



# Illinois Department of Transportation

## Memorandum

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To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS  
From: Becky Koehler  
Bureau Chief of Personnel Management  
Subject: Technical Vacancy  
Date: April 9, 2018

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Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement April 11, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Tuesday, April 24, 2018**. Applications will not be accepted after that time and date.

**NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.**

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CE IV                      Traffic Signal Systems Engineer  
Bureau of Operations  
Office of Highways Project Implementation  
Springfield

Attachments  
42706

Technical Applications [PM1080 rev 6/1/17](#)\*\***must be received** by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to [DOT.CO.BPM.EmploymentApplications@Illinois.gov](mailto:DOT.CO.BPM.EmploymentApplications@Illinois.gov) by **Tuesday, April 24, 2018**, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

**NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.**



## Illinois Department of Transportation

An Equal Opportunity Employer

### Position Summary Sheet

<b>Classification:</b>	<b>Civil Engineer IV</b>	<b>Salary:</b>	<b>\$5,800 - \$7,515*</b>
<b>Position Title:</b>	<b>Traffic Signal Systems Engineer</b>	<b>Union Position:</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Position Number:</b>	<b>PW114-23-75-605-20-01</b>	<b>IPR#:</b>	<b>42706</b>

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#### Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation / Bureau of Operations / 2300 South Dirksen Parkway, Springfield, IL

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#### Description Of Duties:

This position is accountable for assisting in the development and implementation of design standards, specifications and special provisions relating to traffic signal and electrical contracts; reviewing traffic signal construction plans; coordinating railroad-connected signalized intersections; and administration of the Signal Coordination and Timing program and contracts.

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#### Special Qualifications:

##### **Required:**

- Current Illinois Professional Engineer license
- Valid driver's license
- Occasional travel with overnight stays

##### **Desired:**

- Six years of experience in civil engineering including four years of supervisory responsibility and completion of complex civil engineering projects, of which three years should be in traffic engineering
- Thorough knowledge of traffic signal systems engineering
- Strong oral and written communication skills

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#### Shift/Remarks:

8:00 am – 4:30 pm / Monday – Friday

\*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.

\*\*Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted.

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
POSITION DESCRIPTION**

<b>DATE:</b>	February 1, 2018	<b>POSITION:</b>	Traffic Signal Systems Engineer
<b>APPROVED BY:</b>	Amy Eller	<b>OFFICE:</b>	Highways Project Implementation/ Bureau of Operations
<b>CODE:</b>	PW114-23-75-605-20-01	<b>REPORTS TO:</b>	Traffic Systems Engineer

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***Position Purpose***

This position is accountable for assisting in the development and implementation of design standards, specifications and special provisions relating to traffic signal and electrical contracts, reviewing traffic signal construction plans, coordinating railroad-connected signalized intersections, and administration of the Signal Coordination and Timing program and other consultant contracts.

***Dimensions***

Traffic Signal Contract Costs:	\$20 Million Annually
Traffic Signal and Electrical Maintenance Contract Costs:	\$14 Million Annually
Signal Coordination And Timing (SCAT) Consultant Contracts:	\$0.6 Million Annually
Other Consultant Contracts:	\$0.7 Million Annually

***Nature and Scope***

This position reports to the Traffic Systems Engineer. There are no subordinates reporting to this position.

The primary focus of this position is on traffic signals and traffic signal systems on state highways. The contract standards and specifications implemented by and under the direction of the incumbent affect the standardization of traffic signals throughout the state. The incumbent administers downstate consultant traffic signal design engineering contracts and Signal Coordination and Timing (SCAT) contracts. The incumbent assists with developing the annual program for the Traffic Implementation Unit, participates in the negotiations with selected consultant engineering firms, lays out the criteria which will be used in developing consultant agreements, issues work orders to the consultant, monitors the progress of the work, adjusts authorized work to spend the remaining funds, authorizes payment to the consultant for work completed, and upon contract completion, conducts performance evaluations.

Typical problems faced by the incumbent include maintaining awareness of the latest developments in traffic signal design and construction policy, including hardware and software design and operation, as well as signal coordination and timing implementation. The challenge of this position is to ensure that the contracts and operations implemented are consistent with the latest policies and procedures, and state and federal standards.

The incumbent personally reviews preliminary and final traffic signal plans prepared by region personnel, local governmental agencies, and consultants for operational and safety aspects, and adequacy of the planned installations. The plans are forwarded by the central Bureaus of Design and Environment or Local Roads and Streets for review and revisions by the incumbent. The incumbent must ensure that the latest design standards, specifications and special provisions are implemented for traffic signal and electrical contracts; that designs and detailed standards for traffic signals are developed and prepared as directed; that contracts with consultants for preparation of traffic signal plans are developed; that the Bureau of Design and Environment is assisted in the final processing of traffic signal plans, specifications, special provisions, and cost estimates; and that the Bureaus of Design and Environment and Construction are assisted in the analysis of construction change orders for traffic signal items. Plan review and approval by the incumbent is a requisite step in the processing of traffic signal plans

for inclusion in lettings and contracts. The incumbent serves as the bureau's liaison with Region One in the development, processing and administration of their electrical maintenance contracts. For all regions, the incumbent assists with Inter-Governmental Agreements (IGA's) for traffic signals, administers proprietary signal equipment approval for municipalities, and participates in statewide signal maintenance and improvement initiatives. The incumbent serves as the bureau's liaison with the districts in the completion of railroad interconnect inspections, maintains records of these inspections, and coordinates this work with the Illinois Commerce Commission.

Under direction, the incumbent administers downstate contracts for traffic signal design consultant engineering, SCAT, and overhead sign structure and high mast light tower structural inspections. The incumbent has the authority to resolve problems involving the daily operations of the traffic signal plan and change order processing and review functions. Problems of a sensitive or unusual nature that could affect bureau policy or result in adverse publicity or public reaction are referred to the Traffic Systems Engineer for discussion and/or resolution.

The incumbent may serve from time to time on special department advisory committees. Contacts with the department include personnel within the regions and central bureaus regarding processing of plans, specifications and standards, as well as new technologies being implemented. Contacts with outside governmental agencies include the Federal Highway Administration, Illinois Commerce Commission, and local agencies regarding traffic signal contracts. The incumbent has frequent contacts with contractors on traffic commodities and equipment used in traffic signal construction and maintenance. Occasional travel with overnight stays may be required of this position.

The effectiveness of this position is measured by the quality and efficiency of statewide traffic signals installed under contract; reduction in delay and fuel consumption due to the efficient administration of Signal Coordination and Timing (SCAT) contracts; clear and concise contract plans and specifications which can be easily understood and which present little, if any, construction and future maintenance problems; the effect of traffic signals both economically and operationally on the motoring public; and the efficient administration of overhead sign structure and high mast light tower structural inspection contracts.

### ***Principal Accountabilities***

1. Keeps abreast on the current traffic, design and construction policies and procedures to ensure that the department is providing the motoring public high-quality traffic signal devices available with economy of installation, operation, and maintenance.
2. Reviews and approves traffic signal plans and specifications for inclusion in contract lettings.
3. In collaboration with Region One, revises regional specifications and standards for inclusion into the Standard Specifications and the Highway Standards for the statewide use.
4. Administers consultant engineering contracts for traffic signal design, Signal Coordination and Timing (SCAT), and overhead sign structure and high mast light tower structural inspection.
5. Acts as a resource for district and consultant personnel involved in traffic signal design, construction, maintenance, and timing.
6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
7. Performs other duties as required or assigned.