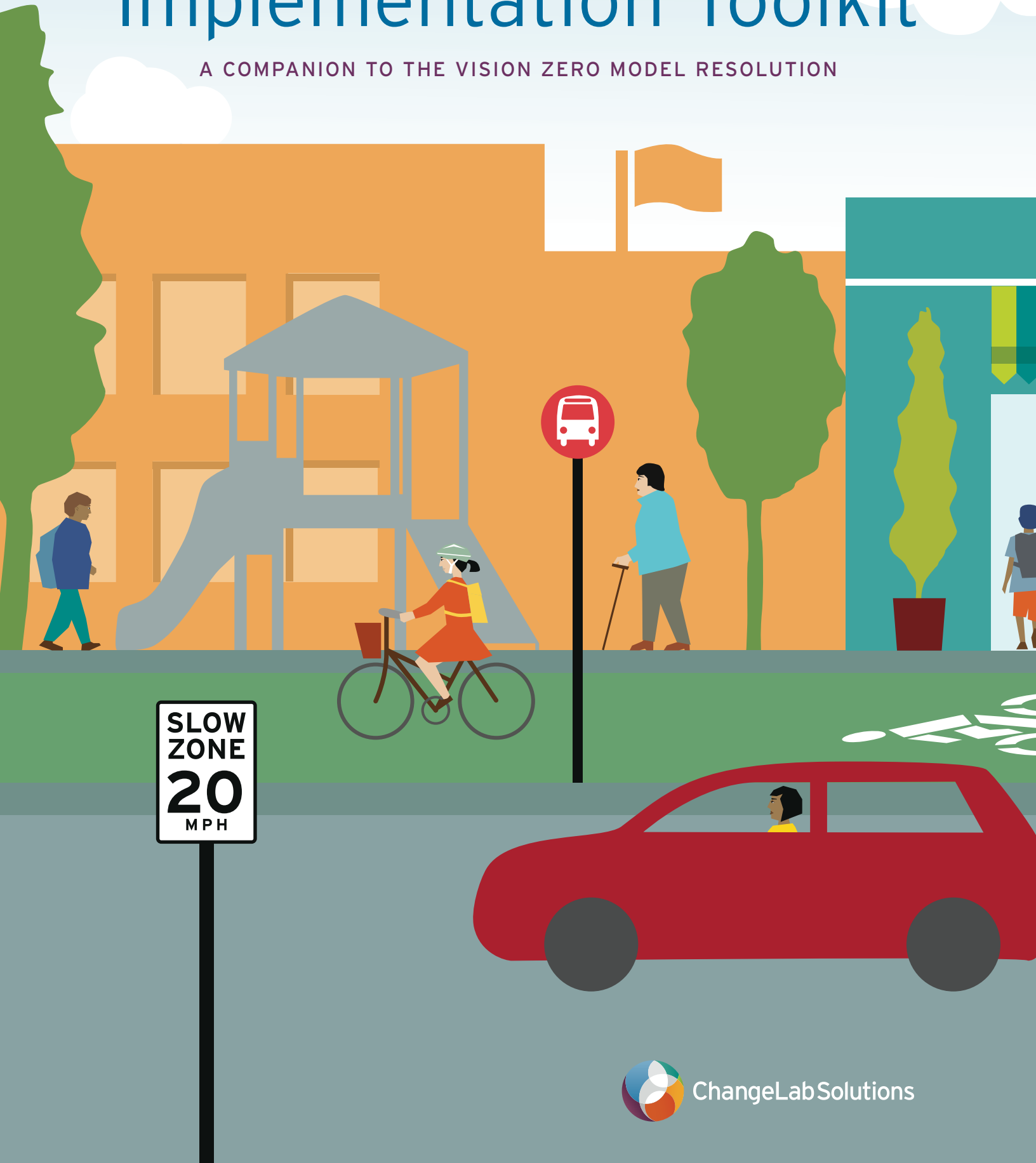# Vision Zero Implementation Toolkit

A COMPANION TO THE VISION ZERO MODEL RESOLUTION

SLOW ZONE 20 MPH

ChangeLab Solutions

Contents

Key Terms

Active transportation: Any self-propelled, human-powered mode of transportation, such as walking or bicycling.[1] Residents are more likely to choose active transportation where there is infrastructure for active transportation (e.g., sidewalks, bike lanes) and where destinations are close together.[2]

Community engagement: Various methods of informing, consulting, collaborating with, involving, or empowering community members with respect to government decisions.

Equitable enforcement: A process of ensuring compliance with law and policy that considers and minimizes harm to people affected by health inequities. Enforcement actions can harm, discriminate against, or otherwise undermine the health of the very people whom the laws are meant to protect. Enforcement that is carried out inequitably can create, maintain, or exacerbate health inequities.

Fatal injury: Any injury that results in death within 30 days after the motor vehicle collision in which the injury occurred.[3]

High-Injury Network: Specific streets or roads (or portions thereof) and/or intersections within a specific geographic area that have a high concentration of traffic fatalities and/or severe injuries, according to traffic safety data.

Historically underinvested areas: Neighborhoods where businesses and governments have made little or no investment in development or maintenance of existing buildings, infrastructure, or institutions.[4] These underinvested neighborhoods tend to have a high concentration of residents of color, residents with low income, and/or residents with limited English proficiency.[5]

Performance metrics: Data points that are used to measure progress toward Vision Zero goals.

Preemption: A legal doctrine that allows a higher level of government (like federal or state government) to limit or even eliminate the power of a lower level of government (like state or local government) to regulate a specific issue.[6]

Priority populations: Youth, older adults, communities of color, people with low income, people with disabilities, people with limited English proficiency, people who are unhoused, or others who have a higher risk of severe or fatal injury resulting from a collision with a motor vehicle, due to limited access to efficient and affordable transportation options; unsafe neighborhood infrastructure; or population-specific risk factors. In general, priority populations are subsets of people within a community who are experiencing social and health inequities, are or have been chronically underserved by systems and institutions, and have been or continue to be marginalized due to poverty, structural discrimination, or other factors.

Safe System approach: A human-centered approach to traffic safety that prioritizes the use of vehicle or roadway design and operational changes rather than relying primarily on behavioral changes to ensure safety.[7] The needs of all users (e.g., pedestrians, bicyclists, older people, young people, people with disabilities) are integrated into the transportation system. The system anticipates human error and considers human injury tolerance in order to increase safety.

Severe injury: A significant injury other than a fatal injury that results in broken bones, dislocated or distorted limbs, severe lacerations, or unconsciousness at the collision scene or when the person is taken from the crash scene for emergency medical attention.[3]

Traffic safety data: Data collected for each traffic collision that results in a fatal or severe injury; to the extent available, data should include but are not limited to the following elements: (a) exact location; (b) date and time of day; (c) category of each road user involved (e.g., pedestrian, bicyclist, scooter rider, driver of motor vehicle); (d) type of vehicle(s) involved, if applicable (e.g., motorcycle, car, bus, commercial truck); (e) whether any road users were fatally or severely injured; (f) ages of people involved; (g) collision factors (e.g., unsafe speed, driver distraction, poor lighting); and (h) the movement preceding the collision (e.g., left turn, changing lanes).

Vulnerable road users: Road users who are not protected by an outer shield – such as pedestrians, bicyclists, people using mobility devices, scooter riders, young children, and any other road users who are at high risk of severe or fatal injury resulting from a collision with a motor vehicle. These users need enhanced protection against collisions.

1. Introduction

Overview of the Toolkit

ChangeLab Solutions developed this toolkit to support local jurisdictions in equitably and effectively implementing their Vision Zero policies. It is specifically designed to supplement our Vision Zero model resolution, providing additional context and guidance on components of the model resolution that are important for advancing the health and equity goals of Vision Zero. This toolkit addresses the rationale for Vision Zero, community engagement considerations and strategies, data collection and analysis, how to leverage task forces and advisory groups, key elements of an action plan, equitable enforcement, evaluation, and the legal issue of preemption.

This toolkit is not meant to be a comprehensive resource that addresses all aspects of Vision Zero. We are intentionally not being prescriptive about specific strategies or frameworks that should be used in a Vision Zero initiative. In our view, a process that is rooted in equity, community engagement, and data-driven decisions will result in more equitable safety outcomes, and we have focused on these three pillars throughout the model resolution and toolkit.

A process that is rooted in equity, community engagement, and data-driven decisions will result in more equitable safety outcomes.

Look for this symbol throughout this toolkit to locate more in-depth information on key topics.

Vision Zero sets the goal of eliminating all traffic fatalities and severe injuries for all road users. Vision Zero uses the Safe System approach, which applies the following principles:[8]

- Traffic-related deaths and serious injuries in crashes are unacceptable.

- Humans make mistakes that are preventable.

- Humans are vulnerable.

- Responsibility for decreasing traffic-related deaths and severe injuries is shared by all road users.

- Safety requires us to be proactive.

- Redundancy is a crucial component for ensuring a safe transportation system.

Although Vision Zero policies and action plans have been adopted by many jurisdictions in recent years, these policies and initiatives reflect varying levels of accountability and commitment to health, equity, and community engagement. Our model resolution provides sample language and structure for a Vision Zero resolution that will help local jurisdictions reach their traffic safety goals in a way that also improves health and equity in all of their communities.

Adopting a Vision Zero policy (through a resolution, ordinance, or executive order) is only one step in an effective strategy for achieving traffic safety. Adopting a policy is important because it sets a jurisdiction's commitment to Vision Zero, delineates the jurisdiction's goals for Vision Zero, and lays

out the steps needed to achieve those goals. The model resolution that accompanies this toolkit provides guidance and structure for a process to ensure that the policy comprehensively and equitably responds to the needs of community members. A Vision Zero policy sets goals and ambitions for safety; however, additional complementary policy changes would likely be necessary to fully implement the Vision Zero strategies or remove barriers that might hinder the goals of the policy. For example, additional policies might be related to Complete Streets, street design standards, community engagement, law enforcement, allocation of funds and resources, or institutional changes. Implementation of a policy − and of complementary policy changes − also plays a large role in the effectiveness of a policy to achieve zero traffic deaths and serious injuries.

Achievement of Vision Zero will require shifts in how government agencies and departments work together and how community members are engaged and drive decision making, funding priorities, and strategies for preventing traffic collisions.

The Vision Zero movement has received criticism in the past for being ineffective in reducing traffic collisions,[9] exacerbating health inequities for priority populations, and being inequitably enforced, and these harmful effects have been compounded by a long history of discriminatory and inequitable policy and planning decisions in many jurisdictions.[10,11] Changes to Vision Zero's approach – for example, moving beyond the traditional E's of transportation planning (Education, Encouragement, Enforcement, Engineering, Evaluation), to include Ethics, Equity, and Empathy;[12] rethinking the role of enforcement;[13-15] and adopting the Safe System approach[16,17] – have been made in response to the criticisms. However, the gap between policy adoption and successful implementation persists. This toolkit aims to help bridge that gap.

The development of this toolkit was informed by research to identify existing resources and knowledge gaps; a policy scan to take inventory of the content of Vision Zero policies that are publicly available; key informant interviews with stakeholders representing different aspects of Vision Zero policy development and implementation; and guidance from project advisers.

The primary audiences for our model resolution and toolkit are elected officials and local practitioners who are involved in efforts to adopt and implement Vision Zero in their jurisdiction. Our audience includes people who work in a local government's planning, transportation, public works, public health, or community development department, as well as consultants who are hired to support this work. Community-based advocates may also find the model resolution and toolkit useful in their efforts to advance equity-based Vision Zero policies.

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History of Vision Zero

The concept of Vision Zero originated in Sweden in the 1990s with the belief that we, as a society, have an ethical responsibility to keep people safe as they move about their community.[18] Seen as an innovative approach to traffic safety, Vision Zero has been adopted in other countries worldwide, and it started to gain momentum in the United States around 2014. As of August 2021, over 50 communities in the United States have made a formal commitment to Vision Zero.[19]

Recently, much progress has been made in identifying design, engineering, and policy strategies that are evidence-based, account for human error, and are proven to prevent collisions from occurring or reduce the severity of collisions. Planners are also increasing their awareness and efforts related to the many reasons for becoming less reliant on single-occupancy car trips – including better sustainability, reduced environmental and noise pollution, and less traffic congestion. However, not all communities have benefitted equally from these efforts because infrastructure investments, policies, and services have historically been prioritized in areas with more resources and political power.

Priority populations (such as youth, older adults, communities of color, people with disabilities, people with limited English proficiency, and people who are unhoused) are often also vulnerable road users (the people on the road who are at greatest risk of being severely injured or killed in a collision because they have no outer shield, such as pedestrians, bicyclists, people using mobility devices, and scooter riders). Priority populations are more reliant on non-motorized modes of transportation and are more likely to live or travel in historically underinvested areas, meaning that their communities have received fewer resources and investments and have been left out of public processes and decisions that affect them. In the context of transportation planning, priority populations and historically underinvested areas have been the most negatively affected by a history of systemic discrimination in which policies, plans, and capital investments have resulted in inequitable transportation development. Examples of negative effects include the building of freeways directly through the middle of communities of color; lack of funding to build and maintain infrastructure for walking, biking, and public transportation; and lack of compliance with Americans with Disabilities Act (ADA) regulations that make transportation options accessible to people with disabilities.[20,21] All of these outcomes have contributed to dissolution of the social fabric of these neighborhoods; disconnected transportation networks; and unsafe environments for walking, rolling, and biking.

As jurisdictions develop their traffic safety strategies, the needs of priority populations in historically underinvested areas should be prioritized so that safety efforts benefit all communities, but especially those that have experienced the greatest adverse effects.
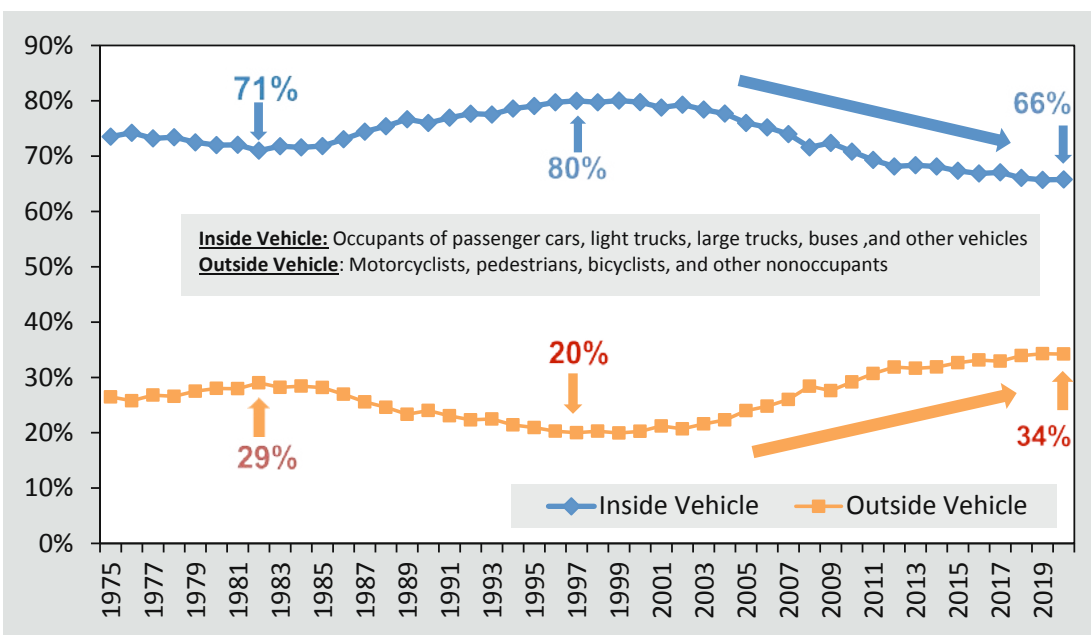
Building the Case for Vision Zero

Transportation is one of the most influential social determinants of health, affecting the extent to which people are able to live healthy and prosperous lives. The transportation system allows people to get to the places where they live, work, learn, and play, but not everyone has safe, affordable, and convenient transportation options to meet these daily needs. Safety − and perceptions of safety − in terms of both traffic safety and public safety influences people's decisions on whether and how they will travel to a destination. Perceived risk of being involved in a collision and the presence of supportive infrastructure and facilities − such as sidewalks, safe crossings, bike paths, and bike parking − play a role in which mode(s) people choose to use for their trips.[22-26]

Black, Indigenous, and other people of color (BIPOC) as well as other priority populations are the most affected by traffic safety issues and disparities in access to safe transportation options.[27] According to the 2021 report *Dangerous by Design*, in the period 2010-2019, 53,435 people were struck and killed while walking, and the number of pedestrians killed increased each year. During this period, deaths among motor vehicle occupants increased by 3.7%, while pedestrian deaths increased by 45%. The distribution of these collisions, controlled for differences in population and walking rates, showed that the collisions disproportionately affected older adults (age 75 years or more) and people of color, especially Black or African American people and American Indian or Alaska Native people. People also died at higher rates when walking in communities with low income (measured by median household income), which are less likely to have safe infrastructure for transportation than communities with high income.[9] In 2020 alone, there were 38,824 traffic fatalities, a 6.8% increase over 2019. Twenty percent of those fatalities were pedestrians, bicyclists, or other people who weren't occupants of the vehicle. Over the years, the proportion of fatalities among pedestrians, bicyclists, and other nonoccupants has increased, while the proportion of fatalities among occupants of vehicles (such as cars, trucks, and buses) has decreased (see Figure 1).[28]

Figure 1. Proportion of Fatalities Inside and Outside Vehicle, 1975-2020

Inside Vehicle: Occupants of passenger cars, light trucks, large trucks, buses, and other vehicles
Outside Vehicle: Motorcyclists, pedestrians, bicyclists, and other nonoccupants

Source: Fatality Analysis Reporting System 1975-2019 Final File, 2020 Annual Report File. In: Stewart T. *Overview of Motor Vehicle Crashes in 2020.* Report no. DOT HS 813 266. Washington, DC: National Highway Traffic Safety Administration, US Department of Transportation; 2022:7. crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813266.

Despite fewer cars on the road and less congestion during the early months of the COVID-19 pandemic, the fatality rate per 100 million vehicle miles travelled (VMT) in 2020 increased by 21% over 2019 and was the highest fatality rate since 2007. A number of states and cities reported higher instances of speeding – a fact that is consistent with recent and past data indicating that speeding is one of the leading causes of collisions and a determining factor in how severe the injuries resulting from a collision will be.[9] Preliminary data estimates indicate that traffic fatalities continued to rise in the first nine months of 2021.[29]

Local governments have many priorities and goals that they must balance, and sometimes priorities must shift during challenging times. Vision Zero can help local governments pursue other priorities besides traffic safety – for example, priorities related to health, equity, and climate change – by creating a built environment that facilitates and enables active transportation. Ensuring that community members have safe and equitable access to transportation is a crucial first step.

Vision Zero is only part of what is needed to achieve a comprehensive traffic safety strategy. Vision Zero policies must work in tandem and be integrated with other planning projects such as annual capital budgets; design standards; Complete Streets policies; municipal plans (e.g., comprehensive plans, sustainability plans, active transportation plans, racial equity plans); and community health needs assessments.

DATA & INFOGRAPHICS

For more national and state data and infographics, see the following resources:

- Dangerous by Design (Smart Growth America) – an annual report on traffic collisions and safety in the United States – is a good research resource that details the number of pedestrians who are struck and killed by cars; includes rankings of municipalities and states; and provides data mapping of dangerous streets.

- Governors Highway Safety Association (GHSA) – a nonprofit representing state and territorial highway safety offices that implement federal grant programs to address behavioral highway safety issues – publishes reports and data on a variety of behavioral highway safety issues.

- National Highway Traffic Safety Administration (NHTSA) – an agency within the US Department of Transportation – administers several safety programs and offers an array of tools, published research, and data collections addressing topics such as crashes.

- National Roadway Safety Strategy is the US Department of Transportation's comprehensive plan for reaching zero roadway fatalities. It provides guidance on the Safe System approach as well as research on existing problems and information on how road safety work intersects with other priority areas for the US Department of Transportation.

> ### 📖 VISION ZERO MESSAGING
>
> For more information on messaging and communications for Vision Zero, see the following resources:
>
> - "Distracted Pedestrians": Distracting from the Real Issues (Vision Zero Network) is a webinar that highlights research findings on misperceptions of distracted walking as a cause of traffic crashes.
>
> - Elevating Equity in Vision Zero Communications: A White Paper Framing the Challenges and Opportunities (Vision Zero Network) offers considerations and suggestions to help local agency partners (1) communicate effectively about how their Vision Zero efforts relate to equity and social justice and (2) use communications strategies to help ensure an equitable approach and equitable outcomes in their efforts.
>
> - From Victim-Blaming to Solutions: Online Toolkit for Changing the Narrative About Traffic Crashes (Pedal Love) provides research findings on how news coverage of traffic crashes involving people walking and biking affects support for safety improvements, plus strategies for changing the public narrative on traffic crashes and roadway safety.
>
> - Words Matter: Effective Vision Zero Messaging (Vision Zero Network) is a webinar on effective messaging that aligns with the Safe System approach.

2. Community Engagement

Collaborative community engagement ensures that the populations most affected by traffic collisions are involved in every stage of designing and implementing Vision Zero initiatives. Priority populations and vulnerable road users often lack political power and access to decision makers and thus are excluded from conversations and decisions that are likely to significantly affect them; and those same systems of structural discrimination result in increased traffic collisions. Without direct engagement with the communities that will be most affected by policies, decision makers and local government staff lack the necessary information to make evidence-based decisions that address the most pressing community priorities. Working to ensure more meaningful and equitable inclusion of priority populations and vulnerable road users results in more representative, equitable decision making. These groups are best suited to identify the traffic risks in their communities and any potential unintended consequences of proposed interventions and enforcement, thereby improving the likelihood of efficacy and equity if their input is incorporated into decisions, policies, and plans.

Collaborative community engagement ensures that the populations most affected by traffic collisions are involved in every stage of designing and implementing Vision Zero initiatives.

For example, vulnerable road users who reside, work, or make frequent visits in a specific area are best suited to offer insights on near misses that are often unreported through formal data collection methods such as police reports and hospital records. By participating in a Vision Zero advisory group (described in Chapter 4), residents can provide input on which issues are most pressing to them (e.g., lack of bike lanes, location of crosswalks, speeding vehicles) and therefore should be prioritized for mitigation. Involvement in an advisory group requires participants to commit time and resources, and organizers can support participation by reducing potential barriers in some of the ways shown in Table 1. Resident participation in advisory groups allows priority populations to engage in decision-making processes that identify proposed solutions and preferred methods of intervention – such as infrastructure design, education, or compliance – helping to ensure equity and community buy-in.

Table 1. Common Barriers to Public Engagement and Accommodations to Reduce Those Barriers

Barrier	Accommodations
Language isolation	• Provide translation at community events • Provide printed materials in the languages spoken in the relevant geographic area • Partner with organizations that serve various ethnic and cultural groups in the relevant geographic area
Employment obligations	• Conduct outreach events over an extended period or at multiple times during the day rather than at a single meeting or event • Vary the time of day and the day of the week for public input events • Show up and engage community members at well-attended community events that are already taking place in the relevant geographic area
Accessibility issues	• Hold meetings in buildings that meet ADA accessibility requirements • Provide printed materials, an American Sign Language interpreter, and/or captioning in multiple languages for people who are deaf or hard of hearing • Provide virtual meeting accommodations for people who are not able to attend in person or do not feel comfortable doing so
Familial obligations	• Provide child care that includes homework assistance • Provide meals
Loss of income or time	• Provide compensation (e.g., cash, gift cards, raffle prizes) for the time required to participate in a meeting or event
Limited transportation	• Ensure that meeting locations are accessible by transit and by sidewalk for people who are not arriving by car • Provide transit passes • Provide compensation for rideshare or taxi service, if needed
Limited literacy	• If printed materials are necessary, provide visual aids instead of text, if possible • Provide an ample number of staff members for people to talk to if they do not feel comfortable with reading materials
Limited access to technology	• Provide multiple, diverse opportunities for community members to engage and provide input or feedback, both in person and online • Provide instructions on how to use digital platforms (such as Zoom) at the beginning of meetings

It can be helpful to conceptualize community engagement as a continuum or spectrum that ranges from informing to empowering, as shown in the International Association for Public Participation's Spectrum of Public Participation. Community members have the least influence on decision making at the "inform" end of the spectrum and the most impact on decision making at the "empower" end of the spectrum. Planners and institutional leaders should strive for the level of community engagement that aligns with their goals, although it may not always be possible to reach that level.[30] For examples of strategies and considerations at each level of community engagement, see Table 3 on page 24 of The Planner's Playbook: A Community-Centered Approach to Improving Health & Equity.

Meaningful and continual community engagement is beneficial to Vision Zero in many ways:

- Broader support for projects
- Solutions that are effective and tailored to the community because they are based on the local knowledge and lived experiences of a diverse and representative group
- Improvement in relationships and trust between community members and governing organizations
- Better understanding of differing and sometimes conflicting values and priorities
- Better understanding of the equity implications and effects of policy decisions, especially those involving priority populations

STRATEGIES FOR COMMUNITY ENGAGEMENT

For more details on strategies and processes for continual and meaningful community engagement, see the following resources:

- Dignity Infused Community Engagement Strategy (Los Angeles Department of Transportation) describes how the City of Los Angeles approached community engagement for Vision Zero through a cross-sector, dignity-infused planning process.

- Long-Range Planning for Health, Equity & Prosperity: A Primer for Local Governments (ChangeLab Solutions) offers guidance on incorporating equity in long-range planning, community engagement, investment, and evaluation processes.

- The Planner's Playbook: A Community-Centered Approach to Improving Health & Equity (ChangeLab Solutions) provides practices, resources, concrete steps, and examples for local officials who want to engage community members in developing plans that disrupt patterns of structural disadvantage.

Strategies can be employed to ensure equity, transparency, and representation in all phases of Vision Zero (planning, implementation, funding, and evaluation). Various activities can be used to share information, garner feedback, collaborate to develop solutions or make decisions, and support community-driven priorities at each stage of planning and implementation. Such activities include community meetings, corridor assessments, surveys, focus groups, attendance at community events such as farmers markets, and use of issue-reporting interfaces such as SeeClickFix. Community engagement shouldn't start and end with a particular project or planning

process; rather, community engagement should be a continual process that builds trust between community members and local government over time. Here are some strategies for centering equity in a Vision Zero community engagement process:

Build relationships and partner with residents and community leaders who work with priority populations. During the planning process, direct outreach to community groups – such as pedestrian or bike advocacy groups, neighborhood groups, school districts, and groups that engage with priority populations or vulnerable road users – can solicit a balance of perspectives to inform Vision Zero planning and implementation. Planners in four cities that have implemented Vision Zero strategies – Portland, OR; Los Angeles, CA; Chicago, IL; and San Francisco, CA – all agreed that having multiple stakeholders from various perspectives that focus on racial equity is essential.[31]

Work to build trust with community members from priority populations. Conflict and unresolved tensions between government officials and transportation practitioners and the communities they serve may be present across a range of issues and topics. For example, government officials may advocate for stricter enforcement, while equity-focused stakeholders may have concerns about the disparate targeting of Black, Indigenous, and other people of color by law enforcement. It is imperative that the number of stakeholders and representatives from traditionally dominant groups be balanced by the number from priority populations, to ensure that the voices of community members don't get drowned out by dominant and more empowered representatives. Long-standing issues of community mistrust of local government or government officials due to past actions may need to be addressed; and therefore, community members may be hesitant to participate or fully engage in the process. Trust can be built – or rebuilt – by investing time and resources to strengthen relationships, work with trusted community groups and leaders on outreach efforts, conduct listening sessions, and compensate people for their time.

Remain accountable and accessible to community partners. Circle back to community members and partners to share how their input informed the strategies developed and decisions made. Reporting back in this way creates an opportunity to verify information, to ensure that community members' ideas have been accurately reflected, and to convey respect for community voices. Keeping up a continuing dialogue with community members and partners also helps to build trust and strengthen relationships for future Vision Zero efforts and other initiatives.

Long-standing issues of community mistrust of local government due to past actions may need to be addressed.

BUILDING COMMUNITY RELATIONSHIPS TO ADVANCE VISION ZERO

- Resident advisory councils consisting of recommended and vetted community leaders and community-based organizations (CBOs) should have the power to propose, lead, and evaluate engagement strategies based on their lived experiences. For example, the **Los Angeles Department of Transportation** (LADOT) trained and provided funding to residents in priority areas to lead Street Teams that gathered public input and conducted corridor walks to identify risks and concerns.[32] Funding community groups to lead engagement and residents to participate is an effective strategy to reduce barriers to participation.

- Time, expertise, knowledge, and work done by residents and CBOs needs to be valued and supported with fair and just compensation, to eliminate economic barriers to participation. For example, the **City of San Francisco** provides funding for a competitive grant program (approximately $180,000 annually) that allocates grants for seven CBOs to increase engagement on Vision Zero programs. One such organization was the Chinatown Community Development Center, which engaged with Mandarin-speaking seniors to conduct walk audits and coordinate a community-based marketing effort to promote Vision Zero measures to Mandarin-speaking people.[33]

Provide accessible engagement opportunities. Making community engagement accessible means that barriers to public participation are identified and accommodated in advance. If residents or community-based organizations are engaged at the beginning of the planning process, it will be easier to identify the barriers that are unique to different priority populations and devise strategies to overcome those barriers. Some common barriers and accommodations are listed in Table 1 on page 13.

3. Data Collection & Analysis

Vision Zero uses a data-driven approach to identifying systemic risk factors as well as priority areas for safety improvements; designing policies; and developing programs. Data can be about a specific corridor, intersection, or area, or about non-geographic trends (such as dangerous behaviors or traffic violations) that can be addressed through policy or program interventions. It is important to use accurate, current, and relevant data, when available, to identify and prioritize locations for Vision Zero interventions (e.g., high-injury intersections or corridors); to implement special considerations for vulnerable road users (e.g., longer crossing signal timing for people with limited mobility); to assess progress toward goals (e.g., progress on timelines or quantitative and qualitative metrics for SMARTIE goals); and to evaluate progress against relevant standards, policies, and laws.

Data collection and analysis is an ongoing process that should be conducted throughout the Vision Zero planning, implementation, and evaluation process. Diverse sources of data (both qualitative and quantitative, and representing different perspectives) with rich detail are fundamental to effective analysis, implementation, and evaluation. The types of data that are collected on crashes should answer the questions listed on the next page.[34] We have also included examples of data points as a starting point, although the lists are not comprehensive.

It is important to use accurate, current, and relevant data, when available, to identify and prioritize locations for Vision Zero interventions.

Data Collection: Questions to Ask & Examples of Data Points

Systems Level

1. What is the transportation infrastructure or environment at the location of the collisions? For example, which of the following items are present?

    a. Sidewalk

    b. Bus shelter

    c. Crosswalk

    d. Median

    e. Bulb-out

    f. Roundabout or traffic circle

    g. On-street parking

    h. Speed limit

    i. Traffic signal

    j. Stop sign

    k. Bike lane

2. At which locations are fatal and severe traffic collisions, as well as near misses, more likely to occur?

Behavior

3. What are the contributing behavioral factors in collisions?

    a. Distracted driving

    b. Excessive speed

    c. Impaired driving

    d. Failure to adhere to traffic signs and signals

    e. Use of safety devices (e.g., helmet, seat belt, car seat)

4. Are there patterns in the frequency of collisions? For example, do they vary according to any of the following factors?

    a. Time of day

    b. Mode of transportation

    c. Weather conditions

Collision Characteristics

5. What is the severity of collisions – i.e., what were the outcomes? (Refer to KABCO injury classification scales by state.[3])

    a. No injury

    b. Minor injury

    c. Severe injury

    d. Fatality

6. What are the demographic characteristics of the victims (e.g., age, race, gender, socioeconomic status, disability status)?

Sources of Data

Police departments

The main source of traffic collision data used in most Vision Zero and traffic safety planning efforts is crash report records from local police departments. These data may be the easiest to access because police departments often operate within the purview of municipal governments that also handle Vision Zero efforts. Police data usually provide characteristics of crashes such as location, contributing factors, time, mode(s), and type of vehicle(s) involved. Police data sources are often accessed through state-level aggregated databases. While these data also tend to lag, taking up to three years to be processed and made publicly available, police departments are still one of the most comprehensive and useful sources of collision data.

Hospitals & public health departments

When feasible, use of hospital and public health data can enhance and complement crash reports obtained from police departments. Due to privacy concerns and laws unique to certain jurisdictions, hospital records can sometimes be difficult to obtain. It is important that these data be presented only in aggregate, without any identifiable information that could be linked to an individual.

In San Francisco, the city's public health department leads efforts to gather more holistic data on traffic fatalities.[35] Hospital records provide greater detail and more accurate classification of the severity of injuries. Police officers at the scene of the collision do not always have the capacity or expertise to accurately assess the extent and severity of injuries. Using police records in conjunction with hospital records also gives a more accurate representation of collision frequency. It is estimated that police records miss approximately 28% of severe traffic injuries in San Francisco.[36]

Residents & community members

Feedback from the wider community can provide additional insights and details that are not possible to obtain from quantitative data obtained from police and hospital records. Collaborating with community leaders, nonprofits, or residents through community engagement activities or an advisory group can help identify traffic risks related to location and transportation environment but also those unique to the type of user and mode of transportation. Such collaboration can also help to corroborate quantitative data and maps, ensuring that they align with community knowledge. These data can be gathered by conducting corridor walk audits, workshops, or surveys.

Technology also plays an important role in the qualitative data collection process. For example, Street Story from the Safe Transportation Research and Education Center (SafeTREC) at the University of California, Berkeley,[37] is a tool that allows travelers to provide input about their overall transportation experiences, collisions, and near misses that is tied to a geographic location on a map.

Data Sharing

As discussed previously, using data from diverse sources is vital to the success of Vision Zero. Once data needs have been established (based on the questions to answer in the introductory section of Chapter 3) and potential data sources have been identified, a memorandum of understanding (MOU) or data-sharing arrangement with other agencies or organizations (such as police departments, hospitals, public health departments, or planning departments) may be necessary to establish expectations for the partnership. Setting up data-sharing agreements and the task of actually sharing the data can be time- and resource-intensive, and not all local governments may have the capacity to do so. However, as Vision Zero efforts gain more momentum and buy-in from decision makers and partners, data sharing may become more accessible.

MOUs & DATA-SHARING AGREEMENTS

- How to Draft Successful Memorandums of Understanding and Data-Sharing Agreements (Practical Playbook), adapted from a chapter in *The Practical Playbook II: Building Mulltisector Partnerships That Work,* walks the reader through the components of MOUs and data use agreements.

- The Intersector Toolkit: Tools for Cross-Sector Collaboration (The Intersector Project) is a guide on cross-sector collaboration that provides tools, guiding questions, and case studies. The Commit to Information Sharing section on page 22 offers guidance on data sharing.

As Vision Zero and other traffic safety efforts continue to progress, it may make sense for local governments to develop centralized, web-based, shared, and publicly accessible data systems to organize and share the data that are being collected as a result of their Vision Zero resolution and action plan. Centralized data systems provide ease in sharing data across various sources such as police departments, hospitals, public health departments, and other relevant data collection agencies in a timely manner. For example, the Transportation Injury Mapping System (TIMS), developed by SafeTREC at the University of California, Berkeley, is free to use and available online. The state of North Carolina has a statewide dashboard for sharing data on traffic collisions, injuries, and fatalities, to assist local communities with their Vision Zero plans. San Francisco has an online dashboard and mapping tool, TransBASE, which allows users to overlay collision data with other data such as infrastructure, transportation patterns, community amenities, types of businesses, and demographics.

Having data available to the public is also beneficial because it promotes transparency and allows professionals such as academics, engineers, and planners to participate in disaggregation and analysis of data. These professionals may analyze the data in ways that have not been thought of by the agencies that are leading Vision Zero efforts.

Some jurisdictions have established a process with multiple partners to further analyze and debrief traffic safety data in order to better understand the full picture of the data and discuss solutions. For example, in New York City (NYC), a task force (consisting of the Police Department [NYPD], Department of Transportation [DOT], Taxi and Limousine Commission [TLC], Department of Health and Mental Hygiene, Department of Citywide Administrative Services, Law Department, and Mayor's Office of Management and Budget) meets

biweekly to review fatality statistics and trends. Each month, a team from the Mayor's Office of Operations prepares a dashboard so that the task force can perform an in-depth analysis of fatalities by mode and by vehicle and compare the current year to the past year and a three-year average. The dashboard also shows agency activities such as enforcement (broken out by NYPD, DOT, and TLC); engineering improvements; outreach and education activities; and interventions with NYC drivers and vehicles. Looking at the data together allows the group to make course corrections if needed, facilitates inter-agency discussions, creates a space to reconcile any disagreements, and provides opportunities to collaborate and come up with new ideas.[38]

How to Use the Data: High-Injury Networks, Equity & Prioritization

Once data are collected and mapped, the spatial distribution of high-collision, high-injury, or severe-injury geographies or networks can be identified. The High-Injury Network – in conjunction with equity-focused datasets such as the distribution and concentration of priority populations or vulnerable road users – can be used to prioritize safety and enforcement interventions and improvements.

It is important to recognize that in many cases, not all streets are under the jurisdiction of the municipality or Vision Zero planning body. A number of arterial and state routes in urban areas fall under the jurisdiction of the state department of transportation; therefore, collaboration between municipal and state transportation planning agencies would be necessary in order to make improvements to state roads within municipal boundaries.

Municipalities use several data analysis tools, methodologies, and thresholds to identify their High-Injury Network; there is no standard method. Municipalities consider the data that are available

as well as their intended goals when developing an approach or methodology. Municipalities also consider input and feedback from priority populations. Here are some examples of how various municipalities identify High-Injury Networks and prioritize areas for investment and intervention:

- The City of **Los Angeles, CA,** identified corridors based on intersection scores (calculated as the sum of collisions, giving fatalities a higher weight). They also used a Health and Equity Index from the city's Health Atlas to identify burdened communities.[39]

- The City of **Atlanta, GA,** used GIS software to spatially sum up the number of fatalities and injuries within 25 feet of each roadway segment. They defined equitable target areas (ETAs) by concentrations of people with low income, people of color, and/or older people. If a roadway segment fell within an ETA, a score of 1 through 3 was assigned; otherwise, a score of 0 was used. The ETAs were used to give priority to traditionally underinvested communities.[39]

- The City and County of **San Francisco, CA,** supplemented police report data with hospital data to get a more accurate picture of injury outcomes and collisions that were unreported to police. This dataset was then mapped, and a geospatial algorithm was used to "corridorize" each block in the street network into overlapping quarter-mile sections. The highest-scoring sections (i.e., most injuries per mile) were selected using an injury per mile threshold, and these sections make up the High-Injury Network.[36]

Additional guidance on how to analyze crash data to identify High-Injury Networks can be found in Chapter 4 of Philadelphia Crash Analysis Standards & Recommendations by the Delaware Valley Regional Planning Commission and Recommendations for California Statewide Guidance on High Injury Networks led by the Southern California Association of Governments.

In summary, collected and analyzed data is used for the following activities:

1. Identify High-Injury Networks

2. Identify the distribution and concentration of priority populations and vulnerable road users

3. Understand the perspectives and priorities of community members

4. Identify contributing factors for collisions

5. Identify patterns of issues that need to be addressed holistically at a systems level

6. Select the most appropriate forms of intervention or improvements

7. Set short- and long-term goals

8. Identify performance metrics for evaluation

9. Create transparency and accountability to the public

IDENTIFYING HIGH-INJURY NETWORKS

- Philadelphia Crash Analysis Standards & Recommendations (Delaware Valley Regional Planning Commission) identifies best practices in the analysis and management of crash data by city departments.

- Recommendations for California Statewide Guidance on High Injury Networks, led by the Southern California Association of Governments, summarizes the methodologies used by various city, county, and metropolitan planning organizations to identify High-Injury Networks (HINs) and makes recommendations for statewide guidance on a definition of and methodology for identifying HINs. The report also includes a variety of approaches for addressing speed in High-Injury Networks.

4. Task Force & Advisory Group

Use of a task force and an advisory group is outlined in our Vision Zero model resolution. Task forces and advisory groups are used to help guide development and implementation of a Vision Zero action plan.

A task force is responsible for developing, implementing, and evaluating a jurisdiction's Vision Zero action plan. Typically, a task force includes agency and department staff and leaders from across a jurisdictional government – from agencies such as planning departments, city attorney offices, local school districts, police departments, and emergency response. This cross-sector approach to Vision Zero is needed because ensuring safe streets is not solely the responsibility of transportation engineers or the police but demands a concerted all-of-government approach. Different communities have taken different approaches to creating a Vision Zero task force, depending on the needs of their community.

Some communities have created an advisory group in addition to their task force, to provide community input into the development and implementation of their Vision Zero action plan. Advisory groups are typically made up of representatives from community-based organizations, active transportation organizations, organizations representing people with disabilities, and regional transit agencies. A Vision Zero resolution can be helpful in providing more detailed instructions related to a task force or advisory group – such as how to determine the members of the task force; the task force's roles and responsibilities; and how the task force should approach community engagement.

A cross-sector approach to Vision Zero is needed because ensuring safe streets demands a concerted all-of-government approach.

Roles & Responsibilities

The roles and responsibilities of task forces and advisory groups vary across jurisdictions. The purpose of this section is to outline different ways that jurisdictions can convene task forces and advisory groups pursuant to the model policy. This section also offers examples from different municipalities. Roles and responsibilities can be explicitly addressed in the Vision Zero resolution[40] and frequently include development of the action plan; data collection and analysis; and oversight of implementation, evaluation, and reporting. The model resolution provides detailed recommendations for the roles and responsibilities of task forces and advisory groups (e.g., development of the action plan) and timelines for their responsibilities.

Task Forces

In addition to developing the Vision Zero action plan, another common role for the task force is data collection and analysis. For example, as part of its Vision Zero executive order, the City of Los Angeles specified that their Vision Zero task force (referred to as a *steering committee*) is responsible for developing uniform processes for evaluation as well as quarterly reporting on Vision Zero.[41] While some resolutions provide more general direction on data analysis (e.g., merely establishing a commitment to track progress),[40] providing time frames and guidance (e.g., how frequently data should be collected and reported) can be helpful and can lead to more successful implementation.

Task forces are also commonly responsible for overseeing implementation of the Vision Zero action plan. Such oversight might involve convening regular meetings to track progress, analyzing collected data to provide recommendations for policy innovations, and reporting back on implementation of the action plan. For example, the City of San Jose holds task force meetings quarterly, posts minutes and presentations from the meetings online, and invites members of the community to participate.[42] It can also be helpful for the task force to meet more frequently when it is first formed, to ensure ongoing commitment and participation from its members. For example, New York City's Vision Zero Task Force began by meeting twice a month.[43] More frequent meetings can help ensure accountability and aid quick development of policy priorities. Lastly, in large jurisdictions, policymakers may want to consider creating subsidiary working groups to focus on specific topics such as data and mapping, reporting and evaluation, and equity.

Advisory Groups

In addition to creating a task force, some local governments have established advisory groups. For example, in Minneapolis, the Vision Zero resolution establishes a task force but also gives the task force the authority to create an advisory group.[44] The resolution further suggests that the advisory group could be made up of community members as a way to increase community engagement.[44] In this circumstance, the advisory group could help identify priority needs based on what community members are most concerned about. For more information on community engagement, please see Chapter 2.

Determining Members & Participation

The makeup of the task force and the advisory group can be critical to the success of Vision Zero initiatives and the use of community engagement to direct policy priorities. Many existing Vision Zero resolutions provide directives on who must be included on the task force or advisory group, and creation of both an interdepartmental task force and an advisory group is included in our model resolution.

If a local government decides to have both a task force and an advisory group, the task force members should be focused on implementation, and the advisory group members should be more externally focused on community engagement. In this scenario, we recommend that community representatives serve on the advisory group rather than the task force. If a local government decides to have only a task force (and not an advisory group), we recommend that the task force involve multisector collaboration as well as engagement of community members. For example, the City of Houston's executive order on Vision Zero requires that the task force include the communities that will be affected by Vision Zero policies.[45] Houston's policy also requires that the task force include street safety advocates and nonprofits. Inclusion of these types of community representatives can help build community trust in policies as well as make the policies more effective and ensure that a specific community's needs are prioritized.

Many Vision Zero resolutions specify departments and agencies that must be included on the task force. For example, Kansas City, MO, specifies that the task force will include representatives of the public works department, the city planning and development department, the office of the city manager, the parks and recreation department, the neighborhoods and housing services department, the water services department, the fire department, the police department, and any other relevant departments, external agencies, and committees.[46] Having a multisector task force that also includes community engagement can be critical in developing effective Vision Zero policies. Community engagement and the collaboration of departments that might not typically address transportation issues — such as public health departments — can aid community buy-in, development of more effective policies, and detection of emerging transportation or enforcement issues that might affect a community. While the composition of a jurisdiction's task force and advisory group will depend on the unique characteristics of that community, including partners beyond government and transportation agencies can be key to successful implementation.

Table 2 summarizes what is outlined in the model resolution with regard to the purpose, composition, roles and responsibilities, and interaction between the task force and advisory group.

Table 2. Task Forces and Advisory Groups: How Do They Differ?

|	Task Force	Advisory Group
Purpose	Develop, implement, and evaluate the action plan, ensuring coordination across all relevant departments, agencies, and stakeholders	Advise the task force on Vision Zero issues, engaging with community members to gather their input and feedback for the task force throughout the process of developing and implementing the action plan

Composition	• Representatives from municipal departments, such as
	  • Transportation
	  • Public works
	  • Fire
	  • Police
	  • Emergency response
	  • Planning
	  • Health
	  • School district
	  • City attorney
	  • General services
	  • Office of equity
	  • Bicycle, pedestrian, multi-modal, and other mobility- and disability-related departments
		• Community members who will be affected by Vision Zero strategies
		• Representatives from stakeholder groups, such as
		  • Active transportation organizations representing pedestrians, bicyclists, and transit riders
		  • Organization(s) representing older people
		  • Organization(s) representing people with disabilities
		  • Neighborhood or community-based organization(s) representing historically underinvested areas and areas with a substantial concentration of High-Injury Networks
		  • Organization(s) representing commercial transportation workers such as taxi drivers, truck drivers, and delivery bicyclists as well as companies with freight-related needs
		  • Local and/or regional transportation agency
		  • School district
		  • City attorney's office
		  • Police department or sheriff's office

Roles and responsibilities	• Develop action plan • Present action plan to mayor and city council • Convene meetings regularly to check in on progress of action plan • Collect and analyze data • Oversee implementation and evaluation of action plan • Coordinate existing safety initiatives (e.g., pedestrian and bike safety) across departments • Revise action plan as needed • Report to the public on progress of action plan • Maintain public web page to share data and updates and solicit feedback	• Consult with community members about their concerns, priorities, and goals on an ongoing basis, not just during initial policy development • Collaborate with the community and gather feedback from community members and stakeholders in order to communicate this information to the task force • Work with the community to identify emerging issues or address existing problems • Empower community members to address issues that matter to them by sharing decision-making responsibilities
Interaction between task force and advisory group	• The task force consults the advisory group throughout each stage of Vision Zero: action plan development, action plan implementation, evaluation, and reporting. • The advisory group provides input, feedback, and advice (gathered from community members and stakeholders) to the task force throughout each stage of Vision Zero: action plan development, action plan implementation, evaluation, and reporting.	

5. Action Plan

The action plan is an important planning document that creates a framework and a comprehensive strategy for achieving Vision Zero goals, as well as ensuring accountability and coordination among government agencies and departments and other stakeholders. While the structure and content of action plans can vary and should be customized to fit the needs of the community, this section of the toolkit is meant to provide guidance on the key components that will aid equitable and successful implementation of a Vision Zero action plan.

The model resolution stipulates the following:

- A set of guiding principles that establish the core values that drive the approach to this work
- The elements of an action plan, which outlines the types of strategies that will be carried out to achieve Vision Zero goals

This section provides an overview of the action plan components laid out in the model policy, as well as additional considerations, including a template for a fair process checklist. Use of this checklist will help ensure that equity, community engagement, and data are considered and addressed in each strategy of the action plan.

This section of the toolkit is meant to provide guidance on the key components that will aid equitable and successful implementation of a Vision Zero action plan.
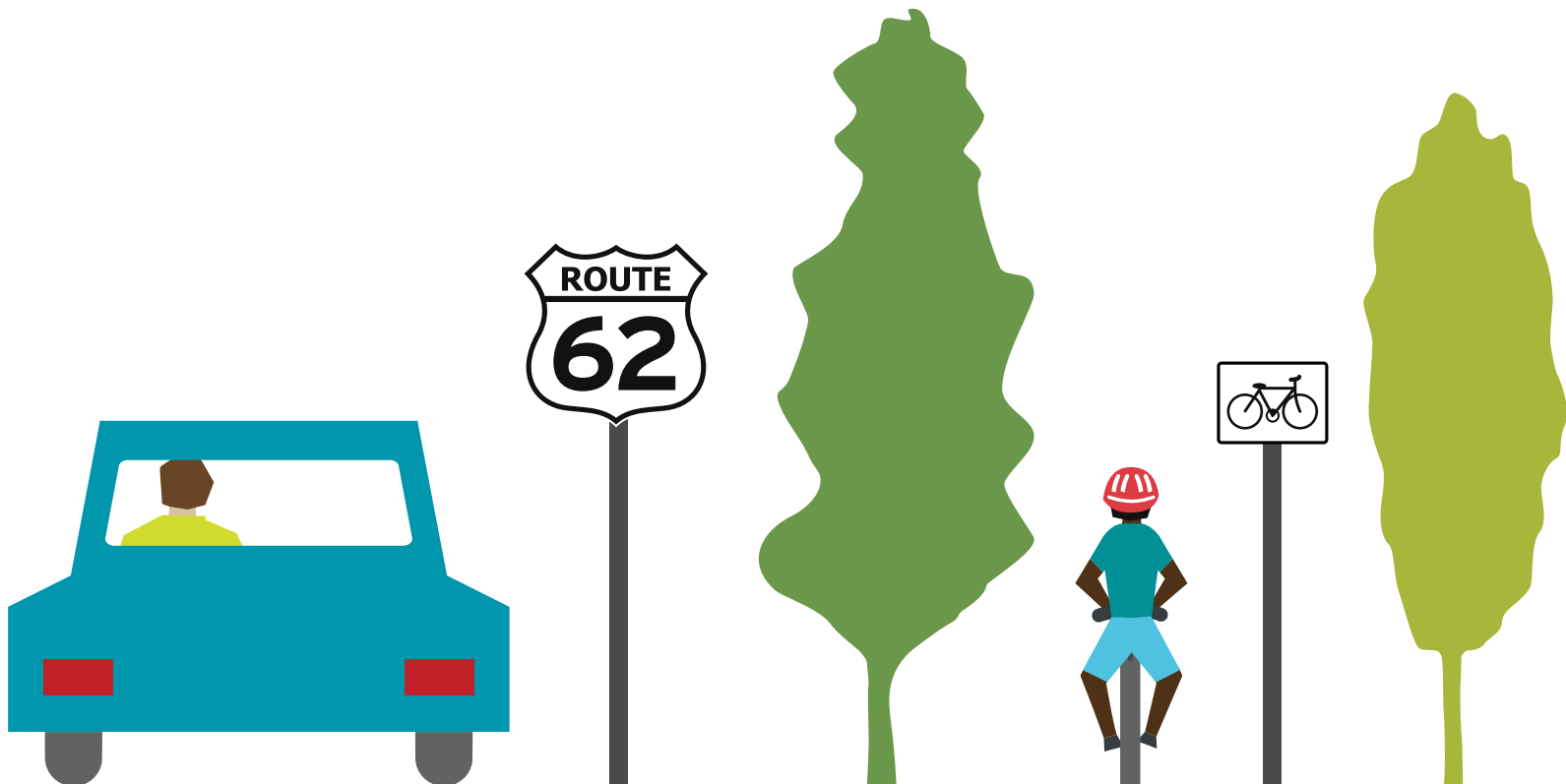
Guiding Principles

Guiding principles set the framework and values that the partners involved will apply to all the steps in developing the Vision Zero strategies and implementing the plan; thus, it is important that community members and stakeholders are engaged in the process of developing the guiding principles. The task force and advisory group can act as liaisons between the community and the partners involved, to inform the development of the guiding principles. This communication can help government agencies build trust with community groups that are often not included in these discussions, facilitating buy-in early in the planning process.

Three example guiding principles are included in the model resolution:

1. Human life shall be prioritized over ease of movement for motor vehicles.

2. People inevitably make mistakes, but these mistakes should not result in death or severe injury; therefore, transportation systems are designed to anticipate these errors so that all transportation users can function safely within the system.

3. It is unacceptable for any one group to suffer disproportionate effects of traffic collisions based on race, age, ability, or income.

These guiding principles can be used as a starting point, and jurisdictions may choose to adapt them or develop completely new ones based on their community's needs and priorities. For example, the Vision Zero resolution for Sacramento, CA, states, "Actions towards Vision Zero will be a comprehensive, collaborative, and equitable approach through engineering, education and culture change, and traffic enforcement."[40]

CREATING VISION ZERO ACTION PLANS

For additional guidance on developing the core elements and guiding principles for an action plan, refer to these resources:

- Core Elements for Vision Zero Communities (Vision Zero Network) outlines 10 core elements of Vision Zero, addressing topics such as data collection, strategic planning, equity, community engagement, and enforcement.

- Guide to Developing a Vision Zero Plan (Collaborative Sciences Center for Road Safety) describes the major steps in developing an action plan – for example, eliciting public participation, analyzing current conditions, developing evidence-based metrics, developing plan goals, and evaluating implementation progress.

- Moving from Vision to Action: Fundamental Principles, Policies & Practices to Advance Vision Zero in the U.S. (Vision Zero Network) is an extensive guide to building a strong Vision Zero approach, including commitments and priorities.

Action Plan Elements

The specific elements and strategies in a Vision Zero action plan should be informed by data, community input, and current and potential future plans and policies. Our model resolution provides guidance on the types of elements and strategies that, together, constitute a comprehensive, equitable action plan. The list of strategies in this section is not meant to be exhaustive, and some of the strategies may overlap across multiple elements. In our model resolution, we have categorized the action plan elements according to four key aspects that align with the Safe System

approach (speed, street design, culture, and collaboration), as well as provided guidance to ensure that equity is integrated throughout the planning process and outcomes.

Safe speed

The safe speed element focuses on managing vehicle speeds for the safety of all road users. Speed is one of the top causes of collisions and has the most consequential effect on the injury or fatality outcomes of the people involved. It is well understood that the likelihood of a pedestrian or bicyclist surviving a collision with a vehicle increases exponentially as speed decreases.[47,48]

Every Vision Zero action plan should take measures to ensure safe speeds that protect the most vulnerable road users through engineering and design strategies, policies (such as how speeds are set and enforced and how vehicles are designed), or education and awareness campaigns. Although strategies to manage speed overlap with the other elements described here, we have elevated speed as a separate element because of its crucial role in traffic safety.

Strategies to promote and maintain safe speeds include re-designing streets for slower travel, adding traffic-calming measures, lowering speed limits, conducting educational campaigns to change culture, and enforcing traffic laws. Trade-offs and potential negative or inequitable outcomes should be considered for all strategies. Any strategies in the action plan that are related to enforcement should include measures to ensure that the strategy will not create or exacerbate racial disparities. See Chapter 6 of this toolkit for more information and guidance on equitable enforcement strategies.

SPEED MANAGEMENT

- City Limits (National Association of City Transportation Officials) provides guidance on using the Safe System approach to set speed limits on urban streets.
- Managing Speed for Safety (Vision Zero Network) is a web page that discusses the rationale for speed management and provides links to resources.
- Speed Management for Safety resource hub (Institute of Transportation Engineers) is a website for transportation professionals that is continually updated with links to articles, case studies, and webinars, and it also serves as a community portal for updates and networking.
- Speed Management Safety resources (Federal Highway Administration) provides links to materials on speed limits, traffic calming, and related topics.
- Speed management web page (Institute for Highway Safety; Highway Loss Data Institute) includes research, statistics, and links to literature and studies on speed.

Safe streets

The safe streets element focuses on designing streets for safety first, providing both greater access and greater protection for vulnerable road users through strategies that are not directly focused on speed but that might support speed management strategies. Engineering and design interventions have been well researched and have proven effective in changing travel behavior as well as accounting for human errors that might occur while someone is walking, rolling, biking, or driving.

Strategies for the safe streets element include physical infrastructure improvements such as crossing improvements, traffic signals, sidewalks,

and bike lanes. Safe streets strategies can also include policies that help to create more welcoming and balanced conditions for people traveling by non-motorized modes of transportation – for example, implementing Complete Streets, reducing parking requirements, daylighting intersections, and shifting traffic measurement standards from Level of Service (LOS) to Vehicle Miles Traveled (VMT) or Multi-modal Level of Service (MLOS). Basing design and planning decisions on VMT or MLOS metrics rather than LOS metrics places non-motorized modes of transportation on an equal footing with automobiles in efforts to avoid traditional car-centric development and land use patterns.

Several factors should be considered when determining what types of safe streets strategies to use, to ensure that the benefits are equitably experienced. Safe streets strategies can include some of these actions:

- Consider data on where serious injuries and fatal collisions have historically occurred the most and why, especially for people walking and biking

- Identify areas that have historically received less investment in infrastructure development and/or maintenance

- Prioritize areas where vulnerable road users travel the most – such as routes to schools and workplaces; transit centers; commercial corridors; and parks

- Align and coordinate strategies with other plans and policies so that efforts can be streamlined and, eventually, institutionalized in long-term strategies

- Support strategies with education and outreach

STREET DESIGN

- Crash Modification Factors Clearinghouse website is a searchable database of countermeasures to decrease collisions that provides crash modification factors (the expected number of crashes after implementing a countermeasure on a road or intersection).

- Optimizing Large Vehicles for Urban Environments (National Association of City Transportation Officials) encompasses two documents (*Advanced Driver Assistance Systems* and *Downsizing*) on redesigning large trucks and vehicles so that they are more compatible with safe street design.

- Proven Safety Countermeasures (Federal Highway Administration) is a collection of countermeasures and strategies that are effective in reducing roadway fatalities and serious injuries.

- A Systemic Approach to Safety – Using Risk to Drive Action (Federal Highway Administration) is a website with resources and case studies on using a systemic safety approach to evaluate risk across an entire roadway system and identify strategies to implement systemwide.

- Transit Street Design Guide (National Association of City Transportation Officials) provides resources and case studies for designing transit streets, covering topics such as transit system strategies, ways to create accessible paths, different types of public transit stop designs, and transitways.

- Urban Bikeway Design Guide (National Association of City Transportation Officials) offers resources and case studies for designing bikeways, covering topics such as bikeway signage, bicycle signals, and different types of bike lanes.

- Urban Street Design Guide (National Association of City Transportation Officials) is a toolkit that provides resources and case studies for designing streets, including coverage of topics such as intersections, street design elements, speed reduction mechanisms, and interim design strategies.

Safety culture

The safety culture element focuses on strategies that empower community members to take community action to advance Vision Zero goals and strategies, promote a culture of transportation safety, and change the hearts and minds of elected officials and decision makers in favor of making bold institutional changes that prioritize safety. Road safety is a shared responsibility, and everyone (including community members, planners, and elected officials) has a role to play in creating an environment where safety is a social norm that is prioritized.

Safety culture and community engagement are closely linked. As discussed in the Chapter 2, some communities have historically been left out of planning and decision-making processes. Trust might need to be built — or rebuilt — between community members and local government as part of a Vision Zero action plan to better tailor strategies to a community's needs.

Strategies to create a culture of safety might include education and awareness campaigns, driver education, Safe Routes to School or other youth-oriented programs, messaging work, and media pieces. Local transportation departments can also adopt "pedestrian first," "bicycle first," or "transit first" policies that prioritize the movement of people walking, biking, rolling, or taking transit over the movement of cars in transportation planning decisions. Safety culture strategies also provide an opportunity for agencies to lead by example — for instance, by instituting driver safety training and pledges for users of city vehicles.

CREATING SAFETY CULTURE

- Principles of Mobility Justice (The Untokening) discusses principles of mobility justice that communities may want to consider when developing a Vision Zero policy — such as removing barriers to justice and the value of community voices.

- The Traffic Safety Culture Development Process: How to Implement a Safety Culture Effort in Your Community (Toward Zero Deaths) outlines steps for developing a safety culture program and resources for each step.

Safety collaboration

The safety collaboration element focuses on collaborating across government agencies, transit agencies, school districts, community organizations, and other partners on safety efforts. The transportation planning and engineering fields have traditionally been siloed, even though transportation affects many aspects of people's lives. Vision Zero requires a multidisciplinary approach and can be more effective and efficient when agencies coordinate. For example, planners and engineers bring technical expertise on street design and countermeasures to reduce the risk of collisions. Transit agencies and school districts bring insight into coordinating services and programs. Public health professionals can help to provide and analyze data in order to tell a more comprehensive story. Community-based organizations can help bridge relationships, lead advocacy efforts, and leverage efforts that they and the general public are already interested in or are working on.

Strategies for safety collaboration might include integrating Vision Zero strategies into internal or public-facing policies and plans; sharing data; coordinating community engagement and outreach efforts with others; prioritizing funding for roadway safety improvements; or coordinating with state and federal agencies that have jurisdiction over the roads in an area.[i] Collaborating in a more integrated way might require agencies and organizations to change their internal structure to allow these activities to happen. A Vision Zero task force and advisory group can help to bridge these connections and hold everyone accountable.

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i Cities should collaborate with state and federal highway or transportation agencies, given that cities might not have jurisdiction to implement road safety improvements on a significant percentage (up to 30 percent) of their most dangerous roads. (Total road mileage and travel by functional system - 2000. Federal Highway Administration, US Department of Transportation website: fhwa.dot.gov/ohim/onh00/pie3.htm. Undated.)

COLLABORATION

- Bicycles, Pedestrians and Micromobility (Governors Highway Safety Association) is an issue brief that addresses how cities are incorporating the use of micromobility programs (e.g., electric scooter rentals) into their infrastructure.
- Centering Safety at Metropolitan Planning Organizations (Vision Zero Network) offers recommendations for centering safety in metropolitan planning organizations, along with examples of cities that have adopted each recommendation.
- The Central Role of Public Health in Vision Zero (Vision Zero Network) is a case study that examines three cities and the role of public health tools (e.g., epidemiology) in development of Vision Zero strategies.

Additional considerations
Equity

While equity is not a stand-alone element identified in our model resolution, equity should be infused through every step and every decision of a Vision Zero action plan. It will take an intentional effort to redress racial disparities that have been created through a legacy of disinvestment and policies that resulted in increased traffic collisions in priority communities.

Strategies to ensure that racial equity and equity for other populations are at the forefront of Vision Zero include prioritizing investments in high-injury corridors; disaggregating data by race in order to understand trends and disparities; conducting meaningful engagement with affected communities; and partnering with community-based organizations to determine priorities as well as provide input for ongoing evaluation of a policy.

INTEGRATING EQUITY INTO VISION ZERO POLICIES & PLANS

- Equity Strategies for Practitioners (Vision Zero Network) is a case study that includes equity tips for practitioners working on Vision Zero policy as well as examples and discussions of issues such as enforcement and data collection.

- Untokening Mobility: Beyond Pavement, Paint and Place (The Untokening) is a report that discusses how transportation policy and resources affect bicyclists and pedestrians and how different policies can be a tool for improving outcomes for BIPOC communities, communities with low income, and other communities.

- Vision Incomplete (The Five D's) (People for Mobility Justice), a web page from an organization that works on mobility justice issues in biking, discusses five factors that communities may want to consider when developing Vision Zero policies.

- Vision Zero: A Health Equity Road Map for Getting to Zero in Every Community (Prevention Institute) is a policy brief with recommendations for advancing health equity through Vision Zero policies; it discusses data collection, community engagement, and public investment in communities most affected by traffic-related harm and death.

Fair Process Checklist

The model resolution outlines procedural elements (i.e., equity, community engagement, data-driven decisions) that should guide the process of developing a Vision Zero action plan. To help jurisdictions incorporate these elements, we developed our Fair Process Checklist. The purpose of this checklist is to ensure that equity, community engagement, and data-driven decision making are an integral part of the strategy development and prioritization process by explicitly requiring municipalities to identify equity implications, community engagement steps, and data that will be used for each strategy identified in their action plan. On p. 47, you will find a template for the checklist that can be used as a starting point and adapted as needed. We have provided two example entries in Table 3 to demonstrate how to use the checklist.

Table 3. Fair Process Checklist: Example

Fill in this worksheet for each goal and strategy in your Vision Zero Action Plan.

Goal	Strategy	Equity Implications	Community Engagement Strategy	Data Metrics
Example: Reduce vehicle speeds	Implement changes to traffic signals to support safe speeds and updated speed limits	Potential for increase in traffic citations for people living in the area	Hold community meetings in affected neighborhoods to solicit feedback, gather ideas for how the community wants compliance efforts to work, and address concerns	• Vehicle speeds • Traffic violations along the corridor, disaggregated by race, if possible
Example: Build safety culture	Carry out an education campaign about safe driving behaviors	Potential need for translation and interpretation of materials as well as translation services during community engagement sessions	Partner with and fund community organizations and trusted community leaders to share information and support engagement and outreach	• Number of materials used or downloaded • Number of meetings held
[Fill in a goal]	*[Fill in a strategy]*	*[Fill in equity implications]*	*[Fill in community engagement strategies]*	*[Fill in data metrics to use]*

📖 EQUITY AUDIT TOOLS

We have listed some equity audit tools that jurisdictions have developed to assess equity considerations as they plan and implement projects, programs, and policies. Although they are not specifically tailored for Vision Zero, they can be applied to Vision Zero work or adapted for it.

- Equity Toolkit: Decision Support Tool (City of Portland Bureau of Planning and Sustainability) is a discussion guide to support team conversations and help integrate an equity analysis into the scoping, design, implementation, and evaluation phases of a project. The toolkit covers racial equity analysis, stakeholder power analysis, community engagement, communications, budgeting, data collection, evaluation, and ongoing decision making.

- Racial Equity Impact Analysis (City of Oakland) is a worksheet with questions to help teams address issues such as identifying racial equity outcomes; gathering and analyzing data on impacts; identifying and engaging stakeholders; identifying and filling equity gaps; implementation; and evaluation and accountability.

- Racial Equity Toolkit: An Opportunity to Operationalize Equity (Government Alliance on Race & Equity) provides guidance for answering a set of questions on proposal, data, community engagement, analysis and strategies, implementation, and accountability and communication. The toolkit also includes examples of how Seattle, WA; Multnomah County, OR; and Madison, WI, have implemented racial equity tools.

- Transportation Equity Toolkit (Center for Urban Transportation Research) includes a policy brief, toolkit, audit tool, scorecard, and user guide.

6. Enforcement

An important factor in the development of Vision Zero strategies is how they will be enforced or how to ensure that people will comply with traffic safety laws. Although traditional enforcement strategies are intended to decrease unsafe driving behaviors through police enforcement of speed limits and other traffic safety measures, police enforcement can present challenges for communities as local governments work to develop policies that decrease traffic-related harm without exacerbating inequities in the communities most affected by those harms. As a result of growing national attention on racial profiling and police tactics used in routine traffic stops, many jurisdictions are grappling with potential effects and consequences of traditional traffic enforcement – such as increased harassment of BIPOC residents, risk of injury or death for priority communities, cumulative negative effects of fine and fee structures related to traffic tickets, and increased interactions with the criminal justice system – that can lead to negative health outcomes. While there is no simple solution that fits all communities, this section will identify some of the challenges of traditional enforcement, discuss the concept of equitable enforcement, and provide some examples of alternatives to enforcement that strive to increase compliance with traffic laws while minimizing potential harms of enforcement.

As a result of growing national attention on racial profiling and police tactics used in routine traffic stops, many jurisdictions are grappling with potential effects and consequences of traditional traffic enforcement.

Traditional Enforcement

Traditional methods of enforcement include the following:

- **Routine traffic stops.** Traffic stops are the most common interactions between police officers and the public.[49] However, research has demonstrated that police interactions that may result from enforcement of Vision Zero policies will inequitably affect BIPOC communities and individuals. According to a policy brief by the Public Policy Institute of California, based on 2019 data from California's 15 largest law enforcement agencies, Black Californians experienced 16% of law enforcement stops while constituting only 7% of the state's population.[50] Further, not only might Black residents be more likely to have increased contact with law enforcement due to traffic enforcement, but racialized enforcement of traffic laws can result in pretextual stops where officers use minor traffic stops (i.e., expired registration, tinted windows) to run background checks and probe for further crimes, even if they are completely unrelated to why the driver was initially stopped.[49,51] Pretextual stops can result in greater harm. For example, Black residents are twice as likely as white residents to have their vehicle searched when stopped and are almost twice as likely to be booked into jail.[50] Additionally, routine traffic stops can escalate into deadly encounters. A 2015 study found that young Black men were nine times more likely than other Americans to be killed by police.[52] Latino men and American Indian/Alaska Native men also have an increased risk of being killed by police.[53] As a result, communities are considering different approaches to enforcement in order to make these strategies more equitable and decrease potential negative effects.

- **Fines and fees.** When local and state governments issue fines and fees associated with traffic stops or parking tickets, these penalties can have a disparate impact on BIPOC communities and communities with low income.[11] In 2017, the US Commission on Civil Rights found that a vast majority of low-level fines are traffic-related and that in addition to the cost of the fine, individuals may also be charged user fees or court administration fees.[11] Individuals who are unable to pay the fine and related fees can accumulate debt that affects their credit, interferes with their ability to obtain a driver's license, and, in some cases, leads to court involvement.[11] Research has also shown that fine and fee structures most heavily affect people of color and people with low income and that the majority of violations were issued to people in the poorest neighborhoods, where residents are disproportionately Black and Latino.[11] For example, a six-year study in Minneapolis found that although Black people make up only 18% of the city's population, 48% of individuals who were cited or arrested in bike-related incidents were Black.[54]

Equitable Enforcement

Equitable enforcement is a process of ensuring compliance with law and policy that considers and minimizes harms to underserved communities.[55] An equitable enforcement approach means considering equity both at the level of the public entity's overall enforcement strategy and at the level of individual enforcement actions. Equitable enforcement also means considering equity at all stages of enforcement, from determining when to undertake an enforcement action — and against whom — to deciding which enforcement tools to use. For example, when developing an enforcement strategy, municipalities may choose an emerging method, such as automated speed enforcement, or implement self-enforcing streets[ii] through investments in infrastructure and street design.

Another way of considering equitable enforcement is by examining its opposite: inequitable enforcement. The racial disparities at every stage of the criminal justice system[56] are caused in large part by inequitable overenforcement. As mentioned earlier, data show that people of color and residents who have low income are disproportionately affected by fees and fines for low-level offenses like traffic violations.[11,57,58] An equitable approach to traffic enforcement would consider the effect of debt resulting from traffic fines on individuals who have low income and would consider alternative measures (e.g., payment plans and low- or no-cost alternatives such as workforce development programs[11,57]). An equitable approach would also consider whether the distribution of law enforcement officers among neighborhoods is motivated by, for example, racial bias.

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ii "A self-enforcing road, also called a 'self-explaining roadway,' is a roadway that is planned and designed to encourage drivers to select operating speeds consistent with the posted speed limit." (Donnell E, Kersavage K, Tierney LF. *Self-Enforcing Roadways: A Guidance Report.* Publication no. FHWA-HRT-17-098. McLean, VA: Turner-Fairbank Research Center, Federal Highway Administration, US Department of Transportation; 2018. fhwa. dot.gov/publications/research/safety/17098/17098.pdf.)

UNDERENFORCEMENT & OVERENFORCEMENT

While some laws are overenforced in priority communities, laws that protect these communities from threats to their health and economic security are frequently underenforced. Public Rights Project — a national nonprofit that seeks to empower state and local governments to proactively enforce their residents' legal rights — conducted a national survey on corporate abuse and found that 54% of Americans had experienced one or more incidents of wage theft, predatory lending, predatory debt collection, unsafe rental housing conditions, or health problems due to pollution created by a business within the past ten years.[59] Further, some individuals who experience underenforcement of certain laws designed to protect them may also experience overenforcement of other laws, which can exacerbate inequities. For example, if a worker with low income is experiencing wage theft and the laws prohibiting wage theft are underenforced, this underenforcement might affect that worker's financial stability. As discussed earlier, this same individual may be more likely to experience overenforcement of traffic laws, and their loss of wages due to the underenforcement of laws against wage theft may affect their ability to pay fines related to traffic violations. Thus, it is important for communities to consider enforcement at every stage of policy development and to develop enforcement strategies that fit their community's needs. As communities and local governments struggle with how to address enforcement — for example, police involvement — in ways that do not lead to additional harm, active and ongoing community engagement can help local governments develop policies that are tailored to be effective in the communities they serve.

As more communities work to address traffic fatalities through Vision Zero and other policies, local jurisdictions have tried a variety of approaches. For example, prior to establishing a Vision Zero program, Washington, DC, created an automated enforcement system for speeding and stops at red lights.[60] The city used data to assess where traffic-related harm was happening and the types of traffic violations that could be most harmful. As a result of this analysis, they identified speeding, running red lights, and running stop signs as priorities.[61]

An automated system may provide more consistent enforcement, reducing the most dangerous behaviors without the presence of law enforcement. For example, a 2016 study found that after the installation of automated speed cameras in Montgomery County, MD, drivers were 62% less likely to drive more than 10 miles above the speed limit.[62,63]

However, despite some of the benefits of equitable enforcement that automated systems may provide, some groups have expressed concern that automated enforcement can have negative consequences, such as incorrect ticketing of drivers due to faulty technology or the creation of perverse financial incentive structures.[62] For example, there has been some concern that speed cameras could create payment structures that lead to overenforcement, as has been experienced in some jurisdictions with red light cameras.[64] The location of automated enforcement systems also has equity implications; if automated systems are located primarily in BIPOC communities or communities with low income, it is likely that people in those communities will be ticketed at disproportionate rates.

To avoid problems caused by unaffordable fines, some local jurisdictions have sought to implement speed cameras with a relatively low administrative penalty that can be converted to community service for residents with low income.[65,66]

All of these examples make clear that when considering the use of automated enforcement, local governments need to engage the affected communities to help them consider potential implications or consequences.

USING CAMERAS FOR ENFORCEMENT

Use of automated speed enforcement cameras has recently gained interest in some cities and counties but also raised concerns about potential inequitable effects based on how they are implemented. Here are some guidelines for using automated enforcement cameras equitably:[67]

- Distribute the cameras evenly throughout the city, so that residents of all races and income levels and communities in all geographic areas are affected at the same rate.

- Do not concentrate the cameras in specific areas, such as communities with low to moderate income, communities of color, or other underserved communities.

- Implement sliding-scale fees, to avoid a regressive fee structure.

- Publicly share all data related to automated enforcement on a regular basis.

- Consider using cameras in conjunction with planning, engineering, and infrastructure improvements that support behavioral change – such as self-enforcing streets.

Penalizing a driver for speeding after it has already happened does not undo the fact that they have been speeding and put themselves and other road users at risk. It also doesn't address the root issue that the design of the street enabled a driver to drive at a high speed and create unsafe conditions for other road users. Local governments may want to consider strategies related to street design to increase safety.

Many jurisdictions have focused resources and funding on aspects of Vision Zero other than enforcement that can also decrease traffic-related harm, such as street design and infrastructure or community education and outreach to increase awareness and understanding of speed and traffic laws. For example, the City of Houston has identified engineering and community education strategies in the Houston Vision Zero Action Plan. The action plan identifies specific actions that use street design as a tool to support and enforce safe speeds – for example, lower speed limits on streets with multimodal activity and high potential for crossing conflicts. The action plan also commits to developing a pedestrian plan for sidewalks to focus on investment in walkability infrastructure; installing at least 25 miles of high-comfort bicycle facilities every year; and working with the state of Texas to include Vision Zero language and resources in defensive driving courses.[68] Addressing strategies beyond enforcement, such as infrastructure and community education, is considered a best practice in developing effective Vision Zero strategies.

Lastly, some cities are experimenting with innovative alternatives to police enforcement of transportation laws. For example, some jurisdictions have invested in unarmed transit agency staff to assist transit users at transit stations, without the ability to issue citations or make arrests.[69] Such personnel allow agencies to educate communities about potential safety issues while seeking to minimize community members' involvement in the criminal justice system.[69] Many transit riders also walk or bike for a portion of their trip, so it is important to consider enforcement approaches on all modes. Other cities, such as Berkeley, CA, have considered creating a local department of transportation that would task unarmed civil servants instead of city police with aspects of traffic enforcement.[70]

Strategies such as these may help reduce reliance on traditional forms of enforcement and police involvement. Enforcement can also be addressed as part of a Vision Zero resolution. For example, some cities include language in the resolution that directs city agencies to include education strategies in the

action plan,[45,71] requires that the action plan and task force develop assurances against racial profiling,[72] or ensures that community members are involved in development of enforcement plans and policies.[73]

While inequitable enforcement of traffic and transportation laws is a long-standing issue of concern for priority communities, it is also an emerging area for innovative approaches. By considering enforcement implications and involving community members at every step of the planning and policy development process, local governments can develop effective and equitable enforcement strategies that are tailored to their communities.

APPROACHES TO ENFORCEMENT

Here are some resources that may be helpful in developing an enforcement approach for Vision Zero:

- The Case for Self-Enforcing Streets (Transportation Alternatives) is a report that includes recommendations on alternative approaches to enforcement.

- Effect of High-Visibility Enforcement on Motor Vehicle Crashes (National Institute of Justice) details research on the City of Nashville, Tennessee's approach to enforcement.

- Example of innovative alternative enforcement (Harvard Gazette) is an article that explores how the city of Bogotá, Colombia, has taken an approach to enforcement that does not involve fines or fees and experienced improved health outcomes.

- Findings on a high-visibility enforcement campaign (Vision Zero SF) describes research on the City and County of San Francisco's approach to high-visibility enforcement.

- Investing in Evidence-Based Alternatives to Policing (Vera Institute of Justice) is a collection of resources on addressing public health issues through alternatives to policing.

- Mobility justice research projects (Equiticity) by an organization dedicated to mobility justice detail research on enforcement of traffic laws and its effect on certain communities.

- Research on social equity in transportation (Northwestern University) lists resources related to equity in transportation policy.

- Self-Enforcing Roadways: A Guidance Report (Federal Highway Administration) describes design principles and methods that may produce self-enforcing or self-explaining roads.

- Taking on Traffic Laws: A How-to Guide for Decriminalizing Mobility (BikeWalkKC) describes lessons learned from BikeWalkKC's advocacy for legislation to decriminalize walking and biking in Kansas City, MO, and outlines action steps that other advocates can take toward decriminalization.

7. Evaluation

As outlined in our model resolution, evaluation procedures and performance goals and metrics should be codified in a Vision Zero action plan. Monitoring and evaluating progress on implementation of strategies, achievement of measurable goals, and efficacy of interventions and investments is crucial to achieving Vision Zero success. Organizations and agencies that are responsible for implementation of a Vision Zero approach should be prepared to adapt and update their Vision Zero action plan at regular intervals, based on the findings of an evaluation.

The action plan should identify performance metrics that will be used to evaluate Vision Zero efforts, how the data will be collected, how evaluation results will be shared, and the frequency of data collection and reporting activities. As mentioned, the action plan should identify specific goals whose achievement will be assessed through performance metrics. Some of the data might be publicly available or available from other agencies through data-sharing agreements (see the "Data Sharing" section in Chapter 3), while other data might need to be collected through surveys, interviews, or other qualitative methods.

Monitoring and evaluating progress on implementation of strategies, achievement of measurable goals, and efficacy of interventions and investments is crucial to achieving Vision Zero success.

Success can be defined in different ways by different stakeholders and can be related to how the strategies are implemented as well as the outcome of those strategies. It might take several months or even multiple years to realize the full effect of a strategy and even longer to undo and remedy historical systemic issues, so it might be beneficial to set short- to medium-term performance goals in addition to long-term goals. The task force and advisory group can help engage community members and stakeholders in order to identify meaningful measures of success that they would like to have evaluated and reported on. Here are some examples of performance metrics related to process and outcomes, any of which could be used for evaluation:

Traffic Safety

- Number of collisions, disaggregated by mode, location, and sociodemographic characteristics of parties involved, with a focus on priority populations and vulnerable road users

- Progress toward infrastructure improvements (new construction or repairs)

- Amount of funding allocated to Vision Zero efforts, disaggregated by intended purposes (infrastructure, community engagement, education programs, etc.) and communities reached

- Number of policies and plans that align with Vision Zero strategies

- Perceptions of safety

- Number or types of traffic stops or citations for safety and speed violations, disaggregated by sociodemographic factors to evaluate whether enforcement is being equitably implemented

Health

- Changes in use of active transportation modes

- Changes in physical activity levels

- Changes in prevalence of chronic disease and mental health issues

Community Engagement

- Methods used to engage community members and partners throughout policy development and planning processes

- Number of participants in or responses to community engagement activities, disaggregated by sociodemographic characteristics

- Satisfaction with the community engagement process (Do community members and stakeholders feel that they had a voice in the process?)

- Satisfaction with the outcomes of Vision Zero strategies (Do community members and stakeholders feel that the benefits are equitably experienced and that inequities were not created or exacerbated?)

Many communities such as New York, NY; Seattle, WA; Boston, MA; Denver, CO; Boulder, CO; Philadelphia, PA; and Eugene, OR, use progress report cards that are shared with the community as well as the partner agencies involved in planning and implementation of Vision Zero. Jurisdictions may choose to report progress and evaluation findings in a variety of formats. Regardless of the format, these reports should achieve the following:

- Evaluate both qualitative and quantitative effects of the interventions

- Incorporate community and user feedback[74]

- Highlight success stories[34]

- Evaluate any disparate effects on priority populations and vulnerable road users from an equity perspective

- Adjust goals and strategies as needed

8. Legal considerations: Preemption

When developing a Vision Zero resolution and approach, local governments need to consider some legal issues that can affect various aspects of Vision Zero. State or federal preemption may affect enforcement, procedures for conducting task forces and advisory groups, or street and speed design. Preemption is a legal concept that allows a higher level of government (like federal or state government) to limit or even eliminate the power of a lower level of government (like state or local government) to pass laws on given subject.[6] For example, a state law might dictate that no local laws may be passed that establish a speed limit above 35 miles per hour on city streets. State law might also dictate which entities may enforce traffic laws and how those traffic laws can be enforced. Thus, if a community wants to consider automated enforcement, they must also understand state laws that might affect automated enforcement. For instance, California state law currently prohibits the use of automated speed cameras.

Additionally, in some states, local governing bodies cannot pass laws related to specific topics unless the state legislature affirmatively gives them the right to do so. Consequently, even if state law doesn't specifically say that a city cannot pass laws reducing speed limits, cities might still lack the authority to do so because it hasn't been granted by the state legislature. Because preemption issues can be very complicated, it may be helpful to consult with an attorney in your state to gain a better understanding of the legal landscape and what types of laws your local government can pass in relation to Vision Zero.

Local policymakers can use a policy platform to advocate for changes in state law that would give local governments more ability to pass laws related to Vision Zero.

Federal → **State** → **Local**
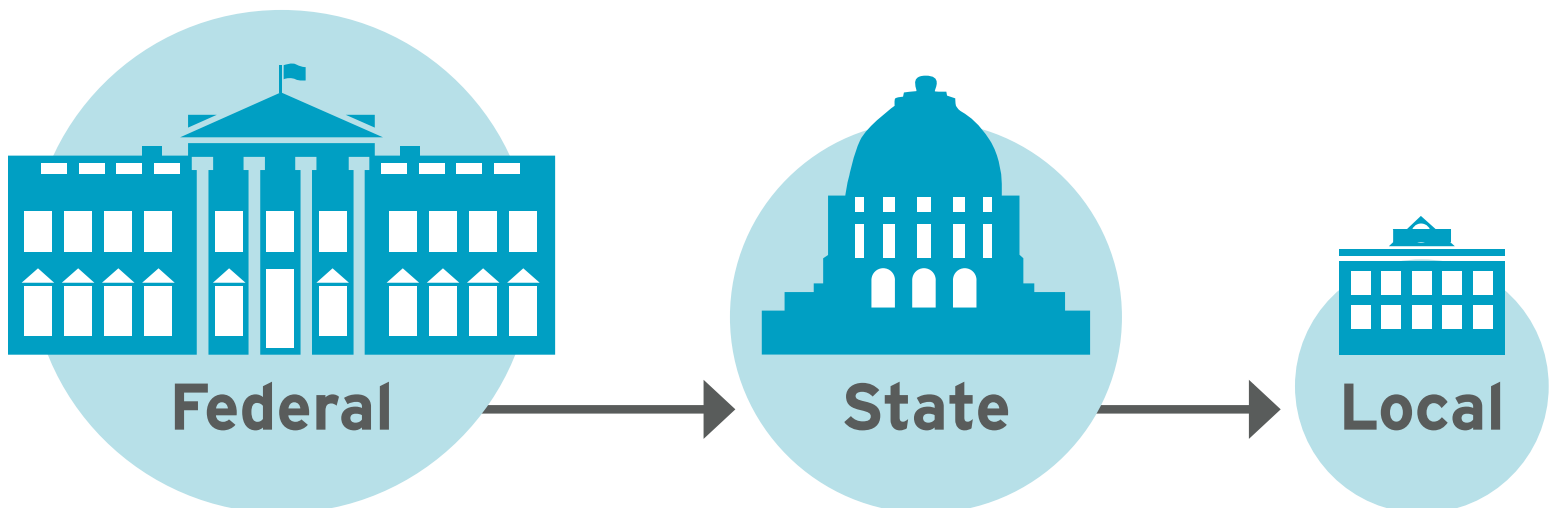
If, after researching laws in their state that are related to Vision Zero approaches, a community determines that certain laws or policies are preempted, the community may want to consider developing a state legislative policy platform. Local policymakers can use a policy platform to advocate for changes in state law that would give local governments more ability to pass laws related to Vision Zero.

Lastly, cities and counties might want to consider coordinating with other jurisdictions in the region to develop a comprehensive and unified approach to Vision Zero. Having a unified approach might improve the effectiveness of Vision Zero policies because communities could work together

to develop strategies that uniquely fit the communities in their region. Such an approach might also increase understanding across cities because their Vision Zero laws and policies would be more uniform. Further, if state-level preemption is an issue that impedes effective Vision Zero policy at the local level, a unified approach might facilitate more effective lobbying at the state level through the creation of a multi-jurisdictional coalition.

For more information and deeper discussion of preemption and how it can affect public health, see ChangeLab Solutions' resources on preemption.

9. Conclusion

Achieving Vision Zero is a bold, ambitious goal but an important part of advancing health equity in communities. To achieve more equitable outcomes, we must change the way that traffic safety strategies have traditionally been planned, implemented, and enforced. There is no one-size-fits-all solution; strategies should be tailored to fit the needs and priorities of each community and respond to the local trends discovered through data analysis. However, we believe that an approach and a process that are rooted in equity, authentic community engagement, and data-driven decisions can help communities, regardless of size or geography, create a safer and more equitable transportation network. We hope that our model resolution will help set a strong framework for a more equitable and effective Vision Zero approach and that this toolkit will equip practitioners with new knowledge and analytical tools to put the policy into action.

To achieve more equitable outcomes, we must change the way that traffic safety strategies have traditionally been planned, implemented, and enforced.
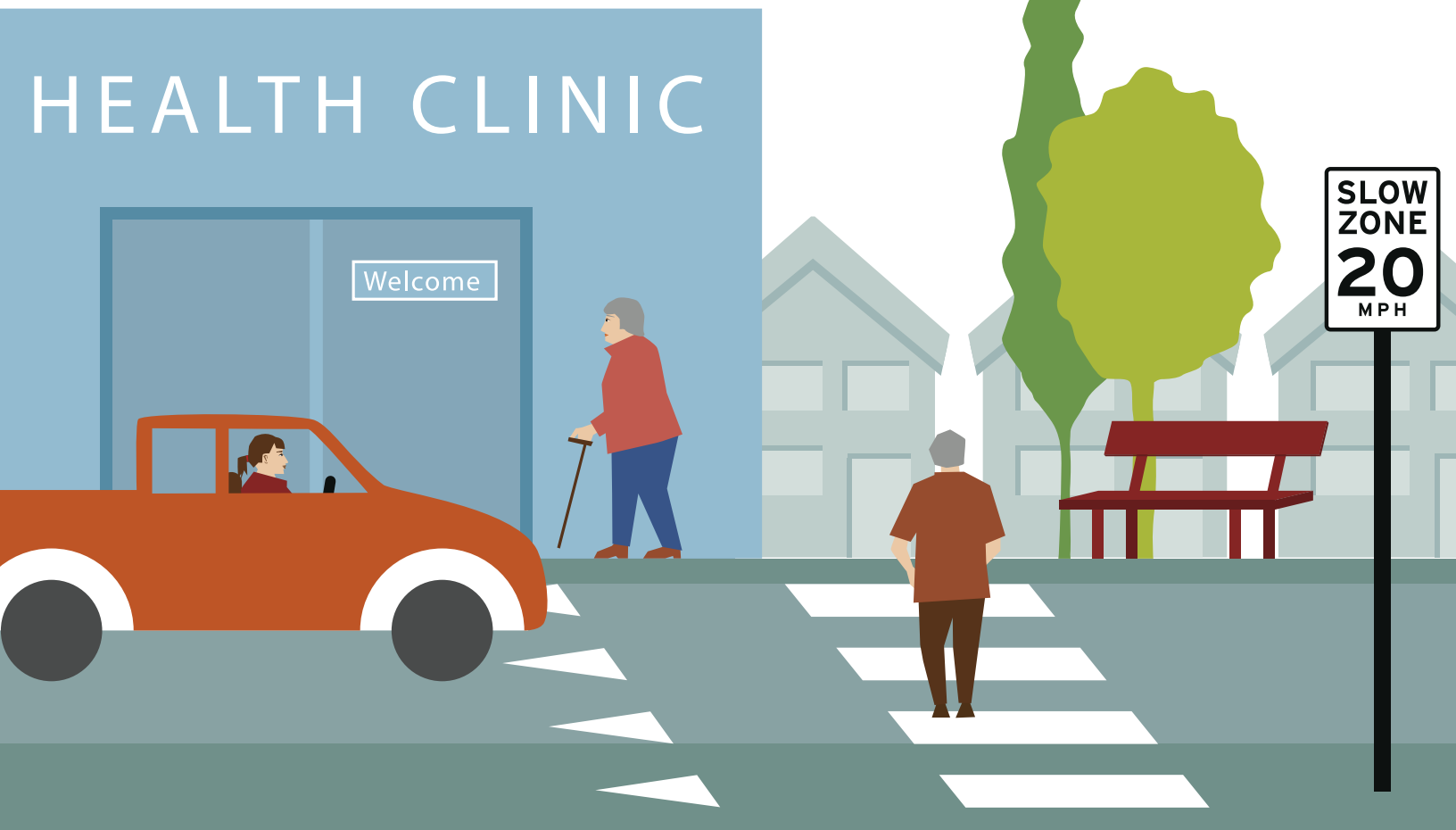
Fair Process Checklist

Fill in this worksheet for each goal and strategy in your Vision Zero Action Plan.

Goal	Strategy	Equity Implications	Community Engagement Strategy	Data Metrics

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Acknowledgments

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