CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Transportation Engineer (Civil)	HQ/Maintenance/Maintenance Traffic Guidance and Safety	
WORKING TITLE	POSITION NUMBER	REVISION DATE
Maintenance Traffic Safety Devices Assistant Program Advisor	913-630-3135-003	

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 general direction of the Branch Chief, the Senior Transportation Engineer (supervisor), the incumbent will assist in managing and leading all maintenance tasks related to the traffic safety devices including guardrails, guardrail end treatments, safety barriers, and attenuators. The incumbent will also participate in activities related to the New Products Traffic Devices Committee in reviewing materials proposed for safety applications on the California State Highway System. Additionally, the incumbent will be responsible for monitoring production and expenditures related to traffic safety devices and assisting with statewide signing and striping and safety devices trainings to the District Maintenance staff on a routine basis.

The incumbent will assist with overseeing, operating, and maintaining the Stripe Retroreflectivity Service Contract and the Asset Collection Service Contract including striping, signs, guardrails, guardrail end treatments, attenuators, safety barriers, and other transportation related facilities. The incumbent will assist with ensuring data integrity and routinely providing technical assistance to the HQ Division of Maintenance, Safety Programs, and District Maintenance. The incumbent will also assist with maintaining collected data in both contracts, and ensuring accurate data flow into the database, and providing necessary training to the Districts. The incumbent will perform quality assurance and control of the output data provided by the consultants. The incumbent will assist with preparing and reviewing technical reports on complex problems/issues related to stripe retroreflectivity and asset collection contracts.

The incumbent will assist in conducting technical research, preparing legislative analyses, writing response letters to public inquiries, responding to legislative requests, preparing engineering reports and charts, developing spreadsheets and memorandum, maintaining database integrity, and performing other duties related to highway traffic control devices and safety devices maintenance program.

As part of your employment with the Division of Maintenance, there is a mandatory TE-Civil Professional Development Rotation Program that applies to all permanent full-time TE-Civils hired after May 19, 2000.

# **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. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network Engagement, Innovation, Integrity)
- Decision Making: Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety First, Cultivate Excellence Engagement, Equity, Integrity)
- 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 First, Cultivate Excellence Engagement, Innovation, 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 First, Strengthen Stewardship and Drive Efficiency, Advance Equity and Livability in all Communities - Engagement, 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. (Safety First, Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Engagement, Innovation)

- 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 First, Advance Equity and Livability in all Communities -Engagement, Equity, Innovation, Integrity, 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 First, Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Engagement, Integrity, Pride)
- Analytical Skills: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes
  underlying issues. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network Equity, Integrity)
- Commitment/Results Oriented: Dedicated to public service and strives for excellence and customer satisfaction. Ensures results in their organization. (Safety First, Cultivate Excellence - Integrity, Pride)

# **TYPICAL DUTIES:**

### Percentage Job Description

Essential (E)/Marginal (M)<sup>1</sup>

- Е Responsible for assisting with the coordination of traffic safety devices installed on Caltrans' State 40% Highway Systems. Traffic safety devices include guardrails, guardrail end treatments, safety barriers, and attenuators. Assists with preparing reports regarding status of striping contracts, monitoring District striping reports and ensuring that Caltrans' 5-year striping warranty is enforced. Coordinates with districts to address and resolve work deficiencies related to traffic safety devices. Reviews and recommends concurrence to proposed District projects related to SHOPP and HM projects. Responsible for coordination with the Divisions of Safety Programs, Design and Construction, and technical cooperation with the Materials Engineering and Testing Services for safety devices. Provides Maintenance perspective to the development of technical specifications and Standard Plan Sheets for guardrails, guardrail end treatments, safety barriers, and attenuators; Standard Specifications and Standard Special Provisions pertaining to guardrails, guardrail end treatments, safety barriers, and attenuators. Assists with the review and evaluation of new traffic safety devices and products to be used in construction, maintenance, and daily operations on the State Highway System. Assists with comprehensive product analysis, which includes needs assessments, cost-benefit and performance analysis, conformance with health and safety, and environmental regulations. Develops sign, striping, and other training materials related to highway traffic control and safety devices. Assists with developing and maintaining annual statewide training course/ conference materials and delivering training course sessions to ensure training materials comply with federal regulations and state policies and procedures. Participates in Traffic Devices New Products Committee meetings. Assists with conducting statewide signing and striping and safety devices trainings to the District Maintenance staff on a routine basis.
- 30% Е Assists in developing and implementing practical quality assurance and control plan for the statewide Retroreflectivity Contract and Asset Collection Contract to ensure accuracy of the data provided by the consultants/contractors. Develops, maintains and updates web interface for internal quality control check and updates team with data analysis results. Coordinates with districts on implementing the statewide asset collection service contracts for stripes, signs, sign structures, median barriers, guardrails, guardrail end treatments, attenuators, and other transportation facilities. Assists districts in identifying annual striping needs and communicate all deficient warranty stripes to the districts and the manufacturer. Provides technical support to districts in meeting the minimum marking retro-reflectivity values set by specifications, FHWA, CA-MUTCD and Safety Programs Division. Provides engineering and technical support to headquarters Safety Programs Division and the districts. Responds to inquiries from management on the health of roadway assets. Assists with District Maintenance Engineering and Support in developing the asset management plan. Coordinates arrangement of meetings, collects and reports the status of projects on a regular basis. Collaborates with other divisions such as Safety Programs, Design, Construction and Engineering Services for signs, guardrail, guardrail end treatment, attenuators, safety barriers and facilities. Analyzes data and prepares various engineering reports regarding progress and status of asset collection service contract. Maintains inventory of the statewide asset inventory program. Prepares district striping retroreflectivity reports and assists the districts enforce Caltrans' striping warranty policies. Coordinates with Geographic Information System (GIS) staff on the development and maintenance of the GIS portal for asset inventory and condition. Conducts field reviews to ensure consistency of the asset data statewide.

10%	E	Reviews and recommends revisions and assists in the implementation of Districts' striping maintenance work plans and performance contracts for allocations and proposed activities. Monitors performance against work plans and performance contracts for multiple Districts. Conducts detailed level of review that ensures District Maintenance activities on the State Highways are performed in accordance with statewide policies, procedures, best practices, standards, and Level of Service (LOS).
10%	E	Responsible for maintaining and updating the Maintenance Manual and assisting with developing policies and memos related to highway traffic safety and control devices. Provides input to the revisions and updates to special provisions, standard specifications, and standard plans for state highway work zones as required. Responsible for maintaining office intranet webpage content. Interprets and analyzes product life cycle trends and makes recommendations to the districts, Construction, Maintenance, Design, Engineering Services, Operations, Office Engineer, Procurement, local agencies, contractors, associations, and manufacturers as needed. Provides guidance to district maintenance staff on annual nighttime inspections, and random statewide QA/QC audits. Collects and analyzes data in the Integrated Maintenance Management System (IMMS) to support other branches' requests related to highway traffic control devices.
10%	Μ	Conduct technical research and coordinate with Districts and Safety Programs staff to implement pilots and tests of technical innovations for the purpose of institutionalizing new traffic safety improvement

technologies. Prepare response to public inquiries, legislative requests, Caltrans Executive requests, or industry when requested. Facilitates headquarters maintenance meetings as needed.

<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

No direct supervision responsibilities. However, the incumbent may act as lead to provide program-related guidance to Transportation Engineers (Civil), Maintenance Area Superintendents, and student assistants.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Incumbent must have general knowledge of the Departmental project delivery process and understand the supporting role of Division of Maintenance with Division of Safety Programs. Must have the ability to correctly interpret errors and determine corrective measures. Prefer Maintenance Design or Traffic Safety experience.

The incumbent must have knowledge of Caltrans organization and departmental policies and procedures. Also requires knowledge of highway design, traffic and construction policies, procedures, standards and other factors relating to transportation facilities and traffic safety and control devices. The position requires knowledge of organizational and engineering functions including IMMS, GIS mapping, computer programming, asset management, project development and database management.

The incumbent must have a working knowledge of maintenance project funding policies, traffic engineering and functional management.

Based on engineering experience and expertise, one must be able to exercise good judgment on matters relating to engineering issues. The incumbent should work efficiently and have good interpersonal skills. Incumbent must have analytical abilities to assimilate technical and procedural input from various sources, to evaluate that input, develop alternative courses of action, and to make objective recommendations on all critical issues affecting safety and operations. Must reason logically and creatively using a variety of analytical and problem-solving techniques.

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#### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

This position is responsible for making independent actions and taking initiatives to carry out the assigned duties. The incumbent will routinely provide data, reports and make final recommendations on changes in policies and procedure. Failure to carry out the responsibilities could result in:

- Compromising the traveling public's health and safety.
- Litigation that could delay and/or add substantial cost to essential projects or activities.
- Loss of credibility and public confidence in Caltrans as a responsible public agency.

- Inability to quantify performance in meeting the Department's strategic goals and safety and mobility commitments.
- Collision costs that impact California's economy and traffic safety culture.

Errors may have a significant impact on the internal and external operations of the Division of Maintenance, as well as the Department as a whole.

### PUBLIC AND INTERNAL CONTACTS

This position routinely has contacts with a large number of people in the Department, in the Districts, and Headquarters. Besides, this position responds to questions from the public regarding the Department's traffic control and safety devices practices. It also has continuous contact with engineers from Federal Highway Administration (FHWA), local agencies, other states, national experts, academia, the private sector, and occasionally foreign governments.

This position requires a high level of both written and verbal communications, as the incumbent works with executives, executive teams, and Department external partners. The incumbent must exhibit tact and diplomacy when addressing an audience, and effectively communicate with the Districts, private organizations, and government agencies federal and local levels.

#### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent may be required to sit for long periods of time using a keyboard/mouse and video display monitor, or while attending meetings. Must be able to use fine manipulation and/or simple grasping during the course of the workday. Some walking may be required. Must be able to work flexible hours, sometimes staying late or arriving early to complete an important assignment.

The position requires the ability to multi-task, adapt to changes in priorities and ensure completion of tasks or projects given short notice, develop new insights into situations, foster a work environment that encourages creative thinking and innovation; and to adapt behavior and work methods in response to new information, changing conditions, or unexpected obstacles.

The incumbent must be able to sustain the mental activity needed to conduct necessary research, analysis, and synthesis of issues and make well-reasoned recommendations to management. Must be able to make presentations, lead workshops, and serve on quality teams. The workload is subject to frequent, substantial, and unexpected changes that could affect the scheduling or completion of assignments. Must deal effectively with pressure, maintain focus, and intensify yet remain optimistic and persistent, even under adversity.

#### WORK ENVIRONMENT

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. The incumbent is expected to be able to report to their work sites 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. When required to report to office, the incumbent will work in a climate-controlled office under artificial lighting. Due to periodic problems with heating and air conditioning, the building temperature may fluctuate.

Business travel may be required periodically within the state (federal and state offices, district offices, local agencies, etc.) to office buildings and indoor/outdoor field locations. Reimbursement for business travel is based on the locations of the candidate's designated headquartered location and 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 selected candidate. The environment is fast-paced, demanding and busy; and requires considerable flexibility in managing time, priorities and assignments. The incumbent must be willing to work outside normal working hours as needed. While at field locations, the incumbent may be exposed to uneven surfaces, noise, and varying climate conditions. The incumbent may be required to travel out-of-state.

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.)

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