



Maryland Green Registry MEMBER

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

Maryland Transit Administration



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State Government
Member since April 2021

Management and Leadership

Environmental Policy Statement

The Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) is committed to providing safe, efficient and reliable transit services across Maryland with world-class customer service. In conducting our mission, we must manage daily processes and handle products that may impact the environment. In addition, the MDOT MTA must plan future transportation services and facilities that reflect the growing role of transit as a key part of a balanced, multi-modal, statewide transportation network. The protection of the environment is one of the MDOT MTA's most important responsibilities as we seek to accomplish our mission.

MDOT MTA is committed to conduct our mission in a manner that is protective of human health, safety and the environment, while efficiently managing the public resources that support our operations. Thus, it is incumbent on each employee to perform his or her duties in a manner that protects the environment, prevents pollution, and supports conservation of our natural and cultural resources.

MDOT MTA Commits To:

- Promote and support innovative solutions, including public-private efforts, for environmental protection and continual environmental process improvement.*

- *Early introduction of environmental protection and pollution prevention in the planning stages of new programs, transit facilities and in all work conducted on MDOT MTA properties.*
- *Compliance with applicable federal, State and local environmental regulations and policies, supported by regularly scheduled internal assessments.*
- *Evaluation of the effectiveness of MDOT MTA’s environmental management program through and review of the Environmental & Sustainability Management System (ESMS) to ensure that established objectives are met.*
- *Promotion of a spirit of collaboration, cooperation and responsiveness both internally and with federal, State and local regulators.*
- *Implement and maintain MDOT MTA’s environmental commitment through effective communication with our employees and stakeholders.*
- *Proactive, sound and fiscally responsible environmental sustainability.*

Environmental Team

Teams consists of the following members. 1: Abdul Bari. 2: Lauren Molesworth. 3: Ryan McAlpine. 4: Virginia Dads. 5: Zachariah Panneton 6: Nadine Pierre-Charles. The team meets quarterly. The Team works towards the Environmental Mission Statement here: <https://onemdot/mdotmta/safety/Pages/Environmental.aspx> and the Environmental Commitment (attached).

Waste

Solid Waste Reduction and Reuse

Scrap metals are recycled, approximately 247 tons in 2020, and the revenue goes to the general fund.

Recycling

Used oil is recycled at the Bus Maintenance shops approximately 144 tons annually. Used antifreeze is recycled from the Bus Maintenance Shops approximately 81 tons annually.

Hazardous Waste/Toxic Use Reduction

MDOT MTA treats waste that contains hazardous waste as universal waste where applicable as an example lead acid batteries are treated as universal waste and recycled. This reduces the disposal cost as well as reducing carbon footprint. Additionally, MDOT MTA segregates used automotive fluid to prevent mixing which can lead to the generation of hazardous waste material. MDOTMTA continues to review SDS to eliminate the purchase of toxic products and provide alternative “green” products.

Energy

Energy Efficiency

MDOT MTA has implemented the following Energy Conservation Measures (ECMs) in recent years.

- ECM-1: Energy-Efficient Lighting
- ECM-2: Occupancy Sensors
- ECM-3: Daylight Harvesting
- ECM-4: Photovoltaic System
- ECM-A1: Wayside Energy Storage
- ECM-A2: LED Lighting Upgrade

The following is a summary of savings from August 1, 2019 to July 31, 2020 by implementation of these ECMs.

ECM	ECM	Electricity		SREC	Maintenance	Total Savings
#	Description	kWh	\$	\$	\$	\$
1	LIGHTING RETROFITS	3,780,026	\$505,138		\$57,724	\$562,861
2	OCCUPANCY SENSORS	161,842	\$20,554			\$20,554
3	DAYLIGHT HARVESTING	5,669	\$670			\$670
4	PHOTOVOLTAIC ARRAY	585,237	\$71,745	\$4,975		\$76,719
Total (Original EPC)		4,532,774	\$598,106	\$4,975	\$57,724	\$660,804
A1	WAYSIDE ENERGY STORAGE	539,571	\$47,482			\$47,482
A2	LED LIGHTING UPGRADE	4,596,995	\$603,126		\$110,791	\$713,917
Total (Contract Addition)		5,136,566	\$650,608	\$0	\$110,791	\$761,399
TOTAL (All ECMs):		9,669,340	\$1,248,714	\$4,975	\$168,515	\$1,422,203

Renewable Energy

1. MDOT-MTA installed a 500 kW Solar PV system at North West Bus Maintenance facility in 2011. Table below shows savings from this Solar PV system.

ECM	Electricity	Electricity	SREC	Total
#	kWh	\$	\$	\$
4	585,237	\$71,745	\$4,975	\$76,719

2. MDOT-MTA installed a Wayside Energy Storage system at West Cold Spring Metro station in 2019. The Wayside Energy Storage System (ESS) is designed to capture regenerative braking energy from braking trains entering the station and return this energy to the system as trains accelerate away from the station. These systems allow for a reduction in energy consumption which reduces operating costs and in addition provides ancillary benefits such as energy resiliency and support to the electric grid. In addition to representing a major opportunity for improving the efficiency and sustainability of public

transportation systems, the ESS is an ideal solution to provide voltage support, to reduce peak power demand from rectifiers and to increase traction capacity of a substation. Table below shows annual savings from this energy storage system.

ECM	Electricity	Electricity
#	kWh	\$
A1	197,145	\$17,349

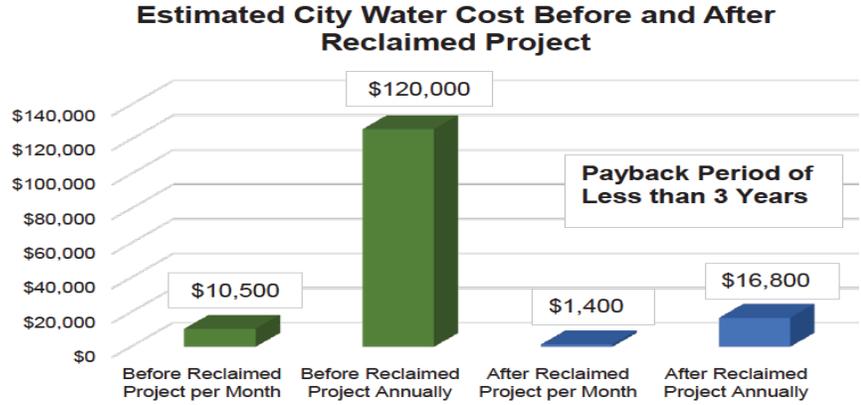
Water

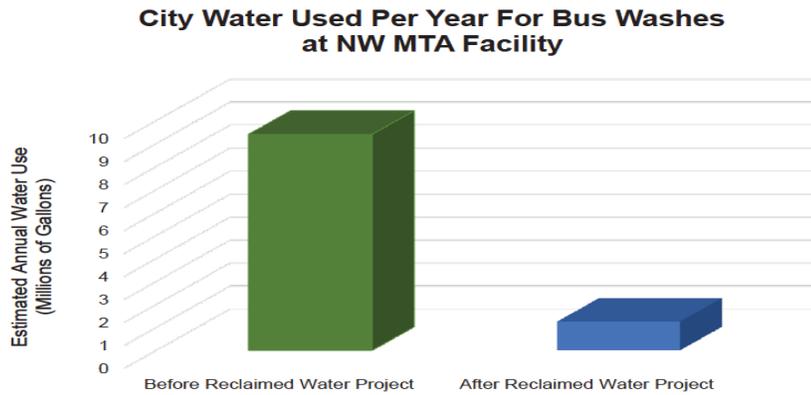


Water Conservation

The Maryland Transit Administration (MTA) engineered and constructed a new water reclamation system at the Northwest Bus Wash Facility in Baltimore. This project is unique and the first installation of its kind in Maryland.

The MTA Northwest Bus Wash Facility was using an average of 36,000 gallons of water per day. This project implemented a system that is simpler to operate and maintain and includes no disposable or one-time-use components. The automatic self-cleaning filter uses a stainless-steel mesh cylinder which is designed for long-term use. The self-cleaning filter only uses 17 gallons of reclaimed water to perform the flushing cycle. Installation of a new reclaimed water system allows the MTA Northwest Bus Wash Facility to use 87% reclaimed water per bus wash, providing substantial cost savings and increasing the facility’s sustainability. The wash system used around 9.4 million gallons of water per year, and installation of this project results in water conservation of around 8 million gallons annually. This water efficiency far exceeds the code requirements, and even meets requirements stipulated for car washes that serve much smaller vehicles.





Stormwater Management

Environmental awareness training is provided annually to the shop personnel on SWPPP and SPCC, and hazardous waste. Facilities Maintenance are encouraged to address all spills and leaks timely and report to the environmental teams. Workers and Supervisors are familiar with spill response, cleanup, and reporting efforts through this annual training. The MS4 training incorporated in the Annual Environmental Awareness Training focuses on preventing and eliminating potential pollutants from entering MDOT MTA’s stormwater. The outreach programs, such as Earth Day, are intended to target the general public in an effort to demonstrate MDOT MTA’s Environmental Policies, environmental stewardship goals, and ways to improve the environmental capacities throughout the communities.

Green Building

LEED Certification

MTA’s MARC Camden Yards station (Camden Station, Baltimore, MD 21201) was built in 2019 and has LEED certification for New Construction.

Environmental Certification Programs, Awards, and Other Activities

MDOT-MTA’s Wayside Energy Storage system was winner of MDOT’s 2020 ‘Environmental Excellence Awards’.

