Governing the City

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Foreword

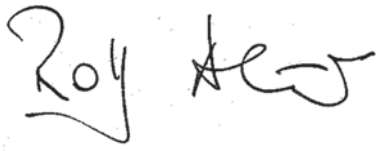
Approximately 200 metropolitan areas of more than 500 000 inhabitants are home to around half the OECD's population. Governing these urban agglomerations effectively is crucial for the economic success and well-being of the more than 500 million people in OECD countries that live in them.

"Governing The City" aims to provide policy makers with the insights and tools to adapt the governance arrangements of their metropolitan areas to the requirements of a 21st century urban society and its complex economy. A special focus is placed on land-use and transport policies – two of the most important policy fields in metropolitan areas. Policies in these fields need to be harmonised with each other, but often responsibilities lie with different institutions that do not co-ordinate effectively. The report provides solutions for reconciling transport and spatial planning policies in metropolitan areas.

The report draws on the OECD Metropolitan Governance Survey, which generates a new quantitative dataset and offers insights into current experiences and practices of governing cities. They are illustrated by concrete examples from six in-depth case studies of Athens (Greece) Chicago (US) Daejeon (Korea), Frankfurt (Germany), Marseille (France) and Puebla (Mexico). The evidence shows that only few metropolitan areas have comprehensive governance approaches in place and the resulting inefficiencies can significantly hamper economic performance and decrease the well-being of their citizens. Nevertheless, it also highlights many innovative solutions that have been developed in recent years. They have the potential to greatly improve the governance of metropolitan areas and promote better economic and social outcomes.

Understanding what constitutes good governance arrangements for metropolitan areas is only the first step. It is equally important to know how to get there. How to initiate and carry through a successful reform process which is supported by all stakeholders? Again, the case studies and the survey identify crucial factors to overcome gridlock and implement reforms that are long-lasting and effective. Among them are leadership by the national government, buy-in by municipal governments and support from the business sector and the civil society.

This report advocates the importance of metropolitan governance reform, and hopes to inspire policy makers to reform and modernise the governance of their metropolitan areas.



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Acronyms and abbreviations

AMMAC	Association of Mexican Municipalities
AMU	Aix Marseille Université (France)
AOT	Inter-municipal transport authority (France) *Autorité organisatrice des transports*
BRT	Bus rapid transit
CATS	Chicago Area Transportation Study
CMAP	Chicago Metropolitan Agency for Planning
COG	Council of government (United States)
CTA	Chicago Transit Authority
DUIS	Sustainable Integrated Urban Development (Mexico) *Desarrollos Urbanos Integrales Sustentables*
EPCI	Inter-municipal authority (France) *Établissement public de coopération intercommunale*
FUA	Functional urban area
GDP	Gross domestic product
GLA	Greater London Authority
GVA	Gross value added
HRI	Helsinki Region Infoshare
LBB	London Business Board
MGSDP	Metropolitan Glasgow Strategic Drainage Partnership (United Kingdom)
MOLIT	Minister of Land, Transport and Maritime Affairs (Korea)
MPC	Metropolitan Planning Council (United States)
MPO	Metropolitan planning organisation
NGO	Non-governmental organisation
NIPC	Northeastern Illinois Planning Commission
NSRF	National Strategic Reference Framework
OASA	Athens Urban Transport Organisation
ORSA	Organisation for the Planning and Environmental Protection of Athens
PEDA	Regional Association of Municipalities of Attica

PPP	Public-private partnership
RMV	Rhein-Main Transport Association (Frankfurt) *Rhein-Main Verkehrsverbund*
ROP	Regional Operational Programme (Greece)
RTA	Regional Transportation Authority (Chicago, United States)
RVFRM	Regional Authority FrankfurtRheinMain *Regionalverband FrankfurtRheinMain*
SCOT	Territorial spatial plan (France) *Schéma de cohérence territoriale*
SMTC	Departmental public transport syndicate (France) *Syndicat Mixte des Transports en Commun*
TOD	Transit-oriented development
UGB	Urban growth boundary
UVF	Association of Municipalities (Frankfurt, Germany) *Umlandverband Frankfurt*
VRS	Verband Region Stuttgart (Germany)

Executive summary

Key findings: How are OECD metropolitan areas governed?

- More than two-thirds of OECD metropolitan areas have established a specific body in charge of organising responsibilities among public authorities for metropolitan wide development – hereinafter referred to as the metropolitan governance body. Further, there has been a renewed momentum in the number of metropolitan governance bodies created or reformed since the 1990s, against the backdrop of the early 1990s recession and the 2008 financial crisis.
- However, metropolitan governance arrangements come with great diversity and are rarely binding. Four main types of arrangements emerge from OECD experience: informal/soft co-ordination (52% of OECD metropolitan areas that have a metropolitan governance body); inter-municipal authorities (24%); supra-municipal authorities (16%); and a special status of "metropolitan cities" (8%). There is considerable diversity among (and sometimes even within) these four categories in terms of legal status, composition, power, budget and staff. For example, less than one quarter of OECD metropolitan areas has a governance body that can impose regulations.
- Experiences among case study regions, and beyond, suggest that metropolitan governance may not be the only solution, but certainly a critical part of the solution to improve growth and well-being. Many metropolitan areas with poor metropolitan governance arrangements are wedged in sub-optimal socioeconomic results (e.g., Athens-Attica could benefit from more effective inter-municipal co-ordination to better control sprawl; Puebla-Tlaxcala could better leverage the currently state-driven Metropolitan Fund to exploit economies of scale in infrastructure and other projects). Evidence shows that where metropolitan co-ordination has occurred, it often helped unlock significant development potential (e.g., when Marseille agreed on collaborative efforts, it achieved outstanding results such as the success of the European Capital of Culture 2013; the efficient integration of public transport around Frankfurt contributes to the region's economic buoyancy). Even wealthy metropolitan areas could further exploit their agglomeration benefits through more effective governance (e.g., finding win-win solutions to overcome high administrative fragmentation in Chicago could help solve transport bottlenecks). Finally, even those areas endowed with a metropolitan arrangement need to revisit its potential to reach out further (e.g., Daejeon enjoys strongly integrated metropolitan governance but could reinvigorate its sluggish growth by better co-ordinating with surrounding municipalities).
- Better integrating the governance of transport and the governance of spatial planning – which are, respectively, main fields of work for 70% and 60% of OECD metropolitan governance bodies – can contribute significantly to higher growth and well-being. While there is widespread consensus that better connecting transport and spatial planning decisions helps prevent costly consequences of urban sprawl and promotes balanced development, institutional barriers remain slow to dismantle. The responsibility for transport planning and spatial planning occasionally lies within the same entity, but more often within different entities, as illustrated in the experience of the different case study

regions. Co-ordination mechanisms need to be put in place to align strategic decisions and serve a common overarching goal for the development of the metropolitan area.

Key policy considerations: Steps for effective metropolitan governance reforms

- While the OECD does not advocate a specific model of metropolitan governance, experience suggests that metropolitan governance reforms need to reach beyond purely institutional changes to build a long-term process of co-operation, in which central governments can play a critical role by providing leadership and effective incentives.
- The presence of a metropolitan authority does not, in itself, guarantee better policy co-ordination. As metropolitan areas continue to evolve, even once well-functioning governance structures may eventually need to be adapted. A risk commonly encountered is that governments may attempt to replicate a specific type of metropolitan governance arrangement that is considered successful in one place, but which may not be entirely transferable elsewhere given the considerable variety of contexts.
- When looking to adopt a metropolitan governance arrangement, governments are invited to assess not only the trade-offs relating to it, but also the process of designing, implementing and sustaining the reform. The following steps can guide effective metropolitan governance reforms:
  - *Motivate collaboration by identifying concrete metropolitan projects*. Seizing the right window of opportunity in the economic, social and political context of a given territory will help lay the basic foundations for the reforms. Kick-starting collaborative initiatives around tangible projects on key public services can help rally forces at the initial stage and progressively lead to setting a "bigger picture".
  - *Build metropolitan ownership among key stakeholders*. Metropolitan governance reforms need one (or more) strong advocate(s) as the engine of the process. A relevant personality or institution often plays a pivotal role in steering change and creating or maintaining momentum for reform. Beyond municipalities, the national government, intermediate levels of government, the private sector, civil society and universities need to be actively engaged in the reform process.
  - *Tailor reliable sources of metropolitan financing*. The reform needs to assess how the new governance structure can respond to the financial needs of the metropolitan region, and how to match the new governance structure's responsibilities with corresponding financial resources. Securing an appropriate, reliable stream of funding helps avoid unfunded mandates and facilitates effective collaboration.
  - *Design incentives and compensations for metropolitan compromises*. Co-operation among municipalities works best on a voluntary basis with incentives from the top, but also when a strategy is elaborated to engage those who feel threatened by the reform and to leverage their buy-in (sometimes by giving out compensation for their anticipated losses).
  - *Implement a long-term process of metropolitan monitoring and evaluation*. Solid background research and scrutiny from unbiased experts creates and sustains credibility for the reform by strengthening the evidence base. Independent expertise and research capacity are required to demonstrate the need for change and the desirability of the proposed solutions to key stakeholders, as well as analyse and weigh different options against each other.

Part I

The governance of OECD metropolitan areas

Chapter 1

How do OECD metropolitan areas govern themselves?

This chapter describes how OECD countries currently organise the governance of metropolitan areas. It draws primarily from two axes of research, the first quantitative and the second qualitative: i) *the OECD Metropolitan Governance Survey, which collected and analysed data publicly available online about the governance structure of 263 OECD metropolitan areas that have over 500 000 inhabitants; and* ii) *field case studies in a selection of 6 OECD metropolitan areas (Aix-Marseille, France; Athens-Attica, Greece; Chicago, United States; Daejeon, Korea; Frankfurt, Germany; and Puebla-Tlaxcala, Mexico).*

Introduction

The question of how to better govern changing cities, where people work and live across administrative boundaries, often daunts policy makers tasked with delivering economic prosperity and quality public services. At present, about two-thirds of the OECD population lives in cities, and in the next decade there are expected to be nearly 500 cities with more than 1 million inhabitants. At the same time, urbanisation has mostly meant *sub*-urbanisation. As cities expand, their population, built-up area and socio-economic flows often spread from the core city towards the suburbs and beyond – leading to the emergence of metropolitan areas that sometimes span hundreds of municipalities. By nature, such rapidly changing socio-economic flows do not necessarily fit into long-established administrative boundaries.

Co-ordination across municipal boundaries is especially important in metropolitan areas. It is a prerequisite for effective policies in many fields because decisions in one municipality can have consequences on outcomes in other municipalities. For example, a newly built residential neighbourhood in one municipality might increase congestion throughout the metropolitan area if it is not connected to the public transport network in other municipalities. Therefore, effective policies regarding transport and land use (but also many other policy fields) necessarily go beyond the limits of individual municipalities in metropolitan areas.

Co-ordination between municipalities also helps to provide services at the right scale. Not every public service is best provided by individual municipalities. In some cases, it is more efficient to organise the service provision jointly for many municipalities. In other cases, a service provided in one municipality also benefits residents of other municipalities. In both cases, it is obvious that the service provision should be co-ordinated between the different municipalities.

If municipalities are left to pursue strategic policy choices in isolation, they may individually achieve their short-term targets, but collectively miss the point of growing or remaining globally competitive in the medium to long term. The lack of co-ordination may generate a cost not only for municipalities, but also for the larger urban agglomeration, and ultimately for the country. Statistically, increasing fragmentation of a metropolitan area into different municipalities is correlated to lower levels of labour productivity, but much of this effect can be mitigated by the right metropolitan governance structures. Governments at all levels need new ways to plan and finance infrastructure, transport, housing, schools, hospitals and other public services for spatially mobile firms and families. The search for metropolitan governance mechanisms that would help align policy objectives, reap economies of scale and enhance prosperity in metropolitan areas through metropolitan governance (which is defined as organising responsibilities among public authorities in metropolitan areas) is still high on the agenda – and its success often depends on the support of the central government. The need for more effective metropolitan governance is all the more salient in the context of recent crises and long-term pressure on public finances.

This chapter describes how OECD countries currently organise the governance of metropolitan areas. In particular, it draws from two axes of research: the OECD Metropolitan Governance Survey, which collected and analysed the public data available online about the governance structure of 263 OECD metropolitan areas over 500 000 inhabitants; and field case studies in a selection of 6 OECD metropolitan areas (Aix-Marseille, France; Athens-Attica, Greece; Chicago, United States; Daejeon,

Korea; Frankfurt, Germany; and Puebla-Tlaxcala, Mexico) conducted over the 2013-14 period. As cities grow, the number and the scope of actors involved in urban policy continue to grow with them and raise co-ordination challenges. The chapter highlights the following main points: there have been numerous initiatives to develop metropolitan governance mechanisms to address the challenges of administrative fragmentation, albeit with great variation and rarely in a binding manner; the choice of a metropolitan governance model depends on the model's ability to meet a set of three key challenges (co-ordination, action and trust).

Metropolitan governance mechanisms are widespread, but rarely binding

Urban growth typically comes with administrative fragmentation. As cities expand, their population, built-up area and socio-economic flows often spread from the core city towards the suburbs and beyond. The growth of cities into functional metropolitan areas that straddle several administrative boundaries creates particularly fragmented policy-making spaces, where multiple actors each serve bits of the overall territory. On average, the number of municipalities comprised in the metropolitan area – and thus the number of local policy makers defending their own vested interests – tends to increase with the population size of metropolitan areas. For example, it rises to around 540 municipalities and over 1 000 special purpose governments in Chicago, and 1 400 municipalities in Paris.

Where countries differ is less about administrative fragmentation per se – which is a generally unavoidable reality in metropolitan areas – but rather about ways to address fragmentation. Faced with an almost systematic mismatch between socio-economic areas and administrative jurisdictions, both national and sub-national authorities struggle to close the gap through a variety of metropolitan governance arrangements. While some governments have ambitioned to increase efficiency by retrofitting administrative boundaries around a renewed urban shape (e.g. via municipal mergers), many schemes allow existing municipalities to partner for one or more purposes, within a more or less institutionalised framework. Metropolitan governance bodies – defined as bodies aiming at organising responsibilities among public authorities in metropolitan areas – are extremely common in OECD countries. Very few countries have no metropolitan governance body at all, although rarely are all metropolitan areas in a country covered by a metropolitan governance body. There has been renewed momentum in the creation of metropolitan governance bodies (or in the reform of existing ones) since the 1990s (Figure 1.1). According to the OECD Metropolitan Survey (see Box 1.1 for a detailed methodology), more than two-thirds of OECD metropolitan areas (178 out of 263, or 68%) currently have a metropolitan governance body (Figure 1.2). These bodies include voluntary associations of local governments with few or no legal powers, which often lack legal authority.

Box 1.1. Methodological note on OECD research on metropolitan governance

The Metropolitan Governance Survey covers 263 metropolitan areas of at least 500 000 inhabitants. The table below shows the number of metropolitan areas by country as analysed in the Metropolitan Governance Survey.

Number of OECD metropolitan areas analysed in the Metropolitan Governance Survey, by country

Australia	Austria	Belgium	Canada	Chile	France
8	3	4	9	3	15
Germany	Ireland	Italy	Japan	Korea	Mexico
24	1	11	36	10	26
Netherlands	New Zealand	Poland	Portugal	Spain	Sweden
5	3	8	2	8	3
Switzerland	United Kingdom	United States			
3	14	68			

The average population per metropolitan area is slightly below 2 million people and the median population is slightly above 1 million. The smallest metropolitan areas in the sample have a number of inhabitants just around the threshold of 500 000, whereas Tokyo, the largest one, has more than 35 million inhabitants.

1. Definition of metropolitan governance bodies

For the statistical purposes of this project, an organisation has been classified as a metropolitan governance body when it met the following four criteria:

1. Geographical scope: The organisation must cover the central city and a large share of the remaining parts of the metropolitan area. If its geographical scope extends beyond the metropolitan area, the metropolitan area must constitute the predominant part of its sphere of responsibility.

   The geographical focus of an organisation has to lie on the metropolitan area in order to be considered its governance body. In particular, both the central city and the surrounding areas must be represented in it. In practice, it rarely occurs that the geographical extent of a governance body coincides perfectly with the geographical extent of the metropolitan area. Furthermore, in many countries, there is no official definition of metropolitan area. Therefore, the geographical scope can be somewhat different from the metropolitan area as long as it shows a clear focus on the metropolitan area.

2. Involved actors: National or sub-national governments must be dominant actors within the organisation, or the organisation itself has to have the status of a sub-national government.

   National and sub-national governments are the most important actors in metropolitan area governance. This has to be reflected in the composition of the governance body, which must be predominantly composed of representatives of such governments. While governments are the most important actors in metropolitan area governance, they are not the only ones. Therefore, the condition does not rule out that other actors, such as the business community or representatives of the civil society, be represented on the governance body. In some countries, organisations that were created explicitly for the purpose of metropolitan area governance have the status of a full local government. These organisations typically present the most integrated approach to metropolitan area governance and are also considered governance bodies.

Box 1.1. **Methodological note on OECD research on metropolitan governance** (*cont.*)

3. Thematic focus: The organisation must primarily deal with issues that are directly and predominantly relevant to metropolitan area governance.

   Metropolitan governance concerns a wide range of topics. While it is not possible to provide an exhaustive list, all of them concern policy fields that require co-ordination between parts of the metropolitan area. Often, these are issues where decisions in one part of the metropolitan area have spillover effects on other parts. Furthermore, the issues should be directly predominantly relevant for metropolitan areas. They should appear more frequently or have a higher relevance in metropolitan areas than in other areas. In practice, the jurisdictions of many sub-national governments coincide with metropolitan areas. Usually, such sub-national governments were not created with metropolitan area governance in mind and do not focus on it. Instead, they fulfil functions that are similar to other sub-national governments of the same level that do not cover metropolitan areas. Therefore, they are not considered governance bodies as long as they have not received particular powers or responsibilities that strengthen their role as a metropolitan area governance body.

4. Thematic width: An organisation must have a mandate that allows it to work on more than one issue that is related to metropolitan area governance.

   This criterion serves to distinguish metropolitan area governance bodies from single issue bodies and sectoral authorities. Metropolitan area governance always concerns a variety of issues. Furthermore, these issues can rarely be viewed in isolation because they tend to interact with each other. Any organisation that can be considered a metropolitan area governance body must be able to address this complexity. Of course, it is not guaranteed that every organisation which deals with at least two different issues addresses the complexities of metropolitan area governance in a meaningful way. Nevertheless, the distinction between organisations that focus on one issue and organisations that focus on many issues is an operationally useful and objective way to identify organisations that work across individual policy fields.

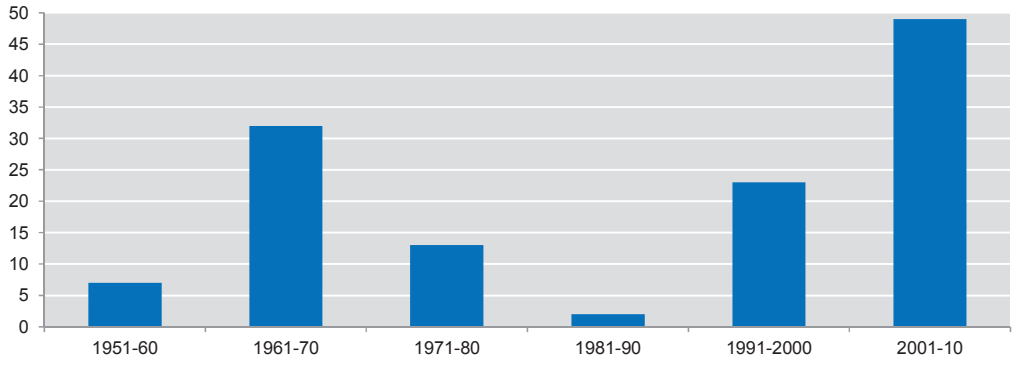
2. Data on metropolitan governance bodies

The results presented in this chapter are based on information that has been collected from publicly available sources on the Internet between May and December 2013. For most metropolitan areas, comprehensive information on governance structures can be found online. If no mention of a governance body or a transport authority was found at all, it is assumed that they do not exist. Generally, the information on governance bodies appears up-to-date and has a reasonably high level of detail. As most information comes from the official websites of governance bodies and local governments, its accuracy can be trusted with a high degree of confidence. However, we cannot rule out the existence of individual cases in which the information is inaccurate, incomplete or out-of-date. In particular, when no information on a governance arrangement could be found online, there is always a small possibility that such an arrangement exists nevertheless.

Source: Adapted from Ahrend, R., C. Gamper and A. Schumann (2014), "The OECD Metropolitan Governance Survey: A quantitative description of governance structures in large urban agglomerations", *OECD Regional Development Working Papers*, No. 2014/04, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jz43zldh08p-en.

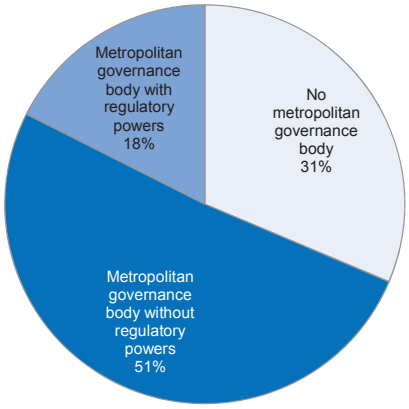
A majority of metropolitan governance bodies work on regional development, spatial planning and transport. However, considerable diversity persists in their legal status, composition, power, budget and staff – hence in their impact on policy design and implementation. Data analysis shows that around 80% of metropolitan governance bodies work on regional development, over 70% on transport and over 60% on spatial planning (Figure 1.3). More than half of metropolitan governance bodies are active in these three fields at the same time.

Figure 1.1. **Average number of metropolitan governance bodies created (or reformed) in OECD countries per decade**



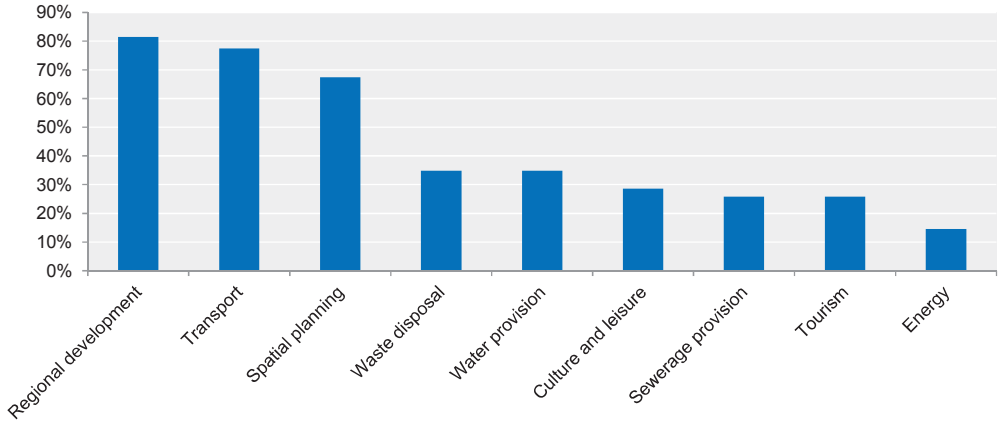
Source: OECD Metropolitan Governance Survey (2014).

Figure 1.2. **Share of OECD metropolitan areas with and without a metropolitan governance body**



Source: OECD Metropolitan Governance Survey (2014).

Figure 1.3. **Share of metropolitan governance bodies active in a policy field**

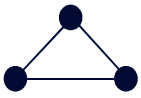
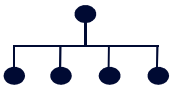
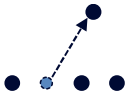


Source: OECD Metropolitan Governance Survey (2014).

Both policy makers' keen interest in and the difficulty of tackling metropolitan challenges are reflected in the wide spectrum of governance models currently in place in OECD countries. While many different typologies of metropolitan governance can be found in the academic literature, the typology chosen here deliberately focuses on municipalities as they are often the administrative level closest to citizens and the most comparable unit in cross-country analysis. The typology is therefore based on showing how municipalities organise themselves (or are sometimes organised by upper levels of government) (also see Table 1.1).[1] Experience in OECD metropolitan areas suggests the following four broad categories of metropolitan governance bodies (from the "lightest" to the most "stringent" in institutional terms): informal/soft co-ordination; inter-municipal authorities; supra-municipal authorities; and a special status of "metropolitan cities" (Table 1.1). This proposed typology is intended to serve as a basic analytical grid rather than a rigid classification. The categories of the typology are not mutually exclusive: two or more metropolitan arrangements sometimes coexist in the same country, and occasionally within the same metropolitan area. For example, a metropolitan area may adopt one arrangement for a specific public service and another arrangement for other services. Some instances may also be hybrid in practice, combining the characteristics of two or more categories. Other cases can encompass rural-urban partnerships within metropolitan areas.[2]

Table 1.1. **Four broad categories of metropolitan governance bodies in OECD metropolitan areas**

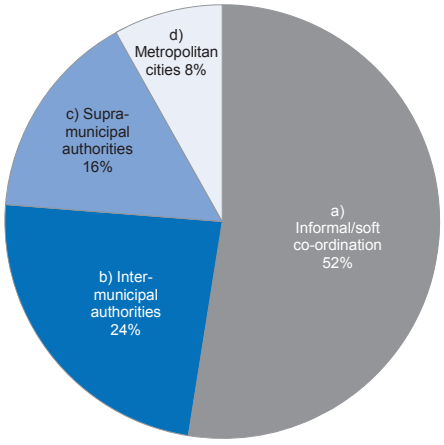
From the lightest to the most stringent in institutional terms

a) Informal/soft co-ordination. Often found in instances of polycentric urban development, lightly institutionalised platforms for information sharing and consultation are relatively easy both to implement and to undo. They typically lack enforcement tools and their relationship with citizens and other levels of government tends to remain minimal.	
b) Inter-municipal authorities. When established for a single purpose, such authorities aim at sharing costs and responsibilities across member municipalities – sometimes with the participation of other levels of government and sectoral organisations. Multi-purpose authorities embrace a defined range of key policies for urban development such as land use, transport and infrastructure.	
c) Supra-municipal authorities. An additional layer above municipalities can be introduced either by creating a directly elected metropolitan government or with the upper governments setting down a non-elected metropolitan structure. The extent of municipal involvement and financial capacity often determine the effectiveness of a supra-municipal authority.	
d) Special status of "metropolitan cities". Cities that exceed a legally defined population threshold can be upgraded into a special status as "metropolitan cities", which puts them on the same footing as the next upper level of government and gives them broader competencies.	

Source: OECD (2014), *OECD Regional Outlook 2014: Regions and Cities: Where Policies and People Meet*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201415-en.

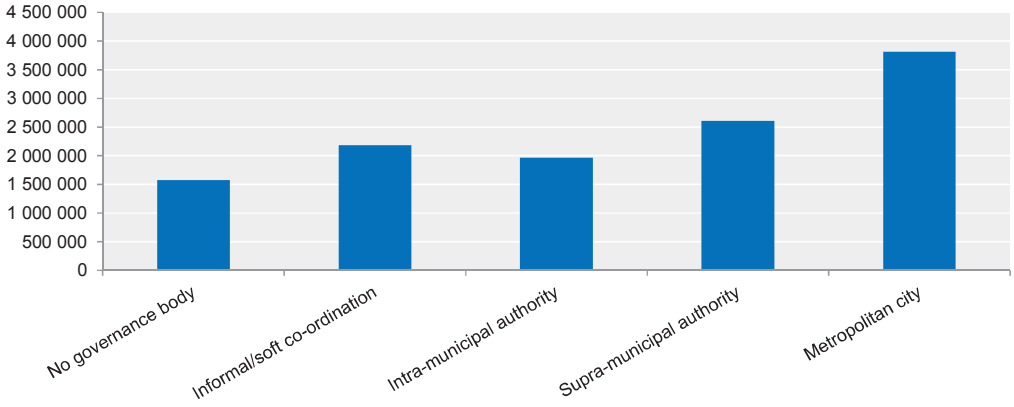
The "lightest" metropolitan governance arrangements tend to prevail over the most "stringent". Among the metropolitan areas with a metropolitan governance body, more than half are using informal/soft co-ordination arrangements, whereas about one-quarter have introduced inter-municipal joint authorities (Figure 1.4). Supra-municipal authorities account for 16% of the cases, and "metropolitan cities" are the rarest arrangement, with only 8%. Unsurprisingly, a size factor is at play: the larger the population size of the metropolitan area, the more "stringent" its type of metropolitan governance arrangement (Figure 1.5).

Figure 1.4. **Breakdown of metropolitan areas by type of governance arrangement**



Source: OECD Metropolitan Governance Survey (2014).

Figure 1.5. **Average population in OECD metropolitan areas by type of governance arrangement**



Source: OECD Metropolitan Governance Survey (2014).

Three key factors guide the choice of a metropolitan governance arrangement

Identifying the most relevant arrangement for individual metropolitan areas remains a matter of political and social choice, conditioned by factors that vary from one country to another, and sometimes across metropolitan areas within the same country. Nevertheless, OECD experience demonstrates that each type of arrangement carries its own set of strengths and challenges to be traded off amongst one another. When selecting a type of arrangement, governments are likely to make a more informed choice if they assess its overall impact in the specific national and metropolitan context – and particularly how fit they are to meet the following three challenges at hand:

- the challenge to co-ordinate policies, both horizontally between municipalities and across policy sectors, and vertically with upper levels of government and supranational institutions
- the challenge to act institutionally and financially, in terms of staff, budget and financing structure and power

- the challenge to be perceived as legitimate and to generate trust among citizens and non-governmental organisations (NGOs), other levels of government, the private sector, etc.

To some extent, these three challenges reflect how the different types of governance arrangements meet their objectives, what tools they use, and how they are received by citizens and other stakeholders.

How much policy co-ordination can the metropolitan governance body achieve?

In metropolitan governance as well as in other domains, carefully designed co-ordination mechanisms may still coexist with co-ordination failures if the right incentives are not offered (Bartolini, 2013). Sometimes, co-ordination failures arise from the lack of awareness about the gains to be reaped from co-operation. In other cases, they stem from a lack of capacity. While tackling such issues is necessary, it may be not sufficient to induce co-operation. Even when actors realise that there are benefits to draw from co-operation and they know how to implement the co-operative strategy, they still face two major obstacles that may hinder their ability to co-operate:

- the incentive to free ride: this occurs from the possibility of obtaining gains without paying the associated costs (which are incurred by the people who decide to co-operate)
- the strategic risk: this refers to the risk of being the only one (or among the few) that acts co-operatively, in which case this player pays the costs but obtains less than what it would have if the other players had decided to co-operate.

Therefore, it may not be enough to create a metropolitan governance body that requests people and institutions to co-operate on the simple grounds that co-operation is in their interest. Identifying the incentives that shape the behaviour of people and institutions is critical to making co-operation operational. Among such incentives, contractual arrangements and financial transfers are often put forward as key tools to facilitate co-operation in metropolitan governance:

- Contractual arrangements have been widely used as an instrument to carry out joint action for regional development across levels of government (OECD, 2007), and among OECD countries there is increasing interest to apply them at a metropolitan scale. The central government would then typically play a prominent role, as it would commit to give specific advantages to metropolitan areas in exchange for stronger co-operation among municipalities (and sometimes the upper levels).
- Financial transfers have proven to be a powerful incentive for inter-municipal collaboration. For example, in France, one of the most fragmented countries in the OECD, the government has encouraged municipalities to form co-operative structures (such as “urban communities” and “agglomeration communities”) by providing an “inter-communality grant” to those municipalities that accepted to have a single business tax with neighbouring municipalities. As a result, an overwhelming majority of the more than 36 000 municipalities in France are currently part of an inter-municipal collaboration structure. At the same time, financial incentives can help reduce the above-mentioned strategic risk linked with co-operation but they are not sufficient if high gains can be reaped from free riding on other people’s actions (Bartolini, 2013). In this case, the financial transfer might induce only temporary co-operation and municipalities are likely to

go back to individualistic behaviour as soon as the transfer ends. Again in France, it has been argued that the current system of financial incentives (combined with other factors) has generated an ineffective proliferation of inter-municipal structures and a 2005 report of the Court of Audit pointed out that inter-municipal collaboration had been a quantitative rather than qualitative success – which the territorial reform underway since 2013 is also striving to address.

What budget and staff does the metropolitan governance body have?

Large metropolitan areas are typically wealthier than smaller regions; but they also face major spending needs as they provide services to a larger concentration of people and firms. This generates fiscal pressure both horizontally within the metropolitan area (as the core city often must finance public infrastructure for commuting workers who actually pay taxes in the periphery) and vertically towards the central government and the rest of the country (when the national fiscal equalisation scheme requires metropolitan areas to contribute, whereas many of the latter rather request transfers to cope with metropolitan needs).

The extent to which metropolitan public finance can support growth goals depends on a number of factors linked with each country's fiscal framework: whether metropolitan areas' own and/or shared tax revenues are designed to encourage economic development rather than distorting the market and are sufficiently diversified to avoid volatility; whether intergovernmental grants promote both solidarity and proactive fiscal behaviour rather than over-reliance over transfers; whether user fees are used to address negative agglomeration externalities (through "smart taxes" such as congestion tax for example); and whether metropolitan areas are allowed to borrow in a responsible manner to carry out necessary large-scale investment.

Faced with such complex fiscal challenges, metropolitan areas often struggle to translate a sometimes painfully achieved consensus for general co-ordination into concrete fiscal modalities. Municipalities and even higher levels of government may concur on the need to set up a metropolitan co-ordination mechanism, but disagree on how to finance it. Therefore, even when a metropolitan governance body has been created with a clearly defined mandate for co-ordination, it may remain underfunded and/or understaffed.

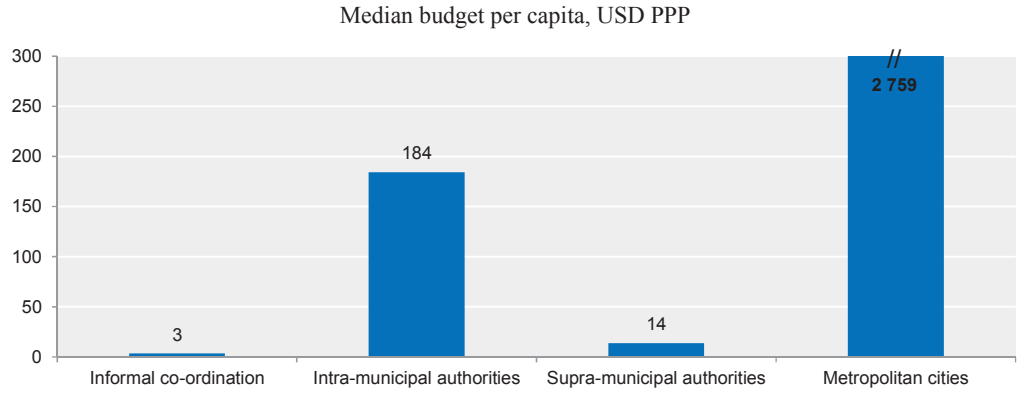
This explains the dominance of the "softest" types of metropolitan governance bodies, which involve only minimal disruption in existing institutions and finance while kick-starting a flexible platform for inter-municipal dialogue. The modest financial endowment of informal metropolitan governance bodies is one of their most attractive but also debilitating features. In practice, informal/soft co-ordination bodies and supra-municipal authorities – albeit with large variation among them – typically have annual budgets of around USD 10 per capita or less (Figure 1.6). Inter-municipal authorities usually have budgets of intermediary size, in the order of a couple of USD 100 per capita. All three are dwarfed by the budgets of metropolitan cities, which usually have more far-ranging functions, such as economic development. Staff numbers roughly follow budgets, with somewhat greater variation.

To what extent do citizens understand the metropolitan governance body?

Metropolitan governance bodies usually add to a historically long-established institutional landscape and thereby tend to be foreign to most citizens. Even carefully designed metropolitan governance reforms sometimes stall due to resistance from

residents and existing institutions, who do not recognise the newly created body or lose out in the reform and thus oppose it. Metropolitan governance bodies may thus alienate citizens and other stakeholders, who might feel remote from decision-making centres and reject the new authority. Economic efficiency arguments in favour of greater metropolitan integration then run against criticisms about the lack of political accountability and weak popular legitimacy of metropolitan governance bodies, and more generally about the "democratic deficit" that these bodies bring about. In reality, the majority of metropolitan governance bodies analysed by the OECD include an indirect form of citizen representation. About 55% of them are composed of elected local government officials (e.g. mayors of municipalities). Nonetheless, only 11% of metropolitan governance bodies are directly elected themselves, and they typically correspond to the most stringent types of governance, such as supra-municipal authorities or metropolitan cities.

Figure 1.6. **Budget of metropolitan governance bodies by type**



Source: OECD Metropolitan Governance Survey (2014).

Beyond purely electoral considerations, metropolitan governance bodies face a more general challenge in terms of trust. The lack of trust not only points to the potential disappointment in traditional government but also to the overarching need for more inclusive and participatory forms of governance. Metropolitan governance bodies are increasingly challenged to embrace non-governmental actors who can voice the needs of an economically, socially and culturally more diverse population. The private sector, but also diverse groups such as the elderly, disabled, immigrants and many others constitute major users of urban policy, who aspire to play a role in shaping it. However, only 9% of metropolitan governance bodies analysed by the OECD include representatives of the private sector or other interest groups. Moreover, these bodies tend to have the fewest responsibilities compared to bodies that do not include citizen representation.

Notes

1. The typology builds on the extensive research carried out in OECD (2006).

2. Rural-urban partnerships refer to a collaboration that is based on: an awareness of the interdependency of rural and urban areas in a given space (functional region); a membership mix that includes the relevant rural and urban representatives; a framework for action or objectives that represents mutual interests (urban and rural); initiatives aimed at yielding collective benefits to urban and rural partners; and an organisational form that is fit for purpose to help realise the partnership's objectives. See a more detailed discussion in OECD (2013b).

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Annex 1A.1
Typology of metropolitan governance arrangements across OECD countries

From the lightest to the most stringent

Types of metropolitan governance arrangements		Relationship to the challenge of… Co-ordination (both horizontal across municipalities and policy sectors, and vertical with upper levels of government)	Action (i.e. staff, budget, financing structure, binding power)	Trust (i.e. accountability, legitimacy)	Examples
a) Informal/soft co-ordination		High degree of flexibility, low level of constraint Low leverage capacity on upper levels of government	Lack of enforcement tools	Weak visibility Low legitimacy	Regional Union of Municipalities of Attica (PEDA):* association of all 66 municipalities of the region of Attica. DeltaMetropool (NL): association created in 2000 by 4 municipalities (Amsterdam, The Hague, Rotterdam, Utrecht), chambers of commerce, water management boards and other associations. Covers around 5 million inhabitants. Informal platform to rethink a polycentric metropolitan area around planning, housing and transport issues.
b) Inter-municipal joint authorities	b.1) Single purpose	Co-operation and cost saving on a specific service No integrated multi-sectoral metropolitan development vision	Sharing existing resources	Weak accountability *vis-à-vis* citizens	Extremely widespread. Specific case of regional transport authorities in Germany (*Verkehrsverbund*), which bring together municipalities, transport authorities and several levels of government in almost all German metropolitan areas, including Rhein-Main-Verkehrsverbund (RMV) around Frankfurt: created in 1995, operated by 15 counties, 11 cities and the *State of Hesse*, responsible for public transport planning in the larger area around Frankfurt.
	b.2) Multi-purpose	Co-operation and cost saving on selected specific services Might provide impetus for further co-operation	Varying degree of resources and responsibilities	Weak accountability *vis-à-vis* citizens Not directly elected by citizens (with a few exceptions such as the MPO of Portland, United States: see category c.2)	*Regionalverband FrankfurtRheinMain* (RVFRM):* created in 2011 to take charge of regional land-use planning in the metropolitan area of Frankfurt. French inter-municipal authorities (*communautés urbaines* and *communautés d'agglomération*) before the 2013-14 reform, such as Marseille:* 18 municipalities in the Communauté urbaine de Marseille Provence Métropole. Metropolitan planning organisations (MPOs) in the United States, notably Chicago* (CMAP): created in 2005 as the result of a merger between the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC), responsible for transport, land-use planning, housing and economic development.

From the lightest to the most stringent

Types of metropolitan governance arrangements		Relationship to the challenge of…			Examples
c) Supra-municipal authorities	c.1) Non-elected supra-municipal authority	Objective of achieving horizontal co-ordination Sometimes encouraged by the central government	Not necessarily strong – conditioned by the existence of executive power and budget	Limited	Puebla-Tlaxcala* (Mexico): the Metropolitan Council, headed by the two state governors with no involvement from municipalities, is in charge of implementing infrastructure projects, financed on a competitive basis by a federal metropolitan fund
	c.2) Elected supra-municipal metropolitan government	*De facto* co-ordination – although sometimes does not cover the entire economic area May produce a long-term strategic vision for metropolitan development	Not necessarily strong – conditioned by existence of executive power and budget	Strong political legitimacy Additional layer of government	Verband Regio Stuttgart (VRS): created in 1994, covers 179 municipalities and 5 *Kreise*, 2.7 million inhabitants. Headed by a council of 91 directly elected members. Very small budget of around EUR 300 million in 2013, of which about 85% goes to public transport and the rest to waste management and planning. Around 50 employees. Portland Metro (United States): set up by the State of Oregon's State Bill 100 in 1973, covers 3 counties and 24 municipalities. Headed by a directly elected government composed of a president and 6 counsellors, it harmonises policies mainly related with land use, waste management, transport planning and urban growth boundary.
d) Special status of "metropolitan cities"		*De facto co*-ordination	Own budget and staff	Strong political legitimacy Substitutes to municipal level	Daejeon* (Korea): split from the province of South Chungcheong in 1989, upgraded into a metropolitan city in 1995, hosts a central government complex since 1997. Other examples: 30 metropolitan municipalities (*büyüksehir belediyesi*, BB) in Turkey since their initial creation by a 2004 law.

Notes: For the purpose of presenting different metropolitan experiences in a rapidly comparable format, this table contains some inevitable simplification. OECD territorial reviews and/or other OECD reports offer more elaborate discussion on each model.

Due to data availability constraints, the data corresponding to inter-municipal authorities in this volume only refer to inter-municipal multi-purpose authorities (type b.1). For more detailed information on the methodology used to collect the data, see Ahrend, R., C. Gamper and A. Schumann (2014).

* Indicates regions that are included as case studies in the current volume.

Chapter 2

A closer look at two strategic sectors of metropolitan governance: Transport and spatial planning

This chapter takes a closer look at two of the most common fields of work of metropolitan governance authorities in OECD countries: transport and spatial planning. First, it reviews different configurations of governing transport and spatial planning in OECD metropolitan areas. It then discusses possible institutional arrangements to achieve more effective integration between transport and spatial planning.

Introduction

Transport and spatial planning are at the core of the work of OECD metropolitan governance bodies. While there is widespread consensus that better connecting transport and spatial planning decisions helps prevent costly consequences of urban sprawl and promotes harmonious development, institutional barriers remain slow to dismantle and co-ordination mechanisms put in place on an *ex post*, *ad hoc* basis may take time to become fully effective. The responsibility for transport planning and spatial planning occasionally lies within the same institution, but more often within different entities, as illustrated in the experience of the different case study regions (Table 2.1). This chapter first reviews different configurations of governing transport and spatial planning in OECD metropolitan areas, then discusses possible arrangements to achieve more effective integration.

Governance of transport: Both a vehicle and a bottleneck for growth in metropolitan areas

Transport offers a fundamental vehicle to growth in metropolitan areas, but failures in the governance of transport, in turn, often undermine growth. Many metropolitan areas owe part of their growth to the higher availability of transport infrastructure, and major transport hubs tend to become economic hubs as well. For example, the economic expansion of Daejeon (Korea) was largely triggered by the central government's investment in two major railways (Gyeongbu and Honam lines). Quickly transformed into one of the country's main crossroads, the city grew into a science and technology hub. However, urban growth often comes with a cost in terms of traffic congestion and infrastructure shortages that relate both to the capacity and the quality of transport facilities. As cities expand into larger metropolitan areas spanning several administrative jurisdictions, the number and scope of actors involved in transport policy also expand, generating co-ordination needs that require adequate governance responses.

Challenges in the governance of transport

The increasing multiplicity of transport policy actors both at horizontal and vertical levels reinforces the need for alignment of priorities and investments. At the horizontal level, the sheer increase in the number of municipalities comprised in the functional metropolitan area automatically entails a rise in the number of municipal actors dealing with transport. The lack of prior co-ordination among municipal authorities generates inconsistencies in the design of routes and complexity in the ticketing system. At the vertical level, the allocation of responsibilities across national, regional and municipal levels requires coherent multi-modal, multi-year strategic planning that is sometimes particularly challenging to implement in metropolitan areas.

Different types of metropolitan authorities are co-ordinating transport planning decisions, with only one instance of metropolitan-wide fare harmonisation among the six case study regions (Table 2.1).

The following sections briefly discuss some of the most common consequences of un-coordinated governance of transport observed in OECD metropolitan areas: a lack of smooth connectivity between the core city and the periphery or across suburbs; the absence of a harmonised fare structure; the dominance of car dependence, with negative impacts on the environment, labour markets and social cohesion.

Table 2.1. **Governance of transport and spatial planning in OECD case study regions**

	Case study metropolitan area	Governance of transport	Fare harmonisation	Governance of spatial planning
a) Informal/soft co-ordination	Athens-Attica (Greece)	The Athens Urban Transport Organisation (OASA) is the single co-ordinating authority for public transport planning	No fare harmonisation	Organisation for the Planning and Environmental Protection of Athens (ORSA), absorbed into the Ministry of Environment in 2014
b) Inter-municipal authorities	Marseille (France)	Around ten transport authorities in the metropolitan area, including six inter-municipal transport authorities (*autorités organisatrices des transports*, AOT), one departmental public transport syndicate (*Syndicat Mixte des Transports en Commun*, SMTC), regional authorities in charge of regional railways	No fare harmonisation	Six inter-municipal authorities (*établissements publics de coopération intercommunale*, EPCI)
	Frankfurt (Germany)	– The *Rhein-Main Verkehrsverbund* (RMV, created in 1995) is the single authority over public transport in the larger area of Frankfurt that covers around 5 million inhabitants. – The RMV brings together 3 levels of government: 11 municipalities, 15 districts (*Kreise*, the next upper level) and the *State of Hesse*	Fares have been harmonised since 1995	– Regional Assembly of South-Hesse (*Land*) – Administrative district (*Regierungsbezirk*), subdivision of the *Land* administration – Regional Board of the Frankfurt RheinMain *Regionalverband* (mandatory association of 75 municipalities)
	Chicago (United States)	– The Chicago Metropolitan Agency for Planning (CMAP) develops a comprehensive regional plan integrating transport and land use for seven counties. – The Regional Transportation Authority (RTA) co-ordinates the three public transport service boards (Chicago Transit Authority [CTA], Metra and Pace).	No fare harmonisation	Chicago Metropolitan Agency for Planning (CMAP)
c) Supra-municipal authorities	Puebla-Tlaxcala (Mexico)	– The Metropolitan Council is in charge of distributing funds from the federal Metropolitan Fund to strategic metropolitan projects, including transport – but the main criterion of eligibility is population size and the modest funds are distributed to small individual projects in municipalities in each of the two states. – The two states (Puebla and Tlaxcala) are in charge of roads and railways. – Public transport is provided by private operators which apply for a concession to the state government and operate low-capacity vehicles.	No fare harmonisation	Municipalities
d) "Metropolitan cities"	Daejeon (Korea)	The Daejeon metropolitan government (transport department) is in charge of transport planning for the entire metropolitan area.	No fare harmonisation	Daejeon metropolitan government

Lack of smooth connectivity between the core city and the periphery, or across suburbs

In many metropolitan areas, the transport system has not kept pace with the evolving urban pattern and remains jammed in a dominantly radial structure (with the main city at the core), therefore unable to accommodate increasing suburb-to-suburb traffic. The provision of transport services follows a static administrative jurisdictional logic rather than a dynamic logic motivated by traffic flows.

In Chicago, even the city-to-suburbs traffic is not adequately served. Approximately 36% of Chicago's population works outside the city of Chicago, and 46% of workers in the city of Chicago live in the suburbs. Yet, the division of the public transport system into an urban part (Chicago Transit Authority, CTA) and sub-urban part (Pace and Metra) means that CTA bus services typically end abruptly at the city limits where Pace services begin, and none of Metra's downtown commuter rail connects directly to the CTA rail network. Only two stations provide intermodal connections between CTA and Metra systems, namely Oak Park and Jefferson Park (Metropolitan Planning Council, 2013).

In Daejeon, the connection between inner city transport and inter-city transport is far from being seamless. Although Daejeon serves many surrounding smaller cities (such as Cheongju, Gongju, Gyeryeong) through public transport (bus), there has not been any co-ordination mechanism to harmonise the transport supply. A metropolitan transport commission exists, but without financial tools or enforcement capacity, it only serves occasional consultation purposes.

Absence of a harmonised fare structure

Many OECD metropolitan areas still operate fragmented fare systems.

In Chicago, there is no harmonised fare structure. Each service board has its own fare structure, with hardly any relation between transport fares and the services that are used. In general, long trips between destinations in the city of Chicago are cheap, whereas travel with similar distances but outside the city is much more expensive. In addition, there is no single fare card for public transport, even if some progress has been made. The Ventra card system, implemented by CTA and Pace, is currently not compatible with Metra that has its own fare card, apparently for sunk investments in its own fare collection system. State law requires that all three agencies accept a single fare card by 2015, but there are currently limited indications that this timeline is going to be achieved.

In Marseille, despite some progress in terms of sharing information on investment plans and pricing systems, public transport fares remain to be harmonised. There are around ten public transport authorities operating in the larger metropolitan area,[1] including six "transport organising authorities" (*autorités organisatrices des transports*, AOT) that cover each of the six existing inter-municipal authorities, plus one "public transport mixed syndicate" (*Syndicat Mixte des Transports en Commun*, SMTC) set up by the *département* in 2009 to co-ordinate the six AOT, and regional authorities in charge of regional trains and express railway lines.

Dominance of car dependence, with negative impacts on the environment, labour markets and social cohesion

The lack of an integrated metropolitan transport system contributes to significant urban and environmental problems, by reinforcing car dependence and congestion. Weaknesses in the public transport system also reduce resident mobility and limit the perimeter of their potential job market, thus exacerbating inequalities in terms of access to employment within the metropolitan area.

In Marseille, around 77% of the population living in peri-urban areas (outside the city of Marseille) does not have access to public transport, 14% of the population has limited access and only 2% has high access (Dijkstra and Poelman, 2014). Only 10% of travel between Aix and Marseille is with public transport. Private cars account for 90% of trips within the metropolitan area, close to the level observed in large US metropolitan areas such as Los Angeles and Denver. Road traffic increased by 10% between 1997 and 2009 and the roadways leading to the main urban cores of the metropolitan area are increasingly congested. As a result, Marseille is the most congested city in France and the fifth most congested city in Europe (out of 59 cities).

Daejeon displays the second highest level of car use (54%) and the lowest level of public transport (15%) among Korean metropolitan cities. In contrast to Seoul-Incheon or Busan, Daejeon displays a share of public transport use in the urban core that is almost equal to or even lower than in the suburbs. This implies that private cars are overwhelmingly dominating traffic even in the urban centre. It has been estimated that the city was losing 4.5% of its gross domestic product (GDP) in congestion costs (according to calculations made by the Daejeon Metropolitan City). Car ownership has increased over the past decade in Daejeon at a faster rate than in other Korean metropolitan cities, including in the capital region. Daejeon currently only operates one subway line and is planning to build two more, including a circular line that serves all of the five autonomous districts. However, Daejeon's relatively low level of fiscal autonomy poses significant constraints on the implementation of public transport projects.

In Chicago, the vast majority of residents drive to work and less than 30% of the city of Chicago residents take public transport to work. In fact, a smaller share of Chicago commuters currently uses public transport than in 1980, with a public transport system that carries 20% fewer passengers than in 1980. The only ridership growth has taken place in Chicago's central neighbourhoods (Metropolitan Planning Council, 2013). Although the regional comprehensive plan "GO TO 2040" adopted the goal of doubling public transport ridership by 2040 as a means of increasing mobility and creating more liveable communities, some parallel policies at various government levels are stimulating car use. Such policies include generous parking policies, a gas tax that is relatively low from an international perspective, and the lack of congestion charges or parking fees in most areas. As there is strong price elasticity between gasoline prices and public transport use in Chicago (Nowak and Savage, 2013), modal shift targets are not facilitated by a policy that keeps the cost of car use low by under-pricing negative externalities of car travel. It is also estimated that 70% of the regional jobs are not within walking distance of rapid public transport. This has a wider set of causes related to a lack of public transport-oriented planning: only 22% of the regional population is located within half a mile of rapid transport stations and 8.5% is within a quarter mile of stations (Metropolitan Planning Council, 2013).[2]

In contrast to most other European capital regions, which tend to have lower rates of driving than the rest of their country, the region of Attica is one of only three capital regions that rank among the top 20 European regions in terms of driving rates (according to data from the 2014 Eurostat Regional Yearbook).[3] As a result, the region of Attica currently ranks below the OECD average in terms of air quality (measured through $PM_{2.5}$).[4] Efforts to reduce air pollution through more effective traffic management have been made in the past, albeit with little to no success.

In Puebla-Tlaxcala, the public transport fleet consists almost exclusively of low-capacity vehicles such as microbuses, minibuses and taxis, further contributing to congestion and impeding the development of an efficient transport network. Urban passenger transport service is mostly supplied by informal groups of individuals called *hombre-camión* ("man-and-a-truck"), who own concessions to operate one or several vehicles. Approximately 6 000 public transport vehicles circulate in the Puebla-Tlaxcala metropolitan zone, with multiple operators covering some of the same routes (284 routes in total), especially in the city centre. The inefficiency of the current transport system often forces workers to ride two or three different buses to get to work. It is estimated that an average family in the metropolitan region of Puebla-Tlaxcala spends about a third of its income, sometimes up to half, on transport. The current transport system also contributes to social segregation. Many workers – especially the lower income categories – live in far-flung communities in the periphery and spend more than two or three hours commuting every day. The dominance of "informal" public transport raises serious safety concerns. Moto-taxis carrying four or five people are common. The negative impact on the environment is significant, as transport accounts for an estimated 82% of greenhouse gas emissions in Puebla (data from the Mexican Ministry of Environment and Natural Resources, SEMARNAT).

The *ex ante* failure of many OECD metropolitan areas to promote public transport has often led to *ex post* efforts to curb car traffic, which represented additional public expenditure and frequently with little tangible success (Box 2.1).

Box 2.1. **Examples of initiatives to curb car traffic in OECD metropolitan areas**

In Athens, a system of alternate car traffic restrictions was introduced in 1982 in the city centre. The system allowed only cars with license plates ending with an odd number to enter a designated zone of 23 km² in the city centre (called *dactylios*) on odd days, and cars with license plates ending with an even number on alternate days. This measure quickly proved to be not only ineffective but also counterproductive, given that it led to a fast rise in car ownership as many Athenians bought a second car with a different ending number (odd or even), and the use of taxis and motorcycles (which were exempted from the traffic restrictions) increased. At a later stage, the system was revised in order to allow less-polluting vehicles (developed with Euro 5 technology or later, which emit less than 140g/km carbon dioxide) to enter the zone regardless of their license plates. However, insufficiencies in traffic police monitoring eventually led to the abolition of the system.

In an attempt to reduce private car use, Daejeon introduced a campaign called "One Day Without Cars" in 2012. If participants in the campaign do not drive from 7 a.m. to 10 p.m. one day per week, they receive benefits, including a 10% reduction of the automobile tax, 30% off the public parking fee, an 8.7% discount on their auto insurance premiums, a 10% discount on the car inspection fee and public transport free insurance service.

Possible solutions for more effective transport planning

Tying capital funding for transport projects to the planning process can motivate metropolitan co-operation

A major obstacle to solving the governance challenges mentioned above is the financial strain on metropolitan authorities in their quest to meet increasing needs for metropolitan-wide mobility. While transport co-ordinating authorities are usually funded through a combination of fares, dedicated taxes, and subsidies from municipal or higher levels of government, all sources of funding have been hit drastically by the crisis and budget crunch, which has undermined the prospect of strategic long-term projects being carried out or completed. Devising a stable funding stream is critical to ensuring a realistic planning process and encouraging co-ordinated decisions.

Requiring a collaborative long-term planning process for transport project fund eligibility can act as a powerful catalyst for metropolitan-wide concertation. An example is found in the United States, where metropolitan planning organisations (MPOs) were explicitly created for planning and programming federal transport funds (Box 2.2). The goal was to ensure that existing and future expenditures for transport projects and programmes were based on a "continuing, co-operative and comprehensive" (3-C) planning process. MPOs are mandated by federal law to produce long-term transport plans based on a comprehensive analysis of demographic, travel and employment trends for their regions and propose a series of transport improvements to meet projected needs.

Clear buy-in from all relevant levels of government and private operators helps find cost-effective solutions

The creation of a single gatekeeper for metropolitan transport co-ordination requires clear buy-in from all levels of government as well as private operators. One of the most sophisticated examples of metropolitan transport co-ordination can be found in Germany. All large metropolitan areas in Germany have set up a metropolitan transport authority called *Verkehrsverbund*. Such transport authorities usually bring together all local governments located in the metropolitan area as well as the corresponding *Land* (or *Länder* if there are several of them, as in the case of Hamburg). The creation of such metropolitan transport authorities has facilitated fare integration and expansion of the public transport supply, as illustrated in the example of Frankfurt (Box 2.3). A few authorities also enjoy competencies in terms of public parking and sometimes urban spatial planning.

Governance of spatial planning: Managing the growth of metropolitan areas more effectively

After transport, spatial planning is the next most frequent field of work for OECD metropolitan governance bodies. Spatial planning encompasses a variety of activities across OECD countries. Generally, its initial objective of avoiding conflicting uses of land is fulfilled through master plans, which set zoning and building regulations as well as decisions on the location of major physical infrastructure projects. How municipalities allocate land to key activities has a direct influence on economic interdependencies and quality of life. However, some municipalities – especially the smallest – lack the technical and financial capacity to elaborate their own spatial plan and call for the next higher level to take over this responsibility. This is sometimes one of the main arguments in favour of the creation of a metropolitan level. The lack of inter-municipal

co-ordination in spatial planning can also lead to overlapping investments ranging from sub-optimal at best to dysfunctional at worst. This gives a major *raison d'être* to metropolitan governance bodies and has been a concern at the highest (i.e. national) level of government. In many countries, urban policy has, in fact, often meant spatial planning policy, with the goal to cope with rapidly expanding urban space and the subsequent need of enhancing infrastructure and service provision. Most OECD countries have developed a spatial planning system in which national, regional and municipal spatial plans are expected to be aligned and altogether contribute to a coherent vision of development.

Box 2.2. **Metropolitan planning organisations in the United States and the example of the Chicago Metropolitan Agency for Planning**

Every urban area in the United States of more than 50 000 residents must have a designated metropolitan planning organisation (MPO) in order to qualify for federal transport funding. In 2013, there were 342 MPOs in the United States. The US Congress created MPOs in the 1960s as flexible entities that adapt to local conditions in order to best allocate federal transport funding. In order to obtain federal funding, MPOs are required to periodically develop long-range transportation plans (also referred to as regional transportation plans or RTPs), with planning horizons of at least 20 years. The planning for these transport improvements is fiscally constrained – i.e. it must be based on a realistic assessment of the available funding over the planning period so that transport projects cumulatively cannot exceed identified revenues. In addition, each decision on major investments planned for the region must be evaluated against a set of alternatives in order to ensure that the most cost-effective solutions are chosen. The long-term plans are then translated into rolling five-year transport improvement programmes (TIP), which list all projects to be funded in the MPO's jurisdiction over the next five years and identify the sources of funding that have been allocated to each.

MPOs are as diverse as the metropolitan areas they serve. Outside of the strict guidelines associated with the formal federal planning process, MPOs are free to operate under the guidance of their respective transportation policy boards. Many MPOs have been designated as existing regional planning commissions or councils of governments. Other states have created MPOs that function independently over other regional organisations. Some MPOs manage their own funding, while many utilise municipalities, states, counties or councils of governments (COGs) as fiscal agents. Several MPOs also act as transport authorities, and some oversee the management of air and seaports.

The case of the Chicago Metropolitan Agency for Planning (CMAP)

Created in 2005, the CMAP is the official regional planning organisation for the north-eastern Illinois counties of Cook, DuPage, Kane, Kendall, Lake, McHenry and Will. (The CMAP planning area also includes Aux Sable and Goose Lake Townships in Grundy County.) The CMAP's Board of directors and voting rules reflect the regional consensus that led to the creation of the CMAP, featuring balanced representation from across the member counties. The Board is composed of 15 members: 5 from the city of Chicago, appointed by the Mayor of Chicago; 5 from suburban Cook County, appointed by county mayors in conjunction with the President of the County Board; and 5 members representing the collar counties co-operatively appointed by the counties' mayors and chief elected county officials. The Board is chaired by a mayor (currently the Mayor of Palos Hills). Approximately half of the Board members are mayors, several are former elected officials, and the others are from the business and civic community. Resolutions require 12 out of 15 votes to pass. The CMAP staff has diverse capabilities in comprehensive planning, data research and analysis, and many related disciplines. The CMAP has committees at the policy, advisory, co-ordinating and working levels that play integral roles in the agency's planning processes.

Box 2.3. **An intergovernmental transport authority for the metropolitan area: The example of Frankfurt**

The Rhein-Main Transport Association (*Rhein-Main Verkehrsverbund*, RMV) is the single authority over public transport in the metropolitan area of Frankfurt. The RMV brings together 3 levels of government: 15 counties, 11 cities and the state of Hesse. It is led by a Board where all member governments are represented. Its geographic coverage includes about two-thirds of the state of Hesse and the city of Mainz (outside of Hesse).

The creation of the RMV was facilitated by a former Association of Municipalities, called *Umlandverband Frankfurt* (UVF) which was created by the state of Hesse in 1975, as a vehicle for inter-municipal policy co-ordination in the region. The UVF had wide-reaching competencies in policy planning and implementation for many specific-purpose functions at the local level. Membership of the 43 municipalities with about 1.6 million inhabitants was compulsory by law. The assembly (*Verbandskammer*) of the UVF consisted of non-elected delegates from member governments. In 1990, the UVF proposed a new expanded transport association that incorporated several smaller transport associations and municipalities that did not belong to any transport associations. Thus, it paved the way for the creation of the RMV in 1995, also supported by federal transfers through the *Gemeindeverkehrsfinanzierungsgesetz*.

The RMV defines metropolitan transport policy and is in charge of planning, investment decisions, price setting and co-ordinating 153 public and private operators (subway, bus, suburban railway, trains). It integrates regional and local transport under uniform and needs-based rules for the entire metropolitan area: one timetable, one price and one ticket. This includes important tasks such as tariff design, scheduling, allocation of transport services to carriers, the development of the network, the tendering of transport services, the assurance of quality and security standards, innovation (e-ticket, mobile ticket, touch&travel, R&D) as well as communication, information and marketing. It ties individual traffic, car-sharing services and the bicycle in its mobility concept, and partners with shipping lines and taxi companies. Similar associations exist in nine other German regions. In terms of number of trips, the RMV holds the fourth position (after Berlin-Brandenburg, Rhine-Ruhr and Hamburg) in Germany. It comprises 42 railway connections with 390 stations and 943 bus routes with 11 900 stops. On average, it handles some 2.5 million passengers per workday, with an average length of travel of 10 kilometres.

Since its inception, the RMV has seen the number of passengers increase by about 25%, from 520 million in 1995 to 708 million in 2013. In terms of revenue per trip, it achieves a top value in Germany, covering its costs at 57%, with the remainder coming from federal regionalisation funds passed through the state budget, and from municipalities via state financial equalisation.

Challenges in the governance of spatial planning

While the overall frameworks for national and municipal spatial plans tend to be broadly comparable across OECD countries, the wide diversity in regional and/or metropolitan levels of government is mirrored in the variation of intermediate spatial plans. Some of the key challenges observed in various countries about the metropolitan governance of spatial planning include the following:

- Need to rationalise plans at metropolitan scale *vs.* the risk of proliferation of planning levels. Even when consensus has been achieved on the need to better co-ordinate municipal land-use decisions through a metropolitan-wide instrument, the risk of overloading the planning landscape might prove counterproductive. The metropolitan spatial plan could constitute a useful bridge between national

and municipal spatial plans, but it would only do so if it streamlines rather than duplicates or supplements existing instruments. Ideally, metropolitan planning should not add administrative burden or unnecessarily complicate existing regulations. A clear focus on minimising inconsistent projects across municipalities and contributing to regional and national strategic development objectives could enhance the effectiveness of metropolitan planning. In particular, a metropolitan plan can add value if it is based on a comprehensive and systematic process of consultation with municipalities.

- Underexploited potential to promote cross-sectoral co-ordination. The larger geographic scale at which metropolitan planning is conducted offers a useful lens for a comprehensive vision of the diverse policy streams at play in the functional territory. However, this potential for cross-sectoral strategic planning is not always exploited. Throughout the OECD, the focus of spatial planning is increasingly shifting from imposing restrictions towards promoting development – at least in the official rhetoric. In practice, when metropolitan spatial plans do exist, they may still be narrowly framed around physical infrastructure and remain disconnected from regional development plans and/or economic development plans, which sometimes command larger funding (e.g. in the case of EU countries that receive Structural Funds).
- Ambiguous intermediate timeframe. Metropolitan spatial plans typically aim to provide a medium- to long-term vision for development, which is, however, not always aligned with the timeframe of other plans at municipal or national levels. There is also a risk that such medium- to long-term plans may be considered too long to imply anything meaningful or realistically feasible for short-term political mandates.

Table 2.2. **Governance of spatial planning in different types of metropolitan authorities**

	Case study metropolitan area	Governance of spatial planning	Plans
a) Informal/soft co-ordination	Athens-Attica (Greece)	Organisation for the Planning and Environmental Protection of Athens (ORSA), absorbed into the Ministry of Environment in 2014	Regulatory Master Plan Athens-Attica 2021 (approved by parliament in 2014)
b) Inter-municipal authorities	Marseille (France)	Six inter-municipal authorities (EPCI)	– Six territorial spatial plans (*schémas de cohérence territoriale*, SCOT) – Inter-SCOT initiative in 2010 at the level of the *département* Bouches-du-Rhône, but no metropolitan spatial plan to date
	Frankfurt (Germany)	– Regional Assembly of South-Hesse (*Land*) – Administrative district (*Regierungsbezirk*), subdivision of the *Land* administration – Regional Board of the Frankfurt RheinMain *Regionalverband* (mandatory association of 75 municipalities)	Regional land-use plan (*Regionaler Flächenutzungsplan*)
	Chicago (United States)	Chicago Metropolitan Agency for Planning (CMAP)	Regional comprehensive plan "GO TO 2040"
c) Supra-municipal authorities	Puebla-Tlaxcala (Mexico)	Municipalities	Municipal urban development plans
d) "Metropolitan cities"	Daejeon (Korea)	Daejeon metropolitan government	– Metropolitan area plan – Urban master plan

The lack of integrated inter-municipal spatial planning has had concrete consequences in terms of socio-economic cohesion, for example in the emergence of problematic areas straddling three municipalities in Puebla-Tlaxcala and five municipalities in Athens-Attica (Box 2.4).

Box 2.4. Consequences of the lack of integrated inter-municipal spatial planning: Examples in Puebla-Tlaxcala and Athens-Attica

Puebla-Tlaxcala: The emergence of gated communities

In Puebla-Tlaxcala, some *ejido* land (i.e. communal land collectively owned and individually used by farmers for agricultural purposes) was initially expropriated by the federal government and transferred to the state of Puebla to serve as a land reserve. However, it eventually turned into gated communities (called *fraccionamientos*), whose development and public service provision mainly take place outside the control of public authorities and contribute to increasing socio-economic inequalities within the metropolitan region. One example is Lomas de Angelópolis, a privately developed and owned neighbourhood straddling 3 municipalities and expected to house around 80 000 residents. Waste collection and some public safety services are provided by municipalities; access roads have been built and managed by the state government; and most other services are provided by the private sector. As the community continues to attract more high-income residents and is thus facing further rapid expansion, the tension between private and public interests is reflected in the ongoing efforts to displace the state-operated toll booth on the access road so that future residents can avoid paying the toll.

Athens-Attica: The case of Eleonas

The area of Eleonas (meaning "olive grove") is a large industrial area of almost 360 ha in the west of Athens, just a few kilometres from the Acropolis. It encompasses parts of five municipalities (Athens, Egaleo, Peristeri, Tavros and St. John Renti). Once a holy olive tree plantation in ancient Athens, the agricultural area industrialised rapidly starting from the 1950s. Today it concentrates heavy industry, logistics and storage activities, and has been a major source of noise and air pollution, commonly referred to as one of Athens's "backyards".

Despite the relatively uniform character of the area and general consensus on the need to better control its development, the lack of agreement among the five municipalities has impeded the design of any common plan. The area was also an illustration of the contradictions between industrial policy and spatial planning regulations, notably leading to large-scale investment approved by the Ministry of Industry in out-of-plan areas that were later designated as residential or green areas.

A series of planning projects for Eleonas were put forward over the years, culminating with a Presidential Decree in 1991. Nonetheless, the decree was never enacted due to disagreement among the municipalities and other stakeholders. After a revision of the plan by ORSA and a research group of the National Technical University of Athens, a second Presidential Decree was concluded in 1995 to create a development corporation. It was assigned the task of carrying out city planning studies and implementing a plan that aimed at reorganising land uses, improving the infrastructural network and creating green areas. While the development corporation was finally formed in 2002 and the government appointed its board in 2010, it has remained inactive owing to the strong resistance of municipalities against delegating powers to it.

Possible solutions for encouraging more effective metropolitan spatial planning

Possible avenues for reform include:

- Implement an extensive consultation process to align priorities and goals between the metropolitan and municipal spatial plans. Ideally, a metropolitan spatial plan would be expected to draw directly from municipal input, or at a minimum, include mechanisms to allow adequate dialogue and co-ordination between the metropolitan authority and the municipalities (Box 2.5).

Box 2.5. Co-ordinating metropolitan and municipal spatial planning: Different examples of mechanisms

London: The Mayor's duty to consult and inform

In the Greater London Authority (GLA), the "London Plan" produced by the Mayor of London is the master spatial development strategy for the Greater London area. London boroughs' local plans need to be in general conformity with the London Plan, and its policies guide decisions on planning applications by councils and the Mayor. The Mayor is, however, bound by the duty to consult on any alteration to or replacement of the London Plan with counties and districts adjoining London, and to inform local planning authorities in the vicinity of London of his views concerning any matters of common interest relating to the planning or development of London or those areas. Following the latest alterations to the plan in January 2014, the Mayor held two consultation events specifically for the Wider South East in March and June 2014. Over 200 individuals from all local authorities within the Wider South East as well as representatives from strategic partnerships and liaison groups were invited to these two events, with over 50 officers and some elected members attending each event.

Chicago: A technical assistance programme for local communities

Although the Chicago Metropolitan Agency for Planning (CMAP) does not have formal authority over land use and zoning, which remain under municipal jurisdiction, the implementation of the metropolitan master plan "GO TO 2040" at the local level is facilitated by the technical assistance programme funded through the US Department of Housing and Urban Development's Sustainable Communities Regional Planning Grant Program. The CMAP initiated the Local Technical Assistance (LTA) Program in 2010. This programme provides assistance to communities across the Chicago metropolitan region to undertake planning projects that advance the principles of GO TO 2040. The CMAP has initiated 160 local projects with local governments, non-profit and intergovernmental organisations to address local issues at the intersection of transport, land use and housing, including the natural environment, economic growth and community development. The CMAP announced 25 new LTA projects in October 2014. This fourth wave of projects emphasises implementation of past plans, such as updates of zoning and regulations, the creation of capital improvement plans and analysis of municipal review procedures.

Vancouver: A regional context statement from each local authority

The Greater Vancouver Regional District (GVRD), renamed Metro Vancouver in 2007, brings together 24 local authorities (22 municipalities, one "Electoral Area" and one aboriginal community called "Treaty First Nation"). Metro Vancouver co-ordinates regional planning by producing the Regional Growth Strategy (RGS). The RGS calls for the alignment of the spatial plans of member local authorities as it requires each member local authority to provide a Regional Context Statement to "demonstrate to the Metro Vancouver Board how its Official Community Plan Supports the RGS".

Frankfurt: A legal obligation to co-ordinate between the inter-municipal association and the state

Two distinct authorities are in charge of spatial planning in the area of Frankfurt: at state level, the Regional Assembly of South Hesse (corresponding to the Administrative District Darmstadt), which is elected by the representative bodies of counties, the urban districts, the municipalities that have more than 50 000 inhabitants; and at the inter-municipal level, the Regional Board of the Regional Authority FrankfurtRheinMain (*Regionalverband*), which has acquired legal competencies for regional land-use planning covering the territory of its member municipalities. The law requires the two entities to agree on the plan, which is usually achieved by harmonising regional/municipal and state planning, but the process of reaching agreement can be considerably long. The *Regionalverband* emphasises its greater closeness to municipalities and better knowledge of details, claiming priority of regional over state planning. A Mediation Committee has been created to consolidate differing views. The Mediation Committee consists of ten members, appointed in equal number by the Regional Assembly and the *Regionalverband*. The Committee Chair and his deputy are appointed annually, alternating between representatives of the two institutions. The Mediation Committee convenes only in case of serious disagreements, which have been avoided so far.

Box 2.5. **Co-ordinating metropolitan and municipal spatial planning: Different examples of mechanisms** (*cont.*)

Municipalities are responsible for micro-planning, which can also conflict with the regional plan. They may raise objections that are dealt with in a similar fashion like the co-ordination of planning between the state and the region. Moreover, the law prescribes the participation of citizens, interest groups and specialised agencies. It entails the need for co-ordination meetings, which generated some 15 000 modification requests for the current land-use plan (which came into force in October 2011, replacing the land-use plans for the 75 cities and counties of the region).

- Provide a strong and clear spatial vision from the central government for metropolitan and regional strategies. The experience of Japan shows how the central government can set a comprehensive spatial perspective at national level, which benefits from inputs at regional and metropolitan levels and is reflected in strategic documents (Box 2.6).

Box 2.6. **The "Grand Design for National Spatial Policy" in Japan**

Cities in Japan face various challenges in terms of sustainable growth, such as suburban sprawl, traffic congestion, deteriorating inner cities, and fiscal constraints associated with an ageing population. While urban planning is the responsibility of local governments in Japan, the national government plays a leading role by delivering key perspectives for future urban challenges. Effective communication between national and local governments is indispensable for designing new urban policies that are tailored to constantly evolving urban forms.

Since October 2013, the Japanese government started to discuss a new "Grand Design for National Spatial Policy toward 2050", a long-term spatial vision which will define the principles of national spatial development and regional policy. The Grand Design was published in July 2014. It includes the aim of consolidating essential functions and residents into core districts to create compact communities in provincial areas. During the process, the ministry consulted the eight regional plan councils currently in place in Japan. Regional plan councils are composed of governors and mayors of local authorities, heads of business organisations and representatives of regional bureaus of national entities. They are in charge of drafting the eight regional plans that cover the metropolitan areas in Japan (including Tokyo) following the principles of sustainable urban use, development and conservation. Regional plans define a strategic and long-term perspective for each individual region, focusing on its specific culture, tradition and landscape. In the process of planning, the opinions of municipalities are carefully examined and integrated in the draft for public consultation before final decision by the national government. This process aims to ensure synergies in the region and to facilitate joint efforts of the whole region, city and industries for achieving higher quality of life. Japan is currently working on revising the National Spatial Planning (by summer 2015) and Regional Spatial Planning (by March 2016).

Sources: Drawing from the opening and concluding remarks by Manu Sakai, Vice Minister of Land, Infrastructure, Transport and Tourism, Japan, Vice-Chair of the OECD Ministerial meeting "Regions and Cities: Where Policies and People Meet", Marseille, 5-6 December 2013; and OECD (2014b), "Japan", in OECD, *OECD Regional Outlook 2014: Regions and Cities: Where Policies and People Meet*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201415-32-en.

- Clarify and harmonise spatial planning guidelines across levels of government. In the case of Athens, while the Ministry of Environment, Energy and Climate Change exerts tight control over the basic land-use plans of municipalities (at

neighbourhood level), it was reported that the absence of clear and consistent guidelines and criteria for approval led to the rejection of some plans that had already required substantial preparation on the part of municipalities and their revision led to a wasteful duplication of time, financial resources and staff effort.

- Support technical and strategic capacity building for spatial planning. In many metropolitan areas, smaller municipalities often lack the sheer human and technical capacity to prepare adequate plans or to update them, and require both training and funding from higher levels of government, as shown in the example of Puebla-Tlaxcala (Box 2.7).

Box 2.7. **Challenges in municipal capacity for spatial planning: The example of Puebla-Tlaxcala**

While the Mexican Constitution grants municipalities the responsibility for urban development and planning, many are ill-equipped to guide the local urban development process. Municipalities have several planning instruments at their disposal with which to regulate and promote urban development. However, most existing plans no longer reflect the demographic or spatial realities of municipalities. With the exception of the city of Puebla, which has just updated its urban plan, most municipal plans in the state of Puebla are 15-30 years old. In Tlaxcala, only 4 of the state's 60 municipalities have updated or are conducting an update of their municipal plans. Even recent planning documents may be based on outdated or only partial data. For instance, the city of Puebla's 2007 Municipal Sustainable Urban Development Programme includes transport data that date back to 1994. Outdated planning instruments will likely continue to be a problem as the metropolitan area keeps growing, which points to a need to rethink the overall planning process. Municipalities generally face major difficulties in updating their plans without financial and technical support of federal and state authorities. Only 15 of the 218 municipalities in Puebla reportedly have the resources to generate their own urban plans. In Tlaxcala, San Pablo del Monte is currently updating its plan with federal funds. The lack of technical capacity constitutes a major hurdle, perpetuated by the loss of municipal staff and information every three years following the election cycle. Although state planning officials provide training to new municipal staff on the process for obtaining funds to develop plans, three years offer a short time span for municipal staff to apply for federal funding and conduct the update. Even when municipal plans are eventually updated, their implementation remains a key challenge.

- Make land management information accurate and accessible. A major obstacle to adequate spatial planning in some countries is the lack of an updated national cadastre. Solving this gridlock requires critical action from the central government, and in this regard, the example of recent progress achieved in Greece in terms of legal framework and financial investment is promising (Box 2.8).

Reconciling transport and spatial planning policies in metropolitan areas

The critical need to better integrate transport and spatial planning is increasingly acknowledged. The availability of transport modes and land-use choices largely shape a metropolitan area's spatial form and development pattern, which, in turn, plays a major role in determining its economic growth and environmental quality. Transport infrastructure influences the locational choices of households and firms by altering the accessibility of sites and people's mobility. New transport investments may produce "induced growth" and pressures on land development, which can then contribute to undesired environmental outcomes. Conversely, changes in land-use patterns influence

the number of trips, their destinations and modal choices. At a minimum, co-ordination of transport and land-use policies requires ensuring that the transport mode is most appropriate to the need defined by the land use (e.g. an industrial area would benefit from good highway access, while cultural areas might be better served by public transport) and assessing how land-use decisions affect the demand for transport and people's access to opportunities to improve the quality of their lives. More effective co-ordination of transport and spatial planning is at the core of key concepts such as those of sustainable development and smart growth.

Box 2.8. **The long road towards updating the national cadastre: The case of Greece**

The lack of basic land management tools and reliable data to inform policy decisions, such as a national cadastre, had for long plagued the Greek planning system. Despite considerable effort from both the Greek government and the European Union, only 40% of the national territory is currently covered by the national cadastre. In the remaining 60% of the national territory that has yet to be surveyed, a very heterogeneous property system exists with no certainty that private property is administered correctly, while coastal and forest zones and public property are not registered at all. After numerous pilot schemes since 1996 to select candidate contractors for the survey work, a new cadastre law was finally passed in 2013 to simplify procedures and cut red tape.

In 2014, work started again towards the completion of the cadastral registration in Greece and is scheduled to be completed by 2020. The necessary information technology infrastructure has been set up, using EU funding for the digital conversion of Greece. Some 126 older survey projects are now being implemented and 28 new survey projects were tendered in October 2013. A new board and management have been put in place at the National Cadastre and Mapping Agency. The total cost of the project is estimated at EUR 1.5 billion, which will not be entirely publicly funded since an owner also pays EUR 35 per registered deed and 0.1% over the value of the property. A new feature will be added in order to enable all transaction prices to be recorded in the cadastral database. A link is also being built between the cadastral database and the taxation database in order to develop a more comprehensive and fairer taxation system, with an expected improvement of property tax revenues.

Yet, despite growing consensus on the need for integration, institutional structures often prevent meaningful co-ordination. The power to regulate the use of land usually lies in the smallest unit of government (e.g. municipalities through building and zoning codes) and local governments carry the legal responsibility for preparing urban land-use plans. In contrast, transport planning tends to controlled by higher levels of government (e.g. state governments and MPOs in the United States).

Challenges of integrating transport and spatial planning

The integrated governance of transport and spatial planning can be mired by a series of gaps that take even greater prominence in metropolitan areas:

- Individual municipal decisions versus strategic metropolitan impact. The mere sum of individual municipal decisions in transport and spatial planning rarely shapes up into a coherent metropolitan development plan. Co-ordination efforts by a metropolitan governance body sometimes boil down to stitching together individual plans on an *ex post* basis. Furthermore, municipalities sometimes do not find out about the plans of neighbouring municipalities until it has become complex and politically costly to negotiate adjustments. Failures in co-ordinating individual municipalities' transport and spatial planning policies thus generate substantial costs at the metropolitan scale in terms of congestion, duplication of investment, and under- or misuse of land.

- Public sector versus private sector leadership. Transport systems are an important tool for public authorities to shape urban development. Land development, however, is often largely driven by the private sector as the market indicates land-use preferences. The influence of public regulations on market choices may sometimes remain fairly marginal. The disconnection between publicly provided transport infrastructure and privately led land development is even more evident at the metropolitan level, and calls for more effective metropolitan-wide co-ordination.
- Short-term versus long-term time horizons. Land-use decisions may sometimes be implemented at a faster pace, whereas large-scale transport projects are typically carried out over a medium- to long-term period, and are often hard to reverse. The benefits of strategic integration between transport and land use are frequently not visible until ten or more years have elapsed, at odds with political mandates that are likely to require visible short-term gains, such as job creation.

Possible solutions for better integrating transport and spatial planning

One single authority in charge of transport and spatial planning – but this configuration remains relatively rare

Co-ordination challenges are expectedly minimised when a single authority is in charge of planning both transport and land use. This configuration is not necessarily the most widespread one among OECD metropolitan areas. It seems to be most often found in federal countries, but also occasionally in unitary countries (Box 2.9).

Box 2.9. **A single authority in charge of co-ordinating transport and spatial planning at the metropolitan level: Selected examples from OECD countries**

Federal countries

In Germany, Verband Region Stuttgart (VRS) was created in 1994 as a voluntary association of the city of Stuttgart and five adjacent districts, through legislation of the state of Baden-Wurttemberg. The VRS is governed by a directly elected regional parliament composed of 93 members. It is responsible for long-term regional integrated planning, including both regional transport planning and land-use planning. With regard to transport planning, the VRS is the second-largest shareholder of the Stuttgart Regional Public Transport and Tariff Association (*Verkehrs- und Tarifverbund Stuttgart*, VVS), which operates the regional public transport system. Although, in principle, municipalities have exclusive planning rights in their territory, they are bound to the goals and principles of higher level spatial planning. The VRS has the authority to overrule local land-use plans and to restrict all activities which contradict the regional plan. As a last resort, it can also sue the municipality that violates its planning rule.

In the United States, the Chicago Metropolitan Agency for Planning (CMAP) has the responsibility to plan for the integration of transport and land-use planning. Transport is controlled by the Regional Transit Authority (RTA), which oversees the three service boards in the metropolitan area, whereas land use and zoning are a municipal responsibility. In 2009, the CMAP published a long-range comprehensive regional plan, entitled "GO TO 2040", which establishes co-ordinated strategies that help the region's 284 communities address transport, housing, economic development, open space, the environment and other quality-of-life issues. The plan was unanimously adopted by its members following an extensive consultation process that attracted attention from other metropolitan planning organisations (MPOs) for its use of MetroQuest, an online scenario visualisation tool. Metropolis Strategies (a civic organisation for improving regional planning, which closed in May 2014 after 15 years of activity) campaigned for the consolidation of the CMAP and the RTA, which would give the CMAP the authority and resources to improve co-ordination of regional transport services.

Box 2.9. **A single authority in charge of co-ordinating transport and spatial planning at the metropolitan level: Selected examples from OECD countries** (*cont.*)

Unitary countries

In Korea, the cities that have the status of "metropolitan cities" are in charge of planning both transport and land use. For example, the Daejeon metropolitan government elaborates both the 2030 Daejeon Urban Transport Plan and the Urban Basic Plan – however, these are handled by different departments within the metropolitan government, which both reported an occasional lack of internal co-ordination.

In the United Kingdom, the Greater London Authority (GLA) is responsible for the strategic integration of key policies such as spatial planning and transport, and it has a binding authority over its members (city and boroughs) in this regard. Concerning spatial planning, the Mayor of London produces the "London Plan", a statutory spatial development strategy for the Greater London area, which sets out a fully integrated economic, environmental, transport and social framework for the development of the capital up to 2031. Regarding transport, the GLA does not provide services itself but appoints the Board of Transport for London, which is responsible for underground, rail and surface transport. It should be noted, however, that the spatial coverage of the GLA is relatively limited compared with the OECD definition of the functional urban area (FUA).

Transport planning can also be conceived upfront as a structural pillar of overall spatial planning in one single master plan that guides urban development. For example, the metropolitan area of Copenhagen has been developed via one of the most strongly integrated forms of transport and urban planning among OECD countries, as the state-led "Finger Plan" aimed to locate urban development along five pre-determined public transport corridors. In this approach, the planning of the main transport network is an integral part of regional land-use planning. While this type of arrangement has initially allowed for efficient control of sprawl by linking together the sides of demand (land use) and supply (transport), it does not preclude from the need to search more effective metropolitan-wide collaboration in the long term (Box 2.10).

Box 2.10. **Central government-led metropolitan integration of transport planning and urban planning: The example of the Copenhagen "Finger Plan"**

First presented by the Danish Town Planning Institute in 1947 at a time of low car ownership, the Finger Plan ("*Egnsplan*" in Danish) set out development guidelines based for the metropolitan area of Copenhagen along five "fingers" of commuter rail lines extending from the "palm" in central Copenhagen. As one of the first schemes of transit-oriented development (TOD), the plan aims at locating clustering economic activities close to railway stations – with retail stores and high-density housing in each station area – while promoting efficient public transport in the central city and along the corridors. Ring roads were planned to link the larger centres at the end of each finger. Although the Finger Plan had an advisory nature, it was successful in co-ordinating the development of housing land in the 29 municipalities covered by the plan, at a time when the city of Copenhagen was short of land and unable to extend its boundaries further (Knowles, 2012). The plan helped control urban sprawl, calling for a clear demarcation between urban and rural land and reserving the wedges between the fingers for farmland and recreational purposes.

Box 2.10. **Central government-led metropolitan integration of transport planning and urban planning: The example of the Copenhagen "Finger Plan"** (*cont.*)

However, by the early 1960s, most of the Finger Plan's housing land had already been developed, leading to the extension of the two southernmost fingers in 1963. When the Greater Copenhagen Council was created (*Hovedstadsrådet*, which existed between 1973 and 1989), its first 1973 Regional Plan continued the Finger Plan's principles of TOD and became legally enforceable – although this coincided with a stagnation of population growth in Greater Copenhagen, lower demand for urban expansion and growing policy focus on supporting the development of the rest of Denmark. The 1989 Regional Plan also followed Finger Plan principles of TOD by allowing industrial and service facilities to be constructed only within 1 kilometre of stations on the radial railway corridors, thereby reducing the amount of commuter traffic into central Copenhagen. In the 1990s, the Danish government's attention shifted back to the need to strengthen Copenhagen's international competitiveness. Several major projects were launched in this respect, including the construction of the Öresund Bridge (see Box 3.2 in Chapter 3) and the development of the Ørestad new town as a "sixth finger" (initially served by a driverless light rail system in 1995, later upgraded into the fully automated new Copenhagen Metro system in 2007, and partly funded by land-value capture). Ring road traffic rose tremendously in the early 2000s.

In 2007, the Danish Ministry of the Environment launched the Finger Plan 2007 as a national planning directive, which has legal binding impact on all 34 municipalities covered by the plan. To date, the 2007 Finger Plan remains the major planning guideline for the metropolitan area of Copenhagen, although roads and railways are under increasing pressure and ensuring efficient mobility between the urban fingers is considered one of the major challenges for future infrastructure planning in the area.

The 2007 reform of local governments in Denmark also affected the institutional setting of the area, by abolishing the short-lived Greater Copenhagen Authority (*Hovedstadens Udviklingsråd* – HUR, established in 2000 with the responsibility of elaborating regional plans) and establishing instead the Capital Region as one of the five larger regions of Denmark, while transferring the responsibilities for operating public transport to a separate agency called Movia (jointly owned by the Region Capital and the adjacent region of Sjaelland). Although the 2007 Finger Plan elaborated by the Ministry of Environment broadly shares similar orientations as those of the HUR's 2005 Regional Plan, to some extent it has marked the re-centralisation of planning authority for the Copenhagen metropolitan area, and municipalities are left to find new ways to co-ordinate their development. The Capital Region currently offers a limited number of policy instruments for metropolitan co-operation, apart from the mandatory regional tools required by the 2007 reform. As other regions, the Capital Region has thus created a Regional Growth Forum (while the island of Bornholm, part of the Capital Region, has its own forum), which brings together regional and local politicians, and representatives from the business community, trade unions and higher education institutions. Like other regions, the Capital Region is also in charge of elaborating a Regional Growth and Development Strategy. There has been a particular focus on promoting the international branding of Copenhagen through the creation of two dedicated offices, Wonderful Copenhagen (for tourism) and Copenhagen Capacity (for foreign direct investment attraction). The Capital Region also runs a Municipality Contact Council (KKR), which is meant to help ensure co-ordination between municipalities, and between municipalities and the region.

Sources: Drawing on various sources including OECD (2009), *OECD Territorial Reviews: Copenhagen, Denmark 2009*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264060036-en; Knowles, R.D. (2012), "Transit oriented development in Copenhagen, Denmark: From the Finger Plan to Ørestad", *Journal of Transport Geography*, Vol. 22, pp. 251-261; OECD (2014d), "Region of Southern Denmark (Denmark)", in OECD, *How's Life in Your Region?: Measuring Regional and Local Well-being for Policy Making*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264217416-8-en.

Co-ordination mechanisms to align transport and spatial planning decisions

When different authorities are in charge of transport planning and spatial planning, carefully designed co-ordination mechanisms can help bridge the two sectors. For example, in Canada, the regional planning authority Metro Vancouver aligns the spatial plans of its member municipalities and influences the strategic plan of the separate regional transport authority TransLink (Box 2.11). In the United States, the goals and priorities put forward by the directly elected metropolitan planning organisation Portland Metro also shape the organisation of public transport by the separate transport authority TriMet, without Metro using the existing legal possibility to take over the control of TriMet.

Box 2.11. **Co-ordinating transport and spatial planning decisions at the metropolitan level: Examples from Vancouver and Portland**

In Vancouver (British Columbia, Canada), the Greater Vancouver Regional District (GVRD), renamed Metro Vancouver in 2007, is a supra-municipal authority created in 1967, which brings together 24 local authorities (22 municipalities, 1 "Electoral Area" and 1 aboriginal community called "Treaty First Nation"). Metro Vancouver provides regional services, including three core utilities (water, liquid waste, solid waste), and co-ordinates regional planning by producing the Regional Growth Strategy (RGS). There is a separate metropolitan public transport authority called TransLink, which was created in 1998 and is responsible for setting and administrating fares for regional public transport services. TransLink is governed by the Mayors' Council on Regional Transportation (where all 24 member local governments of Metro Vancouver are represented) and the TransLink Board of Directors. Metro Vancouver is responsible for formulating the RGS and regional air quality objectives that TransLink must consider when developing long-term transport strategies. Metro Vancouver also provides input to TransLink on its long-term transport strategies and ten-year transport investment plans. Finally, it provides input to the Mayors' Council on proposed borrowing limit increases in ten-year transport investment plans.

Portland (Oregon, United States) has the only metropolitan planning organisation (MPO) directly elected in the United States, called Portland Metro. Operational in its current form since 1979, Portland Metro is primarily in charge of metropolitan strategic planning, while a state corporation (TriMet, officially Tri County Metropolitan Transportation District of Oregon, governed by a Board appointed by the Governor of Oregon) organises and operates public transport. There is, however, an indirect form of co-ordination between the two. Metro adopted the 2040 Growth Concept, a long-term regional plan that lays out a vision for the region in 2040 that includes both land use and transport. The 2040 Growth Concept was first adopted in 1995 and is updated every five years. The 2040 Growth Concept emphasises co-ordination of land use and transport in order to preserve the region's locational advantage as a relatively uncongested hub for trade. It also states that the preferred form of regional growth is to contain growth within a carefully managed urban growth boundary (UGB), a land-use planning line to protect farms and forests from urban sprawl and orient growth in the form of infill and redevelopment with higher density where it is appropriate. The UGB has been expanded more than 30 times since it was first drawn up, in accordance with forecasts of land supply needs. In its quality as an MPO, Metro is also tasked with preparing a Regional Transportation Plan (RTP), which evaluates federal, state and local funding for transport improvements, estimates project costs and proposes funding strategies. The RTP was last updated in July 2014. TriMet must develop a five-year Transit Investment Plan (TIP), updated annually, which is grounded in the objectives of both the 2040 Growth Concept and the RTP. State law gives Metro the right to take over TriMet and the issue was debated several times, without gaining sufficient political traction from Metro councillors to get through.

Sources: Drawing on various sources including Metro Vancouver (2014), www.metrovancouver.org; TransLink (2014), "Regional transportation authority of Metro Vancouver", www.translink.ca; Portland Metro (n.d.), Portland Metro website, www.oregonmetro.gov; TriMet (2014), "Public transport provider for Portland, Oregon", http://trimet.org.

Data and evidence can guide better integration of transport and spatial planning

Gathering both quantitative data and qualitative evidence on the outcomes of better co-ordinated transport and spatial planning can help support common decisions. Scenario modelling can be useful for "envisioning exercises". A number of integrated models are currently being applied in OECD countries (Box 2.12).

Box 2.12. **Some examples of integrated transport and land-use models**

Integrated transport and land-use models differ from typical travel demand models used to predict traffic patterns in that they do not use fixed land-use inputs. Rather, they allow land uses to shift based on the differences in transport policies, investments and behaviour. This is achieved by linking land-use allocation processes with travel demand models. Such models are typically developed for an entire metropolitan region. Through an iterative process, these integrated models predict an equilibrium land-use and traffic pattern for some future year. Based on region-wide forecasts of population and employment, they allocate housing and business development to small zones based on accessibility to public transport, land prices, land availability. The models are calibrated to represent the decision-making characteristics of a given metropolitan area by using historical data on transport accessibility, and observed changes in land development and prices. Examples of several commonly applied integrated models include the following:

- ITLUP is among the most widely applied integrated models in the United States. The model consists of two major components: the first (DRAM/EMPAL) estimates geographic household and employment growth; the second calculates actual land consumption based on these estimates. The model then takes inputs for zone-to-zone travel times from any number of major travel demand models. The model can then be run iteratively to compare a range of combined transport and land-use consequences from various transport policy and investment scenarios.
- UrbanSim is different from most other models in that it simulates urban development as a dynamic process over time, rather than static moments in time or some equilibrium state. It is an integrated transport land-use model that has been applied in a number of regions to test alternative land development scenarios and transport policies. The model represents urban development, urban markets for land, housing, non-residential space and transport. By treating urban development as the interaction between market behaviour and governmental actions, UrbanSim can assess impacts of alternative governmental plans and policies related to land use and transport. The model requires population and employment estimates, regional economic forecasts, transport system plans, land-use plans, and land development policies such as density constraints, environmental constraints and development impact fees.
- MEPLAN and TRANUS are based on fundamental theories of macroeconomic behaviour, and include markets for land, floor space and labour. Employment markets are modelled using input/output models. Jobs and housing are allocated to zones based on land price, labour and travel time.

Because many of the integrated models are highly data- and labour-intensive, they are most likely to be used by large regions.

Sources: Adapted from ICF Consulting (2005), *Handbook on Integrating Land Use Considerations into Transportation Projects to Address Induced Growth*, Fairfax, Virginia, http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25(3)_FR.pdf; Johnston, R.A. and M.C. McCoy (2006), *Assessment of Integrated Transportation/Land Use Models*, http://ultrans.its.ucdavis.edu/files/pecas/06.22.06%20Updated%20Report.pdf; Wegener, M. (2004), "Overview of land-use transport models", in D.A. Hensher and K. Button (eds.), *Transport Geography and Spatial Systems. Handbook in Transport*, Vol. 5, pp. 127-146, Elsevier, Kidlington, United Kingdom.

Some pioneering initiatives have recently recognised the interdependence between transport and land use at the central government level. Promoting the development of indicators can help assess how these factors affect the liveability of specific territories, as showcased in the example of the US Partnership for Sustainable Communities (Box 2.13).

Box 2.13. A central government initiative to better integrate transport, land use and housing: The US Partnership for Sustainable Communities

In 2009, three US federal bodies – the Department of Housing and Urban Development (HUD), the Department of Transportation (DOT) and the Environmental Protection Agency (EPA) – launched the Partnership for Sustainable Communities (PSC). The PSC established a series of six "Liveability Principles" as thematic guidelines for building more economically and environmentally sustainable communities:

1. Provide more transport choices: Develop, safe, reliable and economical transport choices to decrease household transport costs, reduce the nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health.
2. Promote equitable, affordable housing: Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities, to increase mobility and lower the combined cost of housing and transport.
3. Enhance economic competitiveness: Improve economic competitiveness through reliable and timely access to employment centres, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.
4. Support existing communities: Target federal funding toward existing communities, through strategies like transit-oriented, mixed-use development and land recycling, to increase community revitalisation and the efficiency of public works investments and to safeguard rural landscapes.
5. Co-ordinate and leverage federal policies and investment: Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices, such as locally generated renewable energy.
6. Value communities and neighbourhoods: Enhance the unique characteristics of all communities.

To establish progress measurements for the Liveability Principles, the PSC worked with the University of Pennsylvania's Penn Institute for Urban Research (IUR) to build a set of sustainability indicators. Initial research indicated that in the absence of a national sustainable development agenda with associated evaluation mechanisms, a plethora of programmes and assessment models were being developed at the sub-national level by governments, civil society and even the private sector. An indicator set for the PSC's Liveability Principles was thus seen as an opportunity to develop a national level sustainable development indicator system.

The Penn Institute for Urban Research undertook an extensive survey of existing indicator sets, identifying over 60 different indicator initiatives at the regional, municipal and community levels, and almost 500 instances of indicator use. These were then grouped into three thematic areas – housing, land use and transport – and associated with six qualities – access/equity, health, economic competitiveness, affordability, environment and sense of place – using data available from various official statistics. Ultimately, the result was five sustainability dimensions with associated indicators. The PSC has made these available as HotReport Sustainability Indicators, a nationwide comparable indicator set using data available from the US Census Bureau, the American Community Survey and the Department of Labor. The results are published online so that policy makers and communities can compare their performance in the various sustainability dimensions with that of other counties, their home state and the US average performance.

Source: OECD (2014a), *How's Life in Your Region? Measuring Regional and Local Well-being for Policy Making*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264217416-en.

Opportunities for better integrated metropolitan management in emerging economies

Designing and implementing integrated metropolitan strategies holds tremendous opportunities for emerging economies, which are often confronted with rapid urbanisation and a set of unprecedented economic, social environmental challenges. For example, the

experience in Guangdong (People's Republic of China) suggests that within an aggressive pro-urbanisation strategy, spatial planning is increasingly evolving towards the aim of promoting economic growth; Gauteng (South Africa) is grappling with significant post-apartheid inequalities, which coherent metropolitan planning in terms of land use and transport could help curb; and Medelíin (Colombia) offers a good practice of metropolitan integration, with both horizontal co-ordination across nine municipalities and vertical co-ordination through a tripartite voluntary agreement between the department, metropolitan and municipal levels (Box 2.14).

Box 2.14. **Key opportunities for integrated metropolitan planning in emerging economies: Examples from China, South Africa and Colombia**

China: The case of Guangdong

In Guangdong, as in the rest of the People's Republic of China, economic development currently acts as the primary driver of spatial and physical planning. Guangdong's spatial planning is motivated by the aims to restructure the Pearl River Delta (PRD) region to facilitate the production of higher value-added goods and reduce regional disparities. It also aims to construct integrated networks of infrastructure (e.g. regional expressway network), promote compact spatial development by limiting sprawl and preserve resources such as the water supply. After the provincial government's publication of the "Advisory on Speeding up Urban and Rural Construction and Promoting the Urbanisation Process" in 2000, the Guangdong provincial government issued a series of guidelines to support an ambitious pro-urbanisation strategy, including the establishment of 270 central towns, redrawing urban administrative jurisdictions and reforms of the household registration system. A wide spectrum of planning measures includes the "PRD Co-ordinated Urban Cluster Development Plan 2004-2020" ("PRD Urban Cluster Plan"), "Guangdong's Provincial Territorial Plan 2006-2020" and various national spatial directives. The national strategy for the PRD – "Outline of the Plan for the Reform and Development of the Pearl River Delta Region 2008-2020" – also specified that the urbanisation target should reach 85% by 2020.

South Africa: The case of Gauteng

The Gauteng city-region is one of the fastest growing city-regions in South Africa. The functional city-region is largely coterminous with the administrative borders of the Gauteng Province, which was created in 1994, a few months before the country's first democratic elections. Within the city-region, the population has grown particularly rapidly, thanks to in-migration. The population increased by 3.2 million residents between 1995 and 2009, at a rate of 2.6% annually, as compared with the national rate of 0.6%. Population growth has been concentrated in a few locations, generating high economic and environmental costs. This rapid urbanisation has reinforced the spatial segregation and considerable service backlogs inherited from the apartheid era. Public transport access is very low, which reduces mobility and raises the cost of transport. Comparing transport affordability in African cities, i.e. the proportion of household budget spent on transport, the Gauteng city-region ranks as the least affordable city. Currently, typical residents in Gauteng spend 21% of their monthly income on transport, significantly above rates in Lagos, Nairobi and Dar es Salaam. In Gauteng, 54.2% of citizens do not live within walking distance of a train station and 43.7% do not live within walking distance of a bus station. Only 9.5% of the population use rail to commute to work, in contrast to the much higher rate for Cape Town (17.0%). Metropolitan co-ordination is essential in the Gauteng city-region to ensure that sectoral policies are coherent, or at least not contradictory, in a functional metropolitan area that spills over multiple jurisdictions. Such initiatives as the Gauteng Spatial Development Framework (GSDF), which identifies a spatial vision and attempts to integrate the forward planning of all sectors that impact spatial development, merit further support. In particular, policy makers could aim to co-ordinate all public transport fare systems in the city-region and use the Gautrain system as a platform to build co-operation in the city-region.

Box 2.14. **Key opportunities for integrated metropolitan planning in emerging economies: Examples from China, South Africa and Colombia** (*cont.*)

Colombia: The case of Medellín

In Colombia, metropolitan areas were recognised as early as the 1968 constitutional reform, but little implemented in practice until the early 2010s. Six metropolitan areas (Valle de Aburrá, Bucaramanga, Barranquilla, Cúcuta, Centro Occidente and Valle del Cacique Upar), created at the beginning of the 1980s, have been recognised as "administrative units" by the 1991 Constitution. Metropolitan areas are formed on a voluntary basis with the aim to promote co-ordination of territorial development and public services provision across municipal boundaries. The 2011 law established a special tax regime for metropolitan areas. Metropolitan areas have access to different financing sources, including transfers from national, departmental and municipal budgets; betterment levies collected from metropolitan development projects (a land-based financing instrument called *contribución de valorización*), diverse taxes, user charges and fees related to public services provision; borrowing and the gasoline surtax collected within the jurisdiction of the area. The 2013 law strengthened the legal framework for co-ordination of metropolitan areas, by establishing new conditions for the creation, operation and financing of metropolitan areas. Metropolitan areas are governed by a Metropolitan Board (*Junta Metropolitana*) composed of the mayors and councillors of member municipalities and the governor of the department in which the metropolitan area is located.

The Metropolitan area of Medellín (Valle de Aburrá) comprises nine municipalities including the core Medellín. It represents 58% of the population of the department of Antioquia (almost 3.7 million inhabitants) and 67% of its GDP. The Valle de Aburrá was formed with the objective of promoting, planning and co-ordinating the development and service delivery of its member municipalities. It has defined an Integrated Metropolitan Development Plan (which aligns municipal territorial plans) and a Transport Plan. It is also active in environment and housing development. The metropolitan area acts as an Environmental Authority and has created a Metropolitan Environmental Council. It has established a Transport Authority, in charge of mass public transport, in particular the bus, rail, metro and metrocable systems in the Medellín area. The metropolitan area also promotes co-ordination across levels of government to align development objectives. For example, a voluntary agreement has been signed between the Governor's Office of Antioquia, the Metropolitan Area and the municipality of Medellín – a group called "*Comision TriPartita*". Financial management of the Valle de Aburrá metropolitan area is considered as remarkably solid for a voluntary association. The metropolitan area uses almost every possible source of financing in the framework of existing laws to generate revenue, in particular an environmental surtax of 0.2% on the property tax which provided 44% of total revenue in 2013. Contributions from the member municipalities amounted to 22% of total revenue. The city of Medellín represented 85% of all municipalities' contributions.

Sources: Adapted from OECD (2010), *OECD Territorial Reviews: Guangdong, China 2010*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264090088-en; OECD (2011), *OECD Territorial Reviews: The Gauteng City-Region, South Africa 2011*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264122840-en; OECD (2013), *Colombia: Implementing Good Governance*, OECD Public Governance Reviews, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202177-en.

Notes

1. The metropolitan area here refers to the Aix-Marseille-Provence metropolitan area as defined in the French government's Law on the Reform of Metropolitan Areas, as of December 2013.
2. Rapid transport is here considered as the CTA L line, the Metra rail line and the future Ashland Avenue BRT.
3. For more information see European Commission (2014).
4. See the regional well-being profile of Attica on the OECD Regional Well-Being webtool available at: www.oecdregionalwellbeing.org/region.html#GR3 (OECD, 2014e).

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Chapter 3

Steps for effective metropolitan governance reforms

This chapter assesses how OECD metropolitan areas have designed and implemented governance reforms. Drawing from a diversity of practical experiences in case study regions and beyond, it proposes a set of guidelines for conducting effective metropolitan governance reforms.

Introduction

Metropolitan governance reform is not only a highly complex process, but also often a long one. As metropolitan areas continue to evolve, even once well-functioning governance structures may eventually need to be adapted. A risk commonly encountered is that governments may attempt to replicate a specific type of metropolitan governance arrangement that is considered successful in one place, but which may not be entirely transferable elsewhere given the considerable variety of institutional contexts. However, lessons on the process that was adopted to implement the metropolitan reform can guide policy makers who are engaged in a similar path of reform – even where the ultimate objective is a different arrangement. While metropolitan governance reforms are inevitably shaped by the unique history and political framework of each country, some common issues emerge from current reform trends and those observed in the case study regions (Table 3.1). Drawing from the OECD "Making Reform Happen" framework,[1] this chapter seeks to flag key steps to seize as potential levers of strategic change for policy makers at all levels who are contemplating metropolitan governance reforms.

Table 3.1. **Metropolitan governance reforms in case study regions**

	Key reform	Examples of metropolitan projects	Key actors of reform
Athens-Attica (Greece)	Creation of the Organisation for the Planning and Environmental Protection of Athens (ORSA) in 1985, absorbed into central government in 2014	Olympic Games 2004	Central government
Aix-Marseille (France)	Reform into new directly elected metropolitan inter-municipal authority (2014 law, to be applied in 2016)	European Capital of Culture 2013	– Central government – Private sector
Chicago (United States)	Creation of the Chicago Metropolitan Agency for Planning (CMAP) by merger of two planning commissions (2005)	GO TO 2040 plan	– State government – Private sector
Frankfurt (Germany)	Creation of Rhein-Main Transport Association (RMV) (1995)	Integrated public transport systems for metropolitan area and surroundings	– state of Hesse – Municipalities
	Creation of *Regionalverband FrankfurtRheinMain* (RVFRM) (2011)	– Land-use and landscape planning – Strategic management and co-ordination of development	
Puebla-Tlaxcala (Mexico)	Creation of a Metropolitan Council (2009)	n/a	– Federal government – State governments of Puebla and Tlaxcala
Daejeon (Korea)	Upgrade into "Metropolitan City" (1995)	1993 World Expo	Central government

Motivate collaboration by identifying concrete metropolitan projects

Like any reform, metropolitan governance reforms need to be seen as a cycle rather than a single occurrence in time. As such, they are fundamentally embedded in a set of framework conditions that together shape the enabling environment for the actors of the reform. Seizing the right window of opportunity in the economic, social and political context of a given territory will help lay the basic foundations for effective metropolitan governance reforms.

- Economic and social context. Growing awareness of a metropolitan-wide approach to counter the rise of intra-regional inequalities in terms of income, unemployment, skills and other dimensions may offer a powerful trigger to the search for more effective governance mechanisms. In Marseille, for example, the 12% unemployment rate in the metropolitan area (2013 Q3) masks wide

disparities across territories within the metropolitan area and across population groups. Unemployment rises to 30% in the north *arrondissements* and 20.8% of the 15-29 year-olds. Combining both territorial and age factors, youth unemployment is over 35% in the north and roughly 50% in the 14th *arrondissement*.

- Political context. Metropolitan governance reform is also facilitated when the authorities have a clear electoral mandate for change, when elections are approaching or when the different levels of government are aligned (belonging to the same political party or open to possible agreements). For instance, in Milan (Italy), the 2011 municipal elections brought a new political majority to the core city, which was based on the same coalition as the provincial one. When the Italian government proposed a reform to establish "metropolitan cities" (*città metropolitane*) (Box 3.7), the city government of Milan created the post of a deputy mayor specifically in charge of building the metropolitan city of Milan and endowed him with a dedicated administration.

Once framework conditions have been identified as favourable, kick-starting collaborative initiatives around tangible projects on key public services can help rally forces at the initial stage and progressively lead to setting a "bigger picture", as success breeds success and trust. For example, various forms of inter-municipal collaboration arrangements have emerged in the water sector (Box 3.1). Other major infrastructure projects may offer an immediately visible cause for collaboration and their sheer size can generate a scale effect. A particular case is found in cross-border regions, where a large-scale infrastructure project can serve as a powerful initial thrust for the emergence of broader metropolitan dynamics. One of the most widely known examples is the Öresund region, where the opening of a bridge between Copenhagen and Malmö in 2000 triggered growing integration between the two cities across the Danish-Swedish border (Box 3.2). The main cross-border governance body in the region is driven by municipal and regional authorities from both sides (Öresund Committee). However, the differences between national regulatory frameworks have impeded further integration of labour markets. Several major initiatives that could have perpetuated the cross-border metropolitan dynamics beyond the bridge were abandoned recently, such as the Öresund University, which formally closed down in 2010.

Flagship events can also give rise to a metropolitan dynamics, which, however, need to be sustained over time. In some OECD metropolitan areas, preparations for the Olympic Games sparked a push for a greater level of metropolitan integration, albeit with sometimes highly divergent outcomes in the long term. For example, in Athens, the first spatial plan with an explicit metropolitan scale was adopted in 1985 together with the creation of the Organisation for the Planning and Environmental Protection of Athens (ORSA), and the selection of Athens in 1997 as the host city of the 2004 Olympics led to an unprecedented wave of infrastructural and urban investments across the entire metropolitan area. However, the metropolitan spatial plan was soon enough bypassed to accommodate and accelerate Olympic projects, and ten years later, the debate on the metropolitan governance of Athens has not led to any substantial results while ORSA was re-centralised into the Ministry of Environment, Energy and Climate Change in 2014. In contrast, Barcelona accompanied Olympic preparations with an iterative process of strategic planning, starting from the core city and gradually enlarging it to the metropolitan scale through the involvement of sectoral inter-municipal authorities. The process was sustained after the Olympics and culminated in the creation of a new metropolitan authority in 2011 (Box 3.3).

Box 3.1. **Inter-municipal collaboration arrangements in the water sector: Examples from the United Kingdom, the Czech Republic and Spain**

In the water sector, informal/soft arrangements are offering a lightly institutionalised platform for information sharing and collaboration. One example is the Metropolitan Glasgow Strategic Drainage Partnership (MGSDP) in the United Kingdom, a collaborative venture aiming at upgrading the Glasgow metropolitan area's drainage and sewerage network, reducing flooding and supporting urban development requirements while improving water quality and the environment. The partnership brings together a range of stakeholders with varied responsibilities: local authorities (Glasgow City Council, South Lanarkshire Council, Renfrewshire Council and East Dunbartonshire Council, which are responsible for roads drainage, watercourses and flood risk), the Scottish Environment Protection Agency (SEPA – responsible for water quality and flood advice), Scottish Water (responsible for the sewerage network), Scottish Canals (responsible for the canal network), Scottish Enterprise and Clyde Gateway (economic development issues). The MGSDP raises awareness, conducts studies and assists its partners in "transforming how the city region thinks about and manages rainfall to end uncontrolled flooding and improve watercourse water quality" (Metropolitan Glasgow Strategic Drainage Partnership, n.d.). The relevance of the MGSDP has also been acknowledged by the Scottish government, as the partnership has retained its status as a "national development" in the third National Planning Framework (NPF3), which sets out the Scottish government's strategic development priorities over the next 20-30 years. Projects that are classified as national developments are regarded as essential to Scotland's strategic development. The MGSDP continues to be recognised as an exemplar of sustainable water management on a catchment scale. A number of the MGSDP's projects have also been included in the region's City Deal funding bid, and are now subject to detailed business case review prior to funding being confirmed.

Inter-municipal single purpose co-operation also helps share costs and responsibilities across municipalities for water service provision, both at horizontal and vertical levels:

- An example of horizontal co-operation is the Water Management Association of the West Bohemia Region in the Czech Republic, a voluntary union of 91 municipalities and 2 associations of municipalities from 5 districts (Karlovy Vary, Tachov, Sokolov, Chomutov and Rakovník). The association was established in 1993 to carry out the management, operation and development of water supply and wastewater treatment systems, which is a legal obligation of municipalities in the Czech Republic. The number of association members has more than doubled from its initial 40 municipalities from the Karlovy Vary region and now covers a population of about 186 000 inhabitants. It is a voluntary association to which member municipalities transfer their water assets upon joining and take them back when leaving. The governing body of the association is the General Meeting, where each municipality has one vote. By concluding an exclusive lease, the association transferred the responsibility for running and upgrading existing water and wastewater infrastructure to an operating company called Vodakva (*Vodárny a kanalizace Karlovy Vary*) and became one of its two main shareholders with the international group SUEZ Environnement. The two main shareholders check the quality of services and supervise the management of Vodakva. The municipalities also check the realisation of investments carried out by Vodakva via their membership in public procurement committees. All of the association's revenues coming from the rent paid by Vodakva, dividends from Vodakva's shares and capital subsidies from different sources are used to finance investments in water and wastewater systems. The association's members are not only sharing operations, but also investments. This enables them to generate sufficient financial resources to build municipal water and wastewater infrastructure without having a negative impact on municipal budgets. This investment solidarity also supports optimal technical and economical solutions in extending water supply systems and building multi-municipal wastewater networks with wastewater treatment plants.

Box 3.1. **Inter-municipal collaboration arrangements in the water sector: Examples from the United Kingdom, the Czech Republic and Spain** (*cont.*)

- An example of vertical collaboration is the Greater Bilbao Water Partnership in Spain, where the central, regional and provincial governments fund the operation of a municipal partnership to provide water supply and sewage treatment services in Metropolitan Bilbao (about 1 million people). Today, the partnership operates as a consortium of 43 municipalities (19 founding municipalities, 24 municipalities joined subsequently), the provincial government of Biscay, the Autonomous Basque Community and the central government. The partnership was originally founded in 1967 at a time when Bilbao enjoyed strong growth with the boom of the steel, shipbuilding and equipment goods sectors. The outdated water system could no longer cope with increasing demand, and some of the largest municipalities of the metropolitan area suffered severe restrictions in water supply (which sometimes lasted for less than two hours a day). Despite intense pollution caused by industrial development, water treatment was hardly a priority for local political appointees. The responsibility for water management was scattered among different layers of government and multiple small jurisdictions across the metropolitan area. Faced with such challenges, a councillor of the City of Bilbao and a senior executive of a private electricity utility took the initiative to set up a consortium to manage water supply and treatment in metropolitan Bilbao. The structure of this consortium was remarkably innovative and participatory, given the political regime at this time. This partnership's structure is based on three key principles: *i)* municipal ownership of the partnership (all municipalities are represented in the governing bodies of the partnership, proportionally to their respective population size but the maximum number of votes of each municipality could never exceed five); *ii)* participation of the central, regional and provincial governments, which fund the partnership's operations but lack executive and voting powers (however, the provincial government obtained voting powers in 1997); *iii)* a professional staff with strong technical and managerial skills, in order to allow the partnership to operate like a private utility and avoid political interference from government members.

Sources: Drawing on various sources including Metropolitan Glasgow Strategic Drainage Partnership (n.d.), www.mgsdp.org; Scottish Water (2014), "The Metropolitan Glasgow Strategic Drainage Partnership", www.scottishwater.co.uk/assets/domestic/files/investment%20and%20communities/mgsdp/mgsdpsummer2014.pdf, Briefing Note 13 – Summer 2014; Ferrier, R. and A. Jenkins (2009), *Handbook of Catchment Management*, Wiley Blackwell; Hulst, R. and A. van Montfort (2007), *Inter-municipal Cooperation in Europe*, Springer; OECD (1999), "Intergovernmental partnerships at the local level in Spain: *Mancomunidades* and consortia in a comparative perspective", OECD, Paris, www.municipal-cooperation.org/images/4/49/Paper_Intergovernmental_Partnerships_at_the_Local_Level_Spain_1999.pdf.

Cultural projects also provide an increasingly promising axis that can spur metropolitan debate and action. For example, in France, the nominations of Lille and Marseille as the European Capital of Culture in 2004 and 2013, respectively, fostered new forms of co-operation among municipalities and with civil society, which helped develop collaborative projects reaching beyond initial cultural objectives (Box 3.4).

Box 3.2. Opportunities and limits of a large-scale infrastructure project for metropolitan governance: The example of the cross-border Copenhagen-Malmö region (Öresund)

Encompassing parts of eastern Denmark and Skåne on the Swedish side across the Öresund Sound, the Öresund Region contains about 25% of the combined population of Sweden and Denmark. Since 2000, the Öresund Bridge connects Copenhagen and Malmö – in addition to a ferry route between Helsingborg and Helsingör. Commuting flows across the two sides of the sound have increased about tenfold. A breakdown of commuters shows that 80% are between the ages of 25 and 44. While in the early years of the bridge, Danish workers – having moved to Sweden in search of cheaper housing – made up the majority of commuters, between 2005 and 2007 as the Danish economy boomed, unsatisfied labour demand on the Danish side coupled with rocketing house prices spurred increasing flows of Swedish commuters.

Municipal and regional authorities are at the core of cross-border governance in the region. The Öresund Committee was established in 1993 as a forum for voluntary political co-operation. It is composed of: the Capital Region of Denmark, Region Zealand, the City of Copenhagen, the City of Frederiksberg, Bornholm Regional Municipality, the Local Government Regional Council for the Capital Region of Denmark and the Local Government Regional Council for Zealand in Denmark; and Region Skåne, the City of Malmö, the City of Helsingborg, Lund Municipality and Landskrona Municipality in Sweden. The Öresund Committee is financed through contributions from its members calculated according to their population size. Additional funding comes from the Nordic Council of Ministers and other external sources. Since June 2011, at the tenth anniversary of the opening of the Öresund Bridge, representatives of the Swedish and Danish governments have been co-opted onto the Öresund Committee's Cross-Border Obstacles Group.

The bridge presents substantial opportunities for the development of the region. The Öresund Region is home to the largest concentration of highly educated people in Northern Europe, with large capacity ports and a centrally placed international airport. Over the next years, demographic trends and an ageing population in Zealand will lead to an increase in demand for young workers as older workers leave the labour market. Skåne's demographic profile, in which the proportion of working-age population is higher than that on the Danish side, will open up significant opportunities to increase labour market integration across the straight for the benefit of both sides.

However, integration across the Öresund Bridge has not been spared from the impact of the financial crisis. In 2009, commuter traffic fell for the first time and heavy goods vehicle traffic across the bridge saw a decline of 13%. The high share of commuters living in Skåne and commuting to Denmark across the Öresund Straight has contributed to a taxable capacity among the inhabitants of Malmö amounting to only 85% of the national average.

Source: Adapted from OECD (2012a), *OECD Territorial Reviews: Skåne, Sweden 2012*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264177741-en.

Box 3.3. The Olympic Games as a catalyst for the metropolitan governance debate: The contrasted experiences of Athens and Barcelona

Athens

In 1985, the first Regulatory Master Plan of Athens was adopted, and the Organisation for the Planning and the Environmental Protection of Athens (ORSA) was created with the responsibility to monitor the implementation of the plan. The plan marked an ambitious effort to curb further sprawl, reduce social disparities and enhance environmental protection, for the first time using the metropolitan agglomeration as an institutional and regulatory scale.

In practice, the 1985 Regulatory Master Plan was rapidly bypassed as the preparations for Olympic projects entailed major transformations of the urban area that ran into contradicting provisions of the Master Plan. For example, the creation of multiple Olympic nodal activities in the periphery of the metropolitan area (such as the Olympic Village and the equestrian centre) would further promote sprawl while the Olympic ring road and

Box 3.3. The Olympic Games as a catalyst for the metropolitan governance debate: The contrasted experiences of Athens and Barcelona (*cont.*)

proposed road network extensions would aggravate car dependence, in direct conflict with the Master Plan's stated objectives of urban containment and environmental protection. Some other Olympic projects, such as the development of high-impact athletic activities in the Faliron area, would also seriously damage one of the few natural habitat areas in Athens and impede the opening of the waterfront to the public as it had been initially provided by the Master Plan. Strong mobilisation from various groups (e.g. municipalities, non-governmental organisations, local interest groups, the National Technical University of Athens) against locational and infrastructural choices was still unable to help incorporate Olympic projects into a wider urban planning reform process within the Master Plan. No municipality but the municipality of Athens was represented in the Athens 2004 Organising Committee and ORSA was only given a secondary, advisory role at best, while the central government retained control powers over planning and decision-making processes.

Following 2004, the government's search for the valorisation of Olympic facilities made permanent some of the temporary exclusions from the planning framework in order to attract investment in profit-generating activities. In this context, ORSA supervised the revision of the regulatory master plan, which was presented in April 2009 with the main goal to sustain post-Olympic competitiveness, but the proposed plan was immediately abandoned with the change of government following the elections in October 2009.

Despite its unique metropolitan-wide mandate, ORSA struggled with limited formal competences, insufficient implementation powers and the structural deficiencies of the Greek planning system. ORSA was re-centralised and absorbed by the Ministry of Environment, Energy and Climate Change as of October 2014.

Barcelona

The Spanish central government created a Metropolitan Corporation of Barcelona (*Corporacion Metropoliana de Barcelona*, CMB) in 1975, which encompassed 27 municipalities. However, it was dissolved in 1987 when political tensions escalated between the city of Barcelona and the autonomous community of Catalonia, following the selection of Barcelona in 1986 for hosting the 1992 Olympics. Preceding the Olympics, three sectoral inter-municipal authorities were created in 1987, each covering a different geography:

- a planning authority (*Mancomunitat de Municipis de l'Àrea Metropolitana de Barcelona*, MMAMB), covering 31 municipalities (3.1 million people)
- a transport authority (*Entitat Metropolitana del Transport*, EMT), covering 18 municipalities (2.9 million people)
- an environmental authority (*Entitat del Medi Ambient*, EMA), covering 33 municipalities (3.2 million people) in charge of the water network and waste treatment.

Before and after the Olympics, an important process of strategic planning took place, starting with a focus on the core city and gradually evolving towards the metropolitan scale. The city of Barcelona published its first strategic plan in 1990, its second one in 1994, and together with the three sectoral inter-municipal authorities, its third one in 1999. These strategic plans involved many actors from the regional government, all municipalities, universities, the private sector, the port and civic organisations. The Association for the Strategic Plan of Barcelona (*Plan Estratégico Metropolitano de Barcelona*, PEMB), a non-profit organisation created in 2000 with around 300 members from political, economic and social communities, launched a first metropolitan strategic plan in 2003, which covered 36 municipalities. A new strategic plan, Barcelona Visio 2020, was published in 2010 in the continuity of the 2003 plan. Finally, a metropolitan authority was set up in 2011 by Law 31/2010 of the Parliament of Catalonia. The *Àrea Metropolitana de Barcelona* (AMB) brings together the three sectoral inter-municipal authorities (MAAMB, EMT and EMA). Its Metropolitan Council is composed of the mayors from all 36 municipalities (including the city of Barcelona) covered under the strategic plan. The AMB is in charge of planning, transport, water, waste treatment, social cohesion and economic development. In 2013, it commanded a budget of around EUR 600 million, composed mainly of subsidies and transfers (56%), fees and user charges (24%) and own taxes (17%). There is also a specific authority in charge of public transport (*Autoritat del Transport Metropolità*, ATM), which runs an integrated public transport network and a harmonised fare system.

Box 3.4. **Exploiting culture as a metropolitan building block: The examples of Marseille and Lille (France)**

Marseille

The nomination of Marseille as the European Capital of Culture 2013 bolstered new forms of co-operation among municipalities and with the civil society. In particular, the creation of the "MP2013" label (Marseille Provence 2013) through the creation of an association at the metropolitan scale was a key building block and helped develop collaborative projects that reached beyond initial cultural objectives to such areas as urban transport, environment and economic development. The results of the European Capital of Culture 2013 largely exceeded initial expectations, with more than 10 million visitors and around EUR 600 million estimated economic spillover effects.

In 2004, the city of Marseille decided to apply for the title of European Capital of Culture 2013. In December 2006, an association "Marseille Provence 2013" was set up and the project was selected by a European jury in September 2008. The association MP2013 covers 97 municipalities, mainly from the 6 inter-municipal authorities (*établissements publics de coopération intercommunal*, EPCI). About 15% of its EUR 90 million budget comes from private patronage. The association was able to mobilise a wide range of institutional, cultural, associative and economic stakeholders: the European Union, the central government, the region, the *département*, municipalities and inter-municipal authorities, the Chamber of Commerce and Industry Marseille-Provence, the University Aix-Marseille, Euroméditerranée, the Grand Maritime Port of Marseille (GPMM), public and private companies, etc. All those different partners were brought together not only around a common cultural project but also a shared vision of transforming Marseille-Provence 2013 into a sustainable flagship territory of the Euromediterranean. The cultural project focused on exploiting the territorial diversity, including mobile events across the region and the creation of a 360-kilometre metropolitan hiking trail across natural and urban territories (GR®13).

Beyond cultural and artistic events, the MP2013 also allowed for the construction or renovation of cultural monuments across the region. Within Marseille, in particular, several key sites were inaugurated (e.g. MuCEM, Villa Méditerranée). Urban regeneration projects were also conducted, such as the pedestrianisation of the old port of Marseille. The MP2013 also led to new investments in the airport and the cruise terminal.

Lille

Building on its successful experience of having been the European Capital of Culture in 2004, the "urban community" of Lille, Lille Métropole, decided to further pursue cultural projects as a way to reinforce metropolitan identity. It is currently leading a project called "The Spirit of Lille Métropole", with the goal of "shaping a common culture stemming from diversity, sharing emotions, expressing an art of living together". One pillar of the project is to encourage the networking of cultural practices and artistic courses across the metropolitan area and to create a single information site. In parallel, Lille is actively participating to the establishment of a cross-border "Eurométropole" of Lille-Kortrijk-Tournai, a 2-million people area encompassing 147 municipalities and 3 regions in France and Belgium (see Box 3.5). In 2009, a series of meetings were held to discuss common proposals for action such as the creation of a cultural eurometropolitan pass and a cultural agenda for the Eurométropole. In June 2013, a Eurométropole forum was held in partnership with several media (including the French newspaper *Libération*) around the theme "Is culture a value-added for the society?".

Source: Adapted from OECD (2013c), "Vers une croissance plus inclusive de la métropole Aix-Marseille: Une perspective international", report produced for the Ministerial meeting of the Territorial Development Policy Committee, Marseille, 5-6 December 2013, OECD, Paris.

Build metropolitan ownership among key stakeholders

Metropolitan governance reforms need a strong advocate as the engine of the process. A relevant personality or institution often plays a pivotal role in steering change and creating or maintaining momentum for reform. For example, the strong political will of mayors was a key determinant of successful reform in Barcelona, London and Lyon – to quote only a few. In the case of cross-border metropolitan regions, the galvanising personalities of local politicians and entrepreneurs were instrumental in transforming local partnerships into a new European legal entity in the example of the Lille-Kortrijk-Tournai Eurometropolis (Box 3.5).

Box 3.5. From local cross-border partnerships to European metropolitan governance: The example of Lille-Kortrijk-Tournai Eurometropolis (France and Belgium)

The Lille-Kortrijk-Tournai Eurometropolis was established on 28 January 2008 as the first European Territorial Co-operation Group (ETCG), a legal co-operative group created by a convention. It brings together 147 French and Belgian communes including the Urban Community of Lille, the southern and central parts of West Flanders, and Western Hainaut, with a combined population of 2.1 million. This polycentric conurbation had historically seen growing interest for local cross-border partnerships over two decades, particularly driven by key personalities such as Pierre Mauroy (Prime Minister of France 1981-84 and President of the Urban Community of Lille 1989-2008) and Bruno Bonduelle (President of the Lille Chamber of Commerce 2004-10). The creation of the Eurometropolis involved the establishment of new political, technical and civil society structures:

- The political structure consists of the Assembly, the Board and the Chairmanship, which are the primary decision-making bodies for the region and are composed of political actors from the 14 partners of the ETCG. They form six thematic working groups that explore the major themes to prepare collective agendas: economic development, land-use planning, mobility, culture, tourism and citizen services. The Conference of the Mayors informs local and inter-communal executives of the projects of the Eurometropolis and co-ordinates their implementation at the local level.
- Technical aspects of the partnership are co-ordinated by the Eurometropolis Agency, which offers an administrative tool to co-ordinate the thematic working groups, prepare and implement the projects of the Assembly.
- In order to integrate the civil society, the Cross-Border Forum of the Eurometropolis was created to formally incorporate the interests of the residents into the political process.

The creation of the Eurometropolis was followed by a two-year recruitment period for key leadership positions before the structure became operational. The three respective political leaders from Lille, Flanders and Wallonia also needed some transitional time to reach a consensus on their cross-border objectives. Ultimately, the Eurometropolis agenda reinforced connections and emphasised the elaboration of a medium-term common metropolitan strategy.

Sources: Drawing on various sources including the Lille-Kortrijk-Tournai Eurometropolis (n.d.), "Eurométropole/Eurometropool: Lille, Kortrijk, Tournai", www.eurometropolis.eu; Nelles, J. and F. Durand (2014), "Political rescaling and metropolitan governance in cross-border regions: Comparing the cross-border metropolitan areas of Lille and Luxembourg", *European Urban and Regional Studies*, Vol. 21, No. 1, pp. 104-122.

Beyond the municipal level itself, a clear drive for reform may stem from different constituencies, even within a same country. In France, for instance, impetus towards the recent governance reforms in the three largest metropolitan areas has been largely (albeit not exclusively) driven by the central government in Paris; local governments in Lyon (municipalities and *département*); and the private sector as well as the central government in Marseille. This section examines the role of the national government, intermediate

levels of government, private sector, civil society and universities in building and implementing metropolitan governance reforms.

National government leadership

Central governments can play a decisive role in launching or facilitating metropolitan reforms. There is, however, a large spectrum of their level of involvement across OECD countries. In federal countries, the national government may initiate a broad orientation towards metropolitan approaches and let the state governments take over the implementation in their own territory on specific metropolitan areas. In contrast, among unitary countries, a wider diversity of approaches exists.

The central government may be keen on maintaining tight control on the largest metropolitan areas, especially in the case of large capital regions. In Korea, before 1995, the mayor of Seoul was appointed by the President of the Republic, and in turn, the heads of the districts (*gu*) within Seoul were appointed by the mayor. In the United Kingdom, prior to the establishment of the Greater London Authority (GLA), the government used to run a specific Government Office for London (GOL). This powerful body closely oversaw investment programmes and financial transfers for the area, before it was abolished in 2010 together with the other government offices.

However, the central government can sometimes play a prominent role in the enactment of metropolitan governance arrangements, based on growing awareness of the contribution of strong large metropolitan areas to the country's overall growth and well-being. Korea and Turkey have adopted a new legal framework for metropolitan areas (Box 3.6). In Italy, after two decades of institutional gridlock against the backdrop of lingering local conflicts, resistance from the regions and its own inaction, the government decided to play a more proactive role over the regions by proposing a new law on metropolitan cities in 2014 (Box 3.7).

Box 3.6. **The creation of metropolitan municipalities in Turkey and Korea**

In Turkey, metropolitan municipalities were first created in 1984 in the three largest cities (Istanbul, Ankara and Izmir). Two main waves of legislative reform extended the number of metropolitan municipalities: Act N.5216 in 2004 and Act N.6360 in 2012. The 2012 law determines a minimum size of 750 000 people and expands the boundaries of metropolitan municipalities to their corresponding provincial boundaries in order to cover both urban and rural areas. As a result, as of 2014, there are 30 metropolitan municipalities, which together account for approximately 75% of the national population. At the same time, the reform will dissolve 30 provincial administrations, 1 591 smaller municipalities, and 16 082 villages (Akilli and Akilli, 2014). The objective of the reform is to reap economies of scale and improve the planning, co-ordination and cost-effectiveness of public service delivery.

In Korea, the central government upgraded six large cities that had a population of over 1 million inhabitants into "metropolitan cities" in 1995 (Busan, Daegu, Daejeon, Gwangju, Incheon, Ulsan), putting them on the same footing as the next higher level of government (the province, called *do*). This institutional change is an attempt to follow the rapid pace of urbanisation in a country where decentralisation has a short history and locally elected governments are a relatively recent phenomenon. Although the legal foundations of local self-government were set in place shortly after the country's independence in 1948, local governments were little more than branches of the central government. In being effectively agencies of the centre, local governments had to handle all matters for which they were responsible from a national perspective. Decentralisation gained momentum in 1988 when the Local Autonomy Act and the Local Finance Act were thoroughly reformed. In 1991, local assemblies were re-established and local councillors were elected by universal suffrage. Four years later, in 1995, Korea held its first elections for the chief executives of local governments.

Box 3.7. **Resistance from the regions and the decisive role of the central government: The long road to the creation of *città metropolitane* in Italy**

Italy went through more than two decades of deadlock in the metropolisation process before the recent turn in 2014.

The initial legal framework (introduced in 1990 with Law n. 142/1990) offered the possibility for ten major cities of Italy (Rome, Turin, Milan, Venice, Genoa, Bologna, Florence, Bari, Naples and Reggio Calabria) to establish "metropolitan cities" (*città metropolitana*), endowed with a range of key competencies (e.g. in terms of spatial planning, economic development, etc.). These new institutions would require a regional law to create them, in the absence of which the central government would intervene itself. However, neither the regions nor the central government took any strong institutional or financial action. A few instances of local attempts to establish *città metropolitane* remained unsuccessful (e.g. Bologna in the 1990s, Rome and Turin in the 2000s). As a special case, Rome was given different competences from all other Italian municipalities in Law n. 42/2009, Art. 24 (*Roma capitale*).

In 2012, the Italian government decided to address the institutionalisation of Italian metropolitan areas more directly. In 2013, it committed itself to presenting a new law draft creating *città metropolitane*, which would leave no possibility for the regions to oppose it. The government also proposed to put aside some financial incentives in the EU Structural Funds 2014-20 programming period in order to support investments at the metropolitan scale for the ten cities previously targeted and four additional cities from the special status regions (Palermo, Messina, Catania in Sicily, as well as Cagliari in Sardinia).

After a long and difficult legislative process, in April 2014, the Italian Parliament passed a law (Law n. 56/2014) that identifies a roadmap up to 31 December 2014 to establish *città metropolitane*. In an effort to avoid the vexed question of how to identify the boundaries of those metropolitan areas – which had proven a major obstacle to the emergence of metropolitan structures in the past – the government decided to take the territories of the corresponding provinces as the territories for which to assign by law the status of *città metropolitana.* However, it left to each territory the freedom – and responsibility – to decide the depth and breadth of inter-municipal co-ordination. The law also provides the possibility of changing the provincial boundaries and of striking specific agreements between the metropolitan cities and individual contiguous municipalities or clusters of municipalities. Nonetheless, the complex political-administrative procedure required in order to expand the boundaries of metropolitan cities may be regarded as an obstacle discouraging this option.

Source: Adapted from various sources including OECD (forthcoming), *Governing the Metropolitan City of Venice*, OECD Publishing, Paris, forthcoming.

Buy-in from intermediate levels of government

Metropolitan governance bodies need to garner and cultivate trust from other levels of government – most evidently from the municipal level, but also the intermediate levels such as the regions or provinces. No existing level of government is likely to gracefully hand over power to a new metropolitan authority that could become an alternate centre of power – all the more so if such metropolitan authorities were created by the central government on a top-down basis. The search for greater metropolitan autonomy can trigger antagonism from upper-tier governments, especially when the latter do not perceive positive-sum gains from the reform. For example, the complex relationship between the city-regions and the provinces in the Netherlands led to the government's recent decision to abolish city-regions, up-scale municipalities and strengthen the provinces (Box 3.8). The issue can also be generally more pronounced in unitary

countries than in federal countries, which feature a strong tier of state or provincial government between the municipalities and the national government. However, in Germany, for example, the metropolitan government of Stuttgart (VRS) has still been struggling to expand its powers against higher levels of government (*Land* of Baden-Wurttemberg).

Box 3.8. **Abolishing city-regions and strengthening provinces: The ongoing reform in the Netherlands**

The Netherlands currently host 8 major metropolitan areas and 12 provinces. The 8 metropolitan areas, comprising a total of 112 municipalities and 6.5 million people, have been governed through a system of compulsory inter-municipal collaboration called the "city-regions", a "quasi-tier" of government that was created in 1995 and formalised by the WGR+ Act in 2005. City-regions are administered by a council composed of representatives from member municipalities, with a voting system that avoids the excessive dominance of the largest city. City-regions have focused on the delivery of specific public services such as transport, spatial planning, housing, infrastructure and economic affairs. Despite a generally positive evaluation of public service delivery, city-regions have sometimes been criticised for their lack of democratic legitimacy and accountability. City-regions have also tended to be in competition with their corresponding provinces. In some cases, the population of the city-region accounts for half or more of the provincial population (e.g. Amsterdam, Rotterdam and The Hague [aggregated], Regio Twente, Utrecht). According to the Association of Provinces, the majority of the provinces are in favour of the abolition of city-regions.

Abolishing city-regions and up-scaling municipalities

In the government's efforts to simplify the multi-level governance framework of the Netherlands and avoid the overlap of responsibilities, current reforms plan to eliminate the eight city-regions as of 1 January 2015. The tasks related to infrastructure and public transport will be transferred to the provinces. Their other tasks will revert either to the provinces if they fall with provincial competences, or to the municipalities if these tasks were initially transferred voluntarily by the municipalities to the city-regions.

At the same time, municipalities have gone through a continuous process of amalgamation (from 1 209 in 1850 to 403 in January 2014, a drop to one-third) and are still encouraged to merge in the current reform. A new "Policy Framework for Municipal Redivision" was adopted to give a greater role to the provinces, which can play the role of "brokers" for municipalities and are responsible for sending the merger proposal to the central government for approval. The government also decided to give a temporary merger grant from the Municipalities Fund to compensate newly merging municipalities for the additional extra costs incurred, known as "friction costs". The merger grant will be paid over a period of five years and consists of an extra 25% of the initial amount in the year before the actual merger, 40% of the initial amount in the first year after the merger and 20% of the initial amount in the three following years.

Strengthening and re-scaling provinces

Provinces are to take a more prominent role under the present reform. Since 2003, several central government tasks have already been transferred to the provinces. In 2015, provinces will have exclusive say over regional traffic and transport after the abolition of the city-regions (except in the Amsterdam and Rotterdam areas).[1] In parallel, social welfare competences will be transferred from provinces to municipalities, refocusing provincial competences on spatial planning, economic development and sustainability. There have also been plans to streamline the number of provinces through both coercive and voluntary mergers, but the government's initial proposal to merge Utrecht, Flevoland and North Holland was recently withdrawn in the face of strong resistance.

Box 3.8. **Abolishing city-regions and strengthening provinces: The ongoing reform in the Netherlands** (*cont.*)

Some forms of co-operation between provinces and municipalities remain possible, on the model of the Groningen-Assen Regional Alliance, a voluntary platform of co-operation at the scale of the functional urban area. The alliance brings together the 2 provinces of Groningen and Drenthe, as well as 12 municipalities (Assen, Bedum, Groningen, Haren, Hoogezand-Sappemeer, Leek, Noordenveld, Slochteren, Ten Boer, Tynaarlo, Winsum and Zuidhorn). It produced a joint spatial development strategy ("Regiovisie 2030") in 1996, which was updated in 2005, and set up a joint fund (*Regiofonds*) composed of financial contributions of the different partners and supplemented by central government and European grants (for a total of about EUR 1.5 billion for the 2004-20 period).

Notes: 1. In Amsterdam-Almere and in the area of the combined city-regions of Rotterdam and The Hague, two new entities, called "transport regions", will be established. These transport regions will take over the tasks concerning traffic and public transport currently carried out by the city-regions, and will receive the financial resources of the Traffic and Transport Policy Funding (BDU) from the central government. In the case of Rotterdam and The Hague, 24 municipalities have decided to join forces when the 2 city-regions will be abolished. They plan to create a new co-operation structure called the Metropolitan Region Rotterdam The Hague (*Metropoolregio Rotterdam Den Haag*).

Source: Adapted from OECD (2014c), *OECD Territorial Reviews: Netherlands 2014*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264209527-en.

Earning the political support of upper levels of government for the metropolitan authority requires putting in place checks and balances. For example, the reform currently underway in France is both creating strong metropolitan authorities and reinforcing the competencies of the regions (Box 3.9). The next round of contracts between the central government and the region (*contrat de plan État-région*) is also scheduled to include a metropolitan component, which is expected to allow for strategic co-ordination and synergies between the two levels (OECD, 2013c).

Box 3.9. **Strengthening both metropolitan and regional levels of government: The ongoing reform in France**

The ongoing reform in France is based on two pillars: first, strengthening the metropolitan level by creating new metropolitan authorities in the three largest metropolitan areas (Paris, Lyon and Marseille); second, streamlining the regional level by reducing the number of regions.

Strengthening the metropolitan level

The law of 27 January 2014 on the modernisation of territorial public action and affirmation of metropolitan areas (often referred to as the MAPAM law in French) creates three new metropolitan authorities:

- "Métropole du Grand Paris" (to be operational as of 1 January 2016): a new inter-municipal authority (EPCI) encompassing the city of Paris and three *départements* from the closer inner suburbs (Hauts-de-Seine, Seine-Saint-Denis and Val-de-Marne), which will amount to about 6.7 million people across 124 municipalities.
- "Métropole d'Aix-Marseille-Provence" (to be operational as of 1 January 2016): a new inter-municipal authority (EPCI) encompassing the six existing EPCI in three existing *départements* (Bouches-du-Rhône, Var and Vaucluse), which will amount to about 1.8 million people across 93 municipalities.

Box 3.9. **Strengthening both metropolitan and regional levels of government: The ongoing reform in France** (*cont.*)

- "Métropole du Grand Lyon" (to be operational as of 1 January 2015): unlike Paris and Aix-Marseille-Provence, a special status as a metropolitan level of government, which will merge the responsibilities of the existing EPCI Grand Lyon and those of the *département* of Rhône, covering about 1.3 million people.

Each *métropole* will be administered by a metropolitan council, composed of a metropolitan councillor per member municipality plus one more councillor for each municipality per 25 000 inhabitants (an exception is the city of Paris, which will have 90 seats). For the initial creation of the metropolitan council, councillors will be elected by the municipal councils of member municipalities. They will later be directly elected starting from 2020. The President and vice-presidents of the council will be elected by the councillors.

Streamlining the regional level

The law proposal of 18 June 2014 "related to the delimitation of regions, regional and departmental elections and electoral calendar" is currently under discussion in the French Parliament. The proposal reduces the number of regions from 22 to 13 (amended from 14 in the government's initial proposal), to be operational starting from 1 January 2016.

The 13 new regions include:

- 6 unchanged regions (Île-de-France, Centre, Pays de la Loire, Bretagne, Corse, Provence-Alpes-Côte d'Azur)
- 7 new regions resulting from mergers (Poitou-Charentes, Limousin and Aquitaine; Nord-Pas-de-Calais and Picardie; Champagne-Ardenne, Alsace and Lorraine; Basse-Normandie and Haute-Normandie; Bourgogne and Franche-Comté; Auvergne and Rhône-Alpes; Midi-Pyrénées and Languedoc-Roussillon).

The next regional and departmental elections will be postponed from March to December 2015.

The proposal was adopted by the Senate for first reading (with modifications) on 4 July 2014 and adopted by the National Assembly on 23 July 2014. The proposal was submitted to the Senate for a second reading on 28 October 2014.

Momentum from the private sector

The business community can play a powerful role in initiating a metropolitan reform dynamics by raising awareness and organising itself at a metropolitan scale. Examples from OECD countries include strong involvement from large firms in Chicago, Toronto, Marseille and London (Box 3.10). Conversely, weak support from the private sector may also challenge the metropolitan project – as was the case in the Swedish region of Skåne, where the relocation of the major pharmaceutical group AstraZeneca outside the region at the end of 2011 for internal restructuring reasons came as a blow to the potential of the cross-border Öresund region (OECD, 2012a).

Empowerment of citizens and civil society

Citizens and communities – for whom public policy is ultimately undertaken and who have the continuity that political bodies do not have – need to be brought on board at the very beginning of the process. Different stages of citizen engagement can be identified

Box 3.10. The role of the private sector in supporting metropolitan governance approaches

Chicago

In 2005, the state government merged the operations of the former transport planning commission (Chicago Area Transportation Study, CATS) and the land-use planning commission (Northeastern Illinois Planning Commission, NIPC) to create a single organisation responsible for comprehensive regional planning, the Chicago Metropolitan Agency for Planning (CMAP), which also acts as the region's MPO. This institutional reform was the result of a two-year lobbying campaign instigated by a regional non-profit organisation representing the business community, Chicago Metropolis 2020, which orchestrated a media campaign, developed a bipartisan coalition in Illinois' legislature, found legislative sponsors and drafted the legislation that was unanimously adopted by the Illinois General Assembly. The establishment of Metropolis 2020, which changed its name to Metropolis Strategies in 2011, was motivated by the understanding that having two different agencies engaging in planning (one for land use and one for transport) was no longer a coherent strategy. The initiative was also in sync with the long-standing involvement of the business community in the city's civic affairs that dates back to Daniel Burnham's Plan for Chicago, sponsored by the Commercial Club.

Toronto

Strong momentum from the business sector was a driver of the reform process. Following a 2002 summit of business and community leaders, a senior partner of the Boston Consulting Group (David Pecaut) created and led a 40-member steering committee that produced the 2003 report *Enough Talk: An Action Plan for the Toronto Region*, which raised the government's awareness on the economic and social decline of Toronto and provided a roadmap for issues where there was a clear consensus that action was needed and quick progress could be made. Large firms played a key role in the subsequent creation of the Toronto City Summit Alliance (TCSA), a non-profit organisation that brought together civic leaders and firms from sectors such as banking, professional services and high technology. Renamed CivicAction in 2010, the organisation is led by a Board of directors and a 75-leader steering committee. It has been leading and implementing a large number of collaborative projects and initiatives to drive progress on regional challenges, ranging from smart office energy to tourism recovery and income security. In 2007, together with the Boston Consulting Group, the Centre for Social Innovation and independent charity MaRS Discovery District, the organisation co-hosted Canada's first Social Entrepreneurship Summit.

Marseille

In Aix-Marseille, the "Top 20" initiative was led by entrepreneurs as an attempt to bring Aix-Marseille-Provence into the top 20 metropolitan areas in Europe. This initiative followed a study carried out in 2003 by the Inter-ministerial Delegation for Spatial Planning and Regional Attractiveness (*Délégation interministérielle à l'aménagement du territoire et à l'attractivité* régionale, DATAR), which ranked Marseille 23rd out of 180 European cities. In reaction to this disappointing ranking, several economic actors (including the Chamber of Commerce and Industry of Marseille Provence and the Union for the Companies of Bouches-du-Rhône) created the Club Top 20, which brought together about 70 chief executive officers. In July 2010, the club approved a strategic document entitled "Metropolitan archipelago project: The future of Marseille Provence", which put forward the concept of an archipelago as a way to highlight the specific identity of each territory composing the metropolis rather than a "monolithic vision of a centralising metropolis". The document included 28 projects related to key themes such as transport, business tourism, event tourism and international promotion. The Club Top 20 also called upon local elected officials for their support to a "manifesto for the future of Marseille Provence". The Chamber of Commerce and Industry has so far published about ten editions of "Cahier du Top 20" that raise awareness among business leaders about metropolitan themes, such as transport and single ticketing, housing, business tourism, etc.

Box 3.10. **The role of the private sector in supporting metropolitan governance approaches** (*cont.*)

London

Since the mid-1900s, the private sector in London, and more particularly large firms, were at the core of the dynamics to adopt a metropolitan approach to economic development. After the UK government abolished the Greater London Council (GLC) in 1986, economic stakeholders stimulated the debate on the strategic future of Greater London between 1986 and 2000. Following transport-related challenges and the real estate crisis at the beginning of the 1990s, large firms jointly created the London Development Partnership, which published a first strategic document in 1999. The private sector in London has long been represented through several bodies: the City Corporation (financial firms); the London Chamber of Commerce and Industry (LCCI), a voluntary association of about 4 000 members; and the London branch of the Confederation of Business Industry (CBI), which traditionally represents large firms. At the beginning of the 1990s, a business association called London First was established, composed of about 200 globally oriented firms.

The former mayor of London, Ken Livingstone, built a close relationship with the LCCI, the CBI-London and London First. He urged them to co-ordinate among themselves in order to convey a single, stronger voice. The London Business Board (LBB) was therefore created in 2000 as an umbrella organisation for the three business associations at the metropolitan level and to serve as the collective interlocutor with the mayor. The LBB and the mayor met very regularly, on an almost weekly basis. Through the LBB, the business associations solved their internal conflicts of interest and agreed on common requests to submit to the Greater London Authority. Following the election of thenew mayor Boris Johnson in 2008, and at his request, the LBB welcomed a new member, the Federation of Small Business (FSB), as a representative of the interests of smaller firms.

(Box 3.11). Building or reinforcing a sense of belonging to the metropolitan area can help make it a legitimate space for public policies. Feeding citizens' concerns and preferences into decision-making processes at an earlier stage and through more systematic consultation mechanisms could contribute to improving trust in metropolitan authorities. Civil society has often been mobilised in the metropolitan debate together with local authorities and the private sector in the examples discussed earlier, but has sometimes also been targeted through specific initiatives. Two examples can be particularly inspiring in this regard, in Montreal and in Stuttgart. In Montreal, the Montreal Metropolitan Community created a mixed committee of eight elected officials and eight citizens (ecological associations, academics, business leaders and urban planners) to jointly organise a biennial set of debates ("*agora métropolitaine*") among elected officials and civil society to discuss the implementation of the strategic metropolitan plan 2031 entitled "An Attractive, Competitive and Sustainable Greater Montreal". The first series of debates took place in February and March 2013. In Stuttgart, the Verband Region Stuttgart (VRS) set up several initiatives such as the Metropolis Day and thematic fora at the metropolitan level to mobilise specific demographic and social groups (e.g. religious communities, youth, women). Metropolitan areas in emerging economies are also increasingly developing forms of citizen input to metropolitan issues, as shown in the example of Buenos Aires (Box 3.12).

Ever more sophisticated information and communication technology (ICT) is also offering new instruments for opening up metropolitan governance to a wider community and bringing it closer to the daily life of citizens. Such technology can help not only simplify and rationalise public services through e-government mechanisms, but also collect and share inputs from diverse actors through online fora, social networks and

other web-based tools including open source mapping. Some OECD metropolitan areas have already adopted outreach tools and solicited inputs from citizens, like Daejeon in Korea (Box 3.13). Extended use of ICT could help further promote citizen engagement and ownership in metropolitan governance.

Box 3.11. **Different stages of citizen engagement in policy making**

Effective citizen engagement can yield a number of benefits, including building trust in government; generating better outcomes at lower cost; securing higher compliance levels with decisions reached; enhancing equity of access to public policy making and services; leveraging knowledge and resources; and developing innovative solutions.

Three main stages of citizen engagement can be identified:

- Citizen information: Information is conveyed in one direction only, from the government to the public. There is no involvement of the public (e.g. public feedback is not required or specifically solicited) and there are no mechanisms through which citizens are invited to react. Providing information is a critical first stage of more open and transparent government. Communicating information to citizens on decision making, policy development and implementation puts governments in a position to be scrutinised and builds citizen trust. Informing citizens helps educate them about their rights and entitlements and can communicate the rationale, objectives and achievement of government. This is important for ensuring buy-in to changes and reforms and for providing a platform from which citizens can engage with government. Examples of techniques used for citizen information include setting up websites and granting access to public records and data.
- Citizen consultation: Information is conveyed from the public to the government, following a process the government initiates: it provides information and invites citizens to contribute their views and opinions. The main purpose of citizen consultation is to improve decision making, by ensuring that the views and experience of those affected are considered, that innovative and creative options are taken into account, and that new arrangements are workable. Examples include public opinion surveys, focus groups, workshops/seminars, public hearings and public comment on draft legislation.
- Citizen participation and empowerment: Information is exchanged "two ways", between the public and the government, through a dialogue into which the opinions of both parties feed. Citizen participation and empowerment require a relationship founded on the principle of partnership. It recognises the autonomous capacity of citizens to discuss and generate policy options; it requires governments to share the agenda-setting power and to commit to taking into account policy proposals generated jointly in reaching a final decision. Finally, it requires citizens to accept the higher responsibility for their role in policy making that accompanies greater rights of participation. Examples of participatory decision making and participatory budgeting include citizen juries and citizen forums.

Source: OECD (2014a), *How's Life in Your Region? Measuring Regional and Local Well-being for Policy Making*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264217416-en.

Finally, the ongoing move to open government data to a broader public to improve public service efficiency could contribute to better equipping citizens to participate in metropolitan reforms. In carrying out their statutory duties, government bodies produce, collect and manage (or provide funds to others to perform these responsibilities) a vast quantity of data (Ubaldi, 2013). These data are quickly becoming one of the most valuable public goods, and yet they often remain inaccessible or unaffordable to the

majority of stakeholders. Enabling access to and reuse of these data has significant potential not only to improve transparency and efficiency in public administration, but also to deliver people-driven governmental actions that increase public value. The example in the city of San Francisco, albeit limited to one single city, points to the potential of scaling up this kind of initiative at the metropolitan level by sharing and integrating data across different municipalities. In the Helsinki Metropolitan Area (1.3 million people), four cities worked together to create a collaborative web service, called Helsinki Regional Infoshare, which allowed for the development of numerous metropolitan-wide applications (Box 3.14).

Box 3.12. **A metropolitan forum for citizen oversight: The *Fundación Metropolitana* in Buenos Aires, Argentina**

The *Fundación Metropolitana* (Metropolitan Foundation) is a non-governmental organisation in Argentina founded in 2000. It is devoted to the analysis and debate of metropolitan issues affecting the metropolitan area of Buenos Aires (13 million inhabitants, 55% of the Argentinean GDP in 2010). The Metropolitan Foundation has varied membership, including individuals and corporations that contribute to its finances. The foundation works in association with local governments in the metropolitan area (42 municipalities), the city of Buenos Aires, the province of Buenos Aires, universities, other non-governmental organisations and community associations. The Metropolitan Foundation promotes an ample and non-partisan debate on metropolitan issues and solutions by organising yearly fora. The fora debate mostly bottom-up perspectives on the issues and circulate their conclusions and recommendations to corresponding governments and agencies. The forum planned for November 2014 was to focus on "Building Planning for the Grand Buenos Aires", and to include a discussion from the President of Uruguay on the topic of "Governance in Latin America in the Metropolitan Century".

Sources: Adapted from OECD (2013d), *OECD Territorial Reviews: Puebla-Tlaxcala, Mexico 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264203464-en; Fundación Metropolitana (2014), "Metropolitan Foundation Buenos Aires", http://metropolitana.org.ar.

Box 3.13. **ICT at the service of citizen engagement in metropolitan governance: The example of Daejeon (Korea)**

Korea has the highest share of households with Internet access among OECD countries (97.2% against 74.9% in the OECD in 2011). The website of the Daejeon metropolitan government features a well-developed platform for suggestions and comments from citizens. In particular, the section entitled "Here is what I want from Daejeon City" allows citizens to upload a request or a recommendation, to decide whether it should be visible to the general public or only to the city government, and to follow the status of their request (registered, pending, transferred to the unit in charge, resolved, etc.). Further, the city government carries out online surveys on a regular basis about a wide range of activities, such as the construction of a new subway line. Citizens also have the possibility to subscribe to a free service of text messages that keep them informed about the latest news from the city government.

Source: More information is available (in Korean) on the Daejeon Metropolitan City website, at: www.daejeon.go.kr.

Box 3.14. Using open government data to improve local service delivery and quality of life: The examples of San Francisco and Helsinki

San Francisco

Making data available to the public helps overcome information bottlenecks. It ensures that governments, firms, citizens and other stakeholders have access to information that they could not previously obtain, due to a lack of resources, for example. It also helps save time and funds, as this information can provide feedback on local priorities and contribute to greater effectiveness of policy intervention. The impact of open data on service delivery and public sector performance is often most tangible at the local government level. In the city of San Francisco, for example, the heads of the foster care, juvenile probation and mental health departments agreed with the city's district attorney to allow the release and limited exchange of case information among public agencies. As a result, the agencies were able to spot overlapping beneficiaries of services. They also realised that only 2 000 children using the services were consuming half of the departments' resources, and that most of them lived within walking distance. Thanks to this evidence, the Human Service Agency reorganised service delivery to concentrate on specific neighbourhoods and located services delivered by non-institutional care providers in community centres. Sharing data through the new integrated data system helped focus service delivery on the most vulnerable users, upgrade service care, and improve case co-ordination and efficiency.

Helsinki

In 2010, the four cities of Helsinki, Espoo, Vantaa and Kauniainen started to plan the Helsinki Region Infoshare (HRI), a web service that aims to make regional information quickly and easily accessible to all. The first version of the web service was brought on line in March 2011 and further evolved through user-based testing and learning. It has opened over 1 000 datasets on the Helsinki region. By 2014, it had become a part of normal municipal operations.

The data published on the service is mainly statistical and often GIS-based, giving a comprehensive and diverse outlook on different urban phenomena, such as living conditions, economics and well-being, employment and transport. The data on offer is ready to be accessed and used at no cost by anyone, from citizens to businesses, universities, academies, research facilities and municipal administrations. The data has been used in a wide range of fields, including research and development activities, decision making, visualisation, data journalism and in the development of numerous apps on metropolitan-wide public services to make citizens' daily life easier. Examples of fields include mobility, land reserve, housing stock and public expenditure (e.g. the Tax Tree, a software visualisation showing how a city's revenues – represented by the roots of a tree – are spent – represented by branches, whose thickness is proportional to the size of the cash flow), among many others.

The HRI service is funded by the cities of Helsinki, Espoo, Vantaa and Kauniainen, as well as the Finnish Innovation Fund Sitra (an independent public fund under the supervision of the Finnish Parliament). The Finnish Ministry of Finance has also supported the project planning phase through an inter-municipal co-operation grant of EUR 205 000. The operative execution of the service is managed by a composition of the funding and executive parties of the service, as well as City of Helsinki Urban Facts and Forum Virium Helsinki. Forum Virium Helsinki was particularly responsible for the project planning phase during 2010-13, as well as implementing sub-projects and co-ordination. In 2014, operational co-ordination is the responsibility of the City of Helsinki Urban Facts in close co-operation with Forum Virium Helsinki. The HRI service also draws on a number of data material experts and IT experts from the four cities, as well as a lawyer handling all of the legal aspects of the service. Furthermore, the service co-operates widely with other owners and distributors of data materials. Such operators include Statistics Finland, Helsinki Region Environmental Services Authority, the Uusimaa Region, and various agencies of the region's cities and communities.

Sources: OECD (2014a), *How's Life in Your Region? Measuring Regional and Local Well-being for Policy Making*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264217416-en; Helsinki Region Infoshare (n.d.), "Helsinki Metropolitan Area", www.hri.fi/en.

The role of universities

Although universities are not necessarily a leading actor in initiating metropolitan approaches, they can contribute to reinforcing the metropolitan-oriented collaborative dynamics. For example, the merger of the three main universities in Aix and Marseille in 2012 led to the formation of one single "Aix Marseille University" (AMU), which thus became the largest university in France in terms of student enrolment, staff and budget (Box 3.15). The merger was largely facilitated by the French government's proactive plan to promote university poles of international excellence and helped build support for the metropolitan process. The AMU later contributed to the success of the European Capital of Culture 2013 project, a major stepping stone for the construction of the overall metropolitan project in the region and the 2014 reform to transform Aix-Marseille into a new metropolitan authority.

Box 3.15. **The merger of three universities into a single metropolitan-wide university: The case of Aix-Marseille University**

The three universities of Aix-Marseille I (Université de Provence) II (Université de la Méditerranée) and III (Université Paul-Cézanne) started discussions on a possible merger in 2007. When the French government announced its "Plan Campus" in January 2008 in order to support the emergence of ten university poles of international excellence, the three universities decided to apply together and their project was selected. The region, the *département*, the municipalities of Aix and Marseille, the Chamber of Commerce and Industry and many key stakeholders in the metropolitan area joined in supporting this shared ambition. The three universities finally merged into a single Aix Marseille Université (AMU) on 1 January 2012, thus becoming the largest university in France in terms of student enrolment, staff and budget. The AMU currently welcomes 71 000 students, including 10 000 international students. Among the students, 19 000 are pursuing a Master's and 4 000 a Ph.D., out of which 34% are international students. The merger has eliminated duplication and streamlined training provision. The AMU employs 7 500 staff, including a faculty of 4 500 professors and researchers. It hosts 118 research units. It also helped initiate a policy of rationalisation of university assets and sites and gave new international visibility to the university. The government's Plan Campus aims to put the AMU among the top 100 global universities in the next 10 years and will invest a total of EUR 555 million jointly funded by the central government and sub-national authorities.

Source: Adapted from OECD (2013c), "Vers une croissance plus inclusive de la métropole Aix-Marseille: Une perspective international", report produced for the Ministerial meeting of the Territorial Development Policy Committee, Marseille, 5-6 December 2013, OECD, Paris.

Universities can also play a key supporting role by joining metropolitan entities and participating in metropolitan strategic debates. Several examples can be found across OECD metropolitan areas. In Copenhagen, universities participate in the Growth Forum for the Capital Region (created in 2007), together with firms, unions, and local and regional elected officials to support the strategic development of the metropolitan area. The forum adopted a Regional Business Development Strategy in 2007 to lay out the main strategic development orientations by 2015. In Montreal, universities also participate in Montreal International, created in 1996 to help attract foreign direct investment and international workers to the Greater Montreal area. In Barcelona, the University of Barcelona is one of the 300 members of the Association for the Strategic Development of Barcelona (PEMB), a non-profit organisation created in 2000 and chaired by the mayor of Barcelona. In Portland, the elected metropolitan authority Metro has solicited and benefited from the expertise of the university sector in defining the metropolitan spatial plan and in designing the tramway network around the university campus.

Tailor reliable sources of metropolitan financing

Pressure for metropolitan reforms frequently stems from municipal finance bottlenecks. Metropolitan areas are typically scarred by wide internal disparities in terms of revenue-raising potential, expenditure needs and investment capacity. Metropolitan reforms cannot be conceived in isolation from an in-depth debate on how the new governance structure can help respond to the financial needs of the metropolitan region, and how to match the new governance structure's responsibilities with corresponding financial resources among the main sources of revenues (Table 3.2). Metropolitan public finance is often the nexus of political resistance as municipal governments are grappling with a dilemma between the search for greater resources and the fear of additional costs from the reform.

Addressing intra-metropolitan inequalities and financing metropolitan infrastructure

The benefits and costs of public services typically spill over municipal boundaries. How to share costs fairly within the metropolitan area tends to be a universally controversial issue. The core city's need to share the burden of services that it provides across the whole metropolitan area can therefore constitute both a major argument for the creation of a metropolitan governance structure and a critical deterrent for surrounding municipalities.

Intra-metropolitan equalisation schemes can be implemented to address negative externalities of urban sprawl and compensate for inequalities in tax bases. Such schemes may include redistributive grants and tax base sharing. These mechanisms are typically only implemented in megalopolises governed by a single metropolitan government (e.g. Seoul, Tokyo) or in rare exceptions of highly fragmented metropolitan regions (e.g. Minneapolis-St. Paul in the United States) (OECD, 2006). While such equalisation mechanisms help share the costs of public services, they may also generate disincentives for economic development since the wealthier municipalities get, the less they receive in terms of grants.

Besides formal intra-metropolitan equalisation schemes, metropolitan finance reforms need to consider more effective ways to finance growing needs for infrastructure and services while accounting for spillover effects and responding to pressing new urban challenges (e.g. related to ageing, migration, social cohesion, climate change). While large metropolitan areas are confronted with greater expenditure needs, they also have a greater ability to raise revenues in principle. The following section discusses in more detail the potential of metropolitan areas to exploit each type of revenue source with its own advantages and disadvantages.

Property tax constitutes a particularly critical source of revenue for metropolitan areas due to its impact on urban sprawl (Box 3.16). Property tax is often considered to contribute to the stability of the revenue portfolio in metropolitan areas. Residential property taxes, in particular, offer a way to ensure that those who enjoy the benefits of local services are required to pay for them – in contrast to taxes on business, which may be partially exported to residents of other jurisdictions. Despite such advantages, relying solely on property taxes for metropolitan revenue substantially reduces the scope of services the large metropolitan areas are able to provide from their own resources (Bird and Slack, 2013). In practice, there is wide diversity in the use of property tax in the financing scheme of metropolitan governance authorities. While property tax may

Table 3.2. **Main sources of revenues of metropolitan areas in OECD countries**

Main types of revenues		Examples	Characteristics
Own sources	Taxes	Property tax	Most common local tax. Relatively stable source of revenue. Immobile tax base and lower risk of tax evasion. Relatively costly and difficult to administer. Possibility of split-rate.
		Income tax	Sometimes the only local tax. Can offer substantial revenues in periods of economic buoyancy but is highly volatile. Generally argued to be more revenue-elastic than the property tax and more progressive in its distributional impact on taxpayers.
		Sales tax	Allows more direct benefits from local economic growth and addresses externalities from services by making commuters and visitors pay. May be prone to tax competition and distortions if rates are set locally.
		Business tax	Can generate substantial revenue and is more responsive to economic growth, but rarely equitable, often costly to administer, and likely to encourage tax exporting and lead to destructive tax competition.
		Congestion charge	Sometimes called "smart taxes", fees for road use can vary throughout the day to reach its peak during rush hour, as in Stockholm (2006), but also vary across vehicles in order to charge higher rates to higher polluting vehicles, as in Milan (2008) and Singapore (1975-98).
	User fees	Public transport fares	If charged at appropriate levels, can function as market prices for market commodities (allowing users to know how much they are paying for the services they receive from local governments, and giving governments an indicator of consumer willingness to pay for services). Help ensure efficiency in production and accountability in service delivery. Low price elasticity. Uneven levels of cost recovery across OECD metropolitan areas, full recovery not frequent.
		Fees on other public services (e.g. waste, water, energy)	Full cost recovery frequent. Can help encourage resource preservation.
		Parking fees	High price elasticity. Generally effective in reducing car trips and decreasing the car share in the modal split.
Transfers	Intergovernmental transfers	Equalisation grants (represent about 50% of intergovernmental transfers across the OECD)	Redistributive effect (on average in OECD countries, reduces pre-equalisation inequalities by more than two-thirds). Formula can be based on revenue equalisation and/or cost equalisation. Widespread preference for revenue equalisation, which "taxes" the fiscal resources of a jurisdiction (net effect: marginal equalisation rate) and equalises tax-raising capacity. Cost equalisation is prone to sub-national manipulation and can lead to inflated allocations.
		Unconditional grants	General purpose grants with no strings attached.
		Conditional grants (either matching or non-matching)	Earmarked for specific purposes. Oriented towards inputs rather than outputs. Creates an administrative burden and high compliance costs. Disappointing equalising effect in the case of matching grants.
Capital finance	Land- and asset-based sources	Development charges	One-time levy on developers to finance growth-related capital costs (urban infrastructure and services for the developed area). In principle, should be calculated in a way that measures the incremental costs of new construction, including infrastructure costs but also congestion costs.
		Land-value capture (e.g. betterment levies)	Taxes on estimated land-value increments and windfall gains for private sector arising from public investment.
	Public-private partnerships (PPPs) Private participation in infrastructure (PPI)	– Concessions – Private finance initiatives (PFIs)	Wide variety of contractual arrangements where private operators bid for a contract to design, finance and manage the risks involved in delivering public services or assets and receive fees from the public body and/or user tolls. Offer an attractive way to relieve municipalities from upfront capital costs and avoid highly visible debt while tapping into the expertise of the private sector.
	Borrowing	Bond issue or loans	Either direct access to capital markets via bond issue (but unlikely to become a main source of long-term capital investments) or loans from specialised financial institutions (often via the creation of a financial intermediary that spreads the risks across many municipalities and lowers the average cost of borrowing). Access often restricted due to moral hazard and macroeconomic stabilisation problems.

Sources: Author's own research drawing on various sources including Bird, R. and E. Slack (2013), "Metropolitan public finance: An overview", in R.W. Bahl, J.F. Linn and D.L. Wetzel, *Financing Metropolitan Governments in Developing Countries*, Lincoln Institute of Land Policy, Cambridge, Massachusetts; OECD (2013e), *Fiscal Federalism 2014: Making Decentralisation Work*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204577-en; OECD (2006), *Competitive Cities in the Global Economy*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264027091-en.

constitute a significant source of financing for inter-municipal authorities, as in France[2] for example, directly elected metropolitan authorities only use it marginally. For example, among the three directly elected authorities of Portland Metro, Stuttgart VRS and Greater London Authority (the only directly elected metropolitan authority in their respective countries), Portland Metro is the only one that has taxing power and levies a property tax, but the latter represents only 18% of its budget, more than half of which comes from fees and user charges (Table 3.3). In contrast, Stuttgart VRS and the Greater London Authority have no taxing power and are primarily financed through grants and subsidies from other levels of government.

Box 3.16. **Property tax and urban sprawl in metropolitan areas**

Research on the impact of the property tax on urban sprawl is mixed. Theoretically, property tax can have two different effects on sprawl (Brueckner and Kim, 2003):

- The improvement effect suggests that, all else being equal, a property tax based on market value is expected to result in a reduction in density. Where the tax is levied on the assessed value of property (land and improvements), any investment (such as a building) that increases the value of the property increases its assessed value and thereby its tax. Higher property taxes are thus expected to provide an incentive for less densely developed projects – scattered single-family houses rather than apartment buildings. Lower densities mean that the city is likely to expand in a way that is socially inefficient (Brueckner, 2001).
- In contrast, the dwelling-size effect would lead to a reduction in urban sprawl. If the tax is partially shifted onto consumers, it would lead to a reduction in the size of homes and result in a more densely populated city (Brueckner and Kim, 2003).

However, few empirical studies of the impact of the property tax on urban sprawl have been undertaken.

By altering the relative price of property, property tax can influence a number of decisions regarding property improvement, size and location – and ultimately increase or decrease urban sprawl (Deskins and Fox, 2010). When the aim is to decrease sprawl, property tax can be reformed to eliminate incentives for single-family homes over multi-family apartments (e.g. by correcting the under-assessment of single-family home market value and correcting the lower tax rates or tax reliefs for single-family properties). Another tool for encouraging higher density in the urban core is to tax the land value, rather than the buildings or other improvements to the property, in order to give owners an incentive to develop the land to its most profitable use. A possible way to do this is to replace a traditional property tax with a land-value tax (sometimes called a "site-value tax"), or a split-value tax that includes higher rates for land value and lower rates for structures or other improvements.

Sources: Adapted from Merk, O. et al. (2012), "Financing green urban infrastructure", *OECD Regional Development Working Papers*, No. 2012/10, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k92p0c6j6r0-en; Brueckner, J.K. and H.A. Kim (2003), "Urban sprawl and the property tax", *International Tax and Public Finance*, Vol. 10, No. 1, pp. 5-23; Brueckner, J.K. (2001), "Property taxation and urban sprawl", in W.E. Oates (ed.), *Property Taxation and Local Government Finance*, Lincoln Institute of Land Policy, Cambridge, Massachusetts; Deskins, J. and W.F. Fox (2010), "Measuring the behavioural responses of the property tax", in R. Bahl, J. Martinez-Vazquez and J. Youngman, *Challenging the Conventional Wisdom on the Property Tax*, Lincoln Institute of Land Policy, Cambridge, Massachusetts, pp. 47-66.

Table 3.3. **Comparing the sources of financing in three directly elected metropolitan authorities: Portland, Stuttgart and London**

	Portland	Stuttgart	London
Name of the metropolitan authority	Portland Metro	Verband Region Stuttgart (VRS)	Greater London Authority (GLA)
Year of creation	1979	1994	2000
Population coverage	1.5 million across 25 municipalities	1.96 million encompassing the city of Stuttgart and 5 surrounding districts (total of 179 cities and municipalities)	8.2 million across the city of London and 32 boroughs
Composition	– Metropolitan Council composed of six members (one in each district), directly elected every four years – Council President, directly elected region-wide every four years	– Regional assembly of 93 members directly elected every 5 years by proportional vote – President of the regional assembly and regional director, both elected by the members of the regional assembly	– London Assembly of 25 members directly elected by proportional representation – Mayor of London directly elected every four years
Competences	– Land-use planning (e.g. urban growth boundary) – Transport planning (as an MPO) – Managing several park facilities – Handling waste disposal – Maintains landfills and recycling transfer stations – Owning and operating some major facilities (e.g. zoo, convention centre, exposition centre)	– Regional spatial planning – Transport infrastructure and operation (including suburban rail S-Bahn) – Regional economic and touristic development	– Land use (London Plan) – Transport (Transport for London) – Policing (Mayor's Office for Policing and Crime) – Fire and rescue (London Fire and Emergency Planning Authority) – Development (GLA Land and Property)
Financing	– 57% from fees (USD 55 million in 2013-14) –-18% from property taxes (USD 39 million) – Federal and municipal subsidies (USD 13 million)	– No taxing power – Very modest budget – Short-distance public transport service (EUR 91.1 million in 2010) – Transport and mobility subsidies from the city of Stuttgart and the districts (EUR 75 million) – Grants from the *Land* of Baden-Wurttemberg (EUR 56.4 million) – Federal government subsidies (EUR 30.1 million) – Fees from municipalities (EUR 14.6 million)	– No taxing power – More than 80% from central government grants – Remainder from a local property tax and user charges

Sources: Adapted from various sources including Farvacque-Vitkovic, C. and M. Kopanyi (2014), *Municipal Finances: A Handbook for Local Governments*, The World Bank, Washington, DC; OECD (2013c), "Vers une croissance plus inclusive de la métropole Aix-Marseille: Une perspective international", report produced for the Ministerial meeting of the Territorial Development Policy Committee, Marseille, 5-6 December 2013, OECD, Paris; OECD (2006), *Competitive Cities in the Global Economy*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264027091-en.

Metropolitan finance reforms may also help consider the possibility of diversifying the tax portfolio besides the property tax. In particular, three main types of local tax can be taken into account:

- Income tax. In large metropolitan areas with a heterogeneous population, incomes are more likely to be highly correlated with consumption of locally supplied public services than are property values (Bird and Slack, 2013), which makes the income tax more clearly related to the benefits received from municipal services. Even within the largest metropolitan areas, however, it is often recommended to "piggyback" onto higher level income taxes (e.g. to levy the tax as a supplement to a national income tax) or at least to share the same tax base, rather than to bear the cost of administering a separate local income tax.
- Sales tax. Sales tax would allow large metropolitan areas to benefit more directly from growth in local economic activity than a property tax would, while at the

same time discouraging savings and growth less than an income tax. Sales tax may be particularly attractive and justified to address the externalities of municipal public services when substantial numbers of beneficiaries, such as commuters and visitors from neighbouring areas, visit the city to work, shop or enjoy cultural or recreational facilities with no other ways to pay for the public services that they use. However, local sales tax is limited by the potential erosion of the tax base and subsequent economic distortion as it may encourage tax evasion and induce high compliance costs.

- Business tax. Many metropolitan areas impose various types of business tax (including corporate income taxes, capital taxes, non-residential property taxes, transit taxes [*octroi*], license fees [*patente*], and various forms of industry and commerce taxes). Cities often have more discretion over the rate, base and application of such taxes than for any other form of taxation. However, in economic theory, local business taxes are generally seen as rarely equitable, often costly to administer, and likely to encourage tax exporting and lead to destructive tax competition.
- User fees are widely seen as the most appropriate source of revenues for metropolitan areas to finance the operation and maintenance expenses of infrastructure. User fees can be particularly important in large metropolitan areas because they can encourage more efficient land use: when marginal cost prices are charged, consumers who are far away from existing services and hence more costly to serve will pay more, and those closer will pay less (Bird and Slack, 2013). As part of a broader effort to achieve greener growth and sustainable development, large metropolitan areas can also exploit the potential of user fees to signal the scarcity and encourage the conservation of resources such as water and energy. Strengthening the link between the level of fees and actual consumption of water and energy and actual generation of waste can help further promote resource preservation and less waste. Metropolitan governance arrangements can help reduce the political pressure of setting fees on individual municipal governments by turning over the provision of services to a joint public (or private) entity.

Other mechanisms can help metropolitan areas charge the major negative externality coming from congestion. Large metropolitan areas are confronted with the challenge of how to share and reduce increasing costs from congestion, which include air pollution, environmental degradation and high noise levels, but also affect land prices and labour mobility. The revenues of congestion charges adopted in some metropolitan areas have been used to finance urban public transport as in London (introduced in 2003) and Seoul (introduced in 1996). Introducing parking fees can also help reduce road congestion, signal the scarcity of open spaces in the city and generate additional resources to finance public transport. Charging higher rates in particularly congested areas of the metropolitan hour or during peak hours (e.g. as in Los Angeles and New York City) can even more effectively discourage car use (Merk et al., 2012).

Another way to finance metropolitan infrastructure while discouraging sprawl is to tap land-based sources of revenues. The main rationale is that "development should pave its own way", and existing residents of a municipality should not be required to pay for the costs of infrastructure required by new residents (Alm, 2013). This can be done through development charges, which should be differentiated by location to reflect the real costs (e.g. higher costs for areas located further away from major existing facilities). Metropolitan areas can also charge for estimated land-value increments and windfall gains for the private sector that arise from new public infrastructure investment under the

form of betterment levies, which can then be used to finance sustainable transport infrastructure. It is generally considered that development charges are less complicated to administer and more certain than other methods of growth controls (such as zoning, regulations and outright growth limitations).

A wide variety of public-private partnerships (PPPs) is also used to build metropolitan infrastructure, especially at a time of constrained public resources. In practice, PPPs have sometimes mobilised less private finance than expected in metropolitan areas, due to a set of political, economic and institutional constraints that raise the risk profile of urban infrastructure for private investors. The effectiveness of a PPP varies according to the specific characteristics of different risk-sharing and financing schemes, as well as different organisational forms. Many metropolitan areas are turning to PPPs as a way to fund green infrastructure projects, with the expectation that diversifying business risks and stakeholders through PPPs will help implement green projects that would not be possible through traditional public procurement alone. Private firms can help not only foster corporate social responsibility by participating in green projects, but also create new markets for green products (Merk et al., 2012).

Finally, metropolitan governance reforms may help municipalities gain greater access to borrowing for financing infrastructure. Borrowing allows metropolitan areas to immediately fund large capital expenditures for which their current revenues are rarely sufficient. It also allows metropolitan areas to accommodate the uneven stream of funding needs over time without having to impose large yearly fluctuations in their tax rates. Larger metropolitan areas tend to have better access to bond markets than smaller municipalities do and tend to pay lower servicing costs (Bird and Slack, 2013). However, municipal government borrowing has also often generated moral hazard problems. It also presents the disadvantage that the loan's interest obligations must be serviced annually and constrain local fiscal flexibility, since revenues dedicated to debt repayment cannot be used to meet other current expenditures. This challenge may prove particularly critical when local revenue streams are volatile.

Contributing to national equity

Large metropolitan areas typically provide some key services that generate externalities beyond their borders with substantial national implications, in such diverse sectors as transport, health and education. This raises the commonly controversial issue of how metropolitan areas play out in national equalisation schemes, which are generally designed so as to redistribute resources from richer to poorer regions. In many OECD countries, equalisation schemes make metropolitan areas contribute to other areas in a country, as their relatively higher fiscal capacity compensates for their higher expenditure needs. The extent to which metropolitan areas come out as net contributors depends on which elements the equalisation formula takes into account – in particular, revenue and cost. Revenue equalisation tends to lead to redistribution from urban to rural areas because of the latter's lower revenue-raising capacity. Cost equalisation can be based on either geographical need indicators (which usually reinforce redistribution to rural areas where infrastructure costs tend to be higher) or socio-economic need indicators such as social welfare (which weakens the redistributive character of the scheme because socio-economic costs are generally higher in urban areas).

Urbanised areas in most OECD countries remain net contributors to fiscal equalisation systems since higher revenue-raising capacity and lower geographical needs outweigh socio-economic needs, as the equalisation experience in Finland, Italy, Japan,

Korea, Norway and Sweden attests (OECD, 2013e). Experience in large OECD metropolitan areas has suggested that in some cases, municipalities with high tax capacity received more equalisation transfers (e.g. Amsterdam) while some elements of expenditures such as higher labour costs (e.g. Stockholm) or higher land costs (e.g. Helsinki) were not taken into account (OECD, 2006). Specific forms of tax sharing can also cancel out the equalisation effect of general grants. For example, metropolitan municipalities in Turkey are allowed to keep 5% of the general tax revenues collected within their boundaries, in addition to general grants inversely related to a jurisdiction's needs (OECD, 2013e).

Effective national equalisation schemes require a strong central government ability to monitor the actual use and performance of intergovernmental transfers. Many countries have chosen to use a special, independent grants commission to administer their transfers, in order to remove as much as possible the role of politics in grant design and allocation (Alm, 2013). While the OECD has put forward a few general rules on the reform of equalisation (Box 3.17), metropolitan governance reforms call for a particularly careful analysis of how the new metropolitan financial scheme will affect fiscal behaviour in order to avoid generating disincentives to tax effort and economic development.

Box 3.17. **General rules for fiscal equalisation in OECD countries**

Reforms of equalisation must target rising inequality, while ensuring that growth in the more productive regions is not held back or jurisdictions' development incentives undermined. Equalisation is deeply country-specific. Reform considerations and political economy experiences may therefore not be transferable from one country to another. However, it is possible to state a few general rules on the reform of equalisation.

- Equalisation should rely on only a few core indicators that reflect inter-jurisdictional differences in tax-raising capacity and/or spending needs. These indicators should be immune to any manipulation by sub-national governments in order to pre-empt any unfair allocations to jurisdictions or spending excesses by either sub-national governments or central government.
- The institutional set-up should help underpin the efficiency of equalisation while keeping equity objectives intact. In all countries, disparities in revenue-raising capacity across jurisdictions are much greater than those in service cost. They should therefore be the first priority of equalisation. The size of a jurisdiction should not enter the equalisation formula, the possible exception being large agglomerations where living costs are high.
- In order to improve transparency, equalisation should be clearly separated from tax sharing and other intergovernmental grants whose purpose is not redistribution. Equalisation should, ideally, be a single transfer that offsets differences in tax-raising capacity and/or one or more transfers that meet differences in spending needs in the main policy areas devolved to sub-national governments – education, healthcare and infrastructure. Donors and recipients should be clearly visible.
- The impact of equalisation should be regularly monitored. Periodical reviews of the system should assess to what extent equalisation helps reduce inter-jurisdictional inequality and how it affects the efficiency of the public sector, development incentives, overall spending and tax levels. Equalisation should, in particular, come under scrutiny to ascertain whether it provides insurance against asymmetric shocks. If it does not, equalisation and stabilisation should be addressed by two separate transfer systems.

Source: Adapted from OECD (2013e), *Fiscal Federalism 2014: Making Decentralisation Work*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204577-en.

Design incentives and compensations for metropolitan compromises

Communicating the long-term gains of reforms and costs of non-reform is critical. Stakeholders need to be made aware and convinced of how maintaining the *status quo* would affect their interests in the short and long term. There must be a clear strategy to identify and manage the expectations of different constituencies. OECD experience suggests that co-operation among municipalities works best on a voluntary basis with incentives from the top, but also when a strategy is elaborated for engaging those who feel threatened by the reform and leveraging their buy-in (or sometimes intentionally overriding part of their requirements against other compensations for their anticipated losses). Recent examples of such incentives include the City Deals in the United Kingdom, whereby the government is giving a range of new powers to cities that commit to strengthening collaborative governance in their area; the case of Helsinki, where the newly created Metropolitan Council is scheduled to receive fewer powers if municipalities accept to merge according to the government's consolidation plan; and the experience in Lyon, where the core city of Lyon accepted to reduce its number of seats in the "urban community" of the Grand Lyon as a compensation for other municipalities to join (Box 3.18).

Implement a long-term process of metropolitan monitoring and evaluation

Solid background research and scrutiny from unbiased experts can help create and sustain credibility for the reform by strengthening the evidence base. Independent expertise and research capacity are required to demonstrate the need for change and the desirability of the proposed solutions to key stakeholders, as well as analyse and weigh different options against each other. Australia offers rich experience in terms of appointing an independent panel of experts to conduct an extensive review of local and metropolitan government reform, which, in the case of Perth, has put forward a concrete proposal for new boundaries with an extensive process of public consultation (Box 3.19). In Turin as well, the experience of the Metropolitan Conference followed by the Metropolitan Table was a strong attempt to propose dialogue at the metropolitan level with the support of the province and the region over the 2000-10 period, and independent expertise was provided at the regional level by the IRES (*Istituto di Ricerche Economiche e Sociali per il Piemonte*).

Strong, reliable instruments for monitoring and evaluation contribute to fostering continuous improvement. Tools need to be put in place to ensure a continuous stream of feedback. In Canada, for example, Toronto has set up mechanisms to gather feedback on metropolitan issues from citizens and other stakeholders on a regular basis. Since its diagnostic report *Enough Talk: An Action Plan for the Toronto Region* (2003), the Toronto City Summit Alliance convened all three levels of government with business, labour, academic and non-profit sectors into a Greater Toronto Summit every four years to drive collective action on pressing issues such as transport, energy and socio-economic inclusion.

Building in some degree of flexibility in the timeframe, sequencing and speed of metropolitan governance reforms helps put in place a steady process of metropolitan learning. Metropolitan governance reforms can sometimes take the form of incremental experimentation with a selection of a few pilot experiences, as opposed to a one-shot uniform model. In Sweden, for example, governance reforms – to merge counties with a directly elected regional assembly and responsibility for regional development – have

Box 3.18. Different examples of institutional incentives for encouraging metropolitan governance

More metropolitan powers if municipalities collaborate among themselves: UK City Deals

The UK government has recently offered to devolve new powers to cities over transport, infrastructure, business development, education and planning issues if cities put in place stronger governance arrangements (e.g. through an elected mayor for their area or a stronger community of existing local authorities). Each city can negotiate such deals with the government and had to put forward a proposal by January 2013.

The first wave of City Deals was inaugurated with the eight largest cities outside of London, known as the Core Cities (Birmingham, Bristol, Leeds, Liverpool, Newcastle, Nottingham, Sheffield and Manchester). Liverpool and Bristol have voted to have directly elected mayors supported by strong decision-making structures across the wider economic area; Leeds and Sheffield have joined Greater Manchester in forming the West Yorkshire and South Yorkshire Combined Authorities; Newcastle has worked with the seven authorities across their economic area to create a North East Combined Authority; Birmingham is one of the biggest local authorities in Europe and has developed strong private sector leadership and decision making across the Local Enterprise Partnership; and Nottingham has created a new Private Sector Governance arrangement to deliver the deal.

The second wave of City Deals involves 20 cities (the next 14 largest cities outside of London and their wider areas, and the 6 cities with the highest population growth over the 2001-10 period). The cities are expected to negotiate deals with the government throughout 2014.

Fewer metropolitan powers if municipalities merge: Helsinki

In Helsinki, the elected Metropolitan Council introduced by the central government in August 2013 is scheduled to focus on a set of key competencies (i.e. land use, housing and traffic, international competitiveness, immigration and social cohesion). However, it is also planned that the council will receive fewer powers if municipalities merge. This is in a context where the government committed to implementing a comprehensive nationwide reform of municipalities to enhance productivity and effectiveness in the delivery of public services. Mergers will initially be voluntary. Municipal councils discussed merger plans and had an obligation to provide reports and proposals by July 2014, for mergers to be implemented between 2015 and 2017. The government is considering imposing mergers in the ten or so main urban centres (outside the Helsinki Metropolitan Area) if municipalities fail to come up with sufficiently ambitious consolidation plans.

Fewer seats for the core city if other municipalities join: Lyon (before the 2014 reform)

Lyon currently has the largest inter-municipal authority in France in terms of population coverage (1.3 million people) and encompasses 59 municipalities, with a total budget of about EUR 1.9 billion (2013). The inter-municipal authority is called the Urban Community of Lyon (*Communauté urbaine de Lyon*, commonly referred to as Grand Lyon). In the years preceding the 1969 creation of the community, the balance of powers between the core city of Lyon and the surrounding municipalities triggered intense and often hostile negotiations, particularly in terms of the number of seats within the community council to be allocated across municipalities. The city of Lyon claimed an absolute majority for itself given the public services it provides to surrounding municipalities, whereas the surrounding municipalities advocated a better balanced representation. As an incentive for other municipalities to join the community, the city of Lyon finally agreed to reduce its own number of seats in the community council (from an initial proposal of 34 seats out of 60 to a system where the 162 seats are allocated proportionally to the population size of each municipality, with at least one seat per municipality).

Following the law of 27 January 2014 on the modernisation of territorial public action and affirmation of metropolitan areas, Grand Lyon and the *département* of Rhône will be merged into a new directly elected metropolitan level of government (the only one of its kind in France) as of 1 January 2015.

first been tested in two pilot regions around large metropolitan areas (Västra Götaland around Gothenburg, and Skåne around Malmö) with a multi-annual timeline and evaluation mechanisms, before extending the possibility to other interested regions (six counties in 2014) (OECD, 2014b). Providing visibility on the short and long term, and to revisit the arrangement after a given period, will allow actors to anticipate the next steps of the process, while leaving room for trial and error as well as midway adjustments to monitor progress.

Box 3.19. **An independent expert panel to conduct a metropolitan review: The example of Perth (Australia)**

Following an audit conducted in 2009 by the Council of Australian Governments (COAG) on the organisation of Australian municipalities and metropolitan areas, the Australian government appointed the independent Metropolitan Local Government Review Panel in June 2011 to examine the social, economic and environmental challenges facing Perth in the next 50 years. The functional metropolitan area of Perth, home to 1.83 million people, encompasses 30 separate local governments, each with its own mayor (or president), council of elected members, chief executive office and staff, as well as its own system to manage key tasks such as planning, infrastructure management, care for the environment and community capacity building. The system was set up in the late 19th century, and has changed relatively little despite minor changes and realignments of boundaries. The panel was asked to recommend governance models and boundaries for local governments in the Perth metropolitan area that take account of new challenges. The panel was composed of three independent experts and supported by two advisory groups. It released an Issues Paper in October 2011 and Draft Findings in April 2012 for public comment, and received over 250 and 195 submissions on each respectively. It held three public forums and one local government forum. It also met individually with various stakeholders including local governments, state government agencies, community groups and other organisations.

Released in July 2012, the panel's Final Report contained 30 recommendations for changes to Perth's local government arrangements. The panel proposed two options for Perth metropolitan local governments. Both options reduced the number of local governments from 30 to 12. The first option (Option A) was based on an amalgamation of existing entities. The second option (Option B) involved splitting some local government areas to create more strategically focused boundaries. Option B was the panel's preferred option. The report was again released for public comment from October 2012 until April 2013, and 284 submissions were received. The panel also published an extensive selection of background papers and research materials. After considering the report and community feedback and taking into account previous studies, experience from other states and overseas, and information from the sector, in July 2013, the state government announced its proposal for new local government boundaries for metropolitan Perth. The government model used existing local boundaries wherever possible to minimise disruption in amalgamating local governments.

Following the release of the government's proposed model, 18 local governments took up the invitation to submit proposals for boundary changes to the independent Local Government Advisory Board for their review. The government also incorporated feedback from the community and local governments when it finalised its proposals for the Board, which it submitted in November 2013. The changes of boundaries are scheduled to take place by July 2015. The Board will assess all of the proposals, taking into account considerations including community of interests, economic factors, the history of an area and the effective delivery of local government services. As of October 2014, work was underway for the release of the findings of the Local Government Advisory Board report and its recommendations on local government reform. A Metropolitan Reform Implementation Committee will be in charge of implementing the reform. It will be composed of representatives from local governments, the Western Australia Local Government Association (WALGA), the Local Government Managers Association (LGMA) and the Australian federal Department of Infrastructure and Regional Development.

Source: Drawing on Metropolitan Local Government Review (2013), http://metroreview.dlg.wa.gov.au.

Notes

1. See OECD (2010) for details.

2. In France, taxes linked to real estate – property tax on land (*taxe foncière sur les propriétés non bâties*), property tax on buildings (*taxe foncière sur les propriétés bâties*) and residence tax paid by households (*taxe d'habitation*) – constitute a major source of funding for inter-municipal co-operation structures with own-source tax revenue (*établissement public de coopération intercommunale à fiscalité propre*), together with the company real estate contribution (*cotisation foncière des entreprises*, which replaced the business tax [*taxe professionnelle*] in 2010).

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Part II

Case studies of selected OECD metropolitan areas

Chapter 4

Aix-Marseille, France[1]

This chapter begins with a brief socio-economic and institutional overview of the Marseille metropolitan region. It then explores the current status of inter-municipal collaboration, in particular with respect to public transport and spatial planning. Lastly, it discusses the metropolitan governance reforms of 2013.

Key points: Aix-Marseille

- The third-largest French metropolitan area in terms of population and contribution to national gross domestic product (GDP), Aix-Marseille has experienced relatively high economic growth in comparison to other areas in the OECD in the 2000s. Employment growth was the second-strongest of all European metropolitan areas between 2000 and 2012. Aix-Marseille has improved its position in terms of innovation performance and international attractiveness and withstood the crisis better than many other metropolitan areas. The rise in employment during the decade since 2000 has not been sufficient to reduce the unemployment rate, which is still at a high level compared to other French and OECD metropolitan areas. Its strategic position is also under threat. In particular, the port of Marseille-Fos has lost ground in the last several years *vis-à-vis* Genoa and Barcelona.
- However, the most important challenges for Aix-Marseille come from within the metropolitan area itself, rather than from competition with other major cities in Europe or elsewhere. In fact, Aix-Marseille is one of the metropolitan areas with the highest levels of inequality in France, whether measured in terms of income or access to jobs and education. These striking socio-economic inequalities present challenges for generating inclusive and sustainable growth.
- In OECD comparison, Aix-Marseille is one of the most fragmented metropolitan areas in terms of governance. The fragmentation index, measured in terms of the number of municipalities per 100 000 inhabitants, is twice as high for Aix-Marseille as the OECD average.
- The proposed French reform on metropolitan areas of 2013 aims to create one inter-municipal authority (Aix-Marseille-Provence) in 2016, which will merge the current six inter-municipal authorities. In line with the wide array of reforms being enacted in OECD countries, this future metropolitan authority would have strategic competencies. However, the law is merely a first step: how it is implemented will be a key factor in determining its impact. The future metropolitan authority must show that it provides a real added value, and that it will address problems that have remained unresolved thus far.

Overview of the metropolitan area

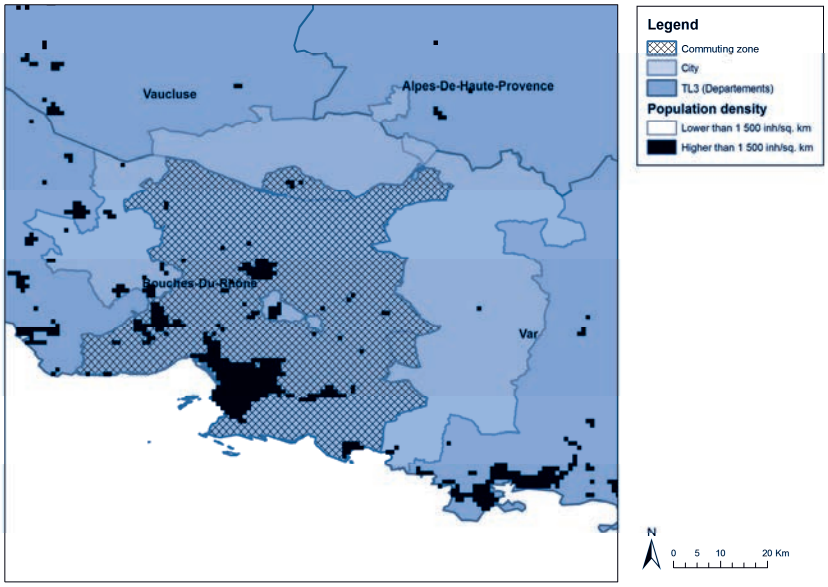
Socio-economic profile

The metropolitan area of Aix-Marseille, with 1.75 million inhabitants, is the third-largest metropolitan area in France after Paris and Lyon (Table 4.1). Covering a surface area of 4 231 km^2, the scale of the metropolitan area is comparable to that of Seoul or Philadelphia. Like a number of metropolitan areas in the OECD, Aix-Marseille is organised around several urban poles. Overall, there are 130 municipalities, including Marseille, Aix-en-Provence, Salon-de-Provence, Marignane, Martigues, Aubagne, Istres and Vitrolles. The population of the metropolitan area has grown at a slightly lower rate than the average for OECD metropolitan areas in the last decade (0.7% versus 0.9% for the period 2000-12). This growth has been primarily driven by municipalities on Marseille's periphery. As a result, the city of Marseille's share of the metropolitan area's population has declined over the past 50 years (65% in 1968 down to 46% in 2010). Urban sprawl was significant until the 2000s, but has slowed considerably since then.

Table 4.1. **Basic facts on Aix-Marseille**

Aix Marseille	
Population	1.75 million inhabitants
Number of municipalities	132
Existing metropolitan institutions and funds	Currently six inter-municipal authorities (*établissements publics de coopération intercommunale*, EPCI), reform under way to merge them into one in 2016
France	
Population	66 million
Levels of government	
	– Regional level (22 regions), soon to be reformed into 13 regions
	– Inter-municipal authorities (EPCI)
	– Municipal level (more than 36 000 municipalities)

Figure 4.1. **Limits of the metropolitan area of Aix-Marseille as defined by the *OECD Metropolitan Database***



Source: OECD (2012a), "OECD Metropolitan Database", http://measuringurban.oecd.org.

Functional integration within the Aix-Marseille metropolitan area is intensifying, so that interdependence among different sub-areas is increasing. Between 1999 and 2010, employment growth was particularly robust in the municipalities surrounding Marseille: 35% in Aix-en-Provence and 25% in Salon-de-Provence versus 12% in the Marseille-Aubagne area (Figures 4.2 and 4.3). The shift in the employment situation resulted in an increase in commuting within the urban area, in terms of both volume and distances travelled. Trips to and from work increased by 20% between 1999 and 2010 and the distance between home and work is now 16 kilometres on average. Over 240 000 daily trips are taken between Marseille and Aix, over 127 000 between Aubagne and Marseille, and over 150 000 between Étang de Berre and Marseille.

Figure 4.2. **Population growth of the Aix-Marseille metropolitan area (INSEE definition)**

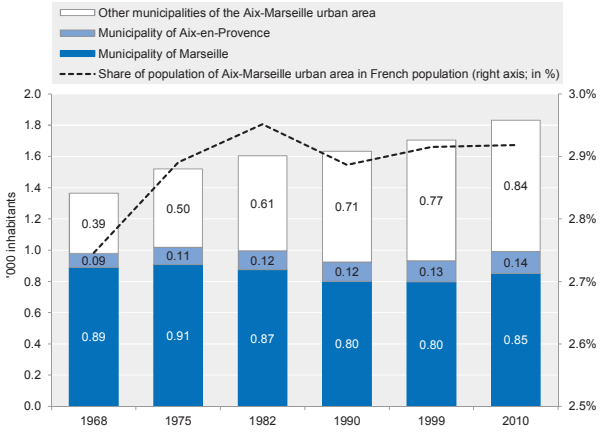
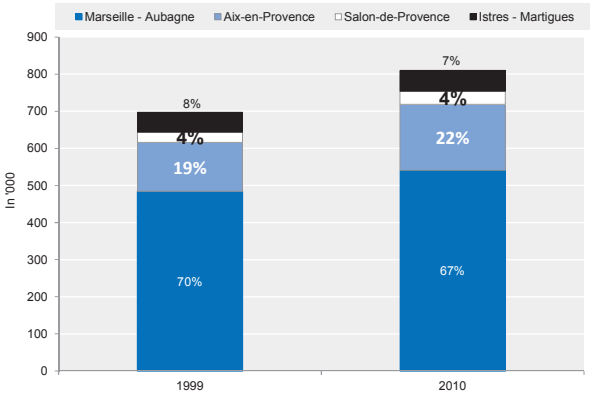


Figure 4.3. **Employment growth in the Aix-Marseille metropolitan area (INSEE definition)**



Source: OECD elaborations, based on INSEE data (2010).

The Aix-Marseille metropolitan area is at the centre of a network of cities on the Mediterranean coast. Valencia, Barcelona and Montpellier to the west; while Nice, Turin, Genoa and Milan are located to the east; and Lyon, Geneva and Basel are found to the north. The area is well connected and benefits from: *i)* its geographic position at the doorstep of the Mediterranean basin and the end of the Saône and Rhone river valleys; and *ii)* a network of modern infrastructure (highways, high-speed train line, international airport, port and river transport). The Marseille Provence international airport has grown significantly in recent years, with traffic increasing by 45% between 2005 and 2012 and a total of 1 million additional passengers in 2012. It was the fastest growing airport in France and the 4th fastest out of the top 80 airports in Europe.

The development of the port of Marseille-Fos is not as strong, although it remains a major port of entry for the region and the Mediterranean basin. It plays a crucial role in the economy of the metropolitan area (and for France). The port of Marseille-Fos generates around 40 000-45 000 direct and indirect jobs, which accounts for over 5% of all jobs in the metropolitan area. However, the port's total merchandise volume has been flat in recent years and it has ceded its global market share from 3.1% in 2001 to 2.4% in 2010 (Merk and Comtois, 2012). Neighbouring Mediterranean ports that previously had comparable container traffic are now two to four times as big as Marseille-Fos (e.g. Valencia, Barcelona and Genoa). Recently, there has been a rebound in container

traffic, thanks mainly to the application of port reforms and the construction of new terminals.

The components of a knowledge-based and innovative economy have grown stronger over the past few years. Marseille is ranked 40th out of 445 cities in the world and 18th among European cities according to the Innovation Cities Global Index for 2012-13, which is based on 162 quantitative and qualitative indicators. It ranks ahead of cities such as Milan, Barcelona and Rotterdam. Research and development is particularly dynamic, as shown by the number of patents registered (1.22 per 10 000 inhabitants, 43rd among OECD metropolitan areas). It also has significant potential in terms of research and higher education, which have also been strengthened over the past several years. The three main universities in Aix and Marseille merged on 1 January 2012 to form Aix Marseille University, the biggest university in France in terms of enrolment. The metropolitan area is also home to major research laboratories of international renown, seven "competitiveness poles" as designated by the French government, numerous technology transfer structures, regional innovation centres and local economic development centres (PRIDES). In terms of economic attractiveness, Aix-Marseille has improved its position compared with other European metropolitan areas in recent years, ranking third (behind Paris and Lyon) in the attraction of foreign direct investment (FDI).

Job growth from 2000 to 2012 was remarkable compared with OECD and national averages. With an annual employment growth of 2.1% between 2000 and 2012, Aix-Marseille ranks 1st among the 15 French metropolitan areas, 2nd among the 114 European metropolitan areas in the OECD, and 5th among the peer OECD metropolitan areas selected for this study. Job growth was much faster than population growth over this period. The number of jobs increased by 16.2% while population grew only by 7% (INSEE-DGI, 2010). The service and construction sectors as well as the self-employed were the main growth drivers, whereas industry continued to shed jobs. The economic profile of Aix-Marseille is diversified. The top four companies in the metropolitan area account for 12.3% of total employment (AGAM, 2012).

The metropolitan area has considerable strengths, including strong environmental assets. Yet Aix-Marseille ranks in the bottom quartile for quality of life of the 21 European cities analysed by an AGAM study conducted in 2013, trailing Barcelona, Milan, Amsterdam, Budapest, Lyon, Gothenburg, Turin and Valence. The levels of crime, pollution and congestion, as well as access to public services and the average cost of housing all have a negative impact on Aix-Marseille. These conditions are also reflected in the level of trust the population has in fellow residents and the public authorities, which is lower in Marseille than in other European cities. In the city of Marseille, only 50% of residents feel that the public administration spends public money efficiently, versus nearly 80% in Stockholm, for example (Eurostat, 2009).

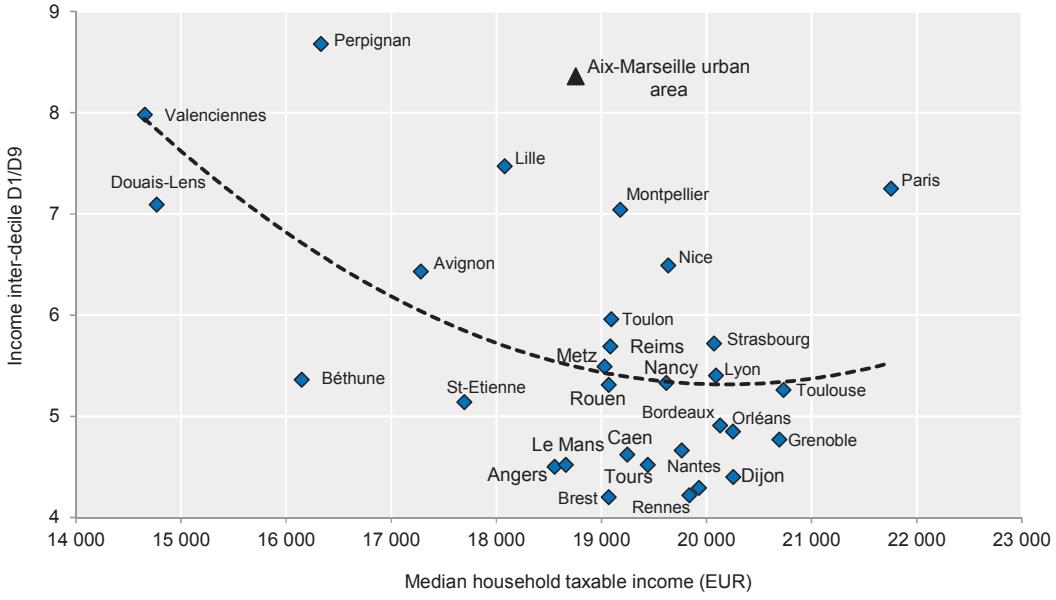
Major challenges with respect to unemployment and competitiveness

Significant job growth in the 2000s was not sufficient to reduce the unemployment rate in Aix-Marseille, which remains high with respect to other French and OECD metropolitan areas. The unemployment rate in Aix-Marseille ranges from 9.8% in the Aix-en-Provence employment area to 13.3% in that of Marseille-Aubagne (Q2 2013). The average unemployment rate in the four employment areas reached 12%, against 10.5% at the national level (INSEE, 2013b). Young people are particularly affected by unemployment, with 20.8% of 15-29 year-olds unemployed.

Labour productivity has strongly declined in Aix-Marseille over the past ten years (0.8% per year on average between 2000 and 2010). Aix-Marseille is among the 25 OECD metropolitan areas with the lowest average annual productivity growth over the 2000-10 period. To some degree, this has likely been driven by strong employment growth over the past decade, but also by more structural causes such as the loss of jobs in the industrial sector or the weight of the "residential" economy, less able to generate productivity gains.

Aix-Marseille is one of the most unequal metropolitan areas in France when it comes to income and unemployment (Figure 4.4). In the northern districts of Marseille, the average income is EUR 10 000 per year, while in Aix-en-Provence this figure stands at EUR 21 000. The average income is over EUR 24 000 in the 8th arrondissement of Marseille and it reaches EUR 35 000 in approximately 25 municipalities in the metropolitan area. All in all, median taxable income for Marseille is roughly 10% lower than in Lyon, Toulouse or Bordeaux.

Figure 4.4. **Median income and inequalities in the 27 most populated urban areas in France, 2010**



Source: OECD elaboration based on data from INSEE-DGI (2010), "Taxable and Social Income Survey", INSEE, Paris.

Disparities in unemployment rates are also particularly high in Aix-Marseille, with joblessness concentrated in specific neighbourhoods. The unemployment rate in the north of Marseille was approximately 30% in December 2011. Variations in unemployment by municipality are considerably higher in Aix-Marseille compared with other French urban areas, with particularly strong disparities in youth unemployment. Youth unemployment exceeds 35% in the northern neighbourhoods of Marseille, and even 50% in the 14th arrondissement. Moreover, a non-negligible percentage of the population that has stopped actively seeking a job is not registered as unemployed, and therefore not included in unemployment statistics. Inequalities with regard to education – while strongly correlated with income levels – are even more striking than economic inequalities. The percentage of the population above 15 years of age without a high school diploma is 14%

in Aix-en-Provence, 24% in the city of Marseille and up to 39% in neighbourhoods in the north of Marseille (INSEE-DGI, 2010).

Institutional background

Aix-Marseille ranks among the most fragmented urban areas in the OECD – like many French cities, when fragmentation is defined by the number of municipalities per 100 000 inhabitants. As of 1 January 2012, there were 36 571 municipalities in France, which accounts for nearly 41% of all municipalities in the European Union and over one-quarter of all municipalities in the OECD. The Aix-Marseille metropolitan area (as defined by the OECD methodology) is home to 132 municipalities, and its fragmentation index, which measures the number of municipalities per 100 000 inhabitants, is twice as high as the OECD average for metropolitan areas (7.6 versus 3.7). Aix-Marseille is, however, less fragmented than comparable other French metropolitan areas, all of which are among the 20% most fragmented in the OECD.

At the OECD scale, Aix-Marseille is one of the municipally most fragmented cities in a sample of 50 OECD metropolitan areas of comparable size[2] – behind Prague, Vienna, Porto or Geneva. However, the problem for Aix-Marseille goes beyond the challenge of municipal fragmentation. To a significant extent, it is driven by the overlapping of four different levels of local government that have the power to levy taxes (region, *département*, municipalities, inter-municipal associations), on top of which there are numerous state-run public entities and bodies of territorial administration. The state has also maintained control over key areas, particularly the management of the port of Marseille-Fos, and other significant initiatives such as *Euroméditerranée*, Marseille's urban renewal project.

In Aix-Marseille, co-ordination challenges are due to socio-economic, political, territorial and historical reasons. All these reasons have made it difficult for public authorities to adopt a common public interest (Langevin, 2012). Unlike in some French cities, where laws on inter-municipal co-operation have paved the way for co-ordination at the metropolitan scale, inter-municipal entities have so far not been effective in Aix-Marseille. This may not be overly surprising as there have been no less than six inter-municipal authorities (*établissements publics de coopération intercommunale*, EPCI) across the metropolitan area since the start of the 2000s. The Marseille Provence Métropole – which includes the city of Marseille – groups only 17 municipalities of the 132 of the metropolitan area, with 5 other inter-municipalities covering the remaining municipalities. These inter-municipal authorities have added another layer to the different strata of local authorities.

Territorial and institutional fragmentation, combined with a lack of co-operation among different public institutions operating in Aix-Marseille, leads to difficulties in designing policy at the relevant scale. Public transport, urban planning, environmental policy and economic development are examples of policy areas with a critical lack of co-operation at the metropolitan scale.

Differences in taxation potential within the Aix-Marseille metropolitan area are particularly striking and exacerbate the lack of co-ordination at the metropolitan level. Taxation potential – an indicator used in order to compare the potential tax wealth of local authorities and their inter-municipal authorities – for the urban community of Marseille Provence Métropole is only one-fifth of the wealthiest inter-municipal authority (the EPCI named Ouest Provence, which covers six municipalities including Istres). Reasons for the gap in tax revenues include, in particular, sizeable differences in tax

bases and rates between the inter-municipal authorities. There are also substantial gaps in terms of per capita public investment between the inter-municipal areas, up to a factor of eight between the highest and lowest. A lack of financial capacity at the urban centre must be seen in the context of jurisdictions at the centre of urban cores typically being confronted with larger expenses than less centrally placed ones, as they must offer public services that actually benefit the wider area.

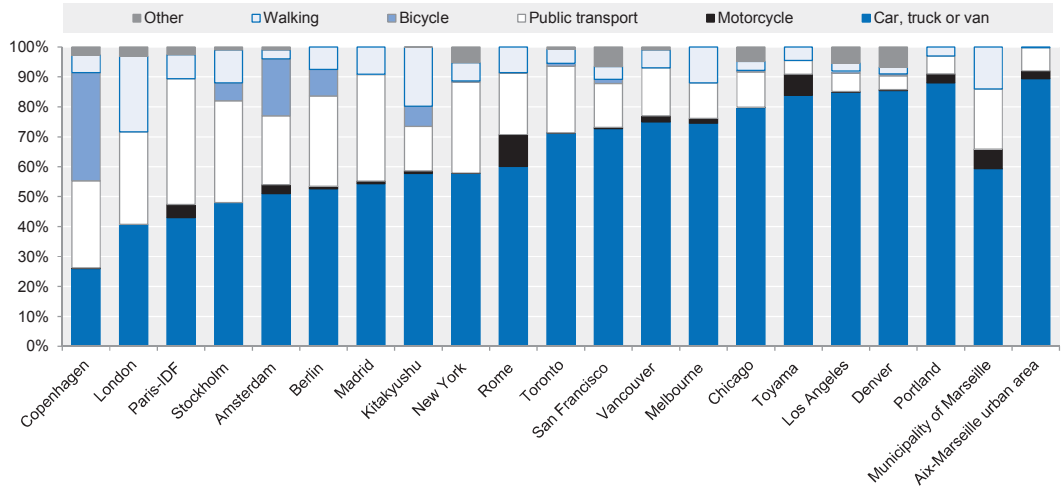
The governance of transport

The metropolitan transport system is highly fragmented and does not respond adequately to citizens' needs. There are around ten different transport authorities in the metropolitan area. Three main types of actor provide intercity and urban public transport services: the region (regional express trains and lines: TER and LER), the *département* (*Cartreize* coach network), and the inter-municipal authorities, which provide public transport services within their transport boundaries (six *autorités organisatrices des transports*, AOT). This institutional fragmentation has resulted in an overall supply of public transport that falls short of residents' needs.

While access to public transport within the cities of the metropolitan area of Aix-Marseille is fairly good, public transport between the different urban centres of the metropolitan area appears particularly underdeveloped. The transport networks are unable to meet the increasing demand for travel between urban cores. Around 77% of the population living in peri-urban areas (outside the city of Marseille) has no access to public transport, 14% of the population has limited access and only 2% has high access (Dijkstra and Poelman, 2014). Only 10% of travel between Aix and Marseille is with public transport. Nearly 90% of travel is done by car; this rate is higher than in large metropolitan areas of the United States such as Los Angeles, Chicago or Denver, and considerably higher than in Stockholm, London, Amsterdam or Paris/Ile-de-France (Figure 4.5). Road traffic increased by 10% between 1997 and 2009. The roadways leading to the main urban cores of the metropolitan areas are increasingly congested, which contributes to significant urban and environmental problems. Marseille is the 5th most congested city in Europe (out of 59 cities) and the most congested in France, according to the TOM-TOM Europe statistics published in October 2013. Weaknesses in the public transport system also reduce resident mobility and limit the *de facto* perimeter of their potential job market, thus contributing to inequalities in access to employment and reducing the economic potential of the metropolitan area.

Public transport planning is also set at the inter-municipal level (EPCI) rather than the wider metropolitan area level. This situation has created overlaps and a host of complications for users. Moreover, this fragmented approach does not adequately connect residential neighbourhoods to commercial areas, the port, the airport, universities, research centres and other technopoles. Some areas have good access to public transport, while others do not – particularly the disadvantaged neighbourhoods of Marseille. The rail connection between Marseille and Aix-en-Provence is emblematic of the lack of an integrated vision and of the overdue development of infrastructure, as for half the distance between the two cities, there is only one set of tracks. The situation seemed to be getting better in 2009, when the county (*département*) created a joint transport authority (*Syndicat mixte des transports en commun*), which brought all of its transport authorities together under one roof (Box 4.1). The latter has contributed to co-ordinating timetables, networks and routes, but has been unable to develop a strategic and operational vision on public transport.

Figure 4.5. **Modes of urban transport in selected OECD cities**



Source: Based on OECD (2013a), *Green Growth in Kitakyushu, Japan*, OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264195134-en.

Box 4.1. **A large number of transport authorities in the metropolitan area and the joint transport authority for the Bouches-du-Rhône *département***

There are currently eight transport authorities in the Bouches-du-Rhône *département*, six of which are located in the Aix-Marseille-Provence area. In 2009, to improve the co-ordination of transport services, the General Council set up a special type of joint transport authority provided for under the 2000 Act on Solidarity and Urban Renewal. The aim was to consolidate and co-ordinate transport authorities within a single body in order to provide a uniform, coherent and simplified transport supply at the level of the *département*, which is slightly larger than the metropolitan area. Joint transport authorities set up under the provisions of the act have a number of mandatory duties, namely co-ordination of the transport services provided by their members, a common ticketing system and a co-ordinated fare policy, as well as the introduction of a multi-modal information system for users. They may also be assigned optional duties in two areas: the organisation of regular and request services, and the provision and management of transport infrastructure, which is carried out on behalf of its members.

Urban transport plans (*plans de déplacement urbains*, PDU), which set out a ten-year framework for implementing a coherent overall transport policy, are also drawn up at the level of the inter-municipal authorities in accordance with their own procedures and timetables. For example, the new Urban Transport Plan for the Marseille Provence Métropole urban community was approved in June 2013 for the 2013-23 period. The Urban Transport Plan for the Pays d'Aubagne et de l'Étoile will be renewed and updated in 2015 for a period of ten years. The plan for the Agglopole Provence expires in 2019. This failure to co-ordinate urban transport plans, both in terms of timing and spatial coverage, has led to a lack of territorial coherence.

The future of the metropolitan area does not lie solely in territorial development and internal mobility. Long-distance connections also need to be taken into account if the exceptional location of the metropolitan area at the crossroads of two major European development corridors, namely the Rhone valley corridor and the Mediterranean arc, is to be capitalised upon. The external connections linking the Aix-Marseille metropolitan area

to national, European and international long-distance communication and transport links have not benefited either from a strategic vision or co-ordinated management. Admittedly, the "general accessibility" of the area has improved over the past 20 years, thanks in particular to the various planning contracts and documents that have opened the door to major investments. The latest projects in progress are the new high-speed rail line between Marseille and Nice and the redevelopment of Saint-Charles station, which is currently saturated. However, despite the benefits and the projects already completed, significant delays have built up in a number of areas. Several obstacles have been identified, such as the lack of an overall vision for the transport system and the failure to co-ordinate the various actors involved in the planning, construction or financing of these infrastructure projects.

The governance of spatial planning

Progress has been made in recent years in terms of co-ordinated spatial planning, but the metropolitan area of Aix-Marseille still lags behind a number of other metropolitan areas in France in this field. The so-called *Schémas de cohérence territoriale* (SCOT) (territorial spatial plans) are established at the inter-municipal level rather than the metropolitan scale (Box 4.2). There are currently six SCOT within the metropolitan area of Aix-Marseille, whereas Lyon, for example, has developed a single SCOT at the level of three inter-municipalities, as well as an "inter-SCOT" at the metropolitan scale. The various SCOT established in the Aix-Marseille area have been developed on the basis of different methodologies and indicators. They have generated a series of individual projects, which have typically focused on the interests of specific territories rather than the general interest of the metropolitan area as a whole. In terms of urban planning for businesses, the situation remains equally fragmented.

Box 4.2. The *Schémas de cohérence territoriale* (SCOT): An instrument for territorial development in France and the inter-SCOT approach

The territorial spatial plans (SCOT) introduced in France in 2000 aim to co-ordinate policies in urban planning, housing, transport, economic development, business infrastructure and environmental conservation for time periods covering 10-15 years. However, they are designed and implemented at the inter-municipal level (EPCI) and not at the metropolitan scale. At present, there are six SCOTs within the Aix-Marseille metropolitan region.

The inter-SCOT initiative was launched in 2001 to ensure the coherence of different plans at the metropolitan level. The initiative brought together the main actors in the metropolitan area on a voluntary basis: the six EPCI, the Regional Council, the county, the chambers of commerce and industry, the Chamber of Trade, the Chamber of Agriculture and, on the government side, the General Secretariat for Regional Affairs (SGAR); the Regional Directorate for the Environment, Development and Housing (DREAL); the Regional Directorate for Food, Agriculture and Forestry (DRAAF); and the National Statistical Institute (INSEE). The urban planning agencies of Marseille Provence Métropole and Pays d'Aix provided technical assistance. The objective of the inter-SCOT was to exchange knowledge and foster complementarities across the different spatial plans. Several steering committee meetings have been organised since 2010, but the initiative has so far not led to the development of any concrete co-operation projects.

Source: Préfecture de Région Provence-Alpes-Côte d'Azur (2012), "Démarche interSCOT des Bouches-du-Rhône", rapport d'activités 2010/2011, January.

The launch in May 2010 of an "inter-SCOT" at the level of the Bouches-du-Rhône *département*, at the initiative of the central government, nonetheless represented progress towards a joint approach between inter-municipalities (EPCI). To date, however, this initiative has not yet resulted in the creation of a metropolitan spatial plan, unlike the situation in other French metropolitan areas (Greater Lyon, Nantes, Toulouse, Bordeaux, etc.). In addition, since the inter-SCOT initiative relies on the willingness of stakeholders to co-operate, it has only met limited success.

Even less progress has been achieved with respect to urban planning. The land-use plans (POS) and local urban development plans (PLU), whose main purpose is to regulate land use for five-year periods, are generally still adopted at the level of the municipalities, unless responsibilities have been transferred to an EPCI. At the level of the metropolitan area, only the Marseille Provence Metropole adopted an urban development plan in June 2013. At present, multiple land-use and urban development plans coexist in the metropolitan area.

There are also numerous environmental problems, particularly given the ecological assets of the area and the high level of environmental risks, but their management is also very fragmented. Many different environmental planning documents (prepared in the context of the Grenelle 2 environmental law) on issues ranging from energy/climate change or waste management to air pollution have been prepared in a fragmented way across the metropolitan area.

In addition, the port of Marseille-Fos, owned and managed by the state, is not sufficiently integrated in its local community or its hinterland (OECD, 2012b). Nevertheless, efforts in recent years have been made to connect the port and its surroundings, and to implement more integrated development policies. Notable examples are the Euroméditerranée initiative and the "City-Port Charter".

The fragmentation of economic development plans is also an obstacle to the area's competitiveness

Despite the development of numerous local job creation schemes and economic development plans, such initiatives are disparate and lack co-ordination at the metropolitan scale. Companies and entrepreneurs are confronted with multiple contact points, especially when they are located at the intersection of several municipalities or inter-municipalities (EPCI). Several projects that would benefit the metropolitan area and the region as a whole (e.g. the Henri Fabre project for helicopters, which aims to employ 10 000 persons by 2020) suffer from this lack of co-operation and from unsolved conflicts regarding land use. In addition, initiatives to attract international investment are not well co-ordinated, thus failing to reveal the metropolitan area's strengths.

Conclusion

Co-operation has produced results in specific domains

Co-operation efforts to overcome fragmentation have increased during the last decade in the metropolitan area of Aix-Marseille. Such attempts have tended to be flexible, voluntary and weakly institutionalised. The central government, civil society and the private sector have been particularly active in spearheading co-operation, contrary to local governments.

- Initiatives led by the central government. The French central government (state) has always been very active in Aix-Marseille through its territorial administration, its economic development initiatives, and its involvement in planning and financing of large infrastructures. There have been efforts led by the central government to encourage co-operation among local actors since the 1960s, but they have met little success (Douay, 2013). Several co-operation initiatives have been launched over the past 15 years: first, through the launch of a Spatial Planning Directive in 1999 (*Directive territoriale d'aménagement*); then, in the early 2000s, with a "Call for Metropolitan Co-operation by the Inter-ministerial Delegation for Spatial Planning and Regional Attractiveness" (*Appel à Coopération métropolitaine de la Délégation interministérielle à l'aménagement du territoire et à l'attractivité régionale*, or DATAR). In 2010, the central government launched an initiative to ensure the consistency of urban planning documents of different EPCIs. However, this initiative has not yet produced concrete results. In addition, the central government has intensified its involvement in metropolitan governance with the 2010 Law on the Creation of Metropolitan Areas and the 2013 Law on the Creation of New Metropolitan Area Authorities, which includes a specific configuration for Aix-Marseille-Provence (see below).
- The civil society and private sector are also very active in fostering co-operation at the metropolitan level. One of the first initiatives led by entrepreneurs, "Top 20", has striven to bring Aix-Marseille-Provence into the top 20 metropolitan areas in Europe. Higher education, R&D and innovation are among the sectors that have seen the most intensive co-operation at the metropolitan scale in the past several years. The selection of "Marseille Provence" as the European Capital of Culture in 2013 paved the way for wider co-operation efforts between different economic, cultural and political actors that pooled together their strengths to make the event a success.
- Local authorities have also launched initiatives, organising conferences to encourage dialogue at the metropolitan scale and improving co-operation among urban planning agencies. These initiatives, while only few, have at least helped start a dialogue and encourage politicians to take some common positions, albeit without any concrete results so far.

The 2013 metropolitan governance reform

There is a broad consensus on the necessity to reform governance in the metropolitan area among both local actors and the French government, but opinions still diverge as to what shape governance should take. In 2013, the central government took the initiative to propose a Law on Metropolitan Areas that seeks to clarify their competencies. Three specific projects have been discussed for Paris, Lyon and Aix-Marseille. For Aix-Marseille, the law adopted in December 2013 stipulates the creation on 1 January 2016 of a new inter-municipal body, with its own taxing power, which would replace the six inter-municipalities (EPCIs) that currently exist in the metropolitan area. This metropolitan structure (Aix-Marseille-Provence) will be managed by a council, which will operate along the same lines as an "urban community" (*communauté urbaine*). The region and *département* will be able to delegate some of their functions to the new structure. It will also have dedicated resources (grants and local taxes). In addition, the metropolitan area will be split into several sub-areas with the same perimeter as the

current inter-municipal associations. Each sub-area will be administered by a council (*conseil de territoire*) comprised of advisors assigned by the municipalities. In line with the panoply of reforms enacted in OECD countries, the future metropolitan authority will be endowed with strategic competencies. Such competencies include planning and economic development, as well as management of key sectors (transport, environment, social housing, water, waste management and other utility networks). The new authority will therefore have significant operating responsibilities. The French reform emphasises the need for the future metropolitan authority to have adequate capacity for action. The new metropolitan authority will be phased in (implementation in 2016; direct election for a certain share of metropolitan officials in 2020).

The future metropolitan body must demonstrate that it offers institutional and financial added value, i.e. that it tackles issues that are not sufficiently addressed by other local authorities and thus resolves long-standing problems. The metropolitan authority will also make it possible to think strategically about the development of the entire metropolitan area. However, the law in itself is merely a first step, while its implementation will largely determine its impact. In order to implement the reform, the central government has created an Inter-ministerial Task Force for the Metropolitan Project Aix-Marseille-Provence, which is responsible for ensuring the transition and making sure that that all stakeholders (citizens, local authorities, the private sector and civil society) are on board. Comprised of national civil servants and experts seconded by the partners (municipalities, chambers of commerce, the port and other public enterprises), this task force seeks to ensure the implementation of the future metropolitan authority.

What initiatives should be carried out in the short term?

For the reform process to be successfully carried out, timing issues need to be properly organised and managed. Concretely, the metropolitan area must start to exist from the outset via specific initiatives that make it visible, while not losing sight of the end goals of the proposed reform. The most urgent action needed for nearly all national and local players is to provide a strategic response to public transport needs. In particular, it seems necessary to rethink public transport between the urban cores. Aix-Marseille is one of the few French metropolitan areas that does not have an integrated public transport system, both in terms of the fares it charges and the physical network. It is urgent to set up such a network. Such a configuration is present in a number of metropolitan areas of the OECD. The second most urgent initiative concerns planning in a broad sense, including strategic and spatial planning. A merger of the urban planning agencies would enable the entire metropolitan area to move forward on reforms from a technical and political standpoint. It is important that the central government adapts its own territorial administrations to the metropolitan scale and the same goes for the private sector, non-governmental organisations and civil society more generally.

Notes

1. This case study is based on OECD (2013e).
2. Based on a sample of 50 metropolitan areas that were selected on the basis of comparability with Aix-Marseille in terms of size of population and representativeness of OECD countries.

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Chapter 5

Athens-Attica, Greece

This chapter discusses existing metropolitan governance arrangements in Athens-Attica, with a closer look at the governance of two strategic sectors: transport and spatial planning. It concludes with possible considerations for strengthening future policy co-ordination in the metropolitan area.

Key points: Athens-Attica

- Athens-Attica, capital of Greece and home to about a third of the national population, is facing a set of deep economic, social and environmental challenges linked to a sprawling development pattern and the decline of the inner city. The area is also going through a period of profound multi-faceted transformation in a context of crisis, while learning to play a new institutional role following the 2011 Kallikratis reform that streamlined regional and municipal authorities.
- Mechanisms for metropolitan-wide co-ordination and planning currently do exist, but all face specific institutional and operational limits.
- The Regional Association of Municipalities of Attica (PEDA) aims to offer a platform for dialogue and exchange of information among all municipalities in the region, but it has generally not been seen as playing an active role.
- The governance of transport currently remains centralised, with the Athens Urban Transport Organisation (OASA) under the control of the Ministry of Infrastructure, while the governance of spatial planning was temporarily metropolitan but freshly recentralised, with the recent merger of the Organisation for the Planning and Environmental Protection of Athens (ORSA) into the Ministry of Environment, Energy and Climate Change.
- The Region of Attica operates four sectoral "metropolitan committees" (environment and quality of life; spatial planning and urban renewal; transport and networks; civil protection and security). These committees meet on an *ad hoc* basis for deliberative purposes, but they do not hold any decision-making power and municipalities are not systematically represented.
- Further metropolitan governance reform can only be envisaged as effective if it comes with a carefully designed financial scheme in support of the stated objectives.

Table 5.1. **Basic facts on Athens-Attica**

Greece	
Population	11 million
Levels of government	– Central government
	– 7 decentralised administrations (each headed by General Secretary appointed by the Ministry of Interior)
	– 13 regions (headed by governors directly elected for 5 years)
	– 325 municipalities (headed by mayors directly elected for 5 years)
Athens-Attica (OECD functional urban area)[1]	
Population	3.5 million
Number of municipalities	53 municipalities
Region of Attica	
Population	3.8 million
Number of municipalities	66 municipalities
Municipality of Athens	
Population	0.66 million
Existing metropolitan institutions and funds	
	– Regional Union of Municipalities of Attica (PEDA); covers all 66 municipalities of the Region of Attica
	– Organisation for the Planning and Environmental Protection of Athens (ORSA) – absorbed into the Ministry of Environment, Energy and Climate Change as of October 2014
	– Athens Urban Transport Organisation (OASA); covers 52 municipalities
	– Four "metropolitan committees" within the Region of Attica

Notes: The OECD, in collaboration with the EU, has constructed a new definition of cities that is comparable across countries and corresponds to their functional economic area rather than administrative boundaries. The functional urban area (FUA) methodology uses information on density and commuting patterns in order to identify boundaries that approximate the city's functional labour market. The commuting data used to construct the FUA of Athens-Attica are extracted from the 2001 census; the FUA of Athens consisted of 94 pre-Kallikratis municipalities and communities, that approximate to 53 post-Kallikratis municipalities. For further details on this new city definition, please consult OECD (2012).

Introduction

Athens-Attica, capital of Greece and home to about a third of the national population, is facing a set of deep economic, social and environmental challenges linked to a sprawling development pattern and the decline of the inner city. The area is also going through a period of profound multi-faceted transformation in a context of crisis, while learning to play a new institutional role following the 2011 Kallikratis reform that streamlined regional and municipal authorities. This chapter discusses existing metropolitan governance arrangements in Athens-Attica, with a closer look at the governance of two strategic sectors, transport and spatial planning. It concludes with possible considerations for strengthening future policy co-ordination in the metropolitan area.

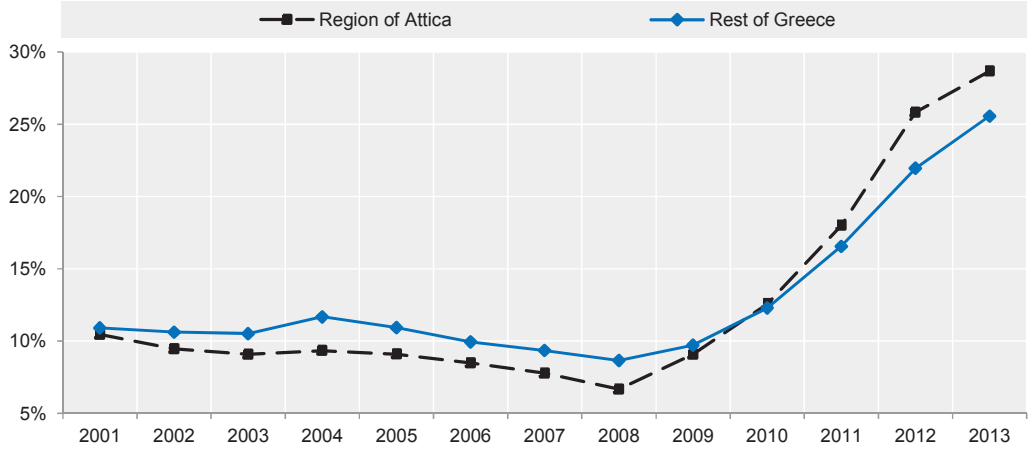
Overview of the metropolitan area

Athens-Attica is the largest metropolitan area of Greece, with around 3.5 million inhabitants according to the OECD definition of a functional urban area (FUA).[1] It consists of 53 municipalities, with the Municipality of Athens only hosting about 19% of the metropolitan area's total population (664 046 inhabitants according to the 2011 census) while the rest is distributed in multiple small and medium-sized urban municipalities. The metropolitan area of Athens-Attica encompasses about 90% of the population of the region of Attica, which includes semi-urban and rural areas as well as islands.

Socio-economic profile

The recent economic crisis that Greece has been undergoing has a distinct spatial dimension. Since 2009, Greece lost approximately a quarter of its gross domestic product (GDP). The region of Attica, traditionally the engine of the Greek economy, has suffered substantially from the crisis. Its unemployment rate rose from 6.7% in 2008 to 28.7% in 2013, even surpassing the national rate of 27.5% by reversing a long-term pattern of better performance than the rest of the country (Figure 5.1). High unemployment and falling incomes have led to an increase in urban poverty and exacerbated marginalisation in the central part of Athens, along with rising homelessness, crime and social tension. The crisis affected disproportionally the most vulnerable groups such as the youth, females and migrants. In particular, youth unemployment in the region of Attica reached 60% in 2013, at six percentage points higher than the rest of Greece (Figure 5.2). In contrast to the period before the crisis when Athens attracted talent, it now appears to offer fewer employment opportunities than the other regions of Greece. As a result, many young people migrate abroad, leading to a wasteful "brain drain" (Labrianidis, 2014). Female unemployment in the region of Attica surpassed 30% in the same year.

Figure 5.1. **Unemployment rate in the region of Attica and the rest of Greece**



Note: The rest of Greece refers to the average unemployment in the remaining regions of Greece excluding the Region of Attica.

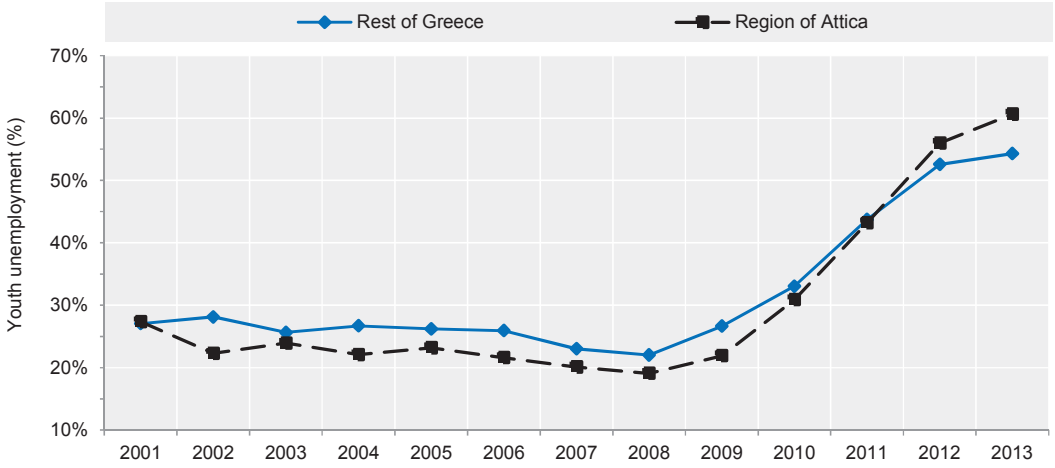
Source: Greek Statistical Authority (ELSTAT).

The crisis has also exacerbated some of the challenges that the city faced before 2008, such as urban sprawl and the depopulation of the city centre. The metropolitan area stems from a rapid urbanisation that started in the 1960s, based on small self-financed property development in rural lands with limited public expenditure for urban infrastructure. Continuous sprawl towards the periphery contrasts with the increasing share of vacant buildings in parts of the city centre. Following the crisis, the property market collapsed and it is estimated that around 120 000 flats are currently vacant in Athens, with the vast majority located in the inner parts of the city. Between the two censuses of 2001 and 2011, the municipality of Athens lost 18% of its population, while the Region of Attica gained about 6%.

Preparations for the 2004 Olympic Games had triggered unprecedented public investment in transport infrastructure and large-scale facilities across the metropolitan area, which public authorities are now struggling to capitalise on in the aftermath of the

crisis. The Greek government had addressed the Olympic Games as an exceptional programme excluded from the conventional planning framework and had developed a separate set of legislation to enforce the Olympic Masterplan while creating a set of special agencies. This led to fast-track procurement and execution of public works, which contributed to inflating the total cost of the Olympic Games (with estimates around EUR 9-11 billion) to twice the initially planned spending. During the period before and just after the Olympic Games, Greece experienced a boom of its construction sector, and this was particularly noticeable in Athens. Following the crisis, construction activity shrunk by about two-thirds, reaching a low of 1.8% of the Attica's gross value added (GVA; Figure 5.3). Trade, repairs, transport and food services remain the main economic activity of the region, corresponding to almost 24% of the total GVA.

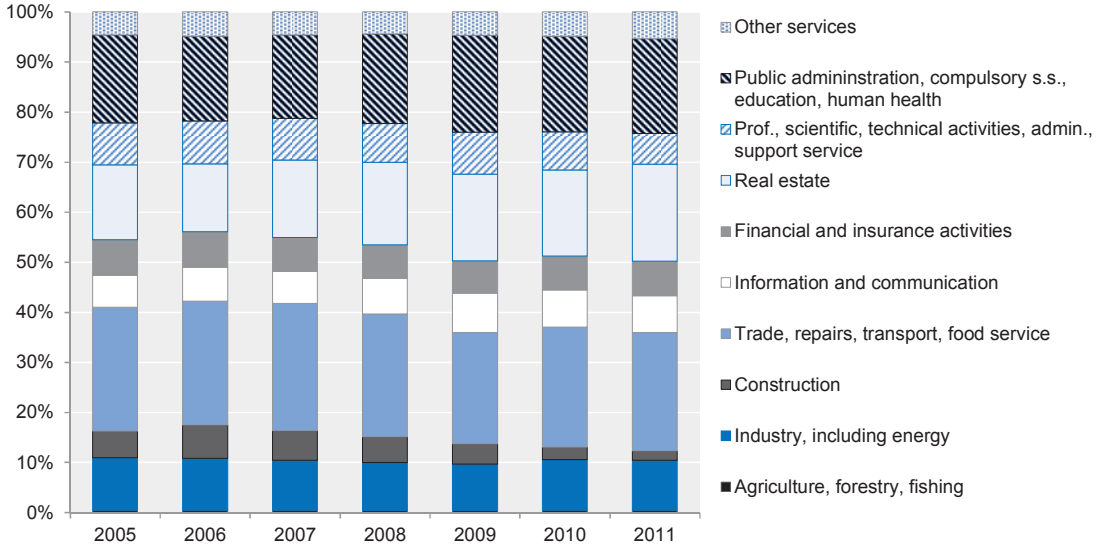
Figure 5.2. **Youth unemployment rate in the Region of Attica and the rest of Greece**



Note: The rest of Greece refers to the average unemployment in the remaining regions of Greece excluding the Region of Attica.

Source: Greek Statistical Authority (ELSTAT).

Figure 5.3. **Gross value added by sector in the Region of Attica, 2005-11**

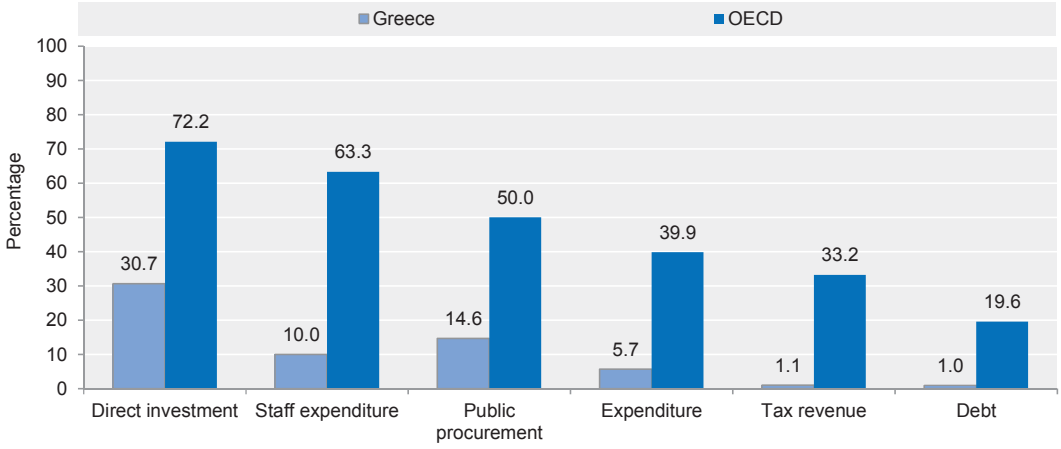


Source: Authors' calculations based on data from OECD (2013c), *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/region-data-en.

Institutional background

Greece has traditionally been a centralised country both in institutional and fiscal terms, with sub-national government representing a sizeably smaller share of general government than the OECD average in a number of indicators ranging from staff expenditure to tax revenue (Figure 5.4). However, there have been recent steps towards streamlining the complex system of sub-national authorities and decentralising responsibilities. The multi-level governance landscape was drastically overhauled by two waves of local government consolidation: the 1997 Kapodistrias reform followed by the 2011 Kallikratis reform (Law 3852/2010; effective from 1 January 2011) (Table 5.2).

Figure 5.4. **Sub-national government as a percentage of general government, 2012**



Sources: OECD (2014b), *OECD Regional Outlook 2014*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201415-en, based on data from OECD (2013b), *Subnational Governments in OECD Countries: Key Data* (brochure), OECD, Paris, www.oecd.org/regional/regional-policy/Subnational-government-key-data-2013.pdf.

Table 5.2. **The Greek territorial framework before and after the Kallikratis reform**

	Before the Kallikratis reform	After the Kallikratis reform (2011)	Current framework in the Region of Attica
Central government representatives across Greece	13 regions	7 decentralised administrations (general secretary appointed by the Ministry of Interior)	Decentralised administration of Attica
Regional level	54 prefectures	13 regions (regional governor and regional council elected every 5 years), divided into 74 sub-regional units (vice-regional governor)	Region of Attica (3 000 employees), divided into 8 sub-regional units + Regional Ombudsman Executive Committee Economic Committee 4 metropolitan committees + Intermediate Management Authority (IMA) in charge of the Regional Operational Programme (ROP) of Attica, transferred from the decentralised administration
Municipal level	1 034 municipalities	325 municipalities (mayor elected every 5 years), subdivided into municipal units and communities (advisory councils to municipalities)	66 municipalities

Concerning the territorial representation of the central government, the Kallikratis reform replaced the former 13 regions with 7 "decentralised administrations" (including one for Attica) that maintain the functions that the central government state decided to keep under its responsibility. The seven decentralised administrations are each administered by a General Secretary appointed by the Ministry of Interior, and are mainly responsible for implementing and monitoring central government legislation at the local level, in areas such as immigration, public property, environment and spatial planning.

At the regional level, the Kallikratis reform created 13 new self-governing "regions", endowed with regional governors and regional councils directly elected for 5-year terms. The regions are subdivided to 74 sub-regional units that tend to correspond geographically to the former 54 prefectures that existed before the reform. The creation of the regions intends to mark an important devolution of power from the central government to sub-national authorities. The first regional elections were held in November 2010. The mandate of the regions is to plan and implement policies at a regional level according to the principles of sustainable development and social cohesion, taking into account the national and European policies.

At the municipal level, the Kallikratis reform reduced the number of municipalities from 1 034 to 325 in order to reduce administrative complexity and cut costs. Like the regions, the municipalities are now governed by mayors and municipal councils directly elected for five-year terms aligned with the regional terms. The Region of Attica currently includes 66 municipalities.

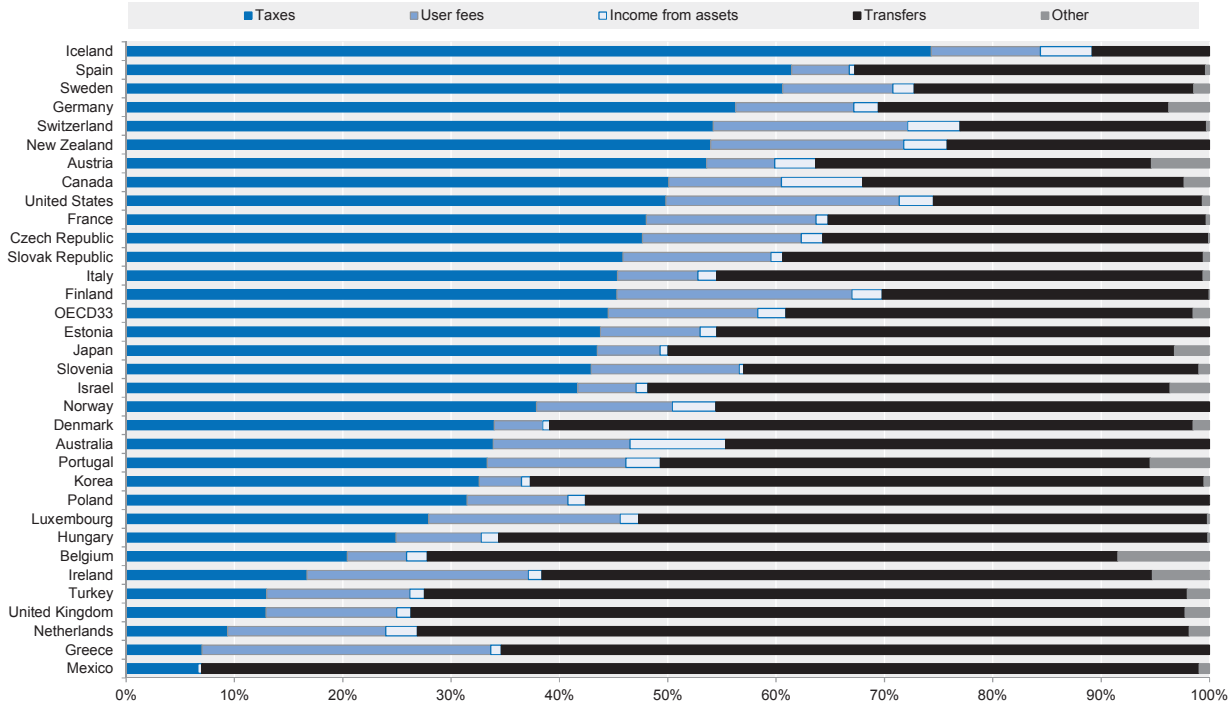
However, decentralisation remains an ongoing and progressive process in Greece. The central government continues to control several key responsibilities while regions and municipalities rely heavily on central government transfers and EU funding. Compared to other OECD member countries, Greece has the second-lowest percentage of tax revenue that is collected by sub-national authorities, at only about 7% of their revenues, much lower than 45% for the OECD average (Figure 5.5). Concerning EU funding, the Region of Attica – through the Intermediate Management Authority (IMA) transferred from the Decentralised Administration of Attica – is expected to run a Regional Operational Programme (ROP) of about EUR 2 billion for the 2014-20 period, funded by the European Regional Development Fund (ERDF) and the European Social Fund (ESF). The ROP of Attica promotes the restoration and upgrading of the productive and social fabric for balanced, sustainable and inclusive growth.

Against the backdrop of continuing urban challenges in a context of crisis with no major progress in the debate on the possible governance of the Athens metropolitan area (Box 5.1), mechanisms for metropolitan-wide co-ordination and planning currently do exist, but all face specific institutional and operational limits.

- The Regional Association of Municipalities of Attica (PEDA)[2] aims to offer a platform for dialogue and exchange of information among all municipalities in the region, but it has generally not been seen as playing an active role. It brings together the 66 municipalities of the Region of Attica and from the islands of the Saronic Gulf. PEDA is run by a 25-member Governing Council. The positions of President, Vice-President and Secretary-General are occupied by mayors of member municipalities. PEDA holds annual meetings of members and is represented in the Central Union of Municipalities of Greece (KEDE). It can give a consultative opinion on national proposals related to local and regional government issues, and used to have a representative on the Board of the Organisation for Planning and Environmental Protection of Athens (ORSA,

discussed below). PEDA has also been participating in European local government networks such as the European Regional and Local Authorities on Asylum and Immigration network (ERLAI) and the European Social Inclusion and Social Action network (ELISAN). A few other specialised thematic associations of municipalities also exist, such as the Association of Municipalities in the Attica Region (EDSNA – formerly the Association of Communities and Municipalities in the Attica Region, called ESDKNA), which was established in 1970 to oversee solid waste management in the region and commissioned several technical studies on the issue, but failed to bring about inter-municipal consensus to build new landfill sites.

Figure 5.5. **Source of sub-national government revenues in OECD countries, 2012**



Notes: 2010 Canada and New Zealand; 2011 Australia, Japan, Korea, Israel, Mexico, Switzerland, Turkey and the United States. Data are not available for Chile. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD (2013a), *OECD Regions at a Glance 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/reg_glance-2013-en.

- ORSA was created by law in 1985 as a special agency, subsidiary to the Ministry of Environment, Energy and Climate Change. Composed of about 20-30 employees (the majority of which were seconded from the Ministry of Environment, Energy and Climate Change), it served as an advisory council to municipalities. The Executive Committee of ORSA was composed of seven members: a President, a Vice-President, two independent experts (all four appointed by the Council of Ministers upon proposal of the Minister of Environment), a representative of the Region of Attica, a representative of PEDA and a representative from the Municipality of Athens. One of its main

responsibilities consisted in the implementation and revisions of the Regulatory Master Plan of Athens (1985) and its subsequent update (Law 4277/2014). Despite its unique metropolitan-wide mandate, ORSA has been struggling with limited formal competences, insufficient implementation powers and the structural deficiencies of the Greek planning system (Chorianopoulos et al., 2010). At the time of writing, ORSA was scheduled to be re-centralised and absorbed by the Ministry of Environment, Energy and Climate Change – as of February 2014 initially, postponed to October 2014.

- The Region of Attica operates four sectoral "metropolitan committees" (environment and quality of life; spatial planning and urban renewal; transport and networks; civil protection and security). These committees meet on an *ad hoc* basis for deliberative purposes, but they hold no decision-making power. In addition, municipalities are not systematically represented in the committees, although they are occasionally requested to provide data on relevant topics under discussion.

Box 5.1. **Three main scenarios initially envisaged for the metropolitan governance of Athens**

Drawing on a combination of various studies on the possible metropolitan governance of Athens, three main scenarios were selected to be discussed among the relevant stakeholders from the metropolitan area and the Ministry of Interior in 2005-06.

- A "metropolitan union" of municipalities, which is expected to be easily accepted by participating municipalities, but is likely to remain unable to apply concrete solutions to controversial policy challenges.
- A "metropolitan second tier of local authority", with an elected president and an elected council, and subdivided into sub-metropolitan areas.
- A "metropolitan regional council", which would be a mixed form composed of three bodies: a first body directly elected by citizens, a second body composed of representatives from all municipalities and a third body from sectoral agencies. The President of the Metropolitan Regional Council would either be elected by the first two bodies or appointed by the parliament.

Source: Drawn from Sykianaki-Kylika, C. (2006), "Analysis of approaches to the administration of metropolitan areas in the European capitals: The case of Athens Metropolitan Area", paper prepared for Metrex International Seminar "Moscow and European megapolises: Experience of planning for sustainable development", Moscow, 28-30 June 2006.

The governance of transport

Public transport improvements had been one of the most pressing challenges for the development of the metropolitan area of Athens for decades. In contrast to most other European capital regions, which tend to have lower car ownership rates than the rest of their country, the region of Attica is one of only three capital regions that rank among the top 20 European regions in terms of car ownership rate (according to data from the 2014 Eurostat *Regional Yearbook*).[3] The Region of Attica currently ranks among the bottom 37% of OECD regions in terms of air quality (measured through $PM_{2.5}$) (OECD, 2014a).[4] Efforts to reduce air pollution through more effective traffic management have been made in the past, albeit with little to no success. For example, a system of alternate car traffic restrictions was introduced in 1982 in the city centre. The system allowed only cars with license plates ending with an odd number to enter a designated zone of 23 km² in the city centre (called *dactylios*) on odd days and those ending with an even number on even

days. This measure quickly proved to be not only ineffective but also counterproductive, given that it led to a fast rise in car ownership as many Athenians bought a second car with a different ending number (odd or even). At a later stage, the system was revised in order to allow less-polluting vehicles (developed with Euro 5 technology or later, which emit less than 140g/km carbon dioxide) to enter the zone regardless of their license plates.

The pressure of preparing for the 2004 Olympic Games provided an unprecedented momentum for action and triggered massive investment in public transport infrastructure. Given the congestion of the urban road network and the lack of parking space, priority was given to increasing the capacity and performance of the public transport network in the Olympic Transport Strategic Plan. In the years leading to the Olympic Games, the overall public transport network of the metropolitan area was radically overhauled and modernised. The subway network was extended and renovated, while having to deal with the challenge of new underground archaeological discoveries and demolishing unauthorised buildings. The tramway network, which had been dismantled more than 50 years previously, was re-established in order to connect the centre of Athens to the southeast suburbs, at an average speed of 25.5 km/h compared to 10 km/h by car in the centre of Athens (Martinet and Allaire, 2012). Suburban trains and roads were also newly inaugurated or refurbished. It has been estimated that public transport represented almost three-quarters of all trips during the Olympic Games and successfully contributed to a significant shift in urban mobility in the metropolitan area, leading to further subsequent extensions of bus lanes, tramway and subway connections. Concerning efforts to promote sustainable urban mobility, modes of soft mobility such as walking and cycling remain relatively underdeveloped in the metropolitan area of Athens. There are no dedicated cycling lanes in central Athens and cycling has been considered to be difficult and risky given the other vehicles' driving behaviour. Recently, there has been slow but steady progress through the activities and awareness-raising campaigns of cycling associations. The Athens Metropolitan Cycling Network was included in the Regulatory Master Plan of Athens-Attica 2021 and is being partially implemented in part of the northern suburbs since 2014. Furthermore, the first part of the metropolitan cycling lane along the south axis (Faliro-Centre) has just started construction works.

A single co-ordinating authority for public transport

When bus services were renationalised in 1993, the Athens Urban Transport Organisation S.A. (OASA S.A.) was founded as a commercial company entirely owned by the Greek government, performing in the public interest under the supervision and control of the Ministry of Transport and Communications. In December 1998, the Public Transport Act (Law 2669/98) gave OASA the authority for the planning, co-ordination and control of all public transport modes in the greater Athens area. The OASA affiliate companies are responsible for the execution of transport services. The main goals assigned to OASA were: to improve the quality and quantity of transport services provided; to reorganise bus and trolleybus networks in order to facilitate interchange and use of guided-track transport; to encourage Athenians to use public transport more often.

In 2011, the Greek government streamlined the governance of transport in the Attica region by merging several of the operating companies. Currently, OASA is the unique umbrella public company responsible for the strategic and operational planning as well as the supervision, monitoring and control of all public transport services within the region of Attica (although not all of them: 52 municipalities out of 66). It operates under the supervision of the Ministry of Infrastructure, Transport and Networks. The Managing Director of OASA is appointed by the Minister of Finance and the Minister of

Infrastructure. OASA is administered by a Board of Directors, which is in charge of deciding, controlling and organising the company's goals and activities.

OASA co-ordinates the following companies:

- OSY S.A. (ΟΣΥ Α.Ε. in Greek), which co-ordinates the bus network (formerly operated by Etaireia Thermikon Leoforeion/Thermal Bus Company, ETHEL) and the electric trolleybus network (formerly operated by Ilektrokinita Leoforeia Periohis Athinon-Peiraios/Electric Buses of Athens-Piraeus ILPAP)
- STASY S.A. (ΣΤΑΣΥ Α.Ε. in Greek), which co-ordinates the Athens Tram system, the Piraeus-Kifissia urban railway (ISAP), sometimes referred as Athens Metro Line 1, and the Athens Metro system (consisting of Metro Line 2 and Metro Line 3, formerly owned by Attiko Metro S.A. and operated by subsidiary Attiko Metro Etaireia Leitourgias, Attiko Metro Operations Company, AMEL)
- a suburban rail system using Hellenic Railways Organisation (OSE) lines and a part of the OSE main line (between Piraeus and Aghios Stefanos) operated by TrainOSE S.A.

OASA sets the fares and allocates fare revenues among the different operators according to the number of passengers. Presently, fares alone do not cover the operational costs. OASA is currently working on developing an automatic fare collection system, which is expected to help reduce the shortage of funding and provide data that is currently lacking.

Co-ordination between OASA and municipalities on transport planning is undertaken on an *ad hoc* basis, with no systematic procedure in place. OASA evaluates any request from municipalities for introducing new connections between them and gives its approval (or disapproval in relatively rare cases of overlapping routes, safety concerns, etc.) within 60 days. In case of approval, OASA sends the official request for formal approval to the Ministry of Infrastructure, Transport and Networks.

Co-ordination between transport planning and overall metropolitan planning is also ensured on an *ad hoc* basis. OASA has collaborated with ORSA, notably by contributing to the recent revision of the Master Plan. For example, OASA has proposed the creation of bus rapid transit (BRT) lanes and is currently investigating possible sources of revenues in this respect.

The port of Piraeus: An illustration of opportunities for more effective metropolitan governance and regional policy alignment

The port of Piraeus plays an important role as transport hub for metropolitan Athens, as well as for the whole country. It is one of the busiest in Europe in terms of ships calling the port. Piraeus is also the 8th European container port handling 3.1 million TEUs[5] in 2013, the 3rd cruise port in the Mediterranean with more than 2 million cruise visitors and the main Eastern European car port with around 0.5 million cars handled in 2013. The leading position of the port of Piraeus has significant economic impacts: it increases connectivity of the mainland of Greece with its many islands; it lowers the costs of Greek external trade, generates economic value added and sustains thousands of local port-related jobs. Moreover, the port of Piraeus is at the core of a large maritime- and tourism-oriented economic sector, metropolitan Athens being one of the world's leading maritime clusters, with a strong concentration of ship-owners and related industries. The direct and indirect port-related value added in

Piraeus port has been estimated at EUR 4.2 billion in 2009, with an estimate of 94 000 port-related jobs (National Bank of Greece, 2013). While the exact distribution of local and national effects is not known, the economic impacts of the Piraeus port go beyond metropolitan and even national boundaries: over the last years, Piraeus has developed into one of the main European transshipment hubs serving many ports in the East Mediterranean Sea.

As a global port, Piraeus is confronted with the complexities of multi-level governance, not only at the metropolitan level, but also at the national and global level. The port of Piraeus is located on, and touches four different municipalities: Piraeus, Keratsini, Perama and Salamina (the Selinia and Ampelakia area). It is located only ten kilometres from the city centre of Athens, with which it is connected via road, urban and sub-urban rail, and metro (Line 1 and Proastiakos). It services the whole metropolitan area of Athens. Athens-Piraeus is also designated as a development pole of international dimension in the new Regulatory Master Plan for Athens-Attica 2021 (discussed in the next section); and the Region of Attica is involved in various port-related projects, e.g. through the coastal development plan. The port is also linked to the national railway system since 2013, and as such, is connected to the rest of Greece and other Southeast European countries. Its global role has been recognised by the national government, which has classified it as a port of "international significance". Around three quarters of its shares are owned by the Greek government (and the rest floating on the stock exchange), which appoints almost all of its board members. The national government is also ultimately responsible for hinterland connectivity via road and rail, and approves environmental impact assessments in case of port expansions, provides relevant permits via the inter-ministerial body ESAL, even if such expansions sometimes also require local permits and need to be in line with local land-use plans. Finally, there are supra-national dimensions, if only because investments have been secured via European funds, such as Cohesion Funds, ERDF and European Investment Bank loans. The largest share of Piraeus's container terminals (Piers 2 and 3) has been operated since 2010 by the Chinese port terminal operator Cosco Pacific, subject to a 35-year concession. This concession has greatly improved the attractiveness of Piraeus to global shipping lines, which have integrated Piraeus in various intercontinental shipping routes. It has, however, also raised concerns with respect to local labour standards (Psaraftis and Pallis, 2012) and has added yet another dimension to the institutional complexity. The port therefore operates in a context of multi-layered governance, where the interests of the main actors are not always aligned.

Continuing port growth will present increasing challenges to policy alignment in the region. In addition to the economic impacts outlined above, the port has severe effects on the local traffic, environment, noise and everyday quality of life. Approximately 500 000 port-related trucks passed through Piraeus and metropolitan Athens in the peak year 2007, which represents almost 1 600 trucks per day according to the Piraeus Port Authority (PPA),[6] adding pressure to the already very congested road network in Athens. The transport of cruise passengers to Athens (in particular the Acropolis as a main tourist site) adds to peak hour traffic, with up to 1 000 coaches on the road in case of full capacity at the 10 cruise berths of the 2 cruise terminals in Piraeus port. Port activity also contributes significantly to air pollution in the metropolitan areas of Athens, with environmental externalities due to ship emissions in the port of Piraeus estimated at EUR 51 million in 2008 (Tzannatos, 2010). Negative port impacts are illustrated by the fact that proximity to the port affects housing prices negatively, whereas this is the reverse for proximity to metro, tram, suburban railway and bus stations (Efthymiou and

Antoniou, 2013). The port of Piraeus has managed to achieve impressive growth rates over the last years, e.g. increasing container throughput from 0.8 million TEUs in 2010 to 3.1 million in 2013, and doubling the number of cruise passengers over the last decade. These growth rates are expected to continue and various expansions of the port are either ongoing or planned, both with respect to containers (Pier 3) and cruise (new cruise berths at the south of the port). These expansions will arguably increase traffic and environmental impacts, even if they are accompanied by some mitigating measures such as uptake of the train connection of the port to the Thriassion plain, and a proposed monorail around the cruise and passenger berths that would better connect this part of the port with the metro and tramway connections to Athens, and might potentially shift traffic from coaches provided by cruise lines to public transit. All this would require a concerted regional approach. The disconnection between port growth and local development might be mitigated if port expansion also led to greater local benefits. However, most of the container port growth has been in sea-to-sea transshipment traffic that generally generates limited local economic value added and employment, whereas most of the cruise passengers are bypassing Piraeus in order to see Athens and its tourist attractions. In defence of the transshipment ambitions of the PPA, local traffic depends heavily on local economic conditions, which are currently adverse.

The port site of Piraeus provides interesting opportunities for regional policy alignment. An example of this is the coastal development of Piraeus and its neighbouring municipalities, promoting archaeological areas and monuments recognised as national treasures. The aim of this project would be to capitalise on Piraeus maritime and archaeological assets and create a cultural image that would increase the local quality of life and could attract tourists. As part of interventions like the proposed project of "Piraeus Cultural Coast", port silos and warehouses would be transformed into museums and archaeological sites would be valorised. The port of Piraeus has partnered with the Region of Attica, various ministries (Culture, Shipping) as well as the Prefecture of Piraeus, in developing this project, and is willing to transform part of the port area for such purposes. Considering that approximately 30% of cruise passengers do not leave the ship during its call in Piraeus, there is a potential group of visitors to be attracted by this local development, which could generate economic spillovers for the Piraeus area.

Regional policy alignment requires fundamental governance choices that would strengthen the regional and public role of the port authority. A government proposal to create one regional port authority for the ports of Attica, which would include Piraeus, Lavrion, Rafina and Eleusis, has been held up by a simultaneous discussion on the future governance structure of the port of Piraeus. The issue at stake is the value that the PPA and its assets represent, which could be used to reduce public debt. The main political choice currently debated is between partial privatisation of the remaining operations of the port via concessions, and the sale of the shares currently owned by the government (74.1%), which would imply full privatisation of both operations and port authority functions, with the latter often of a more regulatory nature. Although a sale would bring immediate revenues, it might also complicate the port-city interface as the port would then principally serve private interests. It would also put Piraeus in a fairly exceptional position worldwide, as the large majority of countries have public port authorities. In the case of a partial privatisation of port operations, the new concession agreements could consider containing societal goals and indicators, similar to the concession for the Maasvlakte 2-terminal in Rotterdam, as a way to align private and public interests. Although concessions generally tend to generate public revenue over the whole duration of the concession, they could also include the requirement of an upfront payment if that

was essential from the perspective of Greek public debt reduction. Political commitment to such an option could unblock the proposal to create a regional port organisation for the ports of Attica. Such a regional regrouping of ports is increasingly being used to reap regional synergies and complementarities in a context of port regionalisation – and has been applied to ports such as Vancouver, Rotterdam, Hamburg and Le Havre. Such a reform of port governance in Attica could also open a window of opportunity for considering more local participation in port governance, as local municipalities – like Piraeus – have already proposed given the joint local and national interests. In the current structure, there is only one local board seat (for the Mayor of Piraeus) on the Board of the Piraeus Port Authority.

The governance of spatial planning

In the face of rapid urbanisation, the role of urban planning has traditionally been weak in Greece, limited until the country's EU accession to "*a posteriori* rationalisation of informally developed areas through their subsequent incorporation within the official town plan boundaries with an additive logic" (Pagonis, 2013). Waves of internal migrants in search of employment opportunities settled predominantly in the western suburbs, close to the industrial plants. Uncontrolled growth of small self-promoted housing in a car-dependent model led to traffic congestion, air pollution and the degradation of the urban environment. The government set forth to address these issues by introducing a new legal framework for urban planning in 1983 (Law 1337/1983), with the aim of equipping every urban area with a plan. Currently, the spatial planning system includes three main levels of planning (Table 5.3).

Table 5.3. **Spatial planning system in Greece and in the metropolitan area of Athens**

Level of government in charge	Planning tool
Central government	– General Spatial Plan
	– Special Spatial Plans
	– Regional Spatial Plan
Region	– Regulatory Master Plan of Athens
Municipality	– General Urban Land-Use Plan (at municipal level)
	– Local Urban Land-Use Plan (at neighbourhood level)

Note: The plan refers to the situation before the introduction of the new planning Law 4269/2014.

Source: Author's own research based on OECD interviews and various sources including Economou, D. and Y. Evmolpidis (2013), "The current crisis, and administrative and geographical inconsistencies in Athens", presentation for Open Days, Brussels, 2013 workshop "Strengthening an EU urban policy to the next programming period: How to manage change in a sharp economic downturn?".

A metropolitan scale of planning was introduced in Athens three decades ago, but its effectiveness remains to be strengthened (Table 5.4). In 1985, the first Regulatory Master Plan of Athens was adopted and the Organisation for Planning and the Environmental Protection of Athens (ORSA) was created with the responsibility to monitor the implementation of the plan. The plan marked an ambitious effort to curb further sprawl, reduce social disparities and enhance environmental protection, for the first time using the metropolitan agglomeration as an institutional and regulatory scale. With the initiation of the first EC Community Support Framework (CSF) in the 1989-93 period in Greece, urban and territorial planning benefited from the financing of the Operational Programme

for the Environment, and the new concepts of sustainable development and strategic territorial planning defined at EU level have progressively filtered into local policy formulation. For example, ORSA also monitored the implementation of an ambitious urban and environmental action plan called "Attiki SOS", which was launched by the Ministry of Environment, Physical Planning and Public Works in 1993-99 to reduce pollution and improve quality of life in the region (e.g. by creating dedicated bus lanes, renewing the bus fleet, enhancing road traffic control, etc.).

Table 5.4. **Regulatory Master Plan of Athens in 1985, 2009 and 2011**

1985	2009	2011
First foundation for metropolitan scale planning Significantly amended in 1999 to accelerate Olympic projects	Proposal presented in 2009, but draft law was never produced for vote in parliament	Called Regulatory Master Plan for Athens-Attica 2021 (RPA-2021) Composed of three main documents: – RPA 2021 draft law – Strategic environmental assessment (SEA) – Action plan (to clarify the priorities and financial means): outsourced by ORSA to a private consulting firm. Incorporates the main orientations of the ROP of Attica 2014-2020. Approved by parliament 1 August 2014 (Law 4277/2014)
Focus on: – Environmental protection – Control of peri-urban growth	Focus on: – Sustainable spatial development from the environmental and cultural point of view – Balanced economic development, competitiveness and strengthening of the international role of Athens – Improvement of the quality of life in a cohesive and friendly city	Focus on: – Promotion of the image of Athens as a Mediterranean capital – Social cohesion – Reconstruction of the productive structure – Restriction of unauthorised buildings – Strengthening and redistribution of development resources – Establishment of green belts and ecological corridors – Urban regeneration with recycling of land and housing stock – Strengthening of sustainable mobility – Valorisation of the sea front

Sources: Author's own research drawing from various sources including Skayannis, P. (2013), "The (master) plans of Athens and the challenges of its re-planning in the context of crisis", *International Journal of Architectural Research*, Vol. 7, No. 2, pp. 192-205; Pagonis, A. (2013), "The evolution of metropolitan planning policy in Athens over the last three decades: Linking shifts in the planning discourse with institutional changes and spatial transformation", paper presented at the international conference "Changing cities: Spatial, morphological, formal and socio-economic dimensions", University of Thessaly, Skiathos Island, 18-21 June 2013; Chorianopoulos, I. et al. (2010), "Planning, competitiveness and sprawl in the Mediterranean city: The case of Athens", *Cities*, Vol. 27, pp. 249-259.

Despite these efforts to guide urban growth at a more functional and comprehensive scale of planning, a series of structural challenges have remained. Such challenges include: a gap between planning and implementation; a gap between spatial planning and socio-economic planning; the incomplete development of basic land management tools; and the lack of participatory planning.

Gap between planning and implementation

In practice, the 1985 Regulatory Master Plan was rapidly bypassed as the preparations for Olympic projects entailed major transformations of the urban area that ran into contradicting provisions of the Master Plan. For example, the creation of multiple

Olympic nodal activities in the periphery of the metropolitan area (such as the Olympic Village and the equestrian centre) would further promote sprawl while the Olympic ring road and proposed road network extensions would aggravate car dependence, in direct conflict with the Master Plan's stated objectives of urban containment and environmental protection. Some other Olympic projects, such as the development of high-impact athletic activities in the Faliron area, would also seriously damage one of the few natural habitat areas in Athens and impede the opening of the waterfront to the public as it had been initially provided by the Master Plan. Strong mobilisation from various groups (e.g. municipalities, non-governmental organisations, local interest groups, the National Technical University of Athens) against locational and infrastructural choices was still unable to help incorporate Olympic projects into a wider urban planning reform process within the Master Plan. No municipality except for Athens was represented in the Athens 2004 Organising Committee and ORSA was only given a secondary, advisory role at best, while the central government retained control powers over planning and decision-making processes.

After 2004, the government's search for the valorisation of Olympic facilities made permanent some of the temporary exclusions from the planning framework in order to attract investment in profit-generating activities. In this context, ORSA supervised the revision of the regulatory master plan, which was presented in April 2009 with the main goal to sustain post-Olympic competitiveness, but the proposed plan was immediately abandoned with the change of government following the elections in October 2009.

The recent shift of territorial planning responsibilities from the Ministry of Environment, Physical Planning and Public Works to the newly created Ministry of Environment, Energy and Climate Change marked a renewed commitment to environmental concerns and coincided with the development of the EU concepts of green growth, energy efficiency and sustainable urban mobility. At the same time, the unprecedented economic crisis hit harshly the metropolitan area, either exacerbating existing problems (sprawl, urban degradation) or generating more recent ones (criminality, illicit trade, homelessness, marginalisation of immigrant communities), particularly in the inner city of Athens. Both national and local initiatives started to promote urban regeneration, such as the plan to launch an international architectural competition in 2012 to pedestrianise the main boulevard of Panepistimiou Avenue[7] or the recent Integrated Urban Intervention Plan (SOAP) that brings together initiatives from different ministries and the Municipality of Athens, that also has the overall supervision, in a joint effort to revitalise the city centre, strengthen entrepreneurship, boost the property market and support cultural activities (with a time horizon to 2021 and estimated cost of EUR 120 million).

The new government from October 2009 appointed new members in the Executive Committee of ORSA, which presented a new Regulatory Master Plan of Athens-Attica (known as the RPA 2021). Reflecting some aspects of the crisis, the proposed plan contained more specific goals (related to social cohesion, control of unauthorised buildings and urban regeneration, for example) and a renewed focus on the city centre. In contrast with the previous plans, the proposal was submitted for public consultation in an extensive process of feedback but ran into several disagreements from municipalities (e.g. Athens and Piraeus) and other stakeholders, while the entire process stalled for some time when the nationally appointed members of the Executive Committee of ORSA resigned in March 2012. The consultative process continued with subsequent revised versions of the plan, addressing most of the viewpoints of the sectoral ministries and the

local authorities so that the final plan was eventually approved by parliament in mid-2014.

Continuous inertia in addressing intermunicipal spatial planning issues can have adverse socio-economic and environmental consequences, as illustrated in the example of the Eleonas area, which covers parts of five municipalities in the region and whose anarchic development has led to the persistence of an unregulated "urban void" in decay (Box 5.2).

Box 5.2. **Challenges of inter-municipal collaboration in spatial planning: The example of Eleonas**

The area of Eleonas (meaning olive grove) is a large industrial area of almost 900 acres in the west of Athens, just a few kilometres from the Acropolis. It encompasses parts of five municipalities (Athens, Egaleo, Peristeri, Tavros and St. John Renti). Once a holy olive tree plantation in ancient Athens, the agricultural area industrialised rapidly starting from the 1950s. Today it concentrates heavy industry, logistics and storage activities, and has been a major source of noise and air pollution, commonly referred to as one of Athens's "backyards".

Despite the relatively uniform character of the area and general consensus on the need to better control its development, the lack of agreement among the five municipalities has impeded the design of any common plan. The area was also an illustration of the contradictions between industrial policy and spatial planning regulations, notably leading to large-scale investment approved by the Ministry of Industry in out-of-plan areas that were later designated as residential or green areas.

A series of planning projects for Eleonas were put forward over the years, culminating with a Presidential Decree in 1991. Nonetheless, the decree was never enacted due to disagreement among the municipalities and other stakeholders. After a revision of the plan by ORSA and a research group of the National Technical University of Athens, a second Presidential Decree was concluded in 1995 to create a development corporation. The corporation was planned to be called "Restoration and Management of the area of Eleonas in Attiki, S.A." (ADEA S.A.) and hosted in the municipality of Renti. It was assigned the task of carrying out city planning studies and implementing a plan that aimed at reorganising land uses, improving the infrastructural network and creating green areas. While the development corporation was finally formed in 2002 and the government appointed its Board in 2010, it has remained inactive owing to the strong resistance of municipalities against delegating powers to it.

Sources: Drawn from various sources including EU CREPUD MED (2012), "Eleonas: Metropolitan region of Athens, Greece, http://valdedurance.regionpaca.fr/uploads/media/Chapitre_final_Athenes.pdf; Patargias, P.A. and A.X. Pouloudis (2002), "The restoration of the area of 'Eleonas' (holly olive grove) and its contribution to the upgrading of the environment of Attiki", www.isocarp.net/Data/case_studies/141.pdf; Tsadari, S. (2013), "Urban transformations in times of crisis. Eleonas as a case study", paper presented at the 6th biennial Hellenic observatory PhD symposium on contemporary Greece and Cyprus, London School of Economics and Political Sciences (LSE), 6-7 June 2013, www.lse.ac.uk/europeanInstitute/research/hellenicObservatory/CMS%20pdf/Events/2013_PhD_Symposium/Papers%20for%20website/Tsadari%20Sofia.pdf.

Gap between spatial planning and economic development

A broader challenge concerns the hiatus between spatial planning and economic development planning, which is reflected at all levels of government in Greece. At the central government level, the General Spatial Plan is disconnected from the major national economic plans and from the National Strategic Reference Framework (NSRF). The most recent NSRF was recently approved by the European Commission in May 2014

for the programming period 2014-20 and commands a total funding of EUR 26 billion. At the regional level, the Regulatory Master Plan of Athens-Attica was elaborated by ORSA with little co-ordination with any kind of economic development strategy at a corresponding scale – although the Action Plan (which complements the Master Plan) is expected to incorporate the main orientations of the Regional Operational Programme (ROP) of the Region of Attica 2014-20. At the municipal level, the General Urban Land-Use Plan must be sent to the Ministry of Environment, Energy and Climate Change for approval and remains disconnected from the five-year local economic strategic plan that municipalities are expected to elaborate at the beginning of the municipal political mandate. Municipalities have very few responsibilities, low financial resources and weak planning capacity in terms of their own economic development. Capacity building mechanisms for municipalities remain extremely limited, one of the rare examples being the general guidance provided by the Hellenic Agency for Local Government (EETAA).

Incomplete development of basic land management tools

The lack of basic land management tools and reliable data to inform policy decisions, such as a national cadastre, have plagued the Greek planning system for a long time. Despite considerable effort from both the Greek government and the European Union, only 40% of the national territory is currently covered by the national cadastre. In the remaining 60% of the national territory that has yet to be surveyed, a very heterogeneous property system exists with no certainty that private property is administered correctly, while coastal and forest zones and public property are not registered at all. After numerous pilot schemes since 1996 to select candidate contractors for the survey work, a new cadastre law was finally passed in 2013 to simplify procedures and cut red tape. In 2014, work started again towards the completion of the cadastral registration in Greece and is scheduled to be completed by 2020. The necessary IT infrastructure has been set up, using EU funding for the digital conversion of Greece. Some 126 older survey projects are now being implemented and 28 new survey projects were tendered in October 2013. A new Board and management have been put in place at the National Cadastre and Mapping Agency. The total cost of the project is estimated at EUR 1.5 billion, which will not be entirely publicly funded since an owner also pays EUR 35 per registered deed and 0.1% over the value of the property. A new feature will be added in order to enable all transaction prices to be recorded in the cadastral database. A link is also being built between the cadastral database and the taxation database in order to develop a more comprehensive and fairer taxation system, with an expected improvement of property tax revenues.

Underdeveloped mechanisms for stakeholder consultation

The process of developing and revising a metropolitan spatial plan revealed the lack of a transparent and consultative decision-building process. The "Regional Deliberation Committee" (*Epitropi Diavoulefsis*), a participatory platform, was set up at the regional level as part of the Kallikratis reform of state spatial structures. This new advisory structure was envisaged to bring under one roof all municipal authorities in the region, together with state authorities and key socio-economic stakeholders, but so far its functioning is underperforming. The absence of a participatory planning culture was illustrated in the partial or selective use of stakeholder feedback. Even when the proposed plans were submitted to public consultation, the debate sometimes remained a formality, due to the lack of time, resources and expertise for the relevant stakeholders to adequately form and voice an informed opinion. Besides the occasional lobbying for specific local

political interests, it has been reported that critical views expressed by the private sector, the university community or various social groups have rarely been reflected in the design and implementation of planning provisions. This has impeded local buy-in that would be fundamental for the implementation of the plan.

Conclusion

The metropolitan area of Athens-Attica is struggling with both chronic and more recent urban development challenges that require effective tools to guide urban growth. In this context, the governance of transport currently remains centralised, with the Athens Urban Transport Organisation (OASA) under the control of the Ministry of Infrastructure, Transport and Networks while the governance of spatial planning was temporarily metropolitan but freshly recentralised, with the recent merger of the Organisation for the Planning and Environmental Protection of Athens (ORSA) into the Ministry of Environment, Energy and Climate Change. In a context of very recent nationwide territorial reform and unachieved recovery from the crisis, the need for sustainable pragmatic solutions rather than *ad hoc* quick-fix arrangements is all the more salient that ten years have elapsed since the catalytic event of the Olympic Games with little tangible progress in improving actual policy co-ordination in the metropolitan area. Space and economy remain to be planned separately from each other, with little alignment between regional and municipal objectives and few implementation tools.

While improving the metropolitan governance of Athens is no longer only an academic argument but has also gained ground as a political and democratic debate, it remains a sensitive issue revolving around three main options:

- Strengthening the metropolitan co-ordinating role of the Region of Attica, which in practice already covers the quasi-totality of the metropolitan area of Athens. One possibility would have been for the Region of Attica to integrate OASA and ORSA into its existing metropolitan committees to consolidate both inter-municipal and cross-sectoral co-ordination, while serving as an interface with the national and EU levels.
- Reinforcing the metropolitan level, for example by bringing together existing institutions for metropolitan co-ordination such as ORSA, OASA and the metropolitan committees of the Region of Attica into an independent co-ordinating agency. However, this would entail the creation of yet another apparatus, which appears realistically difficult in the short term even if it builds primarily on already existing institutions.
- Strengthening the role of municipalities, or alternatively the role of the Municipality of Athens, in achieving collaborative solutions. Local blockading behaviour has been frequent in the past, and bridging the long-standing divide between the dominant municipality of Athens and the other municipalities would call for the design of powerful incentives for collaboration.

An obstacle common to all three options lies in the fact that the Kallikratis reform changed the distribution of responsibilities and election modalities without significantly reforming the allocation of financial resources across and within levels of government.[8] Further metropolitan governance reform can only be envisaged as effective if it comes with a carefully designed financial scheme in support of the stated objectives. Otherwise, any proposed institution with a metropolitan ambition would simply inherit an unfunded mandate, which is likely to generate frustrations and eventually perpetuate costly inertia.

Concrete tools to mobilise the knowledge of all relevant stakeholders around a shared set of policy priorities will be instrumental to build and implement a coherent strategy for a more competitive, attractive and liveable region of Athens-Attica.

Notes

1. See Table 5.1 for further information on functional urban areas (FUAs).
3. See the official website of PEDA at: http://www.pedattikis.gr/home.
3. See European Commission (2014).
4. See profile at OECD (2014a).
5. Twenty foot equivalent unit, the measure for a small container. Large containers are generally 40-feet long.
6. In 2007, the amount of imported and exported containers from Piraeus reached around 0.85 million TEU (twenty-foot equivalent; Psaraftis and Pallis, 2012). All of these containers were transported to and from the port by truck. These trucks frequently transport large containers, representing two TEUs.
7. Although this plan has been announced by the central government without a consultative procedure involving the main stakeholders, like the Municipality of Athens.
8. Another important obstacle arises from the current constitution of Greece, which states that spatial planning is a responsibility of the central state. This has also been one of the reasons that the state has maintained key functions of spatial planning at the Ministry of Environment, Energy and Climate Change or the seven decentralised administrations. According to the Greek Supreme Court (StE), any further devolution of responsibilities from the state to the sub-national authorities would require a constitutional revision.

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Chapter 6

Chicago, United States[1]

This chapter aims to assess the degree of fragmentation in the metropolitan governance in Chicago (Illinois), United States and its impact on transport and land-use planning, and to identify possible avenues for reform.

Key points: Chicago

- This chapter aims to assess the degree of institutional fragmentation of transport and land-use planning in Chicago and to assess the main challenges related to this institutional fragmentation.
- It provides an overview of local governments in metropolitan Chicago, mechanisms for metropolitan co-ordination, including organisations at the metropolitan scale, dealing with planning, land use and transport.
- Five main challenges related to institutional fragmentation in transport and land-use planning are identified in this chapter: a lack of interconnectivity, coherence across transit modes, regional freight planning, accountability, and implementation power for regional planning and transport objectives. These challenges are analysed in this chapter.
- The concluding section suggests some avenues for reform that could be explored in order to solve the challenges of metropolitan fragmentation in transport and land use in Chicago.

Introduction

Metropolitan fragmentation is a barrier to urban agglomeration effects. These agglomeration effects can be considered the main advantage of cities: they provide deeper labour markets, more extensive markets for services and the knowledge spillovers generally associated with innovation. Metropolitan fragmentation can be considered to hinder the smooth movement of people and goods over the metropolitan areas and thus hinders growth. For a given population size, a metropolitan area with twice the number of municipalities is associated with around 6% lower productivity, an effect that is mitigated by almost half by the existence of a governance body at the metropolitan level (Ahrend et al., 2014). This chapter aims to assess the degree of metropolitan fragmentation and its impact on transport and land-use planning in Chicago, and to identify possible avenues for reform.

Chicago has a long and established tradition of urban and regional planning, which makes it an interesting test case for urban areas across the world. The famous 1909 Plan of Chicago of Daniel Burnham has become one of the benchmarks of American urban planning, subject to wide praise, but also to fervent criticism, for example in the American urban planning classic *The Death and Life of Great American Cities* (Jacobs, 1961). But even before the Burnham Plan, urban planning of some sorts already took place in Chicago (Smith, 2006). Following the 1909 Plan of Chicago, various new plans for Chicago have been developed over the last century, increasingly becoming more regional in scope, reflecting the ongoing spread of the metropolitan area over a wider geographical area (Schwieterman and Mammoser, 2009). The most recent plan for Chicago is GO TO 2040, developed by the Chicago Metropolitan Agency for Planning (CMAP).

This case study on Chicago follows up on previous OECD work on Chicago. The *OECD Territorial Review of the Chicago Tri-State Metropolitan Area*, released in 2012, provided an assessment of the Chicago area with respect to the economy, policies and governance; one of the chapters focused on transport and logistics in the Chicago region. The current case study builds on that chapter and expands on the assessment of transport and land-use governance mechanisms. As highlighted in the 2012 *Territorial Review*, Chicago is one of North America's main logistics hubs, which makes the performance of transport infrastructure crucially important to the region. The *Review* adopted a definition of the Chicago region that goes beyond the boundaries of the state of Illinois and covers parts of the states of Indiana and Wisconsin: the Chicago Tri-State Metropolitan Area. The current case study adopts multiple definitions of Chicago; in addition to the wider Tri-State Metropolitan Area, it also focuses on what is in the current local policy debate most widely considered to be the metropolitan area, consisting of six counties in north-eastern Illinois, which we will refer to here as the metropolitan area of Chicago.[2]

The following sections aim to identify the institutional fragmentation of transport and land-use planning in Chicago and to assess the main challenges related to this institutional fragmentation. The concluding section suggests some avenues for reform that could be explored in order to solve the challenges of metropolitan fragmentation in transport and land use in Chicago.

Overview of the metropolitan area

Socio-economic profile

Chicago is an economic powerhouse with a variety of strong assets. Its economy represented approximately USD 500 billion in 2010, which makes it the third-largest metropolitan economy in the United States. Chicago has a very diversified regional economy, with a strong presence in financial services, wholesale trade and retail, health, and transport and logistics. In addition, it has a relatively strong specialisation in manufacturing. It has a well-educated population and high rates of entrepreneurship. Chicago is home to many corporate headquarters, which is facilitated by excellent global connectivity (via air), good quality of life and a whole range of urban amenities, including prominent universities, research institutes and cultural institutions.

The Chicago metropolitan region faces various economic challenges. Its gross domestic product (GDP) has grown annually at just half the average US GDP rate (0.8% vs. 1.6%) during the past decade. Its regional GDP per capita has also grown more slowly than that of other major US metropolitan areas, such as New York and Los Angeles. Between 2000 and 2010, the rate of employment in the Chicago region declined by an average annual rate of 0.7%, as compared to a decline of 0.15% for the national average. In addition, the Chicago region has experienced slow annual growth in population (0.4% over the last decade, whereas population growth in the country as a whole was 0.9%) and productivity improvement has slowed in recent years (WBC, 2012).

Institutional fragmentation

Chicago is generally considered to be one of the most institutionally fragmented metropolitan areas in the United States – and indeed worldwide. This fragmentation has been explained by two factors. Firstly, by Illinois laws that limit municipal indebtedness and revenues, encouraging the creation of special purpose districts with their own bonding power and taxing authority. The second explanation is the historic city-suburban hostility dating back to the late 19th century. Political divergences, with urban Democratic and suburban Republican competition for the control of the Illinois General Assembly intensified this fragmentation in the 1980s and 1990s (Lindstrom, 2010). The city of Chicago is a municipality included in Cook County, which spans a wider area and also includes suburban municipalities.[3] The metropolitan area of Chicago consists of the city of Chicago and approximately 270 other municipalities, 80% of which have less than 25 000 inhabitants. These suburban municipalities form part of six counties that comprise the metropolitan area.

Institutional fragmentation in Chicago mirrors the fragmentation and multiplicity of government actors in the state of Illinois, in which Chicago is located. According to the Illinois Office of the Comptroller, the state of Illinois consisted in 2011 of 8 400 units of local government, which is a large number of local government units in international perspective. There are five basic types of local government in Illinois, all creatures of the state government. As such, Illinois has 102 counties, around 1 300 municipalities, 1 400 townships, 900 school districts and 3 000 special districts.

Various sub-national governments have responsibilities related to transport and land-use planning. Counties are responsible for the construction and maintenance of secondary roads and bridges, and municipalities for local streets, traffic control and adoption of local laws, called “ordinances” regulating local matters, including zoning. Townships only exist in those counties where a county-wide referendum has created

them. One of their main functions is the construction and maintenance of roads and bridges in unincorporated areas. Townships in Illinois also have zoning authority, but only where the county has not adopted a zoning ordinance. Transport-related special districts include airport authorities, mass transit districts, port districts, road and bridge districts, road districts and transport authorities. The number of transport-related special districts is relatively small compared to other functions (park, recreation, library and fire protection): in the Chicago Tri-State Metro Region there are in total 784 special districts, 5 of which in air transport, 9 in mass transit, 7 in highways and 3 in water transport (OECD, 2012). In addition to the local governments, the state of Illinois has important powers within the domain of road transport. The Illinois Department of Transportation is responsible for maintenance of state public roadways, funding rail, public transit and airport projects; and administering fuel tax and federal funding to local jurisdictions in the state. The Illinois State Toll Highway Authority is responsible for provision of toll-supported highways.

An important mechanism for overcoming the institutional fragmentation in Chicago consists of co-operation between municipalities. This takes the form of agreements to provide services in the region, e.g. in Cook joint action agencies and special districts were established by local governments. Mayors in suburbs in the Chicago metropolitan area have since the 1950s co-operated in suburban councils of government (COGs), voluntary associations to meet the challenges they faced. These informal meetings set the pattern for nine COGs to join the city of Chicago in 1997 to work together in the Metropolitan Mayors Caucus to resolve common challenges. At the beginning, only issues were addressed for which there was a consensus (such as the power outages of the electricity provider Commonwealth Edison and a Clean Air Campaign), but the Mayors Caucus was later also involved in more controversial debates (Lindstrom, 2010). The Metropolitan Mayors Caucus was incorporated in 2001, with task forces on issues such as freight rail, ground transport and regional growth, as well as on various non-transport related topics including emergency preparedness, service delivery and diversity issues. The Mayors Caucus has had a long-standing involvement in regional transport issues. It strongly supported the use of federal funding for transit, highway and safety programmes for the region. The approval of the Mayors Caucus was critical for the creation of the CMAP, and the restructuring of the Regional Transport Authority (RTA) in 2008, both of which will be discussed below. In addition, they recommended funding support for the Chicago Region Environmental and Transportation Efficiency Project (CREATE), a public-private partnership to resolve the freight rail gridlock in the region (Lindstrom, 2010).

Co-operation at the metropolitan level has also been stimulated by business and civil society associations, including the Commercial Club of Chicago, the Metropolitan Planning Council (MPC), the World Business Council (WBC) and the Chicagoland Chamber of Commerce. For example, the Commercial Club of Chicago, uniting business leaders in the Chicago region, issued a report in 1999, entitled "Chicago Metropolis 2020" calling for the region to unite to solve its problems including on transport. The committee established Chicago 2020 to pursue this agenda. The MPC informs policy making and influences policy agendas with well-informed reports and documentation.

Additional ways to combat institutional fragmentation in Chicago consist of co-operation in regional organisations. Within the area of transport and land-use planning, two main organisations exist: the CMAP and the RTA (see further discussion below).

The governance of transport and spatial planning

Chicago Metropolitan Agency for Planning (CMAP)

The Chicago Metropolitan Agency for Planning (CMAP) was created in 2006 based on the 2005 Regional Planning Act, to address development and transport challenges in seven counties in north-eastern Illinois: Cook, DuPage, Kane, Kendall, Lake, McHenry and Will. Its aim is to plan for public and private investments in the area and integrate plans for land use and transport. The CMAP merged the operations of the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC); CATS was responsible for regional transport planning as the federally designated Metropolitan Planning Organisation (MPO) for the Chicago region; and the NIPC for regional land-use planning. Though the NIPC had no authority to implement its land-use plans, CATS had in theory the ability to impose its transport planning on the region but in practice could not.

The CMAP is responsible for developing a comprehensive regional plan at least every five years that integrates land use and transport. This plan presents the goals, policies, guidelines and recommendations to guide the physical development of the region. Elements that are included in this plan are official forecasts, inter-sectoral land use and transport policies, a plan for a co-ordinated and integrated transport system consisting of a multi-modal network of facilities and services to be developed over a 20-year period. Based on this plan, a listing of proposed public investment priorities in transport and other facilities and utilities is made. In addition, the comprehensive regional plan can contain proposals for model ordinances and agreements that may be enacted by local governments, as well as recommendations for legislation that may be necessary to implement the plan. The CMAP's official forecasts and plans are the foundation for all planning in the region, whilst units of local governments continue to maintain control over land use and zoning decisions. The Board of the CMAP may review and comment on proposed county and municipal plans.[4]

The CMAP published its comprehensive regional plan in 2010, called "GO TO 2040", after three years of research and extensive public outreach. In addition to transport and land use, the plan also focuses on taxation, housing, water efficiency, health, local food and energy efficiency. The plan was adopted unanimously by the leaders of the seven counties covered by the CMAP. Currently, the CMAP focuses on supporting the implementation of GO TO 2040. This has been facilitated by a grant from the US Department of Housing and Urban Development (HUD) to the CMAP for technical assistance to communities seeking to implement GO TO 2040. As part of the assistance to local governments, the CMAP has also provided handbooks, such as the *Handbook of Planning Law Principles and Practices for Northeastern Illinois*.

Regional Transportation Authority (RTA)

The Regional Transportation Authority (RTA) in Chicago has the responsibility to develop, implement and enforce plans for adequate, efficient and co-ordinated public transport, provide financial review of the providers of public transport in the region and facilitate public transport provided by the three service boards. These service boards refer to the three transit agencies in north-eastern Illinois: the Chicago Transit Authority (CTA), Metra and Pace. The CTA operates mass transit (buses and trains) in Chicago and adjacent suburbs, Metra commuter rail and Pace the suburban bus system, overlapping with the CTA system in the Cook County suburbs. The RTA is the oversight body for

these operators; the RTA has its own taxing powers, currently exerted through 1.25% or 0.5% (depending on the jurisdiction where a purchase is made) of the sales tax. The RTA has the legislative requirement, as part of the 2008 RTA Act, to update the Regional Transit Strategic Plan every five years. In 2013, the RTA adopted the Regional Transit Strategic Plan, updating the 2007 "Moving Beyond Congestion" Strategic Plan. The new plan is intended to serve as a roadmap for regional transit and is a collaborative effort of the RTA, its service boards and its stakeholders.

The RTA reflects the strong city-suburb divergence in the Chicago metropolitan area: when the RTA was established through a referendum in the 1970s, the overwhelming majority of the positive votes were cast in the city of Chicago (Young et al., 2007). The CTA is a Chicago-dominated agency (with four of the seven Board members appointed by Chicago and three by the state of Illinois), whereas Metra and Pace are predominantly suburban governed agencies, running the suburban commuter rail and buses respectively. Subsequent restructuring of the RTA (e.g. in 1983) has not changed this dynamic; rather than proposing a unified regional transport system, the enabling legislation in 1983 continued the fragmentation and patchwork service (Lindstrom, 2010). According to some observers, the impotence to overcome the city-suburban divide can be explained by the relative absence of the state of Illinois in regional public transport and land-use planning (Lascano Kezic and Durango-Cohen, 2012).

Table 6.1. **Overview of main government actors in metropolitan transport and planning in Chicago**

Name	Function
State of Illinois (Transportation Dept., Tollway)	Construction, maintenance of roads and toll roads
Chicago Metropolitan Agency for Planning	Strategic regional planning for metropolitan Chicago
Regional Transportation Authority (RTA)	Regional transit planning and budget oversight over the three operators
Chicago Transit Authority	Transit operator for Chicago and adjacent suburbs (rail and buses)
Metra	Suburban commuter rail operator
Pace	Suburban bus operator
Counties	Construction, maintenance of secondary roads and bridges
Municipalities	Local streets, traffic control, local planning and zoning

Transport and land-use challenges related to metropolitan fragmentation

Various mechanisms have helped to solve institutional fragmentation in Chicago, such as the CMAP, the RTA, the Mayors Caucus and the civic society involvement at the regional scale, as described above. The various administrative jurisdictions of these organisations and agencies are (more or less aligned) along the lines of the six counties covering the metropolitan area of Chicago.[5] In addition, various policy goals are aligned: the RTA plan is aligned with the GO TO 2040 plan of the CMAP, including on the emphasis on liveable communities, achieving a state of good repair for the region's transit assets, modernising the transit system, as well as the interest in innovative financing approaches. On the larger regional scale, the three MPOs in the three states covering the Tri-State Chicago region (CMAP, NIRPC, SEWRPC) have sought to increase co-operation and co-ordination. However, there are still various challenges that remain with respect to institutional fragmentation in transport and land use. These can be summarised as a lack of interconnectivity, coherence across transit modes, regional freight planning, accountability and implementation power. These challenges are described in further detail below.

Smooth interconnectivity

The current state of transit ridership in Chicago is relatively depressing. Whereas the vast majority of transit users in the Chicago region live in the core, less than 30% of the city of Chicago's residents take transit to work. The vast majority of the Chicago region's residents drive to work, which can be explained by a transit system that is too radial to serve non-downtown trips well, and by the lack of frequent all-day service to areas outside the center (MPC, 2013c). As a result, a smaller share of Chicago commuters uses transit than in 1980: 20% fewer passengers. The only ridership growth has taken place in Chicago's central neighbourhoods (MPC, 2013c).

Limited ridership is related to the lack of an integrated public transit system in Chicago. The provision of transit services follows an administrative jurisdictional logic instead of a logic motivated by traffic flows. The system is neither suited for the city-to-suburb traffic nor for the suburb-to-suburb traffic. Approximately 36% of Chicago's population works outside the city of Chicago, and 46% of workers in the city of Chicago live in the suburbs. Yet, the division of the transit system into an urban (CTA) and sub-urban part (Pace and Metra) means that a large share of these commutes is not transfer-free. Although CTA rail services extend beyond the city limits, this is not the case for the CTA bus services, focused almost entirely on the city of Chicago. CTA bus services typically end abruptly at the city limits where Pace services begin. It is rare for CTA buses to continue out to suburban job locations or for Pace bus lines to extend into urban cores according to the MPC (2013c).[6] A similar system fragmentation exists with respect to rail services. None of Metra's downtown commuter rail connects directly to the CTA rail network, with only two stations that provide true intermodal connections between the CTA and Metra systems, namely Oak Park and Jefferson Park (MPC, 2013c).[7] Due to the radial structure of the public transit network (with the city of Chicago at the core), increased suburban to suburban traffic flows cannot really be accommodated by public transport. Attempts to link the RTA network to the regional transport networks in the other states (Indiana and Wisconsin) have not materialised, due to limited political commitment and priority.

There are various instances of insufficient co-ordination between the different services boards. For example, Metra began its 2010 Union Pacific-North Line bridge reconstruction project without co-ordination with the alternative parallel CTA bus and rail service, which resulted in severe service disruptions; consequently the project had to be stopped and re-planned. In 2013, the CTA initiated the Dan Ryan Reconstruction Project without taking into consideration the 10 000-14 000 Pace customers who take the bus into the 95th Dan Ryan terminal each day, nor the availability of parallel Metra service. Due to a lack of both co-ordination and advanced involvement of the other service boards, Pace had to scramble for funds to accommodate disrupted riders and Metra was asked to accommodate CTA customers with only four months' notice. In addition, there are evident advantages of joint procurement, which have only recently begun to be explored.[8]

This lack of integration constrains ridership. As commuter rail is not well connected to local bus services, only a low share of passengers arrives tt the stations by bus (7% in the early 2000s, the situation not having changed much since). Access to stations is dependent on the automobile, which requires a large amount of parking space. Downtown terminals have a large number of activities within walking distance, but reverse commuters cannot reach their final destination by foot because the location of suburban employment follows highways. It is estimated that 70% of the regional jobs are not within walking distance of rapid transit. This has a wider set of causes related to a lack of

transit-oriented planning: just 22% of the regional population is located within half a mile of rapid transit stations, and just 8.5% is within a quarter mile of a station (MPC, 2013c).[9] The institutional fragmentation in Chicago can be considered to be one of the causes of the absence of a high-speed rail connection between O'Hare airport and the city centre of Chicago, in addition to obvious engineering and cost challenges. O'Hare airport is located on land owned by the city of Chicago, but surrounded by suburban municipalities. The transaction costs to plan for a possible high-speed corridor between the airport and the city centre – and the land acquisition that would be needed for this – have proven prohibitive.

Smooth interconnection is not helped by the absence of harmonised fare structure in metropolitan Chicago. Each service board has its own fare structure, with the result that customers are treated differently according to which services they use. In general, long trips between destinations in the city of Chicago are cheap, whereas travel with similar distances but outside the city is much more expensive. In other words, there is hardly any relation between transport fares and services that are used. These parallel fare structures also give disincentives to transfer between the different services (MPC, 2013c).

In addition, there is no single fare card for public transport in Chicago, even if some progress has been made. The Ventra card system, implemented by CTA and Pace, is currently not compatible with Metra, which has its own fare card, apparently for sunk investments in its own fare collection system. Monthly Metra pass holders may also purchase a Pace bus sticker in conjunction with their monthly pass purchase, which provides access to Pace suburban busses. A CTA link-up option is also available for purchase. State law requires that all three agencies accept a single fare card by 2015, but there are currently limited indications that this timeline is going to be achieved. The Ventra card is designed to allow users with credit cards to use those as fare media instead of a traditional fare card.

Coherence across transit modes

Due to the lack of alignment of strategies and instruments of different governments, there is limited coherence in travel mode policies for the region. The GO TO 2040 plan adopted the goal of doubling transit ridership by 2040 as a means of increasing mobility and creating more liveable communities. The RTA policies support the modal shift proposed in GO TO 2040, but at the same time there are policies at various government levels that stimulate car use, such as generous parking policies, a gas tax that is relatively low from an international perspective, the lack of congestion charges or parking fees in most areas. As there is strong price elasticity between gasoline prices and transit use in Chicago (Nowak and Savage, 2013), one would expect that the modal shift targets are not facilitated by a policy that keeps the cost of car use low by under-pricing negative externalities of car travel.

Related to this is the lack of fluidity of funding across travel modes. Current funding distributions are often not based on thorough evaluation of project costs and benefits. Funding within the RTA is based on out-dated allocation formulas from the 1980s.[10] According to these formulas, the CTA receives 58% of the federal funds for transit in Chicago, Metra 34% and Pace 8%; a similar formula is applied to state funds with 50% allocated to CTA, 45% to Metra and 5% to Pace. Only a very marginal share of the RTA budget (less than 1%) is discretionary spending on which the Board's main budgetary debates are focused. As allocation formulas are decades old, they no longer correspond to current spending priorities and functional realities. However, these formulas turn out to

be politically difficult to change, with the perceived losers of possible reform able to block changes due to the requirement of a supermajority action by the RTA Board. The lack of fluidity of transport funding also applies in a broader sense. Funds for roads are hardly used for public transit, and proceeds from tollways have hardly ever been used for non-road transport.[11]

Regional freight planning

There is little regional co-ordination of freight traffic and logistics activities in the Chicago region. Location patterns are driven by the interplay of market developments and preferences of local governments. Most logistics activities have suburbanised, which is a logical development for a global city such as Chicago with high land rents in core urban areas and central business districts. The institutional fragmentation of the Chicago metropolitan area and the relative lack of a regional freight strategy imply that the location of logistics activity is becoming the outcome of local NIMBY (not-in-my-backyard) approaches, e.g. temporary container storage spills over to jurisdictions that lack restrictive regulations or to municipalities far away from the urban centres that have sufficient undeveloped land. Many municipalities use aesthetic requirements in their zoning regulations or other restrictions to keep container storage areas out. For example, certain municipalities require container storage areas to be connected to waterways and railways, even if municipalities do not expect these containers to arrive by water or railways (Cidell, 2012). It is questionable if such a system of zoning regulations leads to the most rational organisation of freight traffic flows.

Institutional fragmentation also adds to the administrative burdens for truck drivers, with many of the local administrations in the region asking for separate licences for trucking companies. The CMAP admittedly recognises the importance of co-ordination of freight policies. It calls upon the federal government to develop a vision, plan and funding to address freight nationwide, in parallel to efforts to improve the efficiency of the regional freight system. In that respect, it recommends the creation of a regional freight authority. This authority is envisioned to have the ability to finance freight system capital improvements and to address public policy issues, including community impacts such as delays, safety and noise. In addition, the CMAP calls for full funding and implementation of the Chicago Region Environmental and Transportation Efficiency (CREATE) programme, a public-private partnership to achieve strategic rail improvements by reducing freight bottlenecks and raising operating speeds. Some actors currently consider the possibility of a CREATE 2 programme, that would be focused on reducing freight bottlenecks related to road transport.

Remarkably absent from these discussions about regional freight policies are the airports and ports of the region. Main airports in the region are the O'Hare airport and the Chicago Midway airport, both administered by the city of Chicago Department of Aviation (CDA). The CDA has a strategic partnership with Gary Airport in Indiana, which allows it to install some sort of specialisation between the three airports, in conjunction with the modernisation of both O'Hare and Midway airport.[12] The Illinois International Port District (IIPD) is the Port of Chicago, administered by a board appointed by the Mayor of Chicago and the Governor of Illinois. The GO TO 2040 plan gives scant notice to the port and airports which, from their side, also seem to plan and operate without taking the GO TO 2040 plan into account. What could be considered the strategic plan of the IIPD, the 2012 Strategic and Capital Needs Study, does not mention the GO TO 2040 plan, nor does it position the port in the context of regional freight flows (BMO Capital, 2012). It considers rail transport and the other ports in the region, such as

the Port of Indiana-Burns Harbor, as competitors rather than as actors that provide complementary services.

Accountability

Public transit in Chicago is organised such that it is difficult to identify the main actor to hold accountable for underperformance. The RTA as a whole is constructed around the notion of a power balance between city and suburbs, with supermajority requirements that give the possibility to various actors to block decision-making processes. Since 1983, a group of five RTA board members voting in unison can effectively veto decisions of the RTA Board of Directors. Since 2008, there is an equal balance of five members appointed by the Mayor of Chicago, five members from suburban Cook County and another five members of the Collar Counties (the other five counties surrounding Cook County), giving each of these sub-groups the veto option. The structure of the CTA, with the city of Chicago appointing four of the seven board members, somehow makes the Mayor of Chicago more accountable for issues related to the CTA. In Metra and Pace, power is more diffused among the suburban leaders, which makes accountability challenging. The current governance structure of public transport allows agencies to point fingers at each other when there are problems, e.g. with respect to the absence of a universal fare card, the unfinished Block 37 Station and the ADA Paratransit cost escalation (Schlickman, 2013). Under this structure the capital programming process is not comprehensible to users of the system. In addition, the sheer number of Board members (47) creates a heavy management structure, not least as all of these are political appointees, not elected by the general public like in some other US metropolitan areas. Not surprisingly, public transit agencies, such as Metra, have been haunted by stories of cronyism and corruption, with the fragmented structure making it only more difficult for the RTA to prevent this.

The road network in the Chicago region follows a completely incomprehensible pattern of mixed responsibilities. It is possible that the same road has parts that fall under the responsibility of county, other parts under municipal jurisdiction, and yet other parts under the state. This can be explained by the fact that, in the past, responsibility over a road provided possibilities for a government to extract revenues, so that many governments competed to claim responsibility over roads or parts of it. The result is a very fragmented structure of roads. The spread responsibility for a road across several governments leads to huge transaction costs for maintenance and repairs of one road, let alone for the transformation of a whole corridor. The situation also leads to underinvestment, e.g. when local governments are responsible for resolving an obstacle (e.g. a viaduct that is too low for trucks to pass under) from which they do not reap most of the benefits (as the economic benefits of increased truck traffic could spill over to other jurisdictions).

The fragmented road system adds to the lack of public accountability for transport in the Chicago region. The general public is not (and cannot possibly be) aware of which government is responsible for which part of which road; unlike other metropolitan areas in which it is generally possible to identify which types of roads are the responsibility of which type of government, the situation is much more complicated in Chicago. As such, the system of public accountability is diffused: even if it were possible to identify the responsible actors for lagging performance, the fragmentation of responsibilities makes it all too easy for these actors to put the blame on other actors in the system. Rationalisation would be needed to clarify responsibilities for the road network in Chicago. For the moment, this is very difficult to realise as no level of government would be tempted to

accept this responsibility, considering the repairs needed to the roads and the drain this would represent for their public budget.

Implementation power

Chicago has a history of urban and regional planning that continues to foster bold, data-driven strategic visions, such as GO TO 2040. These planning exercises involve local scientists and a wide array of government actors, businesses, civil society actors and the general public at large, for example the RTA's Regional Transit Strategic Plan also used contributions from the general public, which were released in the appendix to its plan. The CMAP engaged with residents in online face-to face and *in situ* deliberations on the long-term future of the Chicago region, using a digital tool for regional planning, MetroQuest, resulting in over 20 000 Chicago-area residents becoming engaged (Haas Lyons et al., 2013). The strategic plans of the other regional planning organisations in the Tri-State Chicago Region, the NIRPC and the SWERPC, are similarly thoughtful, data-driven and forward-looking. Even if one could comment on a lack of ambition in the long-term strategic plan of the RTA, regional strategic planning generally is not the main hiatus in Chicago; what is lacking is effective regional governance mechanisms to implement these visions and plans. The sections below focus on the implementation of regional planning objectives and regional transit objectives.

Implementation of regional planning objectives

The CMAP does not have many instruments to enforce its regional plan. The CMAP's primary permanent financing sources are federal funds dedicated to the agency as a metropolitan planning organisation (MPO), resources that are constrained to transport. The CMAP has no authority over other regional priorities connected to transport, such as natural resources, housing or economic development (MPC, 2013b). The CMAP has neither its own revenues nor the possibility to issue bonds, a common revenue source for sub-national governments in the United States. It also does not have financial incentives or sanctions. The prerogative for land use is with local governments, so most of its power comes from working together with local governments. It has a technical assistance programme, which it has used for assistance to approximately 100 communities seeking to implement GO TO 2040, but this is a temporary initiative financed by a temporary grant from the US Department of Housing and Urban Development (HUD). Despite these handicaps, the CMAP has been described as a "skilled facilitator and convener" that managed to achieve some piecemeal progress towards implementation of its GO TO 2040 comprehensive plan (MPC, 2013b).

Unlike some other metropolitan planning organisations in the United States, public transit planning is not integrated in the CMAP. In Minneapolis, the primary transit operator is a part of the metropolitan planning organisation. Taking an example from Canada, in Vancouver (British Columbia), the region's equivalent of a metropolitan planning organisation is not only in charge of the operation of transit, but also for the region's main roadways. According to some observers, the separation of regional planning from regional transport planning (and operation) hinders the effectiveness of regional planning. For example, the Chicago Metropolis 2020 organisation proposed in 1998 a Regional Growth and Transportation Commission to consolidate the NIPC and CATS (which was implemented by creating the CMAP), but also the planning components of the RTA and the Illinois State Toll Highway Authority into one agency. The larger consolidation did not happen, mainly out of concerns of concentrating too much power into one "super-agency" (Schwieterman and Mammoser, 2009). Some actors

have mentioned the possibility of folding the RTA (and thereby oversight of the transport operating companies) into the CMAP. However, the CMAP is considered to have effectively formulated an ambitious and forward-looking regional plan with its GO TO 2040, and its public image and perception of effectiveness might conceivably suffer if it were to become associated not only with regional transit planning, but also with oversight of the public transport operators.

Not only regional, but also local land-use plans are sometimes difficult to implement. An illustration in case is the land-use planning system in the city of Chicago. Although the city is in charge of land-use planning, most of this is actually taking place in concentration with the 50 wards of the city, each headed by a city council member. These wards engage in discussions with developers that result in negotiated planning outcomes that are relatively loosely connected amongst each other, as the city council does not interfere in what is going on in the wards, nor does the mayor unless he has major objections. Although observers seem to agree that this system generally functions well, it relativizes the power of the Mayor of Chicago in providing long-term land-use plans.

Implementation of regional transport objectives

Like in regional planning, implementation challenges exist with regards to regional transport. Although the RTA has the legal mandate to oversee and plan for regional transit, its room is fairly limited due to the autonomy granted to the three service boards (CTA, Metra and Pace). This can be illustrated by the limited possibilities of the RTA to influence the budgets of the service boards: it can only accept or reject these budgets. The power of rejecting the entire budget could be considered too heavy an instrument to have practical use: the RTA does not want to be responsible for a service shutdown, which a rejection of the budget might imply, so it has not actually rejected a budget of the service boards. The RTA also does not have much power over the management of operations, unlike other regional transport authorities in the United States. In both New York and Philadelphia, a single Board oversees and appoints management of all operations. Moreover, the RTA board votes require a supermajority; this giving each area of the region veto power of the RTA's decisions and hindering the emergence of a regional perspective. The regional transit strategic plan of the RTA lacks the clarity and ambition of GO TO 2040; its long-term financial vision falls short of being a comprehensive plan for future capital investments and operations with clear priorities and proposals for funding. It can be assumed that the complex regional organisation of public transit in Chicago can explain this void.

The lack of a regional vision on transit makes it more difficult to raise money for the transit system through state or federal funding, whilst this is urgently needed. Chicago's transit system is generally considered to be underfunded: not only does Chicago spend less on transit capital expenses than it did 20 years ago, with very slow growth rates in operational spending, but its per capita transit spending is also falling behind that of many other cities in the United States and internationally, e.g. London spends five times more on transit per capita than Chicago, New York more than three times more (MPC, 2013a). As of December 2011, the RTA required USD 18.7 billion to address the "state of good repair" backlog and an additional USD 12.4 billion to meet the ten-year need for normal capital re-investment, according to the RTA Capital Asset Condition Assessment Update (Delcan, 2013).

Conclusion

Various structures and frameworks in the Chicago Metropolitan area are outdated and inefficient, but these are difficult to change because reform is perceived as a zero sum game, and no actor would like to lose in this game. Historic developments explain the proliferated rate of local governments, the irrational organisation structure of the RTA with its service boards, and the funding allocation formula. Underlying these structures is a continuous battle between city and suburb, enforced by political divides along these lines. As many of the institutions in the Chicago region reflect a constructed equilibrium between city and suburbs, any efforts to change institutions touches this sensitive nerve. This means that reforms would have to be solidly built on the acknowledgement of win-win possibilities, and make use of windows of opportunity for change, such as crises or budgetary expansion. Past reforms in the Chicago region have often been adopted in times of budgetary crises. The history of the RTA provides a nice illustration of this point. Its creation in 1974, its reorganisation in 1983 and the new legislation in 2008 all took place within the context of financial problems, funding backlogs, potential bankruptcies and service disruptions.

Recent ethics controversies at Metra have created some momentum for reform. In response to these controversies, the Governor of Illinois created the Northeastern Illinois Public Transit Task Force in mid-2013 that reported in March 2014. The mandate of this task force was to identify potential reforms for region's transport agencies in terms of ethics, governance, finance and service standards. An important contribution of the task force has been its recommendations to increase the ethical standards of board members of the public transit agencies, thereby contributing to restore the public image of the agencies. This could help to garner the public support that would be needed to solve the funding challenges of regional transit in Chicago, either by tariff increases, new tax revenues or other funding sources. Another set of recommendations relate to the governance of the transit system, where the task force proposes to create a single integrated agency with one board (instead of four) and three operating units (Northeastern Illinois Public Transit Taskforce, 2014). The transformation of the RTA into a single transit agency could certainly improve its public accountability and regional coherence, but would need delicate designing and manoeuvring to succeed, compensating the Mayor of Chicago for "losing" its political influence over CTA, without alienating the suburban leaders in the process.

Another window of opportunity could open with a new capital investment programme. Various observers expect that a new capital investment programme initiated by the state of Illinois might be in the making for 2015. This could provide the necessary momentum for metropolitan governance reforms. Directing certain capital funding streams via the CMAP would increase its implementation powers; freight-related capital projects could be linked to progress on the discussion of a regional freight authority, which might also be a function that the CMAP could host. Capital funding for regional transit could be linked to transformation of the RTA into a single agency; to the phasing out of the funding formula for the CTA, Pace and Metra; and to the creation of a funding model that is increasingly based on the merits of projects. A new capital budget could also increase the financial fluidity between different transport sectors and cross-sectoral projects, e.g. congestion charging models in which part of the proceeds are used to stimulate public transit. Finally, a new capital programme could provide opportunities to present a more rational pattern of responsibilities for the roads in Chicago.

Related to this is the attraction of private finance for transport services, but experiences in this respect have been mixed in Chicago. The public-private partnership (PPP) on parking meters in Chicago is generally considered to be a school case of a bad PPP. According to the City of Chicago Inspector General, the city was paid almost USD 1 billion less for the 75-year lease than the city would have received from 75 years' of parking meter revenue (Office of the Inspector-General, 2009a). The contract contained "non-compete" and "compensation" clauses that mean that the city must reimburse the lessee, Morgan Stanley, for any time the space is used for anything other than parking, preventing road maintenance without paying a penalty; and from building parking lots for the entire duration of the contract because they might compete with the outsourced parking meters. Another PPP, the 99-year lease of the Chicago Skyway,[13] has raised criticism because of the toll increases and the absence of a provision in the contract that would enable the city to prevent this. The most recent experiences in the Chicago region appear also not to be very lucky. The Illinois International Port District has so far not managed to get a firm bid for its terminals, whereas the proposed PPP for the Illiana Expressway would put most of the project risk in the hands of the public sector. Finally, the Chicago Infrastructure Trust, created in April 2012, so far only managed to get approval for one project, worth USD 25 million of private investments, an amount earlier announced to be USD 115 million, overall a performance well below expectations.

New transformative projects could facilitate a regional win-win approach. Such a project-based approach could focus the attention of actors towards solving bottlenecks with regional benefits, e.g. along the lines of the CREATE programme. Whereas this programme was focused on the metropolitan area of Chicago in the stricter sense, new projects could also focus on cross-state projects. The only large cross-sectoral project recently proposed, the Illiana Expressway, provides many indications of what to avoid: a project without a sound project evaluation appraisal, a PPP without transfer of risk to the private party, and un-coordinated recommendations of the two regional planning organisations involved, with the CMAP recommending against it and the NIRPC in favour. If new projects would be able to avoid such pitfalls and generate enthusiasm in the region, they might be able to transform current zero sum game approaches into a more constructive regional win-win approach to the challenges of transport and land use in Chicago.

Notes

1. This case study is based on Merk (2014).
2. The Chicago Metropolitan Statistical Area as defined by the US Census contains 14 counties and approximately 10 million inhabitants; the *OECD Metropolitan Database* applies a different definition: a more constrained area of around 9.4 million inhabitants.
3. A small piece of Chicago (the uninhabited land at O'Hare Airport) is in DuPage County.

4. The Board of the CMAP consists of 15 voting members: 5 appointed by the Mayor of Chicago, 5 members representing the non-urban part of Cook County, and the other 5 representing the other counties, appointed by their local government (most of the cases jointly municipal/county appointment).

5. The CMAP also includes a seventh county, Kendall.

6. An exception to this statement is the new bus on shoulder service Pace operates from the southwest suburbs onto the I-55 going down to the Chicago central area.

7. In addition, the Evanston Metra and CTA-Davis stations are adjacent to each other but not directly connected.

8. The examples mentioned in this paragraph were provided by Stephen Schlickman, Executive Director of the Urban Transportation Center of the University of Illinois at Chicago.

9. Rapid transit is here considered as the CTA L line, the Metra rail line and the future Ashland Avenue BRT.

10. The formulas are not statutory but rather understood to be unchangeable political agreements.

11. Federal highway funds can be "flexed" (transferred) to transit through the MPO and/or by consent of the Illinois Department of Transportation (IDOT) but this rarely happens except in the case of the Federal Congestion Mitigation and Air Quality programme for which transit projects can compete and score well against highway projects.

12. This inter-state co-operation also made it practically impossible to create a state-run airport authority, as was discussed at the time.

13. The Chicago Skyway, also known as Chicago Skyway Toll Bridge System, is a 7.8-mile-long (12.6 kilometre) toll road in Chicago carrying I-90 from the Indiana Toll Road to the Dan Ryan Expressway on Chicago's South Side.

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Chapter 7

Daejeon, Korea[1]

This chapter begins with a brief socio-economic and institutional overview of the Daejeon metropolitan region. It then explores the current status of inter-municipal collaboration in two major sectors for urban development: transport and land use. Finally, it reviews existing metropolitan collaboration tools.

Key points: Daejeon

- Daejeon is one of the six large cities in Korea that enjoy the legal status of "metropolitan cities", which puts them on the same footing as the upper tier of sub-national governments (i.e. provinces). Metropolitan cities were devised to cope with the country's rapid urbanisation and economic growth by giving a broader range of competencies and resources to selected cities with a population over 1 million.
- Although Daejeon is a major transport hub in Korea and enjoys excellent connectivity with the rest of the country, the overwhelming dominance of automobile use is raising challenges in terms of congestion costs and sustainable urban development. The metropolitan government's current efforts to expand the public transport network are running into financial constraints, and the lack of collaboration with neighbouring municipalities is creating bottlenecks.
- Daejeon struggles with a growing imbalance between a declining old inner city centre and fast-growing outskirts. While Daejeon has the legal capacity to elaborate a metropolitan area land-use plan, it lacks a fully multi-sectoral plan for integrated development.
- The efficiency of metropolitan city governance in Daejeon will be tested by the changing dynamics in the broader area with the advent of Sejong, a new special administrative city currently being built just 25 kilometres from Daejeon and endowed with a set of central government functions. The capacity of Daejeon to co-ordinate public service delivery and economic development decisions with Sejong and other neighbouring cities will determine the broader area's competitiveness and the well-being of its citizens.

Table 7.1. **Basic facts on Daejeon**

Korea	
Population	50.5 million
Political regime	Unitary presidential republic
Levels of government:	
– Central level	President of the Republic (elected for five years, no re-election)
– Provincial level	Governor (elected for four years)
– Municipal level	Mayor (elected for four years)
Daejeon	
Population	1.5 million (surface area: 540 km²)
Number of municipalities	One metropolitan city, divided into five autonomous districts (*gu*)
Existing metropolitan institutions and funds	Daejeon metropolitan government

Introduction

Daejeon offers an example of a city endowed with a special "metropolitan" status, in a relatively centralised unitary country where the capital region accounts for roughly half of the national population and gross domestic product (GDP).

This chapter begins with a brief socio-economic and institutional overview of the Daejeon metropolitan region. It then explores the current status of inter-municipal collaboration in two major sectors for urban development: transport and land use. Finally, it reviews existing metropolitan collaboration tools.

Overview of the metropolitan area

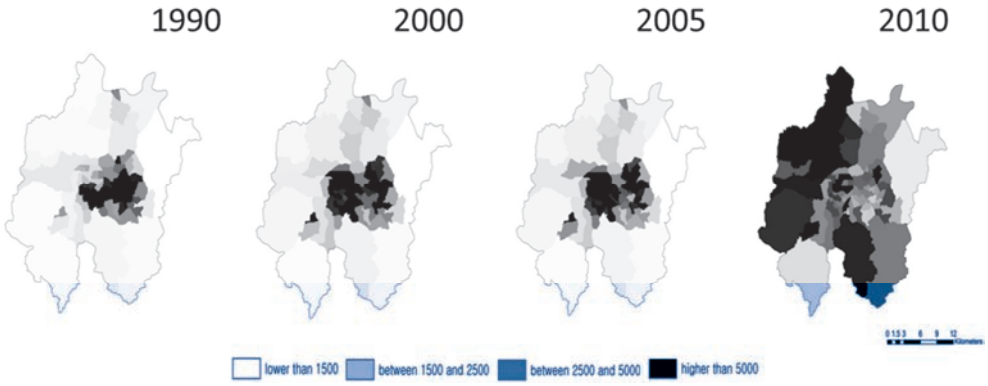
Socio-economic profile

With a population of 1.5 million, Daejeon is the fifth- largest city in Korea (after Seoul, Busan, Daegu and Incheon). It is located roughly 160 kilometres south of Seoul, which can be reached in 50 minutes by high-speed train. Daejeon accounted for 3.1% of the national population but only 2.3% of national GDP in 2010. Its GDP per capita is about two-thirds the national average. It has a service-dominated economy, with the tertiary sector representing 87% of employment. Historically a small rural village, Daejeon began to develop rapidly thanks to its strategic geographic location on Korea's two major railways, the Gyeongbu line between Seoul and Busan, and the Honam line. Daejeon hosted an early battle of the Korean War (1950-53) between the United States and North Korea in July 1950, and the city suffered heavy destruction. Following the central government's will to turn it into a strong science city, it benefited from significant public investment since the end of the 1960s and rapidly modernised itself into one of the highest ranking research hubs in Asia. It hosted the 1993 World Expo in the EXPO Park built in Daedeok Science Town in the north of the city. It is home to numerous leading research and education institutes, such as the Korea Advanced Institute of Science and Technology (KAIST), the Electronics and Telecommunications Research Institute (ETRI), the Korea Aerospace Research Institute (KARI) and the Korea Atomic Energy Research Institute (KAERI). Following the success of Daedeok Science Town, new development projects have been launched, such as the "Daedeok Valley Development project" to build stronger linkages with surrounding areas, and the "Daedeok Techno Valley Development Project" to build a new industrial park equipped with residential and leisure facilities, as well as an industrial zone for foreign investors. Daejeon also hosts the World Technopolis Association (WTA), a multilateral

organisation that promotes international co-operation between science cities. Daejeon was among the venues of the 2002 FIFA World Cup and the Daejeon World Cup Stadium was built at this occasion with a capacity of over 40 000 people. Endowed with numerous mountains, temples, well-renowned hot springs and lakes, it is a major domestic tourism destination.

A key challenge for Daejeon is the increasing imbalance between growing and declining areas, particularly between the old urban centre and the rapidly developing suburbs (Figure 7.1). The old urban centre has been experiencing a continuous decline in population density and economic activity including retail business, whereas the periphery is under severe pressure in terms of housing and access to local public services.

Figure 7.1. **Population density in Daejeon, 1990-2010**



Source: OECD (2014), *Compact City Policies: Korea: Towards Sustainable and Inclusive Growth,* OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264225503-en.

Institutional background

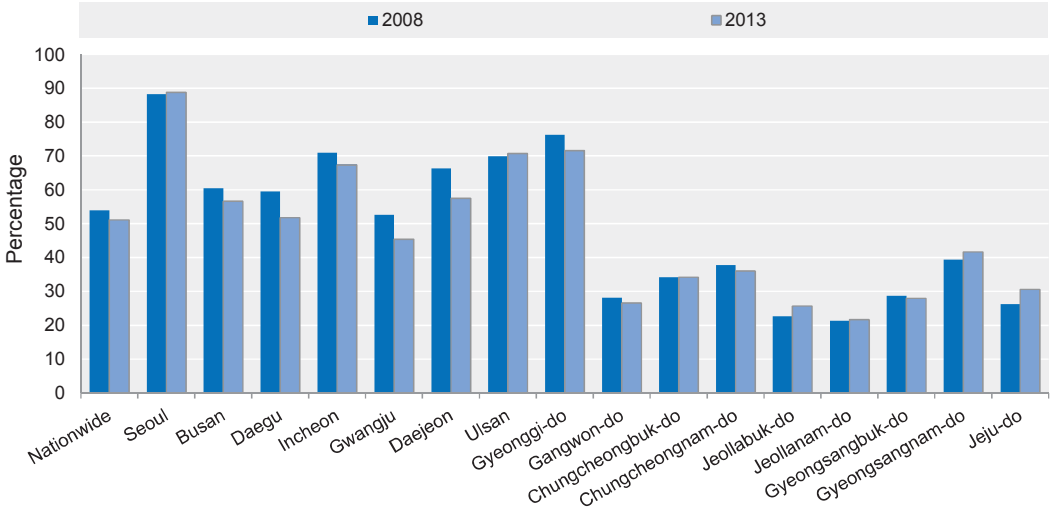
Daejeon has been the capital of South Chungcheong province since 1932. The city's boundaries have evolved numerous times since then, for example with the absorption of the nearby town of Daedeok in 1983. In 1989, Daejeon split from South Chungcheong province and was elevated to the status of directly governed city (*jikhalsi*), like Busan, Daegu, Incheon and Gwangju earlier and Ulsan later on. With the decentralisation reform conducted by the Korean government in 1995, all directly governed cities including Daejeon were renamed "Metropolitan Cities" and put on the same footing as the next higher administrative level, the province. In its quality of metropolitan city, according to the Constitution, Daejeon is responsible for activities that influence more than two basic local governments and have been estimated to be best provided at a scale larger than the basic local governments. Daejeon also benefits from a special relationship with the central government as the latter opened a central government complex in Daejeon in 1997, in an attempt to deconcentrate administrative functions away from the congested capital Seoul.

Table 7.2. **Different types of cities in the Korean administrative system**

	Type	Cities
Upper tier of sub-national administration (same level as provinces)	Special City	Seoul ("Special Free City" split from Gyeonggi Province in 1946, then "Special City" in 1949)
	Metropolitan Cities	Busan, Daegu, Daejeon, Gwangju, Incheon, Ulsan
	Special self-governing city	Sejong
Lower tier of sub-national administration	City	Others

Korea is a relatively centralised country in fiscal terms. The average fiscal autonomy of local governments decreased from 59.4% in 2000 to 53.6% in 2009 and 52.2% in 2010. In contrast to the Capital Region, which exhibits a high level of fiscal autonomy (85.8% in Seoul, 72.8% in Gyeonggi-do, 70.4% in Incheon in 2010), metropolitan cities tend to range between 50% and 70%. Most provinces rely on the central government for two-thirds to three-quarters of their budgets (OECD, 2012).

Figure 7.2. **Fiscal autonomy of metropolitan cities and provinces in Korea, 2008 and 2013**



Source: OECD (2014), *Compact City Policies: Korea: Towards Sustainable and Inclusive Growth,* OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264225503-en.

The creation of Sejong as a special self-governing city with central government functions relocated from Seoul, just 25 kilometres from Daejeon, is changing the dynamics of the broader area around Daejeon (Box 7.1). Sejong is currently under construction and its target is to reach 500 000 people by 2030. The two cities are often presented to be viewed as complementary, but they might also become competitors in the medium to long term. Given that Daejeon already hosts its own central government complex, it is anxious not to lose its functions to Sejong. From Daejeon's point of view, there is little anticipation of a need for formal co-ordination between the two cities, which are left (and expected) to co-ordinate among themselves for managing key public services such as transport.

Box 7.1. **A central government-planned city: Sejong Multifunctional Administrative City**

As part of its strategy to tackle overconcentration in the capital region and promote more balanced national development, the Korean government has put forward the idea of delocalising administrative functions away from Seoul by creating a new capital city. Various iterations of the project have generated numerous political disputes, and giving the status of the capital to the new city was finally ruled out as unconstitutional by the Constitutional Court in 2004. The project was then revised into the creation of a multifunctional administrative city (MAC).

The Multifunctional Administrative City Construction Agency (MACCA) was established on 1 January 2006. In the same year, a special naming committee was set up and citizen preference surveys were conducted before the name of "Sejong" was selected, as a tribute to the king who presided over the invention of the Korean alphabet in 1446. Sejong is located in the middle of Korea, 120 kilometres from Seoul, with an area of 72.9 km^2, composed of all of Yeongi County, three townships of Gongju and one township of Cheongwon County. Sejong is located between three other major Korean cities: Daejeon, Cheonan and Cheongju. It is a 90-minute train ride from Seoul, with trains running approximately every 30 minutes.

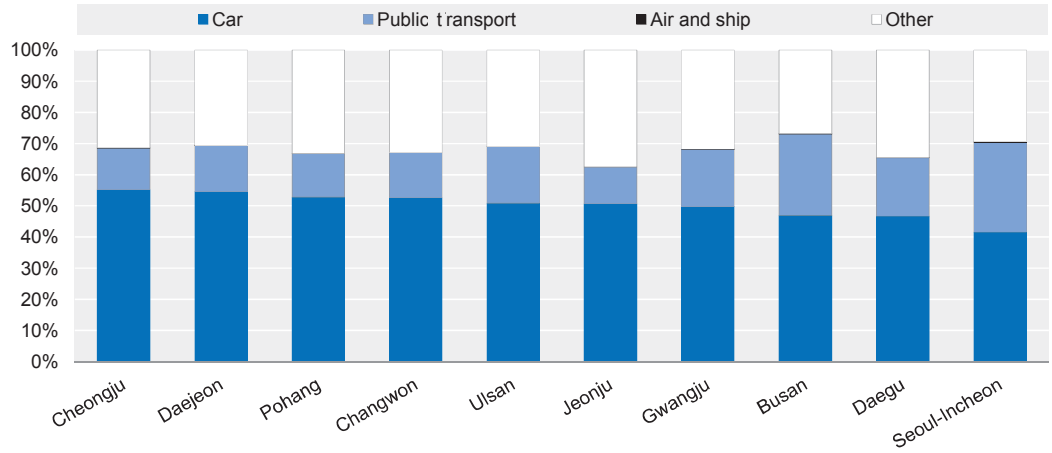
Sejong (officially Sejong Special Self-Governing City) opened on 2 July 2012. The central government will relocate 36 of its organisations to Sejong City by 2015. The city's population is expected to reach half a million by 2030. According to the Master Plan, green space (including a large central park) will take up more than half of the entire city area. It is expected to have six main functions: central administration, culture and international exchange, local administration, university and research, medical and welfare, and cutting edge industry along the ring-shaped public transport network.

The governance of transport

While transport could broadly be considered a policy sector in which municipalities might find a strong rationale to collaborate in order to achieve major investment that they would not be able to afford themselves individually, it also sometimes lends itself to vigorous competition for short-term local priorities that may result in a multitude of scattered small-scale projects.

Daejeon is a major highway and railway crossroads in Korea and the city is within a two-hour reach of the entire country by car. However, it suffers from the dominance of automobile use and undersupply of public transport, which carry congestion costs and may undermine future urban development. According to calculations made by the Daejeon Metropolitan City, it has been estimated that the city was losing 4.5% of its GDP in congestion costs. Although the recent expansion of the road network has contributed to curbing traffic congestion, car ownership has increased over the past decade in Daejeon at a faster rate than in other metropolitan cities, including Seoul and Incheon in the capital region. Daejeon displays the second highest level of car use (54%) and the second-lowest level of public transport use (15%) in Korea, after the nearby city of Cheongju (Figure 7.3). It is estimated that only between 51% and 68% of the city's population lives in an area that is accessible by public transport.[2] National policies to promote public transport have mostly focused on the largest metropolitan areas. The share of public transport in Seoul-Incheon and Busan, the two largest metropolitan areas in Korea, is 29% and 26% respectively, almost twice as high as in Daejeon.

Figure 7.3. **Modal share of Seoul and metropolitan cities**



Source: OECD (2014), *Compact City Policies: Korea: Towards Sustainable and Inclusive Growth,* OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264225503-en.

However, there is a large difference in public transport use between the core and the suburbs among Korean metropolitan areas (Figure 7.4). In Ulsan, Busan, Gwangju, Daegu and Seoul-Incheon that have a high modal share of public transport, urban cores tend to be more encouraged to use public transport than suburbs. In contrast, in Cheongju, Daejeon, Pohang and Jeonju, which display a lower share of public transport, public transport use in urban cores is almost equal to or even lower than in the suburbs. This implies that private cars are overwhelmingly dominating traffic in urban centres. Seoul and Busan, which register lower private car use per capita and more public transport, own fewer vehicles per capita than those in Daejeon and Cheongju, which have higher private car use and lower public transport.

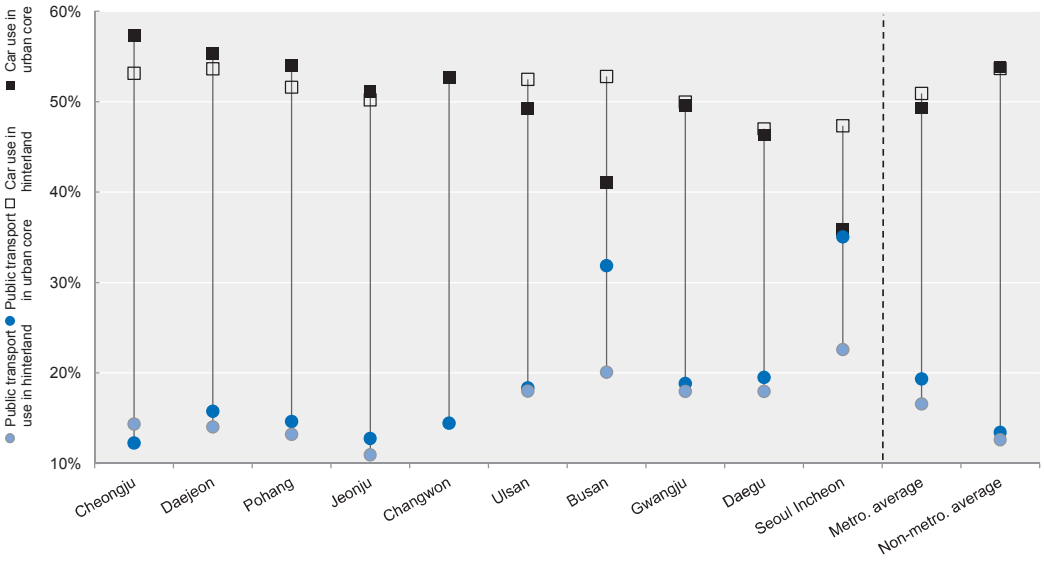
In Daejeon, rail only accounts for 2.8% of transport and bus for 16.1%, compared with almost 45% for cars (Figure 7.5). Only one line of subway is running at present. In addition, the connection between inner city and inter-city transport is not seamless. The connection between the high-speed train KTX station and the subway is not convenient because of the distance between the two.

The Daejeon Metropolitan City has a directorate for transport that is in charge of the strategic planning of transport for the metropolitan area. It elaborated the "2030 Daejeon Urban Transport Plan", which was presented to the Ministry of Land, Infrastructure and Transportation.

Daejeon currently has one subway line and is planning to build two more, including a circular line that serves all of the five autonomous districts. However, Daejeon's relatively low level of fiscal autonomy poses significant constraints on the implementation of public transport projects. Initial plans had to be adjusted and the second subway line will consist of light railway instead. The central government funds 60% of the construction and Daejeon funds the remaining 40%, but operation costs are entirely left to Daejeon. Although Daejeon serves many surrounding smaller cities (such as Cheongju, Gongju, Gyeryeong) through public transport (bus), there has been no co-ordination mechanism to harmonise fares. A metropolitan transport commission exists, but without financial tools or enforcement capacity, it only serves occasional consultation purposes.

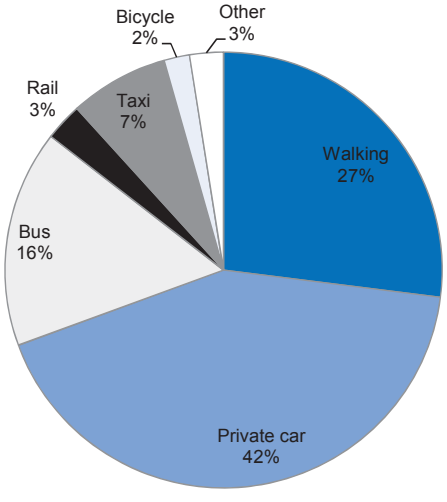
In an attempt to reduce private car use, the Daejeon city government introduced a campaign called "One Day Without Cars" in 2012. If participants in the campaign do not drive from 7 a.m. to 10 p.m. one day per week, they receive benefits, including a 10% reduction of the automobile tax, 30% off the public parking fee, an 8.7% discount on their auto insurance premiums, a 10% discount on the car inspection fee and public transport free insurance service. As of December 2012, the number of participants exceeded 10 000 (according to a 2013 press release from Daejeon).

Figure 7.4. **The gap of modal choices between urban core and hinterland in metropolitan areas**



Source: OECD (2014), *Compact City Policies: Korea: Towards Sustainable and Inclusive Growth,* OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264225503-en.

Figure 7.5. **Modal share by different transport modes in Daejeon, 2010**



Source: OECD (2014), *Compact City Policies: Korea: Towards Sustainable and Inclusive Growth,* OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264225503-en.

The governance of spatial planning

Spatial planning plays a decisive role in shaping urban development but frequently generates conflicts among municipalities as they expand and compete for land or argue over its use. Collaboration in this sector is heavily influenced by the national framework for land-use planning and requires a set of technical, financial and managerial capacities that are not necessarily cultivated at the municipal level.

Table 7.3. **Ministries and levels of government engaged in regional and urban policy in Korea**

Type of plan	Purpose of plan	Lead(s) for implementation	Lead(s) for approval of plans
Comprehensive National Land Plan	– Direction for long-term national development – Strategies for improving industry and balanced development	Minister of Land, Transport and Maritime Affairs (MOLIT)	President
Provincial comprehensive plan	Direction for long-term development at regional level	Provincial governor	Minister of MOLIT
Metropolitan area plan	Common interest in spatial development and inter-regional infrastructures with adjacent local authorities	City mayor, provincial governor (Minister of MOLIT)	Minister of MOLIT
Urban master plan	Direction of spatial development of each local authority for the long term	– City mayor, county governor – Metropolitan city mayor	– Provincial governor – Metropolitan city mayor
Urban management plan	Practical measures of urban policy	City mayor, county governor	Provincial governor

Source: OECD (2012), *OECD Urban Policy Reviews, Korea 2012*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174153-en.

Co-ordinated spatial planning at the sub-national level is a challenge in Korea, given the proliferation of plans to guide spatial planning, economic development and sectoral development, in addition to a history of weak co-operative relationships among local governments (OECD, 2012). Daejeon is an illustration of the challenges of the spatial planning system in Korea:

- Vertical co-ordination across levels of government. Spatial plans are developed at each administrative echelon. The National Comprehensive Development Plan sets nationwide objectives and is directed by the Ministry of Land, Transport and Maritime Affairs (MLTM). The National Plan and its objectives are then followed by provincial plans, metropolitan area plans (elaborated by the central government with input from local governments) and, at the local level, urban master plans and urban management plans (elaborated by local governments, but almost exclusively focusing on physical infrastructure with no strategic vision for urban economic development). *Ad hoc* meetings are organised to co-ordinate the different levels of planning.
- Horizontal co-ordination between spatial plans and sectoral plans. Spatial plans are developed separately from sectoral plans (including those for economic development), leading to further fragmentation of objectives and implementation strategies. Urban master plans are supposed to integrate various components of urban development policies such as transport, but such integration is difficult to achieve in practice in Daejeon as in other cities, notably due to the public administration's work in "silos". Tensions also remain acute between private developers (prone to greenfield development) and the city government (trying to encourage inner-city redevelopment).

- Horizontal co-ordination among sub-national governments. In addition, provinces and metropolitan city governments have tended to see each other as competitors rather than as potential partners in development, concerned with how to use their newly devolved responsibilities and position themselves to attract businesses and national financial support.

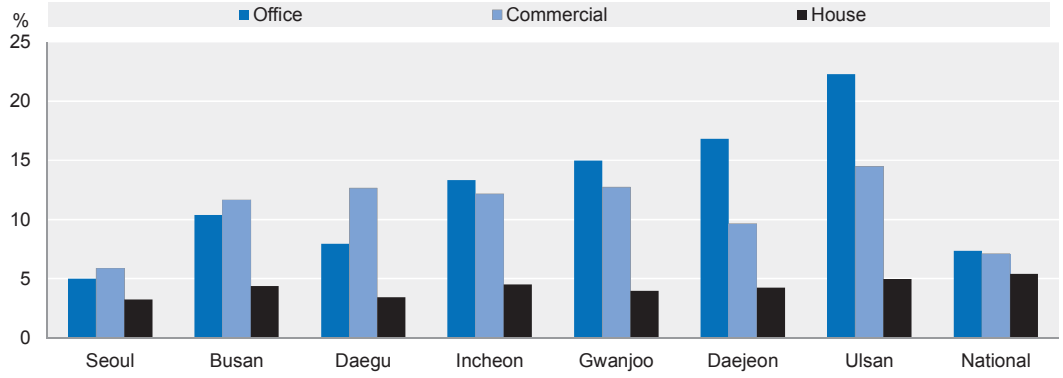
Faced with such difficulties, policy makers are considering various options for improving the efficiency of the land-use system in Korea and discussions for possible reforms are underway at the central government level.

Faced with the decline of the centre and growth of the outskirts, Daejeon is giving priority to better managing density rather than increasing it or further expanding the urban area. Daejeon is conducting a set of urban renewal projects to address the problem of low-density sprawl and encourage brownfield redevelopment. One example is the redevelopment of Daejeon Station. This large-scale project aims at regenerating old districts around Daejeon station. The designated area, which covers about 887 000 m^2 and a population of 7 250 people, includes old housing (73.8% of the housing stock was built before 1980 – which is relatively old by Korean standards given the rapid urbanisation and fast rate of building construction). The project plans to replace old buildings with convention and culture facilities, hospitals, commercial activities and shopping facilities.

The Urban Basic Plan established by Daejeon Metropolitan City aims at establishing mixed land uses combining residential, retail and/or office uses at the level of floors, buildings and blocks. The Daejeon city government is also introducing a project that aims at providing affordable housing in the inner city, called the Rainbow Project (Box 7.2). This requires city government to develop some policy measures as residents rapidly grow older and the buildings deteriorate, and reflect it into the whole urban planning process.

Daejeon also has introduced a Green City Plan (2010), which aims at integrating urban spatial restructuring with environmental sustainability. The objective of the plan is to achieve three Gs: Green compact city, Green community and Green business, in order to promote a more sustainable urban form. Daejeon set up special action plans to establish a polycentric, compact transit-oriented structure and land use to avoid urban sprawl; build a more efficient urban plan in accordance with the national environment by controlling and preserving greenfield sites; increase brownfield development; and introduce transit-oriented development and green transport.

Figure 7.6. **Vacancy rates in Korean metropolitan cities**



Note: Office and commercial values are the annual average for the 2002-12 period. Housing values are the average of 2000, 2005 and 2010.

Source: OECD (2014), *Compact City Policies: Korea: Towards Sustainable and Inclusive Growth*, OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264225503-en.

Box 7.2. **Providing affordable housing: The Rainbow project in Daejeon**

The Rainbow Housing project started in 2006 as an initiative to expand affordable housing opportunities. This project pursues the following explicit goals; *i)* providing appropriate housing that considers different lifestyles, income levels and household types; *ii)* providing housing for low- to middle-income workers in redevelopment areas through public rental housing provision or financial support for relocated residents; *iii)* providing public housing for very low-income households and special needs group; and *iv)* revitalising the urban community by providing good social infrastructure in neighbourhoods, including cultural and welfare services, healthcare services, housing for the elderly, spaces for sport and other leisure activities. The project has been implemented together with projects for improving the residential environment and promoting urban renewal.

Source: Daejeon Metropolitan City (2013b), "Introduction of compact city related policies in Daejeon", presentation by Daejeon government to the OECD mission team in April 2013.

Conclusion

Despite the administrative status of a metropolitan city, there is currently a lack of effective co-ordination tools between Daejeon and the surrounding municipalities. Several cities in Korea are now requesting for the status of a metropolitan city, including cities that have a population of over 1 million such as Suwon, Seongnam, Yongin and Goyang (all located in Gyeonggi Province next to Seoul), as well as Changwon (located in Gyeongnam Province, and the result of a merger between three cities – Changwon, Masan and Jinhae, in 2010). Such cities claim that they have major difficulties managing a city of 1 million inhabitants with competencies and resources that were planned for the management of a city half that size. Upgrading these large cities into metropolitan cities, split from their province of origin, would automatically have a significant draining impact on the size, power and financial resources of their province of origin.

Notes

1. This case study draws on OECD (2014).
2. The OECD adopted two approaches to assess the share of population living in an area accessible by public transport. The first approach looked at the share of population living 400 and 800 meters from a subway train and bus station, with no consideration of the road network and no consideration of frequency. The result was that 68% of the population in Daejeon live in an area accessible by public transport. The second approach included considerations of the road network and the average frequency, and concluded that 51% of the population live in an area accessible by public transport (broken down to 3% of very high, 7% high, 34% medium and 6% low levels of accessibility).

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Chapter 8

Frankfurt, Germany

This chapter studies the governance of the Frankfurt metropolitan area. It focuses on public transport and spatial planning issues. It provides an overview of the economic conditions in the metropolitan area and analyses the role of the regional association of municipalities (Regionalverband FrankfurtRheinMain) and the state of Hesse for metropolitan governance.

Key points: Frankfurt

- Frankfurt am Main is at the core of a prosperous, growing and dynamic economic region, which is polycentric and exhibits centrifugal political tendencies, but shows strong common economic interests. The composition of the population in the Frankfurt region is highly international. More than a quarter of employment is tied to high-value, knowledge-based services such as logistics and transport (gateway function), health services, consulting, finance, information technology, as well as cultural and creative activities.
- Political governance of the greater Frankfurt/Rhine Main area is trailing behind the pace of economic progress in the region, in particular in terms of inter-municipal co-operation. The co-existence of two layers of government responsible for regional planning – the Administrative District of the state of Hesse and the Regional Board of the Frankfurt RheinMain (*Regionalverband*) – is not without frictions and some overlap of responsibilities.
- The Rhine-Main Transport Association (RMV) operates as an independent public company, but allows for substantial efforts in inter-agency and inter-municipal co-operation through its Board consisting of representatives of the various authorities concerned.

Table 8.1. **Basic facts on Frankfurt**

Germany	
Population	80.5 million (end 2012)
Political regime	Parliamentary democracy; federation of 16 states; autonomy of local governments (*Gemeinden*) guaranteed by the Constitution
Levels of government:	
Central level (Federation)	– Federal President (elected by a consortium of the federal parliament and representatives of the states; five years) – Federal parliament consisting of two chambers: the Federal Assembly (*Bundestag*; directly elected representatives), and the Federal Council (*Bundesrat*; delegates of state governments); – Federal government elected by the Federal Assembly
State level (*Länder*)	State parliament (*Landtag*); state government (Prime Minister and Cabinet elected by the state parliament); in the state of Hesse there is a coalition government of Christian Democrats and the Green Party (since 18 January 2014)
Municipal level (cities and communes)	– Local parliaments (in Hessen: *Gemeindevertretung;* for cities: *Stadtverordnetenversammlung*) elected by popular vote (five years) – Mayor (in cities >50 000 lord-mayor), directly elected for five years
Counties (*Landkreise*), a grouping of mainly rural communes	– *Kreistag* (county council whose members are elected by popular vote for five years); the lowest level of the state executive; no legislative powers – *Landrat* (executive organ of the *Kreistag*); directly elected – The "*Kreis*" has no municipal taxes; its budget is financed "from below" by the communes in the county ("*Kreisumlage*")
Frankfurt am Main and its surroundings	
Greater Metropolitan Area Rhine-Main	One of 11 recognised economic regions in Germany; polycentric metropolitan area covering parts of 3 neighbouring states; not institutionalised, but strategic co-operation (public and private sectors)
Population	5.52 million
Area; population density	14 800 km^2; 374 inhabitants/km^2
Number of municipalities	7 cities and 17 counties (total of 468 municipalities)
Administrative District (*Regierungsbezirk*) Darmstadt	Southern subdivision of the state administration of Hesse; state level; also NUTS 2 region; headed by the district president (appointed by the Prime Minister); no legislative power
Population	3.79 million (of 6 million in the state of Hesse)
Area; population density	7 445 km^2; 509 inhabitants/km^2
Number of municipalities	4 cities and 10 counties (total of 183 municipalities)
"Metropolregion" (*Regionalverband*) Frankfurt/Rhine-Main	Based on state law (*Metropolregionsgesetz*) of Hesse; regional/local authority to control and co-ordinate regional development; municipal level (association of cities and communes); own governance structure
Population	2.22 million
Area; population density	2 459 km^2; 904 inhabitants/km^2
Number of municipalities	75 municipalities
Frankfurt am Main	Core city of the region; throng of urban "high-density clusters"
Population	688 000
Area; population density	248.31 km^2; 2 770 inhabitants/km^2
Number of districts	46

Overview of the metropolitan area

Socio-economic profile

The greater metropolitan area of Frankfurt/Rhine-Main is the fifth-largest economic region in Germany in terms of population, and one of four (with Munich, Hamburg and Berlin) where population is still growing. Despite the recent economic crisis, all cities and

counties of the larger Frankfurt metropolitan area have exhibited employment growth over the last five years. Demographic projections forecast that the greater Frankfurt region will grow further at 4.8%, only behind Munich (8.3%), and in tandem with Stuttgart (4.2%) between 2008 to 2030, while the overall population will decline by 1.7% (and for some regions, Middle Germany, as much as 17%) over the same period.[1] Overall, this may exacerbate existing discrepancies between the south of Germany and the north, whose population is expected to decline further.

Within the region, there are notable differences in population development. While the balances in the cities of Frankfurt, Wiesbaden, Mainz, Darmstadt and the Main-Taunus county were positive during the 2006-11 period, both in terms of natural growth and net migration, they were negative at the fringes in the north, in Hesse (Vogelsberg and Fulda counties) and near Bavaria and Rhineland-Palatinate.[2] However, for the cities and counties close to Frankfurt – in particular, all of the municipalities in the *Regionalverband* – population growth was positive even where natural growth was negative. This signals a general attractiveness of the region for immigrants. Population gains were particularly important close to the cities and along commuter corridors.

In the city of Frankfurt itself, population declined up to 2001, but the city reversed the trend through the creation of new neighbourhoods such as Westhafen, Europaviertel or Riedberg. The new location of the European Central Bank in the east of Frankfurt, and the refurbishment of the surrounding road and transport network, including the construction of a new bridge, are likely to give a boost to that part of the city (*Ostend*) in the future – moving it from a mixed economic environment characterised by industry, hand craft and trade (port of Frankfurt), and still bearing wounds of the war, to an attractive and better connected neighbourhood with modern services in IT, higher education, finance and logistics.

The composition of the population in the Frankfurt region is highly international. The share of foreigners living in Frankfurt is 26.1% (2013), and that of Germans with "migration background"[3] 21.3%. The international character is emphasised by the presence of 99 consulates, 60 foreign chambers and commercial representations, tourist offices from 58 countries, 180 foreign business and cultural clubs, and 13 international schools in the region.[4]

The level of gross domestic product (GDP) per capita is comparably high, behind Munich and its region, but at par with the Hamburg region. At the NUTS 2 level, the Administrative District Darmstadt ranked 15th out of 271 regions in Europe in 2009. In terms of employment, the greater Frankfurt area is growing (6.5% in 2006-11), although below the average for all German metropolitan regions (7.6%). On average, unemployment in the Frankfurt/Rhine-Main region was below 6%. Youth unemployment in the region is about 10%, hence significantly below the European average.

The Administrative District Darmstadt is the only district in Germany that ranks among the ten most competitive regions in the European Union according to the Regional Competitiveness Index.[5] In this ranking, the metropolis Frankfurt holds, at par with Paris, the seventh position in Europe. The key competitive advantages of the region lie in an economic infrastructure that responds to global economic challenges – as an important European transport hub, including an international airport, as the core of a pioneering high-speed data network (85% of telecommunication data in Germany),[6] through innovative institutions of higher education and research (such as the House of Logistics and Mobility, HOLM),[7] and as a synergetic mix of economic services and industries.

The economy of the Frankfurt region is strongly tilted toward services, which absorb slightly more than three-quarters of employment. The focus is on high-value added services such as (by descending order) logistics and transport, health services, consulting, finance, information technology, as well as cultural and creative activities. The Frankfurt airport is a hub of international air transport in Europe and a gateway to the world. DE-CIX Frankfurt is the largest Internet Exchange point in the world. The region is world-renowned for its international trade fairs and exhibitions. The region's manufacturing sector is focused on the automotive sector, chemical and pharmaceutical industries, and biotechnology. In support of its high-value services, the region benefits from a large number of universities and other institutions of higher learning, research institutes, laboratories of technology firms, media centres and international organisations such as the European Central Bank, European Insurance and Occupational Pensions Authority (EIOPA) or the European Space Operations Centre (ESOC). In addition, "(t)he region offers an excellent quality of life, providing a concentrated mixture of urban spaces, culture, and recreation areas."[8] A study commissioned to analyse the potential of the region emphasised the strengths and challenges of the main sectors in the Frankfurt/Rhine-Main metropolis (Table 8.2).

More than one-quarter of employment in the greater Frankfurt/Rhine-Main area is tied to knowledge-based services, which is higher than in any other German metropolitan region. The regional economy can draw on a qualified workforce (Regionalverband FrankfurtRheinMain, 2012). Of about 2.1 million employees, 276 000 hold a university degree (13.3%), which is second only to the Munich metropolis (14%). The infrastructure for the human capital formation of the region is geared towards the creation and dissemination of knowledge, with 6 institutions of university rank, 17 universities for applied sciences (*Fachhochschulen*), including 2 for public administration, and 3 institutions of higher learning. In 2010-11, roughly 200 000 students were enrolled in these institutions, with a significant share of foreign students (13.6%, and 16.5% in Frankfurt alone) (Regionalverband FrankfurtRheinMain, 2012). The yearly flow of newly qualified graduates is complemented by net immigration of qualified job seekers (14 000 per year, which is only 0.7% of total employment, but a quarter of the annual number of graduates of the region, assuming a drop-out rate of about 15% and an average of three years' of studies). However, all German regions still suffer from a significant shortage of qualified personnel.

Institutional background

Frankfurt am Main is the core city of a prosperous, dynamic and growing economic region, which is polycentric and somewhat difficult to delineate. The German Ministerial Conference on Spatial Planning[9] officially recognises 11 European metropolitan regions in Germany, among them the greater metropolitan area of Frankfurt/Rhine-Main.[10] These regions have worked together through the Network of European Metropolitan Regions in Germany (*Initiativkreis Europäische Metropolregionen in Deutschland*, IKM) [11] since 2001. The European dimension is particularly relevant for linking the various metropolitan areas via trans-European networks, fostering regional connectivity by rail, road, air and water for people and goods, as well as energy corridors. The initiative constitutes a new policy model whose aim it is to test forms of regional governance that develop growth- and innovation-oriented German regions through closer co-operation between industry, academia, civil society, municipalities, the states, the federal government and the European Union.

Table 8.2. **Main economic sectors in Frankfurt/Rhine Main**

Sector	Employees	Firms	Strengths	Challenges
Logistics and transport	250 064	12 222	International gateway and hub for the transport of persons and goods; cluster with important international players and broad economic base; strong regional market	Shortage of qualified labour; development of space and construction for logistics operations; expansion of the "House of Logistics and Mobility"
Health	247 511	16 441	Innovation and density of research institutions; co-operation; diversity and support to sectorial initiatives	Shortage of qualified labour; co-operation with educational institutions; knowledge transfer; cluster beyond municipal borders
Consulting	169 283	17 620	National cluster with presence of international players; availability of qualified labour; cluster initiatives and networks	International positioning of cluster; expansion of research capacities; more intense internal co-operation
Finance	137 903	4 635	Globally important cluster; high degree of co-operation/informal networks; quality of education and research ("House of Finance", Frankfurt School of Finance and Management, etc.)	Image of the industry; applied research and co-operation for innovation; differentiation; developing markets for the future
Automation	122 927	4 423	Quality of education and research; high standards of products and technologies; "hidden champions"	Shortage of qualified labour; need for greater networking; lack of self-image of the cluster
Automotive industry	116 895	4 803	International exhibition (IAA), presence of international car producing firms; quality of education and research	National positioning; research in future technologies; co-operation with education and research institutions
Information and communication technology	104 474	5 594	Important national cluster broadly based; quality of digital infrastructure (DE-CIX); quality of education and research institutions	International positioning of cluster; bundling of competencies of various networks; build-up of the "House of IT"
Chemistry, pharmacy, biotechnology	96 953	1 613	Globally important cluster with global players; international/ export orientation; quality of education and research	Political support of cluster needed; creation of a "House of Pharma"; support of founder dynamics
Material technology	91 218	3 236	Strong regional centres of various clusters; presence of "hidden champions"; quality of education and research	National and international positioning; creation of platforms across clusters; project-oriented networking
Culture and creative economy	88 723	7 769	Strong inter-regional centres of various clusters; quality of demand; supply of educational and research institutions	National positioning of cluster; stronger networking needed; reinforcement of public funding
Environment and energy	79 089	3 787	Strong political support (sustainability agenda); quality of education and research; regional networks and initiatives	National positioning; co-ordination of a panoply of networks and initiatives; greater transparency as to public financial support
Air and space technology	36 654	602	European Space Operations Centre (ESOC); airport as important partner; quality of education and research	International positioning; strengthening of project-oriented co-operation; settling of additional companies and organisations

Source: Clusterstudie FrankfurtRheinMain (2013), "Wettbewerbsvorteile durch Vernetzung: Im Überblick", Regionalverband FrankfurtRhein-Main, February 2013, www.region-frankfurt.de/media/custom/2033_307_1.PDF?1364309500.

The greater Frankfurt/Rhine-Main metropolis extends well beyond the administrative boundaries of the core city, including significant parts of the states of Hesse, Bavaria and Rhineland-Palatinate, and incorporating major cities such as Mainz and Wiesbaden in the west, Giessen in the north, Aschaffenburg in the east and Darmstadt in the south.

Forming the core of the greater metropolitan agglomeration (*Ballungsraum*), the institutionalised regional association of municipalities (*Regionalverband*) is responsible for the economic development of the region along with land-use and landscape planning, strategic management and co-ordination tasks. In addition, the *Regionalverband* assumes responsibilities for the establishment, maintenance and operation of sports/leisure, recreation and cultural facilities with more than local significance, as well as the marketing of the region. The planning of regional transport and traffic management are

also among the functions of the association. The *Regionalverband* was founded by a state law (*Monopolregionsgesetz*)[12] and consists of 75 municipalities, including the core district-free cities of Frankfurt and Offenbach. They are represented in the Association Chamber (*Verbandskammer*). Membership is mandatory for all municipalities. The association is governed by a Regional Board (*Regionalvorstand*), composed of the mayors of the cities and the heads of the county councils (*Landräte*), along with up to three full-time board members (elected for six years), and a maximum of eight honorary councillors.

Finally, there is one of Hesse's three subdivisions of the state administration, the Southernmost Administrative District (*Regierungsbezirk*) Darmstadt, as a European NUTS 2 region. It represents the intermediate level of state authority between the central government and the lowest level (*Landkreise*) of the executive, covering a large part of the Greater Metropolitan area, excluding of course territories outside Hesse. The main areas of responsibility of the Administrative District are in health, integration, immigration law, regional planning, construction, economy, transport, labour and environmental protection, agriculture, forestry, nature conservation and consumer protection. Although it covers a much wider area of responsibilities than the *Regionalverband*, there are overlapping – and conflicting – competencies between the state authority and the municipal association, particularly in terms of regional planning, construction, transport and environmental issues.

The region has a long history of polycentric development and this history is still reflected in today's political culture. Frankfurt was an independent city in the Holy Roman Empire until 1866. Mainz, Wiesbaden and Darmstadt were all state capitals at different points in time. Thus, local identities are strong and distinct from that of Frankfurt, which can complicate regional governance. The smaller municipalities of the region tend to emphasise their local autonomy as guaranteed by the Constitution, often divided along partisan lines and engaged in aggressive local tax competition.[13] Regional perspectives at the communal level are weak, and where local interests were affected by state decisions bearing on the region (e.g. the expansion of Frankfurt's airport), political clashes were passionate. More recently, a new breed of politicians appears to be more supportive of regional economic integration, and there are encouraging signs of increasing cross-municipal co-operation. For example, Frankfurt and Offenbach co-operate in developing the Main port; Frankfurt's Housing Association (*Wohnungsbaugesellschaft*) supports Friedberg in its programme of converting military compounds into residential housing; and there are cost-saving sectoral inter-municipal activities based either on institutional co-operation (*Zweckverbände*), or – increasingly – on contractual arrangements, including outsourcing to semi-public or private service companies.

The government of Hesse makes co-ordinative interventions through the Administrative District Darmstadt to explore co-operation opportunities with the neighbouring states (Bavaria and Rhineland-Palatinate). In 1975, the state created the regional *Umlandverband Frankfurt* (UVF), which was expected to become the main vehicle for inter-municipal policy co-ordination in the region. The UVF had wide-reaching competencies in policy planning and implementation for many specific-purpose functions at the local level.[14] Membership of the 43 municipalities with about 1.6 million inhabitants was compulsory by law. The assembly (*Verbandskammer*) of the UVF consisted of non-elected delegates from member governments. The UVF was successful in promoting economic integration in certain areas. For instance, in 1990, it proposed a new expanded transport association that incorporated several smaller transport

associations and municipalities that did not belong to any transport associations. Thus, it paved the way for the successful Rhine-Main Transport Association (RMV) that still exists today.[15] However, the UVF had a number of deficiencies from the outset. For political reasons, the territory of the association was too narrow to integrate the economic and social interests of the larger Frankfurt area, excluding important urban and suburban areas. Local mayors often exhibited inward-looking vanity, non-cooperative behaviour or free-rider attitudes. Over time, the counties rather than the core city tended to dominate collective interests, which was resented by the latter. The UVF was finally dissolved in 2001. It was widely regarded as a governance failure. The successor organisation of the UVF, the *Planungsverband Ballungsraum Frankfurt/Rhein-Main* (PBF) comprised a larger number of members, 75 municipalities, but was less strictly organised and bestowed only with partial responsibilities that were mainly confined to regional planning.

In 2011, however, the *Regionalverband FrankfurtRheinMain* (RVFRM) came into being and is now responsible for formulating the region's collective image. In addition to the competencies for land-use and landscape planning of its predecessor, the RVFRM now has a role in strategic management and co-ordination for the development of the region. The former Regional Council of the PBF was dissolved and replaced by an expanded regional Board, which includes, as mentioned above, the mayors and heads of member municipalities (cities and counties). In addition, there are three full-time Board members and a maximum of eight honorary councillors. Representatives of surrounding cities and counties are invited as advisory guests, and municipalities contiguous to the territory of the metropolitan region can join on a voluntary basis, with all the rights and duties of its legally appointed members.[16] The regional authority employs about 120 people and operates on a budget financed from per capita-based contributions from its member municipalities.

The responsibilities of the *Regionalverband* include developing and updating the regional preparatory Land-use Plan (*Flächennutzungsplan)* and Landscape Plan (*Landschaftsplan*); conducting regional monitoring; preparing specific geo-information data; and providing extensive services to member municipalities. The latter consists of communication services, in particular in matters of construction and planning (promotion of urban development and village placement, regional retail trade schemes, energy and environment), the fostering of energy efficiency in public buildings, schemes to involve citizens in order to promote acceptance of plans and achieve sustainability goals, internal residential development and management of existing industrial areas, local transport schemes and the provision of key local services in smaller jurisdictions.

The co-existence of two layers of government, the State Administrative District and the municipal association *Regionalverband*, is not without frictions where responsibilities overlap. This is particularly the case in the establishment of the region's Land-use Plan (see below). Generally speaking, however, state governments have typically respected local autonomy, exhibiting a "hands-off" attitude towards inter-municipal co-ordination. Previous attempts to amalgamate local jurisdictions were fraught with substantial controversies (unless concluded on a voluntary basis),[17] and territorial reform is no longer a political option at present. But the state government appears to take a more active role to spur regional co-operation through its membership in key enterprises with regional scope[18] and inter-municipal initiatives (e.g. *Regionaltangente West*, a missing link in the speed rail network) or through the earmarking of specific municipal grants to encourage inter-jurisdictional co-operation (e.g. in local transport; housing). The state also emphasises local financial autonomy to leverage municipal budgets by encouraging the

greater use of local contributions to road construction and maintenance (*Straßenbeiträge*) and communal fees.

There are also dedicated inter-municipal associations (*Zweckverbände*), which exist for some standard local services such as waste management, sewage, water or transport. For instance, the cities of Frankfurt, Offenbach and Maintal as well as the counties of Main-Taunus, Hochtaunus and Offenbach have jointly formed the Rhein-Main Abfall GmbH (RMA) as a regional waste management company. It is also possible to privatise or outsource such public services to private or semi-public companies, of which municipalities hold shares. More recently, the region also engaged in active marketing through a dedicated company, FrankfurtRheinMain for International Marketing of the Region (FRM GmbH), which is owned by 15 cities and counties in the metropolis, the state of Hesse, chambers of commerce as well as various relevant other organisations. There are also important special-purpose inter-agencies in the region, such as the Rhine-Main Transport Association (RMV), which controls one of the largest and most efficient transport networks in Europe (see next section).

More generally, however, the governance of the greater Frankfurt/Rhine Main area is trailing behind the pace of economic progress in the region, particularly at the municipal level. To what extent this poses a problem is difficult to assess. While some lauded a new spirit of inter-municipal co-operation represented by a new generation of politicians, and encouraged in particular by the *Regionalverband*, others simply denied the existence of organised and regulated inter-municipal co-ordination. According to the latter view, cities and counties of the Frankfurt/Rhine Main metropolis were said to engage mainly in unproductive rivalry, including tax competition, and non-optimal political behaviour. While the economy may suffer under poor local public governance, this was also said to be a positive challenge as it invigorates private actors, which have to respond with adroitness and adaptability. This could render the regional economy more robust, dynamic and competitive than in better-organised regions where the private sector risks to be trapped in static attitudes.

In a situation where municipal co-operation has often proven difficult, the state of Hesse has played a co-ordinating role not only for infrastructure development and relevant public services (road and rail network, organisation of public transport [*Öffentlicher Personennahverkehr*], the airport, integration, regional planning, construction, environmental protection, nature conservation and consumer protection), but also for creating the legal framework for inter-jurisdictional co-operation at the local level (*Regionalverband*) and for fostering local initiatives bearing on the wider region (e.g. the Regional Park initiative or the Culture Fund). The state government also assumes the role of a mediator in case of conflicts between municipalities or groups of the civil society, as in the case of the airport development project (Box 8.1).

The governance of transport

From the Frankfurt airport (487 162 flights in 2011, slightly more than London Heathrow),[19] most European capitals can be reached within two (Berlin, Warsaw, Paris, London) to three hours (Moscow, Rome, Madrid). It is complemented by Germany's largest airport for general aviation in Egelsbach (72 000 flights per year), which is particularly relevant for business travel. The rivers Main and Rhine connect the region to the North Sea and the Black Sea, and the ports of the region transship roughly 10 million tonnes of cargo per year. The region is well equipped with major highways which, at an important crossing (Frankfurter Kreuz), constitutes the busiest traffic junction in Europe

(330 000 cars per day) (Regionalverband FrankfurtRheinMain, 2012). Moreover, the central train station (350 000 travellers per day) is not only one of Germany's most important hubs for rapid inter-city connections linking the region to major cities in Germany and Europe, but also an exchange for regional and local traffic connections. In addition to Frankfurt, eight other cities of the region benefit from direct rapid inter-city connections.

Box 8.1. **Mediation of the state: The example of the Frankfurt airport**

In 1998, the former Prime Minister of Hesse recommended making the future development of the airport subject to mediation between relevant stakeholders, asking for a comprehensive analysis of the options and of potential conflicts. At the time, this process was both innovative and unique in Germany. The mediation process was to clarify the conditions under which the airport Frankfurt/Rhine-Main could sustainably improve the performance of the regional economy in terms of secure jobs and structural economic elements, without increasing the environmental burden. A 21-member mediation group was established with representatives of municipalities; community groups; environmental organisations; industry representatives; the airport AG; Lufthansa AG; German Air Navigation Services; representatives of trade unions in Hesse; the German Federal Ministry of Transport; the Hessian Ministry of Economics, Transport and Regional Development; the Hessian Ministry of Environment, Energy, Youth, Family and Health; and the Frankfurt-based Board of Airline Representatives in Germany, which speaks for more than 100 airlines that operate in the country.

The mediation group, which worked over the 1998-2000 period, produced a report on the future of the Frankfurt airport based on the principle of a sustainable, future-oriented development. To bring the different ecological, economic and social objectives in line, the mediation group presented a complete package whose components are inextricably linked. This "Mediation Package" included: the optimisation of the existing system, capacity increase by expansion, a ban on night flights, an anti-noise pact and the establishment of a permanent Regional Dialogue Forum (RDF). The report of the mediation group remained controversial, but was successful in shaping the further expansion of air traffic capacities with controllable political risks. The RDF continued the work of the mediation group until 2008 when the state government established the framework for a permanent organisational structure of the successor platform: the Forum Airport and Region. Overall, the mediation process relating to the development of the airport is seen to represent an innovative and effective paradigm for inter-agency co-ordination and citizens' involvement in general. Recent construction of a new runway remained controversial, but was successfully concluded with extensive consultations and citizens' involvement.

At the European level, Frankfurt holds the third place for air transport of passengers (after Heathrow and Paris) and the second for cargo (after Paris) (ACI, 2013). As for the transport of passengers by rail, Frankfurt is placed fifth in Europe (measured in terms of scheduled long-distance passenger rail transport connections). The overall evaluation by traffic puts Frankfurt at the top of the list in Europe, followed by London. High-speed railway connections (ICE, TGV, AVE, Thalys) link the Frankfurt/Rhine-Main region to major European cities such as London, Paris, Brussels, Amsterdam, Barcelona, Madrid, Milan and Rome. According to plans of the European Commission, this high-speed railway network (categories I and II) is to double its capacity by 2020 from present levels, and reach the threefold of actual high-speed rail kilometres in 2030 (target of 30 750 kilometres) (Regionalverband FrankfurtRheinMain, 2012).

The state authority holds key responsibilities in the planning, implementation and operation of infrastructure for transport. This is also true for the network of federal roads (*Bundesautobahnen* and *Bundesstraßen*).[20] State duties extend to all aspects of regional traffic and communication under its own responsibility, including planning decisions (*Planfeststellungsbeschlüsse*) for key traffic hubs such as the airports, the state road network (7 200 kilometres) and county roads (surveillance only), as well as measures financed by the federation in the context of the Municipal Transport Financing Act (*Gemeindeverkehrsfinanzierungsgesetz*) for the promotion of local transport infrastructure, in particular for public transport (*Öffentlicher Personennahverkehr*).

Although the government of Hesse has recently developed a concept to move the transport of goods from roads to rail carriers, its direct impact on the railway network remains limited due to the lack of competencies[21] and the absence of an institutionalised body responsible for developing strategies. However, the state can pursue its policy goals, for instance, by encouraging, and co-ordinating, non-public or foreign transport companies to charter train tracks from the DB Netz AG.[22] The state government also aims at anchoring the promotion of rail transport of goods in the areas of spatial planning, land-use planning and business promotion. The *Regionalverband* co-operates in developing an online transport exchange in the context of the EU's Interreg-IVB programme, which focuses on promoting contacts between actors in rail transport, private enterprises and public decision makers in the region (Regionalverband FrankfurtRheinMain, 2013c; Land Hessen, 2012). Apart from a crucial role for developing the regional logistics sector, this initiative also aims at stimulating the maintenance and improvement of the regional rail infrastructure.

The organisation of public transport in the region, in the remit of the state, represents a successful example of inter-jurisdictional and inter-agency co-ordination in the greater Frankfurt/Rhine-Main area. On weekdays, the regional transport system, consisting of underground and S-Bahn trains and trams, regional trains and numerous bus routes (public and private), has to cope with approximately 300 000 commuters to work in the greater Frankfurt metropolis, in addition to a significant number of visitors and tourists. The co-ordination of public transport takes place at three levels: the political level, public transport authorities (PTAs) and providers of services. Political co-ordination involves the state of Hesse, the cities, counties and communes, which are responsible for planning, organisation and financing; the PTAs at the regional and local level design the range of services and composite tariffs, and take care of the distribution network, revenue allocation and traffic surveys; finally, the providers of services are responsible for operations. The latter comprise the Deutsche Bundesbahn (DB Regio, DB Bahn Regiobus), local traffic organisations at county, city and communal levels, and numerous individual transport companies.

The Rhine-Main Transport Association (RMV) integrates regional and local transport under uniform and needs-based rules for the entire metropolitan area: one timetable, one price and one ticket. Similar associations exist in nine other German regions. In terms of number of trips, the RMV holds the fourth position (after Berlin-Brandenburg, Rhine-Ruhr and Hamburg) in Germany. The RMV covers about two-thirds of Hesse's territory, embracing 15 counties, 11 cities, Mainz (outside Hesse) and 368 communes with 2 505 districts. It comprises 42 railway connections with 390 stations and 943 bus routes with 11 900 stops. On average, it handles some 2.5 million passengers per workday with an average length of travel of 10 kilometres.

The RMV co-ordinates and organises all aspects of regional bus and rail transport. This includes important tasks such as tariff design, scheduling, allocation of transport services to carriers, the development of the network, the tendering of transport services, the assurance of quality and security standards, innovation (e-ticket, mobile ticket, touch&travel, R&D) as well as communication, information and marketing. It ties individual traffic, car-sharing services and the bicycle in its mobility concept, and partners with shipping lines and taxi companies. With target-group specific services, for example, in the evenings, at weekends and during the summer months, the RMV offers bridges between work and leisure traffic. Since its inception in 1996, the RMV has seen the number of passengers increase from 520 million to 708 million in 2013. In terms of revenue per trip, it achieves a top value in Germany, covering its costs at 57%, with the remainder coming from federal regionalisation funds passed through the state budget, or from municipalities via state financial equalisation.

Despite an impressive record of success seen both from the customer side and the suppliers of services, co-operation within the RMV remain complex and not exempt of frictions. A recurring controversial theme revolves around the compensation between urban and rural areas, where the former exhibit a shortage of capacity, while there are excess capacities in the latter. Other conflicts arise when extending or improving the rail network, which conveys benefits to some entities to the envy of others.[23] From a governance point of view, decision making of the RMV Board is slow, with a bias in favour of peripheral members (one vote per member), and the financing of planning is often controversial where the benefits are not accruing in a manner considered to be fair (Land Hessen, 2012). The legislative framework for planning exhibits weaknesses where competencies are not assigned to the state (e.g. in the planning of railway nodes) and excessive state regulations are said to form occasional barriers to extending the transport network.

The governance of spatial planning

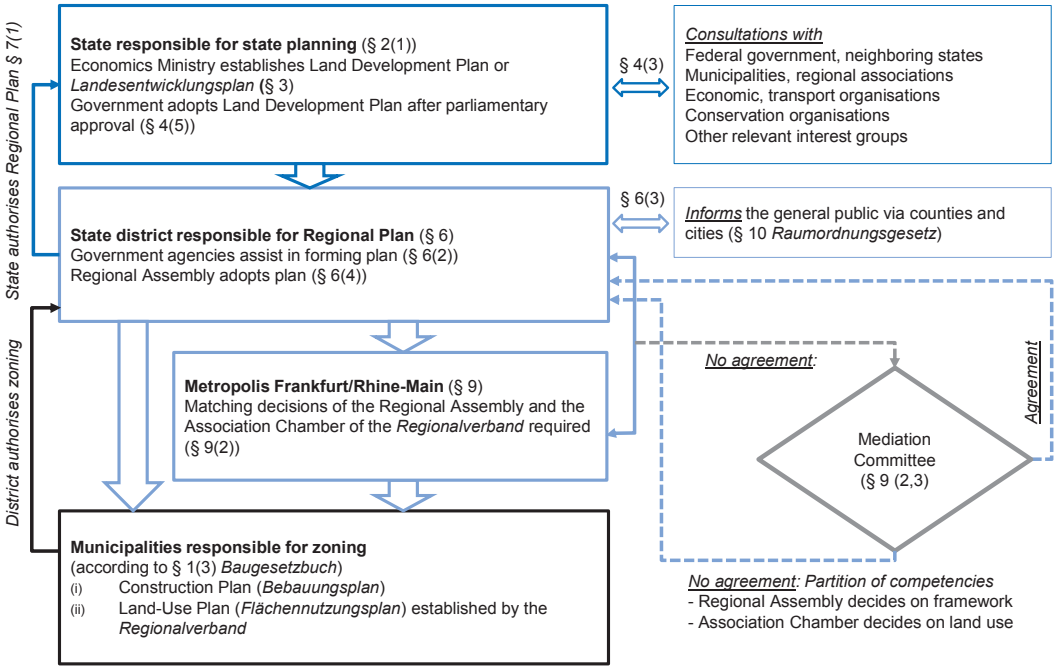
In Germany, the planning system of land use is organised in a hierarchical fashion involving the federation, the states, state districts and municipalities. Downstream planning is used to specify in more detail the planning guidelines of the respective superordinate authority. In Hesse, the following types of spatial planning are distinguished: planning at the state level (*Landesentwicklungsplan*); planning at the regional level (Regional Plan South-Hesse and Regional Land-Use Plan); and local zoning (*Bebauungsplan*). A particularity of the region is the fact that the Regional Authority FrankfurtRheinMain (*Regionalverband*) has acquired legal competencies for regional land-use planning covering the territory of its member municipalities, which requires co-ordination between the state's Administrative District Darmstadt and the regional authority. Moreover, the regional authority integrates the two stages of regional planning into one, the Regional Land-Use Plan (*Regionaler Flächenutzungsplan*).

The Regional Land-Use Plan essentially covers existing residential, mixed and commercial space, plus special areas, and, in particular, areas that can be developed or redeveloped in the future. The objective of the Land-Use Plan is to define basic features of land use with a focus on built-up areas (primarily urban), in order to reconcile the various claims on space by defining priority and reserve areas. Areas that are not to be built, such as green, forest and agricultural areas are also shown as well as the main transport routes and infrastructure facilities.

In addition to the Regional Land-Use Plan, a parallel plan is currently being developed on renewable energy. This, together with the corresponding part of the Regional Plan, replaces the section entitled "Renewable energies" of the actual South Hesse Regional Plan/Regional Land-Use Plan, forming a consolidated strategy for the state and the region. The parallel plan includes descriptive definitions of bio-energy, solar energy, geothermal and hydropowers. For wind energy, it defines the main principles of development and determines priority areas for wind-energy development within exclusionary priority areas.

Governance problems in regional land-use planning arise from two distinct political bodies deciding on the plans, the Regional Assembly of South-Hesse[24] (state) and the Regional Board of the *Regionalverband* (municipal). The law requires the two to agree on the plan, which is usually achieved by harmonising regional/municipal and state planning, but reaching agreement can prolong the process considerably. The *Regionalverband* emphasises its greater closeness to municipalities and better knowledge of details, claiming priority of regional over state planning. Indeed, its planning usually forms the basis for the integrated state plan. This does not exclude potential conflicts. There is a Mediation Committee to consolidate differing views.[25]

Figure 8.1. **Spatial planning in the state of Hesse**



Note: Authors' diagram based on the provisions of the Law on Land Planning (*Hessisches Landesplanungsgesetz*, HLPG).

The municipalities are responsible for micro planning, which could also conflict with the Regional Plan. They may raise objections that are dealt with in a similar fashion like the co-ordination of planning between the region and the state. Moreover, the law prescribes the participation of citizens, interest groups and specialised agencies. It entails the need for co-ordination meetings, which produced some 15 000 modification requests for the actual Land-Use Plan. This plan came into force in October 2011, replacing the land-use plans for the 75 cities and counties of the region. However, the plan is designed

for a period of ten years, but allows appropriate modifications and flexibility in response to new demands.

Land-use planning includes assigning surfaces and corridors to transport. The state authority "Hesse Mobile" is responsible for planning, building, maintaining and managing the entire Hessian road network (except for municipal roads), for a total of approximately 17 000 kilometres of road connections. The authority has a track record of innovative solutions in intelligent traffic control (including the design, construction and operation of roads).[26] The Regional Land-Use Plan also emphasises the link between mass transport and individual traffic, in particular the development, conservation, co-ordination and integration of the Hessian regional cycle route networks (3 300 kilometres).

An important challenge for the regional economy is the definition and expansion of surfaces for residential development in urban and suburban areas. The Land-Use Plan attempts to strike a balance between the need to designate new construction areas close to centres of economic activity and the need to minimise commuting, noise and pollution. It also defines a settlement restriction area surrounding the airport to reduce conflicts resulting from noise pollution.[27] New residential locations are identified mainly close to existing or planned halts of the regional rail transport system. Fifty-four percent of the planned new housing areas conform to this criterion (Land Hessen, 2012). The plan also foresees a higher use density for these areas. At the same time, the plan responds to the need to identify housing areas outside urban centres, with lower use density. To minimise transport time and costs, these areas are provided with appropriate park-and-ride or bike-and-ride facilities at railway stopovers.

The Land-Use Plan of Hesse pays particular attention to the development of retail business in the region. On the one hand, it is recognised that the allure of urban centres in Europe for citizens is linked to the availability of attractive and centrally located shopping opportunities (small businesses, department stores), combined with places of repose (cafés, restaurants) and recreation (parks, culture). On the other hand, many trading companies pull out commercial surfaces from the inner cities to the outskirts, or in industrial areas, because the "green meadow" allows constructing faster, and usually at lower costs. This tends to deprive the inner cities of much of their charm and attractiveness, also making shopping increasingly difficult for people without cars. The Land-Use Plan for Hesse and the Frankfurt metropolis takes a clear position in favour of maintaining the character of inner cities and against shopping malls at the outskirts of cities. However, it makes exceptions for large ventures that do not offer downtown-relevant assortments of goods (e.g. for construction materials, gardening supply or furniture).

Finally, the regional and the state Land-Use Plan pays attention to nature, landscape and recreational areas in the region. About 23% of the territory of the *Regionalverband* is part of a *Biotopverbundsystem* (network of interlinked biotopes), which emphasises the protection of living space for animals and plants, and aims at creating reserve areas in compensation for encroachments upon nature and landscape. The Regional Park (*Regionalpark*), an open space system that opens up the entire region for those seeking relaxation with park-like trails and attraction points, is now firmly entrenched in the Regional Land-Use Plan.

Land-use planning for the greater Frankfurt/Rhine-Main area has proven to be an effective tool to set co-ordinated policy guidelines for spatial development, to reconcile the need for residential and leisure areas with the need for public infrastructure, in

particular in transport, to include the views of relevant interest groups and to inform the public at large on the planned use of land in broader terms, and – last but not least – to orient public and private decision making that will bear on the economic prosperity of the region while respecting environmental and other concerns that affect the well-being of citizens in the longer term.

Conclusion

While the federal structure of Germany cannot necessarily be a model for other OECD countries, especially those with a more centralist tradition, the forms of regional co-operation established in the Frankfurt/Rhine-Main metropolis are worth examining, including with regard to other regions in Germany. From a governance point of view, the Regional Association of Municipalities as an additional layer of authority at the municipal level has both strengthened inter-municipal co-operation and raised greater attention to the policy concerns of the region. It is essential in this context that this association operates on a legal basis with forced membership to ascertain the sound financing of its services and to avoid counterproductive free-rider behaviour. The state government taking up commitments in regionally important public ventures supports the work of the regional authority and the economy. Moreover, the state government has often successfully used the inter-municipal equalisation scheme for creating financial incentives for co-operation – including for the territorial merger of municipalities in the 1970s.[28] The development of regional transport infrastructure benefits in particular from the fact that most competencies for planning and implementation, except for the railway network, rest with the state and its regional districts, with the federal government creating favourable framework legislation and focusing on integrating the main transport corridors into the trans-European network, leaving the states and their regional districts ample scope for policy implementation despite a formally hierarchical structure.

Another lesson that could be drawn from the Frankfurt region concerns its integrated system for regional public mass transport through the Rhine-Main Transport Association (RMV). The RMV operates as an independent public company, but requires substantial efforts in inter-agency and inter-municipal co-operation through its Board consisting of representatives of the various authorities concerned. Similar associations exist in other parts of Germany as well, so Frankfurt cannot claim a pioneering role. But given that most regions in other OECD countries still lack integrated and user-friendly mass transport systems for regional economic development, examining the case of the RMV may well be worth considering.

Land-use planning is organised in a hierarchical fashion in Germany, where the scale of the plan defines the respective competencies. The regional plan involves regional and local authorities as well as citizens and interested groups at large. In the Frankfurt/Rhine-Main region there is a particular complexity in the governance structure resulting from the fact that – by law – two layers of government or government representatives have to reach agreement on the plan. While this may prolong the decision-making process, there are effective mechanisms to avoid possible deadlocks, which have worked successfully so far.

Notes

1. See BBSR (2012) for details.
2. Population growth was negative in the following counties: Limburg-Weilburg, Alzey-Worms (despite strong employment growth), Aschaffenburg, Odenwald and Miltenberg (Regionalverband FrankfurtRheinMain, 2012).
3. "Migration background" being defined as having ancestors who migrated to Germany after 1949.
4. FrankfurtRheinMain GmbH, International Marketing of the Region.
5. See for more information Annoni and Dijkstra (2013). The RCI attempts to assess the quality of governance, macroeconomic stability, infrastructure (airport, motorway and railway potential accessibility), health indicators, scores in education (including the OECD's PISA results), achievements in higher education and life-long learning (including the gender balance), labour market efficiency, market size, technological readiness, business sophistication (gross value added and employment in selected sectors) and innovation (patent applications, scientific publications, number of "knowledge" workers, R&D, etc.).
6. DE-CIX Frankfurt is the largest Internet exchange point in the world with more than 3.2 terabits per second peak traffic. It is the leading Internet exchange for Central and Eastern Europe, and has the world's largest and most advanced ethernet-based platform. See for more details DE-CIX (2014).
7. This state initiative operates in an interdisciplinary and cross-sector environment as a neutral platform for business, science, politics and civil society, responding to global economic challenges through application-oriented projects, research, education and training in the area of logistics, mobility and adjacent disciplines.
8. Regionalverband FrankfurtRheinMain (2013a: 4).
9. *Ministerkonferenz der Länder für Raumordnung* (MKRO).
10. The European metropolitan regions are subject to regular monitoring and statistical reporting by the Federal Office for Building and Regional Planning (*Bundesamt für Bauwesen und Raumordnung*).
11. *Initiativkreis Europäische Metropolregionen in Deutschland*.
12. *Gesetz über die Metropolregion Frankfurt/Rhein-Main*, Wiesbaden, 8 March 2011 (GVBl. I S. 153).
13. In Germany, municipalities levy local property and business taxes, whose tax rates (*Hebesätze*) they set freely. As an example, the cities of Eschborn, contiguous to Frankfurt in the west, or Bad Soden set their local business tax rates at 60% of the level in Frankfurt. (Incidentally, it has caused the Deutsche Börse to move from Frankfurt to Eschborn.)
14. *Gesetz über die Bildung des Umlandverbands Frankfurt (UFG)* of 11 September 1974.
15. The creation of this association, the *Verkehrsverbund* for mass transport in the region, was, however, facilitated by federal transfers through the *Gemeindeverkehrsfinanzierungsgesetz*.

16. So far this option has not yet been evoked.

17. In 1969, there were 2 600 communes in Hessen, which were reduced, from 1972 to 1977, to about 1 200 on a voluntary basis aided by fiscal incentives of the state. Today, there are 221 communes, 21 counties and 5 cities in Hessen.

18. In addition to shares in "traditional" enterprises (such as Fraport AG or the Rhine-Main Transport Association [RMV]), the state is committed to newer initiatives such as the International Marketing (FRM GmbH), Culture Fund (Kulturfonds gGmbH), Regional Park, a regional company devoted to integrated traffic and mobility management (ivm) or the House of Logistics and Mobility GmbH (HOLM), among others.

19. By number of passengers, London Heathrow (69.4 million) is larger than Frankfurt (56.4 million). The difference is explained by Frankfurt's higher share in cargo transport and the – on average – smaller size of passenger planes that operate from Frankfurt.

20. On federal roads the supreme state road authority assumes delegated administrative responsibilities according to Article 90(2) of the Basic Law (*Bundesauftragsverwaltung*) adopting the regional plan for roads, granting planning permission and making decisions according to §74(7) of the Administrative Procedure Act (*Verwaltungsverfahrensgesetz*).

21. The competencies lie in the hands of a federal monopoly, the DB Netz AG of the Deutsche Bundesbahn, under the Federal Railway Authority (EBA), which is supervised and directed by the Federal Ministry for Transport, Construction and Housing. Although the state authority is involved in examining and presenting the plan approval documents for railway projects, and discussing it with citizens, the final decision on the plan (*Planfeststellung*) is in the hands of EBA. At present the DB Bau AG (responsible for railway constructions) has presented a remodelling plan for the node Frankfurt – Sportfeld 2, one of the busiest points in the German railway network, and a critical bottleneck (two-thirds of Germany's long-distance railway traffic pass through the region).

22. In accordance with §4 *Eisenbahninfrastruktur-Benutzungsverordnung* (EIBV).

23. For instance the planned railway extension "Westtangente" will link Eschborn directly to the airport, which is resented on arguments of the municipality's "unfair" regional tax competition combined with a disproportionally low statutory share of co-financing.

24. The Regional Assembly South Hesse is responsible for strategic planning at the state level for the Planning Region Southern Hesse (corresponding to the Administrative District Darmstadt). Its members are elected by the representative bodies of counties, the urban districts, the municipalities belonging to more than 50 000 inhabitants and the Regional Board of the *Regionalverband*.

25. The Mediation Committee consists of ten members. The Regional Assembly and the Association Chamber of the *Regionalverband* each appoint five members and an equal number of deputies. The Committee Chair and his deputy are appointed annually, alternating between representatives of the two institutions. The Mediation Committee convenes only in case of serious disagreements, which so far could be avoided.

26. Its flagship project, "Congestion Free Hessen 2015", started in 2008 and counts on an IT-based strategy called "Dynamic Informations and Applications for Securing Mobility with Adaptive Networks and Telematics Infrastructure", which also pursues environmental goals.

27. However, the establishment of noise protection zones, that prevent new housing or sensitive infrastructure such as hospitals, schools or pensioner homes being built in existing residential area, are defined outside the current land-use plan.

28. The historic equalisation formula of the 1970s, in addition to supporting municipal recurrent spending in key areas, laid emphasis on the development of "visible" infrastructure in rural areas, such as construction of new school buildings, sports facilities, neighbourhood centres, village community centres, village refurbishment, etc. The actual equalisation formula supports infrastructure development and maintenance in a more consolidated form (lump sums), but some specific investment categories remain or were added (e.g. municipal roads, local public mass transport, hospitals, public pensioner homes, or drinking water and wastewater plants).

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Chapter 9

Puebla-Tlaxcala, Mexico

This chapter begins with a brief socio-economic and institutional overview of the Puebla-Tlaxcala metropolitan region. It then explores the current status of inter-municipal collaboration in two major sectors for urban development: transport and land use. Finally, it reviews existing metropolitan collaboration tools.

Key points: Puebla-Tlaxcala

- Puebla-Tlaxcala is a monocentric metropolitan region with a large wealthy core city surrounded by smaller municipalities over the two states of Puebla and Tlaxcala. All municipalities operate under the administrative constraints of the Mexican municipal system, i.e. a single three-year not immediately renewable mayoral term and relatively low fiscal autonomy.
- Municipalities have limited input into the design of the transport system, but they are required to manage its economic, social and environmental consequences. State governments have exercised little coherent strategic oversight in light of the proliferation of private concessions in public transport.
- The spatial expansion of the region has been difficult to manage due to the lack of technical and financial capacity at municipal level. Municipalities face challenges in implementing, updating and exploiting existing instruments related with land use and urban development planning.
- Puebla-Tlaxcala has a supra-municipal authority, the Metropolitan Council, and receives annual resources from a federally established Metropolitan Fund. However, the effectiveness of such tools is undermined by the almost complete lack of involvement from municipalities. Although both tools were originally intended to serve metropolitan interest, practical decisions to support specific investment projects remain aligned with state boundaries, and there is little evidence of metropolitan-oriented prioritisation.

Table 9.1. **Basic facts on Puebla-Tlaxcala**

Mexico	
Population	115 million people (as of 2012)
Political regime	Federal republic
Levels of government:	
– Federal level	President (elected for six years, with no re-election)
– State level (31 states and 1 federal district)	Governor (elected for six years, with no re-election)
– Municipal level (2 456 municipalities)	Mayor (elected for three years, with no immediate re-election)
Puebla-Tlaxcala metropolitan region (*zona metropolitana*)	
Population	2.7 million people (fourth-largest metropolitan region in Mexico)
Number of municipalities	39 (19 in the state of Puebla, 20 in the state of Tlaxcala)
Existing metropolitan institutions and funds	– Metropolitan Council (*Consejo Metropolitano*) – Metropolitan Fund (*Fondo Metropolitano*)

Table 9.2. **Comparing the Puebla-Tlaxcala metropolitan zone and the OECD functional urban area of Puebla**

	Puebla-Tlaxcala metropolitan zone (*zona metropolitana*)	OECD functional urban area of Puebla
Population	2.7 million people	2.1 million people
Number of municipalities	39 (19 in the state of Puebla, 20 in the state of Tlaxcala)	11 (8 in the state of Puebla and 3 in the state of Tlaxcala)

Sources: OECD elaboration, based on data from OECD (2012a), *OECD Metropolitan Database*, http://measuringurban.oecd.org; INEGI (National Institute of Statistics and Geography) (2012), www.inegi.org.mx; CONAPO (National Population Council) (2012), www.conapo.gob.mx; SEDESOL (Secretariat of Social Development) (2012), www.sedesol.gob.mx.

Introduction

Puebla-Tlaxcala is a dynamic metropolitan region spread across two states in a relatively centralised federal country. Its metropolitan governance structure is based on a non-elected supra-municipal authority supported by a federally established Metropolitan Fund. The dominance of inter-municipal competition despite the existence of a formal metropolitan framework suggests that better targeted financial and institutional incentives would be required to help overcome policy fragmentation and implement a broader integrated development strategy at the scale where people live and work.

This chapter begins with a brief socio-economic and institutional overview of the Puebla-Tlaxcala metropolitan region. It then explores the current status of inter-municipal collaboration in two major sectors for urban development: transport and land use. Finally, it reviews existing metropolitan collaboration tools.

Overview of the metropolitan area

Socio-economic profile

Composed of 39 municipalities distributed across 2 states, the Puebla-Tlaxcala metropolitan zone is the fourth largest in Mexico. Its demographic growth has outpaced national and OECD averages, averaging 1.9% per year between 2000 and 2010. In the recent recession of 2009, Puebla experienced a real gross domestic product (GDP) contraction of 9% but recovered quickly to high growth rates in 2010-12. Puebla-Tlaxcala is a major manufacturing hub specialising in auto production and one of Mexico's most

important centres of higher education. Manufacturing (of which 60% is dedicated to the automotive industry) accounts for more than 30% of Puebla's GDP and is still growing relative to other economic sectors. Puebla-Tlaxcala hosts the largest automobile plant in Mexico (Volkswagen) and another plant (Audi) is currently being built just outside the region. Even though the region has the highest number of universities per capita in Mexico, it ranks 6th among 33 in terms of the share of low-skilled working-age population.

The city of Puebla accounts for over half of the metropolitan zone's population and over 60% of its GDP. However, population growth has been fastest in the periphery at the expense of Puebla's once-dense historic city centre, where vacancy rates in some areas now reach over 40%. Puebla registers the fifth-highest poverty level among the 31 states and the Federal District, when Mexico's overall poverty rate (21%) is already the highest in the OECD at nearly double the OECD average in 2008 (11%). Puebla-Tlaxcala also has the second-highest share of population living in neighbourhoods of high and very high marginalisation[1] (49%) among the 33 large Mexican metropolitan zones. Despite the high coverage of water infrastructure in the Puebla-Tlaxcala metropolitan zone (87%), many localities struggle with low levels of access to potable water networks, ranging from 20.18% in San Martin Texmelucan to 70.3% in San Andres Cholula.

Institutional background

In the absence of an elected metropolitan level, municipalities play a central role in the Mexican institutional framework. Mayors (called "municipal presidents") are directly elected for one, not immediately renewable, three-year term and they head the municipal council (*ayuntamiento*). Municipal responsibilities cover a variety of local public services, including water and sewerage, street lighting and maintenance, waste collection and disposal, public safety and traffic, supervision of slaughterhouses, and the maintenance of parks, gardens and cemeteries. However, the three-year single mayoral term erodes municipal room for action. As in the rest of Mexico, municipalities in Puebla-Tlaxcala are highly vulnerable to political changes. Article 115 of the Constitution stipulates that mayors, councillors (*regidores*) and community representatives (*síndicos*) may not be re-elected for the next immediate term. Every municipal and state election cycle is accompanied by a substantial (if not complete) overhaul of municipal and state civil servants. This municipal practice seems to reflect the national pattern, as Mexico registers one of the highest levels of turnover among civil servants accompanying a change of government among OECD countries. Municipal executive positions often serve as a springboard to higher office rather than being seen as a distinct professional career path. Constant levels of high staff turnover are likely to restrict the continuity and coherence of public investment projects in municipalities.

Although overall sub-national expenditures rose sharply from the mid-1980s onwards, Mexico remains one of the most fiscally centralised countries in the OECD. In 2011, sub-national governments' own revenues in Mexico accounted for less than 10% of total government revenues (less than 1% of GDP) compared with an average of about 21% in OECD countries (about 9% of GDP). Both states and municipalities are heavily dependent on federal grants, and own taxes represented less than 5% of sub-central government revenues for states (compared with an average of around 42% in OECD federal countries) and around 10% for municipalities in 2010. Municipal responsibilities continue to expand without parallel efforts to increase revenue-raising capacity. Although municipalities have been authorised to collect property taxes and water and waste fees since the constitutional reform of 1983, they have little or no incentive to increase

own-source revenue given the federal and state transfers. In most municipalities, tax collection remains a challenge due to administrative difficulties and the legacy of historical arrangements in the mindset of citizens. Municipal authorities report a need to educate the population about the purpose and use of tax revenue.

Municipal struggles for fiscal resources are exacerbated by numerous disputes over municipal boundaries. Puebla-Tlaxcala is home to a series of long-standing conflicts between municipalities that are loathe to supply local public services to certain territories without being able to collect tax revenues in return. For example, Concepción Guadalupe is one of five colonies along an 8.5-kilometre fringe between Puebla and San Andrés where the two municipalities regularly argue over revenues from property tax and other taxes. Puebla and Amozoc de Mota also compete over almost MXN 5 million (Mexican pesos) (currently levied in Puebla) to be collected from around 3 500 inhabitants spread across 4 colonies. Such politically sensitive claims generate a continuous source of inter-municipal tension and often result in angry pleas to the Congress – with little success in conflict resolution to date. Another example lies in the *Periférico Ecológico*, a ring road of 58 kilometres opened in 2011, which serves 19 000 vehicles and 200 000 users per day. While this infrastructure project was originally put forward as a way to curb urban sprawl and protect the environment, it currently remains bare of lighting in those portions of the road where disputes about municipal boundaries have translated into bickering over who should pay for it.

Examples of inter-municipal collaboration remain extremely scarce in Puebla-Tlaxcala. While municipal associations have been legally allowed in Mexico since 1983, they have not been widely used as municipalities have rarely managed to identify mutually beneficial schemes. At the national level, the Association of Mexican Municipalities (AMMAC) was created in March 1994 but its membership only counts about 400 municipalities out of Mexico's close to 2 500 municipalities. Even in rare instances when there was a political will towards inter-municipal collaboration, the lack of financial resources often stifled the implementation of joint plans. For example, San Pablo del Monte (in Tlaxcala) has initiated plans for a regional hospital that would serve six municipalities; while the five other municipalities are in favour of the project, none has committed the necessary resources and the project has remained unachieved.

The governance of transport

Transport could broadly be considered a policy sector in which municipalities might find a strong rationale to collaborate in order to achieve major investment that they would not be able to afford individually. However, sometimes it also lends itself to vigorous competition to meet short-term local priorities, resulting in a multitude of scattered small-scale projects.

Transport is predominantly motorised in Puebla-Tlaxcala as in the rest of Mexico. The national automobile fleet has tripled in the last 15 years and the motorisation rate doubled between 2000 and 2010 (from 10 to 20 vehicles per 100 people). The public transport fleet consists almost exclusively of low-capacity vehicles such as microbuses, minibuses and taxis, further contributing to congestion and impeding the development of an efficient transport network. Urban passenger transport service is mostly supplied by informal groups of individuals called *hombre-camión* ("man-and-a-truck"), who own concessions to operate one or several vehicles. Approximately 6 000 public transport vehicles circulate in the Puebla-Tlaxcala metropolitan zone, with multiple operators covering some of the same routes (284 routes in total), especially in the city centre.

Responsibilities for transport are shared, in varying capacities, across federal, state and municipal actors, as well as with private operators (Table 9.3).

Table 9.3. **Allocation of responsibilities and resources for urban transport across levels of government in Mexico**

	Responsibilities	Resources
Federal government	– Large-scale infrastructure – Regulation and guidelines – Technical assessment, capacity building for state and municipal governments	Financial support to state and municipal governments through PROTRAM and PTTU programmes
State government	– Mobility and transport policy – Plans and programmes – Regulation and control – Transport infrastructure – Operation of public transport	– General taxes – Federalised expenditure – Private investment in public transport concessions
Municipal government	– Planning and management of urban development – Traffic control on urban roads – Non-motorised mobility – Public security, safety and emergency response – Approval of local streets design – Approval of terminals and workshops design	– General taxes – Federalised expenditure

Sources: IMCO (2012), *Índice de Competitividad Urbana 2012*, Instituto Mexicano para la Competitividad A.C., Mexico City, http://porciudad.comparadondevives.org; Islas Rivera, V. et al. (2011), "Implementing sustainable urban travel policies in Mexico", *OECD/ITF Discussion Papers*, No. 2011-14, OECD Publishing, Paris, http://dx.doi.org/10.1787/5kg9mq436m42-en.

The state government is the main level in charge of planning and implementing transport policy, although it has exercised little coherent strategic planning in light of the uncontrolled proliferation of private concessions to individual operators. State authorities are currently struggling to take *ex post* remedial action to compensate the lack of *ex ante* planning in transport policy. The organisational, technical and infrastructural deficiencies of scattered informal transport operators make it difficult to exploit economies of scale or improve the quality of services. Initial efforts to regulate the transport system in 1995, with the input of experts from Curitiba, Brazil, were violently countered by the union of concession holders. In Tlaxcala, the state government has frozen new concessions for more than a decade and even suspended some existing concessions. In Puebla as well, the state government is currently working to rationalise the supply side. The deficiencies of the current public transport system are reflected in the coexistence of a private transport system, as some major companies operate their own private transport system (e.g. Volkswagen runs shuttles for a share of its 15 000 employees).

Municipalities have little input into the design of the transport system – and particularly the public transport network – even though they are left to manage its outcomes. The current governance framework allows limited municipal influence over transport investments but severely affects municipalities in economic, social and environmental terms:

- On the economic front, the inefficiency of the current transport system often forces workers to ride two or three different buses to get to work. It is estimated that an average family in the metropolitan region of Puebla-Tlaxcala spends about a third of its income, sometimes up to half, on transport. This represents a considerable loss for the competitiveness and productivity of the entire

metropolitan zone, as well as a high cost in terms of quality of life and consumption opportunities for households.

- The current transport system also contributes to social segregation. Many workers – especially the lower income categories – live in far-flung communities in the periphery and spend more than two or three hours in commuting every day. The dominance of "informal" public transport raises serious safety concerns. Moto-taxis carrying four or five people are common.
- The negative impact on the environment is significant, as transport accounts for an estimated 82% of greenhouse gas emissions in Puebla (data from the Mexican Ministry of Environment and Natural Resources, SEMARNAT). By contrast, road transport accounts for 29% of all urban CO_2 emissions in US cities (OECD, 2013b).

The recent introduction of a bus rapid transit system (BRT), called RUTA, represents a positive first step toward more efficient public transport in the metropolitan zone (Box 9.1). It was largely enabled by an institutional and financial impetus from the federal government.[2]

Box 9.1. **Puebla-Tlaxcala's bus rapid transit system: RUTA**

After León's Optibús, Mexico City's Metrobús, Guadalajara's Macrobus and Monterrey's Transmetro, Puebla recently launched a bus rapid transit (BRT) system called the Articulated Urban Transport Network (*Red Urbana de Transporte Articulado*, RUTA) following successful negotiations between the state government and the 202 private concessionaries operating existing bus routes. The RUTA negotiations also resulted in the inauguration of an integrated single-fare system. The RUTA network will be comprised of six lines, each operated by a different concession. The first line of 18.5 kilometres between Chachapa and Tlaxcalancingo was opened in January 2013. It will operate 40 high-capacity buses along 38 stations to serve an estimated 107 000 users maximum per day. RUTA is an ambitious project that will require an overall investment of MXN 1.32 billion (around USD 105 million). The state of Puebla invested MXN 635 million (around USD 50 million); the national development bank Banobras will provide MXN 394 million (around USD 31 million); and the remainder will come from transport concession holders.

Source: OECD (2013c), *OECD Territorial Reviews: Puebla-Tlaxcala, Mexico 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264203464-en.

Despite its promising objective, the project has illustrated some of the difficulties the metropolitan region is experiencing in linking transport investments to land-use and overall urban development planning. In the initial phases of the project, co-ordination failures and information gaps between transport actors at different levels of government have led to sub-optimal locations for some routes and stations, as well as hasty design decisions. The location of RUTA's routes and stops was decided by the State Secretariat of Transport, after conducting a mobility study (*Estudio de Movilidad de la Zona Metropolitana de Puebla*) and basic negotiations with the three municipalities concerned (Puebla, San Andres Cholula and Amozoc). In a study released in April 2012, the Secretariat of Public Security of the Municipality of Puebla noted, however, that it had been given only partial information on the project. There are also concerns about the objectivity of data and criteria underlying the choice of stops. For example, it was suggested that one of the adopted routes (crossing the Defensores de la República

diagonal and the Atlixco boulevard) was chosen not necessarily because rider demand was there, but because it offered the easiest and fastest deliverable. Hasty construction may also account for the fact that some RUTA stops lack separation between the BRT lane and the lane of regular traffic. The development potential that could stem from linking the BRT network to economic and urban development planning has thus far remained under-exploited.

The governance of spatial planning

Land use plays a decisive role in shaping urban development but frequently generates conflicts among municipalities as they expand and compete for land and its use. Collaboration in this sector is heavily influenced by the national framework for land-use planning and requires a set of technical, financial and managerial capacities that are not necessarily cultivated at the municipal level.

While the Mexican Constitution grants municipalities the responsibility for urban development and planning, many are ill-equipped to guide the local urban development process. Municipalities have several planning instruments at their disposal with which to regulate and promote urban development (Box 9.2). However, most existing plans no longer reflect the demographic or spatial realities of municipalities. With the exception of the city of Puebla, which has just updated its urban plan, most municipal plans in the state of Puebla are 15-30 years old. In Tlaxcala, only 4 of the state's 60 municipalities have updated or are conducting an update of their municipal plans. Even recent planning documents may be based on outdated or only partial data. For instance, the city of Puebla's 2007 Municipal Sustainable Urban Development Programme includes transport data that date back to 1994. Outdated planning instruments will likely continue to be a problem as the metropolitan area continues to grow, which points to a need to rethink the overall planning process.

Municipalities generally face major difficulties in updating their plans without financial and technical support of federal and state authorities. Only 15 of the 218 municipalities in Puebla reportedly have the resources to generate their own urban plans. In Tlaxcala, San Pablo del Monte is currently updating its plan with federal funds. The lack of technical capacity constitutes a major hurdle, perpetuated by the loss of municipal staff and information every three years following the election cycle. Although state planning officials provide training to new municipal staff on the process for obtaining funds to develop plans, three years offer a short time span for municipal staff to apply for federal funding and conduct the update. Even when municipal plans are eventually updated, their implementation remains a key challenge.

The lack of updated and strategic urban development plans gains further salience when it comes to the complex issue of converting and developing *ejido* land (i.e. communal land collectively owned and individually used by farmers for agricultural purposes).[3] In the case of Puebla-Tlaxcala, some *ejido* land was initially expropriated by the federal government and transferred to the state of Puebla to serve as a land reserve, but eventually turned into gated communities (called *fraccionamientos*), whose development and public service provision mainly take place outside the control of public authorities and contribute to increasing socio-economic inequalities within the metropolitan region. One example is Lomas de Angelópolis, a privately developed and owned neighbourhood straddling three municipalities and expected to house around 80 000 residents. Waste collection and some public safety services are provided by municipalities; access roads have been built and managed by the state government; and

most other services are provided by the private sector. As the community continues to attract more high-income residents and is thus facing further rapid expansion, the tension between private and public interests is reflected in the ongoing efforts to displace the state-operated toll booth on the access road so that future residents can avoid paying the toll.

Box 9.2. **Municipal tools for guiding urban development in Mexico**

Municipal urban development plan (*Plan municipal de desarrollo urbano*)

The municipal urban development plan is prepared by the local government to establish the objectives and policies to regulate the city's urban development. It should provide guidance on land use within the municipality, identifying areas suitable for housing, industrial activities, commercial activities, schools, markets, green spaces, public services, communication systems and transport. It is expected to contain an analysis of the geographic, economic and social population centres within the municipality; an inventory of public infrastructure; and a diagnosis that identifies key priority areas in terms of infrastructure and maintenance. The plan should set targets, a schedule and the allocation of responsibilities, and be in accordance with national and state plans for urban development.

Area master plan (*Plan director de los centros de población*)

The area master plan is developed for each population centre within a municipality in view of managing, regulating, conserving and enhancing its growth and development. The plan provides precise details on the urban infrastructure needs; identifies areas for future expansion; promotes urban redevelopment activities; manages the maintenance of public buildings, infrastructure and cultural heritage; and seeks to ensure ecological balance. Its structure is similar to the municipal urban development plan, with regard to the geographical, economic and social diagnosis of the area and the identification of priorities. It is developed by the city in co-ordination with state authorities and local communities and approved by the city council. It must be in accordance with the municipal urban development plan and all other urban development plans and regulations.

Municipal regulations (*Reglamentos municipales relacionados con el desarrollo urbano*)

Municipal regulations related to urban development articulate the rules and norms for public works, building and construction. Regulations pertaining to public works concern public spending and all activities related to the planning, programming, budgeting, implementation and maintenance of municipal public works. Building regulations govern all construction (private and public) and provide norms for hygiene, safety and comfort. These regulations also articulate the process of municipal control over land use and construction via the issuance of building permits and licenses and the requirements for those wishing to build within the city. All municipal regulations related to urban development must also be in accordance with the municipal urban development plan, and all plans and regulations developed at higher levels of government.

Source: OECD (2013c), *OECD Territorial Reviews: Puebla-Tlaxcala, Mexico 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264203464-en.

Recent efforts to curb urban sprawl and address the challenges posed by vacant properties in the historic centre city of Puebla have materialised in the DUIS initiative, an innovative integrated approach to urban redevelopment led by a multi-level, multi-sectoral partnership (Box 9.3). The DUIS programme aims at offering incentives for denser, sustainable urban development. The pilot DUIS project could help

demonstrate the potential and build capacity among public and private actors for a more compact and integrated form of urban development in Puebla-Tlaxcala. If successful, the DUIS initiative could also help build confidence among investors that dense redevelopment efforts can be worthy investments. Nevertheless, critical investments such as DUIS risk limited impact without being linked with other key projects (such as the RUTA) and made operational at the metropolitan scale.

Box 9.3. **An initiative to curb urban sprawl and repopulate the historic core: Puebla's DUIS initiative**

To reduce the trends toward urban sprawl and repopulate the city's historic centre, a 1 250-hectare area comprising the city of Puebla's *zona de monumentos* and surrounding neighbourhoods recently received the federal government's certification for Sustainable Integrated Urban Development, or DUIS (*Desarrollos Urbanos Integrales Sustentables*). The DUIS is a joint initiative of a range of federal ministries and public agencies with mandates related to urban and economic development, housing (including housing finance, construction, regularisation and titling), environmental sustainability, infrastructure and investment. The DUIS programme offers incentives to developers to build dense, mixed-use, sustainable communities. As Herbert, Belsky and DuBroff (2012) report, "in exchange for fulfilling DUIS criteria, developers can receive considerable benefits, including technical land use and environmental planning assistance from the Secretariat of Social Development (SEDESOL) and the Ministry of Environment and Natural Resources (SEMARNAT); preferred housing subsidies from the National Housing Commission (CONAVI); infrastructure financing and loan guarantees from the National Works and Public Services Bank (Banobras); housing mortgage credits from the National Institute for the Workers' Housing Fund (Infonavit), the Housing Fund of the Institute for Social Security and Services of the Workers of the State (FOVISSSTE), and the Federal Mortgage Society (SHF); and the National Infrastructure Fund (Fonadin) investments in land banks and infrastructure."

Puebla's DUIS initiative, the first DUIS-certified project in Mexico to be sited in a city centre, seeks to redensify and repopulate the historic centre of the city. To do so, the plan calls for increasing density allowances of infill locations; improving aging urban infrastructure; and prioritising public transport and non-motorised modes of travel, such as walking and cycling. Local policy makers view the DUIS as a tool to offer federal incentives to private developers to encourage sustainable development projects. The Puebla State Land Bank is responsible for co-ordinating Puebla's DUIS initiative in partnership with the municipality of Puebla.

Source: OECD (2013c), *OECD Territorial Reviews: Puebla-Tlaxcala, Mexico 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264203464-en.

Conclusion

Puebla-Tlaxcala offers no evidence of inter-municipal collaboration in specific sectors such as transport or land use, but it does have a supra-municipal authority and a Metropolitan Fund, which were created with the explicit purpose of serving metropolitan priorities. However, the predominance of state authorities with no parallel involvement from municipalities – both in the composition of the metropolitan authority and the use of the Metropolitan Fund – acts as a major hindrance to the emergence of a widely and clearly shared strategy for the metropolitan region.

Reflecting an understanding of the increasing size and significance of metropolitan areas in Mexico, a federal initiative jointly undertaken by the Secretariat of Social Development (SEDESOL), the National Population Council (CONAPO) and the National Institute of Statistics and Geography (INEGI) established the first definition and delimitation of metropolitan zones (*zonas metropolitanas*) in 2004, which was updated in 2007 and 2012. In 2008, the federal government introduced a Metropolitan Fund to complement state resources in supporting projects of a metropolitan scope – primarily related to infrastructure – in the newly designated metropolitan zones. In 2009, the governors of Puebla and Tlaxcala signed an agreement to create a Council for the Metropolitan Development of the Puebla-Tlaxcala Metropolitan Zone, the authority responsible for the management of Puebla-Tlaxcala's share of the metropolitan fund. The council is supported by a technical committee and a technical sub-committee for project evaluation (Table 9.4).

Table 9.4. **Composition of the Metropolitan Council and its subsidiary bodies**

		Metropolitan Council (*Consejo para el Desarrollo Metropolitano*)	Technical Committee (*Comité Tecnico)*	Technical Sub-committee for Project Evaluation
State of Puebla	Governor	x		
	Secretary General of Government	x	x (joint presidency – head of unit of Programming and Budget)	x
	Secretary of Finance	x	x	x (joint presidency – Director of Monitoring and Investment)
	Secretary of Infrastructure	x	x	x
	Secretary of Social Development	x	x	x
	Secretary of Environmental Sustainability and Territorial Affairs	x	x	x
	Secretary of Accounting			x
	COPLADE	x	x	
	Joint Technical Secretary (Sub-Secretary of Expenditure of the Secretary of Finance)	x	x	x
State of Tlaxcala	Governor	x		
	Secretary of Government	x	x	x (joint presidency)
	Secretary of Finance	x	x	x
	Secretary of Public Works, Urban Development and Housing	x	x	x
	Secretary of Social Development	x	x	x
	Secretary of Economic Development		x	x
	General Co-ordination of Ecology	x		
	COPLADE	x	x	
	Joint Technical Secretary	x (Director of Governmental Accounting of Secretariat of Finance)	x (Sub-Secretary of Expenditure of Secretary of Finance)	x
Federal government	Secretary of Social Development through the Sub-Secretary of Urban Development and Territorial Affairs	x		
	Secretary of Environment and Natural Resources through the relevant Sub-Secretary	x		

Source: Information provided by the state government of Puebla.

Despite its name and initial intent, the metropolitan fund has not yet succeeded in improving metropolitan co-ordination and performance, either generally across Mexican metropolitan zones or in the specific case of Puebla-Tlaxcala. An evaluation of the fund for 2006-09 (Iracheta Cenecorta, 2010) found that the projects financed by the fund responded mostly to sectoral initiatives focused on resolving short-term problems that were close to the interests of the elected officials in office, but not necessarily long-term metropolitan priorities. Between 2006 and 2009, the fund supported a total of 30 projects in the Puebla-Tlaxcala metropolitan zone, the majority of which were roads (78%) and water (13%) projects. The evaluation pointed out the following specific shortcomings:

- There is little to no co-ordination between the two states in the design and implementation of the projects. In the absence of a metropolitan vision or any sort of prioritisation mechanism upon which the allocation of funds could be based, the states simply split the annual allocation of funds based on population. For example, approximately 74% of the 2011 budget (MXD 270-300 million, i.e. around USD 21-24 million) was distributed to Puebla, and the remaining 26% to Tlaxcala (which is equivalent to less than 1% of the state of Tlaxcala's general budget).
- The operational rules do not authorise carrying funds from one fiscal year to the next, and any unused resources must be reimbursed to the federal government. Project proposals therefore tend to split large-scale projects into smaller ones whose cost fits under the threshold of available funds. This piecemeal approach at the project design phase generates uncertainties in the implementation phase about the completion of major investments.
- Municipalities have little (if any) involvement in the identification, selection or implementation of projects funded by the Metropolitan Fund, which are determined by the state-led Metropolitan Council. In fact, the only responsibility (and cost) that the fund leaves to municipalities (together with the states) lies in the operation and maintenance of infrastructures, which often turns out to be neglected in favour of new construction and can create significant safety hazards.

Despite substantial challenges linked with the continuous spatial expansion of the metropolitan region, there is virtually no inter-municipal collaboration in transport and land use in Puebla-Tlaxcala. The only supra-municipal institution currently in place, the Metropolitan Council, is mired by the lack of a collectively agreed metropolitan strategy and the lack of involvement from municipalities. State governments continue to seek state-centred solutions to issues of growing metropolitan relevance, while municipalities are left to struggle with public service delivery obligations often unmatched with financial and institutional capacity. The Metropolitan Fund holds potential to encourage more effective co-ordination, but would need organisational and operational adjustments to do so.

Notes

1. The index of urban marginalisation is an aggregate measure developed by the National Population Council (CONAPO), which reflects lack of access to basic goods, services and infrastructure.
2. Under the 2007-12 National Development Plan, the federal government implemented two programmes for improving the efficiency of public transport and reducing greenhouse gas emissions: the Federal Support for Mass Transit Programme (*Programa Federal de Apoyo al Transporte Masivo*, PROTRAM) and the Urban Transport Transformation Programme (*Programa para la Transformación del Transporte Urbano*, PTTU).
3. See another example of *ejido* land reform in OECD (2012b).

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