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IMPLEMENTING CONGESTION CHARGES: EFFICIENCY AND ACCEPTABILITY

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Charging Systems Examined

Systems in operation

- London
- Stockholm
- Singapore

Abandoned plans

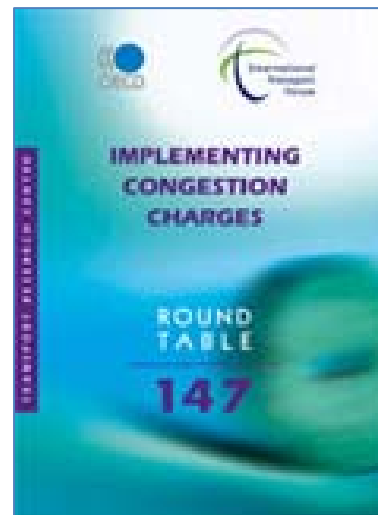
- Netherlands
- United Kingdom national road pricing
- Manchester and Edinburgh cordon charges

References:

www.internationaltransportforum.org

Research Pages

- ITF Roundtable Publication
- ITF Discussion Papers

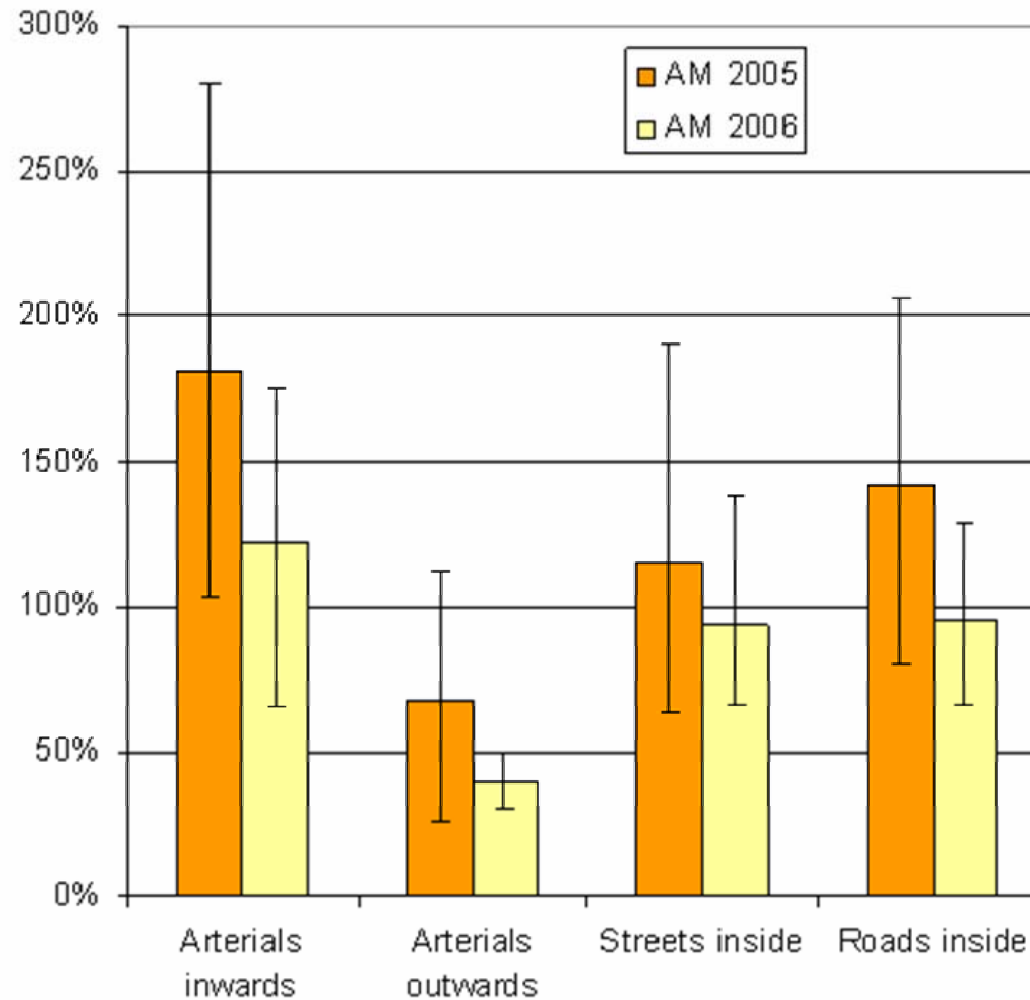


System designs

London	Stockholm	Singapore
Cordon	Cordon	Cordon/area plus Radials
\$16 / day	Charge per crossing <ul style="list-style-type: none"> • peak differentiation to \$3 • maximum \$9 / day 	Charge per gantry crossing <ul style="list-style-type: none"> • peak differentiation to \$3 • no maximum
Number plate recognition	Number plate recognition Transponders phasing out	Number plate recognition Transponders
36 km ² 75 km ² with extension	80 km ²	36 km ² plus some radials to 10 km from core
Start February 2003 Extended February 2007 Extension ended Jan 2011	Trial January-July 2006 Reinstated August 2007	Paper permits 1975 Electronic pricing 1998

Impact of Stockholm Charge on Delays

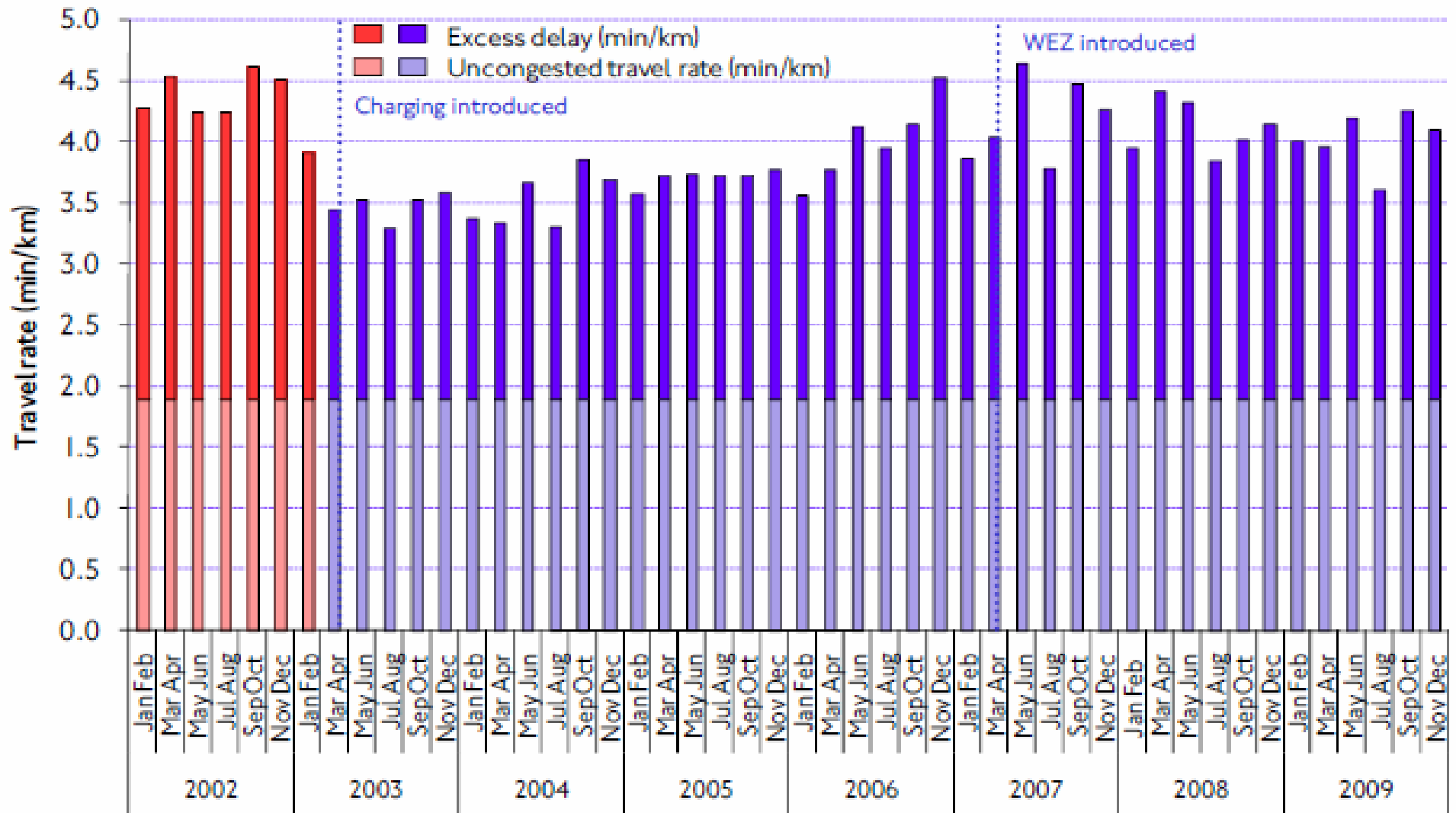
Average trip times compared to free flow
&
10% best and worst trip times



Source: www.stockholm.se/miljoavgifter

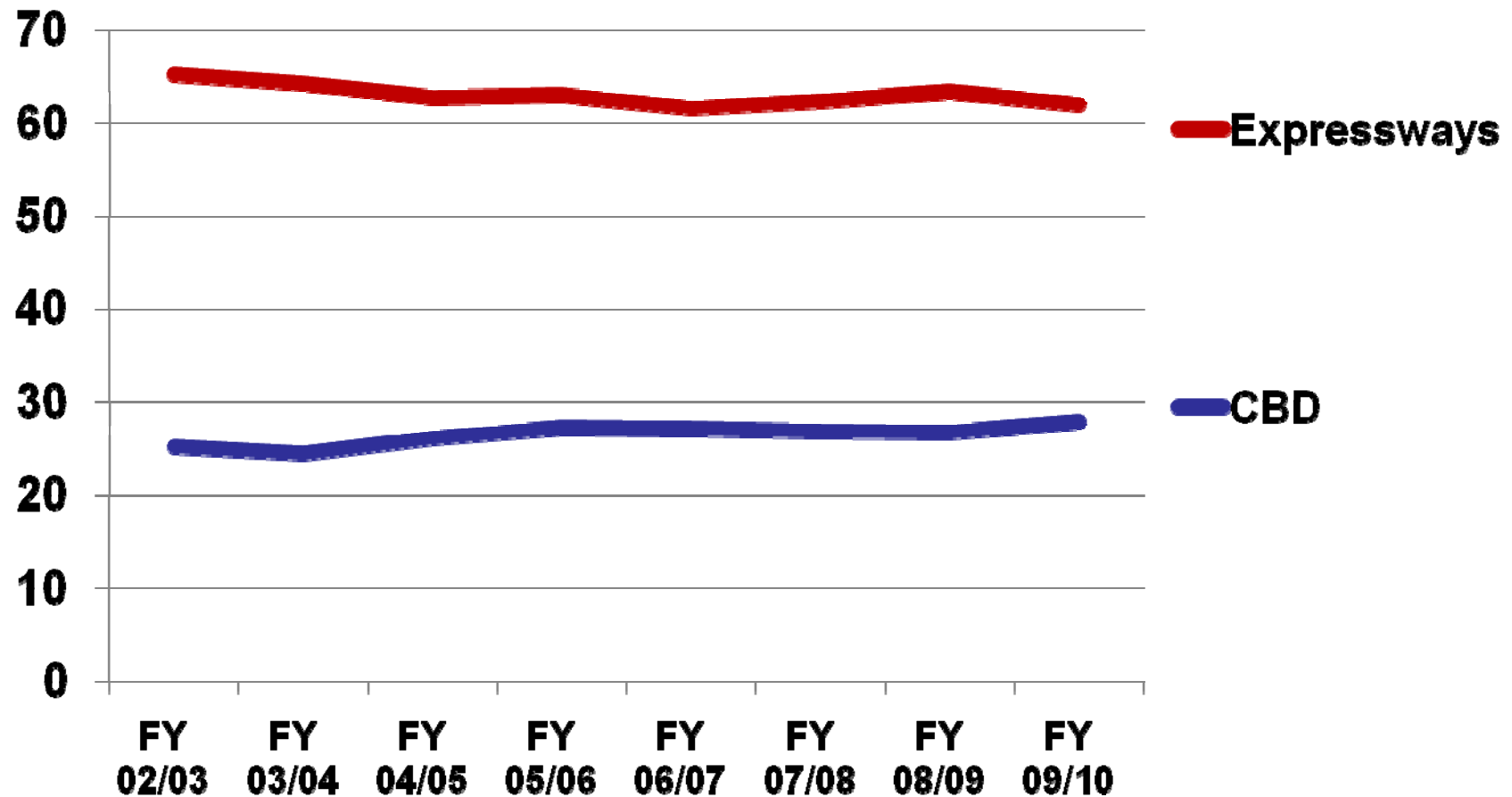
Impact of London Charge on Delays

**Congestion Central London CC zone during charging hours.
Moving car observer surveys, 2002 to 2009**



Singapore Traffic Flow 2002-2010

Average Speed During Peak Hours (km/h)



Source: Singapore LTA [http://www.lta.gov.sg/corp_info/doc/Traffic%20Flow%20\(2009\).pdf](http://www.lta.gov.sg/corp_info/doc/Traffic%20Flow%20(2009).pdf)

How big are the net benefits?

- **London**

\$78m/yr, TfL modeling & Oxford University
Transport Studies Unit

Gross Benefits \$270m – Costs of \$195m

- **Stockholm**

\$100m/year – Eliasson

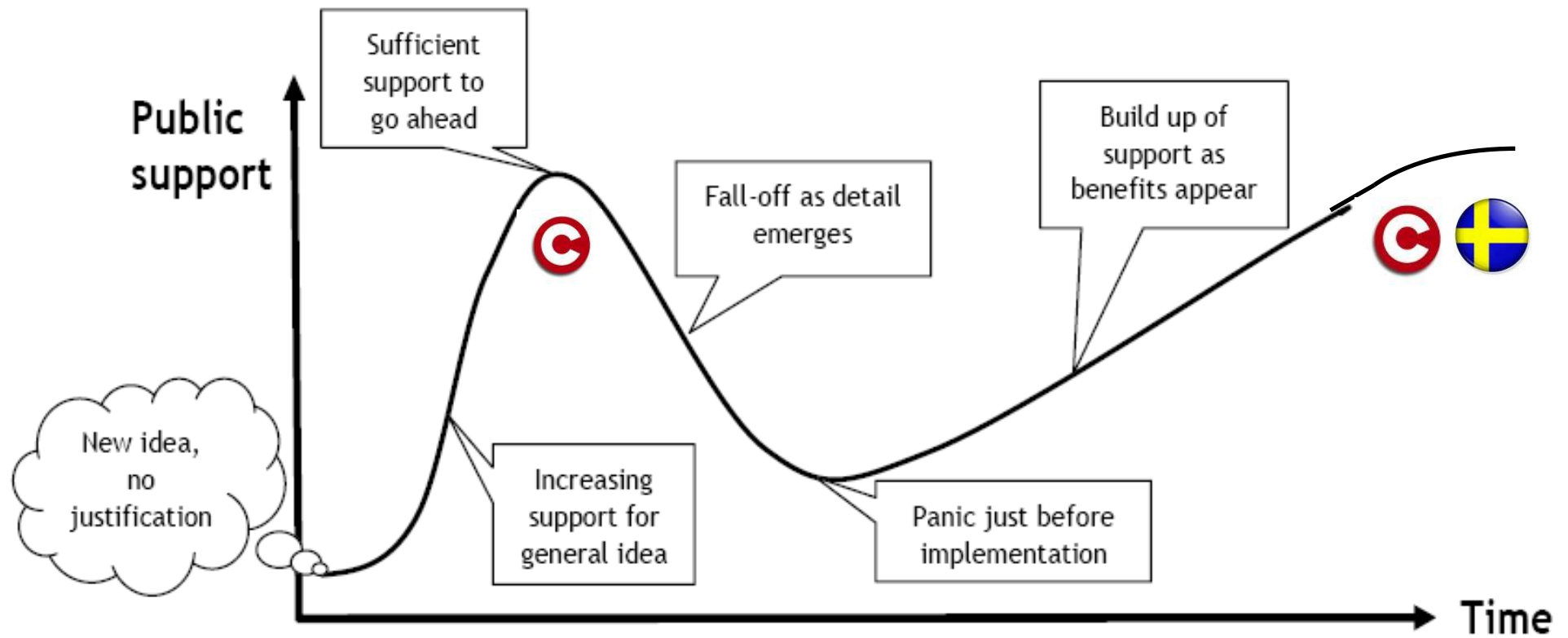
- **Prud'Homme** for London and Stockholm

finds costs exceed benefits but using
undifferentiated French average time values

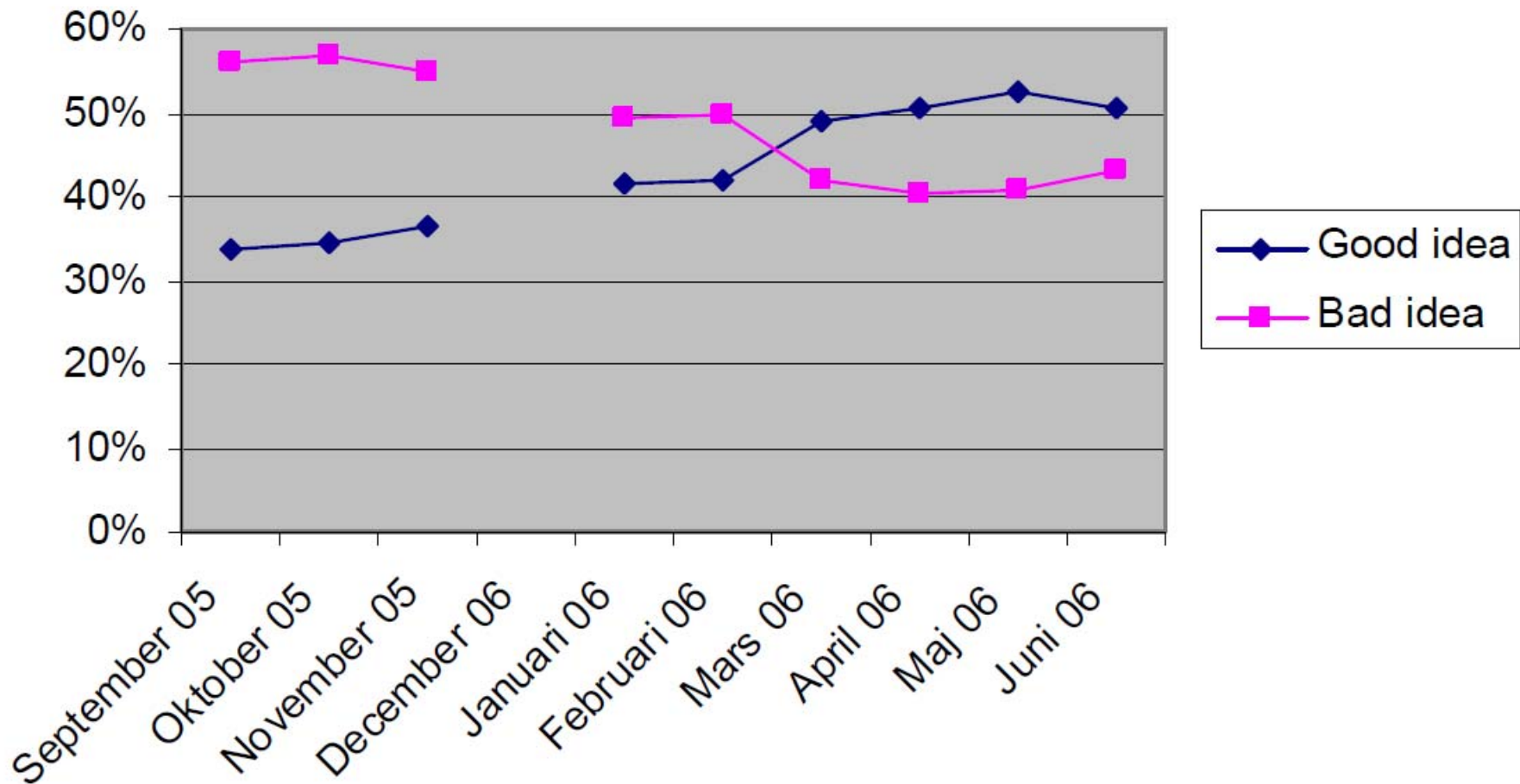
Public Acceptance

- Transparency
 - Communication of size of congestion problem
 - Consultation on alternative solutions
 - NL Platform
 - Establishing realistic expectations
 - Optimisation not abolition of congestion
- Effectiveness
 - Good start
 - Visible reduction in congestion from day 1
 - Phasing in charge would be a mistake

Acceptance: Seeing is Believing



Public Attitude Surveys Stockholm



Source: Gunnar Soderholm, Stockholm Government

Revenues

- Natural public hostility to taxes and charges
- Promise revenue neutrality for acceptance?
 - Credible?
 - Charging systems expensive so large part of revenues needed to cover cost
 - When congestion is a large external cost, internalising it will raise large revenues
 - Revenue use should match government policy
 - Cutting taxes -- Inside or outside transport sector
 - Increased public expenditure / investment -- ditto
- Transparency better guarantee
 - do not confuse objectives

Conclusions

- Factors for Acceptance
 - Only efficient and accepted where congestion is a major cost
 - Acceptance requires results, so no phase-in
 - Cost of operating charges high
 - ✗ Revenue neutrality
 - Transparent use of revenues
 - Cheaper ways to raise revenue, tax CO₂ or make car taxes fairer
 - Do not charge for congestion where congestion is not a major problem



Thank you.

