

MSP



MANAGERIAL SELECTION PROCESS

Caltrans strives to maintain a diverse workforce and be an equal opportunity employer to all regardless of political affiliation, race, religious creed, color, national origin, ancestry, disability, medical condition, marital status, sex, gender, gender identity, gender expression, age or sexual orientation. It is an objective of the State of California to achieve a drug-free state work place. Any applicant for State employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and this special trust placed in public servants. TTY users can contact the California Relay Services line by dialing 711.

THIS IS A CALTRANS PROMOTIONAL EXAMINATION IN WHICH LATERAL CANDIDATES ARE ENCOURAGED TO APPLY.

EXAMINATION ANNOUNCEMENT

THIS EXAMINATION IS DESIGNATED FOR MANAGERIAL POSITIONS.

CLASSIFICATION: **SUPERVISING TRANSPORTATION ENGINEER, CALTRANS**

POSITION TITLE: **CHIEF, OFFICE OF SYSTEM MONITORING AND PERFORMANCE EVALUATION**

SALARY: **\$10,192.00 - \$11,578.00**

LOCATION: **DISTRICT 7 – LOS ANGELES**

DIVISION: **DIVISION OF OPERATIONS**

FINAL FILING DATE: **APRIL 26, 2016**

DUTIES/RESPONSIBILITIES

Under the general direction of the Systems Management Principal Engineer-Division of Traffic Operations, the Chief, Office of System Monitoring & Performance Evaluation provides leadership to establish and maintain a set of programs and associated workplans that measure, assess and align the performance levels of service of existing and future Transportation System Management and Operations (TSMO) investments and strategies driven by real-time, integrated, multimodal transportation system management methodologies together with the implementation of safety and operational improvements across the Los Angeles and Ventura County metropolitan and rural environments. The incumbent develops corridor performance and corridor evaluation workplans to inform the Corridor Managers and to support implementation of all Districts Corridor Management Workplans; formulates baseline and built condition scenarios for advanced transportation congestion and management technology elements, including communication infrastructure, and corridor operations; monitors and recommends measures to improve the efficiency of system, the output of

**Supervising Transportation Engineer
GJ60-3155-16MSP15**

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Department of Transportation**

active operations; monitors and recommends measures to improve the efficiency of system, the output of active traffic management strategies and the gains of corridor's capital, safety and operational improvements and aid regions and the State in achieving sustainability and emissions reduction targets.

Ensures use of micro/meso simulation modeling techniques and methodologies to address complex and politically sensitive transportation problems, perform difficult and complex technical research and analysis of traffic issues or problems, evaluating alternatives and recommending effective courses of action to the Corridor Managers; collects and analyzes multi-modal transportation and travel data to optimize flow, improve travel reliability and enhance safety; develops interactive visualizations, graphical displays, performance dashboards and mapping tools to convey the performance data, general health of the field central equipment, gaps in TMS element coverage, incompatible equipment or protocols and lifecycle replacement needs.

As the Division's State Highway Operations and Protection Plan (SHOPP) Manager for assigned Programs, establishes priorities and coordinates with Headquarters and District line functions to identify, program and secure funding for implementation of SHOPP projects. Oversees the Truck Services Manager responsible for Commercial Vehicles Operations and Safety and the Legal Services function.

The incumbent is responsible for continuous evaluation of the Office's workforce performance, and for taking the necessary steps in workforce development, training, and succession planning towards organizational excellence. Ensures best practices and standards in customer service for both internal and external customers are delivered.

- Ensures the commissioning, configuration and operation of Traffic Management Systems (TMS) along the Priority Study Corridor of Route 210, 605 and 10, to assist the Corridor Manager to efficiently manage congestion and reduce delay. The TMS elements may include, but are not limited to closed circuit television (CCTV) cameras, Changeable Message Signs (CMS), traffic monitoring stations, ramp metering systems, traffic signals, and Highway Advisory Radio (HAR) systems. Ensure that staff monitor detection health through the Performance Measurement System (PEMS) and processes traffic incident information through PEMS and the Transportation Management Center Activity Logging (TMCAL) system. Ensures that TMS elements are performing at an optimal level through this corridor.
- Direct staff to using PEMS and other methods such as tube counts, Bluetooth traffic monitoring to collect data, analyze and provide performance measures such as vehicle hours of delay, travel time reliability, and detector health for various departmental reports, including the Performance Measurement Report, the Traffic Operations High Level Performance Measure Dashboard, the Vehicle Detection Reliability report, the Mile Marker, and other reports as requested. Advises management and Corridor Managers on the use and development of new performance measures, including those related to measuring congestion and reliability as required by Moving Ahead for Progress in the 21st Century (MAP-21) Act, and related to the Division of Traffic Operations Strategic Plan and the Caltrans' Strategic Plan. Responsible for preparing reports, issues papers, emails, and other types of correspondence as necessitated by and for management; developing and delivering presentations to division and district management and customers; and performing special assignments as directed.
- Reviews TMS element infrastructure as-builts and system documentation prepared by staff. Ensures that documentation is complete and accurate. Leads staff to collect, analyze and report traffic data as part of the TMS Corridor study. Provide updates to the Corridor Manager in the District and HQ Corridor Study Manager and technical lead as to the performance status of the corridor. Develops and directs technical studies, special reports, research studies, and consultant studies to determine effective applications for traffic asset management and system planning techniques affecting the State Highway System. Responsible for coordinating with the Division of Information Technology (IT) to plan for PEMS hardware needs. Coordinates with the IT database

administrator and system administrators to monitor the performance of the existing hardware and make sure any issues are addressed promptly.

- Ensure that staff monitor the Managed Lanes (HOV and Express Lanes) to determine usage, vehicle occupancies, violation rates, and any operational problems, using manual occupancy counts, PEMS, Advanced Management Systems (ATMS), tachometer runs, field site visits within the Los Angeles and Ventura County. Work closely in partnership with Los Angeles County Metropolitan Transportation Authority (Metro) staff regarding the I-10 and I-110 Express Lanes operations.
- Oversee the efforts to maintain an Inventory and history of the Managed Lanes Network in Los Angeles and Ventura Counties, including operational and physical characteristics, as well as legislative history, and prepare an Annual Managed Lanes Report.
- Oversee the effort and coordinate with various internal and external agencies, including California Highway Patrol (CHP), Metro, and Federal Highway Administration (FHWA) regarding Managed Lanes issues. Participate in value pricing demonstration projects and studies; ensure preparation and review of Managed Lanes Guidelines; provide input into the Regional Managed Lanes Network Plan and review and provide comments on legislative analysis for all statewide/federal bills pertaining to Managed Lanes.
- Ensure that staff evaluate and monitor traffic conditions on the freeway mainline and ramps, work with and further develop the Advanced Management Systems (ATMS) in the Transportation Management Center (TMC), pertaining to the ramp metering systems including the System-Wide Adaptive Ramp Metering (SWARM) system. Direct staff to collect traffic data, prepares reports, assisting the development and keeping current the Ramp Meter Development Plan and Ramp Metering Master Plan.
- Direct staff to provide collision reports and advisory service to all users in the District. This includes processing of Traffic Accident Surveillance and Analysis System (TASAS) data, Table B, and Table C. Maintain communication with HQs Office of Performance and resolve any issues promptly.
- Functions as the Division's SHOPP Manager. Establishes priorities and coordinate with HQs to secure funding for the Division's SHOPP Programs; including safety improvements, collision severity reduction, operational improvements, America with Disability Act (ADA), and transportation management systems. Develops the Ten Year SHOPP Plan in coordination with the Division of Planning. Represent the Division and coordinate with Division of Project Management, Design, Maintenance, Programming, Planning and other divisions to ensure that projects are properly programmed, scoped and funded. Ensures that the District is properly represented at the Traffic Safety Steering Committee (TSSC) as well as produce to HQ safety monitoring reports on time.
- Oversee the Truck Services Manager functional responsibilities towards the State Highway System (SHS) operations and safety in conjunction with Commercial Vehicles.
- Be knowledgeable about federal, state, regional and local laws, regulations, policies, procedures, standards, principles and practices to complex, specialized and diverse transportation planning processes. Ensures that staff uses micro simulation modeling techniques and methodologies to address complex and politically sensitive transportation problems, perform difficult and complex technical research and analysis of traffic issues or problems, evaluating alternatives and recommending effective courses of action to the Corridor Managers.
- Provides legal reviews as required, attend depositions, provides court testimony as expert witness, or as person most knowledgeable.
- Manages staffing, supervising, budgeting, workload standard development, performance measurement and business planning. Leads the Traffic Operations Business Process to ensure that resources and efforts are focused on pursuing the highest priority strategies, initiatives, actions, and activities. Manages Traffic Operations knowledge, risk and ensure accessibility and integration with Statewide policy resources. Ensures that Traffic Operations personnel have the most current and accurate knowledge, tools, and resources to enable them to make informed decisions and take the best course of action. Ensures that staff are aware of Caltrans' policies such

as Workplace Violence, Sexual Harassment, & Equal Employment Opportunity. Ensures proper charging practices, and takes corrective action as necessary to stay within Office's allocations.

- Identifies needs for related research, Intelligent Transportation Systems, technology transfer and deployment of best practices. Ensures that research results and industry best practices are implemented consistent with the statewide guidelines to maximize mobility and safety throughout the corridors.

MINIMUM QUALIFICATIONS

Applicants must have a permanent civil service appointment with Caltrans and meet the following qualifications by the final file date in order to participate in this examination.

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

Either I

Experience: One year of transportation engineering experience as a senior level engineer in the California state service.

Or II

One year of supervisory or managerial experience equivalent in level to a Senior Transportation Planner in the California state service. and

Two years of civil engineering work at the Associate Engineer level or higher in the California state service.

Or III

Broad and extensive (more than five years) transportation engineering experience, two years of which are equivalent in responsibility to the senior level engineer in the California state service.

KNOWLEDGE AND ABILITIES

Knowledge of: 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; principles and techniques of personnel management and supervision; Department's affirmative action and labor relations objectives; a manager's role in safety, health, affirmative action and labor relations and the processes available to meet these program objectives.

Ability to: Administer an engineering program; plan and direct the work of others; judge work quality and performance; prepare technical correspondence and complete, comprehensive reports; prepare articles for publication; address an audience effectively; analyze situations accurately and adopt an effective course of action; communicate effectively; effectively contribute to the Department's safety, health, affirmative action and labor relations objectives.

EXAMINATION INFORMATION

This examination process provides for position specific examining and selection of the most qualified managerial candidates. Job-selection criteria specific to each position and consistent with the knowledge, skills, and abilities of the classification will be applied. Candidates who meet the qualifications will be admitted into the examination process.

The first step in the examination process is the Position Specific Qualifications Evaluation, which is the appraisal of an applicant's Examination/Employment Application (STD. 678) and Statement of Qualifications. Applicants who achieve a passing score of 70% or higher on the Position Specific Qualifications Evaluation will be invited to the interview portion of the examination. The interview

portion of the examination will establish an eligible list including the ranking of each candidate. Candidates will be notified in writing of their examination results.

POSITION SPECIFIC QUALIFICATIONS/EVALUATION CRITERIA

In addition to the minimum qualifications listed above, the following position specific qualifications will be evaluated based on the candidate's demonstrated:

1. Up-to-date knowledge of existing and emerging federal and state transportation regulations, laws, policies and funding across all transportation modal program elements. Leadership experience in development and programming of corridor safety and facility operation studies, related asset management principles, performance indicators and work plans.
2. Practical knowledge of traffic flow theories, traffic engineering, traffic impact analysis, factors and policies that influence system performance. Experience in managing large or complex real-time, multi-modal, multi-jurisdictional transportation management system projects, technology and enabling innovations.
3. Ability to formulate Transportation System Management & Operations (TSMO) strategies, promote performance based decisions and to align with Caltrans' vision, Strategic Management Plan goals and business needs of the Traffic Operations Program.
4. Ability to take intelligent risks and to support staff in taking informed risks; anticipate the implications and consequences of situations and decisions, and prepare for possible outcomes.
5. Ability to work cooperatively with and build partnerships internally among Caltrans' management as well as with Caltrans' partners, such as local, state and federal agencies, industry representatives, and special interest groups.
6. Experience and knowledge of development and programming of transportation corridor safety and facility operation studies, related asset management principles, performance indicators and workplans.
7. Experience in organizational management, workforce development, professional capacity building, succession planning, Equal Employment Opportunity, employee motivation preventive and corrective disciplinary techniques. Demonstrated ability to supervise and lead teams, delegate responsibility, and manage complex projects.
8. Ability to participate in public forums, communicate effectively, orally and in writing, represent Caltrans in advanced transportation systems matters and serve in a consulting capacity with other Caltrans functional areas.
9. Ability to effectively apply logic and creativity in decision making processes, and to successfully apply negotiation and motivation skills.
10. Possession of skillset to develop personnel and fiscal and personnel resource allocation and expenditure plans, effectively monitor usage of personnel and operating expenses in meeting delivery commitments, and formulate mitigation paths.

FILING INSTRUCTIONS

All interested applicants must submit:

- An original, signed State application (STD. 678), which includes civil service titles and dates of experience. The application should specify the **classification, position title, and the following MSP Number: 16MSP15**
- Faxed or emailed applications will not be accepted.
- A Statement of Qualifications is a discussion of the candidate's experience that would qualify him/her for this position. **The Statement should be no more than two pages in length and should address each of the Position Specific Qualifications listed on this examination announcement.**
- Resumes are optional and **do not** take the place of the Statement of Qualifications or completed State application (STD 678).
- "Effective January 1, 2009, Government Code Section 18991 was enacted which permits persons retired from the United States military, honorably discharged from active military duty with a

service-connected disability, or honorably discharged from active duty, shall be eligible to apply for promotional civil service examinations, for which he/she meets the minimum qualifications as prescribed by the class specification. **Persons applying who qualify as a Veteran under Government Code Section 18991 must submit a copy of their DD214 with their Examination Application (STD. 678)."**

State application and Statement of Qualifications must be received or postmarked by the final file date of **April 26, 2016**. Interagency mail received after this date will NOT be accepted.

The State application and Statement of Qualifications are to be submitted to:

**Department of Transportation
ATTN: Alejandra Saldana 16MSP15
1727 30th Street, MS-90
Sacramento, CA 95816**

APPLICANTS WHO FAIL TO SUBMIT A STATEMENT OF QUALIFICATIONS WILL BE ELIMINATED FROM THE EXAMINATION.

Questions regarding this examination process should be directed to Alejandra Saldana at (916) 227-5534.

ELIGIBILITY INFORMATION

This examination **will not** establish a civil service list; therefore, candidates **will not** have the ability to transfer their eligibility to other departments.

REASONABLE ACCOMMODATION

If you have a disability and wish to participate in one of our testing services, programs, or activities and require a specific accommodation, please mark the appropriate box for Question #2 on the Examination and/or Employment Application form. You will be contacted to make specific arrangements.

For individuals with disabilities, this document may be available upon request in alternate formats. To obtain an alternate format, please write to Caltrans, Office of Examinations and Special Programs, 1727 30th Street, MS-90, Sacramento, CA 95816 or contact us by phone at (916) 227-7858. TTY users contact the California Relay Service at 711.