

## Summary of Synthesis & Recommendations

Regional Workshop: Transport Planning,  
Demand Management & Air Quality,  
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### How the synthesis was prepared?

- Based on presentations
- Outputs of working groups
- Comment and discussion
- Feedback on draft synthesis

## Transport and Air Pollution – Main Problems

- Transport is the main contributor for most pollutants
- Particulate Matter (PM) is a key issue. But other pollutants also of concern
- Urbanization, motorization and associated congestion rapidly increasing
- Diverse Asian city experiences and socio-economic factors that need to be addressed
- Traffic congestion is seen as inevitable by many decision makers
- Key implementation issues include institutional & technical capacity

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## Definitions

- Transport planning – objective, analytical and directed to societal objectives
- Transport demand management (TDM) – seeks to influence demand and indirectly supply to manage congestion and minimize vehicle km. Integral part of Transport Planning
- Transport Systems Management (TSM) – aims to make best use of existing infrastructure and concentrates on managing person-movements rather than vehicle flows.

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## Way Forward

- Achievement of sustainable development requires comprehensive short to long term actions
- Dealing with air pollution from mobile sources requires:
  - Good transport planning; as well as
  - Standards/ measures for clean fuels, clean new vehicles and keeping in-use vehicles clean
- An integrated approach is required

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## Land Use/ Transport Planning

- Comprehensive planning of land use and effective urban development management are vital for sustainable development
- Social dimensions need to be better integrated in plans
- Planning and associated urban development management are most appropriately dealt with at a local level when suitable capacity exists
- Effective planning has 2 components:
  - Long term comprehensive plans ie metro scale
  - Site or locality-specific plans
- Successful implementation requires an appropriate organizational structure and significant technical capacity

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## Land Use/ Transport Planning (Cont)

- Timely provision of transport (and water) infrastructure useful instrument in structuring land uses
- Integrated planning models to aid improved decision making are required but these should be verified for local use
- Key data gaps should be addressed – eg on vehicle fleets and their characteristics; and on emission factors

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## Transport Demand Management

- Motorization growth path can be influenced by appropriate policies
- Urgent need for low cost TDM measures
- Bias towards private vehicles is common in Asia's cities  
→ declining public transport use
- Public transport use should be promoted to achieve sustainability
- TDM is a complex and multi-agency activity – may lead to implementation problems
- TDM measures should be implemented on an integrated basis
- Parking policies are a useful TDM instrument
- Benefits of traffic restraints vary – individual consideration

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## Transport Systems Management

### Traffic Management

- Overemphasis on hardware
- Vehicle mix/ speed variability a key issue
- Effective planning and implementation requires a sound technical capacity
- Institutional issues also important – eg role of police
- Good education & enforcement is very beneficial
- Corruption needs to be minimized

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## TSM (cont)

- Public Transport
  - Role of PT varies widely; in most cities still a dominant mode but mode share declining
  - Diesel-powered PT vehicles major source of PM
  - Policies to improve air quality - clean air vehicle directly (veh upgrade) or indirectly (attract car drivers)
  - Improvements to PT best implemented when PT operators are efficient
  - Efficiency can be enhanced by competition and appropriate regulatory capacity
  - Bus lanes and Busway systems improve efficiency
  - Rail systems have a role in large metro cities
  - In many cases busways are cheaper with similar performance
  - Rail and busway systems → need to be integrated with supporting modes, good passenger information and common ticketing

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## TSM (cont)

- Non Motorized Vehicles and Pedestrians
  - Do not pollute the air
  - NMVs a major mode and source of employment in many cities
  - Prevailing attitude to NMVs is usually negative
  - Improvements to NMVs are cost-effective with positive environmental impact
  - NMV planning should be integral to overall transport planning
  - Low cost investments to enhance pedestrian movements are also beneficial
  - Policies that mandate accessibility of public transport to where people are enhances public transport use

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## Resource Mobilization, Taxation, Pricing, Subsidies

- Road taxes and transport pricing often confused – latter seeks to influence time & location of demand
- Comprehensive transport pricing is feasible (eg Singapore) unlikely to be practicable for Asian cities in general for some time
- Fuel taxes - simple, practical means to moderate demand and raise revenues
- Some earmarking for environmental improvement is justifiable
- Subsidies for PT specifically for air quality improvement (a) veh upgrades or (b) keeping low fares to attract car drivers but this is not usually very successful

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## Resource Mobilization, Taxation, Pricing, Subsidies (cont)

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- Subsidies for alternative fuels etc should be explicit
- Other measures such as differential vehicle taxes, fuel type taxes, PT franchising policies and scrappage schemes all need careful consideration
- To ensure scarce resources well spent, need to observe economic criteria (all costs/ benefits incl environment) in setting priorities
- Private sector should be mobilized

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## Institutional, Legal and Implementation Issues

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- Transport planning has multiple objectives incl: efficiency, safety and then perhaps air quality
- In many cities, overlapping organizational structure and weak technical capacity
- Optimal institutional arrangement for transport planning → organization with an integrated transport responsibility
- In short term, most cities must rely on existing organizations and develop ways of getting the best out of them: (1) good stakeholder consultation (2) high level coordination/ leadership (3) appropriate packaging of work

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## Institutional, Legal and Implementation Issues (Cont)

- Responsibilities for transport planning and air quality management should be devolved to local agencies when capacity is present
- Legal basis should be clarified – responsibilities, technical aspects etc
- Experience from USA suggests that mandating transport plans to conform to air quality plan objectives is very beneficial

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## Promotion, Awareness and Education

- Public attitudes influence politicians and increase political will to tackle problems
- Health impacts should be understood and communicated - very persuasive
- Open media, legislation for "right to know", and better process of public hearings needed
- NGOs & research institutes have a key role
- Good practice examples urgently needed
- Technically robust and understandable air quality/transport plans important to achieve public "buy in"

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