

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Senior Transportation Engineer - Specialist	OFFICE/BRANCH/SECTION Headquarters/Traffic Operations	
WORKING TITLE Multi Disciplinary Accident Investigation Team	POSITION NUMBER 913-350-3161-004	EFFECTIVE DATE

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

Under the supervision of the Office Chief of the Office of Traffic Engineering, the Senior Transportation Engineer provides expertise in highway engineering and traffic operations as a member of the California Highway Patrol's (CHP) Multidisciplinary Accident Investigation Team (MAIT) which investigate severe traffic collisions and/or incidents. The incumbent also receives specific direction from the MAIT sergeant in charge of the team for MAIT responsibilities. The engineer's first line supervisor at Office Chief of the Office of Traffic Engineering addresses personnel and civil service administrative issues.

TYPICAL DUTIES:

Percentage		Job Description
35%	Essential (E)	The engineer assists the team in completing a comprehensive report for each accident or incident. The engineer provides accident reconstruction support to the MAIT team members by preparing and reviewing the "Highway" section of the report. The engineer may assist the team with other sections of the report according to the CHP/Caltrans Joint Operation Policy (JOP).
35%	Essential (E)	The engineer assists in conducting in depth investigations of severe and complicated traffic accidents and incidents. This includes responding to active collision scenes 24 hours a day, seven days a week. The investigations include, but are not limited to, the collection and compilation of roadway and traffic data relevant to accidents or incidents as follows: the overall roadway environment, design speed, horizontal alignment, superelevation, profile grade, signs, signals, pavement and roadway delineation, coefficient of friction, traffic volume, accident history, damage to state property, damage to the environment, and ambient weather factors. The engineer as a part of the Traffic Operation Program collects and compiles the roadway data and provides investigation expertise on incidents and provides liaison expertise to District Traffic Safety offices.
15%	Essential (E)	As required, the engineer presents report findings and conclusions to interested parties, gives legal depositions, and testifies in court. The engineer may be required to provide training to Caltrans, the CHP, allied agencies, and Caltrans public contractors. The engineer assists safety investigators with CHP issues and/or difficult investigations, as well as participates on committees, taskforces, and receives training as needed. The engineer schedules and attends routine meetings with Traffic Safety, District Traffic Manager(s), TMC, Maintenance, and Construction to discuss pertinent MAIT investigations and their affect on items such as lane closures, safety devices, Caltrans/CHP policies and procedures and any other relevant issues.
15%	Essential (E)	The engineer will submit monthly (or more frequent) Activity Reports documenting all completed work, including: Investigations (on system/off system), training, meetings, and other responsibilities, such as: assistance to the District's Office of Traffic Safety through Traffic Accident Surveillance and Analysis System (TASAS) database reports or speed zone investigations and engineering or research support to Caltrans' Legal Division on tort liability cases. The engineer maybe required to search for documentation or information and interpret engineering documents and plans. Based upon direction from the Caltrans supervisor and workload availability, the engineer may be given other Caltrans assignments.

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

The engineer does not exercise supervision in the capacity as the Caltrans MAIT Engineer.

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge and experience in highway design, surveying, and traffic engineering.

An ability to acquire knowledge of accident reconstruction based on physics and the dynamics of bodies in motion. An ability to analyze an accident or incident accurately and to articulate and document the involved sequence of events.

An ability to make effective oral presentations, to prepare correspondence and reports, and to communicate effectively in writing.

The engineer must have a valid California certificate of registration as a Civil Engineer. Possession of a California certificate of registration as a Traffic Engineer is desirable.

Accuracy and thoroughness in the analysis of physical evidence at the scene of accidents or incidents is critical in determining if the engineering characteristics of the roadway have impacted a particular event. The ability to visualize events is necessary to describe the sequence of events in accidents and incidents.

The engineer must be able to analyze complex engineering relationships and to continually review, evaluate, and adopt the latest engineering knowledge in the field of accident reconstruction. The engineer must be able to analyze and recommend a course of action while researching technologies related to the solution of accident reconstruction issues.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The findings and conclusions of the MAIT reports are used to assist in the formulation of safety improvements to prevent accidents or incidents of a similar nature from recurring.

This position is extremely sensitive to the consequences of error since most of the decisions and the recommendations involve traffic control and the traveling public. Errors and delays in decisions could result in a risk to state highway users with attendant liability to the State arising from traffic collisions or hazards. Many of the decisions must be made quickly and based not only on familiarity with the various State and National manuals, codes, warrants, standards, or guidelines, but also using professional judgment and experience. In addition to the obvious safety implications and financial liability, the Department could suffer serious loss of credibility and faith with the general public arising from faulty judgment or delayed investigations, leading to congestion at or on approaches to highway accident scenes.

PUBLIC AND INTERNAL CONTACTS

The Engineer will be responsible for MAIT related contacts within Caltrans from top management down. Engineer will also act as a liaison between CHP and Caltrans provide support to any and/or Caltrans personnel. Engineer will also be responsible for contacts with allied agencies, District Attorneys, and testify about his or her MAIT reports in court.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The position requires a strong mental disposition. The Engineer will likely witness horrific collision scenes which includes the removal of deceased accident victims from scenes. The position also requires field visits both to active and old collision scenes. Field visits sometimes require long periods of standing and walking (i.e. surveying a collision scene).

Physical requirements may require incumbent to move files and computer equipment from one location to another; occasional bending, stooping and kneeling. Incumbent may also be required to work long hours including outside normal business hours and weekends during emergencies.

Mental requirements include sustained mental activity needed for review of plans and specifications, problem solving, analysis and negotiation. Must have the ability to work as part of a team, multi-task, adapt to changes in priorities, and complete tasks or projects within short notice. Must have the ability to model the way; inspire a shared vision; challenge status quo to help develop new insights into situations and apply innovative solutions to make organizational improvements; enable others to act and to acquire the tools and support they need to perform well; and to recognize and reward excellent performance.

Must be able to deal effectively under pressure, maintain focus and intensity and yet remain optimistic and persistent

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

even under adversity. Will consider and respond appropriately to the needs, feelings, and capabilities of others in different situations; tactful and treats others with respect.

WORK ENVIRONMENT

The incumbent will be assigned a State vehicle which may be equipped with a Global Positioning System (GPS), to be used in compliance with applicable California Vehicle Code as well as Caltrans guidelines and requirements for conducting official State business only. While performing MAIT investigation activities the incumbent will work at the CHP MAIT team's location, which is away from the HQ Office. The incumbent may also be required to travel within or outside the District on boundaries

When activities related to MAIT Investigations are not occurring, it is the incumbent's responsibility to coordinate with their direct line supervisor to discuss availability to perform other HQ responsibilities. In addition, monthly (or more frequent) activity reports will be submitted to the supervisor to describe: MAIT Investigations, training, meetings, other responsibilities, et cetera.

I have read and understand the duties listed above and can perform them with/without reasonable accommodation. (If you believe you may require reasonable accommodation, please discuss this with the 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 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)

DUPER TONG

SUPERVISOR (Signature)

DATE
