Government of the District of Columbia Office of the Chief Financial Officer



Jeffrey S. DeWitt Chief Financial Officer

MEMORANDUM

TO: The Honorable Phil Mendelson

Chairman, Council of the District of Columbia

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FROM: Jeffrey S. DeWitt

Chief Financial Officer

DATE: July 10, 2020

SUBJECT: Fiscal Impact Statement - Autonomous Vehicles Testing Program

Amendment Act of 2020

REFERENCE: Bill 23-232, Committee Print as provided to the Office of Revenue

Analysis on July 1, 2020

Conclusion

Funds are not sufficient in the fiscal year 2020 budget and the proposed fiscal year 2021 through fiscal year 2024 budget and financial plan to implement the bill. The bill's implementation will cost approximately \$1.2 million in fiscal year 2021 and \$3.6 million over the four-year financial plan period.

Background

In 2013, the District established the necessary parameters for the regulation of autonomous vehicles in the District.¹ These parameters including defining autonomous vehicles, authorizing the operation of autonomous vehicles, and allowing the conversions of a non-autonomous vehicle into an autonomous vehicle.

The bill establishes a formal Autonomous Vehicle Testing Program (Program) administered by District Department of Transportation(DDOT). DDOT must create a permit application process for an autonomous vehicle testing entity² (entity); approve, reassess, and renew applications, permits,

¹ Autonomous Vehicle Act of 2012, effective April 23, 2013 (D.C. Law 19-278; D.C. Official Code § 50-2351 et seq.).

² The term "autonomous vehicle testing entity" is used in the bill to describe permit applicants and recipients.

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FIS: Bill 23-232, "Autonomous Vehicles Testing Program Amendment Act of 2020," Draft Committee Print as shared with the Office of Revenue Analysis on July 1, 2020

and modifications;³ regularly monitor the availability of the District's roadways to approved entities; receive, evaluate, and publish autonomous vehicle data and crash incidents; report on the success of the Program; establish term and fee structures; and enforce violations of the Program.

As part of the application process, an entity must provide vehicle identification information,⁴ any safety and risk mitigation assessments DDOT may require, information on the operational design domain⁵ in which the entity's vehicles will operate, proof of compliance with federal motor vehicle safety standards, and \$5 million worth of insurance or surety bonding. The bill requires an autonomous vehicle to achieve a minimal risk condition⁶ in the event of a performance failure both when a test operator is present and when a remote operator is monitoring the vehicle. Entities must provide DDOT with reporting on a semiannual basis that includes vehicle miles traveled, a description of situations where a test operator took over control of a vehicle, details on crashes that take place on a public roadway during testing, and any changes made to the vehicle's operations following a crash. Vehicles must be able to record information for the relevant period prior to a crash, the entity must notify DDOT as soon as possible, but no later than twelve hours following a crash, and the entity must file a crash report with DDOT within five days. DDOT can, at its discretion, temporarily limit the locations where an autonomous vehicle can operate to prevent conflicts with emergencies, special events, and dangerous roadway conditions.

DDOT must evaluate the Program and issue a report to the Council within one year of establishing the Program that discusses whether and how the District should allow for the full deployment of autonomous vehicles on the District's roadways.

DDOT can enforce compliance with the Program through the issuance of civil penalties of not more than \$1,000 per day per offense or through the suspension, revocation, or denial of a testing permit. An entity that receives an enforcement action or is otherwise aggrieved by DDOT can appeal to the Office of Administrative Hearings (OAH).

Any company operating or testing in the District prior to DDOT's establishment of the Program must apply to be part of the Program within sixty days of DDOT establishing the Program or cease operations.⁷

Financial Plan Impact

Funds are not sufficient in the fiscal year 2020 budget and the proposed fiscal year 2021 through fiscal year 2024 budget and financial plan to implement the bill. The bill requires DDOT to establish

³ Modifications that require DDOT notification include changes to the operational design domain, an increase in fleet size of greater than 50 percent, transitioning from an in-vehicle test operator to a remote operator, and changes in the make or model of test vehicles.

⁴ The bill requires an entity to submit a quarterly vehicle inventory list to DDOT with vehicle identification information.

⁵ The bill defines operational design domain as the environmental, geographic, time-of-day, traffic, infrastructure, and other conditions under which an autonomous vehicle will function.

⁶ This is the condition where an entity intervenes to reduce the risk of a crash when a trip cannot or should not be completed.

⁷ An entity must also cease operations if its permit application is denied.

FIS: Bill 23-232, "Autonomous Vehicles Testing Program Amendment Act of 2020," Draft Committee Print as shared with the Office of Revenue Analysis on July 1, 2020

the Program to permit entities to operate autonomous vehicles on the District's roadways. DDOT must regularly provide entities with information about where they can operate and receive information about the performance of the Program participants, including crash information. DDOT is responsible for issuing rules to govern the Program and enforcing violations of the Program. DDOT must hire three new program employees to manage the Program and analyze related data, build a database to capture Program data, and hire expert consultants to advise on initial and renewal application evaluations. The new DDOT staff will require an additional \$338,000 in fiscal year 2021 and \$1.4 million over the four-year financial plan period. DDOT will need to hire a consultant to build and maintain a database to track autonomous vehicle data and provide entities with relevant roadway information. This will cost \$600,000 to build in fiscal year 2021 and \$200,000 annually thereafter to maintain. Finally, DDOT expects approximately ten companies to operate in the Program and that it would need to pay an expert consultant \$20,000 per application evaluation, including renewals, for a total cost of \$200,000 annually.

OAH will hear any appeals related to enforcement actions taken by DDOT or any other Program related rule. While the number of likely participants in the Program is low, OAH's licensing and enforcement division is unable to hear any related cases without additional resources. OAH requires an additional legal assistant to help with these cases at a cost of \$60,000 in fiscal year 2021 and \$242,000 over the four-year financial plan period.

The following chart summarizes the additional resources required to implement the bill.

Autonomous Vehicles Testing Program Amendment Act of 2020 Bill 23-232 Implementation Costs Fiscal Year 2021 - Fiscal Year 2024 (\$000s)					
	FY 2021a	FY 2022	FY 2023	FY 2024	Total
DDOT Staff	\$338	\$340	\$341	\$341	\$1,360
Program Database	\$600	\$200	\$200	\$200	\$1,200
DDOT Application Review	\$200	\$200	\$200	\$200	\$800
OAH Staff	\$60	\$60	\$61	\$61	\$242
Total Costs	\$1,198	\$800	\$802	\$802	\$3,602

Table Notes

^a Assumes an October 1, 2020 implementation date.