

**GOVERNMENT OF THE DISTRICT OF COLUMBIA  
Department of Transportation**



**Public Roundtable on  
Climate Resilience Planning in the District**

Testimony of Dawit Muluneh

Chief Engineer, Infrastructure and Project Management Division

Committee on Transportation and the Environment  
Mary Cheh, Chairperson

Committee on the Judiciary and Public Safety  
Charles Allen, Chairperson

Committee on Business and Economic Development  
Kenyan McDuffie, Chairperson

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Good afternoon, Chairpersons Cheh, Allen, and McDuffie and members of the Committees on Transportation and the Environment, the Judiciary and Public Safety, and Business and Economic Development. I am Dawit Muluneh, Chief Engineer of the District Department of Transportation, also known as DDOT. I'm joined today by EJ Simie, Manager of DDOT's Hydraulics and Stormwater Program. I am pleased to provide testimony on DDOT's resiliency efforts and steps we have and continue to take towards building a sustainable and more resilient transportation system.

Everything DDOT does is intended to make the transportation sector more sustainable and resilient. Expanding bus-priority, bicycle, and pedestrian infrastructure makes choosing these modes of transportation more desirable. Electrifying our Circulator bus fleet reduces our operations' greenhouse gas emissions. Preserving and expanding our tree canopy lowers energy consumption in homes and buildings by lowering surface temperatures and combatting the urban heat island effect. Even roadway reconstruction can help make our system more resilient when accompanied by drainage improvements, proper road contouring, and bus, bike, and pedestrian infrastructure. Today, my testimony will focus on DDOT's Flood Emergency Response Plan, our membership of recently established DC Flood Task Force, the expansion of the tree canopy, , and the electrification of the DC Circulator.

In August 2018, DDOT published a Flood Emergency Response Plan which identifies locations within DDOT's roadway network susceptible to flooding. For each location, the plan outlines flood mitigation strategies and emergency response plans should severe flooding create a need for road closure and traffic diversion even on evacuation routes. Common factors that make these and other locations susceptible to flooding are elevation, aging infrastructure, impervious surfaces, and lack of infrastructural capacity. For each location, the response plan

makes recommendations for how to mitigate flooding in preparation for future events and how to manage traffic in the event of an emergency.

DDOT is a member of the DC Flood Task Force which was established to identify equitable ways to reduce the risk of water damage from floods in the District and reduce the financial burdens of flooding on low- and fixed-income homeowners. Over the next 12 months, DDOT along with other members of the task force will work to devise an action plan to tackle some of the major contributing factors to flooding and ways to make individual homes and neighborhood facilities more resilient.

On November 5th of this year, DDOT kicked off its 2021-2022 tree-planting season. Planting new trees and expanding the tree canopy greatly benefits the District's resiliency initiatives by not only protecting our air and water resources but also creating a cooler, more livable environment for residents. Each year, DDOT's Urban Forestry Division plants over 8,000 new trees across all eight Wards with particular emphasis on those locations where tree canopy coverage is in the greatest need of expansion. The District's ultimate goal is to achieve an Urban Tree Canopy coverage of at least 40% by 2032. Residents can find more information about DDOT's efforts to expand the District's tree canopy at [trees.dc.gov](https://trees.dc.gov), which includes an interactive map of upcoming tree plantings and scheduled tree maintenance in their neighborhoods.

Reducing greenhouse gas emissions is one of the most important things the District can do to make our transportation system more sustainable and resilient. DDOT is actively moving toward electrifying the District's Circulator fleet. Currently, about 20% of the fleet is composed of electric buses. DDOT is in the process of procuring additional electric buses that will be

delivered in summer 2023. With these additional e-buses, one-third of our fleet will be composed of electric buses.

In 2021, DDOT completed negotiations for the District's purchase of land in Prince George's County, Maryland, to construct a bus garage that is capable of charging e-buses. One of the biggest challenges to electrifying the fleet is having reliable infrastructure to sufficiently charge buses for the duration of revenue service. The purchase of this land and planning for a bus garage enhances the District's capacity to support future procurements of additional electric buses. The future facility in Prince George's County will require a great deal of additional planning and investment to complete. So, at the same time, we are also planning improvements to our existing facility on South Capitol Street to accommodate fleet expansions in the shorter term. One such improvement includes working with the Department of the Energy and the Environment (DOEE) to incorporate solar power.

Each of these efforts—publishing DDOT's flood emergency response plan, participating in the DC Flood Task Force, increasing the District's tree canopy, and electrifying the DC Circulator fleet—serve as examples of how DDOT is working to make the District more resilient and reflect our commitment to the goals of the Sustainable DC Plan. By working toward building a safe and reliable transportation network that encourages walking, biking, and public transportation, we are helping reduce CO2 emissions and building a more sustainable community.

I thank you for the opportunity to testify and I look forward to answering any questions you may have.