



JULY 2016
FLSA: EXEMPT

SENIOR TRANSPORTATION ENGINEER

DEFINITION

Under general direction, plans, schedules, assigns, and reviews the work of professional engineering staff within the transportation division; serves as project manager for complex multi-modal transportation and traffic projects and activities, including reviewing development plans and applying City codes and regulations to development projects and transportation analyses; provides complex staff assistance to departmental management staff in areas of expertise; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned management staff. Exercises direct supervision over professional and technical staff.

CLASS CHARACTERISTICS

This is the supervisory-level class in the Transportation Engineering series. Incumbents are responsible for planning, organizing, supervising, reviewing, and evaluating the work of professional engineering staff as well as performing the most complex and challenging design, inspection, and computation analyses, and providing professional-level support to assigned management staff in a variety of areas of expertise. Performance of the work requires the use of considerable independence, initiative, and discretion within established guidelines. This class is distinguished from the Transportation Manager in that the latter has managerial responsibility for all functions and activities in a major functional or program area within the Public Works Department.

EXAMPLES OF TYPICAL JOB FUNCTIONS (ILLUSTRATIVE ONLY)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Plans, organizes, assigns, supervises, and reviews the work of technical, administrative, and professional engineering staff in the Transportation Division; trains staff in work procedures; evaluates employee performance, counsels employees, and effectively recommends initial disciplinary action; assists in selection and promotion.
- Monitors activities of the work unit; recommends improvements and modifications and prepares various reports on activities and projects; recommends and assists in the implementation of goals and objectives; implements policies and procedures.
- Reviews development plans and analyses for compliance with driveway and parking guidelines, Transportation Impact Analysis (TIA) guidelines, and Transportation Demand Management (TDM) guidelines; prepares fee schedules, cost estimates, and reimbursements.
- Reviews TIA and Environmental Impact Report (EIR) transportation sections; makes recommendations for measures to mitigate significant traffic impacts.
- Manages the implementation of and prepares plans and specifications for Capital Improvement Transportation projects and other safety improvements; coordinates with contractors, consultants, and other Municipal, State, and Federal agencies.
- Reviews plans and specifications for the installation of traffic signals, traffic control devices, collision prevention and traffic flow improvement devices, pedestrian and bikeway facilities.

- Develops, directs, and reviews standards for design and construction of public works facilities including streets, traffic signals, traffic controls, pedestrian and bikeway facilities, roadway structures, and traffic control devices.
- Participates in the selection of consultants; reviews and manages work plans, schedules, receivables, progress payments, and work of consultants.
- Coordinates with the Engineering and Planning Divisions to identify and recommend relevant and impactful projects that require cross-division collaboration.
- Serves as a liaison for the transportation division to other City departments, the City's Transportation Commission, Planning Commission, the Bicycle Commission, the public, and other outside agencies; prepares meeting agendas, minutes, staff reports, oral presentations, and responds to inquiries from the Commission.
- Answers questions and provides information to the public; investigates inquiries, concerns, and complaints; recommends corrective actions to resolve issues.
- Administers, reviews, and fulfills environmental impact analysis for City projects and private development with an emphasis on traffic circulation and parking.
- Conducts field inspections of projects in progress; participates in the review and checking of private land development proposals, plans, maps and calculations.
- Conducts, coordinates, and directs the execution of appropriate transportation and traffic engineering investigations, surveys, and studies.
- Prepares and maintains records of work performed, time and materials used in each project.
- Attends training, meetings, workshops, etc., as required to enhance job knowledge and skills; stays abreast of new trends and innovations in the field of transportation.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of

- Principles and practices of employee supervision, including work planning, assignment, review and evaluation, discipline, and the training of staff in work procedures.
- Principles and practices of transportation planning and traffic engineering as applied to the planning, design, cost estimating, construction, installation, and inspection of a wide variety of traffic and transportation systems.
- Principles and practices of pedestrian and bicycle facility planning, design and construction.
- Civil and transportation engineering principles, concepts, standards, and practices associated with public works programs and private development projects.
- Principles and practices of environmental impact assessment and related regulatory processes.
- Methods, materials, and techniques used in the construction, design, extension, and maintenance of traffic systems.
- Project management and contract management practices in a public agency setting.
- Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility, including California Vehicle Code, California Manual on Uniform Traffic Control Devices (CA-MUTCD), the National Association of City Transportation Officials (NACTO) guidelines, the American Association of Transportation and Highway Offices (AASHTO) design guidelines, California Environmental Quality Act (CEQA), and Caltrans Highway Design Manual.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff reports.
- Principles and practices of budget development, administration, and accountability.

- Recent and on-going developments, current literature, and sources of information related to the operations of the assigned functional area.
- Safety principles and practices.
- Record keeping principles and procedures.
- Modern office practices and methods including computer equipment and software programs relevant to the work performed.
- Principles of advanced mathematics and their application to engineering work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for effectively representing the City in contacts with governmental agencies, community groups, various business, professional, educational, and regulatory organizations, and with property owners, developers, contractors, and the public.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and City staff.

Ability to

- Assist in developing and implementing goals, objectives, practices, policies, procedures, and work standards.
- Supervise, train, plan, organize, schedule, assign, review, and evaluate the work of staff.
- Conduct complex transportation and traffic engineering research projects in areas such as transportation flow and safety, analyze complex problems, evaluate alternatives, make sound recommendations, and prepare effective technical staff reports.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Prepare, understand, and interpret traffic engineering plans, specifications, and other contract documents for traffic engineering projects in accordance with design requirements and applicable standards and regulations.
- Manage and monitor large and complex projects on-time and within budget.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, legal descriptions, and other written materials.
- Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, and regulations, technical written material, and City engineering policies and procedures.
- Effectively represent the department and the City in meetings with governmental agencies, community groups, and various businesses, professional, and regulatory organizations and in meetings with individuals.
- Establish and maintain a variety of filing, record-keeping, and tracking systems.
- Operate modern office equipment including computer equipment and software programs relevant to the work performed.
- Perform mathematical and engineering computations with precision, including calculations used in traffic operations and roadway capacity.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

EDUCATION AND EXPERIENCE

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

- Equivalent to graduation from an accredited four-year college or university with major coursework in transportation engineering, civil engineering, urban planning with an emphasis in transportation planning/engineering, or a related field.
- Five (5) years of increasingly responsible experience in professional traffic engineering or transportation planning work, including two (2) years of supervisory experience.

LICENSES AND CERTIFICATIONS

- Possession of, or ability to obtain, a valid California Driver's License.
- Possession of a Registered Professional Traffic Engineer or Registered Professional Civil Engineer license issued by the State of California.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer, to inspect City traffic sites, including traversing uneven terrain, climbing ladders, stairs, and other temporary or construction access points, to operate a motor vehicle, and to visit various City and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing and walking between work areas and to conduct inspections may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

ENVIRONMENTAL ELEMENTS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may work in the field and occasionally be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.