SENIOR TRANSPORTATION ENGINEER

DEFINITION

Under direction of the Transportation Manager, provides oversight, and management on major strategic initiatives as stipulated by City Council; manages the City's Traffic Management Center; plans, assigns and reviews the work of transportation engineering staff; performs technical evaluations related to traffic operations in the City, including signal system operations, streetlight system operations, management of neighborhood traffic calming efforts; performs complex and advanced transportation engineering related studies; and provides overall support to the Transportation Manager. Periodically attends and represents the City at the Alameda County Transportation Commission, Metropolitan Transportation Commission and other regional agencies meetings as requested. Also, tasked with preparing grant applications and requests for funding.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level in the Transportation Engineer series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned and independence of action taken, and by the amount of time spent performing the more complex duties. Employees perform the most difficult and responsible types of duties assigned to classes within this series, which includes providing technical and functional supervision over assigned professional and technical personnel. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

SUPERVISION RECEIVED

Receives direction from the Transportation Manager.

SUPERVISION EXERCISED

Exercises supervision over professional and technical staff as needed.

ESSENTIAL DUTIES

Duties may include but are not limited to the following:

Manages the City's Traffic Management Center and makes recommendations on signal timing and other operational improvements, for the city's 135 signalized intersections.

Troubleshoots overall traffic operations and traffic safety concerns reported by the community both in the office and in the field.

Manages and/or prepares various transportation studies or programs.

ESSENTIAL DUTIES (continued):

Plans, prioritizes, assigns, supervises and reviews the activities and staff in the traffic operations unit of the Transportation section.

Participates in the preparation of plans and specifications for new and modified traffic signals, street lighting systems and related traffic control devices.

Prepares grant applications for federal, state, regional or other funding.

Recommends and assists in the implementation of the Transportation section's goals and objectives; establishes schedules and methods for transportation engineering activities and projects.

Assists with and conducts the more complex transportation engineering projects and activities; prepares recommendations for traffic signal timing and coordination improvements; prepares traffic signal timing plans; and supervises and participates in collecting, tabulating and analyzing traffic information.

Acts as City Traffic Engineer.

Provides professional and technical staff assistance.

Supervises the City's speed lump program and makes recommendations for alternative traffic calming measures as appropriate.

Supervises and participates in preparation of work orders for installation, removal or replacement of traffic control devices.

Confers with neighborhood groups, property owners and others relative to information on traffic operations activities; coordinates responses to inquiries from the public, City Council, City Manager and City staff relative to traffic operations issues; investigates complaints and recommends corrective action as necessary to resolve complaints.

Coordinates traffic operations unit activities with other City departments; serves as liaison between the City and boards, councils, outside organizations, and commissions as directed; prepares and presents staff reports and presentations at various City Council, commissions, boards, and other governmental meetings; prepares City Council agenda reports; serves on and attends various committees and task forces, attends Planning Commission, City Council and neighborhood meetings as necessary.

Makes presentations on traffic and transportation issues to citizen and neighborhood groups, City Council, and Planning Commission as appropriate.

Periodically attends and represents the City at the Alameda County Transportation Commission, Metropolitan Transportation Commission and other regional agencies meetings as appropriate.

ESSENTIAL DUTIES (continued):

Prepares and reviews agreements for traffic signal maintenance and streetlight maintenance support as needed.

Participates in budget and Capital Improvement Program (CIP) preparation and administration; prepares cost estimates for budget recommendations; monitors and controls expenditures; recommends funding needs for traffic operations unit functions and capital projects; monitors CIP project expenditures related to traffic operations, and identifies funding sources to supplement the budget for the traffic operations unit.

Builds and maintains positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Participates in the selection of transportation engineering staff; provides and coordinates staff training; works with employees to correct deficiencies; and implements discipline procedures.

Performs related duties as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Principles, practices, methods and techniques used in traffic engineering and operations.

Pertinent local, state and federal laws, ordinances and rules including, the California Vehicle Code, the Manual on Uniform Traffic Control Devices (MUTCD), the MUTCD California Supplement and the Highway Capacity Manual.

Traffic signal system design including communications, timing plans, controller functions and interconnect system design; signal operations, signal optimization software such as SYNCHRO, SIMTRAFFIC, TRANSYT, PASSER, HCS, analysis of traffic operations, development and maintenance of traffic control inventories.

Traffic management software such as SCATS.

Various traffic signal controllers such as NAZTEC and Econolite.

Video detection equipment such as Pentel zoom cameras.

Techniques for analyzing and developing signal timing and coordination plans and use of traffic signal operational analysis and timing software.

JOB RELATED AND ESSENTIAL QUALIFICATIONS (continued):

Knowledge of (continued):

Techniques for improving traffic operations and mitigating impacts in neighborhoods, the downtown and in other areas of the City, and for improving traffic operations and safety on the City's arterial system.

Regional transportation planning, funding and oversight agencies including the Alameda County Transportation Commission, Metropolitan Transportation Commission, Air Quality Management District and others as appropriate.

Street design strategies to address the need to make streets accessible to all users, i.e. Complete Streets.

Basic telecommunication for traffic signal operations.

Techniques for improving pedestrian and bicycle circulation.

Principles and practices of supervision, training, discipline, and performance evaluations.

Principles and practices of budget monitoring.

Principles and practices of safety management.

Ability to:

Prepare accurate, clear, concise and grammatically correct reports and correspondence in a form understandable to the public.

Effectively communicate traffic operations issues to the residents of the City.

Work with signal system design including communications, timing plans, controller and interconnect designs.

Clearly and effectively articulate City positions on regional transportation planning and funding issues.

Work with signal operations including determination of optimum signal splits, offset and cycle lengths, preemption, controller functions and settings of typical signal communication equipment.

Analyze traffic operations to detect and recommend solutions to traffic safety and congestion problems.

JOB RELATED AND ESSENTIAL QUALIFICATIONS (continued):

Ability to (continued):

Perform the most advanced and complex transportation engineering related duties.

Review, evaluate and prepare traffic engineering plans.

Interpret and explain pertinent laws, rules, regulations and policies.

Assist in the development and monitoring of an assigned program budget.

Communicate clearly and concisely, both orally and in writing.

Supervise, organize, direct, train and evaluate staff.

Work effectively and cooperatively with consultants and contractors.

Establish and maintain effective working relationships and deal respectfully and tactfully with those encountered in the course of work.

EXPERIENCE AND EDUCATION

Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

> Experience: Two (2) years of responsible professional transportation engineering work similar to that of an Associate Transportation Engineer with the City of Hayward.
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> Education: Equivalent to a Bachelor's degree from an accredited college or university with major course work in Traffic/Transportation Engineering or a closely related field.
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> Licenses and Certificates: Registration as a Professional Civil or Traffic Engineer in the State of California. An out-of-state P.E. or T.E. will be accepted, but will require the candidate to obtain a State of California registration within a one-year period of being hired. Possession and maintenance of a valid Class C California Driver's License.

SPECIAL REQUIREMENTS

Essential duties require the mental and/or physical ability to: work in a standard office environment and use standard office equipment and current software; work in a field environment when needed in various weather conditions; grasp, perform repetitive hand movements and fine coordination to prepare documents and data using a computer keyboard and mouse/trackball; sit for prolonged periods of time; walk, stand, crouch, reach, twist, turn, kneel, bend, squat, stoop, and safely lift and move equipment and material weighing up to 35 pounds; converse by telephone, by email, in person, and to small or large groups and be clearly understood; read and comprehend engineering designs, plans, legal, technical, and complex documents, interact with the public and all different levels of City staff in and effective and professional manner; and safely drive to various locations throughout the City and County to travel to fulfill assigned duties and to review work outdoors. Essential functions must be performed with or without reasonable accommodation.

PROBATIONARY PERIOD: One (1) Year
H215 Senior Transportation Engineer
Created June 2012
Revised May 2013
Revised October 2017
FPPC STATUS: Designated
FLSA STATUS: Exempt