# OECD Green Growth Studies Compact City Policies: A Comparative Assessment

This OECD report offers a comprehensive understanding of the compact city concept, its role in today's urban contexts, and the potential outcomes of compact city policies. It examines compact city policy practices across the OECD in relation to green growth objectives and the role of indicators. It also proposes compact city policy strategies for achieving better outcomes and highlights governance challenges. Importantly, the report emphasises how urban spatial policies can help foster regional economic growth while preventing environmental degradation and climate change. It thus addresses a central concern of the OECD Green Growth Strategy, and makes an important contribution to it.







#### What are compact cities?

The three key characteristics of a compact city identified in the report are:

- dense and proximate development patterns
- urban areas linked by public transport systems
- accessibility to local services and jobs

Current urban trends underscore the need for compact cities... Compact cities can play a significant role in responding to current urban trends:

- Continuing **urbanisation** underscores the need to conserve land resources. By 2050, 70% of the world's population and 86% in OECD countries will live in urban areas. Land consumption for built-up areas will increase more rapidly than the population in 30 out of 34 OECD countries.
- Global warming raises new issues for cities and requires new responses.
- Increasing energy prices can affect living patterns, for example by raising transport costs.
- The recent **economic crisis** has affected local governments' finances, making it more difficult to invest in new infrastructure.
- As demographics change, policy makers need to adapt urban policies. Population levels in Germany and Japan are already decreasing. The elderly population has doubled over the past 60 years in OECD countries and tripled worldwide. The average household size has also decreased in OECD countries.

## How can compact city policies contribute to urban sustainability?

Compact city policies can help achieve urban sustainability in many mutually reinforcing ways...

#### **Environmental benefits:**

- Shorter intra-urban distances and less automobile dependency can help reduce energy consumption and CO<sub>2</sub> emissions.
- Compact cities conserve farmland and natural biodiversity around urban areas.
- Compact cities create more opportunities for urban-rural linkages. Nearby farming encourages local food consumption and reduces food transportation, which also helps reduce CO<sub>2</sub> emissions.

#### Economic benefits:

- Compact cities can increase the efficiency of infrastructure investment and reduce the cost of maintenance, particularly for line systems (transport, energy and water supply, waste disposal etc.)
- Compact cities give residents easier access to a diversity of local services and jobs.
- High density, combined with a diversity of urban functions, is claimed to stimulate knowledge diffusion and thus economic growth.
- It is also argued that the compact city generates new green needs that promote technological development and innovation, and thus stimulate growth.

#### Social benefits:

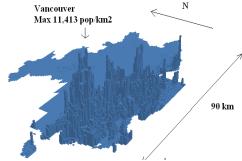
- Shorter travel distances and public transport systems mean lower travel costs; this facilitates the mobility of low-income households.
- Local services and jobs nearby contribute to a better quality of life.



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Tracking compact city policy outcomes requires quantitative studies and indicators Internationally comparable indicators can help monitor compact city policy performance so that metropolitan areas can benchmark their results and improve their policy actions. 18 core compact city indicators are proposed:

- Population and urban land growth
- Population density, measured by 24hour average population over the surface of urban land
- Urban land cover
- Average trip distance, an indicator of proximity
- Share of trips using public transport
- Proximity to public transport, measured by share of population within walking distance of public transport stations
- Matching local services and homes



Urban density map of Vancouver

Different local circumstances call for different policy responses

The OECD compact city survey revealed that most national governments currently have elements of compact city policies. The survey and case studies of five OECD metropolitan regions (Melbourne, Vancouver, Paris, Toyama and Portland) showed that no single, comprehensive compact city model is applicable to all cities and regions, because each must take local circumstances into account. The comparative assessment reveals that several links between local circumstances and policy responses. For example, in fast-growing regions with strong development pressures, regulatory tools are important to prevent uncontrolled urban extension, and complementary fiscal tools can orient market based decisions about the location and volume of development. In contrast, a region with a shrinking population may find measures to contain urban development difficult and sophisticated measures to induce people to move to urban centres may therefore be required.

## Five recommendations for compact city policy strategies

The report proposes five key policy strategies and 20 sub-strategies:

1. Set explicit compact city goals	<ul> <li>Establish a national urban policy framework</li> <li>Encourage metropolitan-wide strategic planning</li> </ul>
2. Encourage dense and contiguous development at urban fringes	<ul> <li>Increase effectiveness of regulatory tools</li> <li>Target compact urban development in green-field areas</li> <li>Set minimum density requirements for new development</li> <li>Strengthen urban-rural linkage</li> </ul>
3. Retrofit existing built- up areas	<ul> <li>Promote brown-field development</li> <li>Harmonise industrial policies with compact city policies</li> <li>Regenerate existing residential areas</li> <li>Promote transit-oriented development in built-up areas</li> <li>Encourage "intensification" of existing urban assets</li> </ul>
4. Enhance diversity and quality of life in urban centres	<ul> <li>Promote mixed land use</li> <li>Attract residents and local services to urban centres</li> <li>Promote focused investment in public space and foster a "sense of place"</li> <li>Promote a walking and cycling environment</li> </ul>
5. Minimise adverse negative effects	<ul> <li>Counteract traffic congestion</li> <li>Encourage the provision of affordable housing</li> <li>Promote high-quality urban design</li> <li>Encourage greening of built-up areas</li> </ul>

### The key role of metropolitan governance

The spatial unit used for the compact city concept is the **functional metropolitan area**. Policy design, planning and implementation, along with programme and service delivery aimed at achieving compact city outcomes, inevitably imply **multi-level governance** arrangements. The case studies identifies four common thematic elements that together can lead to the achievement of compact city outcomes:

- A metropolitan-wide, integrated, long-term vision
- A clear articulation of the roles and responsibilities of all key actors and stakeholders
- Vertical and horizontal co-ordination networked governance arrangements
- Accountability, transparency and reporting regimes to measure progress in implementing the vision and to adjust strategies accordingly

#### For more information

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For further reading

- Redefining "Urban": A New Way to Measure Metropolitan Areas (2012)
- OECD Regional Outlook (2011)
- Towards Green Growth (2011) / Towards Green Growth: Monitoring Progress: OECD Indicators (2011)
- Cities and Climate Change (2010)