

# ANNUAL REPORT 2015

## Community Pedestrian Safety Training Program



Berkeley SafeTREC

SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER



California Walks  
Stepping Up for Health, Equity, & Sustainability



CALIFORNIA OFFICE OF  
TRAFFIC SAFETY

# I. Introduction

## PROBLEM STATEMENT

In 2013, 13,863 pedestrians in the state of California were killed or injured in traffic collisions (including minor and severe injuries).<sup>1</sup> Of these fatalities and injuries, 23% of the victims were between the ages of 15-24 and 48% of the pedestrians were killed or injured while crossing streets in crosswalks.<sup>2</sup>

The effects that road design, traffic speed and road/sidewalk quality have on measures of health, including pedestrian collisions and physical activity levels, are well documented.<sup>3</sup> Research has shown that communities' perceptions of risk and safety significantly affect residents' use of local streets and public areas for physical activity.<sup>4</sup> However, few projects have focused on involving communities in data collection and decision-making processes as a way of promoting collective ownership of community road safety and developing long-term solutions to health concerns related to transportation.

Community-Based Participatory Research (CBPR) has been widely used to address health disparities in marginalized communities, specifically environmental health concerns and community violence.



Salinas CPST, 2010

## PROGRAM OBJECTIVES

- 1 **IMPROVE LOCAL PEDESTRIAN SAFETY**
- 2 **BUILD CAPACITY OF COMMUNITY PARTNERS**
- 3 **CREATE SAFER, WALKABLE COMMUNITIES**



Here, we apply CBPR to pedestrian safety by involving communities in promoting pedestrian-friendly street design, awareness and law enforcement efforts, with the goals of reducing pedestrian injuries and fatalities and increasing physical activity in communities.

The Community Pedestrian Safety Training (CPST) program works to provide community groups with the training, technical assistance, and resources they need to make walking safer and more pleasant in their communities. By involving communities in the data collection and decision-making processes and providing them with the tools to improve pedestrian safety at the local level, the CPST program aims to create changes that will have long-term, sustained impacts on the health and safety of partnering communities.

<sup>1</sup> California Office of Traffic Safety, 2013; SWITRS, 2013

<sup>2</sup> Ibid.

<sup>3</sup> Gómez et al., "Violent Crime and Outdoor Physical Activity among Inner-City Youth"; Heinrich et al., "Associations between the Built Environment and Physical Activity in Public Housing Residents"; Krieger et al., "High Point Walking for Health"; Lee et al., "Neighborhood and PA"; Molnar et al., "Unsafe to Play?"; Rifaat, Tay, and de Barros, "Effect of Street Pattern on the Severity of Crashes Involving Vulnerable Road Users"; Rosén and Sander, "Pedestrian Fatality Risk as a Function of Car Impact Speed"; Sullivan and Flanagan, "The Role of Ambient Light Level in Fatal Crashes"; Zoellner et al., "Environmental Perceptions and Objective Walking Trail Audits Inform a Community-Based Participatory Research Walking Intervention."

<sup>4</sup> Carver, Timperio, and Crawford, "Perceptions of Neighborhood Safety and Physical Activity among Youth"; Gómez et al., "Violent Crime and Outdoor Physical Activity among Inner-City Youth"; Zoellner et al., "Environmental Perceptions and Objective Walking Trail Audits Inform a Community-Based Participatory Research Walking Intervention."

# II. About CPST

## WHO ARE WE?

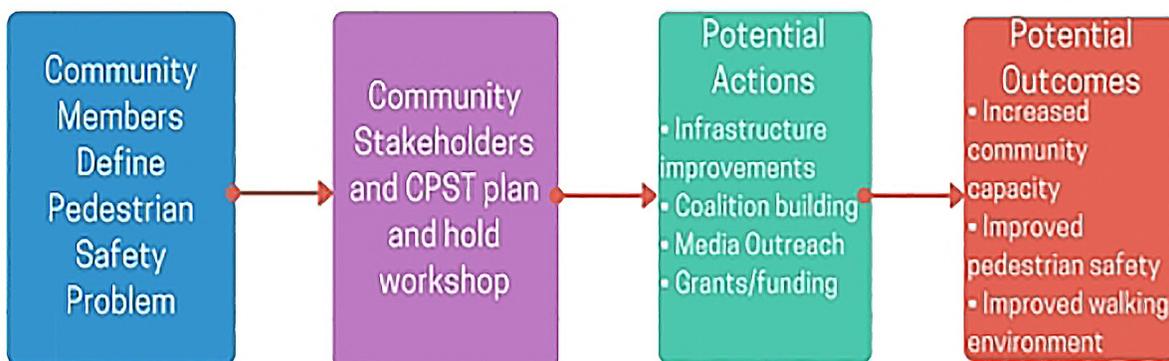
The Community Pedestrian Safety Training (CPST) program is a partnership between the Safe Transportation Research and Education Center (SafeTREC) at UC Berkeley and California Walks. Funding for the project is provided by a grant from the California Office of Traffic Safety (OTS) through the National Highway Traffic Safety Administration. Since 2009, a total of 36 CPST workshops have been implemented in 35 communities.

The CPST program engages both community residents, local agencies and professionals by teaching pedestrian safety best practices and strategies and conducting hands-on walkability assessments. Each workshop concludes with participants identifying immediate action steps—specific to their community—which can be undertaken to improve pedestrian safety.

## WHO ARE OUR PARTNERS?

Communities are initially selected based on pedestrian collision levels and the presence of vulnerable pedestrian groups, including children, older adults, and persons with disabilities. Strong community interest and readiness is also essential for pedestrian safety efforts to be sustained. The CPST program also prioritizes underserved communities facing racial/ethnic disparities to help advance equity in pedestrian safety programming statewide.

Before each CPST, we research the particular communities and identify groups that have the capacity to sustain interest and take action after the CPST. We expect these partnerships to help in sustaining pedestrian safety efforts.



## IMPACT ON COMMUNITIES

- 100% of past surveyed CPST workshop partners are interested in additional or follow-up training
- 92% of surveyed partners reported more enthusiasm and support for pedestrian safety in their communities
- Partners scored the CPST workshops 5.0/5 for “promoting change”

# III. CPST Supports Local Efforts

## WAYS IN WHICH WE SUPPORT LOCAL SAFETY EFFORTS

- 1 **We partner with community groups.**
- 2 **We shape our workshops to fit the interests and need of the community.**
- 3 **We build capacity of community partners, specifically in underserved communities.**
- 4 **Our workshops reach a wider audience than just the participants.**
- 5 **We transfer resources to participating communities.**
- 6 **We act as an intermediary between community groups, local governments, law enforcement and schools.**
- 7 **We build networks between community stakeholders.**



Although CPST is a statewide program, it works directly to support local pedestrian safety efforts. We follow the principles of CBPR in promoting healthy and safe communities for pedestrians and all road users. The CPST emphasizes the following elements to support local pedestrian safety work:

### 1: WE PARTNER WITH COMMUNITY GROUPS.

CPSTs are initiated by local groups concerned about pedestrian safety. Research shows that having community members involved in health planning helps to make issues higher priorities for policy makers.<sup>1</sup>

### 2: WE SHAPE OUR WORKSHOPS TO FIT THE NEEDS AND INTERESTS OF COMMUNITIES.

Research shows that recognizing community needs and shaping approaches to meet these needs allows researchers and community partners to directly address specific health and safety concerns.<sup>2</sup> CPST emphasizes key areas of concern in communities, builds off of work that has already been done in the communities, and takes the participants attending the workshops into consideration. This translates into providing workshops in Spanish, using VideoVoice to involve youth, and building off of existing work done by the group.

### 3: WE BUILD CAPACITY OF COMMUNITY PARTNERS, SPECIFICALLY IN UNDERSERVED COMMUNITIES.

Research has shown that by focusing on teaching participants skills necessary to take on short and long term projects in their communities, CBPR techniques can establish these participants as leaders and educators in their communities and can transfer research capacity onto these groups over the long term.

Because CPST involvement in communities is short-term, we focus on building capacity of community partners. We select communities, in part, based on levels of community interest on pedestrian safety issues and groups' capacity to sustain interest and take action after the CPST workshop.

In order to build local capacity, the workshops focus on teaching community groups how to conduct safety assessments, how to accurately collect and analyze data, and how to involve stakeholders in pedestrian safety planning and programming.

<sup>1</sup> Cacari-Stone et al., "The Promise of Community-Based Participatory Research for Health Equity."

<sup>2</sup> Rosenthal et al., "Building Community Capacity."

# III. CPST Supports Local Efforts

## 4: OUR WORKSHOPS REACH A WIDER AUDIENCE THAN JUST PARTICIPANTS.

Transportation safety concerns are communicated to communities at large through media before and after the workshops take place. Media coverage and community outreach of pedestrian safety efforts and awareness is often one of the follow-up steps taken by communities after CPST workshops.

## 5: WE TRANSFER RESOURCES AND SKILLS TO PARTICIPATING COMMUNITIES.

Community groups we work with are often not aware of resources to access or collect data about traffic conditions and pedestrian, bike and vehicle collisions in their communities. These types of data are critical for applying for grants and advocating for policy or street design changes. By connecting communities with open source mapping technology, traffic data, and research, as well as teaching participants how to access and conduct a variety of safety and walkability audits, we provide communities with the resources and skills to support their traffic safety claims with measurable data.



Delano CPST, 2009

## 6: WE ACT AS AN INTERMEDIARY BETWEEN GOVERNMENT OFFICIALS AND COMMUNITY MEMBERS.

Our workshops act as neutral ground for government representatives and community groups to discuss safety concerns and develop mutually agreed upon solutions. Our workshops are often the first time government officials and community groups meet to discuss street safety issues. In reviews of the CPST program, both community members and government officials have reported that the workshops have been beneficial.



San Jose CPST, 2012

## 7: WE BUILD NETWORKS OF COMMUNITY GROUPS, LOCAL GOVERNMENTS, LAW ENFORCEMENT AND SCHOOLS.

88% of community groups surveyed reported partnering with other community groups, local governmental bodies, or schools after the workshop had taken place. For example, The Greenfield Walking Group in Delano partnered with the City of Delano and the County Public Health Services Department to develop the city's General Plan and a Safe Routes to School program.

# IV. Features of Community Impact

## COMMUNITY CONCERNS

In 2014, we surveyed 16 previous CPST sites to assess initial safety concerns that communities had before the CPST workshops and outcomes in the communities after the workshops had been given.

Of the 16 communities surveyed, the majority were initially concerned about pedestrian safety among youth and in school zones, and safety among high risk and under-represented groups, including new immigrants, Spanish speaking communities, disabled individuals, and seniors.

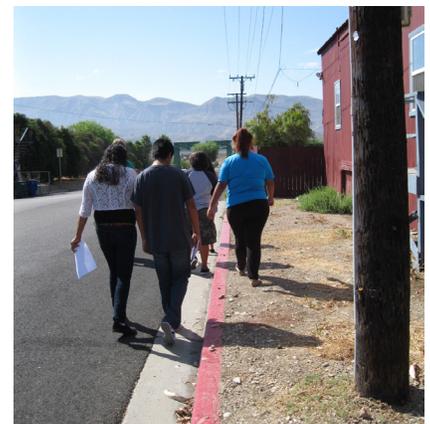
SAFETY CONCERNS	# OF COMMUNITIES WITH THESE CONCERNS	% OF COMMUNITIES WITH THESE CONCERNS
Pedestrian injury among children/school zones	9	56%
High risk/ under-represented populations	8	50%
Specific road infrastructure/user behavior issues	6	38%
High rates of pedestrian injury and fatality	3	19%
Lack of pedestrian infrastructure	2	13%



Berkeley CPST, 2012



Rexland Acres Park, Greenfield CPST, 2012



Fillmore CPST, 2012

# IV. Overview of Partnering Communities

## AFTER THE WORKSHOP

Of the 16 communities surveyed, there were a significant number and variety of outcomes after the CPST workshops had been given. 88% of communities led coalition building efforts, including establishing partnerships, working groups or task forces with local governments, law enforcement, local schools or other community organizations. 35 partnerships, working groups, or task forces were established in the 16 communities surveyed after the CPST workshops were administered. In many cases, community groups developed partnerships with groups from other communities who had also participated in CPST workshops.

88% of communities also led pedestrian safety media campaigns and participated in outreach activities. 75% of communities focused community programming, which included programs like setting up senior or student walking groups or Safe Walks to School programs.

INITIATIVES TAKEN AFTER CPST	# OF COMMUNITIES TAKING ON INITIATIVES	% OF COMMUNITIES TAKING ON INITIATIVES	TOTAL NUMBER OF INITIATIVES
Coalition Building	14	88%	35
Media and Outreach	14	88%	24
Community Programming	12	75%	26
Grants/Funding	11	69%	16
Infrastructure Improvements	8	50%	24
Law Enforcement Efforts	7	44%	9
Additional Safety Assessments/ Counts	7	44%	8
Policy Changes	3	19%	4
Reduced Speed Limits	1	6%	1

Community groups also coordinated with local governments and law enforcement to improve infrastructure, increase law enforcement and change policy concerning pedestrian safety. In total, there were 24 infrastructure improvements, 9 changes in law enforcement efforts and 4 policy changes in the 16 communities surveyed after the CPST workshops were administered.



Long Beach CPST, 2010

# V. Case Studies - Hoopa Valley, CA

The Hoopa Valley Tribe invited California Walks and SafeTREC to hold a CPST workshop as part of the tribe's community-driven grant application process for the California Active Transportation Program (ATP) in April 2015. The workshop and grant application mainly focused on addressing pedestrian safety concerns along State Route 96 (SR-96), which acts as a main thoroughfare for pedestrians and vehicles in the community because of the many community destinations on this road, including two schools, a grocery store, tribal offices, emergency services and a post office. There are currently no existing pedestrian facilities along SR-96. Pedestrians, including school-aged children, use the unpaved shoulder of the highway to get to and from home and community amenities.

## RECOMMENDATIONS FROM THE CPST

The Hoopa Tribe's Active Transportation Program Technical Advisory Committee, community residents, and the California Walks/SafeTREC team submitted a set of recommendations to be considered by the tribe in their ATC grant application. These include:

These include:

- Develop safe, well-lit, multi-use sidewalks along both sides of SR-96 in order to improve pedestrian safety for students and residents, as well as convey the community scale of the road to drivers
- Apply for grants to install roadway infrastructure including; rumble strips, soft-hit posts, new pavement markings, and signage
- Prioritize non-infrastructure activities including: pedestrian safety education in schools, youth-led signs and markings that incorporate Hupa cultural markings/designs, work with students to develop a parent transportation handbook, rebrand Walk to School Days as Salmon 'Run' Events
- Establish a Community Active Transportation Advisory Committee
- Explore the use of Caltrans' Crosswalk Enhancement Policy in Downtown Hoopa

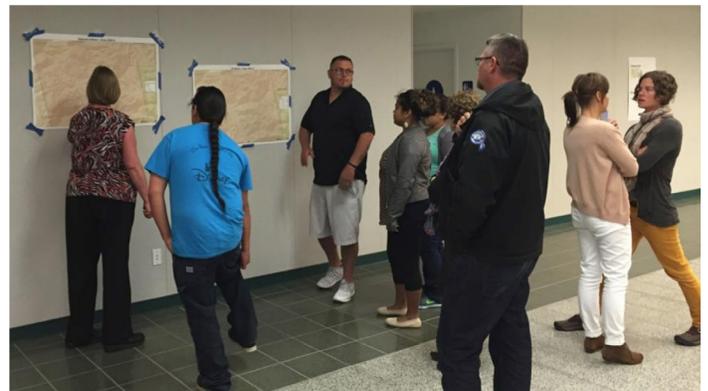
## AFTER THE CPST

Although the Hoopa Valley CPST is one of the most recent workshops held, the community has already secured a \$1.3 million Active Transportation Program from Caltrans. We look forward to seeing the infrastructural changes and non-infrastructural activities that occur over the next few years.

## BACKGROUND

<b>LOCATION</b>	Northern California, Rural Area
<b>INITIAL SAFETY CONCERNS</b>	<ul style="list-style-type: none"> <li>• Lack of pedestrian infrastructure</li> <li>• Pedestrian safety among children/school zones</li> </ul>
<b>POPULATION SIZE</b>	3,041
<b>MEDIAN HOUSEHOLD INCOME</b>	\$29,079
<b>COMMUNITY PARTNERS</b>	<ul style="list-style-type: none"> <li>• Hoopa Valley Tribal Roads Department</li> </ul>





# V. Case Studies - Glendale

Glendale has hosted 2 successful CPST workshops in May 2009 and April 2014. One city council member initiated the first training after a series of high-profile pedestrian injuries and fatalities. The planning team responded to these tragedies by garnering citywide support to focus on pedestrian safety and planning through the CPST. The City's implementation of multi-disciplinary pedestrian safety strategies following the CPST helped to lower the City's per capita pedestrian fatality rate to one of the lowest in the nation in 2011. A string of pedestrian fatalities in 2013 involving older adults, however, prompted the City to revisit its pedestrian safety efforts. The City quickly established a new subcommittee of the Transportation and Parking Commission—the Pedestrian Safety Task Force—to oversee the City's renewed pedestrian safety efforts. The Task Force initiated a second CPST workshop in order to improve the City's efforts with the latest research and best practices.

## AFTER THE GLENDALE CPSTS

### Infrastructural Improvements

- The City installed multiple pedestrian-activated flashing beacons, advanced yield markings, high-visibility crosswalks, upgraded traffic signals, safety lighting, and radar speed feedback signs.

### Grants and Funding

- The City secured close to \$2 million from the State Active Transportation Program for implementing various pedestrian safety projects, and for developing a Pedestrian Master Plan.

### Enforcement Efforts

- Allocated funds for for police officers on bicycles, additional crossing guards, and special enforcement operations.

### Community-Based Programming

- The Glendale Police Department incorporated new education tools identified at the CPST in their traffic enforcement/education program.
- The City releases Public Service Announcements for drivers and pedestrians.
- Walk Bike Glendale, a local advocacy group and a chapter of the Los Angeles County Bicycle Coalition, hosts education and encouragement events promoting walking in addition to advocating for pedestrian safety improvements.

### Coalition Building

- Community Groups and Police Department have formed close partnerships.

## BACKGROUND

### LOCATION

Southern California, Urban Area

### INITIAL SAFETY CONCERNS

High rates of pedestrian injuries and fatalities

### POPULATION SIZE

196,021

### MEDIAN HOUSEHOLD INCOME

\$50,170

### COMMUNITY PARTNERS

- Homeowners' Associations
- Chamber of Commerce
- Glendale Police Department
- Glendale Public Works - Engineering Division
- Walk Bike Glendale



# V. Case Studies - Paradise, CA

Following the fatality of a young student, the Town of Paradise reached out to the CPST team to educate the community on how to improve pedestrian safety, as well as to facilitate community feedback on an upcoming road design improvement project. The CPST equipped participants with evidence-based strategies to improve safety, which were invaluable in educating the broader community during the following year-long planning and design process for the Downtown Paradise Safety Project.

## AFTER THE PARADISE CPST

### Infrastructural Improvements

- Implemented a high-visibility crosswalks, curb extensions, pedestrian safety islands, and rectangular rapid flashing beacons, as recommended by participants at the CPST workshop.
- Widened the shoulder on a local road and added bike lanes.

### Grants and Funding

- Secured over \$8 million in grants to improve walking infrastructure, encourage peer mentorship for elementary school students and develop a program in which older youth teach and demonstrate pedestrian safety skills to younger children.
- Rotary Club and PG&E donated street furniture (benches, planters, garbage figures and planters) valued at \$28,000 for the downtown.

### Community-Based Programming

- Developed programs to educate drivers about their responsibilities in regards to pedestrian safety, and pedestrians on ways to cross the street safely and properly.
- Coordinated education efforts with existing programming in high schools to teach the importance of pedestrian and bicycle safety education.

### Policy Changes

- Adopted a Town Ordinance to prohibit unsafe crossing on certain segments of two busy roads, where marked enhanced crosswalks exist and are close to one another.
- Adopted a daylighting policy.

### Media & Outreach

- Utilized existing newsletters at the senior center, garden club, church, and schools to distribute safety messages.
- Used social media to reach residents (especially young people) with traffic safety messages.

## BACKGROUND

### LOCATION

Northern California, Rural Area

### INITIAL SAFETY CONCERNS

Lack of Pedestrian infrastructure, Pedestrian Injury among children/school zones

### POPULATION SIZE

26,449

### MEDIAN HOUSEHOLD INCOME

\$39,904

### COMMUNITY PARTNERS

• Town of Paradise

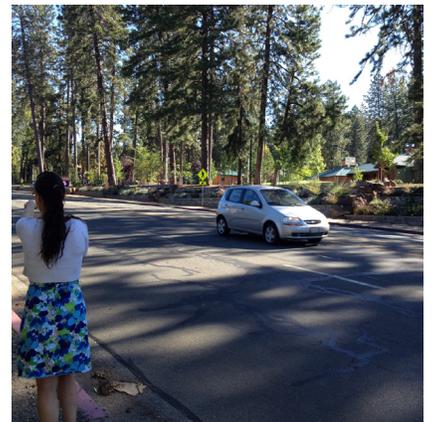


# V. Case Studies - Paradise, CA

“I never would have predicted that CPST would have caused such great changes in our community. CPST brought all the players together and gave us the tools to talk about and make decisions.”

—Town Manager of Paradise

## PRE-CPST SKYWAY ROAD, PARADISE, CA



## POST-CPST SKYWAY ROAD, PARADISE, CA



# VI. Concluding Remarks

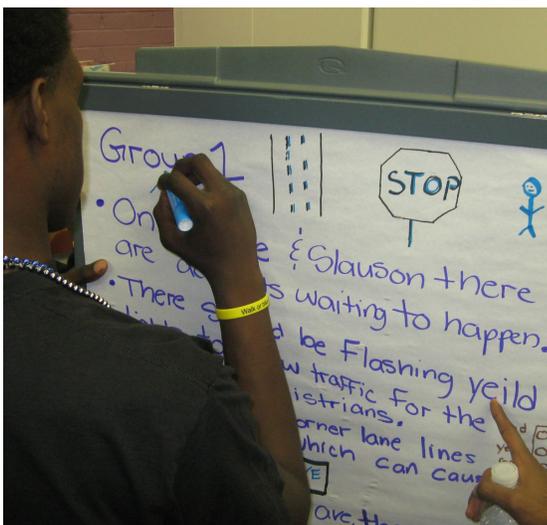
To date, 36 pedestrian safety trainings have trained hundreds of people, but the overall reach has been even greater. Infrastructure improvements benefit entire communities, media campaigns during and after the workshops have reached thousands of people, education programs have reached out to youth as well as seniors, and law enforcement efforts have benefitted entire communities. CPST workshops have helped provide community input to city grants to state programs, such as Highway Safety Improvement Program or Caltran's Active Transportation Program, resulting in millions of dollars worth of additional funding for pedestrian safety throughout the state. In 2015-2016, we will be doing an additional 4 trainings in high risk communities in California.

## FOR MORE INFORMATION PLEASE CONTACT:

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Crenshaw CPST, 2009



Glendale CPST, 2014