

**POSITION DUTY STATEMENT**

PM-0924 (REV 01/2022)

CLASSIFICATION TITLE <b>Research Data Analyst II</b>	OFFICE/BRANCH/SECTION D8 Right of Way / Land Surveys	
WORKING TITLE RDA GIS Support	POSITION NUMBER 908-302-5731-XXX	REVISION DATE 07/03/2024

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 supervision of a Senior Transportation Surveyor, the incumbent serves as a District and Division support person possessing knowledge in the techniques and methodologies utilized in Geographic Information Systems (GIS). The incumbent performs work involving geospatial analysis and geospatial database management, and helps fulfill the Branch's responsibility for providing analytical data, output, and mapping using GIS and Computer Aided Design and Drafting (CADD) applications for various Caltrans project development, planning, asset management, maintenance, data storage and representation, and information delivery needs. The incumbent maintains working knowledge of GIS software and related technologies including desktop and on-line platforms. Incumbent will be assigned work based on Departmental needs. When using state owned vehicles, incumbents are required to have a valid driver's license

**CORE COMPETENCIES:**

As a Research Data Analyst II, 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. (Enhance and Connect the Multimodal Transportation Network - Innovation)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Cultivate Excellence - Integrity)
- **Reliability:** Ability to demonstrate dependability in meeting commitments, and providing a consistent work product. Takes responsibility for individual actions in order to meet deadline demands. (Strengthen Stewardship and Drive Efficiency - Pride)
- **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. (Cultivate Excellence - Innovation)
- **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. (Enhance and Connect the Multimodal Transportation Network - Equity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. ( Advance Equity and Livability in all Communities - Engagement)
- **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. (Enhance and Connect the Multimodal Transportation Network - Engagement)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Strengthen Stewardship and Drive Efficiency - Innovation)
- **Thoroughness:** Ensures that work and information is complete and accurate. Ensures that assignment goals, objectives, and completion dates are met. Documents and reports on work progress. (Cultivate Excellence - Pride)

**TYPICAL DUTIES:**

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

**POSITION DUTY STATEMENT**

PM-0924 (REV 01/2022)

40%	E	Incumbent uses GIS, CADD, and various software applications to develop and integrate data for use by multidisciplinary teams before and during the project delivery process and for continued maintenance. Supports the District's project delivery and maintenance programs to establish and update geospatial data sets for the purposes of asset management, transportation planning, complete streets, operations, maintenance, and geospatial analysis. Incumbent will prepare various maps, perform analysis and process data for use in the office and in the field.
20%		Incumbent designs effective, high quality cartographic products using standard mapping practices and conventions. Cartographic products may be developed for use at departmental and public meetings, as well as in documents and reports, static map formats and interactive on-line applications. Incumbent assists in the development of intranet/ internet based mapping applications using Esri ArcGIS and / or other open source web mapping applications to enhance the District's information sharing and interactive mapping capabilities.
20%		Incumbent provides internal end-user technical support, as well as research, analysis and consultative services to Caltrans staff and project partners. Research and analysis is complex in nature, utilizing geographic information systems (GIS) methods and techniques which include python scripting, java scripting, development of geospatial data, imagery, applications, tools and models.
15%		Incumbent maintains and updates the District Internet and Intranet webpages using web development software (Dreamweaver; Druple, and others). Responsible for designing, coding and modifying websites for various functions in the District and ensuring that all websites follow Caltrans formatting and standards. Using sound conclusions, the Incumbent develops applications, data management plans, and innovative technology based solutions to meet Department needs.
5%		Incumbent will prepare reports and correspondence based on conclusions of the research and analysis performed using spatial analysis from geographic information systems (GIS), and perform other duties as assigned within the specifications of the classification.

<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**

None, incumbent may work in a lead capacity with co-workers.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

A Research Data Analyst II must have a good working knowledge of:

- Principles, practices and techniques of geography, mapping and map projections.
- GIS systems and applications.
- Cartographic design and production techniques.
- Principles and procedures of digital spatial data entry, storage, analysis and output.
- Design and management of relational databases.

Must be proficient in the use of GIS software; be able to perform research, documentation, entry and verification of spatial and attribute data; communicate clearly and concisely, orally and in writing; prepare clear, accurate and concise reports and records; have the ability to provide technical advice and train others on software use; and have strong IT technical skills.

The individual must have excellent analytical and problem solving skills.

**RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR**

The incumbent is expected to assume responsibility for the work performed. Decisions may be routinely reviewed by supervisor or lead worker. However, sound judgment as it relates to Geographic Information Systems, planning, and Caltrans project development procedures is required. A lack of this knowledge could result in inadequate designs, schedule delays, and over expenditure or loss of federal and/or State funds.

**PUBLIC AND INTERNAL CONTACTS**

The incumbent has frequent contact with employees throughout the Department at all levels and with all Divisions. External contacts may include those with other state agencies, local agencies, federal agencies, private citizens and consultant contractors. These contacts may be verbal or written, as needed to perform assignments.

## POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

---

---

### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

#### Physical

- The incumbent may be required to sit for long periods of time using a keyboard and video display terminal.
- Some bending, stopping, kneeling, and light lifting is required to operate specialized equipment used for data collection.
- The incumbent must have the ability to develop and maintain cooperative working relationships within the branch, and respond appropriately to difficult questions and situations.

#### Emotional

- The position requires interaction with office personnel, field personnel, management, and the supervisor. It is important that employees work with others to develop and maintain cooperative relationships.
- Must be able to handle irate public in a calm manner
- Must deal effectively with pressure, maintain focus and intensity yet remain optimistic and persistent, even while working under adverse conditions.
- Is open to change; adapts behavior and work methods when presented with new ideas, changing conditions or unexpected obstacles.
- Behaves in a fair and ethical manner toward others and demonstrates a sense of responsibility and commitment to public service.
- Values cultural diversity and other individual differences in the workforce.

#### Mental

- Must have the ability to be multi-tasked, adapt to changes in priorities and complete tasks or projects with short notice
- Must be able to maintain a sustained mental alertness and concentration for prolonged periods of time while performing tasks assigned to them relating to various projects.
- Must be able to effectively communicate ideas, issues and possible solutions as they relate to a particular task or project.

---

### WORK ENVIRONMENT

- The incumbent works primarily in a climate-controlled office under artificial light. However, due to periodic problems with the heating and air-conditioning, the building temperature may fluctuate.
- Most employees will work at workstations in single or shared cubicles.
- Normal work schedule consists of four 10-hour days each week however, other alternative schedules may be considered. Regular working hours are from 6:00am to 4:30pm. There is a possibility of temporary schedule changes as projects dictate.
- Overtime may be required and vacations may be restricted as departmental workload dictates.
- Assigned tasks outdoors may be in various types of terrain and weather conditions and may include exposure to dirt, noise, and moving across uneven surfaces.
- Incumbent will be assigned work based on Departmental needs and could be assigned to any office within District 8 which includes San Bernardino and Riverside Counties.

# POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

---

---

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.)

---

EMPLOYEE (Print)

---

EMPLOYEE (Signature)

DATE

---

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

---

SUPERVISOR (Print)

---

SUPERVISOR (Signature)

DATE

---

---

---

**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (279) 234-2284, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.