



Promising Practices for Transportation Agencies to Address Road Safety among People Experiencing Homelessness

Case Studies in Current Practice



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Introduction

This Case Study highlights how State and local transportation agencies and professionals are implementing strategies to address the road safety needs of people experiencing homelessness—a population that experiences significant disparities in roadway fatalities—as part of their work to reach the goal of zero deaths. The Case Study shares information on seven promising practices. Each promising practice includes a description, suggested actions to implement the promising practice, and examples of how State and local transportation agencies are implementing them.

The promising practices were developed from interviews with three agencies (Texas Department of Transportation’s Austin District, Hawaii Department of Transportation, and the City of San José, California), a literature review of 20 publications, and input from a panel of experts representing Federal, State, and local agencies; academics; and non-profit organizations.¹

This Case Study is divided into two sections:

- **Background:** Provides an overview of the current state of practice and needs related to transportation agencies’ involvement with people experiencing homelessness, defines key terms, and highlights policy and legal resources.
- **Promising Practices:** Elaborates on the following promising practices and examples.
 - Engage People Experiencing Homelessness in Planning and Decision-making.
 - Collect and Analyze Data to Guide Decisions.
 - Identify potential data sources to better understand the connection between transportation systems and homelessness.
 - Use data to guide effective decision-making.
 - Track impact of strategies to understand effectiveness.
 - Leverage DOT Resources to Support Affordable Housing and Services.
 - Provide vacant land to establish sanctioned encampments with transitional housing.
 - Coordinate with developers and housing agencies to increase affordable housing.
 - Offer Training to Increase Capacity and Improve Treatment of People Experiencing Homelessness in the Right-of-Way (ROW).
 - Lead Coordination to Maximize Effectiveness of Addressing Homelessness.
 - Hire staff dedicated and trained to coordinate activities and programs related to people experiencing homelessness.
 - Coordinate and build a coalition that is dedicated to developing comprehensive solutions for improving safety for people experiencing homelessness.

¹ Interview subjects are included for informational purposes only and are not intended to reflect a preference, approval, or endorsement of any agency's practice or policy. The practices and policies mentioned in this report are offered as suggestions only.



- Plan, Design, Build, and Operate Transportation Facilities that Prioritize Safety and Accommodation for All Users, with Particular Attention to the Travel Needs of People Experiencing Homelessness.
- Engage in Dignified Interactions with People Living in Encampments.
 - Coordinate with social service agencies to provide services and follow-through.
 - Provide storage for personal items.
 - Provide basic health and hygiene services to people living in encampments.

Background

Road safety is a priority for transportation agencies, and many have established the goal of reaching zero deaths from roadway crashes through a Safe System Approach. People experiencing homelessness have an increased risk of being killed or seriously injured in traffic crashes, and transportation agencies can make significant progress towards their goal of zero deaths by implementing promising practices that sustainably, effectively, and humanely address road safety for people experiencing homelessness.

These practices are increasingly relevant as homelessness in the United States has been rising and more individuals are experiencing it in unsheltered settings, such as encampments on the public right-of-way (ROW). Transportation agencies can be a part of the solution to address safety for people experiencing homelessness.²

The Department of Housing and Urban Development (HUD) reports that:³

- On a single night in 2023, roughly 653,100 people – or about **1 in every 500 people in the United States** — were experiencing homelessness. Six in ten of those experiencing homelessness were experiencing sheltered homelessness —emergency shelters, safe havens, or transitional housing programs— while the remaining four in ten were experiencing unsheltered homelessness — cars, bus stops, or encampments on the ROW.⁴ **This is the highest number of people reported as experiencing homelessness on a single night since Point in Time (PIT) count reporting began in 2007.**
 - Note that people experience unsheltered homelessness for multiple reasons, including limited availability and high barriers to entry in shelters and transitional housing. HUD notes that “many shelters are full or deny entry to people who are struggling with a mental health condition and/ or who have a substance use disorder, have criminal records, live with a disability or chronic condition, or identify as LGBTQI+—despite regulations that prohibit this discrimination. People who have disabilities, pets, partners, or older children (especially male teenagers) have fewer options for sheltering

² “ALL IN: The Federal Strategic Plan to Prevent and End Homelessness.”

³ de Sousa et al., “The 2023 Annual Homelessness Assessment Report (AHAR to Congress) Part 1: Point-In-Time Estimates of Homelessness, December 2023.”

⁴ de Sousa et al.



together. Additionally, shelters often fail to meet the needs of people either because they are not culturally appropriate or do not have the capacity to provide adequate support and accommodations for people with significant physical disabilities, mental health conditions and/or substance use disorders.”⁵ Additionally, HUD notes that “many people with serious mental illness are afraid of both shelters and street areas where other homeless people congregate. Instead, persons with serious mental illness [frequently live] along major roads and transportation corridors at the fringes of downtown areas. Further, some people who are new to homelessness may not use shelters.”⁶

- Six of every 10 people experiencing homelessness (both sheltered and unsheltered) did so in an urban area (59%), with more than half of all people counted in the Nation’s 50 largest cities (53%). The remaining four of every ten people who experienced homelessness were located in either largely suburban areas (23%) or largely rural areas (18%).⁷
- Between 2022 and 2023, the number of people experiencing homelessness increased by 12 percent, or roughly 70,650 more people. The overall increase in the number of people experiencing homelessness between 2022 and 2023 reflects both a sharp increase in the number of people experiencing sheltered homelessness, which increased by 47,864 people (or 14%), and increases in the number of people experiencing unsheltered homelessness, which increased by 22,778 people (or 10%) over the last year.⁸
- Homelessness disproportionately affects people who identify as Black, African American, or African; indigenous people (including Native Americans and Pacific Islanders); older people (one in five people experiencing homelessness on a single night in 2023 was age 55 or older); people with disabilities (31% of people experiencing homelessness have a disability⁹); and veterans (35,574 veterans were experiencing homelessness—22 of every 10,000 veterans in the United States).¹⁰

Homelessness directly intersects with many responsibilities of a transportation agency, including road safety, construction, inspections, maintenance, access, and affordability:

- At the time of this case study, there is limited data on traffic fatalities impacting people experiencing homelessness. As such, the following observation is based on the findings of the

⁵ “ALL IN: The Federal Strategic Plan to Prevent and End Homelessness.”

⁶ “A Guide to Counting Unsheltered Homeless People.”

⁷ “ALL IN: The Federal Strategic Plan to Prevent and End Homelessness.”

⁸ de Sousa et al., “The 2023 Annual Homelessness Assessment Report (AHAR to Congress) Part 1: Point-In-Time Estimates of Homelessness, December 2023.”

⁹ Note that this percentage is based on a HUD programmatic definition of the term “disability” that is more limited than the definition of “disability” under the DOJ’s Title II ADA regulations at 28 CFR 35.108. See de Sousa, et al., at 4.

¹⁰ de Sousa et al., “The 2023 Annual Homelessness Assessment Report (AHAR to Congress) Part 1: Point-In-Time Estimates of Homelessness, December 2023.”



literature review. State and local agencies in Texas, Hawaii, Nevada, Oregon, California, and Illinois collect data on crash fatalities and injuries by housing status. Based on the data provided by these States, a correlation exists between traffic safety impacts and housing status. (See Collect and Analyze Data to Guide Decisions.)

- In Clark County, Nevada, the pedestrian traffic death rate was 30.7 per 100,000 among people experiencing homelessness, compared to the death rate of 1.4 per 100,000 among the general population between 2008-2011.¹¹
- In Portland, Oregon, 70% of pedestrian deaths were people experiencing homelessness in 2021. In 2022, this proportion dropped to 36% of pedestrian deaths being people experiencing homelessness, but the rate of pedestrian fatalities was still 50 times greater among people experiencing homelessness than the general population.¹²
- In Los Angeles, California, people experiencing homelessness were 40.2 times more likely to be killed in traffic crashes compared to housed pedestrians and cyclists.¹³
- Indiana’s consultation with State and local stakeholders reported the difficulty in safe access to commercial areas, transit hubs, assisted living facilities, schools, universities, community centers, parks, and essential services for people experiencing homelessness as one of the greatest Vulnerable Roadway User (VRU) related safety challenges in their Vulnerable Road User Safety Assessment.¹⁴
- Construction, inspections, and routine maintenance of bridges, roads, and streets by transportation agencies may forcibly displace people experiencing unsheltered homelessness.
- Lack of access to affordable and reliable transportation may be a factor that could lead an individual to experience homelessness.¹⁵
 - Low-income individuals in the United States spend a large proportion of their income on transportation, at 36 percent of their annual budget for individuals in the lowest income quintile. The transportation cost burden can be a significant barrier to housing stability and can also be a barrier to accessing health services, employment, and permanent housing.¹⁶
- Crashes can be a significant cost for victims of crashes and their families.¹⁷ Medical debt, which may result from crashes that lead to injury, is one of the leading contributors to homelessness.¹⁸ Additionally, if an individual’s vehicle is damaged or they do not have access to reliable transportation, it could lead to unemployment, which is a risk factor for being unhoused.¹⁹ Finally, legal costs from interactions with the criminal justice system from citations may negatively impact individuals with low incomes, particularly people who are Black and

¹¹ Hickox, Williams, and Beck, “Pedestrian Traffic Deaths Among Residents, Visitors, and Homeless Persons — Clark County, Nevada, 2008–2011.”

¹² Zimmerman, “Living Without Refuge.”

¹³ Zimmerman.

¹⁴ “Indiana Vulnerable Road User Safety Assessment.”

¹⁵ Roark Murphy, “Transportation and Homelessness.”

¹⁶ Roark Murphy.

¹⁷ “Traffic Crashes Cost America Billions in 2019.”

¹⁸ Levey, “Medical Debt Nearly Pushed This Family into Homelessness. Millions More Are at Risk.”

¹⁹ Roark Murphy, “Transportation and Homelessness.”



Hispanic.²⁰

- People experiencing unsheltered homelessness, particularly those living in tents or makeshift shelters on or near the ROW, may be reliant on bicycle and pedestrian infrastructure and transit, increasing their exposure and vulnerability to traffic injuries and fatalities, especially in areas with high-vehicle traffic and speeds and where infrastructure for walking may not be present or is insufficient.²¹

Transportation agencies, particularly State Departments of Transportation (DOTs), have historically interacted with people experiencing unsheltered homelessness using the public ROW, including sidewalks, underpasses, bus stops, and landscaping areas along roads and highways, as part of their responsibility for maintaining, inspecting, and upgrading the ROW. When these maintenance and construction activities are taking place, many transportation agencies have traditionally worked with law enforcement to clear encampments, often without providing services or alternate places for people experiencing homelessness to go, and disposing of personal belongings, often without providing storage.

This is considered a “temporary cosmetic fix,” which moves individuals from one area to another rather than connecting people to housing or other services.²² In one example, the New York City Comptroller found that only 90 of 2,308 people forcibly removed from encampments remained in shelter for more than one day and only three people obtained housing.²³ There are opportunities to implement strategies that center the dignity of people experiencing homelessness that can lead to healthier outcomes even when it is necessary to remove encampments from specific locations for safety purposes.

People displaced from an encampment may lose important belongings in the process, while also being separated from social circles and nearby services. These forcible displacements may or may not be announced in advance and may or may not include arrests and ticketed citations. These practices often merely displace people to another location in the ROW or increasingly isolated locations. Additionally, public health literature demonstrates that forcible displacements can have a detrimental impact on the health of people experiencing homelessness, such as by causing further psychological stress and anxiety which can exacerbate an individual’s existing social, physical, or mental health challenges.²⁴

²⁰ Foster, “The Price of Justice: Fines, Fees and the Criminalization of Poverty in the United States.”

²¹ Limited data currently exists on people experiencing unsheltered homelessness; including whether they live in tents and makeshift shelters or cars, vans, or RVs; and their mobility patterns.

²² “Protecting the Health and Well-Being of People Living Unsheltered by Stopping Forcible Displacement of Encampments.”

²³ “Protecting the Health and Well-Being of People Living Unsheltered by Stopping Forcible Displacement of Encampments.”

²⁴ “Protecting the Health and Well-Being of People Living Unsheltered by Stopping Forcible Displacement of Encampments.”



This Case Study shares promising practices that can be implemented sustainably, effectively, and humanely to address road safety for people experiencing homelessness, highlighting examples from State and local DOTs shepherding these approaches across the country.

Key Terms

This section defines key terms used in the Case Study. Unless otherwise noted, all terms refer to definitions from the United States Interagency Council on Homelessness (USICH), which provides a robust glossary of terms in the [Federal Strategic Plan to Prevent and End Homelessness](#), pages 88-95.²⁵

Note that agencies and organizations are increasingly using people-first language, including “people experiencing homelessness” and “people who are unhoused,” to acknowledge that homelessness is a temporary state and is just one condition that people experience.²⁶ Throughout this Case Study, FHWA aims to center the person by using the term “people experiencing homelessness.”

Approaching people experiencing homelessness with respect and dignity is a best practice. When engaging with people experiencing homelessness, using the language that these individuals prefer, which may differ between regions, individuals, or encampments, may provide dignity and autonomy to these individuals and populations.

Continuum of Care (CoC): The group organized to carry out the responsibilities required under 24 CFR 578.3 and that is composed of representatives of organizations, including nonprofit homeless providers, victim service providers, faith-based organizations, governments, businesses, advocates, public housing agencies, school districts, social service providers, mental health agencies, hospitals, universities, affordable housing developers, law enforcement, organizations that serve homeless and formerly homeless veterans, and homeless and formerly homeless persons to the extent these groups are represented within the geographic area and are available to participate.²⁷

Encampment: Temporary shelter, such as tents or tarps, erected outdoors on a sidewalk, park or space not intended for human habitation. These may be inhabited by an individual or group and may be organized or unorganized.²⁸

²⁵ “ALL IN: The Federal Strategic Plan to Prevent and End Homelessness.”

²⁶ “People Experience Homelessness, They Aren’t Defined By It.”

²⁷ “ALL IN: The Federal Strategic Plan to Prevent and End Homelessness.”

²⁸ “Protecting the Health and Well-Being of People Living Unsheltered by Stopping Forcible Displacement of Encampments.”



Forcible Displacement: Forced disbanding of homeless encampments, including eviction and displacement of people experiencing homelessness and removal of their property. This is commonly known by a variety of terms, including abatements, clean-ups, raids, removals, resolutions, or sweeps.²⁹

Homelessness: In general, a situation in which an individual or family lacks a fixed, regular, and adequate nighttime residence. There are several Federal statutory categories of homelessness. Several specific Federal statutes and programs have their own definitions of homelessness.³⁰

Housing First: An approach to quickly and successfully connect individuals and families experiencing homelessness to permanent housing without preconditions and barriers to entry, such as sobriety, treatment, or service participation requirements. Voluntary supportive services are offered to maximize housing stability and prevent returns to homelessness as opposed to addressing predetermined treatment goals prior to permanent housing entry.

Sheltered Homelessness: Situation in which individuals or households are staying in emergency shelters, transitional housing programs, or safe havens.

Transitional Housing: Programs that provide a temporary place for people experiencing homelessness that provides supportive services to facilitate the movement into permanent housing.³¹

Unsheltered Homelessness: People with a primary nighttime location—public or private—that is not designated for sleeping, such as vehicles, parks, or streets.

Policy and Legal Framework

The landscape of evolving laws, regulations, and policies is important for transportation agencies' general awareness.

As noted above, many DOTs forcibly remove people experiencing homelessness from encampments in coordination with law enforcement. The degree to which service providers are engaged in helping people find alternative places to go depends on local policies and attitudes toward encampments.³² Generally, State and local laws are used to determine whether, and in what situation, public agencies have the legal authority to clear camps on their property, as well as what constitutes a camp.³³ In Seattle, for example, local laws state that camps, defined as places where individuals stay overnight outside of posted opening hours, can be cleared if the individuals are determined to be a threat to the public or city employees; if that threat is deemed imminent, the clearing can be done with no advance

²⁹ "Protecting the Health and Well-Being of People Living Unsheltered by Stopping Forcible Displacement of Encampments."

³⁰ 42 USC 11302: General definition of homeless individual.

³¹ "ALL IN: The Federal Strategic Plan to Prevent and End Homelessness."

³² Ricord, Zhu, and Wang, "Impact of Homeless Encampments on Roadway Safety and DOT Policy: Summary of Findings from Current Data Sources."

³³ Kraus et al., *Encampments of Unhoused Individuals in Transportation Rights-of-Way*.



warning.³⁴ Similarly in Texas, camping in a public space overnight is not permitted, and people and their belongings in the ROW can be removed.³⁵ Further, individuals unlawfully camping in the ROW have no right to protection under the [Uniform Relocation Act \(URA\)](#), which only guarantees replacement housing or housing payments for individual occupants who involuntarily lose their housing as a result of a Federal-aid project, though they may be eligible for advisory services. For people experiencing homelessness living in lawful shelters, they may be able to establish residency that may qualify under the URA.³⁶

It is important to note, however, that the constitutionality of forcible displacements is part of an evolving legal framework regarding the rights of people experiencing homelessness.

In addition to laws criminalizing camping and allowing for the forcible displacement of camps, other laws impact people who experience homelessness and their interactions with DOTs, including local labor laws, and Occupational Safety and Health Administration (OSHA) regulations. OSHA and local labor laws may be applicable if DOT employees are interacting with encampments that may place them in danger due to hazardous situations.³⁷

Executive Order 12898 requires Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations.³⁸ The FHWA carries out this direction by requiring an environmental justice (EJ) analysis for federally-assisted projects under the National Environmental Policy Act (NEPA).³⁹ This includes identifying existing minority and low-income populations, including people experiencing homelessness. Depending on the context and circumstances, EJ evaluations may find that people experiencing homelessness experience impacts of a transportation project positively or negatively. For example, a transportation project leading to increased access and mobility choices may have a beneficial impact, such as increased access to social services or employment, while construction leading to displacement of encampments or social services could have an adverse impact.

In one example of an EJ evaluation, the Texas Department of Transportation (TxDOT) identified and evaluated impacts to people experiencing homelessness in the draft [Environmental Impact Statement](#) (EIS) for the I-35 Capital Express Central Project. The EIS stated: "Build Alternative 2 would move main lanes below grade through central Austin. Prop B (City of Austin's camping ban approved in May 2021)

³⁴ Ricord, Zhu, and Wang, "Impact of Homeless Encampments on Roadway Safety and DOT Policy: Summary of Findings from Current Data Sources."

³⁵ "Texas DOT Maintenance Operations Manual."

³⁶ Kramer, "Homelessness Within the Right-of-Way."

³⁷ Ricord, Zhu, and Wang, "Impact of Homeless Encampments on Roadway Safety and DOT Policy: Summary of Findings from Current Data Sources."

³⁸ Executive Order 12898 of February 11, 1994, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations.

³⁹ "Guidance on Environmental Justice and NEPA Environmental Review Toolkit."



in large part has already forced people experiencing homelessness to move from visible camps under the existing I-35 facility. The Build Alternatives would be depressed and as designed would no longer provide shelter under the I-35 facility through downtown.” The EIS describes TxDOT efforts to provide support to people experiencing homelessness through its Be Safe Be Seen Program (a State program which convenes service providers, agencies, and elected leaders to share information, assess needs, and identify housing for people experiencing homelessness) and the TxDOT Mobility35 Initiative to Address Homelessness (IAH) Program and *Esperanza Community*, further described below.⁴⁰

Safe System Approach

Hundreds of agencies across the country, including the United States Department of Transportation, have adopted a goal of zero deaths.⁴¹ To achieve this goal, the transportation community has embraced the Safe System Approach (SSA) as an effective way to address and mitigate the risks inherent in our enormous and complex transportation system.⁴² The SSA works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur. It is a holistic and comprehensive approach that provides a guiding framework to make places safer for people. This is a shift from a conventional safety approach because it focuses on both human mistakes and human vulnerability and designs a system with many redundancies in place to protect everyone.⁴³

In practice, practitioners can implement the SSA by:⁴⁴

1. Prioritizing safety in transportation policy and planning,
2. Refocusing transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity for all road users (e.g. remove severe conflicts and reduce vehicle speeds),
3. Strengthening safety culture in agencies, and
4. Increasing collaboration among transportation and land use stakeholders.

The Safe System Pyramid, depicted in *Figure 1*, prioritizes transportation safety interventions that maximize the population health impact and minimize individual effort.⁴⁵ Under this proven approach, the most effective interventions involve coordinating agencies addressing socioeconomic factors, like homelessness, and the built environment, while the least effective approaches require road users to receive education and take constant action.

⁴⁰ “I-35 Capital Express Central Project From US 290 East to US 290 West/SH 71.”

⁴¹ “National Roadway Safety Strategy.”

⁴² “What Is a Safe System Approach?”

⁴³ “What Is a Safe System Approach?”

⁴⁴ “What Is a Safe System Approach?”

⁴⁵ Ederer et al., “The Safe Systems Pyramid.”

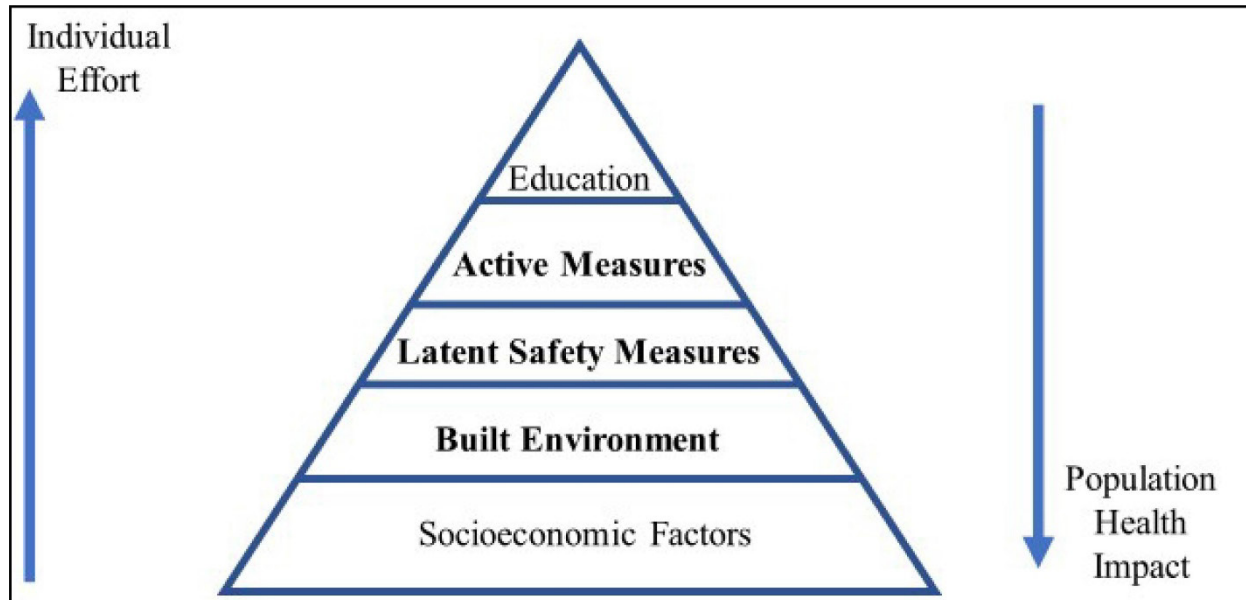


Figure 1 The Safe System Pyramid

Source: <https://www.sciencedirect.com/science/article/pii/S2590198223001525>

Key tactics to apply this approach to address road safety among people experiencing homelessness would include - from most to least effective:

- **Socioeconomic Factors:** Equitable investment in and representation of disadvantaged communities in transportation decision-making (e.g., pull strategies to address homelessness),
- **Built Environment:** Separating users in space (e.g., sidewalks and protected bike lanes),
- **Latent Safety Measures:** Separating users in time (i.e. pedestrian hybrid beacons and leading pedestrian intervals with audible pedestrian signals),
- **Latent Safety Measures:** Managing kinetic energy transfer (i.e. speed management countermeasures like appropriate speed limits for all road users and pavement friction management), and
- **Active Measures:** Increasing attentiveness and awareness of road users (i.e. streetlights and rumble strips).⁴⁶

Underlying the SSA are six principles, all of which may be considered by transportation agencies working to ensure the safety of people experiencing homelessness:

⁴⁶ "Safe System Roadway Design Hierarchy: Engineering and Infrastructure-Related Countermeasures to Effectively Reduce Roadway Fatalities and Serious Injuries."



Table 1. Applying the Safe System Approach to Improve Safety for People Experiencing Homelessness

Safe System Approach Principle	Definition⁴⁷	Application to People Experiencing Homelessness
Death and Serious Injuries are Unacceptable on Roadways	While no crashes are desirable, the Safe System approach prioritizes reducing crashes that result in death and serious injuries, since no one should experience either when using the transportation system.	Individuals and communities (i.e. people experiencing homelessness) who are disproportionately killed and injured in roadway crashes should be further prioritized to identify and address the risks exposing them to fatal and serious injury crashes.
Humans Make Mistakes	People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to accommodate human mistakes to avoid death and serious injuries.	People experiencing homelessness should not be blamed for living on or near and using the ROW; rather, transportation agencies can identify and systemically address the safety of people experiencing homelessness.
Humans Are Vulnerable	Human bodies have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates physical human vulnerabilities.	Note that people outside of vehicles do not have the protections of vehicles making them more vulnerable – and requiring additional layers of protection from infrastructure. Social vulnerability, including homelessness, exposes individuals and communities to greater risk on roadways, and these risks can be systemically addressed.
Responsibility is Shared	All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes don't lead to fatal or serious injuries.	Transportation agencies can collaborate with service providers to ensure that people experiencing homelessness are not killed or seriously injured on roadways.
Safety is Proactive	Proactive tools should be used to identify and mitigate latent risks in the transportation system,	Proactive practices can be implemented to effectively, sustainably, and humanely

⁴⁷ "FHWA-SA-20-015."



	rather than waiting for crashes to occur and reacting afterwards.	address homelessness and decrease risk of fatal and serious injury crashes for this population.
Redundancy is Crucial	Reducing risks requires that all parts of the transportation system be strengthened, so that if one part fails, the other parts still protect people.	Meaningful public involvement can inform the implementation of practices that address multiple layers of vulnerability.

In line with the Safe System principles and prioritization from the Safe System pyramid, transportation agencies can address homelessness on a spectrum that ranges from proactive “pull strategies” – offering a pathway to temporary or permanent housing, employment, and other resources⁴⁸ – to reactive and less effective “push strategies” – removing or pushing people experiencing homelessness out of the ROW.⁴⁹ The table below, from Wasserman, et al.’s *The Road, Home: Challenges of and Responses to Homelessness in State Transportation Environments* (2023), summarizes common strategies from State and local agencies.⁵⁰

Table 2. Strategies for Responding to Homelessness on DOT Land

Type of Strategy	State DOT Strategies	Local Government and External Partner Strategies
“Push” Strategies	Clearance/displacement of encampments Removal and no-trespass notices Preventive maintenance “Defensive” architecture/hardscapes	Clearance/displacement of encampments Ticketing/monetary fines Citations/arrests “Defensive” architecture/hardscapes
“Pull” Strategies	Accommodation of people/encampments in place Arrangement for short-term shelter elsewhere Arrangement for long-term housing elsewhere Coordination with homeless service providers to conduct outreach Hiring a staff coordinator or dedicated team for homelessness	Specialized staff/teams with outreach expertise Upkeeping encampments/providing amenities like toilets Resources for mental health and substance abuse Resource centers Low-barrier shelters Providing/connecting to housing opportunities Coordination among diverse entities

⁴⁸ Accommodation of people experiencing homelessness in the right-of-way of a Federal-aid highway must be approved as an alternate use of the highway right-of-way pursuant to 23 CFR 1.23 and 23 CFR part 710.

⁴⁹ Loukaitou-Sideris et al., “Homelessness on the Road.”

⁵⁰ Wasserman et al., “The Road, Home.”



Use of State DOT land for building shelters Sanctioned campsites on State DOT land Housing individuals in State DOT-owned homes	Temporary shelters/"tiny homes" on surplus/vacant land near freeways Sanctioned campsites near State and local DOT land
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Promising Practices

This section elaborates on promising practices and examples that transportation agencies are using to effectively, sustainably, and humanely address homelessness. Each practice includes a description, suggested actions to implement the practice, and examples of how different government entities have implemented the strategy. The strategies are depicted in the diagram below. Note that pull strategies are prioritized. Push strategies are also listed, but they include important considerations to make them more sustainable, dignified, and humane when applied. All practices center meaningful community engagement and data analysis.

Engage People Experiencing Homelessness in Planning and Decision-making

Meaningful engagement with people experiencing homelessness is important to build trust; accurately identify and assess traffic safety needs, risks, priorities, and travel behavior; and understand peoples' preferences regarding street safety and infrastructure. People experience unsheltered homelessness in different ways – they may live in vehicles, on sidewalks or landscaping, or in other public spaces as individuals or families and may do so for long or short periods of time – and their needs may vary depending on these lived experiences. Centering intentional engagement in all practices is a critical part of working with people experiencing homelessness to develop and implement effective, sustainable, dignified, and humane strategies to meet road safety and other agency goals.

Traditional engagement methods, such as public meetings or surveys, are not effective ways to engage with people experiencing homelessness. Promising practices for meaningful engagement include implementing multiple and varied forms of outreach, including pop-up events, meeting people where they are, and using virtual public involvement, as appropriate. Additionally, agencies may consider conducting engagement in multiple languages as people experiencing homelessness have diverse backgrounds and some individuals may not speak English as a first language. Finally, agencies may consider providing incentives for participation. In addition to outreach, agencies can consider including people experiencing homelessness on a steering committee or task force that helps shape decisions about traffic safety. [USDOT's Promising Practices for Meaningful Public Involvement in Transportation Decision-Making](#) provides additional strategies and tools that may be applied to engage people experiencing homelessness.

- **TxDOT** and its non-profit partner, the Other Ones Foundation, conducted extensive public involvement to empower people experiencing homelessness to drive the Master Plan of the *Esperanza Community* and provide residents with pride and dignity in the project.



- **The City of San José** conducted pop-up events in areas with people experiencing homelessness as part of the City's 2020 Vision Zero Action Plan priority action area to increase community engagement and build a culture of safety. This effort intentionally engaged with the City's disadvantaged communities, including people experiencing unsheltered homelessness. These pop-ups included open-ended surveys, were staffed with Spanish- and Vietnamese-speaking staff and included translated materials. In addition, staff coordinated with community-based organizations.⁵¹ This process gave the city insights into the needs of people experiencing homelessness and helped the city to develop a more informed and inclusive approach to planning for safety improvements in the city. Insights included travel patterns of people experiencing homelessness, like where they needed to cross and what services they needed to access, as well as feedback on existing efforts. For example, the City of San José had previously provided bike helmets, but they learned that most people found them too big and heavy so they didn't keep them.
- **The City of San José** provided incentives based on feedback from the population of interest to boost engagement.
- **Indiana DOT** provides funding to a local service agency to have access to staff hours for engagement with people experiencing homelessness.⁵²

⁵¹ "City of San José Vision Zero Community Engagement Report."

⁵² Loukaitou-Sideris et al., "Homelessness on the Road."



Highlight: Funding Mechanisms for Transportation Agencies to Address Homelessness

Federal funding is available to be used by transportation agencies addressing homelessness. Case study subjects implemented their programs using a variety of funding, including National Highway Traffic Safety Administration (NHTSA) funding through the California Office of Traffic Safety, State general funds, and State DOT funding:

- **TxDOT** used State funds for all site improvement, facilities, and land purchases. State transportation agencies could potentially use Federal funds for environmental mitigation, environmental justice or civil rights to mitigate program or project impacts related to people experiencing homelessness.
- **The City of San José's** engagement was funded by a grant to increase street safety engagement among Spanish and Vietnamese speakers by the California Office of Traffic Safety, which is the California distributor for NHTSA funds. An incentive used to encourage people experiencing homelessness to complete a survey was funded by California's Metropolitan Transportation Commission Transportation Development Act.
- **Hawaii DOT** used State general funds to address homelessness on Hawaii DOT and other State agency properties. If the effort only used State highways funds, Hawaii DOT would have been limited to only addressing Hawaii DOT highway properties. During the COVID-19 pandemic, Hawaii DOT used American Rescue Plan (ARPA) funds.

At the time of publication, the interviewees had not yet integrated homelessness into the transportation planning process, specifically the Metropolitan Transportation Plan (MTP), Statewide Transportation Improvement Program (STIP), Strategic Highway Safety Plan (SHSP), VRU Safety Assessment, or corridor planning studies. Many of these strategies may be integrated into these plans. Increased integration with transportation planning could be a next step in advancing the role of transportation agencies in addressing homelessness.

The Bipartisan Infrastructure Law (Pub. L. No. 117-58) included a new requirement for States to complete a Vulnerable Road User Safety Assessment as part of their Highway Safety Improvement Program (HSIP) (see 23 U.S.C. 148(l)). The VRU Safety Assessment must include a quantitative analysis of VRU fatalities and serious injuries that, among other requirements, considers the demographics of the locations of fatalities and serious injuries, including race, ethnicity, income, and age (23 U.S.C. 148(l)(2)(A)(ii)). Some States have specifically included people experiencing homelessness in their assessment (e.g., Kentucky and Indiana).⁵³

⁵³ Walker, "Vulnerable Road User Safety Assessment Guidance (Due Date: November 15, 2023)."



Collect and Analyze Data to Guide Decisions

Data collection and analysis can help agencies, decision makers, and the public understand how people experiencing homelessness are interacting with the transportation system and how they experience traffic safety impacts. This data can drive design decisions and lead agencies to understand their role in solutions.

Currently, most crash reports, including those using the Model Minimum Uniform Crash Criteria, do not have a field for housing status. In addition to the lack of a field for this information, it is difficult to determine whether a person who is seriously or fatally injured is experiencing homelessness, particularly at the scene of a crash.⁵⁴ The lack of a known address or the use of a shelter or other service provider as a person's address may be used to identify whether an individual was experiencing homelessness at the time of a fatal or serious injury crash.⁵⁵

Some agencies are starting to work with their local Medical Examiner's Office to explore whether people killed in crashes were experiencing homelessness. Defining whether a person is experiencing homelessness is complex. People who are housing insecure may have a residential address where they stay most, but not all, of the time, and it is difficult to know whether individuals killed on public ROW were living on or just traveling along the public ROW. If an individual does not have identification (ID), it could also be another limitation to understanding if the individual was experiencing homelessness. Conversely, chronically unsheltered individuals may use a service provider or shelter as their permanent address, which makes them easier to identify. Given these challenges, it can be difficult to fully understand what percentage of people killed on roadways are experiencing homelessness. Despite these limitations, which may lead to undercounting people experiencing homelessness, agencies that are disaggregating fatal crash data by housing status are finding that people experiencing homelessness are overrepresented in the number of crash fatalities, particularly as pedestrians.⁵⁶

Identify potential data sources to better understand the connection between transportation safety and homelessness

Transportation agencies can build and leverage partnerships with medical institutions and service providers to develop robust and useful data sets to understand how people experiencing homelessness are impacted by traffic safety issues.

- **The City of San José** and the **City of San Francisco** partnered with the County Office of the Medical Examiner, which is better equipped to research crash victims, to define homelessness and add that data to crash reports. [San José's Vision Zero team maps fatal crashes involving people experiencing homelessness](#) to determine if they are geographically clustered and can

⁵⁴ Zimmerman, "Living Without Refuge."

⁵⁵ Zimmerman.

⁵⁶ Zimmerman.



- analyze other trends in such crashes such as mode of transportation, time, and substance use.⁵⁷
- **TxDOT** and **Hawaii DOT** worked with law enforcement officers to develop a code in crash reports to determine if a crash involves a person experiencing homelessness based on whether that person does not have a known address or uses the address of a service provider as their address.
 - **TxDOT** and **Hawaii DOT** also track the locations of encampments on State DOT property as part of their maintenance responsibilities. Knowing where these encampments are helps inform the agencies' understanding of crash data as it might relate to people experiencing homelessness.

Three additional sources of data that may be used by transportation agencies to find more information on people experiencing homelessness:

1. The Homeless Management Information System (HMIS) captures and reports CoC client-level data on the provision of housing and services to individuals and families either at risk of or experiencing homelessness, in compliance with HUD requirements. CoCs are groups of public, non-profit, and private organizations that serve people experiencing homelessness at regional levels. This data is also often used by planners and policymakers to inform policies and decision-making related to homelessness.
2. The International Classification of Diseases, Tenth Revision (ICD-10) codes is a system used by physicians to classify and code all diagnoses, symptoms, and procedures for claims processing.⁵⁸ This data was applied in a novel study to examine the trends, causes, and outcomes of hospitalizations for individuals experiencing homelessness.⁵⁹
3. The nationwide [Point-in-Time \(PIT\) Count](#), which is overseen by the United States Department of Housing and Urban Development, is an annual count of sheltered and unsheltered individuals experiencing homelessness conducted by local agencies. PIT Count data can be a useful way to understand the conditions for people experiencing homelessness in a community. Transportation agencies are encouraged to participate in this process.

Use data to guide effective decision-making

As agencies explore the data, many are finding that people experiencing homelessness are disproportionately impacted by traffic crashes. Using this data to describe where people are most at-risk and what conditions are most dangerous for people experiencing homelessness can help build support and direct investment to the most impactful safety projects.

- **The City of San José** identified the issue of traffic fatalities among people experiencing homelessness through data analysis. During the COVID-19 pandemic, traffic fatalities among people experiencing homelessness tripled between 2018-2021. The data demonstrated that there were 51 traffic fatalities among people experiencing homelessness in five years (2018-2022). The frequency of fatalities among people experiencing homelessness rose from 5 per year to 17 per year in this time period. Working with a Data Equity fellow funded by the Knight

⁵⁷ "Unhoused Traffic Fatalities in San José."

⁵⁸ "ICD-10."

⁵⁹ Wadhera et al., "Trends, Causes, and Outcomes of Hospitalizations for Homeless Individuals."

Foundation, they developed a [StoryMap](#), depicted in [Figure 2](#), of the 51 Traffic Fatalities involving people experiencing homelessness to communicate with the public and decision makers in order to identify, design, and pilot road safety improvements geared toward improving safety for people experiencing homelessness.⁶⁰ This map systemically identifies areas that may be particularly dangerous for people experiencing homelessness; in this analysis it included unhoused encampments, food-serving retail, and 35+ mph streets. Twenty-five of the 51 fatalities involving an unhoused person were located in one of these areas, indicating that these conditions can be used to focus the implementation of safety improvements. Immediately after the StoryMap exercise, the City of San José began in-person engagement with people experiencing homelessness to provide important context to understand and interpret the quantitative data. Using the StoryMap and community engagement, the City of San José identified the Monterey Road and Curtner Avenue/Tully Road intersection as a priority intersection for pedestrian safety improvements: 3 unhoused pedestrian fatalities occurred at this intersection in 2021, the most of any single intersection in the City that year. Using this data, the City of San José was awarded USDOT Safe Streets for All Implementation grant funding to rebuild four intersections, including the Monterey Road and Curtner Avenue/Tully Road intersection, with the highest fatal and severe injuries in the City. The City of San José is exploring additional grant funding opportunities to implement improvements in other areas identified through the StoryMap exercise and community engagement.

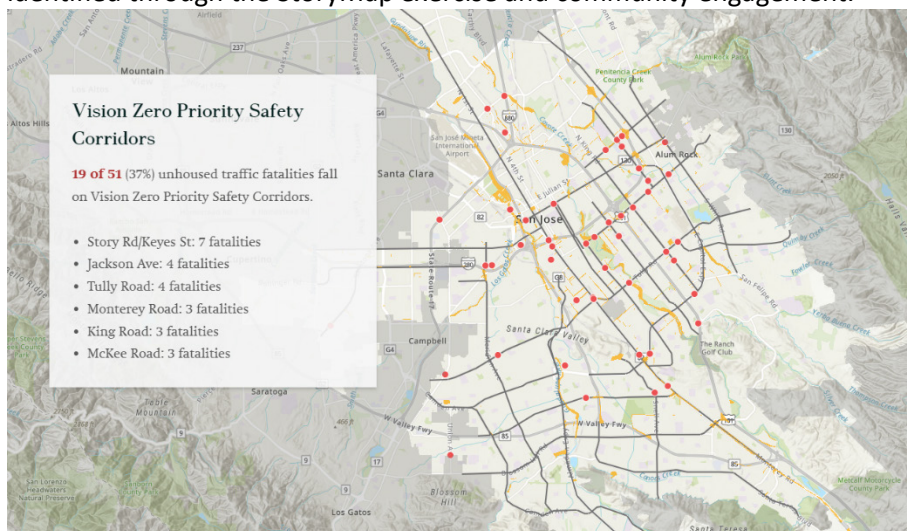


Figure 2 A screenshot from the City of San José's StoryMap depicting fatalities among people experiencing homelessness

Source: <https://storymaps.arcgis.com/stories/47b7f203f6474c76829d701c713120c1>

- **TxDOT** determined, using crash data, that, between 2017-2020, over 80% of all pedestrian fatalities on specific areas of the interstate involved people experiencing homelessness, and

⁶⁰ Davis, "City of San Jose Launches New Equity Through Data and Privacy Program. Knight Foundation's \$750K Investment Will Fund New Effort to Improve Equity and Accountability in the Delivery of City Services to Residents."



90% of those automobile-pedestrian fatalities occurred at night. These leading indicators helped develop the strategy for the Mobility35 Pedestrian Safety Program and eventual development of the *Esperanza Community*.

Track impact of strategies to understand effectiveness

As transportation agencies implement strategies to improve road safety for people experiencing homelessness, evaluating impacts, including reductions in fatal crashes involving people experiencing homelessness and the cost of implementation, is important.

- **TxDOT** spent \$2 million in State funds on the *Esperanza Community* project over the course of five and a half years (including infrastructure investments on the site). Texas DOT staff estimated that they have spent four times as much on cleanup contracts for encampments on TxDOT ROW. Given how recent the Esperanza Community project is, staff expressed that it is difficult to quantify the resulting decrease in encampments, but they believe that the data over time will show the cost effectiveness of investments like the Esperanza Community.
- **TxDOT** is also tracking the number of people that move into the Esperanza Community and that move from the camp into more stable housing options. To date, the facility has served over 300 people, with 200 moving into permanent or supportive housing. The full master community plan has not yet been built; once fully implemented, it is expected to serve even more people in the future.
- **The Washington State Department of Commerce** has a memorandum of understanding with the Washington State Department of Transportation to regularly track the current outcomes, including the housing situations, of residents of the 35 camps that were closed in accordance with their 2022 Rights of Way Safety Initiative. These data show that the majority of people offered housing have accepted it and remained housed. As of March 2024, 1,098 people accepted housing, representing approximately 72% of the people affected by the closures, and 187 of those are in permanent housing.

Leverage DOT Resources to Support Affordable Housing and Services

State and local DOTs often have resources and expertise that can be leveraged to support transitional or permanent housing efforts that advance roadway safety and other agency goals. According to public health experts, the Housing First approach is the most effective option for addressing the homelessness crisis.⁶¹ Implementing this strategy may be new to many DOTs, but as demonstrated by the examples below, transportation agencies may be well-positioned to coordinate with other agencies and non-profit stakeholders, because they have unique skills that can catalyze this strategy.

Provide vacant land to establish sanctioned encampments with transitional housing

State and local DOTs may own vacant or underutilized properties that could be repurposed for transitional housing. Other State or local agencies, such as transit agencies, water departments, and parks and recreation departments, may have underutilized properties as well. Using this land for

⁶¹ “Protecting the Health and Well-Being of People Living Unsheltered by Stopping Forcible Displacement of Encampments.”



transitional housing may help mitigate barriers that other approaches to building housing often face, such as high land costs and permitting.

- **Texas DOT** partnered with a non-profit called The Other Ones Foundation (TOOF) to establish the *Esperanza Community*, a community with transitional housing established on TxDOT land for people experiencing homelessness who had previously sheltered on the I-35 corridor, which was slated for construction, and other areas of the ROW.
- **Hawaii DOT** is using emergency orders related to homelessness and to the 2023 fires on Maui to set up sanctioned encampments on its land more quickly than through normal processes. The State DOT had a vacant 3-acre site and was able to set up a temporary shelter within three weeks that housed 130-140 people. It is in process to become longer-term temporary housing for 125 individuals. On a portion of a baseyard in Windward Oahu, a longer-term temporary housing development is housing 33 individuals.
- **The City of San José** has created six interim housing sites since 2020. The sites are operated by other City departments. City of San José DOT assisted with street safety improvements to access the sites.⁶²

⁶² "Interim Housing Communities."

Highlight: Esperanza Community



Figure 3 An aerial view of the locking, climate-controlled shelters at Esperanza Community

Source: <https://toofound.org/>

Recognizing that people experiencing homelessness made up 80% of fatalities and serious injuries from crashes along I-35 and that upcoming construction would displace encampments on I-35, TxDOT's Austin District recognized that it needed to come up with a meaningful and effective solution to address the needs of people experiencing homelessness. Through a coordinated approach with public, philanthropic, and private organizations, TxDOT proposed a transitional camp concept that would bridge the gap between unsheltered homelessness on the highway and ultimate permanent housing in line with a housing first approach. Leadership buy-in was achieved due to a clear transportation use case—pedestrian safety and displacements.

In 2019, the Governor of Texas tasked TxDOT and its partners to establish a State-sanctioned camp for people experiencing homelessness who had been sheltering in the ROW along I-35 and other major corridors. In partnership with public agencies, philanthropic organizations, private companies, and people experiencing homelessness, TxDOT transformed vacant TxDOT-owned land into the Esperanza Community, which is a State-sanctioned transitional housing master community that, based on the



Lease for the Master Plan Community & Operations, can be used only for providing a safe and secure shelter for people experiencing homelessness.⁶³

TxDOT performed property improvements, including drainage, utility trenching, earthwork, paving, security fencing, and electrical service.⁶⁴ TxDOT then used a provision in Texas State law that allowed the agency to lease this parcel to a non-profit partner, The Other Ones Foundation, for five years with a five-year extension at \$1 annually. The lessee was charged with constructing and maintaining safe and secure shelters and providing aid for people experiencing homelessness, with provisions requiring TxDOT approval and requirements to comply with all applicable standards and codes. The Other Ones Foundation was also required to develop operations and community operations plans as well as provide annual reporting to TxDOT.

An extensive public involvement approach empowered the residents of the Esperanza Community to tell TxDOT and The Other Ones Foundation what they needed, driving the Master Plan and providing residents with dignity and pride in the project. State and local agencies provided basic needs like food, water, 24-hour security, and the Capital Metropolitan Transportation Authority (CapMetro) bus service. The Other Ones Foundation provides holistic support such as onsite work opportunities, harm reduction and substance use support, highly personalized case management and housing navigation, and 24-hour crisis management. The Other Ones Foundation worked with private companies to acquire 200 individual shelter units, shaded gathering areas, hygiene facilities, and a community center.⁶⁵

“Esperanza is a place to come and be safe, where residents have resources to get mentally and physically healthy. It allows people to interact in safe relationships, get over PTSD [and build trust.] Residents have a lock on their door; they can go to work and come back and know their stuff will be there,” explains Mike Arellano, P.E., Austin District Deputy District Engineer at TxDOT, based on the experiences shared with him by people living in the Esperanza community.

TxDOT estimates that its investment in the Esperanza Community will decrease the burden on the agency over time. It invested about \$2 million into the Esperanza Community over five and a half years, and likely spent at least four times that amount on cleanup contracts in that time, an amount that is expected to decrease as people are better connected to housing options and resources. This is in addition to the overall benefit of impacting the overall shortage of housing that exacerbates homelessness in Austin.

⁶³ Arellano and Wagner, “2024 Transportation Research Board: TxDOT Austin District Initiative to Address Homelessness.”

⁶⁴ Arellano and Wagner.

⁶⁵ “Esperanza Community Emergency Shelter In Austin, TX.”



The impact of the Esperanza Community can be demonstrated by the following outcomes:

- As of summer 2023, TxDOT achieved 64% reduction in overall pedestrian fatalities and 89% reduction in pedestrian fatalities involving people experiencing homelessness on I-35 since the launch of the Mobility35 pedestrian safety program in 2017.⁶⁶
 - Over 240 people have been served by the Esperanza Community.⁶⁷
 - 132 people transitioned from the Esperanza Community to safe and stable homes.⁶⁸
 - The infrastructure includes 100 individual units, two communal areas, and six modular offices.⁶⁹
 - Employment services led to \$950,000 earned income for residents.⁷⁰
 - The Esperanza Community has entered Phase 2, which can potentially double the number of shelters.⁷¹
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⁶⁶ Arellano and Wagner, “2024 Transportation Research Board: TxDOT Austin District Initiative to Address Homelessness.”

⁶⁷ “Mobility35 Initiative to Address Homelessness (IAH).”

⁶⁸ “Mobility35 Initiative to Address Homelessness (IAH).”

⁶⁹ Arellano and Wagner, “2024 Transportation Research Board: TxDOT Austin District Initiative to Address Homelessness.”

⁷⁰ Arellano and Wagner.

⁷¹ Arellano and Wagner.



Coordinate with developers and housing agencies to increase affordable housing supply

Transportation agencies can partner with housing developers to provide transportation construction services to make building housing more affordable and feasible. The costs of construction labor and materials for transportation facilities is often a barrier to housing developers building more affordable housing.⁷²

- **Hawaii DOT** is working with local housing developers to complete transportation infrastructure work, which would normally be required of the developer, in exchange for the inclusion of additional affordable units in their developments. Hawaii DOT also partners with the Department of Hawaii Home Lands, which builds housing and holds land for native Hawaiian families. The agency is connecting people that they encounter in encampments to services and resources, including shelters and permanent supportive housing.

Offer Training to Increase Capacity and Improve Treatment of People Experiencing Homelessness in the Right-of-Way (ROW)

Transportation agencies can train their staff and maintenance crews in practices that center dignity and respect for people experiencing homelessness. Without such training, staff may default to calling law enforcement when they encounter people experiencing homelessness. Partnering with social services is one way to ensure that these trainings reflect best practices for engaging with people experiencing homelessness.

- **TxDOT** provides Mental Health First Aid training to all maintenance staff and contractors on how to properly engage with people experiencing homelessness during routine maintenance activities. There were two main goals of the training: (1) to provide contractors and employees the skills and resources to contact the appropriate service provider instead of defaulting to contacting law enforcement; and (2) to assist with the safety of employees. People experiencing homelessness often do not trust government staff because of difficult experiences in the past; they may also have mental health illnesses. Training provides staff with the skills and tools to assess the needs of people experiencing homelessness and contact the appropriate service provider who can provide care. This training emphasizes that the first call likely does not need to be to law enforcement. It empowers staff to effectively fulfill their duties while ensuring the safety and dignity of people experiencing homelessness. Providing tools and training made staff and contractors more comfortable and empathetic working with individuals in encampments.
- **Hawaii DOT** works with maintenance crews to ensure that they treat people in encampments with respect and dignity. In fact, the contractor that handles most of Hawaii DOT's encampment cleanups has hired many people experiencing homelessness and provides a livable wage to conduct cleanups. Hawaii DOT's approach to working with people experiencing homelessness has also impacted law enforcement in the State with an enhanced focus on connecting people to services.

⁷² Hoyt and Schuetz, "Making Apartments More Affordable Starts with Understanding the Costs of Building Them."



Lead Coordination to Maximize Effectiveness of Addressing Homelessness

While transportation agencies have resources and skills to support transitional or permanent housing efforts, they generally do not have the skills or capacity to provide direct services for people experiencing homelessness. To build long-term capacity and provide meaningful services to ensure the success of efforts to address homelessness, transportation agencies can partner with service providers, including non-profits, as the subject matter experts to provide direct services to people experiencing homelessness. These relationships and contracts can be valuable for coordinating efforts and filling any resource gaps to address homelessness.

People experiencing homelessness may have difficulty finding or physically accessing needed social services, like job training, career counselors, mental health experts, family medical providers, and others. Transportation agencies may have opportunities to provide access to these services, either by making physical improvements near these providers or by developing relationships with providers and serving as a bridge to these services, particularly when interacting with people experiencing homelessness in the ROW.

Hire staff dedicated and trained to coordinate activities and programs related to people experiencing homelessness

Dedicating knowledgeable staff to engage with stakeholders and build relationships with service providers, partner agencies, and people experiencing homelessness within the community is key to the implementation of any strategy. Staff who understand the needs of people experiencing homelessness and the ecosystem of available services are better equipped to implement strategies that effectively improve safety for people experiencing homelessness. In a recent study, only 16% of transportation agencies surveyed had dedicated staff to interact with people experiencing homelessness.⁷³

- **Hawaii DOT** hired a Homeless Coordinator and Homelessness Specialist to engage with people experiencing homelessness who are living in encampments, connect them to services, and ensure that efforts to clear encampments on public ROW are done in a dignified way that protects people and their belongings. Within six years in the position, the Homelessness Coordinator has built trust among many residents of encampments, particularly those experiencing chronic homelessness. Through the Coordinator's efforts, many people are connected to services and temporary or permanent housing prior to the clearing of an encampment.
- **The City of San José's** Vision Zero Coordinator unofficially serves as an internal champion to share strategies with staff that they could use to improve safety for people experiencing homelessness. Homelessness tends to intersect several public agencies and, as a result, the City DOT can work directly with other City Departments tasked with engagement. The City of San José is in the process of updating its Vision Zero Action Plan for 2025 to include more initiatives to reduce traffic fatalities and injuries among people experiencing homelessness.

⁷³ Boyle et al., *Transit Agency Practices in Interacting with People Who Are Homeless*.



- **TxDOT's *Esperanza Community*** introduced the “Workforce First” program. People experiencing homelessness are provided an opportunity to both earn a living wage, including services to facilitate transportation to the worksite, and assist the greater community through environmental clean-up.⁷⁴

Coordinate and build a coalition that is dedicated to developing comprehensive solutions for improving safety for people experiencing homelessness

Partners may include public agencies, not-for-profit organizations, and private companies. Building partnerships takes time; however, coordinating with relevant stakeholders can pay dividends in the long term. DOTs can play a critical role as coalition-builders and can grow the network over time as more entities become engaged.

- **TxDOT** refers to a 4P approach (Public, Private, Philanthropic Partnership) and sets the goal to build a program that offers opportunities to public, private, and philanthropic organizations to facilitate services (medical and mental healthcare, coordinated assessment, shelter and housing, etc.) in conjunction with or apart from TxDOT's maintenance and construction activities on State highways.
- **TxDOT** created the Initiative to Address Homelessness (IAH) which brought together multiple stakeholders interested in improving road safety for pedestrians and providing services to people experiencing homelessness, including local elected officials, public agencies, not-for-profit service providers, pedestrian advocates, faith-based organizations, and law enforcement. TxDOT hosted multiple workshops bringing these stakeholders together to develop coordinated solutions to address homelessness on State highways. The *Esperanza Community*, for example, developed out of these workshops.
- **TxDOT** also partnered with The Other Ones Foundation, which specializes in providing services for people experiencing homelessness, to manage the Esperanza Community and with Integral Care, Travis County's Mental Health Services, to provide free training to DOT staff and contractors. Services provided by The Other Ones Foundation include case management, employment opportunities, onsite healthcare services, laundry facilities, temperature/rest stations, creative and communal areas, phone charging, and computer access.⁷⁵
- **Hawaii DOT's** efforts to network, coordinate, and maintain relationships helped it find and hire a contractor to work on clearing encampments in a way that provides dignity to the people who live there.

⁷⁴ “Built on Kinship: The Other Ones Foundation 2023 Annual Report.”

⁷⁵ “Esperanza Community Emergency Shelter In Austin, TX.”



Plan, Design, Build, and Operate Transportation Facilities that Prioritize Safety and Accommodation for All Users, with Particular Attention to the Travel Needs of People Experiencing Homelessness

Transportation agencies typically have design and operation expertise “in house” among staff who were hired to perform typical DOT activities, like planning, building, and maintaining pedestrian facilities. However, people experiencing homelessness may need to cross streets and roads in locations not typically used by housed pedestrians. Installing safety countermeasures in unconventional places to provide safe access for people experiencing homelessness may represent a low-barrier avenue for transportation agencies to get involved and have an impact. Vision Zero Coordinators or other staff may serve as an internal advocate for these safety improvements.

State and local DOTs have many tools related to implementing safety projects within the ROW. Strategies for improving safety, particularly for people outside of motor vehicles, are well documented and researched, and many can be applied in areas where encampments, shelters, or service providers for people experiencing homelessness are located. In some cases, improving safety for people experiencing homelessness may require specific approaches developed based on an understanding of how they are using the ROW, even if these approaches do not meet traditional engineering warrants.

- **The City of San José** identified a midblock pedestrian crossing treatment that would connect two halves of a creek encampment that passes below an 85-foot wide High Injury Network arterial with a posted speed limit of 40 mph where multiple traffic fatalities involving pedestrians experiencing homelessness have occurred. The installation of a controlled mid-block crossing would improve safety, but pedestrian volumes do not meet the traditional minimum warranted to install it. Through intentional data-backed engagement, however, Vision Zero staff are working to make the case for applying for grants to install a signal at this location, which is six hundred feet from the closest signalized intersection and would require the department director’s approval to install.
- **Hawaii DOT** installed speed humps and speed tables in areas that are frequented by people experiencing homelessness, often in response to crash histories at those locations. Hawaii DOT has also installed additional lighting near a transitional housing project and in areas where encampments are common to increase visibility where people experiencing homelessness are likely to be walking.
- **TxDOT’s [Mobility35 Pedestrian Safety Program](#)** engineered a pedestrian crossing deterrent for the interstate by adding two-foot panels to the top of the center median concrete barrier along I-35. Note that while deterrents in this case were useful to reinforce safe behaviors across high-speed roadways, it is also important to consider providing alternatives that allow for safe mobility and access.



Engage in Dignified Interactions with People Living in Encampments

State and local DOTs may consider practicing greater discretion with clearing encampments by assessing which encampments pose a safety and health hazard for people experiencing homelessness or surrounding communities and which may not be harmful. If encampments must be cleared, DOTs can apply multiple strategies – in coordination with the other strategies previously discussed – to clear encampments in a dignified and humane way.

"Washington state's Encampment Resolution Program offers the kind of housing options and services necessary to successfully resolve some of our state's largest, most complex encampments on DOT right of way," said Washington State Department of Transportation Secretary Roger Millar. "In collaboration with our State Department of Commerce and Washington State Patrol, we've resolved over 35 large encampments - one with over 400 people in it at one point in time - and brought more than one thousand people inside. Of that number, more than 70% remain indoors receiving the services they need. Being part of this program has been hard, incredibly meaningful work for our agency. We're not only resolving encampments, we're part of a collective focused on changing the trajectory of people's lives," says Roger Millar, Secretary of the Washington State Department of Transportation.

Coordinate with social service agencies to provide services and follow-through

Through strong communication and an active and respectful presence, transportation agencies can build trust with people in encampments before requiring them to move. DOTs can coordinate and contract with social service providers to connect people in encampments to housing and services instead of immediately displacing them. This leads to better outcomes for people experiencing homelessness and more efficient and cost-effective strategies for DOTs.

- **Hawaii DOT** posts notice of planned encampment cleanups multiple weeks in advance. Staff visit the site at least weekly leading up to the cleanup to try to connect people with more permanent solutions and service providers. They also inform social service providers and non-profits that they will be working to clear an encampment, allowing them time to engage with and provide services to people experiencing homelessness. Over time, Hawaii DOT staff and maintenance contractors have developed relationships with many of the individuals experiencing homelessness, who know that they can trust staff to help them and treat them with respect. Hawaii DOT's Homelessness Coordinator stressed the importance of following up with service providers to ensure that they were reaching people in encampments prior to a sweep.
- **Hawaii DOT's** efforts to network, coordinate, and maintain relationships helped them find and hire a contractor to work on clearing encampments in a way that provides dignity to the people



who live there. The selected contractor is willing to hire people experiencing homelessness, who may not have much work experience or who may have a criminal record. As a result, the employees that the contractor hired were able to empathize with the people whose encampments were being cleared away as they had been in similar situations. The contractor also pays livable wages for this work.

- **Washington State DOT's** [Pre-Apprenticeship & Supportive Services \(PASS\) Program](#) funds local organizations, including vocational programs and local unions, that provide supportive services and pre-apprenticeship training for women, Black, Indigenous, and People of Color (BIPOC) communities, and socially and economically disadvantaged individuals. WSDOT connects individuals experiencing homelessness to this program when removing encampments to help those individuals connect to jobs to support more stable opportunities.
- **TxDOT** sees workforce development as a promising next step to residents of the [Esperanza Community](#). TxDOT plans to provide training and opportunities to people experiencing homelessness, especially in the transportation industry. They see this as an opportunity to also address the gap in workers for Texas's growing infrastructure industry.
- **Hawaii DOT** has relationships with law enforcement, but it generally does not rely on law enforcement during encampment clearing operations unless Hawaii DOT has reason to believe that staff may be in danger. Staff are cognizant that the presence of law enforcement may create conflict with the people living in the encampment and that coming without law enforcement may create more positive interactions. Hawaii DOT provides sufficient advance notice to ensure that there is ample time to connect people experiencing homelessness to the appropriate services.

[Provide storage for personal items](#)

In many communities, sweeps result in the disposal of the personal items of people experiencing homelessness, which may include vital records and valuables. Providing opportunities for people to keep their belongings is one way to show respect for their dignity and livelihoods.

- **Hawaii DOT** includes storage in its maintenance contracts to ensure that people's belongings are not thrown away. In preparation for clearing an encampment, maintenance crews help individuals pack their belongings and store them securely for 30-90 days. Individuals can retrieve their items or have them delivered to them within that time period. This service has been part of Hawaii DOT's success at building trust between Hawaii DOT staff and people experiencing homelessness.
- **TxDOT initially** provided high-visibility backpacks to individuals before clearing encampments. The bags contained contact information for local services and safe pedestrian routes in upcoming work zones. TxDOT also trained maintenance staff not to dispose of these bags and encouraged individuals experiencing homelessness to keep important documents in them, knowing that they would not be thrown away.



Figure 4 Hawaii DOT staff and contractors engage with people experiencing homelessness to understand their needs and connect them to services. When removing an encampment is necessary, they give people time to pack their belongings and provide storage for their belongings.

Source: Hawaii DOT

Provide basic health and hygiene services to people living in encampments

While encampments are not formal residential areas, the people living there still need basic services such as trash pick-up, bathrooms, showers, and secure areas for personal and valuable items.

- **The City and County of Denver** installed portable restrooms with needle disposal boxes, trash cans and hand-washing stations. Employees delivered these services to several sidewalk encampments in the city.⁷⁶
- **TxDOT** provides people experiencing homelessness with high visibility backpacks that contain hygiene products and local service information. TxDOT coordinated with organizations that provided portable restrooms, hand-washing stations, and mobile showers.
- **The City of San José** identified several improvements at an intersection where several local social services and public facilities are located, with such improvements like extended bathroom hours at a local library branch. Knowing that people experiencing homelessness would be traveling between the nearby encampment and the social services, the improvements are expected to increase safety for people walking.

Additional Findings of Interest

- **Transit agencies** – Transit agencies can provide people experiencing homelessness access to safe and affordable mobility, and many are working to advance transit rider personal safety and provide access to services. This topic is covered more fully in the Transit Cooperative Research Program (TCRP) report, “Homelessness: A Guide for Public Transportation.”⁷⁷
- **Substance Use** – To understand the risk factors among people experiencing homelessness,

⁷⁶ Beaty, “Denver Is Prepping Port-a-Potties for Encampments.” Beaty, “Denver Is Prepping Port-a-Potties for Encampments.”

⁷⁷ Zapata et al., “Homelessness.”



communities should analyze local data. In the case of San José, an analysis of traffic fatalities among people experiencing homelessness found that 92% of the victims who were experiencing homelessness were sober and only 8% of the traffic fatalities involved drug or alcohol use, based on autopsy analysis from the Medical Examiner-Coroner.⁷⁸ Consistent with the principle of the Safe System Approach that humans make mistakes, it is important not to victim blame by centering intoxication as the root cause of disparities; instead, consider the pull strategies elaborated in this document section.

- Providing high-visibility materials – Some agencies provide materials intended to increase the visibility of people experiencing or at risk of experiencing homelessness when they are using the ROW. This is a common effort intended to respond to the prevalence of crashes at night involving people biking or walking; however, it may not be effective in isolation as it lies at the lowest level of the Safe System Design hierarchy. While lights and high-visibility vests are relatively easy to purchase and distribute, there are concerns that this promotes victim blaming and individuals may feel unsafe being highly visible while experiencing homelessness, in part due to real and perceived threat of violence. Per the National Highway Traffic Safety Administration’s (NHTSA) Countermeasures that Work, Conspicuity Enhancement, like high-visibility materials, only has two of five stars, indicating there is “limited evaluation evidence [for this strategy], but [it] adheres to principles of human behavior and may be effective if implemented well.”⁷⁹ San José found in its survey among people experiencing homelessness that 69% of respondents did not want to be “visible,” which was taken into consideration when the city was deciding which types of items to give people experiencing homelessness. TxDOT initially opted to provide high-visibility backpacks to people experiencing homelessness, which were mainly intended to provide a place for safe-keeping of belongings, as one part of a broader strategy of building trust and, ultimately, they worked to provide access to transitional housing facilities and connections to services.
- *Esperanza Community*’s Going Home Project offers one-time transportation to reconnect individuals with family members. They report that 89% of people reconnected with family or friends were able to stabilize their housing situation.⁸⁰

Summary/Key Takeaways

Transportation agencies, where authorized, have an opportunity to contribute to solutions that make a significant impact in improving the safety and wellbeing for people experiencing homelessness. This Case Study has demonstrated how multiple transportation agencies are engaging with people experiencing homelessness and adopting more effective strategies, joining multidisciplinary teams, and using agency resources to meaningfully address homelessness. These strategies include actions in the realms of engagement; data collection and analysis; supporting housing first opportunities; dignified

⁷⁸ “Unhoused Traffic Fatalities in San José.”

⁷⁹ “Countermeasures.”

⁸⁰ “Built on Kinship: The Other Ones Foundation 2023 Annual Report.”



coordination with public, private, and philanthropic organizations; training; design and operational solutions; and interactions with people living in encampments.

This case study has provided examples from multiple agencies that are taking action to improve road safety by addressing the needs of a population that experiences significant disparities in roadway fatalities and serious injuries in a dignified and humane way. Each case study agency has reported successes in implementing these strategies; they have also indicated that they plan to expand or scale their efforts to address road safety for people experiencing homelessness. They demonstrate that transportation agencies, in coordination with government, non-profit, and private organizations, can play a key role and take impactful and effective actions to improve safety for people experiencing homelessness.



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