

Montgomery County Dockless Mobility Update

Final Report



TOOLE
DESIGN



Executive Summary

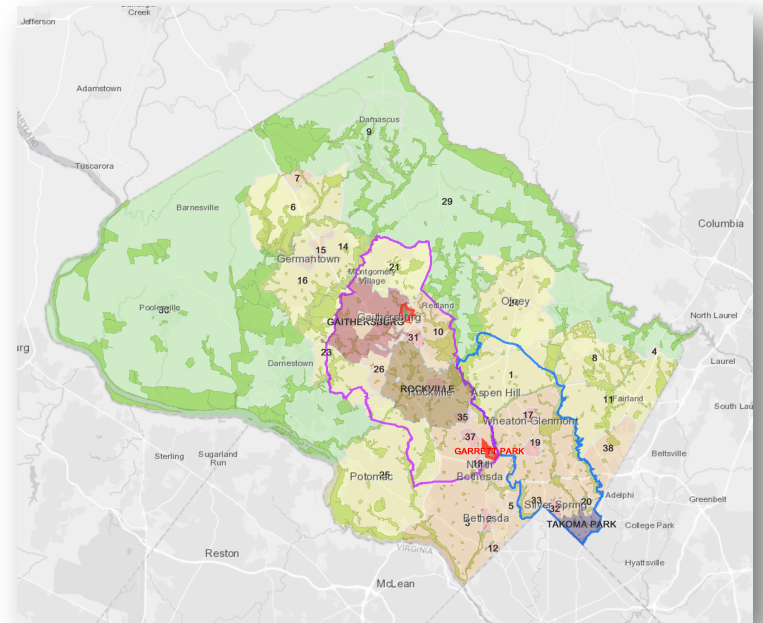


Introduction

- This report covers a dockless mobility demonstration project implemented by the Montgomery County Department of Transportation (MCDOT) between June 1, 2019, and March 31, 2020.
- The demonstration project built on the County's dockless e-bike pilot by adding dockless e-scooters and expanding the territory served by shared dockless mobility providers to include an East County Service Area (Wheaton, Silver Spring, Takoma Park) and a West County Service Area centered (Rockville, North Bethesda).
- The overall goal of the project was to improve personal mobility choices, including first-mile/last-mile connections to transit and employment, and broader access for people of color and other underserved communities.
- MCDOT contracted with Toole Design and Remix.com to help monitor and assess the project. Toole Design is a multimodal transportation planning, engineering, and landscape architecture firm. Remix.com is an online transportation planning platform.

Providers and Service Territories

- MCDOT authorized three shared dockless mobility providers to participate in the demonstration project—Lime, Lyft, and Bird.
- Initially each provider was restricted to one of the two service areas. Lime and Lyft served the East County Service Area and Bird served the West County Service Area.
- On January 9, 2020, MCDOT made it possible for all providers to serve both service areas.



[Online map](#) showing East Count Service Area and West Count Service Area (blue outline)

E-bikes

- Lime was the only authorized provider to offer both e-bikes and e-scooters. Lyft and Bird provided e-scooters only.
- Lime e-bikes were not available between July 10 and September 3, 2019, due to mechanical issues, and Lime suspended e-bike service entirely on November 2, 2019.
- Between June 15 and November 2, 2019, 876 trips were logged by e-bike, approximately 1% of all shared dockless mobility trips logged during the project period.
- Due to the suspension of e-bike service and the comparatively low number of trips logged, this report focuses on e-scooter data unless otherwise indicated.



Montgomery County resident tests a Lime e-bike during a free training.

Additional Context

- The project unfolded against the backdrop of a quickly evolving shared dockless mobility industry and, from March 2020, the COVID-19 pandemic.
- Key shared dockless mobility industry trends included:
 - Increased pressure on shared dockless mobility companies to generate profits.
 - Industry consolidation, including larger companies buying out smaller ones and companies withdrawing from smaller, less-profitable areas.
 - Local governments updating their infrastructure to better support the safe and orderly riding and parking of shared dockless mobility devices.

Additional Context

- Key impacts of the COVID-19 pandemic included:
 - Shared dockless mobility providers temporarily suspended or scaled back service. In Montgomery County, Lime suspended service on March 19 and Bird suspended service on March 21 but resumed service on May 3.
 - Local governments developed programs aimed at maintaining shared dockless mobility options during the pandemic. In Montgomery County, MCDOT worked with Capital Bikeshare and Lyft to provide free memberships to essential workers.
 - Shared dockless mobility providers increased efforts to sanitize shared dockless mobility vehicles and provide relevant sanitary equipment to employees.
 - A marked increase in trip distances has been observed during the pandemic.
 - MCDOT is very interested in maintaining a dockless program and is reaching out to additional companies.

Key Findings

- Shared dockless mobility increased mobility options in Montgomery County.
- Shared dockless mobility operations were generally smooth.
- Shared dockless mobility reduced carbon dioxide emissions by an estimated 48.4 metric tons (106,698 lbs.) over the course of the project.*
- Stronger regional coordination of providers and policies may enhance the consistency and usefulness of shared dockless mobility services.
- Improperly parked shared dockless mobility devices sometimes obstructed pedestrian access routes, impacting accessibility for people with disabilities and others.
- Many high-demand e-scooter routes lack infrastructure that is physically separated from motor vehicle traffic and suitable for scooter riding, e.g., separated bike lanes.
- During the COVID-19 pandemic, shared e-scooters have provided an socially-distanced alternative to public transportation at a time when public transportation service has been cut back.

*CO₂ emissions reductions from shared dockless mobility estimated based on:

- 171,155 miles traveled by e-scooter and e-bike between June 1, 2019, and March 31, 2020.
- 70% of e-scooter and e-bike trips replacing trips that would have otherwise been taken by personal vehicle, taxi, and transportation network company (e.g., Uber, Lyft). The 70% figure is based on a finding in the 2019 [Alexandria Dockless Mobility Assessment Report](#).
- 22.0 mpg average combined fuel economy for light duty vehicles in 2018 as reported by the [Federal Highway Administration](#).
- Carbon Dioxide Equivalent for 5445.8 gallons saved calculated using the [United States Environmental Protection Agency Greenhouse Gas Equivalencies Calculator](#)

Key Recommendations

- Continue access to shared e-scooters in Montgomery County through a pilot program extension or permanent program.
- Seek ways to provide e-bikes as part of the program.
- Require an operations plan to be submitted to the County at the time of the new MOU that outlines general operations for each company.
- Continue coordinating with regional partners and explore further alignment of regional dockless shared mobility policies and program requirements in the future.
- Designate specific additional corrals/parking areas.
- Expand separated bike lane network.
- Consider allowing shared e-scooters and e-bikes on sidewalks adjoining high-speed roads and where pedestrian use is minimal. This would align with County regulations allowing bicycles on sidewalks.
- During the COVID-19 pandemic, ensure safe operations by requiring companies to clean devices regularly, encouraging glove and mask usage, and providing safe social distancing and scooter use messaging.