SENIOR TRANSPORTATION ANALYST

DISTINGUISHING FEATURES OF THE CLASS: This position is responsible for performing moderately difficult and complex duties. The position is responsible for the development, modification, maintenance and operation of the Binghamton Regional Travel Model, a computer-based travel demand model and for the maintenance and application of a Geographic Information System (GIS). This includes acquiring transportation and land use data from federal, state and local government sources. Work is performed under the administrative supervision of the Director of Transportation Planning, with considerable leeway allowed for the exercise of independent judgment in carrying out the details of the work. May oversee the work of subordinate staff. Performs related duties as required.

TYPICAL WORK ACTIVITIES:

Develops, calibrates and operates the BMTS Regional Travel Model, a computer-based travel demand model;

Obtains relevant transportation and land use data for input in order to model real world transportation conditions in an accurate manner;

Develops, maintains and utilizes transportation applications for Geographic Information Systems to store, manipulate and analyze data;

Uses GIS and travel demand software to produce travel forecasts for use in the development of transportation plans, study development activities and land use planning activities;

Prepares various reports and correspondence relative to travel model analysis and GIS;

Consults with New York State Department of Transportation and local government staffs regarding transportation projects.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of the concepts, practices and techniques related to developing, maintaining and operating a travel demand model;

Good knowledge of the concepts, practices and techniques related to developing, maintaining and operating a GIS;

Good knowledge of the principles and techniques related to the transportation planning process;

Good knowledge of travel forecasting analysis techniques, procedures and methods;

Good knowledge of the concepts and techniques of traffic simulation modeling;

Good knowledge of transportation data sources;
Working knowledge of standard GIS and travel demand modeling
  software;
Ability to operate a personal computer and utilize software
  programs including word processing, spreadsheets and
  databases;
Ability to perform close, detail work involving considerable
  visual effort and concentration;
Ability to analyze and organize data, draw conclusions and use
  data to prepare records and reports;
Ability to communicate effectively both orally and in writing to
  both technical and non-technical audiences;
Ability to establish and maintain effective working
  relationships with others;
Physical condition commensurate with the demands of the
  position.

MINIMUM QUALIFICATIONS:

A) Graduation from a regionally accredited college or university
   or one accredited by the New York State Board of Regents to
   grant degrees with a Master's Degree in transportation
   planning, transportation engineering, urban planning,
   geography or closely related field and two years of
   transportation planning experience which shall have involved
   travel forecasting, operating a computer-based travel demand
   model and the use of Geographic Information System software
   (GIS); OR

B) Graduation from a regionally accredited college or university
   or one accredited by the New York State Board of Regents to
   grant degrees with a Bachelor's Degree in transportation
   planning, transportation engineering, geography, economics,
   statistics, urban planning, or closely related field and
   four years of experience in transportation planning which
   shall have involved travel forecasting, operating a computer-
   based travel demand model and the use of Geographic
   Information System software (GIS); OR

C) An equivalent combination of training and experience
   as defined by the limits of A) and B) above.

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