

Santa Clara Valley Transportation Authority Senior Transportation Planner - Modeling & Analysis

SALARY \$126,726.08 - \$154,080.68 Annually **LOCATION** CA 95134-1927, CA

JOB TYPE Full-Time REMOTE Flexible/Hybrid

EMPLOYMENT

JOB NUMBER 01378 DEPARTMENT Planning

Job Description

Senior Transportation Planner

Your talent and drive are the keys to our success! Join the Travel Demand Forecasting team as a Sr. Transportation Planner- Modeling & Analysis.

About VTA

The Santa Clara Valley Transportation Authority employs more than 2,000 people dedicated to providing solutions that move Silicon Valley. Unique among transportation organizations in the San Francisco Bay Area, VTA is Santa Clara County's authority for transit development and operations (light rail and bus), congestion management, transportation-related funding, highway design and construction, real estate and transit-oriented development, and bicycle and pedestrian planning. With local, state, and federal partners, VTA works to innovate the way Silicon Valley moves and provide mobility solutions for all.

Santa Clara Valley Transportation Authority (VTA) is an independent special district that provides sustainable, accessible, community-focused, innovative, and environmentally responsible transportation options promoting the region's vitality. VTA provides bus, light rail, and paratransit services and participates as a funding partner in regional rail services, including Caltrain, Capital Corridor, and the Altamont Corridor Express.

To learn more, go to: vta.org

Planning and Programming Division

This division is responsible for conducting all Congestion Management Program and VTA transportation and transit planning activities. As well as programming and grants management.

The Planning & Programming Division consists of the following areas:

• Planning - Responsible for the planning and conceptual design of all transit projects, forecasting and modeling analysis for capital projects and the CMP, development review, bike and pedestrian planning, and long range

planning functions of the CMP.

Programming and Grants - Responsible for advocating, prioritizing, programming, managing, and ensuring
compliance for all federal, state and regional highway/transit/roadway/bicycle/pedestrian grants, as well as the
programming of funds for the CMP.

Our Community

Santa Clara County, sometimes referred to as "Silicon Valley", is unique for its innovation, natural attractions, and social diversity. With numerous amenities and perfect weather, it has long been considered one of the best places in the United States to live and work. calendar of festivals and celebrations supports the community spirit. Nearby open space provides easy access to mountain parks, trails, lakes, streams, and beautiful coastal beaches. San José has received accolades for its vibrant neighborhoods, healthy lifestyle, and diverse attractions from national media, including Business Week and Money magazines.

The county's population of 1.9 million is the largest in Northern California and is rich in ethnic culture and diversity. Enjoy access and the option to explore our closely neighboring counties of San Francisco and Alameda.

The San Francisco Bay Area is a dynamic, vibrant, and culturally-diverse region that offers businesses and resident's prosperity and an enriching quality of life. Great weather, safe neighborhoods, and easy access to the nature make the region a great place to live and work.

As the Ideal Candidate:

You will be working with planners, engineers, modelers, and GIS professionals who are passionate about making our region a more sustainable and equitable place. You will support VTA (the transportation planning and programming authority & the transit operator for Santa Clara County) in its efforts to develop and maintain a bi-county travel demand model. You will be directly involved in developing and stress-testing a new activity-based travel demand model (ABM). Before the ABM is deployed, you will use the current model to support a wide range of planning and engineering activities, from BART Extension to Silicon Valley and transit-oriented community studies, and from express lane studies to the development of countywide long-range plans. As our team strives to continuously improve our model and other analytical tools, you will research and implement new ideas to enhance and expand our forecasting capabilities.

Definition

Under direction, a Senior Transportation Planner – Modeling and Analysis supervises professional planners, and consultants and carries out activities related with the development, revision, and calibration of regional multi-modal networks and models.

Distinguishing Characteristics

This classification is the first supervisory level with responsibility for developing travel demand models; travel forecasting and analysis of transportation system performance; analyzing household travel surveys and decennial census data; preparing technical documentation of work performed; compiling and analyzing data; responding to information requests; and representing VTA at project technical committees.

Classification Bargaining Unit: AFSCME

Application Deadline: October 20th 2023

Essential Job Functions

Typical Tasks

- Supervises and develops professional staff and consultants, assigns work and evaluates work products, may counsel and discipline staff;
- Develops, maintains and updates travel forecasting and statistical packages;

- Develops and implements recommendations to improve existing model accuracy and efficiency;
- Applies statistical packages to aggregate and disaggregate models; develops and calibrates (aggregate) network models;
- Develops and validates highway and transit networks;
- Develops, maintains, and updates GIS databases and files;
- Applies countywide and regional models to evaluate transportation projects in terms including, but not limited to, trip generation and assignment, transit ridership, mobility, air quality, equity, cost/benefit and cost-effectiveness;
- Manages and participates in the development of documentation including model structure, run-stream parameters, and assumptions;
- Coordinates with VTA/Congestion Management (CMA) staff, member agency staff (cities and County of Santa Clara) and regional agency staff (Association of Bay Area Governments [ABAG] and the Metropolitan Transportation Commission [MTC]) to define, develop and manage regional network components and development strategies;
- Coordinates with VTA bus and rail transit service and operations staff to incorporate transit service operating plans and policies into travel demand modeling and forecasting process;
- Participates in regional modeling efforts to ensure consistency between VTA countywide and ABAG/MTC modeling assumptions;
- Supports Major Investment Study (MIS) and Environmental Impact Study (EIS)/Environmental Impact Report (EIR)
 processes;
- Provides modeling support to evaluate transportation and land use policies;
- Writes, revises and submits research and technical memoranda and reports;
- · Applies quality control procedures for all aspects of travel demand forecasting conducted by VTA/CMA;
- Performs related duties as required.

Minimum Qualifications

Employment Standards

Training and experience equivalent to graduation from an accredited college or university with a major in transportation planning/engineering, urban planning, or a related field and 4 years of progressively responsible professional experience in the field of transportation planning, traffic engineering, transportation data analysis, or related experience with an emphasis on network and demand model simulation.

A Masters Degree maybe substituted for one year of the required experience.

Interested applicants may only meet some of the requirements. We encourage applications from any person who believes they can thrive and grow within VTA.

While we're welcoming to a variety of different candidates, this position could be an excellent role for a number of different profiles, including those who:

- Want to be team players with strong interpersonal skills, working within the community and VTA to help elevate and integrate equitable transit initiatives throughout our work
- Are passionate, adaptable, and innovative team players who want to learn and contribute to the development of a visionary transit network through an equity lens
- Are interested in collaborative and impactful, transformative change; working with supportive diverse teams to help grow our service and lead our region.

Supplemental Information

Knowledge of:

- Theories, principles and practices of travel demand forecasting including 4-step model;
- Mathematical methods and procedures; transportation network simulation methods and procedures;
- Transportation modeling software packages such as CUBE/TP+ and TRANSCAD;
- Geographic Information Systems (GIS) and database development and applications;
- Statistical survey methods and procedures for transportation analysis;
- Concepts, principles, techniques and legal aspects of transportation planning;
- Network development, checking and calibration;
- Travel demand model development and forecasting;
- Capabilities of computer program packages and their utilization in network simulation and survey analysis;
- Governmental organizations and operations;
- Community interrelationships;
- Project management methods and techniques;
- · Principles and practices of supervision, management, employee training and development.

Ability to:

- Conduct comprehensive analyses and studies and make recommendations based on findings in studies, field observation, and public contacts;
- Analyze issues and numerical measures associated with transportation planning projects, including estimates derived from computer models, estimates of costs and benefits, and public input;
- Compile, analyze and interpret complex data sets;
- Negotiate consensus solutions;
- Estimate and administer budgets for studies and schedule and manage planning projects;
- Write correspondence, Board memoranda, planning and technical reports, and fact sheets designed to be understood by all audiences, including the general public;
- Simultaneously manage multiple projects;
- Maintain project objectives and integrity when conflicting interests may influence the project outcome;
- Resolve conflicts between contractors and VTA on the interpretation of contractor project responsibilities;
- Supervise, and develop staff;
- Communicate effectively, both orally and in writing;
- Establish cooperative-working relationships with those contacted in the course of work.

What's in it for You?

Work/Life Balance: 40-hour work weeks, and a flexible/hybrid remote schedule.

Health: VTA participates in a CalPERS-sponsored medical plan with VTA contribution to employee and dependent premium health insurance premiums. Employees pay a monthly contribution of any amount in excess of the Kaiser Bay Area Family rate.

Flex Spending Account: \$300 employer-funded Health FSA for eligible employees

Vision: VSP full premium for employees and eligible dependents

Dental: Delta Dental full premium for employees and eligible dependents

Mental Health Days: 3 days: May 1, 2023 - June 30, 2024

Leave: 17 days of vacation (accrued), 80 Hours of sick time (accrued), 12 paid holidays per year, and 1 floating holiday per year.

Retirement:

- Participation in CalPERS

- Classic Members: 2%@55
- PEPRA Members: 2%@62
- 457 Deferred Compensation Plan (voluntary)
- 457 pre-tax
- 457 Roth
- Self-directed brokerage account option for qualifying employees
- Retiree medical coverage for eligible employees with VTA contributions to the retiree's medical premium

Additional perks:

- All active full-time employees and their eligible dependents are eligible for transit passes for use over VTA lines, including VTA Paratransit services.
- Employee Assistance Program (EAP) is available to each employee, eligible dependent, and household member, 24 hours a day, seven days a week.
- Tuition Reimbursement
- Professional Development Fund
- Wellness Programs

As we continue to implement our <u>VTA Forward Plan</u>, we aim to strengthen and increase our workforce to take on future opportunities and challenges by elevating our people and our services.

For more information about our VTA Forward Plan, visit: https://www.vta.org/VTAForward

General Instructions

Please read this entire job announcement before applying for the position. Print and keep a copy of this announcement so that you can refer to it. Questions not answered within this job announcement may be sent to personnel@vta.org.

To ensure consideration, completed applications must be submitted online to the Human Resources department by the stated closing time and date posted. When the stated closing date is "continuous," apply immediately; the position may close without notice. You will receive an immediate email confirming receipt of your submitted application. If you do not receive this email, contact NEOGOV's Applicant Assistance Line at (855) 524-5627 between 8:00AM to 5:00PM (PST) Monday through Friday, excluding holidays.

Only on-line applications will be accepted for this recruitment (paper applications or resumes will not be accepted). Job Interest Notification Cards, or copies of previous, partial, or un-submitted applications, are not an acceptable substitute to a completed application.

ALL APPLICATION AND TESTING NOTIFICATIONS WILL BE SENT BY E-MAIL. Applicants should select e-mail as the preferred method of notification. Candidates must maintain an up-to-date, valid and reliable e-mail address. Candidates are also responsible for maintaining up-to-date phone numbers and addresses on their on-line account. Due to the number of applications received, candidates must check their application status through their on-line account. Contact NeoGov for assistance if needed.

Information on how to apply for jobs at the VTA is available on the VTA Employment website and from the NEOGOV's Applicant Assistance Line (855) 524-5627. NeoGov Applicant support is available from 8:00AM to 5:00PM (PST) Monday through Friday, excluding holidays.

Americans with Disabilities Act Accommodations

The Human Resources Department will make reasonable efforts in the recruitment/examination process to accommodate applicants with disabilities. If you wish to request an accommodation, please click here (Download PDF reader).

Application Processing Information

All related current and past work experience (including VTA experience) must be listed and fully described in the Work Experience section of the application ("See Resume" is not acceptable). Incomplete or improperly completed online applications may be rejected even if you are qualified for the position for which you are applying. It is your responsibility to ensure that the online application reflects the work experience and education needed to meet the requirements for the position you are applying for. Although your resume may have all your experience and education details, please make sure to complete each section of the online application to ensure that your information is accurately captured during our screening process.

All applications are subject to review as to meeting minimum qualifications at any point in the recruitment process. Passing any step is no guarantee of continuation if it is determined that the applicant does not meet the minimum qualifications as stated in the class specification.

Candidates found to have exaggerated/falsified their qualifications, experience, training, and/or education may be disqualified at any point in the recruitment process and may be denied future employment with the VTA.

If selected for the position, candidates will be required to complete a criminal conviction disclosure form. Candidates who successfully become VTA employees, and fail to disclose any of the criminal background information as required may be subject to discipline up to and including discharge.

Eligible Lists typically remain in effect for six (6) months. However, Human Resources may abolish Eligible Lists at any time during the six (6) month period. Human Resources may extend eligible Lists for up to two (2) years. Eligible Lists may be used for more than one recruitment. If you have questions related to an Eligible List you might be on or were on, you should contact Human Resources.

If you have questions regarding your status as an applicant for this position, please call the Human Resources Department at (408) 321-5575 or email at Personnel@vta.org.

VTA is an equal employment opportunity employer. VTA does not and will not tolerate discrimination against applicants or employees on the basis of age, ancestry, color, marital status, mental or physical disability, genetic information, national origin, immigration status, political affiliation, race, religion, creed, sex, gender identity, gender expression, sexual orientation, pregnancy, medical condition, disabled veteran or veteran status, etc.

Agency

Santa Clara Valley Transportation Authority

Address

3331 North First Street, Bldg. B-1

San Jose, California, 95134-1927

Phone

408-321-5816

Website

http://www.vta.org

Senior Transportation Planner - Modeling & Analysis Supplemental Questionnaire

*QUESTION 1

Describe your experience in preparing travel demand forecasts for major transit capital projects (bus rapid transit and/or rail transit). Please provide details about your specific role.

*QUESTION 2

Describe your experience in preparing travel demand forecasts for major highway improvement projects. Please provide details about your specific role.

*QUESTION 3

Describe your experience in travel demand model development, model calibration, and model validation. Please provide details about your specific role.

*QUESTION 4

Describe your experience in the development and/or application of activity-based models. Please provide details about your specific role.

*QUESTION 5

Describe your experience in database management and data analytics in the context of transportation planning. If you have any experience using Big Data, please list them here. Please be specific about your roles and the tools used.

*QUESTION 6

Please describe any experience you have in transportation modeling or land-use modeling that has not been described in the questions above.

*QUESTION 7

Please describe any experience you may have in other types of computational modeling or simulation.

*QUESTION 8

Please describe any experience you have in coding (e.g., Python and R).

^{*} Required Question