



# 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: June 29, 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 July 3, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Tuesday, July 17, 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 V

Work Zone Safety Engineer  
Bureau of Safety Programs & Engineering  
Office of Highways Project Implementation  
Springfield

Attachments  
42952

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, July 17, 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.**



## Position Summary Sheet

An Equal Opportunity Employer

<b>Classification:</b>	<b>Civil Engineer V</b>	<b>Salary:</b>	<b>\$6,315 - \$8,263*</b>
<b>Position Title:</b>	<b>Work Zone Safety Engineer</b>	<b>Union Position:</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Position Number:</b>	<b>PW115-23-75-803-10-01</b>	<b>IPR#:</b>	<b>42952</b>

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

Office of Highways Project Implementation / Bureau of Safety Programs and Engineering / 2300 S. Dirksen Parkway, Springfield, IL

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### Description Of Duties:

This position is responsible for directing and administering statewide work zone safety and mobility programs for all public highways and streets. This includes developing policy, procedures, standards, specifications, and other technical resources to meet the federal requirements for work zone safety and mobility, to improve the active management of construction and maintenance work zones, and to improve the safety for motorists and workers. This position is responsible for reviewing and approving transportation management plans submitted by district operations and program development staff, performing work zone traffic control reviews, and providing statewide training relative to work zone safety and mobility. The position will provide administration oversight and manage the department's Traffic Control Field Manual and other associated manuals/policies.

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### Special Qualifications:

#### Required:

- Current Illinois Professional Engineer license
- Valid driver's license
- In-state and out-of-state travel that may require overnight stays

#### Desired:

- Nine years of experience in the practice of civil engineering of which at least five years should be in the specific area of highway engineering, three years of which should include supervision of planning/development of significant engineering work
- Knowledge of the principles and practices of civil engineering with special emphasis on activities involving highway safety
- Knowledge of the modern methods and procedures of public works construction and maintenance operations
- Knowledge of the laws controlling the activities administered
- Knowledge of the modern methods and techniques related to highway safety analysis utilizing the AASHTO Highway Safety Manual, and engineering practices following the AASHTO Roadside Design Guide and other relevant guidance documents; and the use and application of the Manual of Uniform Traffic Control Design (MUTCD), Highway Capacity Manual (HCM), and other traffic engineering documents and manuals
- Working knowledge of the modern methods of traffic control signing, pavement marking, and protection of workers in work zones; and the human factor theory with respect to traffic safety
- Ability to develop and maintain cooperative relationships with staff, other agencies, and the public
- Ability to interpret and enforce departmental policies and federal regulations
- Strong oral and written communication skills; and ability to work on multiple tasks simultaneously

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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>	April 17, 2018	<b>POSITION:</b>	Work Zone Safety Engineer
<b>APPROVED BY:</b>	Juan Pava	<b>OFFICE/DIVISION:</b>	Highways Project Implementation/ Safety Programs and Engineering
<b>CODE:</b>	PW115-23-75-803-10-01	<b>REPORTS TO:</b>	Highway Safety Programs Unit Chief

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***Position Purpose***

This position is responsible for directing and administering statewide work zone safety and mobility programs for all public highways and streets. This includes developing policy, procedures, standards, specifications, and other technical resources to meet the federal requirements for work zone safety and mobility, to improve the active management of construction and maintenance work zones, and to improve the safety for motorists and workers. This position is responsible for reviewing and approving transportation management plans submitted by district operations and program development staff, performing work zone traffic control reviews, and providing statewide training relative to work zone safety and mobility. The position will provide administration oversight and manage the department's Traffic Control Field Manual and other associated manuals/policies.

***Dimensions***

Annual Work Zone Traffic Control Costs	\$25 million
Annual Number of Training Programs	30
Annual Number of Detours	70
Annual Number of Transportation Management Plans	35
Annual Number of Work Zone Reviews	80

***Nature and Scope***

This position reports directly to the Highway Safety Programs Unit Chief. No staff report to this position.

This position requires extensive technical knowledge and experience in traffic engineering, queuing analysis, analysis of crash statistics, and knowledge of federal policies and rules, contract plan preparation, construction and operation practices and procedures. The incumbent must be familiar with the Illinois Manual on Uniform Traffic Control Devices (MUTCD), traffic engineering practices including signing and pavement marking techniques, work zone traffic control and human factors theory as it relates to motorist behavior and information needs. The work zone standards, specifications, policies, and procedures developed under the direction of the incumbent affects work zone safety and mobility and the standardization of work zone traffic control devices and their appropriate uses throughout the state. The incumbent must recognize and consider that changes in procedures and methods have significant economic impact on the motoring public and the manufacturers, contractors, distributors, and consultants, as well as the long-term costs to the department and local governments.

The greatest challenge for this position is to use his/her knowledge and experience to develop effective work zone safety programs, to direct research to identify methods and innovative techniques to enhance safety and mobility in work zones, to effectively communicate the need for implementing these programs to others (from upper management to industry) and have the ability to motivate all responsible parties to utilize and adopt safe procedures. Typical problems encountered by the incumbent include incorporating federal policies and rules into practice through policy and procedures, standards and specifications, reviewing construction and maintenance work zone traffic

control and transportation management plans, recognizing the potential for traffic crashes during construction and maintenance operations, and developing new standards, specifications, policies and procedures that address potential and actual crash situations.

The incumbent works with a team of experts and oversees the review of selected work zone sites to identify and recommend measures to improve the safety of the motoring public and workers and ultimately reduce crashes and oversees the analysis of appropriate crash reports and the development of recommended policy, procedure, and standards changes. This position is responsible for assisting the Bureau Chief of Safety Programs and Engineering, the Safety Programs Engineer, and the Highway Safety Programs Unit Chief in directing the efforts of the Statewide Work Zone Safety Committee and its subcommittees, overseeing the development and implementation of work zone safety and mobility and other work zone related training programs; revising Illinois Department of Transportation's (IDOT) Traffic Control Field Manual, assisting local agencies and utility companies, overseeing and directing the efforts of the Illinois Center for Transportation (ICT) technical review panels for research projects; and overseeing and reviewing the development and evaluation of new products and techniques relating to work zone safety and mobility. This position is also responsible for monitoring the latest developments in federal laws and regulations, national practices and policies, and crash trends relating to work zone safety and mobility.

The incumbent is afforded broad latitude in accomplishing his/her accountabilities regarding work zone safety training; program development and implementation; policy, procedure, standards and specifications development; and interpretation of work zone safety and mobility. Problems of an unusual nature may be directed to the Highway Safety Programs Unit Chief and/or the Safety Programs Engineer for discussion or resolution.

Frequent contacts within the department are districts one through nine, the central Bureaus of Construction, Design and Environment, Operations, and Local Roads; and the Office of Planning and Programming (OPP). Contacts outside the department are the Federal Highway Administration (FHWA), the University of Illinois/ICT, the Illinois State Police, county and city engineers, public utility companies, manufacturers, suppliers, contractors, and laborers organizations. S/He represents the bureau on various committees and task forces to provide expertise regarding work zones and traffic safety. Occasional travel is required.

The effectiveness of this position will be measured by the safe and efficient movement of traffic through or around work zones. It will also be measured by the degree to which work zones are in compliance with the provision of the MUTCD, IDOT standards and guidelines, and the federal rules and policies. Other measurements include the ultimate reduction in work zone crashes, the quality of publications developed and distributed, and the success and effectiveness of the safety programs.

### ***Principal Accountabilities***

1. Directs the development and update of appropriate policies, procedures, standards and specifications to improve work zone safety and mobility for all state highways and streets. This entails ensuring the department is in compliance with the requirements of the federal rules for work zone safety and mobility.
2. Monitors, reviews, and makes recommendations regarding the latest developments in federal laws and regulations, national practices and policies, and crash trends relating to work zone safety and mobility.
3. Directs the update of the department's Traffic Control Field Manual, including the training of department staff in the current requirements of the manual.

4. Directs the development and update of appropriate educational materials on work zone safety and mobility. Participates and directs training efforts and encourages and assists others in implementing training courses. These courses are updated regularly based on changes of federal regulations, statewide work zone reviews, and national practices and policies.
5. Provides direction to district traffic control supervisors and design personnel in the proper interpretation of standards and specifications and in the development of traffic control plans.
6. Provides oversight and direction of technical review panels as part of the department's research efforts through its partnership with the ICT. Directs policy and standard changes based on research conclusions.
7. Assists the Bureau Chief of Safety Programs and Engineering, Safety Programs Engineer, and Highway Safety Programs Unit Chief in directing the efforts of the Statewide Work Zone Safety Committee and its subcommittees. This includes chairing pertinent subcommittees.
8. This position is responsible for assisting with the implementation of the Illinois Work Zone Photo Speed Enforcement Program, serving on Strategic Highway Safety Plan (SHSP) implementation teams, and representing the department at the state and national level as an expert in work zone safety and mobility.
9. Directs the statewide joint IDOT/FHWA review of selected construction projects to determine the effectiveness of the state's procedures for work zone safety and mobility. Recommends site specific changes to the districts based on these reviews and further policy, procedure, and standard changes to the Highway Safety Programs Unit Chief and/or Safety Programs Engineer to provide continual improvement to work zones.
10. Oversees the review of selected work zone crash sites to identify and recommend measures to reduce crashes. Oversees the analysis of work zone crash reports and the development of recommended policy, procedure, and standards changes.
11. Monitors work zone traffic control operations and crashes to ensure that work zone safety training and procedures implemented by the Safety Programs Unit are providing for the safety of workers and the motoring public, as well as mobility through or around work zones.
12. Directs the evaluation of work zone safety devices to determine if they are designed, positioned, maintained, and uniformly used to achieve maximum effectiveness.
13. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
14. Performs other duties as assigned.