



State of California
California Energy Commission
DUTY STATEMENT
CEC-004 (Revised 4/2024)

Classification: Research Data Specialist III

Working Title: Data Visualization and Strategic Insights Specialist

Position Number: 535-860-5770-004

Division/Branch or Office: Energy Assessments Division/Fuels Analysis Branch – Transportation Fuels Data Collection Unit

Collective Bargaining Identifier (CBID): R01

Work Week Group (WWG): E

Date Approved: September 3, 2026

Conflict of Interest (COI): ☐ Yes ☒ No

If yes, this position is responsible for making or participating in the making of governmental decisions that may potentially have a material effect on personal financial interests. The appointee is required to complete Form 700 within 30 days of appointment, which identifies pertinent personal financial information.

Job Description

Under the general direction of the Program and Project Supervisor in the Transportation Fuels Data Collection Unit within the Energy Assessments Division (EAD), the incumbent performs at the advisor level and serves as a top subject matter expert on data visualization, strategic data analysis, business intelligence, and data storytelling for California transportation fuels at a high degree of independence, initiative, and judgement. The incumbent serves as a prime resource for the EAD to transform complex transportation fuel data into clear, accurate, and actionable information for management, Commissioners, policymakers, stakeholders, and the public. The incumbent will work on high-profile projects to acquire, analyze, and disseminate sensitive transportation fuel information collected under the Petroleum Industry Information Reporting Act (PIIRA), Senate Bill 1322, Senate Bill X1-2, Assembly Bill X2-1, Senate Bill 237, Senate Bill 767, associated regulations, and other transportation fuels. The incumbent conducts broad analytical and comprehensive work requiring specialized expertise in data visualization, statistical analysis, dashboard development, data architecture, business intelligence, and strategic communication. The incumbent may serve as a liaison for divisions and units and provide expert guidance on the development and presentation of transportation fuel information.

Essential Duties

30% **Technical Lead:** Serve as a highly skilled specialist using novel processes, methods, and techniques to design and manage advanced data visualization, analytical, dashboard, and strategic information products for transportation fuels, as determined by EAD management. Plan, design, and implement major, complicated research and statistical projects including interactive dashboards, executive reporting tools, automated visualizations, analytical applications, and other products that integrate refinery, inventory, pricing, production, imports, exports, pipeline, crude oil, maintenance, and other transportation fuel data. Provide expert

guidance on difficult data analysis issues to demonstrate to top administration how these products can be improved and made more effective in support of EAD's transportation fuel data collection, market monitoring, supply reliability, regulatory, and policy responsibilities. Follow policy guidance to develop and implement methods to integrate and analyze multiple datasets to produce results and ensure information needs are met. Identify relationships and trends in key metrics such as accuracy, reliability, replicability, scalability, and usability, and provides expert consultation services in data analysis. The incumbent will establish visualization standards, analytical methods, quality-control practices, and approaches for communicating complex and sensitive transportation fuel information. Provide technical leadership in the use of Tableau, Microsoft Power BI, Python, R, SQL, Excel, or comparable analytical and visualization tools.

- 20% **Project Management:** Serve as a senior advisor and special projects coordinator for department and office-wide efforts to compile, organize, and manage shared information for the transportation fuel data visualization, analytical reporting, and strategic decision support. Work closely with EAD management to ensure the scope and direction of each project is in alignment with policy goals or leadership direction, that the analytics are accurate and meet quality standards, and that support staff and offices are engaged when necessary. Demonstrate effective leadership techniques and project management principles to monitor project progress, ensure oversight of deliverables/outcomes, and conduct final project evaluations. Utilize a systematic, critical, and analytical approach to managing data collection and querying to support a more comprehensive information clearinghouse. Projects include data coalescing and tracking mechanisms, descriptive and exploratory data analytics, identifying resources for current and future energy studies, liaising with state partners, and coordinating efforts. The incumbent will also coordinate development and modernization of recurring analytical products and dashboards and ensure that data products align with business requirements, statutory responsibilities, data governance standards, and management priorities.
- 15% **Data Analysis:** Independently conduct the more complex statistical analyses of petroleum and transportation fuel data collected or maintained by EAD, including refinery production, inventories, prices, sales, crude oil receipts, imports and exports, refinery maintenance, pipelines, and other transportation fuel market and infrastructure information by staff in the EAD, as well as stakeholders such as the Deputy Directors, Directors, Executive Office, Vice Chair's Office, Chair's Office, Commissioners Offices, Governor's Office, and other related agencies including CNRA, Public Utilities Commission, and Air Resources Board, etc. Present results to stakeholders and summarize results in dashboards, executive briefings, reports, regulatory analyses, the Transportation Fuels Assessment, Transportation Fuels Transition Plan, public-facing products, and other CEC analytical products.
- 10% **Consultation and Collaboration:** Provide expert consultative services on the feasibility and potential impact of energy research projects on topics related to transportation fuel data visualization, analytics, business intelligence, data communication, and strategic reporting. Perform complex and formal research, conduct comparative analysis and reporting, and work closely with EAD, other divisions, and state partners to execute complex research studies in the transportation fuel markets, supply reliability, petroleum infrastructure, and regulatory reporting. The incumbent will also advise management, analysts, engineers, economists, data

collection staff, and other subject matter experts on how to organize, visualize, and communicate complex analytical findings. Collaborate with CEC information technology, communications, and web staff as necessary to develop reliable and effective internal and public-facing analytical products.

- 10% **Outreach and Engagement:** Serve as the prime resource for management and is responsible for planning, organizing, designing, and directing major and complex research and projects, including making recommendations, decisions, and taking action with minimal guidance, providing reports upon completion, and providing ideas on future projects. Develop a thorough understanding of the opportunities and limitations for specific needs of CEC and advise management regarding those opportunities, capabilities, and limitations to support changes in processes. Actively lead interactions with internal and external stakeholders, participating in divisional, inter-divisional, and inter-agency research projects, including coordinating meetings and training sessions. Participate in CEC workshops and other forums as necessary. Stay in direct contact with external and internal stakeholders, independently and with limited direction, to ensure complex and sensitive research and projects are tracked and policy needs are met.
- 5% **Public Relations:** Respond to complex, energy-related inquiries from the public, from other agencies, or from within the CEC, performing ad hoc analysis when necessary.
- 5% **Budget Support:** Serve as a fiscal advisor and liaison for divisions and units by supporting budgetary needs, identifying constraints, and researching financial opportunities for contract-managed projects. Independently complete Budget Change Proposals, program analysis, and other fiscal application processes to articulate and justify the necessity for funding. Present quantitative and qualitative data visually using charts, graphs, tables, and other appropriate methods in order to complete reports, develop presentations, and provide recommendations to EAD, Commissioners, and other governmental agencies on the fiscal needs.

Marginal Duties

- 5% Perform other duties as required, consistent with the specifications of the classification.

Working Conditions

The CEC supports a hybrid workplace model with office-based and remote-centered workers. Limited in-person attendance and occasional travel may be required based on the needs of the division. Regular and consistent attendance is essential to successful performance. This position is remote-centered, which means the incumbent works 50 percent or more of their time from an alternate work location.

Diversity and Inclusion Statement

Serving all Californians, the CEC embodies diversity, equity, and inclusion, and has taken an active and meaningful role in creating an environment that enables each employee to thrive

Employee's Acknowledgement: I certify that I am able to perform, with or without the assistance of a reasonable accommodation, the essential duties of this position.

Employee's Name (Print): _____

Employee's Signature: _____ **Date:** _____

Supervisor's Acknowledgment: I certify this duty statement represents a current and accurate description of the essential functions of this position. I have discussed the duties of this position with and provided the above-named employee a copy of this duty statement.

Supervisor's Name (Print): David Stout _____

Supervisor's Signature: _____ **Date:** _____



State of California
California Energy Commission
DUTY STATEMENT
CEC-004 (Revised 4/2024)

Classification(s): Research Data Specialist II

Working Title: Data Visualization and Strategic Insights Specialist

Position Number: 535-860-5758-XXX

Division/Branch or Office: Energy Assessments Division/Fuels Analysis Branch –
Transportation Fuels Data Collection Unit

Collective Bargaining Identifier (CBID): R01

Work Week Group (WWG): E

Date Approved: September 3, 2026

Conflict of Interest (COI): ☐ Yes ☒ No

If yes, this position is responsible for making or participating in the making of governmental decisions that may potentially have a material effect on personal financial interests. The appointee is required to complete Form 700 within 30 days of appointment, which identifies pertinent personal financial information.

Job Description

Under the general direction of the Program and Project Supervisor in the Transportation Fuels Data Collection Unit within the Energy Assessments Division (EAD), the incumbent serves as a prime resource and subject matter expert on data visualization, transportation fuel analytics, business intelligence, and data storytelling to develop recommendations, design, and direct the more complex research projects to improve existing products and processes that support the overall analytical needs for EAD. The incumbent conducts research and analyses to produce dashboards, visualizations, analytical tools, reports, and strategic data products that communicate California transportation fuel conditions and trends. As a subject matter expert, the incumbent makes recommendations for potential improvements to products or processes that support the overall analytical needs and strategy for EAD.

Essential Duties

30% **Program Support and Research:** Use novel processes, methods, and techniques in transportation fuel data visualization, business intelligence, and strategic analytics, as determined by EAD management. Independently use existing analytical products built in Microsoft Excel, Tableau, R, Python, or similar statistical program to maintain and enhance the products' effectiveness and impacts. Develop and implement methods to integrate and analyze multiple datasets to produce results. Improve key metrics such as accuracy, reliability, replicability, scalability, and usability. Create summary tables and charts to communicate data in reports and presentations, or for the CEC webpage. Track research to identify data and analytical tools and is responsible for planning, designing, organizing, and conducting analyses that will be used in the transportation fuel market monitoring, data collection, supply reliability assessments, regulatory implementation, and policy analysis. The incumbent also develops and maintains dashboards, automated

reporting tools, visualizations, charts, maps, and other data products using refinery production, inventories, prices, crude oil, imports, exports, sales, pipeline, refinery maintenance, and other transportation fuel datasets.

- 20% **Technical Lead:** Serve as a highly skilled specialist using novel processes, methods, and techniques to design and manage complex data visualization and analytical products for transportation fuels, as determined by EAD management. Plan, design, and implement major, complicated research and statistical projects including interactive dashboards, recurring analytical reports, visual data products, and tools used to monitor transportation fuel supply and market conditions. Provide expert guidance on difficult data analysis issues to demonstrate to top administration how these products can be improved and made more effective in support of EAD's transportation fuel data collection, market monitoring, regulatory, and analytical responsibilities. Follow policy guidance to develop and implement methods to integrate and analyze multiple datasets to produce results and ensure information needs are met. Identify relationships and trends in key metrics such as accuracy, reliability, replicability, scalability, and usability, and provides expert consultation services in data analysis. The incumbent will also be responsible for applying appropriate visualization and data-storytelling techniques to make complex technical information understandable to both technical and nontechnical audiences.
- 20% **Data Analysis:** Independently conduct the more complex statistical analyses of transportation fuel data maintained or collected by EAD, including refinery production, inventories, prices, sales, crude oil receipts, imports and exports, maintenance, pipeline information, and other market and operational data by staff in EAD, as well as stakeholders such as other state agencies, regulated entities, contractors, and transportation fuel market participants by staff in the EAD, as well as stakeholders such as the Division Leadership, Executive, Commissioners, Chair, Vice Chair offices. Present results to stakeholders and summarize results in the dashboards, reports, presentations, executive briefings, public-facing products, and other EAD analytical products. The incumbent will also be responsible for analyzing and integrating multiple datasets to identify trends, anomalies, relationships, and emerging transportation fuel supply conditions. Develop repeatable processes to improve the timeliness, accuracy, quality, and usability of analytical products.
- 10% **Outreach and Engagement:** Serve as the prime resource for management and is responsible for designing and directing major and complex research and projects, including making recommendations, decisions, and taking action with minimal guidance, providing reports upon completion, and providing ideas on future projects. Develop a thorough understanding of the opportunities and limitations for specific needs of CEC and advise management regarding those opportunities, capabilities, and limitations to support changes in processes. Actively lead interactions with internal and external stakeholders, participating in divisional, inter-divisional, and inter-agency research projects, including coordinating meetings and training sessions. Participate in CEC workshops and other forums as necessary. Stay in direct contact with external and internal stakeholders, independently and with limited direction, to ensure complex and sensitive research and projects are tracked and policy needs are met.
- 10% **Document Management:** Develop reports detailing all work performed with minimal guidance. Catalog, document, and organize all work products and project artifacts,

including software, presentations, invoices, and draft and final reports, for future use and reference by CEC.

5% **Public Relations:** Respond to complex, energy-related inquiries from the public, from other agencies, or from within the CEC, performing ad hoc analysis when necessary.

Marginal Duties

5% Perform other duties as required, consistent with the specifications of the classification.

Working Conditions

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Diversity and Inclusion Statement

Serving all Californians, the CEC embodies diversity, equity, and inclusion, and has taken an active and meaningful role in creating an environment that enables each employee to thrive

Employee's Acknowledgement: I certify that I am able to perform, with or without the assistance of a reasonable accommodation, the essential duties of this position.

Employee's Name (Print): _____

Employee's Signature: _____ **Date:** _____

Supervisor's Acknowledgment: I certify this duty statement represents a current and accurate description of the essential functions of this position. I have discussed the duties of this position with and provided the above-named employee a copy of this duty statement.

Supervisor's Name (Print): David Stout _____

Supervisor's Signature: _____ **Date:** _____