# Fixing a broken, unjust and deadly transportation system

Actionable steps to acheive Vision Zero in the District of Columbia.

Prepared by the Washington Area Bicyclist Association December, 2018.



### Introduction

The District of Columbia, like many American cities, has committed to eliminating traffic fatalities within the next decade, but struggles to make progress toward that commitment. The city government continues to make incremental adjustments at the margins of a broken, unjust, and deadly transportation system rather than pursue the systemic changes required to meet its stated goal.

This document is a set of actionable policies that represent the baseline level of action required from the District government to stop people from dying on our streets.

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### Change the decision making process

The DC government needs to identify and dismantle systemic barriers to rapid change in our transportation networks. The existing bureaucratic processes for making our streets safer have a strong status quo bias. Road design changes that literally save lives take far too long to implement. A commitment to Vision Zero is a rejection of the status quo, and it should change the way our city makes decisions. The systemic barriers listed below are visible from outside of the government, but more impediments almost certainly exist. Vision Zero agencies needs to aggressively investigate their project timelines, then report publicly on what the roadblocks to rapid implementation are and how to remove them.

### **Centralize ownership and organization of the Vision Zero initiative**

Vision Zero is a commitment made by Mayor Bowser on behalf of the District of Columbia residents to eliminate traffic deaths in our city. Ownership of the commitment and efforts to achieve the goal must live at the mayoral level of the District government. There are 20 different city agencies and offices involved in implementing Vision Zero strategies¹. The coordination, planning and evaluation should be the responsibility within the Executive Office of the Mayor. A newly established Vision Zero Interagency Task Force is a good start. The Task Force should meet frequently and include members of the public. Annual action plans should made public and followed by annual progress reports.

### Adopt a Vehicle Miles Traveled reduction planning methodology

DDOT should abolish the use of the Level of Service traffic planning tool and replace it with a reduction in Vehicle Miles Traveled (VMT) standard. Level of Service (LOS) is a qualitative measurement of traffic quality. Originally intended to be used only on highways, LOS is now the standard planning tool for streets in urban areas as well. LOS planning forces DDOT to preserve vast amounts of traffic capacity for peak hours to shorten delays for drivers. This metric prioritizes motorized traffic above all other road users including transit riders, pedestrians and bicyclists. The LOS evaluation prevents or considerably delays implantation of infrastructure that serves non-motorists such as road diets, bike lanes, sidewalk expansions, dedicated transit lanes and many more multi-modal changes. Changing to a metric that requires all projects to reduce vehicle miles traveled shifts the priority to multi-modal planning. California was the first state in the US to end the use of LOS for traffic planning and development impacts in 2014<sup>2</sup>.

<sup>1)</sup> United States, District Department of Transportation. (2015). A Plan of Action: Vision Zero Action Plan. Washington, DC. Retrieved from http://www.dcvisionzero.com

<sup>2)</sup> Newton, D., & Curry, M. (2014, August 7). California Has Officially Ditched Car-Centric 'Level of Service' [Web log post]. Retrieved from https://la.streetsblog.org/2014/08/07/california-has-officially-ditched-car-centric-level-of-service/

#### **Update DC's Street Design guides**

New designs for safe streets are being implemented throughout the city, often in pilot projects or one-off custom designs. There is now enough in-the-ground time of many of these new designs to standardize them in DDOT design guidance and engineering manuals. For example, protected bike lanes should be built using high-quality and permanent infrastructure rather than temporary installations of paint and plastic bollards. Other well-tested intersections and road treatments should be incorporated as well. Updating design guidance and standard designs saves time in planning and engineering, resulting in projects being implemented quicker.

### Plan big, not piecemeal

DDOT does not consider major changes to street design that are not included in the Metropolitan Washington Council of Governments' planning and air quality modeling process. The agency submits projects on an individual basis. This usually adds at least a year to a project timeline, and gives suburban jurisdictions undue influence over the District's ability to make its streets safer. At minimum, to avoid this delay on future projects, DDOT should submit the complete MoveDC network plan.

#### Fix the public input process

DDOT's investment in community engagement is laudable, but its efforts lack a framework for educating the public or prioritizing feedback. Currently, the weight that DDOT gives to input from Advisory Neighborhood Commissions, civic associations, and other civil society groups can amount to a de facto veto of any project that affects residential parking or motor vehicle traffic congestion, which can delay critical safety projects for years and reduces the scope of projects that the agency proposes in the first place. Neighborhood input is important to crafting a community sensitive street design, but neighborhood groups should not have veto power over street safety improvements.

### Reallocate space

People walking, biking and taking transit collectively account for nearly 60% of all DC commuters<sup>3</sup> and half of all traffic fatalities<sup>4</sup>, but less than 15% of transportation-oriented public space<sup>5</sup> is dedicated to these modes. Eliminating traffic deaths and serious injuries will require a more equitable distribution of space. Vulnerable road users are not safe when they are squeezed into the margins. They are safe when they have ample dedicated, connected space to move.

### An aggressive, enforceable Complete Streets policy

Every street in DC should comfortably accommodate people walking, biking, driving and taking transit. No street should have multiple travel lanes and parking but lack safe sidewalks or protected bike lanes, and yet many do. DC has a Complete Streets policy that attempts to address this problem<sup>6</sup>, but roads like these are regularly repaired and repaved without design changes that make them safer.

The District needs a new, legally binding, Complete Streets policy that requires city agencies to design and build streets that create safe space for all major user groups at every major intervention point, from pothole repair to corridor rebuild. The Bicycle and Pedestrian Safety Act of 2015 (B21-335)<sup>7</sup> actually required the Mayor to write a new policy by July 1 2017, a deadline that has come

- 3) District Mobility Multimodal Transportation. (n.d.). Retrieved from https://districtmobility.org/
- 4) Vision Zero Safety [Online Open Data]. (n.d.). Washington, DC: DC Open Data. Retrieved from opendata.dc.gov
- 5) Browne, C. (2018, August 24). Our streets make us unhappy. They don't have to. Washington Post. Retrieved from https://www.washingtonpost.com/opinions/our-streets-make-us-unhappy-they-dont-have-to/
- 6) "DC Complete Streets Policy." District Department of Transportation Order #06-2010. Available online at: https://comp.ddot.dc.gov/Documents/Complete%20Streets%20Policy.pdf
- 7) The Bicycle and Pedestrian Safety Act of 2015, Bill 21-335, 21st DC Council (2015). Enacted. Retrieved from http://lims.dccouncil.us/Legislation/B22-0351

and gone. The policy should explicitly prioritize mobility and safety over parking and traffic throughput in every design decision.

DC cannot meet its traffic safety or sustainability goals if it maintains its practice of designing roads primarily primarily for driving and parking, then shoehorning in wider sidewalks, transit and bike infrastructure where it fits.

### Expand the bicycling network at rate of 25 miles of lanes per year

The Move DC multi-modal transportation plan<sup>8</sup> outlines a network of 80 miles of protected bike lanes, 160 miles of standard bike lanes and nearly 80 miles of trails. This should be considered a *preliminary* bicycle network build-out. The actual need for safe bicycling infrastructure is much higher and the need is immediate. With as much as 60% of the public interested in biking<sup>9</sup> but unwilling to ride on the street because of safety concerns, building a city-wide, low-stress network should be a top priority for meeting the District's 75% bike, walk and transit mode share goal.

### **Build protected intersections**

Physically separated bike lanes are the vanguard of bicycling infrastructure, but intersections remain a daunting no-man's-land for many people walking and biking. A protected intersection<sup>10</sup> separates the primary modes (drivers, bikes and pedestrians) into their own space, with their own time to cross safely. DC should pilot designs and expand their usage on all major protected bike lane corridors as outline in the 2015 Vision Zero Action Plan.

<sup>8)</sup> United States, District Department of Transportation, Policy, Planning & Sustainability Administration. (2014). Move DC, The District of Columbia's Multimodal Long-Range Transportation Plan. Washington, DC. Retrieved from http://www.wemovedc.org

<sup>9)</sup> Geller, R. (2006). Four Types of Transportation Cyclists (United States, Portland Bureau of Transportation). Portland, OR. Retrieved from https://www.portlandoregon.gov/transportation/article/158497

<sup>10) &</sup>quot;Protected Intersections" Website available online at http://www.protectedintersection.com.



### Invest in rapid change

Eliminating traffic fatalities within the next six years requires a drastic improvement in the pace of progress. The following recommendations address the pace of action.

### Agile and tactical design

Large street redesign projects can take a decade of planning, design, engineering and construction to complete. Often, this timeframe is understandably long given the complexity of many projects. However, the public safety elements of projects is delayed while long planning, design and engineering phases drag on for years. DDOT should standardize the process to implement major safety design concepts using rapid tactical urbanism techniques early in the project development process. The safety benefits of the project, such as road diets or intersection improvements, would be realized years before the final project is complete. And, the final design would be informed by real-world testing of early design concepts before investing significant capital funds into construction where late design changes are very costly to address. New York City is a national leader for using this iterative design process to deliver safety improvements early in a major capital project. Famously, a large temporary plaza was created in Time Square in 2009 resulting in a 40% reduction in pedestrian injuries. The final design and construction for the Time Square plaza was completed in 2017 11.

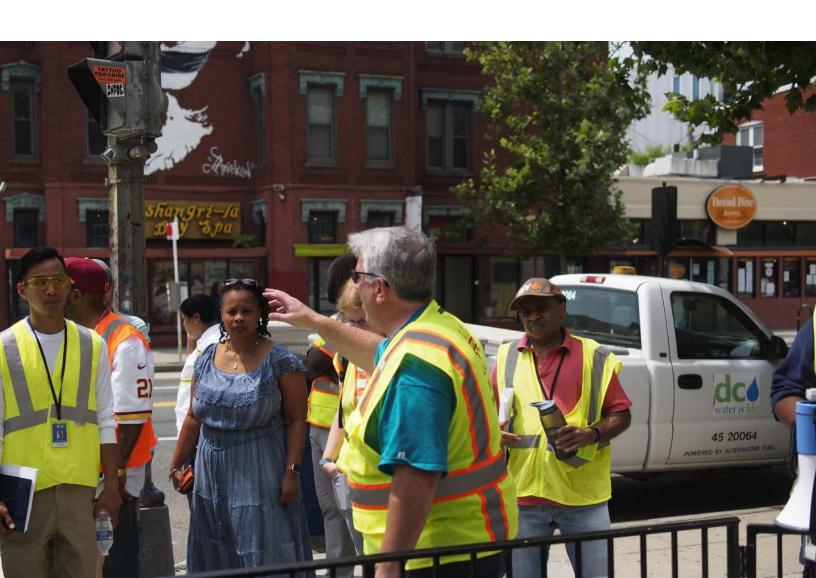
<sup>11)</sup> Warerkar, T. (2017, April 19) Times Square's transformation into a pedestrian-friendly space captured in photos. Curbed NYC. Retrieved from https://ny.curbed.com/2017/4/19/15358234/times-square-snohetta-before-after-photos

### **Operating and capital capacity**

Many street safety projects are inexpensive and can be rolled into the year-over-year work of DC's agencies. Some projects aren't, and those need to be funded as well. Our city should not accept unsafe gaps in our walking and biking networks just because the solution is expensive. The District government should increase funding available for local transportation investments.

#### **Back office support**

Often DC city agencies lack the staff and resources to move projects quickly from concept to reality. Vision Zero agencies need to increase not just program staff (planners, engineers, in-house construction crews, public space inspectors, enforcement teams), but also correlated increases in administrative, support, and implementation capacity. Life-saving projects should not be held up because of contracting delays.





### **Reduce driving**

International cities that are leading on Vision Zero are also leaders in promoting walking, biking and transit usage. Motor vehicles are the most dangerous mode of transportation in a city. The simplest way to reduce fatal crashes is reduce the number of motor vehicles in DC.

### **Downtown congestion charge**

The District of Columbia should work in coordination with Maryland and Virginia to implement a downtown congestion or cordon charge as recommended in the Move DC Long-Range Multimodal Transportation Plan<sup>12</sup>. Driving into the central business district during peak travel times should be discouraged through fair pricing. Funds raised should dedicated to reducing the cost of transit, expanding transit coverage, repairing aging infrastructure and building a dedicated bike network.

### Fair pricing for the Residential Parking Permit Program

On-street parking is a limited supply and the current fee of \$35 for a Resident Parking Permit is absurdly low. The program should be changed from a single flat fee to progressive structure based on household income, number of vehicles, and whether the property has off street parking. The goal is to more fairly distribute public space and the value of it.

<sup>12)</sup> United States, District Department of Transportation, Policy, Planning & Sustainability Administration. (2014). Move DC, The District of Columbia's Multimodal Long-Range Transportation Plan. Washington, DC. Retrieved from http://www.wemovedc.org

### **Equitable employer transportation subsidies**

The DC Council is considering legislation to bring parity for commuting benefits for employees in DC¹³. Currently, employers providing free or reduced parking to employees are extending a disportionate benefit to drivers compared to people who walk, bike or take transit to work. When passed, this law would require employers to provide equal transportation benefits to employees regardless of their commute mode. The goal of this legislation is remove the disincentive for employees walking, biking and taking transit.



<sup>13)</sup> Transportation Benefits Equity Amendment Act of 2017, Bill 22-335, 22nd DC Council (2017). Retrieved from http://lims.dccouncil.us/Legislation/B22-0351

### Safer, slower drivers.

Speed related crashes are one of the top causes for traffic fatalities and serious injuries<sup>14</sup>. Driving fast reduces a driver's reaction time and increases the distance needed to safely stop a motor vehicle. Slower speeds enable drivers to see unsafe situations and avoid crashes.

#### Twenty is plenty

DC should lower speed limits city-wide to promote safer driving speeds. The city-wide speed limit on all non-arterial and limited access roads should be 20 mph. Arterial streets and speed limits on limited access roads should be set to assure safe travel speeds.

#### The speed limit is the speed limit

Eliminate the "grace" value of 10 mph over speed limit on traffic safety cameras<sup>15</sup>. Allowing drivers to operate 10 mph over a set speed limit negates the safety evaluation that went into determining that speed limit, and effectively raises the speed limit by 40% on residential streets. Drivers should not be allowed by policy or law to travel at speeds approaching 40 mph on urban streets. Pedestrians struck at 40 mph are 80% at risk of being killed compared to an 80% opportunity for survival at 25 mph<sup>16</sup>.

14) National Center for Statistics and Analysis. (2017, October).

2016 fatal motor vehicle crashes: Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 812 456). Washington, DC: National Highway Traffic Safety Administration.

- 15) Lazo, L. (2018, September 26). Drivers continue to ignore speed cameras in the District, earning city more than \$100 million. Washington Post. Retrieved from https://www.washingtonpost.com/transportation/2018/09/26/drivers-continue-ignore-speed-cameras-district-earning-city-more-than-million/
- 16) Leaf, W. A., & Preusser, D. F. (1999). Literature review on vehicle travel speeds and pedestrian injuries (United States, U.S. Department of Transportation, National Highway Traffic Safety Administration). Washington, D.C.: U.S. Dept. of Transportation, National Highway Traffic Safety Administration.

#### Eliminate right turn on red

Allowing drivers to turn right on red encourages a number of dangerous behaviors such as rolling through crosswalks and dangerously attempting to merge into moving cross traffic. The right turn on red was enacted in the 1970s as gasoline saving measure during the oil crisis<sup>17</sup>. Cars are far more fuel efficient today and it's a safer behavior to wait until a traffic light turns green to enter the intersection. The DC government should abolish right turns on red city-wide, and not through piecemeal implementation at individual intersections. A city-wide policy would reduce confusion and communicate to the public that this dangerous maneuver is never allowed.

#### **Promote attentive driving**

Since its passage in 2004, DC's distracted driving law has not been modified to adapt to evolving technology. As traffic deaths related to distracted driving continue to rise, there is a growing body of research dedicated to understanding distracted driving. Studies by the AAA Foundation show that divided attention, even with "hands free" devices, impairs driver performance and reaction speed similarly to driving under the influence of alcohol<sup>18</sup>. Essentially, no level of cell phone use should be permitted while driving a vehicle. DC should remove the "hands-free" exemption that allows calls to be made while driving. A regular and consistent city-wide public education and enforcement campaign should be undertaken. Additionally, DC government should advocate for the federal government and private industry to produce cars with fewer in-car distractions by infotainment systems and technology solutions to reduce mobile phone while driving.

<sup>17)</sup> Schmitt, A. (2018, May 15). It's Time for Cities to Rethink Right Turns on Red. Retrieved from https://usa.streetsblog.org/2018/05/15/its-time-for-cities-to-rethink-right-turns-on-red/

<sup>18)</sup> Strayer, D.L., Cooper, J.M., Turrill, J., Coleman, J., Medeiros-Ward, N. & Biondi, F.

<sup>(2013).</sup> Measuring Cognitive Distraction in the Automobile. AAA Foundation for Traffic Safety.

### Require retesting of drivers during license renewal and waive-in process

The laws governing driving and street designs have drastically changed over the past few decades, in addition to many more people using the streets on foot, bike, scooter and bus. It's understandable that the driving public is unaware of many of these changes. DC should require people renewing their driver's license to be aware of changes and testing to a level of proficiency. Also, many licensed drivers in DC waive-in with an out-of-state license, yet may be unaware of the specific DC traffic laws or issues of driving in an all urban state. Internet technology allows for online education and testing prior to a driver's license being renewed or waived-in. Retesting can also be facilitated at any Department of Motor Vehicle location for residents without reliable internet access.



### **Equitable Outcomes**

### Reduce traffic violence in disadvantaged communities

Nationally and locally, traffic-related deaths and serious injuries disportionately impact disadvantaged communities<sup>19</sup>. Decades of systemic inequity in transportation investments and landuse decisions resulted in a community where streets are more dangerous and deadly in disempowered communities. Vision Zero must acknowledge the historic inequity and work proactively to reduce the harm of past decisions.

#### **Public engagement**

Vision Zero is a community commitment. Achieving it will require extensive public input and education that engages entire communities, not just people who have time to show for long public meetings. Vision Zero agencies need to ensure that they are meaningfully connecting with underserved communities and engaging community knowledge to build context sensitive safety improvements.

### Reduce transportation costs and increase access for car-free households

Stabilizing and reducing transportation costs is an important intersectional point for a Vision Zero program in a gentrifying city.

Housing and transportation costs are the two single largest expenses for households nationally, and housing costs in DC continue to rise as demand increases. According to AAA, car ownership costs more than \$8,000 annually in our region<sup>20</sup>. That financial burden falls most heavily on people who can't afford to

<sup>19)</sup> Beck, L. F., MPH, & Naumann, R. B., MSPH. (2013, April 19). Motor Vehicle Traffic-Related Pedestrian Deaths — United States, 2001–2010(United States, Center for Disease Control, Div of Unintentional Injury Prevention, National Center for Injury Prevention and Control). Retrieved from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6215a1.htm

<sup>20)</sup> Your Driving Costs. (2018, September 13). Retrieved from https://newsroom.aaa.com/auto/your-driving-costs/

live near transit. And yet, many of DC's most car-centric streets are in its poorer neighborhoods with limited access to transit, making car ownership even less optional for those residents.

Particularly in underserved communities, DC needs to pair infrastructure safety improvements with a robust investment in transit and other financial incentives to provide alternatives to car ownership.

#### **Educational enforcement**

Enforcement is a last resort strategy to achieve Vision Zero. Better and safer street designs are inherently self-enforcing, which is why they are the primary strategy. However, in the short-term, enforcement plays a important role as an educational tool. Punitive fines and revenue-seeking strategies are counterproductive to the Vision Zero goal, which is behavior change. In practice, enforcement as an educational tool means:

- Enforcement agencies in the city should develop automated ticketing systems that make use of up-to-date behavioral science to maximize behavior change and minimize fines.
- An automatic deferred disposition program should wipe tickets from a driver's record if no further violations occur within a set timeframe.
- Knowledgeable and dedicated traffic safety officers should perform education-based campaigns in every neighborhood in the city.

### Fix infrastructure at high revenue traffic safety cameras

The goal of the automated traffic safety camera program is safety, not revenue. In places where an automated traffic camera generates a disportionate amount of money, the underlying street design should be changed immediately, using the tactical design process described above. Traffic calming techniques should be employed to encourage safe driving through better street design.

### **About Vision Zero**

Vision Zero is a paradigm shift in traffic safety. Its core principle is that serious and fatal crashes are preventable, and the no loss of life on our roads is acceptable. In 2015, Mayor Muriel Bowser committed the District of Columbia to Vision Zero, promising to end traffic fatalities in the city by 2024.

## About the Washington Area Bicyclist Association

The mission of the Washington Area Bicyclist Association is to create a healthy, more livable region by promoting bicycling for fun, fitness, and affordable transportation; advocating for better bicycling conditions and transportation choices for a healthier environment; and educating children, adults, and motorists about safe bicycling.

WABA seeks to achieve this through advocacy, outreach, and education initiatives, as well as membership and development growth. Our events and rides provide additional support for our mission. For more information about what we're working on presently, check out our advocacy priorities.

WABA works for the D.C. metro area, which includes the following jurisdictions: Washington, D.C.; Montgomery County; Prince George's County; Arlington County; Fairfax County; and the city of Alexandria.

More information is available at **waba.org** or by emailing **advocacy@waba.org**.

