

Champaign County Regional Planning Commission

POSITION DESCRIPTION

Position Title: Associate Transportation Engineer

Reports To: Senior Transportation Engineer or Planning and Community Development Director

Supervises: None

FLSA Status: Exempt

Pay Grade: 7

General Duties:

The Associate Transportation Engineer is a mid-level position in the Planning and Community development Division, responsible for transportation planning and engineering work related to various projects including performing traffic impact analysis, traffic signal coordination, corridor studies, access management studies and traffic forecasting, bicycle and pedestrian planning, complete streets, trail improvements, etc.

The Associate Transportation Engineer is also responsible for transportation modeling projects such as travel demand modeling and network modeling. The Associate Engineer works closely with the Senior Transportation Engineer and Transportation Engineer and assists in the coordination of projects involving transportation planners.

Specific Duties and Responsibilities:

- Applies computational models using Cube software or other software to perform travel forecast, analyze travel model results, and assess the impacts of infrastructure investments and transportation and land-use policies.
- Collects, analyzes and prepares studies as assigned in areas of traffic impact, corridor studies, traffic safety, signal operations, signal design, parking, access management, etc. through the utilization of transportation software such as SYNCHRO, HCS, and other software to perform such studies.
- Conducts technical analyses using transportation and demographic data, and other big datasets.
- Performs spatial analyses in an GIS environment.
- Develops data visualization using Open Source software's.

- Works with representatives of equivalent responsibilities and experience from area municipalities, mass transit district, the University of Illinois, the State of Illinois and Champaign County.
- Presents studies to the CUUATS Technical and Policy Committees and other boards or committees as deemed necessary by the Planning and Community Development Director.
- Maintains and operates the CUUATS Travel Demand Model.
- Works with Illinois Modeling Users Group's member agencies and staff to provide travel demand modeling trainings and technical supports.
- Works closely with the Senior Transportation Engineer on projects assisting with larger-scope or longer-range projects.

Required Knowledge, Skills, Characteristics and Abilities:

- Bachelor's degree in transportation planning, civil engineering, urban planning (with a focus on data science) or a related field with three years experience in an engineering environment or a Master's degree in transportation engineering or transportation planning.
- Working knowledge in the following areas: traffic engineering, traffic data collection and analysis, travel demand modeling, traffic safety, traffic signal operations, and ITS Architecture.
- Working knowledge of transportation software such as HCS and SYNCHRO.
- Working knowledge of network modeling software such as Citilabs CUBE and VOYAGER
- Experience in data processing and analysis using programming language coding (e.g., Python or R)
- Familiarity with statistical analysis (regression, RMSE, etc.)
- Experience in using statistical analysis/database software (e.g., R, PostgreSQL)
- Working knowledge of Geographic Information System (GIS)

Essential Functions:

- Experience with computers and transportation engineering/planning software.
- Ability to think analytically, apply general concepts to other applicable topics.
- Excellent organizational skills.
- Excellent verbal and written communication skills
- Strong ability to multi-task and meet deadlines.
- Experience with GIS programs and data sources.
- Ability to work independently as well as with small teams.
- Experience at presenting transportation studies to different groups.

Competencies:

- Problem Solving/Analysis

- Communication Proficiency
- Decision Making
- Ethical Conduct
- Time Management
- Attention to details

Work Environment:

- Office work will be performed in an open cubicle environment sometimes involving distractions.
- Frequent near-vision use for reading and computer work
- Evening and weekend availability is required as needs of the program dictate.

Disclaimer:

The job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee. Other duties, responsibilities, and activities may change or be assigned at any time with or without notice.

Signature of Employee _____

Date _____

07/19