

DAY ONE PROJECT

Sustaining the 2020 Biking Boom

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Summary

The next administration should capitalize on recent interest in cycling spurred by the COVID-19 pandemic by committing to triple the share of commutes made by bicycle from 0.5% in 2019¹ to 1.5% by 2024. This goal is achievable through policies that make cycling safer and more affordable.

Other than walking, cycling is the least pollutive mode of transportation. Led by the Department of Transportation (USDOT), the next administration can encourage a nationwide shift from driving to cycling by adjusting various policies related to cost, road design, and automobile safety. USDOT can further encourage biking by holding states accountable for reductions in automobile vehicle miles traveled (VMT), greenhouse-gas emissions (GHG) from transportation, and traffic fatalities among cyclists and pedestrians.

Challenge and Opportunity

The COVID-19 pandemic has prompted many Americans to begin riding bicycles and electric bicycles (e-bikes) in order to exercise, enjoy the outdoors, and maintain physical distancing while traveling. Cities including Los Angeles and Houston have seen significant upticks in cycling in 2020, while bikeshare systems in Las Vegas, Chicago and New York set new ridership records.² A sustained move toward cycling could reduce GHG emissions from transportation, the sector that is the largest source of GHG emissions in the United States. Pedal bikes produce less than 1/15 as much GHG/mile as taxis or ridehailing services (e.g., Uber and Lyft), and around 1/10 as much a private electric automobile.³ Lifecycle emissions from bikes and bikeshare are nearly as low as pedal bikes, and e-bikes in particular could replace short automobile trips in urban areas.

These data indicate that tripling the share of commutes made by bike from 0.5% today to 1.5% could, by displacing driving, reduce GHG emissions by the equivalent of 3.8 billion car trips annually. A mode shift toward biking would also improve health and reduce urban congestion (because a bike requires less street space than an automobile).⁴

However, there is no guarantee that the current uptick in cycling will endure. Prior “bike booms” in the United States—in the 1890s, the mid-1930s, and the early 1970s—all ultimately faded.⁵

¹ The League of American Bicyclists (2018). *Bicycling and Walking in the United States: 2018 Benchmarking Report*. Chapter 4: Show Your Data.

² Bliss, Laura. *The Pandemic Bike Boom Hits in Some Unexpected American Cities*. Bloomberg CityLab, September 23, 2020. <https://www.bloomberg.com/news/articles/2020-09-23/how-the-coronavirus-affected-biking-in-u-s-cities>.

³ International Transport Forum (2020). *Good to Go? Assessing the Environmental Performance of New Mobility*. OECD. <https://www.itf-oecd.org/good-to-go-environmental-performance-new-mobility#:~:text=Good%20to%20Go%3F-Assessing%20the%20Environmental%20Performance%20of%20New%20Mobility,%2Dbased%20ride%2Dsharing%20services>.

⁴ Celis-Morales, C.A.; et al. (2017). Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *BMJ*, 357.

⁵ Zipper, David *Can the Bike Boom Keep Going?* CityLab, October 29, 2020. <https://www.bloomberg.com/news/articles/2020-10-29/how-the-feds-could-keep-the-bike-boom-rolling>.

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Part of the challenge is that the federal government has historically done little to encourage biking. In fact, federal policies frequently impede cycling by making the activity more dangerous, especially as automobiles have grown heavier and taller (e.g., guidance that speed limits be set according to the “85th percent rule,” which pushes them higher). From 2009 to 2018, cyclist fatalities grew 38% to 1,100 annually, more than eight times the number of Americans killed from rail collisions, to which USDOT allocated \$245 million in FY 2020.⁶

By implementing policies that make cycling safer and cheaper the federal government can pave the way for sustained growth.

Plan of Action

The next administration should take immediate steps to reduce the risk of injury or death to cyclists while reducing the financial cost of cycling. The next administration should also incentivize transportation projects that reduce VMT and GHG emissions, which will boost proposals that encourage biking. Recommended actions are presented below.

Safety

Under the next administration, the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA) should implement the following specific measures to reduce biking deaths and injuries:

- Direct states to share locations of all traffic collisions resulting in death or serious injury, flagging those involving cyclists and pedestrians. NHTSA and FHWA should use the data to create annual High Injury Network maps.
- Direct states to submit up-to-date maps of all bicycle infrastructure, including protected and unprotected bicycle lanes. USDOT field offices should audit this information, and states should receive annual grades for their efforts to reduce pedestrian and cyclist crashes.
- NHTSA should update the Fatality Analysis Reporting System (FARS) to include metrics such as serious injuries and the presence of protected or unprotected biking infrastructure.
- NHTSA should publish revisions to the New Car Assessment Program (NCAP) that credit automakers for vehicles that minimize risk to vulnerable pedestrians and cyclists, through crash-avoidance technologies as well as through designs reducing likelihood of serious injury or death in the event of a collision.
- FHWA should issue guidance to states prohibiting them from setting “negative safety goals” that lead to annual increases in pedestrian and cyclist fatalities that are treated as successes.
- FHWA should eliminate the outdated “85th percentile rule” as a recommendation in the Manual on Uniform Traffic Control Devices (MUTCD).

⁶ National Safety Council (2020). Deaths by Type of Incident. Injury Facts®. <https://injuryfacts.nsc.org/motor-vehicle/historical-fatality-trends/deaths-by-type-of-incident/>.

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- FHWA should issue guidance encouraging the use of federal funds on temporary “pop-up” projects designed as pilots for future infrastructure investments.
- USDOT should require states to demonstrate provision of access and safe accommodation for non-motorized users (i.e., cyclists and pedestrians).

Affordability

The next administration should take the following actions to make biking more affordable to all Americans:

- The U.S. Trade Representative should make bicycle and bicycle components exempt from Section 301 tariffs, which would reduce the cost of importing items like children’s bikes and lithium batteries from China. This would reduce the cost to consumers of purchasing and maintaining a bicycle as well as the cost to businesses and cities of operating public bikeshare services.⁹
- The administration should support passage of H.R. 7330, which would make bicycle and bikeshare expenses eligible for pre-tax commuter benefits. The administration should also support revising IRS 30D, the Plug-In Electric Drive Vehicle Credit, to extend subsidies to e-bikes as well as electric automobiles.

Other actions

The next administration should take the following additional actions to further encourage a conducive environment for biking at the state level:

- Re-establish GHG reduction as a performance measure for transportation and issue annual ratings of state performance.
- Revise the Surface Transportation Block Grant Program to include goals of reducing VMT.
- Issue USDOT guidance on Section 109 of the US Code pertaining to federal-aid highways that clarifies that maintenance projects must demonstrate access for all transportation modes (e.g., protective infrastructure for cyclists and pedestrians).
- Support the language in H.R. 2 that the FHWA adopt “fix it first” principles favoring road maintenance over new construction.

Conclusion

Locking in the sharp growth in cycling spurred by the COVID-19 pandemic could enable the American transportation network to become safer, cleaner, and more efficient, especially in urban areas. The next administration should capitalize on this opportunity through a suite of complementary actions that make biking less dangerous and more affordable. These actions will encourage those who recently began cycling to continue, while compelling millions of additional Americans to begin using a bicycle in place of an automobile.

⁹ PeopleForBikes Foundation (n.d.). Section 301 Tariffs. <https://peopleforbikes.org/tariffs/>.

Frequently Asked Questions

Biking is booming in 2020 without federal support. Why does USDOT need to get involved?

Though biking has enjoyed a surge of popularity in 2020, the fact remains that only a small fraction of trips is taken on a bicycle. Even in Washington DC, the city with the most bike commuters, the share of commute trips taken by bike was only 4.5 in 2018. There is significant room for growth, which the Federal Government can help encourage.¹⁶ Furthermore, many of 2020's new cyclists could revert to other transportation modes when the pandemic recedes. Federal efforts to make biking safer and more affordable will decrease the likelihood of reversion.

How does United States policy regarding biking compare to other countries?

The United States is a laggard. For example, automobile crash ratings in Europe take into account the vehicle's relative danger to those outside the vehicle, but analogous ratings in the United States do not. In 2020 countries including France, Spain, and Italy began offering subsidies for those purchasing bicycles or e-bikes, but the United States has taken no such step. Biking is also much more dangerous in the United States than it is in European countries.¹⁷

Since almost all Americans drive, shouldn't we prioritize electric vehicles over biking?

Research suggests that even the most optimistic forecasts for converting automobile fleets to electric vehicles would fail to keep global average temperature increases below two degrees this century. A shift from automobiles toward walking, biking, and transit would still be necessary.¹⁸ Furthermore, many e-bikes are sold for below \$2,000, a fraction of the cost of an electric automobile. That makes e-bikes an affordable mobility option for a larger share of the population (and means that the taxpayer cost of subsidizing e-bikes would be far less than the current \$7,500 federal electric vehicle tax credit).

What about equity? Aren't most cyclists white and affluent?

No. A study from the Sierra Club found that Latinos are more likely than whites to commute by cycling.¹⁹ Census Bureau data suggests that almost half of those who cycle to and from work make less than \$25,000 per year.²⁰

¹⁶ Aevaz, R. (2019). ACS Survey 5-Year Estimates: Commuting trends mostly stable with dips in driving alone. Eno Center for Transportation, December 16. <https://www.enotrans.org/article/acs-survey-5-year-estimates-commuting-trends-mostly-stable-with-dips-in-driving-alone/>.

¹⁷ Buehler, R.; Pucher, J. (2020). The growing gap in pedestrian and cyclist fatality rates between the United States and the United Kingdom, Germany, Denmark, and the Netherlands, 1990–2018. *Transport Reviews*, 1–25.

¹⁸ University of Toronto (2020). New study shows converting to electric vehicles alone won't meet climate targets. *Phys.org*, September 28. <https://phys.org/news/2020-09-electric-vehicles-wont-climate.html>.

¹⁹ Marx, M.; Sani, H. (2013). Pedaling towards equity: Communities of color lead surge in bike use. *Sierra Club*, May 28. <https://blogs.sierraclub.org/compass/2013/05/pedaling-towards-equity-communities-of-color-lead-surge-in-bike-use.html>.

²⁰ Keatts, A. (2015). Most cyclists are working-class immigrants, not hipsters. *Governing*, October 26. <https://www.governing.com/topics/transportation-infrastructure/memo-to-cities-most-cyclists-arent-urban-hipsters.html>.

About the Author



David Zipper is a Visiting Fellow at the Harvard Kennedy School, where his work examines the interplay between urban policy and new mobility technologies. David's writing about urban innovation has been published in outlets including *Slate*, *Bloomberg*, *WIRED*, and *Fast Company*. He previously served as the Director of Economic Development and Strategy for two mayors of Washington, D.C. and as Executive Director of NYC Business Solutions under Mayor Bloomberg. David has worked extensively with startups as the Managing Director for Smart Cities and Mobility for 1776, a global entrepreneurial hub and venture capital firm.



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