

ITS & Road Pricing

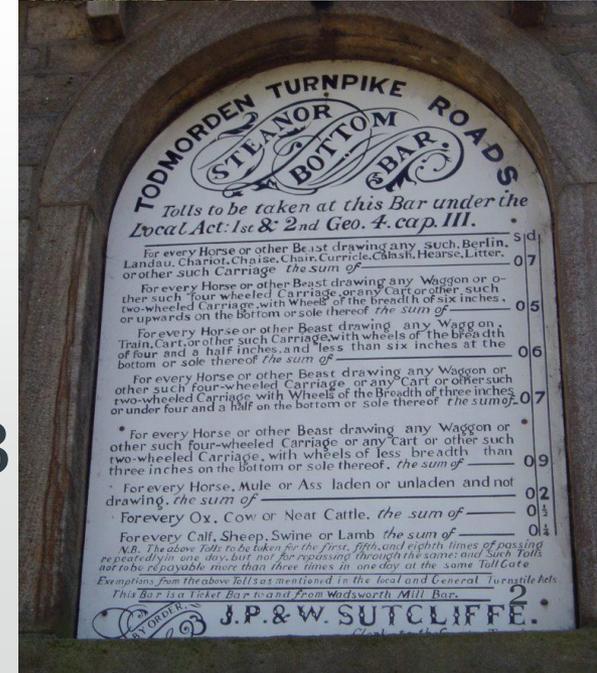
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Road pricing not new. Allowed Industrial Revolution

- Toll roads 2700 years old
 - Susa–Babylon highway: 7C BC
 - Holy Roman Empire: 14C Steanor Bottom toll-house, Todmorden turnpike
- Industrial Revolution
 - more transport demand, expansion in highways, better road maintenance, increased economic activity
 - Led by private sector, not HMG
 - Supported by turnpike roads 1663
 - Railways not started until 1820s



Background

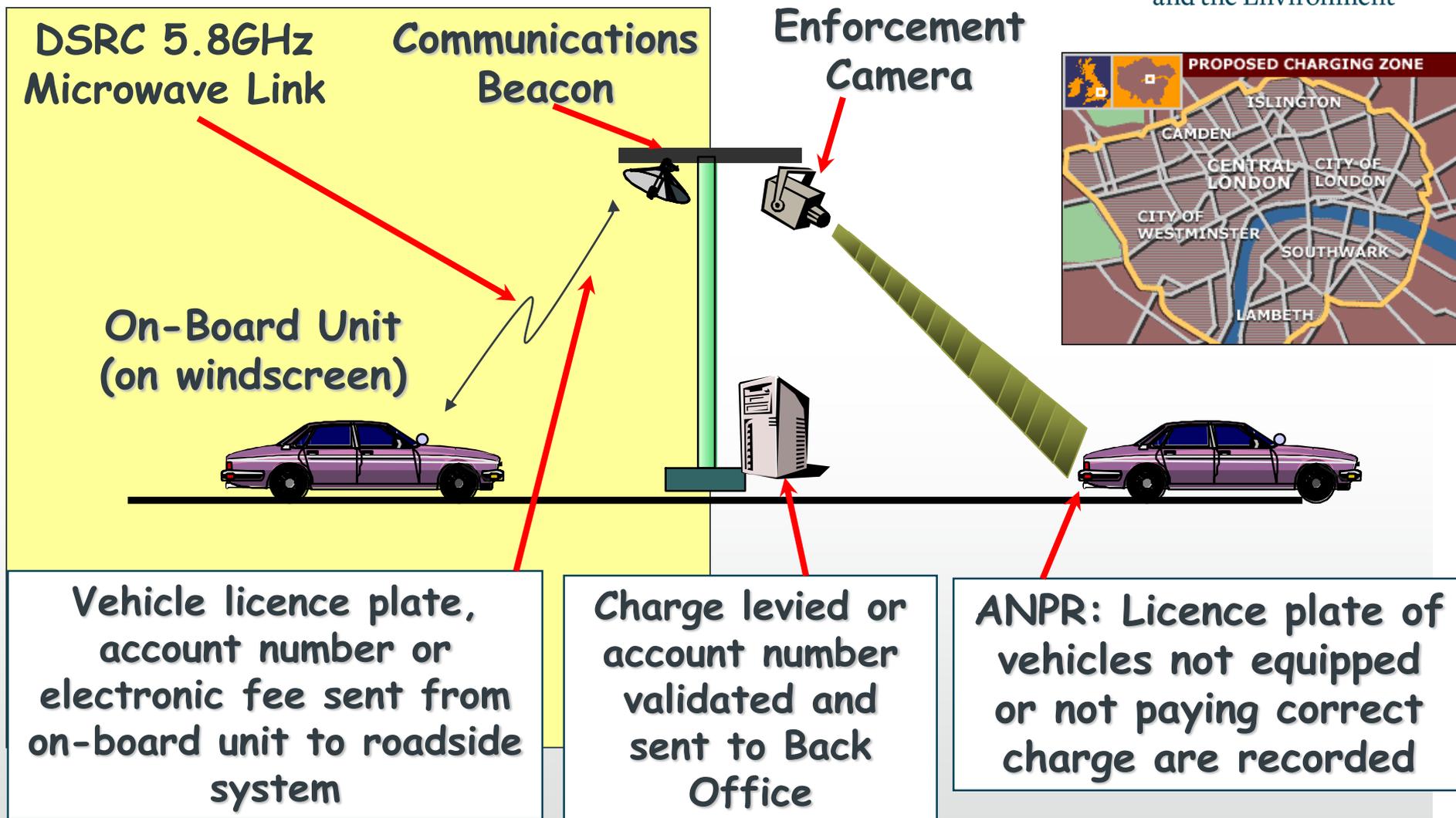
- Technology proven by successful Road Pricing schemes in Singapore, London, Stockholm & truck charging schemes.
- Policy makers & road operators can offer ‘new deal’ to road users with ownership & fuel taxes replaced by more effective ‘pay as you drive’ (PAYD) schemes.
- But hard to convince politicians, drivers & others of benefits.

Objective of today

- Convince attendees that RP is acceptable & relevant to energy, congestion, pollution, climate change & fiscal challenges, & should return to the transport agenda.

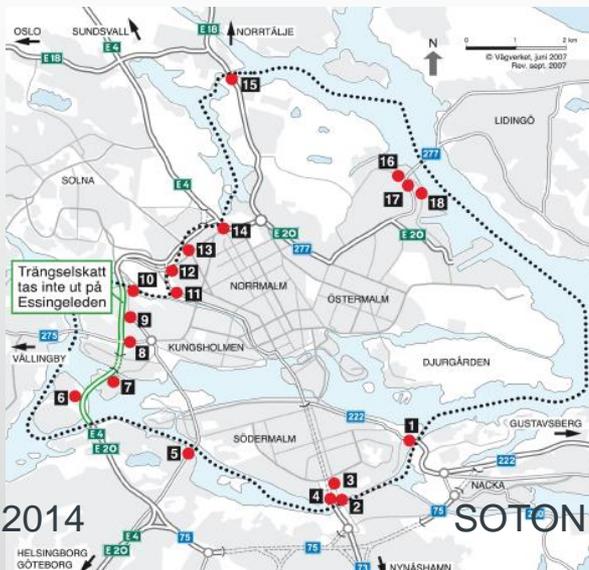


Microwave FreeFlow Tolling

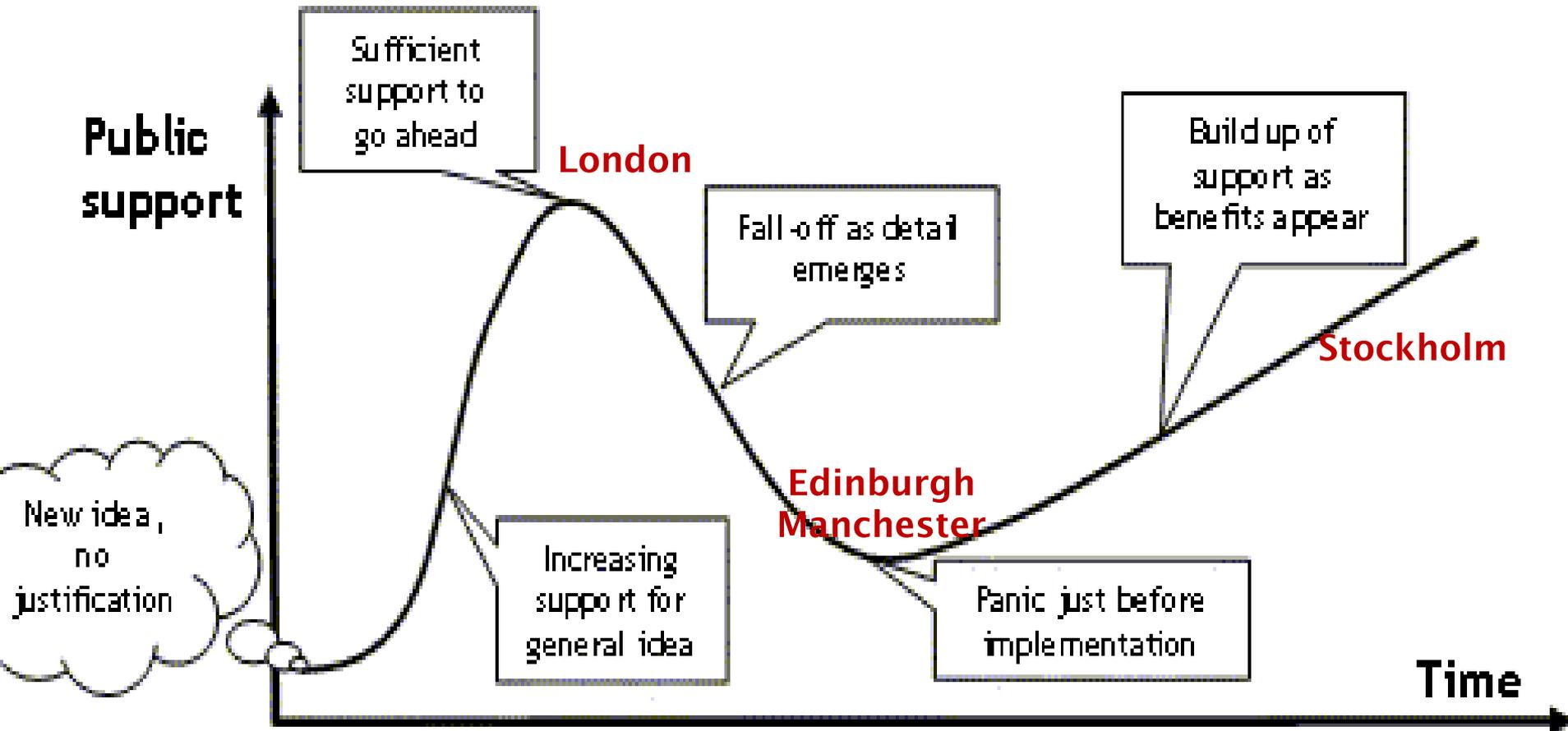


Stockholm Congestion Tax

- Microwave cordon trial Jan-July'06 showed the benefits
 - Charges SEK 10 - 20 (85p-£1.70).
 - Traffic fell 28% (>> predicted); no diversions.
- Pre-trial opposition 62%, but fell during trial.
- Post-trial referendum: majority voted to reinstate scheme; reintroduced in Aug'07 (ANPR-only). Support now 74%.
- **Extra buses from Aug'05, but no effect on road traffic until Congestion Tax began in Jan'06**



Acceptability varies with time



Lessons learned

- Road Pricing schemes acceptable to public if:
 - equitable – which they are, compared to alternatives;
 - revenue-neutral, or revenues reinvested in transport;
 - Low cost overhead;
 - people have experience that road pricing works.
- Note that:
 - large traffic reduction with low charges;
 - No diversion onto other routes;
 - improved public transport won't get people out of cars;
- RP should be integral part of transport policy.
- **'The potential for benefits from a well-designed, large-scale road pricing scheme is unrivalled by any other intervention' (Eddington, 2006). DfT agreed**

Supplementary slides

2005 Edinburgh referendum

- Public voted against by 3:1 so planning for scheme abandoned
- Car use determined voting; drivers strongly opposed; others - weak support
- Limited understanding of scheme increased opposition
 - Maximum charge £2 but 38% thought it was higher
 - 20% of journeys not charged but people thought they were
 - 37% wrongly thought that outbound traffic was charged
 - scheme complex – dual cordon, inbound charging, exemptions
- People not convinced of reduced congestion & improved PT.
 - Needs simple scheme to convince residents, esp. PT users, of benefits

DfT acceptability study (2008)

- 440 people from 8 UK LAs considering RP, met several times
- Principle of road pricing:
 - initially seen as extra cost, no benefits; objective=revenue
 - Not effective? Drivers find other routes, congestion displaced
 - No trust in authorities. How is revenue spent? Fairness?
 - **But with more information, attitudes changed; congestion must be tackled & RP was the most effective way.**
 - But some still negative (young males & C2DEs)
- **Perceptions** on specific schemes:
 - Cordons easier to understand than distance charge. But fears: unclear boundaries; hospitals, stations, P&R charged?
 - ANPR understandable, cheap, works. All cars have plates. No equipment inside car. Detection only at camera sites.
 - Tags perceived (**wrongly**) as complex, costly, easier to track

Public support

- 67/29% margin of support

- Support conditional on using revenue for transit (public transport) improvements

Blocked in State Assembly

- Opposition from outer-boroughs

- Impact on auto users

- “Social engineering”

Key issues

- Promise of transit improvements

- Geographic equity

- Lack of perceived driver benefits

(Bruce Schaller, Deputy Commissioner, Planning & Sustainability, New York City Dept of Transportation)

Evidence that RP moving up the UK political agenda

- HGV Road User Levy starts April 2014
- Conservative Party Strategy group looking at it.
- Was in Lib-Dem last election manifesto.
- IFS prediction of fall in revenue from fuel duty.
- Increasing use of PAYD insurance.
- Spread of HGV charging in Europe
- US HOT lanes receiving driver approval.
- IBTTA campaign: tolling for US transport funding

- RP inevitable: best tool to manage congestion; fuel duty revenue declining - efficient engines, alternative-fuels.
- Road pricing acceptable, works & costs falling; but ignorance and misunderstanding; education is needed.
- To inform people, repeat Stockholm trial in UK city. **But not just technology demonstration – must involve real people and real money to ensure meaningful results.**
- Hold referendum, if you must, AFTER scheme trial, so people vote based on real knowledge and experience.
- National road pricing. Start with cities choosing to adopt it. Provide incentives e.g. reduce/rebate motoring taxes.

Final words

- ‘The potential for benefits from a well-designed, large-scale road pricing scheme is unrivalled by any other intervention’ (Eddington, 2006).
- This view was endorsed by UK DfT in ‘Towards a Sustainable Transport System’ (2007). ‘The Government accepts the Eddington analysis regarding the exceptional case for exploring the potential of road pricing’.
- Walker, J. (2011) “The Acceptability of Road Pricing”.
<http://www.racfoundation.org/research/economics/road-pricing-acceptability>
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