

VIRTUOUS CYCLING

How Two-Wheeled Deliveries Help Drive Local Commerce



Table of Contents

>	Foreword	3
>	Executive Summary	4
>	The Promise Of Two-Wheeled Devices In Cities	6
>	Community	6
>	Sustainability	7
>	Dashers, customers and merchants	9
>	The Road Ahead On Two Wheels	11
>	What DoorDash is doing	11
>	What cities and communities can do	12
>	Conclusion	15



Foreword

The way that we navigate our cities has undergone a remarkable transformation in recent years. Where cars once ruled the road, today, more people than ever in the United States and Canada are turning to two-wheeled devices — bikes, e-bikes, and scooters, to name a few — to safely get to where they're going.

Recognizing that two-wheeled devices can help address congestion, street safety, and climate challenges, some policymakers are leaning into these trends and looking for ways to accelerate them. As we continue to build the future of local commerce in those cities, DoorDash wants to be part of that journey and help ensure our streets remain safe for everyone who shares them — whether they're driving, riding, or simply crossing the street.

Two-wheeled devices are known to offer significant benefits: they can be a viable cost-effective alternative to cars, are more environmentally friendly, are safer for operators and pedestrians, and support more efficient curb management. But perhaps less readily apparent is how these devices support local economies: in places where more deliveries are made on two wheels, delivery workers earn more with platforms like DoorDash, customers have lower wait times, and local businesses receive more orders.

Cities that effectively support two-wheeled devices can expect to experience a virtuous cycle that amplifies these benefits for everyone. In short, two-wheeled devices can help cities thrive.

DoorDash has worked to increase the share of deliveries completed using two-wheeled devices on our platform, and we're glad innovative policymakers are recognizing the benefits they can play for their local economies. We hope more policymakers will follow their lead and start viewing these devices as an accessible way to build more vibrant communities.

Elizabeth Jarvis-Shean
Chief Corporate Affairs Officer



Executive Summary

DoorDash is committed to building the future of local commerce, and we strive to connect customers to the best of their communities. Increasingly in cities across the United States and Canada, that is being done on two wheels. Delivering on two-wheeled devices — via bicycle, e-bike, scooter, or moped — has benefits spanning local economies, while also benefiting the environment and the greater community.

For Dashers: expanding flexible, low-barrier earnings opportunities.



For merchants: helping connect with more customers, more easily.



For communities: creating safer, more livable cities and towns.



For customers: enabling more efficient and reliable delivery.

This report — our first ever on two-wheeled deliveries — highlights some of the benefits of the greater adoption of two-wheeled devices for local economies, the ways that we've been able to expand and help drive those impacts, and how we can continue to work with all stakeholders who share our vision for safer and more prosperous communities.

Highlights

3x

We have tripled the share of deliveries made on two-wheeled devices across U.S. and Canada markets on the DoorDash platform since 2022.

40 MILLION MILES

In a recent four-week period, Dashers in the U.S. and Canada traveled more than 40 million miles on two-wheeled devices alone.



While historically bike-friendly cities already have the vast majority of deliveries completed by Dashers on two wheels, promising signs of growth in deliveries on these devices are emerging in places like **Washington, DC (57% of deliveries on two wheels), Philadelphia, PA (35%), Toronto, ON (32%), and Boston, MA (32%).¹**



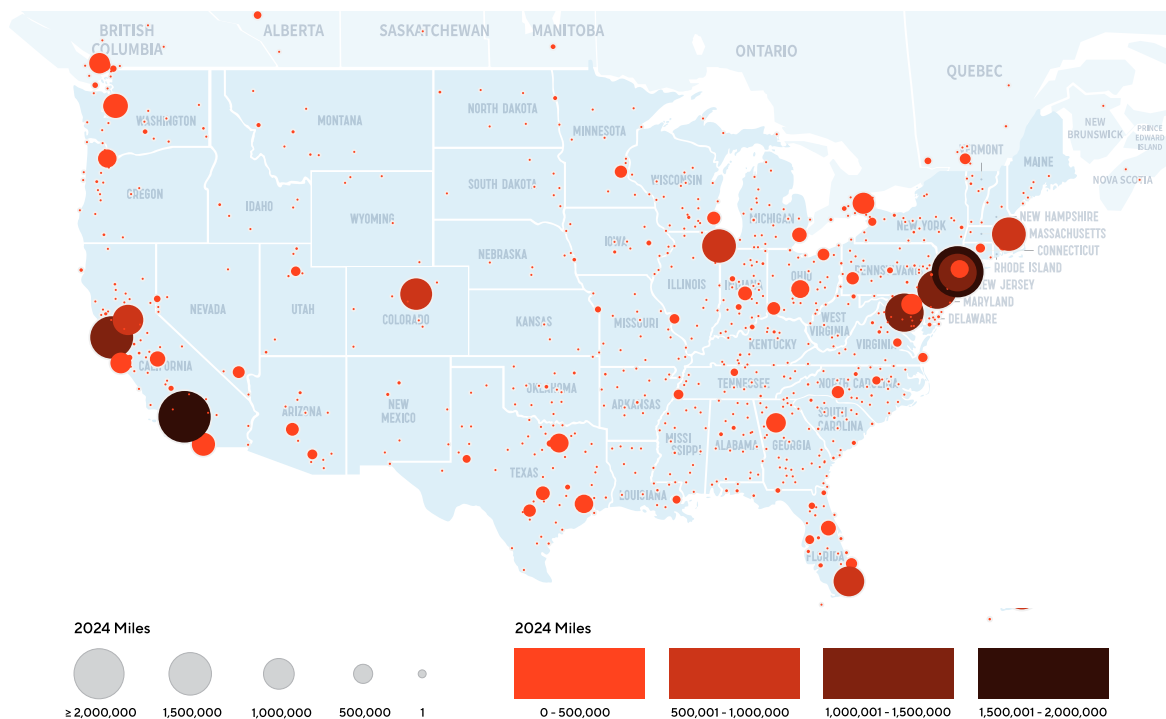
Thanks to greater ease and flexibility in completing deliveries and lower associated expenses, **two-wheeled Dashers in the cities with the greatest share of those deliveries end up taking home higher pay.**



As two-wheeled deliveries increase, **wait times for customers typically decrease,** leading to more orders placed from local businesses.

Top Markets For Deliveries On Two-Wheeled Devices

In a recent four-week period



¹Based on a four-week period from August through September 2024.

The Promise of Two-Wheeled Devices in Cities

Key Takeaways

- In places with the best infrastructure for biking, we see a larger share of deliveries by Dashers using two-wheeled devices.
- Over the course of a year, we estimate that deliveries made by Dashers on two-wheeled devices save over 155,000 tons of carbon emissions.
- Dashers using two-wheeled devices in the top 20 cities with the greatest share of these deliveries earn about 10 percent more than Dashers using cars.



Community

It's clear that investing in stronger infrastructure for two-wheeled devices is good for the health of the overall local economy and the broader community, and can help start a virtuous cycle that continually improves road and traffic safety. The fact is, when there are more people riding two-wheeled devices, the roads are safer for everyone. Research shows that cities with larger shares of people on two wheels have lower rates of traffic fatalities across all modes of transport.² This is thanks in part to the steps these cities have taken to make riding safer, such as building protected bike lanes, lowering maximum speeds for all vehicles, and implementing policies like "daylighting" to improve visibility for cyclists and pedestrians at dangerous intersections.

Meanwhile, cities that have embraced two-wheeled devices have also benefited from less idling and more time moving. A recent study in Washington, DC, found that the Capital Bikeshare program reduced overall traffic congestion by 4 percent, which researchers estimated amounts to the equivalent of roughly \$24 million in time saved and reduced fuel costs.³



DoorDash helps reduce the number of "out-and-back" trips by individual consumers and creates efficiencies by batching offers for Dashers who can complete several deliveries in the same area on a single trip.

²Nicholas N. Ferenchak, Wesley E. Marshall, "Traffic safety for all road users: A paired comparison study of small & mid-sized U.S. cities with high/low bicycling rates," *Journal of Cycling and Micromobility Research*, Volume 2, 2024, 100010, <https://www.sciencedirect.com/science/article/pii/S2950105924000019>

³Timothy L. Hamilton, Casey J. Wichman, "Bicycle infrastructure and traffic congestion: Evidence from DC's Capital Bikeshare," *Journal of Environmental Economics and Management*, Volume 87, 2018, Pages 72-93, ISSN 0095-0696, <https://www.sciencedirect.com/science/article/pii/S0095069616300420>

Ordering through DoorDash – whether delivered by car or two-wheeled devices – already eases congestion by reducing overall miles traveled. Researchers from the University of Michigan find the same.⁴ Delivering on two-wheeled devices – which removes cars from the road altogether – reduces congestion even further.

Sustainability

Two-wheeled devices provide significant environmental and operational benefits, too. Among all vehicle types equipped with motors, e-bikes boast the lowest carbon emissions per mile, and while many scooters are gas-powered, they often achieve over 100 miles per gallon, offering emissions reductions comparable to electric vehicles.

Increasing deliveries on two-wheeled devices is an important part of DoorDash’s sustainability strategy, which also includes helping Dashers switch to fuel-efficient cars like hybrids and EVs. During just a one-month period in 2024, over 40 million miles were traveled via two-wheeled devices to complete DoorDash deliveries – the equivalent of 1,600 trips around the Earth’s circumference. We estimate that, over the course of a year, this would save over 155,000 tons of carbon emissions compared to gas cars, equivalent to:

17.5 million
gallons of gasoline
consumed



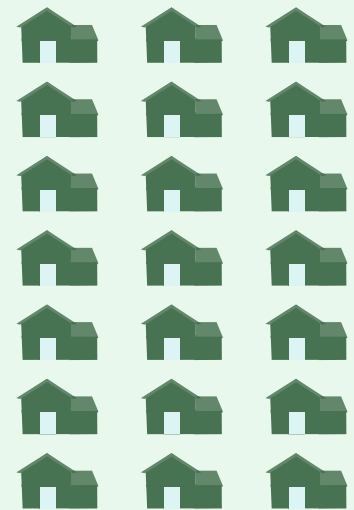
 = 1 MILLION GALLONS

36,000
gas-powered cars
driven in a year



 = 1,000 CARS

21,000 homes’
energy use for
one year.⁵



 = 1,000 HOMES

⁴“How your food delivery impacts the climate and environment,” NPR, September 10, 2024, <https://www.npr.org/transcripts/1257825208>

⁵According to EPA Greenhouse Gas Equivalencies Calculator <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

Top 20 U.S. and Canadian Cities For Two-Wheeled Deliveries⁶

CITY	TWO-WHEELED MILES TRAVELED	SHARE OF DELIVERIES ON TWO WHEELS
San Francisco, CA	1,626,839	76%
San Mateo, CA	269,485	68%
Walnut Creek, CA	269,692	63%
New York, NY	3,201,498	61%
Oakland, CA	619,710	57%
Washington, DC	817,690	57%
Santa Rosa, CA	277,952	56%
Santa Clara, CA	340,055	52%
Sunnyvale, CA	310,638	52%
San Jose, CA	1,472,631	49%
Los Angeles, CA	2,249,062	38%
Philadelphia, PA	928,227	35%
Toronto, ON (CAN)	376,146	32%
Boston, MA	334,679	32%
Seattle, WA	309,634	30%
Miami, FL	411,629	28%
Chicago, IL	645,313	26%
San Diego, CA	572,284	20%
Denver, CO	394,671	20%
Fresno, CA	274,234	20%

⁶Among cities with minimum 250,000 two-wheeled miles traveled from deliveries on DoorDash, August-September 2024

Dashers, Merchants, and Customers

As part of our mission to grow and empower local economies, we need every part of our platform’s three-sided marketplace – Dashers, merchants, and customers – to work in concert with one another. Having more deliveries made on two-wheeled devices demonstrates how these benefits can reinforce one another and help local commerce flourish.

Dashing has always been a flexible way for people to reach their financial goals. Over half of new Dashers in 2022 completed their first dash within a week of passing the background check all Dashers undergo before they can start dashing.⁷ Delivering on two-wheeled devices lowers many of these barriers even further. Two-wheeled devices are far cheaper than cars, and many cities offer e-bike leasing programs that enable Dashers to hit the road and start earning. Traditional bicycles and short-term bikeshare programs represent additional options and flexibility for Dashers who don’t own, have access to, or wish to deliver in a car.

In crowded cities where parking is seldom available and designated courier pickup and dropoff locations are even harder to come by, improving curb efficiency becomes even more important. In a 2022 survey of Dashers in New York City, for example, 44 percent of Dashers in cars reported finding parking “very challenging” – nearly double the amount of bike Dashers who felt the same. Time saved looking for suitable, short-term parking can instead be spent making more deliveries, enabling Dashers to access more earning opportunities and allowing merchants to reach more customers.



Two-wheeled Dashers in the markets with the greatest shares of two-wheeled deliveries earn about 10 percent more than car Dashers.

This ultimately means more take home pay for workers. On average, Dashers on two-wheeled devices net more profit per hour than car Dashers due to lower operational expenses on fuel and maintenance. Given the greater ease in navigating the pickup and drop-off process, they also tend to fulfill more orders. It’s not surprising then that two-wheeled Dashers in the markets with the greatest shares of two-wheeled deliveries earn about 10 percent more than car Dashers.⁸ Perhaps because there is less friction in the delivery process, these Dashers often receive higher customer ratings as well.

At the same time, as more cities build better infrastructure for two-wheeled devices, safety outcomes are improving for Dashers as well. Safety incidents on the DoorDash platform remain rare, and encouragingly, among Dashers on two-wheeled devices, incidents reported decreased by nearly 5 percent in 2024 compared to 2023 – even as deliveries on two wheels increased.

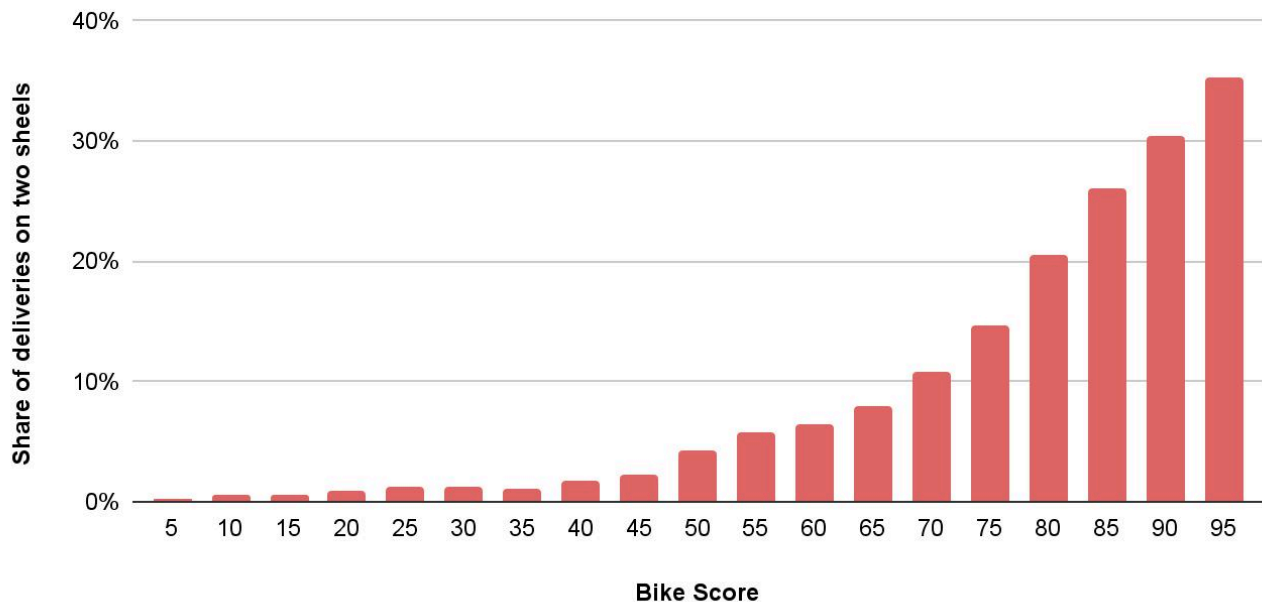
⁷Our Commitment to Grow and Empower Local Economies, DoorDash, 2022, https://s22.q4cdn.com/280253921/files/doc_downloads/2023/DoorDash-ESG-update-2022.pdf

⁸Reflects earnings of Dashers in the markets associated with the 20 cities with the greatest shares of two-wheeled deliveries among those with over 250,000 two-wheeled miles traveled.

These benefits to Dashers have cascading impacts on customers and merchants as well. When it comes to one of the most contentious topics of urban design – parking – two-wheeled devices may provide their greatest benefits. Some of the largest U.S. cities dedicate, on average, nearly a quarter of their land to parking, yet it often remains underutilized.⁹ Two-wheeled devices require far less space than cars, and having more available street space can allow cities to reclaim public spaces to benefit everyone.

DoorDash data bear this out. As the chart below demonstrates, zip codes with higher bike scores – sourced from Redfin, based on a combination of factors, including bike lanes, hills, and road connectivity – have more bike deliveries on DoorDash. For example, a zip code with a bike score of 50 is likely to have less than 5 percent of deliveries on two wheels, whereas a zip code with a bike score of 95 is likely to have over a third of deliveries via two wheels.

Share of deliveries on two wheels increases with bike score



Easier parking – both at the merchant as well as at the customer location – means timelier orders. For example, in downtown Washington DC, where significant investments have been made in improving bike infrastructure, customer wait times for deliveries on average dropped 25% from Q1 2023 to Q4 2024 as deliveries on two-wheeled devices increased substantially in that same time frame.

⁹“Paved paradise: Maps show how much of US cities are parking lots,” The Hill, August 21, 2023, <https://thehill.com/changing-america/resilience/smart-cities/4162455-paved-paradise-maps-show-how-much-of-us-cities-are-parking-lots/>

The Road Ahead On Two Wheels

Key Takeaways

- DoorDash has been leveraging its platform to build towards a best-in-class experience for Dashers in our efforts to encourage more deliveries on two wheels.
- Cities can unlock the full potential that bikes provide to their local economies with smart, forward-looking policies.



What DoorDash is doing

Building towards a more bike-friendly future has required significant effort. DoorDash is actively working to encourage delivering on two wheels, with ambitions to accelerate these efforts in the years to come.



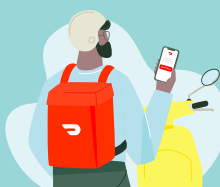
Improving Our Platform

We always strive to ensure the best experiences for Dashers, merchants, and customers, which means that the right deliveries need to be matched to the right Dasher. We've been able to improve this process with **better batching** to account for the distance between pick-up and drop-off locations, as well as the distance between the Dasher's current location and the pick-up location, the size and weight of the delivery, the availability of bike lanes and other bike infrastructure along a suggested delivery route, and more. Particularly in urban centers, two-wheeled devices are a turnkey solution to solving many last-mile delivery problems, which is why we've also **prioritized Dashers on two-wheeled devices** for shorter-distance deliveries in these areas.



Expanding Access To Safe Devices

DoorDash continues to lead the industry forward in providing **access to certified safe two-wheeled devices** through partnerships with leading e-bike manufacturers, such as Whizz and Dirwin, to offer exclusive discounts for Dashers to reduce their upfront costs.¹⁰ We do this with an eye towards greater access to flexible earning opportunities. DoorDash is a proud partner of the Equitable Commute Project, which helps Dashers and other delivery workers in New York City trade in older e-bikes and e-bike batteries for newer models that meet the highest safety standards.



More Resources for Dashers

As more people have chosen to dash on two wheels, we've also launched an improved and expanded suite of **resources** to help those Dashers better understand how to safely navigate city streets, including **dedicated helplines** should problems arise on a dash. We've also been able to make bike-friendly bags more accessible to Dashers, enabling Dashers on two-wheeled devices to accept different kinds of deliveries, like pizza or catering orders.

¹⁰"Become a Bike Dasher," <https://dasher.doordash.com/en-us/about/bike-dashing>



Collaborating With Cities

As our impact in these cities continues to grow, we're committed to playing our part in helping them thrive while promoting safety in our busiest neighborhoods. Along with reminding Dashers of local regulations for the rules of the road, we also work closely with public agencies and cities to help address challenges on their streets.



Advocating for a Better Bike Future

We've been proud champions of policies that would help usher in a brighter future for two-wheeled devices in cities. For instance, DoorDash has proudly advocated in Congress for H.R. 1797, the "Setting Consumer Standards for Lithium-Ion Batteries Act," which would help shut down the flow of unsafe lithium-ion batteries into the U.S. by establishing a new national safety standard through the Consumer Product Safety Commission (CPSC). At the same time, we recently signed on to the World Economic Forum Global New Mobility Coalition¹¹ that is committed to creating more sustainable and efficient urban delivery system by 2030 by embracing new vehicle modes.

What cities and communities can do



Investing In Two-Wheeled Infrastructure



Establishing Dedicated Pickup and Dropoff Zones



Partner On Smarter City Designs



Expanding Access and Availability



Taking National Action with Local Impact

It's clear that more and more cities across the U.S. and Canada are discovering the virtuous cycle that investments in micromobility solutions help foster. This progress is encouraging, and it reflects a widely-shared yearning to rethink and update how we think about and use shared public spaces. We believe that policymakers and other stakeholders can learn from and build upon that progress to continue creating safer, more inclusive, and more sustainable cities and towns both now and in the future. Here's how:

¹¹"Global New Mobility Coalition," World Economic Forum <https://initiatives.weforum.org/global-new-mobility-coalition/home>

1 Investing In Two-Wheeled Infrastructure

Cities can unlock these benefits most effectively by investing in better infrastructure that is reflective of the way people navigate the streets today. Two-wheeled devices should be supported by the infrastructure of the city so that they can be safely incorporated into existing ecosystems. From increasing bike lanes to introducing more permanent solutions for parking (and charging) two-wheeled devices, there is a unique opportunity for cities to innovate, update, and even re-invent themselves.

Much like other infrastructure projects, whether repairing roads or ensuring that bridges are safe to cross, forward-looking policymakers will view these as investments in their local economies – and ones that will pay dividends for their communities for years to come.

2 Establishing Dedicated Pickup and Dropoff Zones

Limited parking and the lack of dedicated pickup and dropoff areas in business districts make it harder for delivery workers to do their jobs and can reduce the efficiency gains that local commerce platforms like DoorDash help provide. Policymakers should consider carving out spaces where two-wheeled deliveries can be made safely and efficiently.

For example, in January 2020, the District of Columbia’s Department of Transportation issued a study on the changing uses of the streets and curbs.¹² In response to that study, the DDOT piloted an innovative program to eliminate some metered parking spots and replace them with pick-up and drop-off zones for app-based food delivery, rideshare, and other commercial purposes. DDOT found, when it first started experimenting with those zones, that they reduced double parking in their vicinity by a remarkable 64 percent. Perhaps most importantly, DDOT found that the drivers who took advantage of those zones the most were not rideshare drivers or parcel delivery drivers, but food delivery workers like Dashers. Making streets safer for delivery workers on two wheels solves a frequent use case, while also making streets safer for everyone who shares the streets.

3 Partner On Smarter City Designs

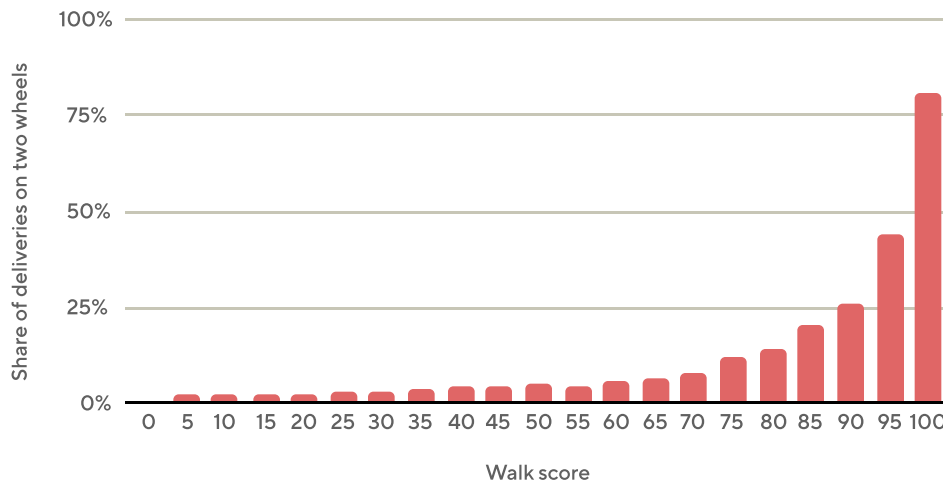
As cityscapes have been reshaped, so too has our understanding of what thriving local commerce in cities looks like. Even as online orders grow, more vibrant city streets can contribute to even greater business resiliency in downtown areas, especially in areas where we see the most heavy usage of platforms like DoorDash.

Cities should continue to explore reforms that embrace and support increased urban density while balancing the needs of pedestrians. Forging partnerships to incorporate aggregated nonsensitive data into city plans can inform smarter planning, allowing for increased two-wheeled deliveries and help more seamlessly integrate local commerce platforms into thriving city ecosystems. Density is well-approximated by a zip code’s walk score, which measures the walkability of an address.¹³ There is a steep uptick in two-wheeled deliveries on DoorDash in zip codes with high walk scores, as illustrated:

¹²“DDOT to Expand Pick-up and Drop-off Zones Through Research Pilot,” District Department of Transportation, August 1, 2019,

¹³“How Walk Score Works,” Redfin, <https://www.redfin.com/how-walk-score-works>

Share of deliveries on two wheels increases dramatically with walk score

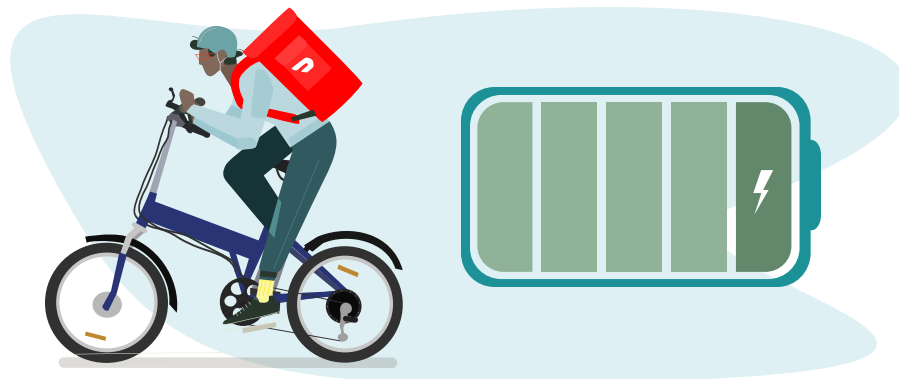


4 Expand Access and Availability

At the same time, these benefits cannot be fully realized unless we make it even easier for even more people to get these devices. Cities like Denver, CO, are creating a blueprint for how to get more people out of cars and onto bikes, as the city has distributed nearly 15,000 e-bike vouchers in fewer than three years as part of its subsidy program.¹⁴ Meanwhile, Washington, DC has offered up to \$2,000 in subsidies towards the purchase of an e-bike or e-cargo bike, plus maintenance, locks, and components to help address disabilities.¹⁵ Policymakers should consider promising concepts that have led to increased adoption of two-wheeled devices by reducing cost barriers through subsidies or rental programs.

5 Take National Action with Local Impact

Federal lawmakers in Congress can also deliver for communities in the cities that they represent to support improved safety for those on two wheels. H.R. 1797 is just one example of necessary action to address glaring loopholes by ensuring that a national safety standard for e-bike batteries exists. As more people across the country begin looking to purchase these devices, policies like these take on even greater importance.



¹⁴"How Denver Became America's Biggest E-Bike Booster." Bloomberg, October 30, 2024. <https://www.bloomberg.com/news/features/2024-10-30/how-denver-became-america-s-biggest-e-bike-booster>.

¹⁵District Department of Transportation. "District E-Bike Incentive Program." District Department of Transportation. <https://ddot.dc.gov/page/district-e-bike-incentive-program>

Conclusion

The last-mile nature of our business enables DoorDash to connect customers to everything they need, when they need it. Helping local businesses compete, succeed, and flourish in the modern economy is the core opportunity DoorDash was created to address. This report underscores that the future is bright for cities that embrace infrastructure and resources to support two-wheeled devices.

Fewer cars on the road means more benefits for everyone: more emissions saved, more vibrant streets, and more livable communities.

In addition to the important community benefits of two-wheel devices, there is a tremendous opportunity for policymakers to take advantage of their full potential to drive local commerce forward for Dashers, merchants, customers, and entire cities.

Our goals are ambitious, and we hope to join with policymakers who share our commitment to a vision of a brighter future for everyone who uses two wheels.

