Curriculum Vitae
Chun-Hung Peter Chen

Email: chpchen@gmail.com; peter.chen@vta.org

EDUCATION

- M.B.A. Data Science & Financial Management in Leavey School of Business, Santa Clara University, Santa Clara, California, 2017
- Ph.D. in Civil Engineering/Transportation Engineering, University of Maryland, College Park, 2004
- B.S. & M.S in Civil Engineering (M.S. in Transportation Engineering), National Taiwan University, Taiwan

PROFESSIONAL MEMBERS AND VOLUNTEERS

- Committee Member, Transit Research Analysis (TRAC) Committee, National Academies. TRAC advises FTA regarding the appropriate federal role in transit research and stakeholder involvement in the federal research program and responds to proposals made by FTA for high-priority federal research.
- Member, Communication Coordinator, Paper Review Chair, Session Presiding Officer, Bus Transit Systems Committee; Member, Event Coordinator, Public Transportation Planning and Development Committee, Transportation Research Board of the National Academies
- Handling Editor, TRR Board, Transportation Research Record Journal of Transportation Research Board
- Paper Reviewer for Transportation Research- Part A and Journal of Advanced Transportation
- Certified Research Associate & Independent Reviewer, Mineta Transportation Institute, San Jose State University
- Member, Institute of Transportation Engineers (ITE), Review Panel of ITE Trip Generation Handbook, ITS Transit Project Reviewer

REGISTRATION & CERTIFICATE

- Registered Professional Civil Engineer (Washington 41354, California 71756)
- Professional Traffic Operation Engineer (PTOE, Transportation Professional Certification Board, ITE, 1604)

LINKEDIN https://www.linkedin.com/in/peter-chen-a66a6729/

EXPERIENCE BY POSITION

Senior Transportation Planner, Transportation Planner III, Santa Clara Valley Transportation Authority, San Jose, California **02/2007 – Present**

- Develop frameworks for forecasting and evaluating the emissions impacts of Transit Oriented Development (TOD) strategies, provide information for traffic studies and Environmental Impact Report/Studies (EIR/EIS);
- Develop VMT and VMT rate tool for Santa Clara County and all jurisdictions in the County, which replaces the Level of Service (LOS) for project Traffic Impact Studies (TIAs) and EIR/EIS;
- Coordinate consultants and other public agencies to deliver products to customers;
- Conduct VTA transit and highway projects, including BART extension, Highway Speed Rail, Light Rail, Bus Rapid Transit, Local Bus, HOT-Lane, Express-Lane, Auxiliary Lanes projects, etc.
- Lead VTA Activity-Based Travel Demand Forecasting Model project: ABM simulates every person trip behavior for 26 million daily trips in Bay area;
- Conduct Geographic Information System (GIS) application integrated with Travel Demand Model, land use Model (UrbanSim & CubeLand) and scenario development through data visualization;
- Review General Plans from all the jurisdictions of Santa Clara County and integrate those data into countywide land use data;
- Develop highway traffic and transit data for El Camino and Stevens Creek Bus Rapid Transit & San Mateo CCAG Model, SamTrans BRT, Grand Boulevard Initiatives, and Alameda County Model Development.

Transportation Engineer, David Evans and Associates, Inc., Bellevue, WA 10/2005 – 02/2007

- Prepared traffic operation and impact studies, signal timing, and roadway design studies using advanced software tools.
- Managed projects like Burden Boulevard/Road 68 Retail Development and various city traffic studies.

Traffic Engineer, The Traffic Group, Inc., Baltimore, Maryland 01/2005 – 10/2005

- Conducted traffic impact studies, accident analysis, and signal timing projects.
- Managed projects including Manassas Gateway Development and Howard County Traffic Study.

Research Assistant, University of Maryland, College Park, Maryland 10/2002 – 07/2004

- Worked on highway maintenance and traffic management projects for the Maryland State Highway Administration.
- Proposed alternatives for work zone activities to enhance traffic control strategies.

Intern, Maryland State Highway Administration, Baltimore, Maryland 09/2001 – 10/2002

- Analyzed Maryland accident data and prepared Maryland Traffic Safety Reports.
- Recommended the integration of specific accident information data, including persons, vehicles, alcohol-related, and 5W (When, Where, Who, How, and Why) and 3E (environment, engineering, and enforcement).

Research Assistant, University of Maryland, College Park, Maryland 08/1999 – 09/2001

- Developed Maryland highway safety models based on Maryland accident data, and identified and compared different intersection simulation software in intersection capacity and delay models, including SYNCHRO, CORSIM, and VISSIM, etc.;
- Conducted an Airport and Airspace Simulation Model with SIMMOD, Airport Noise Analysis with the Integrated Noise Model, and Airport Delays Estimation with Analytic and Simulation Models.

Traffic Analyst, THI Consultants Inc., Taipei, Taiwan 11/1998 – 07/1999

- Conducted projects on traffic safety and urban renewal; recommended solutions to improve school traffic safety; developed neighborhood traffic mitigation plan; proposed traffic calming devices to protect neighborhoods from traffic.
- Participated in projects on heliport development in Taiwan: forecast helicopter passenger demand for commercial and non-commercial and decision for heliport site location.

Field Civil Engineer, Continental Engineering Corporation, Taipei, Taiwan 08/1997 – 08/1998

- Supervised field crew and arranged work schedules for Taiwan National Freeway 3 (Formosa Freeway) construction (including pavement, bridge, sidewalk, and sewer drainage system) and management; negotiated contract terms with the client; prepared final project documentation; adjusted PERT charts monthly according to actual project progress; prepared soil tests standardized by American Society for Testing and Materials (ASTM) before constructing asphalt concrete pavement to satisfy client's specifications.

Infantry Platoon Leader, R.O.C. Army, Taiwan 07/1995 – 06/1997

- Supervised infantry soldiers for military training.
- Supervise building construction in base.
- Coordinate the Multi-Services and Arms Cooperation and Joint Campaign training.

OTHER VOLUNTEER EXPERIENCE

- Assistant Scoutmaster, Advancement Chair, Merit Badge Counselor, Boy Scout of America, Troop 30 Los Altos.
- Safe Route to School Committee member, City of Mountain View, California, March 2022 – present.
- Mountain View Los Altos High School District (MVLA) – Family Partnership Council Member at Large, March 2023 – present.
- Category Judge, Synopsys Silicon Valley Science and Technology Championship, San Jose, March 2011-present.
- Grand Awards Judge for Energy and Transportation, Intel International Science and Engineering Fair, San Jose, May 2010.

HONORS AND AWARDS

- Merit-Based Scholarship, Leavey School of Business, Santa Clara University
- Otter Award, Maryland State Highway Administration
- Presidential Awards, National Taiwan University, Taipei, Taiwan

PUBLICATIONS & PRESENTATIONS

Chen, R., Chen, C. H., Gauss, K. Lo, R., and Lopez, L. "Safe Route to Landels Elementary School Mountain View California", 104th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2025.

Chen, C. H., "An Application of Activity-Based Model in Public Transportation", 98th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2019.

Chen, C. H., "Capturing Census and Zillow Data Using Python API to Predict Housing Price", ICTPA TRB Workshop, Washington D.C., January 2016

Chen, C. H., and Naylor, G., "Management and Integration of Data and Travel Demand Forecasting Modeling at the Santa Clara County Congestion Management Agency", 94th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2015.

Chen, C. H., and Naylor, G., "An Analytical Framework for Forecasting and Evaluating the Emissions Impacts of Transit Oriented Development Strategies", 92nd TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2013.

Chen, C. H., and Naylor, G., "Bus Rapid Transit Development Strategies in Santa Clara County California", 92nd TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2013.

Chen, C. H., and Naylor, G., "Development of a Mode Choice Model for Bus Rapid Transit in Santa Clara County California", *Journal of Public Transportation*, Vol.14 No.3, p41-62, October 2011.

Chen, C. H., and Naylor, G., "Integration of Travel Demand, Land Use and Emissions Modeling for a Transit Corridor Expansion Project in Santa Clara County California", 90th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2011.

Luo, S. S., Kao, C. H., and Chen, C. H., "A Study of Digital Tachograph in the Abnormal Driving Behaviors Management of Bus Drivers Using Data Mining Techniques", 89th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2010.

Chen, C. H., and Naylor, G., "Development of a Regional Truck Model for the Santa Clara Valley Transportation Authority", 88th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2009.

Chen, C. H., and Schonfeld, P., "Pavement Resurfacing Intervals in Work Zone Optimization", 86th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2007.

Chen, C. H., and Schonfeld, P., "Work Zone Optimization for Multiple-Lane Highway Resurfacing Projects with Time Constraints and an Alternate Route", 85th TRB Annual Meeting, Transportation Research Board, Washington D.C., January 2006.

Chen, C. H., Schonfeld, P., and Paracha, J., "Work Zone Optimization for Two-Lane Highway Maintenance Projects with An Alternate Route", *Transportation Research Record 1911*, p95-105, Transportation Research Board, Washington D.C., December 2005.

Chen, C. H., and Schonfeld, P., "Work Zone Lengths for a Four-Lane Road with an Alternate Route". Vol.131 No.10, p780-789, *Journal of Transportation Engineering*, ASCE, October 2005.

Chen, C. H., and Schonfeld, P., "Work Zone Optimization for Two-Lane Highway Maintenance Projects", *Transportation Research Record 1877*, p95-105, Transportation Research Board, Washington D.C., December 2004.

Chen, C. H. "A Study on the Feasibility of Relocating Taipei Airport" Master Thesis, Department of Civil Engineering, National Taiwan University, Taipei, Taiwan, June 1995.