

Case Studies on Mega Cities

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The Case Study Cities

- Hong Kong SAR, China (Q)
- Tokyo, Japan (Q)
- Seoul, Korea (Q)
- Istanbul, Turkey (V)
- London, United Kingdom (V)
- New York City, USA (V)
- Lagos, Nigeria (Q)

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Problem	HK	Tokyo	Seoul	Istanbul	London	NYC	Lagos
Informal settlements (land tenure, development approvals, building control)	N	Y	N	Y	N	N	Y
Traffic management	Y	Y	Y	Y	Y	N	Y
Natural hazards (floods, earthquakes, fires)	N	Y	Y	Y	Y	Y	Y
Unclear responsibilities and mandates (within or between administrations)	N	N	N	N	N	N	Y
Uncoordinated planning	N	N	-	N	N	N	Y
Water management (fresh water supply and waste-water disposal)	Y	Y	N	Y	N	N	Y
Provision of continuous electrical power	N	Y	N	N	N	N	Y
Visual pollution and garbage disposal	Y	Y	N	N	N	Y	Y
Air and water pollution control	Y	Y	Y	N	Y	Y	Y
Population growth	-	-	-	Y	Y	-	-

Major Problems

Problem	HK	Tokyo	Seoul	Istanbul	London	NYC	Lagos
Informal settlements (land tenure, development approvals, building control)	N	Y	N	Y	N	N	Y:High
Traffic management	Y:Med	Y	Y	Y	Y	N	Y:High
Natural hazards (floods, earthquakes, fires)	N	Y	Y	Y	Y	Y	Y:High
Unclear responsibilities and mandates (within or between administrations)	N	N	N	N	N	N	Y:High
Uncoordinated planning	N	N	-	N	N	N	Y:High
Water management (fresh water supply and waste-water disposal)	Y:Med	Y	N	Y	N	N	Y:High
Provision of continuous electricity and power	N	Y	N	N	N	N	Y:High
Visual pollution and garbage disposal	Y:Med	Y	N	N	N	Y	Y:High
Air and water pollution control	Y:Med	Y	Y	N	Y	Y	Y:High
Population growth	-	-	-	Y	Y	-	-

Findings from Case Studies

- Informal settlements are a problem in some cities
- Traffic management is a common problem
- Capacity to plan, prepare, respond and recover from disasters is a common issue
- Fragmented responsibility for matters such as water management and land use
- Population growth is a regional or national issue and needs to be addressed at that level
- Stress to existing systems and facilities, even for those cities not experiencing problems at the moment

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Key Tools Needed

- Strengthening planning laws to cover not just the planning process, but the monitoring and implementation of the laws.
- Planning and development control over water catchments and other sensitive areas affecting the city.
- Good communication between all city units and strong partnerships between the city administration and agencies at other levels of government, especially in infrastructure development and maintenance.
- Coordinated planning and implementation involving transportation, utilities and other infrastructure providers.
- Working with the private sector to ensure financial and property markets had the capacity to meet current and future needs for jobs and housing.
- A strong focus on disaster management
- In the developing world, a stronger focus was needed on good governance, institutional development and capacity building.

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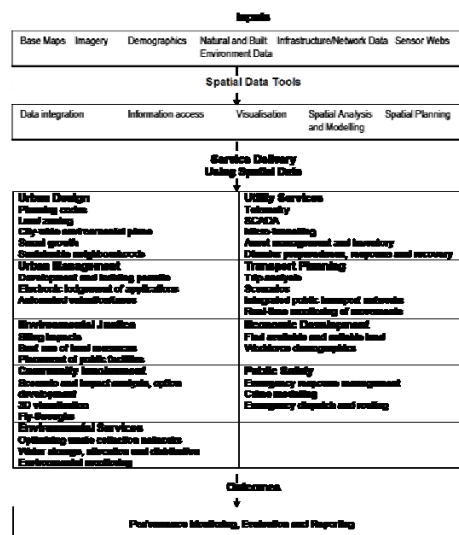
Importance of Spatial Tools

- It was interesting to note that those senior administrators interviewed by the working group candidly admitted the importance of spatial data and analysis in helping them do their job. As users of spatial information, they personally believed that access to timely and accurate spatial data and tools was a key requirement in managing functions such as city planning.

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Use of Spatial Data in Cities



- All 7 cities reported that they had some elements of an SDI
- Most cities reported that they had only small “central” GIS units, under-resourced and generally incapable of providing a comprehensive citywide SDI
- Missing capabilities included no common metadata, spatial data policies and standards, formal data sharing arrangements between units or agencies or shared data access mechanism
- Collection and usage is so widespread that data integration, access and use was hampered by the diversity of data holdings and systems managed by individual units
- Getting data for planning processes can be difficult, costly and slow - fundamental data management standards not used

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Immediate Requirements

- Complete base mapping and conversion of base data into digital
- Common street address file and integrated cadastral database
- Solving internal institutional arrangements to provide access and greater cooperation and cost sharing in new data collection
- A broader understanding within city administration about benefits and stronger sponsorship and more resources for SDI development
- Access to expertise
- Development of an agreed spatial data strategy
- A spatially-enabled one-stop citizen interface.

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