

# METRO

## SUSTAINABILITY



Washington Metropolitan Area Transit Authority  
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# In This Report

## Connecting Riders to a Resilient Region

People choose Metro not only because it is affordable, fast, and reliable, but also because it is a sustainable way to travel. Investments in sustainability are one of the key ways Metro can promote cost savings and responsible stewardship of the region's funding support. This report highlights the accomplishments of Metro's sustainability program in the calendar year 2019. As the keystone of a prosperous region, Metro continues to collaborate with regional partners to create a stronger and more resilient future.

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# Message from the General Manager/CEO

*Paul J. Wiedefeld*

Metro is committed to developing and maintaining a sustainable transportation system that meets the needs of people, communities and businesses, and fosters the environmental, economic and social well-being throughout the region.

The Washington Metropolitan region is experiencing unprecedented changes and challenges due to COVID-19. As the region recovers, our phased recovery efforts focus on protecting the health and safety of our employees and customers. The recovery plan is designed to phase in actions that position Metro to emerge stronger and more resilient for post-pandemic operations.

By metering the return of workers and expanding capacity through bus lanes, local employers and jurisdictions are key partners in creating a healthier, more efficient region. Metro will continue to embed sustainability into our investments and internal operations to guarantee Metro remains a safe, accessible, and green transportation choice.

This report outlines Metro's calendar-year 2019 progress towards improving the sustainability of our operations and contributions to the region. Throughout Metro, we are working to embed sustainability into the organization while also highlight Metro as the most sustainable "ride of choice."

Last year, we began implementing our first-ever Energy Action Plan to reduce energy use, cut greenhouse gas emissions, and generate significant cost savings for Metro and our funding partners. The Plan transforms the way Metro does business to promote innovation and continuous improvement while ensuring a greener, safer, and more reliable ride.

This year, we will continue efforts to update to our 2014 Sustainability Initiative targets to expand beyond traditional environmental targets and include targets related to prosperity, livability, and accessibility.

Sustainability is a fundamental business approach that makes Metro operations more resilient and fiscally responsible while also reducing environmental impacts. We are committed to responsibly use taxpayer dollars and make investments that will lead to short and long-term savings.

With continued support from regional leaders, and a little grace from our customers, we will keep healthy and working as we gradually get back to full service. With sustainability at the forefront of our mission, we will work together as a region to recover better.

# Metro Fuels the Region



Riders are a powerful force for making the Metropolitan Washington region a more sustainable place to live and work. Transportation is the largest source of greenhouse gas (GHG) emissions in the United States, largely because of personal transportation choices. Riding transit, as provided by Metro, is the daily lifestyle choice with the greatest impact on promoting economic, social, and environmental sustainability in the region.

Thanks to Metro, the region's residents and visitors can travel affordably, safely, and efficiently with a far smaller environmental footprint than driving. In fact, Metro displaces about one million car trips each weekday – reducing emissions and improving air quality while getting residents and visitors where they need to go.

## Making the Greenest Choice

Taking Metro is a green transportation choice. On average, traveling by Metro results in 48% less GHG emissions per mile than driving in a single-occupancy vehicle.

Metro is the fifth largest transit system in the country in number of passenger trips. In 2019 alone, passengers took more than 300 million trips on Metrorail and Metrobus. Every day, Metro helps people get to work, school, home, and other important destinations like grocery stores, healthcare facilities, and community services. Every person who travels with Metro makes a choice that supports cleaner air, healthier communities, and an equitable and prosperous region.

## Improving the Metro Experience

Metro's commitment to sustainability is both inherent to our service as a public transit system and part of ongoing efforts to keep Metro safe, reliable and affordable.

**Ridership is the Lifeblood of Metro.** When more travelers choose to ride Metro, more funds are available to invest in the system and improve the transit experience. Ridership is driven by the travel market including changes in population, employment, tourism, and competition from micro-transit, ride-hailing, and telework. It is also a function of the frequency, speed, reliability and affordability of the service Metro provides. To grow long-term ridership, Metro has addressed maintenance backlogs and focused efforts on improving the rider experience.

Metro's system-wide investments are already paying off with an increase in ridership by four percent in 2019. Meanwhile, customer on-time performance improved to its highest level in a decade, with 89.8% of riders arriving on time on weekdays. Customer satisfaction also reached its highest overall rating since 2013.

Metro is partnering with local jurisdictions to invest in a resilient transportation network. Regional investments in Metrorail are yielding dividends, providing for the replacement of half of Metro's entire fleet—more than 500 of the system's oldest and least reliable railcars—with an entirely new generation of state-of-the-art 7000-series trains.

To improve Metrobus ridership, there are clear roles and responsibilities for Metro and the region's jurisdictions. Metro will continue to focus on frequency, reliability, fare collection, and customer care. Our partners support Metrobus service and its riders by giving buses priority on roadways, such as dedicated bus lanes, and investing strategically in infrastructure and walkability around transit stations.



## Investments for Reliability

Metro implemented new initiatives to improve reliability and rider comfort in 2019:

- Prioritizing maintenance programs and investments in new vehicles. The average railcar traveled more than 160,000 miles between delays, a 74% improvement compared to the prior year.
- Improving the first-of-its-kind Rush Hour Promise, which automatically refunds fares to rush hour travelers if their trips are delayed by more than 10 minutes.
- Partnering with DC to implement dedicated bus lanes on H and I (Eye) Streets NW downtown to improve reliability for Metrobuses.

## Metro Moves Us Forward

Metro is implementing programs and upgrades aimed at improving economic, social, and environmental sustainability in the region and within internal operations.

Metro is transforming the way it does business to realize an efficient and sustainable future by integrating and advancing sustainability in all strategies, plans, business practices, decisions and operations.

This report highlights the accomplishments of Metro's sustainability program in the calendar year 2019. Each of the following three sections is a chapter of Metro's sustainability story. As the region looks to the future, Metro is leading the way to a more resilient, healthy, and equitable place to live, work, and visit.



### Livability & Accessibility



### Economic Prosperity



### Environmental Impact

## Updating Metro's Sustainability Targets

Metro is updating the sustainability targets established in the 2014 Sustainability Initiative. Updated targets will aim higher, pushing the Authority to reach ambitious goals to improve our region. The targets under development will be crafted to spark innovation, cultivate community, and embed resilience into the region's infrastructure. The targets will encompass economic, social, and environmental elements of sustainability and provide leadership that will strengthen the region.



## Key Accomplishments and Initiatives

A longtime leader in the region's sustainability efforts, Metro undertook the following initiatives in 2019:

- **Adopting an Energy Action Plan.** Metro announced its first-ever Energy Action Plan—a detailed roadmap to reduce energy use, cut GHG emissions, and save up to \$29 million annually in energy and operations/maintenance costs. This bold five-year initiative commits Metro to investing approximately \$65 million to adopt energy-efficient technology, modernize operations, promote innovation, and reduce operating costs to support a sustainable future.
- **Protecting and Restoring our Region's Waterways.** The Anacostia Watershed Society and Metro worked together to plant 365 native trees at four Metrorail stations in Maryland and DC. Trees provide many environmental benefits while improving aesthetics and providing shade for the community.
- **Engaging in Zero-Emission Fleet Planning.** Metro is preparing for zero-emission bus operations to support a cleaner and more sustainable region, control operating costs, and improve the customer experience. Investments in the Metrobus fleet also support the vision and goals laid out in the Washington Area Bus Transformation Project and Metro's Energy Action Plan by reducing congestion and emissions.





# Livability & Accessibility



Metro helps the region's residents lead happy, healthy, and productive lives. As the backbone of a strong and inclusive regional mobility system, Metro provides access to places, community, and opportunity for hundreds of thousands of residents, commuters, and visitors. The safe, reliable, and affordable transportation offered by Metro enables many area residents to access their destinations while remaining free of the financial obligations of car ownership. Metro's service supports vibrant, economically-thriving, and sustainable communities.

**Supporting Regional Commitments and Resilience.** Metro is partnering with local jurisdictions and organizations to advance their sustainability goals, mitigate risks, and enhance the resiliency of the Washington Metropolitan region. Metro operations support the resiliency commitments enacted by the DC, Maryland, and Virginia. Metro is also developing a comprehensive resiliency strategy for its transportation infrastructure.



## Connecting Communities

At a regional level, Metro knits the region together by providing safe, reliable, affordable access to major destinations. Our Metrorail stations and primary bus corridors serve regional activity centers, which include major employment centers and mixed-use development areas. Within neighborhoods, Metro encourages high quality, dense development on and near Metro-owned properties so that residences and businesses are transit accessible.

## Supporting Transit-Oriented Communities

Metro provides the region with great opportunities for “transit-oriented communities”, which refer to neighborhoods that are designed to allow people to drive less and walk, cycle, and ride transit more. Metro supports compact development that contain a mix of uses—residential, business, hospitality and retail—in both new and existing neighborhoods and encourages bicycle and pedestrian access to all Metrorail and Metrobus stations.

Metro’s Office of Real Estate and Parking advances transit-oriented communities on Metro-owned property by partnering with private real-estate developers. For example, through master planning and coordination, three adjoining public properties (owned by Metro, the City of Falls Church, and Virginia Tech University) around the West Falls Church Metrorail station will collectively create a new three million square foot, education-anchored, mixed-use community. Metro’s 24 acres of parking lots will be transformed into a mixed use, housing, office and retail development. Significant improvements in the road network and pedestrian environment will also improve access to Metro for the surrounding community.



Top Photo: *Photos of farmers' market and senior housing.*  
Photo Credits: Kristina Heggedal, ICF

## Contributing to Livable Communities

Metro contributes to vibrant neighborhoods by providing access to life's destinations, reducing reliance on cars, and encouraging riders to use a variety of modes of transportation. Replacing car trips with transit and personal transportation options reduces congestion on the roads and improves air quality in the region.

## Enabling Active Lifestyles

Riders increase physical activity when they choose Metro. Most Metrorail and Metrobus stations are served by sidewalks and often adjacent to compact land use development, which is why over half of riders arrive on foot at most Metro stations. Even those who arrive by car add activity to their day as they reach their platform and depart at their destination. Walking a half mile each way to and from a Metro station (as the average Metrorail rider does) is equivalent to 15–20 minutes of moderate physical activity.

Metro is continually pursuing projects to support active modes of transportation, including one major bicycle initiative in 2019: allowing bikes on board any railcar during all hours of operation. The initiative makes Metrorail a more attractive travel option for commuters and supports active lifestyles by allowing residents and visitors to use their bike and Metrorail to travel around the city.

## Supporting Clean Air in the Region

The region's health relies on good air quality. Poor air quality puts health at risk—especially among children, older adults, athletes, and people with asthma or other respiratory disorders. Metro riders take about one million car trips off the road each weekday, avoiding emissions that contribute to poor air quality.



Top Photo: Riders participating in the 2019 Bike to Work Day at the East Falls Church Metrorail Station.

To further improve air quality, Metro has converted almost all of its bus fleet to new, cleaner vehicles. Ninety percent of the Metrobus fleet now consists of hybrid electric vehicles or vehicles that use alternative fuels, such as compressed natural gas.

In addition to providing air quality benefits, alternative fuel vehicles are much quieter than those using traditional combustion engines. This has led to lower levels of noise pollution from Metro buses and studies show that noise reductions reduce stress.

## Providing Access to Life's Destinations

Metro connects riders to destinations that improve health and happiness: grocery stores, pharmacies, medical services, houses of worship, retail, parks, historic sites, and entertainment venues. The region's professional sports leagues all rely on Metro to bring fans safely to and from games, including the World Series. Major annual events (such as the Cherry Blossom Festival, July 4th Celebration, and Marine Corps Marathon) can also be reached safely by Metro. This excellent access allows people to enjoy recreational activities while choosing a sustainable mode of transportation and avoiding the challenges of finding parking.

**Supporting Local Art.** Metro incorporates visual and performing arts into its system to enhance the rider experience. Riders can enjoy work by local artists via the Art in Transit program. Currently there are 38 permanent pieces by 36 different artists across the transit system.



Top Photo: A sculpture by Anne Allardyce-Tully, installed near the Congress Heights Metro station

Bottom Photo: Riders near Metro Center Station celebrate Shark Week

# Economic Prosperity



The regional economy relies on Metro. Metrorail and Metrobus provide a critical connection to economic opportunity for those living throughout the region, connecting residents to education, employment, and commercial hubs. Many of the region's businesses rely on Metro to provide reliable and affordable transportation options to employees and customers. Metro is one of the largest green employers in the region and spurs business development by contracting with local businesses across all sectors.

**Sustaining the Regional Economy.** Metro's frequent and convenient service connects communities and promotes housing affordability, regional equity, and economic growth. By making jobs accessible to residents at a reasonable cost, Metro attracts employers and generates wealth for the region. Convenient access to transit attracts development and enables residents and businesses to thrive side by side.



## Attracting Businesses and Employees

Metro's expansive transit network was cited as an important factor for businesses that have recently re-located to the region. From small businesses to global brands, Metro enables employers to attract qualified workers who desire affordable, safe, low-stress commutes. More employees are choosing to take transit to work—nearly a quarter of commuters in the region took transit for weekly commute trips in 2019, up 4% from 2016, according to the Metropolitan Washington Council of Governments (MWCOC) 2019 report on the State of the Commute.

In 2019, the region developed the Bus Transformation Project Action Plan to address congestion, affordability, and mobility. Metrobus is identified as a key partner in transporting large numbers of riders safely and efficiently, providing inclusive mobility for the region, and reducing emissions.

This growing interest and reliance on Metro has also spurred the new development around many Metrorail stations. According to MWCOC, 44% of new commercial space built in 2018 in the region was within a half mile of a Metrorail station. Metro's Silver Line extension will provide direct access to Dulles International Airport and several technology hubs along the corridor, increasing the region's attractiveness to businesses and access to opportunity.

**Providing Green Jobs.** As one of the region's largest employers in the "green" economy, Metro directly supports the region's growth. Each of Metro's more than 12,000 employees have a green job, whether operating vehicles, performing administrative duties, supporting IT, supplying products and equipment, or constructing stations. Metro also prioritizes work with local businesses when possible, directly spurring economic growth in the region.



## Access to Educational Opportunities

Residents and visitors take Metro to reach their destinations. These connections help the area prosper, ensuring access to healthcare and educational opportunities for area residents. Metro provides a safe and reliable method of transportation for students throughout the region. Metro offers special fare programs to students in the Washington Metropolitan region:

- **Kids Ride Free.** In partnership with and sponsored by the DC Government, Metro's Kids Ride Free program provides free rides to students of the DC Public Schools by distributing free SmarTrip cards through school administrators. In 2019, approximately 50,000 students participated in the program and used Metrobus or Metrorail to arrive safely to and from school.
- **UPass.** College students have access to the UPass program through local colleges and universities, allowing students unlimited rides at a significantly discounted price. In 2019, there were over 1.8 million Metro trips taken by enrolled students.

In 2019, Metro partnered with local universities to help orient new students to the benefits of transit. Metro staff promoted the sustainability campaign at university orientation events attended by over 17,000 students. The new students appreciated learning about sustainability while being introduced to the transit options in their new city.



# Environmental Impact



As the leading transit agency in the Washington Metropolitan area, Metro represents the greatest opportunity for the region to reduce its transportation-related carbon footprint. Every trip taken with Metro instead of a car reduces the region's carbon footprint. To achieve further reductions, Metro is looking inward to increase efficiency, reduce energy and resource consumption while continuing to align with regional sustainability efforts and innovation.

**Re-framing Metro as the Sustainable Choice.** Metro launched a sustainability-focused public awareness campaign in 2019 to remind riders how riding transit benefits the region and the environment. The campaign playfully highlights transit riders' role in saving the things they love. As a key partner in achieving regional climate goals, Metro took this step to inform and empower riders to make the greenest choices to help fight climate change.

More CO<sub>2</sub> could lead to less coffee beans.  
Keep the caffeine flowing.  
Take Metro.

More CO<sub>2</sub> could lead to less arctic ice.  
Save the North Pole.  
Take Metro.

More CO<sub>2</sub> could lead to smaller grapes.  
Save the wineries.  
Wine not take Metro?

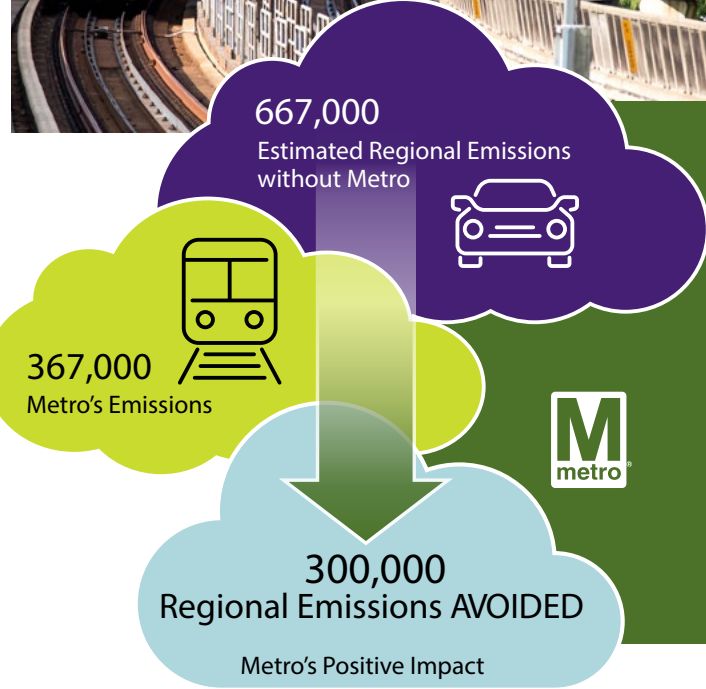
More Metro. Less CO<sub>2</sub>. 

More Metro. Less CO<sub>2</sub>. 

More Metro. Less CO<sub>2</sub>. 

*Advertisements from Metro's Sustainability Campaign*





*Estimated net avoided tailpipe emissions in metric tons of CO<sub>2</sub> (FY19)*

# Reducing Greenhouse Gas Emissions

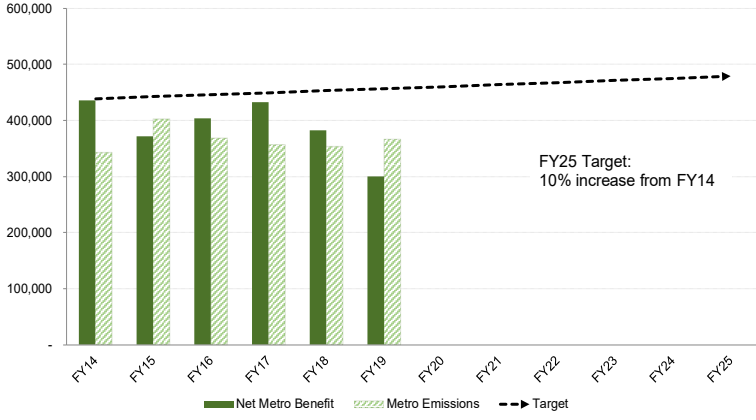
GHG emissions are a major contributor to global climate change, which will increase the number and severity of extreme weather events in the region. In the United States, the biggest source of GHG emissions is from transportation. Each day, individuals have a choice to reduce their carbon footprint. On average, traveling by Metro results in 48% less GHG emissions per mile than driving in a single-occupancy vehicle.

## Reducing Regional GHG Emissions

“Greenhouse gas displacement” measures Metro’s impact by calculating the difference between Metro’s emissions (e.g., bus tailpipe emissions) and the emissions Metro eliminates by replacing trips that would otherwise have occurred in single-occupancy vehicles.

In 2019, Metro helped the region avoid tailpipe emissions equal to 300,000 metric tons of CO<sub>2</sub>—the equivalent to emissions from burning approximately 40 million gallons of gasoline.

**Regional GHG Displacement (MTCO<sub>2</sub>e)**



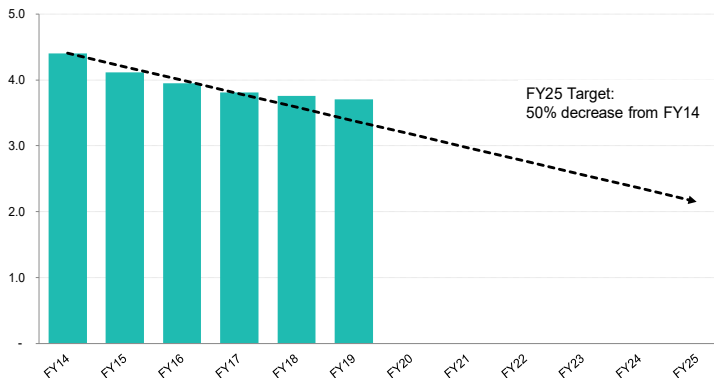
## Reducing Metro's GHG Emissions

Metro's GHG emissions per mile—which include emissions from trains, buses, and facilities—have decreased by 11% since FY14.

Key actions Metro is taking to reduce its own GHG emissions include:

- **Reducing Fuel Use in Buses.** Metro is converting its bus fleet to alternative fuel types and more efficient buses, including compressed natural gas as well as more efficient clean diesel buses.
- **Engaging in Zero-Emission Fleet Planning.** Metro developed its Zero Emission Bus Update in 2019 and released it in early 2020. The update lays out the opportunities that zero-emission bus transportation offers the region, reviews actions Metro has already initiated, and considers the market, infrastructure and policy prerequisites for success. However, before Metro can take this next step, the region must advance significant investments in energy infrastructure, new policies and rate structures, and funding.
- **Reducing Energy Use in Facilities.** By upgrading station and facility lighting to LED lighting technology, Metro uses significantly less energy and increases the time between light bulb replacements.

GHG Emissions (kg CO<sub>2</sub>) per Vehicle Mile



## Innovative Technology for Metrobus

Metro purchased 75 new compressed natural gas and 25 new clean diesel buses in FY19. These new buses come with software that reduces fuel use by managing acceleration, determining the most efficient shift points, and reducing demand on the engine when the vehicle is stopped. The software also provides operators feedback to encourage “eco-driving” techniques that can increase fuel efficiency by about five percent.



*New Metro buses using alternative fuel are cleaner and more energy efficient than traditional buses*



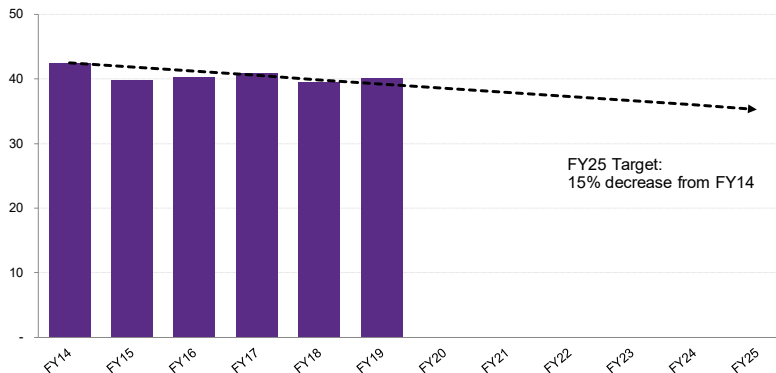
## Reducing Energy Use

Residents and policymakers in the DC region recognize the importance of transitioning to low-carbon energy sources, with area governments taking the following actions in 2019:

- **Maryland:** Clean Energy Jobs Action law mandates 50% renewable energy by 2030
- **Virginia:** Executive Order 43 calls for 100% carbon-free energy by 2050
- **Washington, DC:** Clean Energy Act DC requires the District to transition to run on 100% renewable energy by 2032

As one of the single largest energy users in the region, Metro is an important partner for meeting regional energy goals. Metro's Energy Action Plan provides a roadmap for saving energy and money through efficiency investments, modernized design and operation, and engagement in the regional energy market. The Plan sets an annual energy reduction target of 750,000 million Btus (MMBtus) by 2025, enough energy to power more than 18,000 homes for a year.

Energy Use (MBtu) per Vehicle Mile



## Efficiency Upgrades Lead to Vast Improvements

In 2019, Metro began implementing the Energy Action Plan by:

- Completing LED lighting upgrades at half of Metro's underground rail stations, improving illumination levels, safety, and security. The project is approximately 70% complete and expected to be fully implemented by mid-2020. The upgraded lighting reduces energy use by an average of 60% per station—enough energy to power 40 homes for a year.
- Upgrading chiller plants, which pump cool air into Metrorail stations to keep riders comfortable in the summer months. Metro is almost 75% complete with a multi-year program to replace aging chiller equipment with efficient, state-of-the-art technology. New equipment is estimated to reduce energy costs at each station by approximately \$10,000 to \$15,000 annually.

## Protecting the Region's Watersheds

Everyone values clean water. The region's numerous waterways offer valuable recreational and other services for residents and visitors. Along with its regional partners, Metro is committed to providing a safer environment for families and preserving the beauty of the region's natural resources.

The Washington Metropolitan region has been working diligently to clean local waterways and invest in healthier watersheds for years. Recent investments include bag taxes, river cleanups, and incentives for green infrastructure, which improves regional water quality by serving as a natural filtration system.

As a sprawling urban area, much of the Metropolitan Washington area is covered in pavement, which contributes to flooding, erosion, and pollution of waterways. The presence of Metro allows for compact development and helps to preserve open space that absorbs and filters rainfall and stormwater runoff.

To capture stormwater in place on its own properties, Metro partnered with the Anacostia Watershed Society to plant 365 native trees at four Metrorail stations in Maryland and DC in 2019. Trees provide many environmental benefits while improving aesthetics and providing shade for the community. Each year, these trees will intercept over 15,000 gallons of stormwater while capturing and storing as much CO<sub>2</sub> as would be emitted by driving an average car more than 2,500 miles.



Top photo: *Metro employees participate in a volunteer tree planting event in partnership with the Anacostia Watershed Society*

Bottom photo: *Native plant species fill the landscaping at Metro's new LEED Silver Andrews Bus Garage*

## Reducing Stormwater Runoff

Metro protects the region's water resources by managing its own stormwater runoff and pollutants while reducing its demand for the region's water. Extreme weather events—such as flash floods—pose a significant and increasing risk to the region. Metro is working to reduce these risks by managing the stormwater that falls on Metro properties.

**Installing Green Infrastructure.** Metro installs green infrastructure, such as rain gardens and native plants and trees, to reduce runoff that may cause flooding, erosion, and pollution elsewhere. An assessment of the stormwater infrastructure at Metro facilities identified opportunities to incorporate additional green infrastructure. Metro is implementing stormwater control measures by reducing impervious surfaces and capturing stormwater on-site.

**Improving Resilience of Transit Assets.** To protect the region's investments in its transit system, Metro is working to make its assets less vulnerable to extreme weather. New resiliency measures include securing vent shafts, upgrading pumping stations, and improving interior drainage in Metrorail tunnels. Metro is developing a comprehensive resiliency strategy to address future risks.



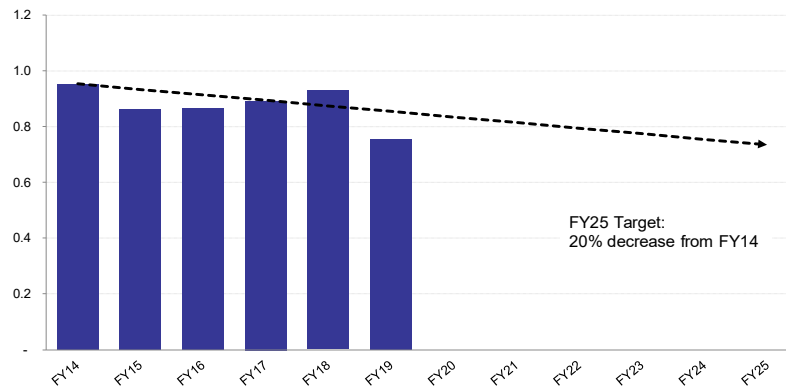
Bottom photo: Rain garden at Andrews Bus Garage

## Reducing Water Use

Water is critical throughout Metro operations: for washing buses and trains, for cooling stations and other facilities, and for supplying water to facilities.

Metro is working to reduce its water use. In FY19, water use per vehicle mile was down eight percent from FY14. Water use is measured “per vehicle mile” at Metro because service expansions could lead to an increase in total water use, obscuring improvements in water use efficiency. Although Metro has expanded its service and logged more miles on its buses and trains, its water use is not rising in proportion to its operational growth. Metro is reducing its water consumption through measures such as replacing bus washing equipment, using captured rainwater to wash buses, and upgrading facilities.

**Water Use (gallons) per Vehicle Mile**



## Putting Stormwater to Use at Andrews Bus Garage

Andrews Federal Center Bus Garage opened in 2019 and was awarded LEED Silver certification. This facility (pictured below) includes rainwater harvesting and on-site water treatment. As with all of Metro’s new and renovated bus garages, the garage includes high-efficiency water saving equipment. During the bus washing process, the wastewater collects in drains and then gets pumped through filters to be reclaimed and reused in future wash cycles.



*Andrews Bus Garage uses technology that captures, cleans, and reuses stormwater*

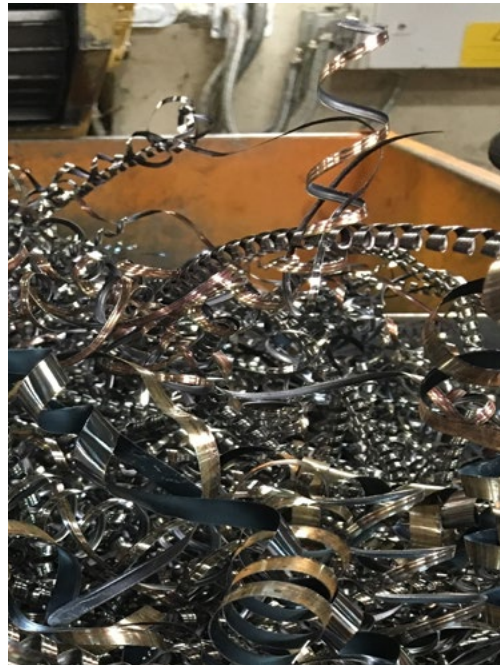
## Reducing Waste

Waste is an inevitable component of any business operation. In the wake of changes to the global recycling market, people and agencies are increasing their efforts to reduce consumption of single-use materials, especially plastics, that often become litter and can ultimately end up in rivers and oceans. Metro is committed to reducing waste across all aspects of its operations—whether recycling old train cars or sending used bus tires back to the manufacturer for recycling or re-purposing.

## Responsible Construction Management

In 2019, Metro completed several new LEED-certified buildings that included responsible waste management as part of their construction, including:

- **Cinder Bed Road Bus Garage.** This new, state-of-the-art facility replaced a nearly 70-year-old bus garage in Virginia. It is LEED-certified (Gold V2009) and used responsible waste management practices throughout construction.
- **Andrews Bus Garage.** This new garage was awarded LEED Silver certification. During its construction, Metro established a construction and demolition waste management plan and exceeded its waste diversion goal by diverting 92% of construction waste from landfills. Andrews is outfitted with energy-efficient building systems, LED lighting in the workshop spaces, on-site water treatment, rainwater harvesting, and built-in containment for spills of chemicals and fuels. It was also built to accommodate future electric buses.



Top Photo: *Metrorail crossing the Anacostia River*

Bottom Photo: *Recycled metal*

## Reducing and Diverting Waste

Metro is developing plans and programs that address waste generation—encouraging reduction, reuse, and recycling of materials used for operations. In addition to addressing waste in its internal operations, Metro stations all include newspaper recycling bins for riders. Metro is working to improve recycling with a variety of projects at stations, such as co-locating waste and recycling containers.

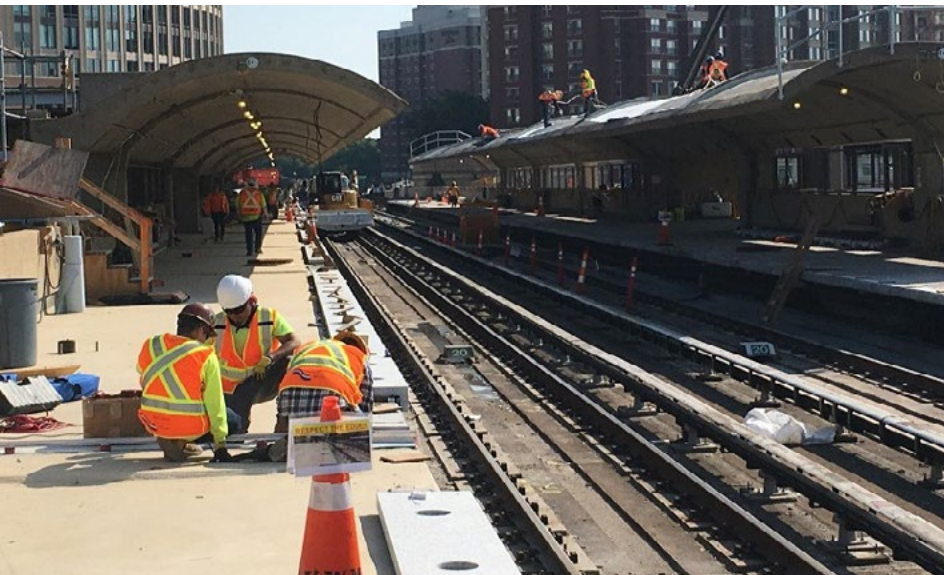
Metro launched and completed the first phase of the Platform Improvement Project in 2019, with six stations successfully reconstructed on the Blue and Yellow lines in Virginia. Metro used the shutdown time to make improvements that enhance the customer experience. All six stations now have conveniently located blue bins for mixed recyclables for riders to dispose of their recyclable waste.

## By the Numbers

In 2019, Metro recycled:

- 380 tons of rail ties
- 6,542 bus tires
- 3,129 gallons of antifreeze
- 91,167 gallons of oil
- 2,164 tons of scrap metal
- Components of 184 retired rail cars, including nearly 5,000 tons of metal

Metro also reused more than 2,500 pounds of refrigerants in rail cars.



*Metro's Platform Improvement Project includes repair and reconstruction of platforms at six outdoor stations*



*Recycling and waste containers are co-located at the King Street Metrorail Station.*



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