

**POSITION DUTY STATEMENT**

PM-0924 (REV 01/2022)

CLASSIFICATION TITLE Supervising Trans Electrical Eng	OFFICE/BRANCH/SECTION Division of Traffic Operations	
WORKING TITLE Office Chief, Connected Ecosystem	POSITION NUMBER 913-350-3156-XXX	REVISION DATE 05/21/2024

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 Deputy Division Chief of Transformational Mobility, a Principal Transportation Engineer, the incumbent, a Supervising Transportation Electrical Engineer, serves as the Chief of the Office of Connected Ecosystem.

The incumbent establishes statewide policies, practices, and guidelines that provide a safe and reliable transportation network that serves all people and respects the environment; works with internal and external partners to implement tools and technologies for day-to-day operations and safety; brings in new innovations and technologies; and facilitates safe and reliable transportation system operations throughout the State.

Electrical Engineering activities that focus on facilitating the early adoption of Connected and Automated Vehicle (CAV) technology, building strategic partnerships with external agencies and industry, establishing interim and permanent guidelines and standards for CAV in California, developing forward looking traffic and people focused mobility solutions and analysis methods, and providing a strategic vision, funding plan, and road map for the implementation of CAV and other emerging concepts such as Roadway Digital Infrastructure, Artificial Intelligence, Smart Cities/Regions, etc. in California

As the Office Chief, the incumbent oversees cross-functional activities related to adopting CAV and re-imagining traffic mobility, safety, and operations, reporting on performance metrics and targets, scaling up transportation technologies, performing traffic operations research, establishing interoperability, minimizing cyber risks, advancing Transportation System Management and Operations (TSMO) and incorporating appropriate elements of CAV and mobility solutions into the Department's programs and processes.

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

**CORE COMPETENCIES:**

As a Supervising Trans Electrical Eng, 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 First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- **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 First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- **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, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)

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- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- **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, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- **Interpersonal Effectiveness :** Effectively and appropriately interacts and communicates with others to build positive, constructive, professional relationships. Tailors communication style based on the audience. Provides and is receptive to feedback. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- **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 First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- **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 First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)

**TYPICAL DUTIES:**

Percentage	Job Description
Essential (E)/Marginal (M) <sup>1</sup>	
40% E	Serves as the Department's focal point for Connected and Automated Vehicle (CAV) technology, Smart Cities, and Roadway Digital Infrastructure related issues. Oversees development of connected transportation infrastructure framework, standards, and architecture that allow all road users to communicate and exchange transportation data to ensure safe and efficient operations of the State Highway System (SHS) and transportation networks. Coordinates with internal programs and external agencies to incorporate CAV elements, transportation technology, and advanced mobility solutions into future revisions of the State Highway Operation and Protection Program (SHOPP), State Highway System Management Plan (SHSMP), and other investment plans or programs. Assists with reducing threats to digital infrastructure. Represents Caltrans at meetings with other state and industry representatives and on national committees for issues relevant to the Office of Connected Ecosystem. Reviews legislative bills and responds to legislative requests for information in a timely manner. Recommends, edits, and reviews Departmental policies and strategic actions.
25% E	Works with Federal, State, regional and local agencies to resolve complex CAV and innovation related issues. Builds and maintains strong working relationships with all stakeholders including Headquarters and District executives. Sets clear expectations for deliverables and holds internal teams accountable for timely delivery and implementation of program activities and related hiring efforts. Incorporates data analytics and data-driven decision making into the Division of Traffic Operations. Supports Caltrans broadband middle-mile planning and implementation.

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20%	E	Supervision: Supervises, coordinates, and oversees all Office staff and operations (including onboarding/offboarding). Monitors Office workload, establishes priorities, and develops strategies to increase productivity and performance levels to achieve Office targets. Coordinates Office of Connected Ecosystem 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. Enhances 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.
10%	E	Leads deployment of a statewide clearinghouse for proven CAV infrastructure technologies to provide guidance to both Caltrans and external agencies. Assists in implementing emerging concepts such as Digital Twins, Artificial Intelligence (AI), etc. to address transportation challenges.
5%	M	Leads and completes a variety of special projects and assignments as needed by the Division Chief and Deputy Division Chief. Assists with emergency response and planning tasks including attendance at emergency operations centers as needed. Performs other work commensurate with the Supervising Transportation Electrical Engineer classification. May occasionally act as the Deputy Division Chief of Transformational Mobility.

<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**

Directly supervises senior level staff and serves as the second line supervisor to engineering and other rank and file staff. Provides guidance to district managers and staff in order to implement strategy, policy, and procedure statewide for the 2070 Traffic Operations Program. May supervise retired annuitants, student assistants, consultants, and contractors. May occasionally act for the Deputy Division Chief of Transformational Mobility or other Office Chiefs in their absence.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

Possession of a valid certificate of registration as professional engineer issued by the California State Board for Professional Engineers, Land Surveyors, and Geologists is required.

Requires knowledge of: Design of electrical systems and traffic control installations; electrical and electronic theory and field practice as applied to traffic control and communication systems; principles and practices of traffic engineering as they apply to traffic control and TSMO/TMS elements; principles of data network security and design; materials and construction costs and reviewing estimates for traffic control and electronic systems; basic occupational safety and health regulations contained in the Title 8 Industrial Relations, Electrical Safety Orders, safety and health policies and procedures as contained in the Department's Injury and Illness Prevention Program, and the supervisor's role in maintaining an effective injury and illness prevention program; various phases of transportation engineering and systems planning; transportation economics and financing; 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 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 coordinate statewide design of highway electrical and traffic control systems; and effectively chair committee of electrical engineers organized to establish statewide electrical and electronic design standards and procurement specifications.

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

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

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**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.

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**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, Safety, Maintenance, Equipment, IT, 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.

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**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.

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**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.

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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'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. 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.)

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EMPLOYEE (Print)

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EMPLOYEE (Signature)

DATE

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

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SUPERVISOR (Print)

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SUPERVISOR (Signature)

DATE

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