

Travel Demand Modeler

TJKM Transportation Consultants (TJKM), is well-established and renowned planning, operations, engineering, and design firm providing consulting services throughout the State of California since 1974. TJKM offers employees a dynamic work environment and a competitive compensation package, including medical, dental, life, disability, profit sharing, and 401(k) plan.

TJKM is seeking a Travel Demand Modeler to join our Travel Demand Forecasting Group in the Pleasanton, San Jose, or Sacramento office. You will provide technical expertise, guidance to other staff, strategic leadership, and management of a variety of modeling and analysis of transportation projects at the system, corridor, and project level. Work includes freeway and arterial corridors, transit corridors, pedestrian and bicycle modes, and other transportation analysis.

General Description:

Under general supervision, is responsible for calibrating, validating, and operation of the regional land-use and transportation planning models and presenting to clients and internal teams conducting transportation planning and programming.

Essential Duties & Responsibilities:

- Maintains travel demand and/or relevant models for generating and interpreting travel forecasts and related statistics for short- and long-range transportation plans and other special studies.
- Responsible for the collection, processing, and management of traffic and other data to update the regional travel demand model and other products.
- Performs model maintenance and improvement activities, including model calibration and validation.
- Perform qualitative and quantitative analyses of travel data, present and publish reports associated with the analyses such as transportation system performance reports.
- Communicate effectively orally, in writing, and graphically.
- Requires personal initiative, sound independent judgment, and strong problem-solving skills based on transportation theories.
- Represents TJKM at various meetings and conferences related to regional planning.
- Perform related work, as required.

Minimum Requirements:

At a minimum, requires combination of knowledge, skills, and abilities to perform duties and either a graduate degree with 2 years of related experience or an undergraduate degree in engineering with 4 years of related experience, or equivalent, in the field of engineering, statistics, and/or computer science.

Experience & Abilities:

- Working knowledge, education, and experience in multimodal travel demand modeling and forecasting.
- Working knowledge of transportation planning, traffic engineering, statistical, and mathematical methods as well as federal transportation planning requirements.
- Ability to effectively manage time, materials, and data.
- Ability to work independently and as part of a team.

Computer Skills:

Strong knowledge of and/or experience with the following:

- Travel demand modeling software such as Cube Voyager, TransCAD, Visum and its associated scripting language.
- Programming language and debugging capability such as Python, C++, Java, and VB.
- GIS mapping software such as ArcGIS and TransCAD.
- Statistical estimation software such as R, SAS, and/or Alogit.
- Transportation engineering software such as HCS and Synchro.
- Spreadsheet, word processing, database, and presentation software such as MS PowerPoint.