Congestion charges: Three questions

Jonas Eliasson
Professor of Transport Systems, Linköping University
Director of Transport Accessibility, Swedish Transport Administration
Vice chair of Governmental Expert group for Studies in Public Economics
Chair of Planning & Civil Engineering division, Royal Academy of Engineering Sciences
https://sites.google.com/view/jonaseliasson
Congestion is a good sign
But...
Urban transport planning: Creating high accessibility with limited space
Efficient urban transport policy

Attractive public transport

Walkability

Compact land use

Restrain road traffic

Efficient urban transport policy
Balancing trip benefits and costs

- Separating “valuable” trips from “less valuable” is best left to travellers (not planners or politicians)
- Pricing gives priority to most “valuable”/“necessary” trips from travellers’ point of view
- Avoids paternalism (“planners know best”)
The Stockholm congestion charges

Introduced 2006 as a 7-month trial, permanent after a referendum
2 € per passage in peak hours, 1€ mid-day,
no charge evenings/weekends
Peak charge increased in 2016 and 2020
Politicians’ questions:
Will it work?
Will they hate me?
What are the main obstacles?
It works.
(Stockholm: \(\approx 20\%\) less traffic across cordon)
What 20% less traffic does to congestion
30-50% less time in queues, and less variability
April 2005/2006

Delay time, PM peak

[Diagram showing the comparison of delay time for different types of roads (inner main roads, inbound, outbound, inner city streets, inner main roads, northbound, southbound) between 2005 and 2006. The bars represent the percentage increase in delay time, with error bars indicating variability.]
Charges only work if well designed.

Use good transport models, and trust them more than your gut feeling.
Congestion charges

Will it work?
Yes, if designed carefully

Will they hate me?
Getting public acceptability

Good design:
- Easy to adapt
- Large benefits
- Low costs

Honest procedure:
- Trust in government
- Decision process & public consultation
- Use of revenues
- Explaining why pricing is a “fair” mechanism
The U-curve of support

- Decision
- Charges introduced
- Referendum
- Govt. decision
Why do people change their minds?

It’s better than you thought

It’s not as bad as you thought
Status quo bias:
Support for charges vs. amount paid
"Do you drive less across the cordon than before the charges?" (2005=>2006)
Each day is different

• Travel patterns and traffic composition vary more and change faster than most people believe

• Most of the traffic any given day are occasional drivers; “regular commuters” are a minority
Congestion charges

Will it work?
Yes, if designed carefully

Will they hate me?
Not once benefits are visible,
and if done honestly

What are the main obstacles?
What has stopped congestion pricing attempts?

- Design inconsistent with stated objectives
- Science-fiction technology and scope (expensive)
- Political conflicts between agencies and levels of government
Summary

• Congestion pricing shaves off “least necessary” trips
• It works, if designed carefully
• Realistic ambitions, honest communication, consistency with objectives, avoid being moralistic
• Survive the introduction process and people will support it once they experience the benefits