

**POSITION DUTY STATEMENT**

DOT PM-0924 (REV 08/2024)

CLASSIFICATION TITLE Research Data Analyst I	OFFICE/BRANCH/SECTION HQ / Division of Research Innovation & System Information	
WORKING TITLE Research Data Analyst I	POSITION NUMBER 913-155-5729-XXX	REVISION DATE 08/01/2024

As a valued member of the Caltrans leadership team, you make it possible for the Department to provide a safe and reliable transportation network that serves all people and respects the environment.

**GENERAL STATEMENT:**

Under the general supervision of the Chief of Traffic Accident Surveillance and Analysis (TASAS) Branch, a Senior Transportation Engineer, the incumbent will apply Geographic Information System (GIS) methodologies and automation techniques to streamline and automate GIS data manipulation, analysis, and presentations in support of Caltrans' business processes. The incumbent will assist in the development and implementation of the New Transportation System Network. The incumbent will work closely and collaboratively with a diverse team of GIS Researchers and Transportation Engineers.

**CORE COMPETENCIES:**

As a Research Data Analyst I, the incumbent is expected to become proficient in the following competencies as described below in order to successfully perform the essential functions of the job, while adhering to and promoting the Department's Mission, Vision, Values, Strategic Imperatives and Goals. Effective development of the identified Core Competencies fosters the advancement of the following Leadership Competencies: Change Commitment, Risk Appetite, Self-Development/Growth, Conflict Management, Relationship Building, Organizational Awareness, Communication, Strategic Perspective, and Results Driven.

- **Creativity and Innovation:** Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (Safety First, Strengthen Stewardship and Drive Efficiency - Engagement, Innovation, Integrity, Pride)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety First, Strengthen Stewardship and Drive Efficiency - Engagement, Innovation, Integrity)
- **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. (Strengthen Stewardship and Drive Efficiency - Engagement, Integrity)
- **Problem-solving and Decision-making :** Identifies problems and uses logical analysis to find information, understand causes, and evaluate and select or recommend best possible courses of action. (Safety First, Strengthen Stewardship and Drive Efficiency - Engagement, Innovation, Integrity)
- **Teamwork and Collaboration:** Sets team structure. Organizes, leads, and facilitates team activities. Promotes team cooperation and encourages participation. Capable of cross functionality and working well with others on a team to achieve personal goals, team goals, and organizational goals. Takes responsibility for individual actions in order to achieve consistent results. (Cultivate Excellence - Engagement, Integrity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Cultivate Excellence - Equity)
- **Communication:** Expresses oneself clearly in all forms of communication. Gives feedback and is receptive to feedback received. Knows that listening is essential. Keeps others in the Division and other functional units informed as appropriate. (Cultivate Excellence - Engagement, Innovation, Integrity)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Safety First, Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Innovation, Integrity, Pride)
- **Computer literacy and application:** Appropriate knowledge of computer applications and other tools necessary to successfully perform tasks. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Innovation)

**TYPICAL DUTIES:**

Percentage	Job Description
Essential (E)/Marginal (M) <sup>1</sup>	
45% E	Participate in the development and implementation of the New TSN. Use GIS software to review and validate data migration results. Provide feedback on project deliverable to the vendors. Create maps from various datasets in the GIS database. Work to identify, communicate, and fix data problems and discrepancies. This will require working closely with project managers and customers to understand data requirements of the system being developed and nature and format of the data to be used.

**ADA Notice**

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25%	E	Perform highway inventory data quality check using excel macro application, ArcGIS Pro software or 1Integrate tool to identify data gap/data missing and data error. Extract roadway inventory related data in ESRI Road&Highway to resolve TSN data quality issues. Assist TASAS engineers in updating and correcting highway inventory data.
15%	E	Represent TASAS branch to participate in the update and maintenance of the Caltrans All Roads Linear Referencing System Network (LRS). Ensure ramps and mainline in the Caltrans LRS are consistent with those in the Transportation System Network.
10%	E	Collaborate with other members of the Office of Highway System Information and Performance, Division of Research, Innovation, and System Information, and other Caltrans staff on other GIS related tasks as necessary. These tasks involve research, analysis, reporting and writing as deliverables.
5%	M	Performs special projects and other duties as required within the scope of the class.

<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.

**SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS**

This position does not supervise. Limited to providing direction at times to Branch's other members on a specific job.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

The RDA I is expected to have knowledge of general principles, concepts and terminology used in GIS; techniques of spatial analysis; familiarity with various GIS data formats, quality, and accuracy; familiarity with map projections and coordinate systems; familiarity with research methods and techniques including planning of studies and investigations, statistical procedures, general principles, and concepts and terminology used in research and analysis to facilitate communication and build relationships with contacts in the Department and external agencies. The RDA I must also have working knowledge of ArcGIS, Microsoft Word, Excel and Access to compile, organize and query data.

The RDA I should be able to prepare correspondence to request data and information and should be able to gather, compile, analyze, and interpret data and to summarize data in reports, on maps, on charts, graphs and spreadsheets. Must be able to successfully follow direction, complete assignments, and keep the Branch Chief informed and involved. The incumbent is expected to communicate effectively and establish and maintain professional working relationships with those contacted in the course of the duties. Must have the ability to work with a team to help make decisions concerning highway systems and be willing to learn system designation, extent and performance aspects of transportation data maintenance and analysis.

**RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR**

The incumbent is expected to operate with a reasonable degree of independence, and assume responsibility for the work performed. Supervisor or an associate level lead worker routinely reviews decisions. However, sound judgment as it relates to transportation planning, traffic safety analysis, geo-spatial data analysis, and Caltrans procedures is required. A lack of this knowledge could result in inaccurate data, schedule delays, and over expenditure or loss of federal and/or State funds.

**PUBLIC AND INTERNAL CONTACTS**

The incumbent has frequent contact with employees in various branches of the Districts and Caltrans Headquarters. In addition, the incumbent occasionally contacts the general public and representatives of other public agencies, for data gathering, commenting, information giving, and coordination.

**PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS**

The ideal candidate should be enthusiastic, reliable, and detail-oriented, with the ability to perform well under pressure. They must excel in maintaining strong organizational and interpersonal relationships.

- Proficiently operate a keyboard, possess manual dexterity, and be comfortable sitting for extended periods.
- Be adaptable to new information and changing priorities.
- Contribute to and foster a work environment that encourages creative thinking, develops new insights, and applies innovative solutions.
- Manage multiple tasks effectively and complete projects on short notice.
- Demonstrate fairness and ethical behavior, showing responsibility and commitment to high performance in public service.
- Inspire others to deliver exceptional customer service and make meaningful contributions toward achieving the mission.
- Respect and value cultural diversity and individual differences within the workforce.

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### WORK ENVIRONMENT

The employee will work in a climate-controlled office under artificial lighting with occasional background noise from other workstations. The employee may be required to travel to meetings.

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I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

I agree that by providing my electronic signature for this form, I agree to conduct business transactions by electronic means and that my electronic signature is the legal binding equivalent to my handwritten signature. I hereby agree that my electronic signature represents my execution or authentication of this form, and my intent to be bound by it.

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EMPLOYEE (Print)

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EMPLOYEE (Signature)

DATE

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

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SUPERVISOR (Print)

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SUPERVISOR (Signature)

DATE

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