

# **March 2011**

## **Traffic Operations Engineer**

### **Job Description**

**Exempt:** Yes  
**Department:** Traffic Operations Engineering  
**Reports To:** Chief City Engineer  
**Location:** 307 Vine Street (Huntington Bldg)  
**Date Prepared:** April 18, 2012

#### **GENERAL DESCRIPTION OF POSITION**

This position is responsible for developing, implementing, and maintaining City's traffic program.

#### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

1. Prepare traffic signal timing and coordination plans. This duty is performed annually, about 35% of the time.
2. Develop and maintain an inventory of City traffic control equipment, signal timings, traffic counts and traffic flow patterns, and other information pertinent to traffic operations. This duty is performed daily, about 25% of the time.
3. Design new or modified traffic signals and roadway intersections, including pavement design, sidewalk approaches, drainage, temporary and permanent signage and striping plans, and utility planning/coordination. This duty is performed irregularly, about 10% of the time.
4. Produce contract documents for the purpose of obtaining professional contracting services to construct traffic signals, signal timing, and infrastructure improvements. This duty is performed irregularly, about 5% of the time.
5. Manage contractor and consultant services. This duty is performed irregularly, about 5% of the time.
6. Prepare RFPs, evaluate proposals and work with consultants/contractors to implement the City's traffic program. This duty is performed irregularly, about 5% of the time.
7. Review proposed land use development plans and prepare conditions of approval, and recommend mitigation measures that preserve roadway capacity. This duty is performed weekly, about 10% of the time.
8. Communicate with the public and respond to inquiries and complaints regarding traffic operations within the City. This duty is performed weekly, about 5% of the time.
9. Perform any other related duties as required or assigned.

#### **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty mentioned satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

## **EDUCATION AND EXPERIENCE**

Technical degree required in such disciplines as law, engineering, etc, plus 5 years related experience and/or training, and 2 years related management experience, or equivalent combination of education and experience.

## **COMMUNICATION SKILLS**

Ability to write reports, business correspondence, and policy/procedure manuals; Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

## **MATHEMATICAL SKILLS**

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane, algebra, solid geometry and trigonometry.

## **CRITICAL THINKING SKILLS**

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

## **REQUIRED CERTIFICATES, LICENSES, REGISTRATIONS**

Licensed Professional Engineer (Civil or Electrical) with the ability to obtain Arkansas licensure within one year from date of hire

## **PREFERRED CERTIFICATES, LICENSES, REGISTRATIONS**

Institute of Transportation Engineers' Professional Traffic Operations Engineer (PTOE) certification

## **SOFTWARE SKILLS REQUIRED**

Mastery: 10-Key

Advanced: Accounting, Alphanumeric Data Entry, Database, Other, Spreadsheet, Word Processing/Typing

Intermediate: Contact Management, Human Resources Systems, Presentation/PowerPoint

Basic: Programming Languages

## **INITIATIVE AND INGENUITY**

### **SUPERVISION RECEIVED**

Under general direction, working from policies and general directives. Rarely refers specific cases to supervisor unless clarification or interpretation of the organization's policy is required.

### **PLANNING**

Considerable responsibility with regard to general assignments in planning time, method, manner, and/or sequence of performance of own work, in addition, the work operations of a group of employees, all performing basically the same type of work.

### **DECISION MAKING**

Performs work operations which permit frequent opportunity for decision-making of minor importance and also frequent opportunity for decision-making of major importance; the latter of which would affect the work operations of other employees and/or clientele to a moderate degree.

## **MENTAL DEMAND**

Intense mental demand. Operations requiring sustained directed thinking to analyze,

solve, or plan highly variable, administrative, professional, or technical tasks involving complex problems or mechanisms.

#### **ANALYTICAL ABILITY / PROBLEM SOLVING**

Moderately directed. Activities covered by wide-ranging policies and courses of action, and generally directed as to execution and review. High order of analytical, interpretative, and/or constructive thinking in varied situations.

#### **SUPERVISORY RESPONSIBILITIES**

Supervises a moderate size group (8-15) of employees, but possibly smaller if difficult, semi-technical work, requiring considerable direction and assistance, is involved. Plans, directs and coordinates work, makes decisions, and performs personally the more difficult aspects of the same broad assignment.

Supervises the following departments: traffic operations staff

Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, hiring and training employees; planning, assigning and directing work; appraising performance, rewarding and disciplining employees; addressing complaints and resolving problems.

#### **RESPONSIBILITY FOR FUNDS, PROPERTY and EQUIPMENT**

Occasionally responsible for organization's property where carelessness, error, or misappropriation would result in moderate damage or moderate monetary loss to the organization. The total value for the above would range from \$5,000 to \$150,000.

#### **ACCURACY**

Probable errors of internal and external scope would have a moderate effect on the operational efficiency of the organizational component concerned. Errors might possibly go undetected for a considerable period of time, thereby creating an inaccurate picture of an existing situation. Could cause further errors, losses, or embarrassment to the organization. The possibility for error is always present due to requirements of the job.

#### **ACCOUNTABILITY**

##### **FREEDOM TO ACT**

Moderately directed. Freedom to act is given by upper level management guided by general policies and objectives that are reviewed by top management.

##### **ANNUAL MONETARY IMPACT**

Very small. Job creates a monetary impact for the organization up to an annual level of \$100,000.

##### **IMPACT ON END RESULTS**

Moderate impact. Job has a definite impact on the organization's end results. Participates with others in taking action for a department and/or total organization.

#### **PUBLIC CONTACT**

Frequent contacts with general public, patrons, or other outside representatives, wherein the manner of handling these contacts has a bearing on the organization's position and operation.

#### **EMPLOYEE CONTACT**

Contacts of considerable importance within the department or office, such as those

required in coordination of effort, or frequent contacts with other departments or offices, generally in normal course of performing duties. Requires tact in discussing problems and presenting data and making recommendations, but responsibility for action and decision reverts to others.

### **USE OF MACHINES, EQUIPMENT AND/OR COMPUTERS**

Regular use of highly complex machines and equipment; specialized or advanced software programs.

### **WORKING CONDITIONS**

Periodically exposed to such elements as noise, intermittent standing, walking, occasionally pushing, carrying, or lifting; but none are present to the extent of being disagreeable.

### **ENVIRONMENTAL CONDITIONS**

The following work environment characteristics described here are representative of those an employee encounters while performing essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the functions of this job, the employee is regularly exposed to outdoor weather conditions; occasionally exposed to work near moving mechanical parts, work in high, precarious places, risk of electrical shock, vibration. The noise level in the work environment is usually moderate.

### **PHYSICAL ACTIVITIES**

The following physical activities described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions and expectations.

High diversity, low physical. Work activities which allow for considerable amount of diversity as an incumbent performs a variety of tasks. Such tasks might be performed from a given work area, or the individual may move about physically in performing a variety of duties.

While performing the functions of this job, the employee is regularly required to stand, walk, sit, talk or hear; frequently required to use hands to finger, handle, or feel, reach with hands and arms; and occasionally required to climb or balance, stoop, kneel, crouch, or crawl. The employee must occasionally lift and/or move up to 50 pounds; frequently lift and/or move up to 10 pounds. Specific vision abilities required by this job include close vision; distance vision; color vision; peripheral vision; and depth perception.

### **ADDITIONAL INFORMATION**

Proficiency in software such as HCM/HCS, Synchro, VISSIM, CORSIM, TRANSYT-7F, PASSER, and TRU-TRAFFIC is preferred.