Body on Frame SUV over 180 cu ft and 8501 to 10000 GVW	Chevy R2500 Suburban, Ford Excursion
12	Van - Compact (1-6000 lbs)	Less than 180 cu ft	Ford Windstar, Dodge Caravan, Honda Odyssey
13	Van - Large (6001-8500 lbs)	Over 180 cu ft	Ford Econoline, Chevy Express, Dodge RamVan
13	Van - Heavy (8501-10000 lbs)	Over 180 cu ft and 8501 to 10000 GVW	Chevy Express Van G30, Ford Comm Strip E350, Dodge Ram Van b350
14	Pickup - Compact (1-6000 lbs)	Inertia Wt less than 4250 lbs (2WD); IWT = curb wt + 350 lbs rounded to nearest 250 lbs)	Chevy S10, Ford Ranger, Nissan Frontier
15	Pickup - Standard (6001-8500 lbs)	Inertia Wt over 4250 lbs (2WD)	Ford F150, GMC Sierra, Toyota Tundra
15	Pickup - Heavy (8501-10000 lbs)	Inertia Wt over 4250 lbs (2WD) and 8501 to 10000 GWV	GMC Sierra C3500, Dodge D300/350, Ford F350

Note 1:
Cross Utility - Small is bifurcated into "Car" and "Truck" due to CAFÉ differences. Manufacturers vary in their designation of "car" vs. "truck" for cross-utility vehicles to suit their particular CAFÉ needs. CAFÉ regulations apparently provide this latitude based on particular characteristics of the vehicle's floor slant.

Medium and Heavy Duty Vehicle Class Definitions

Gross Vehicle Weight Ratings (GVWRs)

Passenger Van (GVWR 1 or 2)
Passenger Van (GVWR 3)
Bus (including trolleybus) between 16 and 35 passengers
Bus (including trolleybus) between 35 and 45 passengers
Unarticulated Bus (including trolleybus) over 45 passengers
Articulated Bus (including trolleybus)
Motor Coach (including articulated)

Straight Truck Class 3-5 (10001 - 19500 lbs.) Other
Straight Truck Class 3-5 (10001 - 19500 lbs.) Dump etc.
Straight Truck Class 3-5 (10001 - 19500 lbs.) Van
Straight Truck Class 6 (19501 - 26000 lbs.) Dump etc.
Straight Truck Class 6 (19501 - 26000 lbs.) Other
Straight Truck Class 6 (19501 - 26000 lbs.) Platform/Flat
Straight Truck Class 6 (19501 - 26000 lbs.) Tank
Straight Truck Class 6 (19501 - 26000 lbs.) Van
Straight Truck Class 7 (26001 - 33000 lbs.) Cement Mixer
Straight Truck Class 7 (26001 - 33000 lbs.) Other
Straight Truck Class 7 (26001 - 33000 lbs.) Platform/Flat
Straight Truck Class 7 (26001 - 33000 lbs.) Tank
Straight Truck Class 7 (26001 - 33000 lbs.) Van
Straight Truck Class 8 (over 33000 lbs.) Cement Mixer
Straight Truck Class 8 (over 33000 lbs.) Dump etc.
Straight Truck Class 8 (over 33000 lbs.) Other
Straight Truck Class 8 (over 33000 lbs.) Platform/Flat
Straight Truck Class 8 (over 33000 lbs.) Tank
Straight Truck Class 8 (over 33000 lbs.) Van
Tractor Trailer Double Trailer Type Dump
Tractor Trailer Double Trailer Type Other
Tractor Trailer Double Trailer Type Platform/Flat
Tractor Trailer Double Trailer Type Van
Tractor Trailer Single Trailer Type Other
Tractor Trailer Single Trailer Type Platform/Flat
Tractor Trailer Single Trailer Type Tank
Tractor Trailer Single Trailer Type Van