

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Senior Transportation Electrical Engineer, Supervisor	Systems Development/Mobility Systems Applications	
WORKING TITLE	POSITION NUMBER	REVISION DATE
Branch Chief, Mobility Systems Applications	913-350-3164-002	06/30/2026

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 Office Chief of Systems Development, a Supervising Transportation Electrical Engineer, the Senior Transportation Electrical Engineer serves as the functional manager of the Mobility Systems Applications Branch. The incumbent supervises engineers who manage the statewide traffic signal operations and develop, support, and train staff on related traffic management and control software programs and applications. As the Traffic Signal Operations Functional Manager, the incumbent, in partnership with district practitioners, provides leadership and guidance to a statewide program to modernize and improve these systems to meet evolving operational, security, and integration requirements for California's multi-modal transportation system.

As the Branch Chief, the incumbent leads a unit responsible for sustaining engineering support, contract and project management support, and technical support for Intelligent Transportation System (ITS) projects. This includes developing software programs that controls and monitors the Department's traffic signals and ramp meters, and providing technical support for cutting-edge transportation solutions.

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.

- **Managing Change:** Demonstrating support for organizational changes needed to improve the department's effectiveness; supporting, initiating, sponsoring and implementing change. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, 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. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **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, 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. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **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, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, 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. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **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, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Managing Performance:** Responsible for employee performance, setting clear goals and expectations, tracking progress against departmental and unit goals, providing feedback, and addressing performance issues promptly. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)

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TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
35%	E	Directs a statewide team of district functional managers to advance the best practices, techniques, and application of emerging technologies toward improving the management, performance, and operations of the Department's traffic signals. Through collaboration with districts, divisions, and internal or external stakeholders, the incumbent directs the development of guidelines, standards, and training for traffic signal operations. Serves as the primary contact for the districts, California Public Utilities Commission, Federal Highway Administration (FHWA), and regional/local agencies in the development of guidelines, policies, contracts, and agreements relating to the planning, design, construction, operation, and maintenance of traffic signals. Approves products and services and ensures contractors provide products/services that are compliant with contract specifications and scope of work. Ensures compliance with contract provisions, monitors contract progress per project schedule, monitors expenditures, authorizes payments, and works with program administrative staff to close out contracts. Develops policies, guidelines, manuals, including but not limited to the California Manual on Uniform Traffic Control Devices (CA MUTCD), Traffic Signal Operations Manual, and Transit Signal Priority. Develops strategies and policies on performance reports governing the use of traffic control software programs.
20%	E	Supervision: Supervises, coordinates, and oversees all Branch staff and operations (including onboarding/offboarding). Monitors branch workload, establishes priorities, and develops strategies to increase productivity and performance levels to achieve Branch and Office targets. Coordinates Office of Systems Development resources to provide effective engineering support services to the entire office. Coaches and mentors staff and creates opportunities for employee development. Provides staff with feedback on their job performance that entails constructive feedback through regular monitoring of their workload and productivity. Enhance employee morale and engagement by acknowledging good work and contributions through formal and informal appreciation efforts. Takes timely action and collaborates with the Offices of Discipline Services, Health and Safety, EEO, Human Resources, etc. for all disciplinary and personnel-related matters as appropriate. Processes timely probation reports, annual performance reviews, and annual training plans. Establishes and upholds employee expectations and telework agreements (if appropriate) and develops plans and tools to build employee strengths and close performance gaps.
20%	E	Directs the development, support, training and strategic direction for traffic control software used to manage traffic signals and ramp metering systems statewide. Uses sound systems engineering practices that govern the requirements management, configuration management, and test management processes in developing software systems. Applies national ITS standards and industry best practices into producing highly reliable, safe and secure systems. Chairs the statewide Traffic Signal Operations functional team. Ensures traffic control programs are integrated and compatible with end-to-end management systems. Partners with districts, local and private agencies to develop and share best practices and solutions which improve cross-jurisdictional mobility and interoperability. Participates in research and pilot studies to develop new techniques and strategies for traffic control systems.

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20%	E	Branch Functional Manager: Serves as the branch functional manager. Develops and enforces production unit and workload standards to validate allocations and resources of assigned project codes. Develops proposed constrained workload hours and operating expenses (OE) (including contracts) to balance statewide needs with available resources. Oversees the development of contracts and statewide policies, guidelines, and procedures related to program functions. Leads cross-functional teams responsible for implementing strategic objectives and supports the Division and districts in implementing strategic objectives.
		Supports innovation, research, and tests of new technologies and strategies to improve transportation management and performance monitoring. Assists with grant and research opportunities. Prepares correspondence, reports, and technical articles for project-related publication and/or presentation. Assists with preparing Budget Change Requests, Finance Letters, and issue papers. Updates executive management and responds to Control Agency inquiries. Reviews legislative bills and responds to legislative requests for information and requests from other State Departments of Transportation and agencies.
5%	M	Leads and completes a variety of special projects and assignments as needed by the Division Chief, Deputy Division Chief, and Office Chief. Assists with emergency response and planning tasks including attendance at emergency operations centers as needed. Performs other work commensurate with the Senior Transportation Electrical Engineer classification. May occasionally act as the Chief, Office of Systems Development.

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

Directly supervises a team of engineering and other rank and file staff. May supervise retired annuitants, student assistants, consultants, and contractors. May occasionally act as the Chief, Office of Systems Development.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Possession of a valid certificate of registration as an electrical engineer issued by the California Board of Registration for Professional Engineers is required.

Must have knowledge of design and preparation of plans, specifications, and estimates for highway lighting and traffic control systems; electrical and electronic theory as applied to highway lighting and traffic control systems; principles and practices of traffic engineering as they apply to highway lighting and traffic control; various codes and field practices governing the design and installation of highway lighting and traffic control equipment; basic occupational safety and health regulations contained in the Title 8 Industrial Relations, Electrical Safety Orders, materials and construction costs for highway lighting and traffic control systems; digital electronics, microprocessors, and development of strategies for traffic control; computer-based traffic management equipment; traffic engineering, traffic safety, and traffic management; highway design; traffic and construction policies, procedures, standards and other factors relating to transportation facilities; organizational and engineering functions (both within and outside of Caltrans) that pertain to design, operations, maintenance, and construction of all types of transportation facilities; factors which influence the impact of transportation facilities on the environment, the community and the economy.

Must have knowledge of transportation principles and methods and the ability to apply the national best practices at Caltrans to improve capabilities and success in meeting goals. Must have a thorough knowledge of Caltrans' organization and policies; strategic planning processes and techniques; performance measure development, implementation, and assessment; principles and practices of public administration, budgeting, personnel, planning, program management, and evaluation.

Must have the ability to supervise multi-disciplinary, technical staff. As a supervisor, requires knowledge of and the ability to implement principles and techniques of personnel management and supervision; the supervisor's role in equal employment opportunity, health and safety, personnel-related, and labor relations programs; and the processes required to meet their objectives. Requires the ability to communicate effectively (both orally and in writing) with multiple audiences; establish and maintain cooperative relationships with individuals and organizations contacted in the course of work; participate in public contact and represent Caltrans; serve in a consulting capacity to other divisions and districts; and respond appropriately to difficult situations.

Must be able to apply sound judgment in problem solving; work productively in a busy and often changing environment; perform multiple tasks simultaneously; maintain a project schedule; accurately and timely follow-up on issues; and effectively interact with many levels of people in a cooperative manner. Must be decisive, take appropriate actions, and complete tasks or projects with a

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short notice. Requires proficiency with Microsoft (MS) Office programs (including MS Word, MS Excel, MS PowerPoint, MS Outlook, MS Teams), Adobe Acrobat, Cisco WebEx, and using the Internet.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

This position is responsible for making independent action and taking initiative to carry out assigned duties. The incumbent's decisions and actions have a direct impact on the Traffic Operations Program and the Department. Inability to carry out this position's responsibilities could result in: adversely affecting public safety and/or result in tort liability for Caltrans; increased expenses resulting from lost Transportation System productivity; litigation that could delay and/or add substantial cost to essential projects or activities; inability to quantify performance in meeting the Department's strategic goals and safety and mobility commitments; loss of credibility and public confidence in Caltrans as a responsible public agency.

PUBLIC AND INTERNAL CONTACTS

The incumbent must maintain the highest level of professionalism and integrity, exhibit tact and diplomacy, and effectively communicate with all internal/external contacts.

Internal contacts include various Caltrans districts and divisions (including Design, Construction, Maintenance, External Affairs, and Engineering Services). External contacts include the Legislature, Governor's Office, CHP, FHWA, construction industry representatives, local agencies, other states, national experts, academia, the private sector, and the general public.

The incumbent must communicate effectively orally and in writing, by telephone, via email, and by web conferencing. The incumbent is also required to facilitate, participate in, and host meetings.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent must: quickly adapt behavior and work methods in response to new information/priorities and unexpected obstacles; multi-task; effectively interact with many levels of people in a cooperative manner; be decisive; take appropriate actions; and complete tasks or projects with a short notice. Must be able to maintain focus and intensity, yet remain optimistic and persistent, even under adversity. The incumbent shall act in a fair and ethical manner toward others; value cultural diversity and other individual differences in the workforce; and demonstrate a sense of responsibility and commitment to public services. The incumbent must be able to develop new insights into situations and apply innovative solutions to make organizational improvements; grasp the essence of new information and master new technical and business knowledge, particularly in the area of outreach; and facilitate and maintain a work environment that encourages creative thinking and innovation.

Must have the ability to work with a computer and have manual dexterity. Required to sit for long periods of time using a computer, monitors, phone, and other office equipment. The incumbent must be able to occasionally lift up to 25 pounds without assistance. Bending, stooping, and pulling may be required within the normal course of performing some of the responsibilities associated with this position. May be required to speak in front of large groups.

WORK ENVIRONMENT

This position's headquartered location is Sacramento, CA. While at the base of operation, the incumbent works in a climate-controlled office under natural and artificial lighting. Due to periodic issues with heating and air conditioning, building temperatures may fluctuate. Multi-floor buildings are equipped with elevators and stairs.

The incumbent is required to travel periodically to other office buildings (federal and state offices, district offices, local agencies, etc.) and indoor/outdoor field locations. While at field locations, the incumbent may be exposed to uneven surfaces, noise, and varying climate conditions. The incumbent is required to travel within the state and may be required to travel out-of-state for business operations. Possession of a valid driver's license is required to operate a State owned, leased, and/or personal vehicle. The environment is fast-paced, demanding, and busy; and requires considerable flexibility in managing time, priorities and assignments. Vacations may be restricted during peak times.

This position may be eligible for telework. The amount of telework is at the discretion of the Department and based on Caltrans' 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. All commute expenses to the headquartered location will be the responsibility of the selected candidate.

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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