Complete Streets and Vision Zero: Engineering for Safe Streets

The share of traffic fatalities involving people walking and bicycling is on the rise. Between 2005 and 2014, over 46,000 people were struck and killed in the US by cars while walking and more than 7,000 people were killed while biking. The National Complete Streets Coalition promotes policies and practices that ensure streets are designed to account for the safety of all road users regardless of mode of transportation, age, ability, race, or income. The Coalition endorses a Vision Zero approach in pursuit of our mutual objective of designing streets that prevent traffic injuries and fatalities, particularly for the most vulnerable road users. Vision Zero is a multidisciplinary approach to prevent and ultimately eliminate all traffic fatalities through a combination of engineering, enforcement, education, and emergency response strategies with a focus on equity. The Coalition believes that Complete Streets is an essential component of Vision Zero efforts and that Vision Zero strategies can be folded into existing Complete Streets programs around the country.

Zero traffic fatalities is an attainable goal even for smaller communities who are strapped for resources. Hundreds of rural towns, counties, and metropolitan regions around the country have already taken great strides to improve the safety of their transportation networks. Over 1,200 jurisdictions in the United States have, through the adoption of Complete Streets policies, committed to design and operate their streets to provide for the needs of all users of the road, regardless of age, ability, income, or mode of transportation. Regardless of whether or not they have passed Vision Zero policies, these communities can capitalize on the momentum generated through the adoption and implementation of Complete Streets policies to provide safe, convenient, healthy, and equitable mobility options for all users of the road.

A Vision Zero approach uses a comprehensive set of design and policy tools in collaboration with partners from many agencies and communities to improve the safety of the transportation system. Too many of our current streets are designed only for automobiles and are thus fundamentally “Dangerous by Design” for people walking, bicycling, using transit and driving. No amount of education or enforcement alone can prevent traffic deaths if driving speeds remain high and safe crossings are few and far between. Consequently, the Coalition believes that street design and engineering solutions provide the most effective opportunities to prevent traffic deaths.

Prioritizing proven engineering countermeasures and multimodal street design first and foremost is essential to address the Dangerous by Design aspects of our historically automobile-centric transportation network. Other strategies, such as educating engineers, advocates, and community members, must support and reinforce engineering solutions. Additionally, ongoing performance measurement of safety interventions is essential to identifying the best solutions for traffic injury and fatality prevention.

We must make equity an overarching component of both Vision Zero and Complete Streets initiatives by prioritizing the safety of underrepresented communities when implementing these strategies, particularly engineering and enforcement. Much of the existing transportation network resulted from systemic discriminatory policies and practices. Consequently, many low-income communities and communities of color remain disproportionately vulnerable to traffic injuries and fatalities due to the proximity of dangerous, high-speed arterial roads and the lack of well-maintained sidewalks, visible crosswalks, and access to transit. Furthermore, enforcement of speeding and other traffic laws is an important component to achieving Vision Zero by promoting
safe road behaviors, and it must be undertaken fairly with cultural sensitivity to marginalized communities.

The National Complete Streets Coalition is committed to work in pursuit of eliminating traffic injuries and fatalities, particularly for the most vulnerable users of the road. We will continue to provide resources to support the adoption of Complete Streets policies that emphasize safe street design for all users of the road, regardless of age, ability, income, or mode of transportation. We will also continue to provide technical assistance on proven engineering countermeasures and safer street design through our webinars, workshops, and Safe Streets Academy.

We look forward to working with jurisdictions large and small around the country to improve the safety of our transportation network through the combined implementation of Complete Streets and Vision Zero.