

**POSITION DUTY STATEMENT**

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Transportation Engineer (Civil)	OFFICE/BRANCH/SECTION District 11/Traffic Safety & Operations/District Traffic Safety	
WORKING TITLE HM4 Coordinator and Route Engineer	POSITION NUMBER 911-355-3135-XXX	REVISION DATE 09/04/2025

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 Senior Transportation Engineer, Caltrans (District Traffic Safety, Branch Chief), the Transportation Engineer (Civil) serves as the Highway Maintenance (HM) 4 Coordinator and Route Engineer. The incumbent is responsible for developing and coordinating HM4 safety projects, planning and conducting Engineering and Traffic Surveys (E&TS), preparing Traffic Investigation Reports (TIRs), providing technical support for the HM4 Safety Program, and other related duties.

This classification consists of four alternate ranges (Range A-D), and as the incumbent progresses in experience, the assignment increases in difficulty, and this position may function as a lead person over the activities of a team of various engineering and technical personnel.

Appointment to Range D requires possession of a valid certificate of registration as a civil engineer issued by the California Board for Professional Engineers, Land Surveyors, and Geologists.

This position is subject to the mandatory Transportation Engineer (Civil) Rotation Program, which is required for all permanent, full-time Transportation Engineer (Civil) employees hired by Caltrans after June 22, 2018. The program provides opportunities for employees and Caltrans to benefit through a standardized process that systematically engages newly hired engineers. By rotating through diverse project delivery functional units, participants will develop well-rounded project delivery knowledge, skills, and abilities. The program includes mandatory 12-month core assignments in the Project Development and Construction Divisions and a mandatory 6-month elective assignment in the Program/Project Management, Environmental, Maintenance Engineering & Asset Management, Traffic & Safety Operations, or other Project Development Divisions. Each rotation assignment is based on workload needs and individual employee goals. The entire program duration lasts from 24 to 33 months. Assignments may involve long-term travel and can be located throughout the state.

**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. (Employee Excellence - Innovation)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety - Collaboration)
- **Ethics and Integrity:** Demonstrated concern to be perceived as responsible, reliable, and trustworthy. Respects the confidentiality of information or concern shared by others. Honest and forthright. Conforms to accepted standards of conduct. (Equity - 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 - People First)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Equity - Pride)
- **Organizational Awareness:** Contributes to the organization by understanding and aligning actions with the organization's strategic plan, including the mission, vision, goals, core functions, and values. (Safety - Integrity)
- **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 - Stewardship)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Climate Action - 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. (Employee Excellence - Collaboration)

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TYPICAL DUTIES:

Percentage	Essential (E)/Marginal (M) <sup>1</sup>	Job Description
45%	E	<b>HIGHWAY MAINTENANCE (HM) 4 SAFETY PROGRAMS</b> Manages, maintains, and analyzes the District Traffic Safety & Operations (TSO) suspense files to identify and evaluate TIRs eligible for the HM4 Safety Program. Develops, scopes, and prioritizes HM4 safety projects in coordination with Route Engineers, District Maintenance staff, and Headquarters (HQ) HM4 divisions. Prepares project documentation, cost estimates, and justifications. Tracks and monitors HM4 project schedules, budgets, and milestones from initiation through completion to ensure compliance with Caltrans standards, policies, requirements, and safety objectives. Collaborates with other Route Engineers within the District to resolve conflicts, integrate roadway and traffic safety improvements, and ensure effective delivery of HM4 projects that enhance public safety and operational efficiency of roadways.
20%	E	<b>ENGINEERING AND TRAFFIC SURVEYS (E&amp;TS)</b> Plans and conducts E&TS for Prima Facie Speed Zones in support of HM4 safety analysis by traveling to project sites, collecting field data using Stalker Lidar and other appropriate equipment, analyzing traffic patterns and roadway conditions, and preparing technical reports and exhibits. Applies professional engineering judgment to interpret traffic survey results and develops recommendations that support enforceable speed zones and advance Caltrans HM4 safety goals.
20%	E	<b>TRAFFIC INVESTIGATIONS (TIRs)</b> Conducts and prepares TIRs in response to sign requests from the Adopt-A-Highway Coordinator, safety concerns, and systematic needs identified through the HM4 Safety Program. Performs field reviews, collects, and analyzes traffic data, and evaluates roadway and operational conditions. Prepares TIRs with exhibits and engineering recommendations. Applies traffic engineering principles to support the development of safe, efficient, and traffic control measures consistent with Caltrans standards and departmental safety objectives.
10%	E	<b>TECHNICAL SUPPORT</b> Provides technical support for the HM4 Safety Program by preparing written correspondence, technical memos, and responses to inquiries from internal divisions, external agencies, and the public. Collaborates with Route Engineers, Traffic & Operations Safety units, and other functional divisions to ensure consistent application of standards. Develops project information and presentations to support management, local agency, and the public understanding of HM4 safety projects and outcomes. Represents the District Traffic Safety Branch in meetings and public forums when assigned.
5%	M	<b>OTHER RELATED DUTIES</b> Provides legal support and documentation, including, but not limited to, interrogatories, depositions, trials, and informed witness testimonies to Caltrans Legal Division regarding traffic-related matters. Provides technical assistance and backup support to other team members during absences to ensure uninterrupted operations. Performs other job-related duties within the scope of the classification for the successful delivery of the HM4 Safety Program and related branch needs.

<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

As the incumbent progresses in experience, the assignment increases in difficulty, and this position may function as a lead person over the activities of a team of various engineering and technical personnel.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

KNOWLEDGE REQUIREMENTS:

- Fundamental traffic engineering principles, practices, and methods of civil and traffic engineering as applied to highway design, operations, and safety
- Caltrans HM4 Safety Program policies, objectives, and procedures
- State and federal laws, regulations, standards, and manuals related to traffic engineering, roadway safety, and project delivery
- Methods and equipment used to conduct E&TS, including Lidar speed measurement devices, field data collection procedures, and statistical analysis techniques
- Principles and techniques of preparing and interpreting TIRs, engineering plans, specifications, and cost estimates.
- Departmental organization, policies, procedures, and interdepartmental coordination required to deliver HM4 safety projects
- Computer applications including MicroStation, AutoCAD, Microsoft Office Suite, Encroachment Permit Management (EPMS), and transportation databases used for project development, tracking, analysis, and reporting.

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**ABILITIES REQUIREMENTS:**

- Apply traffic engineering principles and professional judgment to evaluate roadway safety issues, develop HM4 safety projects, and recommend corrective measures
- Collect, analyze, and interpret field data to prepare E&TS, TIRs, and project documentation that meet program requirements
- Prepare clear, accurate reports, correspondence, exhibits, and cost estimates to support HM4 project delivery and communication with management, stakeholders, and the public
- Review and interpret engineering plans, specifications, and standards to ensure compliance with laws, policies, and departmental requirements
- Organize and manage multiple priorities and project tasks, track schedules and budgets, ensure timely completions of HM4 safety projects, adapt to changing program demands, and maintain accuracy and focus under deadlines
- Establish and maintain cooperative working relationships with those contacted in the course of work and maintain professional composure in stressful or challenging situations
- Communicate effectively, both orally and in writing, to present technical information, explain engineering recommendations, and represent the District HM4 Safety program in meetings and presentations
- Exercise sound judgment and maintain professional integrity in making engineering decisions that affect public safety and program credibility

**ANALYTICAL REQUIREMENTS:**

- Evaluate and interpret field data from ET&S and roadway condition assessment to determine safety needs and prioritize HM4 projects
- Analyze TIRs to identify systematic safety issues, recommend corrective measures, and support project justifications for HM4 projects
- Apply statistical and engineering methods to ensure speed surveys and traffic investigations meet technical requirements
- Review engineering plans, specifications, and cost estimates to ensure compliance with Caltrans standards and efficient use of HM4 resources
- Compare and reconcile data from multiple sources and databases (e.g., Highway and Traffic Accident Surveillance and Analysis System Census) to prepare accurate reports and recommendations
- Identify potential conflicts in project scope, schedule, or budget and recommend solutions in coordination with the Route Engineer and other functional divisions to ensure efficient delivery of HM4 projects
- Assess the anticipated safety and operational impacts of HM4 improvements to maximize program effectiveness

**RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR**

The incumbent is responsible for independent professional engineering decisions and recommendations related to HM4 safety projects, E&TS, and TIRs. Decisions must conform to applicable laws, regulations, policies, and accepted engineering practices. Errors in analysis, recommendations, or documentation could result in unenforceable speed zones, ineffective or delayed safety improvements, loss of HM4 program funding, or increased tort liability for the Department. Inaccurate or untimely communication with management, HQ, or external stakeholders could compromise program credibility and reduce the effectiveness of safety enhancement on roadways.

**PUBLIC AND INTERNAL CONTACTS**

The incumbent has regular contact with Route Engineers, District Maintenance staff, HQ, and other Caltrans functional units to coordinate the development and delivery of HM4 projects. External contacts include local agencies, consultants, community organizations, and members of the public. The incumbent may represent the District Traffic Safety Branch at meetings, presentations, and public forums to explain HM4 project needs, recommendations, and outcomes.

**PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS**

Work involves using a computer, equipment, and engineering tools, staying stationary for prolonged periods, and may require transporting work-related equipment within the office or in the field. Travel is an essential part of the job that involves driving to various Caltrans facilities and field sites, including areas adjacent to or near roadways and freeways that have high traffic volumes. Sites may require the incumbent to move on uneven terrain, including steep slopes or through dense vegetation, and to move operational field equipment.

Mental requirements include but are not limited to, simultaneously working on several assignments and deadlines, working within a noisy and occasionally distracting work environment, and evaluating and understanding critical calculations, data, and other material that may require long periods of mental concentration.

Emotional requirements include, but are not limited to, effective personal interaction skills and the ability to effectively deal with others in various situations, deal with situations calmly and respectfully, and maintain composure in the face of confrontation and highly charged emotional situations. The incumbent must have the emotional ability to maintain a positive, customer service-oriented attitude, resolve emotionally charged issues reasonably and diplomatically, develop and maintain cooperative working relationships.

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WORK ENVIRONMENT

This position involves both office and fieldwork. While working in an office environment, the incumbent works in a climate-controlled office under artificial lighting. Multi-floor buildings are equipped with elevators and stairs for accessibility. Work is indoors and outdoors. The incumbent travels occasionally to conduct field reviews outdoors and may be exposed to traffic conditions, dirt, dust, chemicals, loud noise, uneven surfaces, and severe weather conditions. The incumbent must remain vigilant and adhere to established field safety procedures to mitigate risks when working in the field. Travel to different work locations within the District, including San Diego and Imperial Counties, may be required. Possession of a valid driver's license is required to operate a State vehicle or personal vehicle. Working at night and overtime may be required.

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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