Changing Incentives for Vehicle Use: Low Emission Zones and Congestion Pricing

Taming Traffic
Webinar Series

@ITDP_HQ
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#TamingTraffic
Taming Traffic webinar series

#1 | Road space reallocation - APR 20

#2 | Parking reform - JUN 2

#3 | Zone-based vehicle access restrictions (ZEA, CP) - TODAY!
Taming Traffic report available now!

www.itdp.org/tamingtraffic

- Full report
- Executive summary
- Infographic
What can cities do to tame traffic?

**TAMING TRAFFIC**

Prioritizing people over cars makes streets calmer, cleaner, and safer for all.

**What can cities do to tame traffic?**

- **Reallocation of road space for people**
  - Redesign streets so that the majority of space is dedicated to pedestrians, cyclists, and public transport.
  - Sustainable modes become faster, safer, and more convenient than driving.

- **Price and manage parking**
  - Designate zones with vehicle restrictions:
    - Low emission zones
    - Congestion parking
    - Restricted traffic zones
    - Parking, priced to reflect its true cost, becomes less desirable compared to walking, cycling, or public transport.
    - Revenues cover program operations and fund sustainable transport improvements.

- **Designate zones with vehicle restrictions**
  - Fewer trips made by private vehicles

**CAPACITY**

- **ROAD SPACE REALLOCATION**
  - More safe, comfortable spaces for people shifts trips to sustainable transport
  - Fewer trips made by private vehicles

- **PARKING REFORM**
  - Revenue generated from pricing parking further expands sustainable transport
  - Even fewer trips made by private vehicles

- **CONGESTION PRICING + LOW EMISSION ZONES**
  - A large, high-quality sustainable transport network supports most urban trips
  - Fewest trips made by private vehicles
To price or not to price zones

PRICE

- **Price emissions**
  - Charge a fee based on a vehicle's emissions level

- **Price congestion**
  - Require vehicles to pay a fee to enter or drive within an area

  - Low emission zone

  - Congestion charge

NO PRICE

- **Restrict entrance**
  - Restrict most vehicles from a designated area and impose a high fine on unauthorized vehicles that enter

  - Zero emission area

  - Limited traffic zone
To price or not to price zones

VEHICLES THAT MEET THE EMISSIONS STANDARD OR PAY THE CONGESTION CHARGE CAN ENTER THE ZONE

Zero emission area

Low emission zone
Zone-based restrictions require capacity...

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<th>Privacy concerns</th>
<th>Technology needs</th>
<th>Political complexity</th>
<th>Upfront govt investment</th>
<th>Capacity required for effective implementation</th>
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[Scale: Low, Medium, High]
REVENUE GENERATION strengthens the program when used to support public transport, cycling, or pedestrian infrastructure improvements.

London: £150 million/year or more between 2014-2018

Stockholm: $155 million/year
$12 million to operate

MODE SHIFT away from private vehicles when cheaper, reliable alternatives are available.

London: Bus + bicycle ridership increased after congestion charge was introduced

REDUCED VEHICLE KILOMETERS TRAVELED leads to fewer emissions and improves road safety.

London: 15% fewer VKT within the zone after one year
TAMING TRAFFIC

Key Takeaways

1. Implementing multiple traffic reduction strategies together maximizes impact and reduces potential challenges related to political will and equity.

2. Reallocation road space for people over cars should be considered as part of a comprehensive traffic reduction strategy, especially in limited capacity cities.

3. The presence of alternative transportation options is critical, particularly when most or all private vehicles are restricted from a zone.

4. If capacity is limited, adoption of traffic reduction strategies could follow a progression, starting with low-cost, low-technology options and working toward more robust, complex strategies.