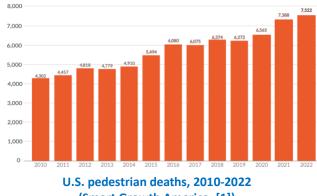
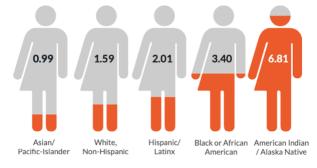
# TRIBAL PEDESTRIAN SAFETY WORKSHOP and QUICK-BUILD DEMONSTRATION PROJECT

Pueblo of Jemez, New Mexico Tuesday, April 29, 2025

#### Introduction

Pedestrian fatalities on U.S. roadways have been rising every year for more than a decade, with American Indians and Alaska Natives (AI/AN) being killed while walking at vastly higher rates than other races and ethnicities [1].





(Smart Growth America, [1])

Pedestrian deaths per 100,000 by race and ethnicity, 2018-2022 (Smart Growth America, [1])

In 2024, a project titled, Pedestrian Fatalities in Indian Country: Responding to a Crisis [2], was awarded a \$190,000 Road to Zero Community Traffic Safety Grant by the National Safety Council. This objective of this project – which is led by Pueblo of Jemez, Cherokee Nation Public Health, Confederated Salish and Kootenai Tribes (CSKT), University of Montana, M.G. Tech-Writing, L.L.C., and America Walks – is to reduce the speed of vehicles passing through tribal communities, and thereby save lives.

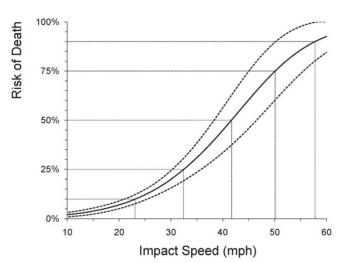
Project activities include several webinars, development of a Tribal Pedestrian Safety Resource Library, an Our Voice community engagement program with CSKT Tribes, and a virtual Policy Round Table which brought together more than 60 tribal safety advocates, practitioners, researchers, and officials. Since so-called "forgiving" road designs which encourage excessive vehicle speeds are responsible for the high rates of pedestrian fatalities in Indian Country, the benefits of traffic calming are being explored and promoted. Cherokee Nation Public Health recently worked with schoolchildren in Kenwood, OK to build a temporary walkway and safer road crossings, and CSKT Tribes will coordinate a similar program with elders later this summer.

This report will focus on the largest and most impactful component of the Road to Zero grant program. On Tuesday, April 29, advocates for safe streets from across the country gathered in Jemez Pueblo for a unique Tribal Pedestrian Safety Workshop and Quick-Build Demonstration Project.

## **Quick-Builds: A Theory of Change**

The goal of a Quick-Build Traffic Calming Project is to reduce vehicle speeds so that collisions with pedestrians are less likely and – if they do happen – less severe.

If a car traveling at 60 miles per hour strikes a pedestrian, there is more than a 90% chance that it will be a fatal crash [3]. However, if the vehicle's speed is reduced to 50 mph the fatality risk falls to 75%, and at 40 mph the pedestrian has more than a 50:50 chance of surviving. At 30 mph, the probability of death falls to approximately 20%, and at 20 mph it is less than 10%. To address high pedestrian fatality rates, vehicle speeds in the areas where people live, work, and play need to be reduced to 30 mph – preferably, to 20 mph.



A typical pedestrian fatality risk versus vehicle speed curve (AAA Foundation for Traffic Safety, [3])

One strategy to do this is to reduce speed limits. However, "Safe Systems" research [4] reveals

that most motorists do not make intentional, conscious decisions about how fast to drive. Instead, visual cues from the roadway ahead directly influence the drivers' operation of the accelerator pedal, effectively bypassing the brain. Wide travel lanes going straight ahead with large open spaces alongside the roadway induce high vehicle speeds irrespective of the posted speed limit – basically, drivers adopt the speed which is dictated to them by the design of the road. While these high speeds may be safe on separated highways with occasional off- and on-ramps, they are deadly in a more complex environment which includes driveways, turning vehicles, and vulnerable road users.

Conversely, narrow lanes, limited sight lines due to street curvature, and the proximity of landscaping, buildings, and parking next to the travel lanes naturally induce much slower, safer speeds. The concept of "visual friction" refers to the sense of a rough edge to the road which makes drivers proceed more cautiously and slowly, and this effect can be created by trees, pedestrian bulb-outs, and parked cars.



A graphical visualization of the ways road design and streetscape parameters influence driving speed (photo and graphics, Dan Burden)

The transformation from a high-speed, car-oriented road to a safe, inclusive, multimodal street illustrated on the previous page would involve a long, expensive planning, approval, design, and construction process. However, a temporary Quick-Build Project can achieve a similar visual impact and speed management effectiveness, using inexpensive materials such as landscaping planters, plastic delineator posts, and pavement paint.

Quick-Builds can be community-led initiatives in which local residents, business owners, and even schoolchildren design and install a demonstration project with the guidance of professional consultants and advocates. By announcing in advance that a particular Quick-Build Project is an experiment, which will only remain in place for a few days, weeks, or months, advocates are often able to blunt opposition which would "kill" a permanent project. During that temporary installation period, speed studies and community surveys can be conducted, which invariably show safety benefits and community approval. In many cases, a temporary Quick-Build leads to strong public support and the political will necessary to approve a permanent project.

This theory of change – using Quick-Builds to smooth the path for permanent traffic calming solutions – has not been widely attempted in tribal communities, where excessive speeds and pedestrian fatalities are common. Goals for the April 29 events in Pueblo of Jemez were to build awareness of this approach and demonstrate its potential to address a serious safety and health threat for Native people.

# **Project Participation**

A total of fifty community advocates, tribal officials, and professionals in a variety of fields (including planning, public health, transportation, and research) registered for the workshop and Quick-Build. These included Kenny Watchman (Navajo Dept. of Highway Safety) and Romella Glorioso-Moss (City of Santa Fe), who both had to cancel at the last minute.

The final participant list included 12 from Pueblo of Jemez, 26 from other communities in New Mexico, and 10 from out of state). Seven staff with State Departments of Transportation (New Mexico, Alaska, and Washington) attended and six different tribes were represented. Here is the full list:

- Mark Aasmundstad, Director, Southwest Bike Initiative
- Halle Adams, Physical Therapy Aide, CSKT Tribal Health
- Sheri Bozic, Director of Planning, Development, and Transportation, Pueblo of Jemez
- David C'De Baca, Videographer
- Jillian Cambridge, Jemez Public Health Program Manager, Pueblo of Jemez
- Willie Chavez, Inspector, City of Santa Fe
- Clara Cheeves, Planner, Washington State Department of Transportation
- Paul Clarke, Assistant Tribal Administrator, Pueblo of Jemez
- Dorothy Claw, Ramah Navajo Transportation Manager, Ramah Navajo Chapter
- Tara Cok, Transportation Planner, Mid Region Metropolitan Planning Organization
- Henry Cole, Maintenance Engineer, Alaska Department of Transportation and Public Facilities
- Micheal Eriacho, Transportation Technician, Ramah Navajo Chapter
- Nick Ferenchak, Director, Center for Pedestrian and Bicycle Safety, University of New Mexico
- Roger Foster, Police Chief, Pueblo of Jemez
- Alison Gillette, Planning Liaison, New Mexico Department of Transportation

- Ryan Gomez, Inspector, City of Santa Fe
- Elsa Goossen, Active Transportation Planner, New Mexico Department of Transportation
- Kymon Greyhorse, Office Manager, Pueblo of Jemez
- Terry Holman, Sr. Manager Transportation Program, Chickasaw Nation Roads Program
- Dawn Hyder, Injury Prevention Specialist, Pueblo of Jemez
- Sandra Jeff, Community Planning and Development Director, Pueblo of Zia
- Kody Keelin, Project Manager, City of Santa Fe
- Eli Leslie, Senior Public Information Officer, Navajo Division of Transportation
- Ana Lucaci, Founder, Made2Walk and Technical Assistance Consultant, America Walks
- Hillary Mead, Primary Prevention Project Supervisor, Cherokee Nation
- Matt Meyers, KLJ Engineering
- Patrick Million, Transportation Planner, North Central New Mexico Economic Development District
- Sullivan Moore, Planning Liaison, New Mexico Department of Transportation
- Beaver North Cloud, Prevention Coordinator, Pueblo of Jemez
- Jolena Palau, Transportation Specialist, Federal Highway Administration
- Marlinda Pecos, Police Officer, Pueblo of Jemez
- Maja Pedersen, Assistant Professor, University of Montana
- Emily Piltch, Piltch Consulting
- Tom Platero, Division Director, Navajo Division of Transportation
- Arlan Romero, Environmental Health Program Manager, Pueblo of Jemez
- Beth Schatz, Senior Project Engineer, KLJ Engineering, LLC
- Aaron Sussman, Transportation Planner, Toole Design Group
- Arlando Teller, Former Assistant Secretary of Indian Affairs, U.S. Department of Transportation
- Ian Thomas, Technical Assistance Lead, America Walks
- Stacey Tisdale, Youth Transportation Safety Program, Texas A&M Transportation Institute
- Vince E. Toya, Transportation Operations Manager, Pueblo of Jemez
- Antoinette Toya, Injury Prevention Specialist, Indian Health Service
- Becky Tremonte, Tribal Relations Coordinator, Cross Timbers Consulting
- Angelica Trujillo, Tribal Liaison, New Mexico Department of Transportation
- Larieta Tso, Department Manager, Navajo Division of Transportation
- Kelsey Walker, Project Planner, Toole Design
- Kalainia Waquie, Project Coordinator, Pueblo of Jemez
- Amy Whitfield, Special Director, New Mexico Department of Transportation

# **Workshop Goals and Agenda**

The following goals for the Pueblo of Jemez Tribal Pedestrian Safety Workshop were identified.

After completing the workshop, participants will be able to:

- 1. Plan, design, and implement a Quick-Build project in their own community
- 2. Conduct quantitative and qualitative evaluations to demonstrate the value of traffic calming, etc.
- 3. Engage community members in understanding the impact of policy and design decisions
- 4. Help organize a national coalition focused on Tribal Pedestrian Safety

The workshop was held at the Community Resource Center in Pueblo of Jemez. Starting at 8:30 am, breakfast snacks were served as participants arrived, signed in, and had an opportunity for networking.

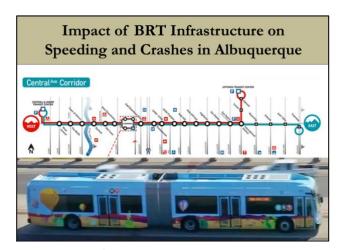
The opening session was led by Sheri Bozic, Director of Planning, Development, and Transportation with the Pueblo of Jemez. After welcoming everyone to the workshop and making some introductions, Sheri invited Governor George Shendo to deliver an invocation and land acknowledgement.

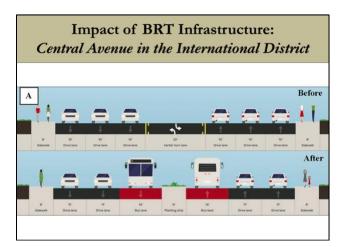
To kick off the main program, Ian Thomas, Technical Assistance Lead with America Walks, facilitated a presentation and discussion titled, "Pedestrian Safety in Indian Country." He started by illustrating the high-speed roadway designs and absence of pedestrian infrastructure seen in many tribal communities.





Many tribal communities are burdened with high-speed roadway designs and a lack of pedestrian infrastructure (photos, Michael Blankenship and Guillermo Narvaez)





Narrowing/reducing lanes and visual friction due to BRT infrastructure reduced traffic speeds and serious crashes on Central Avenue in Albuquerque (photos and graphics, Nick Ferenchak, [5] and [6])

lan also reported research by Nick Ferenchak, Director of the Center for Pedestrian and Bicycle Safety at the University of New Mexico (who participated in the workshop), showing the traffic calming and crash mitigation impact of bus rapid transit (BRT) infrastructure along Central Avenue in Albuquerque. Compared with control sites, the BRT stations and striping lowered vehicle speeds by 4 mph [5] and reduced fatal and serious-injury collisions by 65% [6] – indicating the effectiveness of road design and visual friction in creating safer streets.

Hillary Mead, Primary Prevention Program Supervisor with Cherokee Nation Public Health, gave the next presentation on the role of evaluation in Quick-Build demonstration projects. By way of examples, Hillary discussed speed studies and student surveys she administered during a recent project to create a protected walking path from Kenwood School, OK to the nearby Woody Hair Community Center where the middle-schoolers participate in physical education classes.











In March, 2025, students at Kenwood School, helped install a Quick-Build protected walking path and crosswalk (photos, Cherokee Nation Public Health)

After a break, Maja Pedersen with the University of Montana School of Public and Community Health and Halle Adams with CSKT Tribal Health discussed the importance of community engagement in these projects. They described their recent Community-Based Participatory Research (CBPR) project in which elders living on the Flathead Reservation in Montana used the Our Voice "citizen science" method [7] to document their observations in the community with photos and comments in response to prompts related to pedestrian safety and comfort.





In 2024, elders living on the Flathead Reservation completed an Our Voice project related to pedestrian safety (graphics and photos, Stanford Our Voice, [7])

The final workshop presentation was delivered by Sheri Bozic. She started by discussing the impact New Mexico State Road 4 has had on the Pueblo of Jemez.

Constructed in the 1940s on a tract of land forcibly acquired via the Pueblo Land Condemnation Act (Jemez was compensated just \$3,134 for 74 acres), this high-speed roadway cuts through the center of the village and harms the health and welfare of residents in a variety of ways. In particular, State Road 4 has a speeding problem – over the last six years, local police have issued 22,302 speeding citations (more than 10 per day, on average) – and a dangerous lack of sidewalks or crosswalks.





New Mexico State Road 4 has a speeding problem and a dangerous lack of pedestrian infrastructure (photos, Pueblo of Jemez)

The absence of pedestrian infrastructure has been partially addressed with the recent construction of the Hemish Path to Wellness, which parallels the highway for about two miles through the community. This project was completed in 2021 with funding from a large federal grant.





The Hemish Path to Wellness is a 10-feet wide pedestrian and bicycle paved trail alongside New Mexico State Road 4, which was completed in 2021 (photos, Pueblo of Jemez)

However, speeding along this highway remains a serious problem and it is still extremely unsafe to cross from one side to the other in most parts of the Pueblo. With that in mind, Sheri and colleagues in the Planning, Development, and Transportation Department started to explore the possibility of making New Mexico State Road 4 a "self-enforcing roadway" (using design features to manage vehicle speeds) and installing additional crosswalks. Because of anticipated challenges with the permitting process and project cost, they determined that a temporary and inexpensive Quick-Build Project would be the best first step.

In 2024 – in order to gain experience with this approach on a Pueblo-owned road – they installed a Quick-Build Project consisting of pedestrian bulb-outs and a protected walking lane in partnership with the staff and students at Jemez Day School.

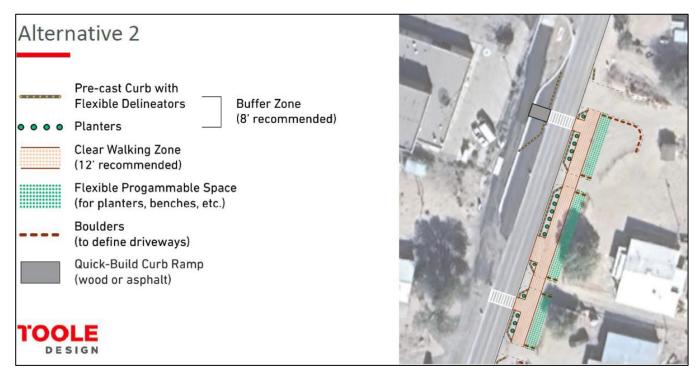




The first Quick-Build Project in the Pueblo of Jemez was constructed on Day School Road in 2024 (photos, Pueblo of Jemez)

Building on the success of that initial demonstration project, the Pueblo and Road to Zero partners started working with the New Mexico Department of Transportation (NMDOT) on a Quick-Build that would be installed on State Road 4. Numerous meetings were held with the NMDOT Planning Bureau, their consultants, Toole Design (who had been engaged to develop NMDOT's Quick-Build Guidebook), and staff with the NMDOT District 6 Office.

After months of discussion, a location in the center of the village was selected, and a design consisting of a pair of crosswalks and a landscaped walkway linking two Sandoval County bus stops (also locations where school buses pick up and drop off) on both sides of the highway, was agreed upon.



The planned New Mexico State Road 4 Quick-Build Project consisted of two crosswalks and a landscaped walkway (Graphics, Toole Design)

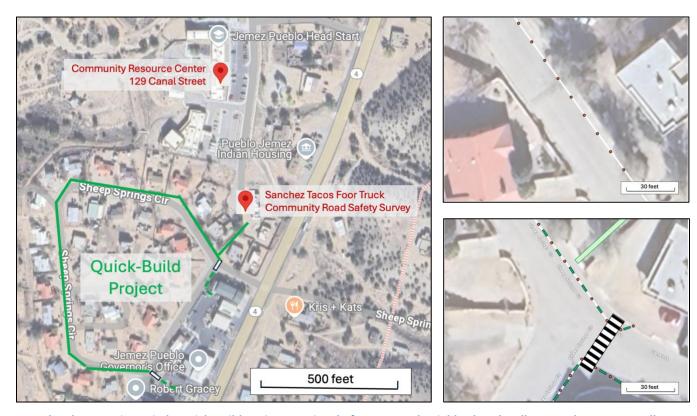
## **Quick-Build Demonstration Project**

Unfortunately, on March 4<sup>th</sup>, less than two weeks before the scheduled project, the Pueblo of Jemez received the following notification from the NMDOT District 6 Engineer:

I received additional comments from our State Traffic Engineer at the General Office. He has reaffirmed that there needs to be an actual engineering evaluation done any time a traffic control device is placed on a state road, whether only a "temporary" installation or not. The proposed crosswalks need to be supported by a warrant evaluation that looks at things like current pedestrian counts and gap timing. It should also look at and evaluate the appropriateness of two separate crosswalks roughly 150 ft apart. Please provide some level of engineering evaluation/analysis to support what is being proposed for this Quick-Build project.

None of these requirements had been mentioned previously, and this decision came as a surprise to the NMDOT Planning Bureau staff and consultants, as well as the Road to Zero project team. With so little time left, no funds to pay for an "actual engineering evaluation," and no guarantee that a permit for the installation would be awarded even if all of the required steps were completed, the New Mexico State Road 4 Quick-Build Project was abandoned.

Instead, Sheri worked with the Pueblo of Jemez governors to design a new Quick-Build Project on a Pueblo-owned road. Sheep Springs Circle is a residential "loop" road where complaints about speeding have been reported on a consistent basis for many years. To manage speeds and improve walkability, it was decided that a temporary Quick-Build walking path and two crosswalks would be installed.



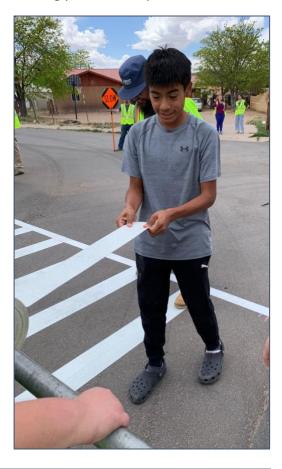
The Sheep Springs Circle Quick-Build Project consisted of a protected neighborhood walkway and two crosswalks (Graphics, America Walks)

On April 29, the workshop concluded at about 12:30 pm, and everyone moved outside to enjoy lunch from a local vendor, complete a community road safety survey, and assist with the Quick-Build Project.

In addition to the workshop participants, dozens of local residents (including several children) joined in with the installation process. Pueblo of Jemez crews had pressure-washed the street, completed some of the measuring and marking, and tested out the application of pavement tape on the previous day, but there was still a lot of work for the volunteers to do.

The most intensive task was striping the two "ladder crosswalks," using pavement tape.









While the crosswalks were being striped, another crew installed the protected walking path.













And Quick-Build "esthetics" were provided by the planter planters and sidewalk chalk artists.





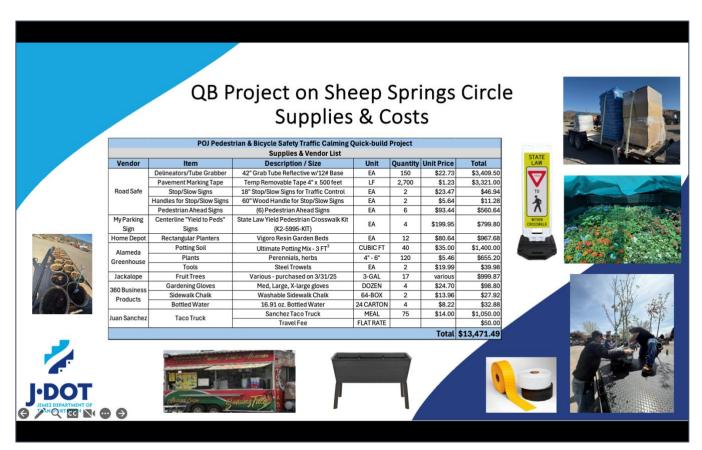






#### **Conclusion:**

Quick-Build materials for this project cost about \$12,000. A total of 70-80 volunteers completed the installation within one afternoon (not counting the preparation work done by Pueblo of Jemez crews). Another \$1,200 was spent on lunch and snacks for workshop participants and community volunteers.



In the evening, a networking event was held for workshop participants and Quick-Build volunteers. Arlando Teller (Navajo Nation member, Assistant Secretary for Tribal Affairs under President Biden, and a former Arizona State Representative) was the keynote speaker. He shared the following observations:

The concept of planting for us here in the southwest is sacred:

You plant for your legacy,

You plant to eat, You plant to feed,

You plant to commute, You plant to bring family together.

That's important – so when I heard that, it meant something to me, That you all got your hands dirty.

And, in a follow-up email, workshop participant Mark Aasmundstad wrote, "I am so grateful for the experience at your event. The way you created professional learning opportunities through melding state-of-the-art presentations with traditional human living activities--walking, talking, planting, decorating, designing, dining, singing, dancing, celebrating the day--was amazing. I appreciate the Jemez Pueblo's hospitality, all their hard work, and the prayers and blessings they offered. I felt a kinship with people and grounded in place. I look forward to the next steps in building an inclusive walking community together."

### **References:**

- [1] Dangerous by Design (Smart Growth America, 2024)
- [2] <u>Pedestrian Fatalities in Indian Country: Responding to a Crisis</u> (America Walks, Pueblo of Jemez, Cherokee Nation Public Health, Confederated Salish and Kootenai Tribes, University of Montana, and M.G. Tech-Writing, L.L.C., 2024)
- [3] <u>Impact Speed and a Pedestrian's Risk of Severe Injury or Death</u> (AAA Foundation for Traffic Safety, 2011)
- [4] Roadway Design is Often Responsible for Driver Error (State Smart Transportation Initiative, 2020)
- [5] <u>Bus Rapid Transit as Arterial Corridor Traffic Calming: A Relationship between Transit Infrastructure and Motor Vehicle Operating Speeds</u> (Ashish Ravi Joshi, Nicholas N. Ferenchak and Lisa L. Losada-Rojas, 2024)
- [6] <u>Impact of Bus Rapid Transit Construction and Infrastructure on Traffic Safety: A Case Study From Albuquerque, New Mexico</u> (Esther Marie Bia and Nicholas N. Ferenchak, 2022)
- [7] Employing Participatory Citizen Science Methods to Promote Age-Friendly Environments Worldwide (King A.C., King D.K., Banchoff A., Solomonov S., Ben Natan O., and Hua J., 2020)