



SUSTAINABLE COLUMBUS

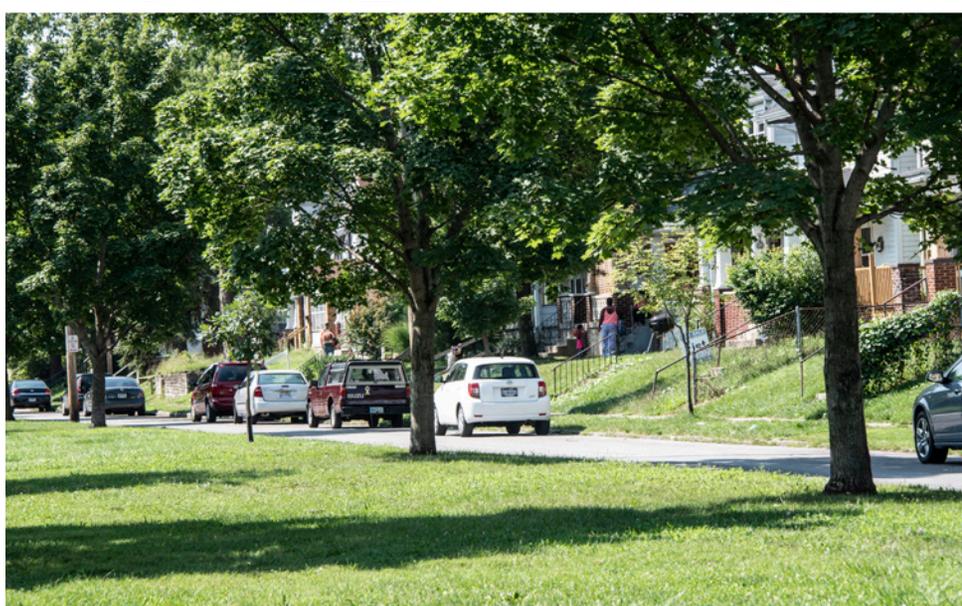
ANDREW J. GINTHER, MAYOR

2020 ANNUAL REPORT



“Working together we can lessen the harmful effects of climate change, help lift our communities, and create greater opportunity for all residents.”

-Mayor Andrew J. Ginther



SUSTAINABLE COLUMBUS



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ANDREW J. GINTHER, MAYOR

A COMMUNITY WIDE EFFORT

Recognizing the role a healthy environment plays in contributing to the City of Columbus continuing to be America's Opportunity City, the City has established the Sustainable Columbus initiative.

This initiative, under the leadership of Columbus Mayor Andrew J. Ginther, focuses on optimizing city operations and working with external stakeholders from all corners of our community to enhance and push environmentally-friendly policies for our region. The City of Columbus strives to be a regional, state and national leader in sustainability.

Learn more about the city's environmental efforts at www.columbus.gov/sustainable/.

THE CITY OF
COLUMBUS

ANDREW J. GINTHER, MAYOR

DEPARTMENT OF
PUBLIC UTILITIES





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LETTER FROM MAYOR GINTHER

Dear Friends and Neighbors:

With extreme weather events becoming more and more common, the need has never been greater to fight climate change.

And through **Sustainable Columbus**, our city's environmental protection initiative, the City of Columbus continues to be a leader in sustainability not only in our region, but our nation.

The year 2020 was a time of historic change in our country. A global pandemic crippled our world. Protests around the country impacted the conscience of the nation. Massive wildfires inside and outside our nation's borders struck, highlighting and raising the stakes on forest management practices and the impact of global warming inside and outside the United States.

I'm extremely proud of our efforts to fight climate change in Columbus. As you'll see in this 2020 Annual Sustainability Report, the city has made substantial progress in promoting energy conservation as the City Council adopted an energy benchmarking ordinance, the first of its kind in the state, that will bring much needed transparency to energy and water usage of large-scale commercial buildings in our city.

Also, we heralded 30,000 home energy audits being done in the city in two years, an accomplishment that will hopefully spur property more and more property owners to make energy-saving improvements in their homes.

And, in November, Columbus voters overwhelmingly approved community-choice aggregation, a feat that will provide 100 percent clean energy to more people in the city than ever before.

These are just some of the accomplishments our city reached in 2020 as we strive to make sure residents in all of our neighborhoods can breathe clean air, drink clean water, have abundant natural areas to enjoy and play in and fight the scourge of climate change.

After reading this report, I hope you will be inspired to take action. Working together we can continue to make Columbus America's Opportunity City now and into the future.

Sincerely,
The Honorable Andrew J. Ginther
Mayor, City of Columbus



A YEAR IN REVIEW

SUSTAINABLE COLUMBUS

The year 2020 was a year of big advancements in sustainability in the City of Columbus.

The City took the first bold steps towards transparency in the use of energy at the building-level by City Council adoption of the first-ever Energy Benchmarking ordinance in the state of Ohio.

As a city, we also celebrated another milestone: Thirty-thousand home energy audits being conducted within the city limits, a development that has identified energy improvements that property owners can make so that their personal residences are the most sustainable that they can be.

And, then in late 2020, voters overwhelmingly approved a ballot issue to allow the City of Columbus to start a community-choice electricity aggregation, a prospect will bring 100 percent clean energy to Columbus.

Benchmarking Ordinance

Early last year, the City Council unanimously adopted the Energy Benchmarking ordinance. Under the ordinance, all large building owners and operators are required to track and report their building's energy and water usage, ushering in a new era of critical information that can help people take action to save energy, water and money.

The city considers this to be a win-win for the public-sector and the real-estate sector of the local economy: Prospective commercial tenants and residents will be able to consider a building's energy use as one of the many factors in determining where to live or work. Building owners will have information about how their properties stack up with other similar buildings and they will have information to be able to prioritize future repairs and investments. Additionally, the community benefits with a projected 3 to 4 percent reduction in community carbon emission reductions.

Under the new ordinance, the focus is on buildings in the commercial and industrial sectors and on apartment buildings as well as city buildings of greater than 25,000 square feet and non-city buildings of greater than 50,000 square feet to benchmark their energy and water usage.

Home Energy Audits

Meanwhile, the City of Columbus advanced in another area of sustainability when it celebrated a key milestone in late 2020 – surpassing 30,000 home energy audits in Columbus within two years.

These audits, which identify opportunities for energy efficiency in homes, will ultimately save residents money and save energy use, helping to ensure a healthier, more equitable Columbus.



SUSTAINABLE COLUMBUS

ANDREW J. GINTHER, MAYOR

Mayor Andrew J. Ginther credited the city working with residents and neighborhoods, utility companies and other stakeholders to rally towards this common goal. The Mayor also credited the work of the city's behavior-change program, Sustainable Steps, which is part of the Mayor's Sustainable Columbus

environmental initiative, in helping achieve the key milestone.

The City will continue to promote energy efficiency including encouraging more residents to take part in in-home energy audits and to install recommended energy-efficiency improvements and to take part in home weatherization programs to help them continue to save money on their utility bills.

Clean Energy Columbus, the city's Community-Choice Aggregation program

And then in late 2020, Columbus voters weighed in on the importance of renewable energy when they overwhelmingly passed a ballot issue to allow the city to take part in community-choice aggregation: Clean Energy Columbus.

According to final, official results Columbus voters approved by more than



75 percent the proposal which will give residents and business owners in the Capital City the ability to join together and purchase clean electricity at bulk rates, increasing the city's use of wind and solar energy.

The city also believes this proposal will help it move closer to achieving its goal of 100 percent clean energy by 2022.

Stakeholder and Community Engagement

The global pandemic severely impacted the operations of governments, businesses and individuals and organizations in 2020 and Sustainable Columbus was no exception.

Sustainable Columbus adapted, as did the rest of the Columbus' city government, moving meetings with internal and external stakeholders to online platforms and thinking of new ways to engage with the public.

Sustainable Columbus held 10 meetings with its Internal Working Group made up of representatives of city government departments, usually the sustainability

point people in each department.

Sustainable Columbus also held three meetings with its External Advisory Committee, made up of stakeholders ranging from environmental groups to business and industry and others.

Sustainable Columbus also has a social media presence, adding to the virtual conversation on sustainability via its handles on Twitter (@SustainableCol1) and Facebook (@SustainableColumbus).

For more information on what the city's doing to fight climate change and enhance the environment for all Columbus neighborhoods, please visit www.columbus.gov/sustainable.

Sustainable Columbus also coordinated the city's data responses to the CDP and the American Council for an Energy Efficient Economy annual requests for environmental program information.

KEY PRIORITY 1: EDUCATION & ENGAGEMENT

GREENSPOT

GreenSpot was created in 2008 as a way for people to learn about living and working greener. The year 2020 saw membership growth and membership now totals 21,880. This includes 20,440 household members, 1,294 business members, and 146 community groups. Additionally, three businesses graduated from the GreenSpot Sustainable Business Course. GreenSpotLight award winners were OhioHealth, E.P. Ferris, and MAD Scientist Associates. Indianola Informal K-8 was designated as the first Columbus City School GreenSpot School. GreenSpot pivoted and held several webinars and created several videos covering sustainability topics for children and adults.



More than 1,830 households participated in the GreenSpot Backyard Conservation cost share program to receive either a rain barrel or native plants.

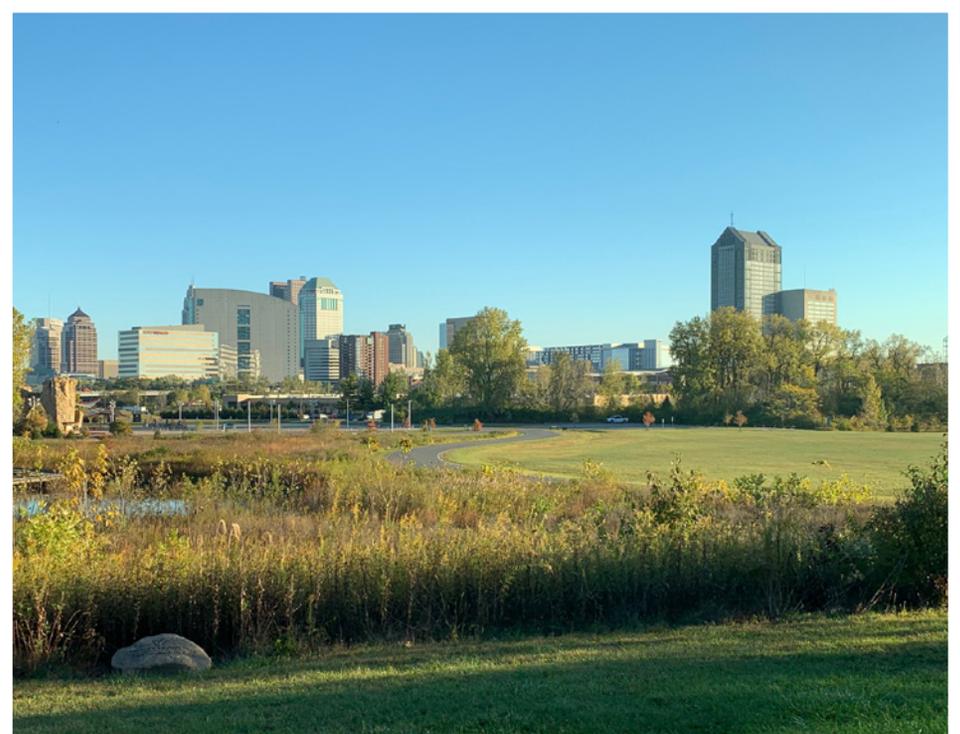
KEEP COLUMBUS BEAUTIFUL

Keep Columbus Beautiful is a City of Columbus community-improvement program and a national affiliate of Keep America Beautiful. KCB focuses on public education and volunteer service related to quality of life environment issues including litter, recycling and beautification projects.

The program is a division of the Department of Public Service offering residents resources and opportunities to improve their neighborhoods through community-based efforts.

In 2020, 967 volunteers spent 1,449 hours picking up 34,635 pounds of litter in Keep Columbus Beautiful neighborhood cleanups.





KEY PRIORITY 2: CLIMATE & ENERGY

ENERGY

In 2020, the City of Columbus set up the implementation of the first-in-the-state policy to require certain building owners in the city to publicly disclose energy and water usage.

Adopted by the City Council in 2020, the proposed energy benchmarking ordinance will make the City of Columbus the 30th city in America to have adopted this policy towards transparency and sustainable energy and water usage.

Where energy comes from matters. Fossil fuels, like coal and oil, contribute to climate change and negatively impact communities. Cleaner energy, like wind, solar, hydro, natural gas and energy efficiencies can improve our climate, health and economy. In 2019, the City continued efforts to move towards clean energy that will pay dividends for our community. Energy efficiency is a quick and easy way to save money and go green.

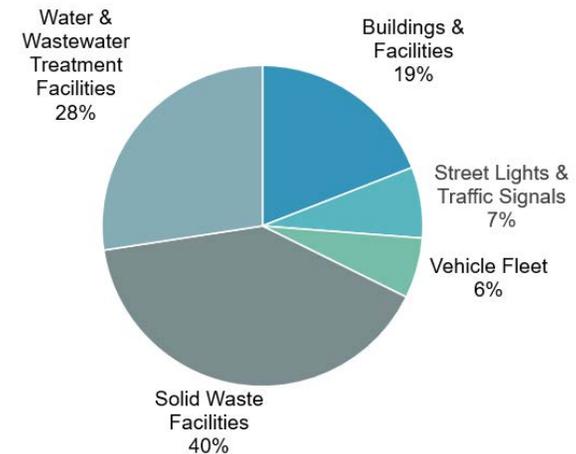
Mayor Andrew J. Ginther has signed onto the Global Compact of Mayors. Under this compact, the city has agreed to build and conduct a community-wide greenhouse gas inventory with a breakdown of emissions for buildings and the transportation sector; identify climate hazards and to publicly report on its progress.

The City of Columbus participates in the CDP, formerly known as the Carbon Disclosure Project, an initiative that supports cities and companies disclosing the environmental impact of major corporations. The project aims to make environmental reporting and transparency and risk management a business standard and to drive disclosure, insight and action towards a sustainable economy.

In November, 2020, Columbus voters approved a ballot issue that gives residents and business owners in the Capital City the ability to join together and purchase clean electricity at bulk rates, increasing the city's use of wind and solar energy.

CLIMATE

2020 Greenhouse Gas Inventory



Government Operations Emissions	Percent Change in Total Emissions 2005 to 2020	Percent Change in Emissions per Capita 2005 to 2020
Buildings & Facilities	-28.3%	-41.7%
Street Lights & Traffic Signals	-19%	-34.2%
Vehicle Fleet	-40.7%	-51.8%
Solid Waste Facilities	36.9%	11.3%
Water & Wastewater Treatment Facilities	-43.4%	-54%
Total Emissions	-19.1%	-34.2%



AMERICAN CITIES CLIMATE CHALLENGE

In 2018, Bloomberg Philanthropies awarded the City of Columbus as a winning city in the Bloomberg American Cities Climate Challenge.

The Bloomberg American Cities Climate Challenge is a \$70 million program that will accelerate 25 ambitious cities' efforts – including the City of Columbus – to tackle climate change and promote a sustainable future for residents. Through the Climate Challenge – which is part of Bloomberg's American Cities Initiative, a suite of more than \$200 million in investments to strengthen city halls and advance critical policies – Columbus was accepted into a two-year acceleration program and will be provided powerful new resources and access to cutting-edge support to help meet or beat the city's near term carbon reduction goals.

Bloomberg Philanthropies selected the City of Columbus as a winning city because of its innovative and ambitious climate action plans to reduce air pollution and city-wide emissions with specific projects aimed at reforming their respective transit and building sectors, areas which are typically responsible for more than 80 percent total of all city-wide emissions

Here are some highlights for 2020 based on key City of Columbus/Bloomberg priorities:

- Implement a workforce development program to train community energy advocates and deploy in tandem with Community Energy Savers.
 - 2020: Hired and trained 6 community energy advocates in the Near East, University District, and Milo-Grogan neighborhoods, for a total of 13 trained energy advocates in 2019 and 2020.
- Energy audits: Complete 30,000 home energy audits in the residential sector with a focus on neighborhoods with the highest rates of energy burden.
 - 2020: Completed more than 37,000 home energy audits in 2019 and 2020.
- Clean energy financing: Accelerate \$15 million in new clean energy financing through commercial and residential property assessed clean energy financing (PACE).
 - 2020: Financed 25 energy efficiency and renewable energy projects through PACE financing in 2020 for a total of more than 48 projects and \$85 million in financing in 2019 and 2020.
- Benchmarking: Establish a commercial and multifamily energy and water benchmarking ordinance for large buildings.
 - 2020: On March 16, 2020, the City of Columbus City Council unanimously voted to adopt the Energy and Water Benchmarking and Transparency Ordinance. The ordinance requires buildings 50,000 square feet and over to track their whole-building energy and water use with the U.S.



requires all new streetlights to be Light Emitting Diodes (LED). As existing lights fail, they are replaced with LED. Additionally, the division is initiating a Smart Lighting project that will convert all the existing HPS lights to LED as this project moves forward. The City of Columbus currently owns and maintain approximately 56,000 street lights, of which approximately 2,800 are LED.

In 2020, the City of Columbus financed 25 energy efficiency and renewable energy projects through Property Assessed Clean Energy (PACE) financing for a total of more than 48 projects and \$85 million in financing in 2019 and 2020.

You can find more info here: <https://columbusfinance.org/services/energy-program/>

In addition, for City tax incentives (direct job incentives or commercial tax abatements) energy efficiency is one factor that is considered on each project. Businesses or developers would need to demonstrate that they are going beyond normal new construction or renovation requirements to meet this evaluation criteria.

The city's building plans review process does have an Expedited Plan Review process that gets building permits in hand within a week for a premium fee. The City of Columbus had to petition the State Building Commission to be allowed to implement this process as state code requires applications to be reviewed in the order they are accepted. This ensures no preferential treatment is given to a particular applicant.

SMART COLUMBUS

Smart Columbus, the city's public-private partnership that is harnessing technology to enhance transportation and provide for more environmentally sustainable ways to get around the city, continued to make progress in 2020.

The project was funded initially by a \$10 million Paul G. Allen Philanthropies grant — which accompanied its \$40 million Smart City Challenge grant from the US Department of Transportation (USDOT) — as well as from state and corporate sponsorship.



Smart Columbus launched new features in 2020 in the Pivot and ParkColumbus apps, the culmination of the final two projects funded by the \$40 million Smart City Challenge Grant awarded by the U.S. Department of Transportation in 2016.

EPA's ENERGY STAR® Portfolio Manager® tool and share this data with the City beginning in 2021.

- New mobility options: Create a framework for implementation of a high-capacity transit corridor(s) and encourage the use of alternative mobility options by adding 3,000 units of bikeshare, e-scooters, and e-bikes.
 - 2020: Added 3,500 new micro-mobility devices for a total of 5,000 new devices added in 2019 and 2020. Worked with City Leadership to identify several corridors to advance high-capacity transit planning and launched the LinkUS initiative.

RENEWABLE ENERGY COMMITMENTS

The average number of sunny hours in the City of Columbus is 2,183 hours per year and solar power continues to take root in Columbus.

In 2020, the City of Columbus issued 215 permits for solar panel installation, a slight increase from the 195 installed in 2019, according to the Department of Building & Zoning Services.

In 2020, City's Division of Power continued to purchase over 30 percent of its energy from renewable energy resources for its nearly 15,000 customers. The division has also implemented new standards for the City of Columbus that

Central Ohio's preferred navigation app, Pivot, is the product of the Multimodal Trip Planning project; it helps residents and visitors plan and pay for their local trips using one or more transportation options like COTA bus, ride-hailing, carpool, bikes, scooters, taxis and even personal vehicle or bike.

The new ParkColumbus features are part of the Event Parking Management project that aims to make Downtown Columbus and the Short North Arts District a better place to visit by reducing traveler frustration, congestion and vehicle emissions. The app upgrade brings private and public parking options together in one app to allow drivers to find, reserve and pay for most parking garages and some surface lots in Downtown Columbus and the Short North Arts District. Additionally, drivers can now see the likelihood of finding an on-street parking place.

"Despite the changes in mobility in our region due to COVID-19, I hold fast to the belief that mobility is the great equalizer of the 21st century. Smart Columbus continues to work as hard as ever to deliver on the long-range, innovative projects that are critical to moving our city forward, today and in the future. With today's launch of new features in ParkColumbus and Pivot, we're making good on our commitment to the community to use technology to improve mobility, and, as a result, people's lives," said Mayor Andrew J. Ginther.

PIVOT PROVIDES EASY ACCESS TO THE REGION'S TRANSPORTATION OPTIONS

Smart Columbus has collaborated with Central Ohio's mobility providers to bring their resources together to release the Pivot app. Pivot is a locally designed app that helps users get around using this area's unique mix of transportation options, like a COTA bus, ride-hailing, carpooling, bike and scooter sharing, taxi service and even personal vehicle or bike. It offers real-time information about the mobility options closest to the user's location, wherever they are in Columbus. Pivot users can link Pivot to their other mobility apps, allowing for easier payment processing for multimodal trips. Users can also customize their mobility preferences, so trip routing favors their preferences, quickest trip or least expensive route.

Participating mobility providers include: COTA, Campus Area Bus Service (CABS), Yellow Cab of Columbus, CoGo, Lime, Bird, Lyft, Uber and Gohio Commute.

"As transportation habits have changed, local mobility providers like myself have had to find new ways to engage and serve the mobility needs of our community. Yellow Cab of Columbus is proud to partner with Pivot to help us connect with more people as travel increases," said Morgan Kauffman, CEO of Yellow Cab of Columbus.

Pivot was developed locally by Etch, LTD, a woman-owned firm that specializes in customized geospatial solutions that streamline mobility and enhance user experience. "We're excited to build on our past work with the City of Columbus and utilize our GIS expertise and local knowledge to create a first-of-its kind, open source, mobility app that brings private and public mobility options together in one place to better serve the residents of Central Ohio," said Darlene Magold, CEO of Etch, LTD.

PIVOT NOW HAS INTEGRATED PAYMENT OPTIONS

Pivot made an early release in August 2019 with trip planning features only. Now, Pivot offers app-to-app payment portal linking from Pivot to partner mobility providers' apps delivering a seamless user experience using the accounts a person already has set up with mobility providers.

Central Ohio residents are encouraged to download, use, and provide feedback on Pivot. Users can earn \$25 up to 2,400 participants for responding to an in-app survey.

PARKCOLUMBUS MAKES PARKING OPTIONS MORE ACCESSIBLE

The Event Parking Management project was conceived in partnership with Experience Columbus as part of a parking initiative to improve the visitor experience in 2016. At the time, the focus was about improving parking in Downtown Columbus and the Short North Arts District during major events like the Arnold Classic.

"Even with major events cancelled this year due to COVID-19, Smart Columbus stayed the course with the development of the app to provide more parking options now, to make it easier to support local businesses who need our support more than ever, and for later, when major events start to resume," said Mandy Bishop, Program Manager, Smart Columbus. "Experience Columbus and other participating partners including the Short North Alliance, the Downtown Special Improvement Districts and many parking providers have been diligent in maintaining their commitment to this initiative, which will be important to the continued vibrancy of the community going forward."

"The Event Parking Management integration in ParkColumbus and Pivot app are prime examples of the Columbus community living forward to turn today's dreams into better tomorrows," said Brian Ross, President and CEO of Experience Columbus. "Ensuring ease of transportation makes it easier for our residents to explore within their own backyards and will help visitors seamlessly traverse the city when travel resumes, which will be crucial in helping restore the city's vital tourism economy."

PARKCOLUMBUS USES CITY DATA TO ADD ON-STREET PARKING AVAILABILITY OPTION

The Smart Columbus Operating System team worked with ParkColumbus developers to create a predictive model using payment transactions and on-street sensor data to show drivers the likelihood of finding an on-street parking space in Downtown Columbus and the Short North Arts District. Using a red/orange/green color-coded system, drivers can now see by parking zone how likely they are to find an on-street parking spot. To account for changes in parking habits due to COVID-19, the operating system team adapted the predictive model to shift to a rolling average of the last few months of data, rather than historical data from years past.

Partnering parking providers account for 87% of the private garages and surface lots in Downtown Columbus and the Short North Arts District and include: SP+, LAZ, Nationwide Realty Investors, Towne Park, Allpro Parking, Park Place, Citrin, Professional Parking, and CampusParc.

ParkColumbus is a white-label app developed by ParkMobile, the leading provider of parking and mobility solutions in the U.S. “We’re pleased to bring the innovative new parking availability feature to the ParkColumbus app,” says Jon Ziglar, CEO of ParkMobile. “This makes it easier for residents to get around in places that they previously may not have visited due to parking concerns. With the enhancements to the ParkColumbus app, finding open spots will be easier than ever, reducing the need to circle the block looking for parking, which benefits both congestion and emissions in the areas served.”

Adding features to the Pivot and ParkColumbus apps completes the launch-phase of Smart Columbus’ eight U.S. Department of Transportation Smart City Challenge grant-funded projects. The demonstration period for the Multimodal Trip Planning and Event Parking Management projects will continue through March 31, 2021, after which time, project evaluation will take place for final reporting to be made available by May 31, 2021. Both Pivot and ParkColumbus will continue to be supported by the City of Columbus after the Smart City Challenge grant ends.

SMART MOBILITY

The City of Columbus in 2020 continued to move strategically to manage the influx of new ways in which residents, visitors and others can get around the city including using e-scooters, electric bikes and other innovative shared mobility devices.

In 2019, there were three authorized vendors renting e-scooters to customers in the City of Columbus, each permitting 500 devices citywide. In 2020, there

were 2,000 scooters permitted by the City of Columbus, according to the city Department of Public Service, which manages the smart mobility permitting process.

City-adopted rules and regulations require a minimum of 20 percent of a vendor’s active fleet be deployed in neighborhoods designed by Mayor Ginther as “Opportunity Neighborhoods” and a maximum of 25 percent of the fleet deployed downtown.

MOBILITY CORRIDORS

By the Department of Public Service, from the 2020 Annual Report

Planning for mobility choices, equity and economic vitality in our growing region The City of Columbus joined our transportation planning partners in June 2020 to unveil LinkUS, an umbrella program for inclusive, equitable mobility planning along key transportation corridors.



As a LinkUS leader, Public Service is working with the Columbus Department of Development, Central Ohio Transit Authority, Mid-Ohio Regional Planning Commission, Franklin County, other public and private sector partners, and community groups on critical transportation and mobility planning ahead of population projections that the Central Ohio region will grow to 3 million people by 2050. LinkUS will provide mobility options and support infrastructure along key corridors to help manage growth and move people safely and efficiently.

This initiative will increase equity and sustainability with enhanced access to jobs and education, business development, affordable housing and healthcare. It means a better quality of life for all Columbus residents. In 2020, substantial progress was made on comprehensive planning and community engagement efforts for the first LinkUS corridor action plan, the Northwest Corridor Mobility Study — an area along Olentangy River Road, from Downtown to Bethel Road.

The two-year Action Plan is set to be finalized and adopted in spring 2021. Strategies will be guided by these goals to begin to get to zero:

- Design and build safe streets
- Promote a culture of safety
- Do it better — enhance processes and collaboration
- Identify and commit resources Vision Zero Columbus is mindful of equity factors that impact mobility in all city neighborhoods.

The Action Plan will identify safety improvements for Communities of Interest



in Columbus, where residents are at higher risk because they may have fewer choices about how, when and where they travel. These efforts will next identify high-quality transit and mobility improvements along the Northwest Corridor, along with new housing and job opportunities that foster equity and inclusion. Also in 2020, LinkUS kicked off its second corridor planning initiative, the East-West Corridor to study West Broad Street and East Main and East Broad streets as an opportunity for high capacity transit and multimodal connections.

GREEN FLEET

Following are the actions and targets Columbus will utilize to reduce petroleum use and achieve emission reductions from 2019-21.

Action: Increase light duty vehicle purchases that are considered green **Target:** at least 75% of light duty purchases each budget year will be green

“Environmentally preferable purchasing” policy - Fleet will continue to review all vehicle specifications in conjunction with the end user agency and the Purchasing Office to ensure the most “green” vehicles possible are being specified and will continue to meet with City divisions to review purchase requests in order to right-size vehicles for their intended purpose.

Electric vehicles - Fleet Management has fulfilled its portion of the Smart Columbus initiative of adding 200 electric vehicles to our fleet by 2020, along with implementing the necessary charging infrastructure. All electric vehicles were put in service by the end of 2020.

2020 year-end update: Columbus purchased 355 light duty vehicles in 2020. Of, these, 209, or 59%, were some type of green vehicles. The majority of green light duty vehicle purchases this year were battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs), with the remaining green purchases mainly comprised of flex fuel vehicles. Through collaboration with many agencies across the city, Fleet Management purchased its remaining commitment of the 200 electrified vehicles for the Smart Columbus initiative in 2019, and all vehicles were put in service by the end of 2020.

Start/stop technology - Columbus owns approximately 40 Ford Escape vehicles equipped with “start/stop” technology. Start/stop technology is now standard equipment on these Escapes, which allows the engine to shut down during stops, so the vehicle emits zero emissions and burns no fuel. This technology is estimated to boost fuel economy by as much as 6% in stop and go traffic.

Flex fuel - a large portion of Columbus’ light duty fleet are flex fuel vehicles - vehicles that can run on either regular gasoline or gas-ethanol blends up to 85% ethanol (E85). The use of E85 reduces our petroleum use and is also typically less expensive than regular gasoline.

Action: Increase heavy duty vehicle purchases that are considered green (excluding Safety vehicles) **Target:** at least 80% of heavy duty purchases each budget year will be green **Compressed Natural Gas (CNG) vehicles** –

Fleet will continue to encourage the City’s “environmentally preferable purchasing” policy and continue to review all vehicle specifications to ensure that green options are included where feasible on heavy duty vehicles. CNG vehicles will likely comprise the majority of “green” heavy duty purchases in the coming years.

All heavy duty purchases will be targeted for CNG when possible, as heavy duty vehicles are the largest consumers of fuel and therefore yield the greatest return on fuel savings and reduced emissions.

Columbus currently operates four CNG fueling stations for use by both the city and the public located on the east, west, and north sides of the city, and an additional shared station with COTA located near downtown.

2020 year-end update: Columbus purchased 93 heavy duty vehicles in 2020. Of, these, 62, or 67%, were some type of green vehicle. The majority of green heavy duty vehicle purchases were CNG vehicles. City vehicles consumed 845,441 gge’s of CNG in 2020, resulting in a combined savings of almost \$641,200 from reduced costs compared to diesel fuel, as well the \$.50/gge expected federal alternative fuel tax credit rebate.

KEY PRIORITY 3: RESOURCE CONSERVATION & PROTECTION

As a growing city, we also recognize that protecting and conserving our natural resources is critical to maintaining our natural eco-systems, preserving our quality of life, and protecting public health. Through our natural resource protection and conversation programs we connect the people of our community through the power of nature, wellness, and creativity.

Parks, Waterways, and other natural areas reduce stress, provide habitat for thousands of species and contribute to a thriving city. The City of Columbus continues to develop and preserve these assets, and implement protective measures to reduce our footprint.

Through critical partnerships with various community organizations, the City of Columbus was able to host or participate in a variety of events that helped connect citizens with sustainable education and resources:

Earth Day 2020, brought together by a large scale volunteer effort, was a different because of the worldwide pandemic but still successful effort to improve the Central Ohio Community.

The City of Columbus was a proud sponsor of the many small and safe events coordinated by the non-profit organization, Green Columbus. A record number of tree seedlings were planted and distributed in the greater Columbus area. Mulch and topsoil worth \$10,000 was distributed to many community gardens thanks to a generous grant from Scotts. All events followed the strictest guidelines and the established network.

Professionals and individual volunteers:

- Planted and distributed over 31,000 trees that will increase the region's tree canopy fighting urban heat island effects.
- Prepared dozens of community gardens for the growing season

In addition, two tree nurseries were set up for another season, producing more than 1,300 trees for the community.

Earth Day Columbus 2020 has been highlighted by the National Wildlife Federation as a national top 10 event of their urban wildlife program.



The worldwide coronavirus pandemic also impacted the Department of Public Utilities' ability to partner with local environmental professionals for the Children's Water Festival. Indeed, the 2020 version was cancelled because of the coronavirus after several successful years of partnership in the past. The decision was made to cancel the 2021 version of the event, also because of the coronavirus. Officials say they hope to continue the festival once the coronavirus pandemic is under control or abated. The festival uses fun-filled, hands-on activities to educate students on the importance of conserving and protecting this vital natural resource. Fun presentations about drinking water, storm water and wastewater are provided by the City of Columbus Divisions of Water and Sewers and Drains.

Other sustainability accomplishments for the Division of Water in 2020 include:

- Providing 117 site visits and educational materials on storm water best practices, spill prevention and response to 86 (same as in 2019) businesses located along critical waterways immediately upstream of water plant intakes. This effort aims to minimize threats of spills and encourage proper and timely reporting of spills with potential to affect the raw water supply.
- Also, 29,300 pet waste bags were distributed, including 21,200 PUP bags and 8,100 "Thank You" Bags.
- The Department of Public Utilities provided newsletters in 2020 to nearly 300,000 customers quarterly to help them learn about simple practices that conserve and protect water; volunteer storm drain marking opportunities; and free or discounted tools available to help implement strategies such as rain barrels, rain gauges and pet waste bags
- Customer service representatives in DPU's Call Center also assist and educate customers about how to detect and fix water leaks and provide leak detection kits to residents, further promoting strategies to help individuals do their part to protect our water resources

BLUEPRINT COLUMBUS

Blueprint Columbus is the alternative to portions of the Wet Weather Management Plan, submitted to the Ohio Environmental Protection Agency in 2005, to address sewer overflows and consent orders with the state in 2002 and 2004.

The final Blueprint Columbus integrated plan was approved by the agency in 2015. The plan utilizes greener alternatives and residential infrastructure improvements to solve wet weather problems, instead of building more costly sewer tunnels or "gray solutions". The four main strategies, or pillars, of the plan include: residential



home sewer lateral lining, roof water redirection, sump pumps, and green infrastructure.

Clintonville 1, the first of 21 Blueprint project areas, broke ground in 2017 and constructed 423 rain gardens and a wetland feature in Whetstone Park. In 2019 the project began the second phase of implementation: lining individual home sewer laterals and assessing and implementing solutions for roof water redirection. By the end of 2020, 2130 sewer laterals had been lined and 1270 homes had some or all downspouts redirected. All four pillars of Blueprint will be completed for the Clintonville 1 project area in 2021.

Blueprint also began initial construction in our North Linden 1 project area in 2020. The project will first install over 200 green infrastructure features, and then begin lateral lining and roofwater redirection in 2022. Blueprint has also been engaging residents in the green infrastructure design process in Hilltop and Miller Kelton, which will begin construction in the following year.

In 2020 Blueprint Columbus installed 444 sump pumps in the Clintonville 1, North Linden 1, Hilltop 1, and Miller Kelton project areas. Blueprint sump pump installations began in 2017, and has installed a total of 1090 sump pumps in qualifying residential homes.

For more information about Blueprint, please call (614) 645-1253 or visit www.columbus.gov/Blueprint.

PUP & GET GRASSY! CAMPAIGNS

The PUP (Pick Up Poop) program encourages pet owners to clean up after their pets, which helps protect stormwater quality. The program gained 296 new pledges in 2020, bringing the new PUP pledge total to 6,636.

Through its agreement with the City of Columbus, Franklin Soil and Water Conservation District implements several stormwater education programs for Columbus residents. Despite the challenges in 2020 forcing nearly all education exclusively online, these programs experienced an increase in participation as Columbus residents turned their attention to stormwater conservation strategies they could implement in their own yards. 2,030 Columbus residents participated in the “GetGrassy!” lawn care education campaign and the GreenSpot Community Backyards program (a 37% increase from last year), which provided 735 rebates for rain barrels or native plants. Additionally, 3,186 Columbus students learned about stormwater pollution, water quality, soils, and soil erosion via online lectures and home-based activities they could perform with their family; and 2,174 Columbus contractors received targeted education regarding how to properly dispose of paint and concrete materials to prevent stormwater pollution.



NATURAL RESOURCE PROTECTION AND CONSERVATION, EXPERIENTIAL LEARNING OPPORTUNITIES

Columbus Recreation and Parks Department's Net-Zero Wyandot Lodge operates as a teaching tool and provides programming space, including an audio and visual room as well as a hands-on science lab in the Leadership in Energy & Environmental Design (LEED)-certified, Silver designation building. Beyond the building walls, participants learn about outdoor activities and many other things at this center. The program also partners with the 29 community centers to foster an appreciation of outdoor experiences for youth throughout this great city.

The worldwide pandemic impacted the normal usage of the lodge in 2020, but it still served people.

- 444 Total Users
- 93 – Summer Camp participants
- 351 winter and fall program participants

According to the Department of Recreation and Park, the winter and fall were a mix of the lodge's core programming offerings including: fossils, geocaching, reptiles, archery, birds, shelter building and afterschool programs.

COLUMBUS CITY COUNCIL

In 2020, Columbus City Council, under the leadership of Councilmember Emmanuel V. Remy, the chair of Council's Environment Committee, focused on continuing the fight against litter and illegal dumping in Columbus and reviewing internal city processes to help make them more environmentally friendly. Like most cities, COVID-19 drastically affected the work Columbus City Council had planned for the year. Many annual, regular programs – Keep Columbus Beautiful community litter pick-up events, Columbus Litter League, Earth Day volunteering and activities – were canceled due to the pandemic.

In response to this, Councilmember Remy allocated \$250,000 of Federal CARES Act funding to pilot the “Cleaner Columbus Employment Initiative.” This program funded workers to pick up litter for three weeks at \$15 per hour in the Linden, Franklinton and Hilltop neighborhoods, with additional targeted areas in South and East Columbus. The two goals were to create temporary employment to local residents experiencing financial hardships and reduce the amount of litter and





debris in opportunity neighborhoods. The program was a huge success, with 5,789 bags of litter and debris collected weighing a total of 173,670 pounds. This was 53 percent of the total weight of litter collected in all of 2019. With the success of this 2020 pilot, Councilmember Remy has committed to two additional employment programs for 2021.

In addition to our own work, Columbus City Council continues to support the work of City departments. Some examples from 2020 include the Department of Public Utilities with Community Aggregation (Councilmember Rob Dorans); the Department of Recreation and Parks with the Urban Forestry Master Plan (Council President Pro Tempore Elizabeth Brown); and the Division of Refuse with Title 13 code changes that supported illegal dumping mitigation efforts (Councilmember Remy).



KEY PRIORITY 4: REDUCING WASTE

FIGHTING ILLEGAL DUMPING

Illegal dumping is a persistent problem with extensive economic, social and environmental impacts in cities across the U.S. The City of Columbus is no exception. In order to be responsive to our neighborhoods and to combat the increase in illegal dumping, Columbus Mayor Andrew J. Ginther in 2018 unveiled a wide-ranging plan focused on prevention, enforcement and education. It is called the Clean Neighborhoods initiative.

In 2020, Refuse Collection illegal dumping crews cleaned up:

- 6,540 tons of illegally dumped items citywide 35+ tons of dumped tires.
- 3,359 tires.
- An overhaul of the City of Columbus Refuse Collection Code was approved in 2020 to include civil enforcement penalties as another tool to fight illegal dumping in Columbus neighborhoods.
- Title 13 was updated for the first time in more than 20 years. It now defines, clarifies and codifies the city's refuse collection rules and regulations for residential trash, recycling, yard waste and bulk pickup. The reworked code creates civil violations enforceable by Refuse Collection solid waste investigators and law enforcement officers, with the authority to assess civil penalties of up to \$1,000 for dumping and abandoned 59 criminal charges for illegal dumping were filed in 2020, up from 12 in 2019 26 civil violations were filed since Title 13 updates took effect on Sept. 1, 2020.

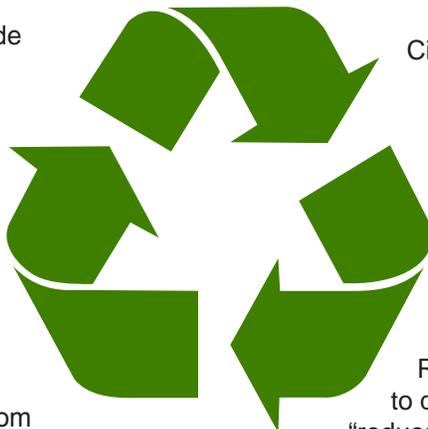
Residents continue to embrace RecyColumbus and other efforts to keep Columbus green.

RecyColumbus, the city's popular recycling program, included 201,326 households.

In 2020, the division collected: 339,139 tons of municipal solid waste 32,727

tons of residential recyclable materials 22,853 tons of yard waste 20,100 tons of bulk items

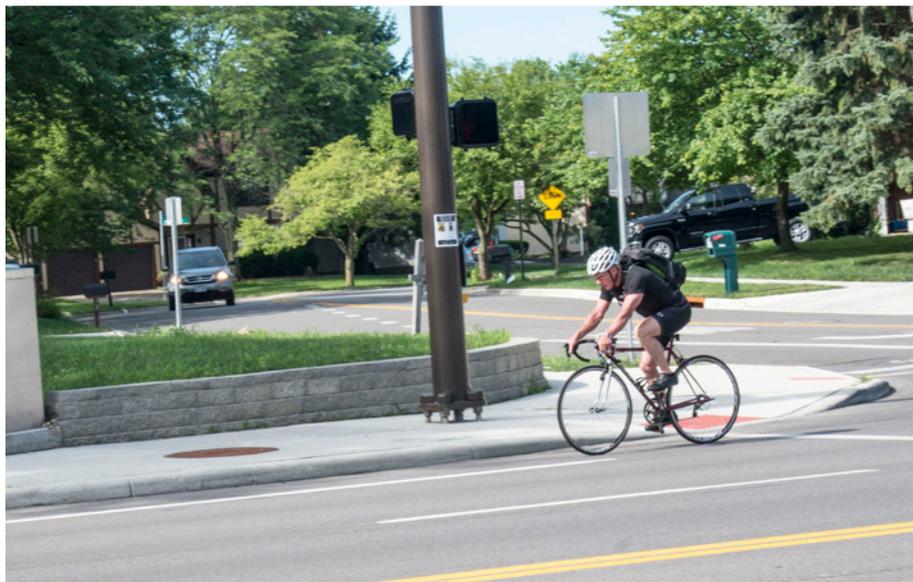
With the support of City Council, the program entered the first of its five implementation phases in April 2012 and concluded in February 2013 with 187,926 single family households. Recycling and yard waste were collected on alternating weeks. In March 2014, the program was expanded to service low-density condos, townhouses and apartments and the schedule was altered to increase efficiencies for Rumpke as well as reduce confusion among our residents. Now, under the recycling program, recycling and yard waste are collected on the same day, every other week.



City staff has regular conversations with Rumpke, the city's recycling contractor, to find ways to increase the types of materials that are recyclable in the residential program. In addition, the City will continue to encourage residents to fit more material in the carts by compacting the recyclables. The City will also continue efforts to encourage signing up for collection reminders and will target outreach to specific neighborhoods to increase participation.

The chasing arrows recycling symbol represent "Reduce, Reuse, and Recycle." Even with all of the City's measurements to quantify recycling, we have few viable methods to measure "reduce" and "reuse" activities, although we know people are engaged in all three activities. The more residents reduce and reuse, the more the recycling waste stream shrinks.

Not only is recycling good policy, but the activity also helps the city reduce its greenhouse gas emissions. When products are dumped in the landfill, the energy used to make them is lost. Recycling organic waste also helps the city reduce its impact on the climate by reducing the amount of methane gas released into the atmosphere.





**SUSTAINABLE
COLUMBUS**

ANDREW J. GINTHER, MAYOR

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