CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	OFFICE/BRANCH/SECTION	
Transportation Engineer (Civil)	District 11/Traffic Safety & Op	District 11/Traffic Safety & Operations-North Region	
WORKING TITLE	POSITION NUMBER	REVISION DATE	
Route Engineer	911-350-3135-911	01/24/2025	

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 a Senior Transportation Engineer, the Transportation Engineer (Civil), serves as the Route Engineer responsible for a wide variety of professional engineering work involving traffic engineering, operations, and safety on assigned routes within the District. The incumbent provides safety and operational consultations to various divisions, collaborates with other agencies, works with the public on traffic-related issues, and develops conceptual projects for safety and operational improvements. Additionally, the role includes providing legal support on traffic-related matters and performing other related work.

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.

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.

- Managing Change: Demonstrating support for organizational changes needed to improve the department's effectiveness; supporting, initiating, sponsoring and implementing change. (Employee Excellence Collaboration, Innovation)
- Dealing with Ambiguity (Risk): Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Safety Innovation, Stewardship)
- 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)
- **Conflict Management:** Recognizes differences in opinions and encourages open discussion. Uses appropriate interpersonal styles. Finds agreement on issues as appropriate. Deals effectively with others in conflict situation. (Safety, Equity Collaboration)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Climate Action Equity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Climate Action Collaboration, 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. (Safety, Employee Excellence - Collaboration)
- Analytical Skills: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Equity - Innovation)
- Technical Expertise: Depth of knowledge and skill in a technical area. (Employee Excellence Innovation, Stewardship)

## TYPICAL DUTIES:

Percentage Job Description

- Essential (E)/Marginal (M)<sup>1</sup> uses beschption 30% E Performs professional engineering work involving plans, designs, details, and maintenance of transportation systems, in whole or in part, that may include freeways, roads, airports, ramps, and bridges involving traffic activity. Conducts traffic investigations to address areas along assigned routes with high collision concentrations, multimodal operational concerns, vehicle delay and congestion, and impacts of construction projects by collecting and analyzing traffic data, collision history, and other pertinent data to perform investigations. Prepares administrative, technical, and statistical reports for traffic safety and operational matters. Recommends alteration or modification of existing transportation structures to improve safety or function. Monitors and investigates traffic concerns and recommends methods to improve traffic flow and safety. Evaluates traffic control and traffic safety devices to determine the need for modification or expansion. Prepares, reviews, and writes Traffic Investigation Reports (TIR) for safety and operational improvements on assigned routes.
- 30% E Reviews, researches, and responds to requests regarding the SHS. Provides safety enhancement recommendations and traffic operational consultation to Planning, Project Development, Construction, and Maintenance Divisions in the planning, designing, construction, and maintenance of the projects delivered by the District. Recommends potential improvements in traffic safety and operations to other divisions for implementation. Participates and collaborates in project development team meetings to discuss plans, specifications, or work schedules. Coordination with other District divisions and Headquarters is required regularly.
- 15% E Receives and addresses inquiries, concerns, and issues related to traffic safety and operations from the public and other agencies. Consults with other public agencies, works with the public, and maintains effective working relationships regarding traffic safety on the State Highway System (SHS). Researches, compiles, and maintains records of actions taken and to be taken on the assigned routes. Prepares and uses District resources to prepare public presentation materials and may represent the Traffic Safety & Operation-South Region Branch in public meetings. Presents data, maps, or other information at public hearings or meetings. Assists the Traffic Safety & Operations-South Region Branch Chief with the preparation of correspondence and responses to inquiries from the public. Prepares project information for outside agencies, citizen groups, and the public.
- 10% E Develops conceptual projects for safety and operational improvements on District routes. Review development plans to determine potential traffic impact.
- 10% E 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.
- 5% M Provides backup support to other team members during absences. Performs other job-related duties within the scope 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

The incumbent does not supervise others in this position but may act as a lead to other team members.

# KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge Requirements:

Basic principles of physics, chemistry, and mathematics as applied to civil engineering; engineering surveying; hydrology and hydraulics; stress analysis; mechanics; strength of materials; properties and uses of engineering construction materials; methods and equipment of engineering construction; engineering economics; knowledge of fundamental traffic engineering principles; and possess knowledge of Caltrans' organization and its functional units.

Abilities and Analytical Requirements:

Do simple mapping and drafting and make neat and accurate computations and engineering notes; prepare reports; establish and maintain friendly and cooperative relations with those contacted in the course of the work; communicate effectively; identify conflicts or issues and communicate those issues with appropriate staff; work with other functional groups to resolve conflicts and develop solutions; multitask and adjust priorities to keep up with variable workloads and circumstances effectively; work independently and locate and reference appropriate standards, guidance and other sources of information; identify needs promptly and to coordinate accordingly; review plans and specifications to accurately; analyze and evaluate various types of engineering and traffic data, various reports, and other documentation to draw conclusions, implement traffic safety improvements, and prepare written reports; complete work and meet deadlines; apply sound judgment in independent situations; and analyze factors and take effective action to accomplish tasks and resolve issues. Learn, access, and utilize the Transportation System Network which includes, but is not limited to, the Highway Traffic Accident Surveillance and Analysis System (TASAS), Census databases, Encroachment Permit Management (EPMS), Microstation, Computer-Aided Design and Drafting (CADD) software, and Microsoft Office applications (e.g., Outlook, Word, Excel); travel and work at various highway and freeway locations throughout San Diego and Imperial Counties; and work longer than eight hours per day when the assigned tasks require such a commitment.

#### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for decisions and actions inherent in the planning and organizing of various activities in conformance with accepted engineering practices, Caltrans standards, specifications, and policies. The incumbent must work effectively with the supervisor, route engineers, and other functional units. These activities may affect the motoring public and the safety and efficiency of State highway operations. Failure to provide adequate responses or timely notification to the supervisor and/or appropriate personnel could result in missed deadlines or could create unnecessary rework. Errors in judgment or decisions could affect public safety and may result in tort liability for the District.

#### PUBLIC AND INTERNAL CONTACTS

The incumbent contacts other District employees, divisions, outside agencies, citizen groups, and the public on a regular basis.

#### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The physical demands described here represent those that must be met by the incumbent to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

The incumbent uses a keyboard, mouse, and video display monitor, stays stationary for prolonged periods, and may be required to transport work-related equipment within the office or in the field. Performing outdoor engineering fieldwork may require driving long distances and moving on steep, uneven terrain.

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 cooper

#### WORK ENVIRONMENT

Work will be both indoors and outdoors. While working indoors, the incumbent works in a climate-controlled environment, under artificial lighting in an office building, field office, or trailer. For outdoor work activities, the incumbent may be exposed to variable traffic conditions, dirt, dust, chemicals, loud noise, uneven surfaces, and inclement weather conditions. 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.

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

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

DATE

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

SUPERVISOR (Print)

SUPERVISOR (Signature)