

# Job Title: CIVIL ENGINEER TRAINEE - RAIL SAFETY ENGINEERING TRAINEE - IPR#45261

Agency: Department of Transportation

Closing Date/Time: 11/29/2021

Salary: \$4,365 - \$4,785 Monthly

Job Type: Salaried Full Time

County: Sangamon

Number of Vacancies: 1

Plan/BU: NR916

**DO NOT APPLY ONLINE**

**\*\*DO NOT CLICK THE APPLY BUTTON\*\***

## **HOW TO APPLY:**

Technical Applications PM1080 (rev 8/21/21) 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 the closing date listed above. The previous application form revised 3/8/21 will be accepted until October 2, 2021. Please visit <https://idot.illinois.gov/about-idot/employment-opportunities/employment/index> to download the Technical Application PM1080.

Unofficial college transcripts must be included with application. Official college transcripts must be submitted upon date of employment. Applicants possessing an Engineer Intern License must also include a copy with application. Applicants not submitting these documents by the posting deadline will not be considered for employment.

In an attempt to fill the posted positions, IDOT will contact applicants during the posting period to schedule interviews. All postings will result in three interview pools, with application cut off dates of: September 27, 2021, October 27, 2021 and November 29, 2021. Those applicants that have been deemed qualified and have submitted a completed application with all required attachments will be invited to interview accordingly based on the date their application documents are received.

Please indicate IPR#45261 on the Technical Application PM1080.

## **Agency Mission Statement**

The Illinois Department of Transportation is seeking to hire a Rail Safety Engineering Trainee.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

Employees enjoy excellent benefits, including health, vision and dental insurance; a retirement plan and deferred compensation options; state holidays and other time off; tuition reimbursement; flexible schedules; and pre-tax benefit programs. The department also offers extensive training and career advancement opportunities.

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

## **Job Responsibilities**

Under direct supervision, this position is responsible for assisting in the administration of the federal Railway-Highway Crossings Program (Section 130), Federal-aid Highway Program (FAHP), and Grade

Crossing Protection Fund (GCPF). Additionally, under direct supervision, the incumbent is responsible for assisting in the development of railway-highway crossing projects under the Section 130 and FAHP.

This position reports to the Highway Railway Safety Engineer. There are no subordinates reporting to this position.

This position operates within an environment where s/he assists the Highway Railway Safety Engineer in the development and administration of programs for the improvement of safety at railway-highway crossings in the state encompassing Section 130, FAHP, GCPF, and locally funded projects. Under direct supervision, the incumbent assists with administering simple railroad projects in accordance with state and federal regulations and guidelines, coordinating projects with railroad companies throughout the state, and providing basic engineering expertise necessary for the development of agreements and plans for railroad-highway projects. S/He assists the Highway-Railway Safety Engineer in prioritizing local project applications. This position utilizes a working knowledge of both highway and railway design, specifically highway and railway geometrics, traffic and rail signal design, and drainage principles.

The greatest challenge of this position lies in maximizing the safety of local system rail crossings for the state within limited funding constraints. A typical problem for this position is to ensure that highway and related railroad work are scheduled to accommodate each other.

Under direct supervision, this position assists in the development and administration of programs aimed at providing effective railway-highway crossing safety including Section 130, FAHP, and GCPF. S/He assists in providing basic engineering expertise necessary for the development of agreements and plans as well as providing district office and local agency staff with the direction necessary to upgrade local agency railway-highway crossings. The incumbent assists in conducting on-site reviews of railway-highway crossings to prioritize projects for the Federal Railway-Highway Crossing Safety Program and responds to traffic signal and railroad signal interconnect inquiries on local highway systems. S/He assists project development engineers to ensure coordination between railroads and contractors for proposed railroad work in federal aid roadway and bike trail projects. Additionally, the incumbent assists with keeping the department's GCPF publication up to date regarding its availability and use. This position is responsible for additional rail related duties as assigned by the Highway Railway Safety Engineer.

### **(Job Responsibilities continued)**

The incumbent performs under immediate supervision and is given little latitude to act independently when performing the responsibilities of this position. S/He refers all problems to the Highway Railway Safety Engineer for resolution. This position is guided by state and federal policies and by the rules and regulations of the Illinois Commerce Commission (ICC) and the department.

Internal contacts include the Office of Chief Counsel (OCC), Office of Highway Project Implementation (OHPI), Office of Planning and Programming (OPP), and Office of Intermodal Project Implementation (OIPI). Additional contacts may include staff from district offices and the Bureau of Design and Environment, Bureau of Operations, Bureau of Materials, and Bureau of Research. External contacts include representatives from local agencies, railroad companies, the ICC, Federal Highway Administration (FHWA), and other state departments of transportation. Generally, these contacts deal with interpretation of law, engineering policies and procedures, ICC orders, and the status of ongoing rail projects. This position requires occasional in-state and out-of-state travel which may include overnight stays in order to attend ICC hearings, meetings, seminars, and railroad crossings throughout the state for on-site reviews.

The effectiveness of this position is measured by the efficiency and relative success of assisting in the administration of rail crossing programs for which the Highway Safety Programs Unit is responsible.

### **Principal Accountabilities**

1. Assists the Highway Railway Safety Engineer in the development and administration of programs aimed at railway-highway crossing safety including Section 130, FAHP, GCPF and locally funded projects.
2. Assists in providing basic engineering assistance as part of project development and agreement preparation to ensure rail crossing protection is commensurate with the scope of proposed highway

improvements.

3. Provides staff at district offices and local agencies with the technical assistance and direction necessary to accomplish the upgrade of local agency railway-highway crossings.
4. Assists in conducting on-site reviews of railway-highway crossings to prioritize projects for the federal Rail Safety Program.
5. Assists in responding to traffic signal and railroad signal interconnect inquiries.
6. Assists project development engineers to ensure coordination between railroads and contractors for proposed railroad work in federal aid roadway and bike trail projects.
7. Assists with keeping the department's GCPF publication up to date regarding its availability and use.
8. Performs additional rail related duties as assigned by the Highway Railway Safety Engineer.
9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
10. Performs other duties as assigned.

## Qualifications

### Position Requirements

- Completion of a bachelor's degree in engineering from an ABET accredited college OR a master's degree in engineering OR a current Engineer Intern License in the state of Illinois (includes those expecting to graduate in fall 2021 or spring 2022)
- Minimum of 2.5 cumulative GPA in engineering related courses. (If 2.0-2.5 GPA, applicants must have passed the Fundamentals of Engineering exam.)
- Occasional in-state and/or out-of-state travel which may include overnight stays in order to attend ICC hearings, meetings, seminars, and railroad crossings throughout the state for on-site reviews
- Valid driver's license

### Position Desirables

- Working knowledge of the routine practices of civil engineering
- Working knowledge of mathematics as applied to engineering activities
- Basic skill in the use of engineering field and office instruments
- Ability to make relatively difficult technical computations and estimates
- Strong oral and written communication skills

Work Hours: 8:00 AM to 4:30 PM Monday-Friday

Work Location: Springfield - 2300 S Dirksen Pkwy

Office: Office of Highways Project Implementation/Bureau of Safety Programs and Engineering

Agency Contact: DOT.CO.BPM.EmploymentApplications@Illinois.gov

Job Function: Transportation

Collective Bargaining Agreement language applies to this requisition

We are currently transitioning our application process away from paper process to an electronic application process. This position has not been transitioned please follow the directions below when applying to this position.

Please visit the IDOT website at <http://www.idot.illinois.gov/about-idot/employment-opportunities/employment/index> to obtain the required bid forms and application forms.