



The San Diego Association of Governments invites applications for the position of:

senior regional demographic analyst

A job at SANDAG is guaranteed to stimulate your mind, expand your skills, and accelerate your professional development. We are committed to recruiting highly talented individuals who are dedicated to working on important issues and passionate about making significant contributions that improve the lives of people all around the region. We look for people who have extraordinary leadership and vision; people who drive change and produce results; people who take ownership of projects and never settle for "good enough."

SANDAG values and rewards continuous improvement. We offer a fulfilling work environment that will challenge your capabilities. And it is a place where you can take ownership of the next steps in your career while being supported with opportunities, tools, and resources that will allow you to be successful.

Applications due by Friday, April 29, 2016
Expected start date: late June 2016





Regional Models Division

An essential component of the success of SANDAG as a multi-modal planning and project implementation agency lies with the quality and capacity of our Demographic, Transportation, Economic, and Land Use Modeling program. A team of fifteen highly skilled professionals support a variety of projects including long-range coordinated economic, land use, and transportation plans, corridor studies, major transit investment studies, infrastructure development studies, and air quality plans.

As regional issues become more complex, the demands and expectations of our modeling program also have increased. To meet these challenges, SANDAG has committed the resources necessary to develop and maintain a robust, agile, and integrated modeling infrastructure. The Economic and Land Use Modeling group ensures the land use, demographic, and economic models are current and reflect the future needs of the region. The team designs, builds, and maintains a small-area, land-use simulation model based on UrbanSim along with components from the Production, Exchange, and Consumption Allocation System (PECAS) framework and maintains the current suite of tools, including the regional Demographic and Economic Forecast Model (DEFM). These models are integrated with the SANDAG Activity-Based Model (ABM). The development and use of these models ensures SANDAG remains at the forefront of model development and supports important regional policy development and decision making.

Senior Regional Demographic Analyst Role

The Senior Regional Demographic Analyst will coordinate the SANDAG sub-regional demographic and economic forecasts including detailed population, housing, and income characteristics for the region. In addition, this position will lead the development of the annual population estimates which are relied upon for current population and housing data, and will provide complex analytical support and guidance for land use planning and implementation projects, manage project teams, and coordinate modeling functions with other divisions and departments, committees, and outside agencies.

Job Responsibilities

This opportunity is for a 'hands-on' working supervisor; someone who has both the skill to perform the technical requirements of the position and the ability to provide leadership for the team. With support from the Manager of Regional Models, examples of primary responsibilities include:

- Lead regional demographic and econometric forecasting efforts that support the implementation of San Diego Forward: The Regional Plan, Smart Growth Incentive Program, Transit Oriented Development Strategies, and other major, transit, highway, and infrastructure investment studies.
- Collaborate on inter-departmental and inter-agency project teams assembled for land use, demographic, and econometric modeling, analyses, and planning; foster collaborative working relationships with local jurisdictions and the various transit and transportation agencies.
- Prepare and present written, oral, and visual reports to policy and stakeholder committees, member agencies, community groups, private organizations, and members of the public;
- explain and interpret regional growth patterns and the impacts on local communities.
- Maintain the land use and socioeconomic database by coordinating with other SANDAG departments and outside agencies to ensure accurate and up-to-date information on current land use, planned development, and other demographic trends.
- Participate in efforts to enhance land use, demographic, and econometric modeling functions that involve engineering new and existing models, and developing and organizing data sources, processing survey data, and integrating transportation model results.
- Coordinate the compilation of various types of small area or parcel level demographic, economic, social, geographic, and other quantitative data from local, state, and federal agencies, the Internet, surveys, government publications, and other sources; review data for quality and accuracy and resolve data inconsistencies.
- Examine and recommend innovative modeling and forecasting techniques to ensure SANDAG remains at the leading edge of forecasting and planning.
- Ensure quality assurance/quality control, accuracy, and monitoring of detailed GIS data systems used in land use, demographic, and econometric modeling.
- Prepare Requests for Proposals (RFPs) including scopes of work and project budgets; evaluate competitive project proposals and participate in the selection of consultants; manage consultant performance and ensure projects are completed on schedule, within the prescribed budget, and with a high-level of effectiveness.

- Supervise, mentor, train, and support development opportunities for staff; meet with employees to identify and resolve problems; review and evaluate work products, methods, and procedures; oversee and coordinate the development, preparation, and implementation of a diverse range of projects assigned to the group.
- Provide highly technical and complex assistance to higher level managers and executives.

Experience and Qualifications

Numerous factors contribute to an individual's ability to be successful in any given role. For this position, we are searching for a candidate who is responsible and well-organized with an aptitude for analytical thinking, problem solving, and innovation. The ability to work collaboratively with a variety of end-users to build consensus, and exceptional communication skills, are key characteristics for this position.

The minimum education, training, and experience qualifications include a bachelor's degree with major coursework in demography, urban or regional economics, urban planning, social science, statistics, or a related field and five years of professional research experience developing demographic forecasts or estimates. An advanced degree is highly desirable.

The following information describes the specific types of career experiences that are most relevant to this position.

- Demonstrated knowledge of the principles and practices of demographic and econometric forecasting; experience developing demographic forecasts and estimates for a state, regional, or local area.
- Demonstrated experience developing and applying integrated demographic-economic models, preferably in a regional planning environment; ability to effectively interpret and explain model outcomes.
- Demonstrated knowledge of small area and parcel level data sources, preferably those related to regional land use and transportation planning.
- Knowledge of fundamental design principles for relational database management systems; familiarity with MS SQL Server or other enterprise relational database systems.
- Knowledge of statistical techniques and the ability to use statistical software to analyze survey data and estimate parameters for land use, demographic, and econometric models.
- Experience with GIS software to create, edit, document, analyze, and map data.
- Experience developing land use, demographic, and econometric modeling applications using computer programming languages such as Python and R.

- Successful project management experience, including development of RFPs, scopes of work, budgets, and schedules, consultant selection, and contract management.
- Experience supervising and evaluating the work of professional and technical personnel; experience providing administrative and professional leadership and direction for assigned programs and projects.
- Experience acquiring, transforming, and maintaining demographic and economic administrative records and other data sets from public and private sources for regional forecasting and monitoring purposes.
- Ability to communicate highly technical information effectively, both orally and in writing; ability to prepare and deliver public presentations and recommendations regarding various program elements to upper management, community groups, and other audiences.
- Ability to research, analyze, and disseminate information on the implications of land use modeling and analysis for the development of regional public policy.
- Demonstrated ability to establish and maintain effective working relationships with those contacted in the course of work including local, state, and federal agencies, other government officials, community groups, the public, and media representatives; ability to gain cooperation and consensus through discussion and persuasion.
- Excellent organizational skills and the ability to manage several concurrent projects at various stages of completion; ability to establish and maintain priorities and work independently.
- Strong computer skills and proficiency with the Windows operating system and Microsoft Office applications especially Word and Excel; experience with relational database management, statistical analysis (SPSS, SAS, or R), and presentation software.



About SANDAG

SANDAG is one of the most recognized regional agencies in the nation with responsibilities that cover a broad range of complex, interrelated program areas connected by a Quality of Life theme. We are best known for our efforts related to transportation and this role continues to expand as we push beyond traditional boundaries to deliver a state-of-the-art transportation system for the region. In recent years, leadership in areas such as comprehensive land use and environmental planning, public safety, and modeling and data systems also have earned SANDAG much acclaim. With an employee group about 300 strong, we work for our Board of Directors - mayors, city council members, county supervisors, and other leaders representing the jurisdictions within the San Diego region and neighboring areas. They play the important role of making policy decisions that shape the future of the region. Our collaboration with stakeholders, partners, and the community, the precision of our data, the completeness of our reports and studies, and our sound recommendations are essential components of the regional decision-making process.

Salary and Benefits

SANDAG rewards the efforts of its employees with a comprehensive compensation package. Competitive salaries are supplemented with a flexible offering of health, financial security, and time-off benefits to meet the work and life needs of employees and their families.

This Senior Regional Demographic Analyst position has an annual salary range of \$67,578 to \$108,125; the starting salary will depend on the qualifications and experience of the selected candidate.

Our benefits include traditional health, dental, and vision insurance as well as employee assistance, wellness, and work/life balance programs. Retirement and financial security benefits are provided through a pension plan and deferred compensation program. To support the need to rest and rejuvenate, employees are provided with a bank of paid time off in addition to paid holidays.

How to Apply

We encourage all interested candidates to apply for this position by completing a SANDAG Employment Application form. Resumes, cover letters, and work samples may be submitted in addition to the Employment Application but are not a substitute for this document.

The Employment Application can be downloaded in PDF format from the SANDAG website. Alternatively, a copy can be requested by calling (619) 699-1900 or emailing hr@sandag.org. Completed applications and related materials can be submitted via email, fax, regular mail, courier, or delivered by hand. See our *Careers / How to Apply* webpage for additional information.

Applications for the Senior Regional Demographic Analyst position will be accepted until 5 p.m. on Friday, April 29, 2016.

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 (619) 699-1900, (619) 699-1904 (TTY), fax (619) 699-6905, or hr@sandag.org.

Additional Application Requirement

To help us further evaluate the skills and experience of individuals interested in this position, applicants are asked to respond to the Supplemental Questions below. The information can be up to 500 words per question and should be submitted with the Employment Application. This is considered a required component of the application; applications received without a response will be screened out of the selection process.

Supplemental Questions

1. Provide an overview of a project you have been involved in that required significant collaboration with internal or external stakeholders. Outline the tasks you were responsible for and describe your most significant contribution to the project.
2. In your opinion, what is the most innovative or important land use, urban economics, or demographic modeling advancement in the last decade? Why do you feel it is important and how would you apply this advancement at an organization like SANDAG?

Candidate Selection and Notification

Candidates will receive written confirmation that their application has been received. The hiring manager will begin reviewing and evaluating applications within a few days of the close date. Based on this evaluation, the best qualified candidates will be invited to continue in the selection process. All candidates will receive written notification as to the final outcome of their application.

Further Information

The SANDAG website contains a wealth of information about our various project and program areas. The Careers section of the site lists all of our current Job Openings as well as information on how to apply for positions and Frequently Asked Questions about our recruitment process.

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.