



# Chicago Metropolitan Agency for Planning

233 South Wacker Drive  
Suite 800  
Chicago, Illinois 60606

312 454 0400  
[www.cmap.illinois.gov](http://www.cmap.illinois.gov)

## Policy & Programming Senior Engineer – (SE12019) January 22, 2019

**Job Category:** Senior  
**Experience Required:** Minimum 5 years  
**Salary Range:** \$65,700 to \$97,206

The Chicago Metropolitan Agency for Planning (CMAP) is hiring a Professional Engineer to provide engineering guidance to support implementation of the agency's regional plan. CMAP is our region's official comprehensive planning organization. The agency and its partners are implementing ON TO 2050, a new long-range comprehensive regional plan to help the seven counties and 284 communities of northeastern Illinois implement strategies that address transportation, housing, economic development, open space, the environment, and other quality-of-life issues. See [www.cmap.illinois.gov](http://www.cmap.illinois.gov) for more information, and details regarding benefits are at [www.cmap.illinois.gov/about/careers#benefits](http://www.cmap.illinois.gov/about/careers#benefits).

### Position Purpose

#### Senior Engineer:

In this new position, the Senior Engineer will lead project scoping and development or review of engineering concepts and cost estimates for CMAP's forthcoming Freight Bottleneck Elimination Conceptual Engineering study, coordinating the work of an engineering consulting firm. This project will focus on highway-rail grade crossings and on truck bottlenecks that occur off the Interstate system. The project will evaluate roadway deficiencies, propose solutions, and explore ways to incorporate the results of the study into partner agencies' project programming activities, including the CREATE program. The Senior Engineer will bring a new level of expertise to aid in CMAP's transportation programming, planning and analysis work.

The Senior Engineer will also provide expert guidance, including development or review of engineering concepts and associated cost estimates for subregional transportation studies and Local Technical Assistance program projects as appropriate. Additional assignments may include assisting with a program of pavement management plans and truck routing plans being developed for local agencies, helping deepen CMAP's efforts in highway safety project development for local agencies, and helping guide ongoing refinement of evaluation methods used in CMAP's capital programs (CMAQ, TAP, and STP).

The successful candidate for this position has demonstrated the application of expert technical knowledge to solve complex problems, has worked with public officials and construction managers, coordinated consultant work, effectively analyzed data, managed research and development of reports, and communicated findings to a broad range of audiences.

## Responsibilities

### Senior Engineer:

- Manages projects, including the Freight Bottleneck Elimination Conceptual Engineering Analysis project.
- Investigates traffic problems and recommends methods to improve traffic flow and safety.
- Compiles and analyzes engineering data and prepares conclusions and recommendations.
- Develops highway improvement project scopes to the point of readiness to proceed as Phase-I engineering projects.
- Provides technical expertise for CMAP's pavement management plan development process for local agencies.
- Provides technical expertise for CMAP's Truck Route and Community Studies.
- Develops or reviews conceptual improvements, evaluates feasibility, develops conceptual cost estimates.
- Uses CMAP's project management methodologies and tools to manage project scope and achieve time, budget and deliverable objectives.
- Oversees the work of external contractors or consultants.
- Monitors expenditures against project budget; reviews and approves invoices; confirms work completed, deliverables, and timeliness; identifies and reports variances.
- Provides technical expertise for other CMAP projects as assigned and identifies ways to further incorporate engineering and related expertise into ongoing and new projects.
- Establishes and maintains positive relations with stakeholders, community officials and representatives.
- May serve on committees, task forces, and other bodies to represent CMAP.
- May present to CMAP committees.
- Attends internal department meetings as well as external committee meetings, outreach events, and workshops as assigned. Some in-region and occasional out-of-region travel required.
- Incorporates the policies and recommendations of ON TO 2050 throughout their work.

## Knowledge, Skills and Abilities

### Senior Engineer:

- Knowledge of engineering principles and practices used in the location, design, construction, and maintenance of all types of highways, bridges, and related structures.
- Knowledge of materials, methods, and techniques used in the design, construction, and maintenance of highways, bridges, and related structures.
- Knowledge of highway laws, codes, standards, and guidance pertaining to highway engineering and costs.
- Knowledge of intelligent transportation and traffic management systems technology and applications.
- Knowledge of traffic operations theory and practice, including traffic safety.
- Ability to compile and effectively communicate technical information to external and internal audiences orally, in writing, and in presentations.
- Ability to develop project scope, cost/budget, timeline, and deliverables.
- Ability to use project management tools to monitor project performance.

- Ability to establish and maintain effective working relationships with community or civic leaders, public sector officials and staff, partner agencies and organizations, and the general public.
- Ability to work successfully in a collaborative, team-oriented environment
- Ability to manipulate and analyze data sources in spreadsheets, databases, and geographic information systems (GIS), generate findings from these data, and communicate results to a non-technical audience.
- Ability to prepare technical information on issues of public policy and transportation planning and to effectively communicate that information clearly to external and internal audiences orally, in writing, and in presentations.

## **Education and Experience**

### **Senior Engineer:**

Bachelor's degree in Civil Engineering from an accredited institution is required.

Professional Engineer License in the State of Illinois is required. Additional certifications are a plus.

A minimum of five years of work experience as a licensed PE is required.

Experience with analysis and preparation of preliminary engineering studies is required and experience working with municipalities, local agencies and IDOT District 1 is strongly preferred.

### **How to Apply**

Please submit cover letter and résumé via the web at [www.cmap.illinois.gov/about/careers](http://www.cmap.illinois.gov/about/careers). Please refer to **Job Code (SE12019)**.

### **Posting End Date**

This posting will close on February 22, 2019 at 5:00 p.m. CST. All applications must be completed and submitted within that timeframe.

*The Chicago Metropolitan Agency for Planning is an Equal Opportunity Employer.*