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Urban Transport Policy and the Environment

Paper by
Ken Gwilliam and Masami Kojima
Presented by George Tharakan, World Bank


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Overview

- Setting environmental priorities
- Transit policies to reduce air pollution
- Traffic management to reduce air pollution
- Taxation policies
- Technology
- Environmental strategy implications


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Cities on the Move

Setting Environmental Priorities

- Significance of transport for urban air quality
- Identifying priorities within transport
- Reducing vehicle kilometres
- Using less fuel per vehicle kilometre
- Generating less pollution per unit of fuel


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Transit Policies to Reduce Air Pollution

- Traffic management for public transport
- Internal efficiency of operating entities
- Competition and its regulation
- Choice of technology
- Public transport subsidies


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Transit Policies - Conclusions

- Vehicle standards must consider financial sustainability
- Efficiency of public transport critical to environment
- Priority in use of road infrastructure – segregated busways
- Competition for the market can support environmental improvement


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Traffic Management to Reduce Air Pollution

- Managing traffic – reducing congestion, traffic calming, incident detection
- Traffic signal control systems – green waves, cycle lengths, ATC
- Bus priority systems
- Parking policies
- Restraints on vehicle use


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Traffic Management - Conclusions

- Emissions increase disproportionately with congestion – focus on traffic flow
- Limit induced traffic increases
- Traffic management is relatively cheap - institutional, political and human resources
- Developing countries typically are deficient
- Police authorities must be key partners


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Taxation Policies

- Guidance from general tax theory
- Setting efficient taxes on transport fuels
- Structuring transport taxation to help the environment


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Taxation Policies – Conclusions

- More precisely targeted alternatives to fuel taxes should be considered
- Environmental externalities – tax polluting goods not subsidize alternatives
- Strong case for setting gasoline tax above general tax rate on commodities
- Case for diesel tax a little more complex but still justified


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Vehicle Technology

- Vehicle fleet renewal
- Vehicle scrappage policy
- Cash for scrappage or replacement
- Indirect incentives
- Fuel conversion - CNG


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Technology Conclusions

- Scrappage schemes must target high polluters
- Scrappage schemes require strong enforcement of emission controls
- Scrappage without replacement effective for private cars
- Scrappage with replacement for public transport
- Fuel conversion - long-term economics, infrastructure needs, quality of retrofits

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Environmental Strategy Implications

- Technical coherence – fuel, catalyst, infrastructure
- Inclusive motivation – balance objectives with social, economic concerns
- Comprehensiveness – urban transport requires actions on many fronts
- Careful prioritization – best technology often not cost-effective


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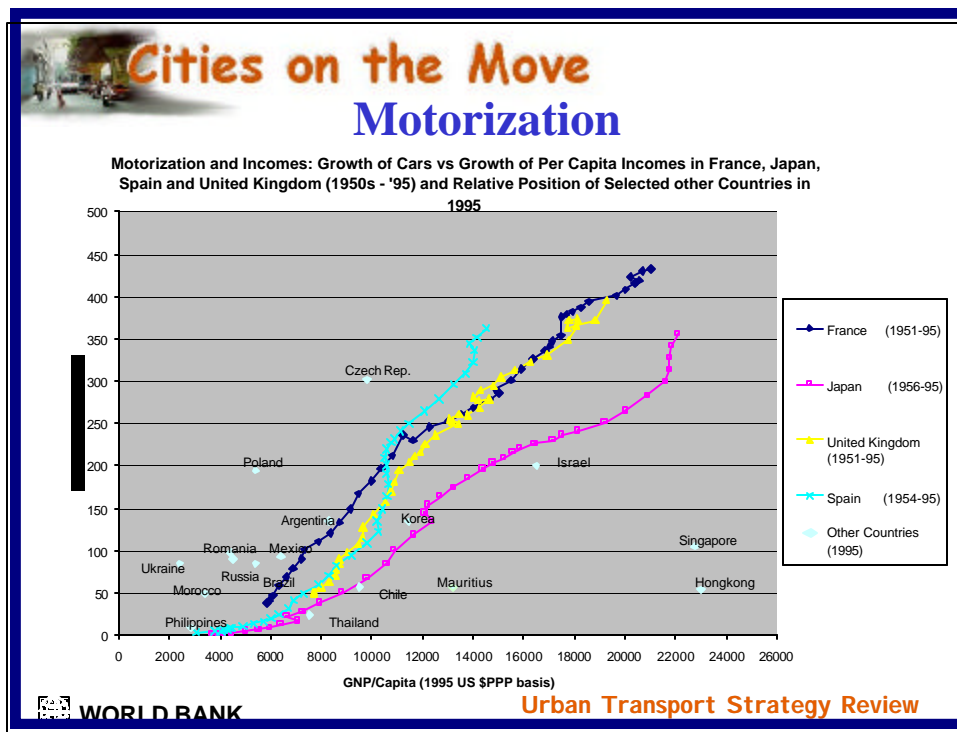



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Institutional Dimensions

- Integrated urban transport responsibility
- Locally empowered institutions
- Technical competence – policy analysis and design
- Fiscal Capacity – local responsibility supported by adequate resources


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Weblinks

- To Access the Full (draft) Text of the Bank's forthcoming Urban Transport Strategy Review Paper:
<http://wbln0018.worldbank.org/transport/utsr.nsf>
- To Access the Bank's Transport website:
<http://wbln0018.worldbank.org/transport/index.html>



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