

POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

CLASSIFICATION TITLE Transportation Engineer (Civil)	OFFICE/BRANCH/SECTION Project Development / Engineering Services / Traffic Design	
WORKING TITLE Transportation Engineer (Civil)	POSITION NUMBER 910-207-3135-911	REVISION DATE

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 direction and supervision of a Senior Transportation Engineer, the Transportation Engineer performs activities requiring engineering knowledge and management skills for the preparation of plans, specifications, estimates, design drawings, written documents, presentations, and other related work for transportation projects. The main purpose of the duties is to be a premier engineering team delivering transportation projects for our project stakeholders and regional partners; In addition to the Department's values, we consider safety, efficiency, cost, quality, sustainability, environmental protection, aesthetics, and community values in all of the products we design. Ensures during the development of projects, the consideration, and when appropriate, the implementation of Smart Mobility and Complete Streets components, towards the Department's Mission to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Incumbent may be assigned by Supervisor to be a Lead-worker to train, direct, and manage the work of other staff within assigned branch.

As incumbent progresses in experience, assignment will increase from average to high difficulty. Transportation Engineer (Civil) Range D requires registration as a Professional Engineer in the State of California.

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. (Cultivate Excellence - Innovation)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Strengthen Stewardship and Drive Efficiency - 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. (Strengthen Stewardship and Drive Efficiency - Engagement)
- **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. (Strengthen Stewardship and Drive Efficiency - Pride)
- **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. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Engagement)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Cultivate Excellence - Engagement)
- **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. (Cultivate Excellence - Engagement)
- **Planning and Results Oriented:** Organizes and executes work to meet organizational goals and objectives while meeting quality standards, following organizational processes, and demonstrating continuous commitment. (Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network - Pride)
- **Thoroughness:** Ensures that work and information is complete and accurate. Ensures that assignment goals, objectives, and completion dates are met. Documents and reports on work progress. (Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network - Integrity)

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POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

TYPICAL DUTIES:

Percentage	Essential (E)/Marginal (M) ¹	Job Description
40%	E	For the customer/stakeholder (i.e. Project Development Team, Supervisor, Local Agencies, Headquarters, Executive Level, Design or Functional Units, Central Region Divisions, etc.) will develop, review, and recommend alternatives for the traffic design part of the transportation projects or problems by using engineering knowledge and skills, and applying the appropriate department standards and guidelines related to the traffic design function. These duties will be performed during the course of the Project Development process from project initiation to closeout. Prepare quality traffic design drawings such as Construction Area Signs plans, Pavement Delineation plans, Signs plans, Traffic Handling plans, Motorist Information plans, other traffic design related plans, special provisions, and estimates as requested by the due date. Various project management techniques such as monitoring the project cost, scope, and schedules will be utilized. Perform Computer Aided Drafting and Design (CADD) or manual delineation. Use current department drafting guidelines and tolerances for design.
25%	E	Accurately complete complex engineering mathematical calculations such as quantities (by utilizing, but not limited to, hand written calculations, calculators, MS Excel, and MicroStation). Produce technical engineering documentation such as memorandums as part of the design and project delivery process (by utilizing, but not limited to, MS Word, and MS Excel). Document engineering decisions and perform tasks based on the allocated resources and duration. Review and check the work of others and document the comments. Also expected to document lessons learned (database is utilized to capture this information) so that the knowledge derived from the experience can be shared with others and utilized in the future. Plot CADD files at the appropriate scale.
15%	E	Research information related to the project assignment through various records including, but not limited to, as-built drawings, photo log, various reports, and manuals. Collect and record field data relevant to the assigned projects. In coordination with District Traffic Operations and Maintenance department assist Resident Engineers in determining the most appropriate traffic control devices.
10%	M	Perform general (Non-Engineering) office duties such as preparing memos, letters and reports, filing and organizing both electronic and hard-copy project files, scheduling meetings, faxing and scanning documents, making copies, and maintaining the office and field equipment.
10%	M	Attend various Design, Project Development, Project Management, and mandated training courses. May provide formal or informal training to others related to Design or Project Delivery. Participates in internal and external teams and committees related to project delivery and design. Attends meetings such as staff, safety, project, and public meetings.

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 does not supervise; however, the incumbent may be given the authority to lead in the absence of the supervisor. The lead person's authority is limited to reviewing work, assigning tasks, providing input on employee performance, and preparing recommendations relating to work assignments.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

The incumbent must be able to meet the following requirements:

Knowledge of:

- Transportation design and construction terminology, methods, and concepts such as horizontal and vertical alignments, structural sections, typical section, traffic operations, hydrology and hydraulics, surveying, maintenance and construction work.
- All phases of engineering, departmental operations, and their interrelationship to project location and design. This includes traffic design procedures and traffic operational analysis, economics, environmental considerations, principles and technique of personnel management and computer principles.
- Must have the experience to perform the duties described above or be capable of quickly learning how to do so. Must be able to write effective reports and correspondence.
- Project management techniques such as monitoring project scope, cost, and schedules.
- Conventional and state-of-the-art equipment and computers applicable to office and field office transportation engineering work.
- CADD systems and Engineering software to design, prepare, and modify drawings.

Ability to:

- Use office/field equipment, computers, CADD systems, and software applicable to design, project management, preparation,

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POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

and modification of drawings and perform field transportation engineering work.

- Use personal computers both on and off a network and general office software including, but not limited to Microsoft Word, Microsoft Excel, Microsoft Power Point, and Microsoft Windows.
- Perform accurate complex mathematical calculations.
- Create neat and accurate drawings and technical sketches.
- Effectively communicate both verbally and in writing at a level required for successful job performance.
- Prepare and organize technical reports and other project related documentation to produce effective work products without repetitious direction.
- Assist in planning and organizing project needs and directing others.
- Be an effective team member.
- Maintain cooperative relations with employees whose work is related.
- Evaluate work methods and traffic conditions closely, both before and during the work, to assure safety when at project sites.
- Lay out work strategies, analyze situations accurately and adopt an effective course of action, make effective presentations, dictate correspondence and report preparation are absolutely essential.
- Learn and understand functions and organization of other work units within the department, procedures, and policies (such as sexual harassment prevention, discrimination, ethics, workplace violence prevention, state equipment usage, etc).

Analytically to:

- Analyze situations accurately and take effective action.
 - Check accuracy of own work and the work of others.
 - Understand engineering principles standards.
 - Develop, review, and recommend project alternatives.
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RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The decisions from this position will provide for more efficient movement of public traffic, both private and commercial, on existing highways where there are future improvements and where adjacent development modifies traffic circulation. Errors in judgment in the review, recommendation and preparation of design features could result in increased accidents, damage to property, personal injury and/or death to members or the traveling public, and increased tort liability. Good judgment must always be exercised as poor decisions can lead to traffic conditions that may result in increased accidents and legal liability for the department.

The incumbent is responsible to incorporate appropriate standards and for the technical information and engineering data upon which recommendations, conclusions, and decisions are based. Failure may result in expensive waste of time and materials, cause additional work, jeopardize project and programmed delivery, lead to loss of department credibility, increased liability, excessive contract claims, errors in payment, and affect the cost and schedule of improvement projects. Incumbent is responsible for his/her actions, decisions, quality of work, and proper use of State time, equipment, and materials. Improper performance of duties and/or failures to adhere to established policies, procedure.

PUBLIC AND INTERNAL CONTACTS

While on office assignments, the majority of the contacts are with departmental staff. Occasional contacts may occur with the general public, technical/professional level staff of outside agencies, public agencies, engineering consultants, contractors and their personnel, developers, private individuals, and elected officials or their staff.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical Requirements:

- Sit for long periods of time using a keyboard, mouse, and video display terminal. Other physical requirements include, but are not limited to walking, climbing stairs, lifting/carrying objects without causing injury (i.e. books, binders, plan sheets, box(s) of plotter or printer paper, etc.), twisting, stretching, bending, stooping, and kneeling.
- Travel to and from project sites or meeting locations.

Mental Requirements:

- Grasp the essence of new information and master new technical knowledge.
- Simultaneously work on several work assignments and/or deadlines.
- Work within a noisy and occasionally distracting work environment.
- Evaluate and understand critical calculations, data and other material that may require long periods of mental concentration.

Emotional Requirements:

- Deal with all contacts in a calm and respectful manner.
 - Resolve emotionally charged issues reasonably and diplomatically.
 - Develop and maintain cooperative working relationships with all contacts.
 - Receptive to change, new information, new situations.
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PM-0924 (REV 01/2022)

WORK ENVIRONMENT

The majority of the work performed while in office assignments will be in a climate-controlled office environment and within a work cubical or work area under artificial lighting.

Field assignments may have exposure to moving vehicles, fog, field work, earthwork, paving operations, weather conditions, equipment, animals, insects, environmental hazards, machinery, heat, cold, dust, gas, fumes, outdoor conditions, humidity, uneven ground, heights, and high decibels of noise.

Overtime may be required and vacation restricted during peak times and fiscal year-end closing. One day, overnight trips, or extended travel may be required. The typical office working hours are between 7:30 am and 4:15 pm, Monday through Friday, and 40 hours per week.

May be required to go on mandatory rotation or loan to other units (i.e. Construction, Maintenance, Permits, Traffic, Office Engineer, PJD, etc.).

This position may be eligible for telework. The amount of telework is at the discretion of the Department and based on Caltrans's current telework policy. While Caltrans supports telework, in-person attendance may be required based on operational needs. Employees are expected to be able to report to their worksite with minimal notification if an urgent need arises, as determined by the Department. The selected candidate may be required to travel to the headquartered location. All expenses to travel to the headquartered location will be the responsibility of the selected candidate.

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.)

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

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