

EMPTY MILES

Why Too Many Rideshare Cars Mean More Air Pollution, More Congestion, and Less for Drivers

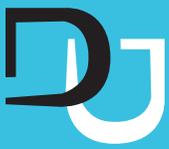
UBER & LYFT:

STOP FLOODING OUR STREETS!



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EXECUTIVE SUMMARY

Drivers Union has received funding from the Department of Ecology and the Climate Commitment Act to reduce criteria air pollution in overburdened communities in South King County. Excess vehicle miles traveled (VMT) leads to excess criteria air pollution such as carbon monoxide (CO), nitrogen oxides (NOx), ozone, and particulate matter.

Empty Miles reveals a dramatic explosion in the number of empty deadheading miles, meaning miles driven by Uber drivers without a passenger. These unnecessary miles create air pollution and increase congestion, wear and tear to roads and highways, safety concerns for road users, and expenses for drivers.

Quantitative analysis in this report is based on an examination of Uber driver trip and tax data covering over 950,000 trips in Washington State from 2019–2024, combined with analysis of King County Records and Licensing data of all trips and driver permitting in the County. **Unless otherwise identified, all quotes in this report are from driver focus groups conducted at the University of Washington Information School in 2025.** Qualitative analysis, including community-driven recommendations, is derived from one-on-one driver meetings and focus groups.

This project is supported by the Department of Ecology with funding from Washington’s Climate Commitment Act. The CCA supports Washington’s climate action efforts by putting cap-and-invest dollars to work reducing climate pollution, creating jobs, and improving public health. Information about the CCA is available at www.climate.wa.gov.



FINDINGS

1. More Uber miles are empty miles.

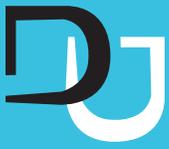
- ▶ A majority of miles driven by Uber drivers are now without a passenger.
- ▶ In 2024, Uber drivers spent an average of 9.9 miles per trip deadheading without a passenger, up from 3.5 empty miles per trip in 2019.
- ▶ The number of empty miles per trip has increased in each of the past three years.
- ▶ Drivers report oversaturated streets leading to increased empty miles (VMT without a passenger) and depressed earnings.

2. Flooding the streets with vehicles is accelerating the problem.

- ▶ The number of rideshare drivers is currently increasing nearly 7 times faster than trip growth.
- ▶ Drivers report oversaturated streets leading to depressed earnings.

It’s getting worse and worse. Before, it [only] used to be slow in December and January and February. Now I drained my savings to cover my bills.





RECOMMENDATIONS

- ▶ Rideshare drivers call for a pause in onboarding new drivers until a reduction in unnecessary empty deadheading miles is achieved.
- ▶ Rideshare drivers recommend rules to maintain a balanced market where increases to driver supply don't continue outpacing trip growth.

INTRODUCTION

Empty Miles reveals a dramatic explosion in the number of empty deadheading miles, meaning miles driven by Uber drivers without a passenger. These unnecessary miles create air pollution and increase congestion, wear and tear to roads and highways, safety concerns for road users, and expenses for drivers.

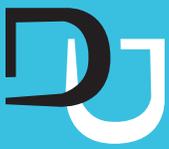
This report is based on an examination of Uber driver tax data covering 952,940 trips in Washington State from 2019–2024, combined with analysis of King County Records and Licensing data on all trips and driver permitting in King County. Driver quotations throughout the report are taken from focus groups conducted by a research team at the University of Washington. Trip-level data collection is facilitated by a data tool created at the Workers Algorithm Observatory, a collaborative team of applied and academic researchers at four major universities.

Data from King County Records and Licensing suggests the empty miles problem is likely becoming more acute as rideshare companies flood the streets with far too many vehicles.

The best solution will be to stop enrolling new drivers, because there's already enough drivers. We even make the traffic [jam], because so many Uber and Lyft drivers [are] out there.



I have six kids that I have to support. If I'm only making \$50 a day it is not enough for us. [Especially if it's] \$50 some days [and others] none at all. All my savings is what I'm spending now. I'm about to get to [the] end of that, then I won't even know how to live after that.



WHY IT MATTERS

Rideshare companies like Uber and Lyft have made accessing private transportation easier for many people across our state. Unfortunately, their rapid growth has also brought considerable side effects.

Unnecessary deadheading miles contribute to rising air pollution, clog up highways and streets, increase hazards for other road users, and decrease driver earnings.

Excess vehicle miles traveled (VMT) leads to excess criteria air pollution such as carbon monoxide (CO), nitrogen oxides (NOx), ozone, and particulate matter. While unnecessary emissions from gas-powered vehicles contribute directly to this problem, all excess VMT contribute to increased emissions through congestion-related increases in travel time, lower vehicle speeds, and changed driving patterns that increase air pollution.

As the quotes in this report demonstrate, drivers are deeply concerned about their ability to earn a living as streets become oversaturated with rideshare vehicles. A solution that reduces unnecessary vehicle miles traveled in the rideshare industry can have positive benefits for emissions and congestion reduction, while also increasing driver earnings after expenses. A balanced market approach will also ensure availability for riders who depend on rideshare services.

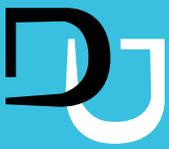


The current situation isn't benefiting drivers at all. And I question to what extent it is benefiting the companies that most of my rides are 30 seconds to a minute away, two to three blocks away. Most of the time we show up and wait two or three or four minutes [for the rider]. They're really trying to address a demand that isn't even there.



Usually from Bellevue I have an airport trip and then go empty from the airport all the way downtown. I just sit here, there, then move somewhere else. You know, it's like last Monday when I worked four hours to get three trips, [earning] \$10.40.





MORE EMPTY MILES

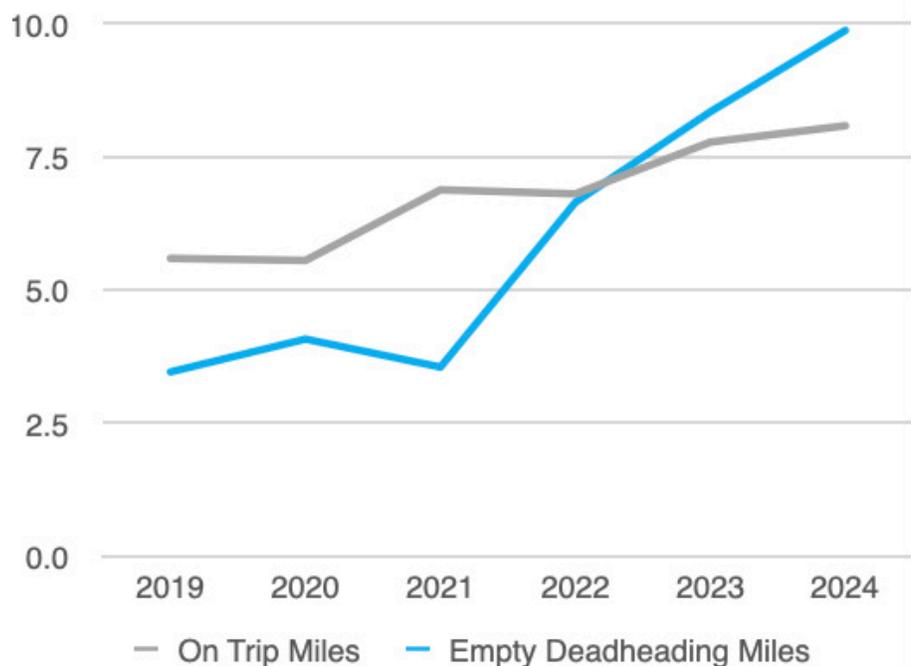
Unnecessary deadheading miles – when drivers circle the block empty between trips – add to air pollution, congestion, and unpaid expenses for drivers. Analysis of driver data from 952,940 trips in Washington State between 2019 and 2024 reveal that the number of empty miles driven without a passenger by Uber drivers has skyrocketed.

I would say 70 percent of the time [I am driving without a passenger]. And it's getting worse.

In 2019, Uber drivers spent a majority (62 percent) of on-app miles with a passenger, and an average of just 3.5 miles deadheading between each trip. That percentage was similar in 2021, when Uber drivers spent 66 percent of on-app miles with a passenger.

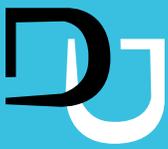
Since then, empty deadheading miles have ballooned to 9.9 miles per trip in 2024. Now, the majority of miles driven by Uber drivers – 55 percent – are **without** a passenger, and the trendline is increasing.

Miles per Trip



Uber doesn't really care about the drivers. They don't care if you work too many hours.

[Drivers] don't make enough money, but someone else will fill their spot. If [Uber] can have 50 million drivers and half of them make next to nothing, so what? All the money is still funneled into Uber.



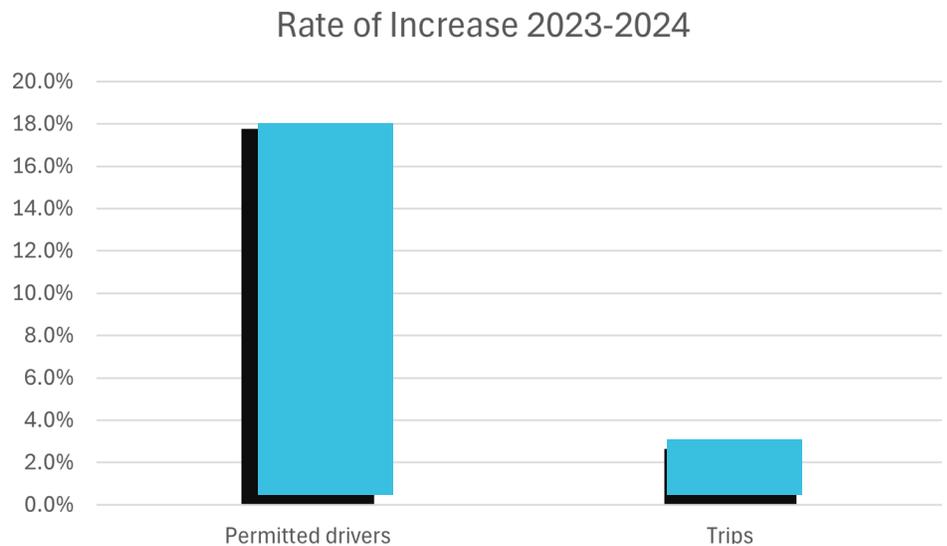
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YEAR	2019	2020	2021	2022	2023	2024
On Trip Miles (miles with a passenger)/Trip	5.6	5.5	6.9	6.8	7.8	8.1
Empty Deadheading Miles/Trip	3.5	4.1	3.5	6.6	8.3	9.9
Total Miles/Trip	9.0	9.6	10.4	13.4	16.1	17.9
Empty Deadheading Miles Percentage	38%	42%	34%	49%	52%	55%

*Sums may vary from totals due to rounding.

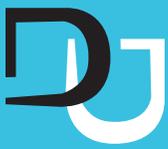
Data from King County Records and Licensing indicates that the problem of empty deadheading miles may be accelerating due to an oversupply of drivers relative to ridership growth.

The majority of all TNC trips in Washington State occur in King County, which regulates licensing for transportation network company drivers. An analysis of King County Records and Licensing data reveals that, over the last year, the number of licensed TNC drivers in King County increased nearly seven times faster than trip growth.



For struggling drivers who care about air pollution, earning a living still comes first. Fortunately this report shows that the solutions are the same: reducing empty miles is good for both driver economics and air quality, and an overall win for our communities. - Peter Kuel, President, Drivers Union





SUMMARY OF FINDINGS

1. More Uber miles are empty miles.

- ▶ A majority of miles driven by Uber drivers are now without a passenger.
- ▶ In 2024, Uber drivers spent an average of 9.9 miles per trip deadheading without a passenger, up from 3.5 empty miles per trip in 2019.
- ▶ The number of empty miles per trip has increased in each of the past three years.

2. Flooding the streets with vehicles is accelerating the problem.

- ▶ The number of rideshare drivers is currently increasing nearly 7 times faster than trip growth.
- ▶ In focus groups and one-on-one conversations, drivers report oversaturated streets leading to more empty miles, increased criteria air pollution, and depressed earnings.
- ▶ Drivers have also identified the unchecked onboarding of new drivers as the major contributor to the problem.

Right now [Uber and Lyft] just continue to onboard. I would like to suggest a three or six-month pause on all hiring while we sort out what to do, because the situation is terrible.

RECOMMENDATIONS

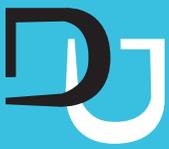
Limiting unnecessary vehicle miles traveled – such as from the growing segment of deadheading miles from rideshare vehicles – is a critical objective.

Reducing unnecessary vehicle miles traveled in the rideshare industry can have positive benefits for air pollution and congestion, while also increasing driver earnings after expenses. Drivers have recommended pausing onboarding of new drivers as a solution that will have an immediate impact on unnecessary vehicle miles traveled. A balanced market approach will also ensure availability for riders who depend on rideshare services.

Community-identified solutions to reduce VMT include:

- ▶ Rideshare drivers call for a temporary pause in onboarding new drivers until a reduction in unnecessary empty deadheading miles is achieved.
- ▶ Rideshare drivers recommend rules to maintain a balanced market where increases in driver supply do not continue to outpace trip growth.





METHODOLOGY

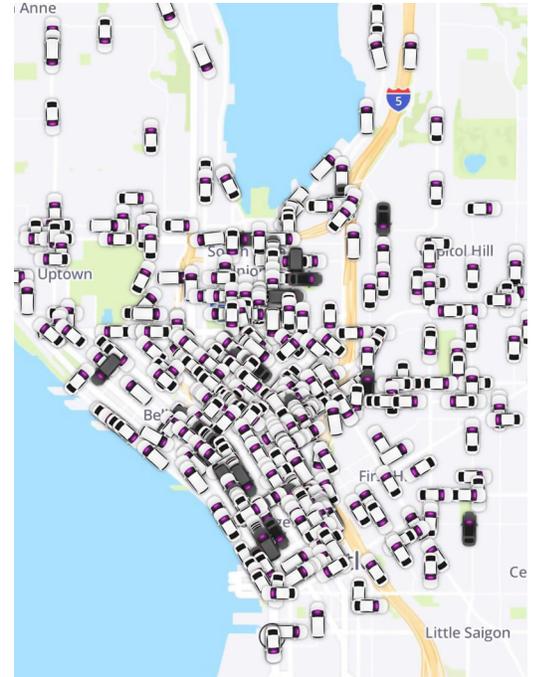
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For this study, Drivers Union collected Uber-generated tax summaries from 212 Uber drivers. Tax summary data covered 952,940 trips from 2019 through 2024 and showed aggregate data on the number of trips a driver completed as well as the total on-app miles driven.

In addition to data sharing, participating drivers engaged in one-on-one conversations with Drivers Union that informed the findings in this report. Qualitative feedback included driver-identified solutions to address air pollution, congestion, and depressed earnings due to unnecessary vehicle miles traveled (VMT).

Participating drivers also shared trip level data through FairFare, a tool for crowdsourcing data from the Workers' Algorithm Observatory (WAO), a team of applied and academic researchers at Princeton University, Pennsylvania State University, University of Colorado Boulder, and University of California, Berkeley.

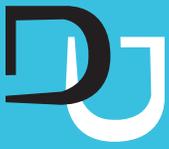


We already have enough drivers. Just keep these drivers and then when those drivers quit, [the new drivers] can fill in. That would be fair.

The best solution will be to stop enrolling new drivers, because there's already enough drivers. We even make the traffic [jam], because so many Uber and Lyft drivers [are] out there.

It does come back to so many drivers on the road. What could be earned is spread out thin.





Trip level data included the number of on-trip miles for each trip. Learn more about the Workers' Algorithm Observatory at <https://wao.cs.princeton.edu/>.

To analyze deadheading miles per year, researchers examined only the records of drivers who shared both tax summary data with Drivers Union and trip-level data with WAO researchers. This subset contained data for 952,940 trips in the tax summary data and 464,183 trips in the trip level data shared with WAO. Deadheading miles per trip were calculated by subtracting on-trip miles per trip from total on-app miles per trip.

All rideshare drivers in King County are required to have a For-Hire Permit, which is issued by King County Records and Licensing Services (RALS). King County RALS also maintains records on the number of Transportation Network Company trips, which is provided by TNC companies. Study authors received yearly permitting data and quarterly trip data through an information request to King County, and compared the rate of increase of permitted drivers to the rate of increase of trips.

Authors recognize that there is an information asymmetry in the rideshare industry where rideshare companies have massive amounts of rider and driver data, while academics, regulators, policy makers, and even drivers themselves have far more restricted access to data.

This first-of-its-kind driver pattern dataset will help drivers, researchers, and policymakers understand the scope of the problems created by empty rideshare vehicle miles traveled and identify solutions.



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**OUR
VOICE
FOR
FAIRNESS**



Drivers Union is the voice for Washington's more than 30,000 ride-hail drivers and is certified by Washington Department of Labor & Industries as the statewide Driver Resource Center. Drivers Union has championed the nation's strongest labor protections for rideshare drivers — including a nation-leading minimum pay standard, paid sick and safe time, just cause job protections, unemployment, workers compensation, and paid family & medical leave. For more information, visit www.DriversUnionWA.org