

# STATE DOT CLIMATE CHANGE PLANNING INITIATIVES

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Colleen Turner, Maryland Department of Transportation (MDOT)  
Matthew Gaskin, District Department of Transportation (DDOT)  
Jim Ponticello, Virginia Department of Transportation (VDOT)

TPB Work Session on Climate Change Planning in the National Capital Region  
October 21, 2020



# MDOT Climate Change Planning Initiatives

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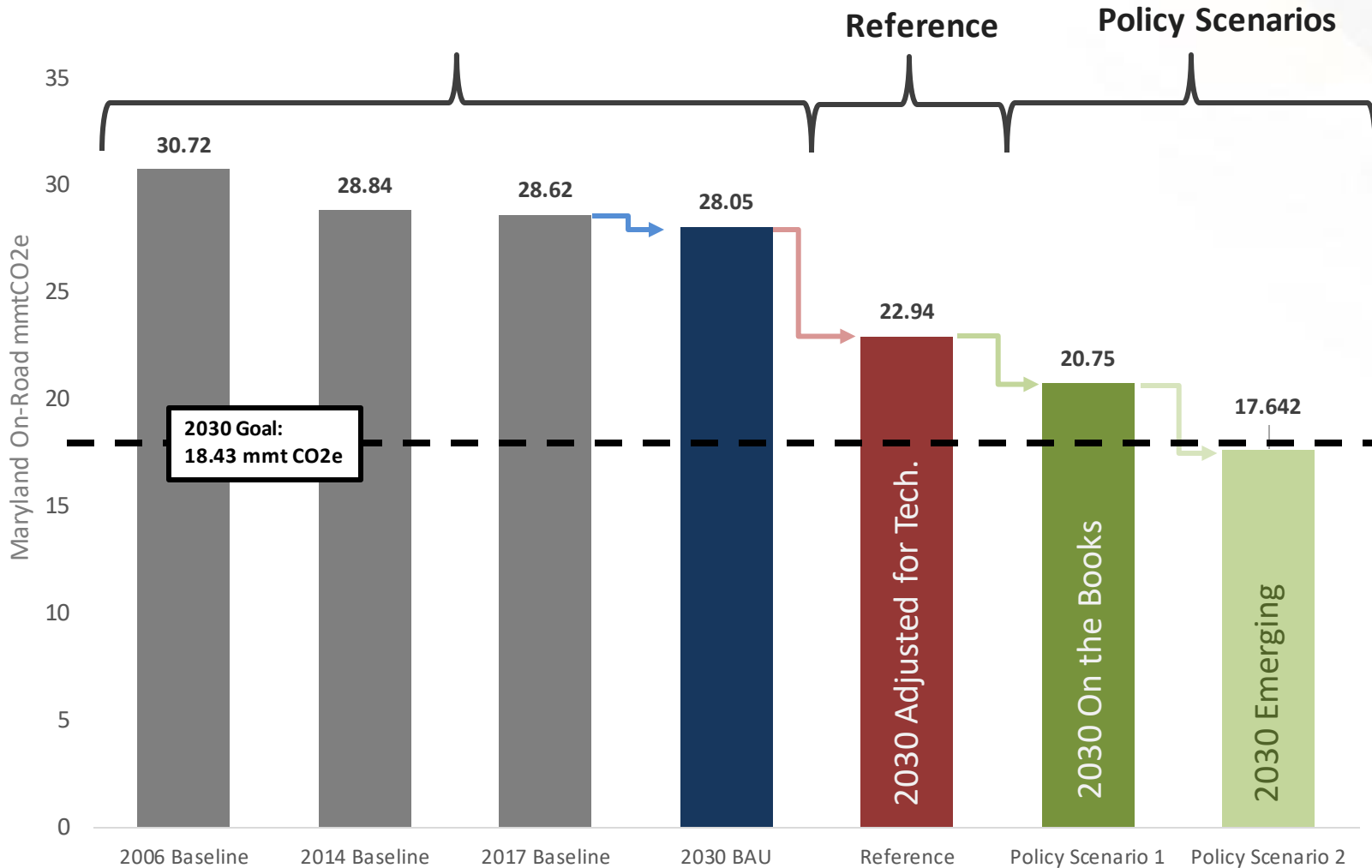
TPB Work Session on Climate Change Planning

**Colleen Turner – Assistant Director, Office of Planning and Capital Programming**

Maryland Department of Transportation

October 21, 2020

# GHG Reduction Goals & Progress To Date



## Greenhouse Gas Reduction Act (GGRA)

- Passed in 2009
- 25% Reduction by 2020

## 2016 GGRA Goal

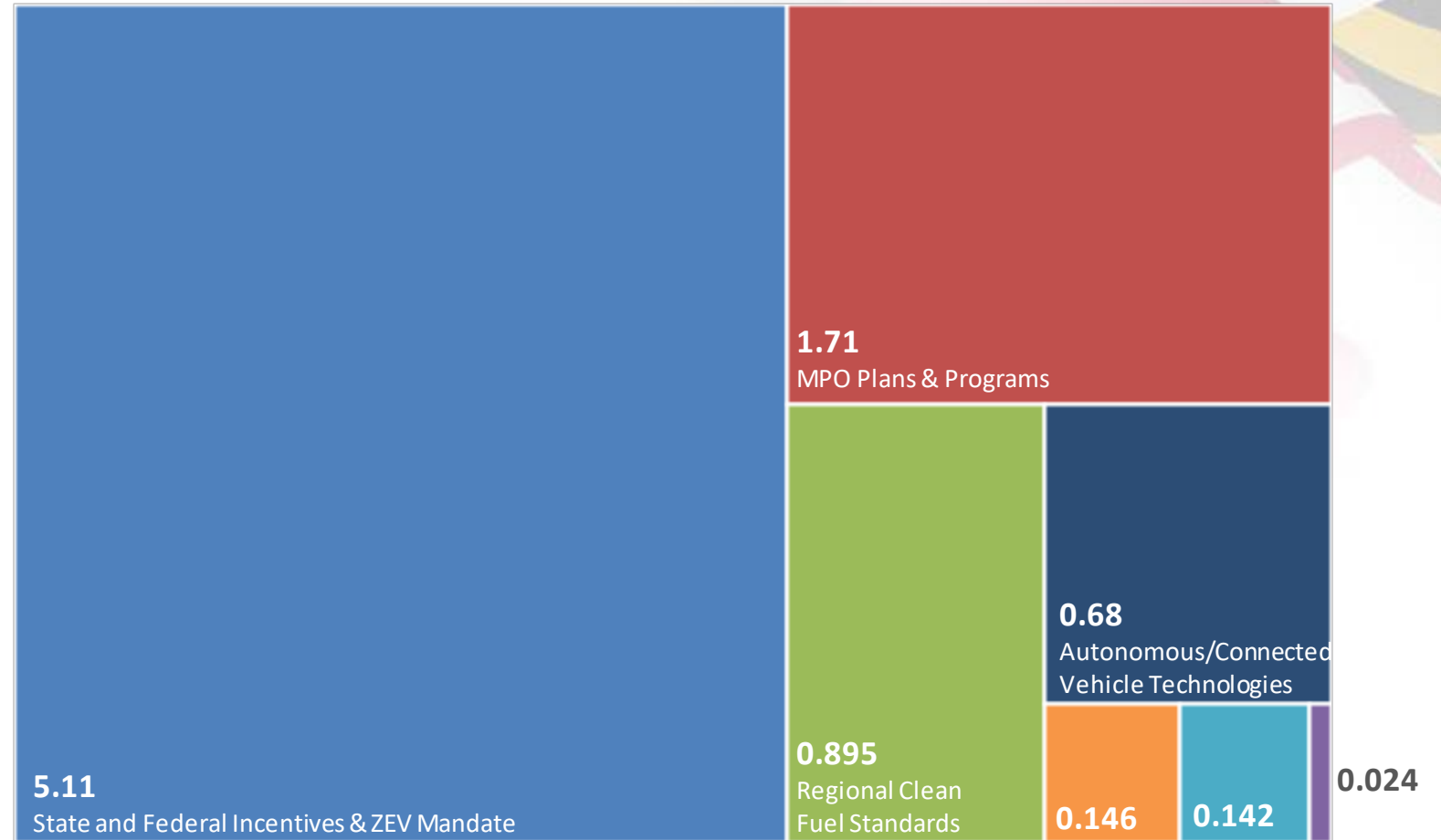
- 40% Reduction by 2030
- 90% Reduction by 2050

## Proposed Goal

- 50% by 2030
- Net Zero as early as 2045

# Where do Reductions Come From?

- In 2017, a reduction of **2.10 billion VMT** is required to reduce GHG emissions by 1 mmt CO<sub>2</sub>e
- In 2030, a reduction of **2.82 billion VMT** is required to reduce GHG emissions by 1 mmt CO<sub>2</sub>e
- In other words, **2030 VMT would have to be reduced by 4.4 percent to achieve a 1 mmt CO<sub>2</sub>e reduction in on-road emissions**



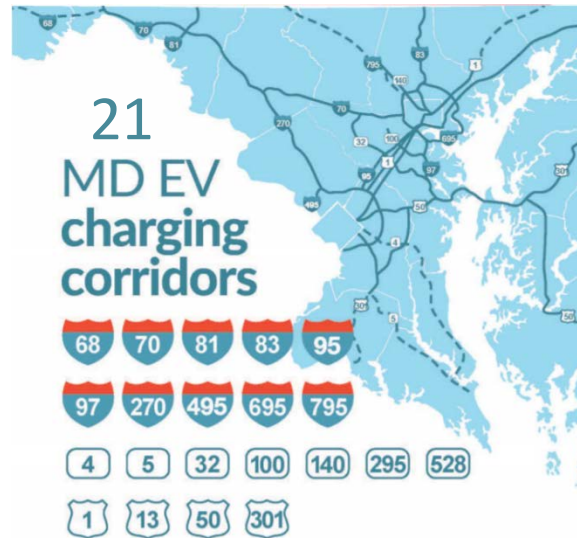
Transportation Demand Management On-Road Technology Bicycle and Pedestrian Strategies

# Think Regionally, Act Locally

## What is MDOT Doing?

- Setting Intentions
- Tracking / Modeling
  - AR
  - State Agency Report
  - ZEV/Infrastructure
- Fleet Innovation
- TDM
- Congestion Management

## #MarylandEV



## What Can YOU Do?

- Land Use
- ZEV Fleets
- ZEV Infrastructure
- Local Polices & Codes
- Attend MCCC
- Attend ZEEVIC
- Promote Commuter Programs
- Share Successes & Challenges!



# Resources & Opportunities

- [Maryland Commission On Climate Change](#)
  - Upcoming Meeting – October 27, 2020
- [Maryland Zero Emission Electric Vehicle Council \(ZEEVIC\)](#)
  - Upcoming Meeting – November 19, 2020
- [Maryland EV](#)
  - Public facing website, including resources for local governments
- Statewide ZEV Outreach Webinar
  - Upcoming – October 28, 2020
  - Register: <https://attendee.gotowebinar.com/register/6822216073273313296>
- [US Climate Alliance](#)



**Weston Young, Rural Representative**  
Assistant Chief Administrative Officers, Worcester County

**Liam Davis, Urban Representative**  
Baltimore City Department of Transportation



**David Edmondson, Urban Representative**  
Planner, City of Frederick

**Nina Forsythe, Rural Representative**  
Commissioner, City of Frostburg

# Contact Information

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# TPB Work Session On Climate Change Planning

## DDOT Climate Change Planning Initiatives



October 21, 2020



# Programs

- The District released three reports detailing progress on the Mayor's vision to transform DC into the healthiest, greenest, most livable city in the country.
  - Clean Energy DC
  - Climate Ready DC
  - Sustainable DC 2.0
- Sustainable DC 2.0, 92% of the 143 actions in Sustainable DC 2.0 were underway, 10 of which are transportation related.
  - 19.5% of commuter trips are made by biking or cycling.
  - 60 new Capital Bikeshare stations.
  - Five new miles of bike lanes, one new mile of protected bike lanes.

- 2010 DDOT Sustainability Plan
  - Document that ensure that DDOT incorporates sustainable practices in all its activities. This plan serves as a guide for decision-making at DDOT so that the District of Columbia remains a safe, multi-modal and healthy city for present and future generations.
  - Eight priorities noted to make DC more sustainable.
  - Tracked with goals and performance metrics.
- 2013 Climate Change Adaptation Plan
  - Guiding document for DDOT to address and mitigate the effects of climate change on the transportation system.
  - Derived from one of the eight priorities found in the 2010 DDOT Sustainability Plan.

# Projects

- Car Free Lanes
  - 14th St., H & I St., K St., MLK Blvd., M St., 7<sup>th</sup> St., and 16<sup>th</sup> St.
- Bike Lanes
  - Protected Bike Lanes
- Electric Buses
  - DC Circulator
- P3 Streetlights Project
  - Conversion to LED Streetlights
- Telework
  - During and after COVID-19
- Anti-Idling Initiatives

# Next Steps

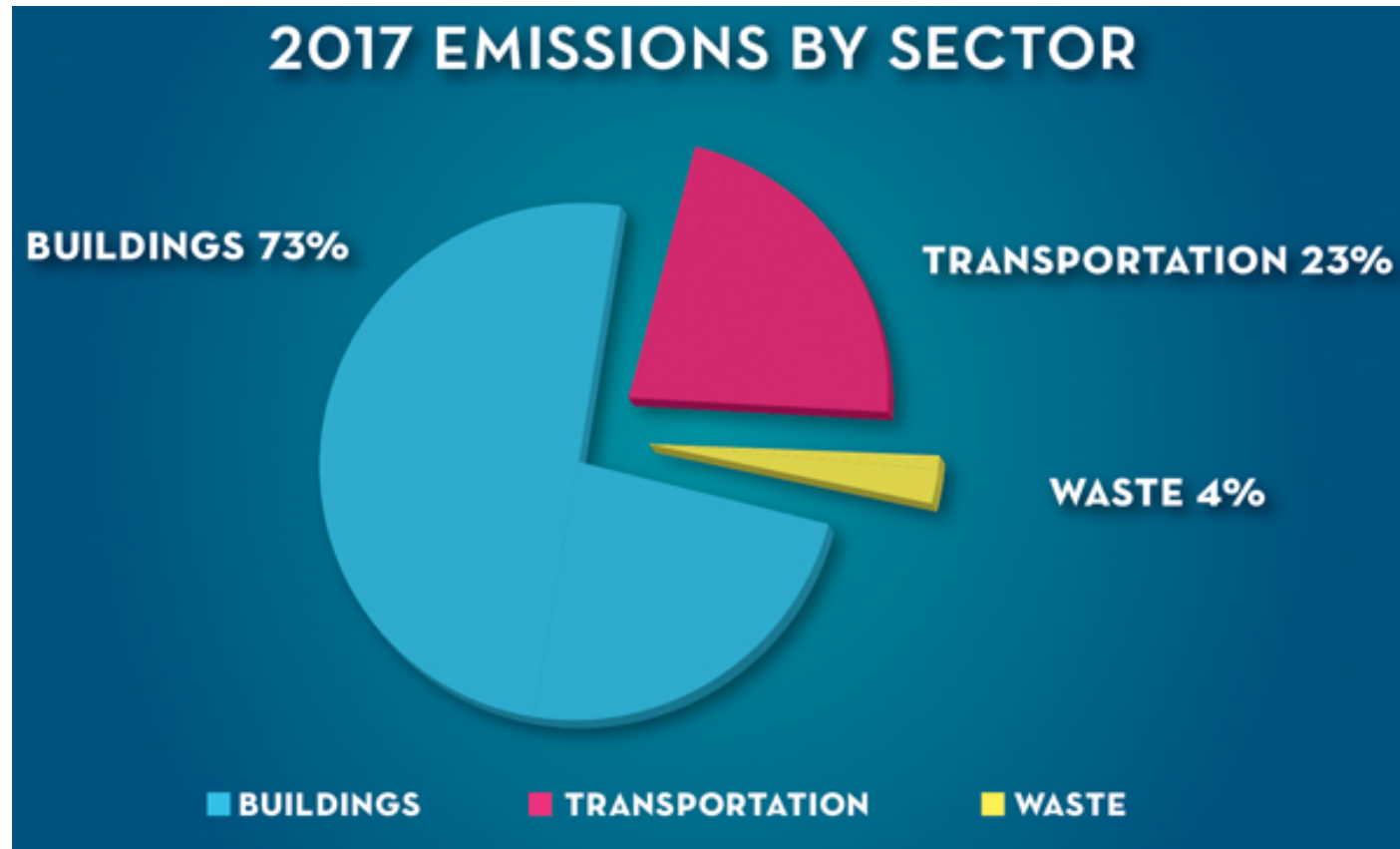
- Updates of the DDOT Sustainability Plan.
- Continued coordination with DOEE and DDOT.
- Increase CMAQ funded projects with quantifiable measures reducing emissions.
- Possible participation in the TCI regional cap on global warming pollution from transportation fuels.
- Future in depth presentation to TPB regarding the programs/projects in the District used to address climate change.

**Austina Casey:** Environmental Program Manager  
**Matthew Gaskin:** Air Quality Coordinator

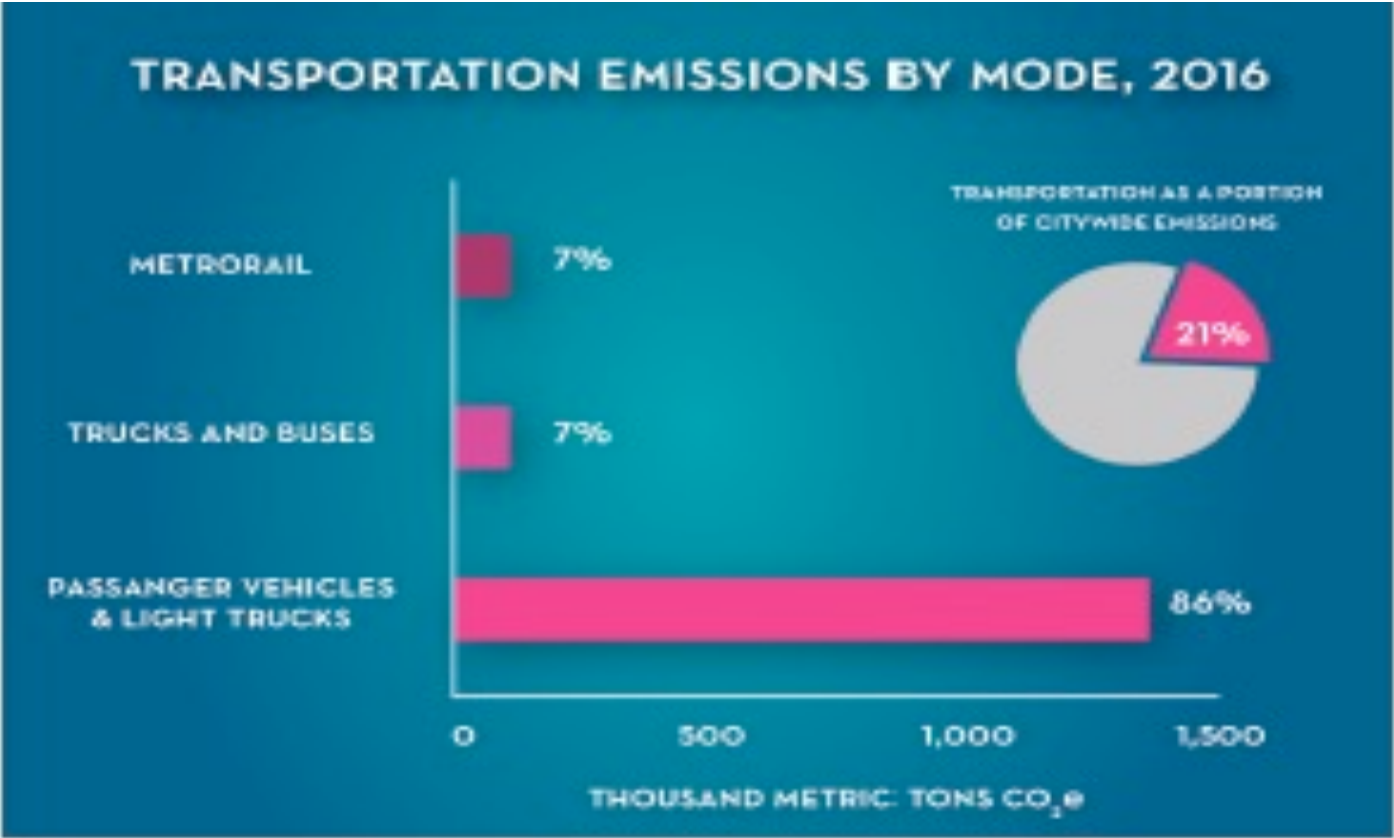
d. delivers

district department of transportation

# Background



# Background







# GREENHOUSE GAS MITIGATION STRATEGIES

Commonwealth of Virginia

 Jim Ponticello, Air & Noise Program Manager

October 21, 2020

# Virginia Initiatives

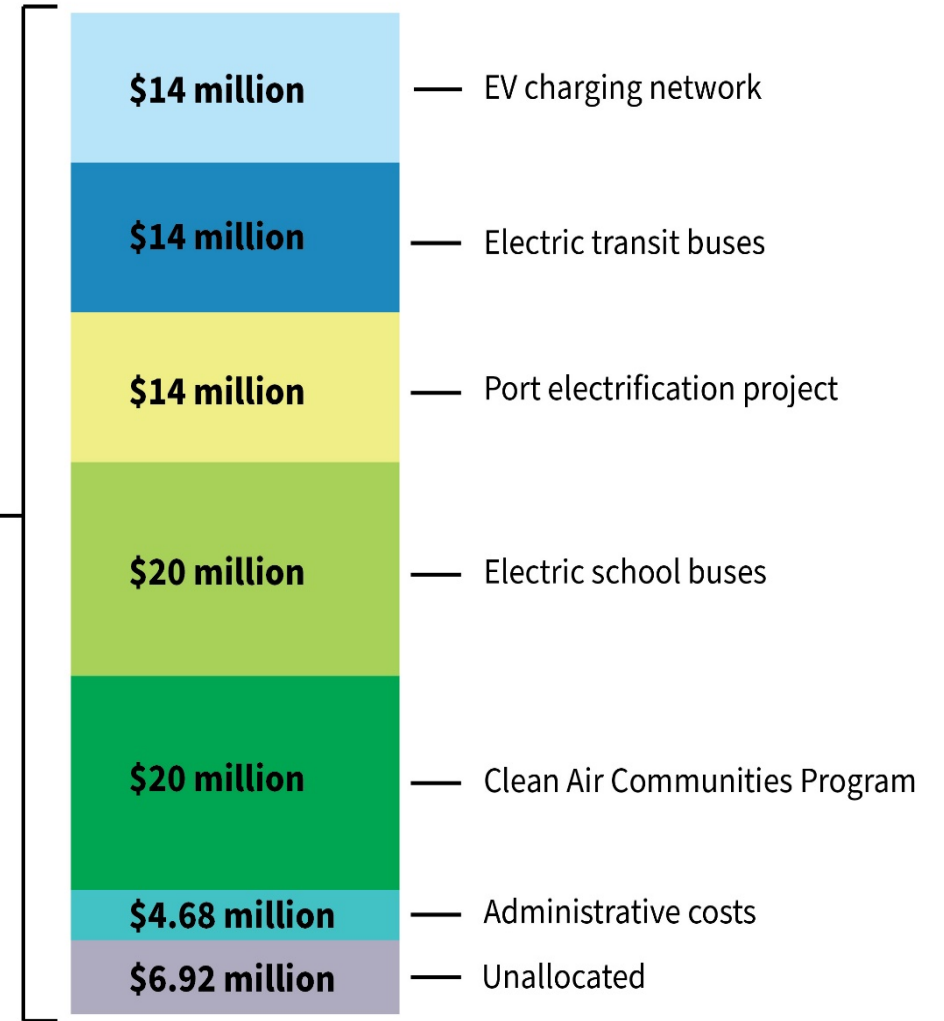
- **TCI – In September 2018 Virginia joined regional coalition of states working towards low carbon transportation solutions**
- **Governor’s Alternate Fuel Vehicle Program**
  - **VDOT, DMME and Virginia Clean Cities**
  - **Utilizes CMAQ funding to cover incremental cost**
  - **CNG, propane, EVs**
- **Statewide Planning-Level GHG Analysis for NEPA**

# Virginia Initiatives

## VW Settlement

- VDOT also supporting signage

The Volkswagen  
Environmental  
Mitigation Trust  
**\$93.6 million**



# Virginia Initiatives

## Virginia Electrification Coalition

Portfolio of resources customized to support EV policy development

### Policy Resources – Menu of Options

#### CROSS CUTTING NATIONAL FOCUS

- Policy assessments, case studies, templates and sample language
- Market data and analysis
- Communications materials
- Guidance on COVID-19 responses
- Electrification calculators
- EV Roadmap Roundup



#### STATE SPECIFIC OPTIONS TO CONSIDER

- Fuel cost-savings analyses (state fleets, statewide fleets, LD, MD/HD, etc.)
- State fleet transition analysis
- Economic development impact studies
- Grid and emissions analysis
- Public health and equity indicators
- Oil Dependency Factsheet



# Department of Rail and Public Transportation Growing Technologies and Integrated Mobility

- **Connected Autonomous Vehicle Shuttle Pilot Project (Fairfax)**
  - Awarded \$250K demonstration grant for testing driverless technologies
- **Electric Bus State Procurement**
  - Working with Virginia Department of General Services to establish a statewide contract
- **Volkswagen Mitigation Trust**
  - Replace older diesel transit buses with battery-powered electric transit buses
- **Providing Intercity Bus Service**
  - Daily service between Blacksburg and Washington, D.C.
  - Expanding to include Danville to Washington, DC and Richmond to Martinsville soon
- **TDM Operating Assistance and Mobility Grant Programs**
  - Telework!VA - Promotes telework and helps businesses set up telework programs
  - Vanpool!VA - Developed to increase the number of vanpools and riders

# Virginia Strategies – Traffic Operations

- All NoVA traffic signals were converted to LED several years ago
- Implementing a Governor initiative to convert lighting on I-95 to LED.
- Transurban started replacement of lighting with LED and all new projects are being built with LED.
- More current projects include upgrading the video wall at PSTOC using LED monitors and upgrading all 200 CCTV from analog to digital camera technology that uses low voltage power over ethernet instead of 120volt AC

# Northern Virginia Strategies - General

- **Tree planting initiatives**
- **Telework initiatives**
- **Slugging (citizen initiative)**
- **Bike/Ped initiatives**
- **Reduced mowing**
- **Anti-Idling (shut off engines after 3 minutes)**