

CLASSIFICATION TITLE Transportation Engineer (Civil)	OFFICE/BRANCH/SECTION DES/PPM&OE/OPM/PMAS	
WORKING TITLE Data Management & Tool Development	POSITION NUMBER 559-150-3135-106	REVISION DATE 11/17/2025

As a valued member of the Caltrans team, you make it possible to improve lives and communities through transportation.

GENERAL STATEMENT:

Under the direction of the Branch Chief, a Senior Transportation Engineer (Supervisor), the incumbent manages engineering project data through Department-approved applications. The incumbent develops and maintains engineering business processes, procedures, and tools that provide timely project management information to Division of Engineering Services (DES) managers and engineering functional units. The position ensures that DES functions have the proper tools, materials, training, and data necessary to deliver project commitments on schedule. The incumbent coordinates the development, maintenance, data quality assurance, and training of DES project management tools as needed to support DES functional units, Headquarters (HQ), and Districts/Regions.

As part of employment with DES, there is a mandatory TE-Civil Professional Development Rotation Program that applies to all permanent full-time TE-Civils hired after January 1, 2017. Temporary relocation more than 50 miles from the permanent unit may be necessary for rotation assignments.

CORE COMPETENCIES:

As a Transportation Engineer (Civil), 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. (Prosperity - Innovation)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Employee Excellence - Pride)
- **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. (Employee Excellence - 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. (Employee Excellence - Stewardship)
- **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. (Equity - Collaboration, People First)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Employee Excellence - Pride)
- **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. (Employee Excellence - People First)
- **Planning and Results Oriented:** Organizes and executes work to meet organizational goals and objectives while meeting quality standards, following organizational processes, and demonstrating continuous commitment. (Employee Excellence - Stewardship)
- **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. (Employee Excellence - Integrity)

TYPICAL DUTIES:

Percentage	Job Description
Essential (E)/Marginal (M) ¹	

POSITION DUTY STATEMENT

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35%	E	DATA COORDINATION AND REPORTING Coordinate and automate the development of DES engineering reports by evaluating, establishing, and maintaining data connections with internal and external data sources. Assess, design, create, and maintain SQL database tables to organize and centralize information; perform data cleansing and transformation; and develop customized SQL database views for reporting. Create, test, and maintain dataflows for Power BI workspaces to provide automated, accurate reporting solutions for DES management and staff.
20%	E	WEBPAGE MANAGEMENT Provide webpage management and support for the Program Project Management and Office Engineer (PPM&OE) subdivision, including designing, modifying, and updating webpage layouts and content. Link webpages to automated reports and dashboards using Drupal, JavaScript, and PHP to ensure information is current, accurate, and accessible to Caltrans users.
20%	E	PROJECT ADVERTISEMENT AND AWARD SUPPORT Support the Office Engineer's Project Advertising and Awarding processes by maintaining and updating FileMaker Pro databases and VBA macros. Manage FileMaker scripts and update VBA macros for eBid file generation, bid book compilation, bid opening, and quality reviews. Maintain connections for automated processes between Office Engineer databases and the PPM&OE site.
20%	E	DES TOOL MANAGEMENT Participate in the development and maintenance of DES project management tools, including VISION, a SQL enterprise web application used across DES subdivisions for program and task management. Diagnose and troubleshoot user-reported issues; perform testing and validation of new developments; document findings; and recommend corrective actions. Assist in planning, developing, and implementing training programs for project management tools and applications to support continuous improvement and user proficiency.
5%	M	Serve on task forces, quality teams, and other collaborative groups to support DES initiatives. Act as a stand-in for the Branch Chief during absences or scheduling conflicts.

¹ESSENTIAL 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 other employees.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS
Requires knowledge of departmental program/project management, task management, project development, and engineering practices and processes. Requires knowledge of DES project delivery, scope, scheduling, and cost-estimating methodologies. Requires knowledge of methodologies to manage data electronically through Department-approved applications. Must be able to communicate effectively both verbally and in writing and understand how to develop or update data management tools based on client needs.

Must be able to analyze situations accurately, adopt effective courses of action, and develop and maintain cooperative working relationships. Requires knowledge of the Department's strategic plans, mission, vision, goals, diversity, equity, inclusion, and safety principles, and the ability to effectively contribute to them.

Must be able to interpret frequently changing and detailed Department guidelines, analyze program/project requirements, and recommend solutions for sensitive issues that may affect program and project priorities and DES personnel.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR
Responsible for decisions and actions that affect timely project delivery. Improper planning or decisions may result in project delays, increased costs, loss of Federal funding, or negative impacts to the public interest. Expected to act professionally and courteously at all times. Failure to do so would negatively impact the credibility and effectiveness of the Office of Project Management and DES.

PUBLIC AND INTERNAL CONTACTS
Must maintain effective professional working relationship internally with the DES, the Districts/Regions and HQ. The success of the DES and Caltrans in meeting the project delivery goals hinges on the ability of the incumbent to effectively communicate with District management, project managers, and functional staff.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS
Employees may be required to sit for long periods of time using a keyboard and video display terminal. They may also be required to move large or cumbersome plans and diagrams from one location to another.

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WORK ENVIRONMENT

In the primary work location, the incumbent works in a climate-controlled office under artificial lighting. As a statewide organization, DES adjusts to fluctuating workloads to successfully deliver projects. The incumbent may be required to travel and perform fieldwork and may be exposed to dirt, uneven surfaces, extreme temperatures, noise, vibration, and odors associated with field environments. They may work around bulky or heavy materials and equipment located near inspection areas and may also be exposed to the motoring public. DES employees may receive temporary assignments on DES projects throughout the state as workload demands.

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.

EMPLOYEE (Print)

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.

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE
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