



# Urban Cycling: Behaviors and Perceptions Across the Mobility Ecosystem



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## Today's Speakers

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# Cycling Trends

- Cycling is big, and it is growing!
- Estimate of over 100 million bikes in the US
- Cycling is growing fastest in America's largest cities
- However, only 1% of bicycles in the US are used for urban trips compared to 30% in the Netherlands.



ADOLESCENTS WHO BIKE ARE 48% LESS LIKELY TO BE OVERWEIGHT AS ADULTS.



AMERICANS SPEND \$81 BILLION ON BIKING ANNUALLY, GENERATING 770,000 JOBS AND \$10 BILLION IN TAXES.

THE NUMBER OF U.S. BIKE TRIPS DOUBLED



OVER THE LAST DECADE, U.S. BIKE COMMUTING GREW



NATIONWIDE



LARGEST CITIES

TRIPS AMERICANS MAKE



NEARLY 86% OF BICYCLES SOLD IN THE U.S. ARE IMPORTED FROM CHINA.

USE OF BICYCLES FOR URBAN TRIPS



Bicycle-Guider.com

Resources: Peopleforbikes.org; www.worldometers.info



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## BACKGROUND

As more and more Americans pick up cycling as not only a hobby but also a means of transportation, cities and fellow users of the road have had to evolve with them.

OvationMR is exploring this phenomenon, first in the US and then expanding to Europe.

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## OBJECTIVES

- 1 Understand emerging behaviors related to cycling
- 2 Explore attitudes among cyclists, drivers, and pedestrians
- 3 Identify key areas of tension associated with urban cycling
- 4 Identify opportunities for improvement & harmony









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# Phase 1 - Quantitative Methodology

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OvationMR conducted an online survey among US-based consumers in eight cities:

- Portland (OR), San Francisco, Boston, NYC
- Denver, Austin, Orlando, Washington, DC

A total of **1,822** adults were surveyed and were assigned to one of three audience types:

**Bike Riders** N=599

**Drivers** N=681

**Pedestrians** N=542

Data collection took place from Nov20, 2023 to February 5, 2024

## SCREENING CRITERIA

- MALE/FEMALE 18+
- LIVE OR WORK IN ONE OF EIGHT IDENTIFIED URBAN AREAS
- **RIDERS:** REGULARLY RIDE A BIKE IN AN URBAN AREA
- **DRIVERS:** REGULARLY DRIVE ON URBAN STREETS
- **PEDESTRIAN:** REGULARLY WALK IN URBAN AREA

Note: Follow-up phases of research will follow this study to examine other regions such as the EU, and to take a deeper dive into perceptions of cycling and proposed improvements.

## Phase 2 – AI Chat Methodology

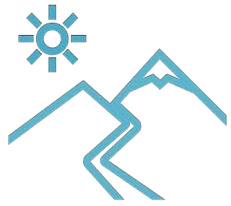
To dive deeper into personal experiences and beliefs around urban cycling, we conducted a second phase leveraging OvationMR's **Qualibee.ai** models.

- 300 AI interviews between February 12th – February 15th, 2024
- Respondents were from the same cities and screened into the same categories (Cyclists, Drivers, Pedestrians)
- Five programmed questions per respondent, each with an AI follow-up pertaining to their answer
- Probing technology coaxed respondents into providing much more detail than their original answer
- Quick initial analysis using proprietary Gen AI technology

### QUESTION FLOW

- Initial open-ended question from programmed discussion guide
- Respondent provides answer
- OvationMR AI considers context of the original question, the answer, and it's guiding prompt to generate a relevant follow-up
- Respondent provides answer to new question

# Bike Types Used



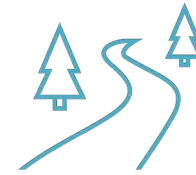
## Mountain bikes

Since exercise and recreation is a driver for cyclists, some use bikes which have suspension and sturdy frames for off-road cycling.



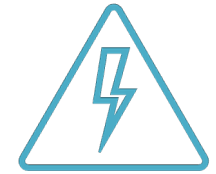
## Road bikes

Many cyclists use lightweight road bikes designed for speed and long distances on paved surfaces.



## Hybrid bikes

Hybrid bikes with upright handlebars are popular for versatility on roads and trails.



## E-bikes

Electric-assist bicycles are growing in popularity for extra power while pedaling.

While 21% of cyclists use a mountain bike, the majority use a road bike, hybrid, or other commuter bikes such as e-bikes.



## Cyclist Usage of Bike Sharing

- Shared bike services such as Lime and Citi Bike are widely used by urban cyclists.
- Communal use of bikes signals a shift towards more sustainable urban mobility.
- Yet this shift does not come without challenges



**Over the past year, 79% of cyclists have used shared bikes to travel around downtown.**

**Of this group, 87% use a shared bike at least once a week.**





# Cyclists, Drivers, and Pedestrians: A Comparison



## Acknowledged Benefits

Non-cyclists show low cycling activity but acknowledge environmental and health benefits.



## Use of Public Transit

Cyclists and Pedestrians are more inclined towards public transportation than Drivers, likely due to suburban living situations of the latter.



## Safety for Cyclists

Safety perceptions vary significantly, with Cyclists more likely to report experiencing or witnessing accidents.

Understanding the dynamic between groups can help promote safe, active transport.





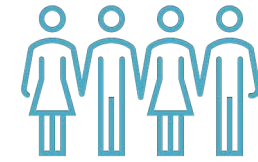
Cyclists have much higher opinions of cycling

Only 50% of non-cyclists view cycling positively, compared to 77% of cyclists.



Others see benefits but are less positive

Non-cyclists recognize benefits but have concerns about safety, practicality



Cyclists have a shared sense of community

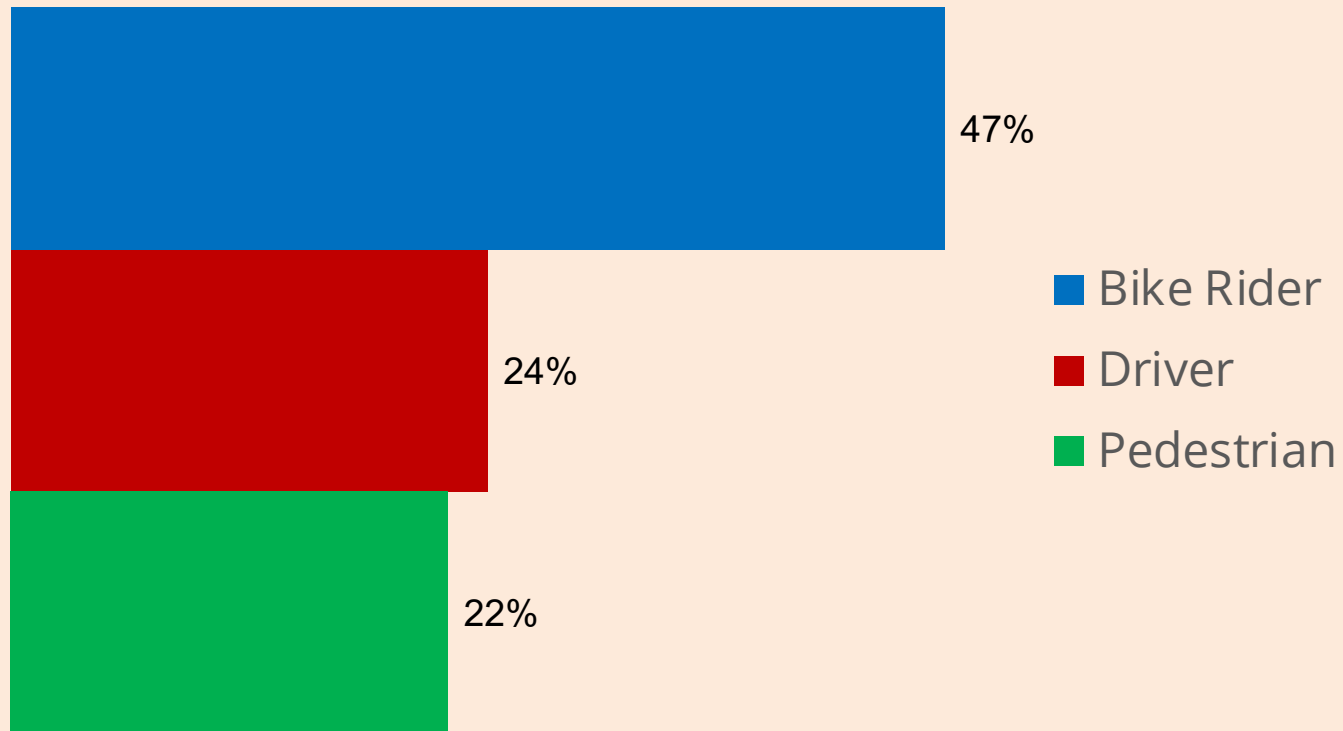
71% of cyclists have partaken in group rides

## Attitudes Towards Cycling

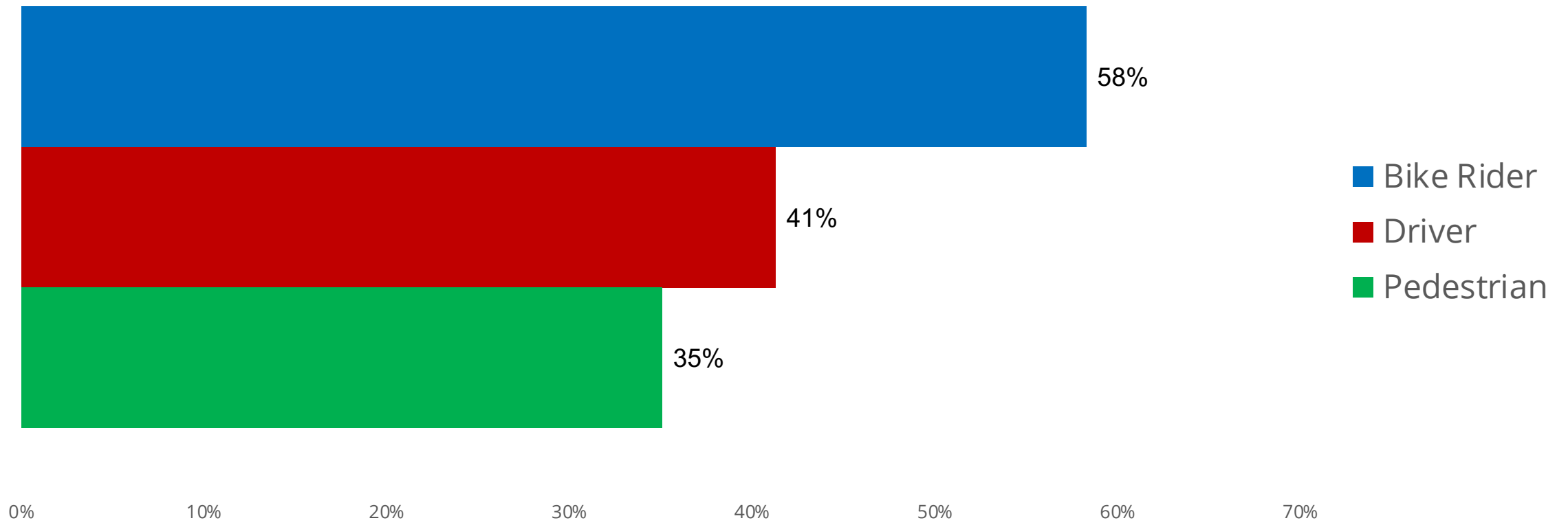
There is a divide between cyclists and non-cyclists in their attitudes and perceptions of cycling.

# Rating of Overall Attitude Towards Cycling in Your City

## 5- Most Positive



# Do cyclists and motor vehicle drivers in your city follow traffic rules to the same degree?





# Perceptions of Urban Cycling



% Agreeing

**85%**

Cycling helps the environment

**81%**

Cycling helps improve the overall health of the population in my city

**60%**

Cycling is a safe mode of transport in my city

**50%**

Drivers of motor vehicles go out of their way to be safe around cyclists

# Perceptions of Urban Cycling

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Drivers of motor vehicles go out of their way to be safe around cyclists

**Riders**

**89%**

**88%**

**75%**

**61%**

**Drivers**

**83%**

**78%**

**52%**

**49%**

**Pedestrians**

**83%**

**78%**

**52%**

**39%**

[News](#)

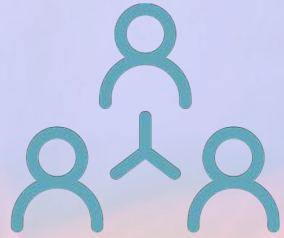
# Despite Safer Cars, Reports Show More Cyclist and Pedestrian Deaths Than Ever

BIGGER VEHICLES AND A LACK OF FOCUS ON PEDESTRIAN VISIBILITY MAY BE TO BLAME.

BY MOLLY HURFORD Published: Sep 27, 2023 3:14 PM EST

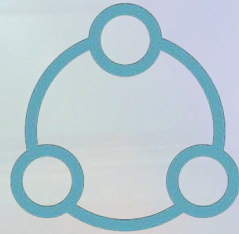






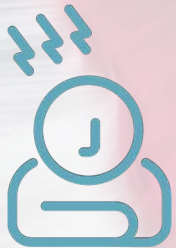
### **Blame game**

**Both groups often blame each other for accidents**



### **Shared responsibility**

**However, 55% of cyclists said fault was shared or on the cyclist**



### **Tension**

**There is often disagreement and tension between cyclists and drivers about following road rules as well as pedestrians on sidewalks/trails**

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## **Incidents Between Modes**

Our streets tell a story of missed connections — a small majority of cyclists admit to shared fault in incidents with motorists and pedestrians.

This challenges the narrative of reckless cycling and highlights the urgent need for improved infrastructure that caters to all.

# Shared Spaces



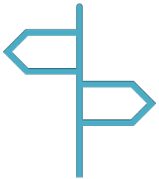
## City Walking

Pedestrians are more likely than drivers to have witnessed or experienced an accident involving a cyclist.



## Not Just the Street

Of those reporting an incident, 79% of Drivers and 75% of Pedestrians say it occurred in a crosswalk or on a sidewalk.



## Danger in the Crosswalk

Of those who have seen or experienced accidents, Crosswalks saw the highest reported incident rate among Drivers and Pedestrians.



While many of the worst cycling accidents occur on streets, areas shared with pedestrians show the highest incident rates.

# City Comparisons

**New York City:** Cyclists significantly more likely to have participated in group rides and on indoor tracks. Most popular city for commuter and folding bikes.

**Denver:** Cyclists are using their bikes for commuting to work and practical tasks like running errands.

**Washington, DC:** Second to Denver in cyclists using their bikes to commute. Most likely city for cyclists to use their bikes for seeing the sights.

**Orlando:** With many suburban riders, Orlando respondents have the highest opinion towards cycling. Potentially due to lowest rate of reported incidents.



"No matter what, a big bicycle taking up space in the road or sidewalk will be annoying no matter what someone does, but I think if cyclists only cycle in fairly small groups and practice street safety, I don't think people will find them as annoying" - Pedestrian, Washington DC

"My city has a great and excellent infrastructure for cycling. I feel safe riding my bicycle in my city." - Cyclist, Orlando

"Many get frustrated with cyclists, but to me it is a natural part of our city." - Driver, NYC

"The cycling community has actually grown quite a bit since I've been living here in the Denver area, which is about 17 years. More and more people are choosing to cycle over taking the bus, which has gotten extremely expensive, or driving, which is equally as expensive." - Cyclist, Denver

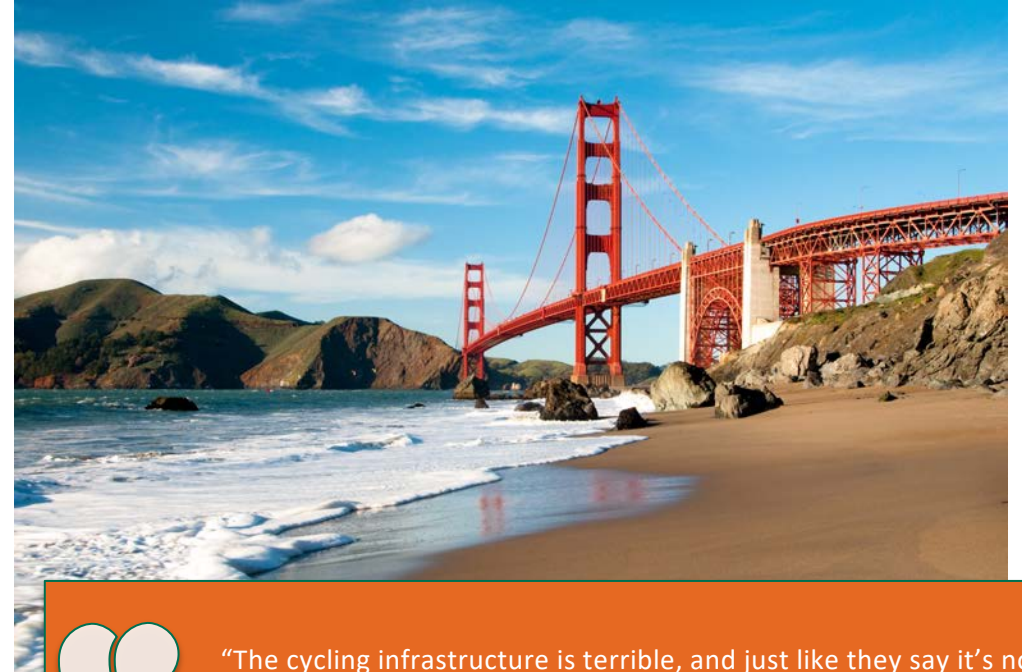


# City Comparisons

**San Francisco:** Unlike Orlando, SF has a low opinion of cyclists and low overall ownership rates. However, most popular city for e-bikes. Due to difficulty of landscape?

**Portland:** Most popular city for road bikes and highest reported usage of bikes for escaping the city and riding “out in the country.”

**Boston:** Least likely to cycle for commute and also least likely to have participated in group rides. We make no assumptions on city friendliness.



“The cycling infrastructure is terrible, and just like they say it’s not a walkable city, it isn’t a bike-able one either.” - Driver, San Francisco

“People here in Portland do not care for cyclists. And I’ve noticed over the years that less and less people are biking.” - Pedestrian, Portland

“I think cycling is a good idea, but I also think the city isn’t properly equipped for it. They need more dedicated bike lanes and better enforcement of vehicle lane violators.” - Pedestrian, Boston

# Socioeconomic Background



## Higher income and education

Cyclists overall have higher income and education levels than other commuters. They're more likely to hold bachelors and graduate degrees.



## Work in professional occupations

Cyclists are more likely to have professional occupations like management or science/arts jobs than service industry jobs.



## Pedestrians have the lowest income of all groups

Urban pedestrians rely on walking and public transportation for their commutes

In summary, cyclists tend to come from a higher socioeconomic status followed by drivers.

Thank You!

