How does Vision Zero differ from the traditional traffic safety approach in U.S. communities?

American cities are adopting Vision Zero, drawn to its departure from traditional approaches to traffic safety. But what makes Vision Zero an innovative road safety policy with the potential to make our streets safe? In this case study we identify the key elements that distinguish Vision Zero.

1. Reframing traffic deaths as preventable
2. Focusing on system failure
3. Reducing the impact of collisions
4. Adopting a Safe System approach
5. Data-driven decision-making
6. Road safety as a social equity issue

Traffic Deaths are Preventable

Names provide shape and meaning, which is why the "zero" in Vision Zero is so important and represents a key means to shift away from the traditional traffic safety approach.

The Swedish architects of Vision Zero set zero as the "only justifiable fatality target for road traffic." Calling out a vision of zero deaths (and, in some places, serious injuries) sends a strong message: traffic-related fatalities and injuries are not an inevitable and acceptable side-effect of the transportation system. With its name alone, Vision Zero fundamentally re-conceptualizes how we understand injuries and deaths on our streets as *preventable.*

As with other preventable public hazards (think measles, small pox and other diseases prevented through vaccines), Vision Zero calls us to be proactive; to identify risk and take steps to prevent injuries by designing the transportation system in a way that collisions won't result in fatal or serious injury.

Focusing on System Failure

Solutions are responses to problems. Tired? Drink coffee! Need a break? Go on a walk! Traffic deaths and injuries? In the United States, individual road users—bad drivers, careless bicyclists, distracted pedestrians—have historically been presented as the problem, the cause of collisions. Consequently, solutions have focused on perfecting human behaviors through strategies like licensing, testing, education, training and media campaigns.

But in the Vision Zero framework, the road safety problem isn't the individual, but rather the flaws in the transportation system—flaws that mean, for example, that cars can move at excessive speeds on city streets and incompatible road users (for instance, bicyclists and drivers) have to share the road.

In redefining the problem, we're required to develop solutions that will impact the true culprit: an unforgiving street network that doesn't take into account that people make mistakes. The focus thus shifts from solutions focused on perfecting individual behavior to solutions focused on perfecting a transportation system that failed to protect people who made predictable errors. As the Swedish architects of Vision Zero state: *"In every situation a person might fail. The road system should not."* We have to design a system for people, instead of asking people to adjust to an imperfect system.

Who perfects the flawed system? As Juan Martinez from the New York City Department of Transportation articulated in 2016: Engineers, public health professionals, policy and law enforcement must take responsibility for every death. His words serve as a moving call to action; a reminder that not only do system designers have the *ability* to create a system in which crashes do not result in fatal or serious injury, it is also their *responsibility*.

Individuals also have a responsibility in Vision Zero: road users are expected to be competent, alert, in compliance with the rules of the road and unimpaired by alcohol, drugs, distraction or fatigue—and they have the responsibility to demand and expect safety improvements from civil servants and elected officials.

Vision Zero means individuals should expect safe streets from their government, just as they do clean water or trash pick-up. This implies not only that public participation in transportation decision-making is central to Vision Zero, but also that cities must use communication and education to help generate collective action around the need for safer streets.

Washington D.C. engaged in a robust public process to draft their Vision Zero Action Plan. They hosted 10 community events, where nearly 2,700 people completed surveys to identify top safety concerns, and developed an online, crowdsourced **Safety Map** on which residents could identify hazardous locations and the conditions and behaviors they experienced there. The District's **Vision Zero Action Plan** reflects a strong commitment to meaningful engagement and developing a plan that is grounded in the needs and experiences of D.C. residents.

From Engineering to a Public Health Perspective

While traditional approaches to transportation safety have prioritized reducing or preventing collisions, Vision Zero instead advocates for the focus to be *preventing injuries.*

Instead of asking "Why did that person crash?" the Vision Zero framework examines "Why was that person so seriously injured in the crash?" This change in thinking, from collision reduction to injury prevention, represents a significant shift from an *engineering to a public health perspective.*

Instead of preventing collisions, engineers work to ensure that no one is exposed to so much crash force (the force being what actually causes injury or death, not the collision itself) that they are seriously injured. So the vulnerability of the human body—not the collision itself—forms the basic parameter in the design of the transportation system.

This brings a moral imperative to the work. When we think in terms of people and injuries instead of collisions, it changes the question from "what can we do?" to "what must we do?"

A Systems Approach to Safety

Vision Zero takes a Safe System approach to road safety—a holistic view that requires people to think about the road system *in its entirety*, from infrastructure projects to institutions like government. It means understanding how "upstream factors" such as design guidelines, public participation, policy, and vehicle regulations all influence injuries and deaths. One of the ways cities are doing just this is by creating steering committees and task forces with representation from all the different actors involved.

The Safe System approach also examines how these different parts interact. To create a safe transportation system, street users, vehicles, and the transportation network have to be addressed in an integrated manner, through a wide range of interventions. We won't achieve a safe system by just focusing on redesigning roads, unless we also manage the speeds on the roads and consider how policies, like automated enforcement, can assist in this effort.

Data-driven Decisions

Vision Zero is also different in its emphasis on data and data-driven decision-making. Approaching road safety from a Safe System perspective, we need to not only collect data on where and how crashes happen, but we need to also examine a wide range of additional inputs, such as the demographics of impacted communities, enforcement citations and hospital injury reports.

But it's not enough to just collect the data. It's imperative that the data be made available to the public in order to facilitate transparency and accountability and assist the public in monitoring progress toward zero.

The crowdsourced map created by **Washington D.C.** is a great example of increased data access and transparency. Additional examples include, **New York City's Crash & Interventions Map,** which shows detailed information on traffic injury and fatality crashes in New York City and how the city is responding, and **San Francisco's online project delivery tracking tool,** which allows anyone to track the City's progress on its engineering commitments.

Note: Future case studies will explore how cities are using data to guide Vision Zero implementation.

Road Safety as a Social Equity Issue

Social equity is at the core of Vision Zero. Traffic collisions disproportionately impact vulnerable communities, including people of color, lower income individuals, seniors, children and people who walk, bike and use transit. Vision Zero addresses these inequities by prioritizing interventions in areas most in need of safety improvements.

Equity also means meaningfully engaging with these communities to empower them to be involved in the effort, and actively creating institutions and processes that incorporate vulnerable populations into decision-making processes.

Top Take-Away

While Vision Zero in American communities will surely look different than other countries that have adopted the Safe System approach, it is imperative to its success that it build on and be anchored in these core principles. Vision Zero is not just a catchy or hopeful campaign phrase. It is, indeed, a notably different way of ensuring people have the right to move about their communities safely.

Learn more and find additional case studies at www.visionzeronetwork.org