

# SM RT

**SM  
RT**  
COLUMBUS

**PROGRAM YEAR 2** EXECUTIVE  
SUMMARY



# LAYING THE FOUNDATION FOR THE FUTURE OF MOBILITY

Columbus won the U.S. Department of Transportation's Smart City Challenge in 2016 due to the bold goals set forth to improve the lives of residences by electrifying the transportation sector and deploying next generation technology in transportation. Smart Columbus was formed to deploy the \$50 million grant awarded from the challenge (\$40 million from the U.S. Department of Transportation and \$10 million from the Paul G. Allen Family Foundation), as well as to align and catalyze additional local and regional investment in the mission. To date, Smart Columbus partners have invested nearly \$600 million in alignment with the objectives of the initiative.

Smart Columbus is jointly led by the City of Columbus and the Columbus Partnership, a non-profit membership organization of 75 local CEOs committed to ensuring the economic vitality of our region. This partnership is emblematic of "The Columbus Way," Columbus' uncommon ability to partner across the public, private, academic and non-profit sectors to make big things possible. It's in this spirit that we're pursuing our smart city transformation and turning the Smart City Challenge win into a long-term initiative that will improve quality of life, enhance safety, foster sustainability and drive economic development in our region.

In 2016, more than 82 percent of commuters in the Columbus region were driving to work alone and there were no existing policies at local level incentivizing electric vehicle (EV) adoption. Because the Columbus region is projected to grow by 1 million more residents by 2050, consequences related to more vehicles on our roadways are likely to follow. This is the perfect time for our community to rally together and adopt more sustainable transportation practices that reduce the single-occupancy vehicle (SOV) rate and incentivize EVs. These efforts will help ensure this growth doesn't jeopardize our high air quality and public health.

Fast forward two years later, Smart Columbus has made a clear impact — we've doubled the size of our shared mobility ecosystem, we've outpaced national rates of EV adoption, we've increased the amount of charging infrastructure in our region, we've galvanized an active group of corporate partners, and conducted an unprecedented number of test drives in electric vehicles. As a result of this and more, we were named City of the Year by *Smart Cities Dive* magazine.

This document gives you a deep dive on how our programs have moved the needle to make Columbus transportation smarter and more sustainable in 2018.

Sincerely,



**MARK PATTON**

*Vice President, Smart Cities*  
**The Columbus Partnership**



**MICHAEL STEVENS**

*Chief Innovation Officer*  
**City of Columbus**

## PROGRESS TO GOALS

We closed the second program year of the Smart Columbus Electrification Program sponsored by the Paul G. Allen Family Foundation in March 2019, with our outreach strategies strong. Since the beginning of 2017, the cumulative new electric vehicle registrations in the Columbus region have **increased by 121%**. Columbus' growth in **new EV registrations have outpaced the 82% expansion in the Midwest region and 94% seen across the U.S.** over the same time period. We feel that our programs and strategies that target employees of central Ohio's largest employers are aligned with what the public needs to transform their car purchases.

### → REGIONAL EV ADOPTION



**121%** increase in Central Ohio EV registrations

### → EV CHARGING INFRASTRUCTURE



**534** charging ports installed

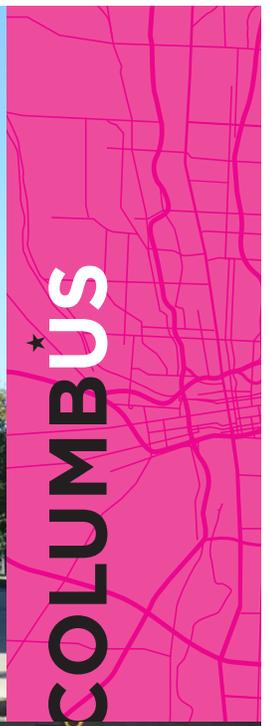
36 MULTI-UNIT DWELLING // 75 PUBLIC ACCESS // 248 WORKPLACE // 175 FLEET

### → EV TEST DRIVES



**7,907** completed to date

INCLUDES EXPERIENCE CENTER TEST DRIVES AND RIDE & DRIVE ROADSHOW



## THE SMART COLUMBUS EXPERIENCE CENTER



**Educating the community about the future possibilities of mobility is one of our top priorities**, it is important for us to have a destination where people can come to get hands-on experience with smart technology being tested in the city and learn about the benefits of EVs. In June 2018, we opened the Smart Columbus Experience Center in downtown Columbus on the Scioto Mile. The Experience Center includes a **3,000 square foot showroom** with interactive displays from our partners, and EVs that people can test drive on the spot. It also houses a worksite for our partner organizations, with more than 40 dedicated employees who work in an additional 3,000 square feet space. Since opening, **more than 7,200 visitors** including folks from more than 30 cities spanning seven countries **have visited the Experience Center** and we've hosted more than **260 EV test drives**.

# PRIVATE SECTOR ENGAGEMENT

## → ACCELERATION PARTNERS

The approach of driving consumer adoption through large employers at a local level is unique to the Smart Columbus program and a new model for increasing adoption across the country. The Smart Columbus Acceleration Partners Program is a forum for engaging the local private sector to help Smart Columbus achieve these goals. It also serves as a platform for the private sector to support smart mobility projects where they have expertise or particular relevance.

# 63

ACCELERATION PARTNERS

# 61

MOBILITY AMBASSADORS (ACROSS 47 COMPANIES)



# IGNITE ACTION FUND

The Smart Columbus Ignite Action Fund is a tool for Acceleration Partner program companies to fund new incentives and/or projects that motivate respective company associates to drive electric and/or drive less.

## → ELECTRIFICATION FUNDING AWARDED: \$60,850

### Companies awarded:

American Electric Power (AEP)/AEP Ohio // Columbus Zoo & Aquarium // Alliance Data // the Columbus Partnership // Dispatch Media Group

### Electrification projects funded:

**\$1k-\$2.5k** All five companies offered an EV lease/purchase rebates with amounts ranging from \$1,000-\$2,500 per vehicle

**\$200** The Columbus Zoo & Aquarium offered \$200 per charging station

**\$125** The Columbus Zoo & Aquarium offered \$125 per e-bike

### Completed programs:

AEP & AEP Ohio

15/15 \$2,000 EV rebates redeemed in 2018, all in less than 30 days

Alliance Data

15/15 \$2,000 EV rebates redeemed in 2018

47% of employees bought/leased EVs within the year because of the rebate program

## → SOV REDUCTION FUNDING AWARDED: \$79,150

### Companies awarded:

Battelle // Columbus Zoo & Aquarium // CoverMyMeds // Denison University // OhioHealth // State Auto Insurance Companies // Steiner + Associates (Easton Town Center) // White Castle System, Inc.

### SOV Reduction projects funded:

Companies were awarded **\$5,000 to \$15,000** each to support efforts to **reduce associate SOV commutes**. White Castle System, Inc. paid 80% of a monthly **COTA pass** for all interested staff working at their Headquarters and Castles (restaurants).

Partners are using funds to launch **new associate micro-transit services**, incentivize non-SOV commutes, support internal educational initiatives, and incentivize the purchase of a bicycle for commuting. One company is offering 80% subsidized transit passes to staff working at their headquarters or restaurants.



## RIDE & DRIVE ROADSHOW

### → RIDE & DRIVE ROADSHOW

The Ride & Drive Roadshow is Smart Columbus' electrification education program, driving EV adoption by educating central Ohio residents about EVs by providing opportunities for residents to test drive electric vehicles of all varieties in a low-pressure, educational environment. We developed a strategy focused on large employers in the Columbus Region that will put **12,000 people behind the wheels of an EV by 2020**, with at least **13.5% of them opting in** to be contacted by a dealer about the vehicle they drove.



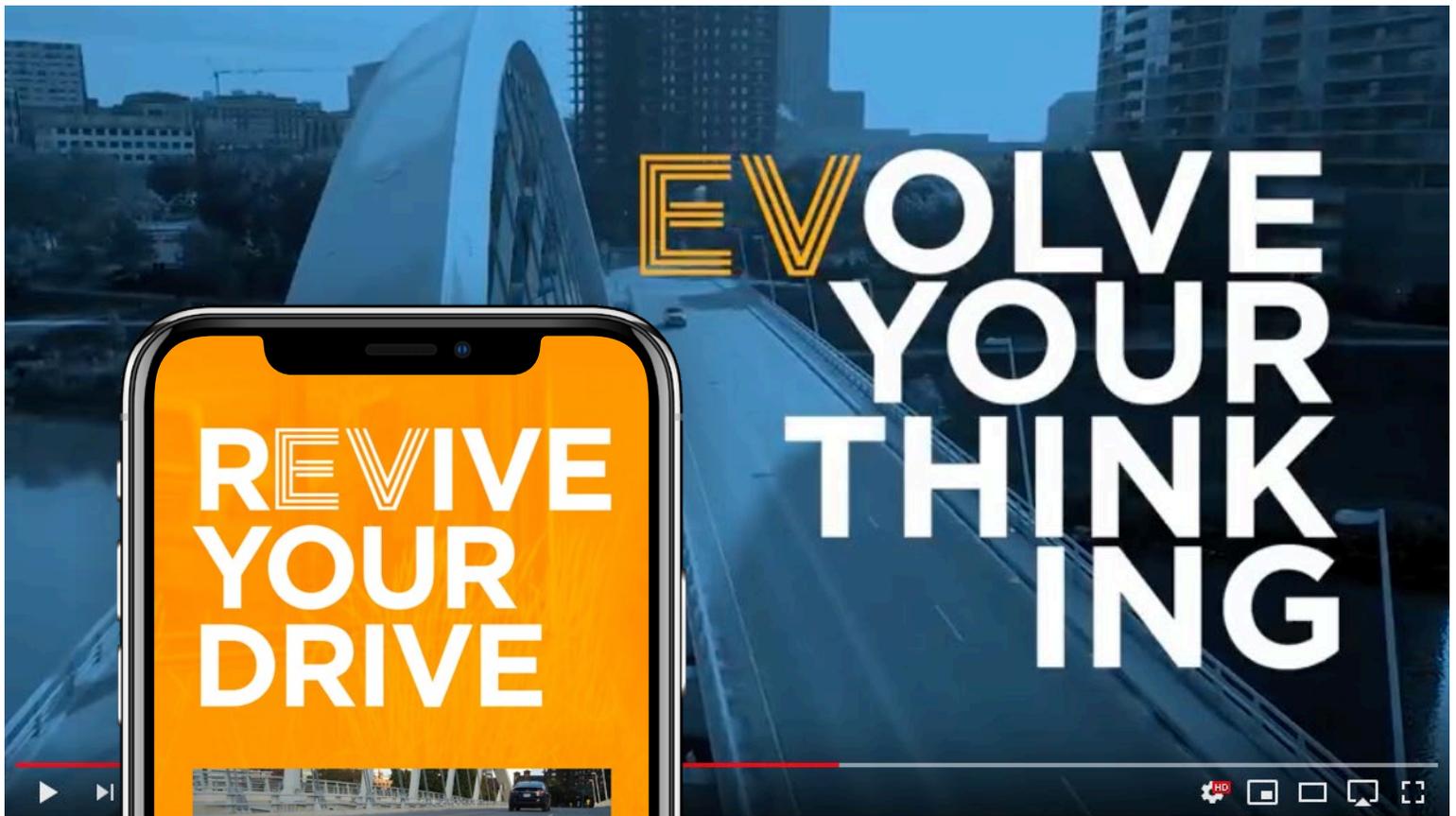
**276** most drives in a day,  
at JP Morgan Chase

<b>51</b>	<b>69</b>	<b>7,647</b>	<b>13.3%</b>
UNIQUE HOST SITES	EVENTS	DRIVERS	OPT-INS FOR DEALERSHIP FOLLOW-UP

### WE ARE CHANGING MINDSETS

**16.7%** increase in the number of drivers who say they are likely or very likely to purchase an EV after their test drive

**50%** more drivers said "EVs are for them" after their test drive, according to post drive surveys



→ **CONSUMER EDUCATION CAMPAIGN**

We established the hypothesis that **influencing early adopters in the workplace** is vital to achieving our EV adoption goals, we also need to be **present online** as they take the next step in researching and completing their purchase.

The Smart Columbus **consumer education campaign** includes a variety of digital banners, video spots in 15, 30 and 60-second spots, and a nine-minute educational video that leveraged the testimonials of real EV owners from the region.



**Messaging pillars:**

**Driving REvolution** General information on the benefits of electric vehicles

**Go EVerywhere** Information on charging accessibility and vehicle range

**Budget ReliEVer** Information on EV affordability and purchase incentives

**Driving is BelieVing** Information on the performance of EVs, and how fun they are to drive

**The consumer education campaign is across multiple mediums:**

Local TV // Streaming TV // Online digital ads // Social media ads // Online search // Waze navigation

# MEETING THE DEMAND AND CLOSING THE SALE

## → INVENTORY ANALYSIS

In 2018, there were **25 different EV models** for sale from **41 dealerships** in central Ohio.

VEHICLES ON  
DEALERSHIP LOTS

69 in 2017

263<sub>now</sub>

% OF EV MODELS SOLD IN THE  
U.S. AVAILABLE IN CENTRAL OHIO

46% in 2017

61%<sub>NOW</sub>

## → ELECTRIFIED DEALER PROGRAM

Smart Columbus prioritizes dealerships to engage them on how to **get buy-in from consumers to increase sales and grow a community of EV owners**. To be ahead of the curve and future-proof their business, dealers have to be **educated on EVs** and **know how to sell them**. Otherwise, their companies are taking a long-term risk. Since Smart Columbus is an influential and visible local brand, we asked area car dealerships to partner with us, and lead on EV sales in exchange for local recognition and preparation for the future of the automotive industry.

The Smart Columbus **Electrified Dealer** certification process has been embraced by dealers, especially the dealers that want to be forward-thinking and leaders in the community and among their peer dealers.

25

ELECTRIFIED DEALERS  
IN CENTRAL OHIO

DAVE GILL  
CHEVROLET **top selling EV Chevy  
dealer in Ohio**

TANSKY SAWMILL  
TOYOTA **top selling EV Toyota  
dealer in Ohio**

# ELECTRIFYING AND GROWING SHARED MOBILITY

## → AV SHUTTLE LAUNCH IN DECEMBER

Smart Columbus and DriveOhio launched **Smart Circuit**, Ohio's first self-driving shuttle. Smart Circuit is open to the public and will run daily from 6 a.m. to 10 p.m. Shuttles pick up and drop off passengers at Center of Science and Industry (COSI), the National Veterans Memorial and Museum, Bicentennial Park and the Smart Columbus Experience Center.

**More than 170 people** rode the shuttles on December 10, their first day in operation, and more than **2,400 people rode through the end of December**. The shuttles offer residents and visitors a hands-on educational experience with self-driving technology.

Engineers, researchers and policymakers from Smart Columbus, DriveOhio and OSU will use the demonstration to inform future deployments of self-driving vehicle technology in Ohio, including a route planned for a Columbus neighborhood, funded by the U.S. Department of Transportation Smart City Challenge grant.

**5,100+** people have ridden the Smart Circuit shuttle to date

## → SHARED MOBILITY PARTNERS

Yellow Cab of Columbus was awarded **\$30,000** in the first round of the **Transportation Service Provider Battery Electric Vehicle Rebate Program** to replace 10 internal combustion engine vehicles in its fleet with new electric taxis.

Yellow Cab of Columbus purchased 10 Chevy Bolt EVs through the first round of this program.

Columbus Yellow Cab demonstrated a commitment to **electrifying its entire fleet of 175 vehicles**, which travel a **combined 9.6 million miles per year** and carry nearly one million passengers.

**175**

EVS PLANNED FOR THE COLUMBUS YELLOW CAB FLEET

**9.6M**

COMBINED MILES TRAVELED PER YEAR

**10**

EVS PURCHASED



“Central Ohio is quickly becoming a model for the nation on how to use smart, 21st-century transportation to help create economic growth and expand opportunity.” -U.S. SENATOR ROB PORTMAN (R-OHIO)

→ GROWTH OF MOBILITY OPTIONS

**15.68** miles of bike infrastructure

**1,000** e-scooters from Bird and Lime were deployed in the Columbus market

→ PUBLIC & PRIVATE FLEET ADOPTION

**125**

EV FLEET VEHICLES PURCHASED BY THE CITY OF COLUMBUS

**158**

PUBLIC EV FLEET VEHICLES PURCHASED

**31**

PRIVATE EV FLEET VEHICLES PURCHASED

→ COLUMBUS POLICE E-BIKES

The Columbus Division of Police’s Bike Patrol has deployed **six custom e-bikes funded by the Smart Columbus Electrification Program** to help officers better serve Columbus. The e-bikes’ pedal-assist electric motor enables officers to travel more quickly—up to 28 miles per hour—and arrive at calls while conserving energy for their work.

The **\$16,580 eBike deployment** is funded by the \$10 million grant awarded to Columbus by the Paul G. Allen Philanthropies.

# CHARGING INFRASTRUCTURE

## → AEP OHIO EV CHARGING INCENTIVE PROGRAM

AEP Ohio launched an incentive program to encourage the installation of EV charging stations at public sites, workplaces and apartment complexes. The **\$10 million program** provides funding for up to **375 EV charging stations** throughout the AEP Ohio service territory.

The program will provide AEP Ohio and others with information about how EV charging is utilized by Ohio customers. The goal of the program is to **encourage EV charging** in a number of different settings and learn how they are utilized by customers. This information will help inform how charging stations are deployed throughout the AEP Ohio territory, across the state, and the nation.

104

APPLICATIONS FOR AEP OHIO'S EV CHARGING INCENTIVE PROGRAM

306

LEVEL 2 PORTS AT WORKPLACE, PUBLIC AND MULTI-FAMILY CHARGING SITES

21

DC FAST CHARGING PORTS

## → MUD EV CHARGING REBATE PROGRAM

Smart Columbus awarded a total of **\$272,000 in two rounds of rebates** to fund the installation of electric vehicle charging stations at multi-unit dwellings (MUDs), such as apartments and condominiums in central Ohio.

Rebates of up to **\$25,000 were awarded** in two rounds across the seven-county Columbus region:

ROUND 1: 5 developers awarded // 11 MUD sites // 48 EV spaces created

ROUND 2: 5 developers awarded // 8 MUD sites // 34 EV spaces created



## PLAYBOOK

Our education efforts aren't just local. Our vision to be a model for connected cities in the future means that we aim to share our best practices and lessons learned with other cities across the nation and around the world. In November 2018, we launched the **Smart Columbus Playbook** as an online destination that includes in-depth content about our programs and initiatives. Through the playbook, we invite other cities and organizations to use our program materials—including contracts, branding and surveys—and learn from our original research to create and develop their own smart city strategies.

These playbook learnings are available online and have extended to events and speaking engagements, where our team gives insights on our successes and challenges. To date, we have had learning exchanges with government officials and business leaders in more than **60 cities**, and our team has been invited to speak about our programs at several conferences including the **International EV Symposium** in Kobe, Japan, and the **Consumer Electronics Show** in Las Vegas.

41

NATIONAL/  
INTERNATIONAL  
LEARNING EXCHANGES

146

CONFERENCES  
OR SPEAKING  
ENGAGEMENTS BY  
SMART COLUMBUS TEAM

44

EVENTS HOSTED BY  
SMART COLUMBUS



## 2019 / LOOKING AHEAD

Though we have made big steps in cultivating the EV market in Columbus, we still face some uncertainty: **car manufacturers including Tesla and GM near the end of the \$7,500 federal tax incentive for EV purchasing**, and threats to cut the incentive all together have come from the nation's top office. Luckily for us, U.S. Senator Rob Portman (R-Ohio) has been a champion for Smart Columbus since its inception, by working on the federal, state and local level to assist the city with winning the grant. In 2018, **Portman continued to advocate for smarter mobility by supporting an extension to the federal EV tax incentive as a way to generate EV support.**

Looking forward, we see the next program year through March 2020 as a time for Smart Columbus to continue to do things the "Columbus Way," with a **goal to attain aligned investments from more than 100 public and private sector partners.** Today, the total value of **leveraged investment has grown to nearly \$600 million** that will transform our community and our country's understanding of mobility.

100+

GOAL TO ATTAIN ADDITIONAL PUBLIC AND PRIVATE SECTOR PARTNERS

NEARLY  
\$600M

TOTAL VALUE OF LEVERAGED INVESTMENT

### SMART COLUMBUS ACCELERATION FUND

U.S. DEPARTMENT OF TRANSPORTATION GRANT

PAUL G. ALLEN PHILANTHROPIES GRANT

FRANKLIN COUNTY & OHIO DEPARTMENT OF TRANSPORTATION GRANTS & INVESTMENTS

ACCELERATION FUND OF PLEDGED PRIVATE & PUBLIC SECTOR INVESTMENTS

