GET CHARGED UP!

23Q4 Stakeholder Challenge

Mobility & Clean Transportation

November 8, 2023

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

Maryland Transit Administration

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Service Modes

Core Bus, Light Rail, Metro, Mobility, MARC, and Commuter Bus

15th

Largest Transit System

Out of all transit agencies in the United States by total ridership in 2022

~3,300

Employees

1,500 operators, 700 mechanics, 80% union

$12.6B

In Total Asset Value

Includes assets for which MTA has direct capital responsibility

~$1B

Operating Budget

For FY24, includes contracted service, salaries & benefits, LOTS

~$4B

Capital Budget

For FY24-29, major projects include vehicle overhauls & replacements, transit facilities

Core Bus

Serves Baltimore region with over 60 routes; largest mode by ridership; network redesign launched in 2017; 10th largest bus system in United States

Light Rail

33 stations from Hunt Valley to Cromwell and BWI Airport; 57 miles of track; mid-life overhaul of vehicles underway

Metro

Heavy rail service with 14 stations from Owings Mills to Johns Hopkins Hospital; fleet replacement underway

Mobility

Paratransit service for individuals with disabilities who are unable to use the MTA fixed route system; service is contracted

MARC

Commuter rail service with 3 lines; 42 stations in MD, WV, and DC; service is contracted

Commuter Bus

Peak-period limited-stop bus service; 4th largest system in United States; service is contracted

Supporting Our Region

- 54 million rides last year throughout system
  - Ridership continues to recover
- ~30% of Baltimore households have no access to a vehicle
  - Over 80% of Core Bus riders
- Over a third of Core Bus riders have <$20k household income
- Owning a car in Baltimore costs around $14,000 a year
- For every $1 invested in transit, the regional economic return is $4

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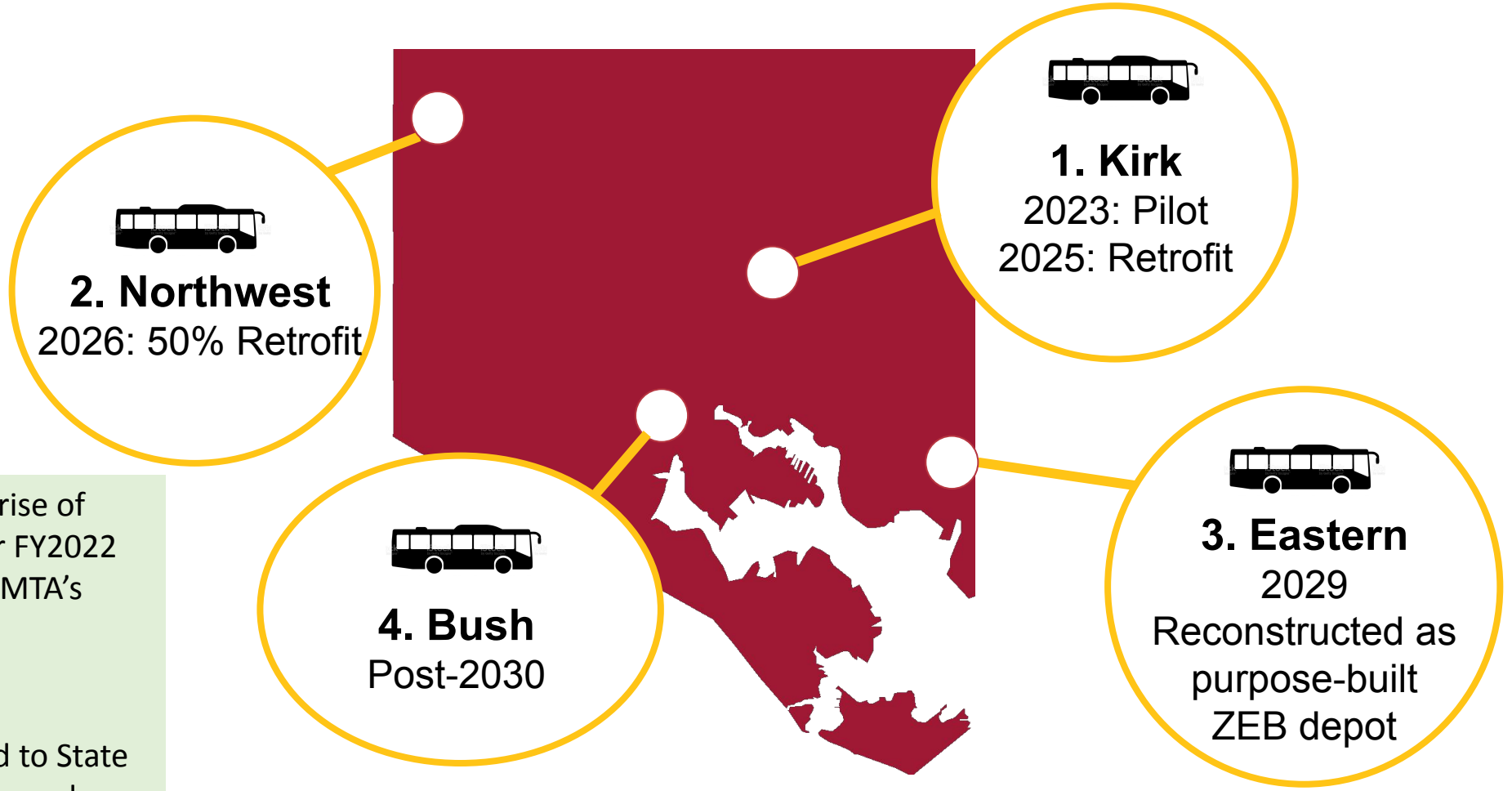
ZEV Transition Policy Mandates & Timelines



Transition Policy Objectives

- New procurements can only comprise of Zero-Emission Vehicles (ZEVs) after FY2022
- Transition requirement for 50% of MTA's core bus fleet to ZEV by 2030
- Transition goal for 100% of state non-revenue fleet to ZEV by 2033
- Annual legislative report submitted to State Government documenting progress and challenges
- Registered Apprenticeship program started in July 2023, initial focus on electricians

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Issue and Goal Statement

- Issue:
  - Many private and public organizations that operate fleets are challenged with **the issues tied to coordinating with utilities, other public owners of right of way** to clearly understand the process to provide the **required amount of electric power to their sites for charging infrastructure.**
  - Improved coordination between fleet operators and utilities' **capital investments** can be **streamlined to support fleet transition efforts**.
  - Improved coordination between **infrastructure and fleet vendors** and fleet operators/utilities will ensure that **upgrades and fleet deployments** can progress in a **timely and coordinated manner.**
- Goal:
  - Create guidance to more **clearly define the complex steps** that fleet operators, utilities and vendors must follow to **implement efficient utility enhancements** and **infrastructure upgrades** to support **large and reliable ZEV fleet deployments**.

Key Obstacles for 12-Month Resolution Period

- Initial Focus
  - Identify critical challenges for implementing utility upgrades and necessary infrastructure to support ZEV fleet.
- Key Stakeholders
  - Fleet Operators
    - Public Transportation
    - School Bus
    - Private Fleets
    - Municipal Fleets
  - Utility Companies
  - Public Service Commissions
  - Private Industry
    - EVSE/Charging Infrastructure Firms
    - Charge/Load Management Providers
    - Vehicle Manufacturers
- MTA's Role
  - Provide Overview of Coordination Activities with BGE
- Key Milestones/Funding Opportunities
  - Grant Programs
    - Federal: LoNo, Bus Facilities, RAISE, CRP
    - State: MEA, Volkswagen Mitigation
    - Utility Programs

Outcomes and Implications

Benefits of Addressing this Obstacle:

- **Reduce capital and operating expenditures** for fleet operators and utilities.
- Ensure **efficient use of utility grid** (through solutions such as load management)
- **Clean air and noise pollution reducti**on will benefit transit-dependent communities and the surrounding region on an earlier timeframe.
- Supports **accelerated phase-in of ZEV fleets**, **providing more data to the industry** to support future procurements and technologies
- Opens up new opportunities **to train and develop a skilled workforce** that can support these technology.

Consequences of not Addressing this Obstacle:

- **Delayed phase-in** of ZEV fleets
- **Inefficient use of resources**
  - Utility grid
  - Capital/operating expenditures from fleet operators and utilities
- **Transit-dependent communitie**s will need to wait longer to reap the benefits of cleaner air and quieter neighborhoods

Discussion

Regarding Mobility and Clean Transportation, to achieve the DMV Region's Climate, Health & Equity goals, a critical obstacle to collectively overcome in 12 months is **streamlining processes related to workforce development, infrastructure, facility and utility upgrades to support the accelerated phase-in of ZEV fleets.**

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