



Center for Pedestrian and Bicyclist Safety

Semi-Annual Progress Report

Federal Agency: U.S. Department of Transportation
Office of the Assistant Secretary for Research and Technology
University Transportation Center Program

Federal Grant Number: 69A3552348336

Project Title: Center for Pedestrian and Bicyclist Safety

Center Director Information: Nicholas N. Ferenchak, PhD, PE
Associate Professor
Civil, Construction & Environmental Engineering Department
University of New Mexico
Phone: 505-277-2722
Email: ferenchak@unm.edu

Submitting Official Information: (Same information as Center Director)

Submission Date: April 30, 2025

DUNS and EIN Numbers: DUNS = 868853094; EIN = 85-6000642


Recipient Organization: The University of New Mexico
1700 Lomas Boulevard NE
Albuquerque, NM 87131

Recipient Identifying Number: F6XLTRUQJEN4

Project/Grant Period: June 1, 2023 – May 31, 2029

Reporting Period End Date: October 1, 2024 – March 31, 2025

Report Term: Semi-annual

Signature of Submitting Official: 

1. ACCOMPLISHMENTS

1.1 What are the major goals of the program?

The goal of the Center for Pedestrian and Bicyclist Safety (CPBS) is to eliminate pedestrian and bicyclist fatalities and serious injuries. CPBS's activities address the Promoting Safety research priority area. Specifically, CPBS addresses the first key challenge under that priority: Vulnerable Users. In addition, CPBS contributes to other Promoting Safety key challenges including Infrastructure, Safety Culture and Behavior, and Rural Transportation Safety.

The primary strategic goal from the **US Department of Transportation (US DOT) Strategic Plan** that CPBS addresses is Safety. According to the US DOT Strategic Plan, safety is the highest priority goal and must be a multimodal effort. In addition, CPBS advances secondary strategic goals of Transformation, Equity, and Climate and Sustainability. CPBS advances these goals through the promotion of safe, comfortable, and accessible pedestrian and bicycle networks that will improve the resilience of the overall transportation system, advance sustainability, and be fair and equitable for all road users.

To meet the above goals, CPBS addresses the following objectives from the **US DOT Research, Development, and Technology (RD&T) Strategic Plan**: Safety Culture and Behavior, Human-Technology Interaction, Safety Design, Safety Data, and Safety Technology. CPBS is led by the University of New Mexico (UNM) in collaboration with consortium members San Diego State University (SDSU), University of California Berkeley (UCB), University of Tennessee Knoxville (UTK), and University of Wisconsin Milwaukee (UWM).

1.2. What was accomplished under these goals?

Administrative Accomplishments

Administratively, CPBS directors developed a Year 3 Strategic Plan in December 2024. The CPBS directors then translated the Year 3 Strategic Plan into a Call for Problem Statements which was issued throughout December 2024 and January 2025. We received 30 problem statements and had them peer reviewed by members of the CPBS advisory committee. The CPBS directors then selected 20 problem statements to move forward as Year 3 projects. CPBS organized their proposed Year 3 budget to fit those 20 selected projects and submitted the Year 3 budget and project titles to US DOT for review.

In addition to developing proposed Year 3 activities, CPBS is also close to closing out their Year 1 expenditures and almost all Year 1 projects have been finalized except for two projects that experienced IRB delays. Year 2 CPBS projects are currently ongoing.

Research Accomplishments

At UNM, Dr. Nick Ferenczak advanced 24UNM02 by completing a draft of the New Mexico Department of Transportation (NMDOT) Pedestrian Outreach Program and distributed it to stakeholders statewide for feedback to refine its implementation. Dr. Su Zhang progressed 24UNM04, developing a database structure to integrate Volunteered Geographic Information (VGI) into the online crash mapping platform, thereby enhancing traffic safety data analysis for Native American communities. Dr. Lisa Losada-Rojas reported on 24UNM03, where students studied validation measures for naturalistic and virtual environment scenarios, planning data collection for May 2025. A manuscript is in preparation for 23UNM04, while two 23UNM05 papers are under review at *Transportation Research Record* and *Transportation Interdisciplinary Perspectives*. Dr. Losada-Rojas highlighted CPBS's role in UNM's visibility, leading to her involvement in four safety-related proposals, including a funded NMDOT Pedestrian Awareness Program (awarded March 2025) and a collaboration with the Swedish National Road and Transport Research Institute (VTI), awarded in April 2025. CPBS collaborator Karim Habib received the 2025 Japan Society for the Promotion of Science (JSPS) Fellowship to research physiological safety measures.

At UCB, Dr. Julia Griswold updated 24UCB01, completing a California state-level hit-and-run analysis and coordinating with UTK while analyzing Fatality Analysis Reporting System (FARS) data. Project 24UCB03 utilized Retrieval Augmented Generation (RAG) with Large Language Models to extract crash report features, assessing extraction certainty. For 24UCB02, a literature review on bike/pedestrian and emergency response conflicts covered nearly 200 sources, with databases expanded to 120 entries. Case studies began in Austin, TX; Baltimore, MD; Berkeley, CA; and Nashville, TN. For 23UCB02, police stop data from October 2024 were cleaned with a model using natural language processing to predict violator mode.

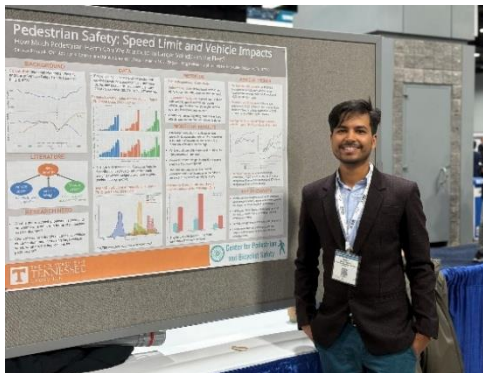


Figure 1. UTK student Saurav Parajuli presents a poster at the 2025 TRB Annual Meeting.

At UWM, Dr. Robert Schneider reported on 24UWM01, refining a pedestrian crash paper after *Journal of Safety Research* feedback and modeling bicyclist crashes across eight states (2008–2012, 2017–2021). Interviews were conducted with agencies to explore fatality rate shifts, and a paper on city traffic trends is being revised. A collaboration was built through this project with Wisconsin DOT in the form of a project examining injury patterns in Wisconsin. For 24UWM02, Dr. Shi reviewed abnormal driving behavior methods and improved detection algorithms. Dr. Qin’s 24UWM03 survey reached 34 state DOTs. For 24UWM04, mid-block crossing counts were collected at 60 Milwaukee segments. For 24UWM05, a Pedestrian Level of Traffic Stress (PLTS) survey was submitted to IRB that will validate PLTS scores for local professionals.

At UTK, Dr. Candace Brakewood and Dr. Chris Cherry advanced 23UTK01, submitting a paper on fatal bus stop pedestrian crashes to the *Journal of Safety Research* and analyzing 38 Minnesota transit-related crashes. Dr. Cherry and Saurav Parajuli progressed 23UTK02 and 23UTK03, updating pedestrian crash analyses with road design and vehicle weight data, presenting at TRB 2025 (Figure 1) and preparing for the May 2025 Transportation Research Symposium. Dr. Asad Khattak’s 23UTK04 paper explored VRU crash patterns, while 24UTK01 analyzed transit crash severity. For 24UTK02, Dr. Khattak and Dr. Bruce Appleyard (from SDSU) studied built environment impacts on safety. Dr. Khattak’s 24UTK03 evaluated Pedestrian Autonomous Emergency Braking (P-AEB) systems, presenting two papers at TRB 2025. Dr. Cherry’s 24UTK06 reviewed e-bike safety.

At SDSU, the research team produced a manuscript for 23SDSU02 that they submitted to TRB for publication and presentation. While not chosen for publication, they are currently working to revise and resubmit it elsewhere. They are also conducting interviews with the press and presenting the work at conferences and through webinars. For 23SDSU03, they submitted two papers to TRB and are now working to revise them for resubmission elsewhere.

Technology Transfer Accomplishments

CPBS expanded outreach through its ongoing webinar series (Figure 2). In October 2024, Dr. Bruce Appleyard presented “From Heartbreak to Hope: Advocating for Safer Streets Through Storytelling” (48 attendees). In November 2024, Dr. Robert Schneider and Dr. Nick Ferenchak presented “Pedestrian and Bicycle Level of Traffic Stress,” introducing PLTS and BLTS tools (166 attendees). In December 2024, Dr. Appleyard and Dr. Wes Marshall discussed transportation effects on

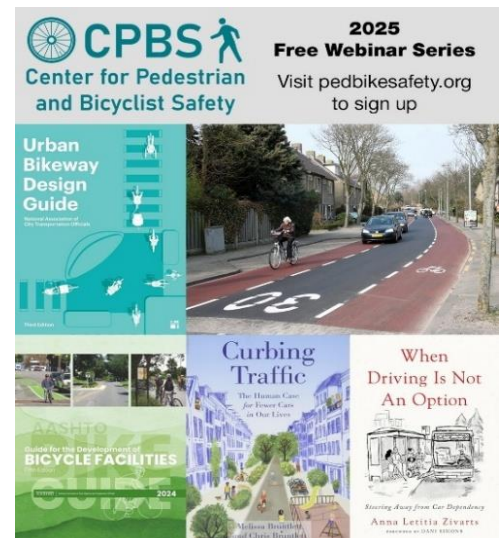


Figure 2. The CPBS webinar series produces a wide variety of relevant presentations and attendance continues to increase.

quality of life in “Street Livability and Safety” (106 attendees). February 2025’s “Vehicle Design and Pedestrian Safety” featured Dr. Chris Cherry, Saurav Parajuli, and Dr. Ferenchak (86 attendees). March 2025 webinars included “The Human Case for Fewer Cars” by Melissa and Chris Bruntlett (106 attendees) and “Edge Lane Roads” by Michael Williams (143 attendees). Recordings and slides are at <https://pedbikesafety.org/webinars>.

At UWM, Dr. Robert Schneider presented research and led outreach on various projects. Dr. Xiao Qin co-hosted the Southeastern Wisconsin Regional Transportation Symposium with WisDOT in October 2024, where Dr. Schneider presented “Geographic, Temporal, and Socioeconomic Shifts in Pedestrian Injuries During the 2010s” (24UWM01) and led a walking tour. For 24UWM03, Dr. Yang Li co-hosted a VR workshop with SARUP XR Labs, engaging participants with bike lane scenarios. Dr. Schneider presented 24UWM01 findings at the Association of Collegiate Schools of Planning Conference (November 2024, ~30 attendees), a CPBS webinar (~160 attendees), UWM’s Innovative Cities Lecture (December 2024, ~150 attendees), TRB 2025 (~80 attendees), and the American Planning Association Conference.

At UNM, Dr. Lisa Losada-Rojas presented 23UNM05 at UNM’s Geography department (April 2025, ~20 attendees) and, with Karim Habib, to Colombia’s National Road Safety Agency (~25 attendees). Dr. Su Zhang’s webinar through NM LTAP showcased the crash mapping platform to NMDOT (**Figure 3**). Dr. Ferenchak had three presentations related to pedestrian safety at the TRB Annual Meeting in January 2025. Dr. Ferenchak was featured on UNM’s university-wide podcast “It’s (Probably) Not Rocket Science” in November 2024. PhD student Ana Lucaci was featured by the Colorado Department of Transportation in their “Pedestrian Stories” series in October 2024.

At UCB, Dr. Julia Griswold submitted a 24UCB01 hit-and-run abstract for the 2025 Society for Epidemiologic Research Meeting. SafeTREC’s YouTube webinar on safe speed limit setting gained another 58 views during the reporting period for a total of 399. Matt Raifman presented active transportation solutions in March 2025 in the UC Berkeley School of Public Health’s “Latest in Public Health Research Series.”

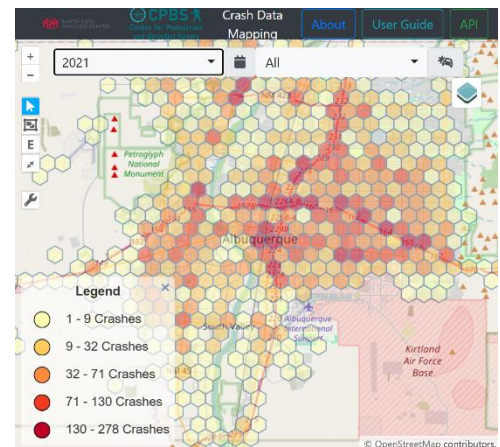


Figure 3. Crash Data Mapping Platform developed by CPBS researcher Dr. Su Zhang

At UTK, Dr. Chris Cherry and Saurav Parajuli shared pedestrian safety research via a Tennessee Transportation Assistance Program webinar (December 2024) and a CPBS webinar on vehicle design (February 2025, ~86 attendees). They presented crash trends at TRB 2025. Dr. Asad Khattak and Zeinab Bayati presented P-AEB system analyses at TRB 2025. UTK’s ITE student chapter hosted five seminars (October 2024–February 2025) on safety, EVs, and intelligent transportation systems.

At SDSU, Dr. Appleyard was interviewed by KPBS radio and TV about their Right Turn on Red study as part of 23SDSU02.

Workforce Development Accomplishments

At UNM, Dr. Nick Ferenchak contributed to professional training by speaking at the Urban Land Institute’s “Safe Streets for All – Pedestrian & Bike Safety” event in October 2024 (~50 participants), engaging attendees on strategies to enhance roadway safety. Dr. Su Zhang collaborated with the New Mexico Local Technical Assistance Program (LTAP) to organize a training workshop focused on the online crash mapping platform, equipping professionals with tools to analyze traffic safety data. Dr. Lisa Losada-Rojas reported significant student milestones, with two CPBS-funded students graduating during this period. One student defended their master’s thesis and will continue pursuing a PhD within CPBS projects, while two undergraduate civil engineering students joined the team, supporting CPBS-related work and expected to graduate in Fall 2025 and Spring 2026.

At UWM, Dr. Robert Schneider delivered a lecture titled “Wisconsin Transportation: Current Trends and Sustainable Future” to approximately 20 attendees at the Osher Lifelong Learning Institute in December 2024, highlighting strategies for sustainable transportation. He also led a UWM Campus Walk Audit for the Physical Environment Committee Transportation Subcommittee in December 2024, identifying pedestrian accessibility needs and opportunities to improve pedestrian, bicycle, and transit infrastructure.

At UTK, eight students engaged in pedestrian, bicycle, and micromobility safety research, gaining hands-on experience. Graduate students developed skills in safety analysis through a dedicated course, applying analytical methods and producing research reports and papers for refereed journals, enhancing their readiness for transportation safety careers.

At SDSU, Dr. Appleyard hosted a lunch where he gave a book talk on *Livable Streets 2.0* to a broad representation of transportation professionals visiting from Hawaii.

Educational Accomplishments

At UNM, Dr. Lisa Losada-Rojas enhanced the curriculum for CE 482/582 Traffic and Highway Engineering, integrating findings from 23UNM04 and 23UNM05, with Dr. Karim Habib contributing to two lectures. She developed a new course teaching statistical methodologies for civil engineering students, emphasizing modeling techniques for transportation safety analysis. A student working on a CPBS project received the Roy Sekreta Memorial Scholarship from the Gerald May Department of Civil, Construction and Environmental Engineering, recognizing their contributions to safety research. Dr. Su Zhang created a class session for undergraduate and graduate students in Civil Engineering and Geography, demonstrating the online crash mapping platform to illustrate its application in traffic safety analysis. The UNM team demonstrated the VR setup to 25 high school students in March 2025 and offered lab tours to first-year engineering students and prospective UNM students.

At UCB, Dr. Julia Griswold reported robust educational and outreach efforts. SafeTREC’s VR bicycle simulator, developed under the Bicycle Level of Service (BLOS) research project, was featured at the Interdistrict Transportation Competition (ITC) on November 9, 2024, during the “Traffic Simulating Demo with Autonomous Vehicles” workshop, engaging students in transportation-related challenges. The team mentored nine graduate and four undergraduate students, guiding them in producing high-quality CPBS research on pedestrian and bicyclist safety. PhD student and Summer 2024 UCB CPBS Fellow Masuma Miti presented a paper, “Bicycle Crash Incidents in San Francisco Before, During and After COVID-19,” co-authored with Jean Doig and Dr. Griswold, at the 2025 Transportation Research Board Annual Meeting in Washington, D.C. Additionally, a partial refresh of the CE C265 Traffic Safety and Injury Control course was completed, with 12 students enrolled for Spring 2025.

At UTK, Dr. Asad Khattak integrated Vision Zero, vulnerable road user safety, and emerging technologies into CE559 (Transportation Safety; Fall 2024) and CE558 (Planning and Transportation; Spring 2025). Dr. Cherry incorporated multimodal designs into CE455/CE456 (Transportation Engineering II; Fall 2024) and policy debates into CE557 (Transportation Policy and Economics). PhD candidate Nastaran Moradloo defended her PhD dissertation, joining Georgia Tech as a postdoctoral researcher. MS student Allison Rewalt defended her thesis, was named CPBS’s Outstanding Student (**Figure 4**), and attended Bike



Figure 4. UTK student Allison Rewalt was selected as the CPBS 2024 Outstanding Student.

Walk Knoxville 2025. Students Allison Rewalt, Saurav Parajuli, and Zeinab Bayati earned scholarships, with Bayati submitting P-AEB and safety research for journal review.

1.3. What opportunities for training and professional development has the program provided?

CPBS provided diverse training and professional development opportunities. At UNM, Dr. Nick Ferenchak's Urban Land Institute presentation (October 2024) trained professionals on pedestrian safety, while Dr. Su Zhang's LTAP workshop (October 2024) equipped stakeholders with crash mapping tools. Two CPBS-funded students graduated, enhancing workforce readiness. The upcoming June 2025 LTAP workshop and July 2025 Summer Transportation Institute will engage professionals and students. At UWM, Dr. Robert Schneider's Osher lecture and walk audit (December 2024, ~40 attendees) educated professionals, while the Southeast Wisconsin Transportation Symposium and VR workshop (October 2024) trained stakeholders. At UTK, eight students gained safety research experience through a graduate course, with Allison Rewalt and Saurav Parajuli earning Lifesavers Conference scholarships and Zeinab Bayati receiving the ITS Tennessee award. There were six CPBS webinars (October 2024–March 2025, ~86–166 attendees each) during the reporting period that disseminated safety expertise to professionals nationwide.

1.4. How have the results been disseminated?

CPBS's results have been disseminated through various established channels, including the CPBS website, newsletter, and LinkedIn page which now has 3,027 followers. The newsletter, distributed to 1,395 subscribers, continues to be a key platform for sharing updates. In addition, CPBS produced 18 journal publications, 9 research reports, 6 conference papers, and 25 presentations during this reporting period. Nine websites currently support CPBS objectives. CPBS's work continues to reach broad audiences through these channels, with an ongoing focus on sharing research outcomes and practical applications.

1.5. What do you plan to do during the next reporting period to accomplish the goals?

Research Plans & Goals

CPBS plans to advance Year 2 projects and initiate Year 3 efforts during the next reporting period. At UNM, Dr. Nick Ferenchak plans to finalize Year 2 project reports, upload them to relevant databases, and launch Year 3 projects. Dr. Su Zhang will enhance a crowdsourcing web application using Volunteered Geographic Information (VGI), incorporating gamification to boost traffic crash data collection. Dr. Lisa Losada-Rojas will prepare two papers for submission: one on 23UNM05 for *Transportation Research Part F* and another on 24UNM03 for the TRB Annual Meeting. Data collection for 24UNM03, along with guidelines, will be reported next period.

At UCB, Dr. Julia Griswold outlined plans for 24UCB01 to finalize modeling of hit-and-run predictors, focusing on pandemic trends, for a journal manuscript. For 24UCB02, the team will complete case studies, update conflict/solution databases, draft a literature review, hold a final Community Advisory Committee meeting, and prepare a public report and journal article. For 23UCB02, natural language processing modeling will predict violator modes, and the codes will be shared. For 24UCB03, statistics on Large Language Model effectiveness for crash data extraction will inform the final report, alongside best practices for latent space vector storage.

At UWM, Dr. Robert Schneider will continue 24UWM01 practitioner interviews, revise papers on pedestrian and bicyclist crash trends, and draft a new bicyclist injury paper. For 24UWM02, the team will deploy and analyze an abnormal driving behavior identification method, drafting a paper and final report. For 24UWM03, a survey will target safe routes to school coordinators, with results analyzed for a paper and report. For 24UWM04, mid-block crossing data will be annualized, crash rates calculated, and a TRB paper drafted. For 24UWM05, Pedestrian Level of Traffic Stress validation will involve practitioner feedback, video collection, and a national survey.

At UTK, Dr. Candace Brakewood will finalize 23UTK01 and 24UTK01 reports, submitting a manuscript on transit bus stop crash severity. Dr. Asad Khattak will complete 24UTK02 and 24UTK03 manuscripts on built environment

safety and P-AEB systems. Dr. Chris Cherry will finalize the 24UTK06 micromobility safety analysis and launch PS25UTK01 which will study pedestrian behavior with AI. PS25UTK03 and PS25UTK06 will advance crash analysis using AI.

At SDSU, Dr. Appleyard will be presenting findings regarding Right Turn on Red from 23SDSU02 at a webinar on 5/8/25.

Technology Transfer Plans & Goals

CPBS will advance technology transfer through webinars and conference participation. At UWM, Dr. Robert Schneider will present geographic shifts in pedestrian injuries (24UWM01) during a CPBS webinar in September 2025 and discuss the Pedestrian Level of Traffic Stress method (24UWM05) at the AAA Foundation for Traffic Safety Safe Mobility Conference in April 2025. Dr. Schneider and Dr. Xiao Qin, with Dr. Yang Li, will participate in a panel on crash reporting methods at the same conference. Dr. Schneider will also lead a workshop on pedestrian activity factors in Rock Island, IL, in May 2025. At UNM, Dr. Lisa Losada-Rojas reported two student presentations accepted for the ASCE International Conference on Transportation & Development (ICTD 2025). Dr. Su Zhang will develop an API for web mapping tools and organize a workshop to showcase the crowdsourcing web application. Dr. Ferenchak will present on pedestrian safety in relation to land use at the AAA Foundation for Traffic Safety Safe Mobility Conference in April 2025. At UCB, Dr. Julia Griswold noted a 24UCB01 hit-and-run analysis abstract accepted for the 2025 Society for Epidemiologic Research Annual Meeting. At UTK, Dr. Chris Cherry and Saurav Parajuli will present 23UTK03 abstracts at the 2025 Transportation Research Symposium in the Netherlands, Dr. Asad Khattak and Zeinab Bayati will share 24UTK03 results at the Tennessee ITS Chapter meeting in April 2025, and Dr. Cherry will plan the 2026 International Cycling Safety Conference. CPBS will host webinars in April 2025 on NACTO/AASHTO bike guide updates, in May 2025 on nondriver community access, in August 2025 on street safety conflicts, and in September 2025 on pedestrian injury shifts.

Workforce Development Plans & Goals

CPBS will continue fostering transportation professionals through targeted training initiatives. At UNM, Dr. Nick Ferenchak will collaborate with Dr. Su Zhang's Traffic Safety group to develop workforce capacity in traffic safety tools and methodologies. Dr. Su Zhang plans to create a New Mexico Local Technical Assistance Program (LTAP) training workshop, scheduled for June 2025, to demonstrate the use of the crowdsourcing web application and online crash mapping platform. The workshop will be recorded and made publicly available on an accessible platform, such as YouTube, ensuring broad access for professionals unable to attend live, thereby enhancing the reach and impact of CPBS's safety-focused training resources. The UNM tram will also be involved in the ITE Mountain District Annual Meeting which will be hosted in Santa Fe, NM, in June 2025.

At UTK, nine students in the graduate transportation planning course will gain research experience by applying planning methods and contributing to research reports and journal papers, enhancing their skills for transportation safety careers.

Education Plans & Goals

CPBS will enhance transportation education through coursework and student programs. At UNM, Dr. Nick Ferenchak will support the Summer Transportation Institute and begin developing a study abroad course for summer 2026. UNM will also organize an Institute of Transportation Engineers (ITE) Student Leadership Summit in June 2025, held in conjunction with the ITE Mountain District Annual Meeting in Santa Fe, NM. Dr. Su Zhang will deliver lectures in GEOG488L/588L on online mapping and Volunteered Geographic Information (VGI) with gamification, educating students on transportation technologies. At UWM, Dr. Robert Schneider will teach the Pedestrian Level of Traffic Stress (PLTS) method in UP 772, with guest speakers Sydney Swift and Kyle Nelson, engaging students in validation and intersection redesign projects. Dr. Tom Shi will introduce the abnormal driving behavior identification method in CIV 490, discussing real-world applications. At UTK, Dr. Asad Khattak will

teach an Intelligent Transportation Systems course in Fall 2025, focusing on advanced technologies for mobility, safety, and traffic management. UTK will also pursue a Safety City educational program with K-12 students.

2. PARTICIPANTS & COLLABORATING ORGANIZATIONS

2.1. What organizations have been involved as partners?

2.1.1. New Partners

CPBS established new partnerships with six new organizations and continued partnerships with 30 others. These partnerships support a wide variety of CPBS activities including providing data (e.g., MRCOG) and in-kind support (e.g., NMDOT) for research projects, supporting CPBS educational efforts (e.g., Knoxville Police Department), and supporting workforce development activities (e.g., NM LTAP). New and ongoing partnerships established during the reporting period are listed below:

Name	Location	Support
California Polytechnic State University, San Luis Obispo	San Luis Obispo, CA	Research support for the SDSU speed study being conducting
California State Assembly Staff	Sacramento, CA	Providing guidance to SDSU's RTOR report. Findings will guide state policy
California State Senate Staff	Sacramento, CA	Providing research support for SDSU's intelligent speed assistance (ISA) project. Findings will guide state policy
Navajo Nation Division of Transportation	Gallup, NM	UNM co-design and co-development of the crowdsourcing tool
Tennessee Highway Patrol	Nashville, TN	UTK collaboration on assessing tools and data for road safety
VTI	Sweden	UNM collaboration on equipment

2.1.2. Ongoing Partners

Name	Location	Support
AAA Foundation for Traffic Safety	Washington, DC	Serving on CPBS Advisory Committee
Association of Pedestrian and Bicyclist Professionals (APBP)	Lexington, KY	CPBS presented at an APBP webinar in December 2024
Albuquerque Public Schools	Albuquerque, NM	Collaborating with APS Vision Zero for Youth Initiative
California Department of Motor Vehicles	Sacramento, CA	Providing vehicle registration data for UCB projects; Collaborating on AV research
California Office of Traffic Safety	Elk Grove, CA	Financial support for graduate level safety courses
California Transportation Commission	Sacramento, CA	Provided data and report revisions for ATP project; Cost share for vehicle weights and VRU safety project
Caltrans	Sacramento, CA	In-kind match for several UCB projects

Center of Southwest Culture – Story Riders	Albuquerque, NM	CPBS supported educational program
City of Milwaukee - Department of Public Works	Milwaukee, WI	24UWM04/05: Milwaukee staff review methods, fund crossing data; support PLTS surveys, test, review results.
Council of University Transportation Centers (CUTC)	Missoula, MT	CPBS joined CUTC and attends regular meetings
Federal Highway Administration (FHWA)	Washington, DC	Supporting UNM educational efforts through internal Eisenhower Fellowship
Institute of Transportation Engineers (ITE)	Washington, DC	Serving on CPBS Advisory Committee
Insurance Institute for Highway Safety (IIHS)	Arlington, VA	Collaborative research and providing data for UTK projects
Knoxville Police Department	Knoxville, TN	Programmatic educational support for UTK; Utilizing Safety City data and access to assess educational interventions.
Mid-Region Council of Governments (MRCOG)	Albuquerque, NM	Providing infrastructure data and staff support for 23UNM05
Muse Community + Design	Chicago, IL	24UWM05: Harmonize PLTS methods, input on survey, review report, present project results.
New Mexico Department of Transportation (NMDOT)	Santa Fe, NM	\$120k annual cost share and ongoing personnel support
New Mexico Local Technical Assistance Program (NM LTAP)	Albuquerque, NM	Staff time for organization and implementation of tech. transfer and workforce development events
Oak Ridge National Laboratory	Oak Ridge, TN	Simulating Vulnerable Road User crashes
People for Bikes	Boulder, CO	Data, policy support, tech. transfer
Safe Streets Research & Consulting	Portland, OR	24UWM05: Harmonize PLTS methods, apply network-based PLTS, input on survey, compare crash data, review report, present results.
Tennessee DOT	Nashville, TN	Providing data for UTK projects
Tennessee Department of Safety and Homeland Security	Nashville, TN	Tennessee police crash data for 24UTK02
Transportation Research Board (TRB)	Washington, DC	Support for 2 UNM students to attend TRB Annual meeting to present their research
UC Berkeley Institute of Transportation Studies	Berkeley, CA	STRP research grants; Collaborating on CTC research project
UC Davis Institute of Transportation Studies	Davis, CA	Collaborator on CTC research project

UC Irvine Institute of Transportation Studies	Irvine, CA	Collaborator on CTC research project
UNM Engineering Student Success Center	Albuquerque, NM	CPBS organized local field trips for the NM Summer Transportation Institute K-12 education program
UNM Lobo Bike Shop	Albuquerque, NM	Provided facilities and bike equipment and assisted with recruitment for 23UNM04 and 24UNM03
Wisconsin DOT	Madison, WI	24UWM01: Establish matching grant for CPBS using State Planning and Research Funds, June 2024, for UWM's WisDOT project analyzing pedestrian and bicyclist injury shifts.

2.2. Have other collaborators or contacts been involved?

In addition to the established partnerships detailed in the table above, other CPBS partnerships are in the exploratory phase. Nascent CPBS partnerships are detailed in the table below:

Name	Location	Support
City of Manteca	Manteca, CA	Organizing workforce development workshop with Caltrans on safe speeds
Milwaukee County DOT	Milwaukee, WI	Exploring collaboration opportunities
Southeastern Wisconsin Regional Planning Commission	Waukesha, WI	Exploring collaboration opportunities

Over the next reporting period, CPBS members will continue to develop the above partnerships to help further the goals of the center. While many of the partnerships detailed above were institution-specific partnerships tied to specific research projects, CPBS will also pursue center-wide collaborations that will support center-wide efforts that CPBS is currently developing.

3. OUTPUTS

The following lists highlight the outputs generated during the reporting period.

Performance Measure	Count	Performance Measure	Count
Journal publications	19	Presentations	32
Books/non-periodicals	1	Websites	8
Research reports	1	New methods	5
Policy papers	0	Inventions	0
Conference papers	1	Other products	1

3.1. Publications, conference papers, and presentations

Journal publications

1. Adeel, M., Khattak, A., Mishra, S., & Thapa, D. (2024). Enhancing work zone crash severity analysis: The role of synthetic minority oversampling technique in balancing minority categories. *Accident Analysis & Prevention*, 208, 107794.

2. Adeel, M., King, M., Usman, S., & Khattak, A. (2025). Advancing crash investigation with connected and automated vehicle data: Insights from a survey of law enforcement. *Journal of Transportation Safety & Security*, 1–30.
3. Ahmad, N., & Khattak, A. (2024). The role of human errors and violations in pedestrian-related crashes: Harnessing a unique database and accounting for heterogeneity. *Journal of Safety Research*, 91, 136–149.
4. Bayati, Z., & Khattak, A. (2025). Shedding light on safety: Comparing the crash likelihood and speed at impact of pedestrian crash avoidance systems across day and night conditions. *Journal of Safety Research*. Manuscript submitted for publication (2nd round, 2025).
5. Bayati, Z., Khattak, A., & Mahdinia, I. (2025). Understanding pedestrian and bicycle safety risks and their correlates across geographies. *Journal of Transportation Safety & Security*. Manuscript submitted for publication (1st round, 2025).
6. Bayati, Z., Khattak, A., & Moradloo, N. (2025). Day and night performance differences in detection and deceleration by pedestrian automatic emergency braking systems. *Accident Analysis & Prevention*. Manuscript submitted for publication (1st round, 2025).
7. Chaves Lasso, Y. T., Ferenchak, N., Lin, Y., & Losada-Rojas, L. L. (2024). Statistical and spatial analysis of pedestrian and bicyclist crashes on arterial roads. *Transportation Research Record*. Manuscript submitted for publication (November 17, 2024).
8. Chaves Lasso, Y. T., Ferenchak, N., Simon, W., Sheets, S., & Losada-Rojas, L. L. (2024). Impact of access management on arterial road crashes: A case study of Albuquerque, New Mexico. *Transportation Research Interdisciplinary Perspectives*. Manuscript submitted for publication (December 4, 2024).
9. Ferenchak, N. N., Janson, B. N., & Marshall, W. E. (2024). Estimating lives saved and serious injuries reduced by bicycle helmet use in Colorado, 2006–2014. *International Journal of Injury Control and Safety Promotion*, 31(1), 1–12.
10. Gibbons, J., Appleyard, B., Honey, M., Ahangarfabrik, N. (2025). The intersection of race and class: Neighborhood socio-economic status and fatal pedestrian and bicycle collisions by race/ethnicity. *Transportation Research Interdisciplinary Perspectives* 30, 101357
11. Giron, A., Gu, X., & Schneider, R. J. (2025). Socioeconomic characteristics of drivers versus pedestrians in pedestrian crashes. *Transportation Research Interdisciplinary Perspectives*. (Related to CPBS work).
12. Moradloo, N., Mahdinia, I., & Khattak, A. (2025). Who initiates the automated vehicle disengagement—humans or automated driving systems? *Journal of Intelligent Transportation Systems*, 1–18.
13. Neshagaran, A., Cherry, C. R., & Sanders, R. L. (2024). Safety insights from e-scooter rider and bicyclist behavior observations in two US cities. *Transportation Research Record*, 2679(5), 1–14.
14. Parajuli, S., Cherry, C. R., Kazemzadeh, K., & Tiwari, H. (2025). Assessing pedestrian safety perceptions in low-income cities. *Transportation Research Part F: Traffic Psychology and Behaviour*, 112, 236–255.
15. Patwary, A. L., & Khattak, A. (2024). Endogeneity of pedestrian survival time and emergency medical service response time: Variations across disadvantaged and non-disadvantaged communities. *Accident Analysis & Prevention*, 208, 107799.
16. Rewalt, A., Brakewood, C., & Cherry, C. R. (2025). An analysis of pedestrian safety at bus stops using FARS data. *Journal of Safety Research*. Manuscript submitted for publication (2nd round, 2025).
17. Shah, N. R., Parajuli, S., & Cherry, C. R. (2024). Ride-hailing users are likely early adopters of shared micromobility in mid-sized cities of developing countries: A case study of Kathmandu, Nepal. *Journal of Cycling and Micromobility Research*, 2, 100037.
18. Usman, S., & Khattak, A. (2025). Beyond the conventional: Exploring pedestrian safety on interstates with Bayesian and machine learning models. *Journal of Safety Research*. Manuscript submitted for publication (2nd round, 2025).
19. Wen, Y., Cherry, C. R., Bassett, D. R., Thorsen, T., Zhang, S., Weinhandl, J. T., & Brakewood, C. E. (2025). Physical activity and muscle activity of riding electric scooters. *Journal of Transport & Health*, 40, 101936.

Books or other non-periodical, one-time publications

1. Moradloo, N. “The Role Of Automated Vehicles in Enhancing Road Safety: A Comprehensive Evaluation of Operational Safety Challenges in Mixed-Traffic Environment,” Ph.D. Dissertation, University of Tennessee, Knoxville, TN. https://trace.tennessee.edu/cgi/viewcontent.cgi?article=12027&context=utk_graddiss

Research reports

1. 24UCB01: Griswold, J., & co-authors. (2024). Creating an inclusive bicycle level of service: Virtual bicycle simulator study. UC ITS research report related to CPBS project. Available at: <https://escholarship.org/uc/item/6gd9s0bf>

Policy papers

Nothing to Report

Conference papers

1. Schneider, R. J., Gu, X., Nelson, K., & Ferenchak, N. (2024). Neighborhood-level shifts in US pedestrian injuries during the 2010s. Association of Collegiate Schools of Planning Conference, Seattle, WA.

Presentations

1. SDSU: Appleyard, B., Pande, A., Honey, M., Gibbons, J., Tanvir, S., Ahangarfabrik, N., & Carbajal, M. (2025, January 8). A Safe Systems Approach to Guide Policy for Prohibiting Right Turn on Red. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
2. SDSU: Carbajal, M., Appleyard, B., Swayne, M., Honey, M., & Ahangarfabrik, N. (2025, January 7). Ten Years Forward: An Evaluation of California’s Active Transportation Program. Lectern Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
3. UCB: Griswold, J. (2024, December 18). University transportation centers 101: An overview of the UTC program and exploring how practitioners can engage the process. Webinar Presentation at the Association of Pedestrian and Bicycle Safety Professionals, Online.
4. UCB: Griswold, J. (2025, March 11). “I can drive 10 miles over the speed limit”: Interventions & strategies to prevent speeding. Presentation at the Lifesavers Conference, Long Beach, CA.
5. UCB: Hsu, C.-K., and Griswold, J. (2025, January 7). A context-sensitive roadway classification framework for speed limit setting in the US. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
6. UCB: Lutzker, L. (2025, March 10). Speed management to support pedestrian & bicyclist safety. Presentation at the Lifesavers Conference, Long Beach, CA.
7. UCB: Mahdinia, I., and Griswold, J. (2025, January 7). Understanding pedestrian and bicyclist safety trends in the post-pandemic era. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
8. UCB: Miti, M., Doig, J., and Griswold, J. (2025, January 7). Bicycle crash incidents in San Francisco before, during and after COVID-19. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
9. UNM: Abadi, M. G., Nguyen, J., Ferenchak, N. N., and Maas, D. (2025, January 7). Is a 3-second leading pedestrian interval effective? Exploring the influence of signal configurations and audio cues on pedestrian behavior. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.

10. UNM: Chaves Lasso, Y. T., Simon, W., Sheets, S., Ferenchak, N. N., and Losada-Rojas, L. L. (2025, January 7). Impact of access management on arterial road crashes: A case study of Albuquerque, New Mexico. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
11. UNM: Ferenchak, N. N., and Tafoya, O. (2025, January 7). Pedestrian safety and vehicle design: Longitudinally examining changes in SUV and pickup truck front-end height. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
12. UNM: Perez, M., and Losada-Rojas, L. L. (2025, January 5). Identifying disparities in Albuquerque's bicycling infrastructure network. Invited Student Paper Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
13. UNM: Zhang, S. (2024). Online crowdsourcing through VGI. Networking Meeting Presentation with Navajo Nation Division of Transportation, Albuquerque, NM.
14. UTK: Bayati, Z., & Khattak, A. (2025). Shedding light on safety: Comparing the collision likelihood and impact severity of pedestrian crash avoidance systems across day and night conditions. Conference Presentation at the Transportation Research Board 104th Annual Meeting, Washington, DC.
15. UTK: Bayati, Z., Khattak, A., & Moradloo, N. (2025). Day and night performance differences in detection and deceleration by pedestrian automatic emergency braking systems. Conference Presentation at the Transportation Research Board 104th Annual Meeting, Washington, DC.
16. UTK: Moradloo, N., & Khattak, A. (2025). What can we learn from field tests of commercially available automatic emergency braking systems: A focus on system limitations. Conference Presentation at the Transportation Research Board 104th Annual Meeting, Washington, DC.
17. UTK: Parajuli, S., Cherry, C., & Barnhart, K. (2025, January 7). Pedestrian safety: Speed limits and vehicle impacts. Presentation at the Transportation Research Board 104th Annual Meeting, Washington, DC.
18. UTK: Rewalt, A. (2025, January 7). An analysis of pedestrian safety at bus stops using FARS data. Poster Presentation at the Dwight D. Eisenhower Transportation Fellowship Program Poster Session, Transportation Research Board 104th Annual Meeting, Washington, DC.
19. UTK: Rewalt, A. (2025, January 7). A summary of transit-related pedestrian safety datasets. Lightning Talk at the Transit Data Committee (AP090) Meeting, Transportation Research Board 104th Annual Meeting, Washington, DC.
20. UTK: Usman, S., Adeel, M., Brakewood, C., & Khattak, A. (2025). A safety analysis of vulnerable road users in transit bus collisions: Insights from the National Transit Database. Conference Presentation at the Transportation Research Board 104th Annual Meeting, Washington, DC.
21. UTK: Usman, S., & Khattak, A. (2025). Beyond the conventional: Exploring pedestrian safety on interstates with Bayesian and machine learning models. Conference Presentation at the Transportation Research Board 104th Annual Meeting, Washington, DC.
22. UWM: Liang, X., and Shi, X. W. (2025, January 7). A computational framework for automated vehicle decision-making at crosswalks. Poster Presentation at the Transportation Research Board Annual Meeting, Washington, DC.
23. UWM: Liang, X., and Shi, X. W. (2025, April). A computational framework for automated vehicle decision-making at crosswalks. Poster Presentation at the Safe Mobility Conference, Madison, WI.
24. UWM: Schneider, R. J. (2024, October). Geographic, temporal, and socioeconomic shifts in pedestrian injuries during the 2010s. Presentation at the Southeast Wisconsin Transportation Symposium, University of Wisconsin-Milwaukee, WI.
25. UWM: Schneider, R. J. (2024, November). Neighborhood-level shifts in US pedestrian injuries during the 2010s. Presentation at the Association of Collegiate Schools of Planning Conference, Seattle, WA.
26. UWM: Schneider, R. J. (2024, November). Pedestrian level of traffic stress. Webinar Presentation at the Center for Pedestrian and Bicyclist Safety University Transportation Center (CPBS UTC), Online.

27. UWM: Schneider, R. J. (2024, December). Wisconsin transportation: Current trends and sustainable future. Presentation at the UW-Milwaukee School of Continuing Education, Osher Lifelong Learning Institute, Milwaukee, WI.
28. UWM: Schneider, R. J. (2024, December). UW-Milwaukee campus walk audit to identify pedestrian accessibility needs and opportunities for pedestrian, bicycle, and transit improvements. Invited Presentation for the UWM Physical Environment Committee Transportation Subcommittee, Milwaukee, WI.
29. UWM: Schneider, R. J., and Sanders, R. L. (2024, December). Pedestrian safety at night: Strategies to create 24/7 safe street networks. Presentation at the UW-Milwaukee Department of Urban Planning Innovative Cities Lecture, Milwaukee, WI.
30. UWM: Schneider, R. J. (2025, January 7). Pedestrian level of traffic stress. Presentation at the Transportation Research Board Pedestrian Committee Meeting, Washington, DC.
31. UWM: Schneider, R. J. (2025, March). Essential ingredients for traffic safety in US cities. Presentation at the American Planning Association National Conference, Denver, CO.
32. UWM: Shi, X. W. (2025, April). Modeling pedestrian-vehicle interactions at crosswalks: Insight into anomaly detection. Presentation at the Traffic Engineering Workshop and Transportation Planning Forum, Pewaukee, WI.

3.2. Website(s) or other internet site(s)

1. UCB: Safe Speeds Toolkit: <https://safetrec.berkeley.edu/tools/california-safe-speeds-toolkit>
2. UNM: Center for Pedestrian and Bicyclist Safety: <https://www.pedbikesafety.org>
3. UNM: Crash Data Mapping Portal: <https://crash-mapping.edacnm.org/>
4. UTK: Center for Transportation Research (CTR): <https://ctr.utk.edu/>
5. UTK: Tennessee Transportation Assistance Program (TTAP): https://ttap.utk.edu/resource/web_training.php
6. UTK: ITE Student Chapter: <https://tesp.utk.edu/ite/>
7. UTK: Micromobility Research: <https://micromobilityresearch.com>
8. UWM: Institute for Physical Infrastructure and Transportation: <https://uwm.edu/ipit/project/>

3.3. New methodologies, technologies, or techniques

UWM developed a new methodology, Pedestrian Level of Traffic Stress (PLTS), for project 23UWM05, enabling comprehensive measurement of pedestrian network accessibility and stress to enhance urban safety planning. UNM advanced online crowdsourcing through Volunteered Geographic Information (VGI) for project 24UNM04, creating a web application to collect and analyze traffic crash data, improving community engagement and data accuracy for transportation safety initiatives. At UTK, a visual experiment for project 24UTK03 uses AI-enhanced image editing and fractional factorial design to assess pedestrian perceptions of walkability, comfort, and safety, informing infrastructure countermeasures. Crash narrative analysis extracts insights from unstructured crash report text, and machine learning techniques improve predictive modeling of crash patterns.

3.4. Inventions, patents, and/or licenses

Nothing to Report

3.5. Other products

UNM developed an Immersive Virtual Environment for project 24UNM03, designed to enhance outreach efforts. This innovative tool will be utilized through Engineering Student Success (ESS) Center activities to engage high school and first-year students visiting UNM, providing interactive experiences to promote transportation safety and engineering education. The virtual environment supports CPBS's mission to inspire and educate the next generation of transportation professionals.

4. OUTCOMES

4.1. Event participation

CPBS’s research, education, technology transfer, and workforce development efforts have been translated into several events, which have engaged numerous transportation students and professionals. These events and their reach are detailed below.

Research Events

CPBS researchers delivered numerous presentations, as detailed previously. At UWM, Dr. Robert Schneider presented at the Southeast Wisconsin Transportation Symposium (October 2024, ~30 attendees), Association of Collegiate Schools of Planning Conference (November 2024, ~20 attendees), CPBS UTC webinar (November 2024, ~140 attendees), TRB Annual Meeting (January 2025, ~80 attendees), and American Planning Association National Conference (**Figure 5**) (March 2025, ~80 attendees). Dr. Schneider and Dr. Rebecca Sanders presented at UWM’s Innovative Cities Lecture (December 2024, ~150 attendees). Dr. Yang Li, Dr. Xiao Qin, and colleagues presented at the Traffic Engineering Workshop and Safe Mobility Conference (April 2025, ~50–250 attendees). Dr. Xiao Shi and Xinyu Liang delivered presentations and posters at TRB and Safe Mobility Conference (January–April 2025, ~100–250 attendees). At UNM, Dr. Lisa Losada-Rojas presented a 23UNM05 poster at TRB (January 2025, ~10 attendees), spoke at UNM’s Geography department (April 2025, ~20 attendees), and, with Dr. Karim Habib, presented to Colombia’s National Road Safety Agency (ANSV) on 23UNM04 and 24UNM03 (~25 attendees). Additional CPBS presentations can be found in Section 3 above.



Figure 5. Dr. Robert Schneider presents at the 2025 American Planning Association Conference in Denver, CO.

Education Events

CPBS is organizing part of the New Mexico Summer Transportation Institute for July 2025, a program for 9th–12th grade students nationwide to encourage transportation careers, with planning efforts underway during this reporting period. UNM will also host an Institute of Transportation Engineers (ITE) Student Leadership Summit in June 2025, held with the ITE Mountain District Annual Meeting in Santa Fe, NM, fostering student leadership in transportation safety. The CPBS team at UNM is also participating in the UNM Taskforce for Safe Micromobility on campus. The team involved in the CPBS project has helped create maps, provided feedback on written documents regarding future plans, and participated in outreach activities.

Workforce Development Events

At UNM, Dr. Ferenchak contributed to the Mid-Region Council of Governments’ Regional Transportation Safety Action Plan (RTSAP), adopted in December 2024, and served on the Stakeholder Advisory Committee for Albuquerque’s 2024 Bikeway and Trail Facilities Plan, adopted in December 2024. CPBS tabled at a UNM Office of Sustainability survey event by engaging professionals and community members to support an action plan (**Figure 6**) and is working with the Office of Sustainability organizing a Bike To UNM Day. At UWM, Dr. Schneider led a campus walk audit for the Physical Environment Committee (December 2024, ~20 attendees) and presented at the Osher Lifelong Learning Institute (December 2024, ~20 attendees), advancing professional education.



Figure 6. CPBS tabled at UNM “Mobility Day of Action” event to promote safe walking and bicycling on the university campus.

4.2. Popular press

CPBS researchers appeared in a variety of news publications from across the country, showing that CPBS's work has wide reach and relevance. Media citations referring to CPBS or its efforts from the last reporting period are below:

1. UCB: Newsweek. (November 26, 2024). "Map Shows Deadliest States for Highway Workers." By Donnie Douglas. <https://www.newsweek.com/map-shows-deadliest-states-highway-workers-1990965>
2. UCB: High Country News. (December 5, 2024). "Unhoused people pay a disproportionate price for the West's deadly roads." By Sarah Tory. <https://www.hcn.org/issues/57-2/unhoused-people-pay-a-disproportionate-price-for-the-wests-deadly-roads/>
3. UCB: Herald-Tribune. (December 17, 2024). "Why do some drivers flee after a crash? The psychology behind hit-and-runs." By Gabriela Szymanowska. <https://www.heraldtribune.com/story/news/investigations/2024/12/17/experts-psychology-behind-why-hit-and-runs-happen-is-hard-to-synthesize/75016720007/>
4. UCB: KQED NPR. (December 28, 2024). "What to Know About the 'Daylighting' Parking Laws in 2025 (and How to Avoid a Ticket)." By Rachael Bong. <https://www.kqed.org/news/12019725/daylighting-laws-will-be-enforced-in-the-bay-area-in-2025-heres-how-to-avoid-a-ticket>
5. UCB: Fox KTVU 2. (December 30, 2024). "2025 brings handful of new California car laws." By Jesse Gary. <https://www.ktvu.com/news/2025-brings-three-new-california-car-laws>
6. UCB: WTTW PBS. (January 6, 2025). "Black, Latino and Older Chicagoans More Likely to Die in Traffic Crashes, Data Shows." By Amanda Vinicky. <https://news.wttw.com/2025/01/06/black-latino-and-older-chicagoans-more-likely-die-traffic-crashes-data-shows>
7. UCB: Mercury News. (February 4, 2025). "As EV vehicles get heavier, they're also getting more dangerous, safety experts say." By Gary Richards. <https://www.mercurynews.com/2025/02/04/electric-trucks-dangers/>
8. UCB: KCBS Radio. (February 4, 2025). "Because of their weight, electric vehicles cause more serious crashes." By Matt Pitman. <https://www.audacy.com/podcast/kcbs-radio-on-demand-011f4/episodes/because-of-their-weight-electric-vehicles-cause-more-serious-crashes-5b844>
9. UCB: CalMatters. (March 19, 2025). "Repeat dangerous drivers: Tracking vehicular manslaughter convictions in California." By Robert Lewis. Forthcoming.
10. UCB: Santa Cruz Local. (March 27, 2025). "Bicycle and pedestrian injuries and deaths in Santa Cruz County." By Jesse Kathan. Forthcoming.
11. UCB: LAist. (March 27, 2025). "Traffic fatalities in Los Angeles County." By Kavish Harjai. Forthcoming.
12. UNM: Strong Towns. (October 3, 2024). "'Do Bike Lanes Reduce Congestion' Is the Wrong Question." By Emma Durand-Wood. <https://www.strongtowns.org/journal/2024/10/3/do-bike-lanes-reduce-congestion-is-the-wrong-question>
13. UNM: Streetsblog USA. (October 1, 2024). "Should We Stop Calling Bike Lanes 'Bike Lanes'?" By Kea Wilson. <https://usa.streetsblog.org/2024/10/01/should-we-stop-calling-bike-lanes-bike-lanes>
14. UNM: KRQE News. (October 2024). "Albuquerque city councilor tests out noise cameras." By Jessica Barron. <https://www.krqe.com/news/albuquerque-metro/albuquerque-city-councilor-tests-out-noise-cameras/>
15. UNM: Public News Service. (November 22, 2024). "NM researcher studies why pedestrian, bicyclist deaths are on the rise." By Roz Brown. <https://www.publicnewsservice.org/2024-11-22/urban-planning-and-transportation/nm-researcher-studies-why-pedestrian-bicyclist-deaths-are-on-the-rise/a93705-1>
16. UNM: UNM Newsroom. (November 2024). "'It's (Probably) Not Rocket Science' podcast explores road safety on two feet." By Carly Bowling. <http://news.unm.edu/news/its-probably-not-rocket-science-podcast-explores-road-safety-on-two-feet>

17. UWM: Milwaukee Journal-Sentinel. (November 26, 2024). “As Milwaukee fights to reduce traffic deaths, new speed humps draw mixed feelings.” By Eva Wen. <https://www.jsonline.com/story/news/local/2024/11/26/new-speed-humps-draw-mixed-reviews-from-milwaukee-residents/76410775007/>
18. UWM: WUWM Bubbler Talk. (March 6, 2025). “Who uses Milwaukee’s downtown skywalks?” By Emily Files. <https://www.npr.org/podcasts/988173576/bubbler-talk>
19. UWM: Milwaukee County Press Conference, covered by FOX 6. (March 11, 2025). “Milwaukee vehicle collision dashboard; Phase 2 launched Tuesday.” By Aaron Maybin. <https://www.fox6now.com/news/milwaukee-vehicle-collision-dashboard-phase-2-launch-tuesday>
20. UWM: WUWM Public Radio. (March 12, 2025). “Milwaukee County takes new steps toward goal of zero deaths on county roadways by 2037.” By Chuck Quirnbach. <https://www.wuwm.com/government-politics/2025-03-12/milwaukee-county-takes-new-steps-toward-goal-of-zero-deaths-on-county-roadways-by-2037>
21. UWM: WUWM Radio. (March 14, 2025). “Using roadside surveillance cameras to detect abnormal driving behaviors.” By Chuck Quirnbach. <https://www.wuwm.com/technology/2025-03-14/using-roadside-surveillance-cameras-to-detect-abnormal-driving-behaviors>
22. UWM: CEAS Newsletter, UWM REPORT, and Universities of Wisconsin News Service. (March 2025). “UWM researchers’ work is transforming traffic data into road safety solutions.” By UWM News Service. <https://uwm.edu/news/uwm-researchers-work-is-transforming-traffic-data-into-road-safety-solutions/>

4.3. CPBS’s reach

In addition to the direct references to CPBS research and other efforts that are listed above, there are indirect measures of CPBS’s reach such as visits to the CPBS website and newsletter recipients. CPBS’s reach grew significantly, with website visits up 68% and LinkedIn followers up 55%, surpassing targets. Such indirect measures of reach are detailed in the table below:

Reporting Period			Visitors to CPBS website	Page visits on CPBS website	Project views on CPBS website	LinkedIn followers	Newsletter subscribers	Media mentions
Past	6/1/2023 – 9/30/2023	Actual	353	1,164	n/a	514	662	16
	10/1/2023 – 3/31/2024	Actual	637	2,822	n/a	875	696	18
	4/1/2024 – 9/30/2024	Actual	1,443	5,374	1,583	1,958	731	8
Current	10/1/2024 – 3/31/2025	Actual	2,428	7,542	2,097	2,945	1,395	22
		Target	1,500	5,000	2,000	2,500	750	15
Next	4/1/2025 – 9/30/2025	Target	1,750	6,500	2,250	3,500	1,500	20

5. IMPACTS

5.1. What is the impact on the effectiveness of the transportation system?

Dr. Su Zhang from UNM enhanced transportation safety through online crash mapping platforms for project 24UNM04. These platforms, leveraging Volunteered Geographic Information (VGI) and gamification, increased

road safety awareness, particularly in Native American communities, by providing real-time crash location data, encouraging cautious driving in high-risk areas. The data informed safety interventions, enabling trends analysis that supported improved signage, road design, and law enforcement in underserved regions, enhancing system efficiency and equity.

Community engagement was bolstered as residents used the platforms to report incidents, fostering participation and improving data coverage in Native American communities. The platforms served as educational tools in schools and communities, promoting responsible driving practices and cultivating a safety-focused culture among young drivers. Researchers accessed this data to study accident trends, advancing evidence-based solutions for road safety, which benefits transportation planning nationwide.

At UTK, Zeinab Bayati's pedestrian safety research (24UTK03) was presented at TRB 2025 and informed crash avoidance technology improvements, enhancing system safety. Graduate students, including Nastaran Moradloo (PhD, now at Georgia Tech) and Allison Rewalt (MS, now pursuing PhD at UTK), strengthened research capacity by supporting safety-focused transportation solutions.

At SDSU, findings from 23SDSU02 (Right Turn on Red) and subsequent policy recommendations that the research team crafted helped inform policy for California State Assembly staff.

5.2. What is the impact of technology transfer on industry and government entities, on the adoption of new practices, or on research outcomes which have led to initiating a start-up company?

CPBS directors, PIs, and staff are impacting government entities – and having their research implemented – through involvement on committees such as:

1. Dr. Cherry (UTK): Member, City of Knoxville Vision Zero Working Group
2. Dr. Ferenchak (UNM): Member, NMDOT Pedestrian Safety Task Force
3. Ben Garland (UNM): Member, City of Albuquerque's Transit Advisory Board
4. Ben Garland (UNM): Member, City of Albuquerque's Complete Streets Committee
5. Ben Garland (UNM): Member, Mid-Region Council of Governments' Active Transportation Committee
6. Dr. Griswold (UCB): Member, California Walk & Bike Technical Advisory Committee
7. Dr. Griswold (UCB): Member, FHWA Bicycle and Pedestrian Data Collection Handbook Working Group
8. Liza Lutzker (UCB): Member, City of Berkeley's Transportation and Infrastructure Commission
9. Liza Lutzker (UCB): Panel Member, TRB's Behavioral Traffic Safety Cooperative Research Program
10. Dr. Qin (UWM): Member, Wisconsin Automated Vehicle External (WAVE) Advisory Committee
11. Dr. Qin (UWM): Member, WisDOT Traffic Record Coordinating Committee
12. Dr. Schneider (UWM): Member, WisDOT Non-Driver Advisory Committee

5.3. What is the impact on the body of scientific knowledge?

CPBS's leadership in committees throughout the scientific community makes them well prepared to have a significant impact on that community. CPBS researchers are members, research coordinators, and chairs of many TRB committees and subcommittees, NCHRP/BTSCR/TCRP project panels, and other technical committees.

A list of CPBS directors and PIs and their leadership roles on TRB committees and subcommittees is listed below:

1. Dr. Appleyard (SDSU): Member, Committee on Landscape and Environmental Design (AKD40)
2. Dr. Brakewood (UTK): Chair, Committee on Public Transportation Marketing and Fare Policy (AP030)
3. Dr. Cherry (UTK): Member, Committee on Developing Countries (AME40)
4. Dr. Ferenchak (UNM): Committee Research Coordinator, Member, Pedestrian Committee (ACH10)

5. Dr. Ferenchak (UNM): Member, Bicycle Transportation Committee (ACH20)
6. Dr. Khattak (UTK): Member, Committee on Traveler Behavior and Values (AEP30)
7. Dr. Losada-Rojas (UNM): Member, Committee on Traveler Behavior and Values (AEP30)
8. Dr. Losada-Rojas (UNM): Committee Research Coordinator, Transportation and Health Committee (AME70)
9. Dr. Losada-Rojas (UNM): Member, Public Transportation Planning and Development (AP025)
10. Dr. Qin (UWM): Member, Committee on Safety Performance Analysis (ACS20)
11. Dr. Qin (UWM): Chair, Subcommittee on Safety Analytical Methods (ACS20(1))
12. Dr. Shi (UWM): Member, Emerging Technologies in Network Modeling Subcommittee (AEP40(4))
13. Dr. Zhang (UNM): Member, Committee on Geospatial Data Acquisition Technologies (AKD70)
14. Dr. Zhang (UNM): Member, Committee on Geographic Information Science (AED40)

CPBS researchers also serve on various other technical committees, which span a variety of topics across the transportation field. This involvement will help expand CPBS's impact beyond the discipline of active mobility:

1. Dr. Cherry (UTK): Chair, SAE Micromobility Committee
2. Dr. Ferenchak (UNM): CPBS and UNM representative on Council of University Transportation Centers (CUTC)
3. Dr. Qin (UWM): Panel, NCHRP 07-36 Guide for Self-Explaining Roads in Context of Safe System Approach
4. Dr. Qin (UWM): Panel, NCHRP 22-84 Development of Crash Prediction Models for Short-Term Durations
5. Dr. Shi (UWM): Co-Chair, IEEE Emerging Transportation Technology Testing (ET3) Technical Committee
6. Dr. Shi (UWM): Member, ASCE Connected & Autonomous Vehicles (CAV) Impacts Committee

CPBS's directors and PIs also serve on the editorial boards of many academic journals which expand CPBS's impact on the body of scientific knowledge:

1. Dr. Brakewood (UTK): Associate Editor, Journal of Public Transportation
2. Dr. Cherry (UTK): Associate Editor, Transportation Research Part D
3. Dr. Cherry (UTK): Associate Editor, Journal of Cycling and Micromobility Research
4. Dr. Cherry (UTK): Associate Editor, Journal of Sustainable Transportation
5. Dr. Ferenchak (UNM): Editorial Advisory Board, Safety Findings
6. Dr. Khattak (UTK): Editor-in-Chief, Journal of Intelligent Transportation Systems
7. Dr. Khattak (UTK): Associate Editor, International Journal of Sustainable Transportation
8. Dr. Khattak (UTK): Special Adviser, Journal of Transportation Safety & Security
9. Dr. Khattak (UTK): Advisory Board Member, Analytic Methods in Accident Research
10. Dr. Losada-Rojas (UNM): Editorial Board, International Journal of Transportation Science and Technology
11. Dr. Qin (UWM): Associate Editor, Urban Lifeline
12. Dr. Qin (UWM): Associate Editor, Journal of Transportation Safety & Security
13. Dr. Qin (UWM): Handling Editor, Transportation Research Record
14. Dr. Qin (UWM): Editorial Board, Accident Analysis and Prevention
15. Dr. Schneider (UWM): Editor, Journal of Transport and Land Use

5.4. What is the impact on transportation workforce development?

During this reporting period, CPBS advanced transportation workforce development through educational and professional initiatives. At UNM, Dr. Su Zhang's planning for a June 2025 LTAP workshop will equip professionals with crash mapping skills, while CPBS contributions to the Regional Transportation Safety Action Plan and Bikeway Plan (both published in December 2024) engaged stakeholders in safety planning. Two CPBS-funded UNM students graduated, with one continuing on to pursue a PhD. The Summer Transportation Institute (July 2025) and ITE Student Leadership Summit (June 2025) will prepare students for careers in the transportation field.

At UWM, Dr. Robert Schneider's walk audit and Osher lecture (December 2024, ~40 attendees) educated professionals. CPBS webinars (November 2024–March 2025, ~86–166 attendees) disseminated safety expertise, enhancing workforce capacity in pedestrian and bicyclist safety.

There is also significant CPBS engagement with ITE student chapters and professional chapters. Dr. Shi is the faculty advisor for UWM's ITE student chapter, Dr. Ferenchak is the faculty advisor for UNM's ITE student chapter, and UTK's ITE student chapter is also active. Please see the sections above for details on more workforce development activities.

6. CHANGES/PROBLEMS

6.1. Changes in approach and reasons for change

Nothing to Report

6.2. Actual or anticipated problems or delays and actions or plans to resolve them

Year 1 research projects 23UCB02 and 23UTK01 were delayed because of data acquisition and IRB issues. CPBS is in communication with the PIs and the final research reports should be submitted during the next reporting period.

6.3. Changes that have a significant impact on expenditures

Grant spending was lower than expected in Year 1 because several students were unable to register for their studies and spending shifted between direct spending categories because of those changes. CPBS has submitted a request for re-budgeting to US DOT in conjunction with those changes.

6.4. Significant changes in use or care of human subjects, vertebrate animals, and/or biohazards

Nothing to Report

6.5. Change of primary performance site location from that originally proposed

Nothing to Report

7. SPECIAL REPORTING REQUIREMENTS

There are no special reporting requirements to note. The SF425 financial reporting requirement will be met by separate reports.