

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Senior Transportation Electrical Engineer, Supervisor	OFFICE/BRANCH/SECTION D03 / TROP / Mobility Programs / TMS Operations Branch	
WORKING TITLE Senior TMS Operations Branch Chief	POSITION NUMBER 903-350-3164-004	REVISION DATE

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

GENERAL STATEMENT:

Under general direction of the District 3 Office Chief of Mobility Programs, a Supervising Transportation Engineer, the Senior Transportation Electrical Engineer (Supervisor) serves as the District Senior TMS Operations Branch Chief while supervising a team of Intelligent Transportation Systems (ITS) practitioners in the development, deployment, and continuous engineering of a sustainable Transportation Management System (TMS) projects and architecture. The incumbent, in partnership with district practitioners, divisions, and local agencies, provides leadership and guidance in continuously transforming the Department's TMS network into a high-performing and integrated multi-modal transportation system for the State of California. Additional duties include serving as the district's SHOPP TMS 315 program advisor, providing support to the District Regional Traffic Management Center (RTMC), lead toll system integration and design activities, and leading research and development efforts related to new transportation technology and strategies. The incumbent must pass a DOJ background check for building access. Possession of a valid driver's license is required when operating a State owned or leased vehicle

CORE COMPETENCIES:

As a Senior Transportation Electrical Engineer, Supervisor, 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 - People First)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Employee Excellence - People First)
- **Reliability:** Ability to demonstrate dependability in meeting commitments, and providing a consistent work product. Takes responsibility for individual actions in order to meet deadline demands. (Equity - 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, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, 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. (Employee Excellence - Collaboration, People First)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Employee Excellence - Collaboration, People First)
- **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, People First)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Prosperity - People First)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)

TYPICAL DUTIES:

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

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40%	E	Identify future TMS needs as District 3's 315 program advisor, initiate projects to address TMS needs, and provide direction on TMS element project development. TMS elements work includes the 9 Core Elements identified in the State Highway System Management Plan as well as Advanced Transportation Managed Systems (ATMS) hardware, software and communication. Ensure team identifies TMS needs and deficiencies through the lens of operational needs and goals and objectives identified in the SHSMP. Participate in and ensure staff attend Project Development Team (PDT) meetings. Coordinate with and provide support to other electrical units to optimize project planning, design, construction, and maintenance. Provide support on tolling projects including toll system integration, toll system design, and coordination between tolling and TMS element construction.
30%	E	Provide support to District 3's RTMC through software application development and maintenance. Platforms include Activu, ActiveITS, RMIS, Platinum, Wowza, and District 3 virtual machines. Lead efforts to develop new applications to streamline TMS related activities and RTMC operator needs. Lead development and maintenance work related to databases used for central systems, TMS elements, and RTMC staff support. Lead tasks to update and maintain TMC central system servers. Attend Statewide TMS meetings for both central systems and field element support.
20%	E	Lead and work collaboratively with others on research and development efforts and pilot projects. Participate in and prepare for HQ Statewide Meetings, Electrical Board Meetings, ITS regional partnership meetings, and meetings with industry leaders. Leads District GenAI efforts in coordination with HQ and other District 3 Divisions. Ensure TMS inventory database is current and that it is consistent with the Statewide TMS asset management database. Other duties as assigned by supervisor.
10%	M	Staff Supervision: Hires, develops, trains, coaches, and mentors a team of engineering staff to deliver the aforementioned programs. Ensures staff understands the organization's mission, vision, and strategic management plan, the Division's strategic plans and principles along with office and branch performance targets. Schedules work assignments, establishes priorities, manages resources, and monitors work performance. Prepares timely probation reports and annual performance reports. Provides training opportunities within the unit, and develops plans and tools to build strengths and close performance gaps. Organize for success by implementing succession planning techniques. Employs necessary actions to address performance and disciplinary issues.

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 supervises professional staff of Transportation Engineers, Transportation Engineering Technicians, and others. Occasionally there will be the added supervision of Student Assistants or rotational staff.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

- Knowledge of electrical and electronic theory, principles and practices of traffic engineering as they apply to TMS elements, Electrical Systems, Central Systems, and communication.
- Ability to layout work for others and direct them in their work; analyze situations accurately, and adopt an effective course of action.
- Ability to communicate effectively and efficiently with Maintenance, Construction, Permits Engineers, Law Enforcement, Emergency Service Providers, Transit Agencies, other governmental agencies, and the media.
- Knowledge of traffic management systems and techniques.
- Knowledge of traffic management system technologies and traffic data collection tools
- Knowledge of methods to communicate with the public regarding traffic incidents.
- Knowledge of the functional and organizational characteristics of the Division.
- Knowledge of District functions, policies, procedures, and operations.
- Knowledge of computers and the Department's standard software.
- The ability to work independently, learn quickly, analyze situations, and communicate

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Incumbent is responsible for the decisions made regarding the communication, and assessment of incidents and events, regarding traffic management. Errors could result in increased delays and costs to the traveling public. Bad decisions or failure to respond to traffic incidents in a timely and effective manner could also result in complaints, economic loss, and poor public image.

PUBLIC AND INTERNAL CONTACTS

Must be able to respond to inquiries and provide accurate and factual information; should be able to deal effectively with others. Incumbent will be expected to communicate with numerous people, both within and outside of the Caltrans organization. Will be

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expected to communicate and work effectively with the California Highway Patrol (CHP), co-workers in the TMC, and in the adjacent CHP Communications Center.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical requirements for this position include sitting for long periods of time using a keyboard and video display terminal and may occasionally require bending, stooping and kneeling. Mental requirements for this position include the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice; ability to organize and prioritize large volumes of varied documents; and the ability to concentrate in order to review and create documents and meet strict deadlines. Emotional requirements for this position include the interaction with many people and the ability to encourage employees to work together in a cooperative manner; ability to resolve emotionally charged issues reasonably and diplomatically; deal effectively with pressure, maintain focus, and intensity, yet remain optimistic and persistent, even under adversity; consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations; is tactful and treats others with respect; open to change and new information; and adapts behavior and work methods in response to new information, changing conditions, or unexpected obstacles.

WORK ENVIRONMENT

While at their base of operation, employee will work in a climate-controlled office under artificial lighting. Indoor lighting may be dimmed in places to provide better view to computer screens and television monitors. Employee may also be required to travel and work outdoors and may be exposed to traffic, dirt, noise, uneven surfaces, and exposed to extreme heat or cold.

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