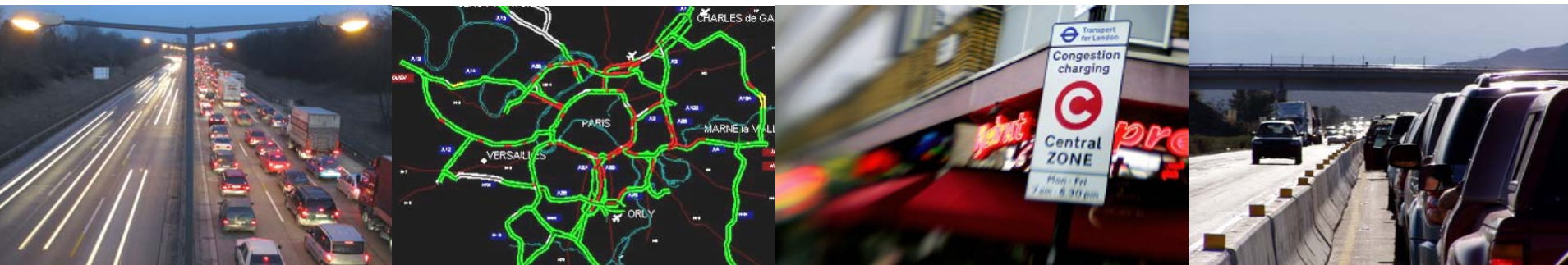


Managing Congestion A Political Perspective

Stephen Perkins
Joint Transport Research Centre



Mitigating Congestion

Ministerial Sofia May 2007

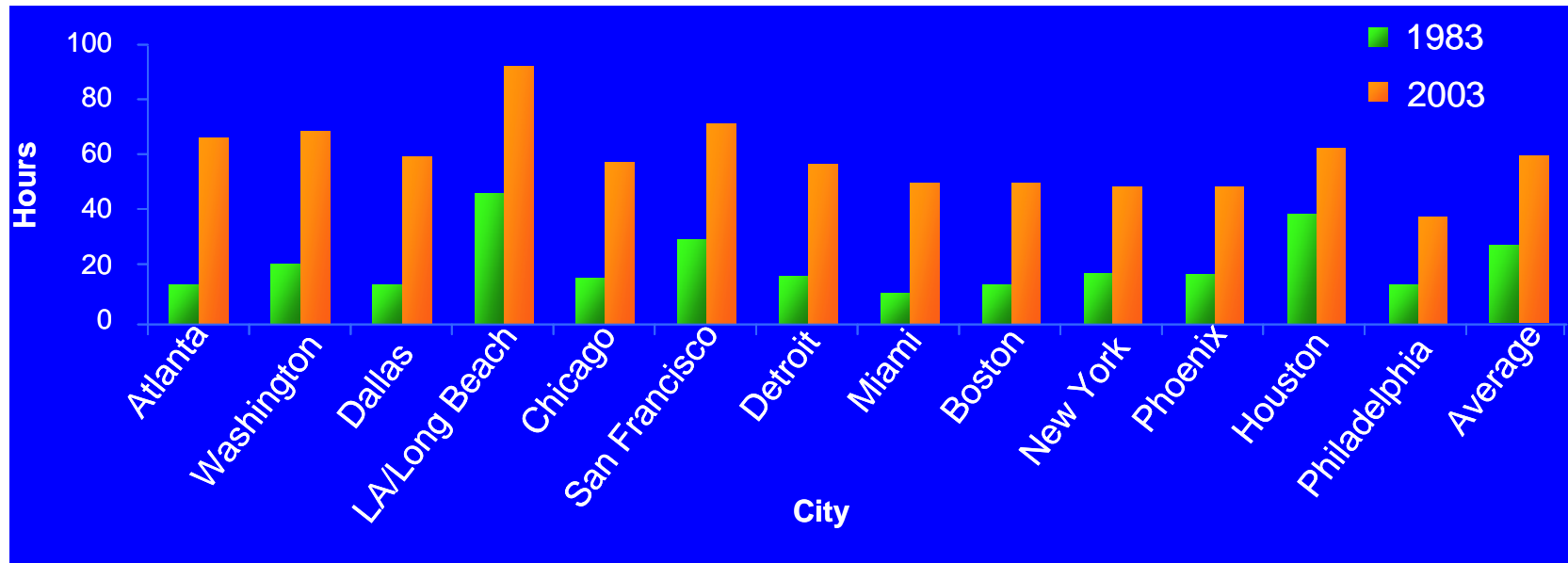
- ECMT → International Transport Forum
- Debate on Congestion
 - The extent and cost of congestion
 - Better system management
 - Pricing
 - Adding capacity

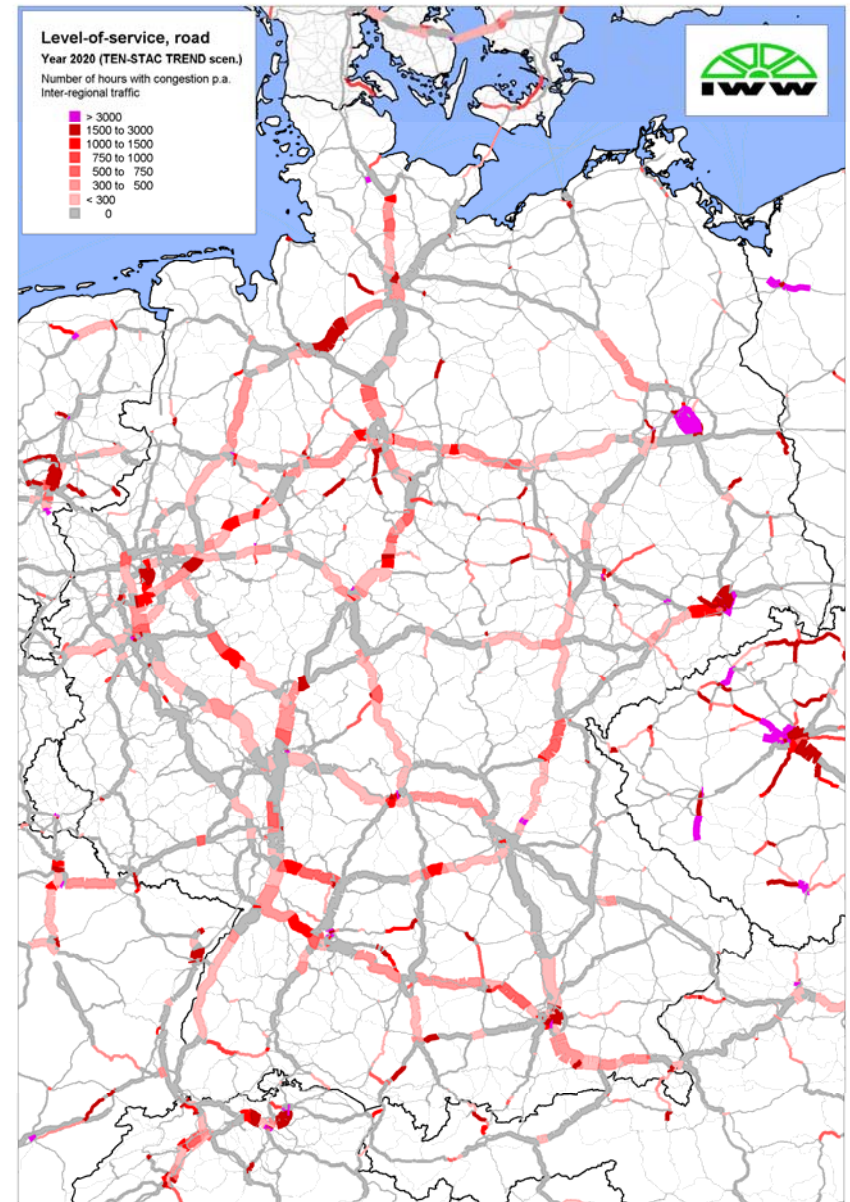
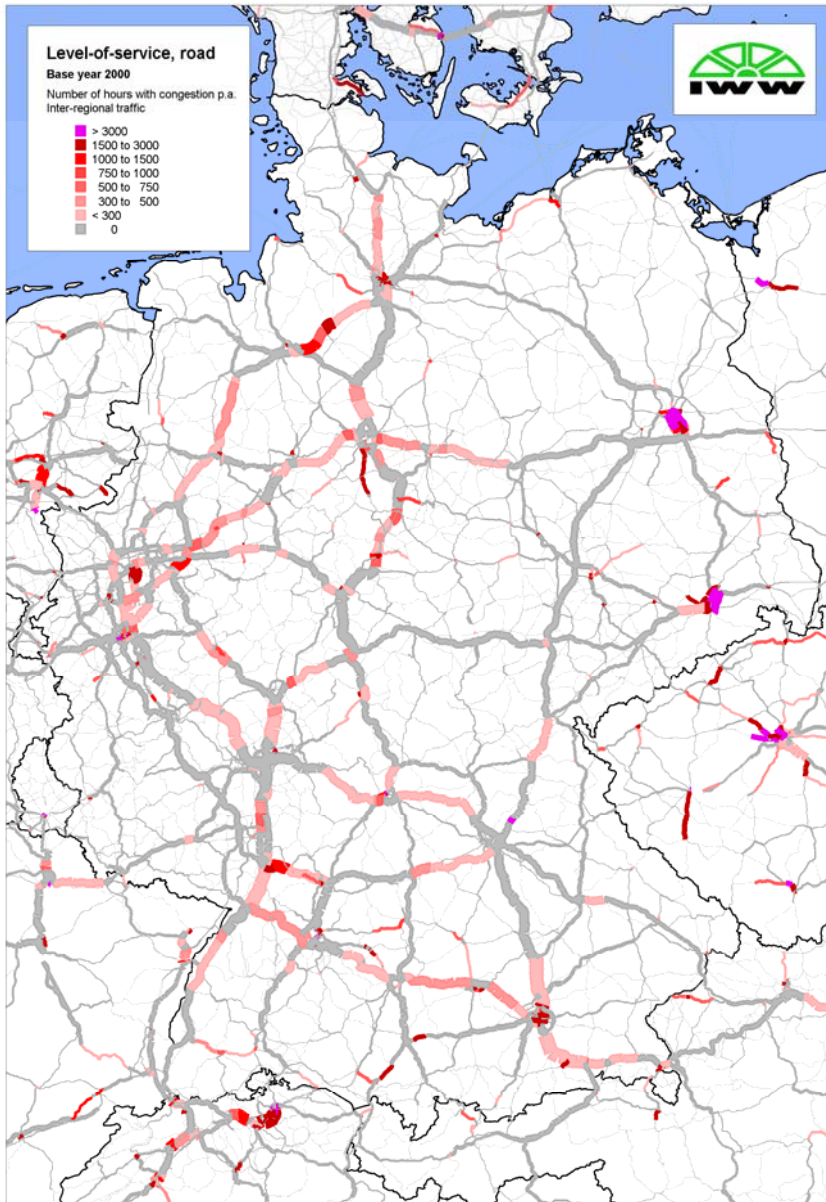
Pattern of Congestion

- Road costs 10X other modes
- Chronic in cities
- Chronic on trunk roads around conurbations
- Road and rail corridors serving ports
- Recurrent at hub airports
- Recurrent in some ports

Congestion is getting worse

Hours Lost to Congestion in US Cities





Congestion costs

- USA – 1.6% of GDP, 150 billion Euros
- EU – 1.1% of GDP, 140 billion Euros
– 1% of GDP on roads alone
- UK roads: business + freight 0.5%; total 1%



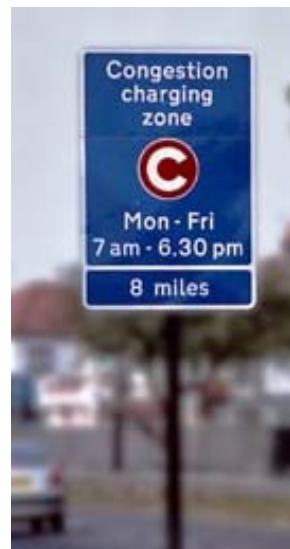
Peak costs

- Roads in Los Angeles

1200 euros/year per peak traveler

- Roads in central London

£8/day/vehicle or 3500 euros/yr

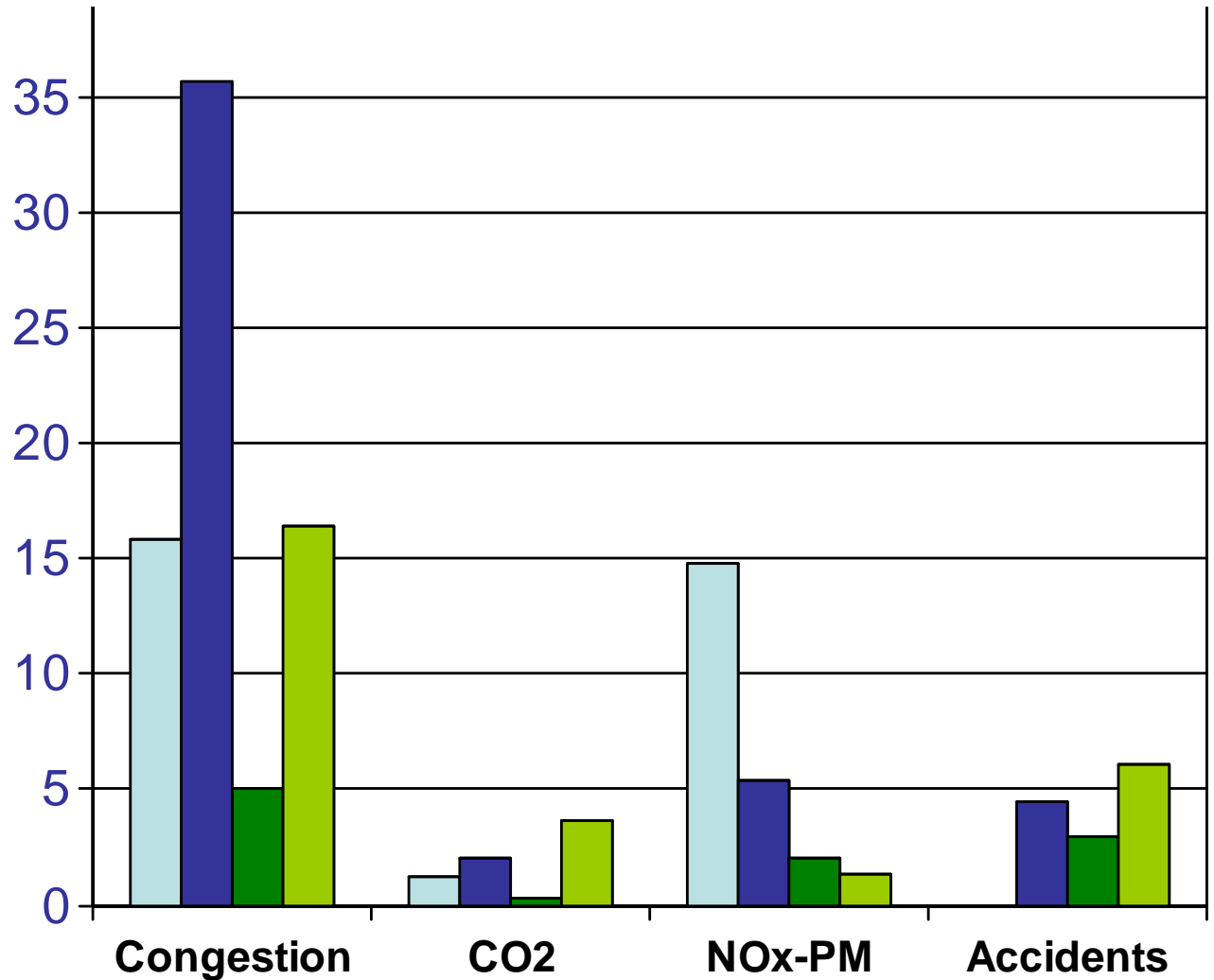
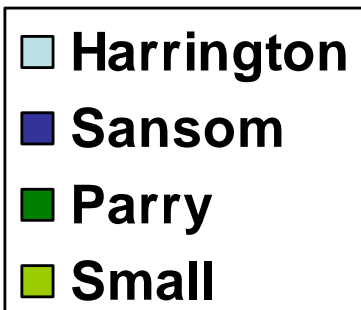


Congestion relative to other costs

Cost estimates

US cents/mile

Studies:



Potential Benefits of Mitigating Congestion

- 2000 data modeled for Germany, France, UK
- Optimised cong. using prices +/- investment
 - 30 billion euro welfare gain
 - 100 billion euros in revenues
 - for tax cuts or investment in infrastructure
- Cost of doing nothing: 100 billion euros

UK Eddington Report: Half cost could be saved

UK	Actions	Cost in 2025-30
Roads	Planned investments no pricing or demand mgmt	33 billion Euros
Roads	Optimal pricing and investment	17 billion Euros
Airports	Planned investments delayed	9 billion Euros
Ports	No new investment plans	0.2 billion Euros

Mitigation measures

- Investment in roads
- Better maintenance management
- Better incident management
- Better, intelligent, traffic management systems
- Hard shoulder use in peak hours
- Investment in rail, buses and trams

When congestion still outstrips capacity: road pricing

- Urban road pricing
- Potential of national pricing to be explored
- Acceptance requires transport tax cuts
- Or investment – concessions and PPPs
- System costs to be minimised
- And confidence building

Dutch road pricing

- “Rekening rijden I”, km-charge, 1988-1990
- “Spitsvignet”, rush-hour charge, 1990-1993
- “Rekening rijden II”, tolling cordons around 4 major cities, 1994-2001
- “Kilometerheffing”, km-charge, 2001-2004
- “Better charging” national km-charge 2005→

Developed through consensus but with tough conditions

- User “platform” recommended charges
- To replace fixed vehicle charges
- With “fairer” pay-as-you go charge
- “Fairness” means a national scheme, that is revenue neutral and identical for all users
- Costs must not exceed 5% of revenues
- Aim, operation 2014, phase in from 2011

UK Policy

- Km charges, not so much if, but when and how?
 - To manage demand
 - To charge domestic and foreign trucks fairly
 - To reduce fuel excise tax burden in rural areas
- Electronic lorry charge
 - for introduction in 2008, now merged with cars
- Goal – national electronic km charge for all vehicles
 - differentiated for congestion
 - to replace part of fuel excise tax
 - better align charges with costs

Truck km charges

- Germany and Switzerland shown 10-15% reduction in traffic through logistic response
- France will charge in Alsace and examining potential nationally

Finance and investment

- US hot lanes popular, private investment needed, makes value pricing inevitable
- Mexico concessioning existing motorways to finance new motorways avoiding traffic forecast risks

Conclusions

- Mitigation essential to avoid economic losses
- Some urban congestion inevitable – reduce rather than eliminate
- Reliability of travel times is key element
- Corridors serving gateways are critical areas for improvement
- Border crossing procedures must improve

The package: traffic management, pricing and investment

- Fuel price/tax increases not effective – vkm less affected as incomes rise
- Km charges instead of fuel tax
- Stockholm, London, Maut demonstration effect aiding acceptance
- More private investment expected to add to public investment

www.internationaltransportforum.org

www.cemt.org

