

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Senior Transportation Engineer, CT	OFFICE/BRANCH/SECTION 54 Construction/Performance & Innovation	
WORKING TITLE Innovation Engineer	POSITION NUMBER 913-500-3161-010	REVISION DATE 08/17/2026

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

GENERAL STATEMENT:

Under the general direction of the Chief, Office of Performance and Innovation (Supervising Transportation Engineer), the Innovation Engineer performs difficult and complex engineering work that drives Division of Construction's effort to enhance and digitize existing construction administration tools and processes, develop training programs for Automated Machine Guidance (AMG) and digital field engineering, and integrate them with the Department's Building Information Modeling for Infrastructure (BIM4I) initiatives. The Innovation Engineer partners and collaborates with various headquarters and district functions, external vendors, the construction industry, other state DOTs and Federal Highway Administration (FHWA) to analyze and develop implementation strategies, policies, processes, programs, standards and concepts - and provides updates and trainings at various in-person or virtual venues. Travel is required to perform the duties.

CORE COMPETENCIES:

As a Senior Transportation Engineer, CT, 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, Prosperity, Employee Excellence - Collaboration, Innovation, Integrity, People First)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Prosperity, Employee Excellence - Collaboration, Innovation, Integrity, Stewardship)
- **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. (Safety, Prosperity, Employee Excellence - Collaboration, Innovation, Integrity, Pride, Stewardship)
- **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, Equity, Prosperity, Employee Excellence - Collaboration, Innovation)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Equity, Prosperity, Employee Excellence - Collaboration, Innovation, Integrity, People First, Pride)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Equity, Prosperity, Employee Excellence - Collaboration, Innovation, People First, Stewardship)
- **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. (Equity, Employee Excellence - Collaboration, Innovation, Integrity, People First)
- **Vision and Strategic Thinking:** Communicates the "big picture". Models the department's Vision and Mission to others. Influences others to translate vision into action. Future oriented, and creates competitive and break through strategies and plans. (Safety, Climate Action, Prosperity - Equity, Innovation, Stewardship)
- **Commitment/Results Oriented:** Dedicated to public service and strives for excellence and customer satisfaction. Ensures results in their organization. (Prosperity, Employee Excellence - Collaboration, Innovation, Integrity, Stewardship)

TYPICAL DUTIES:

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

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

30%	E	Develop, implement, pilot and document AMG, BIM4I and digital as-built processes using advanced field data collection technologies to enhance existing construction contract administration processes. Provide subject matter expertise and change leadership through effective communication and direct engagement with internal and external stakeholders and vendors. Manage procurement of digital construction management technologies in timely coordination with Division of Procurement and Contracts (DPAC). Provide regular updates to the division on progress, risks and successes, and provide team leadership for efforts being driven by teams.
30%	E	Develop and perform training for AMG and digital field engineering using various technology solutions and processes for both users and future trainers, both online (on-demand on CTLeads and virtual instructor-led) and in-person. Identify strategic training needs for digital field engineering for the statewide construction program.
20%	E	Analyze existing and future technology solutions for any gaps with current workflows, policies and procedures. Provide strategic, actionable recommendations and draft policy revisions to address those gaps.
10%	E	Provide timely support for users for AMG, model-based delivery and implementation or pilot of new or updated technologies and processes through effective coordination and direct engagement with technology vendors and other stakeholders such as HQ Office of Land Surveys and Information Technology (IT).
5%	M	Participate in research studies, including preparation of issue papers and policy proposals related to innovative construction technologies and their application to BIM4I. Provide oral and written presentations to division managers, and represent the Department and Division of Construction in various committees and meetings that may be held virtually or in-person. Work with research entities such as Division of Research, Innovation and System Information (DRISI), Transportation Research Board (TRB), FHWA and other state DOTs to evaluate new technologies used in construction contract administration.
5%	M	Provide support for data collection and reporting activities for regular and ad-hoc status updates and public records requests. Review and provide analysis of legislations affecting Division of Construction and the Department's overall construction program.

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

No direct supervision is exercised. However, the incumbent performs a lead role and may direct the activities of other personnel who assist in developing business plans and reports.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

The incumbent must possess a valid certificate of registration as a professional engineer issued by the California State Board of Registration for Professional Engineers and have the knowledge of construction policies and practices, including construction techniques, construction engineering, and construction contract administration.

The incumbent must possess knowledge of the mission, vision, goals, values, purpose, organization, policies and procedures of the Department; transportation economics and financing; and the methods and materials used in the construction of state highway facilities. The incumbent should have knowledge of the goals, objectives, organizational policies and procedures of project development.

The incumbent must have the ability to prepare complete and comprehensive engineering reports, accurately analyze matters relating to construction engineering and adopt an effective course of action; present recommendations and information through oral and written communication methods and address an audience effectively; and effectively contribute to the Department's industry relations objectives. The incumbent must have the understanding of construction field office procedures and knowledge of computer applications. The incumbent must have the desire and ability to work cooperatively with others, analyze situations accurately, and take effective action.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for independently carrying out the assigned duties. Failure to carry out these responsibilities could result in delays and cost overruns to existing and ongoing procurements and contracts, loss of grant allocations, inefficient project delivery and loss of construction industry and public confidence in the Department as a responsible public agency.

PUBLIC AND INTERNAL CONTACTS

Incumbent will be responsible for developing and maintaining partnerships with other headquarters and district functions, local

ADA Notice

This document is available in alternative accessible formats. For more information, please contact the Forms Management Unit at (279) 234-2284, TTY 711, in writing at Forms Management Unit, 1120 N Street, MS-89, Sacramento, CA 95814, or by email at Forms.Management.Unit@dot.ca.gov.

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

governments, contractors, state agencies, and federal agencies, and speaking in public on the effects of current transportation projects as they relate to transportation matters. The incumbent will have contact with external entities and will be responsible to respond to inquiries and sensitive issues.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent sits for long periods of time at a desk, often with a computer (on keyboard with monitor).

The incumbent develops new insights into situations and applies innovative solutions to make organizational improvements. The incumbent must have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice. The incumbent creates a work environment that encourages creative thinking and innovation as well as develops and sustains an organizational culture which encourages others to provide the quality of service essential to high performance.

The incumbent must be able to develop and maintain cooperative and collaborative working relationships, be able to resolve emotionally charged issues reasonably and diplomatically, and behave in a fair and ethical manner toward others. The incumbent demonstrates a sense of responsibility and commitment to public service as well as influences others toward a spirit of service and meaningful contributions. The incumbent values cultural diversity and other individual differences in the workforce, ensures that the organization builds on these differences and that employees are treated in a fair and equitable manner.

WORK ENVIRONMENT

The incumbent will usually work in a climate-controlled environment under artificial lighting, but will be required to travel to districts. Travel to conferences and peer exchanges (both in-state and out-of-state) with other DOTs may also be required.

This position may be eligible for telework. The amount of telework is at the discretion of the Department and based on Caltrans's evolving telework policy. Caltrans supports telework, recognizing that in-person attendance may be required based on operational needs. Employees are expected to be able to report to their worksites with minimum notification if an urgent need arises. The selected candidate will be required to commute to the headquartered location as needed to meet operational needs. Business travel may be required, and reimbursement considers an employee's designated headquartered location, primary residence, and may be subject to CalHR regulations or applicable bargaining unit contract provisions. For permanent and limited term appointments, all commute expenses to the headquartered location will be the responsibility of the selected candidate.

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
----------------------	------

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

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE
------------------------	------