# Boster, Kobayashi & Associates

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# NEVIN Q. SAMS, P.E., T.E., P.T.O.E.

# Curriculum Vitae

# **EDUCATION**:

B.S. Civil Engineering, California Polytechnic University, San Luis Obispo, 1982 A.S. Engineering Technology, West Valley Junior College, Saratoga, CA, 1979

## **CERTIFICATION:**

Registered Civil Engineer, No. C 46422 Registered Traffic Engineer, No. TR 2277 Certified Professional Traffic Operations Engineer, No. 1365 Certificate of Attainment, Advanced Accident Investigation, CHP Academy, 1989

# **PROFESSIONAL EXPERIENCE:**

Tenure with California Department of Transportation

Tenure with Boster-Kobayashi and Associates

23 years

8 years

Experience in Traffic Operations, Traffic Safety, Traffic Design,
Construction, Surveys, Roadway Design and Planning

# **PROFESSIONAL AFFILIATION:**

Institute of Transportation Engineers (ITE) ITE Safety Counsel American Society of Civil Engineers (ASCE)

# **PRESENT POSITIONS:**

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 maintenance and traffic engineering.

## **PREVIOUS POSITIONS:**

1992 to 2006 District Traffic Safety Program Coordinator
District Traffic Safety Engineer
Department of Transportation, Caltrans, District 05, San Luis Obispo, CA

# District Safety Traffic Engineer:

- Responsible for addressing safety issues and concerns on state highways in five counties which compose District 05. This includes maintaining the State's collision surveillance system and the safety improvement program. Also responsible for addressing safety inquiries from the public, California Highway Patrol, elected officials, the media, and other public agencies. In addition, responsible for providing safety consultation to other Caltrans offices including Design, Planning, Maintenance, Landscape and Construction. As the District Traffic Engineer, I was in responsible charge of over 3,000 traffic safety and operational investigations and the resulting actions. Typical improvements resulting from these investigations include signage, striping, crosswalks, bike lanes, signal phasing and capital improvements such as median barrier, guardrail, turn lanes, shoulder widening, curve realignment, signals, and hazard elimination.
- Engineer in responsible charge for assessing traffic issues and applying traffic engineering principles to a wide variety of applications in District 05. These included the following: Assessment of stop warrants and the installation of stop signs throughout the district. Evaluation and installation of painted cross walks. Installation of electronic warning devices such as flashing beacons, radar speed feedback signs and dynamic curve warning signs. Coordination with local school districts in establishment of suggested route to school programs and school zone warning devices. Assessment of the safety justification for signals and the installation of signals meeting safety program criteria. Ball banking and installation of curve warning signs. Assessment and installation of all warning (yellow) signs in the district. Engineer in charge over Safety systems including guardrail, crash cushions, and barrier. Engineer in charge for establishment of rumble strips, and profiled thermo plastic pavement delineation. Responsible for addressing bicycle and pedestrian safety issues. Responsible for assessing parking issues and establishing parking restrictions.
- Attended city and county Traffic Committee meetings to assist in resolving local traffic issues.
- <u>Project Manager</u> and <u>Design Senior</u> for Traffic Safety projects such as pavement overlays, turn pockets, shoulder widening, sight bench, pavement delineation, pedestrian enhancements, guardrail, crash cushions, and drainage improvements.
- Responded to the media on a regular basis including television and newspaper interviews and written correspondence. Responded to the public and other agencies on a regular basis in meetings or written correspondence.
- Participated in numerous community-based task forces dealing with safety issues. Utilized extensive background and experience in working with the public and elected representatives on difficult safety and traffic related topics. Department's representative on seven corridor projects sponsored by the CHP and the California State Office of Traffic Safety.

## **PREVIOUS POSITIONS:** (continued)

- Developed District Policy on Traffic related community interface issues including pedestrian/bicycle safety, in-ground crosswalk lights, traffic calming, within the application on Context Sensitive Solutions (CSS) philosophy.
- Responsible for review of safety aspects of permit applications.
- Responsible for assistance to the Department's Legal Office regarding Traffic Safety/Design issues. I provided training to new attorneys entering the department's legal office. I was deposed in numerous tort cases as Person Most Knowledgeable (PMK) and testified in trial as both PMK and State's Expert of Traffic Engineering Applications. I also developed numerous declarations as a professional engineer.

# **District Traffic Safety Program Coordinator:**

- Implemented the objectives and procedures of the state Safety Improvement Program. Assessed the traffic safety needs of 1200 miles of state highway in the District. Identify and scope projects to address safety issues and qualify identified projects for funding. Engineer in charge for implementing the following programs:
- Apply benefit-cost safety index analysis to potential safety projects utilizing accident data from the state's accident data base (TASAS and SWITRS). Estimate project costs and develop safety project charters.

<u>Spot Safety Improvements</u>: Monitor safety projects for compliance to program priorities and objectives.

<u>Median Barrier Monitoring System</u>: Responsible for investigating locations identified in the state's annual median barrier report, initiating appropriate projects and scoping and reviewing median barrier projects in District 05.

<u>Two and Three lane Monitoring System</u>: Responsible for initiating, scoping and reviewing safety improvements aimed at reducing cross centerline head-on accidents on two and three lane highways.

<u>Guardrail and Crash Cushions:</u> Responsible for identifying locations requiring guardrail or guardrail upgrades and developing projects to address these locations on a priority basis.

Wrong Way Monitoring: Responsible for researching wrong way accidents and recommending signing and delineation modifications.

<u>Rock Fall</u>: Responsible for initiating rock fall protection projects at locations with rock related accidents.

<u>CURE (Clean up the Roadside Environment)</u>: Responsible for identifying projects to remove fixed objects and/or to increase clear recovery for errant vehicles.

# **PREVIOUS POSITIONS:** (continued)

<u>Glare Screen</u>: Responsible for evaluating potential glare screen projects, considering effects of grades, horizontal alignment, and traffic volumes.

Over Crossing Pedestrian Fencing: Responsible for evaluating the potential for risk of objects dropped or thrown on the travel way from bridge structures.

<u>Rumble Strips</u>: Responsible for evaluating the need for audible warning systems and soft barriers and initiating these types of projects.

<u>Signals</u>: Responsible for evaluating the need for signals at locations meeting the accident warrant per MUTCD criteria.

<u>ADA Capital Improvements</u>: Identify and prioritize locations for ADA (American with Disabilities Act) compliance including sidewalk improvements and wheel chair ramps.

Run off the Road (ROR): Responsible for initiating, scoping, and reviewing projects that address run off the road accident concentrations identified in the states' ROR monitoring program.

<u>Skid Number Monitoring System</u>: Responsible for District monitoring of locations with low skid numbers as provided by Headquarters Skid Testing Unit.

- Managed the Accident Surveillance and Traffic Investigation System. Responsible for developing traffic investigations (HT-65) to assess safety needs on state highways in the district and develop remedial or improvement strategies.
- Responsible for the District TASAS (Traffic Accident Surveillance and Analysis System) accident database and Highway database.
- Developed 10 year projections for anticipated traffic safety needs in District 05.
- Engineer of responsible charge for the District's traffic safety devices coordination including the following applications:
  - a) Guardrail installations, operational characteristics, hardware function and applications, including breakaway vs. non-breakaway systems, concrete vs. metal, gating principles, posts and end treatments.
  - b) Crash cushions installations, operational characteristics, hardware function and applications including gating vs. non-gating systems, length, and maintenance intensity.
- Developed Safety Analysis reports which detected potential safety improvements for possible inclusion on capital projects.

## **PREVIOUS POSITIONS:** (continued)

**1990 to 1992**: Associate Transportation Engineer

Department of Transportation, Caltrans, District 05, San Luis Obispo, CA

- Served as Assistant Manager of the District Traffic Safety Improvement Program and Accident Surveillance System.
- Served as MAIT Associate on the Central Division Multidisciplinary Accident Investigation Team (MAIT). Wrote numerous engineering and environment report segments.
- Wrote Safety Analysis for department projects.
- Prepared Median Barrier Monitoring Reports.
- Generated TASAS reports.

# **1984 to 1990** Assistant Transportation Engineer

Department of Transportation, District 04 in San Jose and District 05 in San Luis Obispo, CA

- Performed safety investigations, assessed operational deficiencies.
- Developed Traffic Projects. Prepared striping plans, sign plans, layout sheets engineer's estimates and project documents.
- Highway Design: Developed project plans including profile and superelevation sheets, alignments, layout sheets, bridge site plans, contract plans and estimates.

#### **1983 to 1984** Junior Civil Engineer

Department of Transportation, District 04, San Jose, CA

- Engineering Rotation through Planning, Construction, and Surveys offices
- Wrote Route Concept Reports for State Routes in Santa Clara County.
- Construction inspection for projects in Santa Clara County
- Worked in survey party on projects in Santa Clara County.

### **1982 to 1983**: Maintenance Supervisor

Wastewater Systems, Hayward, CA

• Served as Maintenance Chief for sewer line inspection and maintenance operations. Duties included bidding contracts, scheduling projects, developing project reports, and supervising a field crew.

## **COMMITTEE INVOLEMENT:**

## 1992 to 2006: California Traffic Safety Training Committee:

Since its creation in 1992, I served as the Chairman of this Committee which has developed and deployed a statewide training effort for Caltrans and CHP personnel in the area of Traffic Safety. I also developed lesson plans for guardrail and barriers and for safety project initiation.

#### **1992 to 2006**: California Department of Transportation Safety Academy:

Since its creation in 1992, I served as the Safety Academy Coordinator and Moderator. I have also instructed on numerous safety topics including public interface, safety applications of intelligent transportation systems (ITS), safety devices and hardware, and the Safety Improvement Program.

## **COMMITTEE INVOLEMENT**: (continued)

## 1996 to 2006: Safety Corridor Task Force:

As District Traffic Safety Engineer, I represented the Department of Transportation on eight safety corridor task forces in deployment in District 05 over the last 10 years. The Safety Corridor Task Force effort is sponsored by the California Office of Traffic Safety and is locally run by area CHP. The Safety Corridor Task Force is a multidisciplinary effort including local agencies, emergency services, CHP, American Automobile Association, and elected officials. I was responsible for identifying engineering, signing and striping strategies to enhance the safety of the highway corridors.

## **2003 to 2006**: State Run-off-the-Road Program:

Committee member in Caltrans effort to implement a safety program to address high accident concentrations associated with run-off-the-road collisions.

## 2006: State Freeway Safety Task Force:

Committee member in Caltrans effort to evaluate safety issues specific to freeways.

# **2006**: Aesthetic/Low Maintenance Guardrail System

Research Committee: Member of focus team to develop guardrail systems that integrates aesthetic criteria into functional crash criteria for guardrails.

## **2005 to 2007:** Cold Spring Arch Bridge Suicide Prevention Committee:

Member of a multidisciplinary team dedicated to reducing the frequency of suicide jumping from the member Cold Spring Historic Arch Bridge in Santa Barbara County.

# 2006 to 2010: Strategic Highway Safety Plan:

Participant in the development of the Bicycle Safety components of the California Strategic Highway Safety Plan.

## **2008**: Safe Routes to School Program

Member of the Application Review Committee for the Federal Safe Routes to School Program for District 05, in the central coast region of California.