## In This Report

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>A Message from the General Manager and CEO</td>
</tr>
<tr>
<td>03</td>
<td>Introduction</td>
</tr>
<tr>
<td>04</td>
<td>Vision Forward</td>
</tr>
<tr>
<td>07</td>
<td>Social Wellbeing</td>
</tr>
<tr>
<td>14</td>
<td>Economic Prosperity</td>
</tr>
<tr>
<td>20</td>
<td>Environmental Stewardship</td>
</tr>
</tbody>
</table>
Message from the General Manager/CEO

The Covid-19 pandemic brought unprecedented changes to how we work, travel, and engage with our communities. Throughout the pandemic, Metro’s essential transit workers kept the region moving for healthcare providers, first responders and other frontline workers like grocery store employees—all the people we depend on. As we adjusted to this new normal, we continued planning for a future where Metro better supports social equity and delivers additional economic and environmental benefits for the National Capital Region.

Since January 2020, Metro delivered several successful projects and initiatives, while also propelling sustainability and equity topics to the forefront of many conversations, at both the staff and Board of Directors levels. This includes Metro’s Transit Equity Framework, introduced in July 2020, which identified opportunities to advance equitable policies and practices that support Metro’s mission, including sustainability.
In summer 2021, the Board of Directors officially adopted Metro’s first Sustainability Vision and Principles, providing a new framework to help guide long-term policy and investment decisions. The Vision and Principles recognize that Metro’s investments and operational decisions have immediate and significant impacts on health, equity, economic prosperity, and the overall social and economic well-being of the region.

Another major policy the Board adopted in the past year is Metro’s zero-emission bus plan, committing to a 100% zero-emission bus fleet by 2045. This will improve regional air quality, reduce greenhouse gas emissions, and provide customers with a quieter, more comfortable ride. Since transitioning to zero-emission technology will require more than just new buses, multiple departments at Metro are working to identify and execute the facility and infrastructure investments necessary to support this transition.

As you will read in this report, Metro’s recent sustainability progress also includes several significant projects and initiatives that advance the region’s sustainability goals. For example, Metro’s first-ever Climate Bonds Certified (CBI) bonds were issued in spring 2021, helping to finance sustainable infrastructure and climate resiliency projects included in the Capital Improvement Program.

Furthermore, an innovative lease agreement negotiated by Metro will add solar carports at multiple Metrorail stations, resulting in one of the region’s largest community solar project once completed. And as we build Metro’s new office buildings and other facilities, sustainability has been included in all phases of design.

I want to express my profound gratitude to the Metro team for accomplishing these significant milestones during an unprecedented period in Metro’s history. Each and every one of our approximately 12,000 employees helps advance Metro’s sustainability mission, in ways both small and large. Without our dedicated, talented, and adaptable workforce, we could not have achieved the important list of accomplishments covered in this report.
Introduction

Through Metrobus, Metrorail, and MetroAccess, Metro provides public transportation services for a population of four million people within a 1,500-square mile area. Every day, Metro helps people get to work, school, home, and other important destinations like grocery stores, healthcare facilities, and community services. Riding transit, as provided by Metro, is a daily lifestyle choice with a large impact on promoting economic, social, and environmental sustainability in the region.

Like many other organizations, Metro has faced challenges posed by the Covid-19 pandemic. Given public transit service is essential to the Washington Metropolitan region, Metro has taken every precaution against the virus with daily cleaning and sanitizing of the bus and rail fleets and stations as well as requiring all employees, contractors, and visitors to wear masks while on Metro property or in a Metro vehicle.

Even amidst the ongoing challenges of the pandemic, Metro continues to innovate and adopt best practices. The 2020-2021 Annual Sustainability Report communicates progress and highlights achievements in sustainability at Metro for the reporting period of January 2020–December 2021.
Vision Forward

In 2021, the Metro Board of Directors adopted a new Sustainability Vision and eight Sustainability Principles, recognizing sustainability as a core value of Metro as well as a cost-effective way to improve performance, achieve climate and environmental goals, and contribute to livable and equitable communities. The Vision and Principles were created with input from departments across Metro and in coordination with the broader sustainability goals of the American Public Transportation Association and local governments in the Washington metropolitan area.

Metro’s sustainability framework aligns the agency with jurisdictional partners who are advancing sustainability and resiliency policies and goals. It commits Metro to planning, partnering, designing, building, operating, and maintaining transit infrastructure to meet current needs without compromising the future needs of the region.

In 2022, Metro is developing a sustainability action plan in support of the Board-adopted Vision and Principles that includes specific priorities and strategies and draft targets and performance measures for Board consideration.

TO LEARN MORE, VISIT:
wmata.com/sustainability
Metro’s Sustainability Principles

Metro provides a sustainable transportation system that meets the needs of people, communities, and businesses in the region, and fosters social wellbeing, equity, economic prosperity, and environmental stewardship.

Develop and implement an action plan with specific priorities, strategies, and targets to advance sustainability at Metro and in the region.

Make cost-effective and data-driven business decisions that provide Metro and its partners with the best return on investment.

Recognize that investments and operational decisions change lives. Make those decisions intentionally to address historical, social, environmental, and economic disparities and racial and social injustice.

Advance the region’s efforts through leading transparent and authentic collaboration with stakeholders and community partners.

Build, operate, and maintain a resilient transportation system to improve livability, the environment, equity, and access to opportunity.

Foster a culture of sustainability and continual improvement through growing staff capacity and leveraging regional expertise and innovation.

Leverage the special nature of Metro’s service and unique market position to advance regional goals.

Establish measurable performance indicators to track implementation and successes of Metro’s strategies and actions.
Key Themes

SOCIAL WELLBEING

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 each year. In addition to connecting the region, Metro strives to affect positive change in the workforce and communities throughout the region.
Advancing Equity in Transit

Equity is part of Metro’s mission and is essential to achieving Metro’s vision to become the regional employer and transportation provider of choice. In 2020, Metro’s Board of Directors advanced the Framework for Transit Equity with focus areas including The Bus Transformation Project, Disadvantaged Business Enterprise and Minority Business Enterprise programs, public participation, and sustainability. Building on this framework, Metro is developing a Diversity, Equity, and Inclusion Strategy that will center equity in how Metro does business and makes decisions.

SPOTLIGHTS ON EQUITY

Metro is committed to identifying and addressing transit and social equity across all aspects of the business. Throughout this report, look for “equity spotlights” that highlight projects or initiatives advancing equity in the region and workforce.
Covid-19 Response

Since the pandemic began, Metro has been a lifeline for essential workers who need to get to and from work. Metro has pledged to follow all public health guidelines and protect riders by regularly cleaning and disinfecting facilities and equipment, including rail stations, buses, and trains. Metro’s efforts have earned the American Public Transportation Association’s Health & Safety Commitment seal, and Metro continues to actively respond to the Covid-19 public health emergency, taking all appropriate measures to protect the health and safety of front-line employees, customers, and the community at large.

Know Before You Go

Social distancing is a top concern as the region navigates the Covid-19 public health crisis. In 2020, Metro launched real-time crowding information for Metrobus and Metrorail that enables customers to see how full a bus or train is before it arrives. With this information, riders are empowered to make more informed decisions about how and when they feel safe riding. Operations also uses crowding information to assess trends over time and identify where buses and trains can be deployed strategically and proactively to alleviate crowding.
Contributing to Livable Communities

Transit-oriented development (TOD) at and around Metrorail stations and stops provides the necessary infrastructure to support walkable, bike-able, mixed-use communities. TOD improves air and stormwater quality by focusing regional development around existing and planned transit instead of developing open space. By promoting high-quality, intensive development on and near Metro-owned properties, Metro can increase ridership, support long-term system capacity and generate new revenues for transit.

In 2020, Metro launched a new application called SmartTOD. This one-stop-shop for developers, planners, and economic development specialists provides data-driven tools for exploring development trends and opportunities near Metro. With one of the largest joint development programs in the country, Metro is a leader in activating communities near the transit system.

EQUITY SPOTLIGHT: AFFORDABLE HOUSING NEAR TRANSIT

Amazon and Metro announced a goal in June 2021 to create more than 1,000 new affordable housing units at Metro Stations where WMATA has Joint Development Agreements. As part of this collaboration, Amazon will provide $125 million in below-market capital from its Housing Equity Fund to create or preserve affordable housing units for families earning 30% to 80% of area median income, providing locations with easy access to employment, schools, healthcare, education, and other amenities. Twenty-five million of the total will be available exclusively for use by minority-led developers. This unique approach to transit-oriented development and affordable housing promotes equity and inclusion by supporting diverse, connected, and sustainable communities.

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Increasing Access and Improving Rider Experience

Metro’s biggest impact on regional sustainability is driven by the transit service we provide. In 2020, Metro implemented improvements to increase access and improve neighborhood connections.

Metro launched mobile pay—the contactless way to pay for Metro and all regional transit providers in the Washington, DC area—on Apple and Google Pay, providing riders the convenience to tap-and-go with their smartphone. Metro is also installing new faregates to make mobile payment quicker and easier to travel on Metro.

Additionally, rail riders now enjoy one of the most connected wireless experiences of any rail system in the country. Metro partnered with the nation’s major wireless carriers—AT&T, T-Mobile, and Verizon—enabling customers to communicate or stream content with their phones throughout their journey from street, to station, to train.

EQUITY SPOTLIGHT:
REFOCUSING POLICE SERVICES TO ADDRESS HOMELESSNESS

In 2020, the Metro Transit Police Department established a Homeless Outreach Team to deploy in Metro stations that experience high rates of homelessness and launched Crisis Intervention training for officers. The Outreach Team is trained to recognize individuals experiencing mental health crises and connect them with resources. Officers use an Emergency Services Directory provided by the Interfaith Council to direct people to charities, shelters, and information on where to go for food, jobs, furniture, drug addiction treatment, and medical or legal services.
Prioritizing Buses in the Region

Metro is implementing the vision and strategies of the region’s Bus Transformation Project through strategic wayside and on-bus technologies for prioritizing buses on the region’s roadways. Implemented in collaboration with local jurisdictions, these initiatives and pilot projects increase bus reliability and operating speeds for improved rider experience, environmental sustainability, and financial stewardship.

Metro is supporting bus queue jumps, bus lanes, and transit signal priority initiatives through collaboration with jurisdictions, including queue jumps in Prince George’s County and Montgomery County, transit signal priority in Northern Virginia, and several strategies in the District of Columbia. Numerous other initiatives for bus priority measures are currently in the planning phase.
**BUS QUEUE JUMPS**

Bus queue jumps are traffic signals that let buses proceed through intersections a few seconds before signals for general traffic turn green, granting buses priority over other vehicles. Queue jumps also enhance safety by allowing buses to merge into a general purpose travel lane from a bus stop without relying on other motorists to yield to the bus. Metrobuses now get green lights ahead of other traffic—queue jumps—at 14 key intersections in the District of Columbia.

**BUS LANES**

Metro is actively engaged with the region’s jurisdictions to implement dedicated bus lanes on their roadways. In 2020, the District Department of Transportation installed five permanent dedicated bus lanes. These improvements help make transit faster and more reliable along the District’s busiest bus routes.

**TRANSIT SIGNAL PRIORITY**

Transit signal priority (TSP) combines operational and technical changes at traffic signals to reduce bus dwell times by either holding green lights longer or shortening red lights. In 2021, Metro deployed TSP to prioritize buses on new corridors in Northeast and Southeast DC. Equity, along with improving performance, was a key consideration in identifying these corridors and bus routes.
Metro provides a critical connection to economic opportunity for those living throughout the region, connecting residents to education, employment, and commercial hubs. Metro connects communities and supports housing affordability, regional equity, and economic growth.
In May 2021, Metro’s first Climate Bonds Certified (CBI) bonds were issued as part of the agency’s commitment to delivering sustainable, cost-effective transportation service to the Washington metropolitan region. Independent certification demonstrates that these bonds meet international standards and best practices for climate integrity, proceeds management, and transparency.

Metro’s Capital Improvement Program was verified to meet the sector criteria of infrastructure for low carbon transport and directly contributes to the United Nations Sustainable Development Goals for clean transportation. Bond proceeds will finance state of good repair, safety, resiliency, and electrification of the system, which will improve the public transit experience and reduce greenhouse gas emissions in the region.
Expanding Opportunity for Small Businesses

Metro fosters economic prosperity by supporting regional small businesses. The Minority Business Enterprise Program, Small Business Program, and Micro-Business Program were created to provide additional contracting opportunities for small, women, and minority-owned businesses that support the regional economy.

In 2020, Metro’s Small Business Directory certified 146 new small, disadvantaged, minority- and women-owned businesses, helping connect businesses to opportunities with Metro. Expanded certifications and training support increased the participation of small and minority-owned businesses as prime contractors and subcontractors for Metro projects.

Metro’s Small Business Program Office also established the Equity Initiative to learn about certified businesses’ experience working as Metro prime or subcontractors. As a result, Metro is coordinating with local small business organizations to increase awareness and provide training materials to harder-to-reach business communities.

EQUITY SPOTLIGHT:
SMALL BUSINESSES EVENT

Metro’s 8000-series railcars will be built at an assembly plant in the National Capital Region, bringing opportunities to small businesses throughout the District of Columbia, State of Maryland, and Commonwealth of Virginia. Metro hosted a virtual Small Business Outreach event for local businesses in the region in 2021 and encouraged small, minority- and women-owned businesses to attend.

This event featured Hitachi Rail Washington, LLC, the company awarded the prime contract worth up to $2.2 billion to build Metro’s new 8000-series railcars. Participants learned about contracting opportunities and benefits for local businesses.
MetroAccess Goes Hybrid

Metro is transitioning MetroAccess to hybrid vehicles, improving customer comfort, saving capital and fuel costs, and supporting equity through reduced noise pollution and emissions. MetroAccess expects cost savings over time and will closely track fuel consumption as the hybrids are rolled out in 2021–2022. The hybrid fleet helps avoid emissions that contribute to poor air quality and supports healthy communities.

EQUITY SPOTLIGHT: FARE DISCOUNTS AND MORE SERVICE

In June 2021, Metro’s Board of Directors authorized temporary improvements to Metrobus and Metrorail service and fares that support the region’s recovery and encourage more customers to return to transit. The improvements include more frequent trains and buses, free transfers between bus and rail trips, and special weekend fares that encourage visitors and area families that start traveling again to take transit.

The changes seek to meet the needs of existing riders, reflect new travel patterns and lifestyle changes, and attract returning and new customers. In addition, new fare reductions and service provide essential workers and low-income passengers with reduced transportation costs. Metro staff are engaging with the public and analyzing fiscal impacts to present potential permanent changes.
Prioritizing Fiscal Responsibility

Metro is always finding ways to improve efficiency and reduce operational costs. In 2020, Metro reviewed and revised practices in facility and bus maintenance generating 32,000+ hours in annual labor savings amounting to $2.6M in annual operational cost savings—and still counting.

Efficient maintenance means improved use of staff time and enhanced maintenance practices. Lessons learned are being applied to procedures in other maintenance departments in 2021, improving sustainability by extending the life of assets and reducing maintenance labor hours and costs for the entire agency.

Innovation and Continuous Improvement

Metro’s Sustainability Lab and Annual Sustainability Awards promote cost-effective innovation and best practice adoption across the Authority. Since their inception, these two programs have supported adoption of new best practices, test and evaluation programs, and operational improvements as well as recognizing more than 120 employees in areas such as efficient construction (see page 26) and traction power braking energy recovery.

Metro has also launched tools to support continuous improvement and data-driven business decisions. For example, Metro actively monitors its energy consumption and costs through a centralized location for all utility data enabling insight into operations and identification of opportunities for cost savings.
Metro strives to attract highly skilled, diverse candidates to a workforce of more than 12,000 employees. In 2020, the Metro College Internship Program was recognized as one of the “Top 100 Internship Programs in the U.S.” Metro also established a university relations initiative to create entry-level opportunities for college graduates, fostering economic opportunity and jobs in the region.

Mission Metro is an outreach program focused on recruiting and connecting service members, veterans, and their families. Metro has been designated a military-friendly organization for the last eight years.

Metro Trabajo is a Latino recruitment strategy strongly supported by community workforce partners and Spanish-speaking media. Metro was named top employer for Latinos in 2018, 2019, and 2020 by Latina Style Magazine and Hispanic Network Magazine.

Metro Beyond Barriers is Metro’s recruiting strategy for individuals with disabilities. The strategy works to create a barrier free, inclusive, employment environment for Metro employees.

EQUITY SPOTLIGHT: FOSTERING AN INCLUSIVE WORK ENVIRONMENT

In 2020, Metro facilitated discussions with employees of different backgrounds about how to increase awareness of racial injustice, become advocates for equality, and create change moving forward. Metro also developed an unconscious bias training course to help participants approach workforce differences with increased openness and understanding to foster a more inclusive work environment. 9,000 employees have completed the course. More offerings will be available to staff moving forward.
Metro’s core business—moving people on public transportation—is inherently sustainable. 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, and continue to align with regional sustainability efforts and innovations.
Decarbonizing Transit

In June 2021, Metro awarded a new District of Columbia electric supply contract in coordination with the General Services Administration that requires the supplier to provide 50% of the electricity from renewables. This contract aligns with the Sustainability Vision and Principles adopted by the Board and increases Metro’s use of renewable energy. This shift will have a decarbonization impact equivalent to 25,000 families in DC purchasing clean power each year.

METRO IS THE SUSTAINABLE CHOICE

Riders can now discover their positive environmental impact as riders of public transit. In 2020, Metro released a tool on wmata.com that calculates the personal contribution to avoided greenhouse gas emissions using an individual’s SmarTrip® card number. The website aims to increase the public’s awareness of public transportation’s environmental benefits and empower riders to feel good about protecting the climate and improving air quality when choosing Metro.
Energy Market Engagement

One of the single largest energy users in the region, Metro is an important partner in meeting regional energy goals. As the world confronts climate change, Metro engages with a rapidly changing energy market in a way that supports a sustainable and resilient grid, controls energy costs, and helps transition to the fleet of the future.

Solar Carports at Metrorail Stations

In support of regional clean energy goals, Metro sought an innovative approach to develop solar canopies at Metro parking facilities. In 2020, Metro negotiated a lease agreement to install approx. 10 MW of solar photovoltaic power at four Metrorail stations in Maryland and DC. In 2021, the project was approved for community solar.

Under the agreement, SunPower Corporation will install a solar system that an affiliate of Goldman Sachs Renewable Power LLC will own and operate through 2045 at no cost to Metro. Once operational, the solar panels will reduce greenhouse gas emissions by up to 9,500 metric tons of CO2 annually and generate long-term revenue for Metro. This will be one of the largest community solar projects in the National Capital Region.

In 2020, Metro’s lease was recognized by the Rocky Mountain Institute for making one of the 10 “Most Noteworthy Local Government Renewables Deals of 2020.”
Increasing Efficiency Through the Energy Action Plan

In 2020, Metro completed projects in its Energy Action Plan that increase energy efficiency, contain operating costs, modernize operations, promote innovation, and help meet the region’s sustainability goals.

Continued to incorporate energy-efficient design standards in major facilities under development—including the Heavy Rail Overhaul Facility, Potomac Yard Station, Northern and Bladensburg Bus Garages, Grosvenor-Strathmore Parking Garage, and the three new Metro headquarters buildings.

Awarded a contract to Hitachi Rail Washington, LLC for new 8000-series railcars which include efficiency measures, such as improved regenerative braking technology and light-weighting incentives.

Completed lighting upgrades at Metro’s 48 underground stations with new, brighter lights that improve visibility and enhance safety and security while reducing energy costs. The LED lighting upgrades, initially expected to take three years, were completed a year early resulting in an earlier realization of energy cost savings.

Foggy Bottom Metrorail Station

Before

After
Moving Toward a Zero-Emission Bus Fleet

Along with the Sustainability Vision and Principles, Metro’s Board of Directors adopted the goal of transitioning the Metrobus fleet to 100% zero-emission vehicles by 2045. This transition will improve regional air quality, reduce greenhouse gas emissions, and provide customers with a cleaner, quieter ride.

These zero-emission bus goals set out a phased conversion that will begin with the purchase of only lower-emission buses in 2023 so that all new buses entering service by 2030 will be electric or other zero-emission technology. Metro is also investing in facility and infrastructure upgrades over the coming years to support the transition to zero-emission buses.

Electric Bus Test and Evaluation

Metro is initiating an electric bus test and evaluation at Shepherd Parkway Bus Division to inform the rollout of a zero-emission fleet. The Shepherd Parkway division was selected because it serves low-income communities on routes in DC, Maryland, and Virginia. The test and evaluation will include 12 electric buses and is supported by a $4.2 million grant awarded in 2020 by the Federal Transit Administration’s Low or No Emission Program. Project implementation is underway, with initial bus deliveries expected in late 2022 to early 2023 and analysis completion expected by the end of 2024.

TO LEARN MORE, VISIT: wmata.com/initiatives/plans/zero-emission-buses.cfm
Building Sustainably

Metro integrates innovative sustainability strategies throughout project planning, design, and construction to create safer, healthier, and more resource-efficient buildings that support employee and community health and wellbeing.

LEED-ING THE WAY

Metro’s Maintenance of Way, Transportation, and Service & Inspection buildings at Dulles Rail Yard on the Silver Line were awarded LEED Silver certification in 2020. The buildings have abundant natural light, best practices in ventilation including increased amounts of fresh air and were built using materials and products that did not contain harmful chemicals. The building complex also maximizes open space to provide outside areas for employees. To ensure stormwater runoff into local waterways is clean, the site includes stormwater control measures and native landscaping. The buildings also use energy-efficient lighting that is designed to limit light pollution in surrounding community and habitats.

Third-Party Certifications

Today, Metro designs all new and “significantly renovated” buildings to Leadership in Energy and Environmental Design (LEED) standards. Nine Metro projects and facilities have achieved a standard of LEED Silver or better, and eight more sustainably designed projects are underway.

In addition, Metro uses best practice certifications such as Parksmart and Envision as applicable. In 2020-2021, Metro provided training for over 70 employees to become Envision Sustainability Professionals.
In 2021, Metro was recognized by the Metropolitan Washington Council of Governments as a 2021 Climate & Energy Leadership Award Winner. With a number of large capital projects underway, Metro wanted to improve the way it powers construction projects. A collaborative project team designed a new electricity solution that cut the use of diesel generators by 90% during the Platform Improvement Project, saving Metro approximately $5 million dollars, improving safety and efficiency, and reducing noise and air pollution. This innovative approach will be used as a model for future programs.

EQUITY SPOTLIGHT:
SUPPORTINGHealthy Communities

The health burden from poor air quality disproportionately impacts historically disadvantaged communities. Riding with Metro is the best way to cut down on transportation-related emissions and helps ensure riders, employees, and communities can breathe clean air. Metro is the largest provider of public transit in the Washington metropolitan region, taking car trips off the road and avoiding tailpipe emissions that contribute to poor air quality. To further support air quality and health in the region, Metro is encouraging mode shift by making service affordable and easy to use, decarbonizing its energy supply, improving energy efficiency by implementing the Energy Action Plan, and transitioning to zero-emission buses which will reduce tailpipe emissions in the communities we serve.
Climate Resiliency Readiness

Metro continues to work closely with our jurisdictional partners to support a regionally coordinated response during weather events and participates in inter-agency planning involving our federal, state, and local partners and experts in the field. Metro also continues to invest to mitigate and prepare for the impacts of a changing climate.

In line with newly adopted Sustainability Principles, Metro has launched an effort to develop a climate resilience implementation strategy. The goal of the strategy is to identify vulnerabilities and develop a plan of action to prepare for and prioritize investments in infrastructure to improve resiliency.

SUPPORTING CLEAN WATERWAYS AND OPEN SPACE

As part of Metro’s commitment to preserving the beauty and health of the region’s natural resources, Metro operates and maintains wastewater pretreatment systems to remove harmful pollutants before being discharged to the sewer system. In 2021, Metro received Pretreatment Recognition Awards from the Washington Suburban Sanitary Commission (WSSC) Industrial Discharge Control Program. This honor recognized the Greenbelt and Shady Grove rail yards in Maryland, both of which have WSSC wastewater discharge permits for train wash operations and have been consistently in compliance with wastewater discharge for three and five years respectively.