



# PROMOTING COOPERATION FOR SUSTAINABLE URBAN DEVELOPMENT

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Key message:

**Integrated, metropolitan-wide policy approach for urban sustainability**

1. Experience in OECD cities: compact city policies
2. Urban green growth in dynamic Asia
3. OECD work on metropolitan indicators



# COMPACT CITY POLICIES



OECD (2012), Compact City Policies: A Comparative Assessment, OECD Green Growth Studies, OECD Publishing.

<http://dx.doi.org/10.1787/9789264167865-en>

Also visit our website:

[www.oecd.org/gov/regional-policy/compact-city.htm](http://www.oecd.org/gov/regional-policy/compact-city.htm)



# The concept of compact City

## Dense and proximate development patterns

- Urban land is intensively utilised
- Urban agglomerations are contiguous or close together
- Distinct border between urban and rural land use
- Public spaces are secured

## Urban areas linked by public transport systems

- Effective use of urban land
- Public transport systems facilitate mobility in urban areas

## Accessibility to local services and jobs

- Land use is mixed
- Most residents have access to local services either on foot or using public transport

... not at a city scale (in an administrative term), but at the **metropolitan** scale.

... not only for small- and medium-sized cities, but it is relevant to **cities of all sizes**, even to mega-cities!



# Compact city policies' contribution to urban sustainability

Compact city policies can generate **synergistic** impacts:

Compact city characteristics	Environmental benefits	Social benefits	Economic benefits
<b>Less automobile dependency</b>	<ul style="list-style-type: none"><li>– Fewer CO<sub>2</sub> emissions</li><li>– Less pollution from automobiles</li></ul>	<ul style="list-style-type: none"><li>– <b>Lower transport costs</b></li><li>– <b>Higher mobility for people without access to a car</b></li><li>– <b>Improved human health due to more cycling and walking</b></li></ul>	<ul style="list-style-type: none"><li>– Development of green jobs/ technologies</li></ul>
<b>Shorter intra-urban distances</b>	<ul style="list-style-type: none"><li>– Fewer CO<sub>2</sub> emissions</li><li>– Less pollution from automobiles</li></ul>	Higher mobility of low-income households, due to lower travel costs	Higher productivity due to shorter travel time for workers
<b>More efficient public service delivery</b>	-	Public service level for social welfare maintained by improved efficiency	Lower infrastructure investments and cost of maintenance



Policy complementarity:

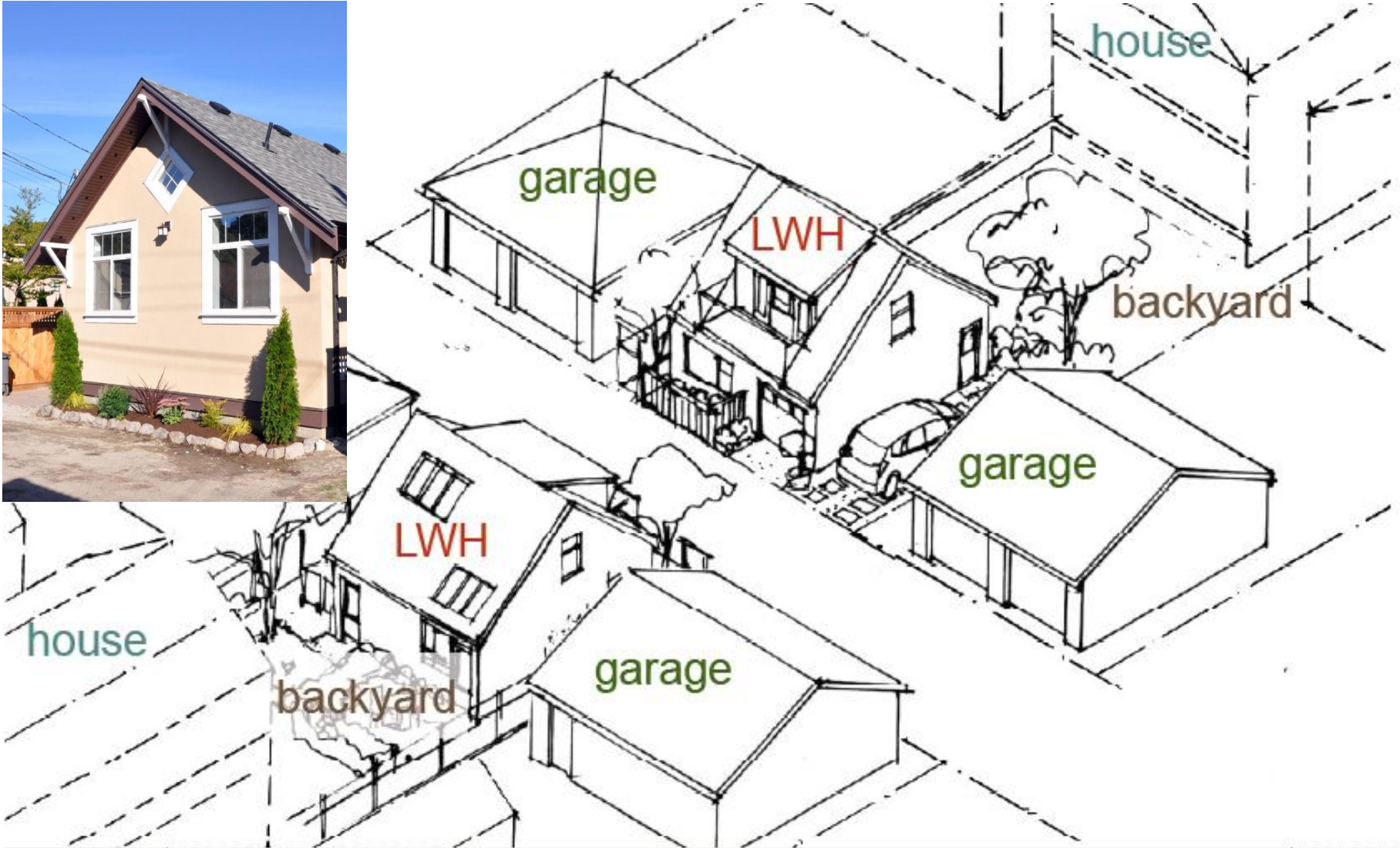
## Identified policy strategies

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1. Set explicit compact city goals
2. Encourage dense and contiguous development at urban fringes
3. Retrofit existing built-up areas
4. Enhance diversity and quality of life in urban centres
5. Minimise adverse negative effects



# Policy complementarity: Densification + affordability (Vancouver)







Policy complementarity:

# Storm water + heat island + perceived density (Portland)







# OECD GREEN CITIES PROGRAMME:

## URBAN GREEN GROWTH IN DYNAMIC ASIA



# OECD's Green Cities Programme (2010 – )

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- Conceptual framework (2011)
- Case studies (2011-12)

## ***City-level***

Paris (2011)

Chicago (2011-12)

Kitakyushu (2012)

Stockholm (2012)

## ***National-level***

Korea (2011)

China (2012)

- Synthesis report: *Green Growth in Cities (2013)*
- Next step: extending the scope to cities in developing countries



# Economic growth, consumer behaviour and greening of cities

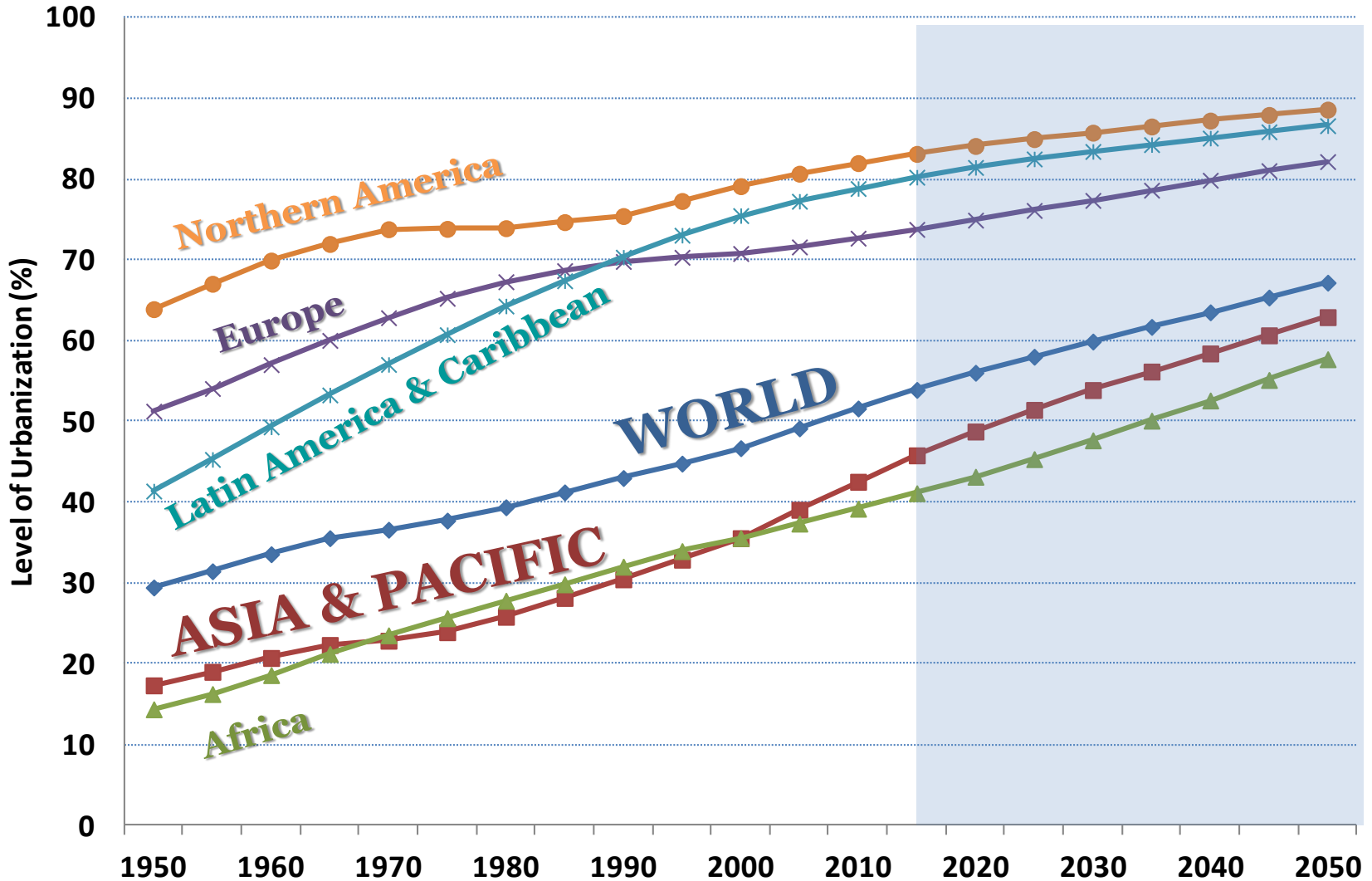
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- Income growth raises demand for:
  - personal living space
  - personal mobility
  - energy consuming appliances (air conditioning, etc.)
- How to de-couple income growth and GHG emissions?
- How to accelerate necessary actions at an earlier stage of income growth and minimize the environmental consequences?



Dynamic growth in Asia:

# Urbanising fast, but still a long way to go ...

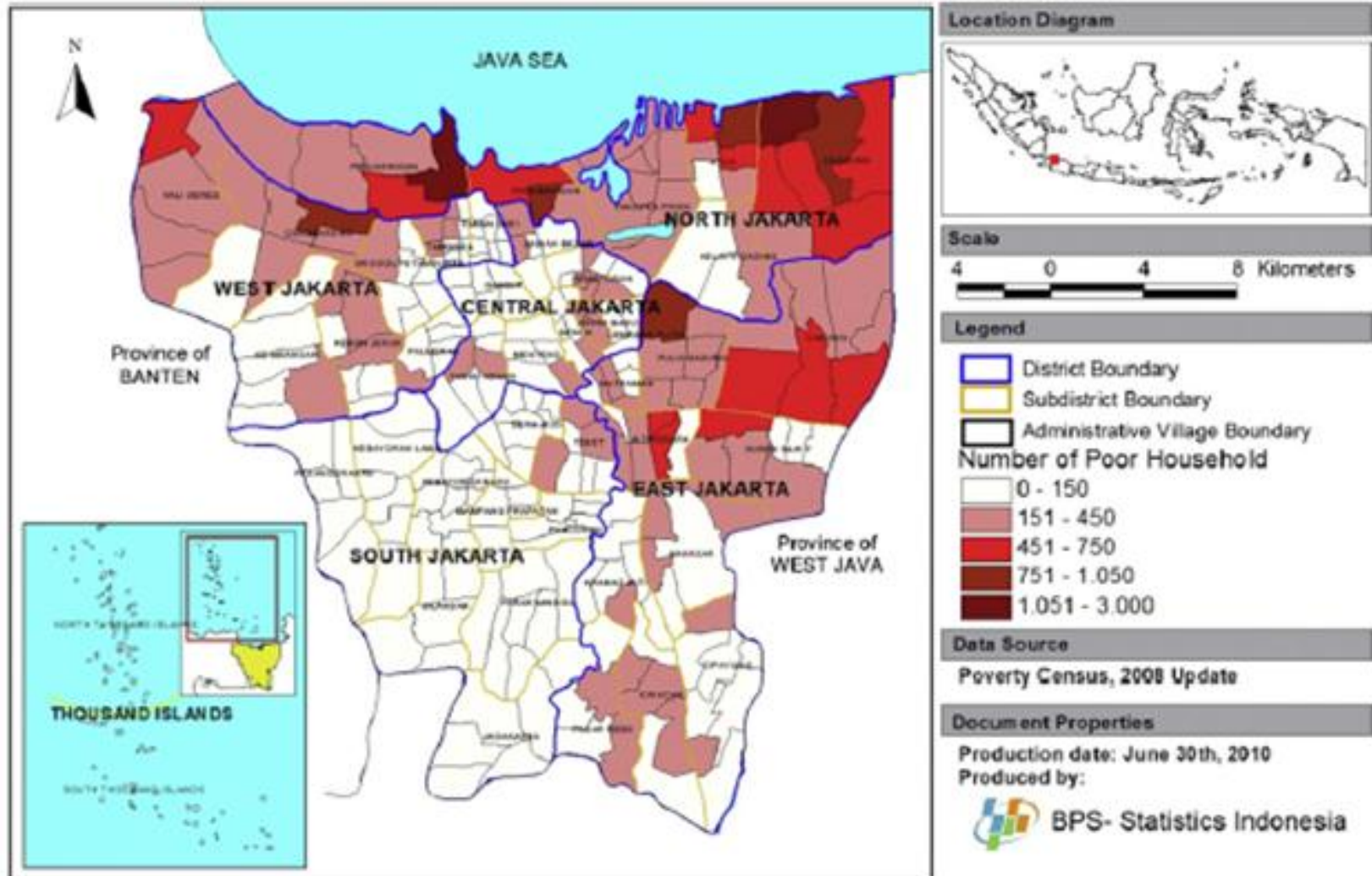


Source: ADB (2012), Key indicators for Asia and the Pacific 2012, 3<sup>rd</sup> Edition.





# Global and local environmental risks: Vulnerability to climate change

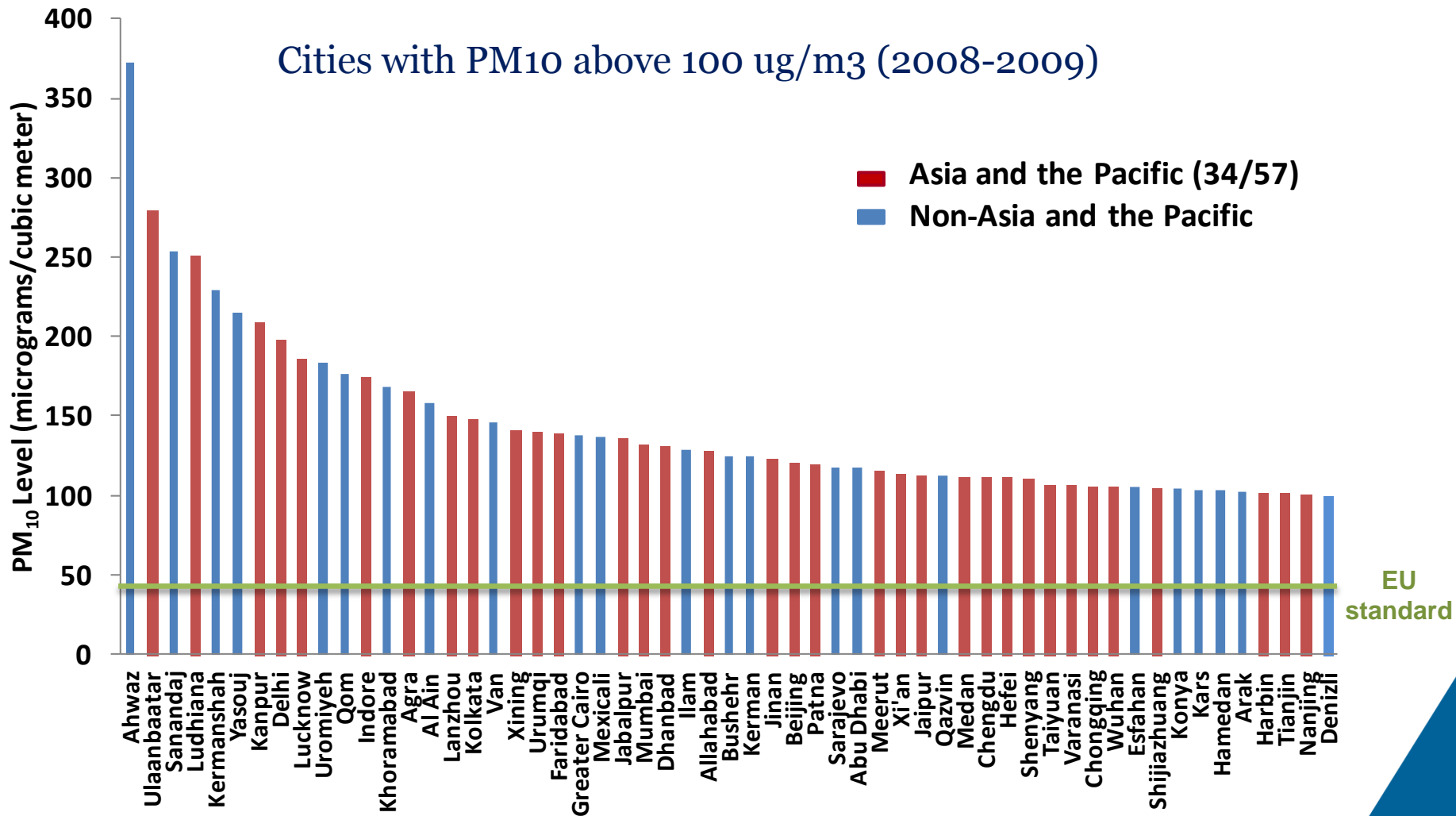


Source: Firman, T., et al. (2011)



## Global and local environmental risks:

# Human health threatened by poor air quality





# Cities under current investigation





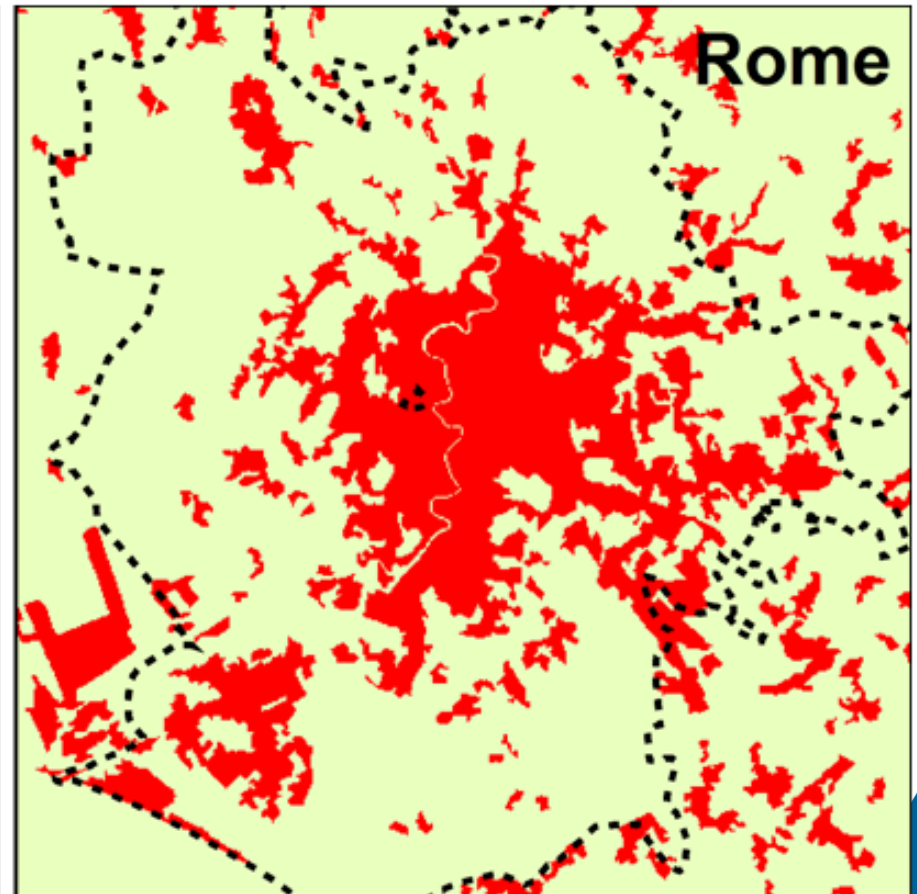
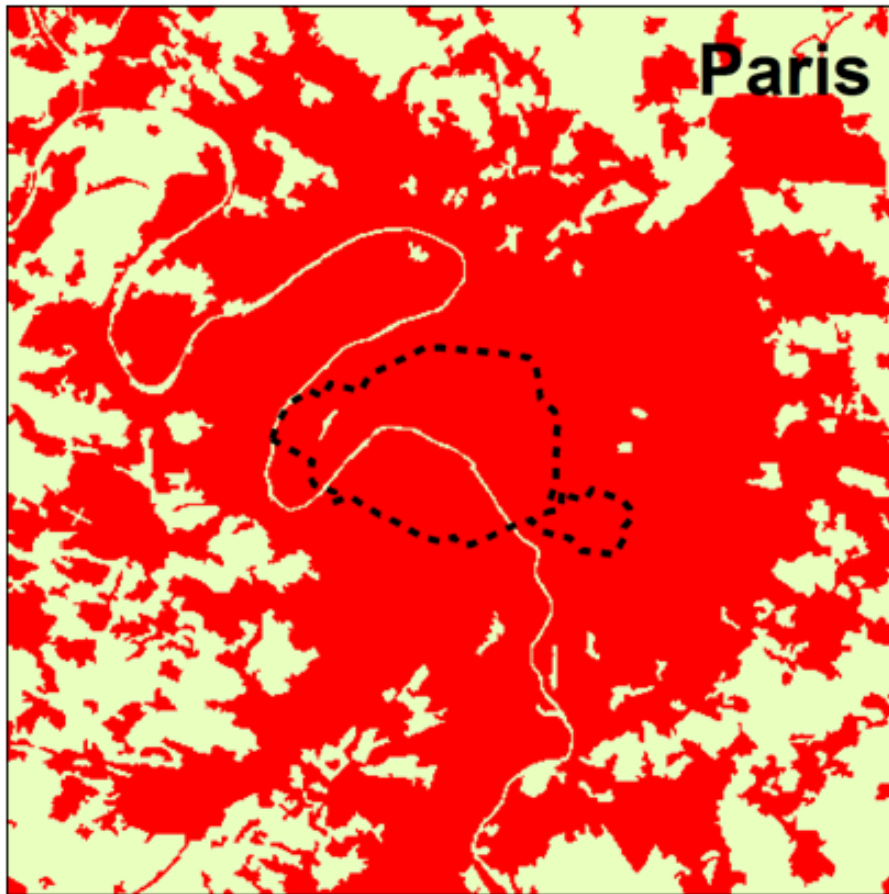
# KEY INDICATORS TO MONITOR POLICY PERFORMANCE

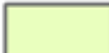




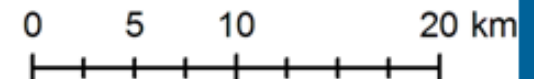


# Shifting towards Functional regions

## Urban areas vs. administrative cities



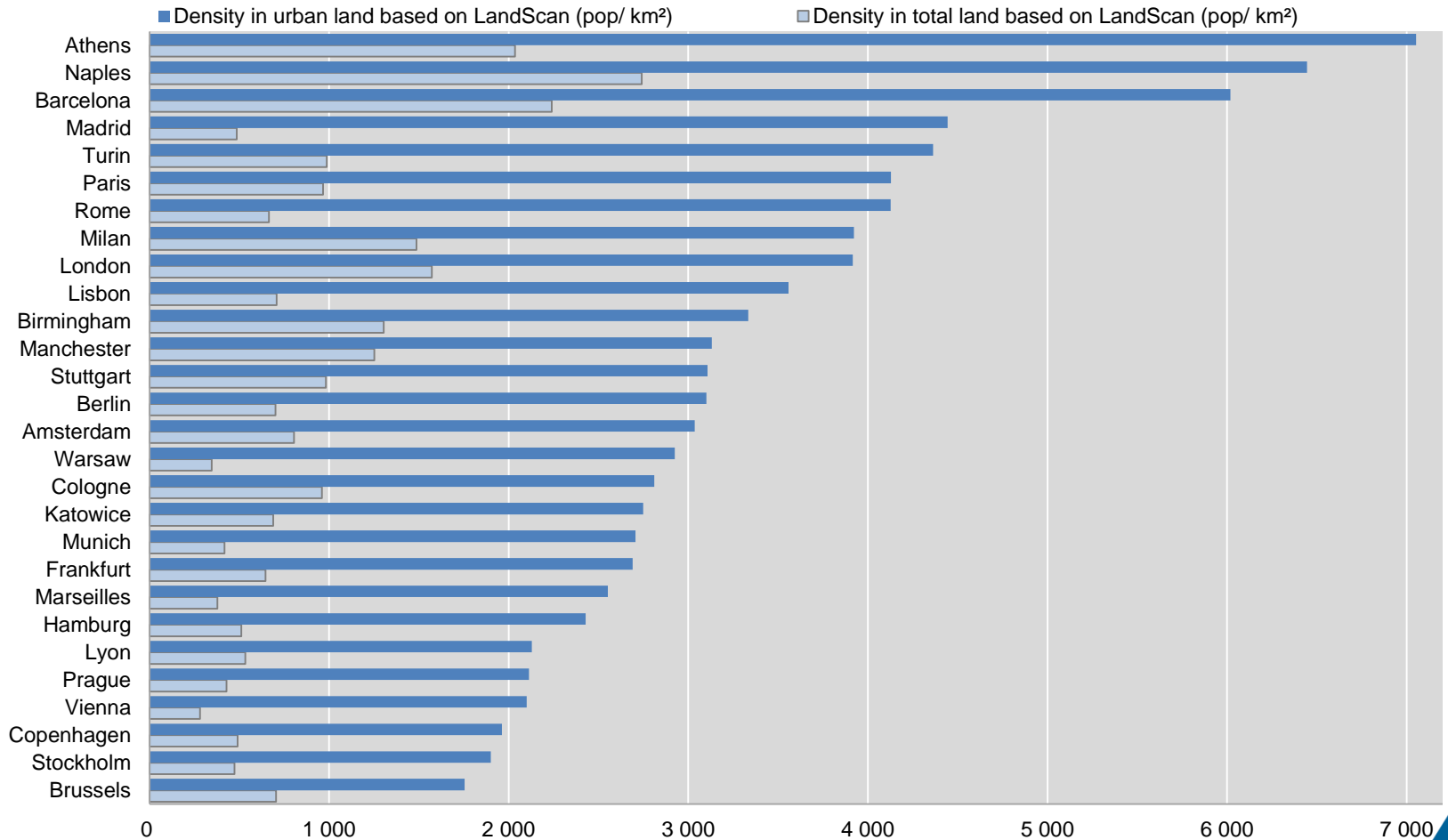
 Non-urban  Urban  Administrative unit boundaries





# Population density on urban land

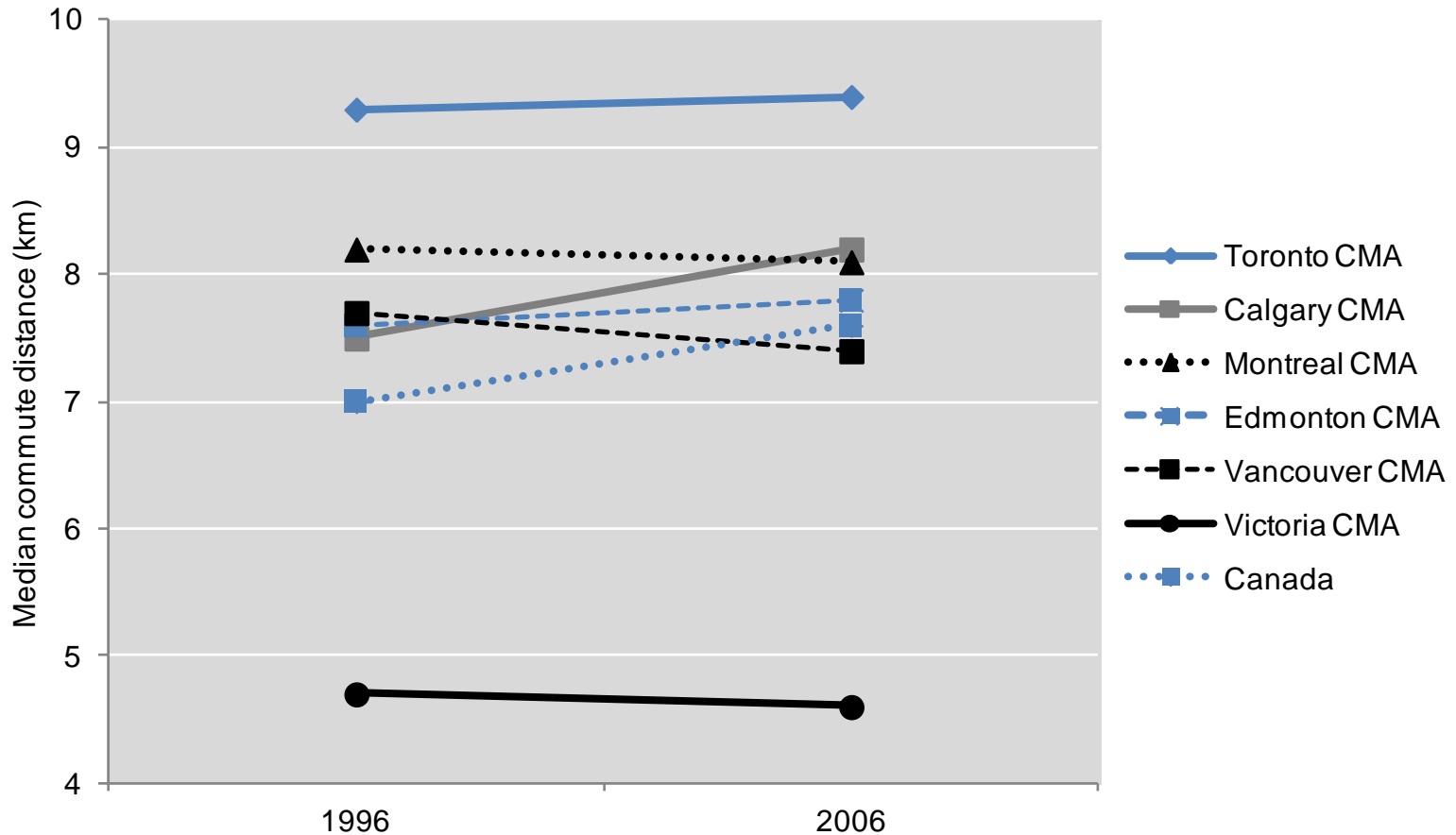
## Density in 28 metropolitan areas in Europe





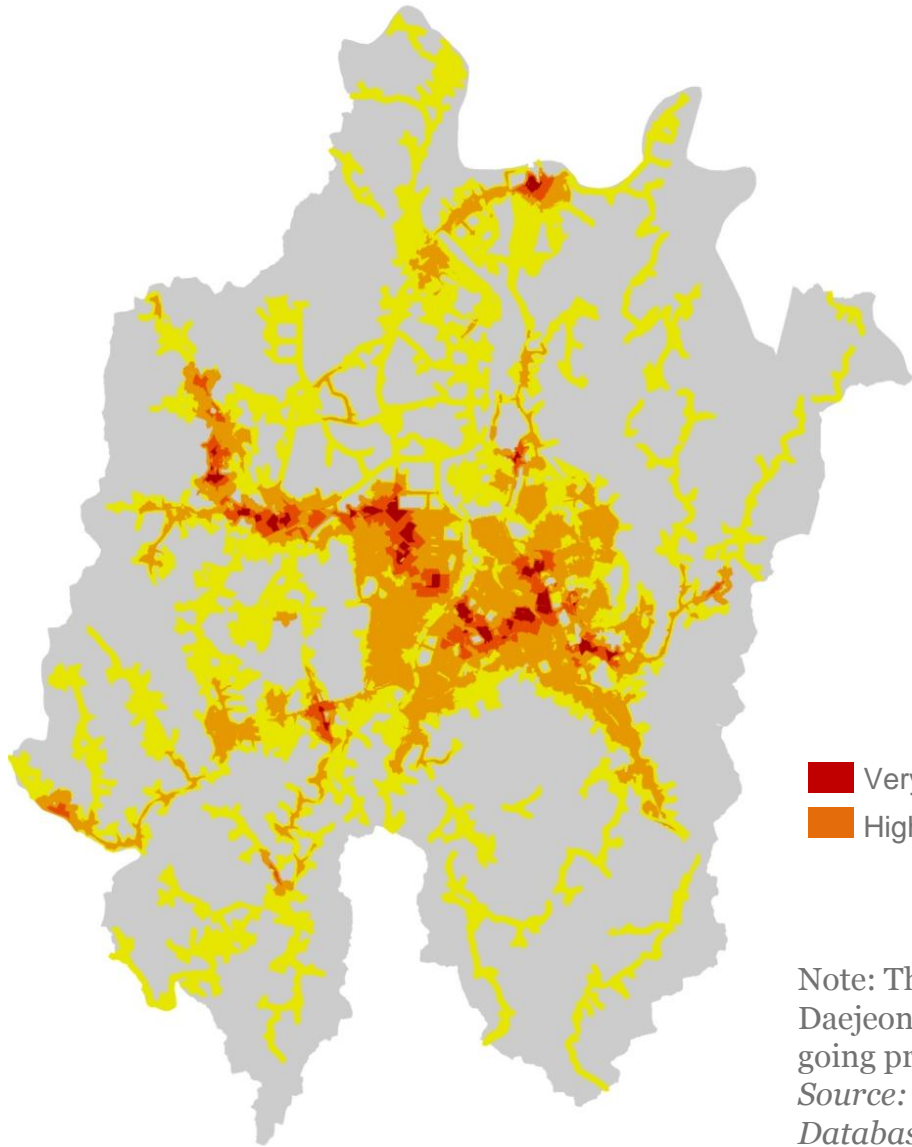
# Median commute distance

for selected metropolitan areas in Canada, 1996-2006

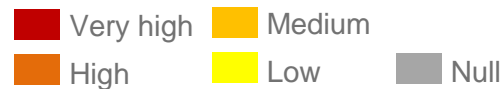




# Accessibility to public transport



- Methodology
  - Distance (5 or 10 minute walk from stations) based on road network
  - Average frequency ( $\geq 5$  or  $< 5$  times per hour) is combined with distance
- Result
  - 51% of city's population are living in the area accessible by public transport (3 % of very high, 7% high, 34% medium, 6% low accessibility)



Note: This analysis is based on administrative border of Daejeon, Daejeon is chosen considering data availability and relevance to the on-going project: Compact City Study; Korea

Source: OECD's elaboration based on Korea Transport Database(2011)





# OECD Metropolitan Database: a tool for policy-making

Interactive maps and data on metro areas  
<http://measuringurban.oecd.org/>

