

Boster, Kobayashi & Associates

59 Rickenbacker Circle
P.O. Box 2049
Livermore, CA 94551-2049

Office: (925) 447-6495
Fax: (925) 447-6589

CHRISTIAN ENGELMANN, P.E., T.E.

Curriculum Vitae

EDUCATION:

Bachelor of Science, Civil Engineer, Cal Poly, San Luis Obispo

PROFESSIONAL REGISTRATION:

Registered Professional Civil Engineer, CA Certificate No. C 62554
Registered Professional Traffic Engineer, CA Certificate No. TR 2309

CERTIFICATION:

CHP MAIT – Automobile Restraint Examination Seminar
CHP MAIT – Skid Test Analysis and Vehicle Speed Determination
ITS Berkeley Certified – Traffic Signal Diagnostic and Maintenance
Governor's Office of Emergency Services (Cal OES) Safety Assessment Program Evaluator

PROFESSIONAL EXPERIENCE:

Employed with the California Department of Transportation for over 17 years
Employed in the construction industry three years
Experience in Traffic Safety, Traffic Maintenance and Operations, Design, and Construction Project Management for 23 years

PROFESSIONAL AFFILIATION:

Institute of Transportation Engineers (ITE)
American Society of Civil Engineers (ASCE)
Transportation Research Board (TRB) – Committee on Tort Liability
Transportation Research Board (TRB) – Committee on Traffic Control Devices

PRESENT POSITION:

Associate of Boster, Kobayashi & Associates, a consulting firm specializing in the technical aspects of traffic engineering and accident reconstruction. Typical assignments involve traffic safety, highway design, highway construction and maintenance, and traffic engineering.

PREVIOUS POSITIONS:

California Department of Transportation, HQ Division of Traffic Operations, Office of Traffic Engineering, Sacramento, 7/2014 – 7/2016

- As Editor of the California Manual on Uniform Traffic Control Devices (CA MUTCD), reviewed, edited and prepared policy in the CA MUTCD. Served as subject matter expert in the application and use of traffic control devices in California and provided declarations and deposition testimony to the courts. Worked closely with the Federal Highway Administration to maintain substantial conformance with the federal MUTCD. Work included addressing inquiries by Caltrans staff, local agencies, the legislature and the public on the application of traffic control devices, including signs, striping details, speed zone surveys, construction and maintenance zones, and other traffic engineering policies or related matters.
- As the California Traffic Control Devices Committee (CTCDC) Executive Secretary, provided technical support to committee members with their applications for new traffic control devices and prepared quarterly meeting agenda items.
- Served as the acting Traffic Investigation Branch Chief, oversaw the Statewide Traffic Investigation Reporting.
- Additional duties included acting as the Bike and Pedestrian Branch Chief, assisting Districts and Headquarter staff with issues as they related to bicyclists and pedestrian safety.
- Assisted the Division of Design in developing design standards for Cycletrack, Class IV bikeways.
- Developed material for ADA-related design revisions in the Highway Design Manual.
- Lead the development of statewide training curriculum for CA MUTCD training.
- Instructed on the CA MUTCD at the Caltrans Traffic Safety Academy.

California Department of Transportation, Division of Local Assistance, District 5, 11/2010 – 7/2014

- Administered State and Federal transportation funding programs with local agencies within District 5. Performed engineering work involving the review, preparation, acceptance and processing of a variety of local projects related to STIP, Prop 1B Bond, Emergency Relief, Safe Routes to School, HSIP, Active Transportation and other Federal and State Programs. This work included plan reviews to ensure agencies are meeting CA MUTCD, HDM, AASHTO or other design standards. Conducted field reviews, final inspections and maintenance inspections of local projects within these programs.
- Served as the District ADA coordinator for local agencies and oversaw that local ADA complaints were properly handled per Department of Justice mandates.
- Worked on the CHP Multidisciplinary Accident Investigation Team (MAIT) and assisted with evidence/forensic collection in District 5.
- Assisted the State's legal counsel in tort liability cases, including court trial testimony and depositions.

California Department of Transportation, HQ Division of Traffic Operations, Chief of the Strategic Highway Safety Program (SHSP) Implementation Branch, 11/2009 – 11/2010

- Duties included managing the implementation of over 150 strategic actions in the SHSP with over 300 safety stakeholders. Tasks included the development and implementation of SHSP strategies and actions, conducting research and operation studies, planning, organizing, controlling and coordinating the development of work plans for SHSP actions.
- Prepared and submitted the Annual California Highway Safety Improvement Program 5 Percent Report (Annual 5% Report) on California's most severe safety needs locations as required by SAFETEA-LU.
- Served as the Caltrans representative on ad-hoc committees that addressed transportation system safety issues, which included reviewing and determining the impact of State and Federal policies and existing or proposed regulations and legislation related to the activities listed above, and to formulate and present recommendations for Caltrans action.

California Department of Transportation, Division of Maintenance and Operations, District 5, 5/2001 -11/2009

- As Lead Engineer, coordinated and conducted about 250 Traffic Safety Investigations annually in District 5. Duties included conducting field reviews, analyzing collision and traffic data, scoping projects and making recommendations to the District Traffic Engineer; designed and oversaw installations of traffic control devices per CA MUTCD; provided written and verbal responses to internal and external agencies and the public regarding traffic safety related issues.
- Closely coordinated with Caltrans maintenance and construction personnel to implement strategic changes in roadway striping or signing via maintenance work orders or project change orders.
- Participated in statewide committees on new research and development in pavement skid testing, run-off-road collision reduction, and bicycle markings enhancements.
- Served as Pedestrian and Bicycle Coordinator in District 5.
- Assisted the State's legal counsel in tort liability cases as the Person Most Qualified with court testimony and depositions.
- Participated as an engineer with the CHP MAIT on multiple-fatal collisions, collecting evidence/forensics to recreate collision events and determine causation.
- San Luis Obispo, CA – South Street Road Diet – converted a ¾ mile State Highway from a 4-lane facility to a 2-lane with left-turn channelization and raised medians. Work was part of a \$10 million pavement rehabilitation project within the City of San Luis Obispo. Work involved managing a task force made up of local residents, school and city officials, and representatives of the visually impaired to design a more pedestrian and bicycle friendly facility without compromising operation and efficiency of the roadway.
- Pacific Grove, CA – Highway 68 Road Diet to improve pedestrian safety near the Pacific Grove High School. Worked with City of Pacific Grove and their school district to implement significant roadway changes.
- Worked with many communities in developing pedestrian and bicycle improvements and traffic calming strategies for state highways that are main streets in the following communities: Los Alamos, Davenport, Felton, Boulder Creek, Santa Barbara, Montecito, Lompoc, San Luis Obispo, Santa Cruz, and Santa Maria.
- Conducted a “Raised pavement markers on right shoulder” study on bicyclist safety and how it affects driver behavior.
- Participated in the creation of a statewide monitoring program for run-off-road collisions.
- Participated in the Monterey 156 Safety Group Task Force.
- Prepared guidelines on maintaining rumble strips.
- Prepared pavement skid testing request policy for Caltrans as part of the Highway Safety Improvement Program Guidelines.
- Assisted in the development of Caltrans training programs for Traffic Safety Investigations.
- Served as Training Coordinator for Traffic Safety Investigations in District 5.

California Department of Transportation, Design, District 5, 12/1999 – 5/2001

- This position with Caltrans involved the application of engineering and communication skills in the planning, documenting and design of various highway projects within District 5. Projects ranged from drainage design to major roadway rehabilitations. Strong communication skills were utilized to manage complex issues that involved the public and other personnel essential in the delivery of the projects.
- Ben Lomond, CA – Project Engineer on \$1.2 million highway widening project, including drainage improvements, streetscape improvements, and pedestrian safety improvements through a small community.
- Reviewed and approved signing and striping plans for several roadway rehabilitation projects.

Homer J. Olsen, General Engineering Contractor, Construction Engineer, 1/1996 – 6/1998

- As Construction Engineer, this position required the updating of construction plans, maintaining progress payments for a \$50 million project that built a 20-mile, 42” diameter water pipeline as part of the California Department of Water Resources (DWR) Coastal Branch California Aqueduct System in the central California coast.
- Reviewed and implemented traffic control plans for day to day operations.
- Managed construction of access roads, resurfacing of public roadways affected by the project.
- Managed construction crews and interacted with DWR inspectors