Resolution No.: 20-319

Introduced: October 3, 2023
Adopted: November 7, 2023

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

Lead Sponsor: Council President at the Request of the County Executive

SUBJECT: Amendment to the FY23-28 Capital Improvements Program and

Supplemental Appropriation #24-13 to the FY24 Capital Budget

Montgomery County Government
Department of Transportation

Hydrogen Fuel Cell Buses and Fueling Site (No. 502408), \$14,875,975

Background

- 1. Section 307 of the Montgomery County Charter provides that any supplemental appropriation shall be recommended by the County Executive who shall specify the source of funds to finance it. The Council shall hold a public hearing on each proposed supplemental appropriation after at least one week's notice. A supplemental appropriation that would comply with, avail the County of, or put into effect a grant or a Federal, State or County law or regulation, or one that is approved after January 1 of any fiscal year, requires an affirmative vote of six Councilmembers. A supplemental appropriation for any other purpose that is approved before January 1 of any fiscal year requires an affirmative vote of seven Councilmembers. The Council may, in a single action, approve more than one supplemental appropriation. The Executive may disapprove or reduce a supplemental appropriation, and the Council may reapprove the appropriation, as if it were an item in the annual budget.
- 2. Section 302 of the Montgomery County Charter provides that the Council may amend an approved capital improvements program at any time by an affirmative vote of no fewer than six members of the Council.
- 3. The County Executive recommends the following capital project appropriation increases:

Project	Project	Cost		Source
Name	Number	Elements	<u>Amount</u>	of Funds
Hydrogen Fuel Cell Buses	502408	Planning, Design		
and Fueling Site		and Supervision	\$1,198,989	
		Construction	\$1,654,689	
		Other	\$12,022,297	
TOTAL			\$14,875,975	Federal Aid

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4. This increase is needed to implement green hydrogen technology in transit for the first time in the State of Maryland. This hydrogen production and fueling facility will power the County's first 13 hydrogen fuel cell buses. The recommended amendment is consistent with the criteria for amending the CIP because the project leverages significant non-County sources of funds.

- 5. The County Executive recommends an amendment to the FY23-28 Capital Improvements Program and a supplemental appropriation in the amount of \$14,875,975 for Hydrogen Fuel Cell Buses and Fueling Site (No. 502408), and specifies that the source of funds will be Federal Aid.
- 6. Notice of public hearing was given and a public hearing was held on October 17, 2023.

Action

The County Council for Montgomery County, Maryland, approves the following action:

The FY23-28 Capital Improvements Program of the Montgomery County Government is amended as reflected on the attached project description form and a supplemental appropriation is approved as follows:

Project	Project	Cost		Source
Name	Number	<u>Elements</u>	Amount	of Funds
Hydrogen Fuel Cell Buses	502408	Planning, Design		
and Fueling Site		and Supervision	\$1,198,989	
		Construction	\$1,654,689	
		Other	\$12,022,297	
TOTAL			\$14,875,975	Federal Aid

This is a correct copy of Council action.

Sara R. Tenenbaum

Clerk of the Council



Hydrogen Fuel Cell Buses and Fueling Site (P502408)

Category Transportation
SubCategory Mass Transit (MCG)
Planning Area Countywide

Date Last Modified Administering Agency Status 08/14/23
Transportation
Preliminary Design Stage

	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
EXPENDITURE SCHEDULE (\$000s)											
Planning, Design and Supervision	1,199	-	-	1,199	-	967	232	-	-	-	-
Construction	1,655	-	-	1,655	-	-	1,655	-	-	-	-
Other	12,022	-	-	12,022	-	2,958	7,614	1,450	-	-	-
TOTAL EXPENDITURES	14,876	-	-	14,876	-	3,925	9,501	1,450	-	-	-

FUNDING SCHEDULE (\$000s)

Federal Aid	14,876	-	-	14,876	-	3,925	9,501	1,450	-	-	-
TOTAL FUNDING SOURCES	14,876	-	-	14,876	-	3,925	9,501	1,450	-	-	-

OPERATING BUDGET IMPACT (\$000s)

Maintenance	1,200	-	-	-	400	400	400
NET IMPACT	1,200	-	-	-	400	400	400

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 24 Request	-	Year First Appropriation	-
Supplemental Appropriation Request	14,876	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project implements the green hydrogen technology in transit for the first time in the State of Maryland. The new hydrogen fuel production and fueling station will operate at the County's existing David F. Bone Equipment Maintenance and Transit Operations Center (EMTOC) in Gaithersburg. This facility will power the County's first 13 hydrogen fuel cell electric buses (FCEBs), which will be procured as part of this project. The County will partner with industry experts, the Center for Transportation and the Environment (CTE) and Trillium, to implement the project.

ESTIMATED SCHEDULE

Initial planning, including a Program of Requirements, was completed as part of the County's Zero Emissions Transition Plan in FY23. Preliminary design and bus procurement will begin in FY24. Completion of the facility and receipt of the buses will occur in FY25.

PROJECT JUSTIFICATION

This project will reduce carbon emissions, increase the reliability and sustainability of the bus fleet, and is an essential step in the transition to a zero-emissions fleet to reach the goals in the County's Climate Action Plan. The new hydrogen fuel production facility will produce hydrogen fuel that is greener than traditional fossil fuel-based hydrogen, as the fuel will be produced from water using zero-emission electrolysis. Similarly, fuel cell electric buses can provide uninterrupted service on bus routes that have a standard daily range of over 150 miles, which is beyond the maximum range currently allowed by zero-emission battery-electric buses.

OTHER

Electricity needed to produce hydrogen fuel at this facility will be generated by a solar microgrid to be constructed at the David F. Bone Equipment Maintenance and Transit Operations Center.

FISCAL NOTE

Funding for this project includes a Low or No Emission Grant from the Federal Transit Administration. The County's match funds are provided in the Ride On Bus Fleet Project (P500814). FY24 supplemental in Federal Aid for the amount of \$14,875,975.

COORDINATION

Federal Transit Administration (FTA), Department of General Services, Department of Finance, Department of Permitting Services, Utility Companies, Industry Expert Partners