

SENIOR TRAFFIC STUDIES ANALYST

JOB DESCRIPTION

Classification Responsibilities: Under general supervision, performs professional, technical, and supervisory duties in the preparation of traffic studies and supervision of the studies unit. The position performs other related work as required.

Distinguishing Features: An employee of this class supervises and participates in the work of the Traffic Studies Unit under the supervision of the Senior Transportation Engineer or Transportation Engineer. Assignments are broad in scope requiring the use of independent judgment. Work involves frequent contact with the public regarding controversial and sensitive traffic issues. This class is FLSA exempt-executive.

QUALIFICATIONS

Minimum Qualification(s) Required. Graduation from high school or GED. Any combination of training, education, or experience equivalent to five years of technical or professional traffic, or civil engineering work; **OR** graduation from an accredited college or university with a Bachelor's Degree in Traffic, Civil Engineering, or related field, and any combination of training, education, or experience equivalent to at least two years of technical or professional traffic or civil engineering work.

Special Requirement(s). Must possess a valid Arizona Driver's License by hire date.

Substance Abuse Testing. None.

Preferred/Desirable Qualification(s). Experience in dealing with the public concerning controversial or unpleasant matters is preferred. Supervisory experience is also preferred.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public and other City employees in order to respond to citizens' questions, objections, and concerns regarding such traffic engineering matters as traffic signal requests, left-turn arrow requests, speed limit reviews, crosswalks, general traffic safety, parking prohibitions, signing, striping, school zones, and neighborhood traffic and speed mitigation concerns. Notifies citizens of the results of traffic studies. Prepares written documents, memos, letters, and technical reports with clearly organized thoughts using proper sentence structure, punctuation, and grammar to handle citizen complaints; explains City policies; and makes recommendations for traffic control changes. Presents technical information clearly, both verbally and in writing, at a level appropriate to the audience. Communicates with construction inspectors, contractors, and other Transportation Division work groups (i.e., Field Operations, Traffic Signals, Streetlights, and Traffic Engineers) to coordinate work for signal turn-on and opening newly constructed street segments. Communicates with neighborhood groups, Homeowner Associations, and individuals regarding residential speed issues, and measures available for speed mitigation. Educates property owners/managers of their responsibility for maintaining landscaping to ensure adequate sight distance. Educates and assists contractors with proper barricade placement during construction. Identifies deficiencies and recommends revisions and corrections to approved signing and striping plans, and

communicates these to Engineering Design, engineering consultants, contractors and/or Traffic Operations, as appropriate.

Manual/Physical: Conducts field studies for locations where accidents frequently occur in order to determine whether engineering improvements can be made to reduce the number of occurrences. Collects pedestrian, vehicular, and directional counts at intersections and in school areas; measures vehicle delay; makes field observations of traffic patterns, driver and pedestrian behaviors; measures safe horizontal and vertical curve speeds; and measures sight distance at intersections and of traffic control devices. Reviews the work product of others (inspects contractor's and studies analyst's striping field layouts and proposed signing locations; reviews approved signing and striping plans) to ensure compliance with procedures and state regulations regarding the Manual on Uniform Traffic Control Devices (MUTCD), "A Policy on Geometric Design of Highways and Streets", and City of Mesa signing and striping standards, and City code. Operates a motor vehicle requiring a standard Arizona Driver's License to respond to traffic concerns and to field-check completed work. Uses steel tape measure, rolling tape measure, or in-vehicle distance measuring device to collect data for pavement striping designs and to determine and mark appropriate locations of signs and pavement striping reference points. Enters data on personal computer in order to log in work request information, customer complaints and investigations/actions, and prepare memos/reports. Prepares maps and graphs, to be used in written reports as part of fieldwork requests. Sets up or removes traffic cones to guide traffic during studies or emergencies and to evaluate existing sight distance. Recognizes deficiencies in barricade setups and communicates deficiencies to contractors, City crews, or construction inspectors. Maintains an awareness of surrounding conditions for safety of self, other employees, and the public. Uses common hand tools such as a hammer, meter wheel, measuring tape, and trimmer.

Mental: Plans and organizes the activities of the traffic studies group. Supervises and evaluates the work of subordinate personnel, such as technical reports, customer contacts, and striping and signing fieldwork requests. Prioritizes own work and work of other, and assigns work to personnel. Conducts research and analyzes data to perform traffic studies (i.e., traffic count, traffic speed data, traffic accident data, striping and signing) to make recommendations to resolve traffic concerns. Collects and analyzes data on the physical and traffic characteristics of intersections in order to determine the need for signals. Analyzes and tallies by location, traffic accident reports received through local law enforcement agencies. Resolves operational work-related problems by conducting traffic studies to determine need for traffic control changes. Summarizes and analyzes pedestrian, vehicular, and directional counts. Recommends whether a school crosswalk should be established. Evaluates technical information and statistics. Performs mathematical calculations, statistical computations, sight distance calculations, pavement marking tapers, and determination of appropriate warning sign locations. Comprehends and makes inferences from written material or verbal communications from concerned citizens in order to respond to the concern being raised. Comprehends and uses reference material (MUTCD, American Association of State Highway and Transportation Officials [AASHTO] "A Policy of Geometric Design of Highways and Streets," City policies, City Traffic Barricade Manual, and other manuals) to appropriately apply the traffic engineering standards for signing and striping designs for traffic control changes. Applies good judgment using the principles and practices of traffic engineering to make field changes that are needed and were not identified in previously approved signing and striping plans. Identifies non-standard roadway geometry that may affect the installation of traffic control measures or devices at desired standards. Understands and interprets as-built construction plans, supplemented by in-

field measurements, and blueprints to prepare signing and striping diagrams. Learns job-related material through on-the-job training regarding City policies and standards, Transportation Division policies and practices, the MUTCD, and the City Traffic Barricade Manual.

Knowledge/Skills/Abilities:

Knowledge of:

principles and practices of traffic engineering, MUTCD, AASHTO, and the City Traffic Barricade Manual;

the operation, application, and limitations of electronic traffic signal controllers and peripheral equipment;

safety procedures, practices, and policies;

traffic laws and regulations pertaining to traffic control;

traffic surveying techniques and practices;

terminology, methods, practices, and techniques used in technical traffic engineering report preparation; and

principles and practices of employee supervision and training.

Skill in:

effective written and verbal communication;

determining traffic control measures to implement; and

operation of a computerized data system.

Ability to:

supervise Traffic Studies Analysts or Engineering Technician IIs in the studies unit, including completing performance evaluations;

review projects of subordinates to ensure conformance to established plans, specifications, and goals;

participate in the selection of staff, provide or coordinate staff training, work with employees to correct deficiencies;

participate in the preparation of traffic studies, including parking studies, accident analyses, signal studies, left-turn signal studies, high accident location studies, and studies concerning traffic conditions in neighborhoods and around schools;

determine traffic control measures to implement in response to complaints or emergency situations;

evaluate technical information and statistics;

present recommendations effectively both orally and in writing;

determine adherence to traffic engineering specifications;

effectively supervise employees and deal with individuals and groups, and promote a harmonious, efficient operation in Traffic Studies;

prepare for, participate in, and conduct public meetings; and

communicate with, and respond pleasantly to, a demanding and diverse public in answering questions, explaining City policies, and handling complaints.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised 8/15

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EEO-Prof

NDOT Safety-No

NDOT Random-No

DOT Safety-No

RESP-No

JOB FCTN-TEC

INCREMENTS 62-200

PAY GRADE: 49

Security-No

CDL-No

IND-9410

SWORN-No