



Manager of Regional Models

Annual Salary Range: \$120,449 to \$186,697

First Review of Applications: August 12, 2022

Expected Start Date: September 2022

Role

This position will manage the Transportation Model Development program and team which maintains and improves a suite of models including Activity Based Model (ABM), Rapid Strategic Model (RSM), Commercial Vehicle Model (CVM), Crossborder Model (CBM), and other special market models. Key focus areas include the addition of new features related to emerging technologies, transformative transportation modes, and shared mobility. The Model Development team also support model applications in key agency projects, including regional, local, and border-related projects.

Overview of Data Science Department

As a premier multi-modal planning and project implementation agency, SANDAG relies on the quality and capacity of our Transportation, Demographic, Economic, and Land Use Modeling programs. A team of highly skilled professionals support a variety of projects including long-range coordinated transportation, economic, and land use plans, corridor studies, major transit investment studies, infrastructure development studies, and air quality plans.

As regional planning needs, travel behavior, and socioeconomic conditions change, the demands and expectations of our modeling program have increased. To meet these challenges, SANDAG has committed the resources necessary to develop and maintain a robust, agile, and integrated modeling infrastructure to support policy development and decision making. SANDAG has developed a nationally recognized and highly sophisticated ABM. As the future transportation system transforms, SANDAG will be updating its ABM, RSM, CVM, and CBM to respond to the impact of emerging transportation technologies, transformative travel modes, and shared mobilities used for regional planning.

Benefits

SANDAG offers comprehensive benefits, to include health, dental, and vision insurance as well as employee assistance, wellness, and work/life balance programs. Additionally, SANDAG offers the following:

- 9/80 flexible work schedule
- Pay-for-performance merit increases
- CalPERS pension plan with employer and employee contributions
- Excellent health insurance options for employees and their eligible dependents
- Free dental and vision insurance for employees and their eligible dependents
- Education Assistance of up to \$5,250 a year for regular employees
- Free transit pass for use throughout the San Diego region, bus, Rapid Express, Trolley, and COASTER
- Paid time off including 12 paid holidays, 2 floating holiday days, generous paid time off (PTO) per year, depending on length of service
- The employee selected for this position will be offered a three-year At-Will employment contract, which provides an annual \$5,000 contribution to their defined contribution plan.



Job Responsibilities

- Scope, guide, manage, monitor, and evaluate complex travel model development projects, such as ABM, RSM, CBM, and CVM to ensure timely delivery of comprehensive, detailed, and validated modeling tools for Regional Plans and corridor and project level studies.
- Lead efforts to enhance transportation modeling functions that involve writing complex computer programs and routines, improving transportation modeling software applications, developing GIS and data management procedures, applying traffic engineering principles, analyzing survey data, and evaluating transportation model results.
- Serve as the in-house domain expert in travel demand modeling to investigate and resolve highly technical issues; interpret and answer complex technical questions to internal and external stakeholders.
- Manage the Model Development program, including maintenance, administration, and performance; evaluate the efficacy of the group structure; assess and monitor workload; identify opportunities for improvement; and direct the implementation of changes.
- Ensure transportation modeling tools and analytical capabilities are credible and effective for policy analysis; participate in quality assurance and quality control processes.
- Perform research and participate in the development of modeling features related to emerging transportation technologies, transformative modes, and shared mobilities
- Coordinate with internal departments, external stakeholders, and members of the public to address questions and needs related to transportation modeling.
- Prepare and present written, oral, and visual reports to policy and stakeholder committees, member agencies, community groups, private organizations, and members of the public.
- Execute, manage, and maintain consultant contracts and agreements for the program; develop Requests for Proposals, scopes of work, and project budgets; evaluate competitive project proposals and make recommendations for consultant selection.
- Supervise, mentor, train, and provide career development opportunities for a team of professional staff with expertise in transportation modeling.

Experience and Qualifications

- A bachelor's degree in transportation modeling, computer science, mathematics, statistics, engineering, or a related field; advanced degrees are preferred.
- Minimum of seven years of career development experience is required, including proven lead or supervisory experience.
- Knowledge of the principles and practices of travel demand modeling and forecasting; experience in development and/or the application of activity-based models (ABM) is required.
- Experience programming in languages such as Java, Python, R, and SQL; experience developing and maintaining custom software applications to support modeling functions.
- Experience using modeling software such as EMME to support large, complex model development and applications projects.
- Experience with big/passive data and applications in travel demand modeling is preferable; research and/or modeling autonomous vehicles, transformative modes, and shared mobilities are desirable.
- Experience with data acquisition, compilation, and quality assurance/quality control methods; experience with relational databases such as SQL Server is desirable.
- Experience with transportation modeling data dissemination, reporting, and visualization.

How to Apply

Interested candidates may apply for this position by completing a SANDAG Employment Application at sandag.org/careers.

In compliance with the Americans with Disabilities Act (ADA), SANDAG will accommodate persons who require assistance in order to apply for a position at SANDAG. Applicants requiring an accommodation due to a disability during any stage of the recruitment and selection process, including requesting this document and related application materials in an alternative format, should make their needs known by contacting Human Resources at hr@sandag.org, (619) 699-1900, (619) 699-1904 (TTY), or fax (619) 699-6905.

Further Information

In compliance with the Immigration Reform and Control Act of 1986, applicants hired by SANDAG must show acceptable proof of identity and evidence of authorization to work in the United States.

The selected candidate can anticipate a driving record check upon hire, and approximately annually thereafter. The results of the check may determine whether the selected candidate will be permitted to drive for SANDAG business.

SANDAG requires all new employees to be fully vaccinated for COVID 19 within 45 days of hire.

SANDAG employees are expected to work in-person in our San Diego office; there are telework options available, as well as a 9/80 work schedule (every other Monday off).

Contact Us

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 (619) 699-1900 | TTY/TDD: (888) 722-4889

 sandag.org

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