

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

IMMEDIATE JOB OPENING

DEPARTMENT OF TRANSPORTATION PLANNING TRANSPORTATION ENGINEER IV

STARTING SALARY \$74,542 - \$108,310 DOQ

AGENCY AND CONTEXT

Transportation planning at the regional level in the Washington, D.C. metropolitan area is coordinated by the National Capital Region Transportation Planning Board (TPB). The TPB is the federally designated Metropolitan Planning Organization (MPO) for the metropolitan area and also plays an important role as the regional forum for transportation planning. The TPB coordinates regional transportation planning activities and develops the long-range transportation plan in order for federal-aid transportation funds to flow to the Washington region. The TPB includes representatives of local governments; state transportation agencies; the Maryland and Virginia general assemblies; transit agencies; and non-voting members from the airports authority and federal agencies. The TPB is staffed by the Metropolitan Washington Council of Governments' Department of Transportation Planning (DTP).

THE POSITION

The Department of Transportation Planning is seeking a Transportation Engineer IV with both data science skills and transportation engineering insights, to carry out the region's Congestion Management Process (CMP) planning, taking full advantage of technology-generated enterprise/big data, and ensuring DTP's usage of the best analytical practices, methods, and tools. The position's work on the federally-mandated CMP, with associated development of a Congestion Management Plan, will quantify regional congestion as well as identifying and analyzing appropriate mitigation strategies. The position will also produce quick-turnaround congestion analyses of occasional traffic-impacting regional events, and undertake associated media/social media outreach on the CMP in general, or when such newsworthy traffic-impacting events occur.

EXAMPLES OF WORK

The successful candidate will undertake both analytical tasks and planning activities to address the Congestion Management Process requirements and utilize transportation data especially big data for planning purposes. Activities are likely to include:

- Compile, process and integrate a broad range of traditional and technology-generated data from both public-sector and private-sector to assess multimodal transportation congestion and reliability.
- Analyze and identify transportation demand management, operational management and job access strategies in congestion reduction and mitigation.
- Harness the opportunities of big data and open data for transportation planning; develop database and analytical tools to facilitate the use and communication of such data.
- Communicate results through such means as presentations, memoranda, reports, regional planning documents, websites, media/social media outreach, or online "dashboards".
- Interface with state, regional, and local agencies and other stakeholders regarding the development of the Congestion Management Plan and implementation of CMP strategies.

MINIMUM QUALIFICATIONS

- Transportation Engineer IV: 1) Either a Master's degree in transportation engineering, transportation planning, or a closely related field and more than five years' experience, or 2) a Bachelor's degree and more than seven years' applicable experience. Any equivalent

combination of experience and training which provides the required knowledge, analytical and writing skills, and abilities will be considered.

- Excellent statistical analysis and related quantitative analysis and software (e.g., SAS) skills.
- Experience with geographic information system (GIS) applications such as ArcGIS.
- Ability to work cooperatively in a team environment.
- Strong analytical and problem-solving skills, with a good knowledge of research methods.
- Strong verbal and written communications skills, including media and social media outreach skills.
- Familiarity with the transportation planning process and its principles.

IDEAL CANDIDATE

- Strong interest in the transformation of the transportation field through analysis of big data, including (1) a desire to devote a significant portion of work time to data mining, analysis, and presentation of results, and (2) the ability to guide usage of these data sets and analysis tools by other staff and agency partners.
- Experience with transportation field private-sector enterprise/big data, such as vehicle probe data (e.g. INRIX, HERE, TomTom, and the National Performance Management Research Data Set); experience with social media or shared mobility-generated data (e.g., Waze, Uber) is a plus.
- Familiarity of database management tools (e.g. SQL, MS Access), open data concepts and applications, and business intelligence and visualization tools (e.g., Tableau).
- Experience in communicating data and study/analysis results to various audiences, and to the public through media and social media.
- Knowledge of federal, state and regional transportation institutions and policies.

EEO EMPLOYER

To apply for this position, please submit your cover letter, salary history, and resume to:
The Metropolitan Washington Council of Governments/ Human Resources
777 North Capitol Street, NE Suite 300
Washington, DC 20002-4290

Visit our website at: www.mwcog.org or Fax: 202-962-3715

