

Job Title: TECHNICAL MANAGER V - TRAVEL DEMAND MODELING UNIT CHIEF - IPR#44626

Agency: Department of Transportation

Closing Date/Time: 06/04/2021

Salary: \$6,145 - \$10,210 Monthly

Job Type: Salaried Full Time

County: Cook

Number of Vacancies: 1

Plan/BU: NR916

DO NOT APPLY ONLINE

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

HOW TO APPLY:

Technical Applications PM1080 (rev 3/8/21) 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. Please visit <https://idot.illinois.gov/about-idot/employment-opportunities/employment/index> to download the Technical Application PM1080. Please indicate IPR#44626 on the Technical Application PM1080.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire a Travel Demand Modeling Unit Chief. 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

This position is accountable for maintaining the statewide travel demand model to serve internal and external customers for program and project development. The incumbent will work to integrate the use of the statewide travel demand model into regular project planning and development.

This position reports to the Travel Demand Modeling and Forecasting Section Chief. Reporting to this position is the Travel Demand Modeling Assistant.

This position will be responsible for leading a staff that will develop and maintain the statewide travel demand model with associated data. The incumbent will oversee the modeling team where the primary responsibilities focus on maintaining the statewide travel demand model; making recommendations on data and software products to enhance travel demand modeling; providing technical support to Illinois' metropolitan planning organizations (MPO); and integrating the statewide travel demand model into statewide processes. The incumbent will develop the travel demand modeling work program and provide ongoing management of the program including developing and implementing a vision for the continued maintenance and enhancement of the Illinois statewide travel demand model. Types of data used to maintain and develop the travel demand model are traffic counts, origin-destination surveys,

census data, household travel surveys, innovative data solutions such as big data, Institute of Transportation Engineers (ITE) Trip Generation manuals, and MPO's travel demand models. This position requires an advanced understanding of the fundamentals of discrete choice models, population synthesis, gravity models, and economic modeling software. This position provides substantial technical support of the development, maintenance, and operation of the Illinois statewide travel demand model. The incumbent will be responsible for initiating and expanding the department's use of Regional Economic Models, Inc. (REMI).

The greatest challenge for this position is to be able to integrate the travel demand model into project development throughout the department's districts, coordinating with MPO's, and developing staff. Additional challenges will be vetting possible data sources including innovation data such as big data. The incumbent is responsible for managing the statewide travel demand model and delegating work assignments to staff. This position will be responsible for reviewing work completed by consultants for traffic forecasts for project development reports. This position is responsible for developing the travel demand modeling portion of a manual that details the travel demand model and provides ongoing guidance of its evolution. The incumbent will be responsible for maintaining relevant training on the latest technology for travel demand management.

(Job Responsibilities continued)

Additional responsibilities include providing technical expertise to the Bureau of Information Processing (BIP) for the procurement and coordination of software and data to maintain and enhance the statewide travel demand model.

The incumbent accomplishes accountabilities through the following staff:

Travel Demand Modeling Assistant who will assist in maintaining the statewide travel demand model through ensuring network and traffic analysis zones (TAZ) are accurately represented. They will be responsible for assisting in identifying data sources to enhance the travel demand model, making recommendations for the enhancement of the travel demand model, and ensuring software is up-to-date and functioning.

The incumbent will work with the Travel Demand Modeling and Forecasting Section Chief to manage and develop staff, make recommendations related to maintaining and updating the travel demand model software, data, and hardware. The incumbent will work with the Travel Demand Modeling and Forecasting Section Chief to determine how to coordinate with the MPOs and districts to raise awareness of the travel demand model and simulations as well as the use of REMI. The incumbent will work with the Travel Demand Modeling and Forecasting Section Chief on determining which information and data should be shared with internal and external stakeholders. The incumbent is constrained by state and federal laws and departmental policies, regulations, and practices. The incumbent has internal contact with the department's districts, BIP, Bureau of Design and Environment, and the Bureau of Planning staff. External contacts include Illinois' MPOs, data providers, software providers, and consultants. This position requires occasional statewide and out-of-state travel with overnight stays.

The effectiveness of this position is measured by the incumbent's ability to integrate the travel demand model into regular project planning and development.

Principal Accountabilities

1. Manages the statewide travel demand model and delegates work assignments to staff and consultants.
2. Analyzes work completed by consultants for traffic forecasts for project development reports.
3. Develops the travel demand modeling portion of a manual that details the travel demand model and provides ongoing guidance of its evolution.
4. Provides technical expertise to BIP for the procurement and coordination of software and data to maintain and enhance the statewide travel demand model.
5. Stays current with relevant training on the latest technology for travel demand management.
6. Develops staff to ensure competency with the latest technology for travel demand management.
7. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
8. Performs other duties as assigned.

Qualifications

Position Requirements

- Education/Experience:
 - Completion of a bachelor's degree majoring in urban planning, statistics, or geographic information systems plus three years of experience in travel demand modeling, technical analysis, transportation planning, traffic modeling and forecasting, mapping, data collection, or a combination thereof, OR
 - Eleven years of experience in travel demand modeling, technical analysis, transportation planning, traffic modeling and forecasting, mapping, data collection, or a combination thereof
- Occasional statewide and out-of-state travel with overnight stays
- Valid driver's license

Position Desirables

- Expertise in various travel demand modeling software such as TransCad, Cube, and TransModeler
- Supervisory experience
- Strong oral and written communication skills

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

Work Location: Chicago - 69 W Washington St

Office: Office of Planning & Programming/Bureau of Planning

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.