



## CALIFORNIA TRANSPORTATION COMMISSION DUTY STATEMENT

<b>CLASSIFICATION TITLE</b> Research Data Specialist I	<b>DISTRICT/DIVISION/OFFICE</b> California Transportation Commission	
<b>WORKING TITLE</b> Research Data Specialist	<b>POSITION NUMBER</b>	<b>EFFECTIVE</b> 11/01/2021

### GENERAL STATEMENT:

The California Transportation Commission (Commission) is an independent public agency dedicated to ensuring a safe, financially sustainable, world-class multimodal transportation system that reduces congestion, improves the environment, and facilitates economic development through the efficient movement of people and goods. The Commission is responsible for the programming and allocating of funds for the construction of highway, passenger rail and transit improvements throughout California. The Commission also advises and assists the Secretary of the California State Transportation Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs.

The Research Data Specialist, under the direction and supervision of the Associate Deputy Director or the Assistant Deputy Director, will develop and manage data and data tools, perform independent technical research and make recommendations, manage general Trade Corridor Enhancement Program and Road Charge Program functions, make presentations to the Commission and Road Charge Technical Advisory Committee, and perform other duties as required. The incumbent is expected to consistently exercise a high degree of initiative, independence, and originality in performing assigned tasks. All duties are to be performed in accordance with Commission policies.

**TYPICAL DUTIES:**

Percentage Job Description  
 Essential (E)/Marginal (M)<sup>1</sup>

30% E	<p><b>Develop and manage transportation data and data tools</b></p> <ul style="list-style-type: none"> <li>• Identify data sources and tools needed to support freight planning and policy, road usage charge, and other California Transportation Commission activities, and obtain data and resources accordingly.</li> <li>• Develop needed data tools, such as spreadsheets, GIS maps, or modeling tools.</li> <li>• Become a subject matter expert in freight data and frequently used data tools.</li> <li>• Complete and present technical work such as trend analyses and forecasts.</li> <li>• Develop processes for gathering, analyzing, and interpreting data.</li> <li>• Develop recommendations based on data. Develop data visualization tools.</li> <li>• Develop contacts with academics, regional agencies, and others as necessary to carry out workload.</li> </ul>
25% E	<p><b>Independent technical research</b></p> <ul style="list-style-type: none"> <li>• Research, organize, analyze, and prepare recommendations on various technical topic areas such as sources of alternative energy, freight transportation infrastructure needs, California commodities and economics, various road charge topics, and other topics as needed.</li> <li>• Become familiar with specialized knowledge such as battery optimization methods or telematics security standards and be able to articulate issues, provide options, and recommend courses of action.</li> <li>• Compare and contrast various methods, ideas, and strategies.</li> </ul>
25% E	<p><b>Support Trade Corridor Enhancement Program and Road Charge Program</b></p> <ul style="list-style-type: none"> <li>• Review items and make recommendations.</li> <li>• Maintain a working understanding of the policies, procedures, issues, work items, and deadlines in the Trade Corridor Enhancement Program and the Road Charge Program.</li> <li>• Review and make recommendations on requests from the California Department of Transportation, regional transportation planning agencies,</li> </ul>

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<sup>1</sup> ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned  
 MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others

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	<p>and others for financial allocations, delivery extensions, program amendments, etc.</p> <ul style="list-style-type: none"> <li>• Assist with any Senate Bill 671 and Senate Bill 339 work activities not already covered under the above descriptions.</li> <li>• Respond to questions, develop Commission meeting items, prepare talking points, and present to the California Transportation Commission and the Road Charge Technical Advisory Committee.</li> <li>• Develop workshop materials and presentations.</li> <li>• Demonstrate political sensitivity and the ability to work well with stakeholders to achieve consensus-building.</li> <li>• Review and evaluate project applications.</li> <li>• Develop and maintain good working relationships with a variety of internal and external stakeholders.</li> </ul>
10% M	<p><b>General office support</b></p> <ul style="list-style-type: none"> <li>• Create and maintain schedules, manage meetings and calendar invites, and track program actions.</li> <li>• Develop deadlines and schedules, using visualization tools like Visio when needed.</li> <li>• Manage multiple schedules and schedule challenges. Set up large meetings and workshops. Send out Save the Dates, agendas, and meeting notices. Manage meeting logistics.</li> <li>• Track commission actions. Update and create funding summaries. Coordinate project information with the California Department of Transportation and others.</li> <li>• Assist with developing, interpreting, and adapting guidelines and/or procedures.</li> </ul>
10%M	<p><b>Program support</b></p> <ul style="list-style-type: none"> <li>• Develop program information as needed, assist other units, and perform other duties as required.</li> <li>• Compile information for the Annual Report. Respond to information requests from the Legislature.</li> <li>• Develop materials for new Commissioner briefings and on-boarding.</li> <li>• Assist with analyzing bills which have an impact on the State Transportation System, and in particular, those measures which influence transportation funding. Develop program fact sheets. Create benefit summaries, allocation summaries, and other information for the public.</li> <li>• Assist with preparing the project lists for Senate Bill 1 programs. Act as an advisor on various Senate Bill 1 research topics.</li> <li>• Assist other units and perform other work as required.</li> </ul>

## **SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS**

None. May act as lead over staff assigned to projects.

## **KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS**

**Knowledge of:** Data analysis methods and techniques including gathering and collection of structured and unstructured data, as well as general principles, concepts and terminology used in research; planning studies and investigations; trend analysis procedures; time management techniques to provide for efficient prioritization and completion of projects and assignments; software to prepare spreadsheet summaries, reports, charts, and tables; basic arithmetic and statistical techniques to analyze numerical data; and departmental policies and procedures.

Knowledge of design and implement research-related projects; practices required to ensure and maintain data security, including securely transmitting confidential data; experimental design procedures; problem-solving techniques and processes to identify and resolve issues related to the completion of work assignments; and advanced mathematical techniques and descriptive statistical analysis techniques and methods.

Knowledge of principles and concepts applied in research and statistical settings; principles and concepts appropriate to data and research techniques and methodologies; operations research methods; current data analytics processes, including the utilization of business intelligence software programs; broad principles of algorithms, data structures, and data management; application of computerized models to research data, statistical and other methods used in the analysis; survey methods and analytical techniques; organizational analysis including data presentation and interpretation; principles and procedures of forecasting, and of research planning, design, methodology; problem solving techniques and processes to facilitate the identification and resolution of issues related to the completion of work assignments.

**Ability to:** Research, gather, compile, and analyze structured and unstructured data; conduct and interpret descriptive statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations; prepare research and statistical reports; analyze written and numerical data regarding general governmental problems; speak and write effectively; develop and evaluate alternatives, recommendations, solutions, and conclusions or approaches to research problems; manage a workload consisting of multiple projects and assignments; complete work under critical timelines to meet project objectives and deadlines; be objective and flexible to adapt to changes in priorities and work assignments; and gain and maintain the confidence and cooperation of others, collaborate, and work in multidisciplinary teams.

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Ability to query, mine, analyze, and manipulate data; communicate effectively both orally and in writing to individuals and groups related to the area of research; present ideas and information effectively; adapt and apply formal research methods and principles to research problems; design and validate studies and analyze the accuracy of data collected; analyze quantitative and qualitative data to reach sound conclusions and/or make recommendations; identify improvements and originate and develop new solutions which depart from traditional and existing patterns; identify required data, information, materials, and resources needed to complete/perform a project; reason logically and creatively and use a variety of analytical techniques to resolve or provide information regarding complex research and data problems; consult with and advise administrators or other interested parties on a wide variety of subject-matter areas; recognize when issues, activities, and/or decisions need to be elevated to management, and communicate information effectively to others.

Ability to plan and carry out large scale research and data projects; prepare and present reports and data models; adapt and apply complex research methods and principles to research problems of an applied practical nature; identify required data, information, materials, and resources needed to complete/perform a project; identify data needs of complex analyses and evaluate adequacy of existing data to meet these needs; develop procedures for collection and integration of data sources; design and test complex data base structures for storage and manipulation; access and process data located on large databases, servers, mainframes and/or desktop computers; design and conduct a complex research project and/or validating studies; conduct program evaluation studies including the systematic analysis of program requirements, goals, and outcomes to ensure program effectiveness; analyze and evaluate the impact of programs, procedures, business processes, and/or policies; develop documents related to data processing and analysis procedures for research projects and assignments to be used as a future resource; determine how a system or process works and how utilizing new inputs, operations, and environmental conditions would affect outcomes; function as a technical lead for complex projects to ensure timely completion; provide technical assistance to professional personnel; establish and maintain cooperative relationships with others, and with stakeholders; communicate with internal and external stakeholders with diplomacy and tact, especially concerning difficult and sensitive issues.

#### **DESIRABLE QUALIFICATIONS:**

The Research Data Specialist is responsible to gather, compile, and analyze data; formulate conclusions and recommendations, prepare research and statistical reports; analyze written and numerical data; speak and write effectively; develop and evaluate alternatives, recommendations, solutions, and conclusions or approaches to research problems; manage a workload consisting of multiple projects and assignments; complete work under critical timelines to meet project objectives and deadlines; be objective and flexible to adapt to changes in priorities and work assignments; and gain and maintain the confidence and cooperation of others, collaborate, and work in multidisciplinary teams.

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## **RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR**

Recommendations by the incumbent will inform Commission actions and policies, and Commission recommendations to the Legislature and the Administration. The consequences of not meeting responsibilities or making poor decisions and recommendations could be the result in the inability to complete statutory requirements, loss of credibility with the Legislature, the Administration, and transportation stakeholders.

## **CORE COMPETENCIES**

**Analytical Skills:** Approaches problems using logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues.

**Communication:** Expresses oneself clearly in all forms of communication. Gives feedback and is receptive to feedback received. Knows that listening is essential. Keeps others at the Commission informed as appropriate. (Transparency)

**Computer Literacy and Application:** Appropriate knowledge of computer applications and other tools necessary to successfully perform tasks.

**Conceptual Thinking:** Ability to find effective solutions to issues by taking the appropriate perspective (i.e., holistic, abstract, or theoretical)

**Creativity and Innovation:** Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (Innovation)

**Flexibility and Managing Uncertainty:** Adjusts thinking and behavior in order to adapt to changes in the job and work environment.

**Initiative:** Ability to identify what needs to be done and doing it before being asked or required by the situation. Seeks out others involved in a situation to learn their perspectives.

**Managing Change:** Demonstrating support for organizational changes needed to improve the department's effectiveness; supporting, initiating, sponsoring and implementing change

**Organizational Skills:** Keeps work prioritized and organized. Logically approaches situations.

**Reliability:** Ability to demonstrate dependability in meeting commitments and providing consistent work product. Takes responsibility for individual actions in order to meet deadline demands.

**Thoroughness:** Ensures that work an information is complete and accurate. Ensures that assignment goals, objectives, and completion dates are met. Documents and reports on work progress.

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**PUBLIC AND INTERNAL CONTACTS**

Attendance at the Commission meetings is required. Must have effective communication with other staff members, Commission’s Executive Director, and be responsive to information requests from Commission members and other stakeholders.

**WORK ENVIRONMENT**

Travel to the Commission meetings is required. Occasional travel to other meetings and hearings may also be required. While at their base of operation, employee will work in a climate-controlled office under artificial lighting.

**PHYSICAL REQUIREMENTS**

Employee may be required to sit for long periods using a keyboard and video display terminal to review and access information.

\_\_\_\_\_  
Employee’s Name

\_\_\_\_\_    \_\_\_\_\_  
Signature    Date

I have discussed the duties with and provided a copy of this duty statement to the employee named above.

\_\_\_\_\_  
Supervisor’s Name

\_\_\_\_\_    \_\_\_\_\_  
Signature    Date