

METRO

Classification Description

Title: Senior Researcher and Modeler
Job Code: 6029
Pay Range: 21
FLSA Status: Exempt – Professional, Learned

Bargaining Unit: AFSCME 3580
Established: March 2012
Revised:
EEO Category: Professionals

DESCRIPTION

Serve as a travel demand or land use modeler participating in numerous multimodal studies within the Portland region. Locally developed travel or economic, real estate and land use models and commercially prepared network analysis tools are used to determine the impacts from potential infrastructure improvements and household/employment growth assumptions.

For transportation modeling, typical tasks may involve the coding of simulation networks, the application of travel demand models, the analysis and interpretation of results, and the design of new models. For land use, typical tasks may involve the analysis and development of land use/real estate development databases, collecting and merging complex data sets, statistical research, application of economic and land use/real estate simulation models, interpretation of forecast results, and design of new models. Responsible for complex transportation or land use modeling assignments and involvement in policy formulation.

DISTINGUISHING CHARACTERISTICS

The Senior Level differs from the Associate Level by having involvement in policy formulation, project management and evaluation within his/her area of expertise or program area and the responsibility to serve as a lead over other professional staff. Incumbents in this class are recognized as technical specialists in a specific program or functional area.

DUTIES AND RESPONSIBILITIES

Tasks listed are intended to be descriptive and not restrictive. An employee in this classification may perform any of the tasks listed; however, these examples do not include all the tasks which an employee may be expected to perform.

1. Collects and organizes technical information for use in computer analysis and report generation.
2. Applies the travel demand or land use and economic modeling software to produce estimates of multi-modal travel or regional growth trends.
3. Analyzes and summarizes the results obtained from the application of the travel demand or land use and economic models.
4. Develops technical reports.
5. Performs research to develop new computer modeling techniques.
6. Defines and/or assists in defining methodologies for use in analysis.
7. Represents Metro at meetings regarding the discussion of modeling results.
8. Liaise between Metro technical staff and administrators, consultants, and the public regarding modeling data and information.

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9. Fulfills Metro's employee values of Public Service, Excellence, Teamwork, Respect, Innovation, and Sustainability. These duties include but are not limited to:
 - a. Maintaining positive relationships;
 - b. Respecting diversity of ideas and perspectives of others;
 - c. Demonstrating sustainable practices;
 - d. Assisting the public, public officials and other employees in a professional and courteous manner;
 - e. Developing safe work habits and contributing to the safety of self and co-workers;
 - f. Contributing to a positive team atmosphere; and
 - g. Having regular and punctual attendance.
10. Perform assigned duties during an emergency situation.
11. Other duties as assigned.

JOB SPECIFICATIONS

(These are any combination of education and experience that has provided knowledge, skills and abilities to perform the duties of this position. Prior work experience and educational requirements listed are typical ways of obtaining the required qualifications. Other equivalent combinations of education, training and experience will be considered.)

Job Preparation

Education and Work Experience

- Bachelor's degree in a quantitative science (mathematics, statistics, econometrics, engineering, computer science, economics, geography, etc.) or planning (with a quantitative emphasis) and
- Three years of transportation or land use and real estate modeling experience or
- Any combination of education and experience that provides the necessary knowledge, skills and abilities to perform the classification duties and responsibilities

Knowledge, Skills and Abilities

- Transportation or regional economic and urban real estate research methods and techniques at the advanced level
- Quantitative analysis and statistics at the advanced level
- Write technically
- Use computer software to perform quantitative analysis
- Lead, organize, and conduct transportation or real estate and economic studies
- Make recommendations using numerical analysis
- Maintain good working relationships with other people
- Communicate effectively both orally and in writing
- Work independently and as part of a team
- Use a computer and relevant software

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- Apply Federal, State, and local laws and regulations and agency policies and procedures for respective field
- Use discretion with confidential and sensitive matters
- Fulfill Metro's employee values of Public Service, Excellence, Teamwork, Respect, Innovation, and Sustainability
- Work in a safe manner and follow Metro safety policies, practices, and procedures
- Perform all essential duties of the position

Special Requirements

Successfully pass the background check and screening requirements of the organization for this particular position

Tools and Equipment Used

All standard office equipment, including but not limited to computer and printer, fax machine and copy machine, and computer software including MS based word-processing and spreadsheets

Supervision and Lead Work

Supervision is received from a manager

As directed by manager, provide lead work, such as assigning and reviewing work, training, and leading projects

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions.

Work is performed mostly in an office setting.

The job classification description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.