Using Crowdsourced Data Strategies in Community Engagement

Using Crowdsourced Data Strategies in Community Engagement was the first installment of Strengthening Partnerships: A 2022 Peer Exchange Series for former Community Pedestrian and Bicycle Safety Training (CPBST) sites. The peer exchange was held on March 15, 2022, virtually. Sponsored by the California Office of Traffic Safety and facilitated by UC Berkeley SafeTREC and Cal Walks, the peer exchange drew 15 participants from state and county agencies, as well as the communities of Altadena, Castro Valley, Florence Firestone, Madera, Long Beach, Los Angeles Chinatown, Walnut Park. Attendees shared their experiences in promoting and implementing crowdsourced data collection including Street Story, Photovoice, and Videovoice.

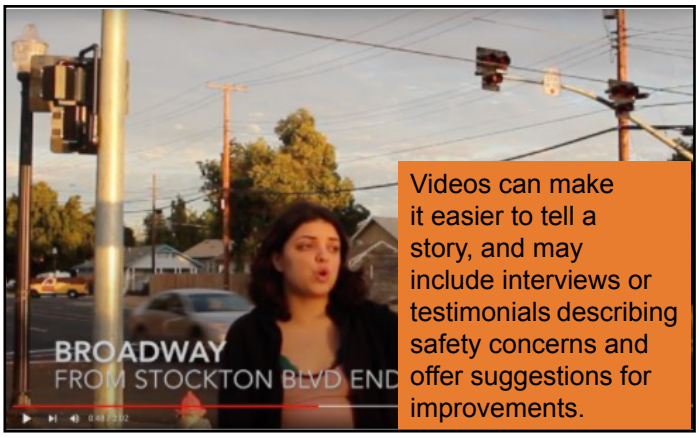
The purpose of this exchange was to bring together peers to learn about crowdsourced data strategies in community engagement, engage in discussions related to data storytelling and how to use Street Story, Photovoice, and Videovoice, and to identify how to translate crowdsourced data to support relationship building with city leaders and active transportation safety.

Peer Exchange Overview

Over the last five years, SafeTREC and Cal Walks have conducted 72 CPBST workshops statewide. We invited local leaders from the CPBST communities to this meeting to network and learn from their peers as well as to support the implementation of recommendations developed during their workshops. This peer exchange focused on crowdsourced data strategies and methods to improve community engagement efforts. As nearly half (42.9 percent) of the registrants were either “very unfamiliar” or “somewhat unfamiliar” with the topic, we started with an overview of crowdsourced data strategies for community engagement before diving into a facilitated discussion where attendees shared successes, challenges, and lessons learned in their communities on collecting and using crowdsourced data in community engagement projects and planning.

What is crowdsourcing?

Crowdsourcing is a data collection method that uses collective knowledge to meet organizational or research-oriented goals. It is used to gather information, solve problems, and generate and prioritize ideas. It ideally requires community involvement to collect data and outcomes from this approach must, also ideally, directly affect the community. In this peer exchange, we discussed three crowdsourced strategies used in transportation: 1) Photovoice, 2) Videovoice, and 3) Street Story. They are a good way to involve all community members, including those who may not otherwise have the flexibility to participate in public meetings, including youth, seniors, persons with disabilities, parents, people with multiple jobs, etc.



Videos can make it easier to tell a story, and may include interviews or testimonials describing safety concerns and offer suggestions for improvements.

Broadway Safety Changes Videovoice example in Sacramento

Photovoice and Videovoice are projects where residents use images or videos to describe their experience, communicate their perspectives, and raise awareness of safety issues impacting their communities. It is an opportunity for communities to advocate for their needs and control their story. Through images, community members may discuss concerns “what do you see in the photo?” to steer conversations to actionable solutions answering such questions as “what can we do to address this problem?”. For example, community members may walk or bike to assess current conditions, photograph assets and concerns, and then assemble them into presentations to share their experiences. with decision-makers, elected officials, and others.

Videovoice is a method of gathering public feedback on walking and biking issues. Instead of photos, short videos are captured. While it's possible to convey a story in a photograph, it's sometimes easier if you can use video to capture a moment or convey emotions. Videos can make it easier to tell a story, and may include interviews or testimonials describing the safety concern and offer suggestions for improvements. For example, imagine being an elementary school student crossing a busy street as car horns are honking, a bus is beeping at the bus shelter, and the crossing guard is waving at you to cross quickly. While a few photos can capture distinct moments, a video is better able to convey the complexity of crossing a busy street.

The last example discussed is Street Story. Street Story is a web-based tool that allows people to enter data about crashes, near-misses, hazardous places, and safe places to travel. There are many ways this data may be used on the local level. For one, community groups and agencies may use the data to communicate transportation safety concerns to constituents and decision-makers. Further agencies may seek feedback from communities on particular areas they aim to improve. The platform and the information collected is free to use and publicly accessible. Visit https://streetstory.berkeley.edu for more information.

These three types of crowdsourcing are not mutually exclusive. They can be used collectively to build a stronger data narrative. For instance, a local coalition or city agency might be interested in applying for funding for safety improvements. Aside from crash data, photographs from Photovoice, videos from Videovoice, and the data and narratives from StreetStory can provide compelling evidence demonstrating the community's need. These tools may also be used by communities to obtain coordinated feedback about issues critical to these communities and may supplement crash and demographic data that is collected more formally.

Discussion

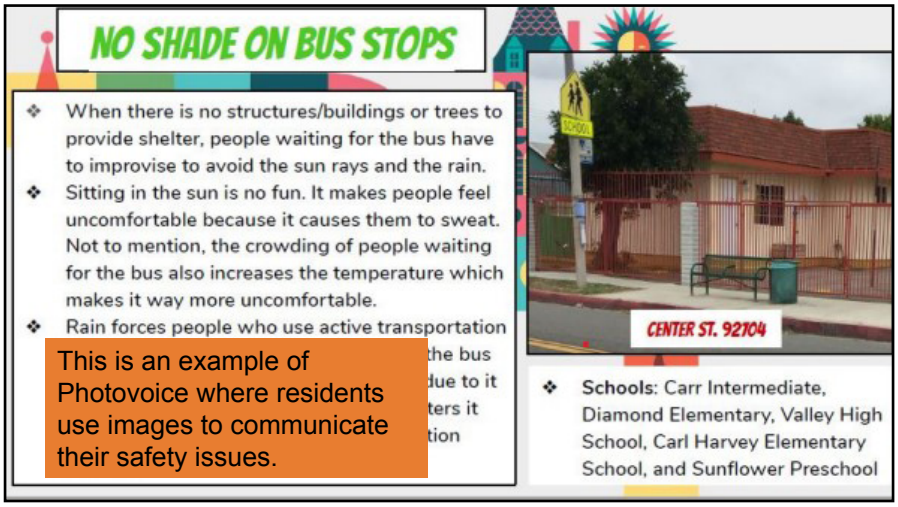
Participants shared their experiences with using Street Story and other crowdsourcing methods. There was general consensus that crowdsourcing was a beneficial source of data, one that provides insight into transportation concerns that otherwise might not be collected. In that way, it may complement traditional sources of data. While some participants were new to crowdsourced data strategies, everyone was familiar with community engagement and the heightened challenge of working remotely with communities in a meaningful manner.

Crowdsourcing and community engagement

Some shared links to their community sites, where Street Story had been introduced and included in engagement efforts.

Participants shared that videos of near-misses are a powerful tool to demonstrate safety concerns and advocate for safety improvements. One participant from Cyclist Video Evidence, a California group that asks cyclists to capture risks in real time by cycling with a camera, shared their near-miss spectrum and incident reporting system. From increased training to prevent unsafe behaviors to treatments for improving infrastructure, videos can help traffic planners, law enforcement, cyclists, and decision makers see where they need to prioritize improvements.

Another participant shared their Local Road Safety Plan tool, a website developed to collect data on areas of concern in their community via a map and survey. This approach was successful and helped to retrieve targeted information for that community.



KidWorks Photovoice Project in Santa Ana

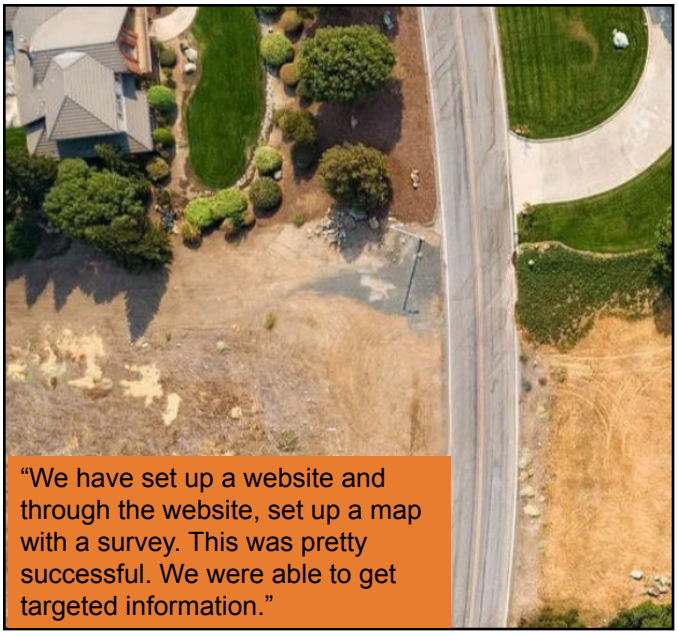
Use in grant proposals

One participant asked about the potential to use crowdsourced data methods for grant funding and if other organizations were successful in receiving funding based on these strategies. Participants discussed several ways to use, for example, the Street Story tool, including reporting on community-level data to describe a transportation safety concern or using the custom boundary feature to look more in-depth in particular neighborhoods, corridors, etc.

COVID-19 and engagement

There were mixed reviews as to whether the pandemic has had a negative or positive impact on community engagement and crowdsourcing strategies. One participant shared their challenges in reaching Tribal communities; with the help of a community outreach and engagement team, they created an interactive online flyer with a QR code to make engagement fast, easy, and more effective. Caltrans District 2 developed a Story Map to summarize some of their findings on the existing conditions and needs identified by the community.

Some participants expressed that they've received better participation in a virtual setting, while others felt a lack of engagement in that space. Peers agreed that they would adapt a hybrid approach of in-person and virtual meetings moving forward.



"We have set up a website and through the website, set up a map with a survey. This was pretty successful. We were able to get targeted information."

Image of Unincorporated Area in Tulare County

Complementing walk audits, workshops, and other projects

Participants stressed the role of crowdsourcing at walk-audits and workshops to help residents see the complete transportation safety picture and make connections. Specifically, they discussed how surveys can provide numbers and testimonials about specific safety improvements and point-in-time counts can demonstrate the need to decision makers. One community shared that they conducted a survey in conjunction with a newly installed pedestrian walkway and temporary curb extension near a local park. They were able to definitively tell their Public Works department that park users overwhelmingly support the new improvements with over 70 percent approval.

About the CPBST

The Community Pedestrian and Bicycle Safety Training (CPBST) program is a statewide active transportation and community engagement project of UC Berkeley Safe Transportation Research and Education Center (SafeTREC) and California Walks (Cal Walks). It uses an adapted Safe System Approach to engage residents and advocates to develop an action plan to improve active transportation safety in their communities, support complete streets planning, and strengthen collaboration with local officials and agency staff.

Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.

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