This bill requires the Maryland Transit Administration (MTA) to (1) provide safety and workforce development training (including registered apprenticeships and other labor-management training programs) for its workforce related to the new zero-emission buses that it is required to purchase under the Zero Emission Transition Act (Chapter 693 of 2021) and (2) include additional information in the annual transition report required by Chapter 693. **The bill takes effect July 1, 2022.**

### Fiscal Summary

**State Effect:** Transportation Trust Fund (TTF) expenditures increase by $585,200 in FY 2023 to develop and implement an apprenticeship program; future years reflect inflation, termination of one-time costs, and ongoing operating costs. Revenues are not affected.

<table>
<thead>
<tr>
<th>(in dollars)</th>
<th>FY 2023</th>
<th>FY 2024</th>
<th>FY 2025</th>
<th>FY 2026</th>
<th>FY 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>SF Expenditure</td>
<td>585,200</td>
<td>168,400</td>
<td>173,200</td>
<td>177,800</td>
<td>182,500</td>
</tr>
<tr>
<td>Net Effect</td>
<td>($585,200)</td>
<td>($168,400)</td>
<td>($173,200)</td>
<td>($177,800)</td>
<td>($182,500)</td>
</tr>
</tbody>
</table>

Note: () = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; () = indeterminate decrease

**Local Effect:** The bill does not directly affect local government operations or finances.

**Small Business Effect:** Minimal.
Analysis

Bill Summary: MTA must provide the training to its operations training workforce and its maintenance workforce so that it can safely repair and maintain MTA’s zero-emission buses and their components as well as the charging infrastructure for the buses. The safety and workforce development training provided by MTA must include registered apprenticeships and other labor-management training programs to address the impact of the transition to zero-emission buses on MTA’s workforce.

The annual report on the transition to zero-emission buses completed by MTA must include a plan for (1) ensuring that no duties or functions of State employees are transferred to a contracting entity as a result of the conversion to zero-emission buses and (2) ensuring that any entity other than MTA that operates or maintains the buses on behalf of MTA provides employee protections equivalent to the protections required by the plan. MTA must also certify that it is adhering to the plan, including a requirement by Chapter 693 to transition adversely affected State employees to similar or other employment with commensurate seniority, pay, and benefits.

Current Law: MTA is a modal unit within the Maryland Department of Transportation (MDOT), and it operates a comprehensive transit system throughout the Baltimore-Washington metropolitan area, including more than 50 local bus lines in Baltimore and other services, such as the light rail, Baltimore Metro subway, commuter buses, MARC trains, and mobility/paratransit vehicles. Except for the Washington Metropolitan Area Transit Authority, MDOT and MTA are generally the agencies responsible for the construction and operation of transit lines in the State.

Chapter 693 prohibits MTA, beginning in fiscal 2023, from entering into a contract to purchase buses for its transit bus fleet that are not zero-emission buses; however, MTA may purchase an alternative-fuel bus instead if it determines that no available zero-emission bus meets the performance requirements for a particular use. Chapter 693 does not apply to any bus that is part of a locally operated transit system. MTA must ensure the development of charging infrastructure to support the operation of zero-emission buses in the State transit bus fleet, and the full cost of any buses purchased under Chapter 693 must be paid from TTF.

Chapter 693 also requires MTA to submit a report by January 1, 2022, and each January 1 thereafter, regarding the conversion of its bus fleet to zero-emission buses. The annual report must include, among other things, a plan for transitioning any State employee adversely affected by the conversion to similar or other employment within MTA or MDOT that has commensurate seniority, pay, and benefits. MTA plans to launch its first battery-electric buses pursuant to Chapter 693 in 2023.
Registered Apprenticeships

Apprenticeships are available to individuals age 16 and older; an employer, however, may set a higher entry age. By law, individuals must be age 18 to apprentice in hazardous occupations. Apprenticeships last from one to six years, although most are three to four years, and involve a minimum of 144 hours of classroom instruction per year and at least 2,000 hours per year of on-the-job training. A national apprenticeship and training program was established in federal law in 1937 with the passage of the National Apprenticeship Act, also known as the Fitzgerald Act. The purpose of the Act was to promote national standards of apprenticeship and to safeguard the welfare of apprentice workers.

Along with 24 other states and the District of Columbia, Maryland has chosen to operate its own apprenticeship programs under the federal law. The Division of Workforce Development and Adult Learning (DWDAL) within the Maryland Department of Labor is responsible for the daily oversight of State apprenticeship programs. More specifically, DWDAL approves new apprenticeship programs, changes to current programs, and compliance with State and federal requirements. The approval process involves assessing the appropriateness of an apprenticeship program in a proposed industry, the education that will be provided to the apprentice, the current staffing level of the entity proposing the program to determine whether adequate supervision can be provided, recruitment and retention efforts, and the overall operations of the entity.

State Expenditures:

Prohibition on Transfer of Duties

MTA advises that it does not intend to transfer any current duties of State employees to a contracting entity and, thus, the prohibition against doing so has no fiscal or operational impact. MTA advises that it intends to procure an electrification partner that will be responsible for new duties associated with electrifying the bus fleet.

Training Plan in the Absence of the Bill

Under MTA’s current plans, the electrification partner would be required to provide training to MTA staff related to the operations of the chargers (e.g., making sure the buses are in position to be charged) and the charge management system (e.g., read-out of bus state of charge, charger availability, and other key performance indicators). While the operation of the chargers will largely be automated, and the maintenance of the chargers will be handled largely by a combination of the equipment manufacturers and the electrification partner, the electrification partner is still being asked to provide MTA with a comprehensive operations and management training program so that staff will be in
position to take over full operations and management responsibilities at the end of the service contract term.

**Workforce Training and Apprenticeship Requirements**

To implement Chapter 693, MTA plans to have employees trained and/or certified by its electrification partner and directly from the manufacturers of the buses and charging equipment. While these plans and trainings can continue to take place under the bill, MTA must also develop and implement an apprenticeship program. MTA does not currently have any registered apprenticeship programs, does not have any experience with apprenticeship programs, and does not yet have any experience with the new electric buses and charging equipment. Efforts by MTA to find an existing registered apprenticeship program related to the operation and maintenance of zero emission vehicles were not successful. As such, to implement such a program, MTA needs consultant assistance and additional staff.

Therefore, TTF expenditures increase by $585,150 in fiscal 2023, which accounts for the bill’s July 1, 2022 effective date. This estimate reflects (1) a one-time cost to contract with a consultant to develop and secure approval of an apprenticeship program for the maintenance of electric motors and (2) hiring two trainers to work with existing employees and to supervise and instruct apprentices. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses.

<table>
<thead>
<tr>
<th>Positions</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Fringe Benefits</td>
<td>$169,934</td>
</tr>
<tr>
<td>Consultant Costs</td>
<td>400,000</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>15,216</td>
</tr>
<tr>
<td><strong>Total FY 2023 State Expenditures</strong></td>
<td><strong>$585,150</strong></td>
</tr>
</tbody>
</table>

Future year expenditures reflect salaries with annual increases and employee turnover, annual increases in ongoing operating expenses, as well as the termination of one-time consulting costs.

This estimate assumes that staff are hired on July 1, 2022, so that MTA maintenance staff are prepared to work with the buses when they begin operations in 2023. The trainers will also instruct and supervise apprentices once the consultant secures approval of the apprenticeship program by DWDAL. As State regulations require a minimum ratio of one journeyman (trainer) to each apprentice, it is assumed that the apprenticeship program initially will serve only two apprentices at a time and can be operated and maintained without the assistance of a consultant going forward. If the apprenticeship program expands after more MTA staff are fully trained and thus capable of supervising apprentices, administrative costs may increase to manage a larger program.
MTA can include the additional information in its annual report using existing budgeted resources.

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**Additional Information**

**Prior Introductions:** None.

**Designated Cross File:** SB 61 (Senator Zucker) - Education, Health, and Environmental Affairs.

**Information Source(s):** Maryland Department of Transportation; Department of Legislative Services

**Fiscal Note History:**
- First Reader - January 18, 2022
- Third Reader - March 17, 2022

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