



Taxing Shared Micromobility

Best Practices from Cities

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3 big takeaways from the research:

1. Scooters are popular, but the business is difficult.
2. Cities (generally) charge scooter companies fees to operate.
3. There's no clear consensus on what fees should be, and fees are high – 10x per mile what US drivers pay in the gas tax.

Lime's recommended best practices:

4. Cap fees at no more than the cost of administration.



Shared micromobility is hugely popular...

In Europe in 2022¹, riders took:

- 275 million scooter trips
- 38.5 million dockless bike trips

In North America in 2022², riders took:

- 72.2 million scooter trips
- 6.8 million dockless bike trips

¹ [Fluctuo European Shared Mobility Index: "Annual Review 2022"](#)

² [North American Bikeshare and Scootershare Association, "4th Annual Shared Micromobility State of the Industry Report"](#)



... yet the industry faces headwinds

Nice Ride shuts down pioneering Minneapolis bike share program

Amy Felegy and Matt Sepic March 3, 2023 4:00 AM

Transportation

Tier Mobility and Spin lay off 100 more employees






VCs Squandered Billions On Scooter Startups. Markets Think They're Worth A Pittance

Joanna Glasner July 29, 2022

Transportation

Bird may not have enough funds to continue shared micromobility business



Mode	Carbon footprint (g CO2e / p-km) ¹
	251
	161
	49
	35
	27



**Decreasing
carbon
footprint**

¹ Fraunhofer ISI: *"The Net Sustainability Impact of Shared Micromobility in Six Global Cities"*






² University of Illinois Chicago: *"Taxing New Mobility Providers"*

³ City Observatory: *"Scooter Lessons: Success, but a stark double standard"*

⁴ North American Bikeshare and Scootershare Association: *"2021 Shared Micromobility State of the Industry Report"*

⁵ San Francisco Chronicle: *"Another company leaves S.F., blaming 'the most onerous regulations' in the world"*



Mode	Carbon footprint (g CO ₂ e / p-km) ¹	<i>Socially-Optimal</i> Taxes vs Subsidies
	251	Tax
	161	Tax
	49	Subsidy
	35	Subsidy
	27	Subsidy

¹ Fraunhofer ISI: [“The Net Sustainability Impact of Shared Micromobility in Six Global Cities”](#)






² University of Illinois Chicago: [“Taxing New Mobility Providers”](#)

³ City Observatory: [“Scooter Lessons: Success, but a stark double standard”](#)

⁴ North American Bikeshare and Scootershare Association: [“2021 Shared Micromobility State of the Industry Report”](#)

⁵ San Francisco Chronicle: [“Another company leaves S.E., blaming ‘the most onerous regulations’ in the world”](#)



Mode	Carbon footprint (g CO ₂ e / p-km) ¹	Actual Taxes vs Subsidies
	251	(Many cities unable to assess fees) 10¢ - 25¢/Trip ² ~4¢/Mile
	161	~2¢/Mile³ (gas tax/mileage fees)
	49	+70%⁴ (30% farebox recovery)
	35	+80%⁴ (20% farebox recovery)
	27	~24¢/Mile CO

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Slide 7

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Update!

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Research questions

1. What is the current state of program fees?
2. How do program fees impact shared micromobility businesses?
3. How do program fees stand compared to other modes?
4. What are best practices for program fees?





Research team



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Data & Methods

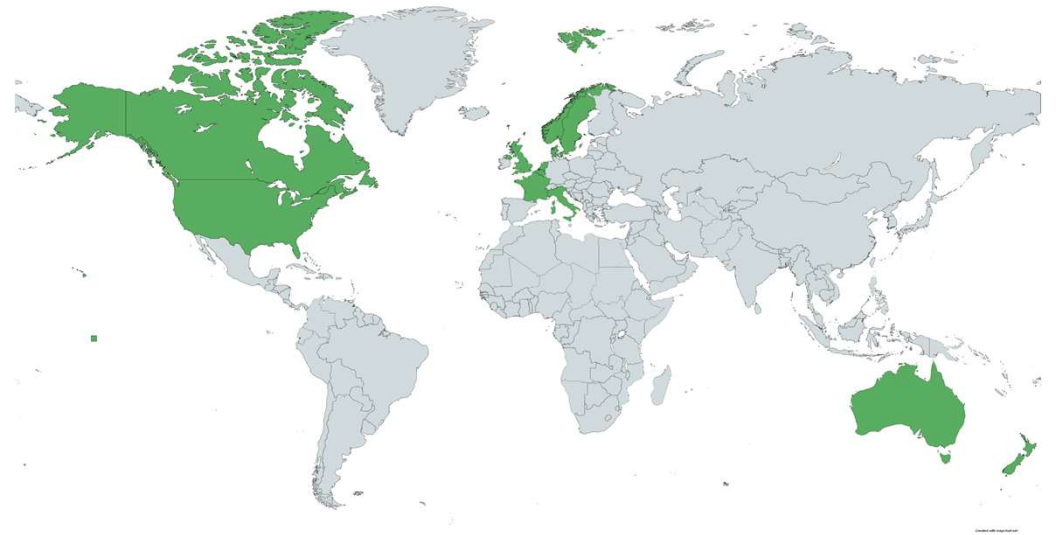
Research Question 1:

Program fees overview
93 cities in 12 countries

Research Questions 2 & 3:

Financial impact analysis and
mode comparisons

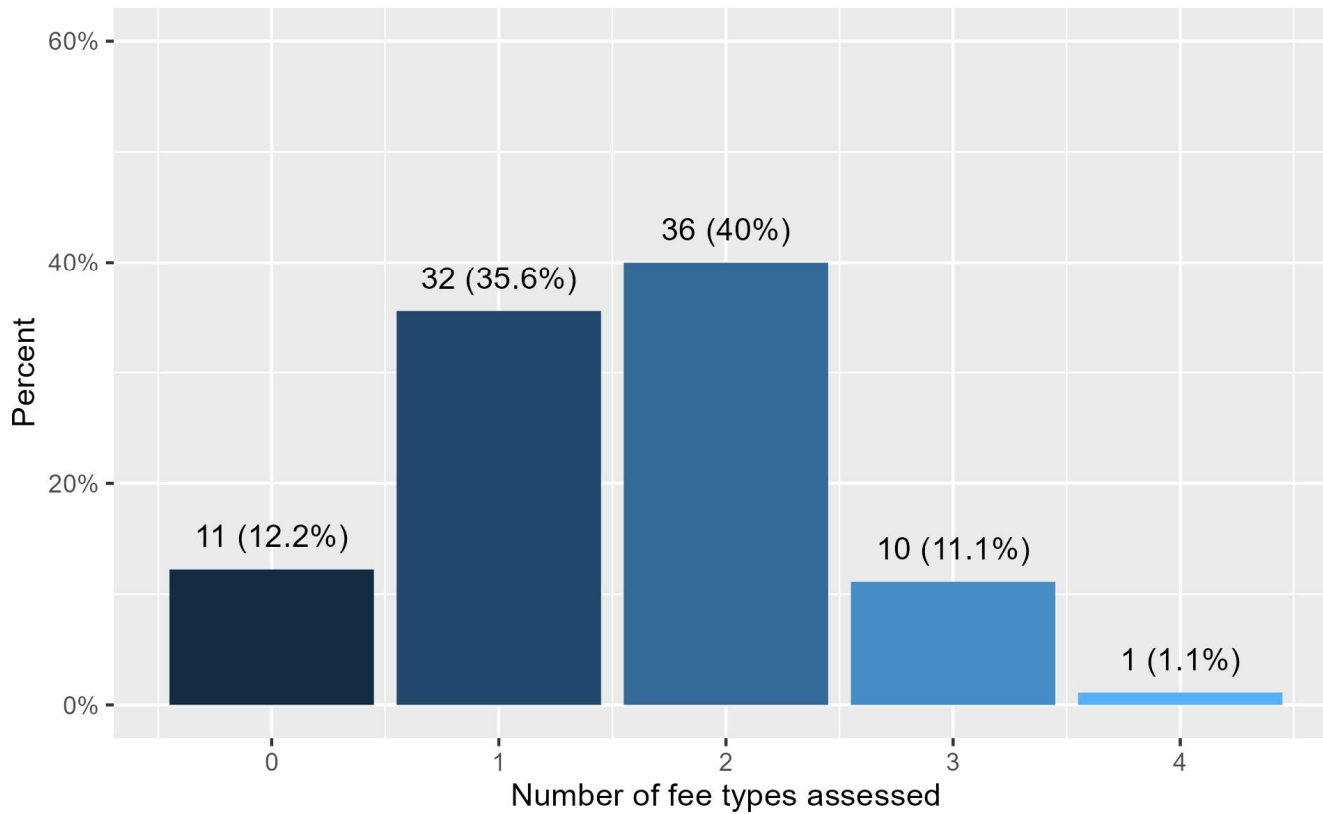
57 cities (out of the 93 above),
selected based on where
system performance data was
available:



- RideReport and Populus
- Open data portals
- Evaluation reports and government documents



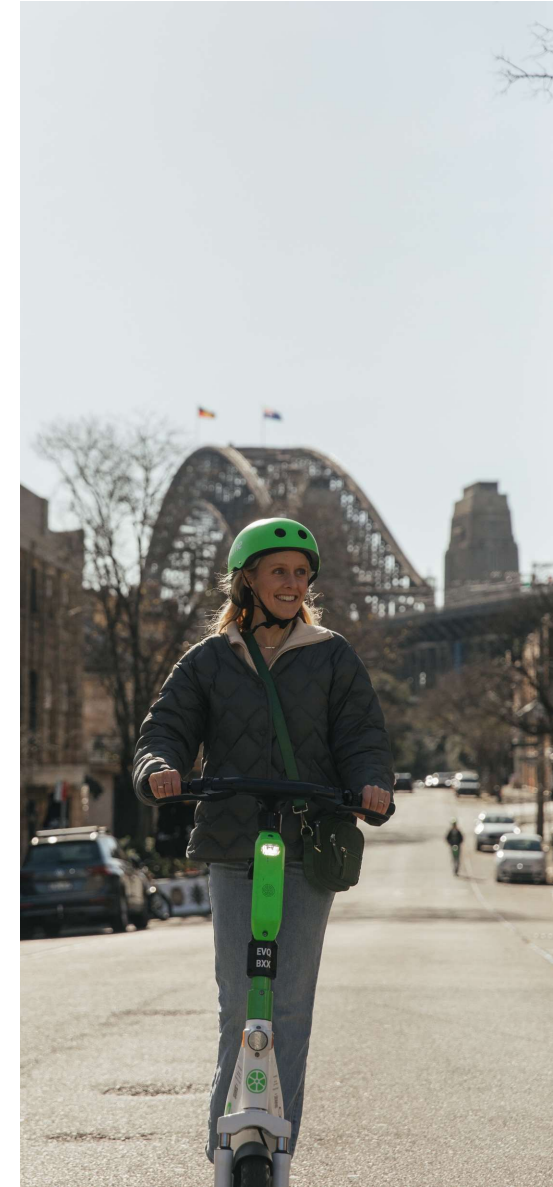
Results: (1) Current landscape of program fees





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Fee type	Min	Mean	Max	Range
<i>Per-trip</i>	\$0.05	\$0.16	\$0.40	8x
<i>Per-vehicle</i>	\$1	\$54	\$430	430x
<i>Annual</i>	\$300	\$19,000	\$100,000	333x
<i>Permit</i>	\$100	\$3,800	\$25,000	250x





Results: (2) Business Impacts - overall

Average annual fee revenues:
US\$315,000

High variability:

- 5 cities collected 0 fees (annual OR one-time), and 6 cities collected only one-time fees
- 5 cities collected over US\$1M annually (Stockholm, Austin, Brisbane, Chicago, and San Diego)





Results: (2) Business Impacts – in context

The average jurisdiction's program fee was:

- **US\$0.30 per trip**
- **US\$0.24 per mile**

On average, fees made up **5.1% of fare revenues**, but they made up 10% or more in 7 cities:

- Brisbane, Australia (10%)
- San Diego, California (11%)
- Kelowna, Canada (14%)
- Indianapolis, Indiana (15%)
- Phoenix, Arizona (17%)
- Boise, Idaho (26%)
- Chicago, Illinois (34%)



Results: (3) Comparison to other modes

Drivers of gasoline-powered cars pay **fuel taxes of 50.6 cents per gallon.**

An average vehicle with a fuel economy of 20 mpg would be charged **2.5 cents per mile in gas tax.**

Shared scooters are charged 24 cents per mile, **10 times higher than the car.**





Lime's Recommended Best Practices



Antwerp

\$0 program fees
2M+ trips





Copenhagen

US\$25 – US\$53 per vehicle
1M+ trips

Danish law requires that
fees are no more than the
cost of administration.





3 big takeaways from the research:

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**Thank you for
your attention!**



Outline

- Headlines – companies leaving markets, merging, stock prices down, etc. (2)
 - “In this context, it’s worth noting that shared micromobility is a difficult business.”
- Comparison table (3)
 - “Shared scooters are treated even less favorably than cars, despite having characteristics like public transit and docked bikeshare.”
- Our study (3)
 - “So what are cities doing, and which cities are leading the way in sustaining a shared scooter system while achieving city goals?”
- Highlights from our study (Variability in fees, Differences in size of fees in Europe vs US) (7)
 - “We worked with academics to study permit fees around the world, here’s what we found.”
 - General patterns
 - Case study - let’s look at 4 cities, all of which have successful programs boasting millions of trips per year. Now what does that translate to in terms of fees - it’s the opposite pattern you might expect. What does that mean for those cities?
- Lime recommendations for policy (5)
 - “Fees should not exceed the cost of administration. Cities should consider eliminating fees altogether, considering VAT and sales tax contributions.”



Mode	Carbon footprint (g CO ₂ e / p-km) ¹	Actual Taxes vs Subsidies	Parking Fines (example from San Francisco) ⁵
	251	(Many cities unable to assess fees) 10¢ - 25¢/Trip ² ~4¢/Mile	\$108
	161	~2¢/Mile³ (gas tax/mileage fees)	\$108
	49	+70%⁴ (30% farebox recovery)	\$150
	35	+80%⁴ (20% farebox recovery)	-
	27	~24¢/Mile CO	\$150

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C0 Update!

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