BIKING AND WALKING SAFETY & ACCESSIBILITY

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WHY IT MATTERS

Increased active mobility is essential to achieving Virginia's climate goals. Motor vehicles pollute the air, shed microplastics, and drip petroleum and heavy metals into the environment. Transportation is Virginia's largest generator of climate change emissions.[1] Shifting trips to walking or bicycling will reduce emissions and contribute to healthy habits and overall health. Unfortunately, safety and infrastructure concerns are a key deterrent to people of all ages and abilities.[2,3,4] In addition to the climate impact of driving, motor vehicle crashes have been and continue to be the leading cause of death for children in the United States.[5,6] Improving safety for people who would walk or bike yet are hesitant to face such dangerous conditions, especially in communities with disproportionate rates of traffic fatalities and serious injuries, would increase active travel. Many traffic fatalities, which affect Black and Brown people at more than twice the average rate, are preventable with the right infrastructure.[7]

Traffic fatalities take nearly 1,000 lives in Virginia each year. Reducing car speeds and redesigning our roadway network for better bicycle and pedestrian protection are proven methods to improve safety. Creating safe streets for vulnerable road users can (or has the power to) improve air quality, reduce fossil fuel consumption, and reduce demand for the destructive expansion of highways. Active transportation to school also increases regular physical activity and improves long-term social, emotional, and physical health outcomes, and improves the air quality in and around schools.[8] It's imperative to shift our transportation model away from reliance on automobiles by taking concrete steps to make walking, biking, and other multimodal forms of transportation realistic for more Virginians of any age.

CURRENT LANDSCAPE

The Virginia Department of Transportation's $8.8 billion annual budget does not prioritize designs at the scale necessary to significantly curb the danger to vulnerable road users. An effective way to improve safety is to redesign our commercial and residential roads with safety-oriented infrastructure such as raised crosswalks, dedicated bicycle lanes, speed humps, narrower lanes, bump-outs, and pedestrian refuges et cetera, and ensure the current network of Automated Speed Enforcement Cameras are used equitably and effectively.

Virginia has yet to legalize the Bicyclist Safety Yield, otherwise known as the Idaho Stop, which improves bicyclist access and convenience and affords bicyclists the crash-prevention benefits of yielding at certain intersections. The Safety Yield reduces crashes because bicyclists can clear intersections faster, reducing conflicts from behind and oncoming side traffic.[9] Virginia also places excessive and ambiguous restrictions on two-abreast bicycling that impede the safety and movement of bicyclists who are riding in groups. Virginia transportation agencies regularly report that riding in groups is safer, while the law impedes this essential practice.

A modern update to the State Bicycle Policy Plan, last updated in 2011, and VDOT's Complete Streets program is critical to decision-making for investments in bicycle infrastructure, implementing policies supportive of behavior change and safety, and building accessible and equitable connectivity to bicycling, focusing on transportation and economic opportunity, and Safe Routes to School programs. Safe Routes to School develops life-long habits to ensure better driving behavior and higher familiarity with safe biking and walking which is critical to a culture of transportation safety needed in Virginia.[10]

OPPORTUNITIES

To meaningfully encourage people to choose biking and walking and to address the largest sector of Virginia's greenhouse gas emissions would require a focus on improved safety and expanded accessibility for these modes. Dedicated funding for a more complete network of multi-use trails throughout Virginia and allowing bicyclists more freedom of movement to reduce bicycling injuries are two key strategies.

Greater emphasis on roadway reconfigurations would cost-effectively increase dedicated space for people biking and walking and reduce speeding. Quick-build projects can expedite conversions, saving considerable time, effort, and money. Many of VDOT's biking and walking facilities are in disrepair due to a lack of attention and/or funding; proactive maintenance of these existing active mobility assets would increase usage.

VDOT's Neighborhood Traffic Program works with communities to decrease the impacts of traffic and enhance safety in neighborhoods. However, before traffic calming is applied to dangerous roads, VDOT requires 50.1% of the residents to approve the designs. This requirement could be eliminated so that safety decisions can be made by professionals.

Automated Speed Enforcement Cameras are an effective deterrent to speeding, the number one predictor of crash mortality.[11] Further studies can ensure speed safety cameras, and data they collect, are used

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as intended to increase safety without disproportionate impacts on low resourced communities and communities of color.

TOP TAKEAWAYS

To reduce Virginia's top source of carbon emissions and other pollutants, expanding safety and accessibility for active transportation is essential.

Expand funding for active transportation infrastructure, quick-build and roadway reconfiguration projects, and reestablish Virginia's Safe Routes to School program.

Allowing for expanded bicycling freedom and a focus on pedestrian-scale improvements would better protect vulnerable road users.

ENDNOTES

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