To:       DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From:     Dianna L. Taylor
          Bureau Chief of Personnel Management
Subject:  Technical Vacancy
Date:     March 16, 2017

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement March 21, 2017 in the designated areas.

The deadline for applicants to submit their names for consideration is 4:30 p.m. on Monday, April 3, 2017. Applicants 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.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CE V       Highway Railway Safety Engineer
           Bureau of Safety Programs & Engineering
           Office of Program Development
           Springfield

Attachments
41457
Technical Applications (PM 1080 rev 9/19/16) 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 by Monday, April 3, 2017, 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

Classification: Civil Engineer V
Position Title: Highway Railway Safety Engineer
Position Number: PW115-23-65-803-11-01

Salary: $6,315 - $8,263*
Union Position: ☒ Yes ☐ No
IPR#: 41457

Office/Central Bureau/District/Work Address:
Office of Program Development/Bureau of Safety Programs and Engineering/2300 South Dirksen Parkway, Springfield, IL

Description Of Duties:
This position is responsible for the administration of a statewide highway-railway grade crossing safety program which includes developing and maintaining the Highway - Railway Grade Crossing Implementation Plan as required by federal regulations, coordinating with the Illinois Commerce Commission to develop local highway-railway grade crossing improvement projects under the Illinois Grade Crossing Protection Fund (GCPF), development of statewide railway-highway safety crossing projects under the Federal Highway-Railway Grade Crossing Safety Program, and reporting annually to FHWA on the accomplishments of the Highway -Railway Grade Crossing Safety Program. This position also provides broad support for the Highways Safety Programs Unit and assists the Safety Design Engineer.

Special Qualifications:

Required:
- Current Illinois Professional Engineer license
- Valid driver’s license
- Statewide travel with limited out-of-state travel which may require overnight stays

Desired:
- Nine years of experience in civil engineering of which at least five years should be in the specific area of highway engineering, three years of which should have been supervising engineering functions
- Knowledge of highway and railway geometrics, traffic and rail signal design and drainage principles
- Ability to maintain harmonious, cooperative relationships with departmental staff, state, federal, railroad and industry personnel
- Ability to prioritize work load with daily activities as well as long-range planning
- Ability to make presentations at meetings, conferences or training sessions
- Strong oral and written communication skills

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.
POSITION DESCRIPTION

DATE: 10/13/16
POSITION: Highway Railway Safety Engineer

APPROVED BY: Priscilla Tobias
OFFICE: Office of Program Development
/Bureau of Safety Programs & Engineering

CODE: PW115-23-65-803-11-01
REPORTS TO: Safety Programs –Unit Chief

Position Purpose

This position is responsible for the administration of a statewide highway-railway grade crossing safety program which includes developing and maintaining the Highway - Railway Grade Crossing Implementation Plan as required by federal regulations, coordinating with the Illinois Commerce Commission to develop local highway-railway grade crossing improvement projects under the Illinois Grade Crossing Protection Fund (GCPF), development of statewide railway-highway safety crossing projects under the Federal Highway-Railway Grade Crossing Safety Program, and reporting annually to FHWA on the accomplishments of the Highway -Railway Grade Crossing Safety Program. This position also provides broad support for the Safety Programs Unit and assists the Safety Design Engineer in management of unit functions.

Dimensions

<table>
<thead>
<tr>
<th>Staff:</th>
<th>2 direct</th>
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<tbody>
<tr>
<td>GCPF, Federal-Aid Hwy/Railroad:</td>
<td>+ 150 projects annually + $48M annually</td>
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<tr>
<td>Local federal-aid construction projects:</td>
<td>250-300 projects annually</td>
</tr>
<tr>
<td>Special Projects</td>
<td>+ $15-$20M annually</td>
</tr>
<tr>
<td>Active Railroad Companies:</td>
<td>+30</td>
</tr>
<tr>
<td>Rail Crossings:</td>
<td>+ 8,100</td>
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Nature and Scope

This position reports to the Safety Programs Unit Chief. The Highway-Railway Safety Engineer and the Highway-Railway Technician report directly to this position.

This position operates in an environment of developing and administering programs for the improvement of safety at highway-railway crossings encompassing GCPF, Federal-aid, MFT and state and locally funded projects. S/He is the technical expert for highway-railway grade crossing safety programs and projects and provides engineering and technical guidance in support of the implementation of a statewide highway-railway grade crossing safety program. This position coordinates with local agencies, districts, and ICC for highway-railway grade crossing improvements project identification, development and delivery. It administers highway-railway crossing safety projects in accordance with state and federal regulations and guidelines. The incumbent represents the department at ICC hearings (accompanied by Chief Counsel), coordinates highway -railway grade crossing safety projects with railroad companies, supervises the development of agreements, selects local projects for inclusion in the annual federal highway-railway safety program, secures federal authorization, performs technical review of associated invoices, performs final inspections of completed projects, processes close-out documents, and maintains GCPF use manuals. Successful completion of these tasks requires knowledge of highway and railway geometrics, traffic and railway signal design, drainage principles, and basic invoice accounting. The incumbent is responsible for developing and maintaining the highway-railway grade crossing safety implementation plan and reporting annually to FHWA on the accomplishments of the highway-railway grade crossing safety program as required by federal regulations.
The greatest challenges for this position lie in using knowledge and experience to ensure safety of operation for each crossing improvement based on the magnitude of the crash potential, should the installation be inadequate, and in maximizing the safety of all public system highway-railway crossings in the state within limited funding constraints. Typical issues encountered for this position include maintaining up-to-date knowledge of the applicable state and federal design criteria and policies in order to assure policy compliance of railroad plans and constructed projects and assuring that highway and related railroad work is coordinated and scheduled to ensure timely completion with the least disruption to highway and railway traffic.

Personal functions of this position include representing the department at ICC hearings (accompanied by Chief Counsel); conducting on-site field meetings and on-site review of all highway-railway crossings included in federal safety program applications to prioritize projects and determine funding eligibility; performing periodic inspection of completed crossing projects to verify proper installation; performing on-site diagnostic reviews for high speed rail and quiet zone evaluations; and functioning as liaison between ICC, districts, local agencies, and Bureau of Operations personnel for traffic signal/railway signal interconnects on the state and local highway system. This function is unique in that it is solely responsible for the entire process from selecting projects, coordinating programming, notifying successful candidates, preparing agreements, issuing notice to proceed, monitoring progress, reviewing billing/invoices, performing final inspections, and conducting final closeout. S/He provides responses to attorney and general public inquiries, reviews approach roadway design exceptions, reviews general layout plans and cost estimates for highway-railway crossing projects, and assures coordination between the railroad companies and contractors. The incumbent resolves problems associated with railroad agreements, railroad bills/invoices, stipulated agreements, and inspections of completed projects. These duties require knowledge of design criteria, construction techniques, and contract administration.

This position is assisted in all highway-railway matters by the following:

Rail Safety Engineers, who assist in representing the bureau at ICC hearings and provides liaison with the ICC, railroad companies, districts, and local agencies on project development and construction.

Rail Safety Technician, who prepares agreements for state and local railway-highway projects, prepares department’s comments for stipulated agreements, reviews or notifies district personnel upon completion of all state and local highway-railway projects, conducts on-site operational inspection of projects, evaluates bills/invoices for crossing projects, and monitors projects after completion through closeout.

The incumbent is afforded broad latitude in accomplishing accountabilities regarding implementation of policy, procedures, and standards and specification development, and interpretation of highway-railway grade crossing safety guidelines and principles. S/He accomplishes objectives in accordance with established policy and procedures with minimum guidance from the immediate supervisor regarding the position’s objectives, plans for the work, and specific details for accomplishing work. This position recommends staffing needs, conducts staff performance evaluations, and recommends disciplinary actions when necessary. The incumbent is constrained by federal, state, and departmental regulations, laws, policies, and procedures. Issues of an unusual nature may be directed to the Safety Programs Engineer and/or the Safety Implementation Engineer for discussion or resolution.
Internal contacts include the Bureaus of Local Roads and Streets, Design and Environment, Operations, and Materials; the Offices of Chief Counsel, Planning and Programming, Office of Intermodal Project Implementation. External contacts include Illinois Commerce Commission, Federal Highway Administration, the Federal Rail Administration Illinois State Police, county and city engineers, other state highway departments, other state agencies, local agencies, and railroad companies. These contacts generally deal with issues/problems involving the interpretation of law, policies, procedures, ICC orders, resolution of design problems, scheduling with districts and local agencies and railroad companies, and status of ongoing highway-railway projects. S/He represents the bureau on various committees and task forces to provide expertise regarding highway-railway grade crossing traffic safety. The incumbent frequently travels to attend ICC hearings, meetings, seminars, and on-site reviews of crossings throughout the state.

The effectiveness of this position can be measured by the degree to which highway-railway grade crossing improvement projects are in compliance with applicable standards and guidelines and federal rules and policies as well as the incumbent’s efficiency and relative success in administering the Highway-Railway Safety Programs. Other measurements include the ultimate reduction in highway-railway grade crossing crashes and the success and effectiveness of the highway-railway grade crossing safety programs as demonstrated by the incumbent's efforts to work closely with ICC, districts, central office bureaus, and local agencies to accomplish this goal.

**Principal Accountabilities**

1. Administers the statewide GCPF, Federal-aid Highway-Railway Safety Program, from development to close-out for upgrading highway-railway crossing protection on state and local agency routes.

2. Develops and maintains the Highway Railway Grade Crossing Safety Implementation Plan with input from various safety stakeholders according to federal regulations.

3. Develops and submits annual report to FHWA on the effectiveness of the Highway Railway Grade Crossing Safety Program.

4. Provides districts and local agencies with the technical assistance and direction necessary to lead to the upgrading of state and local agency highway-railway crossings.

5. Conducts statewide on-site reviews of state and local project application locations in order to develop the annual Federal-aid Highway-Railway Safety Program.

6. Represents the department at ICC hearings and on-site meetings and serves as a liaison between ICC, district, and Bureau of Operations personnel for traffic signal interconnects on the state and local highway system.

7. Provides responses to attorney and general public inquiries for highway-railway grade crossing projects.

8. Reviews all safety related issues relative to highway-railway grade crossings and related, potential highway-railway grade crossing projects.

9. Reviews general layout plans; reviews and approves approach roadway design exceptions; and reviews cost estimates for highway-railway grade crossing projects.
10. Develops, or assists in development, and updates appropriate policies, procedures, standards, and specifications to improve highway-railway grade crossing safety for state and local roadways in Illinois, ensuring compliance with federal rules for highway-railway grade crossing safety.

11. Trains, motivates, and evaluates staff to ensure a well-developed and competent staff in accomplishing all assignments and performs all duties in a manner conducive to the fair and equitable treatment of all employees.

12. Assists the State Safety Engineer, the Safety Implementation Engineer, and the Safety Programs Engineer in directing efforts of the Statewide Railroad Safety Committee, as outlined in the Strategic Highway Safety Plan (SHSP), and its task groups. This includes chairing pertinent task groups.

13. Coordinates ongoing efforts working with Operation Lifesaver and Public Education and Enforcement Study (PEERS) programs which are aimed at reducing crashes, fatalities, and serious injuries at highway-railway crossings.

14. Performs duties in compliance with department safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.

15. Performs other duties as required or assigned.